



WINTERS PERFORMANCE

AUTOMATIC TRANSMISSION

COMPONENTS CATALOG

CATALOG #MP3, VOL. 3



HOURS 8:30 - 5:30 EST Monday - Friday
ADDRESS 1580 Trolley Road York, PA 17408 USA
PHONE 717-764-8269
FAX 717-764-8017
WEB www.wintersperformance.com

At Winters Performance, our mission is to offer unsurpassed quality control and customer service. We also realize it is all for naught if the product is not on the shelf. We want to be the company you like doing business with.

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 can not 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, obsolete, damaged, used or altered merchandise.

ALL RETURNED MERCHANDISE MUST INCLUDE:

- RA# clearly written on outside of box as well as:
 - Customer number, name and phone number
 - Copy of invoice
 - Written explanation for cause of return
 - Whether return is for replacement, credit or refund

Returned merchandise is subject to the following restocking fees (except sellers error):

- 1-90 days = 15%
- 91 days - 6 months = 25%
- NO RETURNS AFTER 6 MONTHS
- Returns must be freight pre-paid (except sellers error).
- Returned parts must be packaged properly to avoid damage.
- Shipping damages must be reported immediately to your carrier.
- Shortage claims must be reported immediately.
- Save your cartons.

TABLE OF CONTENTS

Sidewinder Standard Shifter	2-3	Powerglide Planetary Carrier	22-23
Sidewinder Lockout Shifter	4-5	Planetary Carrier Gear Sets	24-25
Gate Plates	6-7	Planetary Carrier Housings & Shafts	26
Shifter Mounting Options	8	Powerglide HD Tail Housing	27
Safety Switches	9	Powerglide Drive Assembly	28-29
Shifter Options	10	Powerglide Band Apply	30-31
Shifter Conversion Kits	11	Powerglide Components	32
Shifter Exploded Views	12-15	Miscellaneous Components	33
Turbo-Hydro 400 Valve Body	16-18	Turbo-Hydro 400 Components	34-35
C-6 Valve Body	19	Clutch Hydro Kit	36
C-4 valve Body	20	Shifter Installation Instructions	37-51
Valve Body Separator Plates & Gaskets	21	Drive Assembly Installation Instructions	52

HOW TO ORDER



Determine Your Base Shifter Assembly

Our Sidewinder Shifter comes completely assembled in a console with a five foot cable and mounting hardware. Select from either a Standard (Pages 2-3) or Lockout (Pages 4-5) Style Assembly based on your application.

AVAILABLE ASSEMBLIES		FOR REFERENCE ONLY INCLUDED IN ASSEMBLIES		
SHIFTER P/N	APPLICATION	GATE PLATE	INSTALL KIT	DECAL
107-1	Turbo-Hydro 400 Stock Shift Pattern ('65 & Later)	1031	1095	6018-04
107-2	Turbo-Hydro 400 Reverse Shift Pattern ('65 & Later)	1032	1095	6018-03
157-1	Turbo-Hydro 350 Stock Shift Pattern ('69 & Later)	1031	1595	6018-04
157-2	Turbo-Hydro 350 Reverse Shift Pattern ('69 & Later)	1032	1595	6018-03
177-1	400R4 & 4L60E Stock Shift Pattern	4013	4095	6018-09
187-1	480E Stock Shift Pattern	4013	1495	6018-09
197-1	480E LCT1000, 2000 & 2400	4013	1395	6018-09
207-1	700 Torqueflite TF-8 Stock Shift Pattern ('66 & Later)	2027	2095	6018-06
207-1	American Motors Stock Shift Pattern ('72 & Later)	2027	2095	6018-06
207-2	700 Torqueflite TF-8 Reverse Shift Pattern ('66 & Later)	2028	2095	6018-05
207-2	American Motors Reverse Shift Pattern ('72 & Later)	2028	2095	6018-05
257-1	900 & 999 Torqueflite TF-6 Stock Shift Pattern	2027	2795	6018-06
257-2	900 & 999 Torqueflite TF-6 Reverse Shift Pattern	2028	2795	6018-05
307-1	Ford' C-6 Stock Shift Pattern ('66 & Later)	3014	3095	6018-02
307-2	Ford' C-6 Reverse Shift Pattern ('66 & Later)	3015	3095	6018-01
317-1	Ford' AOD Stock Shift Pattern	3286	3295	6018-11
327-1	Ford' AODE & 4R70E Stock Shift Pattern	3286	3495	6018-11
337-1	Ford' E4OD & 4R100 Stock Shift Pattern	3286	3395	6018-11
357-1	Ford' C-4 Stock Shift Pattern ('64 & Later)	3014	3595	6018-02
357-2	Ford' C-4 Reverse Shift Pattern ('64 & Later)	3015	3595	6018-01
507-1	Powerglide Stock Shift Pattern	6127	5595	6018-07
507-2	Powerglide Reverse Shift Pattern	6128	5595	6018-08
607-1	Toyota' A340 & JEEP' AW4	12181	6027	6018-13

Options (If Applicable)

Throughout this catalog you will find a number of Options, highlighted in blue, to customize your shifter. When ordering, simply add these Option Numbers to your Base Assembly Part Number.

SHIFTER OPTIONS

BUTTON SHIFTER CONVERSIONS

These conversion kits feature a hollow shift shaft that provides the switch wires a convenient path to the underside of the console.

P/N 4712
Standard Shift

P/N 4712S
Short Shift

OPTION 9111

P/N 4712T
Standard Shift

P/N 4712TS
Short Shift

OPTION 9117

P/N 4712B
Standard Shift

OPTION 9118

CABLE LENGTHS

Original style, heavy duty cables feature 1/4" - 3/8" thread on both ends with 2" of travel.

LENGTH	P/N	OPTION	LENGTH	P/N	OPTION
Less Cable	---	9102-0	8 Foot	9102-34	9102-35
4 Foot	9102-41	9102-42	10 Foot	9102-36	9102-37
5 Foot, Standard	9102-43	9102-44	12 Foot	9102-38	9102-39
6 Foot	9102-71	9102-72	14 Foot	9102-40	9102-41

EXAMPLE ORDER

107-1 Turbo-Hydro 400 Stock Shift Pattern ('65 & Later) Standard Shifter

↑ **Your Base Shifter Assembly Part Number**

9112-1032-1..... Rock Crawler Reverse Pattern Gate Plate Substitution

9110-96 8 Foot Cable Substitution

↑ **If Applicable, Your Selected Option Numbers**

SIDEWINDER SHIFTER

SIDEWINDER

STANDARD SHIFTER

A responsiveness that puts you far out ahead of your competition... the sureness that snaps you into the gear you want, when you want it... the kind of ruggedness that lets you slam it into gear without the fear of jamming or springing the mechanism... that's the Sidewinder Shifter for you! It's so well built, so finely engineered, so beautifully designed that you know at once... it has to be by Winters®.



The Sidewinder is fail-safe! It's mechanically impossible to accidentally shift into reverse from any forward gear. A sturdy, steel guard bars the shifting rod from all other positions except first, second or third. When you want reverse, only you can put it there. The Sidewinder can be installed on any street, strip or off road transmission. It is available in both conventional and reverse shift patterns. Our Standard Shifter comes completely assembled in a console with a five foot cable and mounting hardware. A number of options are available to tailor your application.



AVAILABLE ASSEMBLIES

FOR REFERENCE ONLY
INCLUDED IN ASSEMBLIES

SHIFTER P/N	APPLICATION	GATE PLATE	INSTALL KIT	DECAL
107-1	Turbo-Hydro 400 Stock Shift Pattern ('65 & Later)	1031	1095	6018-04
107-2	Turbo-Hydro 400 Reverse Shift Pattern ('65 & Later)	1032	1095	6018-03
157-1	Turbo-Hydro 350 Stock Shift Pattern ('69 & Later)	1031	1595	6018-04
157-2	Turbo-Hydro 350 Reverse Shift Pattern ('69 & Later)	1032	1595	6018-03
177-1	700R4 & 4L60E Stock Shift Pattern	4013	4095	6018-09
187-1	4L80E Stock Shift Pattern	4013	1495	6018-09
197-1	Allison® LCT1000, 2000 & 2400 Stock Shift Pattern	4013	1195	6018-09
207-1	727 Torqueflite TF-8 Stock Shift Pattern ('66 & Later)	2027	2095	6018-06
207-1	American Motors Stock Shift Pattern ('72 & Later)	2027	2095	6018-06
207-2	727 Torqueflite TF-8 Reverse Shift Pattern ('66 & Later)	2028	2095	6018-05
207-2	American Motors Reverse Shift Pattern ('72 & Later)	2028	2095	6018-05
257-1	904 & 999 Torqueflite TF-6 Stock Shift Pattern	2027	2795	6018-06
257-2	904 & 999 Torqueflite TF-6 Reverse Shift Pattern	2028	2795	6018-05
307-1	Ford® C-6 Stock Shift Pattern ('66 & Later)	3014	3095	6018-02
307-2	Ford® C-6 Reverse Shift Pattern ('66 & Later)	3015	3095	6018-01
317-1	Ford® AOD Stock Shift Pattern	3286	3295	6018-11
327-1	Ford® AODE & 4R70E Stock Shift Pattern	3286	3495	6018-11
337-1	Ford® E4OD & 4R100 Stock Shift Pattern	3286	3395	6018-11
347-1	Ford® A4LD Stock Shift Pattern	3286	3027	6018-11
357-1	Ford® C-4 Stock Shift Pattern ('64 & Later)	3014	3595	6018-02
357-2	Ford® C-4 Reverse Shift Pattern ('64 & Later)	3015	3595	6018-01
507-1	Powerglide Stock Shift Pattern	6127	5595	6018-07
507-2	Powerglide Reverse Shift Pattern	6128	5595	6018-08
607-1	Toyota® A340 & JEEP® AW4	12181	6027	6018-13

SIDEWINDER

LOCKOUT SHIFTER

A responsiveness that puts you far out ahead of your competition... the sureness that snaps you into the gear you want, when you want it... the kind of ruggedness that lets you slam it into gear without the fear of jamming or springing the mechanism... that's the Sidewinder Shifter for you! It's so well built, so finely engineered, so beautifully designed that you know at once... it has to be by Winters®.



The Sidewinder is fail-safe! It's mechanically impossible to accidentally shift into reverse from any forward gear. A sturdy, steel guard bars the shifting rod from all other positions except first, second or third. When you want reverse, only you can put it there.

The Sidewinder can be installed on any street, strip or off road transmission. It is available in both conventional and reverse shift patterns. Our Lockout Shifter features an extra mechanism that must be pulled up towards the knob in order to shift in and out of the reverse and park positions. This shifter also includes a safety switch that requires you to have the shifter in the park position in order to start your vehicle. These features satisfy all sanctioning body's rules and regulations.



AVAILABLE ASSEMBLIES

FOR REFERENCE ONLY
INCLUDED IN ASSEMBLIES

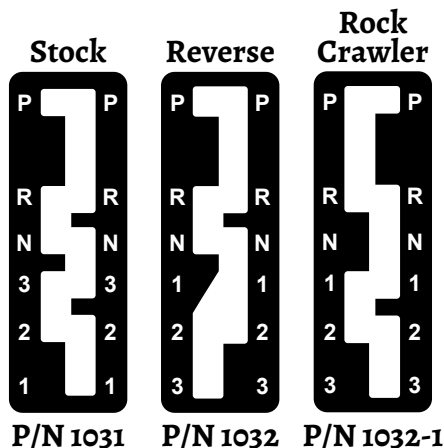
SHIFTER P/N	APPLICATION	GATE PLATE	INSTALL KIT	DECAL
107-1B	Turbo-Hydro 400 Stock Shift Pattern ('65 & Later)	1091	1095	6018-04
107-2B	Turbo-Hydro 400 Reverse Shift Pattern ('65 & Later)	1092	1095	6018-03
157-1B	Turbo-Hydro 350 Stock Shift Pattern ('69 & Later)	1091	1595	6018-04
157-2B	Turbo-Hydro 350 Reverse Shift Pattern ('69 & Later)	1092	1595	6018-03
177-1B	700R4 & 4L60E Stock Shift Pattern	4014	4095	6018-09
187-1B	4L80E Stock Shift Pattern	4014	1495	6018-09
197-1B	Allison® LCT1000, 2000 & 2400 Stock Shift Pattern	4014	1195	6018-09
207-1B	727 Torqueflite TF-8 Stock Shift Pattern ('66 & Later)	2091	2095	6018-06
207-1B	American Motors Stock Shift Pattern ('72 & Later)	2091	2095	6018-06
207-2B	727 Torqueflite TF-8 Reverse Shift Pattern ('66 & Later)	2092	2095	6018-05
207-2B	American Motors Reverse Shift Pattern ('72 & Later)	2092	2095	6018-05
257-1B	904 & 999 Torqueflite TF-6 Stock Shift Pattern	2091	2795	6018-06
257-2B	904 & 999 Torqueflite TF-6 Reverse Shift Pattern	2092	2795	6018-05
307-1B	Ford® C-6 Stock Shift Pattern ('66 & Later)	3091	3095	6018-02
307-2B	Ford® C-6 Reverse Shift Pattern ('66 & Later)	3092	3095	6018-01
317-1B	Ford® AOD Stock Shift Pattern	3287	3295	6018-11
327-1B	Ford® AODE & 4R70E Stock Shift Pattern	3287	3495	6018-11
337-1B	Ford® E4OD & 4R100 Stock Shift Pattern	3287	3395	6018-11
347-1B	Ford® A4LD Stock Shift Pattern	3287	3027	6018-11
357-1B	Ford® C-4 Stock Shift Pattern ('64 & Later)	3091	3595	6018-02
357-2B	Ford® C-4 Reverse Shift Pattern ('64 & Later)	3092	3595	6018-01
507-1B	Powerglide Stock Shift Pattern	5583	5595	6018-07
507-2B	Powerglide Reverse Shift Pattern	5584	5595	6018-08

GATE PLATES

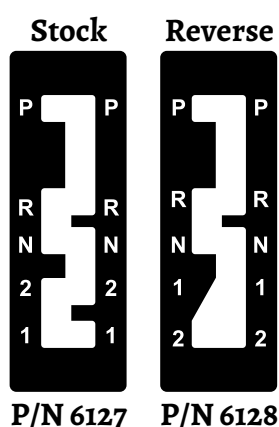
STANDARD SHIFTER

NOTE: Any Stock Gate Plate is available with a Reverse Decal by adding 'R' to the end of the P/N. Any Reverse Gate Plate is available with a Stock Decal by adding 'S' to the end of the P/N.

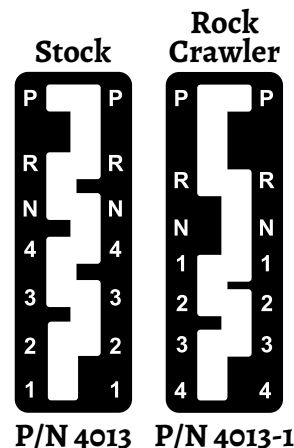
TURBO-HYDRO 400 & 350



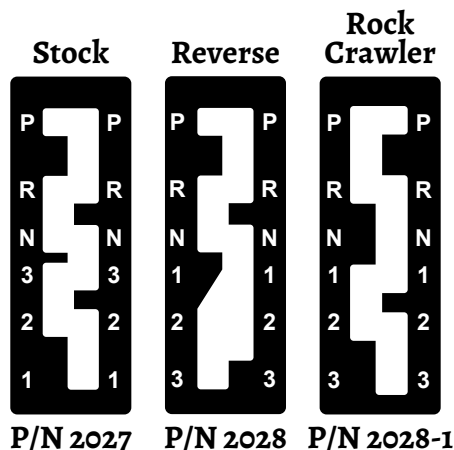
POWERGLIDE



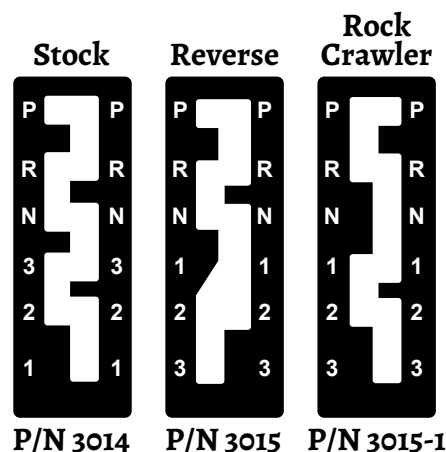
TURBO-HYDRO 700R4, 4L60E, 4L80E, ALLISON® LTC1000, 2000 & 2400



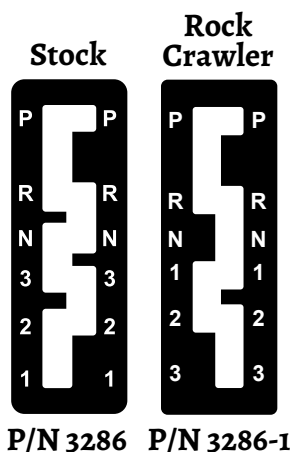
**727, 904 & 999
TORQUEFLITE TF-6 & TF-8 &
AMERICAN MOTORS**



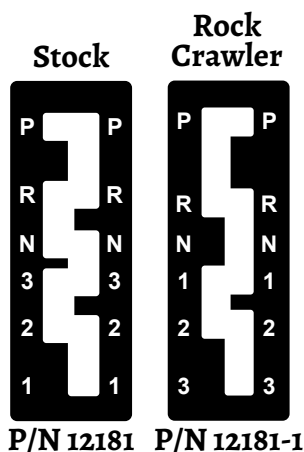
FORD® C-6 & C-4



FORD® AOD, AODE, 4R70E, E4OD, 4R100 & A4LD



TOYOTA® A340 & JEEP® AW4



OPTION 9112-XXXX

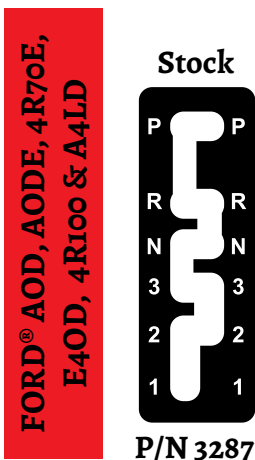
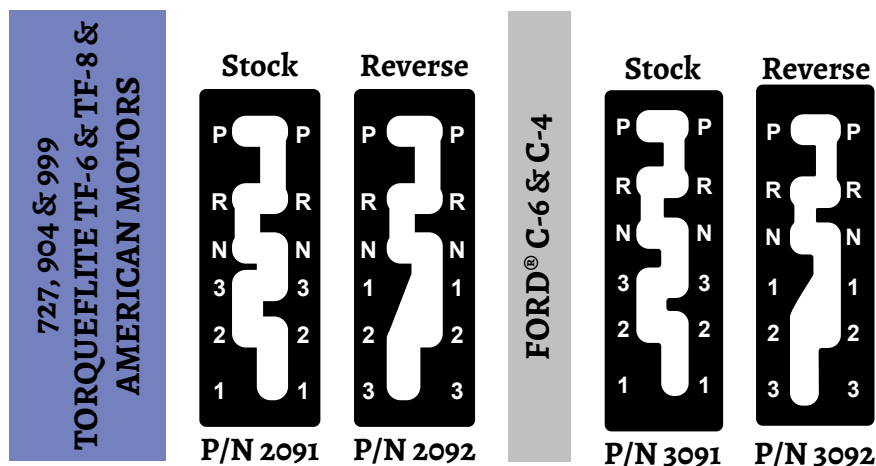
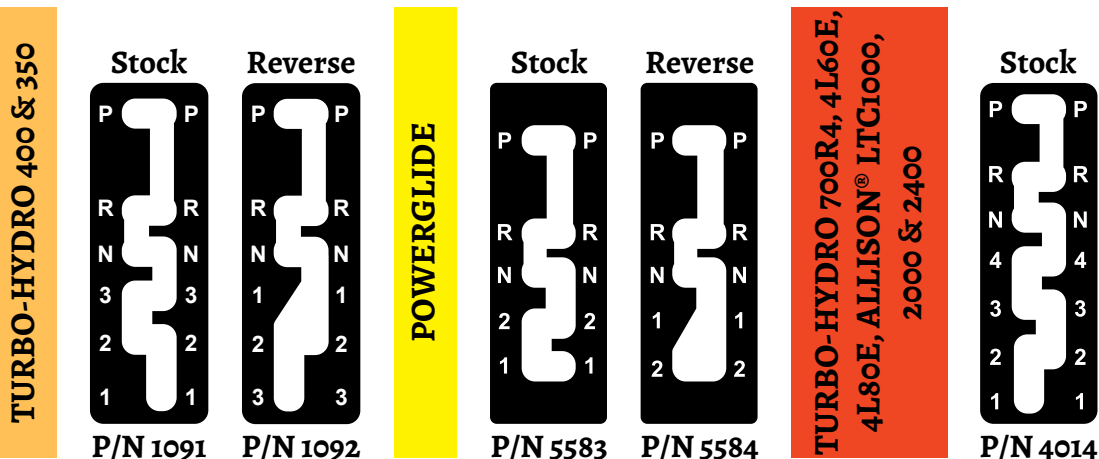
Add to Shifter P/N to
substitute Gate Plate

Example: P/N 107-1
9112-1032-1

GATE PLATES

LOCKOUT SHIFTER

NOTE: Any Stock Gate Plate is available with a Reverse Decal by adding 'R' to the end of the P/N. Any Reverse Gate Plate is available with a Stock Decal by adding 'S' to the end of the P/N.



MOUNTING OPTIONS

STANDARD CONSOLE

P/N 5070



SWITCH MOUNT CONSOLE

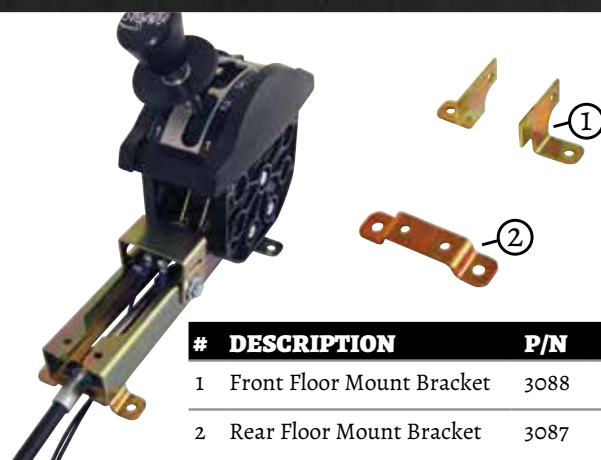
P/N 1458

OPTION 8258



COMPETITION SHIFTER

OPTION 8257



UNIVERSAL MOUNT SIDE PLATE

P/N 6636-02 (2 Required)

OPTION 9103

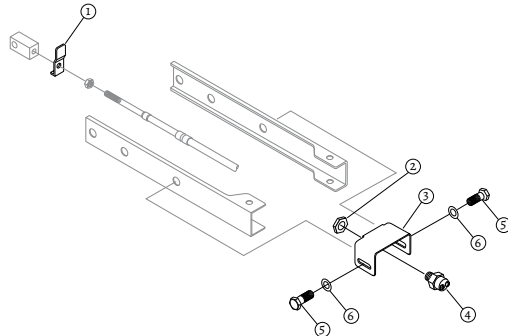


SAFETY SWITCH



KIT P/N 1089

This safety switch operates in park only. When properly installed, it requires the shifter to be in the park position in order for the vehicle to be started.



#	DESCRIPTION	P/N	QTY
1	Contact Bracket	1087	1
2	Pal Nut	7951	1
3	Switch Bracket	1086	1
4	Safety Switch	1088	1
5	1/4-20 x 1/2" HHCS	7941	2
6	1/4" Flatwasher	7131	2

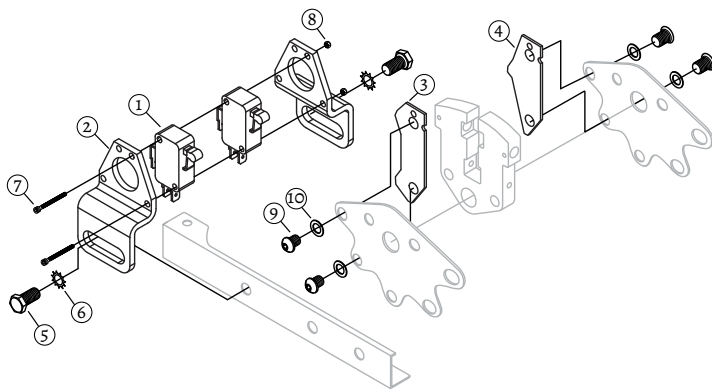
DOUBLE SAFETY SWITCH

This safety switch has one switch that operates in park and neutral, while the other operates in reverse. Choose a kit from the following that best suits your application.



KIT P/N DESCRIPTION

1089-21	Turbo-Hydro 400 & 350
1089-211	Ford® AOD, AODE, 4R70E, E4OD, 4R100, & A4LD
1089-213	Toyota® A340 & JEEP® AW4
1089-23	727, 904 & 999 Torqueflite TF-6, TF-8 & American Motors
1089-25	Ford® C-6 & C-4
1089-27	Powerglide
1089-29	Turbo-Hydro 700R4, 4L60E, 4L80E, Allison® LTC1000, 2000 & 2400



#	DESCRIPTION	P/N	QTY
1	Switch	12118	2
2	Bracket, Switch	12108	2
3*	Cam, Park & Neutral	XXXX	1
4*	Cam, Reverse	XXXX	1
5	1/4-20 x 1 1/2" HHCS	7941	2
6	1/4" Int/Ext Lockwasher	7937	2
7	4-40 x 1 1/4" SHCS	8995	2
8	4-40 Nyloc Nut	8996	2
9	5/16-24 x 3/8" BHCS	8391	4
10	5/16" Washer	7196	4

* Cam P/N varies depending on Kit # used. Please call if a replacement is needed.

SAFETY SWITCHES

SHIFTER OPTIONS

BUTTON SHIFTER CONVERSIONS

These conversion kits feature a hollow shift shaft that provides the switch wires a convenient path to the underside of the console.

ALUMINUM SHIFT KNOB, STANDARD SHIFTER



P/N 4712

Standard Shaft

P/N 4712S

Short Shaft

**OPTION
9111**

"T" HANDLE SHIFT KNOB, STANDARD SHIFTER



P/N 4712T

Standard Shaft

P/N 4712TS

Short Shaft

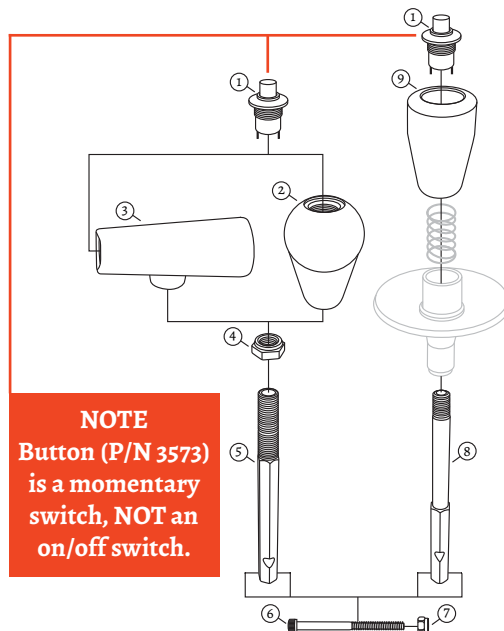
**OPTION
9111T**

ALUMINUM SHIFT KNOB, LOCKOUT SHIFTER



P/N 4712B

**OPTION
9111B**



NOTE
Button (P/N 3573)
is a momentary
switch, NOT an
on/off switch.

#	DESCRIPTION	P/N	QTY
1	Button	3573	1
2	Aluminum Shift Knob	2100-02	1
3	"T" Style Shift Knob	2100-02T	1
4	Locknut	4668	1
5	Shaft, Standard, 5 3/8"	5941-02	1
5	Shaft, Short, 4 3/8"	5941-02S	1
6	#10-24 x 2 1/2" SHCS	7967	1
7	#10-24 Nylon Locknut	7968	1
LOCKOUT SHIFTER			
8	Shaft, 5 3/8"	1097	1
9	Aluminum Shift Knob, Lockout	12015	1

CABLE LENGTHS

Original style, heavy duty cables feature 1/4" - 28" thread on both ends with 3" of travel.



LENGTH	P/N	OPTION
Less Cable	-----	9110-0
4 Foot	6014-48	9110-48
5 Foot, Standard	6014-60	-----
6 Foot	6014-72	9110-72

LENGTH	P/N	OPTION
8 Foot	6014-96	9110-96
10 Foot	6014-120	9110-120
12 Foot	6014-144	9110-144

CONVERSION KITS

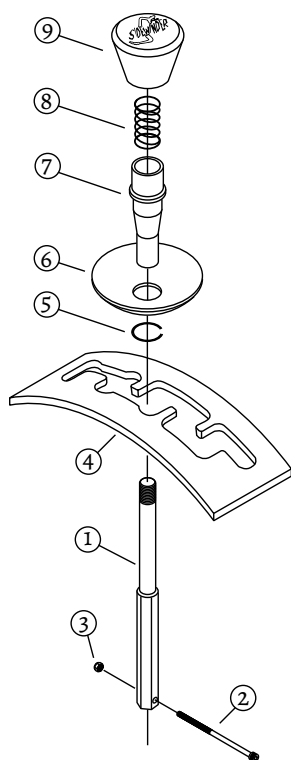
CONVERTS STANDARD SHIFTER TO LOCKOUT SHIFTER

*Choose from the
Kits listed at right.*

APPLICATION

KIT P/N

Turbo-Hydro 350-400 Stock Shift Pattern	1490-01
Turbo-Hydro 350-400 Reverse Shift Pattern	1490-02
Torqueflite 727, 904, 999 & American Motors Stock Shift Pattern	1490-03
Torqueflite 727, 904, 999 & American Motors Reverse Shift Pattern	1490-04
Ford® C-4 & C-6 Stock Shift Pattern	1490-05
Ford® C-4 & C-6 Reverse Shift Pattern	1490-06
Powerglide Stock Shift Pattern	1490-07
Powerglide Reverse Shift Pattern	1490-08
Turbo-Hydro 700R4, 4L60E, 4L80E & Allison Stock Shift Patterns	1490-09
Turbo-Hydro 700R4, 4L60E, 4L80E & Allison Reverse Shift Patterns	1490-10
Ford® AOD, AODE, 4R70E, E4OD, 4R100 & A4LD Stock Shift Pattern	1490-11
Ford® AOD, AODE, 4R70E, E4OD, 4R100 & A4LD Reverse Shift Pattern	1490-12



#	DESCRIPTION	P/N	QTY
1	Shifter Shaft	1097	1
2	#10-24 x 2 1/2" SHCS	7698	1
3	#10-24 Nylon Locknut	7968	1
4	Gate Plate		1
	Turbo-Hydro Stock Pattern	1091	
	Turbo-Hydro Reverse Pattern	1092	
	Torqueflite Stock Pattern	2091	
	Torqueflite Reverse Pattern	2092	
	Ford® Stock Pattern	3091	
	Ford® Reverse Pattern	3092	
	Ford® AODE & E4OD Stock Pattern	3287	
	Turbo-Hydro 700R4 Stock Pattern	4014	
	Powerglide Stock Pattern	5583	
	Powerglide Reverse Pattern	5584	
5	Retaining Ring	7670	1
6	Collar	1094	1
7	Lockout Sleeve	1093	1
8	Lockout Spring	1098	1
9	Shifter Knob, Specify Color	1096	1

A. Remove old shaft and gate plate. Replace with new shifter shaft using #10-24 x 2 1/2" SHCS (#2) and locknut (#3). **DO NOT USE** roll pin from old assembly.

B. Install new gate plate (#4).

C. Install lockout sleeve assembly (#'s 5, 6 & 7). This sleeve must slide freely on the shifter shaft.

D. Install spring (#8) and then shifter knob (#9). After knob is in place, recheck the movement of the lockout sleeve. It **MUST** slide freely on the shifter shaft.

STANDARD SHIFTER



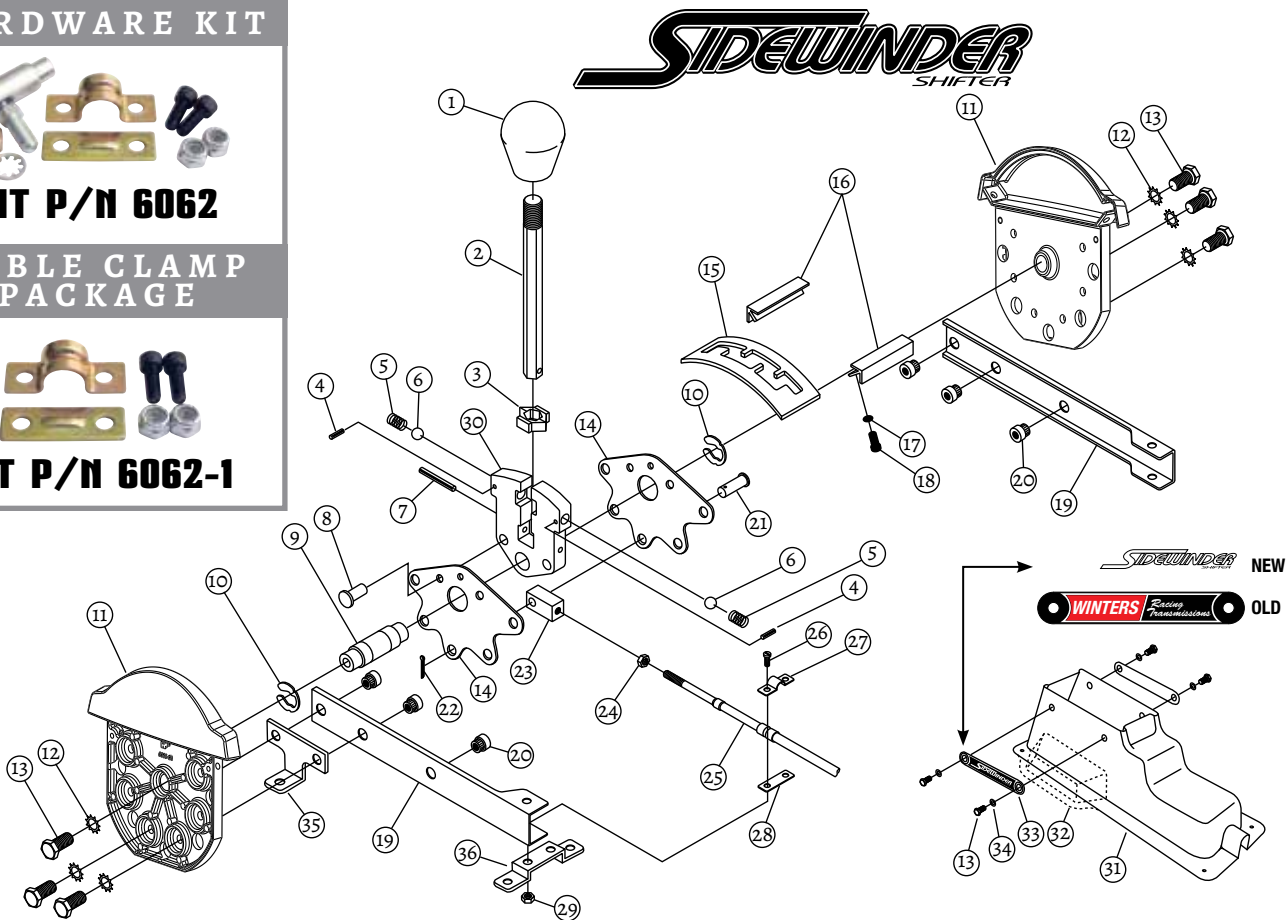
HARDWARE KIT

KIT P/N 6062

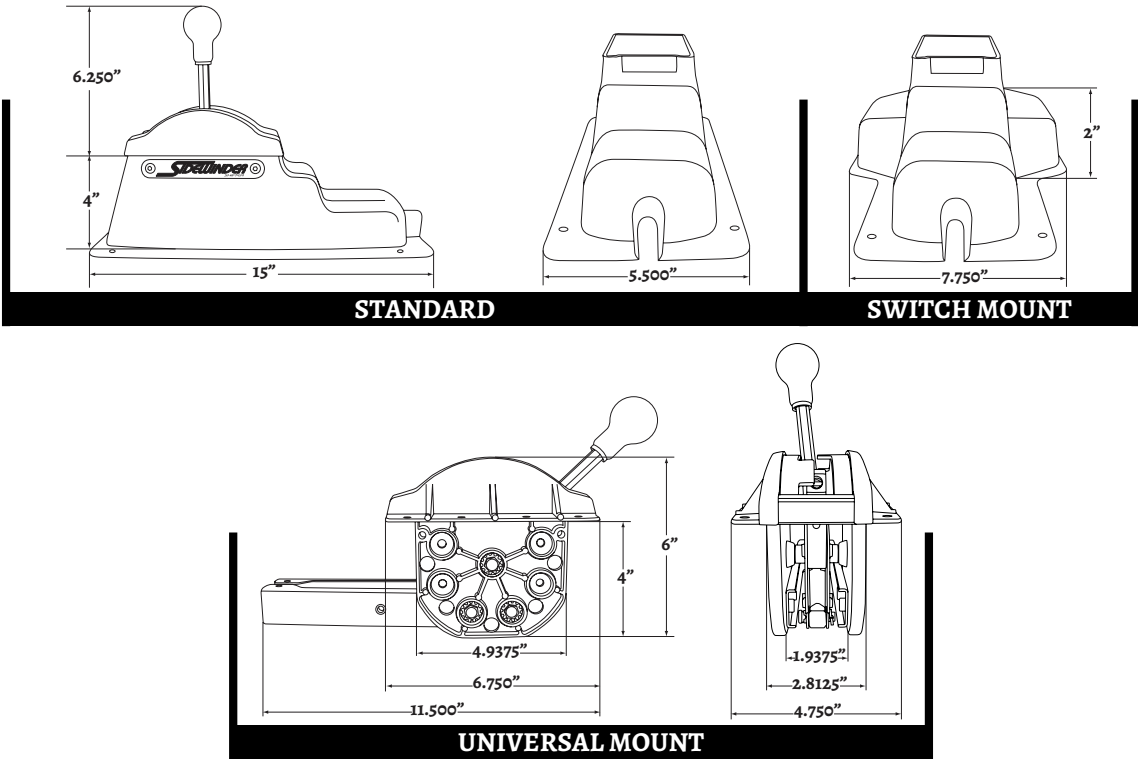


CABLE CLAMP PACKAGE

KIT P/N 6062-1



CONSOLE DIMENSIONS



#	DESCRIPTION	P/N	QTY	#	DESCRIPTION	P/N	QTY
1	Shifter Knob	2100	1	19	Side Bracket	6643	2
2	Shifter Shaft	5941	1	20	Self-Clinching Nuts	7950	6
3	Nylon Bushing	7887	1	21	Clevis Pin	7888	1
4	1/8" x 5/8" Roll Pin	7966	2	22	Cotter Pin	7139	1
5	Detent Spring	1112	2	23	Clevis	6647	1
6	3/8" Detent Ball	7755	2	24	1/4-28 Jam Nut	7926	1
7	3/16" x 1 1/2" Roll Pin	7945	1	25	Cable	See Pg. 10	1
8	1/4" x 7/8" Rivet	7965	2	26	#10-32 x 1/2" SHCS	7943	2
9	Cross Pin	6644	1	27	Cable Clamp	1312	1
10	E-Clip	7671	2	28	Cable Clamp Shim	1313	1
11	Side Plate	6636	2	29	#10-32 ESNA Locknut	7944	1
12	1/4" Int/Ext Tooth Lock Washer	7937	6	30	Shifter Shaft Housing	6637	1
13	1/4-20 x 1/2" HHCS	7941	10	31	Console	5070	1
14	Cable Control Side Plate	6648	2	32	Switch Mount Console	1458	1
15	Gate Plate	See Pg. 6	1	33	Name Plate	6022	2
16	Gate Plate Retainer	6875	2	34	1/4" Washer	7131	4
17	#10 Lock Washer	7128	4	35*	Shifter Bracket, L Style	3088	1
18	#10-24 x 3/8" SHCS	7938	4	36*	Shifter Bracket, U Style	3087	1

* Optional Item

LOCKOUT SHIFTER

HARDWARE KIT



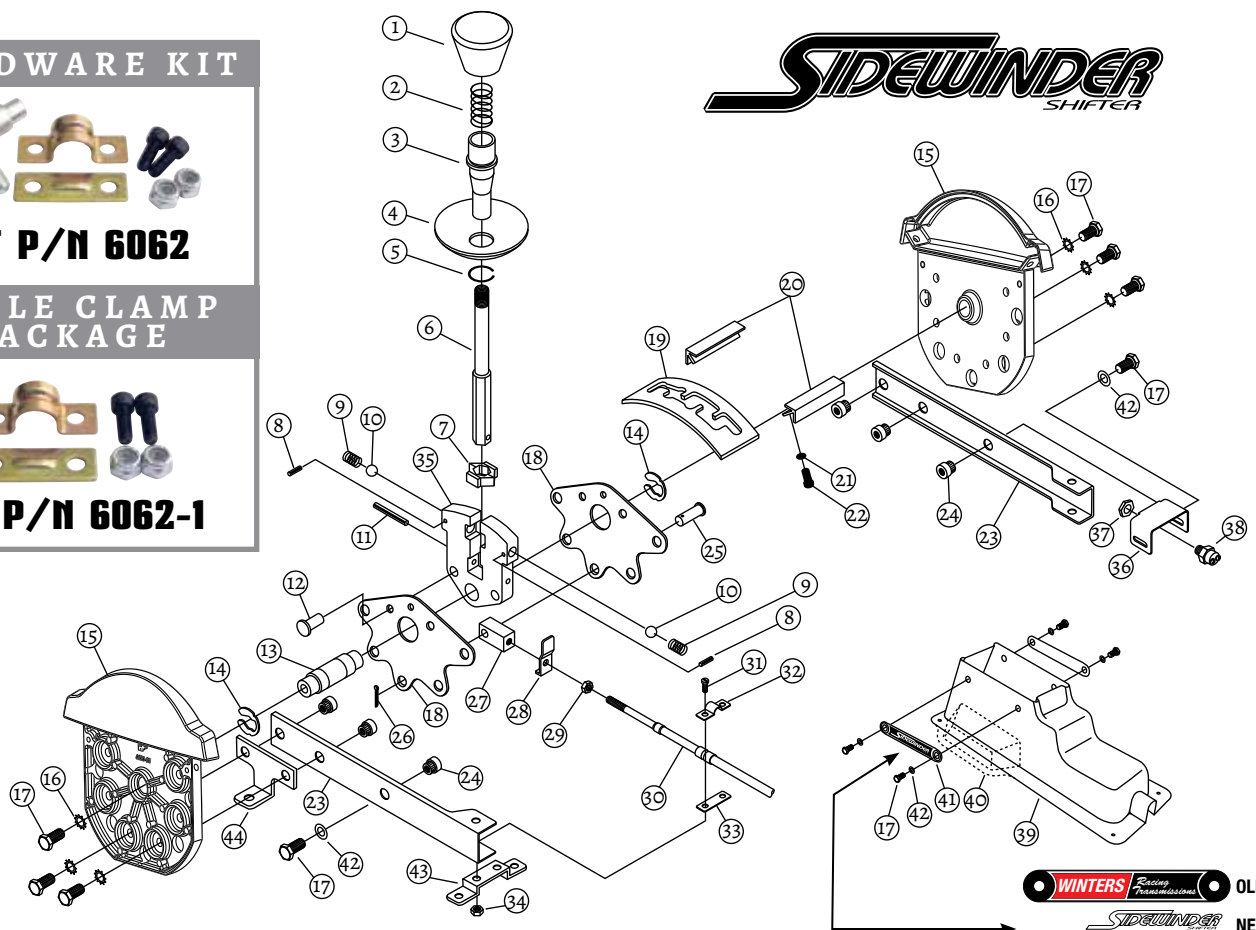
KIT P/N 6062

CABLE CLAMP PACKAGE

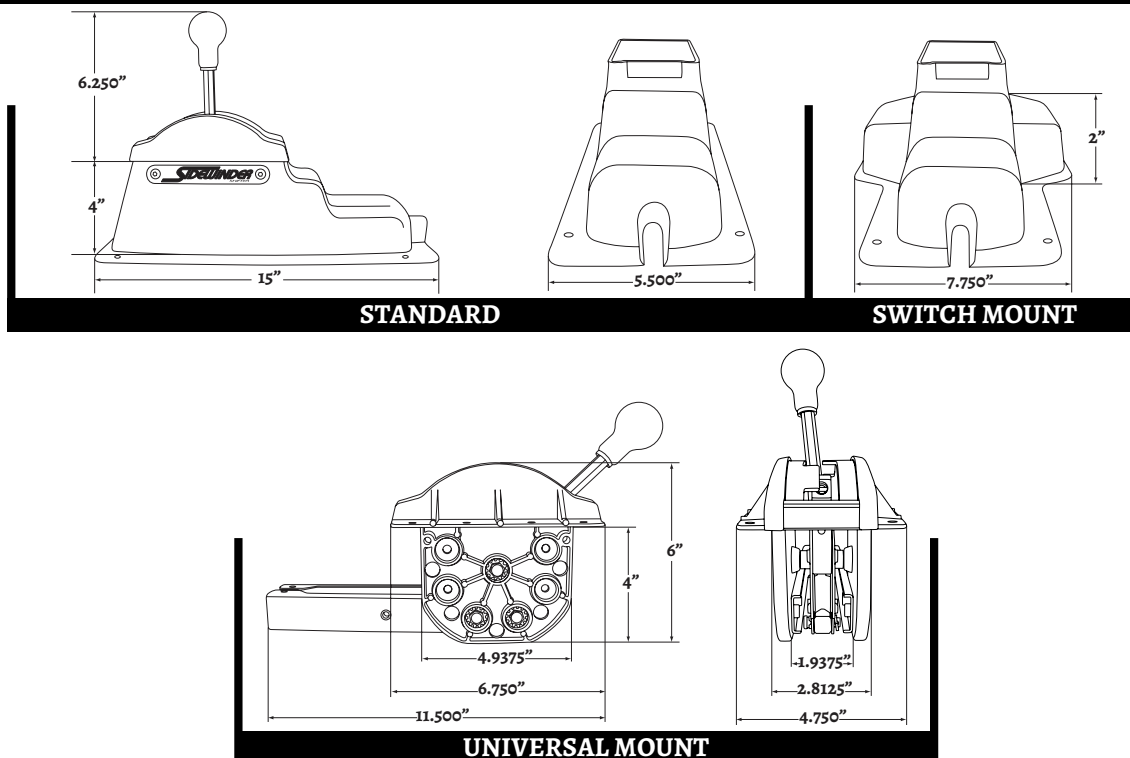


KIT P/N 6062-1

SIDEWINDER
SHIFTER



CONSOLE DIMENSIONS



#	DESCRIPTION	P/N	QTY	#	DESCRIPTION	P/N	QTY
1	Shifter Knob	1096	1	23	Side Bracket	6643	2
2	Lockout Spring	1098	1	24	Self-Clinching Nuts	7950	6
3	Lockout Sleeve	1093	1	25	Clevis Pin	7888	1
4	Collar	1094	1	26	Cotter Pin	7139	1
5	Retaining Ring	7670	1	27	Clevis	6647	1
6	Shifter Shaft	1097	1	28	Contact Bracket	1087	1
7	Nylon Bushing	7887	1	29	1/4-28 Jam Nut	7926	1
8	1/8" x 5/8" Roll Pin	7966	2	30	Cable	See Pg. 10	1
9	Detent Spring	1112	2	31	#10-32 x 1/2" SHCS	7943	2
10	3/8" Detent Ball	7755	2	32	Cable Clamp	1312	1
11	3/16" x 1 1/2" Roll Pin	7945	1	33	Cable Clamp Shim	1313	1
12	1/4" x 7/8" Rivet	7965	2	34	#10-32 ESNA Locknut	7944	1
13	Cross Pin	6644	1	35	Shifter Shaft Housing	6637	1
14	E-Clip	7671	2	36	Safety Switch Bracket	1086	1
15	Side Plate	6636	2	37	9/16" Pal Nut	7951	1
16	1/4" Int/Ext Tooth Lock Washer	7937	6	38	Safety Switch	1088	1
17	1/4-20 x 1/2" HHCS	7941	12	39	Console	5070	1
18	Cable Control Side Plate	6648	2	40	Switch Mount Console	1458	1
19	Gate Plate	See Pg. 7	1	41	Name Plate	6022	2
20	Gate Plate Retainer	6875	2	42	1/4" Washer	7131	6
21	#10 Lock Washer	7128	4	43*	Shifter Bracket, U Style	3087	1
22	#10-24 x 3/8" SHCS	7938	4	44*	Shifter Bracket, L Style	3088	1

* Optional Item

VALVE BODIES

TURBO-HYDRO 400 CONVERSION KIT

KIT P/N 1082

Kit includes the following

DESCRIPTION	P/N	QTY	DESCRIPTION	P/N	QTY
Top Gasket	1069	1	Aluminum Plug	1028	1
Separator Plate	1048	1	Steel Plug	1027	1
Bottom Gasket	1068	1	Manual Valve	1046	1
Modulator Plug	1002	1	5/16" Ball	7398	1



Our redesigned valve body is intended for competition only - the shift pattern has been reversed to P R N 1 2 3.

1. The following parts should be removed from the transmission since their use is no longer necessary.

- A. Intermediate over-running band and apply servo parts.
- B. Governor assembly
- C. Governor supply tubes
- D. Replace the modulator with aluminum plug P/N 1002 (retain valve in bore).
- E. Remove all valve body check balls in case except one shown in Figure 1.
- F. Remove center lip seal in direct clutch pack.
- G. Park rod may be retained or removed at your option.

2. Punch out accumulator guide pin in valve body casting.

3. Install furnished 5/16" ball, P/N 7398, in shortest governor passage (closest to manual valve).

4. Substitute modulator on side of transmission case with furnished modulator plug, P/N 1002.

5. Top and bottom valve body gaskets are different - It is imperative that they be put in their proper positions. Compare to drawings in Figure 2 to make certain that holes noted are in gaskets supplied. Note the difference in Figure 2. "B" gasket must be installed between the main case and the separator plate.

FIGURE 1

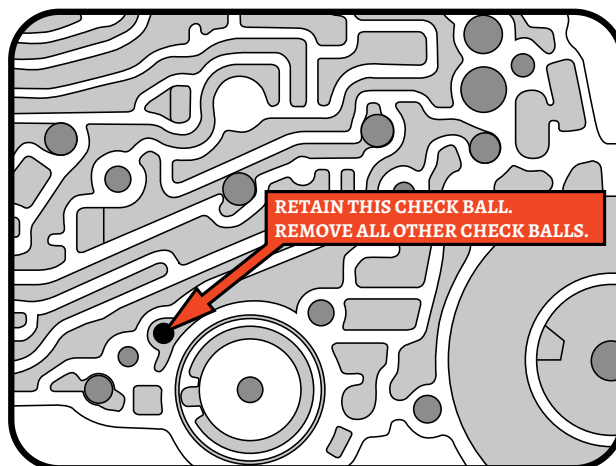
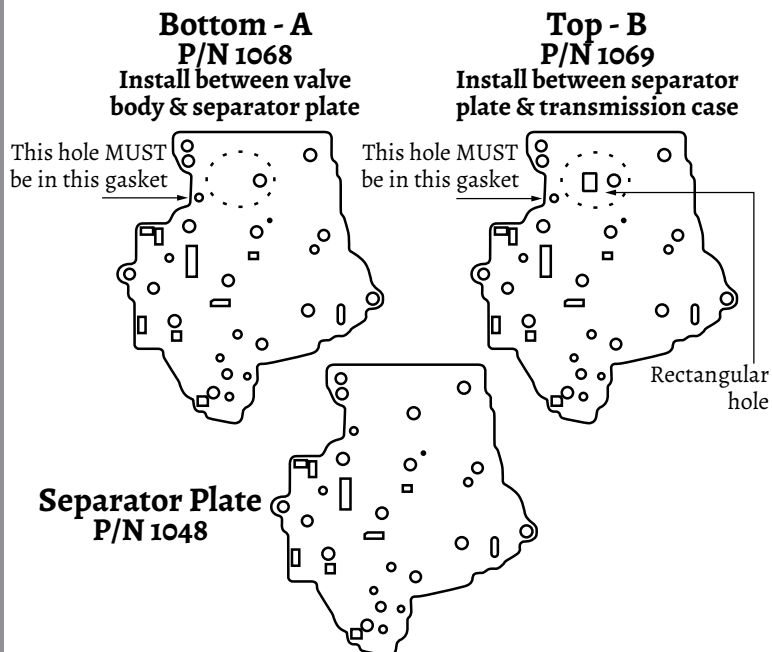
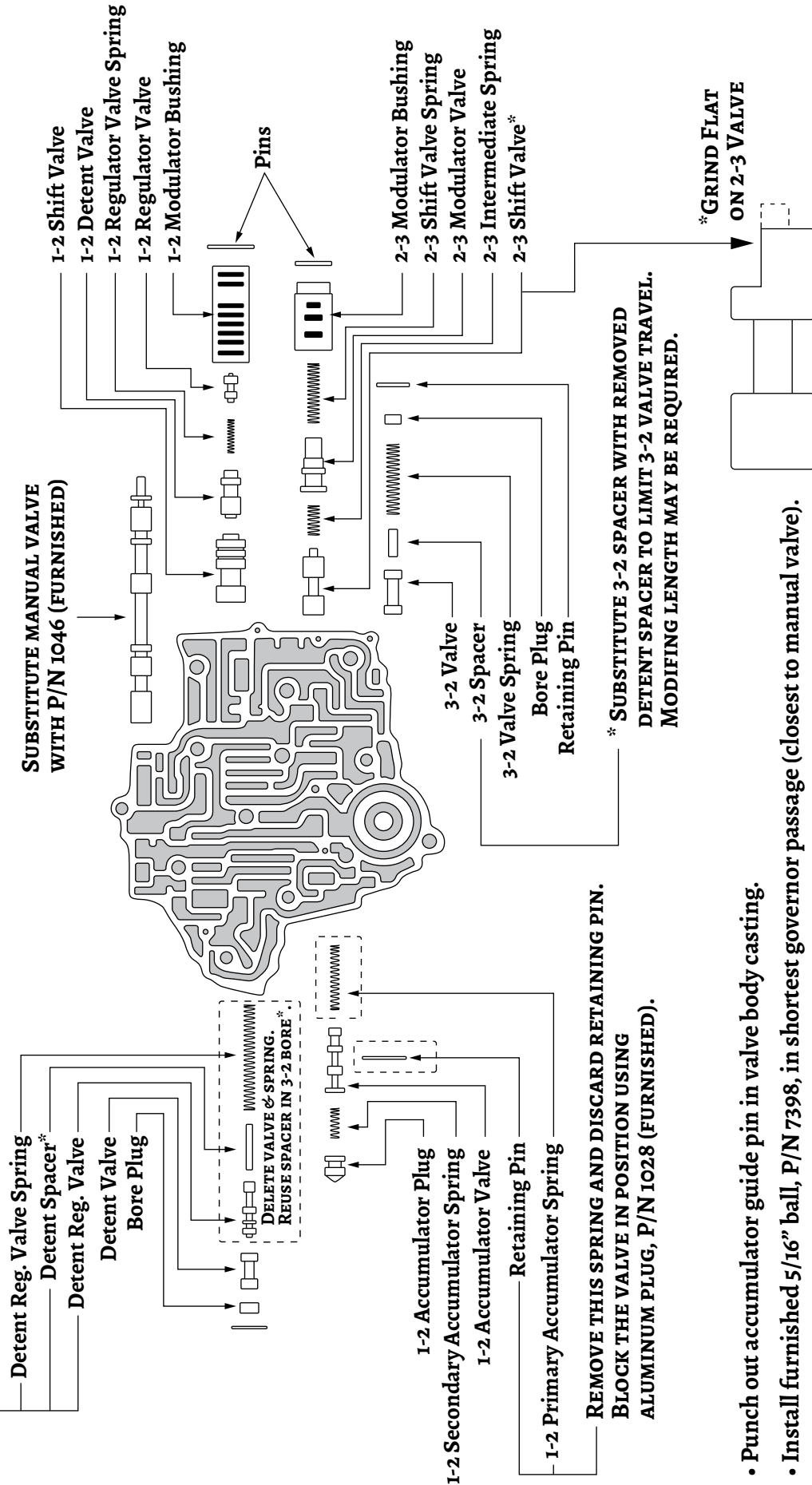


FIGURE 2



DELETE THESE PARTS AND TAP INTO IT'S PLACE,
3/8" DIA. ROD P/N 1027 (FURNISHED),
SO REMAINING PARTS CAN BE INSTALLED.
* REUSE DETENT SPACER IN 3-2 BORE.



- Punch out accumulator guide pin in valve body casting.
- Install furnished 5/16" ball, P/N 7398, in shortest governor passage (closest to manual valve).
- Substitute modulator on side of transmission case with furnished modulator plug, P/N 1002.

VALVE BODIES

TURBO-HYDRO 400 MANUAL VALVE BODY



Installation Instructions - Turbo-Hydro Reverse Pattern Manual Shift Valve Body

This valve body replaces stock cast valve body without alteration, except for removing all check balls in the case on all 1965 and later Turbo-Hydro 400 transmissions.

NOTE: It is necessary to use original manual valve in new aluminum valve body.

CAUTION: Make sure the manual valve has no scores or burrs on the outside surface that may mar the bore in the new aluminum valve body.

If nicks, burrs or scores are present, use a fine oil stone to smooth them so the valve slides through the bore smoothly.

Torque 5/16" bolts to 10 ft. lbs., Torque 1/4" bolts to 8 ft. lbs.

Remove vacuum line from modulator or replace modulator with Winters® P/N 1002, aluminum case plug. In either case, valve must be retained.

Suggested Internal Transmission Modifications

1. Remove front over-run band.
2. Remove middle lip seal in direct (high) clutch drum.
3. Remove governor.
4. Replace original reverse servo release spring and inner piston with special band release spring (P/N 1006), available from Winters®, to further enhance performance and durability of your Turbo-Hydro 400.

We suggest the use of type "F" transmission fluid (Ford®).

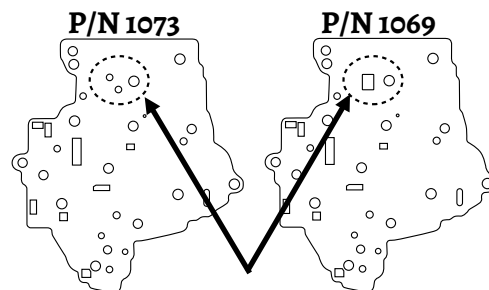
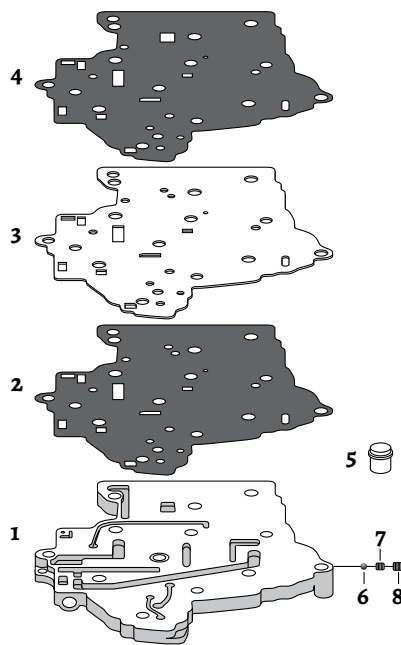
When Winters® special release spring (P/N 1006) is used in servo, stock spring and accumulator piston must be removed.

When our spring is not used and the stock spring and accumulator are used in the stock position, the rings on the accumulator piston must be removed. Otherwise, a no reverse condition will exist at times.

KIT P/N 1042

Kit includes the following

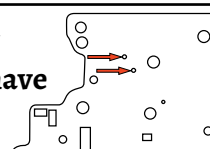
#	DESCRIPTION	P/N	QTY
1	Channel Casting, TH400	1078	1
2	Bottom Gasket	1073	1
3	Separator Plate	1047	1
4	Top Gasket	1069	1
5	Aluminum Case Plug	1002	1
6	Steel Ball	7347	1
7	Ball Seat	5188	1
8	3/8-24 x 1/4" SS	7100	1



NOTE THE DIFFERENCE

Gasket P/N 1069 (square hole) **MUST** be installed between the main case and separator plate.

Separator Plate P/N 1047
Confirm that 1/8" holes have been drilled at arrows.



VALVE BODIES

C-6 MANUAL VALVE BODY



KIT P/N 3040

Kit includes the following

DESCRIPTION	P/N	QTY
Regulator Spring (135 PSI)	3047	1
Regulator Spring (165 PSI)	3048	1
Gasket	3049	1
Separator Plate	3023	1
Channel Casting	3041	1

The C-6 Competition Valve Body Kit is designed to perfectly replace, without alterations, the stock channel casting, gasket and separator plate on all '68 and later valve bodies and also '67 GT series. This results in a manually controllable reversed shift pattern (P R N 1 2 3).

Since the pressure regulator is the **ONLY ACTIVE VALVE** used in the stock main upper body (see Figure 1), all other valves may be optionally discarded or left in place as desired. Valve body may be returned to stock condition in the future by retaining valves.

The governor assembly and modulator are no longer needed. Their removal is optional as is the kickdown rod and lever assembly for passing gear.

Proper reinstallation of the converter check ball and spring is important. This is necessary whether the valve body is used with a conventional converter type transmission or clutch type transmission.

PLEASE NOTE: Two pressure regulator springs are furnished. The 2 1/2" long spring (P/N 3047) produces 135 P.S.I. oil pressure and is to be used on all street and strip transmissions. The 2 1/4" long spring (P/N 3048) produces 165 P.S.I. oil pressure and is used on competition transmissions only. Fuel cars may install one or two 5/16" SAE flatwashers between spring and retainer plate to further increase oil pressure to a maximum of 185 P.S.I. Installation of these springs will require removal of both the stock springs and regulator boost valve assembly.

NOTE: Because of our exclusive oil circuitry, excessive oil pressure is neither necessary nor desirable and has little effect on shift response or shift feel.

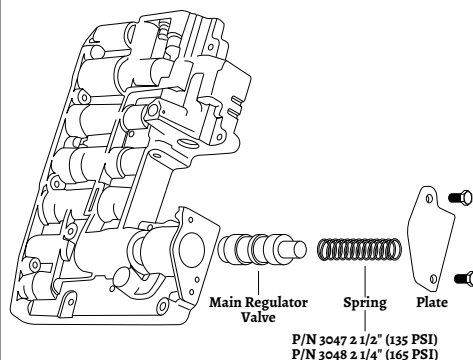
No attempt to further modify the valve body should be made.

Band should be presoaked in type "F" fluid at least two hours prior to installation. Correct band adjustment is one (1) turn off.

While not absolutely essential, we recommend the use of the "F" band apply lever Ford P/N C6AZ-7330E. Also, strut P/N C6AZ-7DO29A. Use servo assembly type "R" (from Cobra Jet®) or type "H" (police interceptor) where applicable.

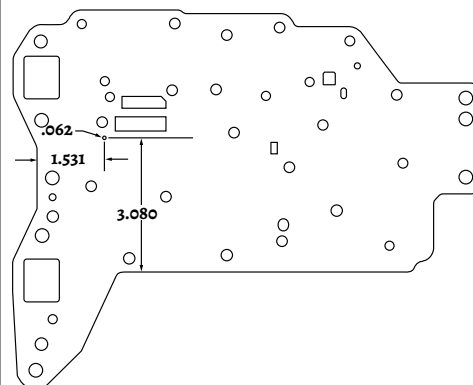
Pressure Regulator Valve Assembly

FIGURE 1



Bleed Hole Position

FIGURE 2



CAUTION: Check plate carefully to make sure the dimensioned bleed hole (.062), shown above, is drilled. This hole **MUST** be drilled as shown.

VALVE BODIES

C-4 MANUAL VALVE BODY



Instructions for 1965 or 1966 C-4 Valve Body must be used.

All items circled in number 1 can be removed from the upper control body.

All items circled in number 2 are discarded and replaced with the pressure regulator spring, P/N 3502, provided.

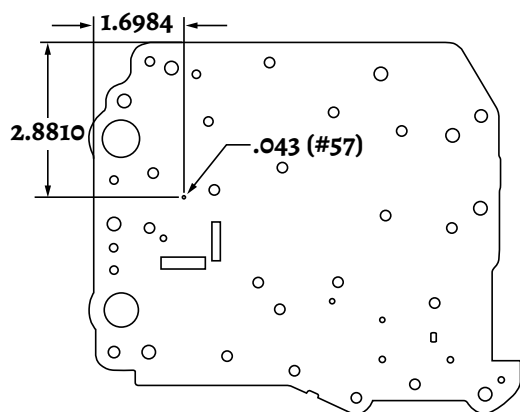
Refer to manufacturers manual for proper installation procedures and torque specifications.

KIT P/N 3540

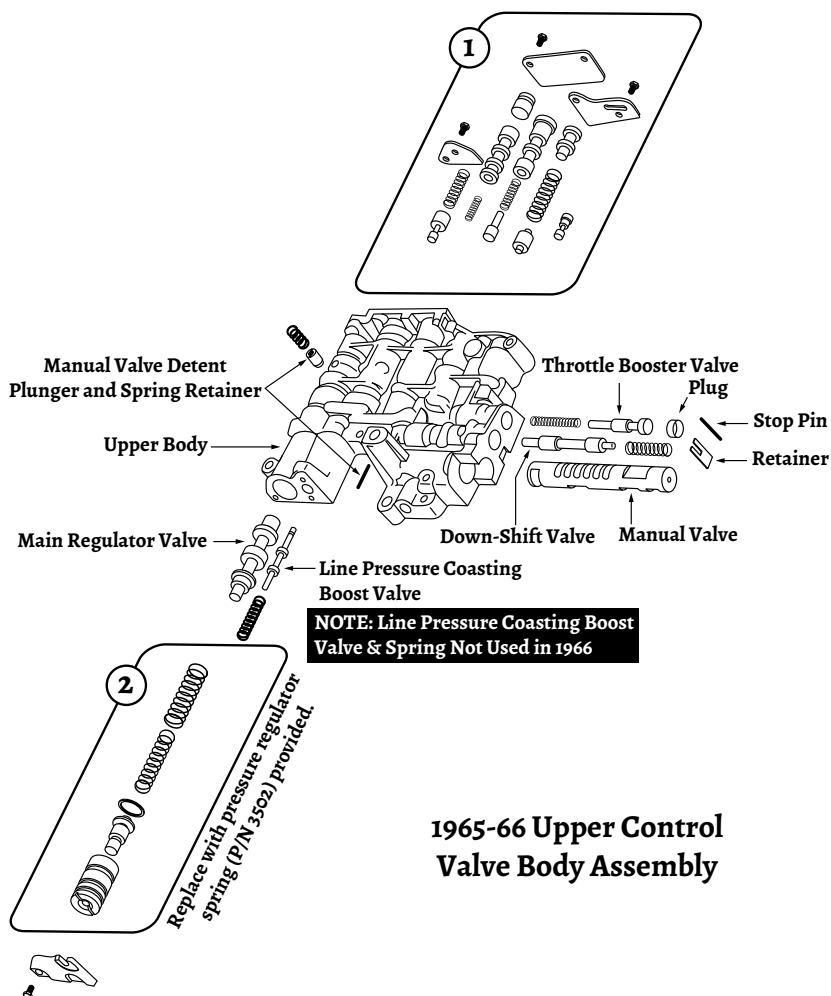
Kit includes the following

DESCRIPTION	P/N	QTY
Regulator Spring	3502	1
Separator Plate	3505	1
Channel Casting	3506	1

Separator Plate P/N 3505



CAUTION: Check separator plate P/N 3505 to make sure the dimensional bleed hole (.043) is drilled. This hole **MUST** be drilled as shown.

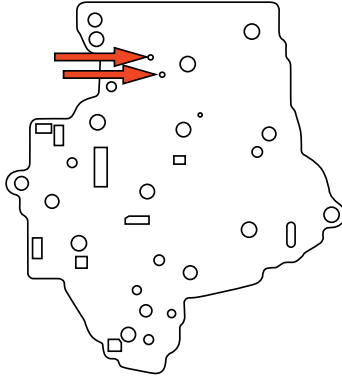


**1965-66 Upper Control
Valve Body Assembly**

SEPARATOR PLATES & GASKETS

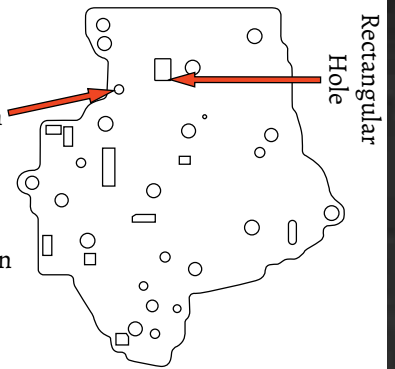
**Turbo-Hydro 400
Separator Plate
Manual Valve Body Only
P/N 1047**

CAUTION:
Confirm that 1/8" holes have been drilled at arrow locations.



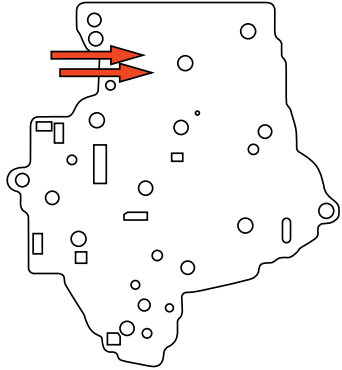
**Turbo-Hydro 400
Top Gasket
All Applications
P/N 1069**

CAUTION:
This hole **MUST** be in this gasket.
Install between transmission case and separator plate.



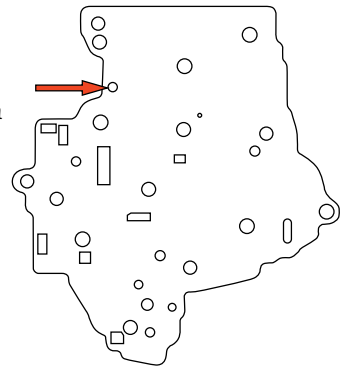
**Turbo-Hydro 400
Separator Plate
Conversion Kit Only
P/N 1048**

CAUTION:
Does not have 1/8" holes like P/N 1047.



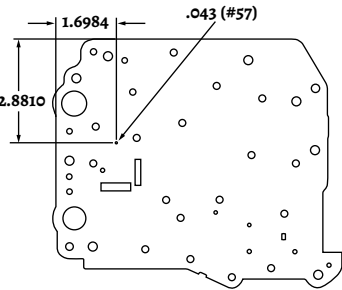
**Turbo-Hydro 400
Bottom Gasket
Conversion Kit Only
P/N 1068**

CAUTION:
This hole **MUST** be in this gasket.



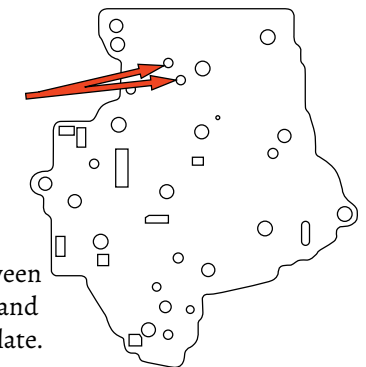
**C-4
Separator Plate
P/N 3505**

CAUTION:
Check plate carefully to make sure the dimensioned bleed hole (.043) is drilled. This hole **MUST** be drilled as shown.



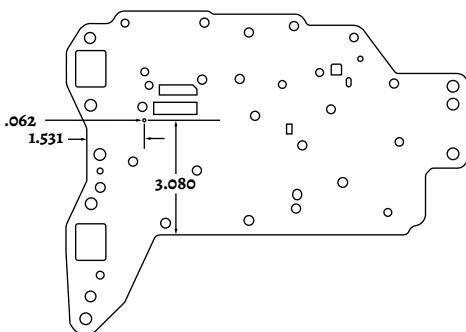
**Turbo-Hydro 400
Bottom Gasket
Manual Valve Body Only
P/N 1073**

CAUTION:
Note these two holes.



**C-6
Separator Plate
P/N 3023**

CAUTION:
Check plate carefully to make sure the dimensioned bleed hole (.062) is drilled. This hole **MUST** be drilled as shown.



NOTE

For your valve body to operate properly, it is imperative that the hole locations shown match your separator plate and/or gasket for your desired application.

PLANETARIES

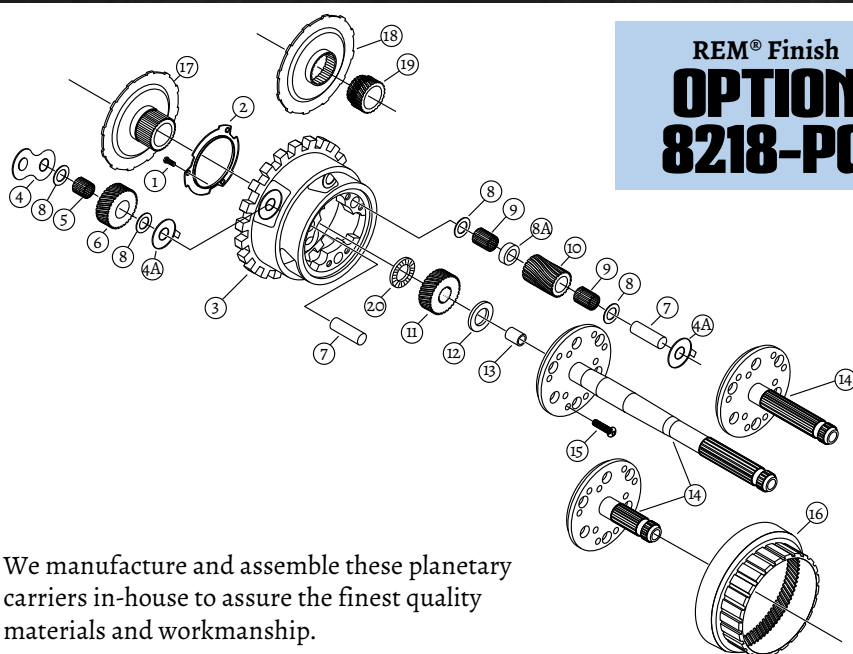
POWERGLIDE - 1.76 RATIO HELICAL CUT



ASSEMBLY P/N 2979 (LONG)

ASSEMBLY P/N 2979S (SHORT)

ASSEMBLY P/N 2979SL (SHORT, LONG SPLINE)



REM® Finish
**OPTION
8218-PG**

We manufacture and assemble these planetary carriers in-house to assure the finest quality materials and workmanship.

#	DESCRIPTION	P/N	QTY	#	DESCRIPTION	P/N	QTY
1	12-24 x 1 1/4" Panhead Screw	8008	3	14	Output Shaft with Flange		1
2	Shaft Retainer Plate	1926	1	14	Standard Length	1999	
3	Carrier Housing	1553	1	14	Shorty Length	1999S	
4	Link Washer	8615	3	14	Short, Long Spline	1999SL	
4A	Tab Washer	8616	6	15	3/8-16 x 1" BHCS	7878	6
5	Needle Bearing Set	7597-20	3	16	Steel Reverse Internal Gear	1554	1
6	Planetary Gear, 34 Tooth	1558	3	17	Flanged Sun Gear Assembly		1
7	Planetary Gear Shaft	2476	6	17	Non Heat Treated	2958S	
8	Thin Spacer	2939	12	17	Heat Treated	2958HT	
8A	Thick Spacer	2938	3	18	Flange Stamping		1
9	Needle Bearing Set	7597-40	3	18	Non Heat Treated	1966	
10	Planetary Gear, 21 Tooth	1559	3	18	Heat Treated (Option 8248)	1966HT	
11	Sun Gear, 34 Tooth	1560	1	19	Flange Sun Gear, 26 Tooth	2094	1
12	Thrust Washer	8600	1	20	Low Sun Gear Needle Thrust Brg.	8629	1
13	Pilot Bushing	7595	1				

PLANETARIES

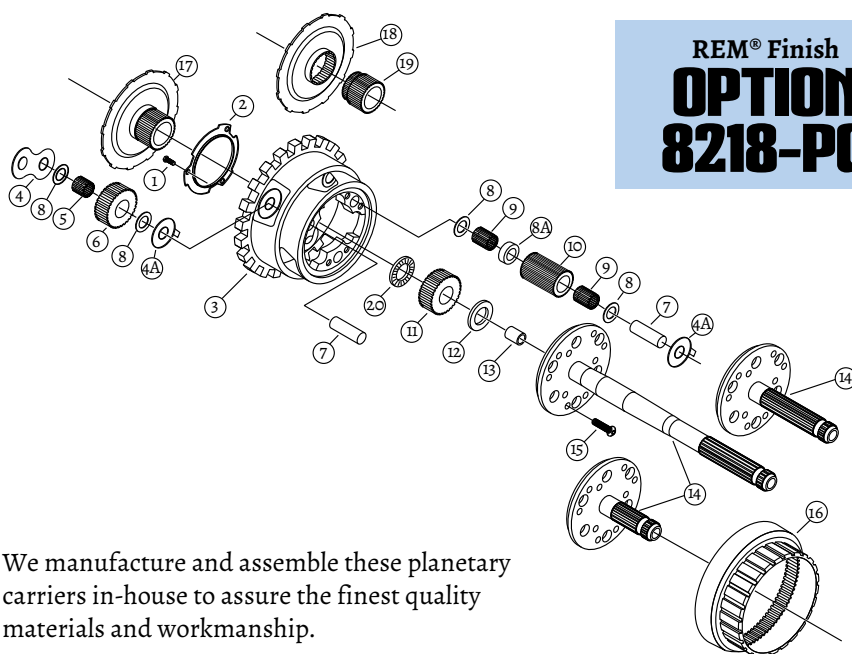
POWERGLIDE - 1.80 RATIO STRAIGHT CUT



ASSEMBLY P/N 2979-S180 (LONG)

ASSEMBLY P/N 2979S-S180 (SHORT)

ASSEMBLY P/N 2979SL-S180 (SHORT, LONG SPLINE)



REM® Finish
**OPTION
8218-PG**

We manufacture and assemble these planetary carriers in-house to assure the finest quality materials and workmanship.

#	DESCRIPTION	P/N	QTY	#	DESCRIPTION	P/N	QTY
1	12-24 x 1 1/4" Panhead Screw	8008	3	14	Output Shaft with Flange		1
2	Shaft Retainer Plate	1926	1	14	Standard Length	1999	
3	Carrier Housing	1553	1	14	Shorty Length	1999S	
4	Link Washer	8615	3	14	Short, Long Spline	1999SL	
4A	Tab Washer	8616	6	15	3/8-16 x 1" BHCS	7878	6
5	Needle Bearing Set	7597-20	3	16	Steel Reverse Internal Gear	3144	1
6	Planetary Gear, 25 Tooth	3140	3	17	Flanged Sun Gear Assembly		1
7	Planetary Gear Shaft	2476	6	17	Non Heat Treated	2958-S180	
8	Thin Spacer	2939	12	17	Heat Treated	2958-S180HT	
8A	Thick Spacer	2938	3	18	Flange Stamping		1
9	Needle Bearing Set	7597-40	3	18	Non Heat Treated	1966SS	
10	Planetary Gear, 16 Tooth	3141	3	18	Heat Treated (Option 8248)	1966SSHT	
11	Sun Gear, 25 Tooth	3142	1	19	Flange Sun Gear, 20 Tooth	3143	1
12	Thrust Washer	8600	1	20	Low Sun Gear Needle Thrust Brg.	8629	1
13	Pilot Bushing	7595	1				

PLANETARIES

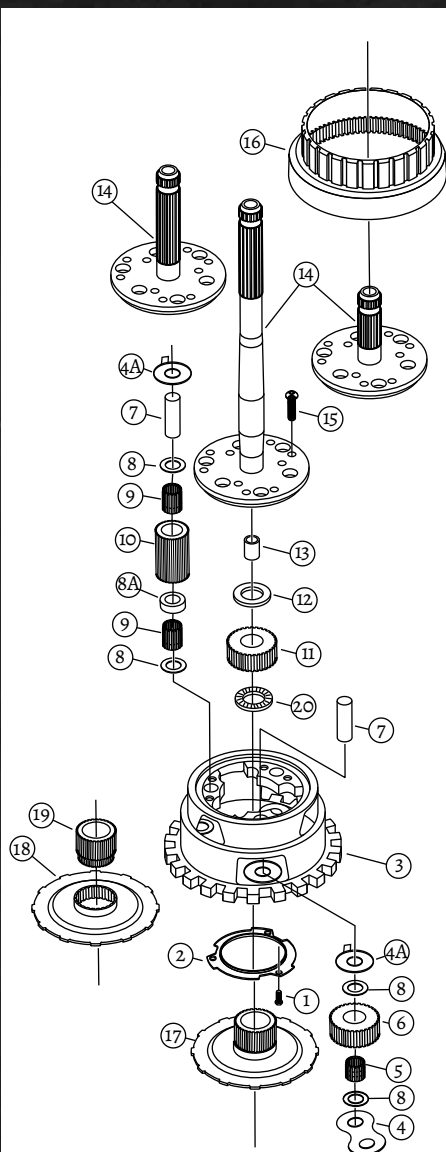
ADVANTAGE SERIES IMPORTED GEAR SETS

The Advantage line of Powerglide planetary gears feature a 1.80 ratio, straight cut design. They are not manufactured by Winters, but have been used by leading performance transmission assemblers around the world for several years. They are dimensionally accurate and can be further enhanced by cryogenics (**Option 8276-PG**), a standard procedure in the manufacturing of Winters gears. The gear sets are backed by a one year warranty from the manufacturer. To further improve the performance and life of the gear sets, consider the popular REM® Finish (**Option 8218-PG**) which polishes the gear tooth to a mirror like finish to minimize friction and reduce the opportunity for stress cracks.

ASSEMBLY P/N 2979A-S180 (LONG)

ASSEMBLY P/N 2979AS-S180 (SHORT)

ASSEMBLY P/N 2979ASL-S180 (SHORT, LONG SPLINE)



#	DESCRIPTION	P/N	QTY
1	12-24 x 1 1/4" Panhead Screw	8008	3
2	Shaft Retainer Plate	1926	1
3	Carrier Housing	1553	1
4	Link Washer	8615	3
4A	Tab Washer	8616	6
5	Needle Bearing Set	7597-20	3
6	Planetary Gear, 25 Tooth	3140A	3
7	Planetary Gear Shaft	2476	6
8	Thin Spacer	2939	12
8A	Thick Spacer	2938	3
9	Needle Bearing Set	7597-40	3
10	Planetary Gear, 16 Tooth	3141A	3
11	Sun Gear, 25 Tooth	3142A	1
12	Thrust Washer	8600	1
13	Pilot Bushing	7595	1
14	Output Shaft with Flange		1
14	Standard Length	1999	
14	Shorty Length	1999S	
14	Short, Long Spline	1999SL	
15	3/8-16 x 1" BHCS	7878	6
16	Steel Reverse Internal Gear	3144	1
17	Flanged Sun Gear Assembly		1
17	Non Heat Treated	2958A-S180	
17	Heat Treated	2958A-S180H	
18	Flange Stamping		1
18	Non Heat Treated	1966SS	
18	Heat Treated (Option 8248)	1966SSHT	
19	Flange Sun Gear, 20 Tooth	3143A	1
20	Low Sun Gear Needle Thrust Brg.	8629	1

REM® Finish
OPTION 8218-PG

Cryogenics
OPTION 8276-PG

PLANETARIES

STRAIGHT & HELICAL CUT GEAR SETS

Straight Cut

9 GEAR SET



Straight Cut

9 GEAR SET

w/ Install Kit



DESCRIPTION

P/N

1.80:1 Ratio

2885-S180-9

Advantage Series 1.80:1 Ratio

2885A-S180-9

DESCRIPTION

P/N

1.80:1 Ratio

28869-S180

Advantage Series 1.80:1 Ratio

2886A9-S180

Helical Cut

8 GEAR SET



Helical Cut

8 GEAR SET

w/ Install Kit



DESCRIPTION

P/N

1.76:1 Ratio

2885

DESCRIPTION

P/N

1.76:1 Ratio

2886

Helical Cut

9 GEAR SET



Helical Cut

9 GEAR SET

w/ Install Kit



DESCRIPTION

P/N

1.76:1 Ratio

2885-9

DESCRIPTION

P/N

1.76:1 Ratio

2886-9

Washer Kit

P/N
8630



Install Kit

P/N
8630-1



REM® Finish
OPTION 8218-PG

Cryogenics
OPTION 8276-PG

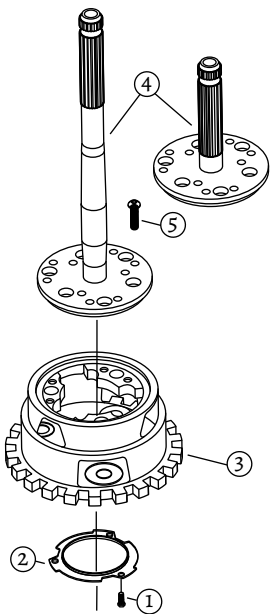
PLANETARIES

PLANETARY CARRIER - LESS GEARS

Accepts 1.76 and 1.80 ratio gear sets.



DESCRIPTION	P/N
Winters® Housing, Winters® Long Shaft	2584
Winters® Housing, Winters® Short Shaft	2584S
Advantage Series Housing, Advantage Long Shaft	2584A
Advantage Series Housing, Winters® Short Shaft	2584AS
Aluminum Housing, Winters® Long Shaft	A2584
Aluminum Housing, Winters® Short Shaft	A2584S
Aluminum Housing, Advantage Series Long Shaft	A2584A



HD Output Shaft
OPTION
8178-XX
Specify length & spline

Carrier Housing available
in steel or aluminum.

#	DESCRIPTION	P/N	QTY
1	12-24 x 1/4" Panhead Screw	8008	3
2	Shaft Retainer Plate	1926	1
3	Carrier Housing		1
3	Carrier Housing	1553	
3	Aluminum Carrier Housing	1553AL	
4	Output Shaft with Flange		1
4	Standard Length	1999	
4	Advantage Series Standard Length	1999A	
4	Shorty Length	1999S	
5	3/8-16 x 1" BHCS	7878	6

ALUMINUM CARRIER HOUSING



P/N 1553AL

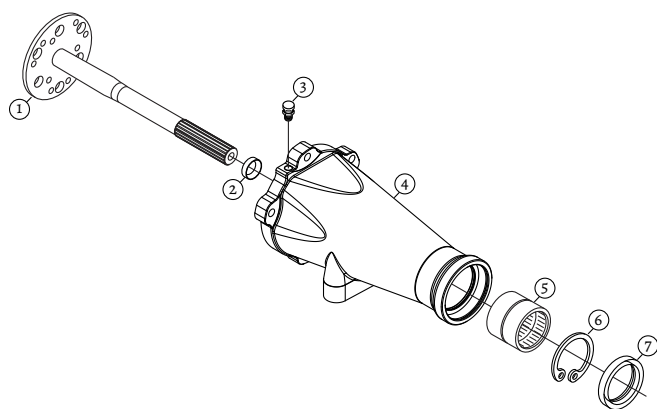
Our Powerglide Planetary Carrier Housing is made from billet aluminum. Accepts 1.76 and 1.80 ratio gear sets.

POWERGLIDE

HEAVY DUTY TAIL HOUSING KIT

KIT P/N 4231

This kit upgrades the Powerglide to efficiently handle some serious horsepower. The output shaft has been enlarged up to 1 3/8" diameter with 32 splines (Turbo 400). This kit allows for installation of the heavy duty shaft by boring and installing bushing P/N 7515A in your Powerglide case. Will accept Winters Performance®, Mark Williams® and other Turbo 400 Slip Yokes.



#	DESCRIPTION	P/N	QTY
1	Output Shaft, Long	1999HD	1
2	Bushing	7515A	1
3	Breather	8024	1
4	Tail Housing	2986HD	1
5	Bearing	8688	1
6	Retaining Ring	8355	1
7	Oil Seal	8801	1

Gundrilled Output Shaft
OPTION 8228-PGHD

Slip Yoke with Kit
OPTION 80119-PGHD

SLIP YOKE

P/N 12277



1350 Series, 32 Spline

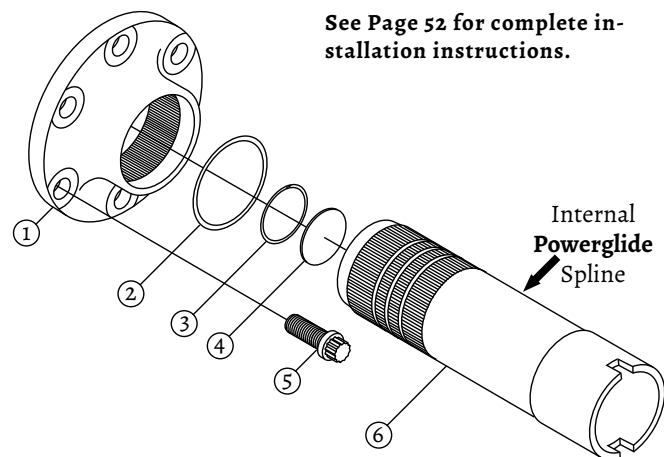
POWERGLIDE

DRIVE ASSEMBLY

Winters® **Powerglide** Drive Assembly eliminates torque converter. This assembly is made from 4340 billet steel and is precision CNC machined to exacting tolerances.



- P/N 5485** (EARLY CHEVY®, LARGE BOLT PATTERN)
P/N 5485A (EARLY CHEVY®, LARGE BOLT PATTERN, ALUMINUM)
P/N 6859 (LATE CHEVY®, '88 & UP BOLT PATTERN)
P/N 5485B (FORD® SMALL BLOCK)
P/N 5485C (MOPAR® 6 BOLT)
P/N 5485D (CRANK COUPLER NOT DRILLED)



See Page 52 for complete installation instructions.

#	DESCRIPTION	P/N	QTY
1	Crank Coupler		1
1	Early Chevy®	5420	
1	Early Chevy®, Aluminum	5420A	
1	Late Chevy®	6833	
1	Ford®	1970	
1	Mopar®	1969	
1	Not Drilled	5420-0	
2	External Retaining Ring	7614	1
3	Internal Retaining Ring	7613	1
4	1 1/8" Expansion Plug	7712	1
5	7/16-20 x 1" 12pt	7739*	6
6	Drive Sleeve	5419-01	1

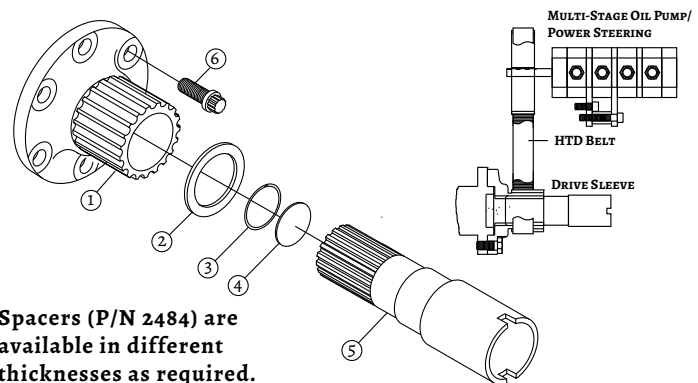
* Supersedes P/N 7710 in P/N 5485 & P/N 5485A

DRIVE ASSEMBLY WITH HTD DRIVE

P/N 2495

EARLY CHEVY®, LARGE BOLT PATTERN

NOTE: HTD belt load is on the crankshaft, NOT the drive sleeve.



Spacers (P/N 2484) are available in different thicknesses as required.

#	DESCRIPTION	P/N	QTY
1	Crank Coupler	2446	1
2	Spacer	2484	1
3	Retaining Ring	7613	1
4	1 1/8" Expansion Plug	7712	1
5	Drive Sleeve	2463	1
6	7/16-20 x 1" 12pt	7739*	6

* Supersedes P/N 7710

POWERGLIDE

DRIVE ASSEMBLY - TURBO-HYDRO SPLINE

Winters® **Turbo-Hydro** Drive Assembly eliminates torque converter. This assembly is made from 4340 billet steel and is precision CNC machined to exacting tolerances.



P/N 6866	(EARLY CHEVY®, LARGE BOLT PATTERN)
P/N 6866A	(EARLY CHEVY®, LARGE BOLT PATTERN, ALUMINUM)
P/N 6886	(LATE CHEVY®, '88 & UP BOLT PATTERN)
P/N 6866B	(FORD® SMALL BLOCK)
P/N 6866C	(MOPAR® 6 BOLT)
P/N 6866D	(CRANK COUPLER NOT DRILLED)

Installation

Figure 1: Install stock flex plate & crank coupler to engine crank shaft. Note the flange protruding from the face of the O.E.M. flex plate. Check that the protrusion on the flex plate does not keep crank coupler from seating against face of flex plate. If interference occurs, machine away enough flex plate protrusion to eliminate this problem. Torque crank coupler bolts (P/N 7739) to factory specs.

Figure 2: Indicate crank coupler to insure it is within + or - .002 run out (T.I.R. .004). Lubricate front pump and seal. Install drive sleeve into Powerglide front pump. Install Powerglide to engine, turning drive sleeve to engage splines in crank flange is essential.

Caution: Make sure drive sleeve has 1/16" to 1/8" end play fore and aft movement before transmission retaining bolts are torqued. Moving external retaining ring P/N 7614 will accomplish this.

DO NOT attempt to draw transmission against engine using bolts. If transmission will not seat against engine without force, contact your dealer for assistance.

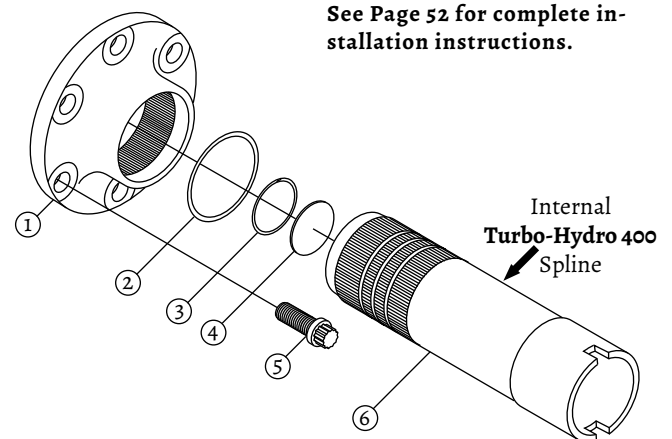


FIGURE 1

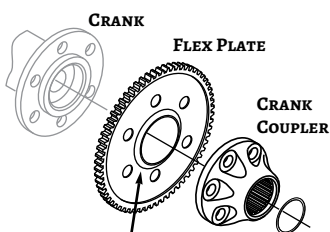
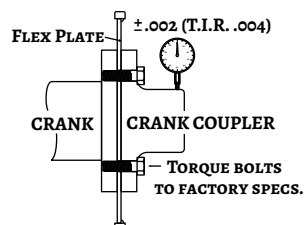


FIGURE 2



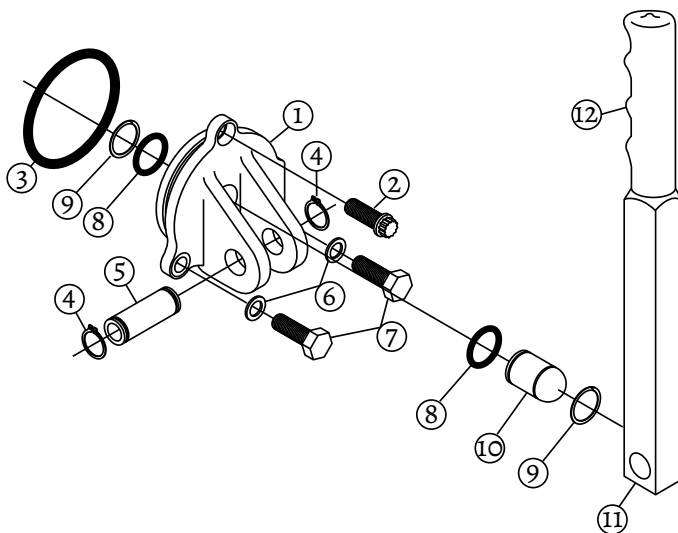
#	DESCRIPTION	P/N	QTY
1	Crank Coupler		1
1	Early Chevy®	5420	
1	Early Chevy®, Aluminum	5420A	
1	Late Chevy®	6833	
1	Ford®	1970	
1	Mopar®	1969	
1	Not Drilled	5420-O	
2	External Retaining Ring	7614	1
3	Internal Retaining Ring	7613	1
4	1 1/8" Expansion Plug	7712	1
5	7/16-20 x 1" 12pt	7739*	6
6	Drive Sleeve	5419-O2	1

* Supersedes P/N 7710 in P/N 5485 & P/N 5485A

POWERGLIDE

MANUAL BAND APPLY

ASSEMBLY P/N 5484



#	DESCRIPTION	P/N	QTY	#	DESCRIPTION	P/N	QTY
1	Band Apply Cover	5422	1	7	3/8-16 x 1 1/4" HHCS	7107	2
2	3/8-16 x 1" 12pt	7735	1	8	O'Ring, Plunger	7421	2
3	O'Ring, Cover	7419	1	9	Snap Ring	7616	2
4	Retaining Ring	7631	2	10	Plunger	5620	1
5	Pivot Sleeve	5615	1	11	Handle	5621	1
6	3/8" Flatwasher	7151	2	12	Handle Boot	2404	1

Installation Instructions

Exercise care when removing the original servo cover to insure that the band apply strut does not fall out of place.

Carefully install Winters® cover assembly, applying oil or petroleum jelly to the o'ring. Make sure the cover gasket is in place and all three bolts are started.

It is advisable to back off the band adjusting screw several turns before final torquing the retaining bolts. Tighten the retaining bolts in a criss-cross pattern until the cover is tight. Torque to 15 ft lbs.

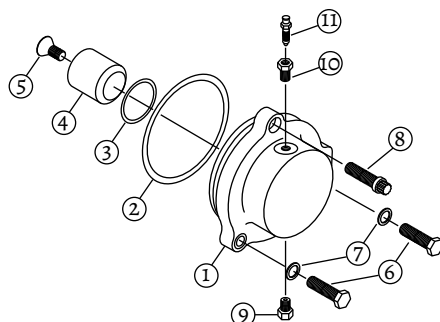
The band must now be re-adjusted to the factory specifications with the servo apply lever in a released position.

The band apply lever should be used positively to insure minimum band slippage, otherwise, accelerated band wear will result. However, excessive pressure can damage the transmission.

Push start in **NEUTRAL ONLY** at a preferred starting speed of 2 to 10 mph.

POWERGLIDE

HYDRAULIC BAND APPLY



P/N 2284

#	DESCRIPTION	P/N	QTY	#	DESCRIPTION	P/N	QTY
1	Band Apply Cover	1099	1	7	3/8" Flatwasher	7151	2
2	O'Ring, Cover	7447	1	8	3/8-16 x 1" 12pt	7735	1
3	O'Ring, Piston	7461	1	9	Compression Fitting	8042	1
4	Piston	1103	1	10	Adapter, Bleeder Screw	5314	1
5	5/16-18 x 5/8" FHCS	7913	1	11	Bleeder Screw	5313	1
6	3/8-16 x 1 1/4" HHCS	7107	2				



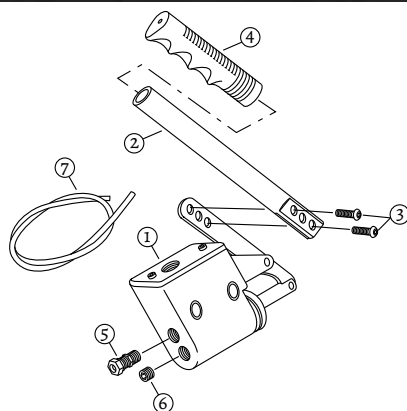
Use DOT 3 Brake Fluid

HYDRAULIC MASTER CYLINDER

P/N 2482

Rebuild Kit

**P/N
2820**



#	DESCRIPTION	P/N	QTY
1	Master Cylinder Only	2379	1
2	Master Cylinder Handle	2382	1
3	1/4-20 x 3/4" BHCS	8037	2
4	Handle Boot	2404	1
5	Compression Fitting, Male	8042	1
6	1/8" NPT Hex Socket Plug	7772	1
7	1/4" Black Hose, Per Inch	2813	36

Installation Instructions

Exercise care when removing the original servo cover to insure that the band apply strut does not fall out of place.

Carefully install Winters® cover assembly, applying oil or petroleum jelly to the o'ring. Make sure the cover gasket is in place and all three bolts are started.

It is advisable to back off the band adjusting screw several turns before final torquing the retaining bolts. Tighten the retaining bolts in a criss-cross pattern until the cover is tight. Torque to 15 ft lbs.

The band must now be re-adjusted to the factory specifications with the servo apply lever in a released position.

The band apply lever should be used positively to insure minimum band slippage, otherwise, accelerated band wear will result. However, excessive pressure can damage the transmission.

Push start in **NEUTRAL ONLY** at a preferred starting speed of 2 to 10 mph.

POWERGLIDE

COMPONENTS

30 SPLINE INPUT SHAFT

P/N 2831 HyTuf® Spec Material

P/N 2831V VascoMax® Material



Use Turbo-Hydro 350/400 Torque Converter

ALUMINUM OIL PAN

ASSEMBLY P/N 3964

Assembly includes Reinforcing Flange (P/N 3974) and Plug (P/N 7874A).



PUMP GEARS

Made from heat treated billet steel. Choose gears best suited for your application from the part numbers listed below.



DESCRIPTION

P/N

Powerglide, Stock

5690-01

Turbo-Hydro 400, Trans Brake

5690-04

MISCELLANEOUS

COMPONENTS



C-6 REGULATOR SPRING

P/N 3047

This spring allows for 135 psi oil pressure and is to be used on all street and strip transmissions.

This may be found in our Ford® C-6 Manual Valve Body Kit. It measures 2 1/2" long.



C-6 REGULATOR SPRING

P/N 3048

For competition transmissions only. This pressure regulator spring allows for 165 psi. This spring may be found in our Ford® C-6 Manual

Valve Body Kit. It measures 2 1/4" long.



C-4 REGULATOR SPRING

P/N 3502

This pressure regulating spring is found in our Ford® C-4 Manual Valve Body Kit. When properly installed it creates the correct amount of oil pressure for your performance transmission.



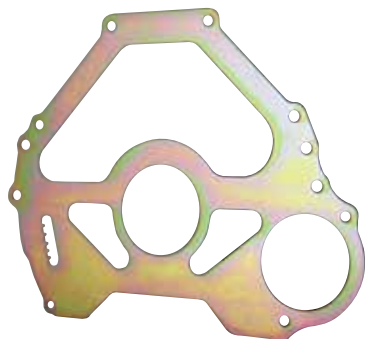
TORQUEFLITE 8 REGULATOR SPRING

P/N 2005

For ultimate shift response and longevity. TF-8 special regulator spring allows oil pressure to be raised from present high of approx. 115 psi to a low of 120, or a high of 140 psi with stock adjustment screw without shimming. Case reinforcing along pan or case girdle a necessity with this spring.

MOTOR PLATE

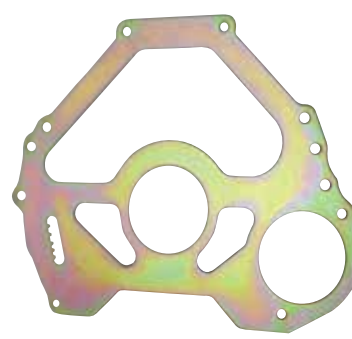
P/N 3829



Ford Style, Small Block, 164 Tooth

MOTOR PLATE

P/N 3979



Ford Style, Small Block, 157 Tooth

TURBO-HYDRO 400

COMPONENTS

ALUMINUM FORWARD CLUTCH DRUM

P/N 4812

HyTuf® Spec Input Shaft

P/N 4812V

VascoMax® Input Shaft

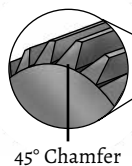
- 5 lbs 14 oz - 3 lbs 2 oz lighter than stock with most of the weight removed at a 6 3/4" diameter.
- Hard Anodized Billet Aluminum Clutch Drum
- Heat Treated Center Hub - 28 Splines at Center Hub



HEAVY DUTY INPUT SHAFTS

For Drag Racing

P/N 1070 HyTuf® Spec Material



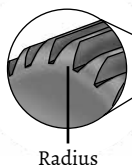
0.875" O.D.

28 Oversize Splines

1.000" O.D.

1.124" O.D.
35 Splines

P/N 1070HD HyTuf® Spec Material



P/N 1070V-2 VascoMax® Material

RESPLINED FORWARD CLUTCH DRUM



P/N 1058 (Labor Only)

Double the torque capacity with 28 oversize splines. We take your stock drum, bore it and respline it. We can then install the 28 spline shaft of your choice.

These pieces eliminate the Turbo-Hydro's weak spot from high horsepower engines.

TURBO-HYDRO 400

COMPONENTS

MANUAL VALVE P/N 1046



Manual valve to reverse shift pattern in Winters® style Turbo-Hydro 400 valve bodies.

CASE PLUG P/N 1002



Replaces modulator with valve body conversion.



REGULATOR SPRING P/N 1005

Heavy duty regulator spring for Turbo-Hydro 400 transmission. Boosts oil pressure to 175 psi.



SERVO RELEASE SPRING P/N 1006

Turbo-Hydro special rear band servo release spring. This spring guarantees full band release when not in reverse, thus avoiding internal friction thru band drag. Suggested for use in competition built transmissions.

INTERMEDIATE SHAFT

P/N 4810H HyTuf® Spec Material
P/N 4810V VascoMax® Material



Replacement intermediate shaft for Turbo-Hydro 400. Choose from HyTuf® Spec or VascoMax® material.

PUMP GEARS P/N 2701-01



Heat treated, stock configuration gears made from billet steel.

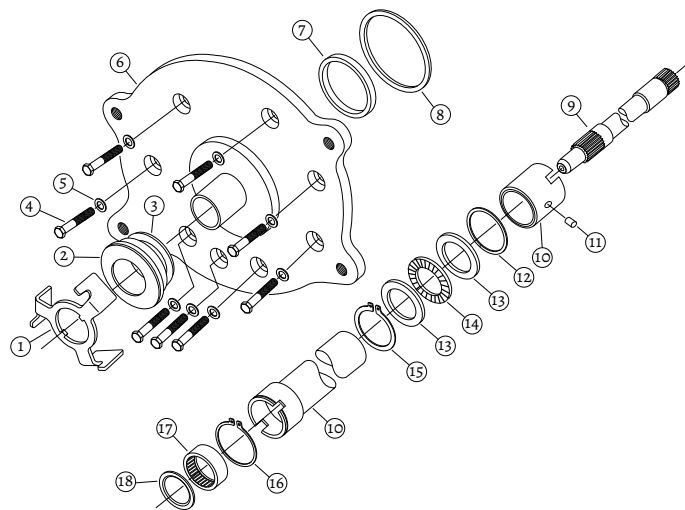
CLUTCH HYDRO KIT

SPECIAL ORDER ONLY



Kit includes complete, easy to follow instructions.

KIT P/N 10510
CLUTCH HYDRO TO GM®



#	DESCRIPTION	P/N	QTY
1	Pump Drive Spider	6050	1
2	Throwout Bearing	6052	1
3	Throwout Bearing Sleeve	1039	1
3	Throwout Bearing Sleeve Assembly	1060	
4	5/16-18 x 2 1/4" Cover Bolt	7125	8
5	5/16" Flatwasher	7127	8
6	Adapter Cover	1024*	1
7	Seal	7208	1
8	O'Ring	7407	1
9	Input Shaft & Drum Assembly	1063*	1
10	Drive Sleeve & Pump Hub Assembly	1062*	1
11	Roll Pin	7140	1
12	Snap Ring	7602	1
13	Bearing Races	7316-O2	2
14	Thrust Bearing	7315	1
15	Retaining Ring	7605	1
16	Retaining Ring	7604	1
17	Needle Roller Bearing	7326	1
18	Seal	7207	1

* Specify engine make & size when ordering parts.

SHIFTER INSTALLATION

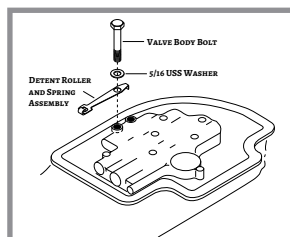
TURBO-HYDRO 400

KIT P/N 1095

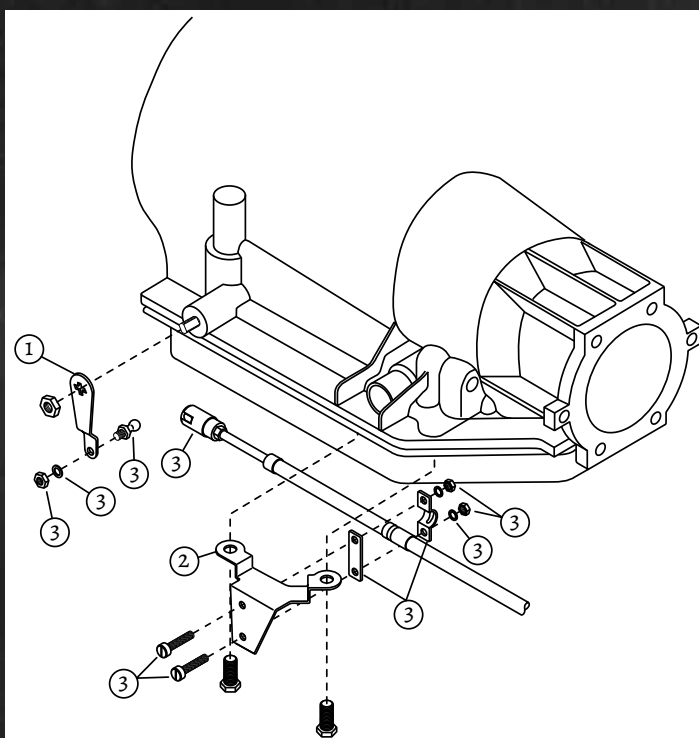
Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	1037
2	Cable Bracket	1036
3	Hardware Kit	6062

Please Note: The shift feel of the Turbo-Hydro 400 transmission can be greatly enhanced by placing a 5/16" USS washer between the valve body bolt and detent roller and spring assembly. To gain access to this bolt the transmission fluid must be drained and the pan removed.



Please consult factory service manual for removal instructions.



A. Remove shifting mechanism from transmission.

B. Assemble ball joint, lockwasher, and nut, to Winters® linkage arm, then remove nut and replace present arm with Winters® linkage arm. When arm is on the transmission, it should bend in towards the pan with the ball joint on the inside.

C. Remove two pan bolts and install cable bracket. Ensure pan bolt length is adequate.

D. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

E. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3 on page 38.

F. Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.

G. Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.

H. Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made.

SHIFTER INSTALLATION

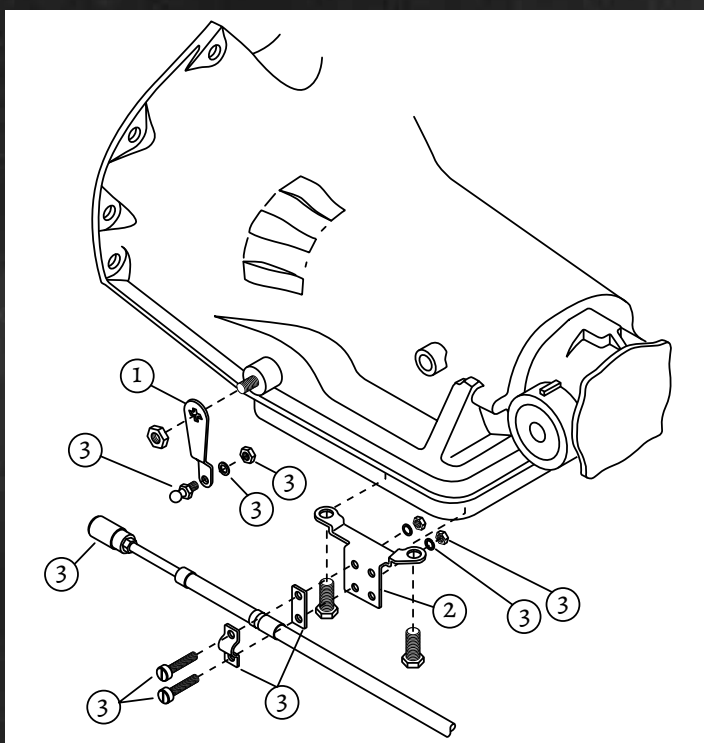
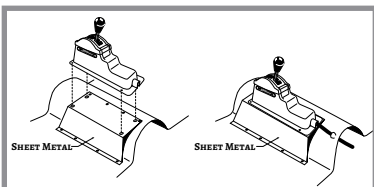
TURBO-HYDRO 350

KIT P/N 1595

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	1037
2	Cable Bracket	1500
3	Hardware Kit	6062

FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



A. Remove shifting mechanism from transmission.

B. Assemble ball joint, lockwasher, and nut, to Winters® linkage arm, then remove nut and replace present arm with Winters® linkage arm.

C. Remove two pan bolts and install cable bracket. Ensure pan bolt length is adequate.

D. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

E. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.

F. Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.

G. Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.

H. Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

SHIFTER INSTALLATION

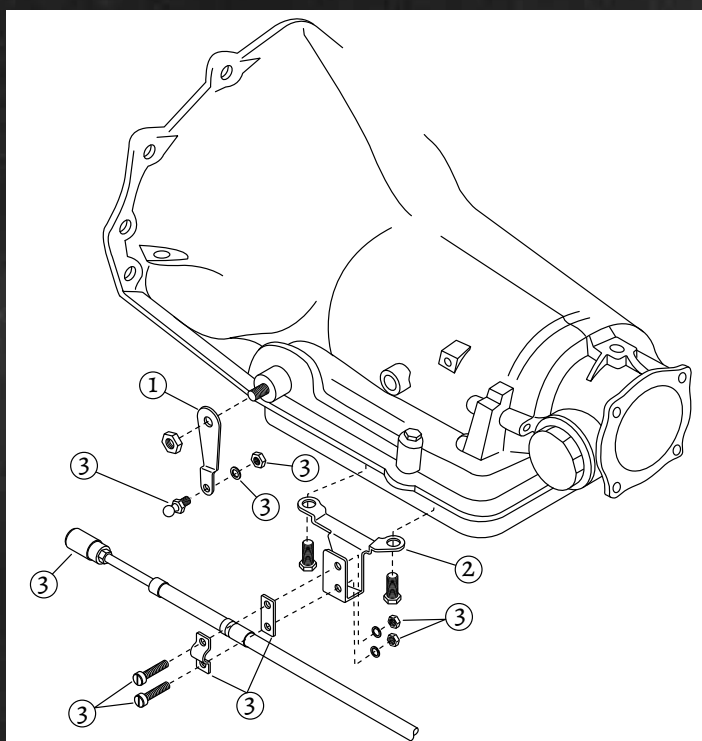
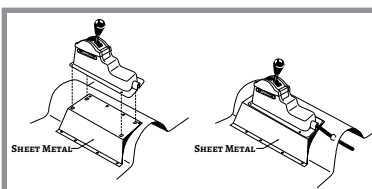
TURBO-HYDRO 700R4 & 4L60E

KIT P/N 4095

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	4011
2	Cable Bracket	4012
3	Hardware Kit	6062

FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



A. Remove shifting mechanism from transmission.

B. Assemble ball joint, lockwasher, and nut, to Winters® linkage arm, then remove nut and replace present arm with Winters® linkage arm.

C. Remove two pan bolts and install cable bracket. Ensure pan bolt length is adequate.

D. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

E. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.

F. Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.

G. Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.

H. Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

SHIFTER INSTALLATION

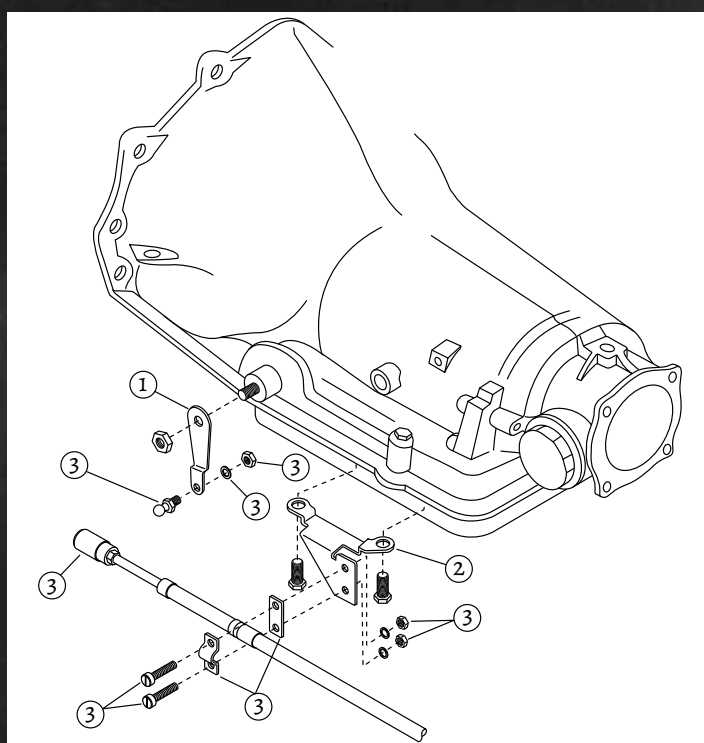
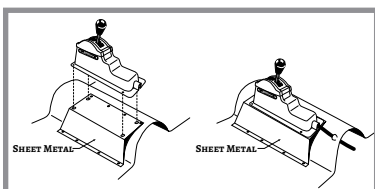
TURBO-HYDRO 4L80E

KIT P/N 1495

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	4011
2	Cable Bracket	4944
3	Hardware Kit	6062

FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



A. Remove present shifting mechanism from transmission.

B. Assemble ball joint, lockwasher, and nut, to Winters® linkage arm, then remove nut and replace present arm with Winters® linkage arm. When arm is on the transmission, it should bend away from the pan with the ball joint on the outside.

C. Remove two pan bolts and install cable bracket. Ensure pan bolt length is adequate.

D. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

E. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.

F. Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.

G. Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.

H. Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

SHIFTER INSTALLATION

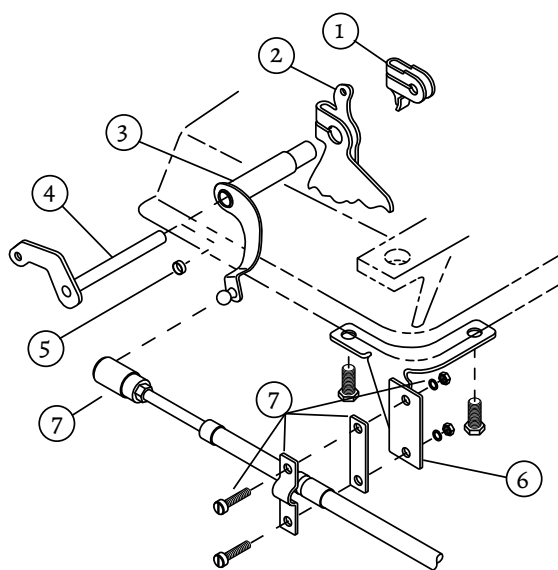
POWERGLIDE

KIT P/N 5595

Kit includes the following

#	DESCRIPTION	P/N
1	Inner Throttle Lever	†
2	Inner Manual Lever	†
3	Linkage Arm & Shaft	6123
4	Outer Throttle Lever	†
5	Cup Plug	7763
6	Cable Bracket	6126
7	Hardware Kit	6062

† Items marked are part of the transmission.



A. Remove present shifting mechanism from transmission.

B. Refer to appropriate transmission service manual for procedure to drain oil, remove oil pan and disassemble stock throttle and manual levers.

C. Replace stock outer manual lever with Winters® outer manual lever. On applications not using the throttle lever hookup, the provided cup plug must be inserted in the counterbore of the Winters® outer manual lever to prevent fluid leakage.

D. Before re-assembling all parts to the transmission, make sure the Winters® outer manual lever will operate through all detent positions without interfering with any external transmission parts.

E. After all internal transmission components are re-assembled and before all pan bolts are tightened, attach Winters® cable bracket in position with the two left rear corner pan bolts. Ensure pan bolt length is adequate.

F. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

G. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3 on page 40.

H. Attach cable to cable bracket with provided hardware.

I. Attach quick-disconnect end of cable to outer manual lever.

J. Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made.

SHIFTER INSTALLATION

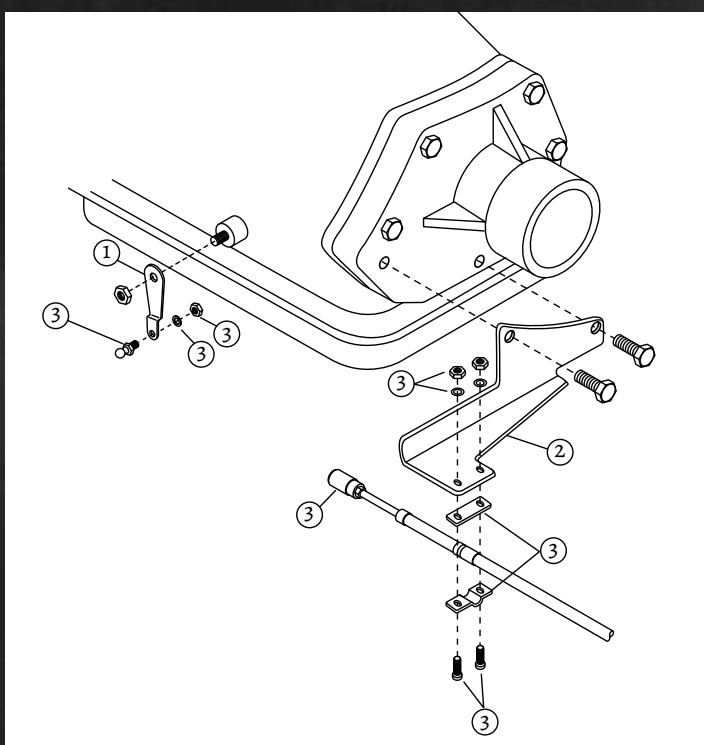
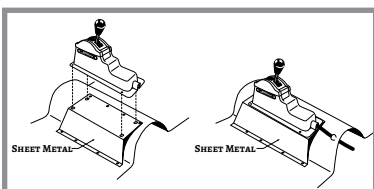
ALLISON® LTC1000, 2000 & 2400

KIT P/N 1195

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	4011
2	Cable Bracket	4977
3	Hardware Kit	6062

FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



A. Remove present shifting mechanism from transmission.

B. Assemble ball joint, lockwasher, and nut, to Winters® linkage arm, then remove nut and replace present arm with Winters® linkage arm. When arm is on the transmission, it should bend away from the pan with the ball joint on the outside.

C. Remove two pan bolts and install cable bracket. Ensure pan bolt length is adequate.

D. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

E. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.

F. Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.

G. Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.

H. Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

SHIFTER INSTALLATION

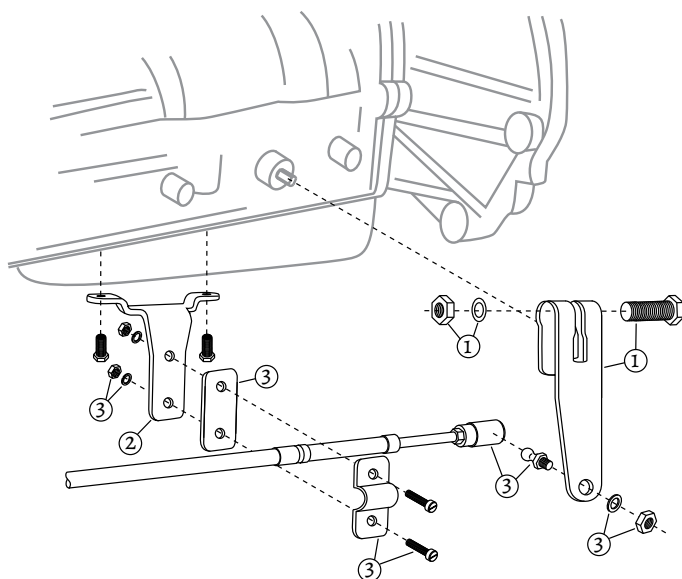
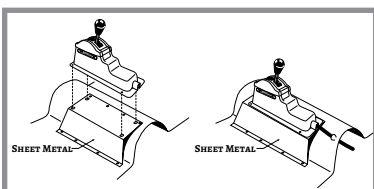
TOYOTA® A340, JEEP® AW4

KIT P/N 6027

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	12167
2	Cable Bracket	12168
3	Hardware Kit	6062

FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



A. Remove present shifting mechanism from transmission.

B. Assemble ball joint, lockwasher, and nut, to Winters® linkage arm, then remove nut and replace present arm with Winters® linkage arm. When arm is on the transmission, it should bend away from the pan with the ball joint on the outside.

C. Remove two pan bolts and install cable bracket. Ensure pan bolt length is adequate.

D. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

E. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.

F. Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.

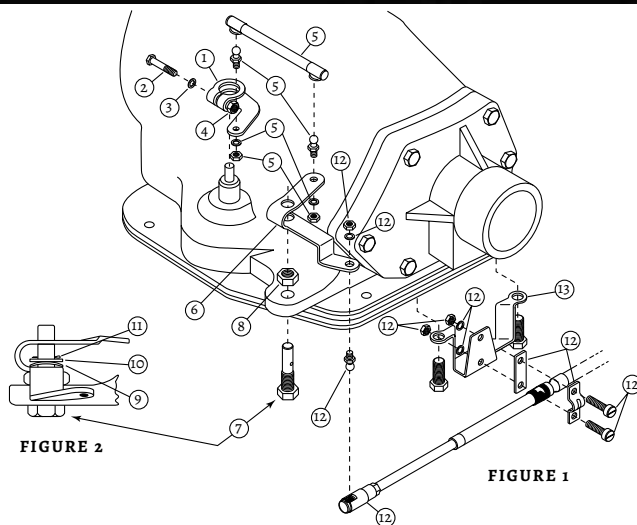
G. Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.

H. Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

SHIFTER INSTALLATION

727, 904 & 999 TORQUEFLITE TF-6 & TF-8 &
AMERICAN MOTORS

- A.** Remove present shifting mechanism from transmission.
- B.** Before assembling parts on transmission, assemble ball joints to linkage arm and pivot arm, using washers and nuts, as illustrated in figure 1 on page 45.
- C.** Assemble linkage arm on transmission and tighten bolt.
- D.** Assemble pivot arm on transmission by inserting pivot bolt through transmission pad and tightening nut. The pivot arm can then be secured to the pivot bolt with the spring washer, flat washer, and cotter pin in position as illustrated in figure 2 on page 45.
- E.** Attach the connecting rod by pushing ends over the ball joints.
- F.** Attach the ball joint to the pivot arm using lockwasher and nut.
- G.** Remove two pan bolts and install cable bracket in position. Ensure pan bolt length is adequate.
- H.** Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.
- I.** Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3 on page 43.
- J.** Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated in figure 1.
- K.** Attach quick-disconnect to ball joint on pivot arm.
- L.** Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.



727 TORQUEFLITE TF-8 & AMERICAN MOTORS

KIT P/N 2095

Kit includes the following

#	DESCRIPTION	P/N	#	DESCRIPTION	P/N
1	Linkage Arm	2033	8	Jam Nut	7137
2	1/4-20 x 1 1/2" HHCS	7124	9	Wave Washer	7138
3	1/4" Washer	7130	10	Flat Washer	7114
4	1/4-20 Nut	7134	11	Cotter Pin	7139
5	Ball Joint Assembly	2024	12	Hardware Kit	6062
6	Pivot Arm	2035	13	Cable Bracket	2032
7	Pivot Bolt	2034			

904 & 999 TORQUEFLITE TF-6

KIT P/N 2795

Kit includes the following

#	DESCRIPTION	P/N	#	DESCRIPTION	P/N
1	Linkage Arm	2033	8	Jam Nut	7137
2	1/4-20 x 1 1/2" HHCS	7124	9	Wave Washer	7138
3	1/4" Washer	7130	10	Flat Washer	7114
4	1/4-20 Nut	7134	11	Cotter Pin	7139
5	Ball Joint Assembly	2024-01	12	Hardware Kit	6062
6	Pivot Arm	2035	13	Cable Bracket	2050
7	Pivot Bolt	2034			

SHIFTER INSTALLATION

SHIFTER INSTALLATION

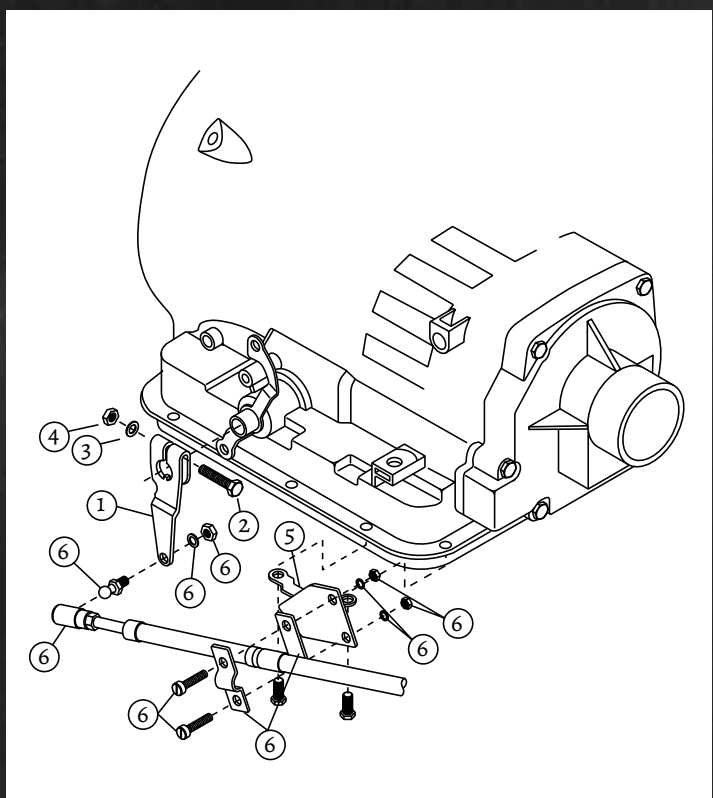
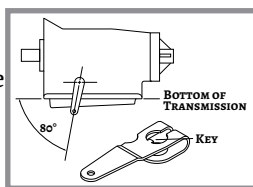
FORD® C-6

KIT P/N 3095

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	3018
2	1/4-20 x 1 1/2" HHCS	7124
3	1/4" Washer	7130
4	1/4-20 Nut	7134
5	Cable Bracket	3017
6	Hardware Kit	6062

FIGURE 1: On some models of the Ford® C-6 transmission the linkage shaft does not have a keyway to accept the Winters® linkage arm. In this case the key must be ground off (2 places). Then with the transmission in park, mount the linkage arm on the linkage shaft at an 80° angle to the bottom of the transmission and tighten.



- A.** Remove shifting mechanism including neutral start switch.
- B.** Assemble ball joint, lockwasher, and nut, to linkage arm, then push the linkage arm on the transmission linkage shaft until the arm is flush with the shaft. By tightening screw and nut, the arm will be secured in its proper position (see figure 1).
- C.** Remove two pan bolts and install cable bracket. Ensure pan bolt length is adequate.
- D.** Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.
- E.** Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3 on page 47.
- F.** Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.
- G.** Attach quick-disconnect to ball joint on linkage arm.
- H.** Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made.

SHIFTER INSTALLATION

FORD® C-4

KIT P/N 3595

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	3503
2	1/4-20 x 1 1/2" HHCS	7124
3	1/4" Washer	7130
4	1/4-20 Nut	7134
5	Cable Bracket	3504
6	Hardware Kit	6062

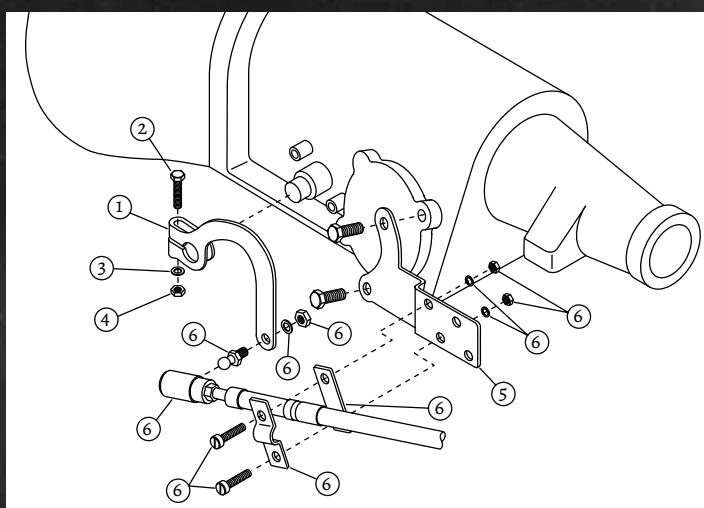
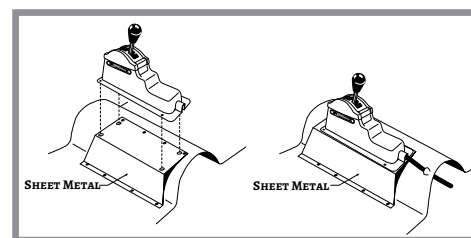


FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



- A.** Remove shifting mechanism including neutral start switch.
- B.** Assemble ball joint, lockwasher, and nut, to linkage arm, then push the linkage arm on the transmission linkage shaft until the arm is flush with the shaft. By tightening screw and nut, the arm will be secured in its proper position.
- C.** Remove two rear servo bolts and install cable bracket. Ensure servo bolt length is adequate.
- D.** Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.
- E.** Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.
- F.** Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.
- G.** Attach quick-disconnect to ball joint on linkage arm.
- H.** Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made.

SHIFTER INSTALLATION

FORD® AOD

KIT P/N 3295

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	12504
2	Cable Bracket	3249
3	Hardware Kit	6062
4	Seal	12525
5	Throttle Valve Lever	†

† Items marked are part of the transmission.

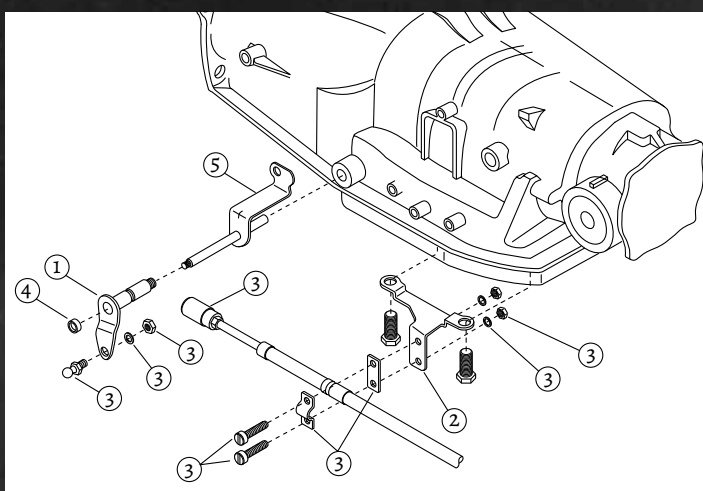
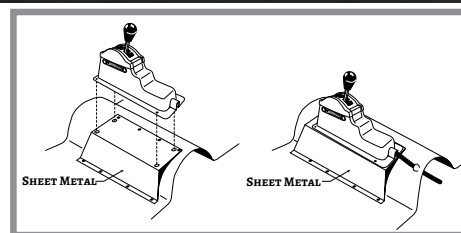


FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



- A.** Remove present shifting mechanism from transmission.
- B.** Refer to appropriate transmission service manual for procedure to drain oil, remove oil pan and disassemble stock linkage arm and shaft.
- C.** Replace stock linkage arm and shaft with Winters® linkage arm and shaft. Reinstall stock throttle valve lever. Use appropriate assembly procedures from transmission service manual.
- D.** Before re-assembling all parts to the transmission, make sure the Winters® linkage arm and shaft will operate through all detent positions without interfering with any external transmission parts.
- E.** Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.
- F.** Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.
- G.** Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.
- H.** Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.
- I.** Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

SHIFTER INSTALLATION

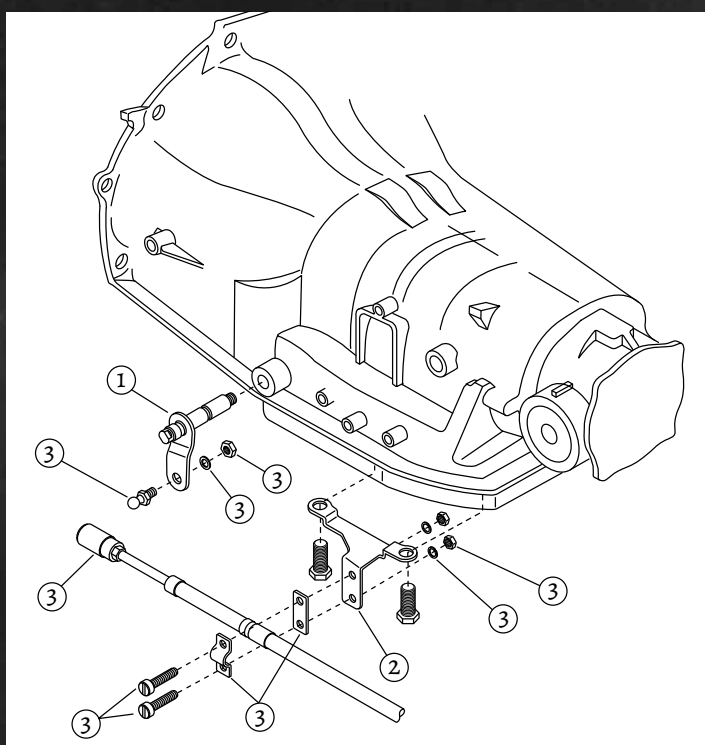
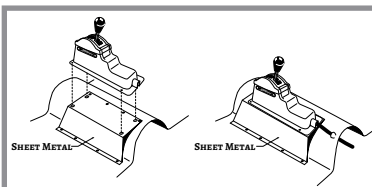
FORD® AODE & 4R70E

KIT P/N 3495

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm & Shaft	3248
2	Cable Bracket	3249
3	Hardware Kit	6062

FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



- A.** Remove present shifting mechanism from transmission.
- B.** Refer to appropriate transmission service manual for procedure to drain oil, remove oil pan and disassemble stock linkage arm and shaft.
- C.** Replace stock linkage arm and shaft with Winters® linkage arm and shaft. Use appropriate assembly procedures from transmission service manual.
- D.** Before re-assembling all parts to the transmission, make sure the Winters® linkage arm and shaft will operate through all detent positions without interfering with any external transmission parts.
- E.** Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.
- F.** Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.
- G.** Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.
- H.** Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.
- I.** Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

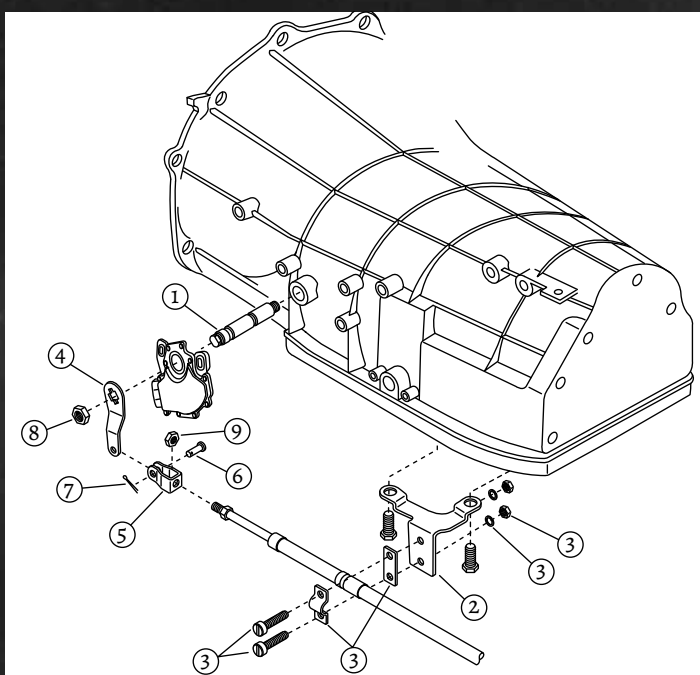
SHIFTER INSTALLATION

FORD® E4OD & 4R100

KIT P/N 3395

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Shaft	3721
2	Cable Bracket	3723
3	Cable Clamp Package	6062-1
4	Linkage Arm	3722
5	Clevis Bracket	3724
6	Clevis Pin	8743
7	Clevis Clip	8744
8	Linkage Shaft Nut	7766
9	Jam Nut	7926



A. Remove present shifting mechanism from transmission.

B. Refer to appropriate transmission service manual for procedure to drain oil, remove oil pan and disassemble stock linkage arm and shaft.

C. Replace stock shaft with Winters® shaft (P/N 3721). Use appropriate assembly procedures from transmission service manual. Reinstall stock switch then attach Winters® linkage arm (P/N 3722) to Winters® shaft (P/N 3721) using linkage shaft nut (P/N 7766).

D. Before re-assembling all parts to the transmission, make sure the Winters® linkage arm and shaft will operate through all detent positions without interfering with any external transmission parts.

E. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

F. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3 on page 51.

G. Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.

H. Attach clevis bracket (P/N 3724) to end of cable using clevis nut (P/N 7926). Install end of cable to linkage arm using clevis pin (P/N 8743) and clip (P/N 8744).

I. Check adjustment in each gear. By loosening locknut and screwing the clevis bracket (P/N 3724) either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

SHIFTER INSTALLATION

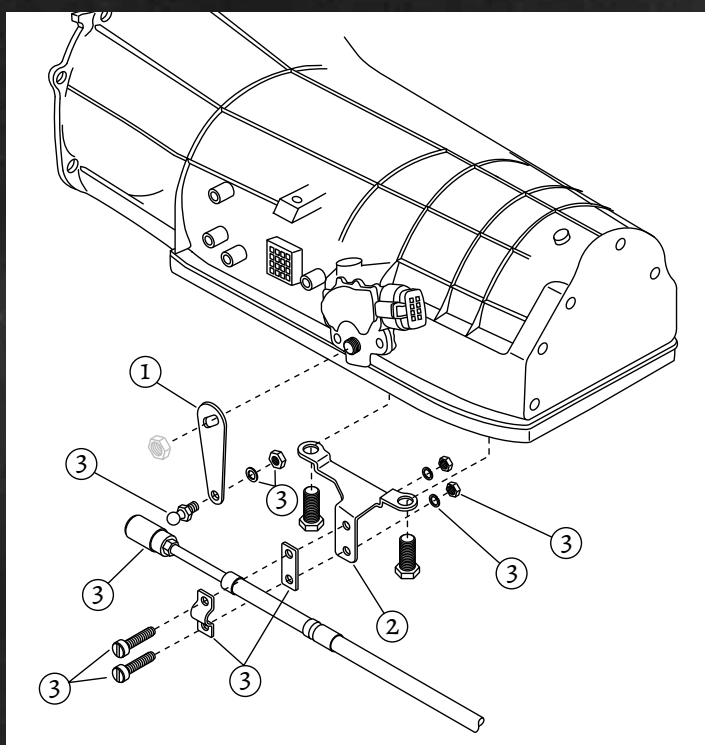
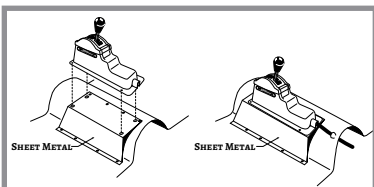
FORD® A4LD

KIT P/N 3027

Kit includes the following

#	DESCRIPTION	P/N
1	Linkage Arm	12746
2	Cable Bracket	12748
3	Hardware Kit	6062

FIGURE 3: Illustrated is a suggestion for tunnel-mount applications of the Sidewinder Shifter. By bending a piece of sheet metal suitable for your application, a flat surface will be obtained allowing your shifter to be securely fastened in the proper location. Make sure the sheet metal is of substantial thickness (18 or 20 ga.) or securely braced to minimize undesirable vibration.



A. Remove shifting mechanism from transmission.

B. Assemble ball joint, lockwasher, and nut, to Winters® linkage arm, then remove nut and replace present arm with Winters® linkage arm.

C. Remove two pan bolts and install cable bracket. Ensure pan bolt length is adequate.

D. Plan location of console and cable route in car. Keeping bends to a minimum will enhance the shift feel.

E. Drill 5/8" diameter hole in floor for cable to exit. By inserting a drill or rod in hole and bending the sheet metal, you can obtain a hole that will allow the cable to enter and exit more smoothly. After feeding the cable through, secure console in position using screws as shown in figure 3.

F. Using screws, clamps, lockwashers, and nuts, attach cable to bracket as illustrated.

G. Attach quick-disconnect to ball joint on linkage arm. When console shift lever is in park position, the linkage arm should be all the way forward.

H. Check adjustment in each gear. By loosening locknut and screwing the quick-disconnect either in or out, corrective adjustments can be made. If additional adjustment is necessary, a similar arrangement within the console is provided.

INSTALLATION INSTRUCTIONS

DRIVE ASSEMBLY

Proper installation of the crank coupler to the crank is important since crank coupler run out can cause drive sleeve run out in excess of .004 T.I.R. maximum (Figure 2).

It is suggested that S.F.I. approved 153 tooth automatic flex plate and a compatible starter be used with your Powerglide installation. Welding weights on a flex plate for crank balance is not recommended; however, drilling holes for balance is permissible. It is preferable for all crank balance to be done internally. Check the flex plate before mounting it on the crank for nicks or high spots that would cause flex plate or crank coupler run out (Figure 1).

After determining coupler bolts are correct length, torque the crank coupler bolts evenly to factory specifications (Figure 2).

Carefully install the drive sleeve in the transmission making sure that the input shaft splines and the pump gear drive lugs are compatible and properly engaged.

ALSO NOTE: Dowel pins must extend out of the engine block enough to have good engagement in the transmission to properly locate it on the engine. On engines using a block plate, new, longer pins must be installed. Use care when installing the pins to be sure that they are true and square. This is important, do not ignore it.

Your transmission may now be installed on the engine. **-DO NOT USE FORCE-** If the transmission won't mate against the block, check for the cause. If the transmission mates satisfactorily, only then do you install the retaining bolts and torque to factory specifications.

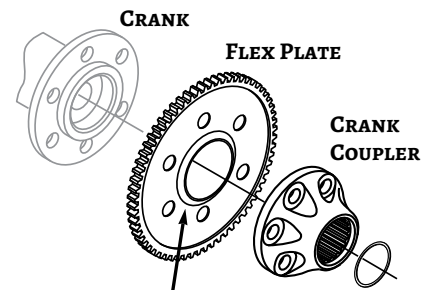
Note the spiral lock snap ring in the rear radial groove through the splines on the drive sleeve. Moving this snap ring to another groove allows for lateral adjustment of the sleeve movement for the proper engagement of the drive pump ears in the transmission pump. Engine torque plate thickness will dictate which groove to use to limit the drive sleeve movement to the suggested 1/16" to 1/8" fore and aft travel.

NOTE: Check and consider crank shaft end play when determining if the drive sleeve movement is to specifications. Too much or too little drive sleeve end play will destroy the transmission front pump, so don't take any chances.

When the transmission is bolted directly to the engine (i.e. when no block plate is used) the snap ring may have to be discarded for proper sleeve adjustment.

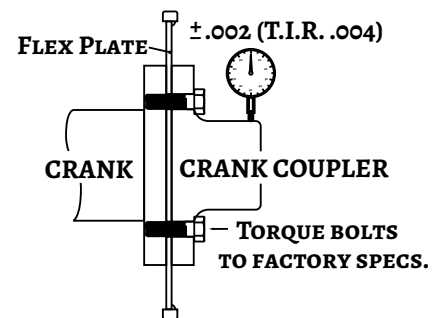
Some Chevy® cranks for standard transmissions are not machined with the same bore dimensions as for automatics. If the pilot bushing in the stick crank affects proper sleeve lateral movement, corrections must be made to comply with the master installation instructions. Sometimes shimming is necessary or the pilot bushing may be removed. Transmission life depends on proper installation.

FIGURE 1



NOTE flange protruding from face of O.E.M. flex plate. Check that the protrusion on the flex plate does not keep crank coupler from seating against face of flex plate. If interference occurs, machine away enough flex plate protrusion to eliminate this problem. With crank coupler installed and torqued to factory specs, indicate as shown in Figure 2.

FIGURE 2



DO NOT attempt to draw transmission against engine using bolts. If transmission will not seat against engine without force, contact your dealer for assistance.

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 THE 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 risks 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 written above.

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: \$45.00 per returned check/payment. Repayments must be made by cashier check or money order. WHEN YOU PROVIDE A CHECK AS PAYMENT, YOU AUTHORIZE US EITHER TO USE THE INFORMATION FROM YOUR CHECK TO MAKE A ONE-TIME ELECTRONIC FUND TRANSFER FROM YOUR ACCOUNT OR TO PROCESS THE PAYMENT AS A CHECK TRANSACTION.

On request, parts manufactured by Winters Performance Products, Inc. are available in super strength heat treated steel at 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.

© Winters Performance Products, Inc. All rights reserved. Winters Performance Products, Inc. claims no responsibility for typographical errors.



HOURS

8:30 - 5:30 EST Monday - Friday

ADDRESS

1580 Trolley Road York, PA 17408 USA

PHONE

717-764-8269

FAX

717-764-8017

WEB

www.wintersperformance.com

