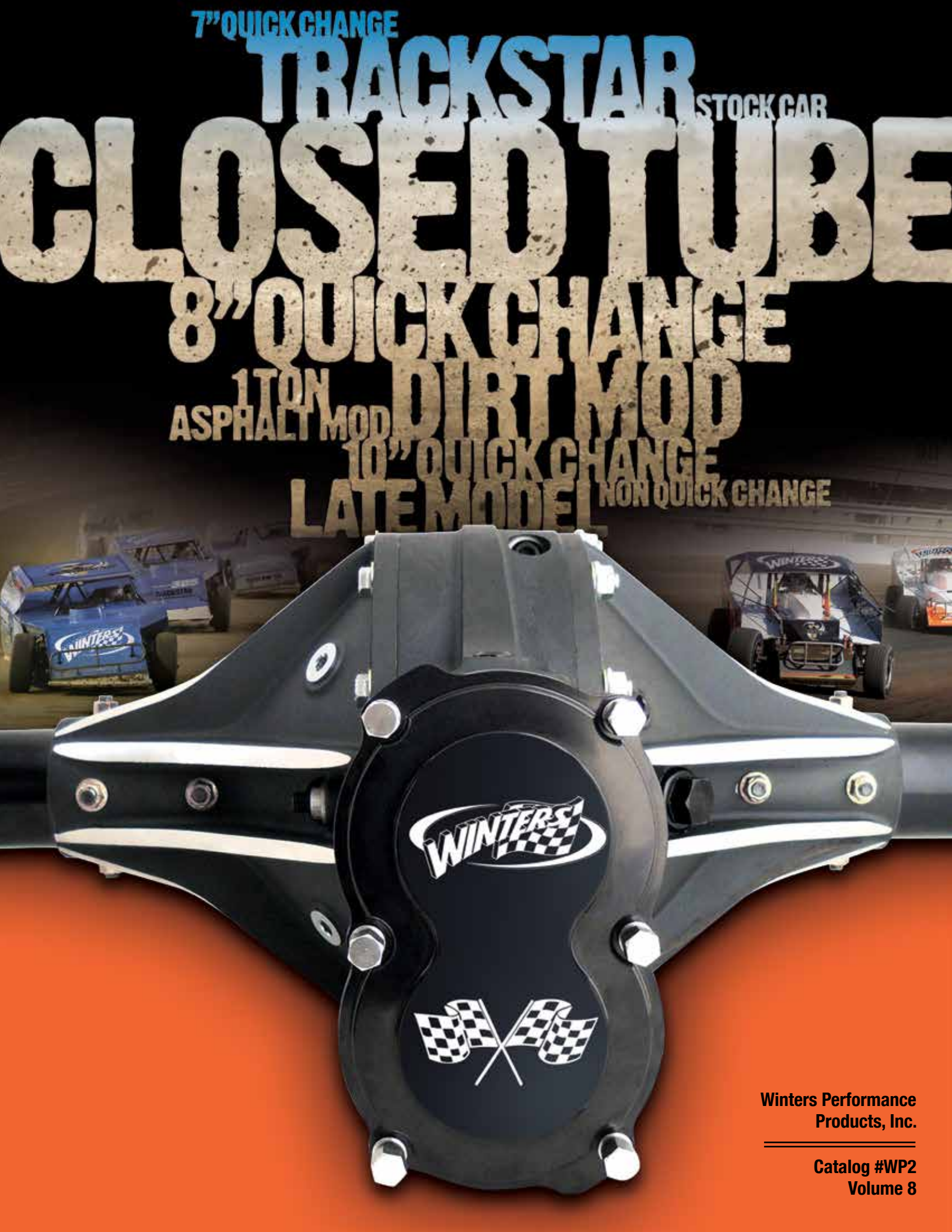


Winters Performance Products, Inc.

Catalog #WP2
Volume 8

There is no substitute for the best!

All Winters Rears are assembled with light pinion preload and light carrier preload. Winters uses the finest ring & pinions money can buy, assuring you optimum efficiency and reliability.

Some of our most popular options include Lightweight Ring Gears, Gundrilled Pinions, REM® Surface Finish, Soft Lip Viton Seals with Light Springs, Gundrilled Lower Shafts, Aluminum Yokes, Angular Contact Pinion and Carrier Bearings, Thermal Heat Dispersant, Lightweight Differentials and Titanium Bolt Kits just to name a few.

Over 50 years of experience has made us what we are today, the best manufacturer of Quick Change Rears in the world! Our track record speaks for itself!
Thanks For Choosing Winters!

EXPORTING WINTERS GOODS CONTRARY TO U.S. EXPORT LAWS IS STRICTLY PROHIBITED.

ORDER POLICY

- Know your customer number.
- Order by part number. Winters will not be responsible for incorrect orders placed by description only.
- Specify shipping instructions - otherwise use our discretion.
- Refused orders will have a $25.00 handling charge and applicable freight charges billed to the customers account.
- Special orders cannot be cancelled after the order is in process.

RETURN POLICY

IMPORTANT: All returns must include a Return Authorization Number (RA#), The issuance of an RA# does not constitute a guarantee of credit or replacement. Credit, refund or replacement will only be issued after an inspection and determination at our discretion. No returns are accepted on special order merchandise, obsolete products, damaged, used or altered merchandise. Returns will not be accepted after six (6) months of date of purchase.

ALL RETURNED MERCHANDISE MUST INCLUDE:

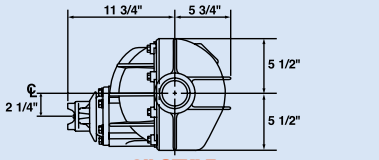
- RA# clearly written on outside of box(s) as well as:
  - Customer number, name and phone number
  - Copy of invoice
  - Written explanation for cause of return
  - Whether the return is for credit, refund or replacement
- Returned merchandise is subject to the following restocking fees (except sellers error):
  - 1 to 90 Days = 15%
  - 91 Days to Six (6) Months = 25%
  - NO RETURNS AFTER SIX (6) MONTHS
- Returns must be freight pre-paid (except sellers error)
- Returned parts must be packaged properly to avoid damage in transit
- SHIPPING DAMAGES MUST BE REPORTED IMMEDIATELY TO YOUR CARRIER
- SHORTAGE CLAIMS MUST BE REPORTED IMMEDIATELY
- SAVE YOUR CARTONS

1580 Trolley Road
York, PA 17408 USA
Hours 8:30 am to 5:30 pm EST Monday - Friday
P 717-764-9844
F 717-764-0617
www.wintersperformance.com

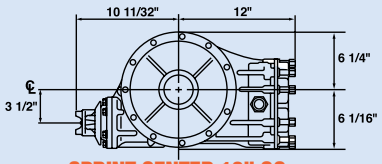
LEGENDARY
High Performance.

Quick Change & 9" Rears

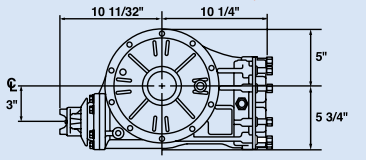
DIAGRAM 1



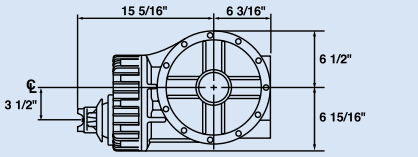
9" STYLE



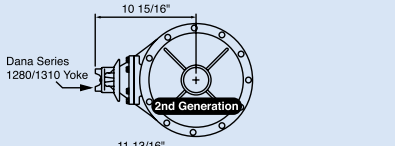
SPRINT CENTER 10" QC

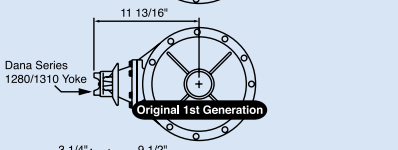


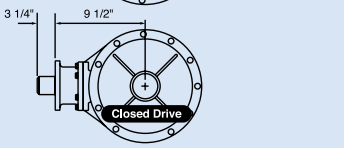
V8 8 3/8" QC



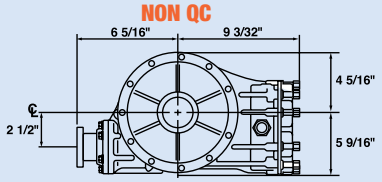
FRONT QC



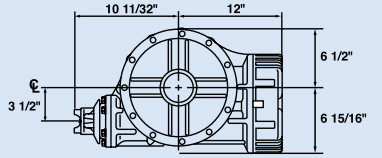




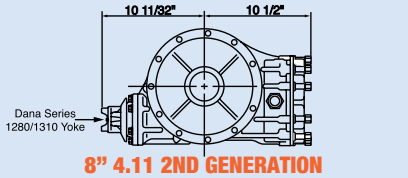
NON QC



7" QC



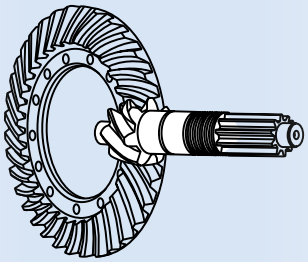
XTREMELINER QC



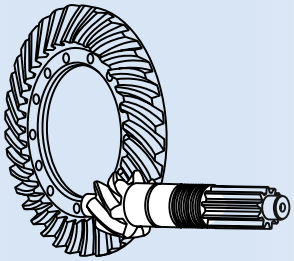
8" 4.11 2ND GENERATION

Winters manufactures a complete line of Quick Change and 9" Rears (see 9" catalog). With two minute gear changes and over 65 ratios to choose from, the Quick Change obviously has differences. All Winters' Quick Changes use spiral bevel ring & pinions It's the most efficient ring & pinion available. Pinion placement of a spiral bevel ring & pinion (see diagram 1) uses less power, is more efficient and runs cooler than hypoid type. Hypoid ring & pinions create more sliding action, increasing heat and power loss. Hypoid ring & pinions consume more power than spiral bevel ring & pinions. However, a 9" does not use quick change gears. Adding quick change gears virtually evens these numbers. For example: If your 5:42 ratio 9" hypoid uses 14hp, your 5:42 ratio Quick Change uses 14hp. When you factor in being able to fine tune your ratio, you can see more advantage. Depending on which Quick Change you use, drive shaft height will vary (see diagram 2). However, compared to a 9" rear, these differences should only enhance drive shaft alignment and increase transmission seal life. Weights are comparable. You can expect 110-120 lbs. in a 9" depending on which housing, third member and spool are installed. A Quick Change complete with quick change gears installed varies between 100-115 lbs. A Quick Change may require more clearance than a 9" (see diagram 2). Winters manufactures several different sized Quick Changes. If clearance is a factor, consider our Front Quick Change. This option allows the use of a Quick Change without chassis modification.

DIAGRAM 2



Spiral Bevel (3 o'clock)



Hypoid (5 o'clock)

Bearing Information

Angular Contact Pinion Bearings (Option 8244S-P)

As an option, Winters builds what is referred to as “low drag rears” by substituting angular contact pinion bearings in place of our standard issue tapered roller pinion bearings. Be aware, angular contact pinion bearings have approximately 20% capacity compared to Winters’ tapered roller bearings. Frequent pinion bearing inspection will be required. Inspect pinion end play when changing Quick Change Gears. Grab top pinion shaft to make sure you have no in and out movement. If movement is present, make sure your pinion locknut is tight. Recheck if pinion end play exceeds .004. Replace pinion bearing pack.

Angular Contact Carrier Bearings (Option 8244S-CT)

Considering flywheel and rotating weight, this assembly is the largest moving object inside a Quick Change (standard aluminum spool w/ 10” ring gear weighs 17 lbs). Angular Contact Carrier (Differential) Bearings have similar capacity limitations. However, since the carrier rotates at much slower revolutions per minute, the bearing life is usually satisfactory in all but the highest horsepowered cars. These bearings need to be inspected every 1/2 season. Disassemble rear and inspect for excessive wear or cracking of the brass ball cage. If present, replace bearings and reassemble.

What are the benefits of using Angular Contact Bearings in your new rear?

Roughly 10 In-Lb “less” torque is required to turn the pinion on a new rear with angular contact bearings as compared to an equivalent new rear with standard issue tapered roller bearings. A new standard tapered roller bearing rear will require 30 In-Lb of torque to turn the pinion when you purchase it from the factory. When you race it one or two races, check it for drag. You will find it to be the same as an angular contact equipped rear, the difference being the roller bearings “break in” much like the rings in your engine cylinder. Because tapered roller bearings are “over kill” strength wise, they will carry load almost forever with out failure. The virtue of angular contact bearings is they have very low drag and are at their peak strength when new. In a rear end application they are being stressed to the max, well beyond their designed load carrying capability for durability. Because of the working environment in the rear end, they are over stressed and at some point will need to be replaced.

The bottom line is that durability and reliability are at stake. You decide which is best for your application.

EDM Ring Gear or Lightweight Ring Gear (Option 8202-Ratio)

Although ring and pinion life is not affected, lightweight ring gears have a tendency to work loose. Inspect every 1/2 season. Disassemble rear assembly and retorque ring gear bolts to 60 Ft-Lbs. If you find any ring gear bolts loose, remove bolts, clean and install using Red Loctite®. Retorque to 60 Ft-Lbs. If you remove ring gear, make sure you mark the ring gear and carrier. Install at the same location.

Tapered Bearing

Low Drag Angular Contact Bearing

WEIGHT SAVING OPTIONS

Compared to Standard 4.86 Rear

OPTION	DESCRIPTION	SAVINGS
8111	4.12 Ring & Pinion	0.65 lbs
8111-8	8” 4.11 Ring & Pinion	3.50 lbs
8111-8S	8” 4.11 Ring & Pinion, Short, 2nd Gen	3.80 lbs
8126	Titanium Thru Bolts	1.35 lbs
8130	Ultralight Aluminum Spool	0.65 lbs
8182B	Aluminum Yoke w/ Stainless Steel Sleeve	1.45 lbs
8184	Gundrilled Lower Shaft	1.30 lbs
8202-412	EDM Ring Gear, 4.12	0.85 lbs
8202-486	EDM Ring Gear, 4.86	0.75 lbs
8202-V8	8” EDM Ring Gear, 4.11	1.25 lbs
8296-412	O.D. 8 7/8” Ring Gear, 4.12	2.10 lbs
8299	Gundrilled Pinion Shaft	0.45 lbs

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PUT HEAVY WEIGHT DIRECTLY ON YOUR WHEELS WITH THESE NEW HUBS

Add Option 9161

"Now Available"

Solid Aluminum And Magnesium Hubs

Aluminum Hub weighs 19 lbs - 8 ounces

Magnesium Hub weighs 13 lbs - 4 ounces

See Pages 62-63 For Hub Part Numbers

Add Option 9161

1 TON ALUMINUM WIDE 5 TUBE

See page 54 for more details.

Stainless Steel Sleeve (P/N 12536) for increased tube life

GOT FLEX?

The larger outside diameter of the One Ton Spindle results in a 50% increase in spindle strength. This drastically reduces spindle flex. The free rolling bearing packs fit all Wide 5 Hub Assemblies.

P/N 12313 Aluminum Wide 5, Specify Length

P/N 12313L Aluminum Wide 5, XL, For Tube Length Longer Than 29”

1 TON Tube Purchased Separately

Option 8140-1TON 1 Piece Aluminum Tubes, 1 Ton

Option 1/2 8140-1TON 1 Piece Aluminum Tubes, 1 Ton, One Side Only

Complete Rear Assembly Option

1 TON BEARINGS & RACES

Note: Bearing & Race are a set and can not be sold separately.

#	DESCRIPTION	P/N	QTY
1	Tapered Roller Bearing & Race, Inner	12305	1
2	Tapered Roller Bearing & Race, Outer	12306	1

Option 9141

1 Ton Bearings & Races Installed in Wide 5 Hub

For complete Hub Assembly 1 Ton Bearings & Seal Upgrade use

P/N 8254-1TON

Wide 5 Hub with 1 Ton Bearings, Races, Seal & Lock Kit

(See Pages 62-69)

WALL THICKNESS COMPARISON

1 TON WIDE 5

P/N 12313 & 12313L

See Page 54

STANDARD 3/4 TON WIDE 5

P/N 6672 & 6672L

Retaining Ring P/N 7610

19.69” End To End

VascoMax® Lower Shaft

P/N 5003-V

Option 8106-V

All 10" REARS

Will now include the Posi Lock Roller Nose Bearing, 1 peice drop in race and ARP Bolts

2-7/8 Wide 5 Hub
Shown with option 9158, Thermal Coating, Lightweight with Hi-lighting
See Page 73

1 TON STEEL WIDE 5 TUBE

P/N 12751
Spindle Sleeve,
1 Ton Spindle, Wide 5

P/N 8434
O'Ring, 1 Ton Spindle Sleeve

P/N 5151-1TON
1 Ton Spindle, Wide 5
1-31/32-16 Threads

P/N 5145-1TON
Steel Wide 5,
Specify Length

Option 9152
1 Piece Steel Tubes, 1 Ton

Option 1/2 9152
1 Piece Steel Tubes,
1 Ton, One Side Only

HEAVY WALL TUBE

Option 9151-200 2" Tube I.D.
(*Adds Approx. 10 lbs. per Side)

Option 9151-175 1-3/4" Tube I.D.
(*Adds Approx. 13 lbs. per Side)

Option 9151-150 1-1/2" Tube I.D.
(*Adds Approx. 16 lbs. per Side)

Available for Wide 5, 2-1/2" GN and 2" GN Tubes.

When ordering, add option number to tube P/N.

Example: 5145-XXX (Specify Tube Length) + 9151-XXX (Specify Tube I.D.)

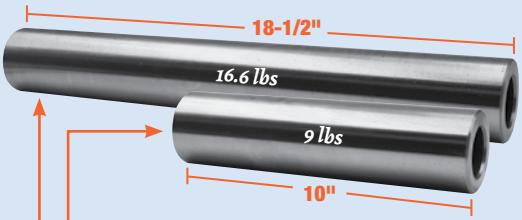
Option 9151-200
2" Tube I.D.
Heavy Wall
Thickness

2.600" Tube I.D.
Standard Wall
Thickness

*Based off 24" end to end axle tube. Weights will vary depending on length of tube & application.

2-7/8" 5 ON 5" STEEL TUBE & SPINDLE ASSEMBLY

P/N 3916



P/N 12767-10
P/N 12767-18-1/2
HEAVY WALL SLIDE IN INSERT
(See Page 61)

ARP® RING GEAR BOLT KIT

KIT P/N 9381
Option 9147 Installed in Rear

COMING SOON!

P/N 9381S
P/N 9147S
Call for details

2-7/8" SPINDLE LINER
For Increased Spindle Strenth
P/N 12786

10" Sprint Center

THE MOST ADVANCED QUICK CHANGE AVAILABLE 10" RING GEAR - 12 BOLT

Often imitated, never duplicated! Winters 10" Sprint Center Quick Change is the best of the best! Factory built with the finest materials inside and out. This go to rear is the standard of the industry. Dollar for dollar, pound for pound, no other rear comes close!

Available options provide combinations to suit many applications. Available in magnesium and aluminum. Order closed tube assembly part number with Option 8133 to specify Sprint Center. Every Sprint Center rear is built with Option 8104 Posi-Lock, Option 8143 Pinion Nose Roller Bearing, and Option 8115 31 Spline Aluminum Spool.

4.86 Ring & Pinion Standard

Shown with Option 8208, 8252B & 8186P

All 10" REARS

Will now include the Posi Lock Roller Nose Bearing, 1 peice drop in race and ARP Bolts

ENHANCED SURFACE FINISH

pem® Process

P/N 8218-RP
(Ring & Pinion)

P/N 8218-BRG
(Bearings)

Looks Like Chrome, But Better!

ASSEMBLIES

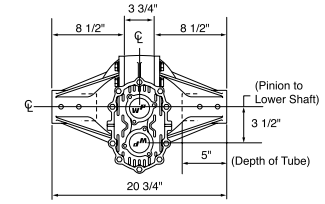
P/N 5063 - 2 1/2" GN
P/N 5260 - Baby Grand
P/N 5270 - Wide 5
P/N 5280* - 8 Bolt
P/N 6960 - Short Wide 5
P/N 6790 - 2" GN
P/N 2810 - Super Speedway

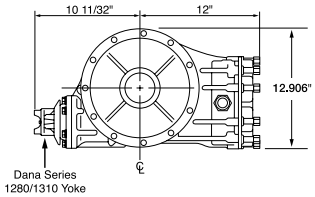
6 BOLT COVER

Option 8133-10-6

*Spindles not included in rear assembly. See page 57. These assemblies are also available with magnesium castings. When ordering a magnesium assembly, add prefix 'K' to the P/N (Example K5270)

DIMENSIONAL DATA





Option 8254-TIM
Timken® Pinion Cup & Cones

The REM® Process, used in finishing gears, increases performance by virtually eliminating gear friction and wear, also reducing oil temperature.

Nothing comes close to being as friction free.

P/N 8218-RP
(Ring & Pinion)

P/N 8218-LS
(Lower Shaft)

P/N 8218-BRG
(Bearings)

OPTIONS

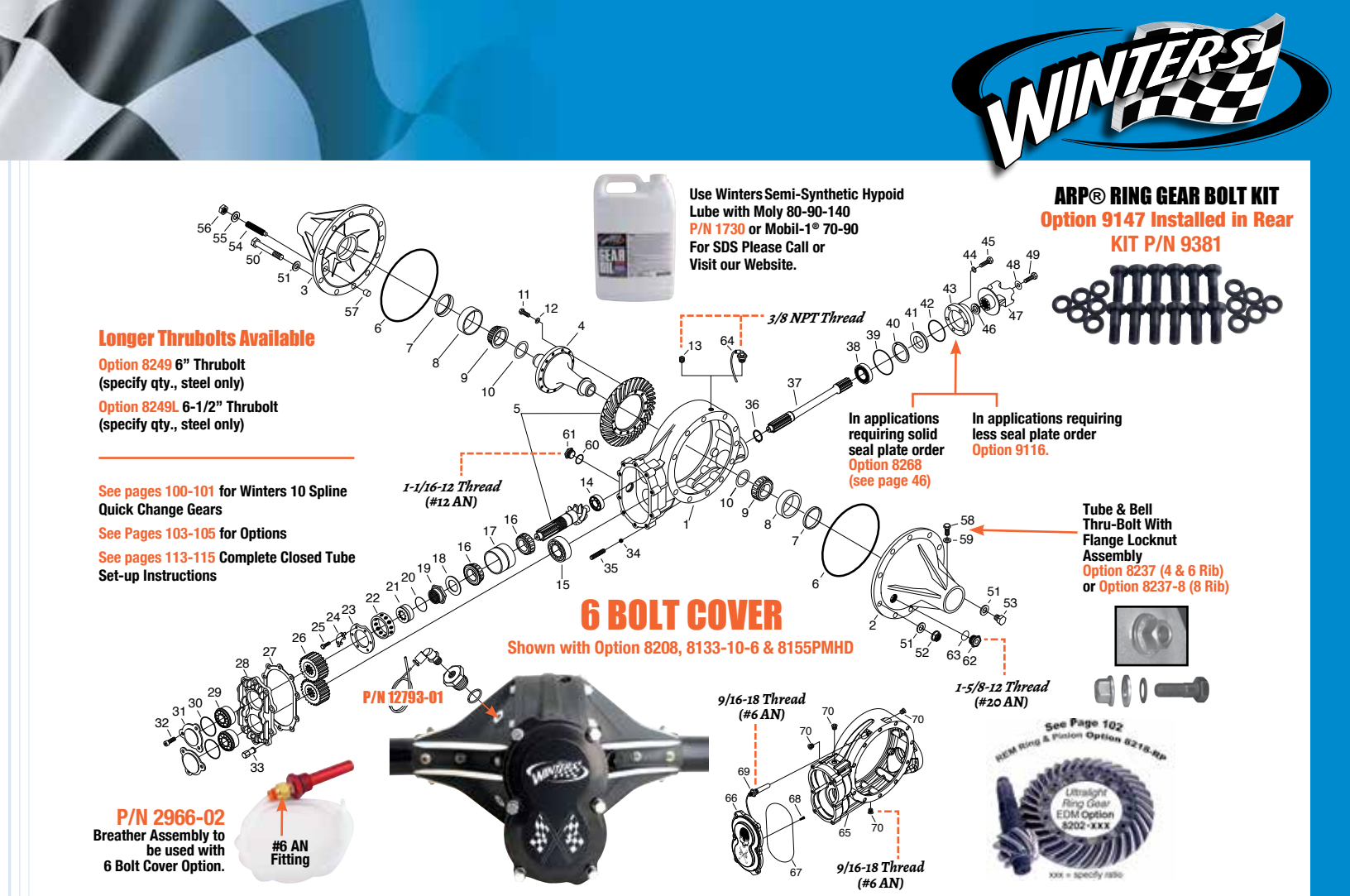
Options highlighted in Yellow are Low Drag Options

Options shown in Blue are Popular Options

CENTER OPTIONS	
8106	**Heat Treated Lower Shaft**
8110	Pump Assembly
8111	4.12 Ring & Pinion
8126	Titanium Thrubolts
8133	**Sprint Center, 10 Bolt**
8133-10-6	**Sprint Center, 6 Bolt**
8137	**Heavy Duty Gear Cover**
8168	Big Bearing Gear Cover
8182B	**Aluminum Drive Yoke**
8184	**HT Gundrilled Lower Shaft**
8199	**Viton Seal, Seal Plate**
81486R	Reverse Rotation 4.86 Ring & Pinion
81457	4.57 Ring & Pinion
8202-XXX	**EDM Ring Gear (specify ratio)**
8208	**Thermal Dispersant Coating**
8218-RP	**REM® Ring & Pinion**
8218-BRG	**REM® Bearing (# is per Bearing)**
8244S-P	**Low Drag Brgs, Pinion, Steel**
8252	Big Brg. Gear Cover w/ Retainers
8252B	Billet BB Gear Cover w/ Retainers
8254-TIM	Bearing, Timken®, Cup & Cones
8264	Gear Cover w/ Pump
8268	Solid Seal Plate
8275	1350 Series Yoke
8298	**Low Drag Carrier Seals**
8299	**Gundrilled Pinion Shaft**
DIFFERENTIAL OPTIONS	
8115	Aluminum Spool (pg. 32)
8121W	Winters Track (pg. 28)
8130	**Ultralight Alum. Spool (pg. 32)**
8171	Aluminum Locker (pg. 29)
8171L	L. W. Alum. Locker (pg. 29)
8183	Aluminum Triple Track (pg. 27)
8231-01	Track Star (pg. 26)
8244S-CT	**Low Drag Brgs, Differential, Steel**
BELL OPTIONS (pgs. 48-49)	
8136P	Lightweight 4 Rib Bell w/ Insp. Plug
8155P	Heavy Duty 8 Rib Bell w/ Insp. Plug
8155PM	Lightweight 8 Rib Bell w/ Insp. Plug
8155PMHD	Heavy Duty 8 Rib Bell, Perm. Mold
8186P	**L. W. 6 Rib Bell w/ Insp. Plug**
8253	6 Rib Bell w/ Insp. Plug (for pump use)
TUBE OPTIONS	
8131	Turned Down Side Tubes
8132*	Alum. 8 Bolt Tubes (Thick Flg/Modified)
8138	Aluminum Tubes w/ Steel Spindles
8140	**One Piece Aluminum Tubes**
8140-1TON	Wide 5 Aluminum Tubes, 1 Ton
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8190*	Thin Flanged 8 Bolt Tubes
8190A*	Thin Flanged Aluminum 8 Bolt Tubes
8201	**Internal Aluminum Tube Seal**
8213	2-1/2" Wide 5 Tubes
8237	Tube & Bell Locknut Assy., 4 & 6 Rib
8237-8	Tube & Bell Locknut Assy., 8 Rib
8239**	2 7/8" Aluminum Tubes
8263**	2 7/8" Steel Tubes
9117	2 7/8" Tubes with Spacers
9119**	2 7/8" Tetrad Tubes

*Spindles not included. See page 57.

**Order Option 9117 (2-7/8" Spacers)



#	DESCRIPTION	P/N	QTY
1*	Aluminum "Sprint" Center Section	5840	1
2*	Aluminum 6 Rib Right Side Bell	1663-01B	1
3*	Aluminum 6 Rib Left Side Bell	1663-02	1
4*	31 Spline Aluminum Spool	5034-11A	1
5*	4.86 Ratio Ring & Pinion, Standard (10 Spline)	5400	1
6*	O'Ring, 8 Rib Bell	7403	2
6*	O'Ring, 4 & 6 Rib Bell	7403T	2
7*	Seal, Side Bell	7205	2
7*	Seal, Side Bell, Viton	7283V	2
8*	Bearing Cup, Side Bell	7310	2
9*	Bearing Cone, Steel Spools & Differentials	7309	2
9*	Bearing Cone, Aluminum Spools & Differentials	7340	2
10	Shim Kit, Aluminum Spools & Differentials	5295	1
11	Ring Gear Bolt, Threaded Ring Gear	7852	12
12	3/8" Belleville Washer, Threaded Ring Gear	7815	12
13	3/8" Recessed Socket Head Pipe Plug	7111B	2
14	Roller Bearing, Pinion Nose	7331	1
15	Shielded Ball Bearing, Lower Shaft	7339	1
16*	Bearing Cone, Pinion Shaft	7308	2
17*	Double Bearing Cup, Pinion Shaft	7307	1
18	Bearing Washer	5055	1
19	Posi-Lock Nut, Pinion Shaft (1-5/16-20 Thread)	6485R	1
20	O'Ring, Posi-Lock	7445	1
21	Posi-Lock Retainer, Pinion Shaft	6484	1
22	Retaining Ring, Pinion	5020	1
23	Retaining Plate, Pinion	6296A	1
24	Lock Tab	2374	3
25	3/8-16 x 1" HHCS, Retaining Plate	7110	6
26	Quick Change Gear Set (Not Included)	8500	1
27*	Gasket, Gear Cover	6729	1
28*	Gear Cover, Less Bearings	6655HD	1
29*	Ball Bearing, Gear Cover	7521	2
30*	O'Ring, Bearing Cap	7406	2
30A*	Back-up Ring, O'Ring	7496	2
31*	Bearing Cap	1667	2
32*	1/4-20 x 1" SHCS	7955	6
33	3/8-16 Aluminum High Nut	7794AS	10
34	5/16" Diameter Ball, Gear Cover	7398	10
35*	3/8-16 x 1 3/4" Stud, Gear Cover	7802	10
36	Retaining Ring, Lower Shaft	7610	1
37*	Standard Lower Shaft	5003-02	1
37*	Option, Gundrilled, Open Drive Lower Shaft	1550	1
38	Front Ball Bearing, Lower Shaft	7390	1

#	DESCRIPTION	P/N	QTY
39	O'Ring, Seal Plate	7413	1
40*	Retaining Ring, Seal Plate, .375" Seal	7653	1
40*	Retaining Ring, Seal Plate, .750" Seal	7652	1
41*	Seal, Seal Plate, .375" Thin Seal	7204	1
41*	Seal, Seal Plate, .750" Thick Seal	7204T	1
41*	Seal, Seal Plate, .750" Viton Seal	7204V	1
42	O'Ring, Seal	7474	1
43	Seal Plate, .750" Seal	5018-01M	1
44	3/8" SAE Flatwasher	7114	6
45*	3/8-16 x 1" HHCS, Seal Plate	7110	6
45*	3/8-16 x 1 1/4" HHCS, Seal Plate	7107	6
46*	Spacer, Drive Yoke (Not used with 3533)	6532	1
47*	Drive Yoke, Steel, 1310 Series	5038	1
47*	Drive Yoke, Steel, Threaded, 1310 Series	5038B	1
47*	Drive Yoke, Billet Aluminum, 1310 Series	5038AS	1
47*	Drive Yoke, Billet Aluminum, 32 Spline	5038AS-32	1
47*	Drive Yoke, Steel with Integral Spacer	3533	1
48	Retaining Washer, Drive Yoke	5037	1
49	3/8-24 x 1" HHCS, Drive Yoke	7109Y	1
50*	7/16-20 x 5 1/2" Thrubolt	7176	10
51	7/16" SAE Flatwasher, Thrubolt	7178	22
52	7/16-20 Flanged Locknut, Thrubolt	7177	10
53	7/16-14 x 1 1/4" HHCS	7117	2
54*	1/2-13 Adjusting Screw, 8 Rib Side Bell	7155	1
54*	1/2-13 Adjusting Screw, 4 & 6 Rib Side Bell	6149	1
55	1/2" SAE Flatwasher, Adjusting Screw	7167	1
56	1/2-13 Jam Nut, Adjusting Screw	7137	1
57	Thrustblock, Adjusting Screw	5010	1
58*	3/8-24 x 1" HHCS, 4 Rib Side Bell	7109	16
58*	3/8-24 x 3/4" HHCS, 6 & 8 Rib Side Bell	7109S	12
59	3/8" SAE Flatwasher	7114	16
60	O'Ring, Inspection Plug	7454	1
61	Inspection Plug	3643	1
62	Inspection Plug, Side Bell	3261	1
63	O'Ring, Inspection Plug, Side Bell	7453	1
64	Top Mount Breather	2966T	1
	6 BOLT COVER		
65	Magnesium Center Section	K12088	1
66	Billet Aluminum 6 Bolt Gear Cover	12175	1
67*	O'Ring, Billet Aluminum 6 Bolt Gear Cover	8447	1
67*	Gasket, Billet Aluminum 6 Bolt Gear Cover	12185	1
68	#10-24 x 1/2" FHCS Bearing Retainer	12417	2
69	Breather Assembly (Sold Separately)	2966-02	1
70	Steel Level Plug with O'Ring	7874S	4

*Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

8" 4.11 Ring & Pinion In A Full Size 10" Housing

HARNESS THE POWER OF YOUR CRATE ENGINE

8" RING GEAR - 12 BOLT

LIGHT YEARS AHEAD OF THE COMPETITION!

Want Real Low Drag? Stick This In Your Car!

Although appearances may be deceiving, this full size quick change uses a New 8" Ring Gear that is 20% smaller and 20% lighter, reducing flywheel weight and unsprung weight. From a performance standpoint, this 8" Ring Gear will accelerate and de-accelerate quicker than a 10" Ring Gear. All cars will benefit, although lower horsepower cars can expect more gain than higher horsepower cars. All Low Drag Bearing & Seal Options Available!

ASSEMBLIES

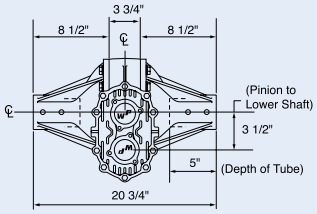
P/N 5063 - 2-1/2" GN
P/N 5260 - Baby Grand
P/N 2810 - Super Speedway
P/N 5270 - Wide 5
P/N 5280* - 8 Bolt
P/N 6960 - Short Wide 5
P/N 6790 - 2" GN

To order any Full Size 10" Quick Change or Center Kit with an 8" Ring Gear add the following Options:

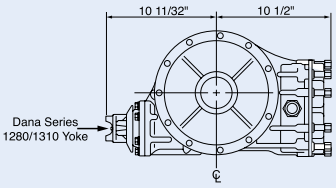
2ND GENERATION
Option 8111-8S
4.11 Ring & Pinion Short
Option 8133-8S
Sprint Center Short

6 BOLT COVER
Option 8111-8S
4.11 Ring & Pinion Short
Option 8133-8S-6
Sprint Center Short

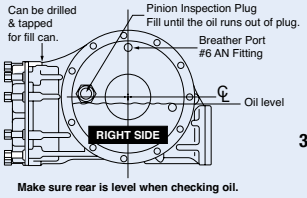
DIMENSIONAL DATA



2ND GENERATION



IMPORTANT



Make sure rear is level when checking oil.

PROPER OIL LEVEL IS CRITICAL

Always maintain oil level at 1/2" (3.5 qt, 3.31 liters) below axle center line.

Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140 P/N 1730 or Mobil-1® 70-90

OPTIONS

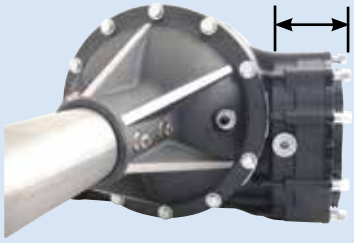
Options highlighted in Yellow are Low Drag Options

Options shown in Blue are Popular Options

	CENTER OPTIONS
8106	Heat Treated Lower Shaft
8111-8S	4.12 Ring & Pinion Short
8126	Titanium Thrubolts
8133-8S	Sprint Center Short, 10 Bolt
8133-8S-6	Sprint Center Short, 6 Bolt
8137	Heavy Duty Gear Cover
8168	Big Bearing Gear Cover
8182B	Aluminum Drive Yoke
8184	HT Gundrilled Lower Shaft
8199	Viton Seal, Seal Plate
8202-V8	EDM Ring Gear (specify ratio)
8208	Thermal Dispersant Coating
8218-RP	REM® Ring & Pinion
8218-BRG	REM® Bearing (# is per Bearing)
8252	Big Brg. Gear Cover w/ Retainers
8252B	Billet BB Gear Cover w/ Retainers
8264	Gear Cover w/ Pump
8268	Solid Seal Plate
8275	1350 Series Yoke
8298	Low Drag Carrier Seals
8299	Gundrilled Pinion Shaft
	DIFFERENTIAL OPTIONS
8115	Aluminum Spool (pg. 32)
8121W	Winters Track (pg. 28)
8130	Ultralight Alum. Spool (pg. 32)
8171	Aluminum Locker (pg. 29)
8171L	L. W. Alum. Locker (pg. 29)
8183	Aluminum Triple Track (pg. 27)
8231-01	Track Star (pg. 26)
8244S-CT	Low Drag Brgs, Differential, Steel
	BELL OPTIONS (pgs. 48-49)
8136P	Lightweight 4 Rib Bell w/ Insp. Plug
8155P	Heavy Duty 8 Rib Bell w/ Insp. Plug
8155PM	Lightweight 8 Rib Bell w/ Insp. Plug
8155PMHD	Heavy Duty 8 Rib Bell, Perm. Mold
8186P	L. W. 6 Rib Bell w/ Insp. Plug
8253	6 Rib Bell w/ Insp. Plug (for pump use)
	TUBE OPTIONS
8131	Turned Down Side Tubes
8132*	Alum. 8 Bolt Tubes (Thick Flg/Modified)
8138	Aluminum Tubes w/ Steel Spindles
8140	One Piece Aluminum Tubes
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8190*	Thin Flanged 8 Bolt Tubes
8190A*	Thin Flanged Aluminum 8 Bolt Tubes
8201	Internal Aluminum Tube Seal
8213	2-1/2" Wide 5 Tubes
8237	Tube & Bell Locknut Assy., 4 & 6 Rib
8237-8	Tube & Bell Locknut Assy., 8 Rib
8239**	2-7/8" Aluminum Tubes
8263**	2-7/8" Steel Tubes
9117	2-7/8" Tubes with Spacers
9119**	2-7/8" Tetrad Tubes
9125	One Piece Aluminum Tubes, 1 Ton (pg. 54)

*Spindles not included. See page 57.

**Order Option 9117 (2-7/8" Spacers)



Ultralight Ring Gear
EDM Option 8202-V8
Weighs 5.75 lbs

ARP® RING GEAR BOLT KIT
Option 9147S Installed in Rear
KIT P/N 9381S

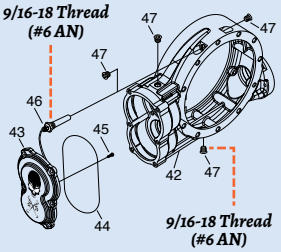
2ND GENERATION

SHORT GEAR CAVITY INCREASES FUEL CELL CLEARANCE 1-1/2"

Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140
P/N 1730 or Mobil-1® 70-90
For SDS Please Call or Visit our Website.

6 BOLT COVER

Shown with Option 8208, 8133-8S-6 & 8155PMHD



P/N 2966-02
Breather Assembly to be used with 6 Bolt Cover Option.

Option 8299
Gundrilled Pinion Shaft

P/N 5034-11UL
Option 8130
Ultralight Aluminum Spool

6 BOLT CENTER WITH PINION BEARING SUPPORT

Option 9139

The new Full Size Rear with 8" Ring Gear is no longer just for limited horsepower cars! The addition of a Pinion Bearing Support takes this rear to a whole new level. This dedicated Dirt & Asphalt Rear is only available for use with a 31 Spline A luminum Spool. The 6 Bolt Billet Cover is a standard option on this new model. With the exception of being able to use a Differential in this rear, all current options are available.
Add option 9145 for No Logo Cover.

NOTE: Aluminum spool shown is not included in center section kit.

P/N 6170 Aluminum
P/N K6170 Magnesium

The center kit retrofits into all existing full size quick change rears. Use your tubes, side bells and quick change gears and replace your 10" ring gear with our new 8" ring gear, which bolts to your carrier (spool, Trackstar, Locker, etc.). See page 41 for more details.

#	DESCRIPTION	P/N	QTY
1	Aluminum "Sprint" Center Section	4949	1
2*	4.11 Ratio Ring & Pinion, Standard (10 Spline)	65411S	1
3	3/8" Recessed Socket Head Pipe Plug	7111B	2
4	Shielded Ball Bearing, Lower Shaft	7339	1
5	Bearing Cone, Pinion Shaft	7308	1
5A	Bearing Cone, Pinion Shaft	7527	1
6	Double Bearing Cup, Pinion Shaft	4871-01	1
7	Bearing Race, Pinion	8622	1
8	Bearing Washer	5055	1
9	Posi-Lock Nut, Pinion Shaft (1-5/16-20-2B Thread)	1806	1
10	O'Ring, Posi-Lock	7455	1
11	Posi-Lock Retainer, Pinion Shaft	1807	1
12	Lock Tab	12042	1
13	Bearing Retainer	12026	1
14	Lock Tab	12043	1
15	3/8-16 x 1 1/4" HHCS	7107	6
16	Quick Change Gear Set (Not Included)	8500	1
17	1/4-20 x 1/2" BHCS	8087	6
18	Bearing Retainer	3258	1
19	Ball Bearing, Gear Cover	8659	2
20	O'Ring, Gear Cover	8478	1
21	Billet Aluminum Gear Cover	4873	1
22	3/8-16 Aluminum High Nut	7794AS	10
23*	3/8-16 x 1-3/4" Stud, Gear Cover	7802	10
24	5/16" Diameter Steel Ball, Gear Cover	7398	10
25	Retaining Ring, Lower Shaft	7610	1
26	Standard Lower Shaft	4951	1
27	Front Ball Bearing, Lower Shaft	7390	1
28	O'Ring, Seal Plate	7413	1

#	DESCRIPTION	P/N	QTY
29*	Retaining Ring, Seal Plate, .375" Seal	7653	1
29*	Retaining Ring, Seal Plate, .750" Seal	7652	1
30*	Seal, Seal Plate, .375" Thin Seal	7204	1
30*	Seal, Seal Plate, .750" Thick Seal	7204T	1
30*	Seal, Seal Plate, .750" Viton Seal	7204V	1
31	O'Ring, Seal	7474	1
32	Seal Plate, .750" Seal	5018-01ML	1
33	3/8" SAE Flatwasher	7114	6
34*	3/8-16 x 1" HHCS, Seal Plate	7110	6
34*	3/8-16 x 1-1/4" HHCS, Seal Plate	7107	6
35*	Spacer, Drive Yoke (Not Used with 3533)	6532	1
36*	Drive Yoke, Steel, 1310 Series	5038	1
36*	Drive Yoke, Steel, Threaded, 1310 Series	5038B	1
36*	Drive Yoke, Billet Aluminum, 1310 Series	5038AS	1
36*	Drive Yoke, Billet Aluminum, 32 Spline	5038AS-32	1
36*	Drive Yoke, Steel with Integral Spacer	3533	1
37	Retaining Washer, Drive Yoke	5037	1
38	3/8-24 x 1" HHCS, Drive Yoke	7109Y	1
39	Inspection Plug	3643	1
40	O'Ring, Inspection Plug	7454	1
41	Top Mount Breather	2966T	1
	6 BOLT COVER		
42	Magnesium Center Section	K12068	1
43	Billet Aluminum 6 Bolt Gear Cover	12070	1
44	O'Ring, Billet Aluminum 6 Bolt Gear Cover	8446	1
45	#10-24 x 1/2" FHCS, Bearing Retainer	12417	2
46	Breather Assembly (Sold Separately)	2966-02	1
47	Steel Level Plug with O'Ring	7874S	4

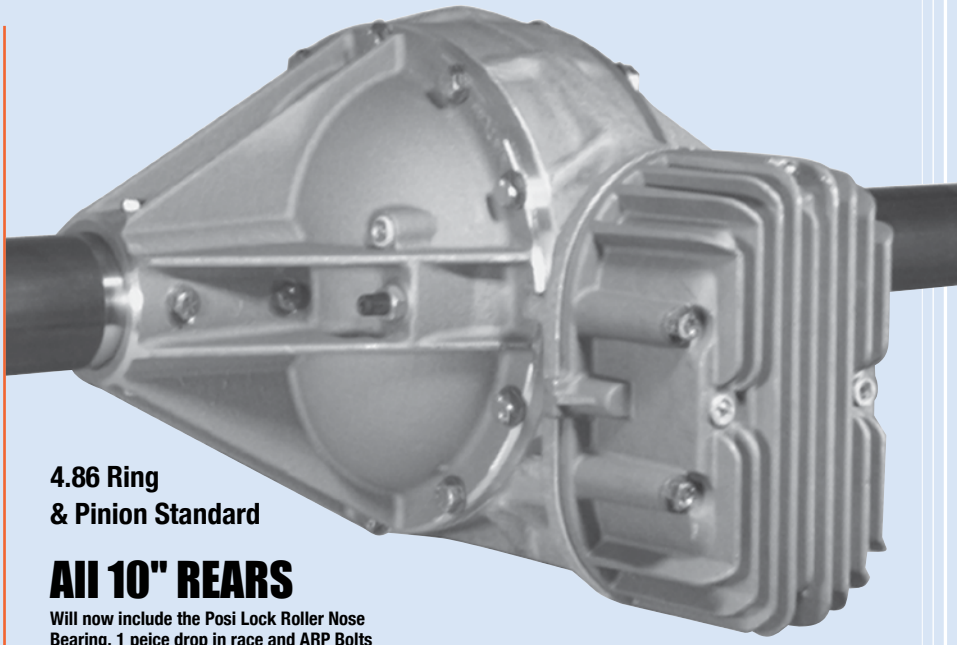
*Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

FIRST RATE QUALITY & RELIABILITY

10" RING GEAR - 12 BOLT

Winters Heavy Duty 10" Quick Change assembly consists of Heavy Duty 8 Rib Side Bells and the Finned "Deep" Style Gear Cover. The Heavy Duty Center Section is standard in this package.

Every Heavy Duty rear is built with Option 8104 Posi-Lock, Option 8143 Pinion Nose Roller Bearing, and Option 8115 31 Spline Aluminum Spool unless otherwise specified.



4.86 Ring & Pinion Standard

All 10" REARS

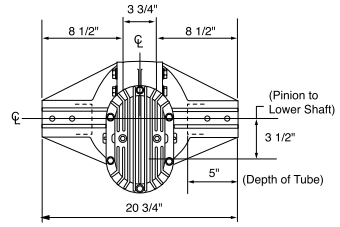
Will now include the Posi Lock Roller Nose Bearing, 1 peice drop in race and ARP Bolts

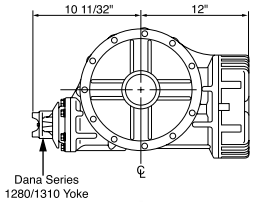
ASSEMBLIES

P/N 5063 - 2-1/2" GN **P/N 5270 - Wide 5** **P/N 6960 - Short Wide 5** **P/N 2810 - Super Speedway**
P/N 5260 - Baby Grand **P/N 5280* - 8 Bolt** **P/N 6790 - 2" GN**

*Spindles not included in rear assembly. See page 57. •These assemblies are also available with magnesium castings.
When ordering a magnesium assembly, add prefix 'K' to the P/N (Example K6790)

DIMENSIONAL DATA





Option 8254-TIM
Timken® Pinion Cup & Cones

OPTIONS

Options highlighted in Yellow are Low Drag Options

Options shown in Blue are Popular Options

CENTER OPTIONS	
8106	Heat Treated Lower Shaft
8110	Pump Assembly
8111	4.12 Ring & Pinion
8126	Titanium Thrubolts
8182B	Aluminum Drive Yoke
8184	HT Gundrilled Lower Shaft
8199	Viton Seal, Seal Plate
81486	Spread Bearing 4.86 Ring & Pinion
81486R	Reverse Rotation 4.86 Ring & Pinion
81457	4.57 Ring & Pinion
8202-XXX	EDM Ring Gear (specify ratio)
8208	Thermal Dispersant Coating
8218-RP	REM® Ring & Pinion
8218-BRG	REM® Bearing (# is per Bearing)
8225	Gear Cover w/ Int. Brg. Retainers
8244S-P	Low Drag Brgs, Pinion, Steel
8254-TIM	Bearing, Timken®, Cup & Cones
8268	Solid Seal Plate
8275	1350 Series Yoke
8298	Low Drag Carrier Seals
8299	Gundrilled Pinion Shaft
DIFFERENTIAL OPTIONS	
8115	Aluminum Spool (pg. 32)
8121W	Winters Track (pg. 28)
8130	Ultralight Alum. Spool (pg. 32)
8171	Aluminum Locker (pg. 29)

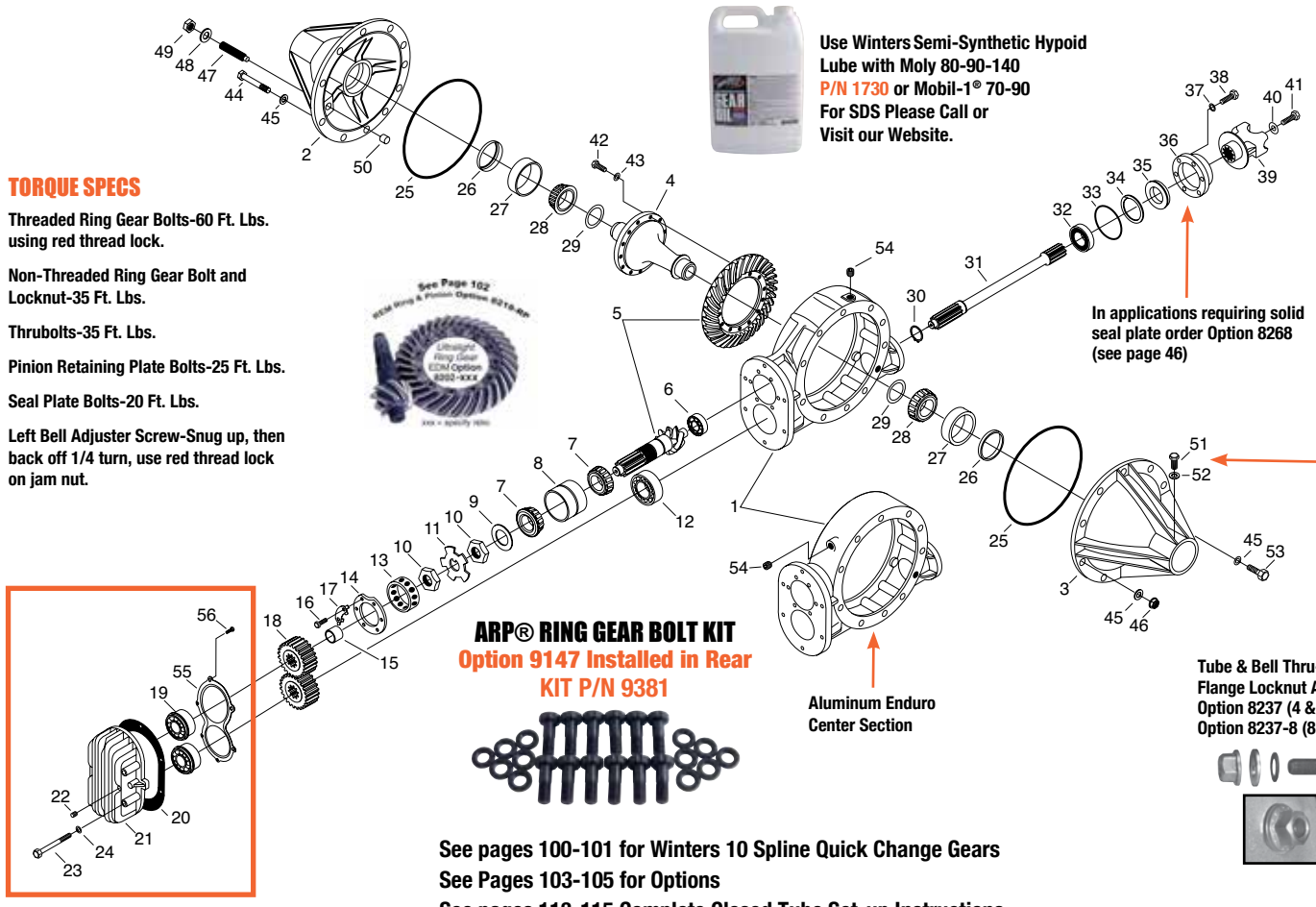
*Spindles not included. See page 57.

8171L	L. W. Alum. Locker (pg. 29)
8183	Aluminum Triple Track (pg. 27)
8231-01	Track Star (pg. 26)
8244S-CT	Low Drag Brgs, Differential, Steel
BELL OPTIONS (pgs. 48-49)	
8136P	Lightweight 4 Rib Bell w/ Insp. Plug
8155P	Heavy Duty 8 Rib Bell w/ Insp. Plug
8155PM	Lightweight 8 Rib Bell w/ Insp. Plug
8155PMHD	Heavy Duty 8 Rib Bell, Perm. Mold
8186P	L. W. 6 Rib Bell w/ Insp. Plug
TUBE OPTIONS	
8131	Turned Down Side Tubes
8132*	Alum. 8 Bolt Tubes (Thick Flg/Modified)
8138	Aluminum Tubes w/ Steel Spindles
8140	One Piece Aluminum Tubes
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8190*	Thin Flanged 8 Bolt Tubes
8190A*	Thin Flanged Aluminum 8 Bolt Tubes
8201	Internal Aluminum Tube Seal
8213	2-1/2" Wide 5 Tubes
8237	Tube & Bell Locknut Assy., 4 & 6 Rib
8237-8	Tube & Bell Locknut Assy., 8 Rib
8239**	2-7/8" Aluminum Tubes
8263**	2-7/8" Steel Tubes
9117	2-7/8" Tubes with Spacers
9119**	2-7/8" Tetrad Tubes
9125	One Piece Aluminum Tubes, 1 Ton (pg. 54)

**Order Option 9117 (2-7/8" Spacers)

Pump Assembly
P/N 5305 • Option 8110
(See page 32)

In applications requiring solid seal plate order Option 8268 (see page 46).
In applications requiring less seal plate order Option 9116.



TORQUE SPECS

Threaded Ring Gear Bolts-60 Ft. Lbs. using red thread lock.

Non-Threaded Ring Gear Bolt and Locknut-35 Ft. Lbs.

Thrubolts-35 Ft. Lbs.

Pinion Retaining Plate Bolts-25 Ft. Lbs.

Seal Plate Bolts-20 Ft. Lbs.

Left Bell Adjuster Screw-Snug up, then back off 1/4 turn, use red thread lock on jam nut.

Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140 P/N 1730 or Mobil-1® 70-90 For SDS Please Call or Visit our Website.

In applications requiring solid seal plate order Option 8268 (see page 46)

ARP® RING GEAR BOLT KIT
Option 9147 Installed in Rear
KIT P/N 9381

Aluminum Enduro Center Section

Tube & Bell Thru-Bolt With Flange Locknut Assembly Option 8237 (4 & 6 Rib) or Option 8237-8 (8 Rib)

See pages 100-101 for Winters 10 Spline Quick Change Gears
See Pages 103-105 for Options
See pages 113-115 Complete Closed Tube Set-up Instructions

#	DESCRIPTION	P/N	QTY
1*	Aluminum Center Section	5012	1
1*	Aluminum Enduro Center Section	5012M	1
2*	Aluminum Heavy Duty 8 Rib Left Side Bell	5016-02	1
3*	Aluminum Heavy Duty 8 Rib Right Side Bell	5016-03	1
4*	31 Spline Aluminum Spool	5034-11A	1
5*	4.86 Ratio Ring & Pinion, Standard (10 Spline)	5400	1
6*	Ball Bearing, Pinion Nose	7312	1
7*	Bearing Cone, Pinion Shaft	7308	2
8*	Double Bearing Cup, Pinion Shaft	7307	1
9	Bearing Washer	5055	1
10	Jam Nut, Pinion Shaft (1-5/16-20-2B Thread)	5032R	2
11	Bearing Lockwasher	5056	1
12	Shielded Ball Bearing, Lower Shaft	7339	1
13	Retaining Ring, Pinion	5020	1
14	Retaining Plate, Pinion	6296A	1
15	Quick Change Gear Spacer	5021	1
16	3/8-16 x 1" HHCS, Retainer Plate	7110	6
17	Lock Tab	2374	3
18	Quick Change Gear Set (Not Included)	8500	1
19*	Ball Bearing, Gear Cover	8659	2
20	Gasket, Gear Cover	1764	1
21*	Aluminum Gear Cover, Less Bearings	5017HD	1
22	3/8" SHCS Pipe Plug	7111AL	4
23*	3/8-16 x 4" HHCS, Gear Cover	7108	6
24	3/8" Flatwasher	7114	6
25*	O'Ring, Side Bell	7403	2
26	Seal, Side Bell	7205	2
27*	Bearing Cup, Side Bell	7310	2
28*	Bearing Cone, Steel Spools & Differentials	7309	2
28*	Bearing Cone, Aluminum Spools & Differentials	7340	2
29	Shim Kit, Aluminum Spools & Differentials	5295	2
30	Retaining Ring, Lower Shaft	7610	1
31*	Standard Lower Shaft	5003-02	1

#	DESCRIPTION	P/N	QTY
31*	Gundrilled Lower Shaft	1550	1
32	Double Row Ball Bearing, Lower Shaft	7311	1
33	O'Ring, Seal Plate	7413	1
34*	Retaining Ring, Seal Plate, .375" Seal	7653	1
34*	Retaining Ring, Seal Plate, .750" Seal	7652	1
35*	Seal, Seal Plate, .375" Thin Seal	7204	1
35*	Seal, Seal Plate, .750" Thick Seal	7204T	1
35*	Seal, Seal Plate, .750" Viton Seal	7204V	1
36*	Seal Plate, .750" Seal	5018-01ML	1
37	3/8" SAE Flatwasher	7114	6
38*	3/8-16 x 1" HHCS, Seal Plate	7110	6
38*	3/8-16 x 1 1/4" HHCS, Seal Plate	7107	6
39*	Drive Yoke, Steel, 1310 Series	5038	1
39*	Drive Yoke, Steel, Threaded, 1310 Series	5038B	1
39*	Drive Yoke, Aluminum, 1310 Series	5038AS	1
39*	Drive Yoke, Billet Aluminum, 32 Spline	5038AS-32	1
40	Retaining Washer, Drive Yoke	5037	1
41	3/8-24 x 1" HHCS, Drive Yoke	7109Y	1
42	Ring Gear Bolt, Threaded Ring Gear	7852	12
43	3/8" Bellville Washer	7815	12
44*	7/16-20 x 5 1/2" Thrubolt	7176	10
45	7/16" SAE Flatwasher	7178	22
46	7/16-20 Flanged Locknut	7177	10
47	1/2-13 Adjusting Screw	7155	1
48	1/2" SAE Flatwasher	7167	1
49	1/2-13 Jam Nut, Adjusting Screw	7137	1
50	Thrustblock, Adjusting Screw	5010	1
51	3/8-24 x 1" HHCS, Side Bell	7109	16
52	3/8" SAE Flatwasher	7114	16
53	7/16-14 x 1 1/4" HHCS	7117	2
54	3/8" Hex Head Pipe Plug	7111	2
55	Bearing Retainer	3258	1
56	1/4-20 x 1/2" BHCS	8087	6

***Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.**

5 On 5" & 5 On 4-3/4" Dirt Modified Quick Change

4.86 Ring & Pinion Standard

Complete Assembly Weighs 97 lbs. 3.2 oz.

10" RING GEAR - 12 BOLT

Pro-Mod Assembly includes 4.86 Ring & Pinion, standard, 8104 Aluminum Pinion Posi-Lock Assembly, 8130 Ultralight 31 Spline Aluminum Spool, 8133-10-6 Sprint Center, 6 Bolt, 8143 Pinion Nose Roller Bearing, 8186P 6 Rib Bell with Inspection Plug, 8199 Seal Plate, Low Drag Viton, 8208 Thermal Dispersant Coating, 8218-BRG Low Drag REM® Bearings, and 8298 Low Drag Viton Seals.
Specify tread width and offset when ordering. Add Option 9145 for Bare, No Logo O'Ringed Billet Gear Cover.

TO COMPLETE YOUR ASSEMBLY ADD:
*(1) 8270: 5 x 5" Hubs, Rotors & Solid Axles
*(1) 8270-4750: 5 x 4-3/4" Hubs, Rotors & Solid Axles
*(2) 9120: Platinum Series Upgrade Only
(1) 8270-2875: 2-7/8" Hubs, Available in Black Only Rotors & Solid Axles
(1) 8228: Gundrilled Axle Upgrade
See Page 60 & 61 for more information

PRO-MOD 10", 6 BOLT COVER ASSEMBLY

P/N 5063-PROMOD - Aluminum
P/N K5063-PROMOD - Magnesium

•These assemblies are also available with magnesium castings. When ordering a magnesium assembly, add prefix 'K' to the P/N (Example K6790)

Assembly shown with Option 8155PMHD Heavy Duty Permanent Mold 8 Rib Side Bells.

ADDITIONAL WEIGHT SAVING OPTIONS

Compared to a Standard 4.86 Rear

OPTION	DESCRIPTION	SAVINGS
8111	4.12 Ring & Pinion	0.65 lbs.
8130	Ultralight Aluminum Spool	0.65 lbs.
8182B	Aluminum Yoke w/ Stainless Steel Sleeve	1.45 lbs.
8184	Gundrilled Lower Shaft	1.30 lbs.
8263-55	2-7/8" Tubes/Hubs, 5 on 5"	5.00 lbs./Rear
8265	0.156" Wall Tubing	4.00 lbs./Rear
8299	Gundrilled Pinion Shaft	0.45 lbs.
9143	Scalloped 5 on 5" Drive Flange	1.00 lb.

MODIFIED 10", 10 BOLT COVER ASSEMBLY

P/N 5063-MOD - Aluminum
P/N K5063-MOD - Magnesium

*Spindles not included in rear assembly. See page 57.
•These assemblies are also available with magnesium castings. When ordering a magnesium assembly, add prefix 'K' to the P/N (Example K6790)

10" RING GEAR - 12 BOLT

Mod Assembly includes 4.86 Ring & Pinion, standard, 8104 Aluminum Pinion Posi-Lock Assembly, 8115 31 Spline Aluminum Spool, 8133 Sprint Center, 10 Bolt, 8143 Pinion Nose Roller Bearing and 8186P 6 Rib Bell with Inspection Plug. Specify tread width and offset when ordering.

All 10" REARS

Will now include the Posi Lock Roller Nose Bearing, 1 peice drop in race and ARP Bolts

4.86 Ring & Pinion Standard

Complete Assembly Weighs 110 lbs. 6.4 oz.

TO COMPLETE YOUR ASSEMBLY ADD:
*(1) 8270: 5 x 5" Hubs, Rotors & Solid Axles
*(1) 8270-4750: 5 x 4-3/4" Hubs, Rotors & Solid Axles
*(2) 9120: Platinum Series Upgrade Only
(1) 8270-2875: 2-7/8" Hubs, Available in Black Only Rotors & Solid Axles
(1) 8228: Gundrilled Axle Upgrade
See Page 60 & 61 for more information

10” STANDARD PINION BEARING, 12 BOLT

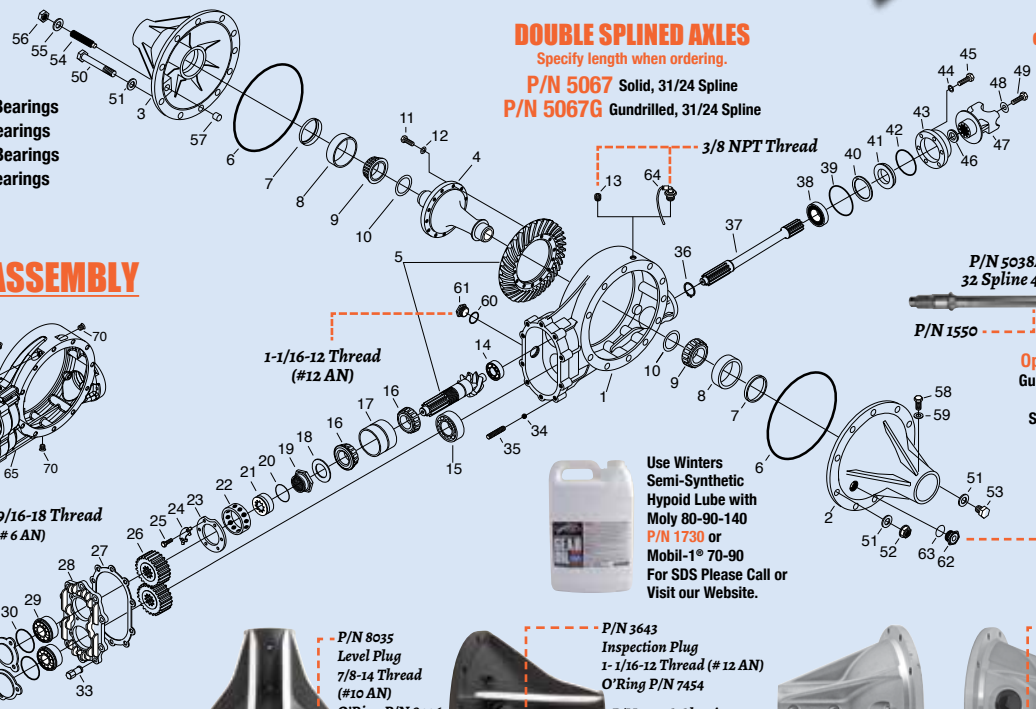
P/N 5400 4.86 Ring & Pinion w/o Bearings
P/N 5401 4.86 Ring & Pinion w/ Bearings
P/N 5714 4.12 Ring & Pinion w/o Bearings
P/N 5715 4.12 Ring & Pinion w/ Bearings
Option 8104 Pinion Posi-Lock Nut
Option 8143 Roller Nose Bearing

DOUBLE SPLINED AXLES

Specify length when ordering.
P/N 5067 Solid, 31/24 Spline
P/N 5067G Gundrilled, 31/24 Spline

ARP® RING GEAR BOLT KIT
Option 9147 Installed in Rear
KIT P/N 9381

PRO-MOD ASSEMBLY



P/N 5038AS-32
32 Spline 45° P.A.
P/N 1550

Option 8184 & 8182B
Gundrilled Lower Shaft & Aluminum Yoke w/ Stainless Steel Sleeve

Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140 **P/N 1730** or Mobil-1® 70-90 For SDS Please Call or Visit our Website.

Option 8299
Gundrilled Pinion Shaft

P/N 5034-11UL
Option 8130
Ultralight Aluminum Spool

P/N 8035
Level Plug
7/8-14 Thread
(#10 AN)
O'Ring P/N 8406

P/N 12080M
Heavy Duty Permanent Mold 8 Rib Left Side Bell
Option 8155PMHD

P/N 3643
Inspection Plug
1- 1/16-12 Thread (# 12 AN)
O'Ring P/N 7454
P/N 7874A Aluminum
P/N 7874S Steel
Level Plug
9/16-18 Thread
(#6 AN)
O'Ring P/N 8405

P/N 12083M
Heavy Duty Permanent Mold 8 Rib Right Side Bell
Option 8155PMHD

P/N 1663-02
6 Rib Left Side Bell
Option 8186P

P/N 3261
Inspection Plug
1-5/8-12 Thread
(#20 AN)
O'Ring P/N 7453

P/N 1663-01B
6 Rib Right Side Bell
Option 8186P

#	DESCRIPTION	P/N	QTY
1*	Aluminum “Sprint” Center Section	5840	1
2*	Aluminum 6 Rib Right Side Bell	1663-01B	1
3*	Aluminum 6 Rib Left Side Bell	1663-02	1
4*	31 Spline Aluminum Spool	5034-11A	1
5*	4.86 Ratio Ring & Pinion, Standard (10 Spline)	5400	1
6*	O’Ring, 8 Rib Bell	7403	2
6*	O’Ring, 4 & 6 Rib Bell	7403T	2
7*	Seal, Side Bell	7205	2
7*	Seal, Side Bell, Viton	7283V	2
8*	Bearing Cup, Side Bell	7310	2
9*	Bearing Cone, Steel Spools & Differentials	7309	2
9*	Bearing Cone, Aluminum Spools & Differentials	7340	2
10	Shim Kit, Aluminum Spools & Differentials	5295	1
11	Ring Gear Bolt, Threaded Ring Gear	7852	12
12	3/8” Belleville Washer, Threaded Ring Gear	7815	12
13	3/8” Recessed Socket Head Pipe Plug	7111B	2
14	Roller Bearing, Pinion Nose	7331	1
15	Shielded Ball Bearing, Lower Shaft	7339	1
16*	Bearing Cone, Pinion Shaft	7308	2
17*	Double Bearing Cup, Pinion Shaft	7307	1
18	Bearing Washer	5055	1
19	Posi-Lock Nut, Pinion Shaft (1-5/16-20-2B Thread)	6485R	1
20	O’Ring, Posi-Lock	7445	1
21	Posi-Lock Retainer, Pinion Shaft	6484	1
22	Retaining Ring, Pinion	5020	1
23	Retaining Plate, Pinion	6296A	1
24	Lock Tab	2374	3
25	3/8-16 x 1” HHCS, Retaining Plate	7110	6
26	Quick Change Gear Set (Not Included)	8500	1
27*	Gasket, Gear Cover	6729	1
28*	Gear Cover, Less Bearings	6655	1
29*	Ball Bearing, Gear Cover	7524	2
30*	O’Ring, Bearing Cap	7476	2
31*	Bearing Cap	1667	2
32*	1/4-20 x 1” SHCS	7842	6
33	3/8-16 Aluminum High Nut	7794AS	10
34	5/16” Diameter Ball, Gear Cover	7398	10
35*	3/8-16 x 1-3/4” Stud, Gear Cover	7802	10
36	Retaining Ring, Lower Shaft	7610	1
37*	Standard Lower Shaft	5003-02	1
37*	Option, Gundrilled, Open Drive Lower Shaft	1550	1
38	Front Ball Bearing, Lower Shaft	7390	1

#	DESCRIPTION	P/N	QTY
39	O’Ring, Seal Plate	7413	1
40*	Retaining Ring, Seal Plate, .750” Seal	7652	1
41*	Seal, Seal Plate, .750” Thick Seal	7204T	1
41*	Seal, Seal Plate, .750” Viton Seal	7204V	1
42	O’Ring, Seal	7474	1
43	Seal Plate, .750” Seal	5018-01M	1
44	3/8” SAE Flatwasher	7114	6
45*	3/8-16 x 1” HHCS, Seal Plate	7110	6
45*	3/8-16 x 1-1/4” HHCS, Seal Plate	7107	6
46*	Spacer, Drive Yoke (Not used with 3533)	6532	1
47*	Drive Yoke, Steel, 1310 Series	5038	1
47*	Drive Yoke, Steel, Threaded, 1310 Series	5038B	1
47*	Drive Yoke, Billet Aluminum, 1310 Series	5038AS	1
47*	Drive Yoke, Billet Aluminum, 32 Spline	5038AS-32	1
47*	Drive Yoke, Steel with Integral Spacer	3533	1
48	Retaining Washer, Drive Yoke	5037	1
49	3/8-24 x 1” HHCS, Drive Yoke	7109Y	1
50*	7/16-20 x 5-1/2” Thrubolt	7176	10
51	7/16” SAE Flatwasher, Thrubolt	7178	22
52	7/16-20 Flanged Locknut, Thrubolt	7177	10
53	7/16-14 x 1-1/4” HHCS	7117	2
54*	1/2-13 Adjusting Screw, 8 Rib Side Bell	7155	1
54*	1/2-13 Adjusting Screw, 4 & 6 Rib Side Bell	6149	1
55	1/2” SAE Flatwasher, Adjusting Screw	7167	1
56	1/2-13 Jam Nut, Adjusting Screw	7137	1
57	Thrustblock, Adjusting Screw	5010	1
58*	3/8-24 x 1” HHCS, 4 Rib Side Bell	7109	16
58*	3/8-24 x 3/4” HHCS, 6 & 8 Rib Side Bell	7109S	12
59	3/8” SAE Flatwasher	7114	16
60	O’Ring, Inspection Plug	7454	1
61	Inspection Plug	6857	1
62	Inspection Plug, Side Bell	3261	1
63	O’Ring, Inspection Plug, Side Bell	7453	1
64	Top Mount Breather	2966T	1
	PRO-MOD ASSEMBLY		
65	Magnesium Center Section	K12088	1
66	Billet Aluminum 6 Bolt Gear Cover	12175	1
67*	O’Ring, Billet Aluminum 6 Bolt Gear Cover	8447	1
67*	Gasket, Billet Aluminum 6 Bolt Gear Cover	12185	1
68	#10-24 x 1/2” FHCS Bearing Retainer	12417	2
69	Breather Assembly (Sold Separately)	2966-02	1
70	Steel Level Plug with O’Ring	7874S	4

*Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

Front Quick Change

WINTERS... A HISTORY OF FIRSTS

10" RING GEAR - 12 BOLT

In some applications, quick change rear ends can compromise placement of the fuel cell. Consider the advantages of moving the fuel cell 6"-8" forward in your chassis. Rear end overhang weight is shifted from the rear side of the axle to the front. This option allows quick change rears to replace Ford® 9" rears without extensive chassis modification. Center section and gear cover assembly for this unit are only available in magnesium.

Please Note: When ordering, right becomes left and left becomes right.

4.86 Ring & Pinion Standard

All 10" REARS

Will now include the Posi Lock Roller Nose Bearing, 1 peice drop in race and ARP Bolts

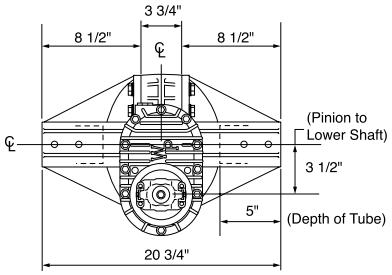
ASSEMBLIES

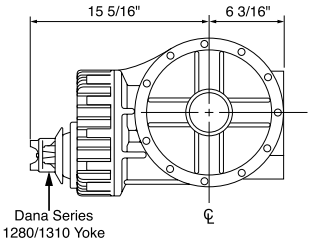
P/N K5063+8232 - 2-1/2" GN
P/N K5260+8232 - Baby Grand
P/N K5270+8232 - Wide 5
P/N K5280+8232* - 8 Bolt
P/N K6960+8232 - Short Wide 5
P/N K6790+8232 - 2" GN
P/N K2810+8232 - Super Speedway

IMPORTANT

When ordering, Option 8232 MUST BE ADDED TO P/N in order for your Quick Change to become a Front Quick Change.
***Spindles not included in rear assembly. See page 57.**

DIMENSIONAL DATA





Option 8254-TIM
Timken® Pinion Cup & Cones

OPTIONS

Options highlighted in Yellow are Low Drag Options

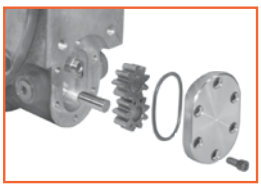
Options shown in Blue are Popular Options

	CENTER OPTIONS
8110FQC	Pump Assembly
8111R	Reverse Rotation 4.12 Ring & Pinion
8126	Titanium Thrubolts
8202-XXX	**EDM Ring Gear (specify ratio)**
8208	**Thermal Dispersant Coating**
8218-RP	**REM® Ring & Pinion**
8218-BRG	**REM® Bearing (# is per Bearing)**
8244S-P	**Low Drag Brgs, Pinion, Steel**
8254-TIM	Bearing, Timken®, Cup & Cones
8267	Solid Lower Shaft Assembly
8298	**Low Drag Carrier Seals**
8299	**Gundrilled Pinion Shaft**
	DIFFERENTIAL OPTIONS
8115	Aluminum Spool (pg. 32)
8121W	Winters Track (pg. 28)
8130	Ultralight Alum. Spool (pg. 32)
8171	**Aluminum Locker (pg. 29)**
8171L	L. W. Alum. Locker (pg. 29)
8183	Aluminum Triple Track (pg. 27)
8231-01R	Track Star (pg. 26)
8244S-CT	**Low Drag Brgs, Differential, Steel**

***Spindles not included. See page 57.**

	BELL OPTIONS (pgs. 48-49)
8136P	Lightweight 4 Rib Bell w/ Insp. Plug
8155P	**Heavy Duty 8 Rib Bell w/ Insp. Plug**
8155PM	Lightweight 8 Rib Bell w/ Insp. Plug
8155PMHD	Heavy Duty 8 Rib Bell, Perm. Mold
8186P	L. W. 6 Rib Bell w/ Insp. Plug
	TUBE OPTIONS
8131	Turned Down Side Tubes
8132*	Alum. 8 Bolt Tubes (Thick Flg/Modified)
8138	Aluminum Tubes w/ Steel Spindles
8140	One Piece Aluminum Tubes
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8190*	Thin Flanged 8 Bolt Tubes
8190A*	Thin Flanged Aluminum 8 Bolt Tubes
8201	**Internal Aluminum Tube Seal**
8213	2-1/2" Wide 5 Tubes
8237	Tube & Bell Locknut Assy., 4 & 6 Rib
8237-8	Tube & Bell Locknut Assy., 8 Rib
8239**	2-7/8" Aluminum Tubes
8263**	2-7/8" Steel Tubes
9117	2-7/8" Tubes with Spacers
9119**	2-7/8" Tetrad Tubes
9125	One Piece Aluminum Tubes, 1 Ton (pg. 54)

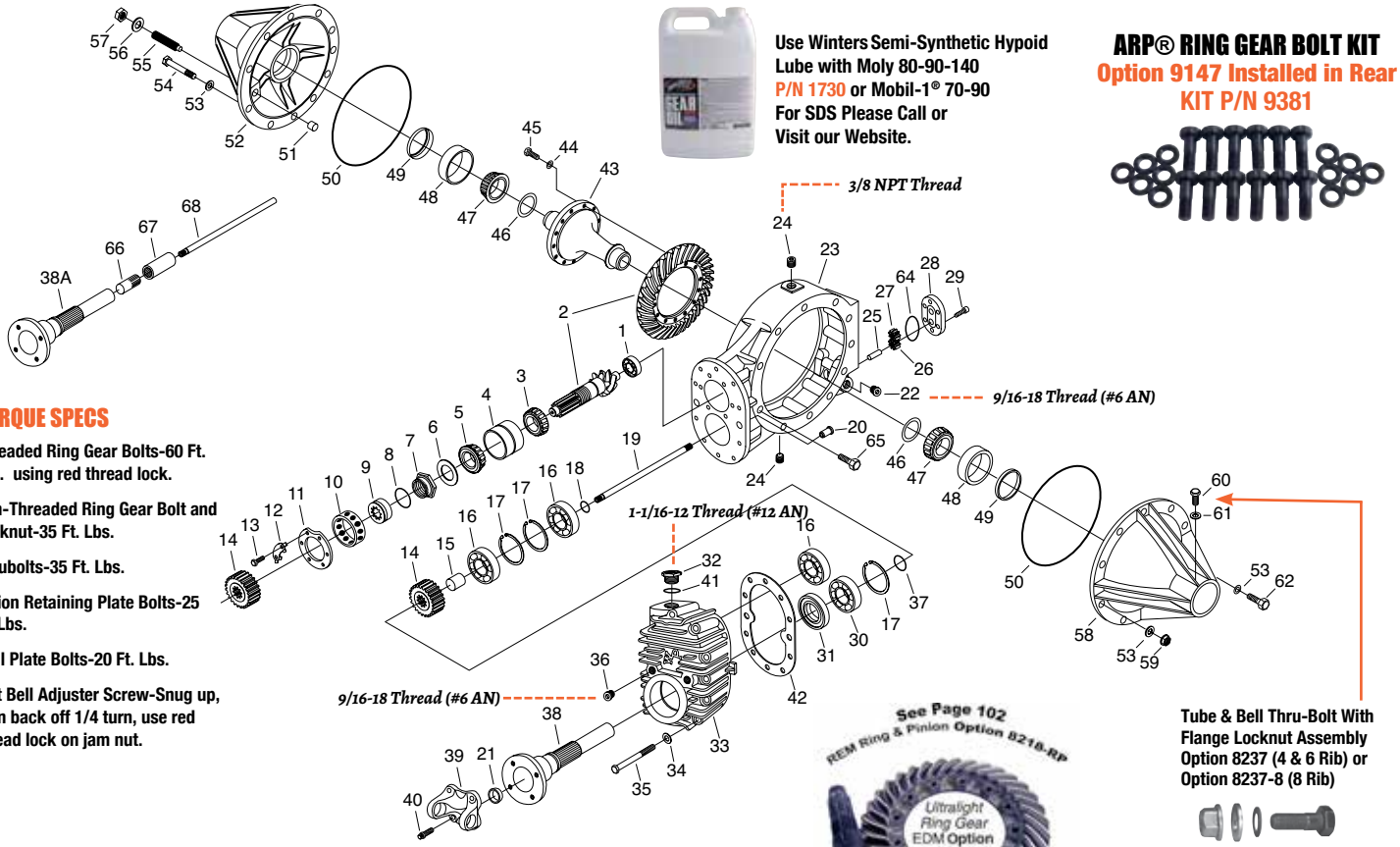
****Order Option 9117 (2 7/8" Spacers)**



Pump Option
Option 8110FQC

Thermal Dispersant Coating
Option 8208

While being 1/3 lighter than aluminum, magnesium acts as an insulator and holds in heat resulting in higher temperatures inside your rear. This very effective corrosion resistant coating helps cool your rear assembly by dispersing the heat, therefore resulting in cooler operating temperatures!



Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140 P/N 1730 or Mobil-1® 70-90
For SDS Please Call or Visit our Website.

ARP® RING GEAR BOLT KIT

Option 9147 Installed in Rear
KIT P/N 9381

TORQUE SPECS

Threaded Ring Gear Bolts-60 Ft. Lbs. using red thread lock.

Non-Threaded Ring Gear Bolt and Locknut-35 Ft. Lbs.

Thrubolts-35 Ft. Lbs.

Pinion Retaining Plate Bolts-25 Ft. Lbs.

Seal Plate Bolts-20 Ft. Lbs.

Left Bell Adjuster Screw-Snug up, then back off 1/4 turn, use red thread lock on jam nut.

See Page 102
REM Ring & Pinion Option 8218-RP

Tube & Bell Thru-Bolt With Flange Locknut Assembly Option 8237 (4 & 6 Rib) or Option 8237-8 (8 Rib)

See pages 100-101 for Winters 10 Spline Quick Change Gears
See Pages 103-105 for Options
See pages 113-115 Complete Closed Tube Set-up Instructions

#	DESCRIPTION	P/N	QTY
1	Pinion Nose Bearing	7331	1
2*	4.86 Ratio Ring & Pinion, Reverse Rotation (10 Spline)	5400R	1
3*	Bearing	7308	1
4*	Pinion Double Cup	7307	1
5*	Bearing	7308	1
6	Pinion Washer	5055	1
7	Pinion Nut, Posi-Lock (1-5/16-20-2B Thread)	6485R	1
8	O'Ring, Posi-Lock	7445	1
9	Pinion Retainer, Posi-Lock	6484	1
10	Pinion Spacer	5020	1
11	Pinion Retainer Plate	6296A	1
12	Lock Tab	2374	3
13	Screw	7110	6
14	Quick Change Gear Set (Not Included)	8500	1
15	Spacer	3425	1
16	Bearing	7332	3
17	Snap Ring	8331	3
18	Snap Ring	8333	1
19*	Pump Shaft	3423	1
20	Bushing	3422	2
21	11/16" Core Plug	8709	1
22	AN Fitting	7874	2
23	Magnesium Center Section	K5012-FQC	1
24	Pipe Plug	7111	2
25*	Pump Shaft, Fixed	3424	1
26*	Pump Gear, Lower	3427	1
27*	Pump Gear, Upper	3428	1
28*	Pump Cavity Cover	3426	1
29*	Screw	8009	6
30	Bearing	7390	1
31	Front Seal	7204T	1
32	Inspection Plug	6857	1
33	Magnesium Gear Cover	K3420-0	1
34	Flatwasher, Gear Cover	7114HD	12
35	HHCS, Gear Cover	7108	12
36	#6 Port Plug	7874S	2

#	DESCRIPTION	P/N	QTY
37	Retaining Ring	8332	1
38*	Drilled Lower Shaft, For use with Pump	3421	1
38A*	Solid Lower Shaft	3421S	1
39	Flange Yoke, Dana #2-2-329	5856	1
40	12Pt. Screw	7152	4
41	O'Ring	7454	1
42	Heavy Duty Gasket	1764-FQC	1
43*	31 Spline Aluminum Spool	5034-11A	1
44	3/8" Bellville Washer	7815	12
45*	Ring Gear Bolt, Threaded Ring Gear	7852	12
45*	Ring Gear Bolt, Non-Threaded Ring Gear	5124	12
46	Shim Kit, Aluminum Spools & Differentials	5295	2
47*	Bearing Cone, Steel Spools & Differentials	7309	2
47*	Bearing Cone, Aluminum Spools & Differentials	7340	2
48*	Bearing Cup, Side Bell	7310	2
49*	Seal, Side Bell	7205	2
49*	Seal, Side Bell, Viton	7283V	2
50	O'Ring, Side Bell	7403	2
51	Thrustblock, Adjusting Screw	5010	1
52*	Magnesium H.D. 8 Rib Left Side Bell	K5016-02	1
53	7/16" SAE Flatwasher	7178	22
54*	7/16-20 x 5-1/2" Thrubolt	7176	10
55	1/2-13 Adjusting Screw	7155	1
56	1/2" SAE Flatwasher	7167	1
57	1/2-13 Jam Nut, Adjusting Screw	7137	1
58*	Magnesium H.D. 8 Rib Right Side Bell	K5016-03	1
59	7/16-20 Flanged Locknut	7177	10
60	3/8-24 x 1" HHCS, Side Bell	7109	16
61	3/8" SAE Flatwasher	7114	16
62	7/16-14 x 1-1/4" HHCS	7117	2
63*	3/8-24 Locknut, Non-Threaded Ring Gear	7908	12
64*	O'Ring, Pump Cavity Cover	7464	1
65	7/16-14 x 1" HHCS	7787	1
66	Press In Coupler	3592	1
67	Pump Coupler	3594	1
68	Pump Shaft	3593	1

***Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.**

Non-Quick Change

1st Generation Only Available in 4.12, 4.57 & 4.86 Ratios

4.86 Ring & Pinion Standard

HIGH-TECH & HIGH RELIABILITY

10" RING GEAR - 12 BOLT

The Non-Quick Change is the lightest full size rear end assembly that Winters offers. There are 20 plus ring and pinion ratios to choose from (see below). Under extreme conditions a circulator and cooler may be required.

Please Note: This assembly uses the same side bells as the conventional quick change, however, the side bells are rotated 180° forward. This will affect mounting brackets, etc., that are welded to tubes if changing tubes over from a Quick Change to a Non-Quick Change.

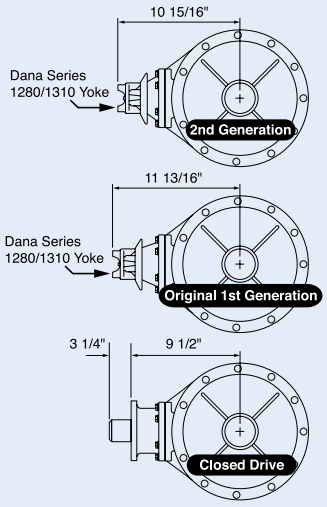
ASSEMBLIES

P/N 4063 - 2-1/2" GN **P/N 4060 - Baby Grand** **P/N 4270 - Wide 5**

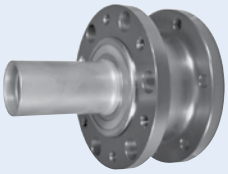
P/N 4280 - 8 Bolt **P/N 4790 - 2" GN**

*Spindles not included in rear assembly. See page 57. •These assemblies are also available with magnesium castings. When ordering a magnesium assembly, add prefix 'K' to the P/N (Example K4270)

DIMENSIONAL DATA



Drive shaft needs to be 7/8" longer when switching from original 1st generation to 2nd generation.



OPTIONS

Options highlighted in Yellow are Low Drag Options

Options shown in Blue are Popular Options

	CENTER OPTIONS
8111	4.12 Ring & Pinion, 1st Generation
8143	Pinion Nose Roller Bearing
8202-XXX	EDM Ring Gear (specify ratio)
8208	Thermal Dispersant Coating
8218-RP	REM® Ring & Pinion
8218-BRG	REM® Bearing (# is per Bearing)
8298	Low Drag Carrier Seals
	DIFFERENTIAL OPTIONS
8115	Aluminum Spool (pg. 32)
8121W	Winters Track (pg. 28)
8130	Ultralight Alum. Spool (pg. 32)
8171	Aluminum Locker (pg. 29)
8171L	L. W. Alum. Locker (pg. 29)
8183	Aluminum Triple Track (pg. 27)
8198	10-10 Coupler Support
8231-01	Track Star (pg. 26)
8244S-CT	Low Drag Brgs, Differential, Steel
	BELL OPTIONS (pgs. 48-49)
8136P	Lightweight 4 Rib Bell w/ Insp. Plug
8155P	Heavy Duty 8 Rib Bell w/ Insp. Plug
8155PM	Lightweight 8 Rib Bell w/ Insp. Plug
8155PMHD	Heavy Duty 8 Rib Bell, Perm. Mold
8186P	L. W. 6 Rib Bell w/ Insp. Plug
	TUBE OPTIONS
8131	Turned Down Side Tubes
8132*	Alum. 8 Bolt Tubes (Thick Flg/Modified)
8138	Aluminum Tubes w/ Steel Spindles
8140	One Piece Aluminum Tubes
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8190*	Thin Flanged 8 Bolt Tubes
8190A*	Thin Flanged Aluminum 8 Bolt Tubes
8201	Internal Aluminum Tube Seal
8213	2-1/2" Wide 5 Tubes
8237	Tube & Bell Locknut Assy., 4 & 6 Rib
8237-8	Tube & Bell Locknut Assy., 8 Rib
8239**	2-7/8" Aluminum Tubes
8263**	2-7/8" Steel Tubes
9117	2-7/8" Tubes with Spacers
9119**	2-7/8" Tetrad Tubes
9125	One Piece Aluminum Tubes, 1 Ton (pg. 54)

*Spindles not included. See page 57.

**Order Option 9117 (2 7/8" Spacers)

Ball Bearing Support

ASSEMBLY P/N 1265

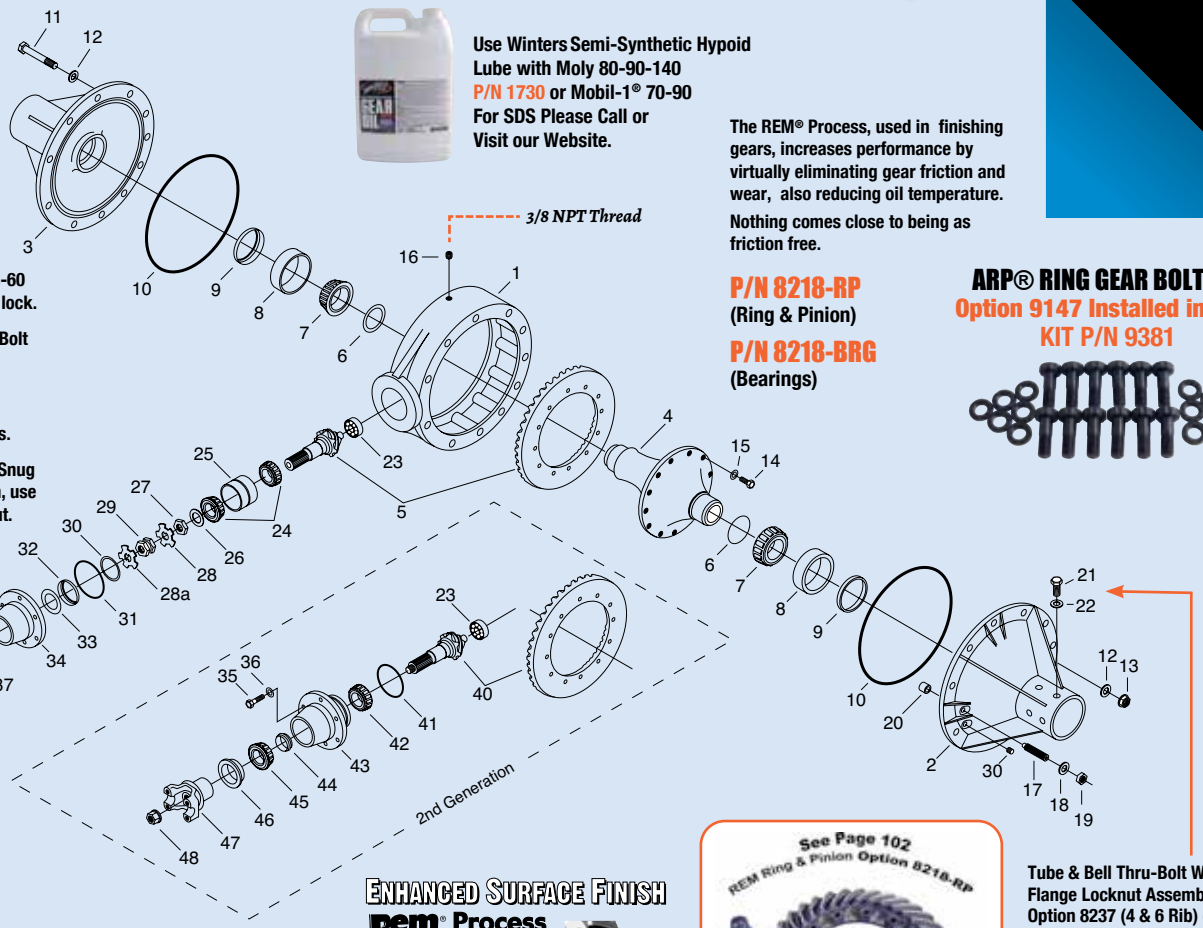
Option 8198

Available for closed drive applications, Winters offers an optional 10-10 coupler support in a heavy duty ball bearing. Bolted on the front end of the Non-Quick Change center section, the housing will accept a standard torque tube and drive shaft. For 10 spline pinion. Available in 4.86, 4.12, and 4.57 only.

RING & PINION OPTIONS

81412	4.12 Ratio	81533*	5.33 Ratio
81422	4.22 Ratio	81542*	5.42 Ratio
81428	4.28 Ratio	81550*	5.50 Ratio
81442	4.42 Ratio	81566*	5.66 Ratio
81457	4.57 Ratio	81583*	5.83 Ratio
81462*	4.62 Ratio	81600*	6.00 Ratio
81471*	4.71 Ratio	81617*	6.17 Ratio
81486	4.86 Ratio	81633*	6.33 Ratio
81500*	5.00 Ratio	81650*	6.50 Ratio
81514*	5.14 Ratio	81667*	6.67 Ratio
81528*	5.28 Ratio		

*Available with Integral Flange Pinion Bearing (2nd Generation). Please Note: Option 8143 is not available on ratios 6.00 and higher.



Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140 P/N 1730 or Mobil-1® 70-90 For SDS Please Call or Visit our Website.

The REM® Process, used in finishing gears, increases performance by virtually eliminating gear friction and wear, also reducing oil temperature.

Nothing comes close to being as friction free.

TORQUE SPECS

Threaded Ring Gear Bolts-60 Ft. Lbs. using red thread lock.

Non-Threaded Ring Gear Bolt and Locknut-35 Ft. Lbs.

Thrubolts-35 Ft. Lbs.

Seal Plate Bolts-20 Ft. Lbs.

Left Bell Adjuster Screw-Snug up, then back off 1/4 turn, use red thread lock on jam nut.

P/N 8218-RP
(Ring & Pinion)
P/N 8218-BRG
(Bearings)

ARP® RING GEAR BOLT KIT

Option 9147 Installed in Rear
KIT P/N 9381

P/N 5034-11UL
Option 8130
Ultralight
Aluminum Spool

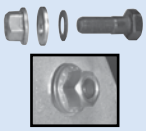
ENHANCED SURFACE FINISH

Rem® Process

P/N 8218-RP
(Ring & Pinion)
P/N 8218-BRG
(Bearings)

Looks Like Chrome, But Better!

Tube & Bell Thru-Bolt With Flange Locknut Assembly
Option 8237 (4 & 6 Rib) or Option 8237-8 (8 Rib)



See Pages 103-105 for Options
See page 116 Complete Closed Tube Set-up Instructions

#	DESCRIPTION	P/N	QTY
1*	Aluminum Non- Quick Change Center Section	6559	1
1*	Magnesium Non- Quick Change Center Section	K6559	1
2*	Aluminum 4 Rib Left Side Bell	6697-02	1
2*	Magnesium 4 Rib Left Side Bell	K6697-02	1
3*	Aluminum 4 Rib Right Side Bell	6697-01B	1
3*	Magnesium 4 Rib Right Side Bell	K6697-01B	1
4*	31 Spline Aluminum Spool	5034-11A	1
5*	4.86 Ratio Ring & Pinion, Standard	5400M**	1
6	Shim Kit, Aluminum Spool	5295	1
7	Carrier Bearing Cone, Aluminum Spool	7340	2
8*	Bearing Cup, Side Bell	7310	2
9	Carrier Seal	7205	2
10*	O'Ring, 4 & 6 Rib Side Bell	7403T	2
10*	O'Ring, 8 Rib Side Bell	7403	2
11*	7/16-20 x 5-1/2" HHCS	7176	11
12	7/16" SAE Flatwasher	7178	22
13	7/16-20 Flanged Locknut	7177	11
14	Ring Gear Bolt, Threaded Ring Gear	7852	12
15	3/8" Bellville Washer, Threaded Ring Gear	7815	12
16	3/8" Socket Head Pipe Plug	7111B	3
17*	1/2-13 Adjusting Screw, 4 & 6 Rib Side Bell	6149	1
17*	1/2-13 Adjusting Screw, 8 Rib Side Bell	7155	1
18	1/2" SAE Flatwasher	7167A	1
19	1/2-13 Jam Nut	7137	1
20	Thrust Block, Adjusting Screw	5010	1
21	3/8-24 x 3/4" HHCS, 6 Rib Side Bell	7109S	12
21	3/8-24 x 3/4" HHCS, 4 & 8 Rib Side Bell	7109	16
22	3/8" SAE Flatwasher	7114	16
23*	Ball Bearing, Pinion Nose	7312	1

#	DESCRIPTION	P/N	QTY
23*	Roller Bearing, Pinion Nose	7331	1
24*	Bearing Cone, Pinion Shaft	7308	2
25*	Bearing Double Cup, Pinion Shaft	7307	1
26	Bearing Washer, Pinion Shaft	5055	1
27	Jam Nut, Pinion Shaft (1-5/16-20 Thread)	5032R	2
28	Bearing Lockwasher, Pinion Shaft	5056	1
28a	Bearing Lockwasher, Double Tab	1136	1
29	Top Nut (1-5/16-20 Thread)	1137	1
30	Internal Snap Ring, Seal Plate	7653	1
31	O'Ring, Seal Plate	7448	1
32*	Seal, Seal Plate	7204	1
33	.065" Thick Shim	6115-065	1
34	Seal Plate	K6554	1
35	3/8-16 x 1-1/4" HHCS	7107	6
36	3/8" SAE Flatwasher	7114	6
37*	Drive Yoke, Steel, 1310 Series	5038	1
37*	Drive Yoke, Steel, Threaded, 1310 Series	5038B	1
38	Retaining Washer, Drive Yoke	5037	1
39	3/8-24 x 1" HHCS	7109Y	1
	2nd Generation Ring & Pinion		
40*	Ring & Pinion	35XXX**	1
41	O'Ring	7490	1
42	Inner Bearing Cone	7554	1
43	Pinion Bearing	7569	1
44	Crush Sleeve	2276	1
45	Outer Bearing Cone	7553	1
46	Seal	7260	1
47	Drive Yoke	2216	1
48	Pinion Nut	2222	1

*Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.
**When ordering 2nd Generation Ring & Pinion add prefix 35 to gear ratio. Example P/N 35500 for 5.00 Ratio. See pages 33 & 37.

INSPIRED BY OUR PASSION FOR DESIGN

10” RING GEAR - 12 BOLT

We had the Bonneville Salt Flats in mind when we created this center section and side bells for our 10”, 3.08 Ratio Ring & Pinion. Whether you are going for a land speed record or want a different ratio for the track, you will benefit from this Beefed-Up Center Section, Heavy Duty 8 Rib Side Bells with Inspection Plug, Heat Treated Lower Shaft, 22 Spline Change Gears, Heavy Duty Super Cover and the Largest Size Pinion Gear ever in a Quick Change.

3.08 Ring & Pinion Standard

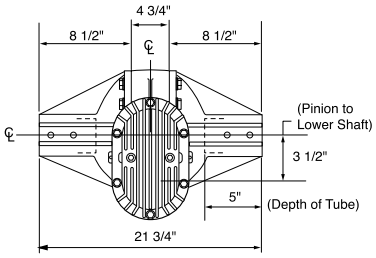
ASSEMBLIES

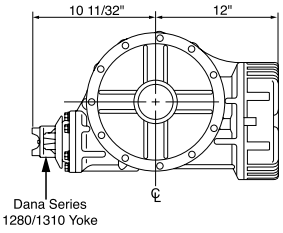
P/N 4810 - Super Speedway **P/N 4825* - Ford® Big Bearing Style (Torino®)**

P/N 4863 - 2-1/2” GN **P/N 4820* - Ford® Big Bearing**

*Big Bearing Rears accommodate stock Ford® 3.150 O.D. Axle Bearings.

DIMENSIONAL DATA





Dana Series 1350 Yoke

OPTIONS

Options highlighted in Yellow are Low Drag Options

Options shown in Blue are Popular Options

	CENTER OPTIONS
8199	**Viton Seal, Seal Plate**
81200†	2.00 Ring & Pinion
81308	3.08 Ring & Pinion
81308RR	3.08 Ring & Pinion, Reverse Rotation
8208	**Thermal Dispersant Coating**
8218-RP	**REM® Ring & Pinion**
8218-BRG	**REM® Bearing (# is per Bearing)**
8298	**Low Drag Carrier Seals**
8299	**Gundrilled Pinion Shaft**
8106-308V	**VascoMax® Lower Shaft**
	DIFFERENTIAL OPTIONS
8114-35	Steel 35 Spline Spool
8115	Aluminum Spool (pg. 32)
8115-31-200	Aluminum Spool, 31 Spline, 2.00 Ratio
8115-35-200	Aluminum Spool, 35 Spline, 2.00 Ratio
8121W	**Winters Track (pg. 28)**
8121W-200	Winters Track, 2.00 Ratio Only
8130	Ultralight Alum. Spool (pg. 32)
8171	Aluminum Locker (pg. 29)
8171L	L. W. Alum. Locker (pg. 29)
8183-01	Aluminum Triple Track (pg. 27)
8231	Track Star (pg. 26)
8244S-CT	**Low Drag Brgs, Differential, Steel**
	TUBE OPTIONS
8131	Turned Down Side Tubes
8132*	Alum. 8 Bolt Tubes (Thick Flg/Modified)
8138	Aluminum Tubes w/ Steel Spindles
8140	One Piece Aluminum Tubes
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8190*	Thin Flanged 8 Bolt Tubes
8190A*	Thin Flanged Aluminum 8 Bolt Tubes
8201	**Internal Aluminum Tube Seal**
8213	2-1/2” Wide 5 Tubes
8237	Tube & Bell Locknut Assy., 4 & 6 Rib
8239**	2-7/8” Aluminum Tubes
8263**	2-7/8” Steel Tubes
9117	2-7/8” Tubes with Spacers
9119**	2-7/8” Tetrad Tubes
9125	One Piece Aluminum Tubes, 1 Ton (pg. 54)

*Spindles not included. See page 57.

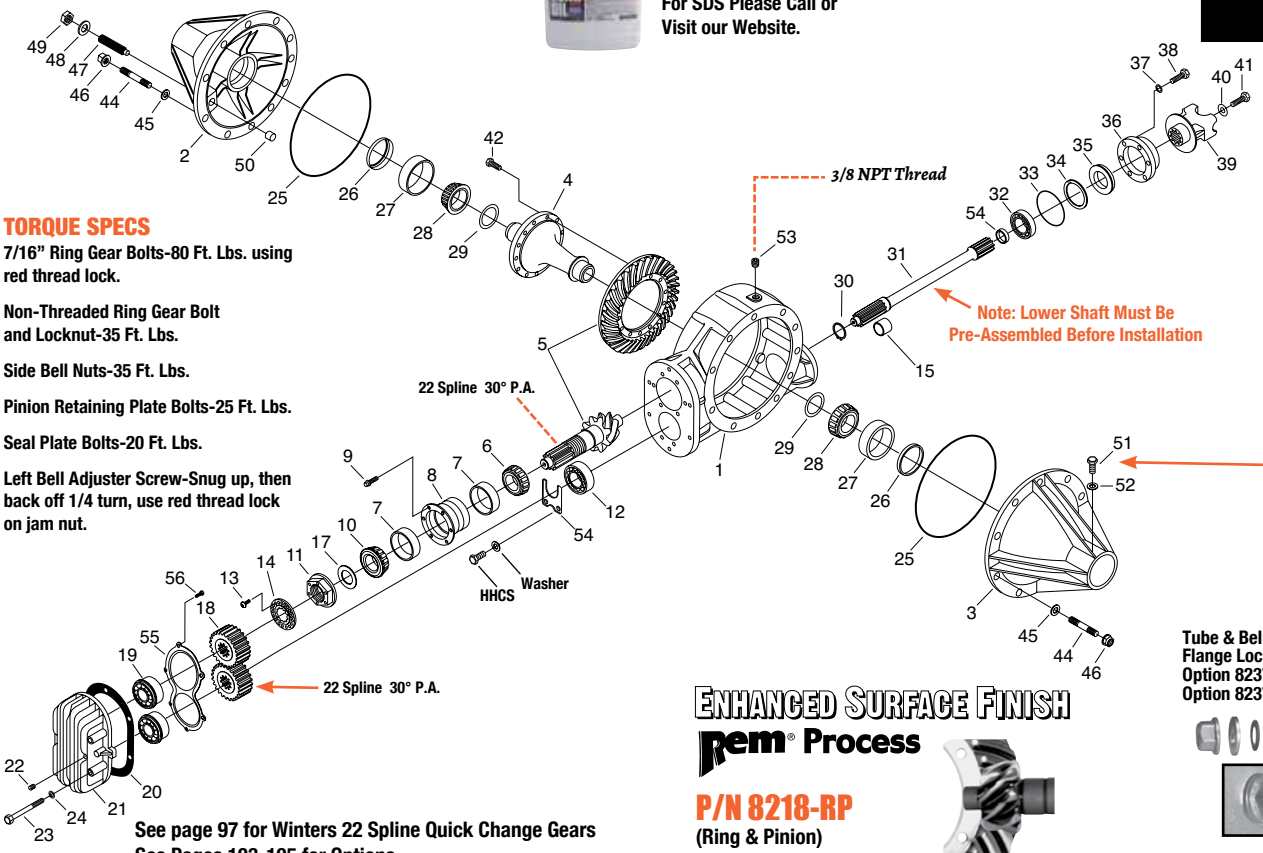
**Order Option 9117 (2-7/8” Spacers)

†Must use with Differential P/N 8121W-200, 8115-31-200 or 8115-35-200

Thermal Dispersant Coating Option 8208

Aluminum acts as an insulator and holds in heat resulting in higher temperatures inside your rear. This very effective corrosion resistant coating helps cool your rear assembly by dispersing the heat, therefore resulting in cooler operating temperatures!

Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140 P/N 1730 or Mobil-1® 70-90 For SDS Please Call or Visit our Website.



TORQUE SPECS

7/16" Ring Gear Bolts-80 Ft. Lbs. using red thread lock.

Non-Threaded Ring Gear Bolt and Locknut-35 Ft. Lbs.

Side Bell Nuts-35 Ft. Lbs.

Pinion Retaining Plate Bolts-25 Ft. Lbs.

Seal Plate Bolts-20 Ft. Lbs.

Left Bell Adjuster Screw-Snug up, then back off 1/4 turn, use red thread lock on jam nut.

ENHANCED SURFACE FINISH

Rem® Process

P/N 8218-RP
(Ring & Pinion)

P/N 8218-BRG
(Bearings)

Looks Like Chrome, But Better!

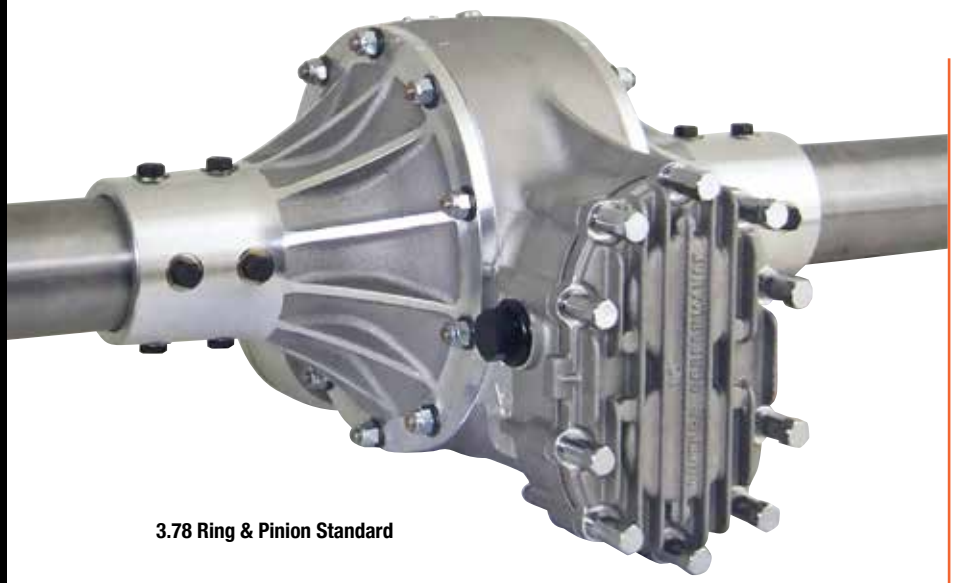
See page 97 for Winters 22 Spline Quick Change Gears
See Pages 103-105 for Options
See pages 113-115 Complete Closed Tube Set-up Instructions

#	DESCRIPTION	P/N	QTY
1	Aluminum Center Section	5012-308	1
2	Aluminum Heavy Duty 8 Rib Left Side Bell	5016-02	1
3	Aluminum Heavy Duty 8 Rib Right Side Bell	5016-308	1
4	31 Spline Aluminum Steel Spool	5034-11A	1
5*	3.08 Ratio Ring & Pinion, Standard	25308	1
6	Front Cone	8634	1
7	Cup	8633	2
8	Pinion Bearing Carrier	3440	1
9	3/8-16 x 1" 12pt	7735	6
10*	Rear Cone	7308	1
11	Pinion Nut (1-1/2-20-3B Thread)	3179	1
12	Roller Bearing, Lower Shaft	7329	1
13	10-24 x 1/2" BHCS	7869	1
14	Pinion Nut Retainer	3178	1
15	Quick Change Gear Spacer	3194	1
17	Washer	3308	1
18	Quick Change Gear Set (Not Included)	308__	1
19	Ball Bearing, Gear Cover	8659	2
20	Gasket, Gear Cover	1764-308	1
21*	Aluminum Gear Cover, Less Bearings	5017HD	1
22	3/8" SHCS Pipe Plug	7111AL	4
23*	3/8-16 x 4" HHCS, Gear Cover	7108	6
24	3/8" Heavy Duty Flatwasher	7114HD	6
25	O'Ring, Side Bell	7403	2
26	Seal, Side Bell	7205	2
27*	Bearing Cup, Side Bell	7310	2
28*	Bearing Cone, Steel Spools & Differentials	7309	2
28*	Bearing Cone, Aluminum Spools & Differentials	7340	2

#	DESCRIPTION	P/N	QTY
29	Shim Kit, Aluminum Spools & Differentials	5295	2
30	Retaining Ring, Lower Shaft	8332	2
31*	Lower Shaft	5003-308	1
31*	Lower Shaft, VascoMax®	5003-308V	1
32	Ball Bearing, Lower Shaft	7390	1
33	O'Ring, Seal Plate	7413	1
34	Retaining Ring, Seal Plate, .750" Seal	7652	1
35*	Seal, Seal Plate, .750" Thick Seal	7204T	1
35*	Seal, Seal Plate, .750" Viton Seal	7204V	1
36*	Seal Plate, .750" Seal	5018L	1
37	3/8" SAE Flatwasher	7114	6
38*	3/8-16 x 1" HHCS, Seal Plate	7110	6
38*	3/8-16 x 1-1/4" HHCS, Seal Plate	7107	6
39	Drive Yoke, Steel	3436	1
40	Retaining Washer, Drive Yoke	5037	1
41	3/8-24 x 1" HHCS, Drive Yoke	7109Y	1
42	Ring Gear Bolt, Threaded Ring Gear	8077	12
44	Stud	7863	22
45	7/16" SAE Flatwasher	7178	22
46	7/16-20 Flanged Locknut	7177N	22
47	1/2-13 Adjusting Screw	7155	1
48	1/2" SAE Flatwasher	7167	1
49	1/2-13 Jam Nut, Adjusting Screw	7137	1
50	Thrustblock, Adjusting Screw	5010	1
51	3/8-24 x 1" HHCS, Side Bell	7109	16
52	3/8" SAE Flatwasher	7114	16
53	3/8" Hex Head Pipe Plug	7111	2
54	Bearing Retainer	3258	1
55	Snap Ring Retainer	3193	1
56	1/4-20 x 1/2" BHCS	8087	6

***Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.**

V8 Quick Change



3.78 Ring & Pinion Standard

THE DIFFERENCE IS IN THE DETAILS

8-3/8" RING GEAR - 10 BOLT

Winters Crate Engine V8 Quick Change gives a new meaning to low drag. Cast from 206 Aluminum (50,000 lbs tensile, 40,000 lbs yield, 10% elongation), this assembly features a 3.78 Ratio Ring & Pinion standard and an 8-3/8" Ring Gear which reduces flywheel and rotating weight.

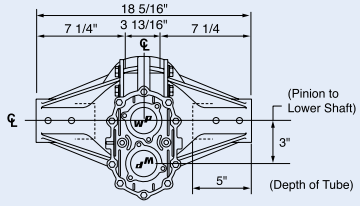
Max Rating: 500 HP, 3000 lbs

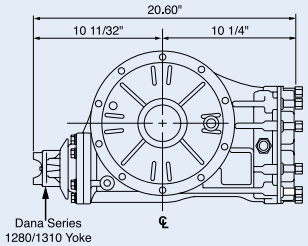
ASSEMBLIES

P/N V8-5063 - 2-1/2" GN
P/N V8-5260 - Baby Grand
P/N V8-5270 - Wide 5
P/N V8-5280* - 8 Bolt
P/N V8-6790 - 2" GN
P/N V8-6960 - Short Wide 5
P/N V8-2810 - Super Speedway

*Spindles not included in rear assembly. See page 57.

DIMENSIONAL DATA





OPTIONS

Options highlighted in Yellow are Low Drag Options

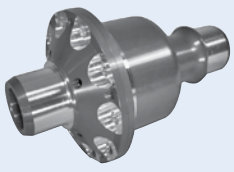
Options shown in Blue are Popular Options

	CENTER OPTIONS
8106	Heat Treated Lower Shaft
8164	4.33 Ratio Ring & Pinion
8165	4.88 Ratio Ring & Pinion
8166	5.13 Ratio Ring & Pinion
8167	5.38 Ratio Ring & Pinion
8169	4.11 Ratio Ring & Pinion
8182B	Aluminum Drive Yoke
8202-XXX	**EDM Ring Gear (specify ratio)**
8208	**Thermal Dispersant Coating**
8218-RP	**REM® Ring & Pinion**
8218-BRG	**REM® Bearing (# is per Bearing)**
8225	Gear Cover w/ Internal Bearings
8298	**Low Drag Carrier Seals**
	DIFFERENTIAL OPTIONS
8115	Aluminum 31 Spline Spool
8115-28	Aluminum 28 Spline Spool (not for 4.11)
8171M-28	Billet Aluminum 28 Spline Locker
8171M-31	**Billet Aluminum 31 Spline Locker**
8183M	Aluminum Triple Track (4.11 Only)
8194M-28	Wedgelock, 28 Spline (pg. 30)
8194M-31	Wedgelock, 31 Spline (pg. 30)
8244S-CT	**Low Drag Brgs, Differential, Steel**
	TUBE OPTIONS
8131	Turned Down Side Tubes
8132*	Alum. 8 Bolt Tubes (Thick Flg/Modified)
8138	Aluminum Tubes w/ Steel Spindles
8140	One Piece Aluminum Tubes
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8190*	Thin Flanged 8 Bolt Tubes
8190A*	Thin Flanged Aluminum 8 Bolt Tubes
8201	**Internal Aluminum Tube Seal**
8213	2-1/2" Wide 5 Tubes
8237-8	Tube & Bell Locknut Assembly, 8 Rib
8238	Splined Tube
8239**	2-7/8" Aluminum Tubes
8263**	2-7/8" Steel Tubes
8265-156	.156" Wall Thickness
9117	2-7/8" Tubes with Spacers
9119**	2-7/8" Tetrad Tubes
9125	One Piece Aluminum Tubes, 1 Ton (pg. 54)

*Spindles not included. See page 57.

**Order Option 9117 (2 7/8" Spacers)

Dana Series 1280/1310 Yoke



Option 8171M-XX

This locker is a fully automatic locking differential. It delivers spool type traction on the straightaways yet automatically unlocks in corners. Available in 28 or 31 Spline. 58 Lb. springs standard. Other spring rates are available installed in your locker. See Page 29

Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140
P/N 1730 or Mobil-1® 70-90
For SDS Please Call or Visit our Website.

ARP® RING GEAR BOLT KIT
Option 9147 Installed in Rear
KIT P/N 9381

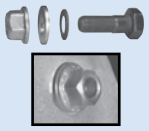
WEIGHTS
58.2 lbs. w/ Spool
62 lbs. w/ Locker
68.9 lbs. w/ Wedgelock
Less Tubes

ENHANCED SURFACE FINISH
Pem® Process

P/N 8218-RP
(Ring & Pinion)
P/N 8218-BRG
(Bearings)

Looks Like Chrome, But Better!

Tube & Bell Thru-Bolt With Flange Locknut Assembly Option 8237 (4 & 6 Rib) or Option 8237-8 (8 Rib)



See pages 98-99 for Winters 6 Spline Quick Change Gears
See Pages 103-105 for Options
See page 117 Complete Closed Tube Set-up Instructions

#	DESCRIPTION	P/N	QTY
1	Aluminum Center Section	V8-2524HD	1
2	Aluminum Right Side Bell	V8-3180-01	1
3	Aluminum Left Side Bell	V8-3180-01	1
4	O'Ring, Side Bell	7451	2
5	Shim Kit, Aluminum Spool	5295	2
6	Bearing Cone, Aluminum Spool	7340	2
7	Bearing Cup, Side Bell	7310	2
8*	Seal, Side Bell	7205	2
8*	Seal, Side Bell, Viton	7283V	2
9	3/8-16 x 2" Stud	7905	20
10	3/8" Belleville Washer	7916	20
11	3/8-16 Nylon Locknut	7885	20
16*	31 Spline Aluminum Spool	6839-31	1
17*	3/8-24 Ring Gear Bolt	7852	10
18*	3/8" Belleville Washer	7815	10
22*	3.78 Ratio Ring & Pinion, Standard	6811	1
23*	Ball Bearing, Pinion Nose	7392	1
24	Bearing Cone, Pinion Shaft	7527	2
25	Flanged Double Cup, Pinion Shaft	7525	1
26	3/8-16 x 1" BHCS (Torx®)	9308	5
27	Bearing Washer, Pinion	6824	1
28	Pinion Nut (1-1/4-20-2B Thread)	6821	1
29	O'Ring, Pinion Nut	7455	1
30	Pinion Nut Retainer	6822	1
31	Bearing Retainer	6751	1
32	Gear Spacer (1" Gears Only)	1372	2
33	1" Wide Quick Change Gear Set (Not Included)	4400	1
33	1-3/8" Wide Quick Change Gear Set (Not Included)	4500	1
34	Gasket, Gear Cover	6703	1
35	Gear Cover	3056	1
36	#6 AN Port Plug	7874S	3

#	DESCRIPTION	P/N	QTY
37	Bearing, Gear Cover	7532-01	2
41	3/8-16 Steel High Nut	7794AS	10
42	3/8-16 x 1-3/4" Stud	7802	10
43	5/16" Diameter Steel Ball	7398	10
44	Bearing, Lower Shaft (Rear)	7534	1
45	Retaining Ring, Rear Bearing	7655	1
46	Retaining Ring, Lower Shaft	7658	1
47*	Lower Shaft	V8-3886	1
48	O'Ring	7471	1
49	Bearing, Lower Shaft	7390	1
50	O'Ring, Seal Plate	7413	1
51	Seal, Seal Plate, .750" Thick Seal	7204T	1
51	Seal, Seal Plate, .750" Viton Seal	7204V	1
52	Internal O'Ring, Seal Plate	7474	1
53	Seal Plate	5018	1
54	3/8" Flatwasher	7114	6
55	3/8-16 x 1" HHCS	7110	6
56*	Drive Yoke, Steel, 1310 Series	3533	1
56*	Drive Yoke, Aluminum, 1310 Series	5038A	1
57	Retaining Washer, Drive Yoke	5037	1
58	3/8-24 x 1" HHCS	7109Y	1
59	3/8" Socket Pipe Plug	7111B	3
60	Small Inspection Plug with O'Ring	6857	1
61	O'Ring, Small Inspection Plug	7454	1
65	3/8" SAE Flatwasher	7114	16
66	3/8-24 x 3/4" HHCS	7109S	16
67	Seal Plate Adapter	3887	1
68	3/8-16 x 1-3/4" 12pt	7861	6
69*	Spacer, Drive Yoke (Not Used w/3533)	6532	1
70	Gasket, Seal Plate	4814	1

*Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

Mini Non-Quick Change

QUALITY.... PLAIN & SIMPLE

8-3/8" RING GEAR - 10 BOLT

The Mini Non-Quick Change features an 8-3/8", 3.78 Ratio Ring & Pinion, 28 or 31 Splined Aluminum Spool and 4 Rib Side Bells. Better for cars under 2600 lbs and 550 HP.

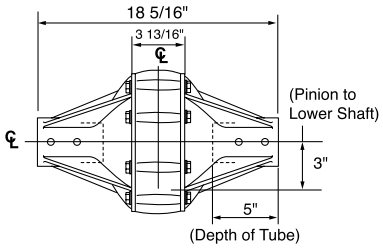
Center Section is available in aluminum only. Order Option 8117 for magnesium Side Bells.

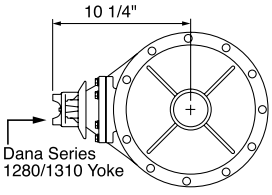
3.78 Ring & Pinion Standard

ASSEMBLIES

P/N 4063M - 2-1/2" GN **P/N 4260M - Baby Grand**
P/N 4270M - Wide 5 **P/N 4790M - 2" GN**

DIMENSIONAL DATA





12 Rib Bells Standard

OPTIONS

Options highlighted in Yellow are Low Drag Options

Options shown in Blue are Popular Options

	CENTER OPTIONS
8164	4.33 Ratio Ring & Pinion
8165	4.88 Ratio Ring & Pinion
8166	5.13 Ratio Ring & Pinion
8167	5.38 Ratio Ring & Pinion
8202-XXX	**EDM Ring Gear (specify ratio)**
8208	**Thermal Dispersant Coating**
8218-RP	**REM® Ring & Pinion**
8218-BRG	**REM® Bearing (# is per Bearing)**
8298	**Low Drag Carrier Seals**
	DIFFERENTIAL OPTIONS
8115	Aluminum 31 Spline Spool
8115-28	Aluminum 28 Spline Spool (not for 4.11)
8171M-28	Billet Aluminum 28 Spline Locker
8171M-31	**Billet Aluminum 31 Spline Locker**
8194M-28	Wedgelock, 28 Spline (pg. 30)
8194M-31	Wedgelock, 31 Spline (pg. 30)
8244S-CT	**Low Drag Brgs, Differential, Steel**
	TUBE OPTIONS
8131	Turned Down Side Tubes
8132*	Alum. 8 Bolt Tubes (Thick Flg/Modified)
8138	Aluminum Tubes w/ Steel Spindles
8140	One Piece Aluminum Tubes
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8190*	Thin Flanged 8 Bolt Tubes
8190A*	Thin Flanged Aluminum 8 Bolt Tubes
8201	**Internal Aluminum Tube Seal**
8213	2-1/2" Wide 5 Tubes
8237	Tube & Bell Locknut Assembly
9125	One Piece Aluminum Tubes, 1 Ton (pg. 54)

***Spindles not included. See page 57.**

Thermal Dispersant Coating Option 8208

While being 1/3 lighter than aluminum, magnesium acts as an insulator and holds in heat resulting in higher temperatures inside your rear. This very effective corrosion resistant coating helps cool your rear assembly by dispersing the heat, therefore resulting in cooler operating temperatures!

The REM® Process, used in finishing gears, increases performance by virtually eliminating gear friction and wear, also reducing oil temperature.

Nothing comes close to being as friction free.

P/N 8218-RP
(Ring & Pinion)

P/N 8218-BRG
(Bearings)

ARP® RING GEAR BOLT KIT
Option 9147 Installed in Rear
KIT P/N 9381

See Page 102
REM Ring & Pinion Option 8218-RP

Tube & Bell Thru-Bolt With Flange Locknut Assembly
Option 8237 (4 & 6 Rib) or
Option 8237-8 (8 Rib)

Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140
P/N 1730 or Mobil-1® 70-90
For SDS Please Call or
Visit our Website.

See pages 98-99 for Winters 6 Spline Quick Change Gears
See Pages 103-105 for Options
See page 117 Complete Closed Tube Set-up Instructions

#	DESCRIPTION	P/N	QTY
1*	Aluminum Non-Quick Change Center Section	V8-2518	1
2*	Aluminum 12 Rib Left Side Bell	V8-3180-01	1
3*	Aluminum 12 Rib Right Side Bell	V8-3180-01	1
4*	31 Spline Aluminum Spool	6839	1
5*	3.78 Ratio Ring & Pinion, Standard (6 Spline)	6811	1
6*	Shim Kit, Aluminum Spool	5295	1
7*	Bearing Cone, Aluminum Spool	7340	2
8*	Bearing Cup, Side Bell	7310	2
9	Carrier Seal	7205	2
10*	O'Ring, 4 Rib Side Bell	7451	2
11	Ring Gear Bolt, Threaded Ring Gear	7852	10
12	3/8" Belleville Washer, Threaded Ring Gear	7815	10
13	3/8-24 x 3/4" HHCS, 4 Rib Side Bell	7109S	16
14	3/8" SAE Flatwasher	7114	16
15*	Ball Bearing, Pinion Nose	7392	1
16	Bearing Cone, Pinion Shaft	7527	1
17	O'Ring	8404	1

#	DESCRIPTION	P/N	QTY
18	Spacer	2951	1
19	Bearing Cup	2519	1
20	Washer	7114	6
21	3/8-16x1 HHCS	7110	6
22	Pinion Nut	2892	1
23	Seal	7204	1
24	Snap Ring	7652	1
25	Output Flange	2521	1
26	Retaining Washer, Drive Yoke	5037	1
27	3/8-24 x 1" HHCS	7109Y	1
28	Yoke	5856	1
29	3/8-16x1 Ferry Head Screw	7735	4
30	Stud	7905	20
31	3/8" Belleville Washer	7916	20
32	3/8-16 Nylon Locknut	7885	20
33	#6 AN Port Plug	7874S	2

*Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.

3.78 Ring & Pinion Standard

HIGH PERFORMANCE REAR ENDS

7" RING GEAR - 10 BOLT

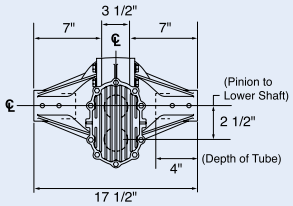
Who else but Winters. Quick Change Rear too big?.... Not anymore! Completely designed from the ground up, Winters 7" Quick Change is compact and strong. This assembly uses efficient Spiral Bevel Ring & Pinion, 31 Spline Aluminum Spool and 2-1/2" Steel Side Tubes. To you, it's more than just a race car, so get more than just a rear end.

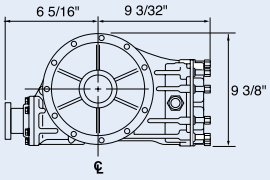
ASSEMBLIES

P/N 72790 - 2" GN P/N 73265 - Toyota® Style Tube Ends P/N 72270 - Wide 5
P/N 72063 - 2-1/2" GN P/N 72260 - Baby Grand

•These assemblies are also available with magnesium castings. When ordering a magnesium assembly, add prefix 'K' to the P/N (Example K72260)

DIMENSIONAL DATA





OPTIONS

Options highlighted in Yellow are Low Drag Options

Options shown in Blue are Popular Options

	CENTER OPTIONS
81378-7	3.78 Ratio Ring & Pinion, Standard
81457-7	4.57 Ratio Ring & Pinion
81513-7	5.13 Ratio Ring & Pinion
8208	Thermal Dispersant Coating
8202-7-378	EDM Ring Gear
8216	Magnesium Center
8218-RP	REM® Ring & Pinion
8218-BRG	REM® Bearing (# is per Bearing)
8227	Yoke, 1310 Series
8298	Low Drag Carrier Seals
	DIFFERENTIAL OPTIONS
8115	Aluminum 31 Spline Spool
8115-28	Aluminum 28 Spline Spool (not for 4.11)
8171M-28	Billet Aluminum 28 Spline Locker
8171M-31	Billet Aluminum 31 Spline Locker
8194M-28	Wedgelock, 28 Spline (pg. 30)
8194M-31	Wedgelock, 31 Spline (pg. 30)
8244S-CT	Low Drag Brgs, Differential, Steel
	TUBE OPTIONS
8181L	Camber, Specify Up or Down
8181R	Camber, Specify Up or Down
8201	Internal Aluminum Tube Seal
8237	Tube & Bell Locknut Assembly
8140	One Piece Aluminum Tube
	RING & PINION OPTIONS
81378-7	3.78 Ratio, Standard
81457-7	4.57 Ratio
81513-7	5.13 Ratio

Thermal Dispersant Coating - Option 8208

While being 1/3 lighter than aluminum, magnesium acts as an insulator and holds in heat resulting in higher temperatures inside your rear. This very effective corrosion resistant coating helps cool your rear assembly by dispersing the heat, therefore resulting in cooler operating temperatures!

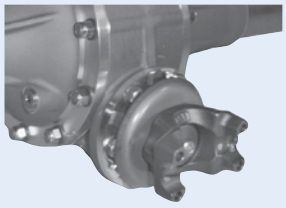
P/N 75067GL-16

2 lbs 6 oz

P/N 75067GL-29500

4 lbs 9 oz

Available in 16", 17", 18" and 29-1/2"

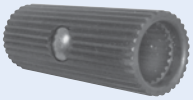


Option 8227
1310 Series Yoke

2-1/2" Baby Grand Tube & Spindle Assembly
P/N 3363A

Lightweight Gundrilled Axles

Made from preheat treated ETD-150 with a 15/16" gundrilled hole. Recommended for light duty applications, these axles are super light. Popular lengths available are 16" and 29-1/2", featuring a 3-1/2", 31 spline end that may be cut down 1-1/2" for shorter applications.



Axle Adapter
P/N 3665

Allows use of stock Toyota® axles with 31 spline aluminum spool.

The REM® Process, used in finishing gears, increases performance by virtually eliminating gear friction and wear, also reducing oil temperature.

Nothing comes close to being as friction free.

P/N 8218-RP (Ring & Pinion) | **P/N 8218-LS** (Lower Shaft) | **P/N 8218-BRG** (Bearings)

ARP® RING GEAR BOLT KIT

Option 9147S Installed in Rear
KIT P/N 9381S

TOYOTA® STYLE FLANGE

26 Spline

P/N 3362
Steel
1-3/8-26 Spline Yoke

P/N 3362A
Aluminum
1-3/8-26 Spline Yoke

NOW AVAILABLE IN MAG!

Mag Assembly Shown with Option 8208

Use Winters Semi-Synthetic Hypoid Lube with Moly 80-90-140 P/N 1730 or Mobil-1® 70-90 For SDS Please Call or Visit our Website.

See page 97 for Winters 7" Quick Change Gears
See Pages 103-105 for Options
See pages 117 Complete Closed Tube Set-up Instructions
See page 83 for Baby Grand Hub Kits
See page 85 for Double Spline Axles

#	DESCRIPTION	P/N	QTY
1	Aluminum Center Section	3300	1
2	Aluminum Right Side Bell	3306	1
3	Aluminum Left Side Bell	3345	1
4	O'Ring, Side Bell	3351	2
5	Shim Kit, Aluminum Spool	5295	1
6	Bearing Cone, Aluminum Spool	7340	2
7*	Bearing Cup, Side Bell	7310	2
8	Seal, Side Bell	7205	2
8	Seal, Side Bell, Viton	7283V	2
9	3/8-16 x 2" Stud	7905	20
10	3/8" Belleville Washer	7916	20
11	3/8-16 Nylon Locknut	7885	20
12*	31 Spline Aluminum Spool	6839	1
13	3/8-24 Ring Gear Bolt	7852S	10
14	3/8" Belleville Washer	7815	10
15*	3.78 Ratio Ring & Pinion, Standard (6 Spline)	11___**	1
16	Bearing Cone, Pinion Shaft	8609	1
17	Bearing Cone, Pinion Shaft	8610	1
18	Flanged Double Cup, Pinion Shaft	3307	1
19	3/8-16 x 1" BHCS (Torx®)	9308	5
20	Bearing Washer, Pinion	3308	1
21	Pinion Nut (1-1/8-18 Thread)	6821-03	1
22	O'Ring, Pinion Nut	7455	1
23	Pinion Nut Retainer	6822	1
24	Bearing Retainer	3349	1
25	Quick Change Gear Set (Not Included)	3800	1
26	Gasket, Gear Cover	3343	1

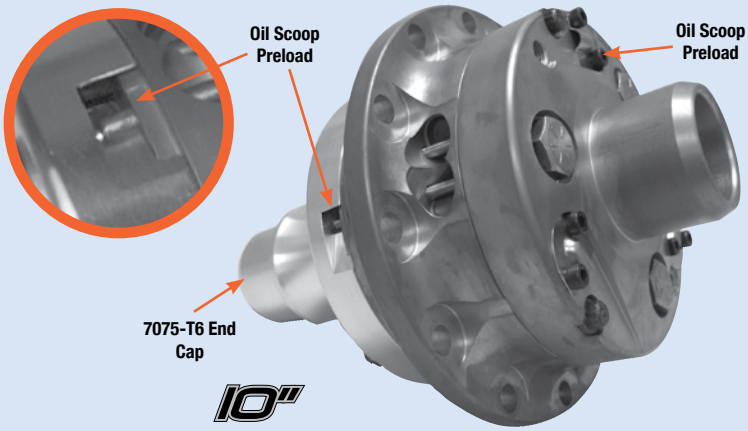
#	DESCRIPTION	P/N	QTY
27	Gear Cover	3342	1
28	#6 AN Port Plug	7874S	2
29	Bearing, Gear Cover, 2nd Gen, 2.0472" O.D.	7532	2
29	Bearing, Gear Cover, 1st Gen, 1.8504" O.D.	8611	2
30	3/8-16 High Nut	7794A	6
31	3/8-16 x 1-3/4" Stud	7802	6
32	5/16" Diameter Steel Ball	7398	6
33	Bearing, Lower Shaft (Rear)	8608	1
34	Retaining Ring, Rear Bearing	8323	1
35	Retaining Ring, Lower Shaft	7634	1
36*	Standard Lower Shaft	3340	1
37	Bearing, Lower Shaft (Yoke Input)	3324	1
39	O'Ring, Seal Plate	7439	1
40	Seal, Seal Plate, .635" Thick Seal	3327	1
41	Internal O'Ring, Seal Plate	7484	1
42	Seal Plate	3325	1
43	3/8" Flatwasher	7114	12
44	3/8-16 x 1" HHCS	7110	12
45*	Drive Yoke, Steel	3328	1
46	Retaining Washer, Drive Yoke	5037	1
47	3/8-24 x 1" HHCS	7109Y	1
48	3/8" Socket Pipe Plug	7111B	1
49	Inspection Plug	3643	2
50	O'Ring, Inspection Plug	7454	2
53	Drive Yoke, Toyota®, Standard Steel	3362	1
53	Drive Yoke, Toyota®, Standard Aluminum	3362A	1

*Part Numbers in this list may vary depending on options ordered at time of purchase. Please check the assembly tag included with your rear.
**Last 3 digits depict ratio. Example: 11378 = 3.78:1

A DIFFERENTIAL OF RESEARCH, HIGH-TECH & HIGH PERFORMANCE

MORE FORWARD BITE THAN ANY OTHER DIFFERENTIAL EVER BUILT!

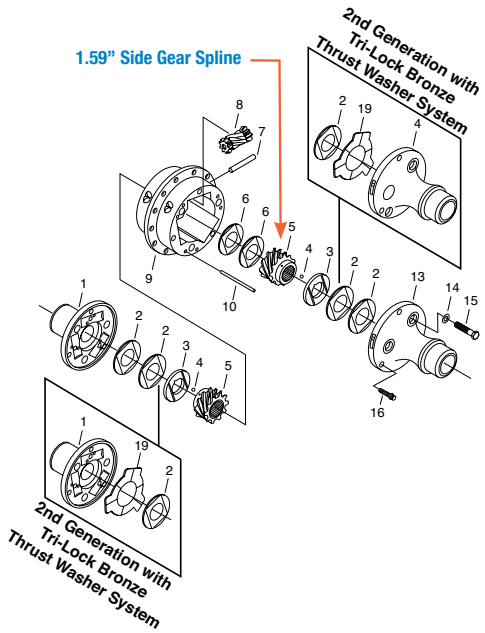
The Trackstar is the only crossed axis gear assembly where both worm and side gears are completely encased in a heat treated 4140 Center Housing. This design eliminates housing flex, maintaining close tolerance gear meshing under load conditions. This increases traction on virtually all track surfaces. During operation, oil is scooped (oil level must be maintained) and gears are automatically lubricated. 7075-T6 End Cap reduces rotating weight to 21 lbs 3 oz. It offers a level of refinement that other differentials will be measured against for years. Winters Trackstar is unparalled! Note: Axle lengths may vary when changing from a spool to a differential. Refer to pages 108-112.



P/N 3224-01

2nd Generation with Tri-Lock Bronze Thrust Washer System
Option 8231-01 Installed In Rear | 2.031" Bearing Diameter 21 lbs 3 oz
P/N 3224-01R For use with Reverse Rotation Only
Option 8231-01R Reverse Rotation Trackstar Installed In Rear

Application - Open | Max. Power - Open | Race Length - Open
Stagger - 1-1/4 - 1-3/4" (Best Results) | Oil - Mobil 1® 70-90



PLEASE NOTE:

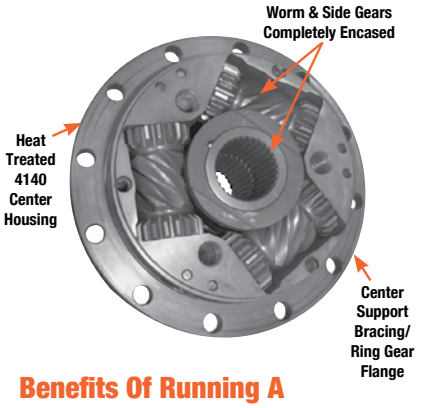
When ordering differential replacement or components, please specify Serial # and P/N of differential when placing order.

2ND GENERATION

The 2nd Generation Trackstar differential is a torque multiplier that works through the use of friction, generated by thrust forces from the internal gearing, as well as the Tri-Lock Bronze Thrust Washer System. This helps multiply what torque is available from the wheel that is starting to spin up or lose traction and sends that available torque to the slower turning wheel with the better traction.

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Side Housing	3185	1
2	Grooved Thrust Washer	7547-03	4
3	Keyed Thrust Washer	3205	2
4	Steel Ball	7399	2
5	Side Gears	3204	2
6	Grooved Thrust Washer	7570-03	2
7	Axle Pin	3214	6
8	Pinion Gear	1709	6
9	Center Housing	3158	1
10	Retainer Pin	3216	6
13	Side Housing	3184	1
14	Washer	8719	6
15	1/2-20 x 1-1/2" HHCS	8058	6
16	5/16-18 x 1-1/4" 12pt	7162	6
17*	Oil Scoop	3206	3
18*	Screws, Oil Scoop	7938	6
	2ND GEN SET-UP		
1	Side Housing	3185	1
2	Grooved Thrust Washer	7547-03	2
4	Side Housing	3184	1
19	Tri-Lock Bronze Thrust Washer	12367	1



Benefits Of Running A Trackstar Assembly

- **Increased straight-a-way speed due to decreased stagger.**
- **Since torque is applied with reference to the difference in inside and outside wheel speeds, corner entry and exit speeds increase.**
- **Tire life improved due to limited wheel slippage.**
- **Adapts well to changing track conditions.**
- **Gear design allows instant torque sensing and transfers the power to the wheel with the most traction.**

P/N 2297

Option 8183 Installed In Rear
2.031" Bearing Diameter
13 lbs 10 oz

Application - Circle Track
Max. Power - 550-600 HP
Race Length - 35-125 Laps
Stagger - 1-1/4 - 1-3/4" (Best Results)
Oil - Mobil 1® 70-90

The Triple Track Traction Control Differential: Race Tested and Improved! This assembly uses crossed axis worm drive gearing with a one piece 7075-T6 Billet Aluminum Housing. Pound for pound nothing comes close. In low horsepower race cars the major disadvantage of other crossed axis worm drive gear units is its mass and weight involved. The result is a high amount of rotational inertia (flywheel effect). This is relieved by using a one piece 7075-T6 Billet Aluminum Housing. This unit will bolt in any full size quick change with a 10" ring gear, as well as the full size rear with 8" ring gear.

Note: Axle lengths may vary when changing from a spool to a differential. Refer to pages 108-112. Too much lube can cause problems as well as too little. Check your level! See the Frequently Asked Questions page for proper fill and level instructions.

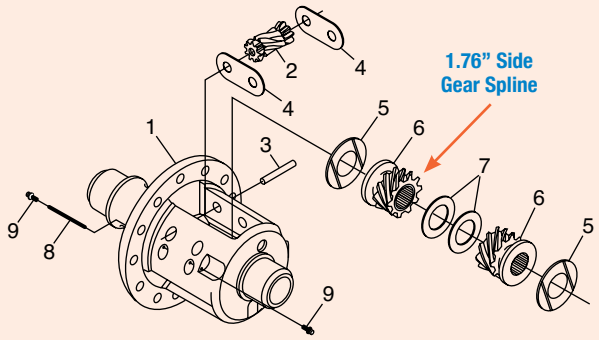
Shown With Option 8218-DG
REM Differential Gears
See page 102

Benefits Of Running A Triple Track Assembly

- Increased straight-a-way speed due to decreased stagger.
- Since torque is applied with reference to the difference in inside and outside wheel speeds, corner entry and exit speeds increase.
- Tire life improved due to limited wheel slippage.
- Adapts well to changing track conditions.
- Gear design allows instant torque sensing and transfers the power to the wheel with the most traction.

PLEASE NOTE:

When ordering differential replacement or components, please specify Serial # and P/N of differential when placing order.



Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Main Housing	1679	1
2	Pinion Gear	1709	6
3	Axle Pin	2298	6
4	Wear Plate	1586	6
5	Grooved Thrust Washer	1718	2
6	Side Gear	2238	2
7	Thrust Washer	7570-03	2
8	Retainer Pin	1608	3
9	1/4-20 x 5/8" 12pt	8009	6

WINTERS TRACK

P/N 6513-31

Option 8121W Installed In Rear

P/N 6513P-31

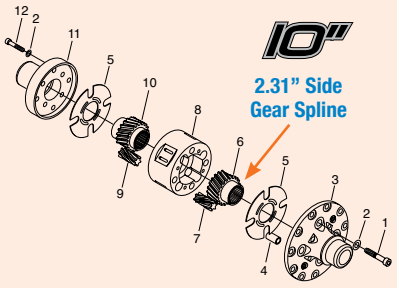
Option 8121P Installed In Rear

2.031" Bearing Diameter

20 lbs 11 oz

CNC machined to exacting tolerances. This virtually unbreakable, parallel design automatically senses wheel spin and delivers positive traction.

Torque Specs: Torque to 120 ft lbs with Red Loctite®.



Assembly Includes

#	DESCRIPTION	P/N	QTY
1	1/2-20 x 2" HHCS	7113	4
2	Spring Washer	7773	8
3*	Left Side Housing	6359	1
4	Bushing	1459	4
5	Wear Plates	6315	2
6	Left Side Gear	6330-02	1

#	DESCRIPTION	P/N	QTY
7	Left Pinion Gear	6329-01	4
8*	Center Housing	6361	1
9	Right Pinion Gear	6329-02	4
10	Right Side Gear	6330-01	1
11*	Right Side Housing	6360	1
12	1/2-20 x 1-1/2" HHCS	8058	4

*Must be purchased as a complete unit.

PLEASE NOTE:

When ordering differential replacement or components, please specify Serial # and P/N of differential when placing order.

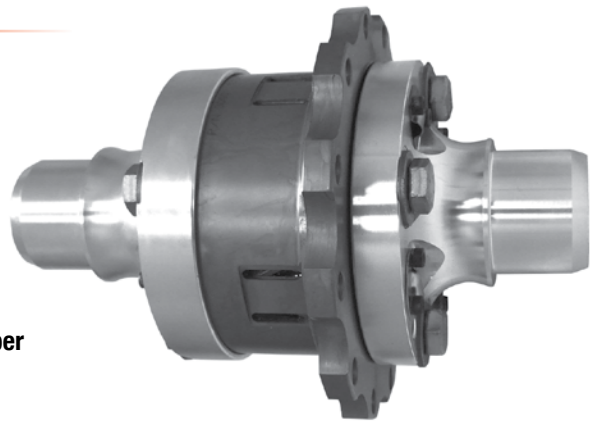
WINTERS OFFSET TRACK

P/N 3090

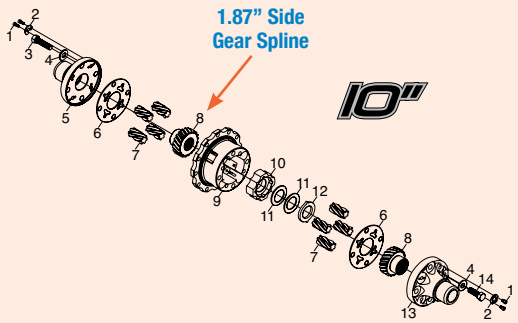
Option 8121WOT Installed In Rear

2.031" Bearing Diameter

19 lbs 3 oz



What separates this assembly from all others? The ring gear bolts directly to the center housing, not the end cap. Eliminating end cap deflection, this design increases structural strength and assures consistent operation. The left and right oil scoop system maintains proper internal lubrication. Offset design may require different axle lengths.



Assembly Includes

#	DESCRIPTION	P/N	QTY
1	10-24 x 5/16" SHCS	8761	16
2	Oil Pick Up	3206	8
3	1/2-20 x 1-1/2" HHCS	8058	4
4	1/2" Belleville Washer	7773	8
5*	Left Side Housing	3072	1
6	Wear Plate	3394	2
7	Planetary Gear	6329	8

#	DESCRIPTION	P/N	QTY
8	Side Gears	2112	2
9*	Center Housing	3065	1
10	Scalloped Spacer	2110	1
11	Washer	2113	2
12	Spacer Insert	2111	1
13*	Right Side Housing	3071	1
14	1/2-20 x 1-1/2" HHCS	7974	4

*Must be purchased as a complete unit.

LIGHTWEIGHT BILLET ALUMINUM LOCKER

P/N 5114-01L

Option 8171L Installed In Rear

2.031" Bearing Diameter

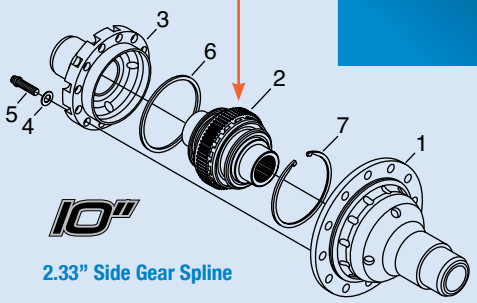
10 lbs 13 oz

Winters Lightweight Aluminum Locker reduces rotating and unsprung weight. At 10 lbs 13 oz... nothing comes close! This assembly requires a 1" longer right axle and a 1" shorter left axle than the standard locker assembly. Comes standard with 78 lb factory calibrated springs installed. Locker spring rates are laser etched on the housing. Other spring rates are available (see options below).

Torque Specs: Torque to 25 ft lbs with Red Loctite®.

Retaining rings sandwich locker assembly eliminating housing wear and inconsistent locker function.

Option 8218-LIA REM® Finish Locker Internal Assembly. See pg. 31 For Individual Internal Parts.



2.33" Side Gear Spline

Assembly Includes

#	DESCRIPTION	P/N	QTY
1*	Main Housing	2880	1
2	Locker Internal Assembly	1390	1
3*	Cover	2881	1
4	Washer	7151	12
5	3/8-16 x 1-1/4" 12pt	7713	12
6	Retaining Ring	3066	1
7	Retaining Ring	8329	1

*Must be purchased as a set.

FACT: Locker assemblies are speed sensitive, not torque sensitive. Whichever wheel travels faster is going to unlock.

BILLET ALUMINUM LOCKER

P/N 5114-01

Option 8171 Installed In Rear

2.031" Bearing Diameter

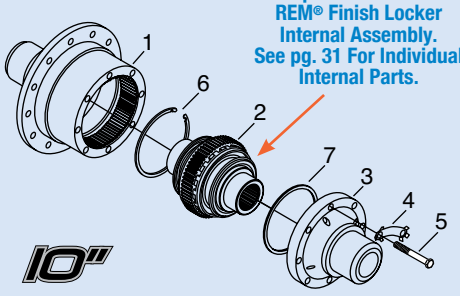
13 lbs 8 oz

This locker is a full automatic locking differential. It delivers spool-type traction on the straightaways yet automatically unlocks in the corners. Comes standard with 78 lb factory calibrated springs installed. Other spring rates are available (see options below).

Torque Specs: Torque to 30 ft lbs, Backoff, Re-torque to 20 ft lbs.

Note: Axle lengths may vary when changing from a spool to a differential. Refer to pages 108-112.

Option 8218-LIA REM® Finish Locker Internal Assembly. See pg. 31 For Individual Internal Parts.



2.33" Side Gear Spline

Too much lube can cause problems as well as too little. Check your level! See the Frequently Asked Questions page for proper fill and level instructions.

Assembly Includes

#	DESCRIPTION	P/N	QTY
1*	Main Housing	6910	1
2	Locker Internal Assembly	1390	1
3*	Cover	6911	1
4	Lock Tab	1589	4
5	3/8-16 x 3-1/4" HHCS	7823	8
6	Retaining Ring	8329	1
7	Retaining Ring	3066	1

*Must be purchased as a set.

LOCKER INTERNAL ASSEMBLY

P/N 1390

See page 31 for individual internal parts.

Option 8218-LIA REM® Finish Locker Internal Assembly.

LOCKER SPRINGS

All Winters springs are tested to ensure accuracy within 2 lbs of rated category.

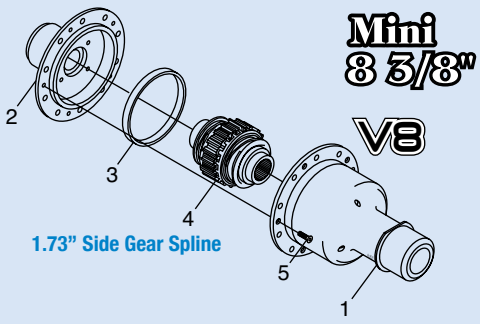
DESCRIPTION	APPLICATION	P/N	OPTION
Side Gear Spring, Orange, 58 lb	10" QC, 8-3/8" QC	1280O	8214-58
Side Gear Spring, Blue, 68 lb	10" QC, 8-3/8" QC	1280B	8214-68
Side Gear Spring, Yellow, 78 lb	10" QC, 8-3/8" QC	1280Y	Standard
Side Gear Spring, Red, 90 lb	10" QC, 8-3/8" QC	1280R	8214-90

8-3/8 Differentials

BILLET ALUMINUM LOCKER

P/N 1791-28 (28 SPLINE)
Option 8171M-28 Installed In Rear
P/N 1791-31 (31 SPLINE)
Option 8171M-31 Installed In Rear
2.031" Bearing Diameter
7 lbs 12 oz

This locker is a full automatic locking differential. It delivers spool type traction on the straightaways yet automatically unlocks in the corners. Available in 28 or 31 Spline. Comes standard with 58 lb factory calibrated springs installed. Other spring rates options are available (see pg. 29).



IMPORTANT
A clearance chamfer must be applied to the ring gear in order for this locker to seat properly.

Assembly Includes

#	DESCRIPTION	P/N	QTY
1*	Main Housing	1786	1
2*	Cover	1785	1
3	Spacer	1789	1
4	Locker Internal Assembly	1774**	1
5	1/4-20 x 1/2" FHCS	7996	5

*Must be purchased as a set.

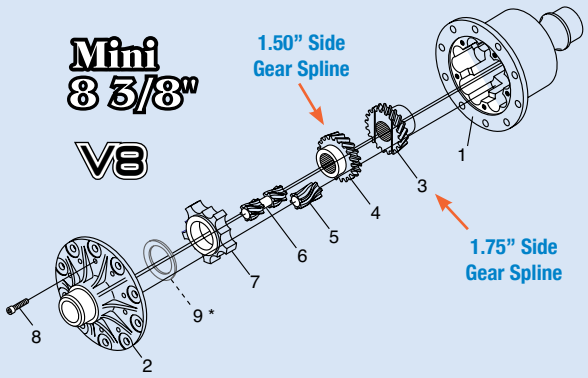
**Specify 28 or 31 Spline (Ex. 1774-31)

WEDGELOCK

P/N 1792-28 (28 SPLINE)
Option 8194M-28 Installed In Rear
P/N 1792-31 (31 SPLINE)
Option 8194M-31 Installed In Rear
2.031" Bearing Diameter
14 lbs 8 oz

The Wedgelock features a parallel gear design which automatically senses wheel spin and delivers positive traction.

PLEASE NOTE:
When ordering differential replacement or components, please specify Serial # and P/N of differential when placing order.



Assembly Includes

#	DESCRIPTION	P/N	QTY
1*	Main Housing	1687	1
2*	Cover	1688	1
3†	Side Gear, Right	1693-xxA	1
4†	Side Gear, Left	1693-xxB	1
5	Pinion Gear, Short	1692-01	5
6	Pinion Gear, Long	1692-02	5
7	Scalloped Spacer	1996	1
8	1/4-28 x 1" 12pt	8796	5
9	Belleville Washer	2113**	1

*Must be purchased as a set.

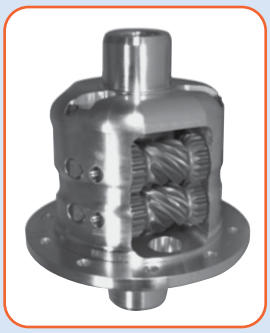
†Specify 28 or 31 Spline (Ex. 1693-31A)
**Washer is used in preload application only.

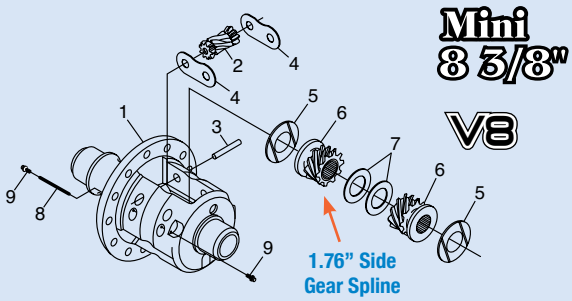
ALUMINUM TRIPLE TRACK

P/N 2297M
Option 8183M Installed In Rear
2.031" Bearing Diameter
13 lbs 8 oz

The 31 Spline Aluminum Triple Track assembly features crossed axis worm drive gearing with a one piece, 7075-T6 Billet Aluminum Housing. Available for 4.11 Ratio Ring & Pinion Only.

Note: Axle lengths may vary when changing from a spool to a differential. Refer to pages 108-112.





Assembly Includes

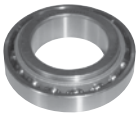
#	DESCRIPTION	P/N	QTY
1	Main Housing, Mini	1679M	1
2	Pinion Gears	1709	6
3	Axle Pin	2298	6
4	Wear Plate	1586	6
5	Grooved Thrust Washer	1718	2
6	Side Gear	2238	2
7	Thrust Washer	7570-03	2
8	Retainer Pin	1608	3
9	1/4-20 x 5/8" 12pt	8009	6

DIFFERENTIAL COMPONENTS

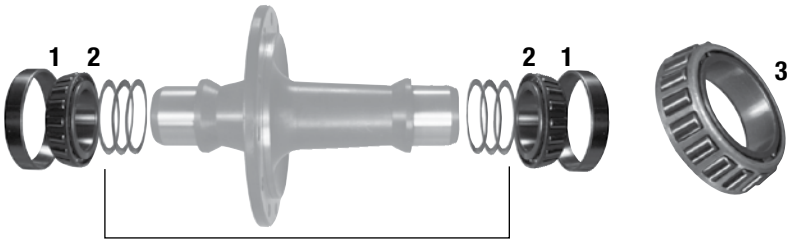
STEEL SPOOLS AND DIFFERENTIALS

2.000" JOURNAL

#	DESCRIPTION	P/N	QTY
1	Carrier Bearing Race	7310	2
2	Carrier Bearing Cone (2.000")	7309	2
3	Checking Bearing Cone (2.000")	5138	2



LOW DRAG!
P/N 7309ACS
Angular Contact Bearings w/ Steel Balls
Refer to page 118 for individual bearings.

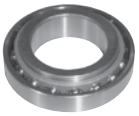


Shown For Reference Only

ALUMINUM SPOOLS AND DIFFERENTIALS

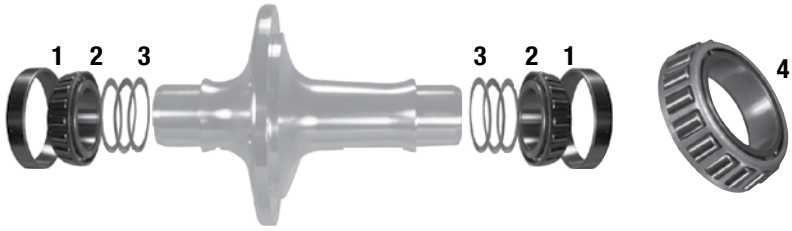
2.031" JOURNAL

#	DESCRIPTION	P/N	QTY
1	Carrier Bearing Race	7310	2
2	Carrier Bearing Cone (2.031")	7340	2
3	Carrier Shim Kit, 12 Shims (2.031" ID)	5295	1
4	Checking Bearing Cone (2.031")	5294	2

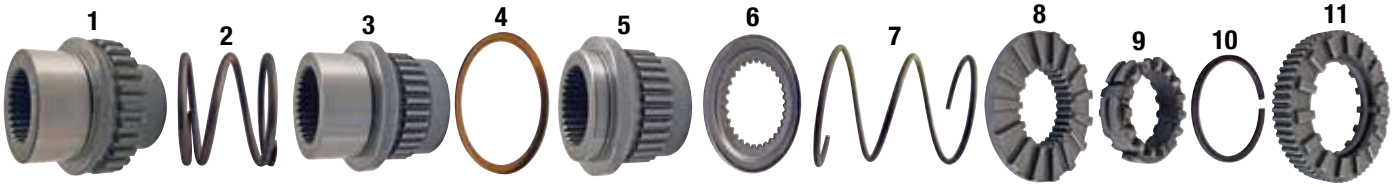


LOW DRAG!
P/N 7340ACS
Angular Contact Bearings w/ Steel Balls
Refer to page 118 for individual bearings.

Purchase Separately
P/N 7325 ACS

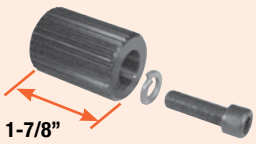


LOCKER PARTS

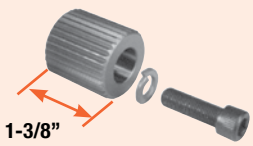


All Winters springs are tested to ensure accuracy within 2 lbs of rated category. (Colors may vary)

DIFFERENTIAL LOCK UP PLUG KITS



31 Spline
P/N 6789L



31 Spline
P/N 6789

#	DESCRIPTION	APPLICATION	P/N	OPTION
1	31 Spline Side Gear (Original Locker)	10" QC	5519-01	------
1	12 Spline Side Gear (Original Locker)	10" QC	5519-02	------
2	Stainless Steel Side Gear Spring (Original Locker)	10" QC	5520	------
3	31 Spline Side Gear (Pre '99 Late Model Locker)	10" QC	1120	------
3	28 Spline Side Gear (Pre '99 Late Model Locker)	10" QC	1122	------
4	Spring Retainer	10" QC, 8-3/8" QC	2279	------
5	31 Spline Side Gear (Pre '99 Late Model Locker)	8-3/8" QC	2064	------
5	28 Spline Side Gear (Pre '99 Late Model Locker)	8-3/8" QC	1968	------
6	Spring Retainer	10" QC, 8-3/8" QC	2313	------
7	Locker Spring, Orange, 58 lb	10" QC, 8-3/8" QC	1280O	8214-58
7	Locker Spring, Blue, 68 lb	10" QC, 8-3/8" QC	1280B	8214-68
7	Locker Spring, Yellow, 78 lb	10" QC, 8-3/8" QC	1280Y	Standard
7	Locker Spring, Red, 90 lb	10" QC, 8-3/8" QC	1280R	8214-90
7	Locker Spring, 100 lb	10" QC, 8-3/8" QC	1280-100	8214-100
8	Splined Disc Spring Retainer	10" QC, 8-3/8" QC	2312	------
9	Center Cam	10" QC, 8-3/8" QC	2311	------
10	Retaining Ring	10" QC, 8-3/8" QC	8343	------
11	Center Gear, 15 Tooth	10" QC, 8-3/8" QC	2310	------

Spools & Oil Circulators

SPOOLS

#	DESCRIPTION	WEIGHT	BRG DIA	P/N	OPTION
1	31 Spline Aluminum Spool, 10"	5 lbs 12 oz	2.031"	5034-11A	8115
2	31 Spline Ultralight Aluminum Spool, 10"	5 lbs 2 oz	2.031"	5034-11UL	8130
3	31 Spline Aluminum Spool, Mini 8-3/8", V8	3 lbs 11 oz	2.031"	6839-31	8115
3	28 Spline Aluminum Spool, Mini 8-3/8", V8	3 lbs 14 oz	2.031"	6839-28	8115-28
3	31 Spline Aluminum Spool, Mini 4.11 Only	5 lbs 1 oz	2.031"	1513-31	8195-31

SPRINT GEAR COVER PUMP ASSEMBLY

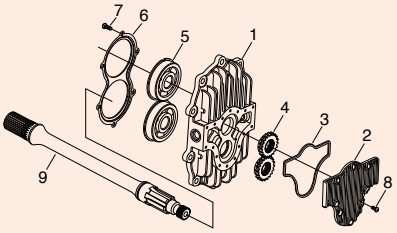
P/N 3792 Gear Cover Assembly & Lower Shaft (10")

P/N 3792-02 Gear Cover Assembly & Lower Shaft (8")

P/N 3792-01 Gear Cover Assembly Only

Option 8264

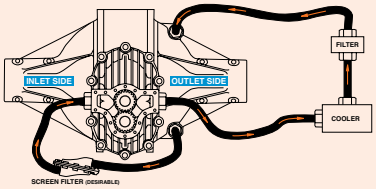
By far the trickest rear end pump assembly ever! This cover installs in minutes and fits all 10" rear ends. Extends no further than existing cover nuts.



#6 AN Inlet & Outlet Port

See page 46 for Oil Screen Assembly P/N 3720

For Heat Treated Lower Shaft add Option 8106 when ordering.



SHOWN USING CONVENTIONAL ENGINE ROTATION
(CLOCKWISE FROM FRONT, COUNTER CLOCKWISE FROM REAR)
INLET IS SHOWN AT MOST DESIRABLE LOCATION (IN BELL).
(USE OF CENTER SECTION BOTTOM DRAIN HOLE NOT TO BE USED W/O IN-LINE FILTER
BEFORE THE PUMP BECAUSE ALL SEDIMENT GRAVITATES TO THE BOTTOM PLUG.)
DEBRIS CIRCULATION WILL DESTROY THE PUMP.

WPS00

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Aluminum Gear Cover	2959	1
2	Aluminum Pump Cover	2965	1
3	Rubber Gasket	2960	1
4	Pump Gear	2961	2
5	Bearing	8659	2
6	Bearing Retainer	3258	1
7	1/4-20 x 1/16" BHCS	8083	6
8	10-24 x 3/8" SHCS	7938	16
9*	Lower Shaft, 10"	2963	1
9*	Lower Shaft, 8"	4951P	1

***P/N may vary depending on options ordered. See page 43 for Lower Shaft Options.**

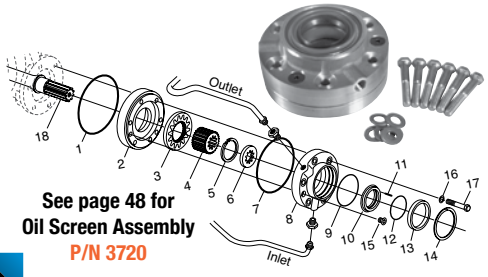
PUMP ASSEMBLY

P/N 5305

Option 8110

This pump assembly fits all Winters 10" rear ends. This is a practical way to lower the oil temperature during long races by circulating lube through a cooler (cooler not included).

Please Note: This pump assembly requires a shorter (1-3/8") drive shaft.



See page 48 for Oil Screen Assembly P/N 3720

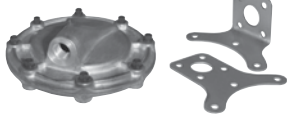
Assembly Includes

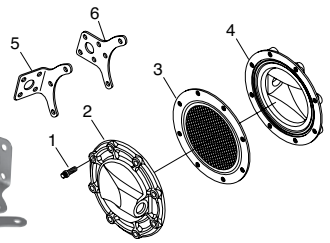
#	DESCRIPTION	P/N	QTY
1	O'Ring, Seal Plate	7413	1
2	Pump Housing	5306	1
3	Rotor Assembly for Pump	5303	1
4	Driver Spacer	5304	1
5	Sealing Ring	2318	1
6	Spacer	2309	1
7	O'Ring, Pump Housing	7412	1
8	Pump Housing	5299-01	1
9	O'Ring	7489	1
10*	Seal, Seal Plate	7204T	1
10*	Seal, Viton, Seal Plate	7204V	1
11	Roll Pin	8028	1
12	O'Ring	7488	1
13	Seal Retainer	2267	1
14	Retaining Ring, Seal Plate	8300	1
15	5/16-18 x 1" Screw	7193	2
16	3/8" SAE Flatwasher	7114	6
17	3/8-16 x 2-1/4" HHCS	7192	6
18	Standard Lower Shaft, Pump	5003-03	1

***P/N may vary depending on options ordered.**

OIL SCREEN

#6 AN Inlet & Outlet Port





400 Micron Screen

ASSEMBLY P/N 3720

See Page 32 for available Oil Pumps

Assembly Includes

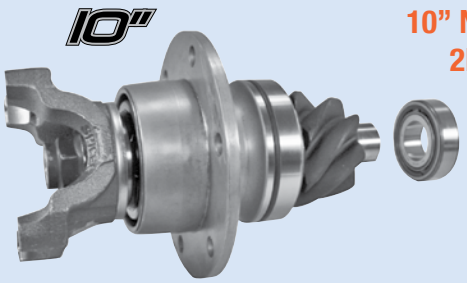
#	DESCRIPTION	P/N	QTY
1	1/4-20 x 1" 12pt	7159	8
2	Screen Half, Drilled	3393-01	1
3	Filter Screen w/ O'Ring	3838	1
4	Screen Half, Tapped	3393-02	1
5	90° Mounting Bracket	3398	1
6	Straight Mounting Bracket	3397	1

RING & PINION NON-QUICK CHANGE ASSEMBLIES

ARP® RING GEAR BOLT KIT
Option 9147
KIT P/N 9381

INTEGRAL FLANGE PINION BEARING

10" NON-QUICK CHANGE
2ND GENERATION

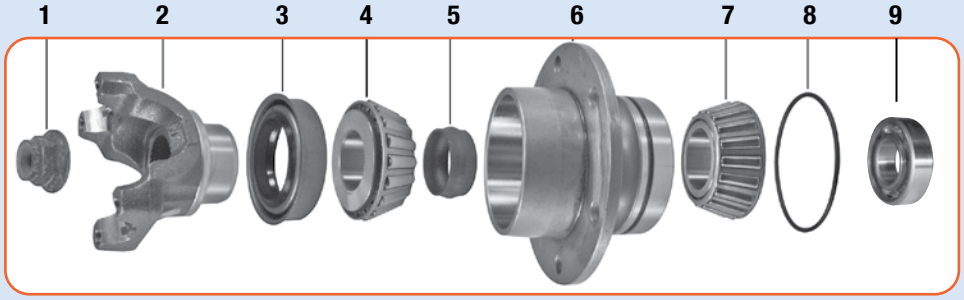


Pinion Nose Roller Bearing
P/N 7331
Option P/N 8143 (not available on ratios 6.00 and higher)

Available Ratios

RATIO	P/N w/o BRGS	P/N w/ BRGS	RATIO	P/N w/o BRGS	P/N w/ BRGS
4.12	35412	36412	5.42	35542	36542
4.22	35422	36422	5.50	35550	36550
4.28	35428	36428	5.66	35566	36566
4.42	35442	36442	5.83	35583	36583
4.62	35462	36462	6.00	35600	36600
4.71	35471	36471	6.17	35617	36617
5.00	35500	36500	6.33	35633	36633
5.14	35514	36514	6.50	35650	36650
5.28	35528	36528	6.67	35667	36667
5.33	35533	36533			

Our Flanged Pinion Bearing Assembly is designed for all Heavy Duty Non-Quick Change applications. Extend ring and pinion life with this spread bearing assembly that bolts in place for added pinion support. An integral seal and o'ring are incorporated into the bearing race.

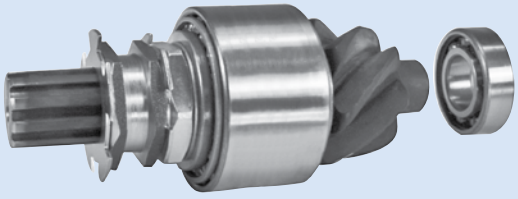


Assembly Includes

#	DESCRIPTION	P/N	QTY
1	3/4-20 Flanged Pinion Nut	2222	1
2	Drive Yoke, 1310 Series	2216	1
3	Seal, Buna "N"	7260	1
4	Outer Bearing Cone	7553	1
5	Crush Sleeve	2276	1
6	Flanged Bearing Race	7569	1
7	Inner Bearing Cone	7554	1
8	O'Ring	7490	1
9	Ball Bearing	7312	1

STANDARD PINION BEARING

10" NON-QUICK CHANGE
1ST GENERATION



Pinion Nose Roller Bearing
P/N 7331
Option P/N 8143 (not available on ratios 6.00 and higher)

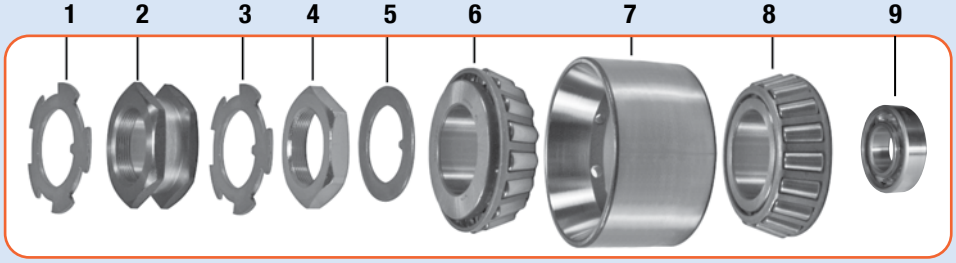
P/N 5401M (4.86 RING AND PINION W/ BEARINGS)
P/N 5400M (4.86 RING AND PINION W/O BEARINGS)
P/N 5715M (4.12 RING AND PINION W/ BEARINGS)
P/N 5714M (4.12 RING AND PINION W/O BEARINGS)
P/N 42457 (4.57 RING AND PINION W/ BEARINGS)
P/N 41457 (4.57 RING AND PINION W/O BEARINGS)

ENHANCED SURFACE FINISH
rem® Process

P/N 8218-RP
(Ring & Pinion)
P/N 8218-BRG
(Bearings)

Looks Like Chrome, But Better!

Our Standard Pinion Bearing Assembly is designed for use with a 10 Spline Pinion. This assembly is only available in 4.12, 4.86 & 4.57 ratios.



Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Lockwasher	1136	1
2	Non QC Pinion Nut (1-5/16-20-2B Thread)	1137	1
3	Bearing Lockwasher	5056	1
4	Jam Nut (1-5/16-20-2B Thread)	5032R	1
5	Washer	5055	1
6	Bearing	7308	1
7	Race	7307	1
8	Bearing	7308	1
9	Ball Bearing	7312	1

8" RING AND PINION

ARP® RING GEAR BOLT KIT
Option 9147S
KIT P/N 9381S

1ST GENERATION
10" QUICK CHANGE

P/N 65411B (4.11 RING AND PINION W/ BEARINGS)
P/N 65411 (4.11 RING AND PINION W/O BEARINGS)

To order any 10" Quick Change or Center Kit with an 8" Ring Gear add the following Options:
Option 8111-8 4.11 Ring & Pinion
Option 8133-8 Sprint Center

All Low Drag Bearing & Seal Options Available!

WANT REAL LOW DRAG? STICK THIS IN YOUR REAR!

Our brand new 8" Ring Gear is 20% smaller and 20% lighter than a 10" Ring Gear, reducing flywheel weight and unsprung weight. From a performance standpoint, this 8" Ring Gear will accelerate and de-accelerate quicker than a 10" Ring Gear. All cars will benefit, lower horsepower cars can expect more gain than higher horsepower cars.

EDM 8" Ring Gear Bolts Directly To All Full Size Spools, Differentials, Lockers, Etc.

Weighs 5.75 lbs

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Posi-Lock Retainer	1807	1
2	O'Ring	7455	1
3	Posi-Lock Nut (1-5/16-20-2B Thread)	1806	1
4	Washer	5055	1
5	Outer Roller Bearing	7527	1
6	Race	8622	2
7	Pinion Cup	4682	1
8	Inner Roller Bearing	8902	1

8" RING AND PINION

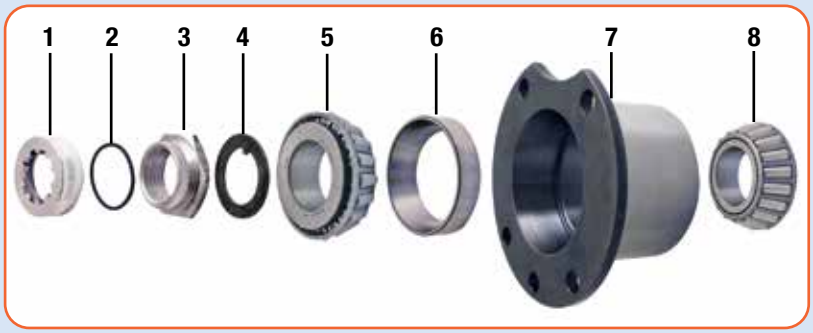
ARP® RING GEAR BOLT KIT
Option 9147S
KIT P/N 9381S

2ND GENERATION 10" QUICK CHANGE

P/N 65411SB-CT (4.11 RING AND PINION W/ BEARINGS)
P/N 65411S (4.11 RING AND PINION W/O BEARINGS)

To order any 10" Quick Change or Center Kit with an 8" Ring Gear add the following Options:
Option 8111-8S 4.11 Ring & Pinion
Option 8133-8S Sprint Center

For Pinion Nose Support add Option 8143-8S when ordering

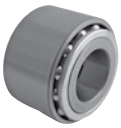


Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Posi-Lock Retainer	1807	1
2	O'Ring	7455	1
3	Posi-Lock Nut (1-5/16-20-2B Thread)	1806	1
4	Washer	5055	1
5	Outer Roller Bearing	7527	1
6	Race	8622	1
7	Pinion Cup	4871-01	1
8	Inner Roller Bearing	7308	1

10" ANGULAR CONTACT PINION BEARING

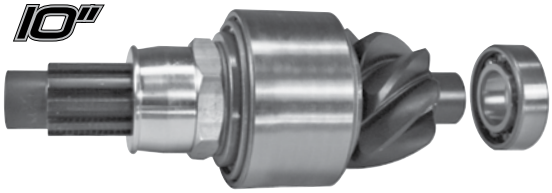
P/N 8642ACS (PINION BEARING KIT/ STEEL BALLS)
Option 8244S-P



ARP® RING GEAR BOLT KIT
Option 9147
KIT P/N 9381

Radial Contact (Low Drag)
This assembly is excellent for asphalt, low horsepower, below 7000 RPM.

10" STANDARD PINION BEARING, 12 BOLT



Pinion Nose Roller Bearing
P/N 7331
Option P/N 8143

Reduce Rotating & Unsprung Weight!
EDM Ring Gear
Option 8202-XXX

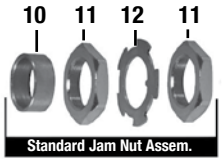
P/N 5400 (4.86 RING AND PINION W/O BEARINGS)
P/N 5401 (4.86 RING AND PINION W/ BEARINGS)
Option 8104 Pinion Posi-Lock Nut
Option 8143 Roller Nose Bearing

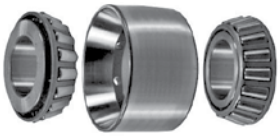
P/N 5714 (4.12 RING AND PINION W/O BEARINGS)
P/N 5715 (4.12 RING AND PINION W/ BEARINGS)
Option 8104 Pinion Posi-Lock Nut
Option 8143 Roller Nose Bearing

P/N 51457 (4.57 RING AND PINION W/O BEARINGS)
P/N 52457 (4.57 RING AND PINION W/ BEARINGS)
Option 8104 Pinion Posi-Lock Nut
Option 8143 Roller Nose Bearing

Replaces Standard Jam Nut Assembly (#s 10-12)

Double jam nuts with double washers are standard on Winters assemblies.





Option 8254-TIM
Timken® Pinion Cup & Cones

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Aluminum Retainer Plate	6296A	1
2	Pinion Retaining Spacer	5020	1
3	Posi-Lock Retainer	6484	1
4	O'Ring	7445	1
5	Posi-Lock Nut (1-5/16-20-2B Thread)	6485R	1
6	Washer	5055	1
7	Bearing	7308	2
8	Race	7307	1
9	Ball Bearing	7312	1
10	Quick Change Gear Spacer	5021	1
11	Jam Nut	5032R	2
12	Bearing Lockwasher	5056	1

10" FLANGED PINION BEARING

P/N 2380

Add Option 8191 & Option 8104 To Standard Ring & Pinion

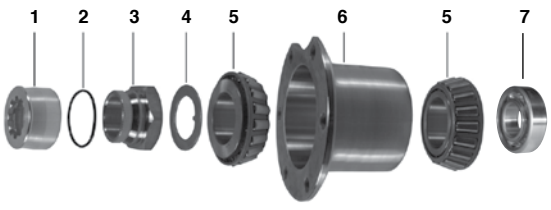
Lock Tab P/N 2374
Fits all 10" except 3.08

An improvement in Pinion stability, assuring pinion alignment under the worst conditions. Can be used with standard 10" ring & pinion ratios.
One piece flanged bearing race eliminates need for separate spacer ring and retaining plate.

ENHANCED SURFACE FINISH
Pem® Process

P/N 8218-RP
(Ring & Pinion)
P/N 8218-BRG
(Bearings)

Looks Like Chrome, But Better!



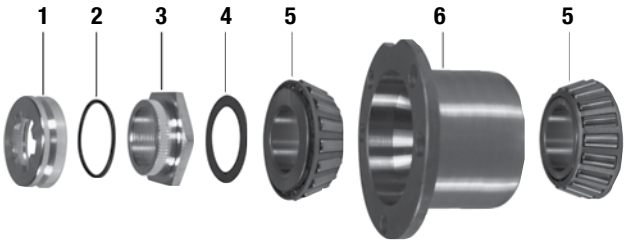
Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Posi-Lock Retainer	6484	1
2	O'Ring	7445	1
3	Posi-Lock Nut (1-5/16-20-2B Thread)	6485R	1
4	Washer	5055	1

#	DESCRIPTION	P/N	QTY
5	Roller Bearing	7308	2
6	Flanged Bearing Race	7528	1
7	Ball Bearing	7312	

8-3/8" FLANGED PINION BEARING

MINI 8-3/8" & V8 10 BOLT QUICK CHANGE



Mini 8 3/8"

V8

Pinion Nose Bearing
P/N 7392

Available Assemblies

RATIO	P/N w/o BRGS	P/N w/ BRGS
3.78*	6811R*	6812R*
3.78	6811	6812
4.11	21411	22411
4.33	6813	6814

RATIO	P/N w/o BRGS	P/N w/ BRGS
4.88	6815	6816
5.13	6817	6818
5.38	6819	6820

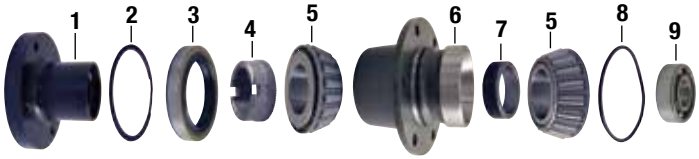
*R = Reverse Rotation

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Posi-Lock Retainer	6822	1
2	O'Ring	7455	1
3	Posi-Lock Nut (1-1/4-20-2B Thread)	6821	1
4	Washer	6824	1
5	Roller Bearing	7527	2
6	Flanged Bearing Race	7525	1

8-3/8" NON-QUICK CHANGE PINION BEARING

MINI 8-3/8" 10 BOLT QUICK CHANGE



Available Assemblies

RATIO	P/N w/o BRGS	P/N w/ BRGS
3.78*	6811R*	6812R*
3.78	6811	6812
4.33	6813	6814

RATIO	P/N w/o BRGS	P/N w/ BRGS
4.88	6815	6816
5.13	6817	6818
5.38	6819	6820

*R = Reverse Rotation

Mini 8 3/8"

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Output Flange	2521	1
2	Retaining Ring	7653	1
3	Seal	7204	1
4	Pinion Nut (1-1/4-20-2B Thread)	2892	1
5	Roller Bearing	7527	2
6	Bearing Cup	2519	1
7	Spacer	2951	1
8	O'Ring	8404	1
9	Pinion Nose Bearing	7392	1

RING & PINION ASSEMBLIES

4.11 has a 9 tooth pinion. 4.12 has an 8 tooth pinion. The root of the tooth is dramatically increased on a 4.12. So is the strength! Be smart - insist on Winters 4.12 Ring and Pinion!

ARP® RING GEAR BOLT KIT
Option 9147
KIT P/N 9381

10" QUICK CHANGE, 12 BOLT

RATIO	P/N w/o BRGS	P/N w/ BRGS
4.12	5714	5715
*4.12R	5714R	5715R
4.86	5400	5401
*4.86R	5400R	5401R
4.87	51487	52487
4.57	51457	52457

**Spread Bearing Pack
*R = Reverse Rotation

10" NON-QUICK CHANGE, 12 BOLT

RATIO	P/N w/o BRGS	P/N w/ BRGS
†4.12	5714M	5715M
†*4.12R	5714MR	5715MR
4.12	35412	36412
★4.28	35428	36428
★4.42	35442	36442
†4.57	41457	42457
★4.62	35462	36462
★4.71	35471	36471
†4.86	5400M	5401M
†*4.86R	5400MR	5401MR
4.86	35486	36486
★5.00	35500	36500
★5.14	35514	36514
★5.28	35528	36528
★5.33	35533	36533
★5.42	35542	36542
★5.50	35550	36550
★5.66	35566	36566
★5.83	35583	36583
★6.00	35600	36600
★6.17	35617	36617
★6.33	35633	36633
★6.50	35650	36650
★6.67	35667	36667

★ Ratios marked with a 'star' are only available with Integral Flange Pinion Bearing (2nd Generation). See page 33 for a complete list of parts included with Ring & Pinion. * Reverse Rotation † 1st Generation Only

10" XTREMELINER QUICK CHANGE, 12 BOLT

RATIO	P/N w/o BRGS	P/N w/ BRGS
2.00	25200	26200
3.08	25308	26308
*3.08R	25308R	26308R

*R = Reverse Rotation

10" QUICK CHANGE STANDARD PINION BEARING, 12 BOLT

P/N 5400 (4.86 RING & PINION W/O BEARINGS)
P/N 5401 (4.86 RING & PINION W/ BEARINGS)
Option 8104 Pinion Posi-Lock Nut
Option 8143 Roller Nose Bearing

ENHANCED SURFACE FINISH
pem® Process

P/N 8218-RP
(Ring & Pinion)
P/N 8218-BRG
(Bearings)

Looks Like Chrome, But Better!

P/N 5714 (4.12 RING & PINION W/O BEARINGS)
P/N 5715 (4.12 RING & PINION W/ BEARINGS)
Option 8104 Pinion Posi-Lock Nut
Option 8143 Roller Nose Bearing

P/N 51457 (4.57 RING & PINION W/O BEARINGS)
P/N 52457 (4.57 RING & PINION W/ BEARINGS)
Option 8104 Pinion Posi-Lock Nut
Option 8143 Roller Nose Bearing

MINI 8-3/8" AND V8, 10 BOLT

RATIO	P/N w/o BRGS	P/N w/o BRGS	P/N w/ BRGS	P/N w/ BRGS
*3.78	*6811R	*6811RM	*6812R	*6812RM
3.78	6811	6811M	6812	6812M
4.11	21411	21411M	22411	22411M
4.33	6813	6813M	6814	6814M
4.88	6815	6815M	6816	6816M
5.13	6817	6817M	6818	6818M
5.38	6819	6819M	6820	6820M

*R = Reverse Rotation M = Non-Quick Change

8" 4.11 RING & PINION IN A 10" HOUSING QUICK CHANGE, 12 BOLT

RATIO	P/N w/o BRGS	P/N w/ BRGS
4.11	65411	65411B-CT
*4.11	65411S	65411SB-CT

*2nd Generation Assembly

ARP® RING GEAR BOLT KIT
Option 9147S
KIT P/N 9381S

7" QUICK CHANGE, 10 BOLT

RATIO	P/N w/o BRGS	P/N w/ BRGS
3.78	11378	12378
4.57	11457	12457
5.13	11513	12513

"Insist on Winters replacement parts for proper fit and exact replacement. There is no other choice!"

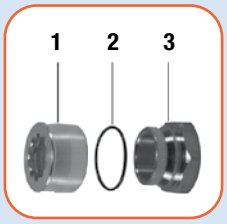
POSI-LOCK

The Posi-Lock Option greatly simplifies pinion installation and bearing preload maintenance adjustment, eliminating the need for special adjustment tools. Required on 'Sprint' Center.

POSI-LOCK, 10" QUICK CHANGE

P/N 6498R
(RIGHT HAND THREAD, STANDARD)
Option 8104
P/N 6498L
(LEFT HAND THREAD)

Assembly Contains One Of Each



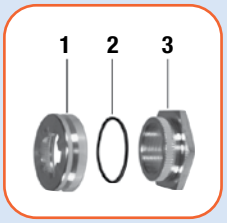
Assembly Includes

#	DESCRIPTION	P/N
1	Aluminum Posi-Lock Retainer	6484
2	O'Ring	7445
3	Alum. Posi-Lock Nut (1-5/16-20 Thread)	6485R (1-7/8 Hex)

POSI-LOCK, 8" & SPREAD 4.86

(Standard Equipment)
P/N 1493
(RIGHT HAND THREAD)

Assembly Contains One Of Each



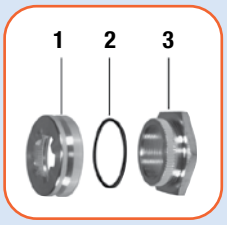
Assembly Includes

#	DESCRIPTION	P/N
1	Posi-Lock Retainer	1807
2	O'Ring	7486
3	Posi-Lock Nut (1-5/16-20 Thread)	1806 (1-7/8 Hex)

POSI-LOCK, MINI 8-3/8" & V8 QUICK CHANGE

(Standard Equipment)
P/N 6823-02
(1-1/4"-20 RIGHT HAND THREAD)

Assembly Contains One Of Each



Assembly Includes

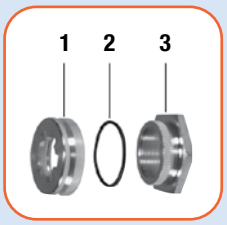
#	DESCRIPTION	P/N
1	Posi-Lock Retainer	6822
2	O'Ring	7455
3*	Posi-Lock Nut (1-3/16-20 Thread)	6821-01 (1-7/8 Hex)
3*	Posi-Lock Nut (1-1/4-20 Thread)	6821-02 (1-7/8 Hex)

*** Please Note: Vintage 8-3/8" QC w/ 3.78 R&P use 6823-03**

POSI-LOCK, 7" QUICK CHANGE

(Standard Equipment)
P/N 6823-03
(RIGHT HAND THREAD)

Assembly Contains One Of Each



Assembly Includes

#	DESCRIPTION	P/N
1	Posi-Lock Retainer	6822
2	O'Ring	7455
3	Posi-Lock Nut (1-1/8-18 Thread)	6821-03 (1-7/8 Hex)

Threaded Ring Gear Bolt Kit
P/N 7868
Threaded Ring Gear Bolt Kit, Short
For use with 8" Ring Gear
P/N 7868S
Non-Threaded Ring Gear Bolt Kit
P/N 7165

ARP® Ring Gear Bolt Kit
P/N 9381
Option P/N 9147
Installed in Rear

ENHANCED SURFACE FINISH

Rem® Process

- Ring & Pinions
- Quick Change Gears
- Differential Gears
- Lower Shafts
- Bearings

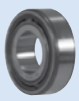
Looks Like Chrome, But Better!

P/N 8218-RP
(Ring & Pinion)
P/N 8218-QCG
(Change Gears)
P/N 8218-LS
(Lower Shaft)
P/N 8218-BRG
(Bearings)

We Can Do Them All!

The REM® Process results in enhanced EHL lubricant films. The REM® Process, used in finishing gears, increases performance by virtually eliminating gear friction and wear, also reducing oil temperature. Nothing comes close to being as friction free!

Lock Tab
P/N 2374
Trouble with pinion retainer plate bolts coming loose? Try this. Lock Tab fits all Winters 10" Rear Ends (Except 3.08).

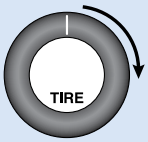


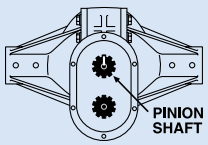
P/N 7331
Option 8143
Pinion Nose Roller Bearing

DETERMINING RING & PINION RATIO

Important: Shut Off Power

1. Elevate car
2. Remove quick change gears
3. Chalk mark the tire at 12 o'clock position
4. Chalk mark the pinion at 12 o'clock position
5. Rotate tire one complete
6. Count pinion revolution as tire is rotated

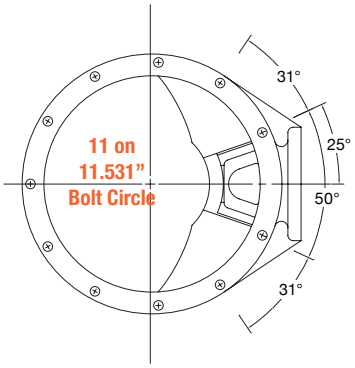




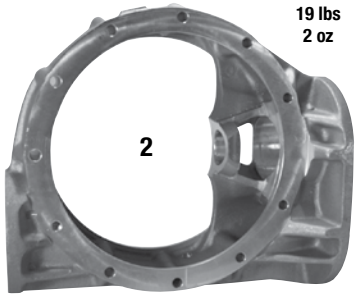
Just past 4 revolutions = 4.12
4-1/2 revolutions = 4.57
Almost 5 revolutions = 4.86

CENTER SECTIONS

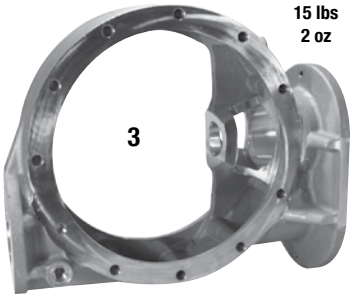
10" NON-QUICK CHANGE
P/N 6559



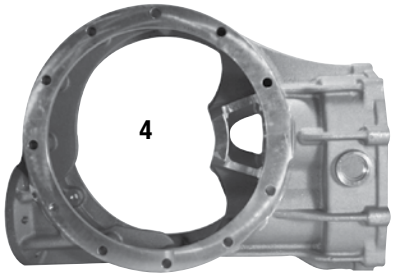
10" HEAVY DUTY
P/N 5012

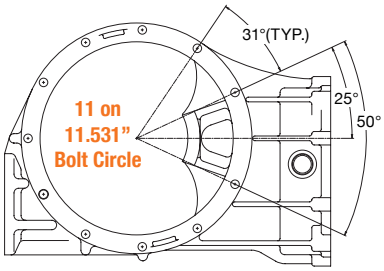


10" ENDURO
P/N 5012M

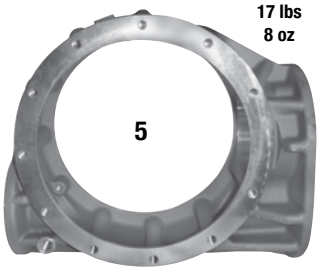


10" SPRINT
P/N 5840

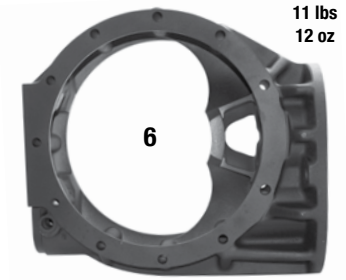




10" XTREMELINER
P/N 5012-308

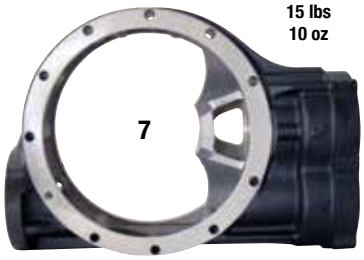


10" FRONT QUICK CHANGE
P/N K5012-FQC



Shown with Option 8208-02
Thermal Dispersant Coating

10" 6 BOLT COVER
P/N 12088



Shown with Option 8208-02
Thermal Dispersant Coating

#	DESCRIPTION	BARE P/N
1	Non-Quick Change Center, Aluminum, 10"	6559
1	Non-Quick Change Center, Magnesium, 10"	K6559
2	Heavy Duty Center, Aluminum, 10"	5012
2	Heavy Duty Center, Magnesium, 10"	K5012
3	Enduro Center, Aluminum, 10"	5012M
4	Sprint Center, Aluminum, 10"	5840

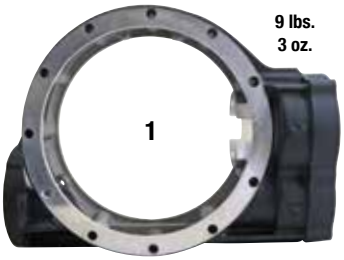
#	DESCRIPTION	BARE P/N
4	Sprint Center, Magnesium, 10"	K5840
4	Sprint Center, Magnesium, Reverse Rotation, 10"	K5840R
5	Xtremeliner Center, Aluminum, 10"	5012-308
6	Front Quick Change Center, Magnesium, 10"	K5012-FQC
7	10" 6 Bolt Cover, Aluminum	12088
7	10" 6 Bolt Cover, Magnesium	K12088

NOTE: All weights listed are in aluminum except # 6.

Fact: Magnesium is 66% the weight of aluminum. Example: 6559 Aluminum Non-Quick Change Center weighs 9 lbs. The same center in magnesium P/N K6559 weighs 6 lbs.

Center Sections

8" 6 BOLT COVER
P/N K12068

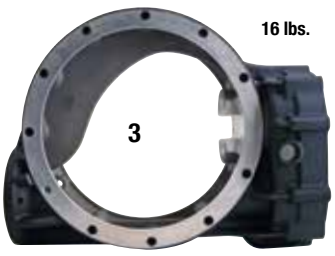


Shown with Option 8208-02
Thermal Dispersant Coating

8" 6 BOLT COVER
With Support Bearing
P/N 12439

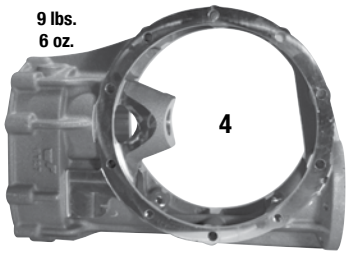
Shown with Option 8208-02
Thermal Dispersant Coating

8" 10 BOLT COVER
P/N 4949

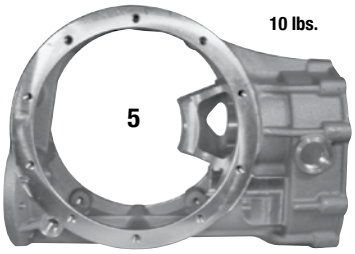


Shown with Option 8208-02
Thermal Dispersant Coating

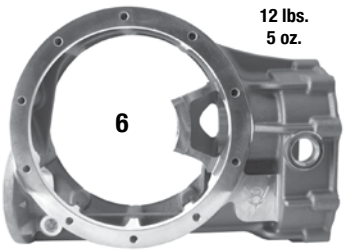
MINI 8-3/8"
P/N 6727

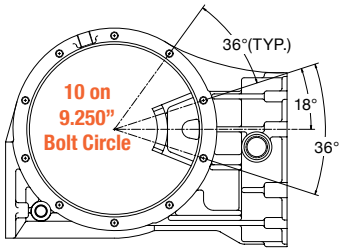


MINI 8-3/8" HEAVY DUTY
P/N 2524HD
Option P/N 8216

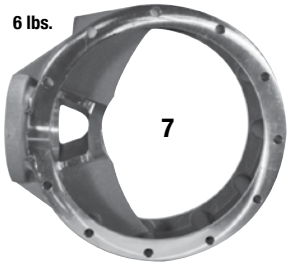


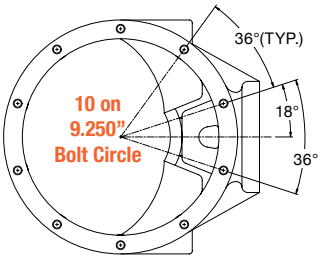
8-3/8" V8
P/N V8-2524HD





8-3/8" NON-QUICK CHANGE
P/N V8-2518





7" QUICK CHANGE
P/N 3300

#	Description	Bare P/N
1	Quick Change Center, Magnesium, 6 Bolt Cover	K12068
2	Quick Change Center w/ Pinion Bearing Support, Aluminum, 6 Bolt Cover	12439
2	Quick Change Center w/ Pinion Bearing Support, Magnesium, 6 Bolt Cover	K12439
3	Short Center, Aluminum, 8"	4949
3	Short Center, Magnesium, 8"	K4949
4	Mini Center, Aluminum, 8-3/8"	6727
4	Mini Center, Magnesium, 8-3/8"	K6727
5	Mini Heavy Duty Center, Aluminum, 8-3/8"	2524HD
6	V8 Heavy Duty Quick Change Center, 8-3/8"	V8-2524HD
7	Non-Quick Change Center, Aluminum, 8-3/8"	V8-2518
8	Quick Change Center, Aluminum, 7"	3300
8	Quick Change Center, Magnesium, 7"	K3300

NOTE: All weights listed are in aluminum except # 1.

Center Kits

To order any Full Size 10” Center Kit with an 8” Ring Gear add the following Options:

1ST GENERATION

Option 8111-8 4.11 Ring & Pinion
Option 8133-8 Sprint Center

2ND GENERATION

Option 8111-8S 4.11 Ring & Pinion Short
Option 8133-8S Sprint Center Short
Option 8133-8S-6 with 6 Bolt Cover
For Nose Support Add Option 9139

TORQUE SPECS

Threaded Ring Gear Bolts-60 Ft. Lbs. using red thread lock.
Non-Threaded Ring Gear Bolt and Locknut-35 Ft. Lbs.
Thrubolts-35 Ft. Lbs.

DESCRIPTION	KIT P/N	KIT w/ BELLS
Non-Quick Change Center Aluminum (10”)	4058	4127
Non-Quick Change Center Magnesium (10”)	K4058	K4127
Heavy Duty Aluminum Center (10” Quick Change)	5058	5127
Heavy Duty Magnesium Center (10” Quick Change)	K5058	K5127
Enduro Aluminum Center (10” Quick Change)	5058M	5127M
Sprint Center Kit, Aluminum (10” Quick Change)	6170	2745
Sprint Center Kit, Magnesium (10” Quick Change)	K6170	K2745
Sprint Center Magnesium-Reverse Rotation (10” QC)	K6170R	K2745R
**Mini Quick Change Aluminum Center (8 3/8” Quick Change)	2096**	2097**
Mini Quick Change Magnesium Center (8 3/8” Quick Change)	K2096	K2097
Mini Non-Quick Change, Aluminum (8 3/8”)	2410	2415
7” Quick Change, Aluminum	3742	3743
Front Quick Change, Magnesium (10” Quick Change)	K3744	K3745
Xtremeliner Quick Change, Aluminum (10” Quick Change)	3746	3747
V8 Quick Change, Aluminum (8 3/8” Quick Change)	4601	4602

****For Heavy Duty Center add Option 8216M**

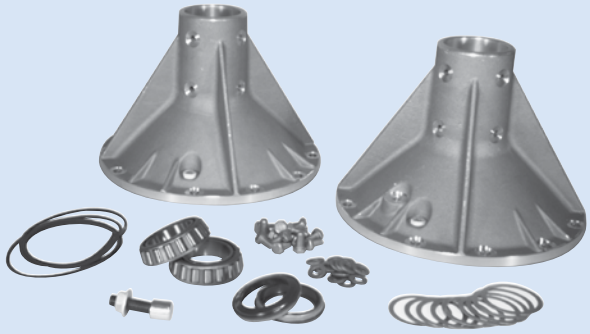
Winters manufactures all centers to exacting tolerances. However, when replacing your center, check the side bell preload and backlash making sure that it is an exact replacement. See pages 113-117 for applicable instructions.

KIT WITH BELLS

Includes items above plus Bells, Seals, O’ Rings, Bearings, Shim Kit, Tube and Bell Bolts and Adjuster (where applicable).

Bell Options

OPTION #	DESCRIPTION
8136P	Lightweight 4 Rib Side Bell w/ Inspection Plug
8155P	Heavy Duty 8 Rib Side Bell w/ Inspection Plug
8155PM	Lightweight 8 Rib Bells with Inspection Plug
8155PMHD	HD Permanent Mold 8 Rib Bells with Inspection Plug, Contoured
8186P	Lightweight 6 Rib Side Bell w/ Inspection Plug



Overhaul Kits

Overhaul kits include all bearings, seals and o'rings needed to rebuild your rear end.

IMPORTANT

Refer to pages 52-53 to identify gear cover.

APPLICATION	BELL	COVER	P/N
Heavy Duty & Enduro Center	4 or 6 Rib	Deep Cover	5057-02A
Heavy Duty & Enduro Center	8 Rib	Deep Cover	5057-01A
Heavy Duty & Enduro Center	4 or 6 Rib	Super Cover	5510-02A
Heavy Duty & Enduro Center	8 Rib	Super Cover	5510-01A
Hawk Center	4 or 6 Rib	Deep Cover	3057-02A
Hawk Center	8 Rib	Deep Cover	3057-01A
Hawk Center	4 or 6 Rib	Super Cover	3510-02A
Hawk Center	8 Rib	Super Cover	3510-01A
Sprint Center	4 or 6 Rib	Tumbled Cover	1209-02A
Sprint Center	8 Rib	Tumbled Cover	1209-01A
Sprint Center	4 or 6 Rib	Heavy Duty Cover	1209HD-02A
Sprint Center	8 Rib	Heavy Duty Cover	1209HD-01A
Sprint Center	4 or 6 Rib	Small Brg Cover	1209SC-02A
Sprint Center	8 Rib	Small Brg Cover	1209SC-01A
Sprint Center	4 or 6 Rib	Big Brg Cover	1209BC-02A
Sprint Center	8 Rib	Big Brg Cover	1209BC-01A
8" Ring & Pinion, 2nd Generation	4, 6, or 8 Rib	Big Brg Cover	12756
8" Ring & Pinion w/Pinion Support, 2nd Generation	4, 6, or 8 Rib	Big Brg Cover	12757
Non-Quick Change Center (1st Generation)	4 or 6 Rib	N/A	2424-46A
Non-Quick Change Center (1st Generation)	8 Rib	N/A	2424-08A
Non-Quick Change Center (2nd Generation)	4 or 6 Rib	N/A	2425-46A
Non-Quick Change Center (2nd Generation)	8 Rib	N/A	2425-08A
Mini Quick Change Center	4 Rib	Mini Cover	2257A
7" Center	6 Rib	Small Brg Cover	3793-02A
Front Quick Change	4 or 6 Rib	Front QC Cover	5057FQC-02A
Front Quick Change	8 Rib	Front QC Cover	5057FQC-01A
Xtremeliner Center	8 Rib	Deep Cover	3794-01A
Xtremeliner Center	8 Rib	Super Cover	3794-01B
Mini Non-Quick Change Center	4 Rib	Mini Cover	2257A-NQ
V8 Quick Change Center	12 Rib	Straight Finned	4399

The above P/N's are for assemblies with an aluminum carrier with 2.031" brg. journals.
If a steel carrier with 2.000" brg. journals is to be used, delete suffix 'A' from P/N. (EXAMPLE 1209-02)

LOWER SHAFTS

10" FRONT QUICK CHANGE

1

2

For Use with Pump

#	DESCRIPTION	GE	P/N
1	Lower Shaft	A	3421S
2	Lower Shaft (for use with pump)	A	3421

10" FULL SIZE QUICK CHANGE

1

Retaining Ring P/N 7610 — 19.69" End To End

2

Retaining Ring P/N 7610 (2 needed) — 19.69" End To End

3

Retaining Ring P/N 7610 — 18.38" End To End

4

Retaining Ring P/N 7610 — 21.05" End To End

5

32 Spline 45° P.A.

Retaining Ring P/N 7610 — 19.48" End To End

6

7

16.13" End To End

Retaining Ring P/N 7610 (2 needed)

22 Spline 30° G.E.

8

19.47" End To End

Retaining Ring P/N 8332 (2 needed) — 32 Spline 45° Yoke

See page 32 for sprint gear cover pump

9

Retaining Ring P/N 7610 — 20.44" End To End

10

19.69" End To End

Retaining Ring P/N 7610 — 32 Spline 45° P.A.

#	DESCRIPTION	GE	YE	P/N
1	Standard Shaft, Open Drive	A	D	5003-02
1	Heat Treated Shaft, Open Drive	A	D	5003
2	Standard Shaft, Closed Drive	A	D	5003-05
3	Standard Shaft, "Hawk"	A	D	6371-02
3	Heat Treated Shaft, "Hawk"	A	D	6371-01
4	Standard Lower Shaft, Pump	A	D	5003-03

#	DESCRIPTION	GE	YE	P/N
5	Gundrilled Shaft, Open Drive	A	E	1550
6	Yoke (for P/N 1550 Gundrilled Shaft)	----	----	3536
7	Lower Shaft, Int. Coupler, 10" Non-Shifter	A	D	3054
8	Lower Shaft, Xtremeliner	B	E	5003-308
9	Standard Lower Shaft, Pump	----	----	2963
10	Heat Treated Shaft, 32 Spline	A	E	5003-32

8" SHORT QUICK CHANGE

1

18.59" End To End

2

18.59" End To End

32 Spline 45° P.A.

3

18.59" End To End

4

19.34" End To End

#	DESCRIPTION	GE	YE	P/N
1	Standard Shaft	A	D	4951
2	Heat Treated Shaft	A	D	4951HT

#	DESCRIPTION	GE	YE	P/N
3	Gundrilled Shaft	A	E	4951GD
4	Standard Shaft, Pump	A	D	4951P

MINI 8-3/8" AND V8 QUICK CHANGE

1

Retaining Ring P/N 7658 — 16.06" End To End

2

Retaining Ring P/N 7658 — 17.81" End To End

32 Spline 45° P.A.

3 4

32 Spline Aluminum Yoke w/ Stainless Steel Sleeve

Option 8182B-32

#	DESCRIPTION	GE	YE	P/N
1	Standard Shaft, Mini QC (Yoke Application)	C	D	6881-01
1	Heat Treated Shaft, Mini QC (Yoke Application)	C	D	6881-03
2	Standard Shaft, V8 QC (Yoke Application)	C	D	V8-3886
3	Bearing	----	----	7390

#	DESCRIPTION	P/N
4	Drive Yoke, 1310 Series	5038
4	Drive Yoke, 1310 Series, Aluminum, Stainless Steel Sleeve	5038AS
4	Drive Yoke, 32 Spline 45° P.A., Aluminum, Stainless Steel Sleeve	5038AS-32

7" QUICK CHANGE

P/N 3340 GE = C YE = F

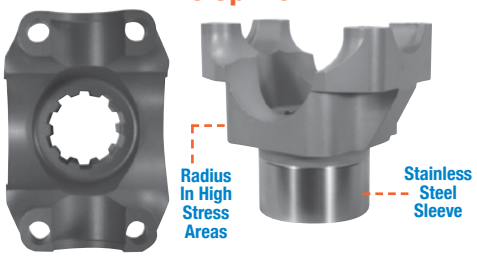
Retaining Ring P/N 7634 — 13.98" End To End

SPLINE SIZE IDENTIFICATION

ID	GEAR END (GE)
A	1.250-10 Spline
B	1.437-22 Spline
C	1.089-6 Spline

ID	YOKE END (YE)
D	1.250-10 Spline
E	1.375-32 Spline
F	1.125-26 Spline

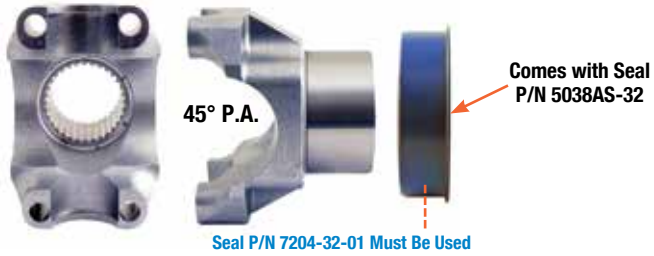
ALUMINUM YOKE
10 Spline



P/N 5038AS
Option 8182B

Fits all popular quick changes.
Machined from high strength 7075-T6 aluminum, this durable yoke is fitted with a stainless steel sleeve at seal contact area. This yoke compliments any weight conscious setup.
Uses series 1310 (1-1/16") joint

ALUMINUM YOKE
32 Spline



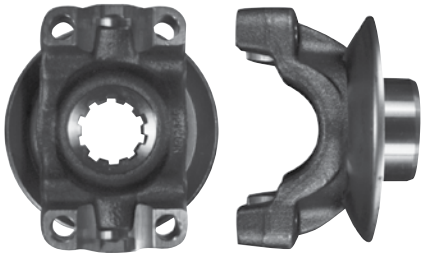
P/N 5038AS-32
Option 8182B-32
FOR USE WITH GUNDRILLED LOWER SHAFT
Fits all popular quick changes.
Machined from high strength 7075-T6 aluminum, this durable yoke is fitted with a stainless steel sleeve at seal contact area. NOTE: Seal P/N 7204-32-01 Must Be Used With Installation Of This Yoke.
Uses series 1310 (1-1/16") joint

ALUMINUM YOKE GIRDLE

KIT P/N 2491
Includes:
2 - Girdles
(P/N 2454)
4 - Lock Washers
(P/N 7760)
4 - 5/16-18 x 1-1/2" 12pt
(P/N 7789)

FITS ALUMINUM YOKE ONLY
Machined from 7075-T6 aluminum, this girdle eliminates trunnion bearing distortion, keeping the trunnion bearing round regardless of retaining bolt torque!
Uses series 1310 (1-1/16") joint

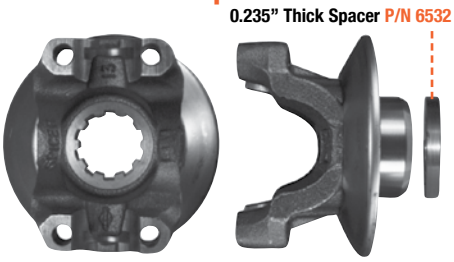
STEEL YOKE
10 Spline



P/N 3588
1-1/4-10 Spline Yoke
Use Dana® Series 1350, 1-3/16" Joint
Option 8275

P/N 3588M
Use with 1st Gen Non Quick Change, 5012 Series Centers, Mini 8-3/8" & V8
Option 8275

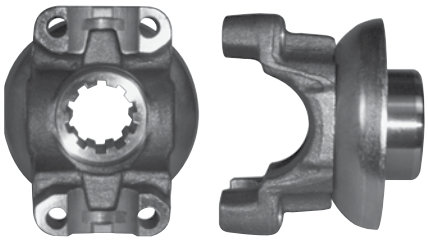
STEEL YOKE
10 Spline



Length of Splines = 1.500"

P/N 5038
1-1/4-10 Spline Yoke
Use Dana® Series 1310, 1-1/16" Joint

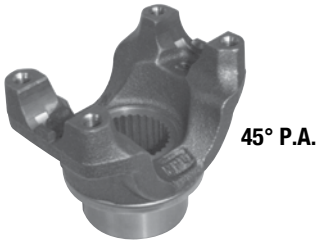
STEEL YOKE
10 Spline



Length of Splines = 1.735"

P/N 3533
1-1/4-10 Spline Yoke
Use Dana® Series 1310, 1 1/16" Joint
Fits Sprint Center & V8 Quick Change

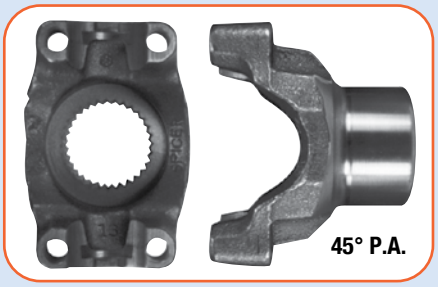
STEEL YOKE
29 Spline



P/N 2216
2nd Generation Non-Quick Change
1-1/4-29 Spline Yoke
Use Dana® Series 1310, 1-1/16" Joint

P/N 3565
2nd Generation Non-Quick Change
1-1/4-29 Spline Yoke
Use Dana® Series 1350, 1-3/16" Joint
Option 8275

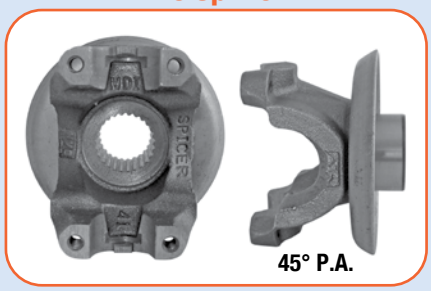
STEEL YOKE
32 Spline



P/N 3536
1-3/8-32 Spline Yoke
Use Dana® Series 1310, 1-1/16" Joint

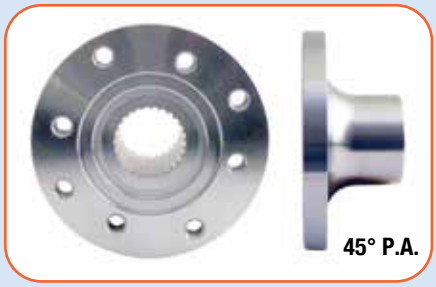
P/N 3566
1-3/8-32 Spline Yoke
Use Dana® Series 1350, 1-3/16" Joint
Option 8275
Involute spline yoke for gundrilled lower shaft.
P/N 3566 is standard on Xtremeliner Rears.

STEEL YOKE
26 Spline



P/N 3328
1.146" Diameter, 26 Spline Yoke
Use Dana® Series 1310, 1-1/16" Joint
Use P/N 3213 Strap Kit
Fits 7" Quick Change Option 8227

TOYOTA® STYLE FLANGE
26 Spline



P/N 3362
1.146" Diameter, 26 Spline Yoke
Use Dana® Series 1310, 1-1/16" Joint
Available for 7" only

Also Available In Aluminum
P/N 3362A

JOURNAL ASSEMBLY

P/N 5382
1310 Series
1-1/16" Diameter w/ Grease Fitting

P/N 6847
1310 Series
1-1/16" Diameter w/o Grease Fitting

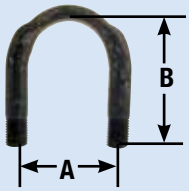
P/N 6996
1350 Series
1-3/16" Diameter w/ Grease Fitting

STEEL FLANGED YOKE

P/N 5856
For Front Quick Change
Use Dana® Series 1310, 1-1/16" Joint

YOKE ACCESSORIES

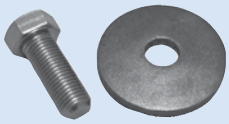
U - BOLT KITS



Kits Includes:
2 - U-Bolts
4 - Lock Washers
4 - Hex Nuts
Torque: 15 Ft Lbs

P/N	A	B	SERIES	JOURNAL DIAMETER
5855	1.406"	1.684"	1310	1-1/16"
5855L	1.406"	1.934"	1310	1-1/16"
6999	1.640"	2.000"	1350	1-3/16"

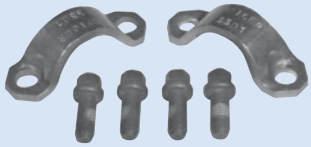
RETAINING WASHER & SCREW



P/N 5037
Retaining Washer

P/N 7109Y
3/8-24 X 1" HHCS

STRAP KIT



P/N 3213
For 1310 Series Journal Assemblies Only

SEAL PLATES

Kit Includes

DESCRIPTION	P/N	QTY
Seal Plate	6554	1
Seal, .375"	7204	1
Retaining Ring	7653	1
O'Ring	7448	1
Shim	6115-065	1

P/N 6663

10" Non-Quick Change w/ Seal 10 Spline, 1st Generation

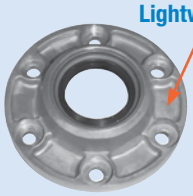
Kit Includes

DESCRIPTION	P/N	QTY
Seal Plate	6854-01M	1
Seal, .750"	7204T	1
Seal, .750", Viton	7204V	1
O'Ring	7474	1

P/N 6854

8-3/8" Quick Change (Open Drive) w/ Seal

Lightweight



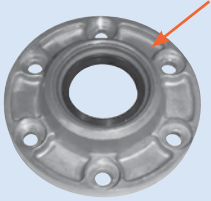
Kit Includes

DESCRIPTION	P/N	QTY
Seal Plate	3325	1
Seal, .750"	3327	1
O'Ring	7484	1

P/N 3302

7" Quick Change Diecast, Lightweight Aluminum Seal Plate

Lightweight



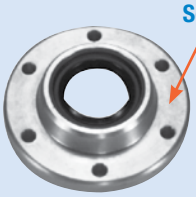
Kit Includes

DESCRIPTION	P/N	QTY
Seal Plate	5018-01ML	1
Seal, .750"	7204T	1
Seal, .750", Viton	7204V	1
Retaining Ring	7652	1
O'Ring	7474	1

P/N 5018L

Diecast, Lightweight Aluminum Seal Plate
Standard equipment on 10" Quick Change (Open Drive)
Use Bolt P/N 7110
Add Option 8199 for Viton Seal

Solid



Kit Includes

DESCRIPTION	P/N	QTY
Seal Plate	5018-01M	1
Seal, .750"	7204T	1
Seal, .750", Viton	7204V	1
Retaining Ring	7652	1
O'Ring	7474	1

P/N 5018

10" Quick Change (Open Drive) w/ Seal
Option 8268 for applications requiring solid seal plate
Add Option 8199 for Viton Seal

BOLT KITS

DESCRIPTION	P/N	OPTION
10" Thrubolt Kit, Steel	5218	------
10" Thrubolt Kit, Titanium	7820T	8126
10" Thrubolt Kit, Steel, Non-Quick Change	4218	------
10" Thrubolt Kit, Titanium, Non-Quick Change	4218T	8126-NQC
10" Thrubolt Kit, Titanium, Front Quick Change	7821T	8127

DESCRIPTION	P/N	OPTION
8-3/8" & 7" Side Bell Stud Kit, Steel	2219	------
8-3/8" & 7" Side Bell Stud Kit, Titanium	2219T	8234

DESCRIPTION	P/N	OPTION
7/16-20 x 5-1/2" HHCS, Titanium Thrubolt	7176T	------
7/16-20 x 6-1/4" HHCS, Titanium Thrubolt	*7176TL	------

*Used for Bracket Mounts
Option 8249 6" Thrubolt, Steel Only (Specify Qty.)
Option 8249L 6-1/2" Thrubolt, Steel Only (Specify Qty.)

OIL SCREEN

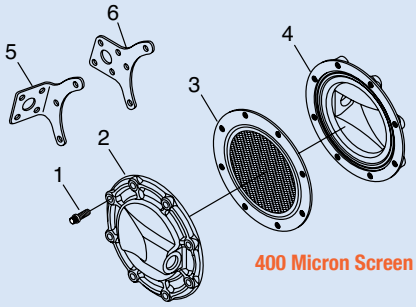
#6 AN Inlet & Outlet Port

ASSEMBLY P/N 3720

See Page 32 for available Oil Pumps

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	1/4-20 x 1" 12pt	7159	8
2	Screen Half, Drilled	3393-01	1
3	Filter Screen w/ O'Ring	3838	1
4	Screen Half, Tapped	3393-02	1
5	90° Mounting Bracket	3398	1
6	Straight Mounting Bracket	3397	1



400 Micron Screen

MISCELLANEOUS COMPONENTS

BREATHERS

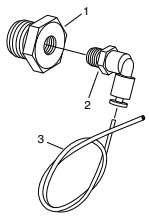
#10 AN
1" Socket

Breather assembly for use with 12080 and 12080M Left Side Bell, Fits option 8155PMHD

Illustration above shows location when installed.

#	DESCRIPTION	P/N	QTY
1	O'Ring	8406	1
2	Plug 7/8-14	12793	1
3	Tube Adapter	8074	1
4	Poly Tubing	8075	1

P/N 12793-01



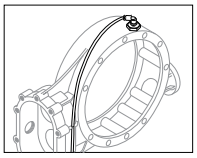
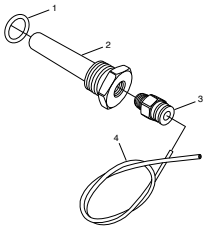


Illustration above shows location when installed in a 10 bolt 5840 center

#	DESCRIPTION	P/N	QTY
1	3/8" Pipe Fitting	8708	1
2	Tube Adapter	8074	1
3	Poly Tubing, 16" Length	8075	1

P/N 2966T

Non AN O'Ring Port. Use on 3/8" Pipe Thread Applications.



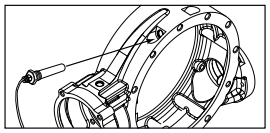


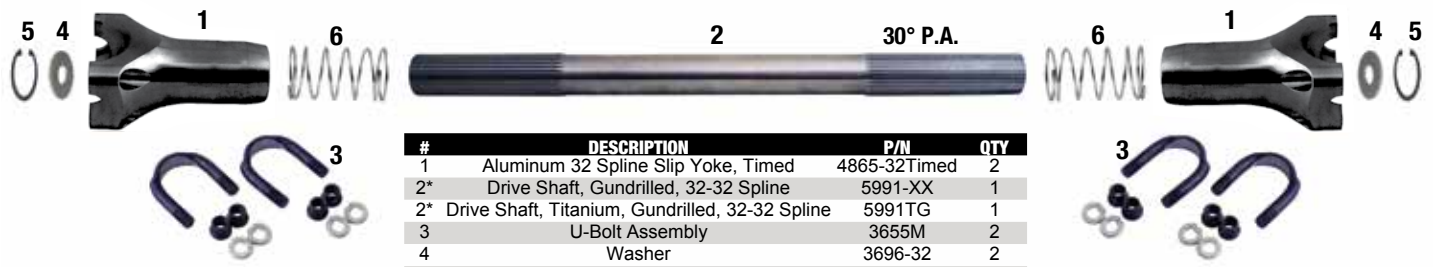
Illustration above shows location when installed.

#	DESCRIPTION	P/N	QTY
1	O'Ring	8405	1
2	Adapter Plug, Breather	8070-01	1
3	Fitting, Breather	8074S	1
4	Poly Tubing, 16" Length	8075	1

P/N 2966-02

For use on Centers with 6 Bolt Cover Option.

DIRT MODIFIED DRIVE LINE



#	DESCRIPTION	P/N	QTY
1	Aluminum 32 Spline Slip Yoke, Timed	4865-32Timed	2
2*	Drive Shaft, Gundrilled, 32-32 Spline	5991-XX	1
2*	Drive Shaft, Titanium, Gundrilled, 32-32 Spline	5991TG	1
3	U-Bolt Assembly	3655M	2
4	Washer	3696-32	2
5	Retaining Ring	8831	2
6	Drive Line Spring	5269-32	2

*Specify Length When Ordering

32 Spline Parts are 30° P.A.

KIT P/N 9380

Gundrilled from solid stock, this 32 spline drive shaft has several advantages. Compared to the antiquated 16 spline assembly, which binds under load, this updated 32 spline assembly glides effortlessly. A large (1.275) O.D. results in less drive shaft whip, extended joint life and reduced drive shaft vibration. This results in a much freer race car.

Kit includes (2) Aluminum 32 Spline Slip Yokes, (1) 32-32 Spline Drive Shaft, (2) U-Bolt Assemblies and (2) Drive Line Springs.

LOCK TABS

P/N 2374

Keeps pinion retainer plate bolts from coming loose. Used for 10" Quick Change (10" Ring Gears)

P/N 12042

Keeps pinion retainer plate bolts from coming loose. Must use in conjunction with P/N 12043 Lock Tab. Used for 8" Quick Change (8" Ring Gears)

P/N 12043

Keeps pinion retainer plate bolts from coming loose. Must use in conjunction with P/N 12042 Lock Tab. Used for 8" Quick Change (8" Ring Gears)

Torque Bolts to 25 Ft Lbs

Bells

All bells shown on this page are available in magnesium or aluminum unless specified otherwise.
When ordering magnesium add prefix 'K' to P/N. Example: K5016-03

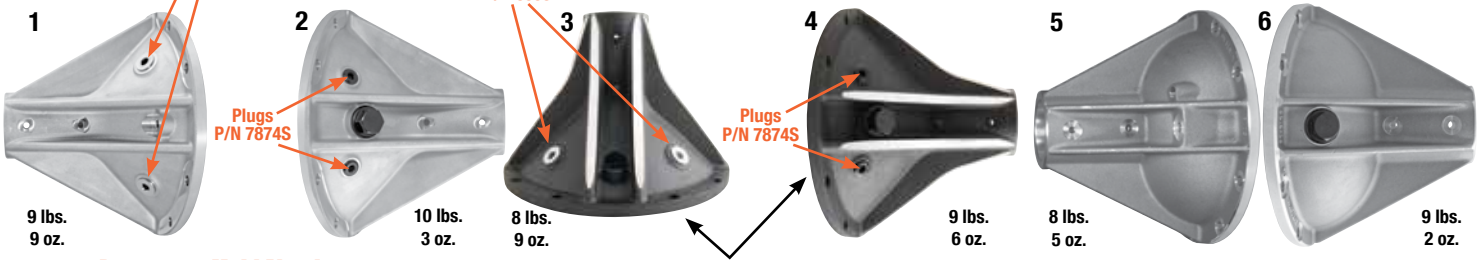
SEE PAGE 50 FOR PLUG SIZES

PLEASE NOTE: Side Bell O'Ring P/N differs depending on the year of your rear end assembly. Please measure the depth of the O'Ring groove to ensure proper replacement.

0.105" - 0.110" Deep = P/N 7403 0.075" - 0.080" Deep = P/N 7403T

10" 8 RIB BELLS

See page 47 for Breather assembly P/N 12793-01

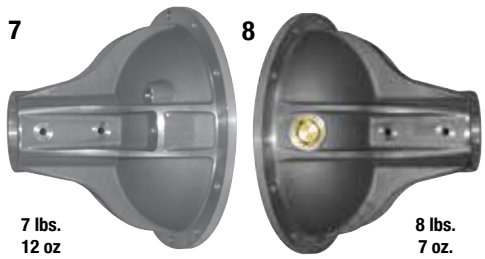


Permanent Mold Aluminum

Shown with Option 8208-B Black Thermal Dispersement Coat

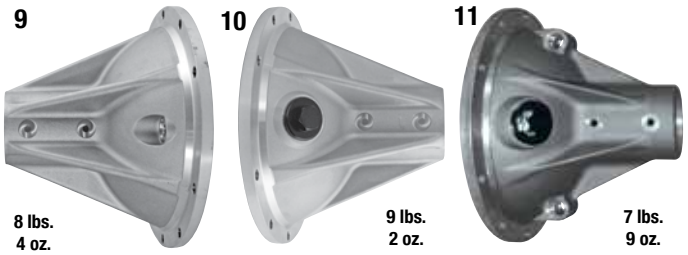
Magnesium Only

10" 8 RIB BELLS



Magnesium Only

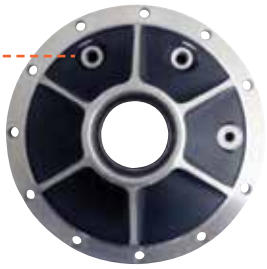
10" 6 RIB BELLS



Permanent Mold Aluminum

For use with pump

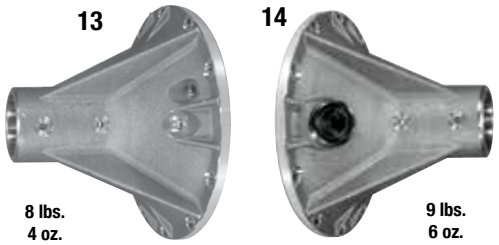
10" 6 RIB BELL



Port for Breather Assembly P/N 2966. See page 47 for more details.

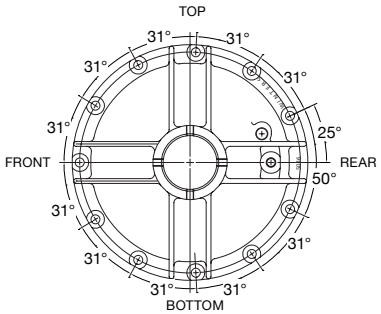
Magnesium Only

10" 4 RIB BELLS



XTREMELINER RIGHT SIDE BELL

10" BELL BOLT CIRCLE



The bolt circle for a Full Size 10" Bell is 11 on 11.532"

#	DESCRIPTION	P/N	PLUG	O'RING	OPTION
1**	8 Rib Bell, Left	12080	8035	7403T	8155PHD
2**	8 Rib Bell w/ Inspection Plug, Right	12083	3261	7403T	8155PHD
3**	8 Rib Bell, Left	12080M	8035	7403T	8155PMHD
4**	8 Rib Bell w/ Inspection Plug, Right	12083M	3261	7403T	8155PMHD
5	8 Rib Bell, Left	K5016-02	------	7403T	------
6	8 Rib Bell w/ Inspection Plug, Right	K5016-03	3261	7403T	8155P
7	8 Rib Bell, Lightweight, Left	K5016-02M	------	7403T	8155PM
8*	8 Rib Bell w/ Inspection Plug, Lightweight, Right	K5016-05	3643	7403T	8155PM
9	6 Rib Bell, Left	1663-02	------	7403T	8186P
10*	6 Rib Bell w/ Inspection Plug, Right	1663-01B	3261	7403T	8186P
11*	6 Rib Bell w/ Inspection Plug, For Pump, Right	K1663-04	3261	7403T	8253
12	6 Rib Bell, Magnesium, Left	K1663-02	------	7403T	8186P
13	4 Rib Bell, Left	6697-02	------	7403T	8136
14	4 Rib Bell w/ Inspection Plug, Right	6697-01B	3261	7403T	8136P
15**	8 Rib Bell w/ Inspection Plug, Right	5016-308	3261	7403	------

***Available only with Inspection Plug. **Available in Aluminum Only.**
NOTE: All weights listed are in aluminum except #'s 5, 6, 7, 8 & 11.

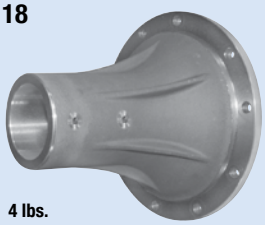
INSTALLATION INSTRUCTIONS

When installing a tube in a bell, place the tube in a 5 gallon bucket of ice.
Heat the bell in an oven to 270°-300°F. Lubricate the bell bore and drop the tube into the bell.
DO NOT TORCH! Annealing and/or cracking will occur.

Fact: Magnesium is 66% the weight of aluminum. Example: 5016-02 8 Rib Side Bell weighs 11 lbs 12 oz.
The same bell in magnesium, P/N K5016-02 weighs 8 lbs 4 oz.

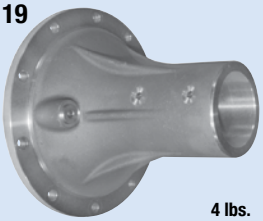
7" BELLS

18



4 lbs.
3 oz.

19



4 lbs.
4 oz.

V8 12 RIB BELL

8-3/8

20

6 lbs.
4 oz.

#	DESCRIPTION	P/N	PLUG	O'RING
18*	7" Quick Change Bell, Left	3345	------	3351
19*	7" Quick Change, Right	3306	3643 & 7874S	3351
20**	V8 Quick Change Bell, Left & Right	V8-3180-01	7874S	7451

*Available in Magnesium & Aluminum. **Available in Aluminum Only.
† Available only with Inspection Plug.
NOTE: All weights listed are in aluminum.
When ordering magnesium, add prefix 'K' to P/N. Example: K1449-02

AXLE/TUBE SEALS

REPLACEMENT SEAL P/N 7267

Winters offers two designs of Axle/Tube Seals to prevent oil in the rear from entering the side tubes. The Aluminum Case Seal incorporates o'rings to seal in the side tube I.D. The lighter, Stamped Steel Case Seal press fits into the side tube much like a conventional oil seal to ensure positive stability. Both styles use a flexible lip with garter spring to grip the axle shaft. A must for use with non-aluminum spool rear ends.

1

2

3

4

5

6

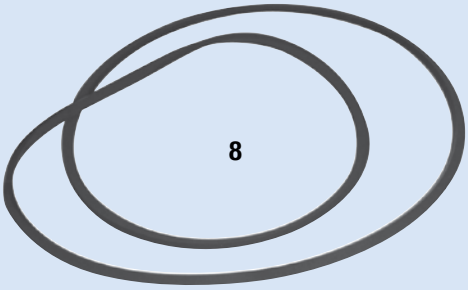
#	DESCRIPTION	P/N	WALL TUBE	I.D.	O'RING	CASE	INTERNAL SEAL
1	Aluminum Case, Aluminum Tube	2842	.250"	2.500"	7460	2733	7267
2	Aluminum Case, Steel Tube	2841	.200"	2.600"	7468	2732	7267
3	Aluminum Case, Steel Tube	3485	.156"	2.700"	8418	3484	7267
4	Aluminum Case, Steel Tube	3483	.125"	2.750"	8419	3483	7267
5	Steel Case, Steel Tube	7266	.200"	2.600"	------	------	------
5	Steel Case, Aluminum Tube	7268	.250"	2.500"	------	------	------
6	7" Aluminum Case, Steel Tube	3677	.140"	2.220"	8435	3676	3675V

LEVEL AND INSPECTION PLUGS

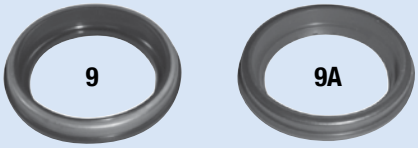
#	DESCRIPTION	APPLICATION	P/N	THREAD	O'RING	'AN' No.
1	Level Plug, Aluminum	10", 8-3/8" & 7"	7111AL	3/8 NPT	------	------
1A	Level Plug w/ O'Ring, Steel	10", 8-3/8", 7" & V8 Center	7874S	9/16-18	8405	6
2	Level Plug w/ O'Ring, Steel	8" Center, 8 Rib Perm. Mold Bells	8035	7/8-14	8406	10
3*	Inspection Plug w/ O'Ring	10" Center & Side Bell	3261	1-5/8-12	7453	20
4*	Inspection Plug w/ O'Ring	V8 8-3/8" Center & Side Bell	3643	1-1/16-12	7454	12
5	Inspection Plug w/ O'Ring & Fitting	1-7/8" Front Quick Change Cooler	5290FQC	1-5/8-12	7453	20

*For use with 1" socket.

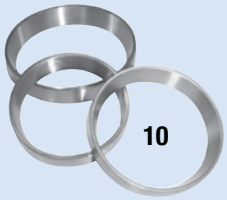
O'RINGS



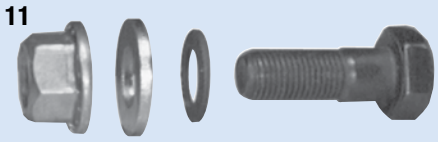
SIDE BELL SEALS



BEARING RACE



TUBE & BELL THRU-BOLT KITS



Option 1/2-8237
One Tube & Bell Assembly, 4 & 6 Rib
Option 1/2-8237-8
One Tube & Bell Assembly, 8 Rib

P/N 8341 4 & 6 Rib Bells
Kit Includes 16 ea 4 Rib, 12 ea 6 Rib:
P/N 7908 3/8-24 Locknut
P/N 7864 3/8" Serrated Belleville Lockwasher
P/N 7852 3/8-24 x 1-1/16" HHCS

P/N 8341-8 8 Rib Bells
Kit Includes 16 ea:
P/N 7908 3/8-24 Locknut, P/N 7114 3/8" SAE Washer, P/N 7864 3/8" Serrated Belleville Lockwasher, P/N 8769 3/8-24 x 1-1/2" HHCS

RING GEAR ADJUSTMENT SCREW KITS

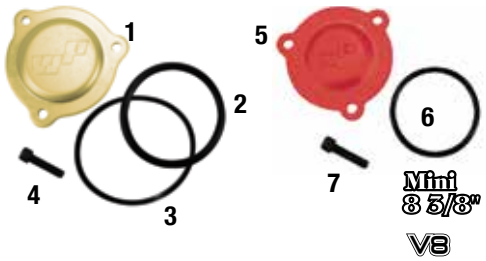
For installation instructions, refer to 10" Set-up, page 115, Step #11.

Please Note: When using 8" Ring & Pinion, Thrust Block is not required.

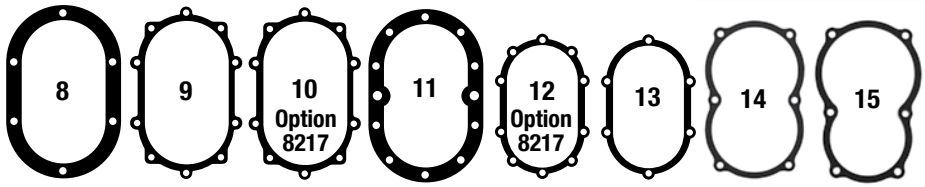
#	DESCRIPTION	APPLICATION	P/N
8	Side Bell O'Ring	10" 8 Rib Side Bells	7403
8	Side Bell O'Ring	10" 4 & 6 Rib Side Bells	7403T
8	Side Bell O'Ring	V8 & Mini 8-3/8"	7451
8	Side Bell O'Ring	7" Quick Change	3351
9	Side Bell Seal	10", V8, Mini 8-3/8" & 7"	7205
9A	Side Bell Seal, Viton	10", V8, Mini 8-3/8" & 7"	7283V
10	Bearing Race	10", 4, 6 & 8 Rib Side Bells, V8 & Mini 8-3/8"	7310
11	Tube & Bell Thru-Bolt Kit	4 & 6 Rib Side Bells	8341
11	Tube & Bell Thru-Bolt Kit	8 Rib Side Bells	8341-8
12	Ring Gear Adjustment Screw Kit	10" 8 Rib Side Bells	5157
13	Ring Gear Adjustment Screw Kit	10" 4 & 6 Rib Side Bells	6236

GEAR COVER COMPONENTS

BEARING CAPS



GASKETS



STANDARD HIGH NUT

16

DESCRIPTION	P/N
Steel	7794
Steel Chrome	7794C
Blue	7794AB
Red	7794AR

DESCRIPTION	P/N
3/8-16 x 1-3/4" Stud	7802
3/8-16 x 1-3/4" Stud, Titanium	7802T

DESCRIPTION	P/N
5/16" Dia. Steel Ball	7398

Steel High Nut Kit
Option 8210

Standard High Nut Kits
Kits include High Nuts, Studs & Steel Balls (10 each).

DESCRIPTION	KIT P/N
Metallic	6390A
Blue	6390AB
Chrome	6390AC

DESCRIPTION	KIT P/N
Gold	6390AG
Red	6390AR
Steel Chrome	6390C

SHORT HIGH NUT

17

DESCRIPTION	P/N
Black	7794ASBK
Metallic	7794ASM
Red	7794ASR

DESCRIPTION	P/N
3/8-16 x 1-3/4" Stud	7802
3/8-16 x 1-3/4" Stud, Titanium	7802T

DESCRIPTION	P/N
5/16" Dia. Steel Ball	7398

Option 8210S
Shorter high nuts increase fuel cell clearance!

Short High Nut Kits
Kits include High Nuts, Studs & Steel Balls (10 each).

DESCRIPTION	KIT P/N
Black	6390ASBK
Black	6390ASBK-6
Metallic	6390ASM
Red	6390ASR

COVER BOLT KITS

18 (6 of each)

LEVEL PLUG

21

HIGH NUT ALTERNATIVES

19

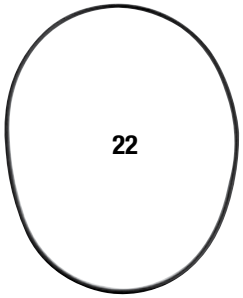
Option 8210AC
Kit Includes:
10- P/N 7792 Studs
10- P/N 7114 Washers
10- P/N 7791 Acorn Nuts

20

Option 8210FL
Kit Includes:
10- P/N 7792 Studs
10- P/N 8076 Flanged Nuts

GEAR COVER O' RING

22



#	DESCRIPTION	P/N
1	Sprint Bearing Cap	1667
2	O'Ring, Standard Cover	7476
2	O'Ring, Heavy Duty Cover	7406
3	Back-up Ring, Needed with P/N 7406	7496
4	Bearing Cap Bolt, Standard Cover	7842
4	Bearing Cap Bolt, Heavy Duty Cover	7955
5	Mini Bearing Cap	1950
6	O'Ring, Mini Bearing Cap	7424
7	Bearing Cap Bolt, Mini	7850
8	Deep & Super Gear Cover Gasket	1764
9	Sprint Center Gear Cover Gasket	6729
10	Sprint Center Gear Cover Heavy Duty Gasket	6729HD
11	Front Quick Change Gear Cover Gasket	1764-FQC
12	Mini 8-3/8"/V8 Gear Cover Gasket	6703
12	Steel Shim w/ Durable Seal-Tite Facing	6703HD

#	DESCRIPTION	P/N
13	7" Quick Change Gear Cover Gasket	3343
14	10" 6 Bolt Center Gear Cover Gasket	12185
15	8" 6 Bolt Center Gear Cover Gasket	12184
16	Steel High Nut & Stud Kit	6390
16*	Aluminum High Nut & Stud Kit	6390A
16*	Aluminum High Nut & Titanium Stud Kit	6390AT
17*	Aluminum Short High Nut & Stud Kit	6390AS
18	Bolt & Washer Kit, Deep Cover	1266A
18	Bolt & Washer Kit, Heavy Duty Super Cover	1266B
19	Acorn Nut Gear Cover Mounting Kit	2930
20	Flanged Nut Gear Cover Mounting Kit	2931
21	Level Plug, For Cover P/N 6746 (ANG)	7874S
22	O'Ring, For Cover P/N 4873 & 4873S	8440
22	O'Ring, For Cover P/N 12070	8446
22	O'Ring, For Cover P/N 12175	8447

*Specify Color

Gear Covers

STANDARD
P/N 6746

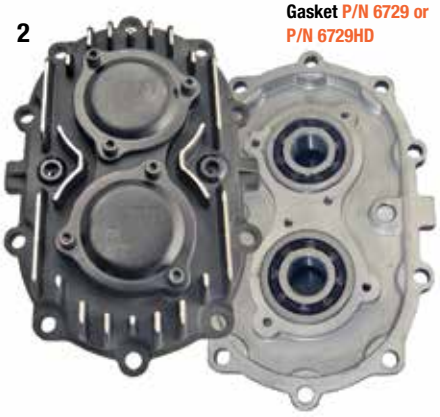
1

Gasket P/N 6729 or P/N 6729HD

Shown With Option 8208-C Thermal Dispersant

HEAVY DUTY
P/N 6630

2

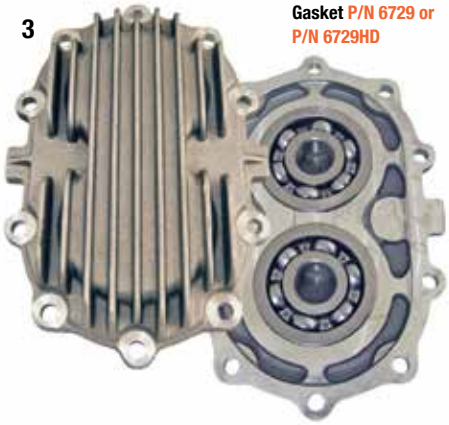


Gasket P/N 6729 or P/N 6729HD

Shown With Option 8208-C Thermal Dispersant

SPRINT CENTER
P/N 6508

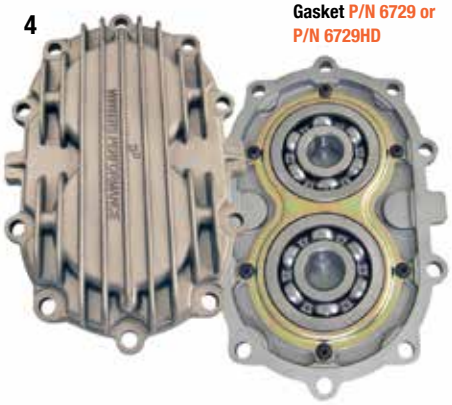
3



Gasket P/N 6729 or P/N 6729HD

SPRINT CENTER
P/N 3736

4



Gasket P/N 6729 or P/N 6729HD

SPRINT CENTER, 6 BOLT
P/N 12175

5

O'Ring P/N 8447
Gasket P/N 12185

INTEGRAL PUMP
P/N 3792-01

6

Gasket P/N 6729 or P/N 6729HD

(Go To Page 32 For A Breakdown.)

DEEP
P/N 5054HD*

7

Gasket P/N 1764

SPRINT CENTER, 6 BOLT SHORT
P/N 12070

8

O'Ring P/N 8446
Gasket P/N 12184

BILLET ALUMINUM
P/N 4873S

9

O'Ring P/N 8440
Gasket P/N 6729HD

BILLET ALUMINUM WITH O'RING
P/N 4873

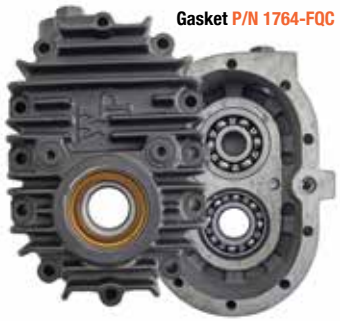
10

O'Ring Groove
O'Ring P/N 8440 (1st Generation)
O'Ring P/N 8478 (2nd Generation)

Shown Black Anodized. Also Available In Silver. Please Specify Finish When Ordering.

FRONT QC
P/N K3420

11



Gasket P/N 1764-FQC

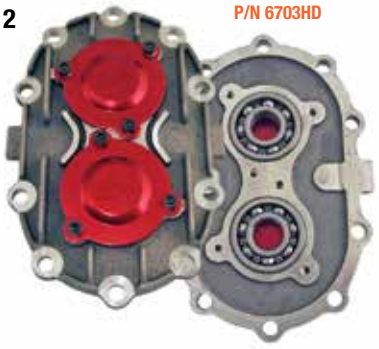
Shown With Option 8208-C Thermal Dispersant

CUSTOM ENGRAVING
P/N 4873L
Option 8252BL

Whether you're building a new rear or buying a new gear cover, this is the cover of choice. Machined from billet aluminum, with over 75 cooling fins, internal bearing retainers and optional logo makes this the coolest cover ever made. Tell us what you want on your cover- Sponsors Name/Logo, Drivers Name, Car Number, etc. and we'll custom machine to your specs. Please Note: Artwork files need to be sent in an Adobe Illustrator (.ai) File (Preferred), JPEG or PDF Format.

STANDARD 8 3/8" & V8
P/N K6915

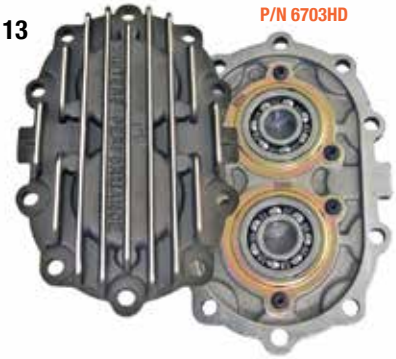
12



Gasket P/N 6703 or P/N 6703HD

FINNED 8 3/8" & V8
P/N 3225

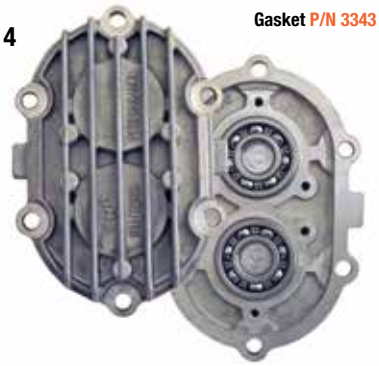
13



Gasket P/N 6703 or P/N 6703HD

STANDARD 7"
P/N 3342

14



Gasket P/N 3343

Shown With Option 8208-C Thermal Dispersant

#	DESCRIPTION	ASSEMBLY	BARE COVER	BEARING P/N	BEARING CAP	CAP BOLT	CAP O'RING	BACK-UP RING	PLUG P/N	RETAINER	RETAINER BOLT	OPTION
1	Standard Lightweight Aluminum Sprint Cover, Tumbled	6746	6655	7524	1667	7842	7476	--------	7874S	--------	--------	8185
2	Heavy Duty Aluminum Sprint Center Cover	6630	6655HD	7521	1667	7955	7406	7496	7874S	--------	--------	8137
3	Aluminum Sprint Center Cover, Large Ball Bearing	6508	6480	7332	--------	--------	--------	--------	--------	--------	--------	8168
3	Magnesium Sprint Center Cover, Large Ball Bearing	K6508	K6480	7332	--------	--------	--------	--------	--------	--------	--------	8168
4	Aluminum Sprint Center Cover, Large Ball Bearing, Retainers	3736	6480-01	8659	--------	--------	--------	--------	--------	3258	8087	8252
4	Magnesium Sprint Center Cover, Large Ball Bearing, Retainers	K3736	K6480-01	8659	--------	--------	--------	--------	--------	3258	8087	8252
5	Billet Aluminum Sprint Center Cover, 6 Bolt, Large Ball Bearing	12175	12175B	8659	--------	--------	--------	--------	--------	--------	12417	--------
6	Aluminum Sprint Center with Integral Pump	3792-01	2959	8659	--------	--------	--------	--------	--------	3258	8087	8264
7*	Aluminum Deep Cover with Ball Bearings	5054HD	5017HD	8659	--------	--------	--------	--------	7111A	3258	8087	--------
8	Sprint Center Gear Cover, 6 Bolt Short	12070	12070B	8659	--------	--------	--------	--------	--------	--------	12417	--------
9	Billet Aluminum Gear Cover	4873S	4872S	8659	--------	--------	--------	--------	--------	3258	8087	8252BS
10	Billet Aluminum Gear Cover with O'Ring	4873	4872	8659	--------	--------	--------	--------	--------	3258	8087	8252B
11	Magnesium Front Quick Change Cover	K3420	K3420-0	7390, 7332	--------	--------	--------	--------	7874S	--------	--------	--------
12	Magnesium Mini 8-3/8" & V8 Center Cover	K6915	K6718	7532	1950	7850	7424	--------	--------	--------	--------	--------
13	Straight Finned Mini 8-3/8" & V8 Center Cover with Bearing Retainers	3225	3056	7532	--------	--------	--------	--------	--------	3059	8087	8225
14	7" Quick Change Cover, 2nd Generation, 2.0472" Bearing O.D.	3342	3342B	7532	--------	--------	--------	--------	--------	--------	--------	--------

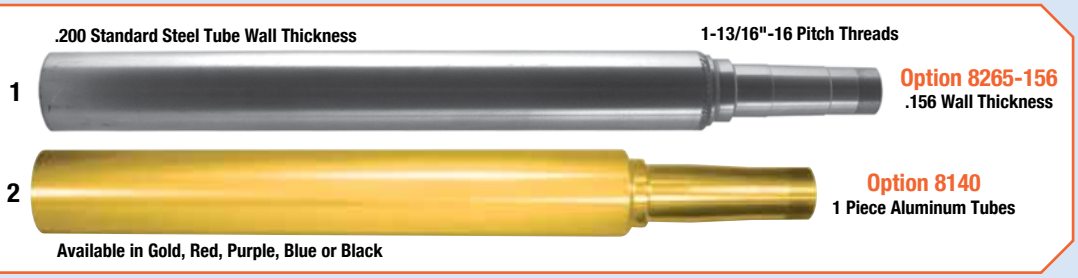
*Supercedes P/N 5017 Gear Cover using P/N 7313 Bearings

3" Side Tubes & Spindles

WIDE 5

INSTALLATION INSTRUCTIONS

When installing a tube in a bell, place the tube in a 5 gallon bucket of ice. Heat the bell in an oven to 270°-300°F. Lubricate the bell bore and drop the tube into the bell. DO NOT TORCH! Annealing and/or cracking will occur.



Option 8265-156
.156 Wall Thickness

Option 8140
1 Piece Aluminum Tubes

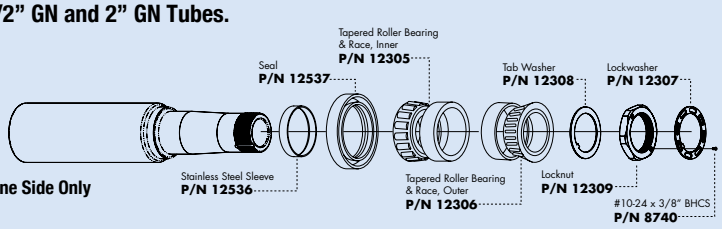
Available in Gold, Red, Purple, Blue or Black

HEAVY WALL TUBE – Option 9151-175 1-3/4" Tube I.D. (*Adds Approx. 13 lbs. per Side) Option 9151-200 2" Tube I.D. (*Adds Approx. 10 lbs. per Side) Option 9151-150 1-1/2" Tube I.D. (*Adds Approx. 16 lbs. per Side)

Available for Wide 5, 2-1/2" GN and 2" GN Tubes.

Option 8140-1TON
1 Piece Aluminum Tubes, 1 Ton

Option 1/2 8140-1TON
1 Piece Aluminum Tube, 1 Ton, One Side Only



WALL THICKNESS COMPARISON

1 TON WIDE 5
P/N 12313 & 12313L

STANDARD 3/4 TON WIDE 5
P/N 6672 & 6672L

When Ordering Wide 5 Hubs for One Ton Tube & Spindle Add:

P/N 6105-1TON Lock Kit w/ Seal P/N 12549 Spindle Nut/Washer Kit

Option 8254-1TON Wide 5 Hub w/ 1 Ton Bearings, Races & Lock Kit Option 9141 Wide 5 One Ton Races & Bearings Installed

See Page 71 for more information.

1 Ton Spindle Nut Socket
P/N 12542

1-13/16"-16 Pitch
Option 8138
Aluminum Tubes with Steel Spindles

1-31/32"-16 Pitch
Option 8140 1Ton
Wide 5 1 Ton Aluminum Tubes

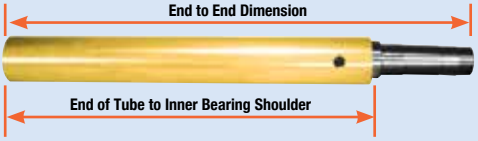
1-31/32"-16 Pitch
Option 9152
Steel 1 Ton Tubes

(P/N 12751) Spindle Sleeve, 1 Ton Spindle, Wide 5

Order 'B DIMENSION' or End to End

Please Order Tubes Using This Dimension

The inner bearing shoulder is what locates all hub assemblies. Remove hub assembly and measure from edge of the bell to inner bearing shoulder. Add the 5" of tube that is in the bell to come up with the tube length. Specify inner bearing to end of tube.



#	DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
1	Wide 5 Steel Tube & Spindle Assembly	Straight	5145	5151	5110
1	Wide 5 Steel Tube & Spindle Assembly	0.5°	1405	1380-05	5110
1	Wide 5 Steel Tube & Spindle Assembly	1.0°	1410	1380-10	5110
1	Wide 5 Steel Tube & Spindle Assembly	1.5°	1415	1380-15	5110
2	Wide 5 One Piece Aluminum Tube & Spindle	Straight	6672	One Piece	One Piece
2*	Wide 5 One Piece Aluminum Tube & Spindle	Straight	6672L	One Piece	One Piece
3	Wide 5 Aluminum Tube with Steel Spindle	Straight	6631	6598	6597
3	Wide 5 Aluminum Tube with Steel Spindle	0.5°	1405A	1379-05	6597
3	Wide 5 Aluminum Tube with Steel Spindle	1.0°	1410A	1379-10	6597
3	Wide 5 Aluminum Tube with Steel Spindle	1.5°	1415A	1379-15	6597
4	NEW Wide 5 One Piece Aluminum Tube & Spindle, 1 Ton	Straight	12313	One Piece	One Piece
4*	NEW Wide 5 One Piece Aluminum Tube & Spindle, 1 Ton	Straight	12313L	One Piece	One Piece
5	Wide 5 Steel Tube & Spindle Assembly	Straight	5145-1Ton	5151-1Ton	5110

*For Tube Lengths 23-1/2" and Longer, Using 'B' Dimension or 29" + End to End Dimension

END TO END TUBE LENGTH

Measure from end of tube to edge of bell. Add the 5" of tube that is in the bell. Specify end to end measurements.

See pages 108-112 for Dimensional Data.

See Page 106 for Camber Options

LOCK NUT KITS

P/N 1865A
Aluminum Nut w/ Socket Head Screws

P/N 1865A-2
Aluminum Nut w/ Button Head Screws

P/N 1865
Steel Nut w/ Socket Head Screws

P/N 1865-2
Steel Nut w/ Button Head Screws

SHORT WIDE 5

1-13/16"-16 Pitch

Option 8236
Short Wide 5 Tubes

Option 8265-156
.156 Wall Thickness

Please Order Tubes Using 'B' Dimension See page 54

DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
Short Wide 5 Steel Tube & Spindle Assembly	Straight	6947	6937	5110

2-1/2" GN 5 ON 5

.200 Standard Steel Tube Wall Thickness — **2.360"-18 Pitch**

1

Option 8265-156
.156 Wall Thickness

2

Option 8140
1 Piece Aluminum Tube

#	DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
1	2-1/2" GN Tube & Spindle Assembly, Right	Straight	5052R	5006-01	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	Straight	5052L	5006-02	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	1.0°	1610R	1383-10R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	1.0°	1610L	1383-10L	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	1.5°	1615R	1383-15R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	1.5°	1615L	1383-15L	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	1.8°	1618R	1383-18R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	1.8°	1618L	1383-18L	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	2.0°	1620R	1383-20R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	2.0°	1620L	1383-20L	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	2.5°	1625R	1383-25R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	2.5°	1625L	1383-25L	5110
2	2-1/2" GN Aluminum Tube & Spindle Assembly, Right	Straight	6754R	One Piece	One Piece
2	2-1/2" GN Aluminum Tube & Spindle Assembly, Left	Straight	6754L	One Piece	One Piece

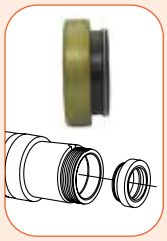
SPINDLE NUT/ LOCK WASHER

P/N 7103-01
Right Spindle Nut

P/N 7103-02
Left Spindle Nut

P/N 7118
Spindle Lock Washer

DOUBLE LIPPED SEAL



P/N 7271
2-1/2" Double Lipped Seal with Spring Seal Retainer. Seals around the axle.

See Pages 108-112 for Dimensional Data

2-7/8" WIDE 5

2-7/8"-16 Pitch Threads

1

Shown with REQUIRED Tube Spacer P/N 3262 with original P/N 7490. MUST USE Seal P/N 7289V with Tube Spacer.

.280 Wall Thickness

2

Option 8239
Aluminum

Option 8263
Steel

#	DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
1*	2-7/8" Tetrad Tube	Straight	3246T	One Piece	One Piece
2	2-7/8" Aluminum Side Tube	Straight	3246	One Piece	One Piece
2	2-7/8" Steel Side Tube	Straight	3791	One Piece	One Piece

*Must Use Tube Spacer

Add Option 1/2 8238 for Splined Tube

See Page 61 for 5 x 5 2-7/8" Tube P/N

NOTE: Seal P/N 7289V is Required When Using Tube Spacer P/N 3262 (Tube Spacer O'Ring P/N 7490).

SUPER SPEEDWAY

2-5/32"-18 Pitch

See Page 106 for Camber Options
See Pages 108-112 for Dimensional Data

DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
Super Speedway Steel Tube Assembly	Straight	1900R	1289R	5110
Super Speedway Steel Tube Assembly	Straight	1900L	1289L	5110
Super Speedway Steel Tube Assembly, Right	1.5°	1915R	1474-15R	5110
Super Speedway Steel Tube Assembly, Left	1.5°	1915L	1474-15L	5110
Super Speedway Steel Tube Assembly, Right	1.8°	1918R	1474-18R	5110
Super Speedway Steel Tube Assembly, Left	1.8°	1918L	1474-18L	5110

SPINDLE NUT/ LOCK WASHER

P/N 7980-01
Right Spindle Nut

P/N 7980-02
Left Spindle Nut

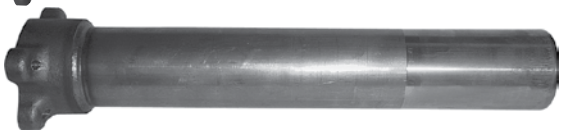
P/N 7983
Spindle Lock Washer

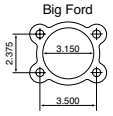
STOCK FORD STYLE BEARING ENDS

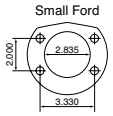
1

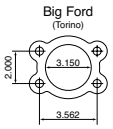
2

3









4 BOLT TUBE ASSEMBLY

4

8 BOLT TUBE THICK FLANGE

SPINDLE BOLTS
8 Bolt Thick Flange
P/N 7873
12 pt 5/16-24 x 1-1/2
Steel Tube
P/N 7774
SHCS 5/16-18 x 1-1/2
Aluminum Tube

See Pages 108-112 for Dimensional Data

5

6

Referred to as Thick

Available in Gold or Black

Option 8132
Aluminum 8 Bolt Tubes
(Spindles Not Included)

8 BOLT TUBE THIN FLANGE

SPINDLE BOLTS
8 Bolt Thick Flange
P/N 7970
SHCS 5/16-24 x 3/4
Steel Tube
P/N 7970A
SHCS 5/16-18 x 1
Aluminum Tube

See Pages 108-112 for Dimensional Data

7

.200 Standard Wall Thickness

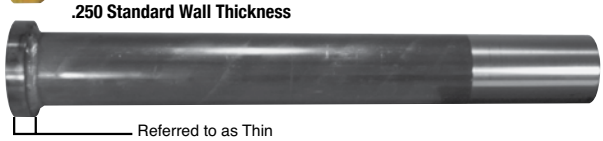
Option 8265-156
.156 Wall Thickness

8

.250 Standard Wall Thickness

Option 8190A
Thin Flanged 8 Bolt Aluminum Tubes
(Spindles Not Included)

9



Referred to as Thin

Option 8190
Thin Flanged 8 Bolt Tubes
(Spindles Not Included)

Please Order Tubes Using 'B' Dimension
See page 54

#	DESCRIPTION	P/N ASSEM	P/N TUBE END	P/N TUBE
1	Ford® Large Bearing Side Tube Assembly, 3.150	6478	6378	5110
2	Ford® Small Bearing Side Tube Assembly, 2.834	6477	6220	5110
3	Ford® Big Bearing Side Tube Assembly, 3.150, Torino®	2970	2505	5110
4	4 Bolt Wide 5 Tube Assembly	5051	5224	5110
4	4 Bolt 2-1/2" GN Tube Assembly	5051	5224	5110
5	8 Bolt Wide 5 Steel Tube Assembly for Bearing Mount, Thick Flange	6577	6560	5110
6	8 Bolt Wide 5 Aluminum Tube Assembly for Bearing Mount, Thick Flange	6603	One Piece	One Piece
7	8 Bolt Thin Flange Steel Tube Assembly, 2" GN	1400	1299	5110
7	8 Bolt Thin Flange Steel Tube Assembly, Wide 5	1400-W5	1299	5110
8	8 Bolt Thin Flange Aluminum Tube Assembly, 2" GN	1400A	One Piece	One Piece
8	8 Bolt Thin Flange Aluminum Tube Assembly, Wide 5	1400A-W5	One Piece	One Piece
9	8 Bolt Thin Flange Steel Tube Assembly, 2 1/2" GN	1439	1397	5110

BOLT-ON SPINDLES

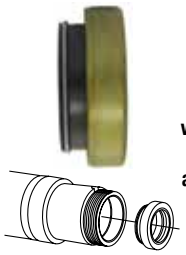
SPINDLE BOLTS

ATTENTION

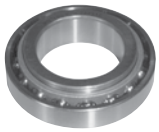
IF ORDERING BOLT-ON SPINDLES, SPINDLE BOLTS ARE SOLD SEPARATELY. Please select from the P/N's at right the bolts that best suit your application.

SPINDLE BOLTS
8 Bolt Thick Flange
P/N 7873
Steel Tube
P/N 7774
Aluminum Tube

SPINDLE BOLTS
8 Bolt Thin Flange
P/N 7970
Steel Tube
P/N 7970A
Aluminum Tube



P/N 7271
2-1/2" Double Lipped Seal with Spring Seal Retainer. Seals around the axle.



Purchase Separately
P/N 7325 ACS

LOW DRAG!

Option 8254S-XX
Angular contact brgs w/ steel balls, Hub

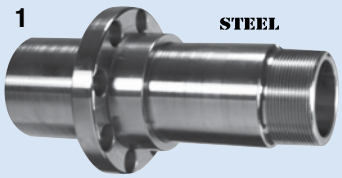
XX = W5 (Wide 5 Hub)
= 2 (2" Hub)
= 25 (2.5" Hub)
= 287 (2.875" Hub)
= DM (Direct Mount Hub)

See Page 118 for Individual Bearings

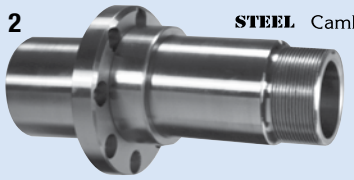
2" GN 5 ON 5

1-13/16"-16 Pitch Threads

1 STEEL



2 STEEL Cambered



NOTE: Spindle Bolts Sold Separately. See Below For Availability.

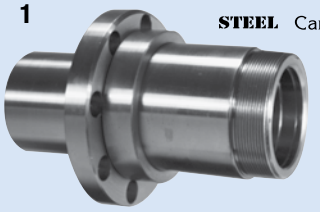
#	P/N	CAMBER	P/N TUBE (Reference Only)
1*	1384	Straight	1400/1400A
2*	1384-05	0.5°	1400/1400A
2*	1384-10	1°	1400/1400A
2*	1384-15	1.5°	1400/1400A
2*	1384-20	2°	1400/1400A
2*	1384-25	2.5°	1400/1400A

*Includes Bearing Sleeve P/N 1440 & O'Ring P/N 7464

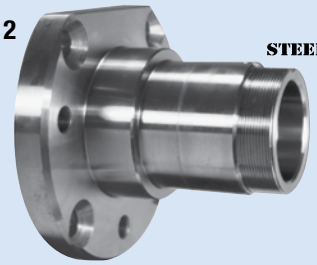
2-1/2" GN 5 ON 5

2.360"-18 Pitch Threads

1 STEEL Cambered



2 STEEL



NOTE: Spindle Bolts Sold Separately. See Below For Availability.

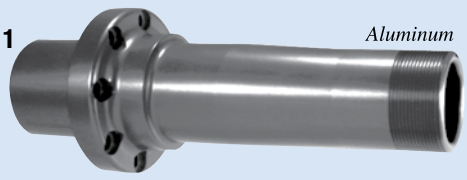
#	P/N	CAMBER	P/N TUBE (Reference Only)
1*	1385-15R	1.5° Right	1439
1*	1385-15L	1.5° Left	1439
2	5155-01	Straight (R)	5051
2	5155-02	Straight (L)	5051

*Includes Bearing Sleeve P/N 1441 & O'Ring P/N 7446

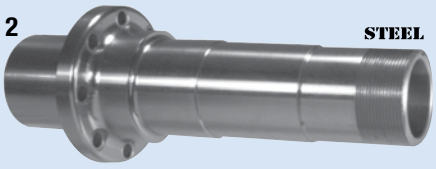
WIDE 5

1-13/16"-16 Pitch Threads

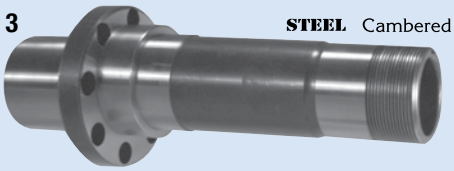
1 *Aluminum*



2 STEEL



3 STEEL Cambered



NOTE: Spindle Bolts Sold Separately. See Below For Availability.

#	P/N	CAMBER	P/N TUBE (Reference Only)
1	6600	Straight	6577/6603/1400A-W5/1400-W5
2	6620	Straight	6577/6603/1400A-W5/1400-W5
2	6620HT	Straight	6577/6603/1400A-W5/1400-W5

#	P/N	CAMBER	P/N TUBE (Reference Only)
3*	6620C-05	0.5°	6577/6603/1400A-W5/1400-W5
3*	6620C-10HT	1°	6577/6603/1400A-W5/1400-W5
3*	6620C-15HT	1.5°	6577/6603/1400A-W5/1400-W5

*Includes Bearing Sleeve P/N 6993 & O'Ring P/N 7464
HT = Heat Treat

3" Side Tubes & Spindles

2" GN 5 ON 5

1-13/16"-16 Pitch Threads

1

See Page 106 for Camber Options

2

Option 8140
1 Piece Aluminum Tube

3

Option 8138
Aluminum Tubes with Steel Spindles

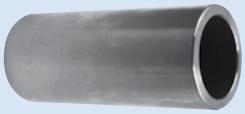
#	DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
1	2" GN Steel Tube & Spindle Assembly	Straight	6785	6758	5110
1	2" GN Steel Tube & Spindle Assembly	0.5°	1505	1382-05	5110
1	2" GN Steel Tube & Spindle Assembly	1.0°	1510	1382-10	5110
1	2" GN Steel Tube & Spindle Assembly	1.5°	1515	1382-15	5110
2	2" GN Aluminum Tube & Spindle	Straight	6786	One Piece	One Piece
3	2" GN Aluminum Tube with Steel Spindle	Straight	1670	1381	6597
3	2" GN Aluminum Tube with Steel Spindle	0.5°	1505A	1381-05	6597
3	2" GN Aluminum Tube with Steel Spindle	1.0°	1510A	1381-10	6597

2-7/8" 5 ON 5"

1

2-7/8"-16 Pitch Threads

#	DESCRIPTION	CAMBER	P/N ASSEM
1	2-7/8" Steel Tube & Spindle Assembly	Straight	3916



2-7/8" SPINDLE LINER FOR INCREASED SPINDLE STRENGTH

P/N 12786

BABY GRAND

1-13/16"-16 Pitch Threads

1

Option 8138
Aluminum Tubes with Steel Spindles

2

#	DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
1	Baby Grand Steel Tube & Spindle Assembly	Straight	2261	6547	5110
1	Baby Grand Steel Tube & Spindle Assembly	1.0°	1810	1386-10	5110
2	Baby Grand Aluminum Tube with Steel Spindle	Straight	2264	1284	6597

See Page 106 for Camber Options
See Pages 108-112 for Dimensional Data

7"

1-13/16"-16 Pitch Threads

1

2

3

#	DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
1	2-1/2" Tube & Spindle Assembly	Straight	3363	3361	3360
1	2-1/2" Tube & Spindle Assembly	1°	3363-01	12127-10	3360
2	2-1/2" Tube & Spindle Assembly	Straight	3363A	One Piece	One Piece
3	2-1/2" Tube & Spindle Assembly, Toyota® Style Ends	N/A	3364	2947	3360

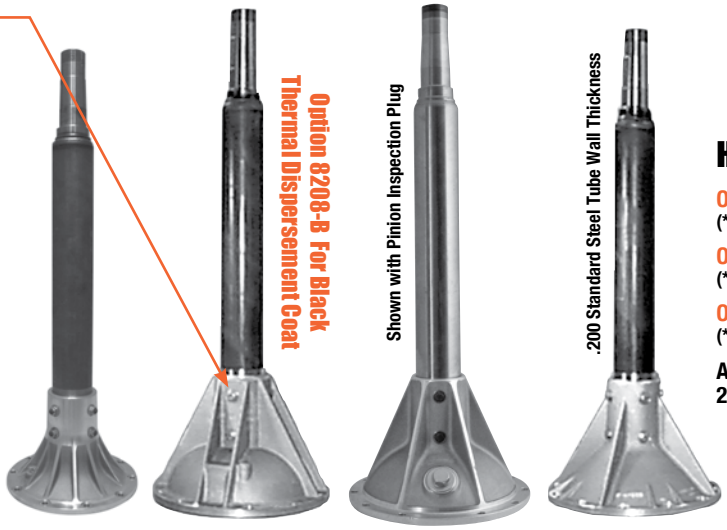
3" TUBES & BELLS

TUBE & BELL THRU-BOLT KITS

Option 1/2-8237
One Tube & Bell Assembly, 4 & 6 Rib
Option 1/2-8237-8
One Tube & Bell Assembly, 8 Rib

P/N 8341 4 & 6 Rib Bells
Kit Includes 16 ea 4 Rib, 12 ea 6 Rib:
P/N 7908 3/8-24 Locknut
P/N 7864 3/8" Serrated Belleville Lockwasher
P/N 7852 3/8-24 x 1-1/16" HHCS

P/N 8341-8 8 Rib Bells
Kit Includes 16 ea:
P/N 7908 3/8-24 Locknut, P/N 7114 3/8" SAE Washer,
P/N 7864 3/8" Serrated Belleville Lockwasher, P/N 8769
3/8-24 x 1-1/2" HHCS



V8 12 RIB BELL & TUBE | 8 RIB BELL & TUBE | 6 RIB BELL & TUBE | 4 RIB BELL & TUBE

HEAVY WALL TUBE

Option 9151-200 2" Tube I.D.
(*Adds Approx. 10 lbs. per Side)
Option 9151-175 1-3/4" Tube I.D.
(*Adds Approx. 13 lbs. per Side)
Option 9151-150 1-1/2" Tube I.D.
(*Adds Approx. 16 lbs. per Side)
Available for Wide 5,
2-1/2" GN and 2" GN Tubes.

ORDERING INFORMATION

When ordering, provide length of tube using 'B' dimension (see below). Refer to pages 108-112 for Dimensional Data. Refer to page 106 for available camber and page 103 for option numbers. For Cambered Tube & Bell Assembly use specification form on page 107.

For Ordering Tube and Bell Assembly With Magnesium Bell add prefix 'K' to P/N. Example: K3146
For Ordering Tube & Bell Assembly With Aluminum Tube installed add suffix 'A' to P/N. Example: K3146A

Aluminum 2-7/8" Wide 5 add Option 1/2 8239
Steel 2-7/8" 5 on 5" add Option 1/2 8263-55
Splined Tube add Option 1/2 8238
*8 Bolt Thin Flange add Option 1/2 8190
.156 Wall Thickness add Option 1/2 8265-156
Tetrad Tube add Option 1/2 9119

6 Rib Bell Assembly Standard with Inspection Plug
For an 8 Rib Right Side Bell with Inspection Plug, add Option 8155P
For an 4 Rib Right Side Bell with Inspection Plug, add Option 8136P
For an 8 Rib Right Side Bell with Inspection Plug, Machined (Lightweight) add Option 8155PM
For an 8 Rib, Heavy Duty, Permanent Mold, Right Side Bell with Inspection Plug, add Option 8155PMHD

DESCRIPTION	SIDE	WIDE 5	2" GN	2 1/2" GN 8 BOLT	4 BOLT
4 Rib Aluminum Bell with Steel Tube	Right	3146*	3150	3044*	3148	3042
4 Rib Aluminum Bell with Steel Tube	Left	3147*	3151	3045*	3149	3043
6 Rib Aluminum Bell with Steel Tube	Right	4146	4150	4144	4148	4142
6 Rib Aluminum Bell with Steel Tube	Left	4147	4151	4145	4149	4143
8 Rib Aluminum Bell with Steel Tube	Right	5146	5141	5044	5148	5042
8 Rib Aluminum Bell with Steel Tube	Left	5147	5142	5045	5149	5043
V8 QC Aluminum Bell with Steel Tube	Right	V8-2146	V8-2150	V8-2144	V8-2148	V8-2142
V8 QC Aluminum Bell with Steel Tube	Left	V8-2147	V8-2151	V8-2145	V8-2149	V8-2143

*.200 Standard Steel Tube Wall Thickness

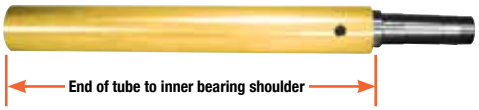
7" REAR TUBE & BELL ASSEMBLY

DESCRIPTION	SIDE	P/N
6 Rib Aluminum Bell with Steel Tube, Baby Grand Spindles	Right	3786
6 Rib Aluminum Bell with Steel Tube, Baby Grand Spindles	Left	3787
6 Rib Aluminum Bell with Steel Tube, Toyota Style Ends	Right	3788
6 Rib Aluminum Bell with Steel Tube, Toyota Style Ends	Left	3789

'B DIMENSION'

Please Order Tubes Using This Dimension

The inner bearing shoulder is what locates all hub assemblies. Remove hub assembly and measure from edge of the bell to inner bearing shoulder. Add the 5" of tube that is in the bell to come up with the tube length. Specify inner bearing to end of tube.



When ordering tube and bell assembly for a Front Quick Change Please Note: Right Side Bell is mounted to Left Side and Left Side Bell is mounted to Right Side.

*.200 Standard Steel Tube Wall Thickness

IMPORTANT

When replacing the tube and bell assembly, check side bell preload and backlash. Install the O'Ring and seal. If left bell, install thrustblock. Torque thrubolts to 35 Ft. Lbs. Snug left bell adjusting bolt, then back it off a 1/4 turn. Thread lock the jam nut with the red stuff!

5 On 5" & 5 On 4-3/4" Hub Assemblies

Shown with 9120 Platinum Hub Upgrade

ASSEMBLIES

P/N 2255C - 5 On 5 Coarse Thread
P/N 2255F - 5 On 5 Fine Thread
P/N 2566C - 5 On 4 3/4" Coarse Thread
P/N 2566F - 5 On 4 3/4" Fine Thread

FITS 2-1/2" GN SPINDLE

Hub & Drive Flange Only 9 lbs 10 oz!

Investment Cast, 4140 heat treated steel. Complete assembly as shown, including 24 spline drive flange, weighs 12 lbs 3 oz.

1 LB WEIGHT SAVINGS!

Complete 5 on 5" Assembly Shown with Option 9143 Scalloped Drive Flange and Option 9120 Platinum Series upgrade.

PLATINUM SERIES

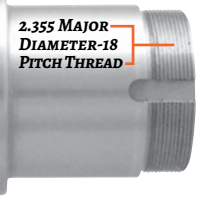
Option 9120

The superior quality of this 5 on 5 hub is unmatched! This investment cast, 4140 heat treated steel hub, featuring 3-3/4" long studs, is available as a premium upgrade to our standard 5 on 5 hubs.

HEAVY WALL TUBE

OPTION 9151-200 2" Tube I.D. (*Adds Approx. 10 lbs. per Side)
OPTION 9151-175 1 3/4" Tube I.D. (*Adds Approx. 13 lbs. per Side)
OPTION 9151-150 1 1/2" Tube I.D. (*Adds Approx. 16 lbs. per Side)

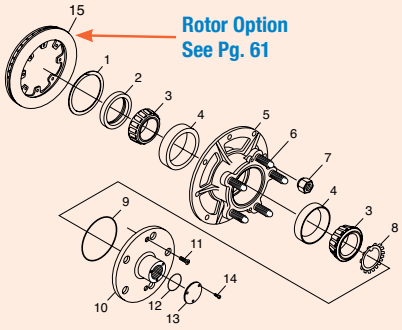
*Based off 24" end to end axle tube. Weights will vary depending on length of tube & application.



2 1/2" 5 ON 5 STEEL SIDE TUBE

TUBE & SPINDLE ASSEMBLY

5052R



Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Retaining Ring	7644	1
2	Seal	7201	1
3	Bearing Cone	7301	2
4	Bearing Cup	7302	2
5	Hub, 5 on 4-3/4"	1750-475	1
5	Hub, 5 on 5"	1750	1
6	5/8-18 x 2-1/2" Stud, Fine	1685	5
6	5/8-11 x 2-1/2" Stud, Coarse	1701M	5
6	5 on 4-3/4" Stud, Fine	2884F	5
6	5 on 4-3/4" Stud, Coarse	3596C	5
7	5/8-11 Lug Nut	5712	5

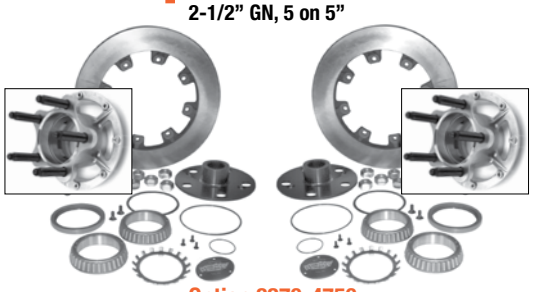
#	DESCRIPTION	P/N	QTY
8	Bearing Lock Washer	7118	1
9	O'Ring, Hub, 5 on 5"	7478	1
9	O'Ring, Hub, 5 on 4-3/4"	7494	1
10	Flange, 5 on 4-3/4"	1680-475	1
10	Flange, 5 on 5"	1680	1
11	5/16-18 x 5/8" FHCS	7913	2
12	O'Ring, Dust Cap	7479	1
13	Red Dust Cap	1726	1
14	10-24 x 3/8" SHCS	7938*	3
15	Rotor Option	See Pg 61	

* P/N 7938 Supercedes P/N 7969

HUBS, ROTORS & AXLES OPTIONS

Add one of the options listed below to your rear end assembly and receive (2) 5 on 5 Hub Kits P/N 2255C, (2) Rotors P/N 2394GM* and (2) Axles P/N 5067†.
*See page 86 for available Rotors. † Specify Length

Option 8270
2-1/2" GN, 5 on 5"



Option 8270-4750
2-1/2" GN, 5 on 4 3/4"

Option 8228
Gundrilled Axles

For Use with Cambered Snout

See Page 76

2-1/2" GN Spindle Nut Socket P/N 5319

PRESS-IN STUDS

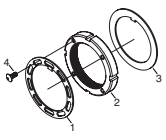
KIT P/N 8940 (Not Sold Individually)
Option 9113 Installed In Hub

Need Longer Studs? Kit includes 5 replacement studs 1" longer. Size: 5/8-11 x 3-3/4"

SCREW-IN STUDS

KIT P/N 8941 (Not Sold Individually)
Option 9114 Installed In Hub

2-1/2" GN LOCKNUT KIT P/N 12236



Kit Includes

#	DESCRIPTION	P/N	QTY
1	Lockwasher	12210	1
2	2-1/2" GN Steel Locknut	12208	1
3	Tab Washer	12209	1
4	10-32 x 1/2" BHCS	8392	2

LOW DRAG!

Purchase Separately
P/N 7301 ACS

Option 8254S-25
Super Free Angular Contact Bearings w/ Steel Balls, Hub

Option 9122
Low Friction Seal (P/N 7201LF)

Pro Eliminator 2-7/8" Hub Assembly

Hubs, Rotors & Axle Options. Add Option 8270-2875 to your Rear End Assembly and Recieve
(2) 5 on 5 Hub Kits P/N 3935C | (2) Rotors P/N 23946M | (2) Axles P/N 5067 *Specify Length*
Option 8228 Gundrilled Axle

1 LB WEIGHT SAVINGS!
Assembly Shown with Option 9143-2875
Scalloped 5 on 5" Drive Flange.

Comes with Short Studs Standard.
Must Order Long Studs.

ASSEMBLIES

P/N 3935C - Coarse Thread
P/N 3935F - Fine Thread
Available in Black Only

FITS 2-7/8" TUBES
Uses Standard 8 Bolt Rotor

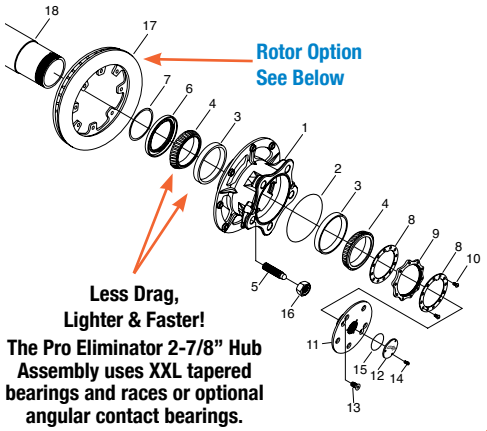
This super trick hub assembly comes standard with free spinning 2-7/8" Roller Bearings. The Inverted Drive Flange uses lighter, shorter axles. This 2-7/8" hub assembly, combined with P/N 3916 2-7/8" 5 on 5 Steel Side Tube & Spindle Assembly, saves an additional 5 lbs. of rotating and unsprung weight per rear end assembly! **ONLY FROM WINTERS!**

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Rear Hub	3601	1
2	O'Ring	8423	1
3	Bearing Cup	8682-2	2
4	Bearing Cone	8682-1	2
5	5/8-11 Wheel Stud, Coarse	3596C	5
5	5/8-18 Wheel Stud, Fine	2884F	5
6	Oil Seal	7284V-01	1
7	Retaining Ring	8349	1
8	Washer	3273	2
9	Spindle Nut	3271	1

#	DESCRIPTION	P/N	QTY
10	10-24 x 3/8" BHCS	8740	2
11	Drive Flange	3602	1
12	Red Dust Cap	1726	1
13	5/16-18 x 5/8" FHCS	7913	2
14	10-24 x 3/8" SHCS	7938	3
15	O'Ring	7479	1
16	5/8-11 x 1" Lug Nut	5712	5
17	Rotor Option	See Below	
18*	2-7/8" 5 on 5" Steel Tube	3916	1

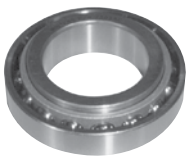
*For Reference Only. Not Included In Assembly



Less Drag, Lighter & Faster!
The Pro Eliminator 2-7/8" Hub Assembly uses XXL tapered bearings and races or optional angular contact bearings.

LOW DRAG!

Purchase Separately
P/N 8658 ACS



Option 8254S-287
Super Free Angular Contact Bearings with Steel Balls, Hub

Dust Cap Replacement Kit
P/N 4310

INVERTED DRIVE FLANGE

P/N 3602

Stronger, Lighter, Better Balance! The Pro Eliminator inverted drive flange uses shorter axles and fits 2-7/8" hubs.

Inside View Shown

SCREW-IN STUDS

KIT P/N 8941
(Not Sold Individually)
Option 9114
Installed In Hub

5/8-11 x 3.78

Aluminum

Steel

Spindle Lock Kit
P/N 4301 Aluminum
P/N 4301S Steel

SPINDLE NUT WRENCH PLATE

P/N 3269

2-7/8" 5 ON 5" STEEL TUBE & SPINDLE ASSEMBLY

P/N 3916

2-7/8"-16 Pitch Thread

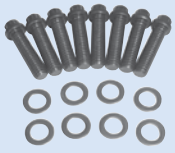
HEAVY WALL TUBE (Reference Page 5)
OPTION 9151-200 2" Tube I.D. (*Adds Approx. 10 lbs. per Side)
OPTION 9151-175 1-3/4" Tube I.D. (*Adds Approx. 13 lbs. per Side)
OPTION 9151-150 1-1/2" Tube I.D. (*Adds Approx. 16 lbs. per Side)
*Based off 24" end to end axle tube. Weights will vary depending on length of tube & application.

P/N 12767-10
P/N 12767-18-1/2

HEAVY WALL SLIDE IN INSERT

ROTOR OPTIONS

(Additional Charge See Page 86)



Rotor Bolt & Washer Kit
P/N 2821F
This Kit is for use with 5x5 & 5x4-3/4 Steel Hubs.

OPTION	DIMENSION	ROTOR P/N
8240	.810 x 12-1/8"	2394
8241	.810 x 11-3/4"	2394GM
8243	1-1/4" x 11-3/4"	6608GM

OPTION	DIMENSION	ROTOR P/N
*8243L	1-1/4" x 11-3/4"	6608GML
*8241L	.810 x 11-3/4"	2394GML

*Drilled Rotor

Rotor options applicable with hub assembly purchase only.

Magnesium Wide 5 Hub Kits

REAR KIT-8 BOLT

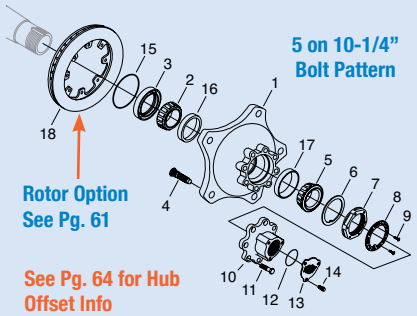
KIT P/N K3752 (# 1-17)

Kit includes cast magnesium hub, 8 bolt 7075-T6 alumium drive flange, bearings and seal kit with trick style aluminum lock nut.

Lug Nuts Not Included

6 lbs.

Drive Flange Stud Kit Option 9159-8



5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 61

See Pg. 64 for Hub Offset Info

Option 8254-1TON
1 Ton Bearing, Race & Lock Kit Installed

Option 9141
1 Ton Bearing & Race Installed

Option 8218S-W5
REM® Polished Tapered Bearings

P/N 1279A
Option 8283X8
Aluminum Crown Spline Drive Flange (page 70)

P/N 3230-55X8
Option 8297X8
Aluminum Drive Flange (page 70)

P/N 2266T
Option 8284X8
Titanium Drive Flange Studs

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub	K6955HD	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Drive Flange	5102-02F	1
11	7/16-14 x 1-1/4" HHCS	7117	8
12	O'Ring	7417	1
13	Flat Cap	3117	1
14	1/4-20 x 5/8 SHCS	7850	3
15	Retaining Ring	8328	1
16	Inner Bearing Cup	7322	1
17	Outer Bearing Cup	7323	1
18	Rotor Option	See Pg. 61	

FRONT KIT-PUSH IN CAP

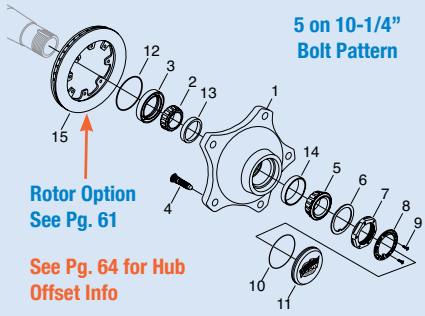
KIT P/N K3752F (# 1-14)

Kit includes cast magnesium front hub, aluminum push in dust cap, bearings and seal kit with trick style aluminum locknut.

Lug Nuts Not Included

5 lbs. 8 oz.

Drive Flange Stud Kit Option 9159-8



5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 61

See Pg. 64 for Hub Offset Info

Option 8204
Titanium Wheel Studs

Option 8204H
Titanium Wheel Studs, Gundrilled

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Front Hub	K6955FHD	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	O'Ring	7471	1
11	Cap	1614	1
12	Retaining Ring	8328	1
13	Inner Bearing Cup	7322	1
14	Outer Bearing Cup	7323	1
15	Rotor Option	See Pg. 61	

FRONT KIT-8 BOLT

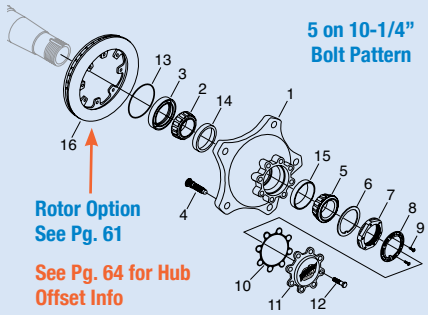
KIT P/N K3752F-8 (# 1-15)

Kit includes cast magnesium front hub, 8 bolt alumium dust cap, bearings and seal kit with trick style aluminum lock nut.

Lug Nuts Not Included

6 lbs.

Drive Flange Stud Kit Option 9159-8



5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 61

See Pg. 64 for Hub Offset Info

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub	K6955HD	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Gasket	5144	1
11	Cap	5094	1
12	7/16-14 x 1-1/4" HHCS	7117	8
13	Retaining Ring	8328	1
14	Inner Bearing Cup	7322	1
15	Outer Bearing Cup	7323	1
16	Rotor Option	See Pg. 61	

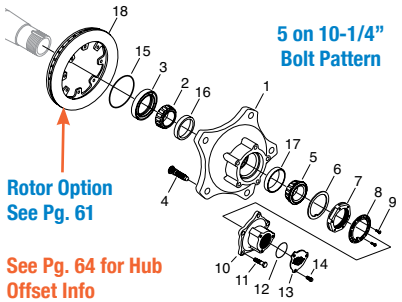
REAR KIT-5 BOLT

KIT P/N K3751 (# 1-17)

Kit includes cast magnesium hub, 5 bolt 7075-T6 alumium drive flange, bearings and seal kit with trick style aluminum lock nut.

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub	K3226	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Drive Flange	5102-5	1
11	7/16-14 x 1-1/4" HHCS	7117	5
12	O'Ring	7417	1
13	Flat Cap	3117	1
14	1/4-20 x 5/8 SHCS	7850	3
15	Retaining Ring	8328	1
16	Inner Bearing Cup	7322	1
17	Outer Bearing Cup	7323	1
18	Rotor Option	See Pg. 61	



5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 61

See Pg. 64 for Hub Offset Info

Drive Flange Stud Kit Option 9159-8

5 lbs. 12 oz.

Lug Nuts Not Included

Option 8218S-W5
REM® Polished Tapered Bearings

Option 8254-1TON
1 Ton Bearing, Race & Lock Kit Installed

P/N 2266T
Option 8284X5
Titanium Drive Flange Studs

P/N 3230-55
Option 8297X5
Aluminum Drive Flange (page 70)

P/N 1279AX5
Option 8283X5
Aluminum Crown Spline Drive Flange (page 70)

Option 9141
1 Ton Bearing & Race Installed

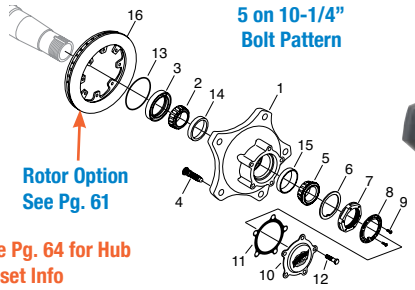
FRONT KIT-5 BOLT

KIT P/N K3751F (# 1-15)

Kit includes cast magnesium front hub, 5 bolt alumium dust cap, bearings and seal kit with trick style aluminum lock nut.

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub	K3226	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Cap	5094-5	1
11	Gasket	3177	1
12	7/16-14 x 1-1/4" HHCS	7117	5
13	Retaining Ring	8328	1
14	Inner Bearing Cup	7322	1
15	Outer Bearing Cup	7323	1
16	Rotor Option	See Pg. 61	



5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 61

See Pg. 64 for Hub Offset Info

Drive Flange Stud Kit Option 9159-8

Lug Nuts Not Included

5 lbs. 12 oz.

Option 8204
Titanium Wheel Studs

Option 8204H
Titanium Wheel Studs, Gundrilled

ZERO OFFSET ROTOR ADAPTER

P/N 12783

This Rotor Plate turns any wide 5 Hub into a Floating Rotor assembly.

Bolt Kit with T-Nuts for 12783 Rotor (Floating) P/N 9388FL

Fits Wide 5 Hub (Page 72)

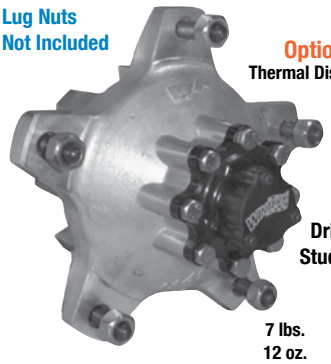
Aluminum Wide 5 Hub Kits

REAR KIT-8 BOLT

KIT P/N 3754 (# 1-16)

Kit includes permanent mold aluminum hub, 8 bolt 7075-T6 alumium drive flange, bearings and seal kit with trick style aluminum lock nut.

Lug Nuts Not Included



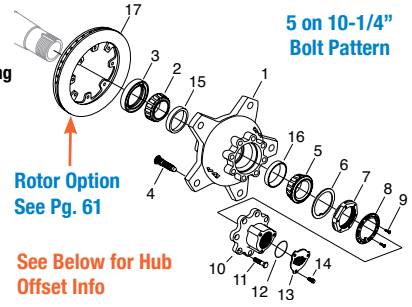
Option 8208-H
Thermal Dispersant Coating

Drive Flange Stud Kit Option 9159-8

7 lbs. 12 oz.

Option 8254-1TON
1 Ton Bearing, Race & Lock Kit Installed

Option 9141
1 Ton Bearing & Race Installed



5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 61

See Below for Hub Offset Info

P/N 1279A
Option 8283X8
Aluminum Crown Spline Drive Flange (page 70)

Option 8218S-W5
REM® Polished Tapered Bearings

P/N 3230-55x8
Option 8297X8
Aluminum Drive Flange (page 70)

P/N 2266T
Option 8284X8
Titanium Drive Flange Studs

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub	6690	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Solid	5688	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Drive Flange	5102-02F	1
11	7/16-14 x 1-1/4" HHCS	7117	8
12	O'Ring	7417	1
13	Flat Cap	3117	1
14	1/4-20 x 5/8 SHCS	7850	3
15	Inner Bearing Cup	7322	1
16	Outer Bearing Cup	7323	1
17	Rotor Option	See Pg. 61	

FRONT KIT-8 BOLT

KIT P/N 3754F (# 1-14)

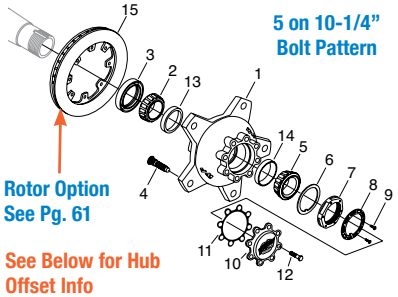
Kit includes permanent mold aluminum hub, 8 bolt 7075-T6 alumium front dust cap, bearings and seal kit with trick style aluminum lock nut.

Lug Nuts Not Included

Option 8208-H
Thermal Dispersant Coating

Drive Flange Stud Kit Option 9159-8

7 lbs. 12 oz.



5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 61

See Below for Hub Offset Info

Option 8204
Titanium Wheel Studs

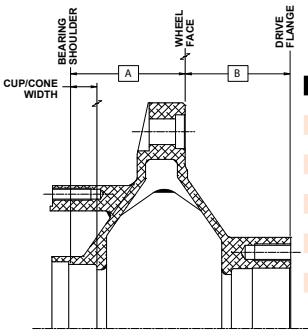
Option 8204H
Titanium Wheel Studs, Gundrilled

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub	6690	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Solid	5688	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10*	Cap	5094-Color	1
11	Gasket	5144	1
12	7/16-14 x 1-1/4" HHCS	7117	8
13	Inner Bearing Cup	7322	1
14	Outer Bearing Cup	7323	1
15	Rotor Option	See Pg. 61	

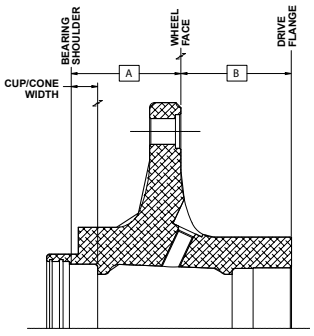
*** Specify Color (see page 71)**

WIDE 5 HUB BEARING TO WHEEL DIMENSIONAL OFFSET INFO



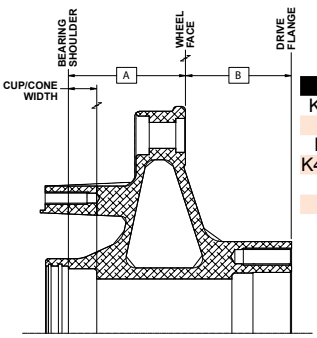
Pages 62-65

KIT	HUB	A	B
K3752	K6955HD	3"	2.75"
K3752F	K6955FHD	3"	2.75"
K3752F-8	K6955HD	3"	2.75"
K3751	K3226	3"	2.75"
K3751F	K3226	3"	2.75"
3754	6690	3"	2.75"
3754F	6690	3"	2.75"
3755	6606-X5	3"	2.75"
3756	6606-X5	3"	2.75"
3755F	6606-FX5	3"	2.75"



Pages 66-67

KIT	HUB	A	B
12242	12253	2-7/8"	2-7/8"
12240	12254	2-7/8"	2-7/8"
12241	12253	2-7/8"	2-7/8"



Pages 68-69 & 72-73

KIT	HUB	A	B
K4045X8	K007X8	3"	2.75"
K4045	K007	3"	2.75"
K4045F	–	3"	–
K4045FBO	K007	3"	2.75"
12292	–	2-3/16"	–
3750	3266	3"	0.6"
3750F	–	2"	–

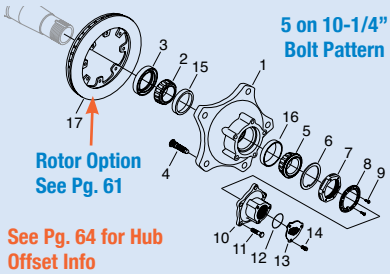
REAR KIT-5 BOLT

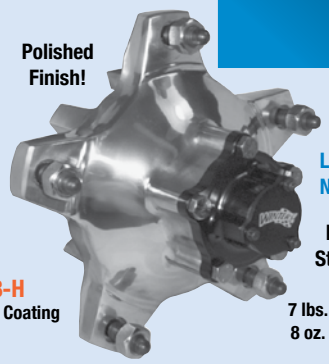
KIT P/N 3755 (# 1-16)

Kit includes polished permanent mold aluminum hub, 5 bolt 7075-T6 alumium drive flange, bearings and seal kit with trick style aluminum lock nut.

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub	6606-X5	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Solid	5688	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Drive Flange	5102-5	1
11	7/16-14 x 1-1/4" HHCS	7117	5
12	O'Ring	7417	1
13	Flat Cap	3117	1
14	1/4-20 x 5/8 SHCS	7850	3
15	Inner Bearing Cup	7322	1
16	Outer Bearing Cup	7323	1
17	Rotor Option	See Pg. 61	





Option 8208-H
Thermal Dispersant Coating

Option 8218S-W5
REM® Polished Tapered Bearings

P/N 1279AX5
Option 8283X5
Aluminum Crown Spline Drive Flange (page 70)

Option 8254-1TON
1 Ton Bearing, Race & Lock Kit Installed

Option 9141
1 Ton Bearing & Race Installed

P/N 2266T
Option 8284X5
Titanium Drive Flange Studs

P/N 3230-55
Option 8297X5
Aluminum Drive Flange (page 70)

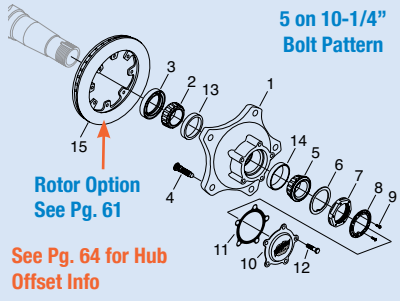
FRONT KIT-5 BOLT

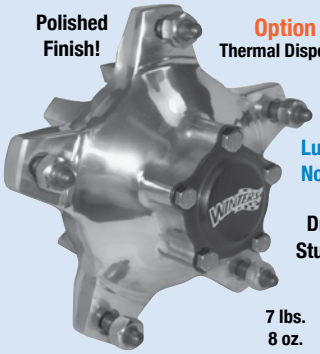
KIT P/N 3756 (# 1-14)

Kit includes polished permanent mold aluminum hub, 5 bolt 7075-T6 alumium dust cap, bearings and seal kit with trick style aluminum lock nut.

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub	6606-X5	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Solid	5688	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Cap	5094-5	1
11	Gasket	3177	1
12	7/16-14 x 1-1/4" HHCS	7117	5
13	Inner Bearing Cup	7322	1
14	Outer Bearing Cup	7323	1
15	Rotor Option	See Pg. 61	





Option 8204
Titanium Wheel Studs

Option 8204H
Titanium Wheel Studs, Gundrilled

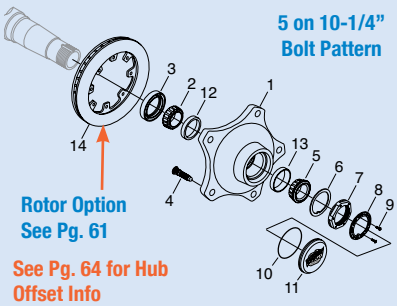
FRONT KIT

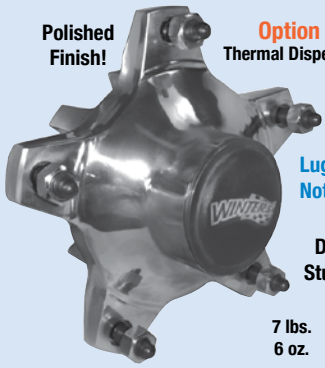
KIT P/N 3755F (# 1-13)

Kit includes polished permanent mold alum. hub, push in alum. dust cap, bearings and seal kit with trick style aluminum lock nut.

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Front Hub	6606-FX5	1
2	Inner Cone	7324	1
3	Seal	7210	1
4	Wheel Stud, Solid	5688	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	O'Ring	7471	1
11	Cap	1614-01	1
12	Inner Bearing Cup	7322	1
13	Outer Bearing Cup	7323	1
14	Rotor Option	See Pg. 61	





Trackstar 10 Wide 5 Hub Kits

THE FUTURE IS NOW!

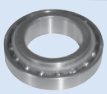
- 10 Spoke Wide 5 Hub
- Aluminum 2024-T3 Forged Construction
- Oil or Grease Friendly
- Accepts Standard or Super Free Angular Contact Bearings
- Solid or Gundrilled Studs Available in Steel or Titanium
- Rear Hub with Gundrilled Studs & Races = 7.95 lbs.
- Front Hub with Gundrilled Studs & Races = 7.75 lbs.

P/N 1279Ax5
Option 8283X5
Aluminum Crown Spline Drive Flange (page 70)
P/N 2266T
Option 8284X5
Titanium Drive Flange Studs

Option 8204
Titanium Wheel Studs
Option 8204H
Titanium Wheel Studs, Gundrilled
Option 8254-1TON
1 Ton Bearing, Race & Lock Kit Installed
Option 9141
1 Ton Bearing & Race Installed

LOW DRAG!

Purchase Separately
P/N 7325 ACS Outer
P/N 7324 ACS Inner



Option 8254S-W5
Super Free Angular Contact Bearings w/ Steel Balls, Hub

Option 8218S-W5
REM® Polished Tapered Bearings

OIL LEVEL

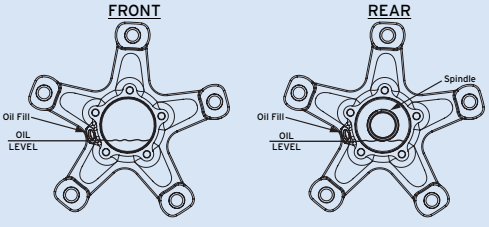
Important

Proper oil level is critical to the performance of these hubs. To fill, rotate the hub so the Oil Fill/Level Plug is positioned at 8 o'clock.

FRONT: Fill until oil level reaches the bottom of the Oil Fill/Level Plug. Approx. 5 1/2-6 oz.

REAR: Fill until oil level reaches the bottom of the Spindle. Approx. 5-1/2-6 oz. Over-filling will result in oil entering your side tubes.

Use Winters P/N 1730 SAE 80W/90 or Mobil 1® 75-90 Oil.



NOTE: Positive & Negative Camber Will Effect Fluid Level.

ROTOR OPTIONS (Additional Charge See Page 86)

Rotor options applicable with hub assembly purchase only.

OPTION	DIMENSION	ROTOR P/N
8240	.810 x 12-1/8"	2394
8241	.810 x 11-3/4"	2394GM
8243	1-1/4" x 11-3/4"	6608GM

OPTION	DIMENSION	ROTOR P/N
*8243L	1-1/4" x 11-3/4"	6608GML
*8241L	.810 x 11-3/4"	2394GML

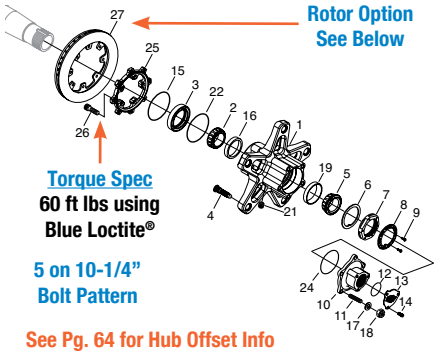
*Drilled Rotor

Floating Rotor Mounting Plate

T-Nut Kit
P/N 5820
Includes 8 of each:
P/N 3663 Bolt
P/N 3662 T-Nut

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub, Aluminum	12253	1
2	Inner Cone	7324	1
3	Seal	7210V	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Drive Flange	5102-55	1
11	Stud	2266	5
12	O'Ring	7417	1
13	Flat Cap	3117	1
14	1/4-20 x 5/8 SHCS	7850	3
15	Retaining Ring	8328	1
16	Inner Bearing Cup	7322	1
17	Washer	7811	5
18	Nut	7177N	5
19	Outer Bearing Cup	7323	1
21	Plug	8757	1
22	O'Ring	8430	1
24	Flange Locator O'Ring	7490	1
25	Rotor Mount	12255	1
26	7/16-14 x 1-1/2" 12pt	8997	5
27	Rotor Option	See Below	



See Pg. 64 for Hub Offset Info

Purchase Separately
P/N 7325 ACS Outer
P/N 7324 ACS Inner

LOW DRAG!
Option 8254S-W5
Angular Contact Bearings w/ Steel Balls, Hub
Option 8218S-W5
REM® Polished Tapered Bearings

REAR KIT-5 BOLT

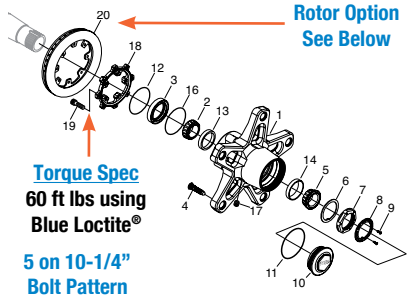
KIT P/N 12242 Gundrilled Studs (# 1-26)
KIT P/N 12242S Solid Studs (# 1-26)

Kit includes hub, 5 bolt 7075-T6 alumium drive flange, rotor mount, bearings and seal kit with trick style aluminum lock nut.

HUB WITH RACES, STUDS, & ROTOR MOUNT
P/N 12261 Gundrilled Studs
P/N 12261S Solid Studs

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub, Aluminum	12254	1
2	Inner Cone	7324	1
3	Seal	7210V	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Screw-On Cap	3929	1
11	O'Ring	7439	1
12	Retaining Ring	8328	1
13	Inner Bearing Cup	7322	1
14	Outer Bearing Cup	7323	1
16	O'Ring	8430	1
17	Plug	8757	1
18	Rotor Mount	12255	1
19	7/16-14 x 1-1/2" 12pt	8997	5
20	Rotor Option	See Below	



See Pg. 64 for Hub Offset Info

HUB WITH RACES, STUDS, & ROTOR MOUNT
P/N 12260 Gundrilled Studs
P/N 12260S Solid Studs

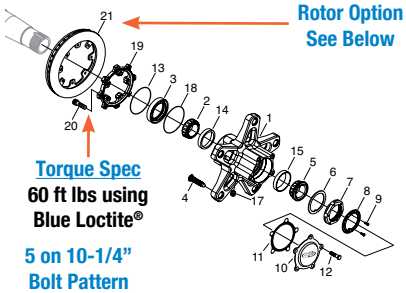
FRONT KIT

KIT P/N 12240 Gundrilled Studs (# 1-19)
KIT P/N 12240S Solid Studs (# 1-19)

Kit includes hub, screw on dust cap, rotor mount, bearings and seal kit with trick style aluminum lock nut.

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub, Aluminum	12253	1
2	Inner Cone	7324	1
3	Seal	7210V	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Bolt-On Cap	5094-5	1
11	Gasket	3177	1
12	7/16-14 x 1-1/4" HHCS	7117	5
13	Retaining Ring	8328	1
14	Inner Bearing Cup	7322	1
15	Outer Bearing Cup	7323	1
17	Plug	8757	1
18	O'Ring	8430	1
19	Rotor Mount	12255	1
20	7/16-14 x 1-1/2" 12pt	8997	5
21	Rotor Option	See Below	



See Pg. 64 for Hub Offset Info

HUB WITH RACES, STUDS, & ROTOR MOUNT
P/N 12261 Gundrilled Studs
P/N 12261S Solid Studs

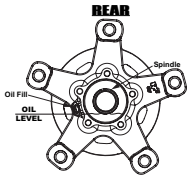
FRONT KIT-5 BOLT

KIT P/N 12241 Gundrilled Studs (# 1-20)
KIT P/N 12241S Solid Studs (# 1-20)

Kit includes hub, 5 bolt aluminum dust cap, rotor mount, bearings and seal kit with trick style aluminum lock nut.

007 Wide 5 HUB Kits

REAR KIT-8 BOLT

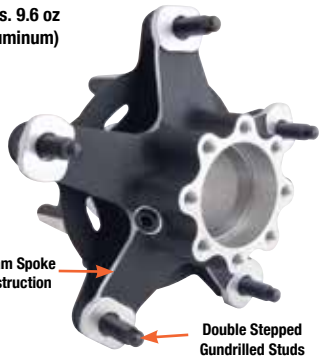


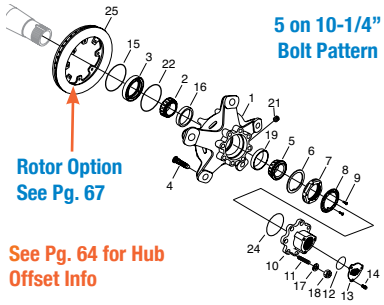
PROPER OIL LEVEL IS CRITICAL
See page 119 for filling & oil level instructions.
Use Winters P/N 1730 SAE 80W/90 or Mobil 1® 75-90 Oil.

KIT P/N K4045X8 Magnesium (# 1-23)
KIT P/N K4045SX8 Magnesium, with Solid Studs (# 1-23)
KIT P/N 4045X8 Aluminum (# 1-23)
KIT P/N 4045SX8 Aluminum, with Solid Studs (# 1-23)

Kit includes hub, 8 bolt 7075-T6 alumium drive flange, bearings and seal kit with trick style aluminum lock nut.

9 lbs. 9.6 oz (Aluminum)





5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 67

See Pg. 64 for Hub Offset Info

Closed Core Hub Design Along With Centrifugal Force Keeps Oil Exactly Where It Needs To Be!

HUB WITH RACES AND STUDS
P/N K007x8 Magnesium GD Studs
P/N K007Sx8 Magnesium Solid Studs
P/N 007x8 Aluminum GD Studs
P/N 007Sx8 Aluminum Solid Studs

Option 8204
Titanium Wheel Studs

Option 8204H
Titanium Wheel Studs, Gundrilled

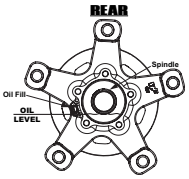
P/N 2266T
Option 8284X8
Titanium Drive Flange Studs

P/N 1279A
Option 8283X8
Aluminum Crown Spline Drive Flange (page 70)

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub, Magnesium	K007X8	1
1	Hub, Aluminum	007X8	1
2	Inner Cone	7324	1
3	Seal	7210V	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Drive Flange	5102-02	1
11	Stud	2266	8
12	O'Ring	7417	1
13	Flat Cap	3117	1
14	1/4-20 x 5/8 SHCS	7850	3
15	Retaining Ring	8328	1
16	Inner Bearing Cup	7322	1
17	Washer	7811	8
18	Nut	7177N	8
19	Outer Bearing Cup	7323	1
21	Plug	7874S	1
22	O'Ring	8430	1
24	Flange Locator O'Ring	7490	1
25	Rotor Option	See Pg 67	

REAR KIT-5 BOLT

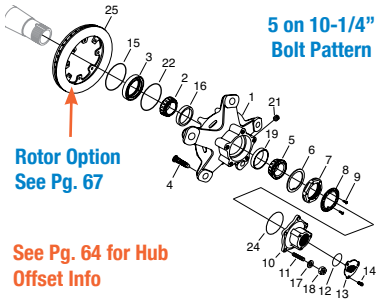


PROPER OIL LEVEL IS CRITICAL
See page 119 for filling & oil level instructions.
Use Winters P/N 1730 SAE 80W/90 or Mobil 1® 75-90 Oil.

KIT P/N K4045 Magnesium (# 1-23)
KIT P/N K4045S Magnesium, with Solid Studs (# 1-23)
KIT P/N 4045 Aluminum (# 1-23)
KIT P/N 4045S Aluminum, with Solid Studs (# 1-23)

Kit includes hub, 5 bolt 7075-T6 alumium drive flange, bearings and seal kit with trick style aluminum lock nut.

9 lbs. 9.6 oz (Aluminum)



5 on 10-1/4" Bolt Pattern

Rotor Option See Pg. 67

See Pg. 64 for Hub Offset Info

Oil Filled Hub Design Increases Bearing Life, Reduces Friction & Drag, Spins Freer & Runs Cooler!

HUB WITH RACES AND STUDS
P/N K007 Magnesium GD Studs
P/N K007S Magnesium Solid Studs
P/N 007 Aluminum GD Studs
P/N 007S Aluminum Solid Studs

Option 8204
Titanium Wheel Studs

Option 8204H
Titanium Wheel Studs, Gundrilled

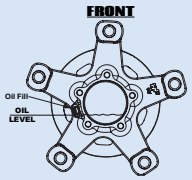
P/N 2266T
Option 8284X5
Titanium Drive Flange Studs

P/N 1279AX5
Option 8283X5
Aluminum Crown Spline Drive Flange (page 70)

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub, Magnesium	K007	1
1	Hub, Aluminum	007	1
2	Inner Cone	7324	1
3	Seal	7210V	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Drive Flange	5102-55	1
11	Stud	2266	8
12	O'Ring	7417	1
13	Flat Cap	3117	1
14	1/4-20 x 5/8 SHCS	7850	3
15	Retaining Ring	8328	1
16	Inner Bearing Cup	7322	1
17	Washer	7811	5
18	Nut	7177N	5
19	Outer Bearing Cup	7323	1
21	Plug	7874S	1
22	O'Ring	8430	1
24	Flange Locator O'Ring	7490	1
25	Rotor Option	See Pg 67	

FRONT KIT-SCREW ON CAP



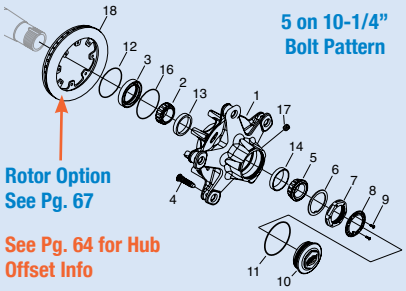
PROPER OIL LEVEL IS CRITICAL
See page 119 for filling & oil level instructions.
Use Winters P/N 1730 SAE 80W/90 or Mobil 1® 75-90 Oil.

KIT P/N K4045F Magnesium (# 1-17)
KIT P/N K4045SF Magnesium, with Solid Studs (# 1-17)
KIT P/N 4045F Aluminum (# 1-17)
KIT P/N 4045SF Aluminum, with Solid Studs (# 1-17)

Kit includes hub, screw on dust cap, bearings and seal kit with trick style aluminum lock nut.

Kit Includes

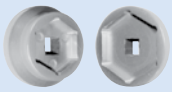
#	DESCRIPTION	P/N	QTY
1	Hub, Magnesium	K007F	1
1	Hub, Aluminum	007F	1
2	Inner Cone	7324	1
3	Seal	7210V	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Screw On Cap	3929	1
11	O'Ring	7439	1
12	Retaining Ring	8328	1
13	Inner Bearing Cup	7322	1
14	Outer Bearing Cup	7323	1
16	O'Ring	8430	1
17	Plug	7874S	1
18	Rotor Option	See Pg 67	



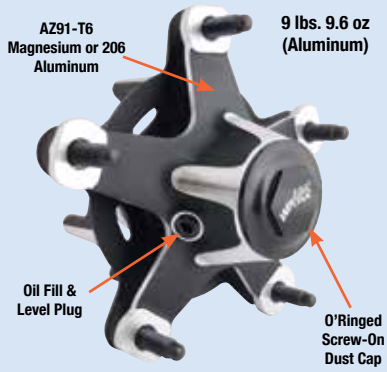
5 on 10-1/4" Bolt Pattern

Rotor Option
See Pg. 67

See Pg. 64 for Hub Offset Info

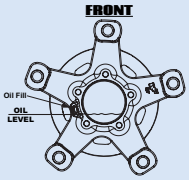


DUST CAP SOCKET
P/N 3153M



Oil Filled Hub Design Increases Bearing Life, Reduces Friction & Drag, Spins Freer & Runs Cooler!

FRONT KIT-5 BOLT



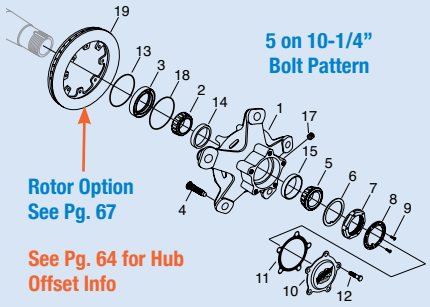
PROPER OIL LEVEL IS CRITICAL
See page 119 for filling & oil level instructions.
Use Winters P/N 1730 SAE 80W/90 or Mobil 1® 75-90 Oil.

KIT P/N K4045FBO Magnesium (# 1-18)
KIT P/N K4045SFBO Magnesium, with Solid Studs (# 1-18)
KIT P/N 4045FBO Aluminum (# 1-18)
KIT P/N 4045SFBO Aluminum, with Solid Studs (# 1-18)

Kit includes front hub, five bolt aluminum dust cap, bearings and seal kit with trick style aluminum lock nut.

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Hub, Magnesium	K007	1
1	Hub, Aluminum	007	1
2	Inner Cone	7324	1
3	Seal	7210V	1
4	Wheel Stud, Gundrilled	5688H	5
5	Outer Cone	7325	1
6	Washer	1664	1
7	Nut, Aluminum	5101AT	1
8	Lockwasher	1665	1
9	10-24 x 3/8" SHCS	7938	2
10	Bolt On Cap	5094-5	1
11	Gasket	3177	1
12	7/16-14 x 1-1/4" HHCS	7117	5
13	Retaining Ring	8328	1
14	Inner Bearing Cup	7322	1
15	Outer Bearing Cup	7323	1
17	Plug	7874S	1
18	O'Ring	8430	1
19	Rotor Option	See Pg 67	

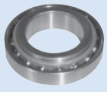


5 on 10-1/4" Bolt Pattern

Rotor Option
See Pg. 67

See Pg. 64 for Hub Offset Info

LOW DRAG!
Purchase Separately
P/N 7325 ACS Outer
P/N 7324 ACS Inner



Option 8254S-W5
Super Free Angular Contact Bearings w/ Steel Balls, Hub

Option 8218S-W5
REM® Polished Tapered Bearings

Closed Core Hub Design Along With Centrifugal Force Keeps Oil Exactly Where It Needs To Be!

ALUMINUM DRIVE FLANGE AND CROWN SPLINE KITS

See page 70 for more details.

5 Bolt Drive Flange
P/N 3230-55
(standard on 4045 hub kits)

5 Bolt Crown Spline
P/N 1279AX5
Option 8283X5
Option 8283X5O (w/ O'Ring)

8 Bolt Drive Flange
P/N 3230-55X8
(standard on 4045X8 hub kits)

8 Bolt Crown Spline
P/N 1279A
Option 8283X8
Option 8283X8O (w/ O'Ring)

Wide 5 HUB Accessories

ALUMINUM DRIVE FLANGE

ASSEMBLY P/N 3215
7075-T6 Aluminum 8 bolt drive flange with removable cap. Not for cambered spindles. The lightest drive flange available. Uses 31/24 spline axles.

P/N 3117 Flat Cap
*P/N 5102-02F Flange
P/N 7117 Flange HHCS (8 Needed)

P/N 7850 SHCS For Cap
P/N 7417 O'Ring
*Available in Black, Red & Gold

ALUMINUM DRIVE FLANGE

ASSEMBLY P/N 3230
7075-T6 Aluminum 5 bolt drive flange with removable cap. Not for cambered spindles. Uses 31/24 spline axles.

P/N 3117 Flat Cap
P/N 5102-5 Flange
P/N 7117 Flange HHCS (5 Needed)

P/N 7850 SHCS For Cap
P/N 7417 O'Ring

ALUMINUM DRIVE FLANGE

Extended Locator Lip

ASSEMBLY P/N 3230-55 (5 Bolt)
Specifically designed for Oil Filled Hub (pages 66-69), this forged 7075-T6 aluminum drive flange works on all wide 5 hubs. Extended locator lip with o'ring helps keep drive flange from loosening up and eliminates the need for gaskets or seals.

P/N 3117 Flat Cap
P/N 5102-55 Flange
P/N 7117 Flange HHCS (5 Needed)

P/N 7850 SHCS For Cap
P/N 7417 O'Ring
P/N 7490 Flange Locator O'Ring

ALUMINUM DRIVE FLANGE

Extended Locator Lip

ASSEMBLY P/N 3230-55X8 (8 Bolt)
Specifically designed for the 007 Oil Filled Hub (pages 68-69), this forged 7075-T6 aluminum drive flange works on all wide 5 hubs. Extended locator lip with o'ring helps keep drive flange from loosening up and eliminates the need for gaskets or seals.

P/N 3117 Flat Cap
P/N 5102-02 Flange
P/N 7117 Flange HHCS (8 Needed)

P/N 7850 SHCS For Cap
P/N 7417 O'Ring
P/N 7490 Flange Locator O'Ring

12PT SAFETY WIRE BOLTS
P/N 7117DR
Please Note: Above P/N is for one bolt only.

CROWN SPLINE

ASSEMBLY P/N 2383
Steel drive flange with aluminum screw on cap. Pre-drilled to be safety wired. With this drive flange you will never again strip your splines. Uses Winters crown spline axles, solid or gundrilled.

P/N 1197 Screw-On Cap
P/N 2231 Flange
P/N 7117 Flange HHCS (8 Needed)

P/N 7419 O'Ring
P/N 7745 Grease Fitting

BALL DRIVE

ASSEMBLY P/N 1414
This heat treated steel ball drive is the ultimate in strength, durability and smooth operation. It will work at any angle up to 6°. Winters precision made ball drive axles are required.

P/N 1408 Flat Cap
P/N 1404 Flange
P/N 7116 Flange HHCS (8 Needed)

P/N 7472 O'Ring
P/N 7545 11/16" Ball (6 Needed)
P/N 7963 Flat Cap SHCS

ALUMINUM CROWN SPLINE

ASSEMBLY P/N 1279AX5 (5 Bolt)
ASSEMBLY P/N 1279AX50 (5 Bolt w/ O'Ring)
A true crown splined coupler with a billet aluminum flange. Uses 31/24 spline axles, solid or gundrilled.

P/N 1197 Screw-On Cap
P/N 1198 Crowned Coupler
P/N 1196Ax5 Flange
P/N 7833 Flange HHCS (5 Needed)

P/N 7471 O'Ring, Cap
P/N 7674 Retaining Ring
P/N 7745 Grease Fitting
P/N 7462 O'Ring, Coupler

ALUMINUM CROWN SPLINE

ASSEMBLY P/N 1279A (8 Bolt)
ASSEMBLY P/N 1279AO (8 Bolt w/ O'Ring)
A true crown splined coupler with a billet aluminum flange. Uses 31/24 spline axles, solid or gundrilled.

P/N 1197 Screw-On Cap
P/N 1198 Crowned Coupler
P/N 1196A Flange
P/N 7833 Flange HHCS (8 Needed)

P/N 7471 O'Ring, Cap
P/N 7674 Retaining Ring
P/N 7745 Grease Fitting
P/N 7462 O'Ring, Coupler

ALUMINUM DRIVE FLANGE

ASSEMBLY P/N 5153A
Winters premium 7075-T6 aluminum 8 bolt drive flange with screw-on cap. Not for cambered spindles. Uses 31/24 spline axles.

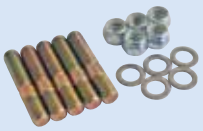
P/N 7424 O'Ring
*Available in Black, Red & Gold

P/N 5874 Screw-On Cap
*P/N 5102A Flange
P/N 7117 Flange HHCS (8 Needed)

TITANIUM BOLTS

P/N 7117T
For wide 5 drive flange.
Please Note: Above P/N is for one bolt only.

DRIVE FLANGE STUD KITS



P/N 2266 Studs
P/N 2266T Titanium Studs
P/N 7177N Locknuts
P/N 7811 Washers

KIT P/N 12177-5 Option 9159-5
5 Bolt Kit (Shown

KIT P/N 12177-8 Option 9159-8
8 Bolt Kit

KIT P/N 12177T-5 Option 9160T-5
5 Bolt Kit Titanium

KIT P/N 12177T-8 Option 9160T-8
8 Bolt Kit Titanium

1 TON BEARING AND LOCK KITS

Note:
Bearing & Race are a set and can not be sold seperately.

KIT P/N 6105-1TON Aluminum Lock Kit w/Seal (#'s 1-5) **KIT P/N 12549** Spindle Nut/Washer Kit (#'s 1-4)
Option 8254-1TON Wide 5 Hub w/ 1 Ton Bearings, Races & Lock Kit
Option 9141 Wide 5 Hub w/ 1 Ton Bearings & Races Installed
Note: Retaining Ring **P/N 8328** for Seal is not included.

#	DESCRIPTION	P/N	QTY
1	Nut, Aluminum	12309	1
2	Lockwasher	12307	1
3	#10-24 x 3/8" BHCS	8740	2
4	Tab Washer	12308	1
5	Seal	12537	1
6	Tapered Roller Bearing & Race, Inner	12305	1
7	Tapered Roller Bearing & Race, Outer	12306	1

1 Ton Spindle Nut Socket
P/N 12542
(2-5/8 Hex)

BEARING AND LOCK KIT

KIT P/N 6105 Steel Nut **KIT P/N 6105AT** Aluminum Nut
Note: Retaining Ring **P/N 8328** for Seal is not included.

#	DESCRIPTION	P/N	QTY
1	Nut, Steel	5101T	1
1	Nut Aluminum	5101AT	1
2	Slot Washer	1665	1
3	10-24 x 3/8" SHCS	7938	2
4	Tab Washer	1664	1
5	Outer Bearing	7325	1
6	Inner Bearing	7324	1
7	Seal	7210	1

TRICK STYLE LOCK NUT KITS

P/N 1865A-2 Aluminum Nut w/ Button Head Screws
P/N 1865-2 Steel Nut w/ Button Head Screws
P/N 1865A Aluminum Nut w/ Socket Head Screws
P/N 1865 Steel Nut w/ Socket Head Screws

8 BOLT HUB CAP

Stamped from aluminum and impressed with the famous WP logo. Available in various colors (see below).
Gasket **P/N 5144**

P/N 5094B Blue
P/N 5094R Red
P/N 5094P Purple
P/N 5094PO Polished
P/N 5094BK Black

ROUND HUB CAP

P/N 1614-01
Press in cap with o'ring fits hub P/N K6955FHD.
Available in black only.
O'Ring **P/N 7471**

5 BOLT HUB CAP

P/N 5094-5 Cap
P/N 3177 Gasket
Available in black only

WHEEL LOCATOR

P/N 6635CX5 (5 Bolt)
P/N 6635C (8 Bolt)
Chrome locator guides wheel into place during pit stop.

5 ON 5 WHEEL SPACERS

P/N 5735 6.25" O.D. 1/16" Thick
P/N 5734 6.25" O.D. 1/4" Thick
P/N 5613-02 7" O.D. 1/16" Thick

ANGULAR CONTACT

LOW DRAG!
P/N 7324ACS
7/16" Inner Bearing w/ 16 Steel Balls
P/N 7325ACS
7/16" Outer Bearing w/ 16 Steel Balls

Option 8254S-W5
Angular Contact Bearings w/ Steel Balls, Hub

Wide 5 Front HUB

KIT P/N 12292
KIT P/N 12292L Lightweight

• 5 Spoke Wide 5 Hubs • Forged 2024-T3 Aluminum Construction • Oil or Grease Friendly
• Accepts Standard or Super Free Angular Contact Bearings

KIT INCLUDES
2 Hubs with Dust Caps
O-Rings, Bearings & Seals

Standard Hub
6 lbs 8 oz with Races & Studs

LIGHTWEIGHT HUB

Cap Not Included

6 lbs with
Races & Studs

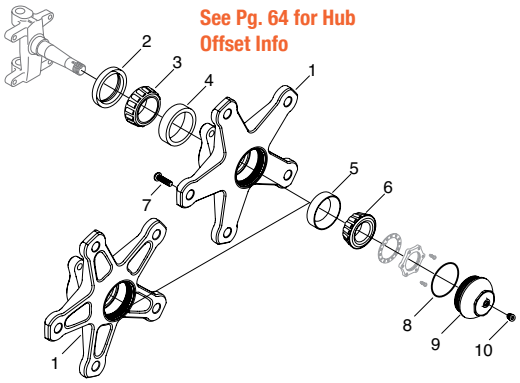
HUB WITH RACES & STUDS
P/N 12290
P/N 12290L Lightweight

5 on 10-1/4" Bolt Pattern

3 BOLT ROTOR ADAPTER
P/N 12784

This Rotor Adapter Plate converts 3 Lug to standard 8 Bolt Rotor.

Bolt Kit with T-Nuts for 12784 Rotor (Floating) P/N 9387FL
Bolt Kit for 12784 Rotor (Fixed) P/N 9387FX

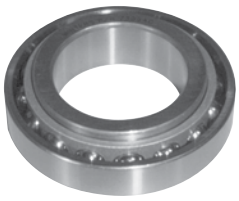


See Pg. 64 for Hub Offset Info

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Direct Mount Hub	12076	2
1*	Direct Mount Hub, Lightweight	12076LW	2
2	Single Lip Seal, Viton	12363	2
3	Inner Bearing Cone	7502	2
4	Inner Bearing Cup	7501	2
5	Outer Bearing Cup	8635	2
6	Outer Bearing Cone	8666	2
7	5/8-11 x 2-1/2" Stud	1701	10
8	O'Ring	7424	2
9	Screw-In Dust Cap	12101	2
10	Plug	7874S	2

*Order Kit P/N 12292L for Lightweight Hubs



LOW DRAG!

Option 8254S-2
Angular Contact Bearing Upgrade w/ Steel Balls,
One Pair of Hubs

Option 8254S-1
Angular Contact Bearing Upgrade w/ Steel Balls,
One Hub Only

INDIVIDUAL BEARING PART NUMBERS
P/N 8666ACS Outer Angular Contact Bearing
P/N 8999ACS Inner Angular Contact Bearing

10° Front Spindle
See Page 74

3 on 5"
Bolt Pattern

10-3/4" Diameter Steel Rotor
P/N SC2710
0.375" Thick

P/N 8394
1/2-13 x 1" Flat Head Socket Cap Screw
FHSCS

Double Sided Hub Cap Socket
P/N 3153M

2-7/8" WIDE 5 HUB KITS

REAR KIT

KIT P/N 3750 (# 1-15)

Kit includes polished permanent mold aluminum hub, 5 bolt 7075-T6 aluminum inverted drive flange, bearings and seal kit with trick style steel lock nut kit.

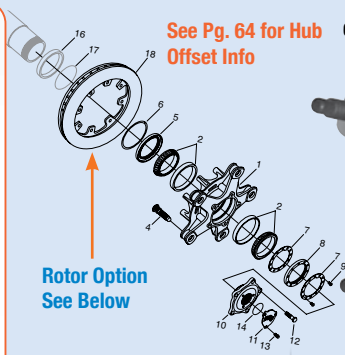
Inverted Drive Flange w/ O'Ring
P/N 3698
O'Ring P/N 7494

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Rear Hub	3266	1
2	Bearing Cup & Cone Set	8658	2
4	Wheel Stud, Solid	5688	5
5	Seal	7284V	1
5*	Seal	7289V	1
6	Retaining Washer	8349	1
7	Washer	3273	2
8	Spindle Nut, Steel	3271S	1
9	10-24 x 3/8" BHCS	8740	2
10	Drive Flange	3267	1
11	Drive Flange Cap	6581	1
12	7/16-14 x 1-1/4" HHCS	7117	5
13	1/4-20 x 1/2" SHCS	7892	3
14	O'Ring	7417	1
16*†	Spacer	3262	1
17*†	O'Ring	7490	1
18	Rotor Option	See Below	

*For Use with Splined Tubes †Sold Separately

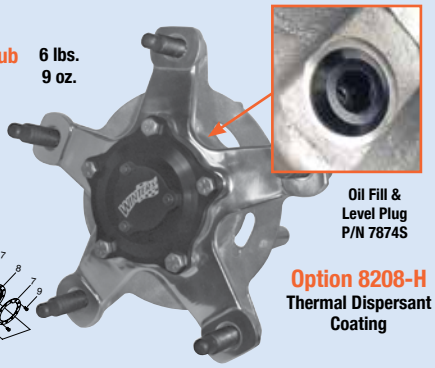
Shown with Option 9158
Thermal Coating, Lightweight with Hi-lighting



See Pg. 64 for Hub Offset Info

Rotor Option See Below

6 lbs. 9 oz.



Oil Fill & Level Plug P/N 7874S

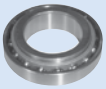
Option 8208-H
Thermal Dispersant Coating

Option 8284X5
Titanium Drive Flange Studs

Aluminum Steel

Spindle Lock Kit
P/N 4301 Aluminum
P/N 4301S Steel

LOW DRAG!
Purchase Separately
P/N 8658 ACS



Option 8254S-287
Super Free Angular Contact Bearings w/ Steel Balls, Hub

Axle/Tube Seal
P/N 7268

IMPORTANT
This seal must be used in conjunction with our 2-7/8" Wide 5 Oil Filled Hubs. Install seal in tube to a depth of 3/4"-13/16".

FRONT KIT

KIT P/N 3750F (# 1-13)

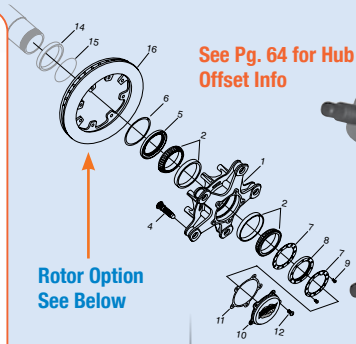
Kit includes polished permanent mold aluminum hub, 5 bolt dust cap, bearings and seal kit with trick style steel lock nut kit.

Kit Includes

#	DESCRIPTION	P/N	QTY
1	Front Hub	3266F	1
2	Bearing Cup & Cone Set	8658	2
4	Wheel Stud, Solid	5688	5
5	Seal	7289V	1
6	Retaining Ring	8349	1
7	Washer	3273	2
8	Spindle Nut, Steel	3271S	1
9	10-24 x 3/8" BHCS	8740	2
10	Hub Cap	3289	1
11	Gasket	3278	1
12	5/16-18 x 3/4" SHCS	7145	5
14†	Spacer	3262F	1
15†	O'Ring	7490	1
16	Rotor Option	See Below	

†Sold Separately

Shown with Option 9158
Thermal Coating, Lightweight with Hi-lighting



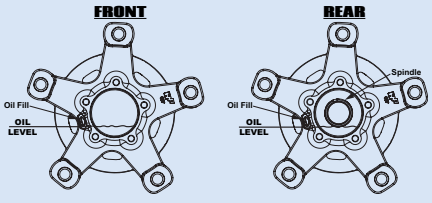
See Pg. 64 for Hub Offset Info

Rotor Option See Below

6 lbs.

Oil Fill & Level Plug P/N 7874S

Option 8208-H
Thermal Dispersant Coating



PROPER OIL LEVEL IS CRITICAL
See page 119 for filling & oil level instructions.
Use Winters P/N 1730 SAE 80W/90 or Mobil 1® 75-90 Oil.

Option 8204
Titanium Wheel Studs

Option 8204H
Titanium Wheel Studs, Gundrilled

Spindle Nut Wrench Plate
P/N 3269

Hub Cap
P/N 3289

ROTOR OPTIONS

(Additional Charge See Page 86)

Rotor options applicable with hub assembly purchase only.

OPTION	DIMENSION	ROTOR P/N
8240	.810 x 12-1/8"	2394
8241	.810 x 11-3/4"	2394GM
8243	1-1/4" x 11-3/4"	6608GM

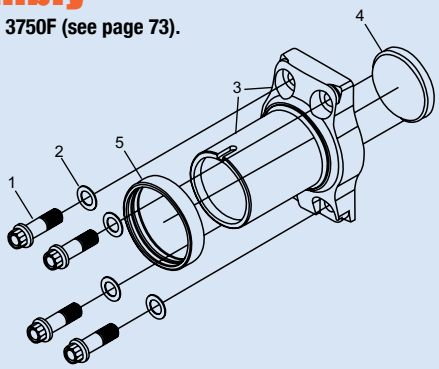
OPTION	DIMENSION	ROTOR P/N
*8243L	1-1/4" x 11-3/4"	6608GML
*8241L	.810 x 11-3/4"	2394GML

2-7/8" ALUMINUM FRONT SPINDLES

ASSEMBLY P/N 3796 Right Front Assembly
ASSEMBLY P/N 3795 Left Front Assembly

Assembly comes with king pin & cap. Check out our 2-7/8" Front Wide 5 Hub Assembly P/N 3750F (see page 73).

Forged 7075-T6 Aluminum



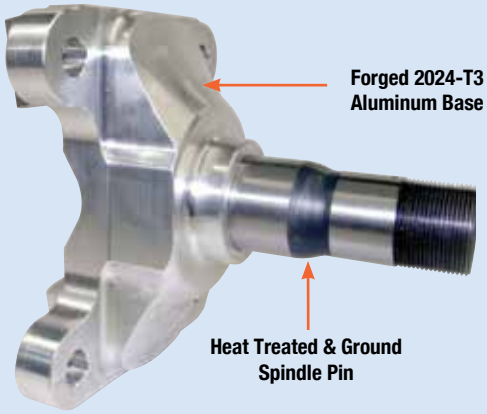
Grooved Washer
P/N 3624

Steel King Pin
P/N 6476

Steel King Pin Cap
(1/2 x 20 Thread Size)
P/N 1109

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Screw	3603-01	4
2	Washer	3604	4
3	Spindle Base & Snout	3608	1
4	Cup Plug	3639	1
5	Steel Spacer	3262F	1



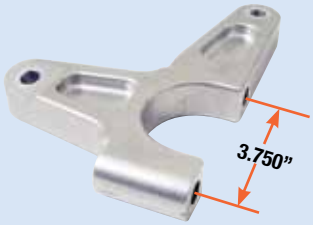
10° FRONT SPINDLE
P/N 12291
10° FRONT SPINDLE WITH TITANIUM PIN
P/N 12291T

Features a Forged 2024-T3 Aluminum Base with a Heat Treated and Ground Spindle Pin.
Check out our Wide 5 Front Hub Kits (see page 72).

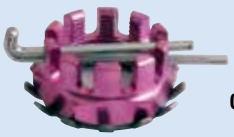
Steel King Pin
P/N 6476

Steel King Pin Cap
(1/2 x 20 Thread Size)
P/N 1109

Steering Arm, Right
P/N 12381



Combo Steering Arm, Left
P/N 12380



Nut P/N 3460
Washer P/N 7859
Cotter Pin P/N 9303

Aluminum Castellated
Spindle Nut Assembly
P/N 12365

Brake Bracket
P/N 12408
3/8" Offset
Dynalite Single Caliper
For Use with 10-3/4" Rotor

Steel Spindle Nut
Assembly
P/N 2377S

King Pin
Shim Kit
P/N 7511-01

Replacement
Bushing
P/N 7515

ELASTIC DYNAMIC DAMPENER

ASSEMBLIES

P/N 1152* Single w/ Round Spools
P/N 1153* Matched Pair w/ Round Spools
P/N 1152T* Single w/ Tear Drop Spools
P/N 1153T* Matched Pair w/ Tear Drop Spools

*Specify Color (Ex.: 1152R = with red spools)

Note: 1153 Series (Matched Pair) includes SHP Grease P/N 1158 and Drive Flange Wrench P/N 7949.

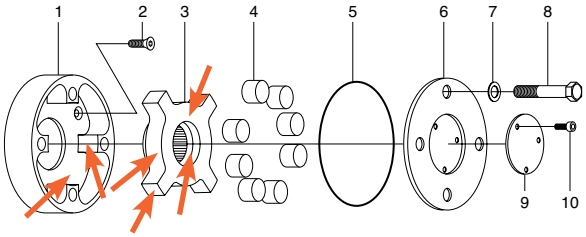
P/N 1849 - Bolt Pack

Fits 8 Bolt Wide 5 Hubs Only

#50 Drive Flange Wrench
P/N 7949

WIDE 5

The Elastic Dynamic Dampener bolts in place of standard wide 5 drive flanges. The dampener cushions the impact of acceleration and deceleration of the drive assembly. This imparts a softer feel and action to the drivetrain. Many combinations can be created by varying the hardness of the replaceable spools. Soft spools on the drive side and hard spools on the coast side or any combination that best suits your driving style or track conditions.



→ Indicates surfaces to generously apply grease. Keep grease and parts clean!

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Housing	1133	1
2	7/16-14 x 1-1/4" FHCS	7116	4
3	Drive Impeller	1132	1
4*	Urethane Spool	1149	8
5	O'Ring	7463	1
6	Cover	1134	1
7	7/16" Belleville Washer	7921	4
8	7/16-14 x 3" HHCS	7920	4
9	Dust Cap	6581	1
10	1/4-20 x 3/8" BHCS	7919	3

*Specify Color

Urethane Spools

Tear Drop			
1460R	Red	Hard	90DUR
1460B	Black	Soft	80 DUR
Round			
1149B	Black	Soft	80 DUR
1149R	Red	Medium	90 DUR
1149Y	Yellow	Hard	95 DUR

Note: Tear Drops are a heavy duty urethane spool.

ASSEMBLIES

P/N 1152C Single w/ Round Spools
P/N 1153C Matched Pair w/ Round Spools
P/N 1152CT Single w/ Tear Drop Spools
P/N 1153CT Matched Pair w/ Tear Drop Spools

Note: 1153 Series (Matched Pair) includes SHP Grease P/N 1158 and Drive Flange Wrench P/N 7949.

P/N 1849C - Bolt Pack

Fits 8 Bolt Wide 5 Hubs Only

SHP Grease
P/N 1158

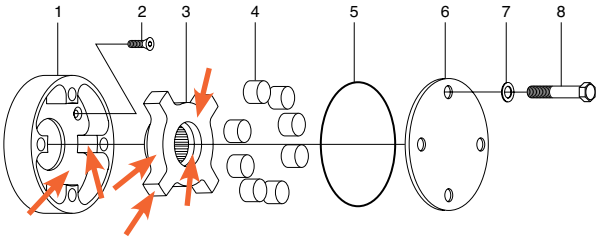
Lubrication Is Essential!

For SDS Please Call or Visit our Website.

CAMBERED WIDE 5

Identical in function to P/N 1152, but engineered to accept up to 1/2° spindle camber. Can be used without camber. Fits 8 Bolt Wide 5 Hubs Only.

Note: Only parts intended for use with camber should be used with cambered spindles.



→ Indicates surfaces to generously apply grease. Keep grease and parts clean!

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Housing	1239	1
2	7/16-14 x 1-1/4" FHCS	7116	4
3	Drive Impeller	1238	1
4*	Urethane Spool	1149	8
5	O'Ring	7463	1
6	Cover	1240	1
7	7/16" Belleville Washer	7921	4
8	7/16-14 x 3" HHCS	7920	4

*Specify Color

Urethane Spools

Tear Drop			
1460R	Red	Hard	90DUR
1460B	Black	Soft	80 DUR
Round			
1149B	Black	Soft	80 DUR
1149R	Red	Medium	90 DUR
1149Y	Yellow	Hard	95 DUR

Note: Tear Drops are a heavy duty urethane spool.

2-1/2" GN Drive Flanges

DOUBLE SPLINE

P/N 5008A-Aluminum Drive Flange
P/N 5008-Steel Drive Flange

Not For Cambered Spindles!
Uses standard 31/24 spline axles, either solid or gundrilled.
Available in 6", 6-1/2", 6-3/4" and 7" O.D. Check with wheel manufacturer for diameter recommendation.

P/N 6864 Flat Cap
P/N 6869 Bullet Cap
P/N 7446 O'Ring
P/N 7145 HHCS for Aluminum Flange/ Flat Cap
P/N 7104 HHCS for Aluminum Flange/ Bullet Cap
P/N 7962 SHCS for Steel Flange/ Flat Cap
P/N 7970 SHCS for Steel Flange/ Bullet Cap

BALL DRIVE

FLANGE P/N 1140

The Ultimate For Cambered & Straight Spindles!
Unsurpassed for smooth rotation and durability regardless of the amount of camber. This is a constant velocity 'U' joint in each wheel. Power is transmitted through 6, 11/16" free rolling balls. Very little frictional heat is generated, making axle life unmatched. Uses Winters special ball drive axle (see page 85).

P/N 1408 Flat Cap
P/N 1409 Bullet Cap
P/N 7472 O'Ring
P/N 7745 Grease Fitting (Inside Cap)
P/N 7963 SHCS for Flat Cap
P/N 7964 SHCS for Bullet Cap

CROWN SPLINE

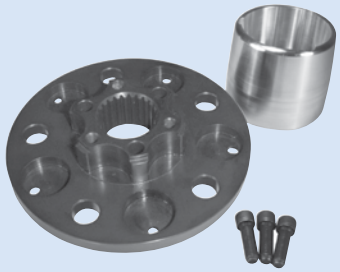
FLANGE P/N 2356

For Cambered & Straight Spindles!
A true crown that works, has many of the ball drive virtues.
Requires using Winters crown splined axles. (see page 85)
For 5 On 5 & 5 On 4-3/4 Hub Assembly. (see page 60)

P/N 2353 Bullet Cap
P/N 7472 O'Ring
P/N 7745 Grease Fitting (Inside Cap)
P/N 7986 SHCS for Bullet Cap

SUPER SPEEDWAY DRIVE FLANGES

DOUBLE SPLINE

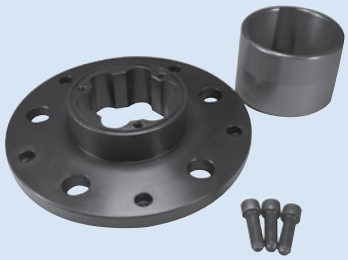


FLANGE P/N 1580

Not For Cambered Spindles!
Heat treated steel, 5 on 5, 24 spline. Uses standard 31/24 spline axles, either solid or gundrilled. Available in 6", 6-1/2", 6-3/4" and 7" O.D. Check with wheel manufacturer for diameter recommendation.

P/N 1833 Bullet Cap
P/N 7477 O'Ring
P/N 7987 SHCS for Bullet Cap

BALL DRIVE



FLANGE P/N 1583

The Ultimate For Cambered & Straight Spindles!
Unsurpassed for smooth rotation and durability regardless of the amount of camber. This is a constant velocity 'U' joint in each wheel. Power is transmitted through 6, 11/16" free rolling balls. Very little frictional heat is generated, making axle life unmatched. Uses Winters special ball drive axle (see page 85).

P/N 1409 Bullet Cap
P/N 7472 O'Ring
P/N 7745 Grease Fitting (Inside Cap)
P/N 7964 SHCS for Bullet Cap

CROWN SPLINE

FLANGE P/N 12407

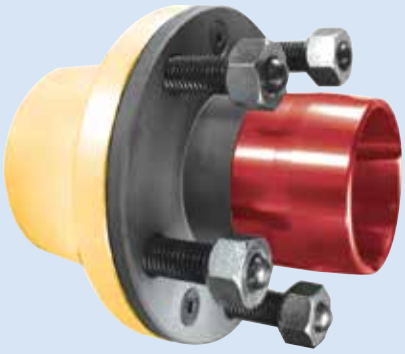
For Cambered & Straight Spindles!
A true crown that works, has many of the ball drive virtues.
Requires using Winters crown splined axles (see page 85).

P/N 2353 Bullet Cap
P/N 7472 O'Ring
P/N 7745 Grease Fitting (Inside Cap)
P/N 7964 SHCS for Bullet Cap

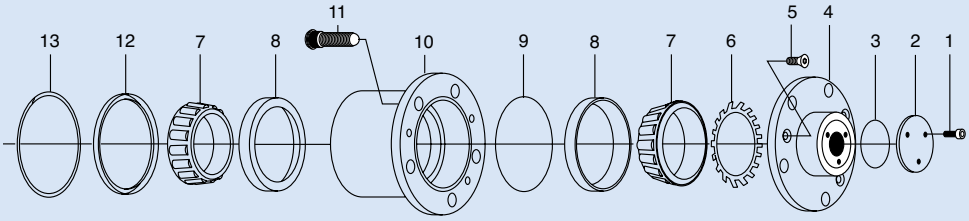
2-1/2" GN HUBS 5 On 5

STEEL REAR

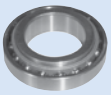
ASSEMBLY P/N 5048-5 Lug On 5" Bolt Circle



Shown with Optional Cap P/N 6869



Purchase Separately
P/N 7325 ACS



LOW DRAG!
Option 8254S-25
Angular Contact Bearings w/ Steel Balls, Hub

Assembly Includes

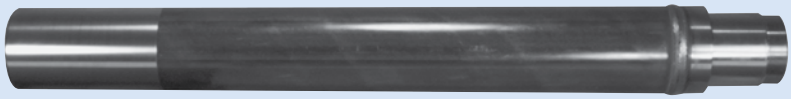
#	DESCRIPTION	P/N	QTY
1	5/16-18 x 7/8" 12pt	7795	3
2	Hub Cap	6864	1
3	O'Ring, Hub Cap	7446	1
4	Aluminum Drive Flange	5008A	1
5	5/16-18 x 3/4" FHCS	7120	2
6	Bearing Lockwasher	7118	1
7	Bearing Cone, Spindle	7301	2

#	DESCRIPTION	P/N	QTY
8	Bearing Cup, Hub	7302	2
9	O'Ring, Hub	7423	1
10	Steel Hub	5007	1
11	5/8-11 Wheel Stud	6522	5
12	Seal, Hub	7201	1
13	Retaining Ring, Hub	7644	1

Note: When using angular contact bearings in hub assembly, pack bearings with wheel bearing grease as normal. Snug bearing locknut removing all bearing play. Do not over torque nut assembly. Hub should spin freely with no end play (zero preload). Secure locknut.

2 1/2" GN 5 ON 5 STEEL TUBES

1



#	DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
1	2-1/2" GN Tube & Spindle Assembly, Right	Straight	5052R	5006-01	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	Straight	5052L	5006-02	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	1.0°	1610R	1383-10R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	1.0°	1610L	1383-10L	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	1.5°	1615R	1383-15R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	1.5°	1615L	1383-15L	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	1.8°	1618R	1383-18R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	1.8°	1618L	1383-18L	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	2.0°	1620R	1383-20R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	2.0°	1620L	1383-20L	5110
1	2-1/2" GN Tube & Spindle Assembly, Right	2.5°	1625R	1383-25R	5110
1	2-1/2" GN Tube & Spindle Assembly, Left	2.5°	1625L	1383-25L	5110

HEAVY WALL TUBE

Option 9151-200
2" Tube I.D.
(*Adds Approx. 10 lbs. per Side)

Option 9151-175
1-3/4" Tube I.D.
(*Adds Approx. 13 lbs. per Side)

Option 9151-150
1-1/2" Tube I.D.
(*Adds Approx. 16 lbs. per Side)

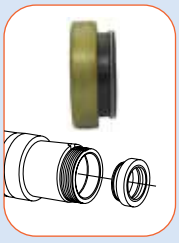
When ordering, add option number to tube P/N. Example: 5052R-XXX (Specify Tube Length) + 9151-XXX (Specify Tube I.D.)

*Based off 24" end to end axle tube. Weights will vary depending on length of tube & application.

SPINDLE NUT/ LOCK WASHER

P/N 7103-01
Right Spindle Nut
P/N 7103-02
Left Spindle Nut
P/N 7118
Spindle Lock Washer

DOUBLE LIPPED SEAL

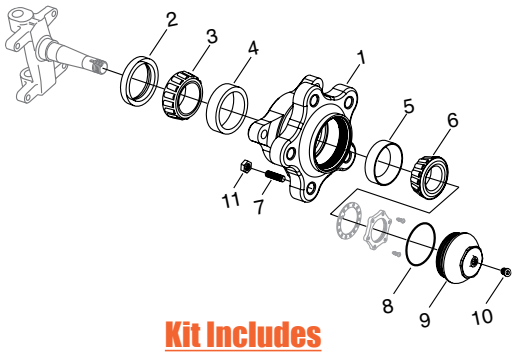


P/N 7271
2-1/2" Double Lipped Seal with Spring Seal Retainer. Seals around the axle.

Option 9151-200 2" Tube I.D. Heavy Wall Thickness

FORGED HUB KITS

5 ON 5 FRONT

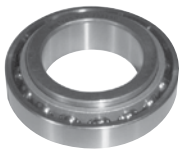


Kit Includes

#	DESCRIPTION	P/N	QTY
1	5 on 5 Hub	12310	2
2	Single Lip Seal, Viton	12363	2
3	Inner Bearing Cone	7502	2
4	Inner Bearing Cup	7501	2
5	Outer Bearing Cup	8635	2
6	Outer Bearing Cone	8666	2
7	5/8-11 x 3-3/4" Stud	12344	10
8	O'Ring	7424	2
9	Screw-In Dust Cap	12101	2
10	Plug	7874S	2
11	5/8-11 Nyloc Hex Jamnut	8396	10

KIT P/N 12383

• 5 Spoke 5 on 5 Hubs • Forged 2024-T3 Aluminum Construction
• Oil or Grease Friendly • Accepts Standard or Super Free Angular Contact Bearings



Purchase Separately
P/N 7325 ACS

LOW DRAG!

Option 8254S-2
Angular Contact Bearing Upgrade w/ Steel Balls, One Pair of Hubs

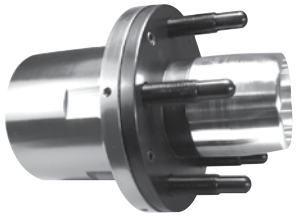
Option 8254S-1
Angular Contact Bearing Upgrade w/ Steel Balls, One Hub Only

INDIVIDUAL BEARING PART NUMBERS
P/N 8666ACS Outer Angular Contact Bearing
P/N 8999ACS Inner Angular Contact Bearing

10° Front Spindle
See Page 74

10-3/4" Diameter Steel Rotor
See Page 72

SUPER SPEEDWAY REAR



ASSEMBLY P/N 1815* 5 Lug On 5" Bolt Circle

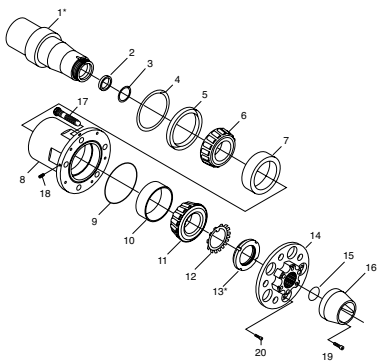
All stressed components are made from quality steel forgings.
100% inspection of complete assembly insures satisfaction.

***Specify Coarse or Fine Studs. Add suffix 'C' for Coarse or 'F' for Fine Threads.**

Assembly Includes

#	DESCRIPTION	P/N	QTY
1*	Straight Weld In Spindle, Right	1289-01	1
1*	Straight Weld In Spindle, Left	1289-02	1
2	Seal	7254	1
3	Retaining Ring	7680	1
4	Retaining Ring	7681	1
5	Seal	7255	1
6	Inner Bearing Cone	7550	1
7	Inner Bearing Cup	7549	1
8	Hub	1561	1
9	O'Ring	7423	1
10	Outer Bearing Cup	7551	1
11	Outer Bearing Cone	7552	1

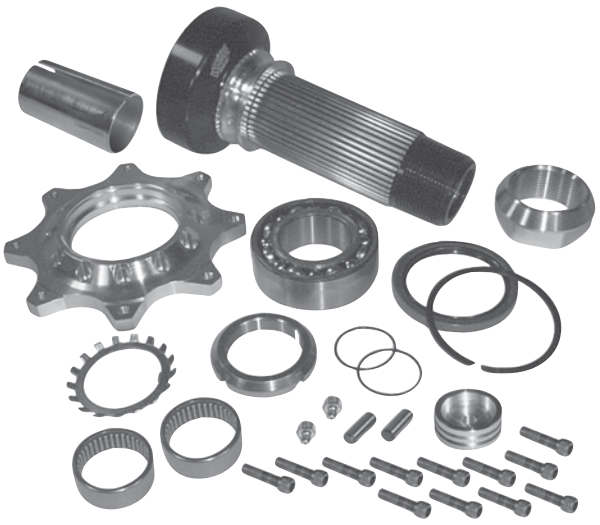
#	DESCRIPTION	P/N	QTY
12	Bearing Lockwasher	7983	1
13*	Spindle Nut, Right Hand	7980-01	1
13*	Spindle Nut, Left Hand	7980-02	1
14	Drive Flange	2669	1
15	O'Ring	7477	1
16	Hub Cap	1833	1
17	5/8-11 Wheel Stud	1755	5
17	5/8-18 Wheel Stud	1684	5
18	Set Screw	7985	5
19	5/16-24 x 1-1/4" SHCS	7987	3
20	1/4-28 x 3/4" SHCS	7986	5



***Not Included In Assembly. Shown For Reference Only.**

ASSEMBLY P/N 3120

Made from 7075-T6 aluminum, Winters Pro Eliminator Hub Assembly utilizes 42 splined hubs, 42 splined wheels and 6 pin style hub with press plate. Track tested, this versatile assembly allows easy wheel adjustment. The open tube style hub assembly uses conventional 31/24 spline solid or gundrilled axles.



42 SPLINE HUB

P/N 3125

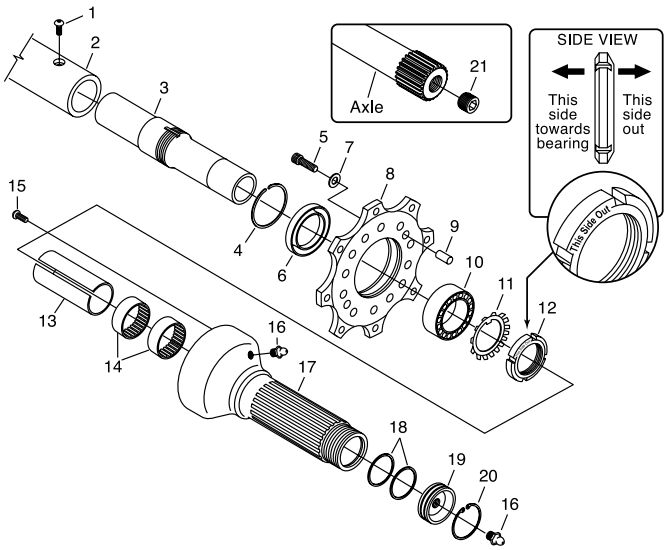
Tube & Spindle Assembly

Option 8223

Tube, Eliminator Hub

Option 1/2 8223

Tube, Eliminator Hub, One Side Only

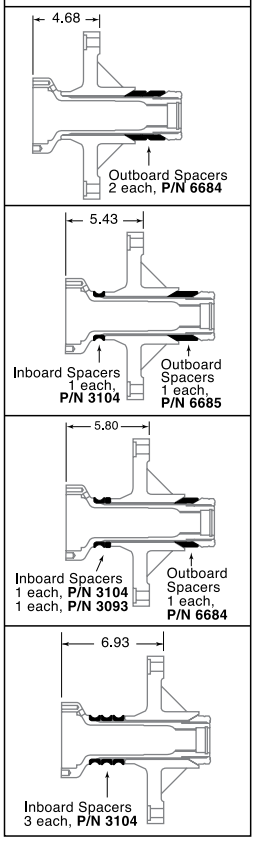


Assembly Includes

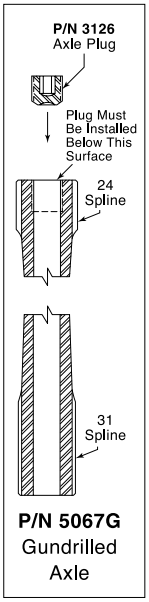
#	DESCRIPTION	P/N	QTY
1	3/8-24 x 1/2" BHCS	7838	3
2	Aluminum Tube	6597	1
3	Spindle	3105	1
4	Retaining Ring	7644	1
5	5/16-18 x 1-1/4"	7162	12
6	Seal	7201	1
7	Washer	7904	12
8	Retaining Plate/Rotor Mount	3102	1
9	Dowel Pin	8088	2
10	Angular Contact Ball Bearing	3115	1
11	Lockwasher	3114	1

#	DESCRIPTION	P/N	QTY
12	Locknut	3113	1
13	Bearing Spacer	3139	1
14	Needle Bearing	3109	2
15	10-24 x 1/2" BHCS	7869	1
16	1/8" NPT Grease Fitting	3110	2
17	Splined Axle Hub/Drive Flange	3103	1
18	O'Ring	7417	2
19	Cap	3106	1
20	Retaining Ring	7646	1
21	3/4-16 Plug	3126	1

Wheel Spacing Options
Wheel May Be Adjusted In 3/4" Increments As Shown

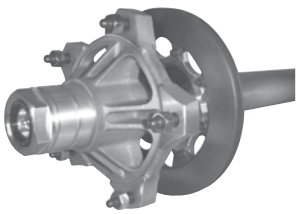


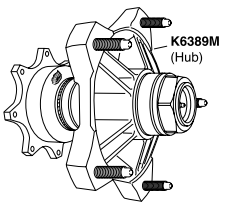
Use Kendall® SHP Grease

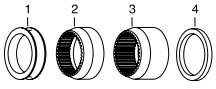


P/N 5067G
Gundrilled Axle

Hex Nut
6121R - Right hand
6121L - Left hand





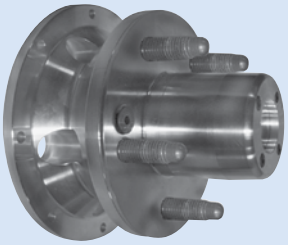


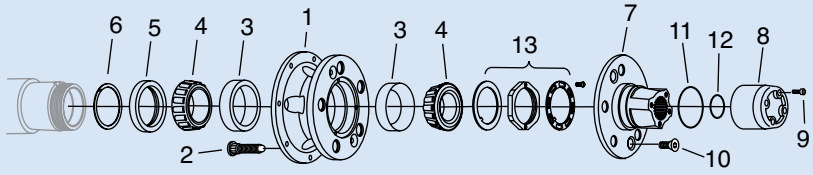
#	DESCRIPTION	P/N	QTY
1	Spacer, 3/4"	3104	3
2	Spacer, 1-1/2"	6684	2
3	Spacer, 2"	6685	1
4	Spacer, 3/8"	3093	1

2" GN HUB KITS

STANDARD REAR KIT

ASSEMBLY P/N 3432-Standard 5 x 5 Hub





Bullet Nose Hub Cap
Option 80121

P/N 4394 Bullet Cap
P/N 7842 1/4-20 x 7/8" SHCS

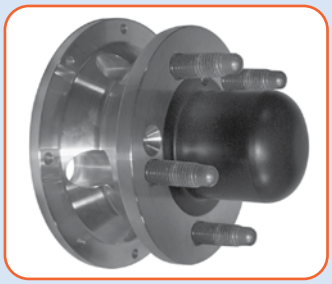
Assembly Includes

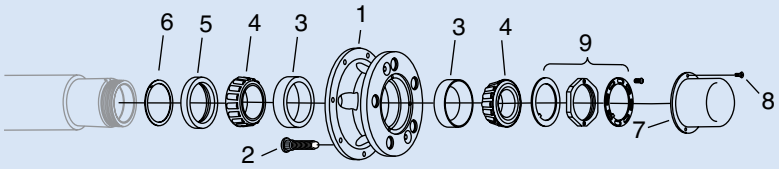
#	DESCRIPTION	P/N	QTY
1	Hub, Aluminum	3082	1
2	Wheel Stud	5688	5
3	Bearing Cup	7310	2
4	Bearing Cone	7309	2
5	Seal	7275	1
6	Retaining Ring	8328	1
7	Drive Flange	2834-04	1

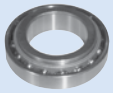
#	DESCRIPTION	P/N	QTY
8	Hub Cap	3089-04	1
9	1/4-20 x 1/2" SHCS	7892	4
10	3/8-16 x 1" FHCS	8041	2
11	O'Ring	7484	1
12	O'Ring	7477	1
13	Spindle Lock Nut Kit	1865	1

STANDARD FRONT KIT

ASSEMBLY P/N 3431-Standard 5 x 5 Hub







LOW DRAG!
Option 8254S-2
Angular Contact Bearings w/ Steel Balls, Hub

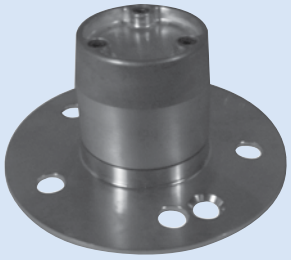
Purchase Separately
P/N 7325 ACS

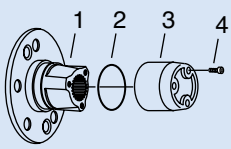
Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Hub, Aluminum	3082	1
2	Wheel Stud	5688	5
3	Bearing Cup	7310	2
4	Bearing Cone	7309	2
5	Seal	7275	1

#	DESCRIPTION	P/N	QTY
6	Retaining Ring	8328	1
7	Hub Cap	3084	4
8	10-32 x 1/2" FHCS	8044	3
9	Spindle Lock Nut Kit	1865	1

DRIVE FLANGE AND CAP-3 BOLT





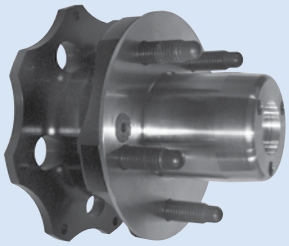
#	DESCRIPTION	P/N	QTY
1	Drive Flange	2834	1
2	O'Ring	7484	1
3	Hub Cap	3089	1
4	1/4-28 x 5/8" SHCS	7964	3

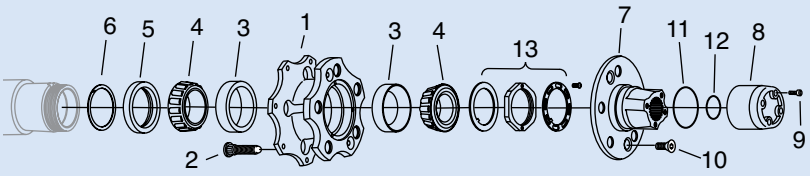
Note: When using angular contact bearings in hub assembly, pack bearings with wheel bearing grease as normal. Snug bearing locknut removing all bearing play. Do not over torque nut assembly. Hub should spin freely with no end play (zero preload). Secure locknut.

2" GN HUB Kits

LIGHTWEIGHT REAR KIT

ASSEMBLY P/N 3434-Standard 5 x 5 Hub





Bullet Nose Hub Cap
Option 80121

P/N 4394 Bullet Cap
P/N 7842 1/4-20 x 7/8" SHCS

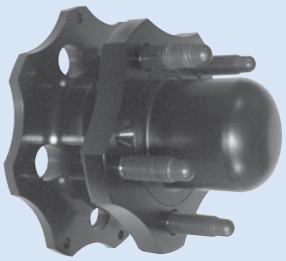
Assembly Includes

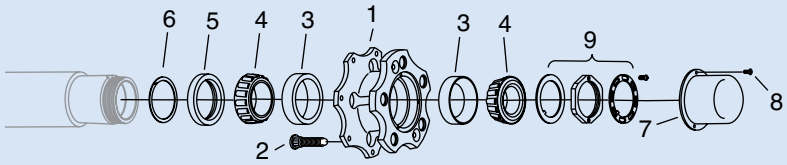
#	DESCRIPTION	P/N	QTY
1	Hub, Aluminum	3082L	1
2	Wheel Stud	5688	5
3	Bearing Cup	7310	2
4	Bearing Cone	7309	2
5	Seal	7275	1
6	Retaining Ring	8328	1
7	Drive Flange	2834-04	1

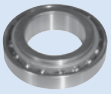
#	DESCRIPTION	P/N	QTY
8	Hub Cap	3089-04	1
9	1/4-20 x 1/2" SHCS	7892	4
10	3/8-16 x 1" FHCS	8041	2
11	O'Ring	7484	1
12	O'Ring	7477	1
13	Spindle Lock Nut Kit	1865	1

LIGHTWEIGHT FRONT KIT

ASSEMBLY P/N 3433-Standard 5 x 5 Hub







LOW DRAG!
Option 8254S-2
Angular Contact Bearings w/ Steel Balls, Hub

Purchase Separately
P/N 7325 ACS

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Hub, Aluminum	3082L	1
2	Wheel Stud	5688	5
3	Bearing Cup	7310	2
4	Bearing Cone	7309	2
5	Seal	7275	1

#	DESCRIPTION	P/N	QTY
6	Retaining Ring	8328	1
7	Hub Cap	3084	4
8	10-32 x 1/2" FHCS	8044	3
9	Spindle Lock Nut Kit	1865	1

2" GN 5 ON 5 STEEL TUBES

1

#	DESCRIPTION	CAMBER	P/N ASSEM	P/N SPINDLE	P/N TUBE
1	2" GN Steel Tube & Spindle Assembly	Straight	6785	6758	5110
1	2" GN Steel Tube & Spindle Assembly	0.5°	1505	1382-05	5110
1	2" GN Steel Tube & Spindle Assembly	1.0°	1510	1382-10	5110
1	2" GN Steel Tube & Spindle Assembly	1.5°	1515	1382-15	5110

HEAVY WALL TUBE

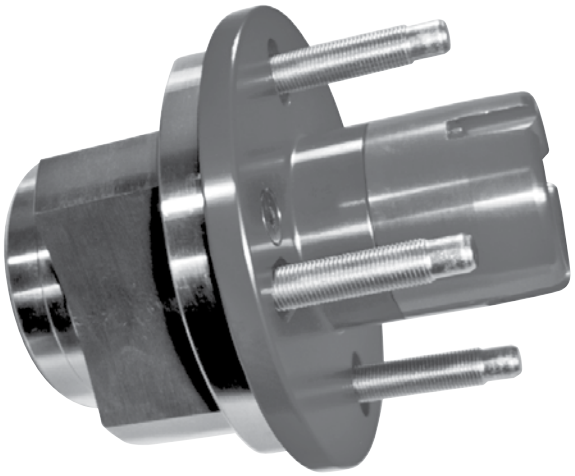
Option 9151-200 2" Tube I.D. (*Adds Approx. 10 lbs. per Side)
Option 9151-175 1-3/4" Tube I.D. (*Adds Approx. 13 lbs. per Side)
Option 9151-150 1-1/2" Tube I.D. (*Adds Approx. 16 lbs. per Side)

When ordering, add option number to tube P/N. Example: 6785-XXX (Specify Tube Length) + 9151-XXX (Specify Tube I.D.)

***Based off 24" end to end axle tube. Weights will vary depending on length of tube & application.**

Option 9151-200 2" Tube I.D. Heavy Wall Thickness

BABY GRAND REAR HUB KITS

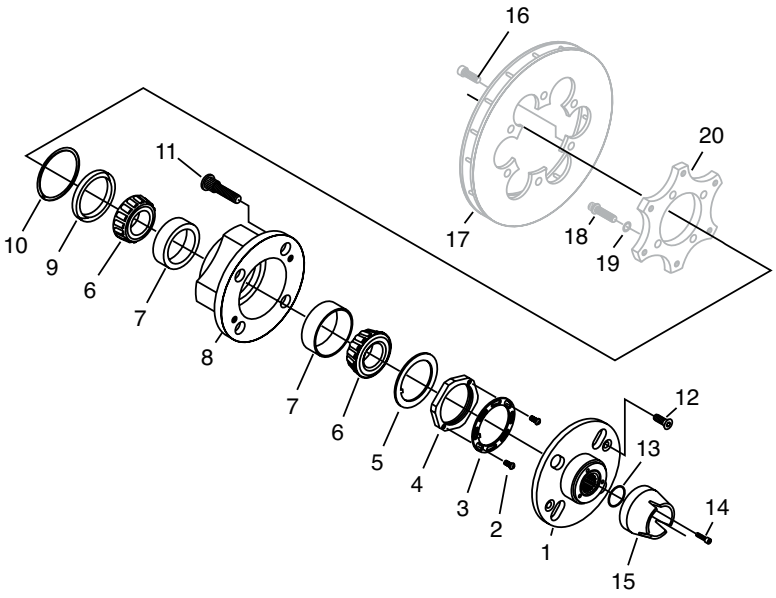


ALUMINUM ASSEMBLIES

KIT P/N 2775-425 4 Lug On 4-1/4" Bolt Circle (#'S 1-15)
KIT P/N 2775-450 4 Lug On 4-1/2" Bolt Circle (#'S 1-15)

ALUMINUM HUB WITH RACES AND STUDS

KIT P/N 2770-425 4 Lug On 4-1/4" Bolt Circle
KIT P/N 2770-450 4 Lug On 4-1/2" Bolt Circle



Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Drive Flange		1
	4 Hole Pattern for 1/2" Studs	6548-500	
	4 Hole Pattern for 5/8" Studs	6548-625	
	5 Hole Pattern for 5/8" Studs	2489	
2	10-24 x 3/8" SHCS	7938	2
3	Slotted Washer	1665	1
4	Spindle Nut	5101T	1
5	Keyed Washer	1664	1
6	Bearing Cone	7325	2
7	Bearing Cup	7323	2
8	Wheel Hub, Aluminum		1
	4 On 4-1/4", 1/2" Studs	2258-425	
	4 On 4-1/2", 1/2" Studs	2258-450	
9	Hub Seal	7203	1
10	Retaining Ring	7689	1
11	Wheel Stud		
	1/2" Press-In	8062-01	4
	5/8" Threaded	5098A	5
12	5/16-18 x 3/4" FHCS	7120	2
13	O'Ring	7458	1
14	10-24 x 1-3/8" SHCS	8096	3
15	Hub Cap	6579	1
16*	5/16-18 x 3/4" 12pt Cap Screw	7145	5
17*	10-1/4" x 3/4" Rotor	6773	1
18*	3/8-16 x 1-1/4" 12pt Cap Screw	7735	4
19*	3/8" Thin Washer	8085	4
20*	Rotor Adapter	1253-01	1

***Not Included In Assembly. Shown For Reference Only.**

TRICK STYLE LOCK NUT KITS

P/N 1865A-2
Aluminum Nut w/ Button Head Screws

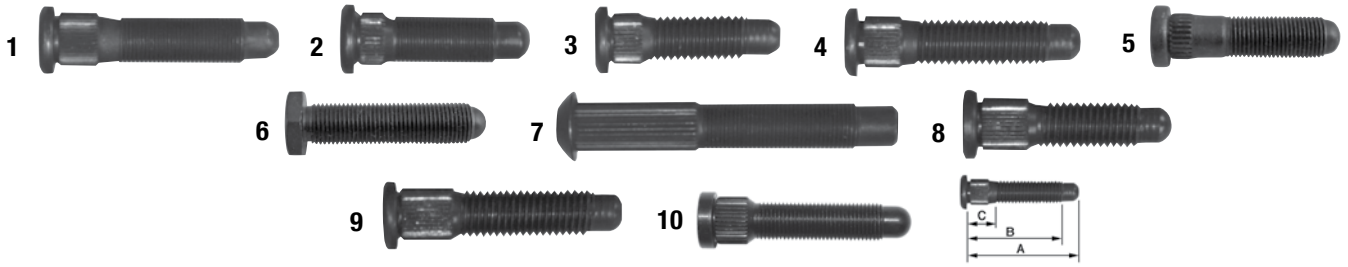
P/N 1865-2
Steel Nut w/ Button Head Screws

P/N 1865A
Aluminum Nut w/ Socket Head Screws

P/N 1865
Steel Nut w/ Socket Head Screws

Wheel Studs & Lug Nuts

FLANGED STUDS



#	P/N	A	B	C	KNURL OD	THREAD
1	1684	3.00	2.53	0.54	0.691	5/8-18
2	1685	2.34	1.88	0.44	0.691	5/8-18
3	1701	2.34	1.88	0.44	0.691	5/8-11
3	1701M	2.34	1.88	0.40	0.691	5/8-11
4	1755	3.00	2.53	0.54	0.691	5/8-11
5	3834	2.06	1.88	0.27	0.55	5/8-18
5	3834-01	1.70	1.52	0.27	0.55	1/2-20
5	3834-02	2.56	2.38	0.32	0.55	1/2-20
6	4266	2.19	2.00	------	------	1/2-20
7	5652	4.25	3.68	1.63	0.651	5/8-18

#	P/N	A	B	C	KNURL OD	THREAD
8	5688	2.64	2.17	0.67	0.691	5/8-11
8	5688D	2.63	2.16	0.88	0.691	5/8-11
8	5688H	2.64	2.17	0.67	0.691	5/8-11
8	5688T	2.64	2.17	0.67	0.691	5/8-11
8	5688TH	2.64	2.17	0.67	0.691	5/8-11
9	6522	3.13	2.66	0.75	0.691	5/8-11
9	6522-01	3.75	3.28	0.63	0.691	5/8-11
10	8062-01	2.51	2.14	0.40	0.625	1/2-20

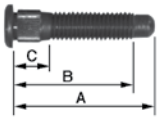
D = Drilled H = Hollow T = Titanium

THREADED STUDS

#	P/N	D	E	F	THREAD
1	5098C	3.750	------	------	5/8-18
2	5098B	3.000	------	------	5/8-18
3	5098A	3.312	------	------	5/8-18

#	P/N	D	E	F	THREAD
4	3596C	2.450	1.763	.687	5/8-18, 5/8-11
4	2884F	2.450	1.763	.687	5/8-18, 5/8-18

A = 3.75
B = 3.28
C = .40

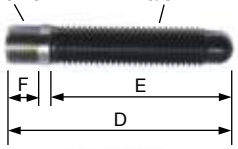


STUD KITS

For use with 5 on 5” & 5 on 4-3/4” Hub Assemblies. See page 60

5/8-18 5/8-11

D = 3.78
E = 2.89
F = .68



PRESS-IN STUDS
KIT P/N 8940
Option 9113 Installed In Hub

Need Longer Studs?
Kit includes 5 replacement studs
1” longer. Size: 5/8-11 x 3-3/4”

(Not Sold Individually)

SCREW-IN STUDS
KIT P/N 8941
Option 9114 Installed In Hub

Size: 5/8-11 x 3.78”

(Not Sold Individually)

LUG NUTS

When required to use steel lug nuts, use these to save 10 oz of rotating weight! For use with 7/8” socket.

#	P/N	MATERIAL	THREAD	SIZE	QTY
1	5789	Aluminum	5/8-11	1”	1
1	5789-0	Aluminum	5/8-11	1-1/16”	1
1	5945	Aluminum	5/8-11	1”	5
1	5945-0	Aluminum	5/8-11	1-1/16”	5

#	P/N	MATERIAL	THREAD	SIZE	QTY
2	5712	Steel	5/8-11	1”	1
2	2254	Steel	5/8-11	1”	5
3	3669	Steel	5/8-11	7/8”	1
3	3669-5	Steel	5/8-11	7/8”	5

FULL FLOATING DOUBLE SPLINED AXLES

Winters Titanium Axles

Lighter than gundrilled steel axles, Titanium Axles have four times the elasticity of steel. Their ability to wind up gives you a performance edge. Excellent for dirt and asphalt.

Winters Premium Steel Axles

Made from the finest material and CNC machined using an automatic double roller steady rest assuring that all axles run true and concentric. Finished with state of the art heat treat and available solid or gundrilled.

Winters Ball Drive Axles

The ultimate for cambered applications. The constant velocity u-joint in the wheel equals minimal friction, heat and wear. Available solid or gundrilled.

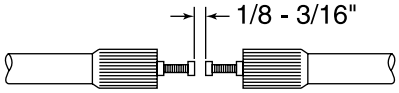
AXLE TYPE	SPLINE	STYLE	P/N
Double Spline	31/24	Gundrilled	5067G
Double Spline	31/24	Solid	5067
Double Spline	31/24	Solid, Titanium	5067T
Double Spline	31/24	Gundrilled, Titanium	5067TG
Vintage Wide 5	12/24	Solid	5064
Vintage Grand National	12/24	Solid	5065
Grand National	31/24	Solid	5067
Ball Drive	31	Solid	1139
Ball Drive	31	Gundrilled	1139G
Crowned Spline	31/20	Solid	2208
Crowned Spline	31/20	Gundrilled	2208G

Add Length From Chart Below To P/N. Ex. P/N 5067G-36

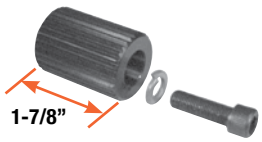
AXLE SPREADER BOLT KIT

P/N 4607

Axles are to be positioned by means of spreader bolts as shown below. Use grade 8 (minimum) spec. bolt with jam nut. Install into opposing ends of axles and adjust for 1/8-3/16" total clearance with both axle retaining plates installed. Torque jam nuts to 30 Ft. Lbs.



DIFFERENTIAL LOCK UP PLUG KITS

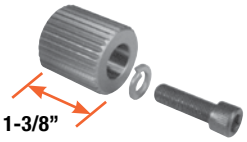


31 Spline
P/N 6789L

Gundrilled Axle Plug
P/N 6382

External Threads 3/4-16

Internal Threads 3/8-24



31 Spline
P/N 6789

11/16" Steel Ball
P/N 7545

SOLID DOUBLE SPLINED AXLES

P/N SW1950-69

Specify Length When Ordering

- Hy-Tuf® Spec Steel
- 31-24 Splines
- REM® Process Standard

Lengths Available

26 ¾"	28 ¾"
27	29 ½"
27 ¼"	30 ½"
27 ½"	31 ½"
27 ¾"	32"
28 ¼"	32 ¼"

Radius Splines Accommodate Camber

DON'T SEE YOUR LENGTH? CALL, WINTERS CAN MAKE THEM!

Lengths Available Wide 5 & GN

*14"	*29 ¼"	35 ¼"
*15"	29 ½"	35 ½"
*16"	29 ¾"	*35 ¾"
*17"	30"	36"
*18"	30 ¼"	36 ¼"
*19"	30 ½"	36 ½"
23"	*30 ¾"	*36 ¾"
24"	31"	37"
25"	*31 ¼"	*37 ¼"
*25 ¼"	31 ½"	37 ½"
*25 ½"	*31 ¾"	*37 ¾"
26"	32"	38"
*26 ¼"	*32 ¼"	38 ½"
26 ½"	32 ½"	39"
*26 ¾"	*32 ¾"	*39 ½"
27"	33"	40"
27 ¼"	33 ¼"	40 ½"
27 ½"	33 ½"	41"
27 ¾"	*33 ¾"	41 ½"
28"	34"	42"
28 ¼"	*34 ¼"	42 ½"
28 ½"	34 ½"	43"
*28 ¾"	34 ¾"	†44"
29"	35"	†45"

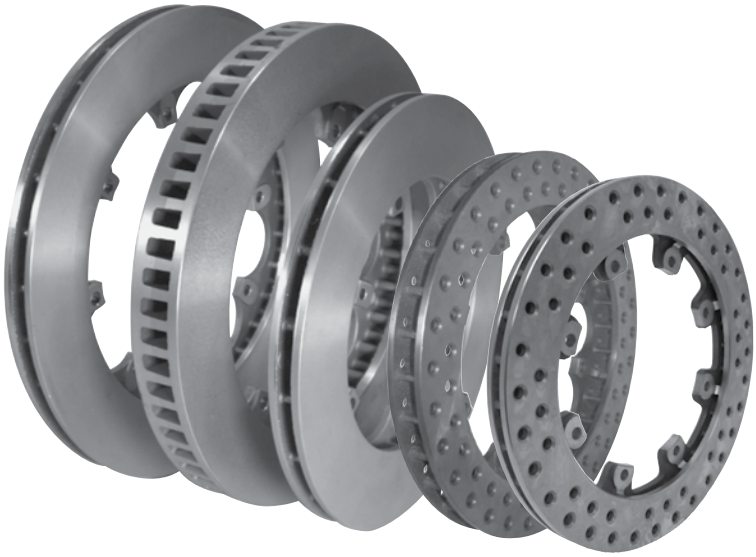
Lengths Available Crown Splined

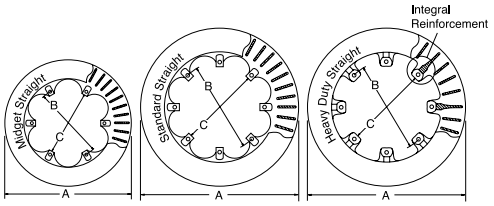
26 ¼"	31 ½"
26 ½	31 ¾"
26 ⅞"	32"
27"	32 ⅛"
27 ¼"	32 ¼"
27 ¾"	32 ½"
31 ¼"	

Lengths Available Ball Drive

28 ⅛"	33"
29"	34 ⅛"
29 ½	35 ⅛"
29 ¾"	36"
31"	37"
31 ½"	38"
32"	

*Available Gundrilled Only †Not Available In Gundrilled





SCALLOPED ROTOR
P/N 2394-01

When using aluminum rotors you must use linings listed on page 87.

P/N	MATERIAL	THICKNESS	(A) O.D.	(B) BOLT CIRCLE	(C) I.D.	MOUNTING BOLT DIAMETER	VANE	OPTION
5439	Iron	1-1/4""	12-1/8"	5 on 6-3/4"	6-3/16"	3/8"	S	----------
5811	Iron	.810"	12-1/8"	5 on 6-3/4"	6-3/16"	3/8	S	----------
6608GM	Iron	1-1/4"	11-3/4"	8 on 7"	6-3/8"	5/16"	S	8243
6608GML	Iron (Drilled Rotor)	1-1/4"	11-3/4"	8 on 7"	6-3/8"	5/16"	S	8243L
6773	Steel	3/4"	10-1/4"	6 on 5-1/2"	4-7/8"	5/16"	S	----------
2394	Iron	.810"	12-1/8"	8 on 7"	6-3/8"	5/16"	HD	8240
2394-01	Iron	.810"	12-3/16"	8 on 7"	6-3/8"	5/16"	LW	8240S
2394GM	Iron	.810"	11-3/4"	8 on 7"	6-3/8"	5/16"	HD	8241
2394GML	Iron	.810"	11-3/4"	8 on 7"	6-3/8"	5/16"	HD	8241L

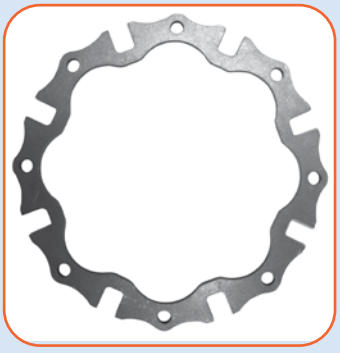
ROTOR BOLT AND WASHER KITS

Rotor Bolt & Washer Kit
P/N 2821
This Kit is for use with Aluminum & Magnesium Hubs.
(8) 7162 (12pt, 5/16-18 x 1-1/4)
(8) 7196 (washer, 5/16)

Rotor Bolt & Washer Kit
P/N 2821F
This Kit is for use with 5x5 & 5x4-3/4 Steel Hubs.
(8) 7198 (12pt, 5/16-24 x 7/8)
(8) 7196 (washer, 5/16)

T-NUT KIT AND MOUNTING PLATE

T-Nut Kit
P/N 5820
Includes 8 of each:
P/N 3663 Bolt
P/N 3662 T-Nut



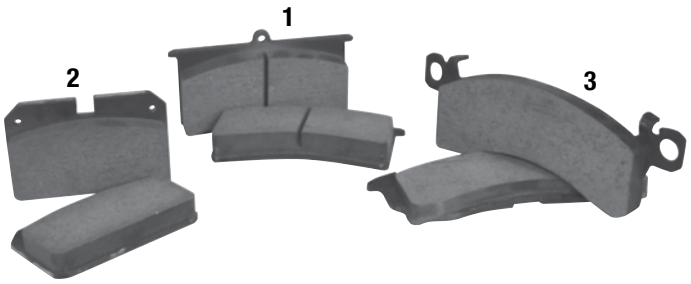
Mounting Plate
P/N 3708
Fits hubs with 8 hole, 7" bolt pattern rotor mounts. Rotor stands must be shortened .250" to place rotor in original position.

LININGS & CALIPER BRACKETS

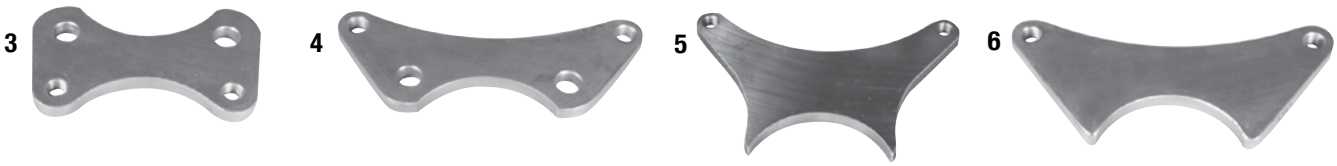
ALUMINUM ROTOR BRAKE LINING

For Use With Winters Aluminum Rotors

#	SIZE	P/N
1	4.750" x .800"	1488
2	4" x .640"	1488-4S
3	GM Single Piston	1488GM



CALIPER BRACKETS

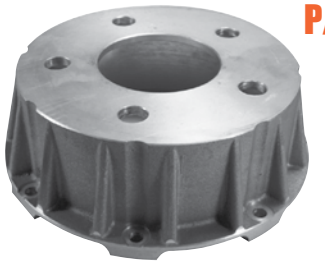


#	DESCRIPTION	CALIPER MOUNTING WIDTH	P/N
3	Bracket Bolts On Wide 5 Rear, To 4 Bolt Spindle	3-1/2"	5724
4	Bracket Bolts On Wide 5 Rear, To 4 Bolt Spindle	6"	5440
5	Bracket Welds To 3" Side Tube	5-1/4"	6462
6	Bracket Welds To 3" Side Tube	6"	5727

ROTOR HATS

P/N 5202-02

P/N 5271



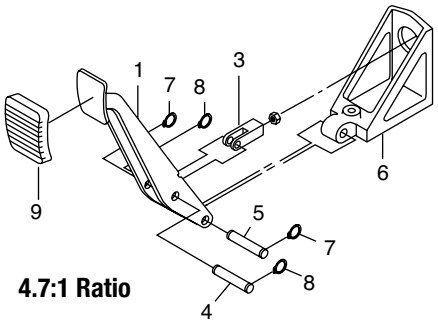
P/N	MATERIAL	OFFSET	ROTOR BOLT CIRCLE	WHEEL BOLT CIRCLE
5202-02	Steel	2-3/4"	8 on 7-1/8"	5 on 5
5271	Aluminum	2-1/2"	8 on 7-5/8"	5 on 5
K5271	Magnesium	2-1/2"	8 on 7-5/8"	5 on 5
5308	Aluminum	2-1/8"	8 on 7-5/8"	5 on 5
K5308	Magnesium	2-1/8"	8 on 7-5/8"	5 on 5

FLOOR MOUNT ASSEMBLIES

- Steel Pedal Arm
- Cast Aluminum Pedal Bracket
- Billet Aluminum Clevis

Steel

P/N 5643-01



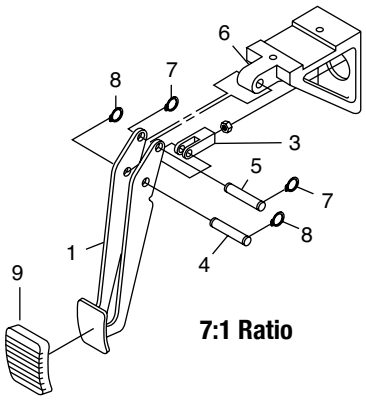
4.7:1 Ratio

SWING MOUNT ASSEMBLIES

- 7:1 (Long) or 4.7:1 (Short) Ratio
- Accepts All Common Master Cylinders
- See Page 90 For Complete Assemblies

Steel

P/N 5643-02



7:1 Ratio

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Short Arm (Floor Mount)	5804-01	1
1	Long Arm (Swing Mount)	5817-02	1
3	Clevis	5806	1
4	Clevis Sleeve	5765	1
5	Pivot Sleeve	5809	1

#	DESCRIPTION	P/N	QTY
6	Pedal Bracket	5799	1
7	Retaining Ring	7622	2
8	Retaining Ring	7623	2
9	Rubber Pad	6117	1

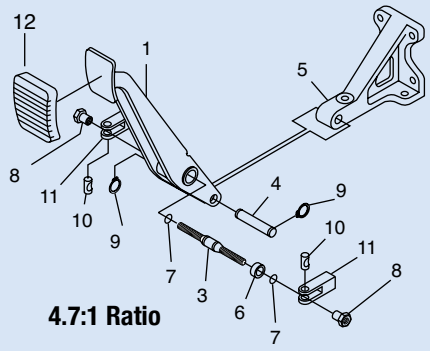
DUAL PEDALS

FLOOR MOUNT ASSEMBLIES

- Steel Pedal Arm
- Cast Aluminum Pedal Bracket
- Billet Aluminum Clevis

Steel

P/N 5644-01



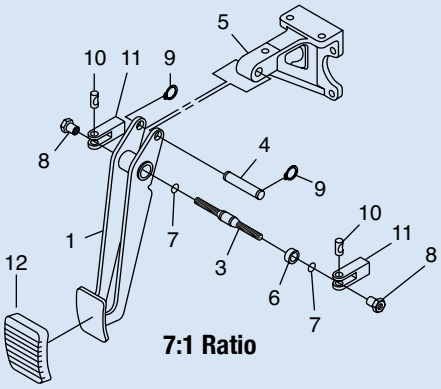
4.7:1 Ratio

SWING MOUNT ASSEMBLIES

- 7:1 (Long) or 4.7:1 (Short) Ratio
- Accepts All Common Master Cylinders
- See Page 90 For Complete Assemblies

Steel

P/N 5644-02



7:1 Ratio

BALANCE BAR

Assembly P/N 5800

Includes two of each of the following: #7, #8, #10, #11, and one each of #3 & #6.

Assembly Includes

#	DESCRIPTION	P/N	QTY
1	Short Arm (Floor Mount)	5804-02	1
1	Long Arm (Swing Mount)	5817-02	1
3	Balance Bar	5808	1
4	Pivot Sleeve	5809	1
5	Pedal Bracket	6712	1
6	Spherical Bearing	7374	1

#	DESCRIPTION	P/N	QTY
7	Retaining Ring	7621	2
8	Locking Nut	5807	2
9	Retaining Ring	7622	2
10	Clevis Pin	5805	2
11	Clevis	5806	2
12	Rubber Pad	6117	1

MASTER CYLINDERS

Clutch Cap P/N 6619

Brake Cap P/N 1396

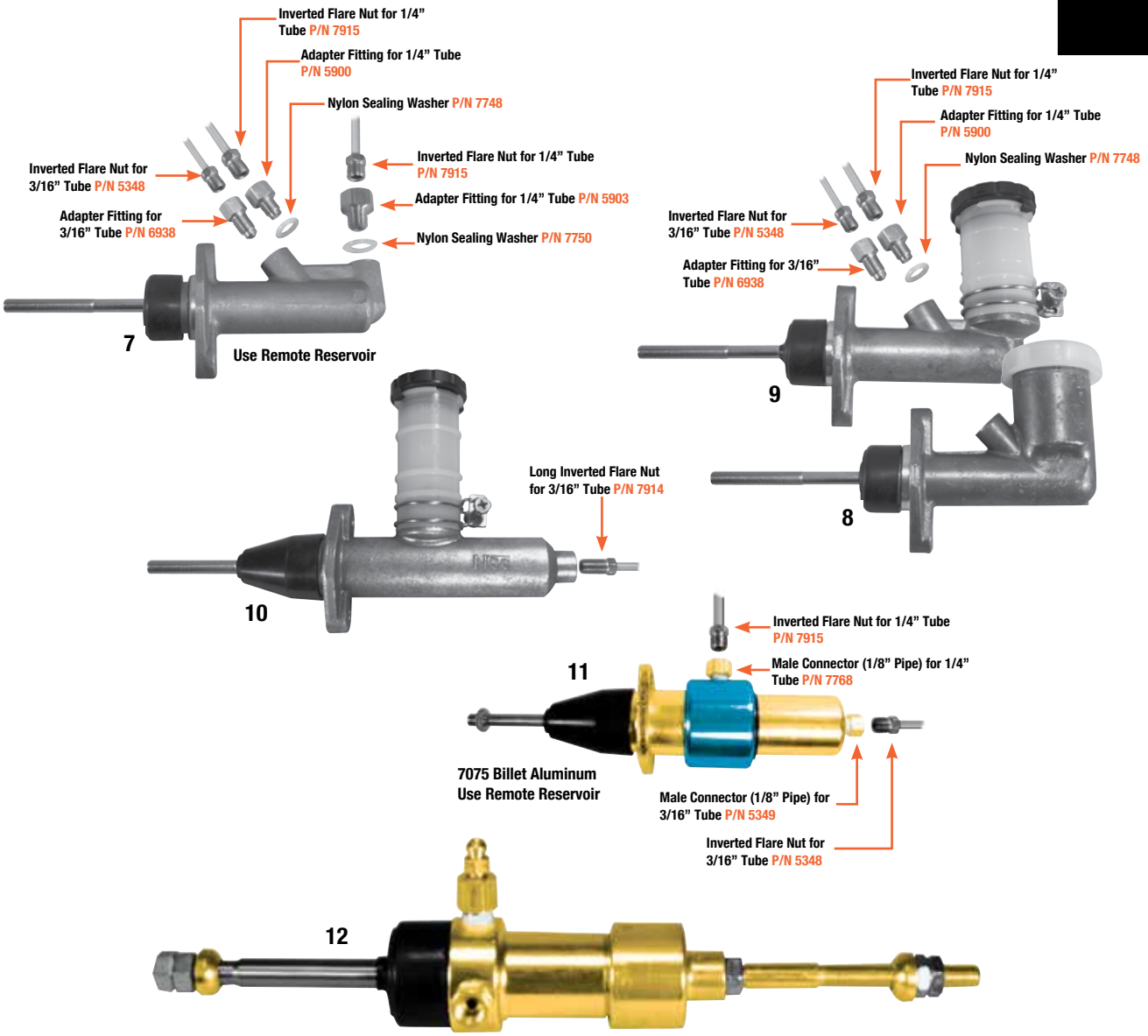
#	PISTON DIAMETER	P/N MASTER CYLINDER	P/N FLOOR MOUNT CLUTCH	P/N SWING MOUNT CLUTCH	P/N FLOOR MOUNT BRAKE	P/N SWING MOUNT BRAKE
7	3/4”	5834	5820-01A	5820-02A	5810-01A	5810-02A
7	5/8”	5904	5820-01B	5820-02B	5810-01B	5810-02B
8	3/4”	5891	5828-01A	5828-02A	5826-01A	5826-02A
9	3/4”	1656	5828-01B	5828-02B	5826-01B	5826-02B
10	3/4”	6610-03	6978-01A	6978-02A	6783-01A	6783-02A
10	7/8”	6610-02	6978-01B	6978-02B	6783-01B	6783-02B
10	1”	6610-01	6978-01C	6978-02C	6783-01C	6783-02C
11	7/8”	6153	6979-01A	6979-02A	6980-01A	6980-02A
11	1”	6152	6979-01B	6979-02B	6980-01B	6980-02B
	Pedals With Out Master Cylinder		5643-01	5643-02	5466-01	5466-02

Refers To Master Cylinders On Page 91.

MASTER CYLINDER COMPONENTS

#	DESCRIPTION	P/N
1	Remote Reservoir with Flare Fitting for 1/4” Line	5835
2	Universal Mounting Bracket Assembly	1194
3	Girling® M/C Plastic Cap	6619P
4	Replacement Cap, P/N 6610 M/C	1396
5	45° Flare for 1/4” Line	7877
6	1/8” Pipe to #4 AN Fitting	8059

MASTER CYLINDERS



#	DESCRIPTION	P/N
7	Master Cylinder with 3/4" Piston Diameter	5834
7	Master Cylinder with 5/8" Piston Diameter	5904
8	Master Cylinder with 3/4" Piston Diameter	5891
9	Master Cylinder with 3/4" Piston Diameter	1656
10	Master Cylinder with 3/4" Piston Diameter	6610-03
10	Master Cylinder with 7/8" Piston Diameter	6610-02
10	Master Cylinder with 1" Piston Diameter	6610-01
11	Master Cylinder with 7/8" Piston Diameter	6153
11	Master Cylinder with 1" Piston Diameter	6152
12	Slave Cylinder for Hydraulic Clutch (Pull Type)	6147

WINTERS SOLID

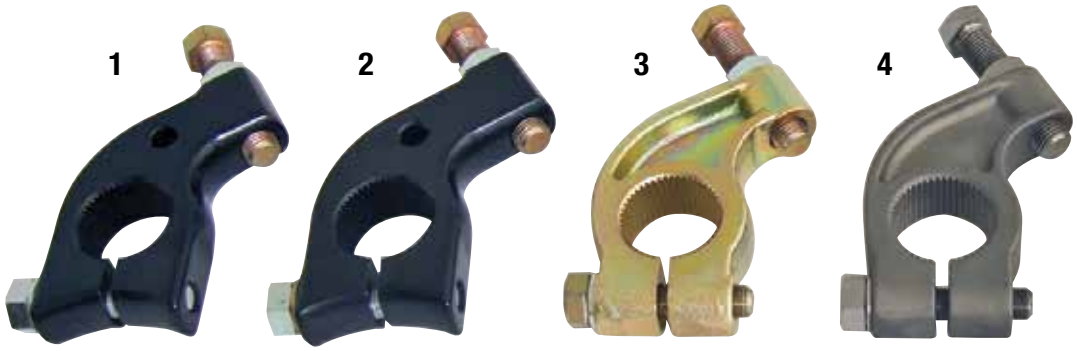
Premium Heat Treated Steel!
There Is A Difference!

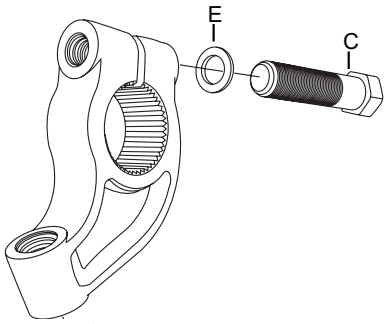
When Ordering, Add Suffix Of Desired Diameter Bar To P/N Ex. P/N 6362-825=
29" Bar, .825 Diameter

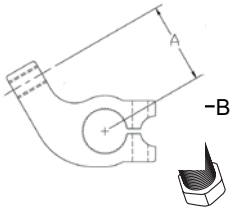
26"	29"
.775	.825
.800	.850
.825	.875
.850	.900
.875	.925
.900	.950
.925	.975
1.025	1.000
1.050	1.025
1.075	1.050
1.100	1.075
	1.100
	1.125

DESCRIPTION	P/N
Solid 29" Bar Available In Various Sizes	6362
Solid 26" Bar Available In Various Sizes	6567

FORGED TORSION STOPS







#	DESCRIPTION	A	B	C	D	E	P/N
1	1-3/4" 7075-T6 Forged Aluminum Stop	1-3/4"	8755	8756	8758	7151	SC2140
2	2" 7075-T6 Forged Aluminum Stop	2"	8755	8756	8758	7151	SC2150
3	1-3/4" Forged Steel Stop	1-3/4"	8755	8780	8758	7151	SC2160
4	1-3/4" Forged Titanium Stop	1-3/4"	8825	8825-01	8826-01	7151	SC2160T
5	2" Forged Steel Stop	2"	8755	8780	8758	7151	SC2170
6	2" Forged Titanium Stop	2"	8825	8825-01	8826-01	7151	SC2170T
7	1-3/4" Billet Titanium Stop	1-3/4"	8825	8825-01	8826-01	7151	SC2160TB

TORSION BAR INFORMATION

TO USE THESE TABLES

Locate the scale that corresponds to the overall length of the torsion bar in your set-up. Find the effective bar diameter in the left column. Read across to the spring rate in the column that corresponds to the length of the arm.

Example: 29” overall bar length, 1.000 inch diameter, 10 inch arm = 490 pounds per inch of travel

29” Bars

Arm Length in Inches
Spring Rate - Pounds Per Inch

Bar Diameter	10”	11”	12”	13”	14”	15”	16”	17”	18”
.875	288	238	200	170	147	128	112	100	89
.900	322	266	224	190	164	143	126	111	99
.925	359	297	250	213	183	160	140	124	111
.950	400	330	278	237	204	178	156	138	123
.975	444	367	308	262	226	197	173	153	137
1.000	490	406	341	290	250	218	192	170	152
1.025	542	448	378	321	276	241	212	187	167
1.050	597	493	414	353	304	265	233	206	184
1.075	656	542	455	388	334	291	256	227	202
1.100	719	594	499	425	367	319	281	249	222
1.125	786	650	546	465	401	349	307	272	243

26” Bars

Arm Length in Inches
Spring Rate - Pounds Per Inch

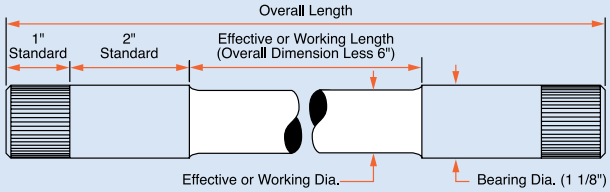
Bar Diameter	10”	11”	12”	13”	14”	15”	16”	17”	18”
.875	331	274	230	196	169	147	129	115	102
.900	370	306	257	219	189	165	145	128	114
.925	413	342	287	245	211	184	161	143	128
.950	460	380	319	272	235	204	180	159	142
.975	510	422	354	302	260	227	199	177	158
1.000	565	467	392	334	288	251	221	195	174
1.025	623	515	433	369	318	277	243	216	192
1.050	686	567	477	406	350	305	268	237	212
1.075	754	623	523	446	385	335	295	261	233
1.100	827	683	574	489	422	367	323	286	255
1.125	904	747	628	535	461	402	353	313	279

30” Bars

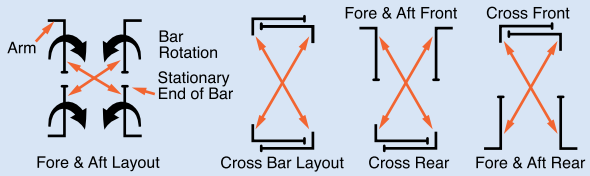
Arm Length in Inches
Spring Rate - Pounds Per Inch

Bar Diameter	10”	11”	12”	13”	14”	15”	16”	17”	18”
.875	276	228	191	163	141	123	108	95	85
.900	309	255	214	183	157	137	121	107	95
.925	344	284	239	204	176	153	135	119	106
.950	383	316	266	227	195	170	150	133	118
.975	425	351	295	252	217	189	166	147	131
1.000	470	388	327	278	240	209	184	163	145
1.025	519	428	361	307	265	231	203	180	160
1.050	572	472	397	338	292	254	223	198	176
1.075	628	518	436	372	321	279	245	217	194
1.100	689	568	478	408	351	306	269	238	213
1.125	754	622	523	446	384	335	294	261	233

This figure will help you order Torsion Bars. On the left side of the illustration you will see the standard spline and bearing length. All bar lengths are expressed in overall length.



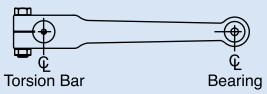
Care should be taken when relocating bars around the chassis that the new location will not result in the bar rotating in the opposite direction from its original location. For example, once a torsion bar has been stressed or settled by twisting in a clock-wise direction (e.g. right front installation on a longitudinal or fore & aft layout), to relocate the bar to the left front would cause it to be twisted in the opposite or counter-clockwise direction. This unwinding would not only cause the bar to have less spring action, but fractures in the turned or effective length would soon occur and the bar would ultimately break.



To determine the effective length of torsion bar arms, measure as follows:

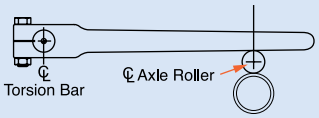
Conventional or Mono Ball Arms

Measure the center distance between the bearing and the splined hole.

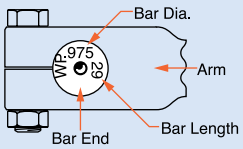


Floating or Blank Arms

Measure the distance between the center of the splined hole and the point where the floating end of the arm contacts the axle roller.



When you first install the new bars on the car, it is advisable to place an index mark identifying the original location of the bar end. This will help prevent relocating the bar to a location that would cause it to “unwind”.

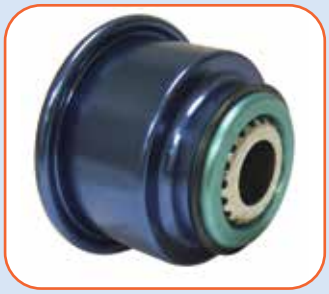


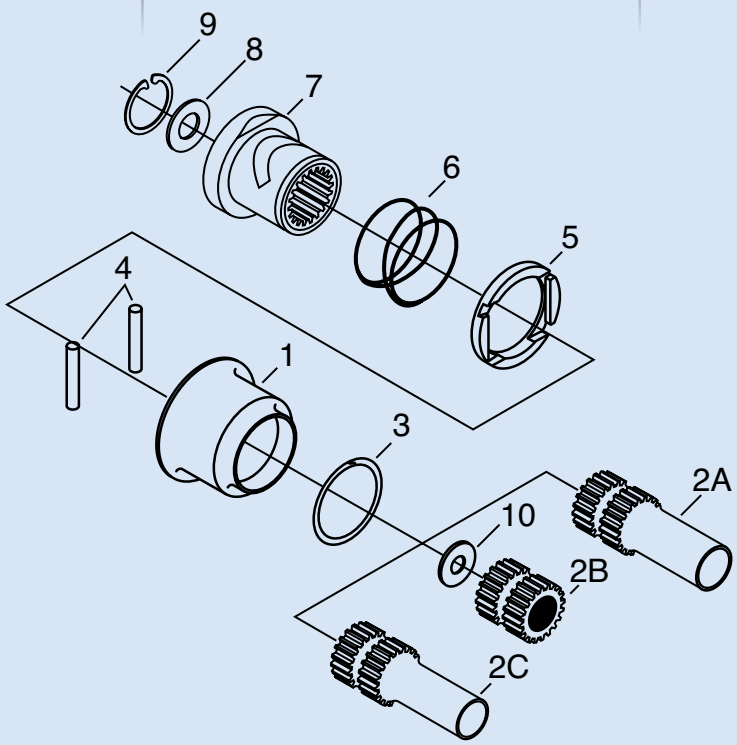
The "Cadillac" of Splined Quick Releases

5/8" Shaft
Assembly P/N 6528

3/4" Shaft
Assembly P/N 6527

3/4"-48 Serration
Assembly P/N 6899
Lee/Profile® Style





#	DESCRIPTION	P/N	QTY
1	Release Collar, Aluminum	6504	1
2A	Quick Release Shaft, 3/4"	6502-02	1
2B	Quick Release Shaft, Lee/Profile® Style	6965	1
2C	Quick Release Shaft, 5/8"	6502-01	1
3	Retaining Ring	7614	1
4	Pin	6505	2
5	Pull Off Ring	6507	1
6	Spring	6499	1
7	Hub	6503	1
8	Washer	6506	1
9	Retaining Ring	7632	1
10	Belleville Washer	7909	1

TOOLS & LUBRICANTS

2-1/2" GN Spindle Nut Socket
P/N 5319

2-7/8" Spindle Nut Wrench
P/N 3269

For use with 2-7/8" Lock Nut Kit

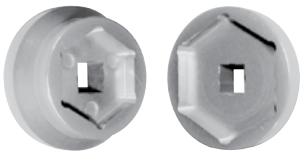
Seal Driver
P/N 5378

Used to Install Side Bell Seal P/N 7205

Torx® Wrench
P/N 7949

#50 Drive Flange Wrench for Elastic Dynamic Dampener

Double Sided Socket
P/N 3153M



1-3/8" 1-7/8"

1/2" Square Drive. For Side Bell Inspection Plugs & 007 Screw-On Dust Cap

Thing-A-Ma-Jig
P/N 2391

This 10 Spline Block Bolts to a Work Bench or Clamps in a Vise to Hold a Pinion

10 Spline Quick Change Gear Box

Available Colors
P/N 12024B (Blue)
P/N 12024BLK (Black)
P/N 12024R (Red)
P/N 12024W (White)

SHP Grease
P/N 1158

For SDS Please Call or Visit our Website.

1 Ton Spindle Nut Socket
P/N 12542

Gear Oil
P/N 1730

#293 Supreme Gear Lube
SAE 80W/90 with Moly
For SDS Please Call or Visit our Website.

Checking Bearings
P/N 5138 2.00 Bearing Journal
P/N 5294 2.031 Bearing Journal

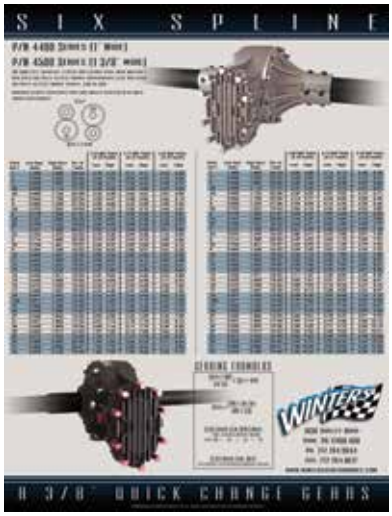
WINTERS T-SHIRT
P/N WINTERS-T

FRONT

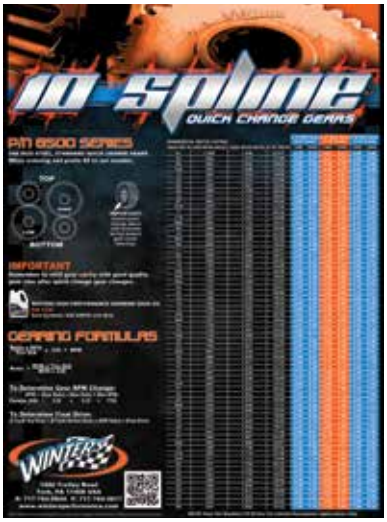
BACK

Call for availability.
Specify Size
when Ordering.

6 SPLINE GEAR POSTER
P/N POSTER-6



10 SPLINE GEAR POSTER
P/N POSTER-10



XTREMELINER GEAR POSTER
P/N POSTER- X

7" GEAR POSTER
P/N POSTER-7

CIRCLE TRACK DECAL
P/N WINTERS-DW

STREET ROD LED SIGN
P/N WINTERS-LED

OFF

ON

7" & XTREMELINER QUICK CHANGE GEARS

7" QUICK CHANGE GEARS

P/N 3800 SERIES (1" WIDE)

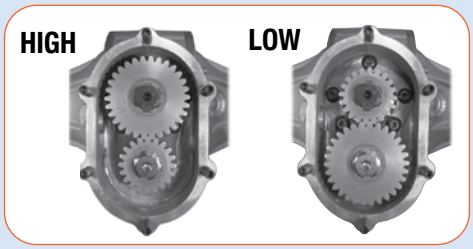
SAE 8620 Steel, Crown Cut, 7" Quick Change Gears. When ordering add prefix '38' to set number.
Example: 3801 | A full sized poster version of this chart is available. Order P/N Poster-7
Remember to refill gear cavity with good quality gear lube after gear changes.

GEARING FORMULAS

To Determine Gear RPM Change:
(RPM) ÷ (Gear Ratio) x (New Ratio) = (New RPM)
Example 8000 ÷ 5.58 x 5.35 = 7670

To Determine Final Drive:
(# Teeth Top Gear) ÷ (# Teeth Bottom Gear) x R&P Ratio = Final Drive

• IMPORTANT •
Install Quick Change Gears With Shoulder Facing Out Toward Gear Cover Bearings



(NUMERICAL RATIO LISTED)

GEAR SET #	LOW SPUR RATIO	HIGH SPUR RATIO	# OF TEETH	3.78 R&P Ratio (9-34 Teeth) LOW	3.78 R&P Ratio (9-34 Teeth) HIGH	4.57 R&P Ratio (7-32 Teeth) LOW	4.57 R&P Ratio (7-32 Teeth) HIGH	5.13 R&P Ratio (8-41 Teeth) LOW	5.13 R&P Ratio (8-41 Teeth) HIGH
01	1.00	1.00	25/25	3.78	3.78	4.57	4.57	5.13	5.13
02	.96	1.05	23/22	3.63	3.97	4.39	4.80	4.92	5.39
03	.92	1.08	26/24	3.48	4.08	4.20	4.94	4.72	5.54
04	.90	1.11	21/19	3.40	4.20	4.11	5.07	4.62	5.69
05	.88	1.14	24/21	3.33	4.31	4.02	5.21	4.51	5.85
06	.85	1.17	27/23	3.21	4.42	3.88	5.35	4.36	6.00
07	.83	1.20	30/25	3.14	4.54	3.79	5.48	4.26	6.16
08	.82	1.22	22/18	3.10	4.61	3.75	5.58	4.21	6.26
09	.80	1.25	25/20	3.02	4.73	3.66	5.71	4.10	6.41
10	.79	1.27	28/22	2.99	4.80	3.61	5.80	4.05	6.52
11	.77	1.29	31/24	2.91	4.88	3.52	5.90	3.95	6.62
12	.74	1.35	23/17	2.80	5.10	3.38	6.17	3.80	6.93
13	.73	1.37	26/19	2.76	5.18	3.34	6.26	3.74	7.03
14	.72	1.38	29/21	2.72	5.22	3.29	6.31	3.69	7.08
14A	.71	1.40	21/15	2.70	5.29	3.26	6.40	3.66	7.18
14B	.70	1.42	27/19	2.66	5.37	3.22	6.49	3.61	7.29
14C	.69	1.44	23/16	2.62	5.44	3.18	6.57	3.57	7.37
14D	.68	1.47	22/15	2.57	5.54	3.12	6.70	3.50	7.52
15	.67	1.50	30/20	2.53	5.67	3.06	6.86	3.44	7.70
15B	.64	1.57	36/23	2.42	5.92	2.92	7.15	3.28	8.03
15A	.63	1.58	30/19	2.39	5.97	2.89	7.22	3.25	8.10
15C	.62	1.61	37/23	2.35	6.08	2.84	7.35	3.19	8.25
15D	.59	1.68	37/22	2.25	6.36	2.72	7.69	3.05	8.63

REM 8218QCG Option

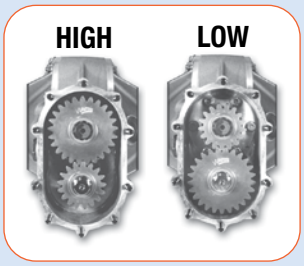
XTREMELINER QUICK CHANGE GEARS

P/N 30800 SERIES (1-3/8" WIDE)

SAE 8620 Steel, Crown Cut, Xtremeliner Quick Change Gears. When ordering add prefix '308' to set number. Example: 30801
A full sized poster version of this chart is available. Order P/N Poster-X
Remember to refill gear cavity with good quality gear lube after gear changes.

(NUMERICAL RATIO LISTED)

GEAR SET #	LOW SPUR RATIO	HIGH SPUR RATIO	# OF TEETH	2.00 R&P Ratio (17-34 Teeth) LOW	2.00 R&P Ratio (17-34 Teeth) HIGH	3.08 R&P Ratio (12-37 Teeth) LOW	3.08 R&P Ratio (12-37 Teeth) HIGH
01	1.00	1.00	21/21	2.00	2.00	3.08	3.08
15	0.95	1.05	19/20	1.90	2.10	2.93	3.23
25	0.90	1.10	20/22	1.82	2.20	2.77	3.39
17A	0.85	1.16	24/28	1.71	2.33	2.62	3.57
03	0.80	1.24	25/31	1.61	2.48	2.46	3.82
16	0.75	1.33	18/24	1.50	2.67	2.31	4.11
14	0.71	1.39	23/32	1.44	2.78	2.19	4.28
36	0.68	1.47	17/25	1.36	2.94	2.09	4.53
21	0.65	1.52	19/29	1.31	3.05	2.00	4.68
28	0.63	1.57	19/30	1.27	3.16	1.94	4.83
31	0.60	1.66	21/35	1.20	3.33	1.84	5.11



6 Spline Quick Change Gears

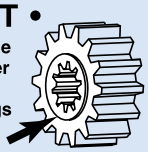
P/N 4400 SERIES (1" WIDE)
P/N 4500 SERIES (1-3/8" WIDE)

SAE 8620 Steel, Crown Cut, 6 Spline Quick Change Gears. When ordering 1" Wide Gears add prefix '44' to set number. When ordering 1-3/8" Wide Gears add prefix '45' to set number. Example: 4401 or 4501

A full sized poster version of this chart is available. Order P/N Poster-6
Remember to refill gear cavity with good quality gear lube after gear changes.

REM 8218QCG Option

• IMPORTANT •
Install Quick Change Gears With Shoulder Facing Out Toward Gear Cover Bearings



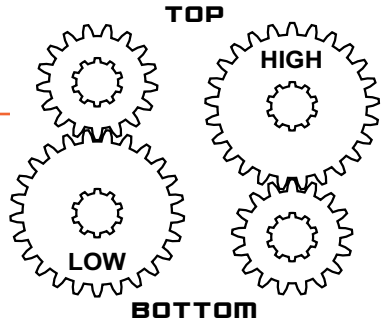
(NUMERICAL RATIO LISTED)

				3.78 R&P Ratio (9-34 Teeth)		4.11 R&P Ratio (9-37 Teeth)		4.33 R&P Ratio (9-39 Teeth)	
GEAR SET #	LOW SPUR RATIO	HIGH SPUR RATIO	# OF TEETH	LOW	HIGH	LOW	HIGH	LOW	HIGH
01	1.000	1.000	24/24	3.78	3.78	4.11	4.11	4.33	4.33
02	.958	1.043	23/24	3.62	3.94	3.94	4.29	4.15	4.52
03	.920	1.087	23/25	3.48	4.11	3.78	4.47	3.98	4.71
03B	.895	1.118	17/19	3.38	4.22	3.68	4.59	3.87	4.84
03A	.880	1.136	22/25	3.33	4.30	3.62	4.67	3.81	4.92
04	.846	1.182	22/26	3.20	4.47	3.48	4.86	3.66	5.12
05	.808	1.238	21/26	3.05	4.68	3.32	5.09	3.50	5.36
05A	.792	1.263	19/24	2.99	4.77	3.25	5.19	3.43	5.47
06	.778	1.286	21/27	2.94	4.86	3.20	5.28	3.37	5.57
24	.767	1.304	23/30	2.90	4.93	3.15	5.36	3.32	5.65
25	.750	1.333	18/24	2.84	5.04	3.08	5.48	3.25	5.77
07	.741	1.350	20/27	2.80	5.10	3.04	5.55	3.21	5.85
23	.727	1.375	16/22	2.75	5.20	2.99	5.65	3.15	5.95
08	.714	1.400	20/28	2.70	5.29	2.94	5.75	3.09	6.06
22	.704	1.421	19/27	2.66	5.37	2.89	5.84	3.05	6.15
09	.696	1.438	16/23	2.63	5.43	2.86	5.91	3.01	6.22
10	.682	1.467	15/22	2.58	5.54	2.80	6.03	2.95	6.35
11	.667	1.500	18/27	2.52	5.67	2.74	6.17	2.89	6.50
12	.655	1.526	19/29	2.48	5.77	2.69	6.27	2.84	6.61
13	.652	1.533	15/23	2.47	5.80	2.68	6.30	2.82	6.64
14	.636	1.571	14/22	2.41	5.94	2.62	6.46	2.76	6.80
15	.625	1.600	15/24	2.36	6.05	2.57	6.58	2.71	6.93
16	.615	1.625	16/26	2.33	6.14	2.53	6.68	2.66	7.04
17	.600	1.667	18/30	2.27	6.30	2.47	6.85	2.60	7.22
18	.591	1.692	13/22	2.23	6.40	2.43	6.96	2.56	7.33
18A	.571	1.750	16/28	2.16	6.62	2.35	7.19	2.47	7.58
19	.560	1.786	14/25	2.12	6.75	2.30	7.34	2.42	7.73
20	.556	1.800	15/27	2.10	6.80	2.28	7.40	2.41	7.79
27	.542	1.846	13/24	2.05	6.98	2.23	7.59	2.35	7.99
21	.531	1.882	17/32	2.01	7.12	2.18	7.74	2.30	8.15
28	.528	1.895	19/36	2.00	7.16	2.17	7.79	2.29	8.20
29	.522	1.917	12/23	1.97	7.25	2.14	7.88	2.26	8.30
26	.517	1.933	15/29	1.96	7.31	2.13	7.95	2.24	8.37
30	.500	2.000	20/40	1.89	7.56	2.06	8.22	2.17	8.66
31	.488	2.050	20/41	1.84	7.75	2.00	8.43	2.11	8.88
32	.475	2.105	19/40	1.80	7.95	1.95	8.65	2.06	9.12

GEARING FORMULAS

To Determine Gear RPM Change:
(RPM) ÷(Gear Ratio) x (New Ratio) = (New RPM)
Example 8000 ÷ 6.59 x 6.35 = 7708

To Determine Final Drive:
(# Teeth Top Gear) ÷ (# Teeth Bottom Gear) x R&P Ratio = Final Drive



$$\frac{\text{Ratio x MPH}}{\text{Tire DIA}} \text{ x 336 = RPM}$$

or

$$\text{Ratio} = \frac{\text{RPM x Tire DIA}}{\text{MPH x 336}}$$

(NUMERICAL RATIO LISTED)

				4.88 R&P Ratio (8-39 Teeth)		5.13 R&P Ratio (8-41 Teeth)		5.38 R&P Ratio (8-43 Teeth)	
GEAR SET #	LOW SPUR RATIO	HIGH SPUR RATIO	# OF TEETH	LOW	HIGH	LOW	HIGH	LOW	HIGH
01	1.000	1.000	24/24	4.88	4.88	5.13	5.13	5.38	5.38
02	.958	1.043	23/24	4.68	5.09	4.92	5.35	5.16	5.61
03	.920	1.087	23/25	4.49	5.30	4.72	5.58	4.95	5.85
03B	.895	1.118	17/19	4.37	5.45	4.59	5.73	4.81	6.01
03A	.880	1.136	22/25	4.29	5.55	4.51	5.83	4.73	6.11
04	.846	1.182	22/26	4.13	5.77	4.34	6.06	4.55	6.36
05	.808	1.238	21/26	3.94	6.04	4.14	6.35	4.35	6.66
05A	.792	1.263	19/24	3.86	6.16	4.06	6.48	4.26	6.80
06	.778	1.286	21/27	3.80	6.27	3.99	6.60	4.18	6.92
24	.767	1.304	23/30	3.74	6.37	3.93	6.69	4.12	7.02
25	.750	1.333	18/24	3.66	6.51	3.85	6.84	4.04	7.17
07	.741	1.350	20/27	3.61	6.59	3.80	6.93	3.99	7.26
23	.727	1.375	16/22	3.55	6.71	3.73	7.05	3.91	7.40
08	.714	1.400	20/28	3.49	6.83	3.66	7.18	3.84	7.53
22	.704	1.421	19/27	3.43	6.93	3.61	7.29	3.79	7.65
09	.696	1.438	16/23	3.39	7.02	3.57	7.37	3.74	7.73
10	.682	1.467	15/22	3.33	7.16	3.50	7.52	3.67	7.89
11	.667	1.500	18/27	3.25	7.32	3.42	7.70	3.59	8.07
12	.655	1.526	19/29	3.20	7.45	3.36	7.83	3.52	8.21
13	.652	1.533	15/23	3.18	7.48	3.35	7.87	3.51	8.25
14	.636	1.571	14/22	3.11	7.67	3.26	8.06	3.42	8.45
15	.625	1.600	15/24	3.05	7.81	3.21	8.21	3.36	8.61
16	.615	1.625	16/26	3.00	7.93	3.16	8.34	3.31	8.74
17	.600	1.667	18/30	2.93	8.13	3.08	8.55	3.23	8.97
18	.591	1.692	13/22	2.88	8.26	3.03	8.68	3.18	9.10
18A	.571	1.750	16/28	2.79	8.54	2.93	8.98	3.07	9.42
19	.560	1.786	14/25	2.73	8.71	2.87	9.16	3.01	9.61
20	.556	1.800	15/27	2.71	8.78	2.85	9.23	2.99	9.68
27	.542	1.846	13/24	2.64	9.01	2.78	9.47	2.91	9.93
21	.531	1.882	17/32	2.59	9.19	2.73	9.66	2.86	10.13
28	.528	1.895	19/36	2.58	9.25	2.71	9.72	2.84	10.19
29	.522	1.917	12/23	2.55	9.35	2.68	9.83	2.81	10.31
26	.517	1.933	15/29	2.52	9.43	2.65	9.92	2.78	10.40
30	.500	2.000	20/40	2.44	9.76	2.57	10.26	2.69	10.76
31	.488	2.050	20/41	2.38	10.00	2.50	10.52	2.62	11.03
32	.475	2.105	19/40	2.32	10.27	2.44	10.80	2.56	11.33

P/N 8500 SERIES (1-3/8" WIDE)

P/N Poster-10

REM
8218QCG
Option

10 Spline Quick Change Gear Box

Available Colors

P/N 12024B (Blue)
P/N 12024BLK (Black)
P/N 12024R (Red)
P/N 12024W (White)

(NUMERICAL RATIO LISTED)

				4.12 R&P Ratio (8-33 Teeth)		4.57 R&P Ratio (7-32 Teeth)		4.86 R&P Ratio (7-34 Teeth)	
GEAR SET #	LOW SPUR RATIO	HIGH SPUR RATIO	# OF TEETH	LOW	HIGH	LOW	HIGH	LOW	HIGH
01	1.000	1.000	21/21	4.12	4.12	4.57	4.57	4.86	4.86
02	.964	1.037	27/28	3.97	4.27	4.41	4.74	4.69	5.04
05	.960	1.042	24/25	3.96	4.29	4.39	4.76	4.67	5.06
15A	.955	1.048	21/22	3.93	4.32	4.36	4.79	4.64	5.09
15	.950	1.053	19/20	3.91	4.34	4.34	4.81	4.62	5.11
26	.931	1.074	27/29	3.84	4.43	4.26	4.91	4.53	5.22
06	.920	1.087	23/25	3.79	4.48	4.20	4.97	4.47	5.28
25	.909	1.100	20/22	3.75	4.53	4.16	5.03	4.42	5.34
12	.897	1.115	26/29	3.69	4.60	4.10	5.10	4.36	5.42
07	.885	1.130	23/26	3.65	4.66	4.04	5.17	4.30	5.49
07A	.875	1.143	21/24	3.61	4.71	4.00	5.22	4.25	5.55
17	.867	1.154	26/30	3.57	4.75	3.96	5.27	4.21	5.60
17A	.857	1.167	24/28	3.53	4.81	3.92	5.33	4.17	5.67
08A	.852	1.174	23/27	3.51	4.84	3.89	5.37	4.14	5.70
08	.846	1.182	22/26	3.49	4.87	3.87	5.40	4.11	5.74
19	.840	1.190	21/25	3.46	4.91	3.84	5.44	4.08	5.78
09A	.833	1.200	25/30	3.43	4.94	3.81	5.48	4.05	5.83
09	.826	1.211	19/23	3.40	4.99	3.78	5.53	4.02	5.88
11	.815	1.227	22/27	3.36	5.06	3.72	5.61	3.96	5.96
03	.806	1.240	25/31	3.32	5.11	3.69	5.67	3.92	6.02
13	.800	1.250	20/25	3.30	5.15	3.66	5.71	3.89	6.07
18	.793	1.261	23/29	3.27	5.20	3.62	5.76	3.85	6.12
18A	.786	1.273	22/28	3.24	5.24	3.59	5.82	3.82	6.18
04A	.783	1.278	18/23	3.22	5.26	3.58	5.84	3.80	6.21
20A	.778	1.286	21/27	3.20	5.30	3.55	5.88	3.78	6.25
04	.774	1.292	24/31	3.19	5.32	3.54	5.90	3.76	6.27
20	.769	1.300	20/26	3.17	5.36	3.52	5.94	3.74	6.31
22	.760	1.316	19/25	3.13	5.42	3.47	6.01	3.69	6.39
16	.750	1.333	18/24	3.09	5.49	3.43	6.09	3.65	6.48
10	.739	1.353	17/23	3.05	5.57	3.38	6.18	3.59	6.57
10A	.733	1.364	22/30	3.02	5.62	3.35	6.23	3.56	6.62
34A	.727	1.375	16/22	3.00	5.67	3.32	6.28	3.54	6.68
34	.724	1.381	21/29	2.97	5.69	3.31	6.31	3.52	6.71
14	.719	1.391	23/32	2.96	5.73	3.29	6.36	3.49	6.76

GEARING FORMULAS

To Determine Gear RPM Change:
(RPM) ÷ (Gear Ratio) x (New Ratio) = (New RPM)
Example 8000 ÷ 6.59 x 6.40 = 7769

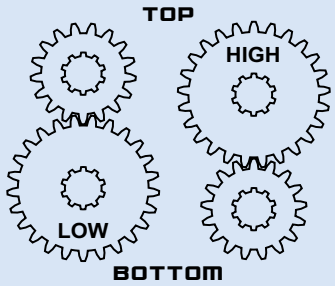
To Determine Final Drive:
(# Teeth Top Gear) ÷ (# Teeth Bottom Gear) x R&P Ratio = Final Drive

$$\frac{\text{Ratio x MPH}}{\text{Tire DIA}} \times 336 = \text{RPM}$$

or

$$\text{Ratio} = \frac{\text{RPM x Tire DIA}}{\text{MPH x 336}}$$

• IMPORTANT •
Install Quick Change Gears With Shoulder Facing Out Toward Gear Cover Bearings



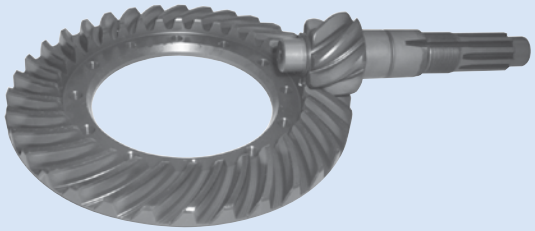
(NUMERICAL RATIO LISTED)

GEAR SET #	LOW SPUR RATIO	HIGH SPUR RATIO	# OF TEETH	4.12 R&P Ratio (8-33 Teeth) LOW	4.12 R&P Ratio (8-33 Teeth) HIGH	4.57 R&P Ratio (7-32 Teeth) LOW	4.57 R&P Ratio (7-32 Teeth) HIGH	4.86 R&P Ratio (7-34 Teeth) LOW	4.86 R&P Ratio (7-34 Teeth) HIGH
14A	.714	1.400	20/28	2.94	5.77	3.26	6.40	3.47	6.80
35	.708	1.412	17/24	2.92	5.82	3.24	6.45	3.44	6.86
32	.704	1.421	19/27	2.90	5.86	3.22	6.49	3.42	6.90
32A	.697	1.435	23/33	2.87	5.91	3.19	6.56	3.39	6.97
24	.690	1.450	20/29	2.84	5.97	3.15	6.63	3.35	7.04
36	.680	1.471	17/25	2.80	6.06	3.11	6.72	3.31	7.14
37	.677	1.476	21/31	2.79	6.08	3.10	6.75	3.29	7.17
23	.667	1.500	22/33	2.75	6.18	3.05	6.86	3.24	7.29
21	.655	1.526	19/29	2.70	6.29	2.99	6.98	3.18	7.41
21A	.652	1.533	15/23	2.69	6.32	2.98	7.01	3.17	7.45
27	.647	1.545	22/34	2.67	6.37	2.96	7.06	3.15	7.51
43	.640	1.563	16/25	2.64	6.44	2.93	7.14	3.11	7.59
28	.633	1.579	19/30	2.61	6.51	2.89	7.22	3.08	7.67
28A	.630	1.588	17/27	2.59	6.54	2.88	7.26	3.06	7.71
29	.625	1.600	15/24	2.58	6.59	2.86	7.31	3.04	7.77
39	.621	1.611	18/29	2.56	6.64	2.84	7.36	3.02	7.83
30	.615	1.625	16/26	2.54	6.70	2.81	7.43	2.99	7.89
40	.613	1.632	19/31	2.53	6.72	2.80	7.46	2.98	7.93
41	.607	1.647	17/28	2.50	6.81	2.76	7.53	2.95	8.00
31	.600	1.667	21/35	2.47	6.87	2.74	7.62	2.92	8.10
33A	.593	1.688	16/27	2.44	6.95	2.71	7.71	2.88	8.20
33	.588	1.700	20/34	2.42	7.00	2.69	7.77	2.86	8.26
31A	.583	1.714	21/36	2.40	7.06	2.67	7.83	2.84	8.33
30A	.577	1.733	15/26	2.38	7.14	2.64	7.92	2.80	8.42
50	.571	1.750	20/35	2.35	7.21	2.61	8.00	2.78	8.50
51	.567	1.765	17/30	2.34	7.27	2.59	8.07	2.75	8.57
52	.563	1.778	18/32	2.32	7.32	2.57	8.12	2.73	8.64
53	.559	1.789	19/34	2.30	7.37	2.55	8.18	2.72	8.69
54	.556	1.800	15/27	2.29	7.42	2.54	8.23	2.70	8.74
55	.552	1.813	16/29	2.27	7.47	2.52	8.28	2.68	8.80
56	.548	1.824	17/31	2.26	7.51	2.51	8.33	2.67	8.86
57	.533	1.875	16/30	2.20	7.73	2.44	8.57	2.59	9.11
58	.531	1.882	17/32	2.19	7.76	2.43	8.60	2.58	9.14

NOTE: Gear Set Numbers 50-58 Are For Limited Horsepower Applications Only

Ring & Pinion Ratios

Winters offers a wide array of optional Ring & Pinion Ratios to help you customize your rear end. Ratios marked with a star '★' are available for your rear end. 4.86 Ratio Ring & Pinion Standard in 10" Full Size Rears. 3.78 Ratio Ring & Pinion Standard in V8, 8-3/8" / Mini and 7" Rears.



OPTION	DESCRIPTION	Sprint Center (10")	Heavy Duty (10")	Enduro (10")	Front Quick Change (10")	Non-Quick Change (10")	Xtremeliner (10")	V8/ Mini Quick Change (8 3/8")	8" Quick Change	7" Quick Change
8111	4.12 Ratio	★	★	★		★				
8111R	4.12 Ratio, Reverse Rotation	★	★	★	★	★				
8111-8S	4.11 Ratio								★	
81200	2.00 Ratio						★			
81308	3.08 Ratio						★			
81378-7	3.78 Ratio									★
81378	3.78 Ratio							★		
81378R	3.78 Ratio, Reverse Rotation							★		
81428	4.28 Ratio					★				
81442	4.42 Ratio					★				
81457	4.57 Ratio	★	★	★		★				
81457-7	4.57 Ratio									★
81462	4.62 Ratio					★				
81471	4.71 Ratio					★				
81486	4.86 Ratio, HD Flanged "Spread" Bearing	★	★	★		★				
81486R	4.86 Ratio, Reverse Rotation	★	★	★	★	★				
81487	4.87 Ratio	★	★	★		★				
81500	5.00 Ratio					★				
81513	5.13 Ratio									★
81514	5.14 Ratio					★				
81528	5.28 Ratio					★				
81533	5.33 Ratio					★				
81542	5.42 Ratio					★				
81550	5.50 Ratio					★				
81566	5.66 Ratio					★				
81583	5.83 Ratio					★				
81600	6.00 Ratio					★				
81617	6.17 Ratio					★				
81633	6.33 Ratio					★				
8164	4.33 Ratio							★		
81650	6.50 Ratio					★				
8165	4.88 Ratio							★		
8166	5.13 Ratio							★		
81667	6.67 Ratio					★				
8167	5.38 Ratio							★		
8169	4.11 Ratio							★		

REM® PROCESS

Option 8218-RP

Winters offers an in-house REM® Process, REM® Chemicals, Inc. are innovators of the Isotropic Superfinish (ISF) Process. The ISF Process is a physicochemical process, using high density, non-abrasive ceramic media and conventional vibratory finishing equipment. The ISF Process removes the surface asperities inherent in machining processes. By safely removing these microscopic peaks, the ISF Process leaves a highly uniform surface, which reduces friction and allows for increased lubrication capability. While the dimensional integrity remains intact, the result is an improved component that will operated at lower temperatures, have increased durability, quieter operation and increased time between maintenance.

CRYOGENIC PROCESSING

Cryogenic Processing is the process through which the material being treated is slowly lowered to -320°F, held for an extended period (20-40 hours), then slowly brought back to room temperature. This process is done in a computer controlled, vacuum insulated Cryoprocessor. The benefits of cryogenics are- Increased abrasive wear resistance (dimensional stability and durability), Homogenization of hardness over the entire structure, Transformation of retained austenite into martensite, Decreased residual stresses, Increased resistance to fatigue failure and chipping and Optimal microstructure alignment to increase strength.

Reduce Rotating & Unsprung Weight!
EDM Ring Gear
Option 8202-XXX

xxx = specify ratio

REAR END ASSEMBLY OPTIONS

Winters offers a wide array of options to help you customize your rear end. Options marked with a star '★' are available for your rear end.

OPTION	DESCRIPTION	Sprint Center (10")	Heavy Duty (10")	Enduro (10")	Front Quick Change (10")	Non-Quick Change (10")	Xtremeliner (10")	V8/ Mini Quick Change (8 3/8")	8" Quick Change	7" Quick Change
8104	Pinion Posi-Lock Assembly	★	★	★	★					
8104S	Pinion Posi-Lock Assembly, Steel Nut	★	★	★	★					
8106	Heat Treated Lower Shaft	★	★	★				★		
8110	Oil Pump, Standard Shaft	★	★	★						
8110-FQC	Oil Pump, Front Quick Change				★					
8111	4.12 Ring & Pinion	★								
8111-8	4.11 Ring & Pinion	★								
8111-8S	4.11 Ring & Pinion, Short	★								
8115	31 Spline Aluminum Spool	★	★	★	★	★	★	★		★
8115-28	28 Spline Aluminum Spool							★		
8117	Magnesium Side Bell	★	★	★		★		★		
8121P	31 Spline Winters Track, Preloaded	★	★	★	★	★				
8121W	31 Spline Winters Track	★	★	★	★	★				★
8121W-200	Winters Track, 2.00 Ratio						★			
8126	Titanium Thrubolts	★	★	★	★					
8126-NQC	Titanium Thrubolts, Non-Quick Change					★				
8130	Ultralight Aluminum Spool	★	★	★	★	★				★
8131	Turned Down Side Tubes	★	★	★	★	★	★	★		
1/2 8131	Turned Down Side Tubes, One Side Only	★	★	★	★	★		★		
8132	Aluminum 8 Bolt Tubes (Spindles Not Included)	★	★	★	★	★		★		★
1/2 8132	Aluminum 8-Bolt Tubes, One Side Only (Spindles Not Included)	★	★	★	★	★		★		
8133	Sprint Center	★								
8133-8S	Sprint Center, Short, 2nd Generation								★	
8133-8S-6	Sprint Center, Short, 2nd Generation, 6 Bolt								★	
8133-10-6	Sprint Center, 6 Bolt	★								
8136P	Lightweight 4 Rib Bells with Inspection Plug	★	★	★	★	★				
8137	Heavy Duty Gear Cover	★								
8138	Aluminum Tubes with Steel Spindles	★	★	★	★	★	★	★		
1/2 8138	Aluminum Tubes with Steel Spindles, One Side Only	★	★	★	★	★		★		
8139	8 Bolt Spindles, Wide 5	★	★	★	★	★		★		
8139HT	Heat Treated 8 Bolt Spindles, Wide 5	★	★	★	★	★		★		
8140	1 Piece Aluminum Tubes	★	★	★	★	★	★	★		
1/2 8140	1 Piece Aluminum Tubes, One Side Only	★	★	★	★	★		★		
8140EL	1 Piece Aluminum Tubes, Ex Long (35" + Longer)	★	★	★	★	★		★		
1/2 8140EL	1 Piece Aluminum Tubes, Ex Long (35" + Longer), One Side Only	★	★	★	★	★		★		
8140-1TON	Wide 5 Aluminum Tubes, 1 Ton	★	★	★	★	★	★	★	★	
8141	Front Open Tube Special Bearing	★								
8143	Roller Bearing on Pinion Nose	★	★	★	★	★				
8154	Closed Drive	★	★	★						
8155P	Heavy Duty 8 Rib Bells with Inspection Plug	★	★	★	★	★				
8155PHD	Heavy Duty Permanent Mold 8 Rib Bells with Inspection Plug	★	★	★	★	★			★	
8155PM	Lightweight 8 Rib Bells with Inspection Plug	★	★	★	★	★				
8155PMHD	HD Permanent Mold 8 Rib Bells with Inspection Plug, Contoured	★	★	★	★	★			★	
8168	Big Bearing Gear Cover, Sprint Center	★								
8171	Billet Aluminum Differential, Locker	★	★	★	★	★				★
8171HSG	Billet Aluminum Differential, Locker, Housing Only	★	★	★	★	★				
8171L	Lightweight Billet Aluminum Differential, Locker	★	★	★	★	★				★
8171LHSG	Lightweight Billet Aluminum Differential, Locker, Housing Only	★	★	★	★	★				
8171M-28	Billet Aluminum Differential, Locker, Mini, 28 Spline									★
8171M-31	Billet Aluminum Differential, Locker, Mini, 31 Spline									★
8180	Urethane Differential	★	★	★	★	★				★
8181L05D	0.5° Camber, Left (Down)	★	★	★	★	★		★		

Rear End Assembly Options

Winters offers a wide array of options to help you customize your rear end. Options marked with a star '★' are available for your rear end.

OPTION	DESCRIPTION	Sprint Center (10")	Heavy Duty (10")	Enduro (10")	Front Quick Change (10")	Non-Quick Change (10")	Xtremeliner (10")	V8/ Mini Quick Change (8 3/8")	7" Quick Change
8181L05U	0.5° Camber, Left (Up)	★	★	★	★	★		★	
8181L10D	1° Camber, Left (Down)	★	★	★	★	★		★	★
8181L10U	1° Camber, Left (Up)	★	★	★	★	★		★	★
8181L15D	1.5° Camber, Left (Down)	★	★	★	★	★		★	
8181L15U	1.5° Camber, Left (Up)	★	★	★	★	★		★	
8181L18D	1.8° Camber, Left (Down)	★	★	★	★	★		★	
8181L18U	1.8° Camber, Left (Up)	★	★	★	★	★		★	
8181L20D	2° Camber, Left (Down)	★	★	★	★	★		★	
8181L20U	2° Camber, Left (Up)	★	★	★	★	★		★	
8181R05D	0.5° Camber, Right (Down)	★	★	★	★	★		★	
8181R05U	0.5° Camber, Right (Up)	★	★	★	★	★		★	
8181R10D	1° Camber, Right (Down)	★	★	★	★	★		★	
8181R10U	1° Camber, Right (Up)	★	★	★	★	★		★	
8181R15D	1.5° Camber, Right (Down)	★	★	★	★	★		★	
8181R15U	1.5° Camber, Right (Up)	★	★	★	★	★		★	
8181R18D	1.8° Camber, Right (Down)	★	★	★	★	★		★	
8181R18U	1.8° Camber, Right (Up)	★	★	★	★	★		★	
8181R20D	2° Camber, Right (Down)	★	★	★	★	★		★	
8181R20U	2° Camber, Right (Up)	★	★	★	★	★		★	
8181R25D	2.5° Camber, Right (Down)	★	★	★	★	★		★	
8181R25U	2.5° Camber, Right (Up)	★	★	★	★	★		★	
8182B	Aluminum Drive Yoke with Stainless Steel Sleeve	★	★	★		★		★	★
8182B-32	32 Spline Aluminum Drive Yoke with Stainless Steel Sleeve	★	★	★					
8183	Aluminum Triple Track Differential	★	★	★	★	★			
8183M	Aluminum Triple Track Differential, Mini							★	
8184	Gundrilled Lower Shaft	★	★	★					
8185	Standard Lightweight Aluminum Gear Cover, Tumbled	★							
8186P	Heavy Duty Permanent Mold 6 Rib Bell with Inspection Plug	★	★	★	★	★			
8190	Thin Flanged 8 Bolt Tubes (Spindles Not Included)	★	★	★	★	★		★	★
1/2 8190	Thin Flanged 8 Bolt Tubes, One Side Only (Spindles Not Included)	★	★	★	★	★		★	★
8190A	Thin Flanged 8 Bolt Aluminum Tubes (Spindles Not Included)	★	★	★	★	★		★	★
1/2 8190A	Thin Flanged 8 Bolt Alum Tubes, One Side Only (Spindles Not Included)	★	★	★	★	★		★	★
8191	Flanged Bearing, Pinion	★	★	★	★	★			
8194M-28	Wedgelock, 28 Spline							★	★
8194M-31	Wedgelock, 31 Spline							★	★
8195-28	28 Spline Aluminum Spool, 4.11 Ring & Pinion							★	
8195-31	31 Spline Aluminum Spool, 4.11 Ring & Pinion							★	
8197	Ball Bearing Support, Open Drive					★			
8198	Ball Bearing Support, Closed Drive					★			
8199	Viton Seal, Seal Plate	★	★	★	★	★		★	★
8201	Aluminum Tube Seal	★	★	★	★	★	★	★	★
8201S	Steel Tube Seal	★	★	★	★	★		★	
8202-XXX	EDM Ring Gear, Specify Ratio					★			
8202-V8	EDM Ring Gear 8" 4.11 R&P In Full Size 10" Housing								
8207-A	Polished Aluminum Tubes	★	★	★	★	★		★	
8208	Thermal Dispersant Coating, Complete Rear	★	★	★	★	★	★	★	★
8208-02	Thermal Dispersant Coating, Center Section	★	★	★	★	★		★	
8208-B	Thermal Dispersant Coating, Bell	★	★	★	★	★		★	
8208-C	Thermal Dispersant Coating, Cover	★	★	★	★			★	
8210	Steel High Nuts, Gear Cover	★						★	
8210-AC	Acorn Nuts, Gear Cover	★						★	
8210-C	Steel High Nuts, Chrome, Gear Cover	★						★	
8210-FL	Flanged Nuts, Gear Cover	★						★	
8210S	Short High Nuts, Gear Cover	★						★	★
8213	2-1/2" Wide 5 Aluminum Tubes	★	★	★	★	★		★	★
1/2 8213	2-1/2" Wide 5 Aluminum Tubes, One Side Only	★	★	★	★	★		★	★
8214-58	Locker Springs, 58 lbs	★	★	★	★	★		★	★
8214-68	Locker Springs, 68 lbs	★	★	★	★	★		★	★

Winters offers a wide array of options to help you customize your rear end. Options marked with a star '★' are available for your rear end.

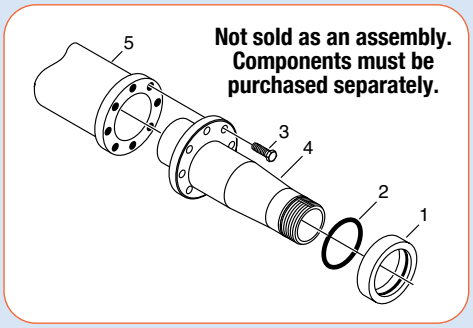
OPTION	DESCRIPTION	Sprint Center (10")	Heavy Duty (10")	Enduro (10")	Front Quick Change (10")	Non-Quick Change (10")	Xtremeliner (10")	V8/ Mini Quick Change (8 3/8")	7" Quick Change
8214-90	Locker Springs, 90 lbs	★	★	★	★	★		★	★
8216	Magnesium Center								★
8216M	Heavy Duty Center, Mini							★	
8217	Heavy Duty Cover Gasket	★	★	★				★	
8218-A	REM® Finish, Axle	★	★	★	★	★	★	★	★
8218-BRG	REM® Finish, Bearing (# is per Bearing)	★	★	★	★	★	★	★	★
8218-DG	REM® Finish, Differential Gears	★	★	★	★	★		★	★
8218-LIA	REM® Finish, Locker Internal Assembly	★	★	★	★	★		★	★
8218-MBB	MicroBlue® Bearing	★	★	★	★	★	★	★	★
8218-QCG	REM® Finish, Quick Change Gears	★	★	★	★		★	★	★
8218-RP	REM® Finish, Ring & Pinion	★	★	★	★	★	★	★	★
8223	42 Spline Aluminum Tubes, Steel Spindles	★	★	★	★	★		★	★
1/2 8223	42 Spline Aluminum Tubes, Steel Spindles, One Side Only	★	★	★	★	★		★	★
8225	Internal Bearing Retainer, Gear Cover	★						★	
8227	Yoke, 1310 Series						★		
8228	Axles, Gundrilled (Use with 8270 Options)	★	★	★	★	★	★	★	
8231-01	Track Star	★	★	★	★	★	★		
8232	Front Quick Change		★						
8233	Yoke, Strap Design								
8234	Side Bell Stud Kit, Titanium, 8-3/8" & 7"							★	
8235	Gear Cover with Coolant Pump						★		
8236	Short Wide 5 Tubes	★	★	★	★	★			
1/2 8236	Short Wide 5 Tubes, One Side Only	★	★	★	★	★			
8237	Tube & Bell Lock Nut Assembly, 4 & 6 Rib	★	★	★	★	★	★	★	★
1/2 8237	Tube & Bell Lock Nut Assembly, One Side Only	★	★	★	★	★	★	★	★
8237-8	Tube & Bell Lock Nut Assembly, 8 Rib	★	★	★	★	★			
8238	Splined Tubes	★	★	★	★	★		★	
8239	Aluminum 2-7/8" Wide 5 Tubes	★	★	★	★	★	★	★	
8240	Rotor Option, .810 x 12-1/8", P/N 2394								
8241	Rotor Option, .810 x 11-3/4", P/N 2394GM								
8241L	Rotor Option, .810 x 11-3/4", Lightweight, P/N 2394GM								
8243	Rotor Option, 1.25 x 11-3/4", P/N 6608GM								
8243L	Rotor Option, 1.25 x 11-3/4", Drilled, P/N 6608GM								
8244S-CT	Low Drag Bearings, Differential, Steel	★	★	★	★	★		★	★
8244S-P	Low Drag Bearings, Pinion, Steel	★	★	★	★	★		★	
8249	Thrubolts, 6" (Specify Pattern/Qty.)	★	★	★	★	★			
8249L	Thrubolts, 6-1/2" (Specify Pattern/Qty.)	★	★	★	★	★			
8252	Sprint Gear Cover, Big Bearing with Retainers	★							
8252B	Billet Sprint Gear Cover, Big Bearing with Retainers	★							
8253	6 Rib Bell with Inspection Plug (For Pump Use)	★	★	★		★			
8254-TIM	Bearing, Timken®, Pinion Cup & Cones	★	★		★				
8263	Steel 2-7/8" Wide 5 Tubes	★	★	★	★	★	★	★	
8263-55	Steel 2-7/8" GN 5 on 5 Tubes	★	★	★	★	★	★	★	
8264	Aluminum Sprint Gear Cover Pump	★							
8268	Solid Seal Plate	★	★	★					
8270	Adds Hubs, Rotors & Axles, 2-1/2" GN, 5 x 5	★	★	★	★	★	★	★	
8270-4750	Adds Hubs, Rotors & Axles, 2-1/2" GN, 5 x 4-3/4"	★	★	★	★	★	★	★	
8275	Yoke, 1350 Series	★	★	★					
8298	Low Drag Carrier Seals	★	★	★	★	★	★	★	★
8299	Gundrilled Pinion Shaft	★	★	★	★		★		
9117	2-7/8" Tubes with Spacers	★	★	★	★	★	★		
9119	2-7/8" Tetrad Tubes	★	★	★	★	★	★	★	
9119-1TON	Aluminum Tetrad Tubes, Wide 5 Spindles, 1 Ton	★	★	★	★	★	★	★	
9120	5 on 5 Hub, Platinum Series Upgrade	★	★	★	★	★	★	★	
9122	Low Friction Seal (P/N 7201LF), 5 on 5 & 5 on 4-3/4" Hubs	★	★	★	★	★	★	★	
9125	One Piece Aluminum Tubes, 1 Ton	★	★	★	★	★	★	★	★

8 BOLT SPINDLE AND TUBE ACCESSORIES

AVAILABLE CAMBER

Specify "Up" or "Down"
(See Definition of Camber diagram below)

Wide 5	2" GN	2-1/2" GN
0.5°	0.5° 1.0°	1.5°
1.0°	1.5° 2.0°	
1.5°	2.5°	



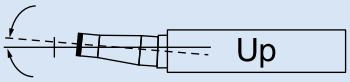
Not sold as an assembly. Components must be purchased separately.

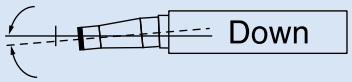
#	DESCRIPTION	APPLICATION	P/N
1	Seal Sleeve	Wide 5	6993
1	Seal Sleeve	2" GN	1440
1	Seal Sleeve	2-1/2" GN	1441
2	O'Ring	Wide 5 & 2" GN	7464
2	O'Ring	2-1/2" GN	7446
3	Spindle Bolts	Steel Tube Thick Flange	7873
3	Spindle Bolts	Aluminum Tube Thick Flange	7774
3	Spindle Bolts	Steel Tube Thin Flange	7970
3	Spindle Bolts	Aluminum Tube Thin Flange	7970A
4*	See pg. 56 for 8 Bolt Tubes		
5*	See pg. 57 for 8 Bolt Spindles		

*Wide 5 Thin Flange Shown

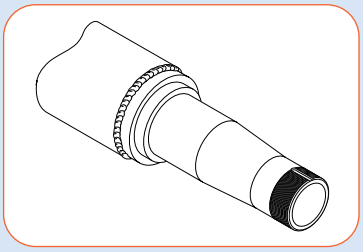
DEFINITION OF CAMBER

Because of the varying definitions of camber, Winters uses the designations up & down.
"Up" refers to the threaded end of the spindle pointing up towards the sky.
"Down" refers to the threaded end of the spindle pointing down toward the ground.





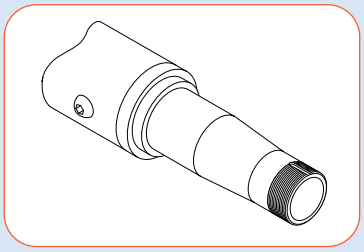
Steel Tube and Spindle Assembly



Winters fabricated steel side tube and cambered spindles are available for the following applications: Wide 5 (14), 2" GN (15), 2-1/2" GN (16), Baby Grand (18), and Super Speedway (19). Third and forth digit of part number indicates degree of camber.

Example: 1405 for 0.5° (Wide 5)
1410 for 1.0° (Wide 5)

Aluminum Tube with Steel Spindle Assembly

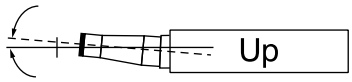


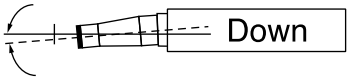
Winters Aluminum side tube with cambered steel spindles are available for the same applications as the steel side tubes. Use the same part number as "steel" and add the suffix 'A.'

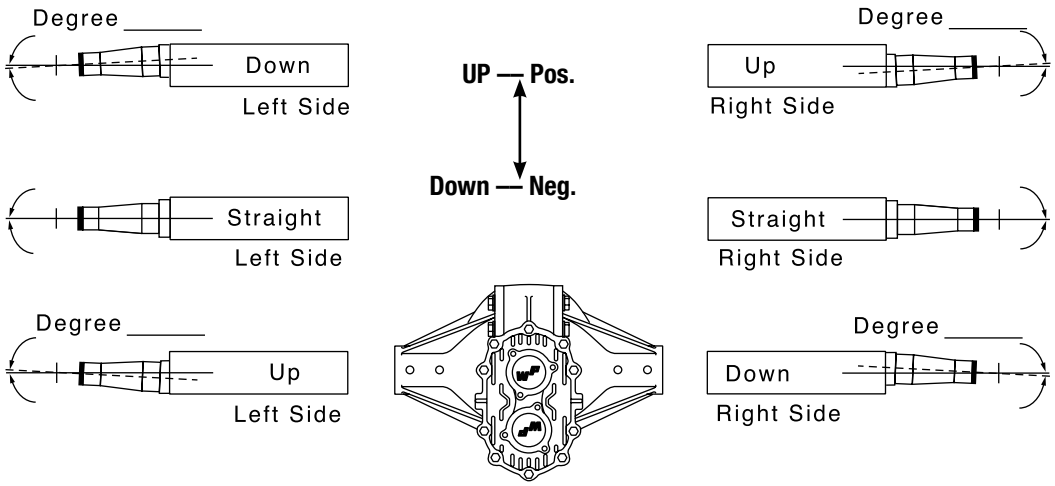
Example: 1405A for 0.5° (Wide 5)
1410A for 1.0° (Wide 5)

CAMBERED REAR SPECIFICATION FORM

Please Note: Because of the varying definitions of camber, Winters uses the designations up and down.
"UP" refers to the threaded end of the spindle pointing up toward the sky.
"DOWN" refers to the threaded end of the spindle pointing down toward the ground.



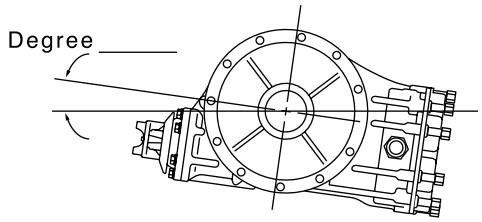


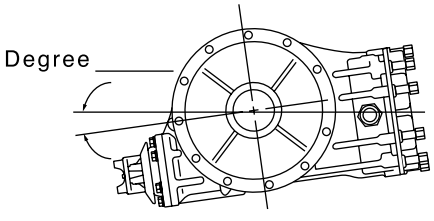


As shown above, there are various choices for direction of camber.
It is essential that we are given the correct information in order to assemble your rear properly.

Please circle the type of camber and note the degree of camber desired for both right and left sides.
Please note if no camber is desired on one side.

Also shown is degree of pinion tilt. If no tilt is required and the pinion is parallel to the ground, enter 0° for pinion tilt.





Sign, Date and Return this form by FAX (717-764-0617) or mail to Winters.

Customer Name _____ **Customer No.** _____

Address _____

Phone _____ **FAX** _____

Signature _____ **Date** _____

WIDE 5

P/N 5270 HEAVY DUTY
P/N 3570 ENDURO
P/N 4270 NON-QUICK CHANGE

AxLE LENGTH FORMULAS

Aluminum Locker, Winters Track & Triple Track

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 3.6875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 3.6875" - Offset

Lightweight Aluminum Locker

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 4.9375" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.4375" - Offset

Spool

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 3.1875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 3.1875" - Offset

Urethane Differential

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 4.1875" + Offset

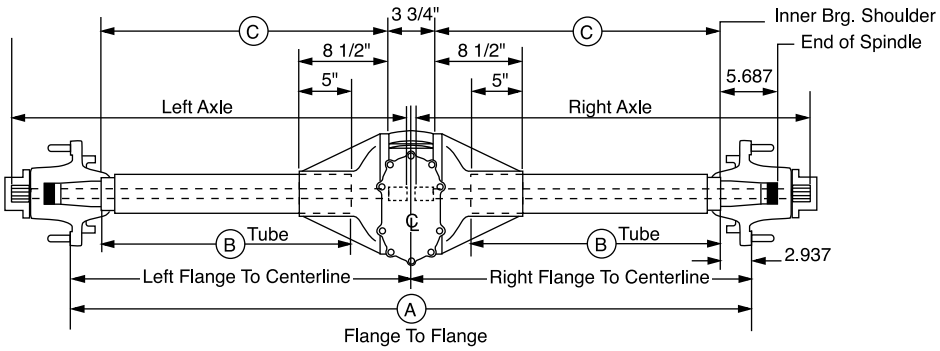
Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.1875" - Offset

Track Star

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 5.6875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.6875" - Offset

Please Note: Popular Dimensions Shown. All Dimensions Available.



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
69-5/8	26.500	30.000	38	32.187
67-5/8	25.500	29.000	37	31.187
65-5/8	24.500	28.000	36	30.187
63-5/8	23.500	27.000	35-1/8	29.187
61-5/8	22.500	26.000	34-1/8	28.187
59-3/8	21.375	24.875	33	27.062
58-5/8	21.000	24.500	32-5/8	26.687
57-3/8	20.375	23.875	32	26.062
55-3/8	19.375	22.875	31	25.062
52-7/8	18.125	21.625	29-3/4	23.812
49-7/8	16.625	20.125	28-1/4	22.312

WIDE 5 DIRT MODIFIED 2-7/8"

P/N 5280 HEAVY DUTY
P/N 3580 ENDURO
P/N 4280 NON-QUICK CHANGE

AxLE LENGTH FORMULAS

Aluminum Locker, Winters Track & Triple Track

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" - Offset

Lightweight Alum Locker

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.625" - Offset

Spool

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" + Offset

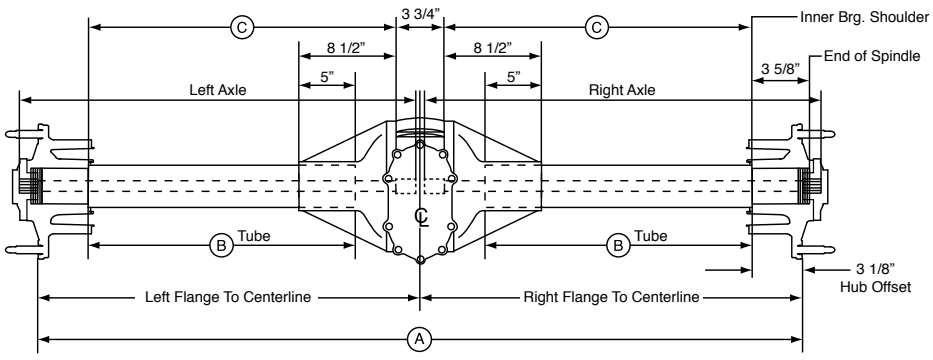
Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" - Offset

Track Star

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.625" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.375" - Offset

Please Note: Popular Dimensions Shown. All Dimensions Available.



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
62	22.500	26.000	31.500	26.125
60	21.500	25.000	30.500	25.125
58	20.500	24.000	29.500	24.125

Keep in mind...with off-set rears, your right tube is longer than the left tube. Example: 1" off-set moves the rear assembly over 1". To do this, the right tube will be 2" longer than the left.

2-1/2" GRAND NATIONAL 5x5

P/N 5063 HEAVY DUTY
P/N 3563 ENDURO
P/N 4063 NON-QUICK CHANGE

Please Note: **Popular Dimensions Shown. All Dimensions Available.**

AXLE LENGTH FORMULAS

Spool, Aluminum Locker, Winters Track & Triple Track

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" - Offset

Lightweight Aluminum Locker

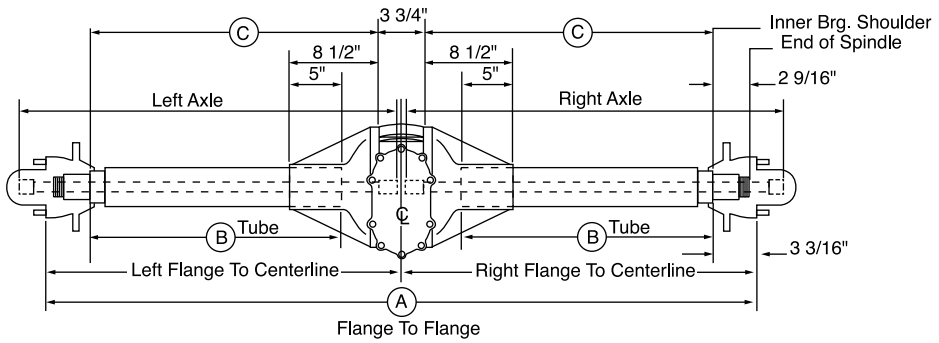
Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.750" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 0.750" - Offset

Track Star

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.500" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 1.500" - Offset



When ordering tread width... Your rear assembly may be straight-up, meaning both tubes are the same length.

A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
65	23.938	27.438	33	26.500
63-1/4	23.062	26.562	32-1/8	25.625
62	22.437	25.937	31-1/2	25.000
61-3/4	22.312	25.812	31-3/8	24.875
60	21.437	24.937	30-1/2	24.000
59-1/2	21.188	24.688	30-1/4	23.750
58-1/2	20.688	24.188	29-3/4	23.250

2" GRAND NATIONAL

P/N 6790 HEAVY DUTY
P/N 3590 ENDURO
P/N 4290 NON-QUICK CHANGE

Please Note: **Popular Dimensions Shown. All Dimensions Available.**

AXLE LENGTH FORMULAS

Aluminum Locker, Winters Track & Triple Track

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.125" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.125" - Offset

Lightweight Aluminum Locker

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 3.375" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 0.875" - Offset

Spool

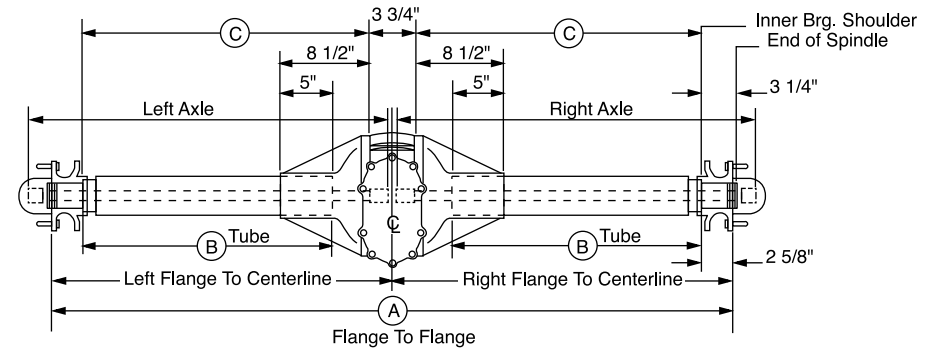
Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.625" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.625" - Offset

Track Star

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 4.125" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + .125" - Offset



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
66-3/4	25.500	29.000	35-1/8	28.750
64-3/4	24.500	28.000	34-1/8	27.750
62	23.125	26.625	32-5/8	26.375
60-3/4	22.500	26.000	32	25.750
58-3/4	21.500	25.000	31	24.750

SUPER SPEEDWAY

P/N 2810

Please Note: Popular Dimensions Shown. All Dimensions Available.

AXLE LENGTH FORMULAS

Spool, Aluminum Locker, Winters Track & Triple Track

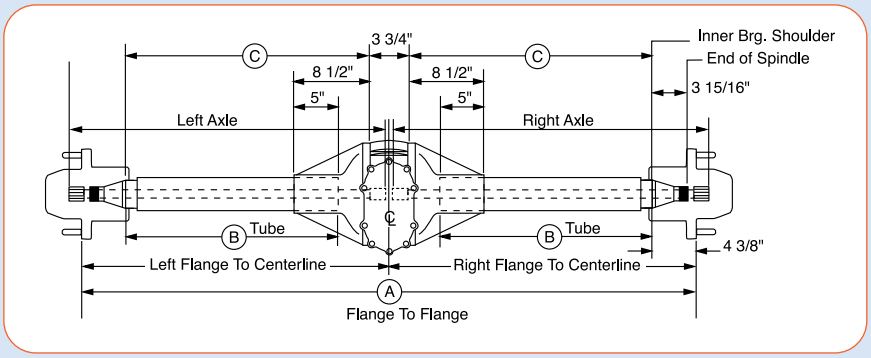
Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.375" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.375" - Offset

Track Star

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.375" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 1.625" - Offset



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
60	20.250	23.750	30-3/8	24.1875
58	19.250	22.750	29-3/8	23.1875
56	18.250	21.750	28-3/8	22.1875

ELIMINATOR HUB (PAGE 80)

Please Note: Popular Dimensions Shown. All Dimensions Available.

AXLE LENGTH FORMULAS

Aluminum Locker, Winters Track & Triple Track

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 4.1875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 4.1875" - Offset

Lightweight Aluminum Locker

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 5.4375" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.9375" - Offset

Spool

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 3.6875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 3.6875" - Offset

Urethane Differential

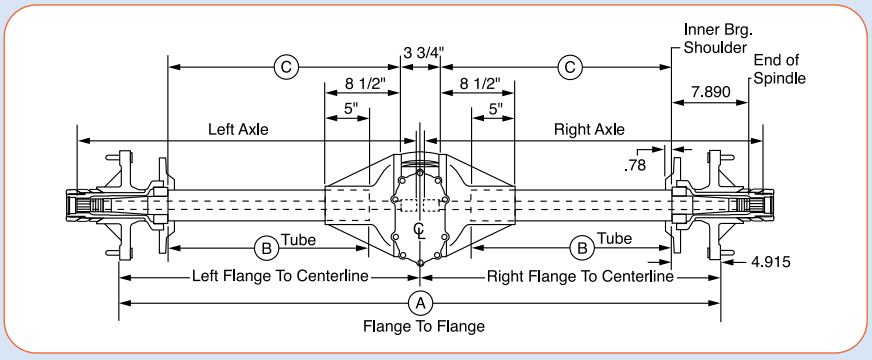
Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 4.6875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.6875" - Offset

Track Star

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 6.1875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.1875" - Offset



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
69-5/8	24.530	28.085	38-1/2	32.420
67-5/8	23.530	27.085	37-1/2	31.420
65-5/8	22.530	26.085	36-1/2	30.420
63-5/8	21.530	25.085	35-5/8	29.420
61-5/8	20.530	24.085	34-5/8	28.420
58-5/8	19.030	22.585	33-1/8	26.920
57-3/8	18.405	21.960	32-1/2	26.295
55-3/8	17.405	20.960	31-1/2	25.295
52-7/8	16.155	19.710	30-1/4	24.045
49-7/8	14.655	18.210	28-3/4	22.545

Keep in mind...with off-set rears, your right tube is longer than the left tube. Example: 1" off-set moves the rear assembly over 1". To do this, the right tube will be 2" longer than the left.

PRO ELIMINATOR 2-7/8" 5 x 5

P/N 5063-MOD MODIFIED
P/N K5063-MOD MODIFIED, MAGNESIUM
P/N 5063-PROMOD PRO-MOD
P/N K5063-PROMOD PRO-MOD, MAGNESIUM

AXLE LENGTH FORMULAS

Spool, Aluminum Locker, Winters Track & Triple Track

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 0.500" - Offset

Lightweight Aluminum Locker

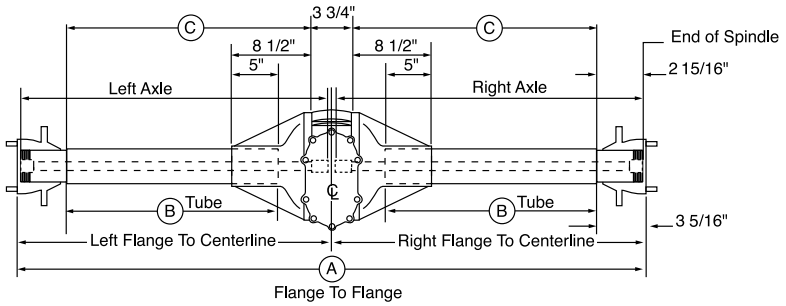
Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.750" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.750" - Offset

Track Star

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 2.500" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.500" - Offset



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
65	23.812	27.312	32	26.750
63-1/4	22.937	26.437	31-1/8	25.875
62	22.312	25.812	30-1/2	25.250
61-3/4	22.187	28.625	30-3/8	25.125
60	21.312	25.687	29-1/2	24.250
59-1/2	21.062	24.812	29-1/4	24.000
58-1/2	20.562	24.062	28-3/4	23.500

WIDE 5 V8

P/N V8-5270 HEAVY DUTY
P/N V8-3570 ENDURO
P/N V8-4270 NON-QUICK CHANGE

AXLE LENGTH FORMULAS

Aluminum Locker

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.250" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 0.250" - Offset

Spool & Triple Track (4.11 Only)

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" + Offset

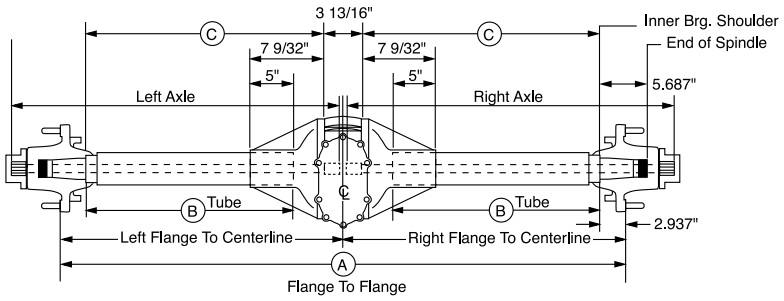
Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" - Offset

Wedgelock

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.375" - Offset

Please Note: Popular Dimensions Shown. All Dimensions Available.



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
69-5/8	27.688	29.969	38	33.375
67-5/8	26.688	28.969	37	32.375
65-5/8	25.688	27.969	36	31.375
63-5/8	24.688	26.969	35-1/8	30.375
61-5/8	23.688	25.969	34-1/8	29.375
58-5/8	22.188	24.469	32-5/8	27.875
57-3/8	21.563	23.844	32	27.250
55-3/8	20.563	22.844	31	26.250
52-7/8	19.313	21.594	29-3/4	25.000

BABY GRAND V8

P/N V8-2260

AXLE LENGTH FORMULAS

Aluminum Locker

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.250" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 0.250" - Offset

Spool & Triple Track (4.11 Only)

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" + Offset

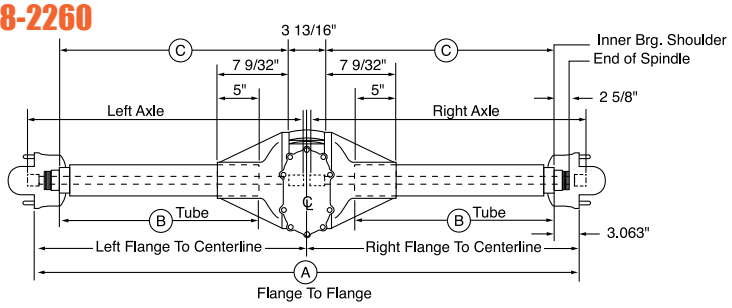
Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" - Offset

Wedgelock

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.375" - Offset

Please Note: Popular Dimensions Shown. All Dimensions Available.



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
60	22.750	25.031	30	25.375
58	21.750	24.031	29	24.375
56	20.750	23.031	28	23.375
54	19.750	22.031	27	22.375

2-1/2" GRAND NATIONAL V8 5 x 5

Please Note: Popular Dimensions Shown. All Dimensions Available.

P/N V8-5063 HEAVY DUTY
P/N V8-3563 ENDURO
P/N V8-4063 NON-QUICK CHANGE

AXLE LENGTH FORMULAS

Aluminum Locker

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.250" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 0.250" - Offset

Spool & Triple Track (4.11 Only)

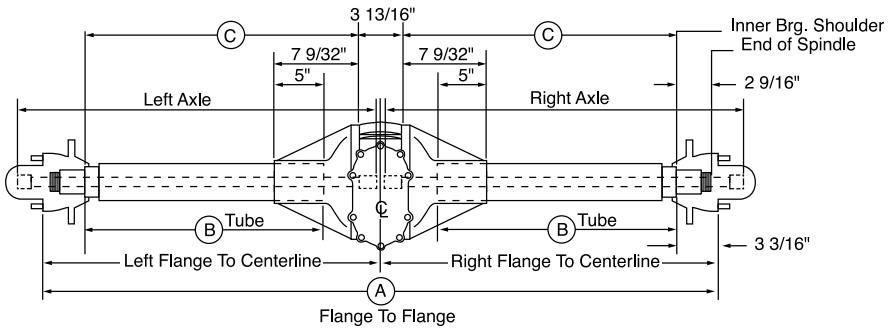
Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" - Offset

Wedgelock

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.375" - Offset



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
65	25.125	27.406	33	27.6875
63-1/4	24.250	26.531	32-1/8	26.8125
62	23.625	25.906	31-1/2	26.1875
61-3/4	23.500	25.781	31-3/8	26.0625
60	22.625	24.906	30-1/2	25.1875
59-1/2	22.375	24.656	30-1/4	24.9375
58-1/2	21.875	24.156	29-3/4	24.4375

When ordering tread width... Your rear assembly may be straight-up, meaning both tubes are the same length.

2" GRAND NATIONAL V8

Please Note: Popular Dimensions Shown. All Dimensions Available.

P/N V8-6790 HEAVY DUTY
P/N V8-3590 ENDURO
P/N V8-4290 NON-QUICK CHANGE

AXLE LENGTH FORMULAS

Aluminum Locker

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 1.250" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ - 0.250" - Offset

Spool & Triple Track (4.11 Only)

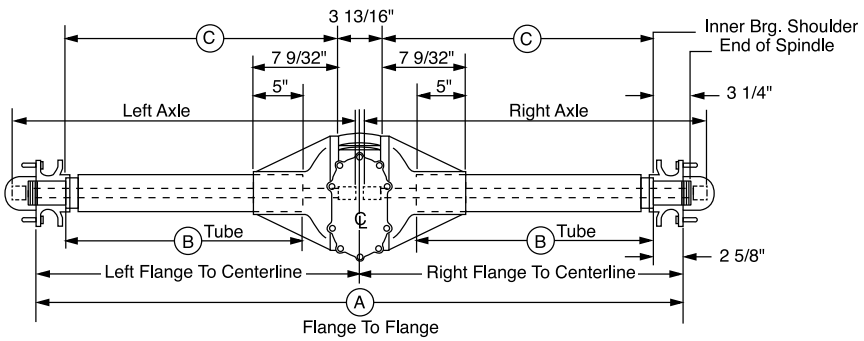
Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.500" - Offset

Wedgelock

Right Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.875" + Offset

Left Axle = $\frac{\text{Flange to Flange}}{2}$ + 0.375" - Offset



A	B	C	DOUBLE SPLINED AXLE LENGTH (W/SPOOL)	TUBE END TO END LENGTH (FOR REFERENCE ONLY)
66-3/4	26.562	28.844	35-1/8	29.312
64-3/4	25.562	27.844	34-1/8	28.812
62	24.188	26.469	32-5/8	27.438
60-3/4	23.562	25.844	32	26.812
58-3/4	22.562	24.844	31	25.812

10" & 8" SET-UP

Do Not Torch
350˚F plus and heat treat is permanently lost. Localized hot spots cause permanent distortion and loss of critical alignments. Castings will "crack" if subjected to torching.

Magnesium can be ignited - Exercise CAUTION!

Preparatory To Installing Pinion Into Case (Center Section)

1 Retain pinion nose bearing on to the pinion gear with fast dry thread lock to insure the bearing does not fall off during installation into the center section.
2 Check and remove any nicks or burrs in the center section pinion bore. Make sure center is clean and free of chemicals or flammable materials.
3 Heat the "clean" center to 270˚- 300°F in an oven.
(DO NOT over heat as loss of heat treatment or distortion will occur.)

Installing Pinion Into Case

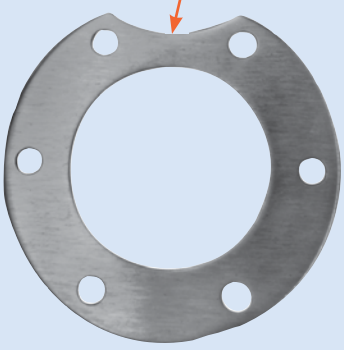
Remove heated center section from the oven and lubricate the pinion bearing bores and bearings.
Install "chilled" pinion, then use a urethane (soft) hammer to insure the pinion is seated.

Install the lower shaft and bearings while the center is still hot (don't burn yourself).

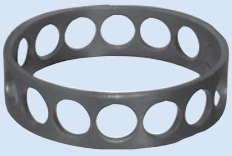
1 Lubricate all bearing bores.
2 Start front ball bearing into case bore approximately 1/8."
3 Install lower shaft through center section from rear to front into ball bearing.
4 Slide rear ball bearing over installed shaft and carefully tap rear bearing evenly into place. Pinion spacer P/N 5020 and pinion retainer P/N 6269A should now be installed using (6) P/N 7110 HHCS 3/8-16 x 1" torqued to 20-25 ft lbs.

Note: All bolts threaded into magnesium or aluminum should be treated with an anti-seize product.

5 Front ball bearing can now be evenly tapped into place. Note: The above assembly procedure is to insure that bearings do not "cock" sideways in center section.
6 Front seal plate may now be installed and retaining bolts torqued to 20-25 ft lbs.



P/N 6296A
Pinion Retainer



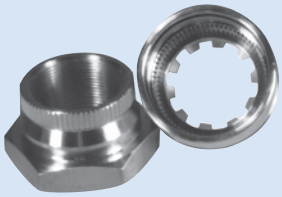
P/N 5020
Pinion Spacer

Allow assembled unit to cool to room temperature 68-72˚F before attempting to adjust pinion bearing preload.

10" & 8" Set-Up

Tappered Roller Bearing Pinion Preload

1 When adjusting pinion bearing posi-lock with new bearings, torque the posi nut to obtain 15-20 in lbs, pinion bearing rotational preload. 3-5 in lbs for REM® Bearings. 8-10 in lbs for used bearings. Lubricate O'Ring in posi-lock retaining cap. Install retaining cap (use finger pressure only). If it resists engagement, remove cap from pinion and rotate to next spline on 10 spline shaft and re-install. 10 splines = 10 combinations...Try each spline for the best "no resistance" fit. Above preloads are set at 68°-72°F



Posi-Lock Assembly
P/N 6498R

Angular Contact Bearing Pinion Preload

After pinion is installed and case has cooled down to room temperature (68°-72°F), torque the pinion nut to 80-100 Ft Lbs (approximate) Pinion preload is set. Lubricate O'Ring in posi-lock retaining cap. Install retaining cap (use finger pressure only). If it resists engagement, remove cap from pinion and rotate to next spline on 10 spline shaft and re-install.

Carrier Assembly and Ring Gear

1 Adjusting Carrier preload is next. Remove seals and O'Rings from bells. Do not install ring gear onto carrier or spool as of yet.
2 Stand left side bell and tube vertically with bell up. Install checking bearing on ring gear end of carrier or spool (refer to chart on page 115 for proper checking bearing).
3 Set carrier and bearing into left vertical bell.
4 Set center section assembly on bell, making sure center section is setting flat against bell flange without bell seals and O'Rings.
5 Install second checking bearing on carrier.

Whether using tapered roller bearings or angular contact bearings, side bell preload remains the same.

Note: Winters spools are manufactured to use approximately .080 shims for initial preload.

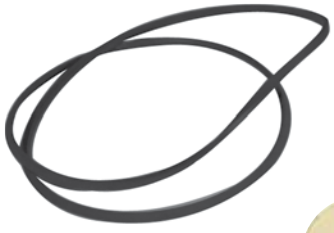
6 Right bell should now be put into position on top of center section. If bell flange has full contact with center section, shims should be added until right bell flange is held above center section approximately .015 for steel spool and steel Triple Track, .012 for Winters Track and Track Star, .010 for aluminum locker, and .010 for Winters aluminum spools and aluminum Triple Track. See figure 1 on page 115 for carrier bearing preload "crush."
7 Now that proper shim pack thickness has been determined, the shim pack should be removed and set aside for step number 9.
8 Ring gear should now be installed on carrier or spool making sure contact surfaces are perfectly clean. Install all 12 bolts and torque nuts alternating in a crisscross pattern in steps to 35 ft lbs (Use 60 ft lbs for threaded W/P type ring gear bolts using belleville washers). Loctite® adhesive should be used on these bolts.
9 Place one shim at a time under checking bearing on ring gear side of carrier. Placing carrier and ring gear assembly in left bell, set center section on left bell and check for ring gear/pinion backlash. Make sure adjustable ring gear pad in left bell is backed out far enough so that is does not make contact with the ring gear. (If you remove the wear pad completely DO NOT forget to replace it before tightening the thru bolts or complete rear will have to be disassembled to re-install the pad.) Carefully add shims until backlash has been removed. The remaining shims from the original shim pack should be installed on the opposite side of carrier. Put the right bell in place and bolt together. Check backlash. It should be between .004 and .006. If backlash is too much, shims from the right side must be moved to the left side. Once proper backlash is reached, the checking bearings can be removed and regular bearings installed, with shims in place.

Carrier Assembly and Ring Gear Continued

10 Install new side bell seals (P/N 7205) and O'Rings (4 & 6 rib bells P/N 7403T, 8 rib bells P/N 7403). Lubricate seals generously. Reassemble, install thrubolts, washers and nuts. Be sure to torque thrubolts in steps until a final torque of 35 ft lbs is reached using an alternating crisscross sequence. Spin the pinion over several times checking the backlash at several intervals. Backlash should be between .004 and .006. If backlash is not correct, the rear must be torn apart and the shims swapped from side to side until proper backlash is obtained. Tight spots are not acceptable.

11 Adjust ring gear wear pad by running wear pad in against the ring gear with force of 5 in lbs, then back off approximately 1/4 turn to obtain .008 to .010 clearance between ring gear and wear pad. Tighten jam nut on adjusting screw being careful not to turn adjusting screw any further.

Note: Assembly Temperature: 68˚- 72˚F



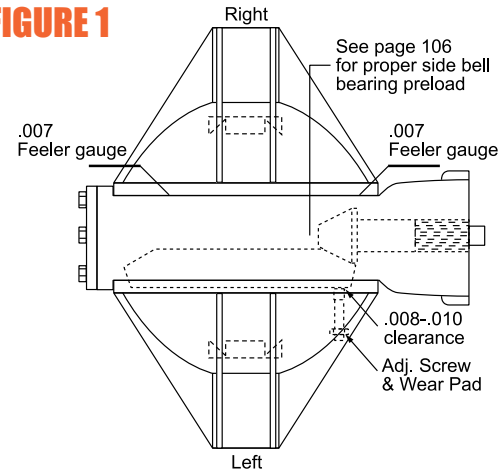
P/N 7403
Side Bell O'Ring

P/N 5378
Seal Driver
Used to Install
Side Bell Seal
P/N 7205

P/N 7205
Side Bell Seal

P/N 7283V
Low Drag Viton
Side Bell Seal

FIGURE 1

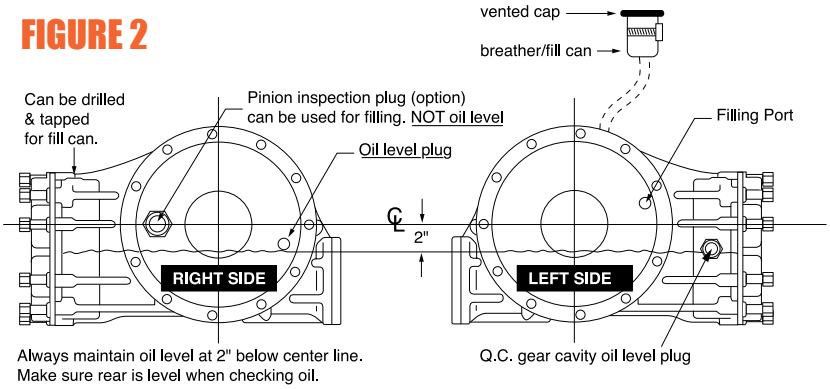


Whether using tapered roller bearings or angular contact bearings, side bell preload remains the same.

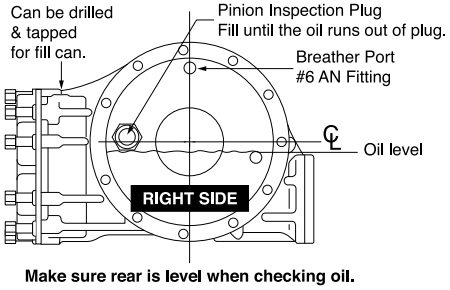
COMMONLY USED REPLACEMENT PARTS

DESCRIPTION	SIZE	P/N
Carrier Bearing, Steel Carrier	2.000	7309
Carrier Bearing, Aluminum Carrier	2.031	7340
Checking Bearing, Angular Contact, Steel Carrier	2.000	7309ACB
Checking Bearing, Angular Contact, Aluminum Carrier	2.031	7340ACB
Checking Bearing, Steel Carrier	2.000	5138
Checking Bearing, Aluminum Carrier	2.031	5294
Carrier Shim Kit, Steel	2.000	5097
Carrier Shim Kit, Aluminum	2.031	5295
Side Bell Seals	------	7205
0.375 Front Yoke Seal	------	7204
0.750 Front Yoke Seal	------	7204T
0.750 Front Yoke Viton Seal	------	7204V
Gear Cover Gasket, 10 Bolt	------	6729
Heavy Duty Gear Cover Gasket, 10 Bolt	------	6729HD
O'Ring, Bell, 4 & 6 Rib	------	7403T
O'Ring, Bell, 8 Rib	------	7403
Winters Threaded Ring Gear Bolts w/ Washers, 12 each	------	7868
Winters 80-90-140 Semi Synthetic Gear Oil w/ Moly	------	1730

FIGURE 2



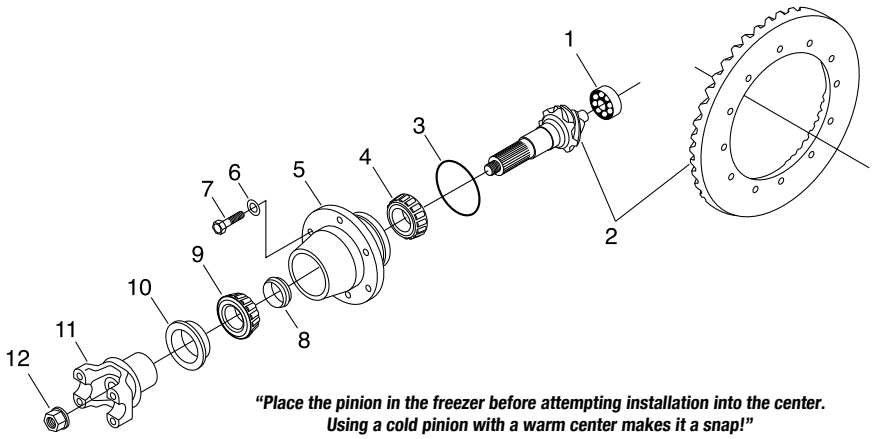
8", 4.11 Rear



Make sure rear is level when checking oil.

Important!
Over-filling can cause problems as well as under-filling.

2ND GENERATION PINION



"Place the pinion in the freezer before attempting installation into the center. Using a cold pinion with a warm center makes it a snap!"

#	DESCRIPTION	P/N	QTY
1	Pinion Nose Roller Bearing	7331	1
2*	Ring & Pinion	35XXX	1
3	O'Ring	7490	1
4	Inner Bearing Cone	7554	1
5	Pinion Bearing	7569	1
6	3/8" Washer	7114	6
7	3/8-16 x 1-1/4" HHCS	7107	6
8	Crush Sleeve	2276	1
9	Outer Bearing Cone	7553	1
10	Seal	7260	1
11	Drive Yoke	2216	1
12	Pinion Nut	2222	1

***When Ordering R&P Add Prefix 35 To Gear Ratio Desired. Ex. P/N 35457 for 4.57 Ratio**

1 Install 2 each 3/8-16 x 3" guide pins into the center section pinion flange to assure holes line up when pinion is installed.

2 Check and remove any nicks or burrs in the center section pinion bore. Make sure center is clean and free of chemicals or flammable materials. Magnesium can be ignited - Exercise CAUTION!

3 Heat the "clean" center to 270˚- 300°F in an oven. (Do not over heat! Loss of heat treat and distortion will occur).

4 Lubricate pinion bearing bore and bearings.

5 Install "chilled" pinion using a urethane (soft) hammer to insure pinion is seated.

6 Allow assembly to cool to room temperature (68°-72°F) before attempting to adjust the pinion bearing preload.

7 Back off pinion nut two turns.

8 With a soft punch (brass or aluminum) and a steel hammer, tap (not strike) on the yoke end of pinion to position pinion nose bearing into it's bore properly.

9 Using a yoke spanner and 3/4 drive, 1-1/16" - 6 point socket, tighten pinion nut gradually while rotating pinion to allow bearings to align. Adjust pinion bearing preload to 20-25 in. lbs.

10 Remove guide studs and install bearing retaining bolts (using anti-seize). Torque to 20-25 ft. lbs.

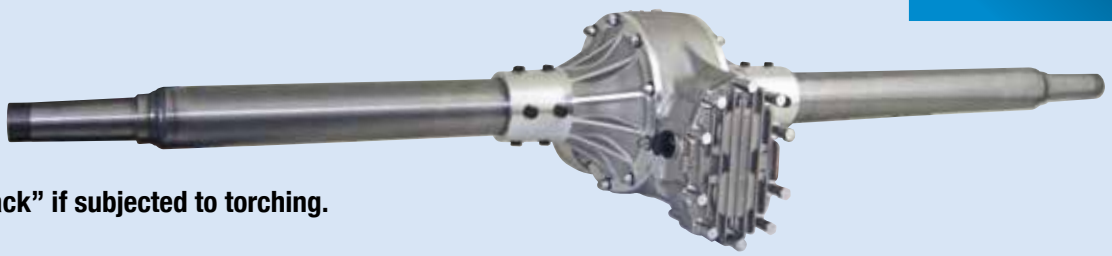
Pinion installation is now complete.

(See Carrier Assembly and Ring Gear instructions on pages 114 & 115)

V8/MINI 8-3/8" & 7" SET-UP

Use specifications below when assembling the V8 / Mini Closed Tube.
Use instructions starting on pages 113-115 for proper sequence.

Do Not Torch
350˚F plus and heat treat is permanently lost. Localized hot spots cause permanent distortion and loss of critical alignments. Castings will "crack" if subjected to torching.



Magnesium can be ignited - Exercise CAUTION!

Pinion Installation

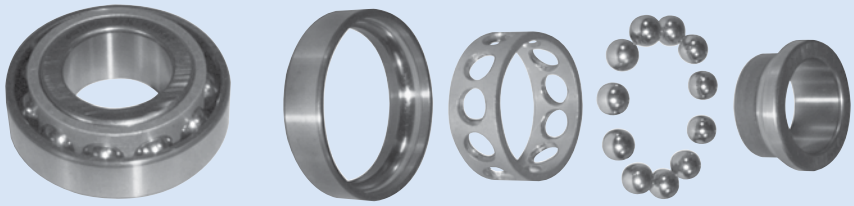
Make sure center is clean and free of chemicals or flammable materials. Heat center to 270°-300°F in an oven. (DO NOT over heat as loss of heat treatment or distortion will occur.) Remove heated center from oven, lubricate pinion bearing bore and bearings. Install "chilled" pinion, using a soft hammer to ensure the pinion is seated.

Pinion Preload	After pinion is installed and case has cooled down to room temperature (68-72°F), torque the pinion retainer bolts to 25 Ft Lbs. Preload New pinion bearings, 15 In Lbs max. Preload Used bearings to 8-10 In Lbs.
Shim Starting Point	.085
Side Bell Preload	without Seals or O' Rings. .005 Spool, Aluminum Locker & Triple Track .007 Wedgelock Whether using tapered roller bearings or angular contact bearings, side bell preload remains the same.
Back Lash (Ring/Pinion)	.004 - .006 (NO tight spots when rotated)
Torque Specifications	Pinion Retainer Bolts - 25 Ft Lbs. Gear Cover Bearing Retaining Caps - 60 In Lbs (5 Ft Lb). ★ Slotted Ring Gear Bolt w/Locknut - 35 Ft Lbs. ★ Threaded WP Ring Gear Bolts with Belleville Washers - Final Torque (steel) 60 Ft Lbs. (use thread lock) ★ Side Bell Nuts - 30 Ft Lbs. ★ High Nuts - 20 Ft Lbs. ★ Torque alternating in a crisscross pattern in steps to specified final torque.

Note: All torque specs are the same for both Steel and Titanium unless specified otherwise.

After Ring Gear is installed and back lash is of absolute minimum and the bolts/nuts torqued, the total preload of the assembly should be: Preload New pinion bearings and seals, 20-25 In Lbs.
Preload Used pinion bearings and seals, 15-20 In Lbs.

LOW DRAG YOUR ENTIRE RACE CAR!!!



RACE-BRED TECHNOLOGY FROM WINTERS!
LOW DRAG ANGULAR CONTACT BEARINGS AND SEALS!

Winters Low Drag Angular Contact Bearings generate less heat, less lubrication required and less energy consumption resulting in cooler operation. Available with steel balls.

Silicon nitride balls have 50% higher modulus of elasticity resistance to deformation and 15 - 20% increase in elasticity while having 3-4 times the service life of conventional bearings.

Available for various applications and products! Call for availability.

P/N	DESCRIPTION	APPLICATION	OPTION
7301ACS	13/32" With 18 Steel Balls	Rear Wheel Hub, 2-1/2" GN, 5x5, 2-1/2" Wide 5	8254S-25
7309ACS	7/16" with 16 Steel Balls	Rear Wheel Hub, 2" GN 5x5, 2" Bearing	8254S-2
7324ACS	7/16" with 16 Steel Balls	Wide 5 Hub Inner	8254S-W5
7325ACS	7/16" with 15 Steel Balls	Wide 5 Hub Outer	8254S-W5
7325ACS	7/16" with 15 Steel Balls	Baby Grand Hub	8254S-BG
7340ACS	7/16" with 16 Steel Balls, Differential	10", 8-3/8", Non-QC, Xtremeliner, 7", V8, 2.031 Brg. Journal	8244S-CT
8642ACS	7/16" with 30 Steel Balls	Pinion, 10" Quick Change	8244S-P
8658ACS	5/16" with 26 Steel Balls	2-7/8" Hub	8254S-287
7309ACB	2.00 Checking Bearing, Angular Contact, Steel Carrier		
7340ACB	2.031 Checking Bearing, Angular Contact, Aluminum Carrier		

NOTE: Ceramic Balls Available For Light Duty Applications

P/N	DESCRIPTION	APPLICATION	OPTION
7283V	Low Drag Seal, Differential	10", 8-3/8", Non-QC, Xtremeliner, 7", V8, 2.031 Brg. Journal	
7210V	Low Drag Seal	Wide 5 Hub	
7201LF	Low Drag Seal	2-1/2" GN	9122

Hub Assemblies

When using angular contact bearings in hub assembly, pack bearings with wheel bearing grease as normal. Snug bearing locknut removing all bearing play. Do not over torque nut assembly. Hub should spin freely with no end play (zero preload). Secure locknut.

Angular Contact Bearing Pinion Preload

After pinion is installed and case has cooled down to room temperature (68°-72°F), torque the pinion nut to 80-100 Ft Lbs (approximate) Pinion preload is set. Lubricate O'Ring in posi-lock retaining cap. Install retaining cap (use finger pressure only). If it resists engagement, remove cap from pinion and rotate to next spline on 10 spline shaft and re-install. Whether using tapered roller bearings or angular contact bearings, side bell preload remains the same. (see pages 113-117)

REM® PROCESS

Option 8218-BRG

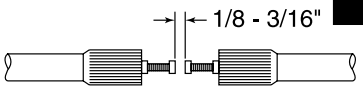
Winters offers an in-house REM® Process, REM® Chemicals, Inc. are innovators of the Isotropic Superfinish (ISF) Process. The ISF Process is a physiochemical process, using high density, non-abrasive ceramic media and conventional vibratory finishing equipment. The ISF Process removes the surface asperities inherent in machining processes. By safely removing these microscopic peaks, the ISF Process leaves a highly uniform surface, which reduces friction and allows for increased lubrication capability. While the dimensional integrity remains intact, the result is an improved component that will operated at lower temperatures, have increased durability, quieter operation and increased time between maintenance.

IMPORTANT INFORMATION

SPREADER BOLT INSTALLATION

KIT P/N 4607

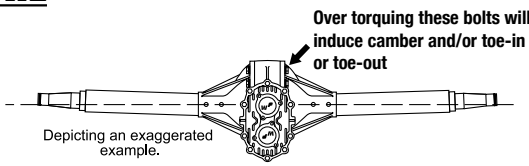
Axles are to be positioned by means of spreader bolts as shown below. Use grade 8 (minimum) bolt with jam nut. Install into opposing ends of axles and adjust for 1/8-3/16" total clearance with both axle retaining plates installed. Torque jam nuts to 30 Ft. Lbs.



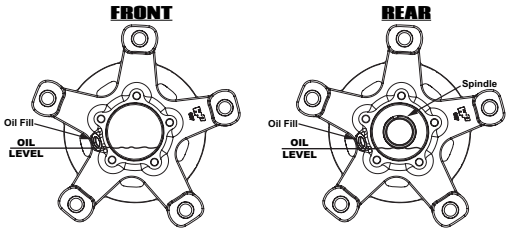
BELL TORQUING PROCEDURE

Caution

Over torquing can induce permanent and unwanted angularities as shown in illustration at right. When attaching suspension brackets, exercise care when torquing thru bolts. Use a torque wrench to tighten bolts in steps. Tighten in a criss cross pattern to 35 ft. lbs.



007 & 2-7/8" WIDE 5 HUB OIL LEVEL



Important

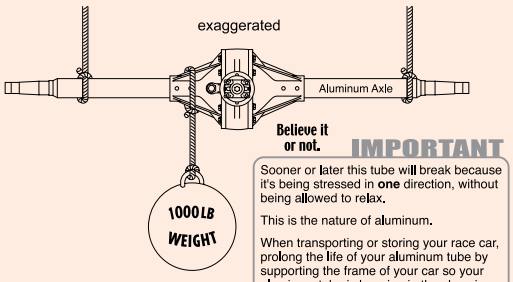
Proper oil level is critical to the performance of these hubs. To fill, rotate the hub so the Oil Fill/Level Plug is positioned at 8 o'clock.

FRONT: Fill until oil level reaches the bottom of the Oil Fill/Level Plug. Approx. 3-1/2-4 oz.

REAR: Fill until oil level reaches the bottom of the Spindle. Approx. 3-1/2-4 oz. Over-filling will result in oil entering your side tubes.

Use Winters P/N 1730 SAE 80W/90 or Mobil 1® 75-90 Oil.

TIE DOWN PROCEDURE



IMPORTANT

Sooner or later this tube will break because it's being stressed in **one** direction, without being allowed to relax.

This is the nature of aluminum.

When transporting or storing your race car, prolong the life of your aluminum tube by supporting the frame of your car so your aluminum tube is hanging in the chassis and not being stressed.

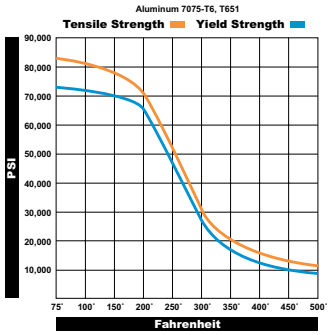
BREAK-IN PROCEDURE

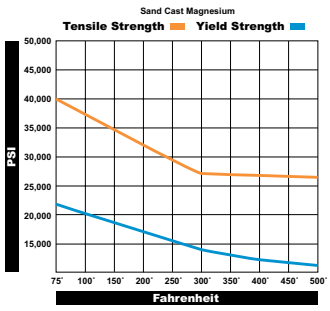
As with any new or rebuilt product, be it an engine, transmission or rear end, it is important to avoid premature wear on the gears and bearings by avoiding full throttle loads and high RPM conditions for at least 20 miles. Start break in at 30% power and gradually increase not to exceed 80% power.

Return the car to the pits, drain and refill the gear lube in both the rear end and the quick change gear cavity to the proper oil levels with the car sitting level. (over filling will cause excessive heat)

If car is equipped with an oil circulator pump, it is advisable to use an inline filter (change oil and filter after each event) Winters recommends the continued use of Winters P/N 1730 with Moly, semi synthetic lubricant or Mobil 1® for the life of your rear end.

TYPICAL TENSILE PROPERTIES AT VARIOUS TEMPERATURES





The following typical properties are not guaranteed since in most cases they are averages for various sizes.

This data is intended only as a guide when determining metals that best suit your requirements.

Refer to Machinery Handbook for strengths of metals, published by Industrial Press, Inc., New York.

FACT: Titanium is 60% the weight of steel.

FACT: Aluminum is approx. 33% the weight of steel.

FACT: Magnesium is 66% the weight of aluminum.

ALUMINUM	TENSILE STRENGTH	YIELD STRENGTH
7075-T6	83000	73000
2024-T3	70000	50000
6061-T6	45000	40000

Frequently Asked Questions

What type of oil should I use in my Winters Rear End?
Use a good quality lube, such as Winters 80-90-140 semi synthetic with moly or Mobil 1 Hypoid 70-90 (GL5) synthetic.

What oil level should I maintain in my Winters Rear End?
Do Not over-fill!! Too much lube causes excessive heat! (see illustration below)

Full Size Rears 10”
Always maintain oil level at 2” below axle center line. Make sure the rear is level when checking oil.

Mini / V8 8-3/8”, 7”
Always maintain oil level at 1-3/4” below axle center line. Make sure the rear is level when checking oil.

8”, 4.11
Always maintain oil level at 1/2” below axle center line. Make sure the rear is level when checking oil.

How do I fill my Winters Rear End with oil?
The fill plug is located on the left side bell. Optional pinion inspection plug, right bell, may be used to fill, however, DO NOT USE to determine fluid level. To determine fluid level, fill until the oil runs out the oil level plug in the front of the right side bell. (see illustration at right)

Ring gear bolt torque specifications.
Threaded Ring Gear Bolts-60 Ft. Lbs. using red thread lock.
Non-Threaded Ring Gear Bolt and Locknut-35 Ft. Lbs.

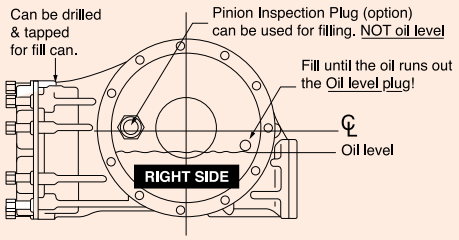
Side bell stud torque specifications.
Full size rears, 10” (7/16” studs) 35 Ft Lbs.
Mini / V8 8-3/8”, 7” (3/8” studs) 30 Ft Lbs.

What is the correct way to install quick change gears?
The machined lip faces out.

Can I use Helical Gears in my Winters Rear End?
Not in extreme applications. Helical gears create excessive and destructive thrust loads on all shafts and bearings. Helical gears have their advantages, but not in this application.

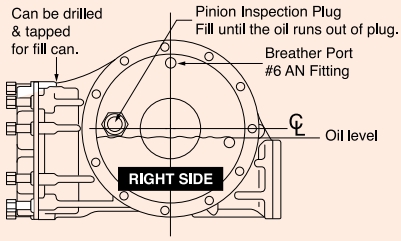
Can I use Wide Gears in my Winters Rear End?
No. It’s a fact – wide quick change gears will cause over-heating in long races.

10”, Mini / V8 8 3/8” & 7” Rears



Make sure rear is level when checking oil.

8”, 4.11 Rear



Make sure rear is level when checking oil.

Fact: Titanium is 60% the weight of steel

Fact: Aluminum is approx. 33% the weight of steel

Fact: Magnesium is 66% the weight of aluminum

See Machinery Handbook for strengths of metals, published by Industrial Press Inc., New York

How do I remove my pinion?
Make sure that the center is clean and free of chemicals or flammable materials. Use an oven to heat your center to 270°- 300°F. Magnesium can be ignited - Exercise CAUTION! Torching your center will damage the casting and ring & pinion life will be adversely affected.

Can I use Quick Change side bells on my Non-Quick Change?
Yes. However, the side bells are rotated 180° forward. This will affect mounting brackets, etc., that are welded to the tubes.

Can I determine R&P ratio without opening up the rear?
Yes. Elevate the car (engine off). Remove quick change gears. Chalk mark the tire at the 12 o’clock position. Chalk mark the pinion at the 12 o’clock position. Rotate the tire by hand 1 complete revolution. Count pinion rotation as tire is rotated. Just past 4 revolutions = 4.11/4.12, 4-1/2 revolutions = 4.57, almost 5 revolutions = 4.86.

Stock Car & Superspeedway Components

REAR WHEEL HUBS

Manufactured Since 1994, Thousands Sold

P/N SW1915-61

6lbs 9oz

P/N SW1915-61W

7lbs 4oz

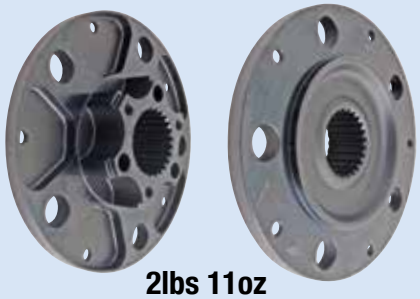
P/N	DESCRIPTION
SW7157	Set Screw for Stud (1/4-28 x 5/16")
SW7254	Spindle Seal
SW7255	Hub Seal
SW7681	Hub Seal Retaining Ring
SW7980-01	Spindle Locknut, Right Hand, N-11
SW7980-02	Spindle Locknut, Left Hand, NL-11
SW7983	Locknut Washer, W-11

Specifications

- Forged Steel
- Pre-Heat Treated to Rc32-36 Then Machined
- ARP® Wheel Studs Preferred
- Outer Bearing
  - -Cone: Timken® #387A
  - -Cup: Timken® #382A
- Inner Bearing
  - -Cone: Timken® #28995
  - -Cup: Timken® #28921

REAR DRIVE FLANGES

Manufactured Since 1999, Thousands Sold



2lbs 11oz

P/N SW1926-69

Specifications

- Forged 4340 Steel
- Heat Treated For Best Durability
- Race Proven

SPINDLES

STRAIGHT SPINDLE

P/N SW1912-8901 Right Thread

P/N SW1912-8902 Left Thread

CAMBERED SPINDLE

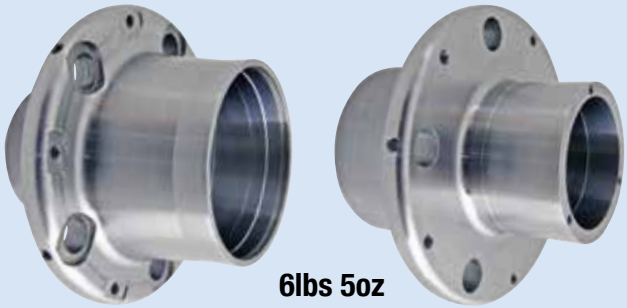
P/N SW1914-74-XX R or L

P/N SW1914-7405L P/N SW1914-7405R
P/N SW1914-7410L P/N SW1914-7410R
P/N SW1914-7415L P/N SW1914-7415R
P/N SW1914-7418L P/N SW1914-7418R
P/N SW1914-7420L P/N SW1914-7420R

REAR WHEEL HUBS

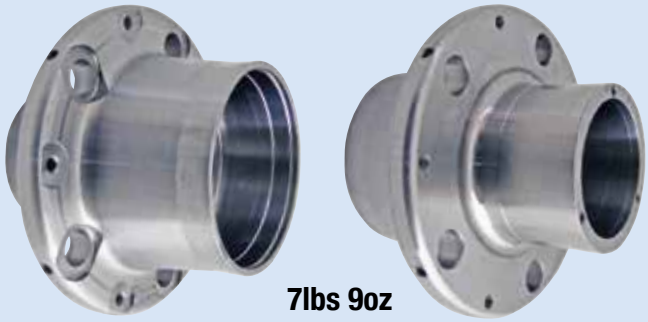
Manufactured Since 1999

P/N SW1953-69



6lbs 5oz

P/N SW1953-69W



7lbs 9oz

Specifications

- Forged Steel
- Pre-Heat Treated to Rc32-36 Then Machined
- Outer Bearing
  - -Cone: Timken® #2691
  - -Cup: Timken® #2630
- Inner Bearing
  - -Cone: Timken® #HM803149
  - -Cup: Timken® #HM803111
- ARP® Wheel Studs Preferred

PREMIUM STEERING ARMS

P/N SW1932-011

P/N SW1932-012

Specifications

- Fully Machined All Over
- Forged 4340 Steel
- Pre Heat Treated to Rc32-36 Then Machined
- Front Steer or Rear Steer
- Conceivably The Strongest Steering Components Available

SPINDLE SET

SET P/N SW1942-61

(Set Includes 2)

Specifications

- Partially Machined
- Forged 4340 Steel
- Pre-Heat Treated to Rc32-36 Then Machined
- Will EDM To Customers Specs
- Optional Shot-Peening Available
- Finish Ground Available In Any State Of Completion
- Or Send Us Your Specs (Prints) For Completion
- Optional Magnafluxed And X-Rayed Inspection With Authentication Papers Available

SPINDLE KIT

KIT P/N SW1934-70

Specifications

- Universal Left & Right Spindles With Steering Arms Forming To Regulations
- Forged 4340 Steel
- Pre-Heat Treated to Rc32-36 Then Machined
- Optional Shot-Peening And/Or Nitriding
- Optional Magnafluxed And X-Rayed Inspection With Authentication Papers Available

SPINDLE NUT AND WASHER

P/N SW1936-67

Specifications

- Spindle Nut
- 4340 Steel
- Heat Treated To 40-45 RC

P/N SW1936-68

Specifications

- Spindle Washer
- Steel
- Zinc Plated

SOLID DOUBLE SPLINED AXLES

P/N SW1950-69 (Specify Length)

Radius Splines Accommodate Camber

Specifications

- Hy-Tuf® Spec Steel
- 31-24 Splines
- REM® Process Is Standard
- The Most Popular Axle In The Industry

Available Lengths

26 ¾" 27" 27 ¼" 27 ½" 27 ¾" 28 ¼" 28 ¾" 29 ½" 30 ½" 31 ½" 32" 32 ¼"

STUDS

P/N SW1943-58

"Short Track"

Specifications

- 4337 Steel
- Heat Treated To Rc40-44
- 2-1/2" Under The Head
- Knurl Size: 0.651" Major Diameter 44 Serrations

P/N SW1943-59

"Superspeedway"

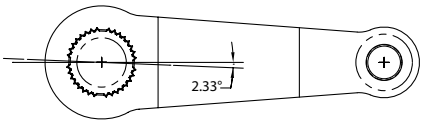
Specifications

- 4337 Steel
- Heat Treated To Rc40-44
- 3-3/8" Under The Head
- Knurl Size: 0.651" Major Diameter 44 Serrations

PITMAN ARMS

P/N SW1937-09

P/N SW1937-10



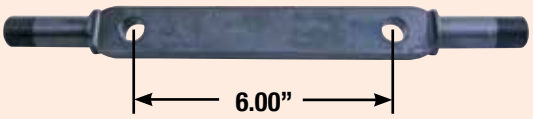
P/N SW1937-10 Shown From Above

Specifications

- P/N SW1937-09 Splined @ 0°
- P/N SW1937-10 Splined @ 2.33°
- Forged 4340 Steel
- Machined In The Heat Treated State To Avoid Heat Treat Distortion
- Custom Offsets Available

UPPER A ARM CROSS SHAFT

P/N SW1943-83



Specifications

- Forged 4340 Steel
- Heat Treated To Rc38-42
- 3/4-16-2A Thread

STRUT ROD END

P/N SW1943-84

Specifications

- Forged 4340 Steel
- Heat Treated To Rc38-42
- 3/4-16-2A Thread

LIMITED WARRANTY

Background

Winters Performance Products, Inc., referred to herein as "Winters", manufactures parts and equipment which are purchased by persons in various industries, who may install and use Winters parts and equipment in applications which may not be suitable for that Purchaser's intended purpose. Purchaser understands, recognizes and acknowledges that all parts and equipment manufactured or sold by Winters are exposed to many, varied and unforeseeable uses and conditions. As a consequence, Winters can make no promise, warranty, affirmation or representation as to the performance of its parts or equipment, nor does Winters make any description of the parts or equipment sold to Purchaser, nor does Winters make any description or affirmation of fact concerning any sample or model of parts or equipment except as specifically set forth in this Limited Warranty. As further consideration for Purchaser using Winters' parts or equipment, Purchaser acknowledges that, due to differing conditions and circumstances under which all parts and equipment are installed and used, Purchaser is not relying on Winters' skill and judgment to select or furnish the proper part or equipment. Purchaser expressly affirms that it is relying on its own expertise, skill, and judgment to select, purchase, and install parts or equipment which are suitably safe and durable for their intended purpose. Purchaser assumes all risks associated with the performance of Winters' parts.

Limited Warranty

Winters warrants to Purchaser that any part or equipment manufactured by Winters ("a Part") will conform to the description of such Part contained in the catalog most recently published by Winters prior to the time of sale of such part or equipment to Purchaser ("the Description"). WINTERS MAKES NO OTHER WARRANTY, EITHER EXPRESS OR IMPLIED WITH RESPECT TO ANY PART. WINTERS EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE OR PURPOSE AND EXPRESSLY DISCLAIMS ANY WARRANTY AS TO PERFORMANCE OF ANY PART. The liability of Winters for breach of the foregoing warranty is limited to repair or replacement of any Part determined to fail to conform to its Description prior to installation and use. The burden of establishing that any Part fails to conform to its Description shall be upon Purchaser. In order to be entitled to repair or replacement of any Part, Purchaser must (i) inspect the Part upon receipt; and (ii) notify Winters in writing of the defect PRIOR TO INSTALLATION OF THE PART. In no event shall Winters be liable hereunder for any Part which has been installed. Purchaser assumes all risk relating to a Part once such Part is installed. WINTERS SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES (INCLUDING BUT NOT LIMITED TO LOST PROFITS) OR FOR LOSS OR DAMAGE DIRECTLY OR INDIRECTLY ARISING FROM THE USE OF A PART. Every claim under this Limited Warranty shall be deemed waived unless made in writing within ninety (90) days of delivery of the Part by Winters to Purchaser. Purchaser acknowledges that, due to the multiple uses of Parts, it is impossible for Winters to predict the performance of any Parts once installed or the suitability of any Parts for any particular use. Purchaser expressly acknowledges its obligation to inform all users (customers) of the above disclaimer.

Indemnity Against Third Party Claims

PURCHASER HEREBY AGREES TO INDEMNIFY AND HOLD HARMLESS WINTERS FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITY, LOSS AND DAMAGES, INCLUDING ATTORNEYS FEES, MADE BY ANY THIRD PARTY AGAINST WINTERS RELATING TO A PART OR THE USE OF ANY PART. Purchaser understands and agrees that no officer, director, employee or agent of Winters (including but not limited to any vendor, dealer, or distributor) has any authority to make any statements contrary to the terms of this Limited Warranty. Winters specifically disavows any statements contrary to what is above written.

Choice of Law/Venue

This Limited Warranty shall be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania. Any legal action which may arise as a result of disputes, controversies, or claims arising out of or related to this Limited Warranty or the purchase or use of any Part shall be litigated exclusively in the Court of Common Pleas of York County, Pennsylvania or the United States District Court for the Middle District of Pennsylvania.

Miscellaneous

This writing constitutes the full, complete and final statement of Winters' Limited Warranty for Parts. All prior oral and written correspondence, test data, negotiations, representations, understandings and the like regarding Parts are merged in this writing and extinguished by it. This Limited Warranty may not be altered, amended, extended or modified except by a writing signed by the President or Vice President of Winters. Winters' failure at any time to enforce any of the terms and conditions stated herein shall not constitute a waiver of any of the provisions herein. This Limited Warranty shall not be assigned by Purchaser. Winters responsibility for merchandise shipped via common carrier ceases upon delivering the order to the carrier. Winters is not responsible for merchandise lost or damaged in transit. Purchaser must file a claim with the delivery carrier for merchandise lost or damaged during transit. Winters will assist Purchaser by supplying any information necessary for submission of a claim. It is the responsibility of the Purchaser to comply with all laws and regulations, Federal, State and Local, governing resale of products sold by Winters. NSF Charge: $38.00 per returned check/payment. Repayments must be by cashier check or money order.

On request, all parts in Winters Performance Products, Inc. inventory and/or catalog are available in super strength heat treated steel (300,000/350,000 P.S.I. tensile strength) @ extra cost and special order. Refer to machinery handbook for strengths of other materials.

RACING IS A DANGEROUS SPORT THAT CAN RESULT IN SERIOUS INJURY OR DEATH. THE ULTIMATE RESPONSIBILITY FOR PARTICIPANT AND VEHICLE SAFETY LIES WITH THE PARTICIPANT.