



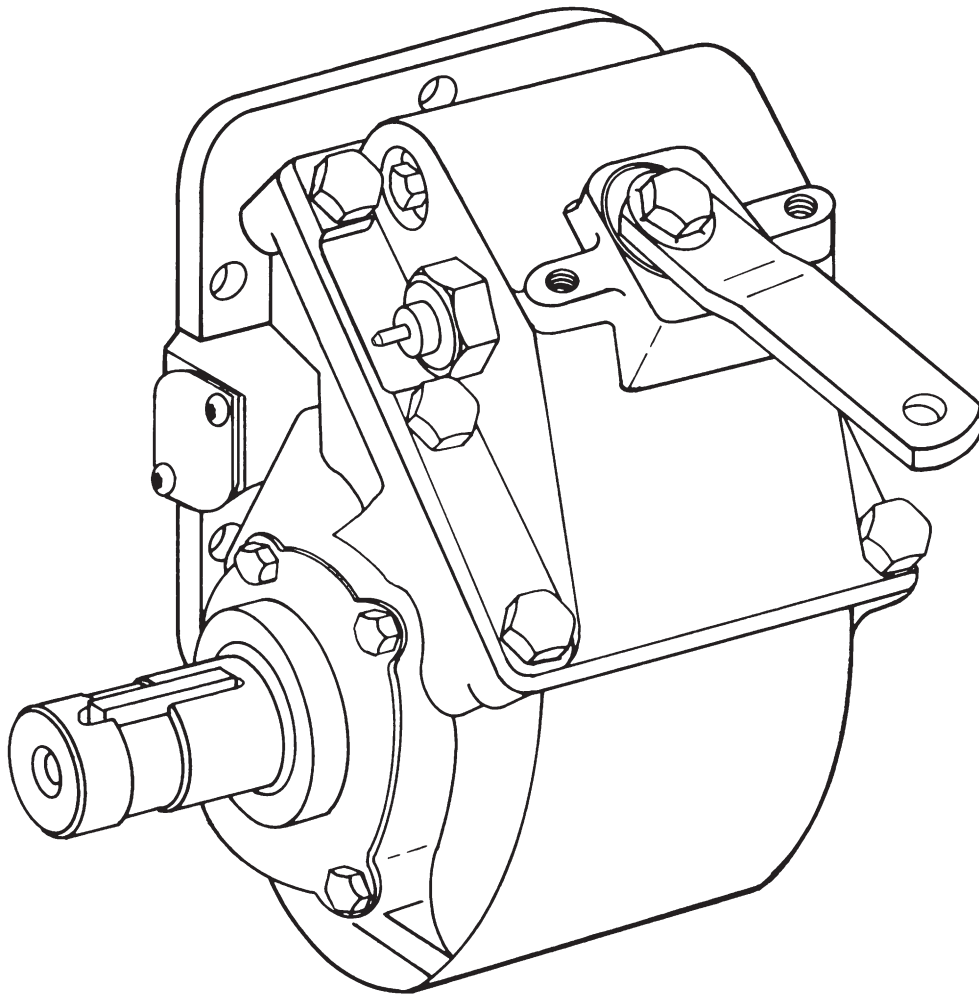
Muncie®  
Power  
Products

# TG SERIES POWER TAKE-OFF

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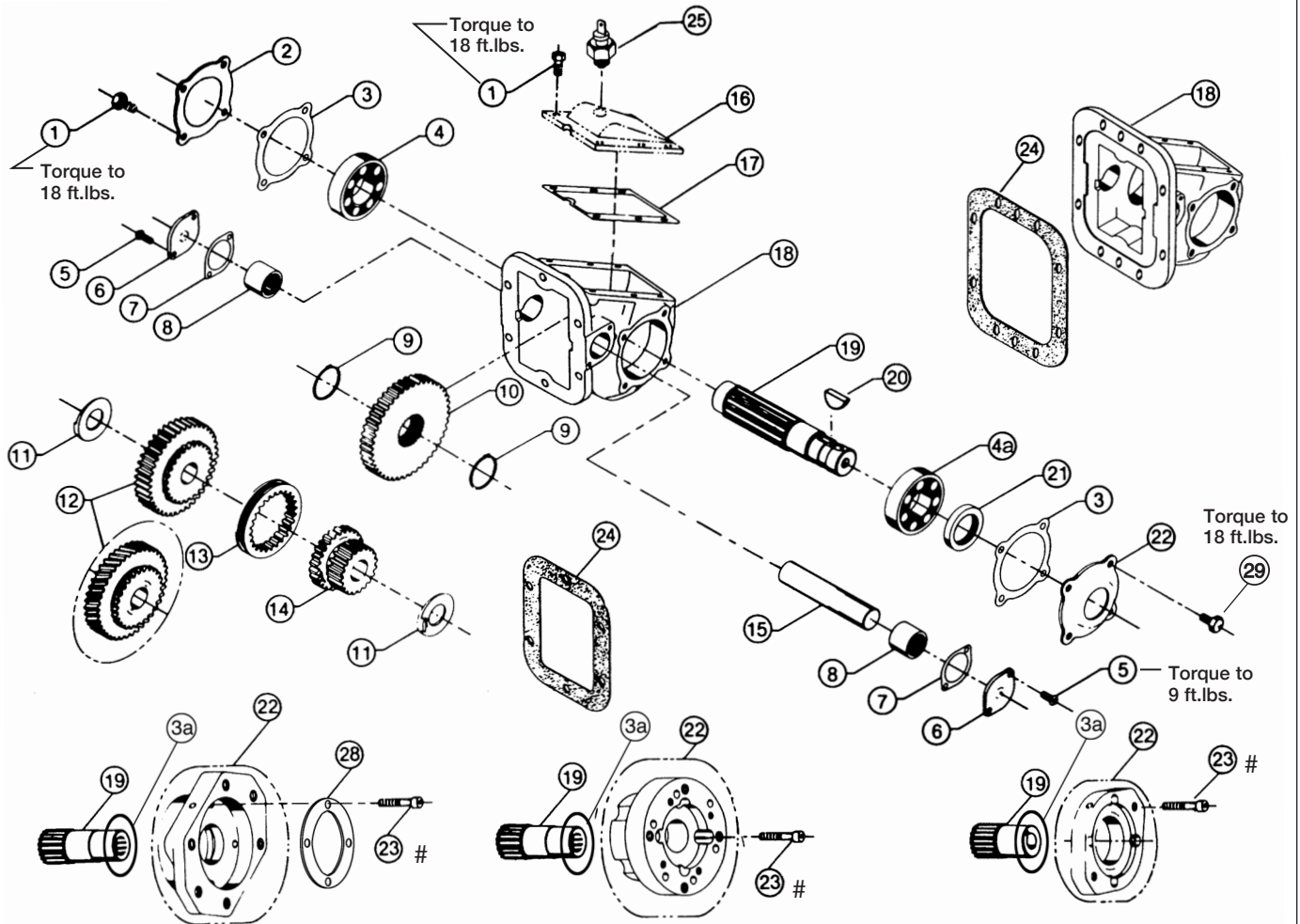
PARTS LIST AND SERVICE MANUAL

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# TG SERIES PTO

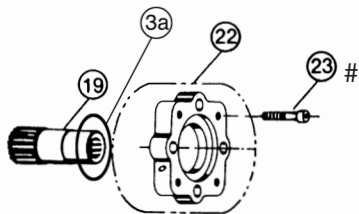
## EXPLODED VIEW



"L", "K", & "P" HYD. FLANGE

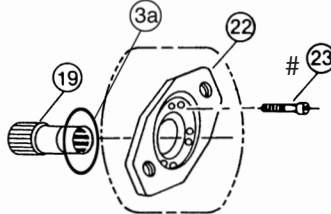
"M" HYD. FLANGE

"F", "Q", "R" & "T" HYD. FLANGE

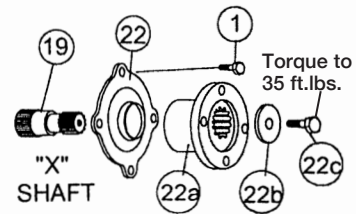


"G" HYD. FLANGE

# Torque to 25 ft.lbs.



"S" HYD. FLANGE

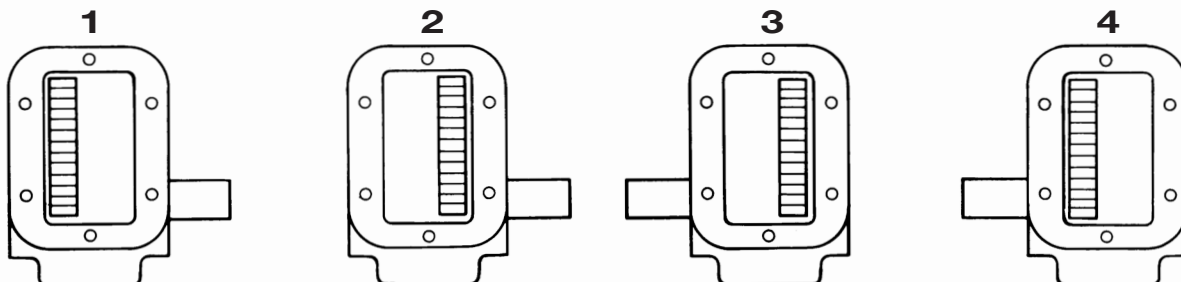


"C" & "2" COMP. FLANGE

Torque to 35 ft.lbs.

**Note:** For "I" and "Z" options, and "KG" and "PG" options, see page 15.

## ASSEMBLY ARRANGEMENTS



# PARTS LIST AND DESCRIPTION

| ITEM | QTY | PART NUMBER | DESCRIPTION                                                  |
|------|-----|-------------|--------------------------------------------------------------|
| 1    | 10  | 19T33233    | Cap Screw Std Assembly                                       |
|      | 4   | 19T33233    | Cap Screw T or 6 Shift Option                                |
|      | 6   | 19T39257    | Cap Screw T or 6 Shift Option                                |
| 2    | 1   | 15T34323    | Closed Bearing Cap                                           |
|      | 1   | 15T34576    | Bearing Cap "KG" & "PG" Shaft                                |
| 3    | 1   | 13T38542    | Gasket                                                       |
| 3a   | 1   | 12T36751    | O-Ring (Output)                                              |
| 4    | 1   | 10T21017    | Output Bearing                                               |
| 4a   | 1   | 10T38248    | Output Bearing "I" & "Z"                                     |
| 5    | 4   | 19T34530    | Button Head Cap Screw (Std.)                                 |
|      | 1   | 19M2562S    | Flat Cap Screw (I85, G85)                                    |
|      | 1   | 19T34530    | Button Head Cap Screw (I85)                                  |
|      | 2   | 19T31664    | Socket Cap Screw (I85)                                       |
|      | 4   | 19T31664    | Socket Cap Screw (S71)                                       |
|      | 3   | 19T34530    | Button Head Cap Screw (G85)                                  |
| 6    | 2   | 15T33977    | Idler Shaft Cap                                              |
|      | 2   | 15T35351    | Idler Shaft Cap (TG6N-I85)                                   |
|      | 2   | 15T35612    | Idler Shaft Cap (TG6N-S71)<br>(See page 21 for installation) |
| 7    | 2   | 13T38286    | Gasket                                                       |
| 8    | 2   | 10T24175    | Input Bearing                                                |
| 9    | 2   | 24T23937    | Snap Ring (as required)                                      |
| 10   | 1   | See Page 4  | Output Gear                                                  |
| 11   | 2   | 21T34281    | Thrust Washer                                                |
|      | 2   | 21T38375    | Coated Washer (A) Gears                                      |
| 12   | 1   | See Page 4  | Input Gear                                                   |
| 13   | 1   | 49T33959    | Clutch                                                       |
|      | 1   | 49T38158    | Clutch (A69)                                                 |
| 14   | 1   | See Page 4  | Ratio Gear                                                   |
| 15   | 1   | 07T33974    | Idler Shaft                                                  |
| 16   | 1   | See Pg 6-10 | Shift Cover Assembly                                         |
| 17   | 1   | 13T64246    | Gasket                                                       |
| 18   | 1   | 01T37765    | <b>Housings</b>                                              |
|      | 1   | 01T33958    | 6-Bolt (6F) Housing                                          |
|      | 1   | 01T34461    | 6-Bolt Housing Std.<br>(see page 24 if marked with "W")      |
|      | 1   | 01T35032    | 8-Bolt 'M' Housing                                           |
|      | 1   | 01T35342    | 6-Bolt (TG6N) Housing                                        |
| 19   | 1   | 06T41757    | <b>Output Shafts</b>                                         |
|      | 1   | 06T36857    | "X", "C", & "2" Shaft                                        |
|      | 1   | 06T35048    | "B" Shaft                                                    |
|      | 1   | 06T35048    | "Q" & "S" Shaft                                              |
|      | 1   | 06T35082    | "R" Shaft                                                    |
|      | 1   | 06T39143    | "M", "K", & "6" Hyd. Shaft                                   |
|      | 1   | 06T38373    | "KG" Hyd. Shaft                                              |
|      | 1   | 06T39140    | "F" & "N" Hyd. Shaft                                         |
|      | 1   | 06T39136    | "G" Hyd. Shaft                                               |
|      | 1   | 06T39139    | "L" Hyd. Shaft                                               |
|      | 1   | 06T36136    | "P" Hyd. Shaft                                               |
|      | 1   | 06T38374    | "PG" Hyd. Shaft                                              |
|      | 1   | 06T38261    | "I" Hyd. Shaft                                               |
|      | 1   | 06T37335    | "T" Hyd. Shaft                                               |
|      | 1   | 06T38242    | "Z" Hyd. Shaft                                               |
|      |     | 06T63182    | <b>TG8F-E80 Output Shafts</b>                                |
|      |     | 06T63180    | "X", "C", & "2" Shaft                                        |
|      |     | 06T63061    | "B" Shaft                                                    |
|      |     | 06T63184    | "M", "K", & "6" Shaft                                        |
|      |     | 06T63168    | "KG" shaft                                                   |
|      |     | 06T63172    | "F" & "N" Shaft                                              |
|      |     | 06T63172    | "P" Shaft                                                    |
| 20   | 1   | 26T01627    | Woodruff Key (Std. Shaft)                                    |
|      | 1   | 26T35254    | Key ("F" Shaft Only)                                         |
| 21   | 1   | 11T37790    | Shaft Seal (2 Req. for "KG" or "PG" Output)                  |
|      | 1   | 11T38247    | Shaft Seal ("I" and "Z" Output)                              |
| 22   | 1   | 15T41683    | <b>Bearing Caps</b>                                          |
|      | 1   | 14T39166    | "B", "C", "2", & "X" Output***                               |
|      | 1   | 14T39165    | "T", "Q", & "R" Hyd. Flange                                  |
|      | 1   | 14T39163    | "G" Hyd. Flange                                              |
|      | 1   | 14T39167    | "K", "KG", "L", "P", & "PG" Hyd. Flange                      |
|      | 1   | 14T39162    | "M" Hyd. Flange                                              |
|      | 1   | 14T38259    | "S" Hyd. Flange                                              |
|      | 1   | 14T38244    | "I" Hyd. Flange                                              |
|      | 1   | 14T39528    | "Z" Hyd. Flange                                              |
|      | 1   | 14T39538    | "6", "6G" Hyd. Flange                                        |
|      | 1   | 14T39538    | KW, PW Hyd. Flange Wet                                       |
|      | 1   | 14T39538    | Spline w/o shaft seal 11T37790                               |

| ITEM | QTY | PART NUMBER | DESCRIPTION                                                                                                                                                                     |
|------|-----|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 22a  | 1   | 18T38246    | Pilot Ring "I" & "Z" Hyd (See page 15)                                                                                                                                          |
|      | 1   | 14T37357    | "C" Companion Flange                                                                                                                                                            |
|      | 1   | 14T37378    | "2" Companion Flange                                                                                                                                                            |
|      | 1   | 12T43185    | KW, PW, Pump O-Ring                                                                                                                                                             |
| 22b  | 1   | 21T20092    | Flat Washer ("2", "C", & "X" Only)                                                                                                                                              |
| 22c  | 1   | 19T38266    | Cap Screw ("2", "C", & "X" Only)                                                                                                                                                |
| 23   | 4   | 19T34462    | Cap Screw (Hyd. "L", "K", "P", "KG", "PG" Assy. Only)                                                                                                                           |
|      | 4   | 19T38249    | "M" Hyd. Flange Assy. Only                                                                                                                                                      |
|      | 4   | 19M84478    | "N" Hyd. Flange Assy. Only                                                                                                                                                      |
|      | 4   | 19T39257    | "F", "G", "Q", "R", "S", & "T" Hyd. Assy. Only                                                                                                                                  |
|      | 4   | 19T41756    | (B Piloted Cover)                                                                                                                                                               |
|      | 4   | 19T96512    | Cap Screw (Hyd. "I" & "Z" Only)                                                                                                                                                 |
| N.S. | 1   | 19MK4717    | Bolt Kit "G" Flange (Option)                                                                                                                                                    |
| N.S. | 1   | 13M51717    | Tube, Gasket Eliminator (For W80 Only)                                                                                                                                          |
| 38   | 4   | 19T41118    | Cap Screw                                                                                                                                                                       |
| 24   | 1   | 13M35091    | .010 6-Bolt Gasket                                                                                                                                                              |
|      | 1   | 13M35092    | .020 6-Bolt Gasket                                                                                                                                                              |
|      | 1   | 13M13541    | Allison Gasket (U60, A69)                                                                                                                                                       |
|      | 1   | 13M35151    | .010 8-Bolt Gasket                                                                                                                                                              |
|      | 2   | 13M35152    | .020 8-Bolt Gasket                                                                                                                                                              |
|      | 1   | 13T35198    | .010 Gasket (TG6N-I85)                                                                                                                                                          |
|      | 1   | 13T35199    | .020 Gasket (TG6N-I85)                                                                                                                                                          |
|      | 1   | 13T62705    | Spl. Gasket (8F-E80)                                                                                                                                                            |
| 25   | 1   | 30T38111    | <b>Positive Indicator Switch (includes O-Ring)</b>                                                                                                                              |
|      | 1   | 30T38110    | For 1 & 4 Assy. (White) N.O.<br>For 2 & 3 Assy. (Black) N.C.                                                                                                                    |
| 42   | 1   | 25T35724    | Cap Plug F, G, K, M, N, Q, & S                                                                                                                                                  |
|      | 1   | 25T35725    | Cap Plug L & P                                                                                                                                                                  |
|      | 1   | 25T38309    | Cap Plug I                                                                                                                                                                      |
|      | 1   | 25T35520    | Cap Plug R                                                                                                                                                                      |
|      | 1   | 25T37387    | Cap Plug T                                                                                                                                                                      |
|      | 1   | 25T35936    | Cap Plug Z                                                                                                                                                                      |
| 27   | 1   | 43T37236    | Zerk ("KG" or "PG")                                                                                                                                                             |
| 28   | 1   | 58T38789    | Installation Ring (Output Flange<br>"K", "L", "P", "KG", "PG", "Z", "6", & "6G")                                                                                                |
| 29   | 4   | 19T41756    | Cap Screw ("B", "C", "2", & "X" Output)                                                                                                                                         |
| N.S. | 2   | 26T37992    | Dowel Pins (TG6F)                                                                                                                                                               |
| N.S. | 1   | 30M91113    | Two Terminal Switch N.O. (I option) (Silver)                                                                                                                                    |
|      | 1   | 30M92247    | Two Terminal Switch N.C. (I option) (Gold)                                                                                                                                      |
| N.S. | 1   | 30T4123     | O-Ring                                                                                                                                                                          |
| N.S. | 1   | 30T4123     | Switch w/Booted Control N.C.                                                                                                                                                    |
| N.S. | 1   | 30T4124     | Switch w/Booted Control N.O.                                                                                                                                                    |
| N.S. | 1   | 36M111NP    | Nameplate                                                                                                                                                                       |
| N.S. | 1   | 36MK3841    | Label Packet                                                                                                                                                                    |
| N.S. | 1   | TG-GSK-A1   | <b>Gasket &amp; Seal Kit – Air Shift Items 3, 3a, 7, 17, &amp; 21, (1) 12T36526 (See Air Cover Pg. 6, Items 10 &amp; 4)</b>                                                     |
| N.S. | 1   | TG-GSK-C    | <b>Gasket &amp; Seal Kit – Cable Shift Items 3, 3a, 7, 17, &amp; 21, (1) 12T36526 (See Cable Cover Pg. 7, Items 1, 5, 6, &amp; 9)</b>                                           |
| N.S. | 1   | TG-GSK-S    | <b>Gasket &amp; Seal Kit – Lectra Shift Items 3, 3a, 7, 17, &amp; 21, (1) 12T36526 (See Lectra Shift Pg. 7, Items 10 &amp; 4)</b>                                               |
| N.S. | 1   | TG-GSK-T    | <b>Gasket &amp; Seal Kit – E-Hydra (before 12/07) Items 3, 3a, 7, 17, &amp; 21, (1) 12T36526 (See E-Hydra Pg. 8, Items 8 &amp; 14, 12T35345)</b>                                |
| N.S. | 1   | TG-GSK-T1   | <b>Gasket &amp; Seal Kit – E-Hydra (12/07 &amp; later) Items 3, 3a, 7, 17, &amp; 21, (1) 12T36526 (See E-Hydra Pg. 8, Items 2 &amp; 11)</b>                                     |
| N.S. | 1   | TG-GSK-IA   | Gasket & Seal Kit – Air – "I" or "Z" Output                                                                                                                                     |
| N.S. | 1   | TG-RBK-A1   | <b>Rebuild Kit – Air Shift Items 3, 3a, 4, 7, 8, 9, 11*, 17, 20, &amp; 21 (1) 12T36526 (See Air Cover Pg. 6, Items 10 &amp; 4)</b>                                              |
| N.S. | 1   | TG-RBK-C    | <b>Rebuild Kit – Cable Shift Items 3, 3a, 4, 7, 8, 9, 11*, 17, 20, &amp; 21 (1) 12T36526 (See Cable Cover Pg. 7, Items 10 &amp; 4)</b>                                          |
| N.S. | 1   | TG-RBK-S    | <b>Rebuild Kit – Lectra Shift Items 3, 4, 7, 8, 9, 11*, 17, 20, &amp; 21 (1) 12T36526 (See Lectra Shift Pg. 7, Items 10 &amp; 4)</b>                                            |
| N.S. | 1   | TG-RBK-T    | <b>Rebuild Kit – E-Hydra (before 12/07) Items 3, 3a, 4, 7, 8, 9, 11*, 17, 20, &amp; 21 (1) 12T36526 (See E-Hydra Pg. 8, Items 8, &amp; 14, 12T35343)</b>                        |
| N.S. | 1   | TG-RBK-T1   | <b>Rebuild Kit – E-Hydra (12/07 &amp; later) Items 3, 3a, 4, 7, 8, 9, 11*, 17, 20, &amp; 21 (1) 12T36526 (See E-Hydra Pg. 8, Items 2, &amp; 11, 12T35343) *Use (2) 21T38375</b> |
| N.S. | 1   | TG-RBK-IA   | Rebuild Kit – Air "I" or "Z" Output                                                                                                                                             |

In assembly and disassembly the recommended torque value of all hex head cap screws is 18 ft.lbs.\*\* and the recommended torque value on the button head cap screws is 9 ft.lbs. Should any cap screw loosen over time, the cap screw should be discarded and threads examined for damage. Use new cap screws with lock patch.

**Notes:** \*\*Hydraulic flange cap screws are 25 ft.lbs. \*\*\* It is recommended to use Loctite #640 on outside of seal when replacing the shaft seal.

# GEAR SET SELECTION CHART

## TRANSMISSION & RATIO DESIGNATOR

U60 04

| ITEM 12    |       |       |      |
|------------|-------|-------|------|
| INPUT GEAR | TEETH | TRANS | NOTE |
| 03T38783   | (30T) | A69   | 3    |
| 03T34810 * | (18T) | C57   |      |
| 03T34452 * | (23T) | C60   |      |
| 03T34454 * | (20T) | C61   |      |
| 03T34453 * | (24T) | C70   |      |
| 03T34455 * | (28T) | C76   |      |
| 03T40079 * | (37T) | D94   |      |
| 03T64783   | (27T) | E70   |      |
| 03T62715   | (33T) | E80   | 10   |
| 03T94192 * | (42T) | F10   |      |
| 03T35189 * | (42T) | F11   |      |
| 03T35031 * | (21T) | F61   |      |
| 03T35613 * | (25T) | F62   |      |
| 03T35024   | (24T) | F63   |      |
| 03T35025 * | (25T) | F65   |      |
| 03T38140   | (24T) | F66   |      |
| 03T37657   | (26T) | F70   |      |
| 03T96626 * | (29T) | F75   |      |
| 03T37740 * | (28T) | F84   | 2    |
| 03T43207 * | (31T) | F89   |      |
| 03T34325 * | (27T) | G73   |      |
| 03T35180 * | (30T) | G85   |      |
| 03T37328 * | (34T) | I84   |      |
| 03T34597   | (26T) | M65   |      |
| 03T38530 * | (31T) | M80   | 4    |
| 03T38531 * | (30T) | M83   |      |

| ITEM 12     |       |       |      |
|-------------|-------|-------|------|
| INPUT GEAR  | TEETH | TRANS | NOTE |
| 03T37655A * | (35T) | N10   | 9    |
| 03T35730 *  | (16T) | N56   | 7    |
| 03T39158 *  | (24T) | N70   | 5    |
| 03T35489A * | (30T) | N79   | 8, 9 |
| 03T35488A * | (28T) | N80   | 8, 9 |
| 03T34457 *  | (28T) | N81   |      |
| 03T34286 *  | (21T) | S60   |      |
| 03T96746 *  | (22T) | S61   |      |
| 03T38184 *  | (22T) | S63   |      |
| 03T94243    | (26T) | S68   |      |
| 03T34287 *  | (24T) | S70   |      |
| 03T35540    | (29T) | S71   |      |
| 03T37918 *  | (28T) | S73   |      |
| 03T38546 *  | (29T) | T81   |      |
| 03T35650 *  | (28T) | T82   |      |
| 03T34451 *  | (20T) | U57   |      |
| 03T34285    | (24T) | U60   | 1    |
| 03T39495 *  | (24T) | U62   |      |
| 03T34284    | (24T) | U68   |      |
| 03T34326 *  | (31T) | W80   | 6    |
| 03T96773 *  | (24T) | X68   |      |
| 03T17306A * | (38T) | Z10   | 9    |
| 03T39491A * | (32T) | Z90   | 9    |
| 03T37260A * | (32T) | Z92   | 9    |
| 03T35935A * | (37T) | Z98   | 9    |
| 03T17307A * | (31T) | Z99   | 9    |

| ITEM 14 |            |       | ITEM 10     |       |
|---------|------------|-------|-------------|-------|
| RATIO   | RATIO GEAR | TEETH | OUTPUT GEAR | TEETH |
| 04      | 04T34277   | (13T) | 02T34278    | (36T) |
| 05      | 04T34275   | (16T) | 02T34276    | (34T) |
| 06      | 04T34441   | (19T) | 02T34440    | (31T) |
| 07      | 04T34271   | (21T) | 02T34272    | (29T) |
| 08      | 04T35186   | (23T) | 02T35185    | (26T) |
| 09      | 04T34399   | (24T) | 02T34398    | (26T) |
| 12h     | 04T35155   | (26T) | 02T35162    | (23T) |
| 13h     | 04T35363   | (27T) | 02T35362    | (21T) |
| 15h     | 04T34598   | (29T) | 02T39172    | (20T) |
| 18h     | 04T34605   | (31T) | 02T34601    | (18T) |

### Note-Item 10 and 14:

Input Ratio Gear & Output Gear must be used in pairs as shown above.

The TG Series PTO is designed to allow easy change from one model transmission to another by changing only one gear and to allow changing speeds by changing two gears.

The chart shows gear part numbers for each transmission designator (Ex: U60) and each speed ratio available (Ex: 04).

### X68 INPUT GEAR:

Mack Trucks and TTC/Spicer provide 6-pitch spur gear drive gears which have a modified tooth profile and this profile makes it possible to have contact with the root of our standard U68 PTO gear as it is designed for the TG PTO. The X68 was design to eliminate this problem. The X68 gear can be used anywhere the U68 gear is used, but it must be used with the additional 23M60032S or 23M80032 spacer. The U68 gear should NOT be used on any application page showing the X68 input gear designator.

### S68 INPUT GEAR:

The S68 input gear is a larger 6-pitch spur gear than the U68 or X68 input gear. This causes the gear to stick out of the housing further (or reach in deep into the transmission) thus the use of the "D" deep mount designator. The S68 is available in the TG Series as well as the SH/CS6/8 Series. (Note that the SH/CS Series with the S68 input gear are limited to the 07, 09, 12 ratios and the SH8D-S6813 or CS8D-S6814 ratios.)

The S68 is designed to fit either the U68 or X68 application without internal tooth interference. As an option, the S68 input gear can be used in place of the U68 or X68 when used with the additional spacer and stud kit as shown on the application page. Changing from the X68 or U68 to the larger S68 will change the output speed shown on the page, use multiplier .92 to determine the new PTO output percentage.

### Notes:

- When using this gear, replace the gasket pack with 52MK1002 or add 13M13541 gasket/shim when used with 04 or 05 ratio on Allison transmissions. Note that the TG04 ratios kits from Muncie Power include this gasket (kit), but the TG05 ratio kits do not.
- With this gear a special housing (01T37765 w/(2) 26T37992 pins), a stud kit 20TK4049 (metric), and 52TK4113 packet is used. Use of any other housing is not approved.
- The TG Series PTO always uses a special shifter cover when this input gear is used. Requires 20MKM604 stud kit and 23M60270 spacer and 52TK4470 kit to be used with the installation of the PTO & shift collar (49T38158).
- Used only with special housing 01T35342 (N) and metric stud kit 20MKM602.
- When selling this gear include the visor seal decal, 36M35665TC, with the boxed gear. When assembling a unit mount this decal on the visor label included with the PTO before applying to vehicle visor.
- 13M51717 tube, gasket eliminator, is to be included with the boxed gear or when assembled into a unit.
- Requires adapter plate kit 29TK3863.
- Include special lube sheet MC94-02.
- Gears with "A" include (2) coated thrust washers 21T38375 (item 11).
- E80 requires special output shaft.

\* Input Gears in italics and with an asterisk are obsolete.

They will be available as service parts only, until inventory is depleted.

# TG MODEL NUMBER CONSTRUCTION

**TG 6S — U60 04 — C 1 B X**

## PTO Type

TG — Triple Gear

## Mounting Options

6S — SAE 6-Bolt Std. Mtg.  
 6D — SAE 6-Bolt Non-Std. Mtg. (N81, S68 & W80)  
 6N — SAE 6-Bolt Non-Std. Mtg. (Isuzu NPR, Spcr. S71, S73, & M80)  
 8S — SAE 8-Bolt Std. Mtg.  
 8D — SAE 8-Bolt Non-Std. Mtg.  
 8F — SAE 8-Bolt Non-Std. Mtg. — Eaton Endurant (E70 & E80)  
 8M — SAE 8-Bolt Extra Deep Mtg.  
 6A — SAE 6-Bolt Std. Mtg. w/29TK3863 (for N56)  
 6B — SAE 6-Bolt Std. Mtg. — Metric Studs  
 6C — SAE 6-Bolt Non-Std. Mtg. — Metric Studs  
 6F — SAE 6-Bolt Std. w/Dowel Pins — Metric Studs (F84)  
 6K — SAE 6-Bolt Non-Std. Mtg. — Less Stud Kit  
 6L — SAE 6-Bolt Std. Mtg. — Less Stud Kit  
 8B — SAE 8-Bolt Std. Mtg. — Metric Studs  
 8C — SAE 8-Bolt Non-Std. Mtg. — Metric Studs  
 8K — SAE 8-Bolt Non-Std. Mtg. — Less Stud Kit  
 8L — SAE 8-Bolt Std. Mtg. — Less Stud Kit

## Transmission Input Gear Options

A69 — Allison 6.86P 20° PA Spur  
 E70 — Eaton 7.055P 20° PA Spur  
 E80 — Eaton 8.048P 20° PA 28.98 RH  
 F63 — Fuller 6.35P 20° PA 22° LH  
 F66 — Fuller 6.65P 20° PA 21.5° LH  
 F70 — Fuller 7P 23° PA 26° LH  
 M65 — Mack 6.48P 17° 30' PA Spur  
 S71 — Trecmec/Spicer 7P 17.5° PA 18° LH  
 S68 — Universal 6P or 6/8P 20° PA Spur Deep Reach  
 U60 — Universal 6P 20° Spur, Full Addendum  
 U68 — Universal 6P or 6/8P 20° PA Spur  
 Kit — None Less Input Gear

## OBSELETE Transmission Input Gears\*

I84 — Aisin 8.46P 20° PA Spur \*  
 C57 — Clark 5.7P 25° PA 38.7° LH \*  
 C60 — Clark 6.100P 25° PA 18° 40' 48" RH \*  
 C61 — Clark 6.100P 25° PA 32° 16' 48" LH \*  
 C70 — Clark 7P 25° PA 30° 46' 48" LH \*  
 C76 — Clark 7.6168P 18° 29' 22" 23° 12' 57" LH \*  
 D94 — Dodge 9.41P 18.33° PA 26.47° RH \*  
 F10 — Fuller 10.1P 20° PA Spur \*  
 F11 — Fuller 10.1P 21.5° PA Spur \*  
 F61 — Fuller 6.1P 20.5° PA 29° LH \*  
 F62 — Fuller 6.27P 22.5° PA Spur \*  
 F65 — Fuller 6.5P 20° PA 23° LH \*  
 F75 — Fuller 7.5P 22° PA 15° LH \*  
 F84 — Fuller 8.38P 18° PA 33.1° LH \*  
 F89 — Fuller 8.97P 17° PA 30.25° LH \*  
 G73 — GMC 7.3449P 20° PA 24° LH \*  
 M80 — Mercedes 8.04P 17.5° PA 26.97° LH \*  
 M83 — Mercedes 8.38P 17.5° PA 24.97° LH \*  
 N81 — New Process 8.116P 20° PA 33° 30' LH \*  
 N10 — New Venture 10.4019P 20° PA 34.5° LH \*  
 N79 — New Venture 7.94P 22.5° PA 30° LH \*  
 N80 — New Venture 7.99P 22.19° PA 29° LH \*  
 N56 — Nissan 5.64P 20° PA Spur \*  
 S60 — Trecmec/Spicer 6P 17.5° PA 26° 10' 37" LH \*  
 S61 — Trecmec/Spicer 6P 17.5° PA 22.25° LH \*  
 S63 — Trecmec/Spicer 6.1P 20° PA 23.15° LH \*  
 S70 — Trecmec/Spicer 7P 17.5° PA 28° 4' 23" LH \*  
 S73 — Trecmec/Spicer 7P 22.5° PA 19° RH \*  
 T81 — Trecmec 8.1P 20° PA 29.47° RH \*  
 T82 — Trecmec 8.19P 20° PA 29.9° LH \*  
 U57 — Universal 5 or 5/7P 20° Spur \*  
 U62 — Universal 6P 25° PA Spur \*  
 X68 — Universal 6P or 6/8P 20° PA Spur, Full Dedendum \*  
 W80 — Warner 8.0829P 20° PA 30° LH \*  
 Z10 — Zed F 10.3673P 20° LH \*  
 Z92 — Zed F 9.2364P 20° PA 36° LH \*  
 Z98 — Zed F 9.96078P 20° RH \*  
 Z99 — Zed F 9.96078P 20° RH \*

**Notes:** \* Obsolete input gears will be available as service parts only, until inventory is depleted.

\*\* Requires Special Kit

\*\*\* Obsolete shift options.

## Special Feature Options

X — None  
 A — Inverted Air Cover  
 E — U60 w/Std. Gasket Pack  
 F — Clearance Idler Cap  
 G — Greaseable Shaft (K, P, & V Only)  
 H — High Torque (12, 13, 15, & 18 Only) Std.  
 I — Dual Terminal Indicator  
 J — High Torque—Pressure Lube (12, 13, 15 & 18 Only)  
 M — Clearance Idler Cap  
 P — Pressure Lube (Optional)  
 Q — Clearance Idler Cap—High Torque  
 V — U60 w/Std. Gasket Pack, Milled Idler Cap  
 7 — Remote Pressure Switch

## Output Options

B — 1½" Round Keyed Shaft  
 C — 1410 Companion Flange  
 F — SAE "A" 2-Bolt  
 G — Special  
 I — DIN 5462  
 K — SAE "B" ⅞" -13T, SAE "B" 2- & 4-Bolt  
 L — SAE "B" 2- or 4-Bolt, Low Box Mount  
 M — SAE "A" ⅝" -9T, SAE "A" 2- & 6-Bolt  
 P — SAE "BB" 1" -15T, SAE "BB" 2- & 4-Bolt  
 Q — SAE "B" ⅞" -13T, SAE "A" 2-Bolt  
 R — SAE "A" ⅝" -9T, SAE "A" 2-Bolt  
 S — SAE "B" ⅞" -13T, SAE "B" 2-Bolt  
 T — SAE ¾" -11T, SAE "A" 2-Bolt  
 X — 1½" -20T Spline for Companion Flange  
 Z — SAE "C" 1¼" -14T, SAE "B" 2- & 4-Bolt  
 2 — DIN 100 Companion Flange

## Assembly Arrangements

1 — Right Side Shaft Low  
 2 — Right Side Shaft Low, Gear to Rear  
 3 — Left Side Shaft Low  
 4 — Left Side Shaft Low, Gear to Rear

## Shift Options

A — 12 V Manual Air  
 C — Cable Shift  
 E — 12 V Electric/Air  
 F — 24 V Electric/Air  
 H — 12 V Hydraulic Shift  
 J — 24 V Hydraulic Shift  
 K — 24 V Manual Air  
 M — Constant Mesh (U6004)  
 P — Manual Air (Less Installation Kit)  
 Z — Cable (A69)  
 4 — 12 V Manual Air (A69)  
 5 — 12 V Electric/Air (A69)  
 9 — 12 V Hydraulic Shift (A69 Only)

## OBSELETE Shift Options\*

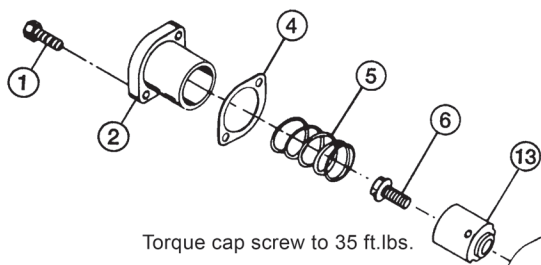
N — Special Electric/Air (N56) \*\*  
 S — Lectra Shift \*\*\*  
 T — E-Hydra \*\*\*  
 6 — Lectra Shift (A69) \*\*\*

## Speed Ratios

04 — .361:1  
 05 — .470:1  
 06 — .613:1  
 07 — .724:1  
 08 — .885:1  
 09 — .923:1  
 12 — 1.170:1  
 13 — 1.333:1  
 15 — 1.500:1  
 18 — 1.720:1



## AIR COVER OPTION "A" OR "E"



### ASSEMBLY PART NUMBERS

|                 |                                       |
|-----------------|---------------------------------------|
| <b>16TA3803</b> | For Assemblies 1 & 4 (Assembly Shown) |
| <b>16TA3804</b> | For Assemblies 2 & 3                  |
| <b>16TA6522</b> | 1 Assembly Eaton Endurant             |
| <b>16TA6523</b> | 2 Assembly Eaton Endurant             |

Lubricate piston before installing in cover cup.



V-Ring installation

Torque cap screw to 9 ft.lbs.

### AIR COVER PARTS LIST AND DESCRIPTIONS

| ITEM | QTY. | PART NO. | DESCRIPTION            |
|------|------|----------|------------------------|
| 1    | 4    | 19T34494 | Cap Screw              |
| 2    | 1    | 28T35675 | Cover Cup (Closed End) |
| 3    | 1    | 28T34480 | Cover Cup              |
| 4    | 2    | 13T38286 | Gasket*                |
| 5    | 1    | 27T35073 | Spring                 |
| 6    | 1    | 19T35681 | Cap Screw              |
| 7    | 1    | 22T35682 | Nut                    |
| 8    | 1    | 16T35377 | Cover Housing          |
| 9    | 1    | 49T35204 | Piston                 |
| 10   | 2    | 28T35205 | V-Ring                 |
| 11   | 1    | 25T34029 | Cap Plug               |
| 12   | 1    | 28T34481 | Yoke                   |
| 13   | 2    | 28T35695 | Guide                  |

#### TG-ASSK-1

Air Cover Seal Kit – Items 4, 10 & (2) 12T35343 [From Page 3 – Item 17, (1) 12T36526]

#### RBK-3838

Air Cover Rebuild Kit – Items 1, 2, 3, 4, 5, 10, 12, (2) 12T35343 [From Page 3 – Item 17, (1) 12T36526]

\* When repairing cover with O-Ring seals (4) use RTV with supplied gaskets.

#### DOUBLE ACTING

#### AIR SHIFT

#### OPTION 16TA3955

#### Add to Standard Air Cover Parts List:

(1) 28T34480,  
(1) 49T35204,  
(2) 28T35205

Delete: (1)  
27T35073,  
(1) 28T35675

### CONSTANT MESH "M" SHIFT OPTION

**For Assemblies 1 & 4 use:** 16TA3804 Air Cover and: Replace (1) 28T34480 with (1) 28T35675; Remove (1) 49T35204 piston and (2) 28T35205 V-Rings; Install (1) 25T32143 plug w/12T36526 O-Ring into indicator switch hole.

**For Assemblies 2 & 3 use:** 16TA3803 Air Cover and change as indicated above.

**When using the U6004 (03T34732) input gear use:** (1) 16T35377 cover housing; Install (2) 15T33977 shaft caps with (2) 13T38286 gasket & (4) 19T34530 cap screws; Install (1) 25T32143 plug w/12T36526 O-Ring into indicator switch hole.

## REVERSED COVER INSTALLATION

### ASSEMBLED SHIFTER PART NUMBERS:

(Includes Adapter Plate and Hardware)

**16TK3835** (Reversed Air Cover For Assys. 1 & 4)

**16TK3836** (Reversed Air Cover For Assys. 2 & 3)

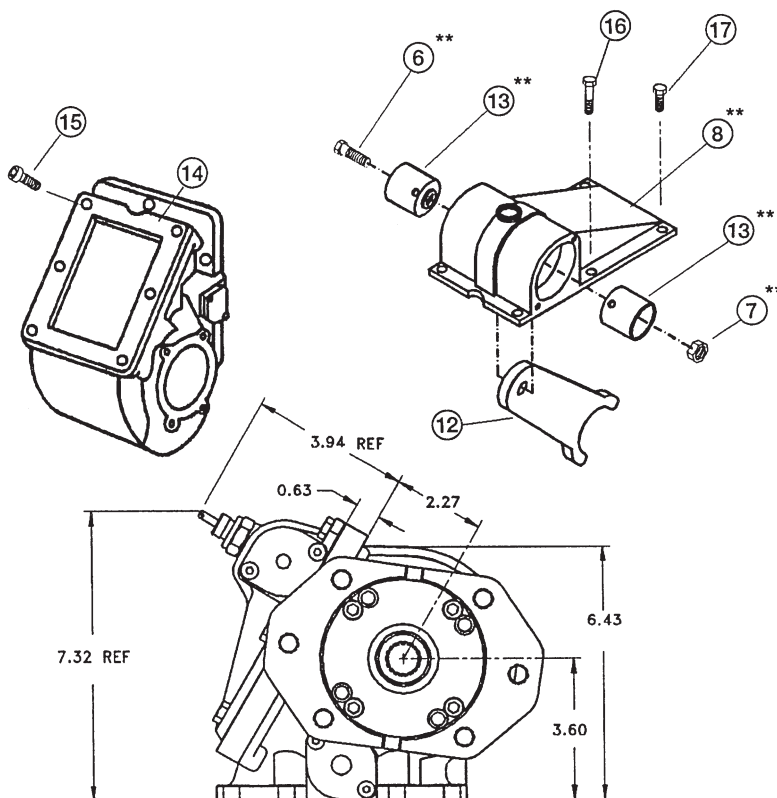
**16TK3837 CONVERSION KIT** (Requires Standard Cover – Used with Air or Lectra Shift Covers Only)

### CONVERSION KIT INCLUDES

| ITEM | QTY. | PART NO. | DESCRIPTION      |
|------|------|----------|------------------|
| 12   | 1    | 28T35581 | Yoke             |
| 14   | 1    | 28T35184 | Adapter Plate    |
| 15   | 4    | 19T35237 | Socket Cap Screw |
| 16   | 2    | 19T35236 | Hex Cap Screw    |
| 17   | 4    | 19T33233 | Hex Cap Screw    |
| N.S. | 1    | 13T64246 | Gasket           |

\*\* Items are included with the standard cover and are reused in this assembly

**NOTE:** Change Indicator Switch from the original item 25 shown on page 3, Switch not included in Kit.



## CABLE COVER OPTION “C”

| Cable Cover Parts List and Descriptions |      |          |                     |
|-----------------------------------------|------|----------|---------------------|
| Item                                    | Qty. | Part No. | Description         |
| 1                                       | 1    | 12T36878 | O-Ring              |
| 2                                       | 1    | 17T34495 | Shifter Rail        |
| 3                                       | 2    | 19T34259 | Cap Screw           |
| 4                                       | 1    | 17T34254 | Shifter Lever       |
| 5                                       | 1    | 28T35061 | Retainer Washer     |
| 6                                       | 1    | 12T36871 | O-Ring              |
| 7                                       | 1    | 16T34473 | Cable Cover Housing |
| 8                                       | 1    | 28T34476 | Yoke                |
| 9                                       | 1    | 21T35071 | Copper Washer       |
| 10                                      | 1    | 27T34253 | Spring              |
| 11                                      | 1    | 28T34252 | Poppet              |
| 12                                      | 1    | 28T34474 | Yoke Plate          |
| 13                                      | 1    | 28T34261 | Trigger             |

**ASSY PART NUMBER: 16TA3735 ALL ASSEMBLIES**

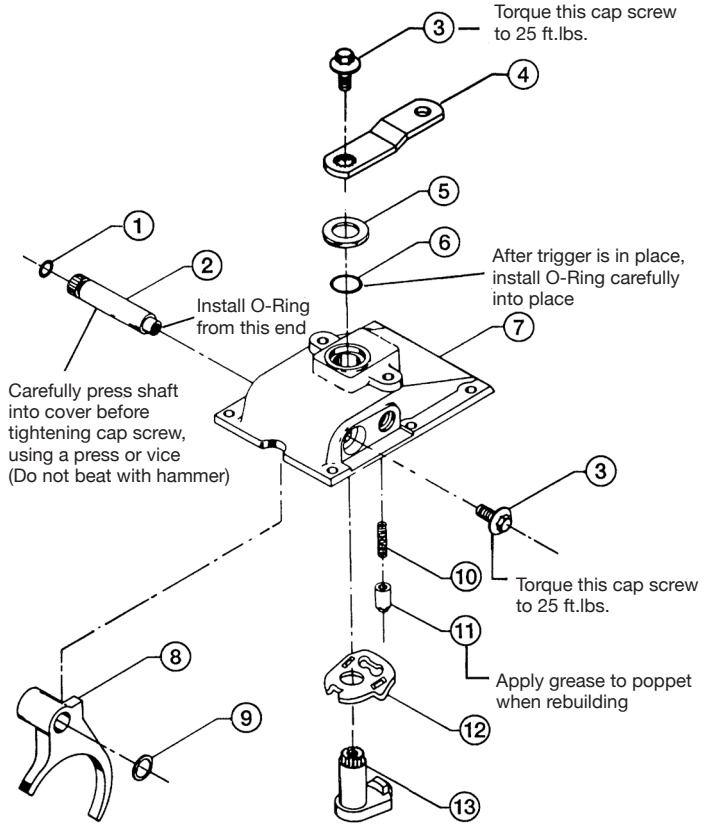
*Indicator switch sold separately*

**TG-CSRK** Cable Cover Rebuild Kit – Items 1, 2, 5, 6, 9, 10, & 11  
[From Page 3 – Item 17, (1) 12T36526]

**TG-CSSK** Cable Cover Seal Kit – Items 1, 5, 6, & 9  
[From Page 3 – Item 17, (1) 12T36526]

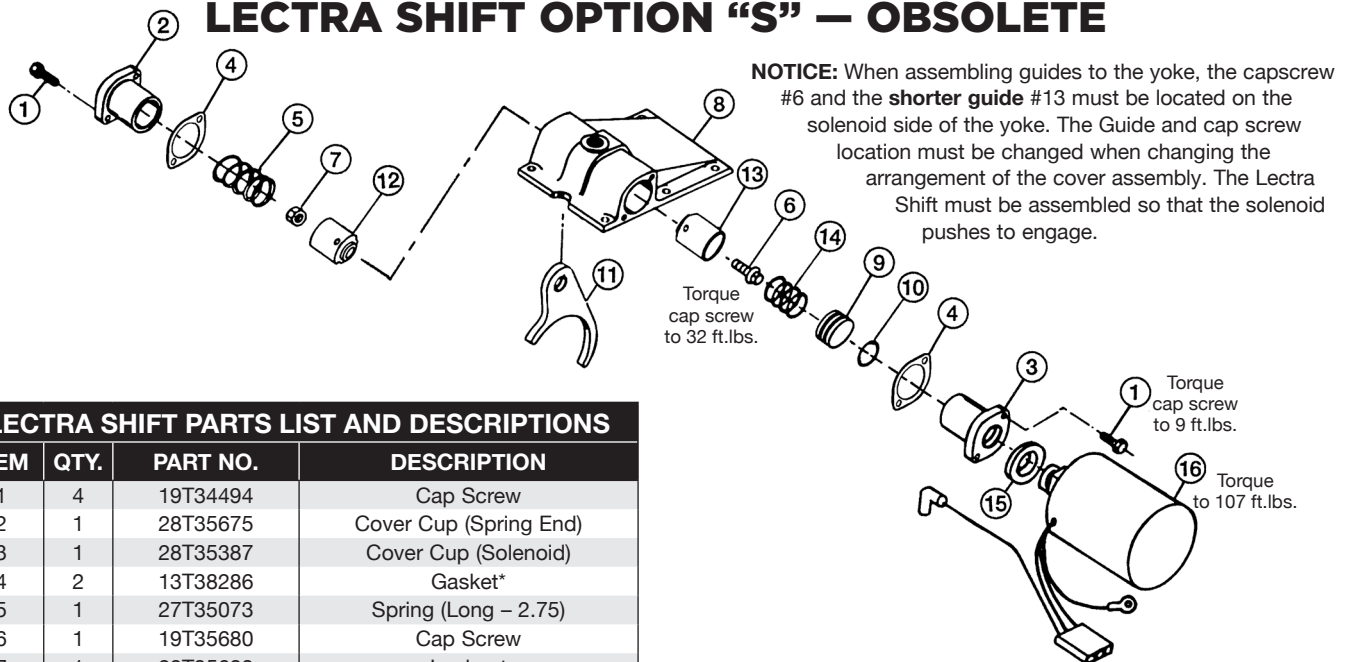
**16TA3793** Cable Cover with Breather Port (W96)  
(Item 7 – 16T35166)

**NOTE:** When rebuilding cover lubricate all O-Rings before installation.



**Cable Shift Option "C" Includes 28MCC120 Cable, 28MK0155 Knob, and 36MK1210A Light Kit**

## LECTRA SHIFT OPTION "S" – OBSOLETE



| LECTRA SHIFT PARTS LIST AND DESCRIPTIONS |      |          |                            |
|------------------------------------------|------|----------|----------------------------|
| ITEM                                     | QTY. | PART NO. | DESCRIPTION                |
| 1                                        | 4    | 19T34494 | Cap Screw                  |
| 2                                        | 1    | 28T35675 | Cover Cup (Spring End)     |
| 3                                        | 1    | 28T35387 | Cover Cup (Solenoid)       |
| 4                                        | 2    | 13T38286 | Gasket*                    |
| 5                                        | 1    | 27T35073 | Spring (Long – 2.75)       |
| 6                                        | 1    | 19T35680 | Cap Screw                  |
| 7                                        | 1    | 22T35683 | Locknut                    |
| 8                                        | 1    | 16T35377 | Cover Housing              |
| 9                                        | 1    | 49T35389 | Piston                     |
| 10                                       | 1    | 12T35304 | O-Ring                     |
| 11                                       | 1    | 28T34481 | Yoke                       |
| 12                                       | 1    | 28T35695 | Guide (Long)               |
| 13                                       | 1    | 28T35390 | Guide (Short)              |
| 14                                       | 1    | 27T35391 | Spring (Short – 1.09)      |
| 15                                       | 1    | 28T35392 | Spacer                     |
| 16                                       | 1    | 28TK4587 | Solenoid (w/grd. wire kit) |

**ASSEMBLY PART NUMBERS: OBSOLETE**

**16TA3822-A** For Assemblies 1 & 4 (Assembly Shown)

**16TA3823-A** For Assemblies 2 & 3

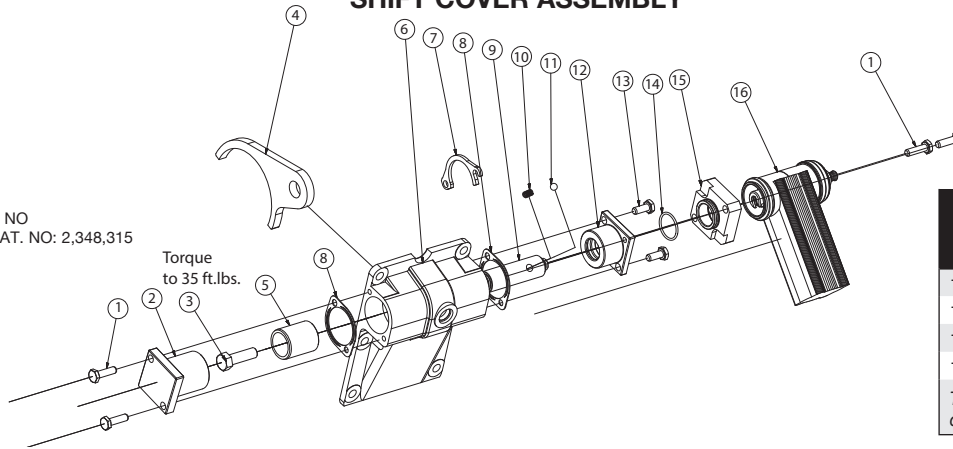
**TG-SSSK** Lectra Shift Seal Kit – Items 4 & 10, (2) 12T35343  
[From Page 3 – Item 17, (1) 12T36526]

**\*When repairing cover with O-Ring seals (4) use RTV with supplied gaskets.**

# E-HYDRA SHIFT TG PTO — OBSOLETE

## SHIFT COVER ASSEMBLY

U.S. PATENT NO  
CANADIAN PAT. NO: 2,348,315



**OBSOLETE**

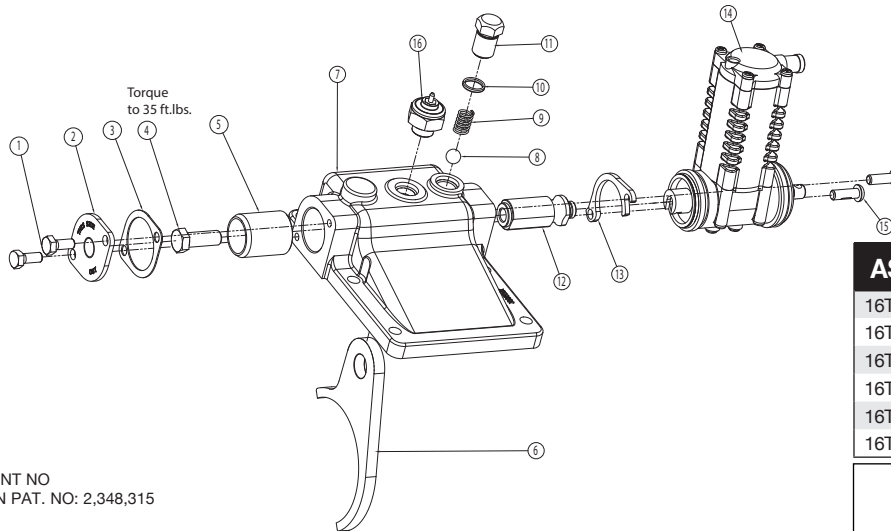
### ASSEMBLY PART NUMBERS

|          |                |
|----------|----------------|
| 16TA4682 | Std. Kit 1 & 4 |
| 16TA4683 | Std. Kit 2 & 3 |
| 16TA4844 | A69 Kit 1 & 4  |
| 16TA4845 | A69 Kit 2 & 3  |

These cover kits are replaced by cover built 12/07 & later.

## SHIFT COVER ASSEMBLY PARTS LIST AND DESCRIPTIONS — E HYDRA BUILT BEFORE 12/7

| ITEM | QTY. | PART NO.             | DESCRIPTION                                                                                      | ITEM | QTY. | PART NO.             | DESCRIPTION                                                                               |
|------|------|----------------------|--------------------------------------------------------------------------------------------------|------|------|----------------------|-------------------------------------------------------------------------------------------|
| 1    | 4    | 19T34494             | Cap Screw                                                                                        | 10   | 1    | 27T39813             | Spring                                                                                    |
| 2    | 1    | 28T40052             | Cup, Spring                                                                                      | 11   | 1    | 28T39814             | Ball                                                                                      |
| 3    | 1    | 19T35681             | Cap Screw                                                                                        | 12   | 1    | 28T40051<br>28T40215 | Adapter – STD 16TA4682 & 16TA4683<br>Adapter – Allison 1000/2000<br>(16TA4844 & 16TA4845) |
| 4    | 1    | 28T38167<br>28T34481 | Yoke – 1 or 4 Assembly<br>– 2 or 3 Assembly                                                      | 13   | 2    | 19T34028             | Cap Screw                                                                                 |
| 5    | 1    | 28T40053             | Guide                                                                                            | 14   | 1    | 12T36280             | O-Ring                                                                                    |
| 6    | 1    | 16T40050             | Cover, Housing                                                                                   | 15   | 1    | 28T39175             | Adapter                                                                                   |
| 7    | 1    | 1214KES5C00          | Retainer – Included with 28TA4685                                                                | 16   | 1    | 28TA4685             | Cylinder Assembly-<br>(REF# 194KES5E212) 12 V                                             |
| 8    | 2    | 13T40303             | Gasket                                                                                           | N.S. | 1    | 12T35343             | O-Ring – Included with 28TA4685                                                           |
| 9    | 1    | 28T39592<br>28T40214 | Shift Shaft – STD 16TA4682 & 16TA4683<br>Shift Shaft – Allison 1000/2000<br>*16TA4844 & 16TA4845 |      |      |                      |                                                                                           |



U.S. PATENT NO  
CANADIAN PAT. NO: 2,348,315

**OBSOLETE**

### ASSEMBLY PART NUMBERS

|          |                                |
|----------|--------------------------------|
| 16TA5008 | Reverse Assembly 1 & 4, Pg. 6  |
| 16TA5009 | Reverse Assembly 2 or 3, Pg. 6 |
| 16TA4852 | Standard Assembly 1 & 4        |
| 16TA4853 | Standard Assembly 2 & 3        |
| 16TA4968 | A69 Assembly 1 & 4             |
| 16TA4969 | A69 Assembly 2 & 3             |

### CONVERSION KITS

See Page 14

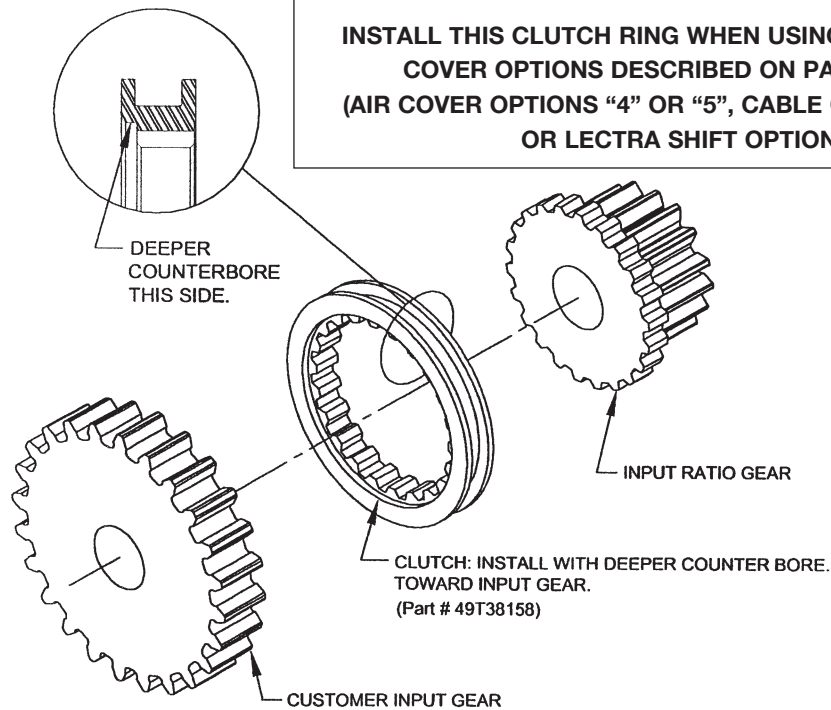
## SHIFT COVER ASSEMBLY PARTS LIST AND DESCRIPTIONS — E HYDRA BUILT 04/10 AND CURRENT

| ITEM | QTY. | PART NO.             | DESCRIPTION                                                          | ITEM | QTY. | PART NO.             | DESCRIPTION                                                                  |
|------|------|----------------------|----------------------------------------------------------------------|------|------|----------------------|------------------------------------------------------------------------------|
| 1    | 2    | 19T34028             | Cap Screw, Hex Head ¼-20 × ¾                                         | 10   | 1    | 12T41760             | O-Ring, Poppet                                                               |
| 2    | 1    | 15T33977             | Cap, Shaft                                                           | 11   | 1    | 28T41383             | Poppet                                                                       |
| 3    | 1    | 13T38286             | Gasket                                                               |      |      | 28T41694             | Shifter Rod                                                                  |
| 4    | 1    | 19T40289             | Cap Screw, Hex Head ¾-24 UNF × 1.00                                  | 12   | 1    | 28T41721             | Shifter Rod (Allison 1000/2000<br>16TA4968 & 16TA4969)                       |
| 5    | 1    | 28T40053             | Guide                                                                | 13   | 1    | 1214ECO1000          | Retainer                                                                     |
| 6    | 1    | 28T34481             | Yoke                                                                 | 14   | 1    | 28TA4685             | Cylinder Assembly                                                            |
| 7    | 1    | 16T41696<br>16T41695 | Cover, Housing (2 or 3 Assembly)<br>Cover, Housing (1 or 4 Assembly) | 15   | 2    | 19T34512             | Cap Screw, Hexagon Socket Button Head                                        |
| 8    | 1    | 28T41391             | ¾ Steel Ball                                                         |      |      | 30T38110<br>30T38111 | Indicator Switch (NC) 2 & 3 Assembly<br>Indicator Switch (NC) 1 & 4 Assembly |
| 9    | 1    | 27T41384             | Spring                                                               | 16   | 1    |                      |                                                                              |

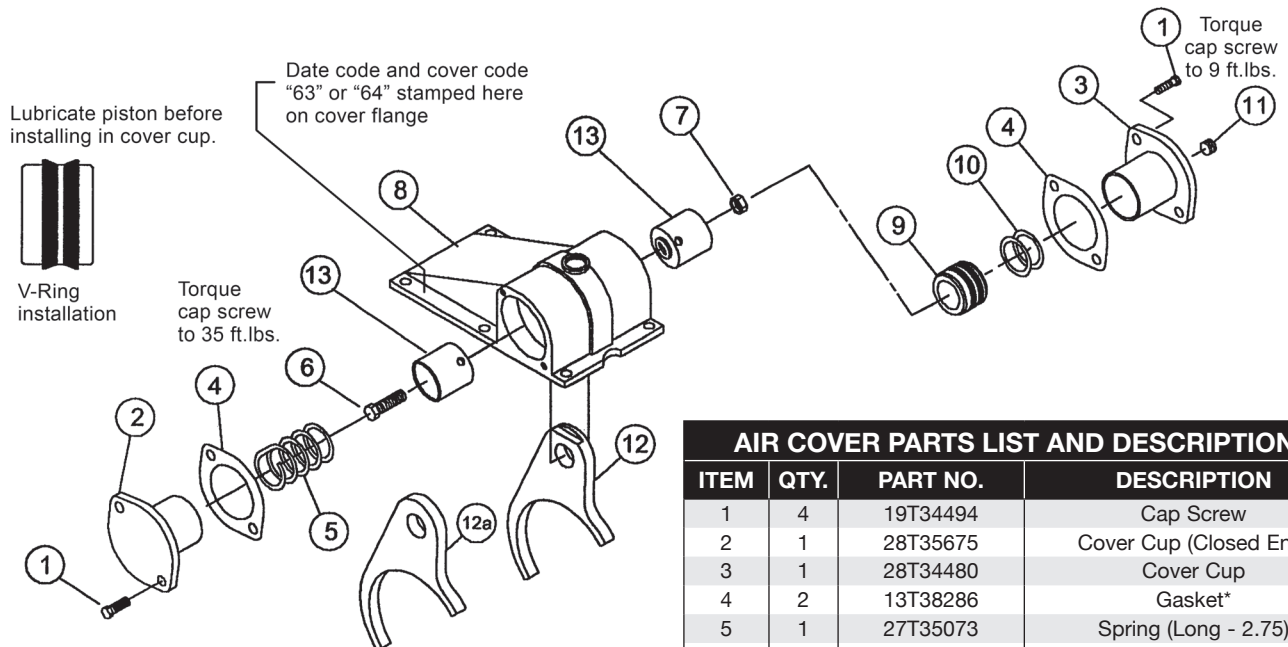
**Note:** \*Indicator switch is included with the PTO and not in any kit.



## TG PTO CLUTCH RING INSTALLATION FOR ALLISON 1000/2000 TRANSMISSION



## AIR COVER OPTION "4" OR "5"



### ASSEMBLY PART NUMBERS:

**16TA4063** For Assemblies 1 & 4 (Assembly Shown)

**16TA4064** For Assemblies 2 & 3

**TG-ASSK-1** Air Cover Seal Kit – Items 4 & 10

[From Page 3 – Item 17, (1) 12T36526]

**\*When repairing cover with O-Ring seals (4) use RTV with supplied gaskets.**

### AIR COVER PARTS LIST AND DESCRIPTIONS

| ITEM | QTY. | PART NO. | DESCRIPTION                 |
|------|------|----------|-----------------------------|
| 1    | 4    | 19T34494 | Cap Screw                   |
| 2    | 1    | 28T35675 | Cover Cup (Closed End)      |
| 3    | 1    | 28T34480 | Cover Cup                   |
| 4    | 2    | 13T38286 | Gasket*                     |
| 5    | 1    | 27T35073 | Spring (Long - 2.75)        |
| 6    | 1    | 19T35681 | Cap Screw                   |
| 7    | 1    | 22T35683 | Nut                         |
| 8    | 1    | 16T35377 | Cover Housing               |
| 9    | 1    | 49T38168 | Piston                      |
| 10   | 2    | 28T35205 | V-Ring                      |
| 11   | 1    | 25T34029 | Cap Plug                    |
| 12   | 1    | 28T38167 | Yoke (1 or 4 Assy. w/notch) |
| 12a  | 1    | 28T34481 | Yoke (2 or 3 Assy.)         |
| 13   | 2    | 28T35695 | Guide                       |

## CABLE COVER OPTION “Z”

## CABLE COVER PARTS LIST AND DESCRIPTIONS

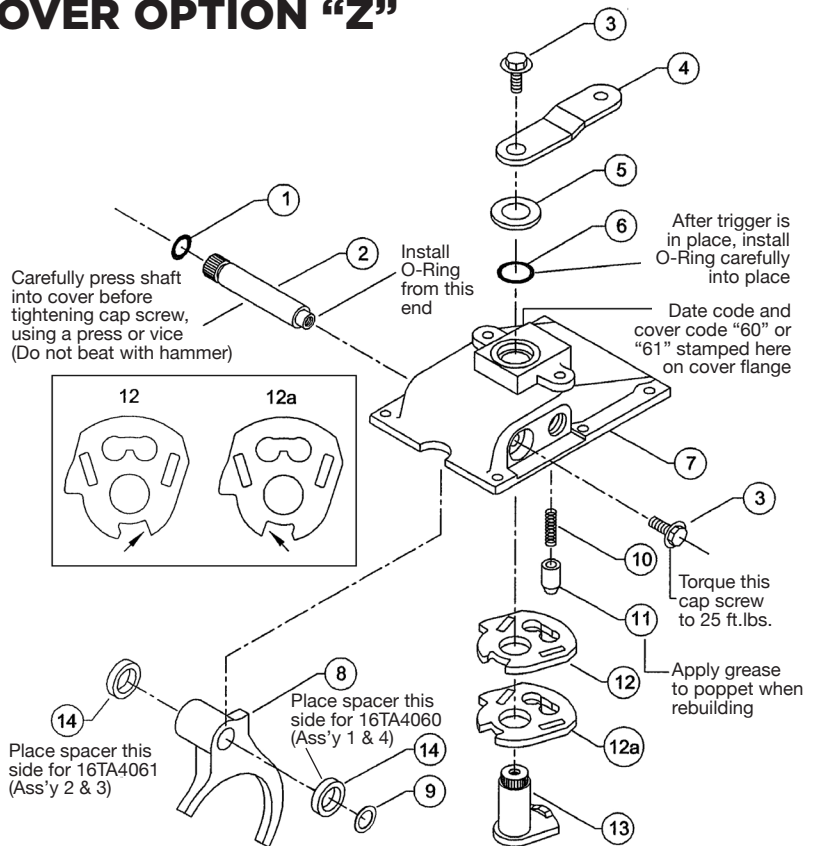
| ITEM | QTY. | PART NO. | DESCRIPTION              |
|------|------|----------|--------------------------|
| 1    | 1    | 12T36878 | O-Ring                   |
| 2    | 1    | 17T34495 | Shifter Rail             |
| 3    | 2    | 19T34259 | Cap Screw                |
| 4    | 1    | 17T34254 | Shift Lever              |
| 5    | 1    | 28T35061 | Retainer Washer          |
| 6    | 1    | 12T36871 | O-Ring                   |
| 7    | 1    | 16T34473 | Cable Cover Housing      |
| 8    | 1    | 28T34476 | Yoke                     |
| 9    | 1    | 21T35071 | Copper Washer            |
| 10   | 1    | 27T34253 | Spring                   |
| 11   | 1    | 28T34252 | Poppet                   |
| 12   | 1    | 28T38164 | Yoke Plate (Assy. 1 & 4) |
| 12a  | 1    | 28T38165 | Yoke Plate (Assy. 2 & 3) |
| 13   | 1    | 28T34261 | Trigger                  |
| 14   | 1    | 18T38166 | Spacer                   |

## ASSEMBLY PART NUMBERS:

### 16TA4060 For Assemblies 1 & 4

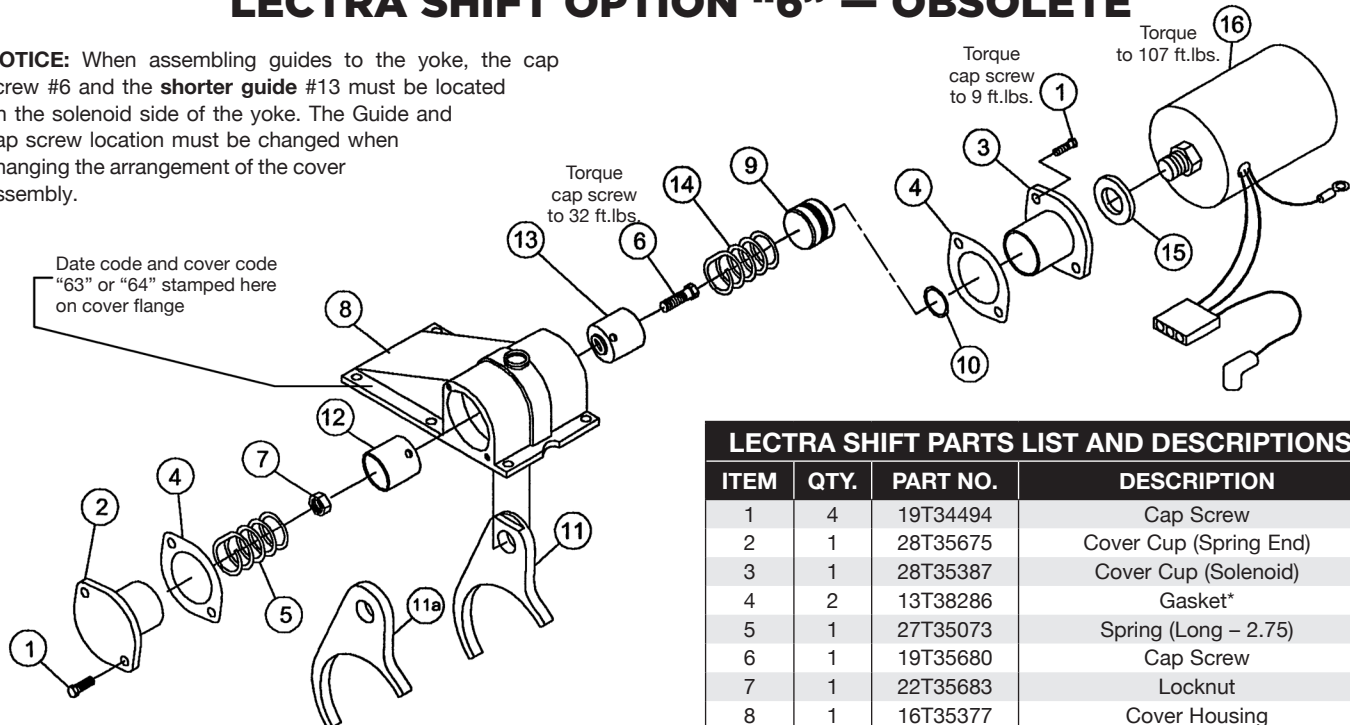
**16TA4061** For Assemblies 2 & 3

**Cable Shift Option "Z" Includes 28MCC120 Cable,  
28MK0155 Knob, and 36MK1210A Light Kit**



## LECTRA SHIFT OPTION “6” – OBSOLETE

**NOTICE:** When assembling guides to the yoke, the cap screw #6 and the **shorter guide** #13 must be located on the solenoid side of the yoke. The Guide and cap screw location must be changed when changing the arrangement of the cover assembly.



**ASSEMBLY PART NUMBERS: OBSOLETE**

**16TA4066** For Assemblies 1 & 4 (Assembly Shown)

**16TA4067** For Assemblies 2 & 3

**TG-SSSK** Lectra Shift Seal Kit – Items 4 & 10

[From Page 3 – Item 17, (1) 12T36526]

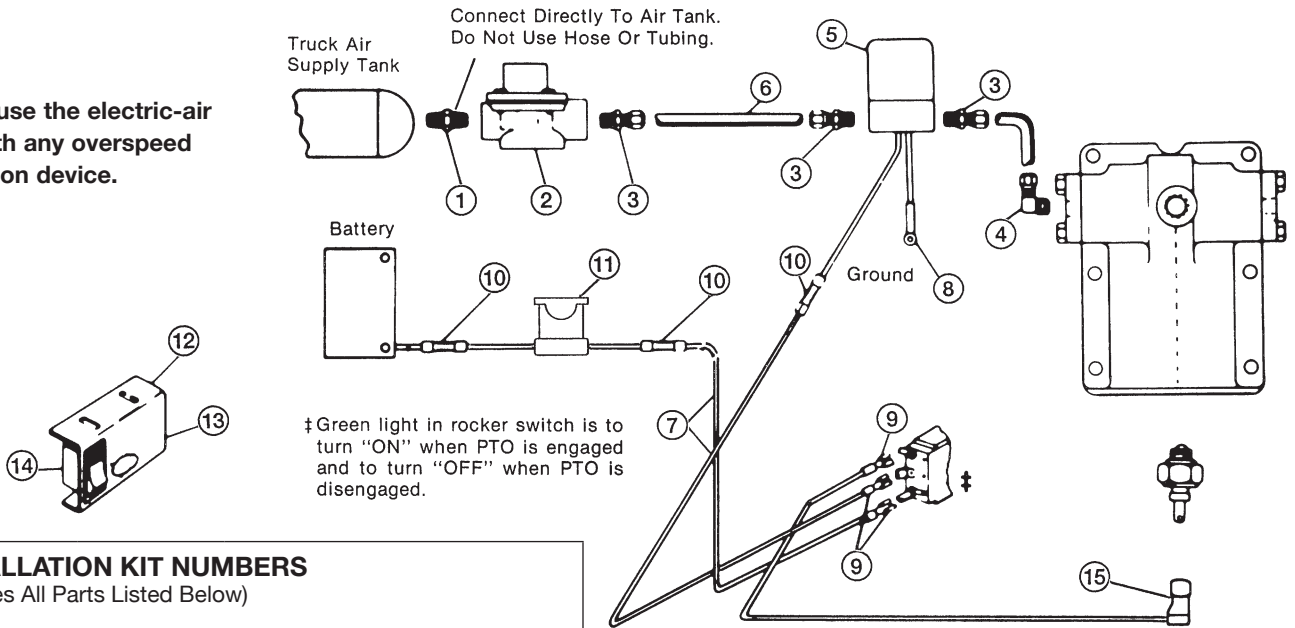
\* When repairing cover with O-Ring seals (4) use RTV with supplied gaskets.

| LECTRA SHIFT PARTS LIST AND DESCRIPTIONS |      |          |                            |
|------------------------------------------|------|----------|----------------------------|
| ITEM                                     | QTY. | PART NO. | DESCRIPTION                |
| 1                                        | 4    | 19T34494 | Cap Screw                  |
| 2                                        | 1    | 28T35675 | Cover Cup (Spring End)     |
| 3                                        | 1    | 28T35387 | Cover Cup (Solenoid)       |
| 4                                        | 2    | 13T38286 | Gasket*                    |
| 5                                        | 1    | 27T35073 | Spring (Long – 2.75)       |
| 6                                        | 1    | 19T35680 | Cap Screw                  |
| 7                                        | 1    | 22T35683 | Locknut                    |
| 8                                        | 1    | 16T35377 | Cover Housing              |
| 9                                        | 1    | 49T38169 | Piston                     |
| 10                                       | 1    | 12T35304 | O-Ring                     |
| 11                                       | 1    | 28T38167 | Yoke (1 & 4 Assy. w/notch) |
| 11a                                      | 1    | 28T34481 | Yoke (2 & 3 Assy.)         |
| 12                                       | 1    | 28T35695 | Guide (Long)               |
| 13                                       | 1    | 28T35390 | Guide (Short)              |
| 14                                       | 1    | 27T35391 | Spring (Short – 1.09)      |
| 15                                       | 1    | 28T35392 | Spacer                     |
| 16                                       | 1    | 28TK4587 | Solenoid (w/wrd. wire kit) |

# TG SERIES ELECTRIC-AIR SHIFT SYSTEM

## PARTS LIST AND DESCRIPTION

Do not use the electric-air shift with any overspeed protection device.



### INSTALLATION KIT NUMBERS

(Includes All Parts Listed Below)

**48M61200-A** (12 V Solenoid and Switch)

**48M62400-A** (24 V Solenoid and Switch)

| ITEM | QTY. | PART NO. | DESCRIPTION                                                          |
|------|------|----------|----------------------------------------------------------------------|
| 1    | 1    | 44MB2164 | Pipe Nipple                                                          |
| 2    | 1    | 31M15759 | Pressure Protection Valve                                            |
| 3    | 3    | 44MB6844 | Tube Fitting                                                         |
| 4    | 1    | 44MB6942 | Tube Fitting (Elbow)                                                 |
| 5    | 1    | 35M30692 | 12 V Solenoid Valve                                                  |
|      | 1    | 35M31692 | 24 V Solenoid Valve                                                  |
| 6    | 1    | 45M44430 | Air Tubing – 30 ft.                                                  |
| 7    | 30   | 37M18000 | Electric Wire – 30 ft.                                               |
| 8    | 1    | 34M18009 | Eyelet Terminal                                                      |
| 9    | 3    | 34M18250 | Spade Terminal                                                       |
| 10   | 3    | 34M18002 | Butt Splice                                                          |
| 11   | 1    | 33T36299 | Fuse Assembly                                                        |
| 12   | 1    | 36MA1005 | Dash Bracket                                                         |
| 13   | 1    | 36M01007 | Face Plate                                                           |
| 14   | 1    | 30T35687 | 12 V Switch                                                          |
|      |      | 30T35712 | 24 V Switch                                                          |
| 15   | 1    | 34T38163 | Booted Connector                                                     |
| N.S. | 1    | 36MK1007 | Bolt Kit (Includes: 6 Bolts, 6 Nuts, 6 Flat Washers, 6 Lock Washers) |

Indicator switch sold separately – Not included in kit.

### CONVERSION KIT NUMBERS – WIRE TO ELECTRIC AIR

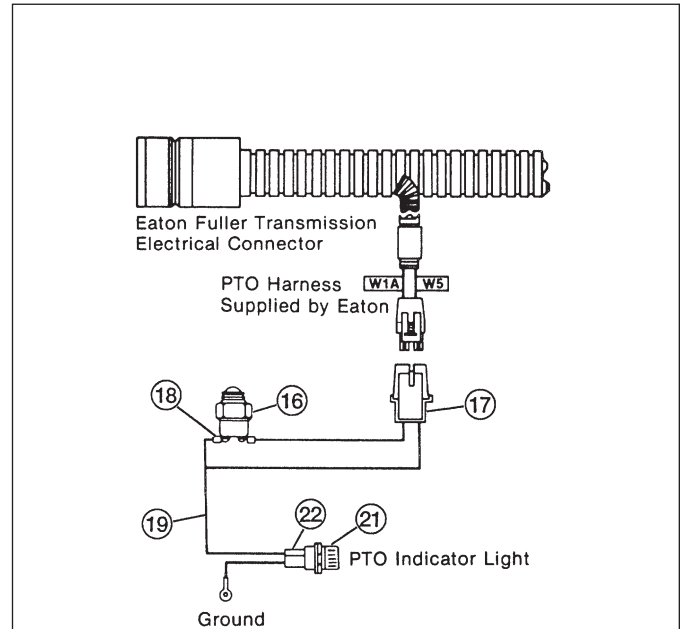
(12 Volt Only Listed)

**16MK0200-A** (For Assys. 1 & 4)

**16MK1200-A** (For Assys. 2 & 3)

Air System Users Only–You will not receive any air through the pressure protection valve to the PTO system until your main tank pressure exceeds 65 PSI. Some chassis have dual air systems; be sure to connect to the air supply at the location recommended by the vehicle manufacturer.

**NOTE:** Solenoid Valve (Item 5) should be mounted on firewall to protect it from corrosive environment.

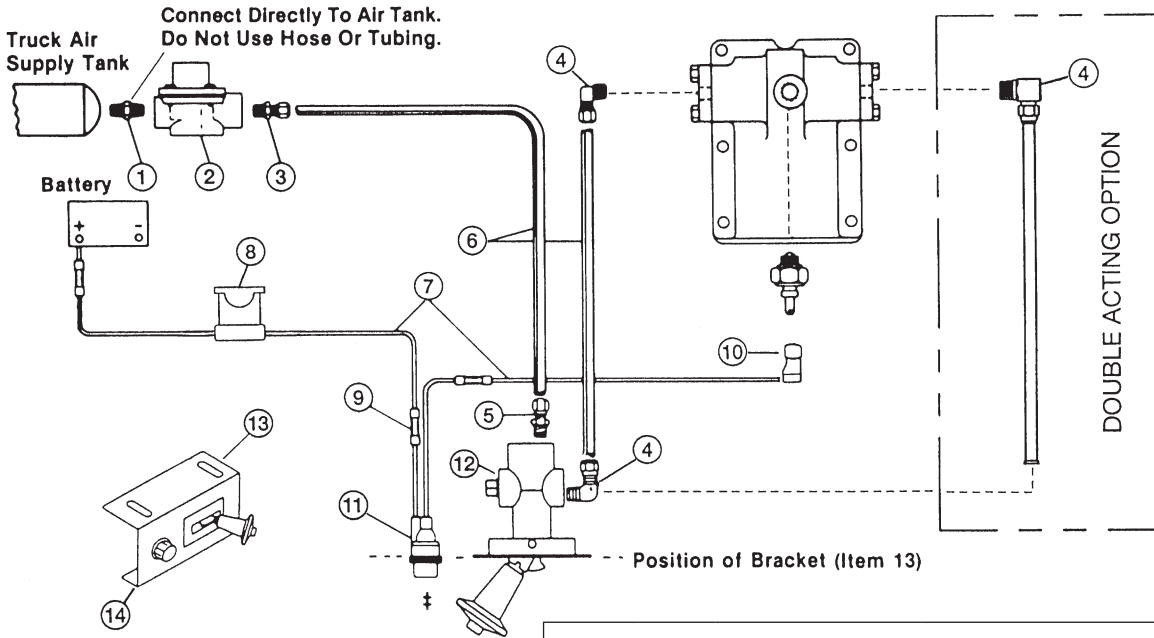


| ITEM | QTY. | PART NO. | DESCRIPTION             |
|------|------|----------|-------------------------|
| 13   | 1    | 36T35431 | Face Plate              |
| 16   | 1    | 30M91113 | Indicator Switch 1 or 4 |
|      | 1    | 30M92247 | Indicator Switch 2 or 3 |
| 17   | 1    | 34MA1420 | Wiring Harness          |
| 18   | 2    | 34M18009 | Ring Terminal           |
| 19   | 15   | 37M18000 | Electric Wire           |
| 21   | 1    | 32MSR12V | 12 V Light              |
| 22   | 2    | 34M18187 | Spade Terminal          |

Eaton is requiring the installation of their wiring harness through a special connection from their harness to a special PTO indicator switch.

# TG SERIES STANDARD AIR SHIFT SYSTEM

## PARTS LIST AND DESCRIPTION



‡ Red indicator light is to turn “ON” when PTO is engaged, and is to turn “OFF” when PTO is disengaged.

### INSTALLATION KIT NUMBERS

(Includes All Parts Listed Below)

**48M61250-A** (12 V Light)

**48M62450-A** (24 V Light)

| ITEM | QTY. | PART NO. | DESCRIPTION                                                          |
|------|------|----------|----------------------------------------------------------------------|
| 1    | 1    | 44MB2164 | Pipe Nipple                                                          |
| 2    | 1    | 31M15759 | Pressure Protection Valve                                            |
| 3    | 1    | 44MB6844 | Tube Fitting                                                         |
| 4    | 2    | 44MB6942 | Tube Fitting (Elbow)                                                 |
| 5    | 1    | 44MB6842 | Tube Fitting                                                         |
| 6    | 1    | 45M44430 | Air Tubing – 30 ft.                                                  |
| 7    | 12   | 37M18000 | Electric Wire – 12 ft.                                               |
| 8    | 1    | 33T36299 | Fuse Assembly                                                        |
| 9    | 3    | 34M18002 | Butt Splice                                                          |
| 10   | 1    | 34T38163 | Booted Connector                                                     |
| 11   | 1    | 32M12001 | 12 V Light                                                           |
| 11   | 1    | 32M24001 | 24 V Light                                                           |
| 12   | 1    | 35M18653 | Air Valve                                                            |
| 13   | 1    | 36MA1004 | Dash Bracket                                                         |
| 14   | 1    | 36M01005 | Face Plate                                                           |
| N.S. | 1    | 36MK1007 | Bolt Kit (Includes: 6 Bolts, 6 Nuts, 6 Flat Washers, 6 Lock Washers) |

Indicator switch sold separately – Not included in kit.

### 4838317-A (12 V LIGHT)

Same as 48M61250-A less Item 12 (35M18653 Air Valve).

### CONVERSION KIT NUMBERS – WIRE TO ELECTRIC AIR

(12 Volt Only Listed)

**16MK3803-A** (For Assys. 1 & 4)

**16MK3804-A** (For Assys. 2 & 3)

### DOUBLE ACTING KIT NO. 48M61261-A (12 V Light Shift Option “D”)

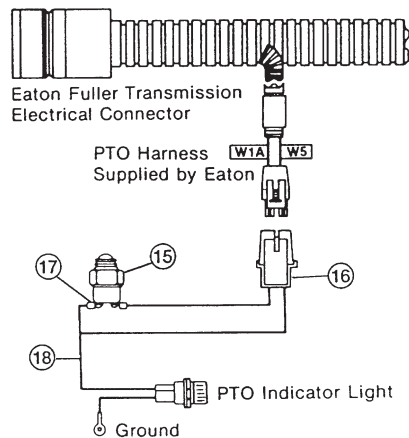
Includes parts listed in 48M61250-A with the exception of item numbers listed below.

| ITEM | QTY. | PART NO. | DESCRIPTION             |
|------|------|----------|-------------------------|
| 4    | 3    | 44MB6942 | Tube Fitting (Elbow)    |
| 12   | 1    | 35T37955 | Air Valve               |
| 13   | 1    | 36T38049 | Dash Bracket            |
| 14   | 1    | 36T38016 | Face Plate              |
| N.S. | 4    | 22MX2520 | .25-20 Hex Nut          |
| N.S. | 4    | 19T34530 | .25-20 x .5 Button Head |
| N.S. | 1    | 36MK1011 | Bolt Kit                |

### EATON FULLER CEEMAT TRANSMISSIONS

**48MK1434-14 (1 OR 4 ASSY); 48MK1434-23 (2 OR 3 ASSY)**

(Used in addition to the kit above)



| ITEM | QTY. | PART NO. | DESCRIPTION             |
|------|------|----------|-------------------------|
| 15   | 1    | 30M91113 | Indicator Switch 1 or 4 |
| 15   | 1    | 30M92247 | Indicator Switch 2 or 3 |
| 16   | 1    | 34MA1420 | Wiring Harness          |
| 17   | 2    | 34M18009 | Ring Terminal           |
| 18   | 1    | 37M18180 | Electric Wire           |

Eaton is requiring the installation of their wiring harness through a special connection from their harness to a special PTO indicator switch.

# TG SERIES AIR SHIFT SYSTEM FOR NISSAN MLS-61A OR B

## OBSOLETE

| BASE KIT 48TK4518 "N" SHIFT OPTION |      |           |                             |
|------------------------------------|------|-----------|-----------------------------|
| ITEM                               | QTY. | PART NO.  | DESCRIPTION                 |
| 9                                  | 1    | 23T35796  | Solenoid Bracket            |
| 10                                 | 2    | 44MB6844  | Compression Fitting         |
| 12                                 | 2    | 19T35800  | Machine Screw               |
| 15                                 | 2    | 21T35901  | Lock Washer                 |
| 16                                 | 1    | 19T20522  | Hex Head Cap Screw          |
| 17                                 | 1    | 22T35145  | Hex Nut                     |
| 19                                 | 1    | 44MB6842  | Compression Fitting         |
| 20                                 | 1    | 44MB6942  | Compression Fitting         |
| 21                                 | 1    | 45M44430  | Tubing - 30 ft.             |
| 22                                 | 2    | 34T35436  | .250" Male Spade Terminal   |
| 23                                 | 2    | 34T35908  | .250" Female Spade Terminal |
| 24                                 | 1    | 35M30692  | 12 V Solenoid               |
| N.S.                               | 1    | 37T42512  | Wire 12.5 ft.               |
| N.S.                               | 4    | 34M18002  | Butt Splice                 |
| N.S.                               | 1    | 36MK1210A | Light Kit                   |

## OBSOLETE

Activation Kit Model Year 1999-2002

48TK4517 (Sold Separately)

Same as 48TK4516 except relay 30T37926  
in place of 30T38973

## OBSOLETE

### ACTIVATION KIT 48TK4516 FOR NISSAN 2003-2004

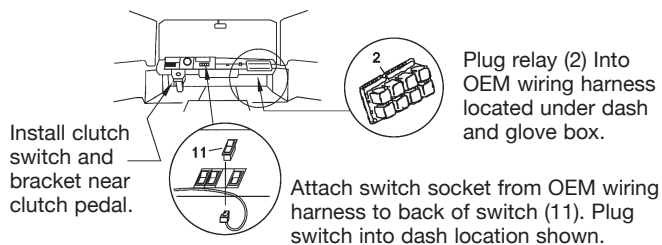
| ITEM | QTY. | PART NO. | DESCRIPTION        |
|------|------|----------|--------------------|
| 1    | 1    | 30T36232 | Clutch Switch      |
| 2    | 1    | 30T38973 | Relay (2003)       |
| 3    | 2    | 44T35790 | Sleeve             |
| 4    | 1    | 44T35791 | Pipe Coupling      |
| 5    | 2    | 44T35792 | Nut                |
| 6    | 1    | 44T35793 | Tee                |
| 7    | 1    | 23T36291 | Switch Bracket     |
| 8    | 1    | 23T36264 | Push Plate         |
| 11   | 1    | 30T36235 | Switch             |
| 13   | 2    | 22T36293 | Hex Nut            |
| 14   | 1    | 22T36297 | Hex Nut            |
| 18   | 2    | 19T36292 | Hex Head Cap Screw |

## OBSOLETE

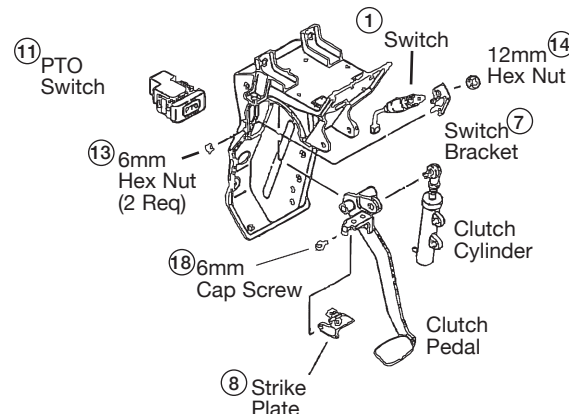
### ACTIVATION KIT 48TK4693 FOR NISSAN 2005-2006

| ITEM | QTY. | PART NO. | DESCRIPTION         |
|------|------|----------|---------------------|
| 1    | 1    | 30T36232 | Clutch Switch       |
| 2    | 1    | 30T38973 | Relay (2003)        |
| 7    | 1    | 23T36291 | Switch Bracket      |
| 8    | 1    | 23T36264 | Push Plate          |
| 11   | 1    | 30T36235 | Switch              |
| 13   | 2    | 22T36293 | Hex Nut             |
| 14   | 1    | 22T36297 | Hex Nut             |
| 18   | 2    | 19T36292 | Hex Head Cap Screw  |
| 27   | 1    | 44TK4607 | Plastic Airline Kit |

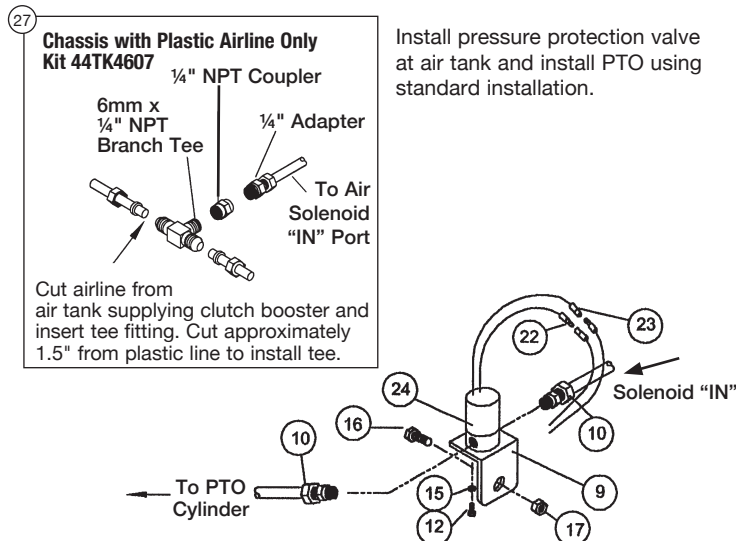
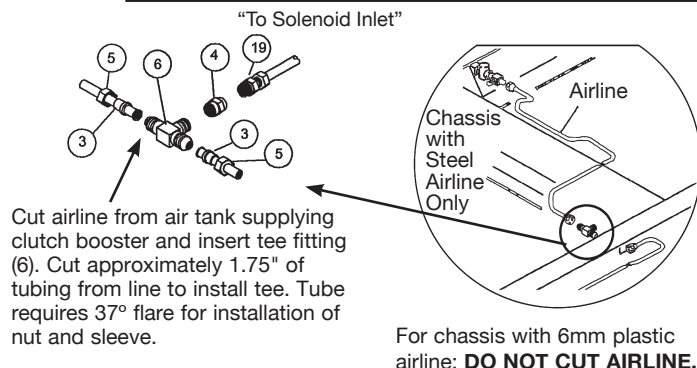
## INSIDE CAB



## CLUTCH SWITCH INSTALLATION

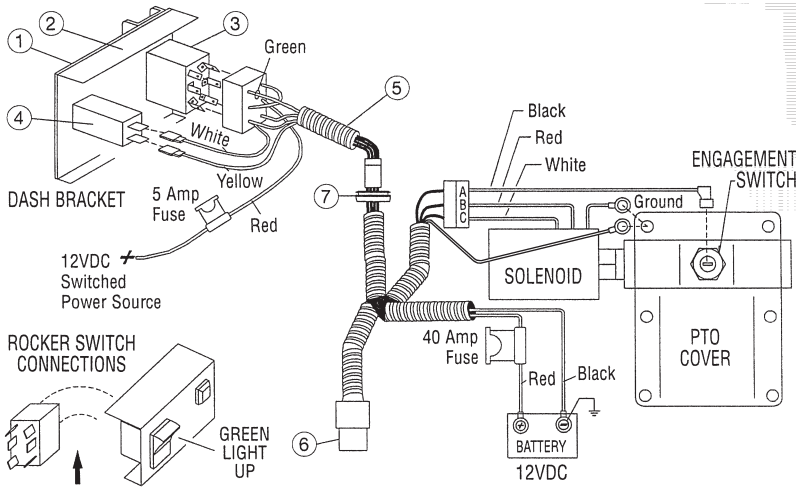


## CHASSIS CONNECTIONS





## TG SERIES LECTRA SHIFT SYSTEM — OBSOLETE



### CONVERSION KIT NUMBERS – WIRE TO LECTRA SHIFT

(12 V Only Listed) **16MK3848-A** (For Assys. 1 & 4)  
**16MK3849-A** (For Assys. 2 & 3)

**Service Kit: 48TK3976** Includes wire harness relay, rocker switch & Indicator Light

### INSTALLATION KIT NUMBER 48TK3981

(Includes All Parts Listed Below)

| ITEM | QTY. | PART NO. | DESCRIPTION          |
|------|------|----------|----------------------|
| 1    | 1    | 36T35431 | Face Plate           |
| 2    | 1    | 36MA1005 | Dash Bracket         |
| 3    | 1    | 30T37620 | Switch               |
| 4    | 1    | 32MSR12V | 12 V Light           |
| 5    | 1    | 34T37751 | Wire Harness         |
| 6*   | 1    | 37T43159 | Relay                |
| 7    | 1    | 37T35674 | Grommet              |
| N.S. | 1    | 19T35439 | Sheet Metal Screw    |
| N.S. | 5    | 28T35442 | Wire Tie             |
| N.S. | 1    | 36MK1007 | Bolt Kit             |
| N.S. | 1    | 36T35710 | Dash Label (MC92-01) |

Indicator switch sold separately – Not incl. in above kit.

\* Relay is supplied in the wire harness.

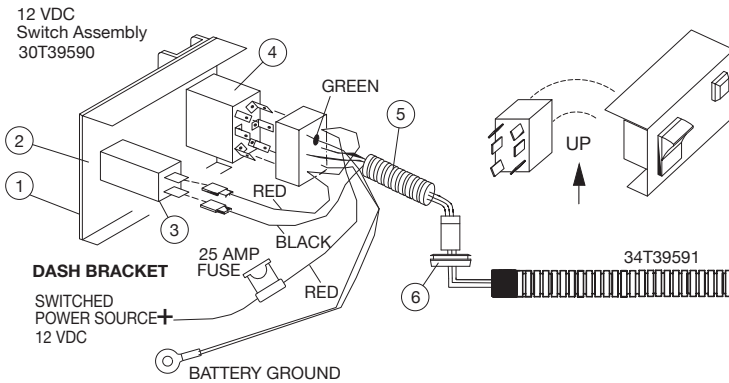
### REPLACEMENT PARTS

Repl. fuses sold as service items.

| ITEM | QTY. | PART NO. | DESCRIPTION |
|------|------|----------|-------------|
| N.S. | 1    | 33T37923 | 05 Amp Fuse |
| N.S. | 1    | 33T36951 | 40 Amp Fuse |
| N.S. | 1    | 37T38559 | Relay Cover |

## TG SERIES E-HYDRA SHIFT SYSTEM — OBSOLETE

### WIRING DIAGRAM FOR ACTIVATION KIT 48TK4686



### 48TK4686 ACTIVATION KIT

| ITEM | QTY. | PART NO. | DESCRIPTION       |
|------|------|----------|-------------------|
| 1    | 1    | 36T35431 | Faceplate         |
| 2    | 1    | 36MA1005 | Bracket, Dash     |
| 3    | 1    | 32MSR12V | 12 V Light        |
| 4    | 1    | 30T39590 | Rocker Switch     |
| 5    | 1    | 34T39591 | Wire Harness      |
| 6    | 1    | 37T39628 | Grommet           |
| N.S. | 1    | 36MK1007 | Bolt Kit          |
| N.S. | 1    | 36T39187 | Dash Label        |
| N.S. | 1    | 36T40209 | Caution Label     |
| N.S. | 1    | IN05-04  | Instruction Sheet |

### IMPORTANT:

Follow PTO installation instructions IN84-03

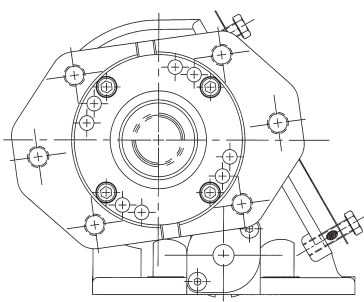
1. The rocker switch and dash bracket (if used) is to be mounted in the cab within easy reach of the operator.
2. PTO engagement is made by pushing the rocker switch fully to the engage position and releasing the switch immediately upon engagement. (indicator light will light)
3. Drill .750 dia. hole in the firewall install black plastic grommet (p/n 37T39628) in hole and run the three wire connector through the grommet and plug into cab harness portion of harness. Note the orientation of the connector to insure proper assembly.
4. Plug the rocker switch receptacle onto the switch so that the green wire is up as noted in diagram.

### E-HYDRA SHIFTER KITS\*

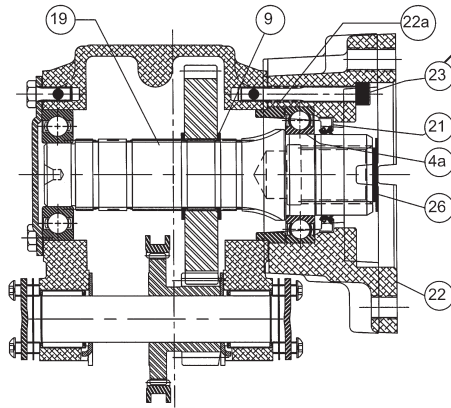
16TK5024 Standard 1 or 4 Assy.  
 16TK5025 Standard 2 or 3 Assy.  
 16TK5026 Allison 1000/2000 1 or 4 Assy.  
 16TK5027 Allison 1000/2000 2 or 3 Assy.

**NOTE:** \* Includes shifter, indicator switch, and activation kit.

## SPECIAL OUTPUT SHAFT OPTIONS



**“Z” OPTION**



**“I” OPTION**

Torque to  
25 ft.lbs.

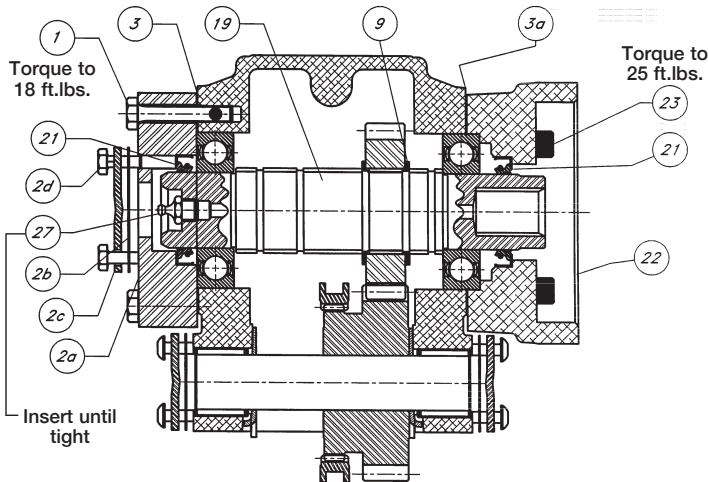
### “Z” OPTION • KIT 14TA4423 SAE “B” FLANGE – SAE “C” 1¼" -14T SPLINE

| ITEM | QTY. | PART NO. | DESCRIPTION      |
|------|------|----------|------------------|
| 4a   | 1    | 10T38248 | Bearing          |
| 9    | 2    | 24T23937 | Snap Ring        |
| 19   | 1    | 06T38242 | Shaft, Output    |
| 21   | 1    | 11T38247 | Shaft Seal       |
| 22   | 1    | 14T38244 | Hydraulic Flange |
| 22a  | 1    | 18T38246 | Pilot Ring       |
| 23   | 4    | 19T96512 | Cap Screw        |
| 26   | 1    | 25T35936 | Cap Plug         |

### “I” OPTION • KIT 14TA4422 DIN 5462

| ITEM | QTY. | PART NO. | DESCRIPTION      |
|------|------|----------|------------------|
| 4a   | 1    | 10T38248 | Bearing          |
| 9    | 2    | 24T23937 | Snap Ring        |
| 19   | 1    | 06T38261 | Shaft, Output    |
| 21   | 1    | 11T38247 | Shaft Seal       |
| 22   | 1    | 14T38259 | Hydraulic Flange |
| 22a  | 1    | 18T38246 | Pilot Ring       |
| 23   | 4    | 19T96512 | Cap Screw        |
| 26   | 1    | 25T37767 | Cap Plug         |

## SPECIAL GREASE OPTION HYDRAULIC KITS



### GREASE BEARING CAP • KIT 15TK4471

| ITEM | QTY. | PART NO. | DESCRIPTION                                            |
|------|------|----------|--------------------------------------------------------|
| 1    | 4    | 19T38772 | Cap Screw                                              |
| 2a   | 1    | 15TA4491 | Bearing Cap Includes Seal<br>11T37790 + Cover 15T38771 |
| 2b   | 2    | 13T38286 | Gasket                                                 |
| 2c   | 2    | 15T33977 | Cap                                                    |
| 2d   | 2    | 19T34028 | Cap Screw                                              |
| 3    | 1    | 13T38542 | Gasket                                                 |

### TG HYDRAULIC FLANGE CONVERSION KIT: FOR “KG” TG SHAFT • KIT 14TA4551

| ITEM | QTY. | PART NO. | DESCRIPTION            |
|------|------|----------|------------------------|
| Kit  | 1    | 15TK4471 | Grease Bearing Cap Kit |
| 3a   | 1    | 12T36751 | O-Ring                 |
| 9    | 2    | 24T23937 | Snap Ring              |
| 19   | 1    | 06T38373 | Shaft                  |
| 22   | 1    | 14TA4535 | Flange                 |
| 23   | 4    | 19T34462 | Cap Screw              |
| 27   | 1    | 43T37236 | Grease Fitting (Zerk)  |

**CONVERSION KIT WITHOUT FLANGE: KIT 06TK4441**  
Same as **Kit 14TA4551** less Item 22 (14TA4535 Flange).

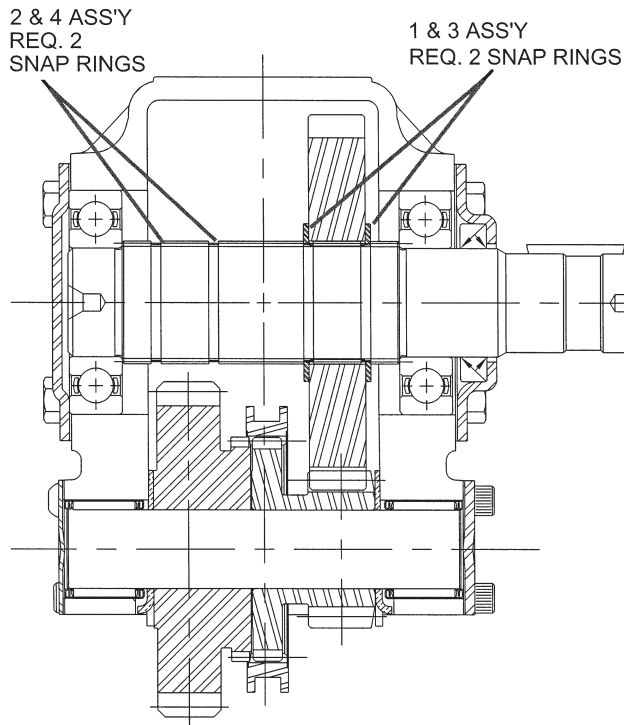
### TG HYDRAULIC FLANGE CONVERSION KIT: FOR “PG” TG SHAFT • KIT 14TA4552

| ITEM | QTY. | PART NO. | DESCRIPTION            |
|------|------|----------|------------------------|
| Kit  | 1    | 15TK4471 | Grease Bearing Cap Kit |
| 3a   | 1    | 12T36751 | O-Ring                 |
| 9    | 2    | 24T23937 | Snap Ring              |
| 19   | 1    | 06T38374 | Shaft                  |
| 22   | 1    | 14TA4535 | Flange                 |
| 23   | 4    | 19T34462 | Cap Screw              |
| 27   | 1    | 43T37236 | Grease Fitting (Zerk)  |

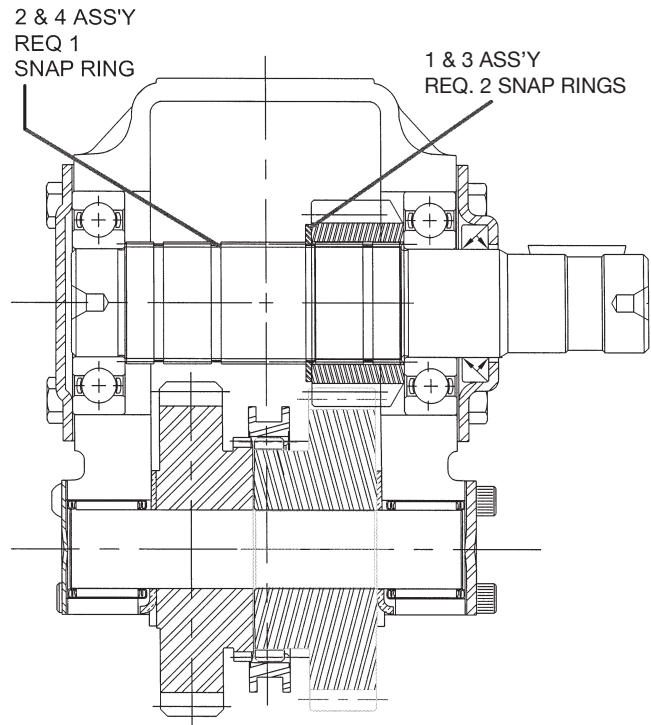
**CONVERSION KIT WITHOUT FLANGE: KIT 06TK4442**  
Same as **Kit 14TA4551** less Item 22 (14TA4535 Flange).

# OUTPUT GEAR INSTALLATION

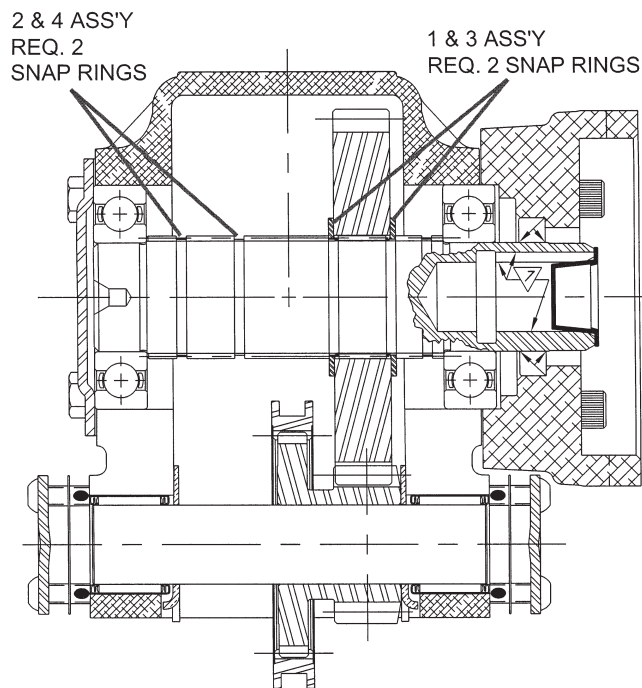
## OUTPUT RATIO 04-13 REMOTE TYPE SHAFT



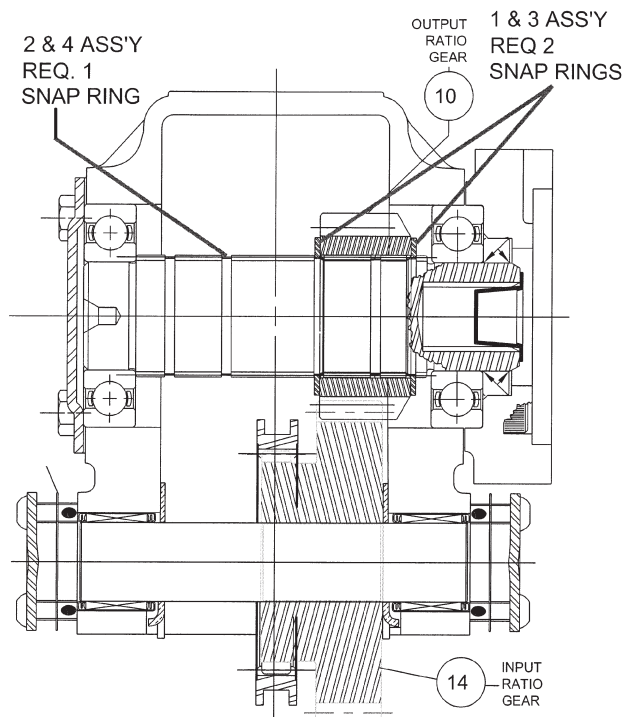
## OUTPUT RATIO 15 & 18 REMOTE TYPE SHAFT



## OUTPUT RATIO 04-13 HYDRAULIC TYPE SHAFT



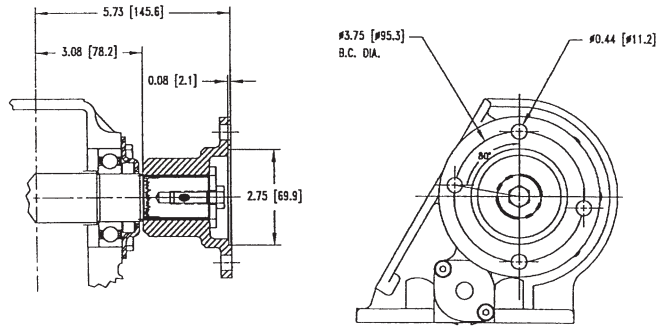
## OUTPUT RATIO 15 & 18 HYDRAULIC TYPE SHAFT



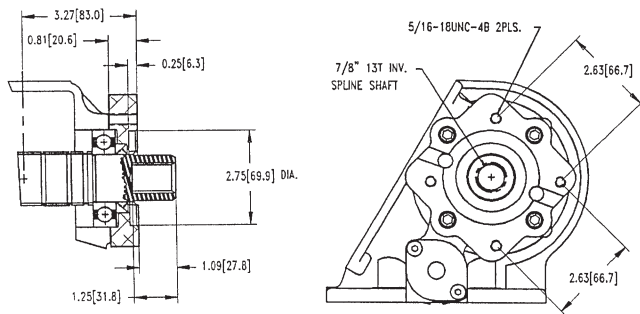
# HYDRAULIC ASSEMBLIES

Conversion kits include Output Shaft, Hydraulic Flange, Cap Screws, Gasket, Shaft Seal, and Snap Ring.

## CONVERSION KIT NUMBER 14TA3974 ("C" ASSEMBLY) 1410 OUTPUT ASSEMBLY

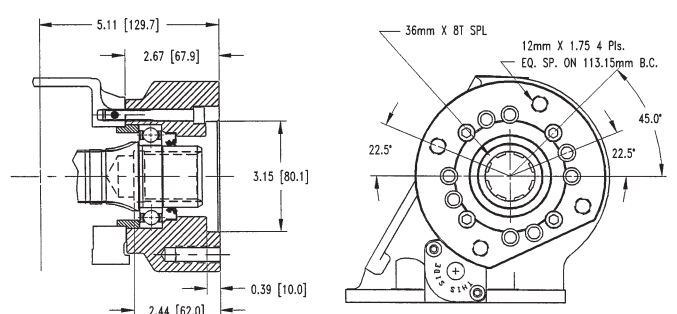


## CONVERSION KIT NUMBER 14TA4528 ("G" ASSEMBLY)



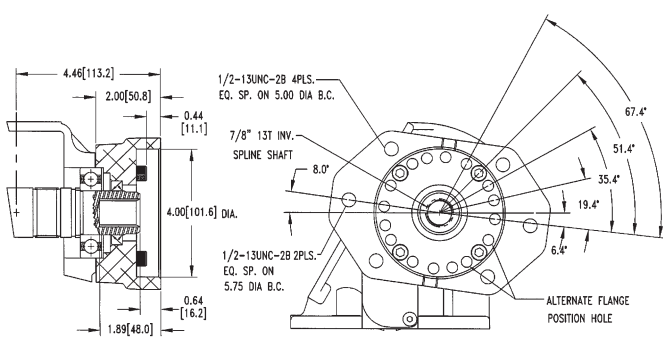
Pump Bolt Kit 19MK4717

## CONVERSION KIT NUMBER 14TA4422 ("I" ASSEMBLY)

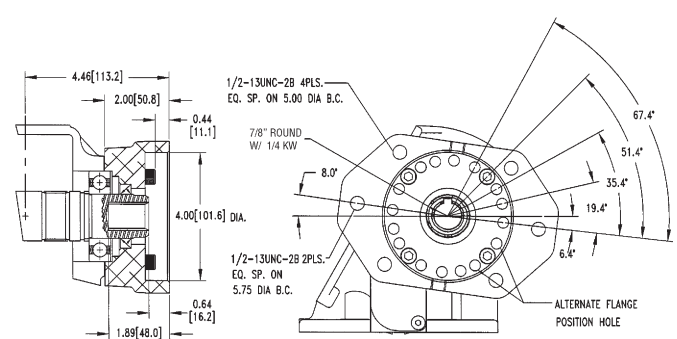


Flange and Seal – 14TA4424

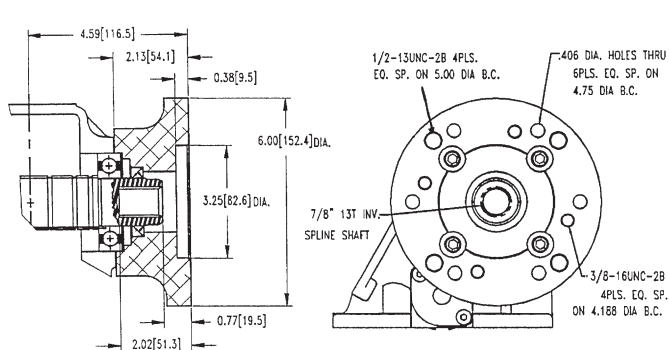
## CONVERSION KIT NUMBER 14TA4531 ("K" ASSEMBLY)



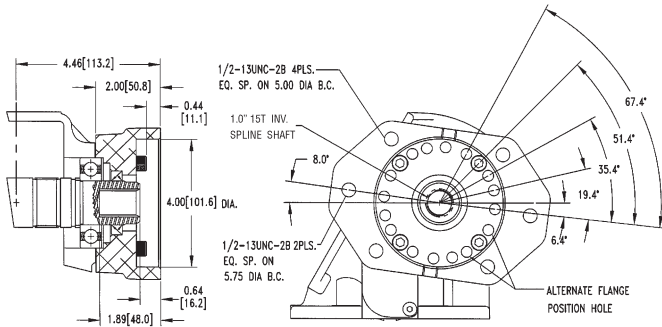
## CONVERSION KIT NUMBER 14TA4550 ("L" ASSEMBLY)



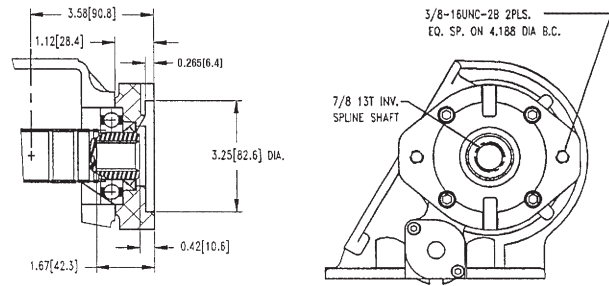
## CONVERSION KIT NUMBER 14TA4553 ("M" ASSEMBLY)



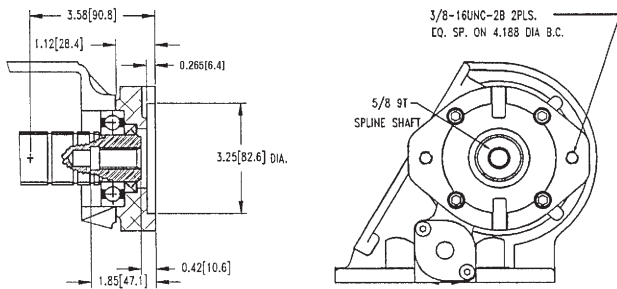
### CONVERSION KIT NUMBER 14TA4532 ("P" ASSEMBLY)



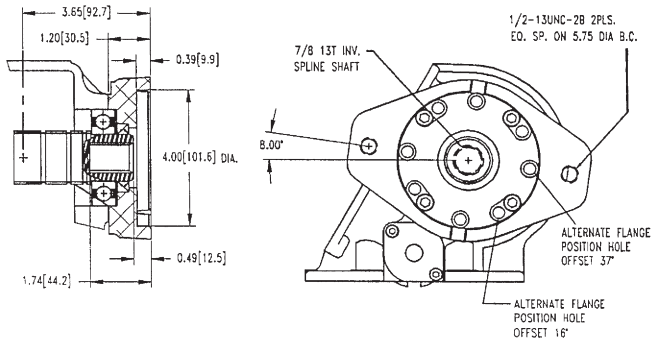
### CONVERSION KIT NUMBER 14TA4529 ("Q" ASSEMBLY)



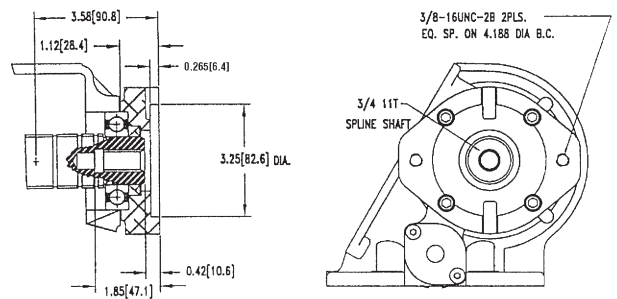
### CONVERSION KIT NUMBER 14TA4541 ("R" ASSEMBLY)



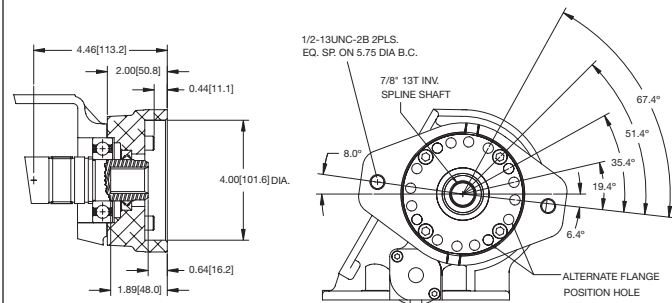
### CONVERSION KIT NUMBER 14TA4530 ("S" ASSEMBLY)



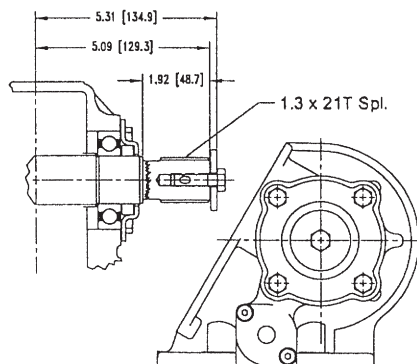
### CONVERSION KIT NUMBER 14TA4533 ("T" ASSEMBLY)



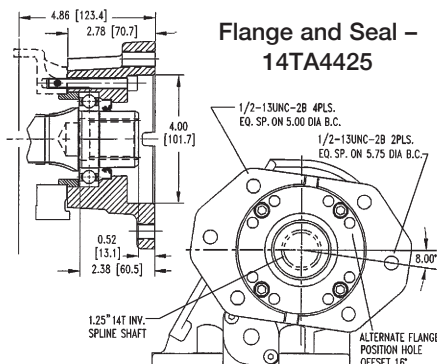
### CONVERSION KIT NUMBER 14TA4915 ("6" ASSEMBLY)



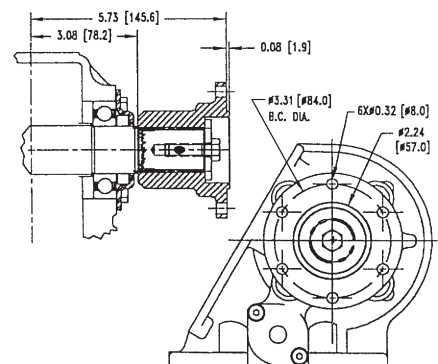
### "X" BASE OUTPUT ASSEMBLY USED IN "C" & "2" OUTPUTS



### CONVERSION KIT NUMBER 14TA4423 ("Z" ASSEMBLY)



### CONVERSION KIT NUMBER 14TA3975 ("2" ASSEMBLY) DIN OUTPUT ASSEMBLY



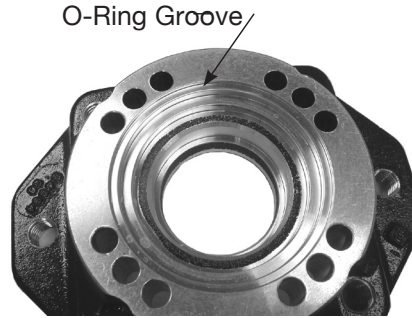
**Note:** Output shafts are supplied with a pure copper anti-seize compound installed in the shaft cavity. PTO applications under severe duty cycles and/or high torque requirements may require servicing this shaft connection by periodically cleaning and re-greasing the shafts.



## TG SERIES HYDRAULIC FLANGE CONVERSION KITS

The following charts show the part numbers for the TG Series hydraulic mount output flanges. These flanges have the O-Ring groove as shown in the photo for the 12T36751 O-Ring. Previous versions of the TG flanges did not have the O-Ring groove and were sealed with a gasket 13T38542. The CS6/8 flange shown are the previous versions of the TG flange without the groove. These flanges are still currently used in the CS6/8 line.

| DESCRIPTION         | TG FLANGE  | CS6/8 FLANGE |
|---------------------|------------|--------------|
| F, Q, R, T Flg      | 14T39166   | 14T39141     |
| G Flg               | 14T39165   | 14T39137     |
| K, KG, L, P, PG Flg | 14T39163   | 14T37779     |
| M Flg               | 14T39167   | 14M39159     |
| N Flg               | 14T39164   | 14M39130     |
| S Flg               | 14T39162   | 14T35464     |
| V Flg               | Obsolete   | Obsolete     |
| I Flg               | 14T38259** | 14T38259     |
| Z Flg               | 14T38244** | 14T38244     |
| 6 Flg               | 14T39528   | 14T38981     |



**TG SERIES Flange**

**Note:** \*\* These flanges still require the 13T38542 gasket and do not have the O-Ring groove.

## TG SERIES SHAFT AND FLANGE KITS

| SHAFT & FLG. KIT        | TG KIT   | FLG. W/SEAL QTY (1) | SHAFT QTY (1) | RING QTY (1) | CAP SCREW QTY (4) | O-RING QTY (1) | CAP PLUG QTY (1) | SNAP RING QTY (2) | GASKET QTY (1) |
|-------------------------|----------|---------------------|---------------|--------------|-------------------|----------------|------------------|-------------------|----------------|
| 6                       | 14TA4915 | 14TA4914            | 06T39143      | 58T38789     | 19T34462          | 12T36751       | 25T35724         | 24T23937          | 13T38542       |
| G                       | 14TA4528 | 14TA4537            | 06T39136      | NA           | 19T39257          | 12T36751       | 25T35724         | 24T23937          | 13T38542       |
| K                       | 14TA4531 | 14TA4535            | 06T39143      | 58T38789     | 19T34462          | 12T36751       | 25T35724         | 24T23937          | 13T38542       |
| L                       | 14TA4550 | 14TA4535            | 06T39139      | 58T38789     | 19T34462          | 12T36751       | 25T35725         | 24T23937          | 13T38542       |
| M                       | 14TA4553 | 14TA4555            | 06T39143      | NA           | 19M31200          | 12T36751       | 25T35724         | 24T23937          | 13T38542       |
| P                       | 14TA4532 | 14TA4535            | 06T36136      | 58T38789     | 19T34462          | 12T36751       | 25T35725         | 24T23937          | 13T38542       |
| Q                       | 14TA4529 | 14TA4536            | 06T35048      | NA           | 19T39257          | 12T36751       | 25T35724         | 24T23937          | 13T38542       |
| R                       | 14TA4541 | 14TA4536            | 06T35082      | NA           | 19T39257          | 12T36751       | 25T35520         | 24T23937          | 13T38542       |
| S                       | 14TA4530 | 14TA4538            | 06T35048      | NA           | 19T39257          | 12T36751       | 25T35724         | 24T23937          | 13T38542       |
| T                       | 14TA4533 | 14TA4536            | 06T37335      | NA           | 19T39257          | 12T36751       | 25T37387         | 24T23937          | 13T38542       |
| V                       | Obsolete |                     |               |              |                   |                |                  |                   |                |
| <b>GREASEABLE SHAFT</b> |          |                     |               |              |                   |                |                  |                   |                |
| KG                      | 14TA4551 | 14TA4535            | 06T38373      | 58T38789     | 19T34462          | 12T36751       | 25T35724         | 24T23937          | 13T38542       |
| PG                      | 14TA4552 | 14TA4355            | 06T38374      | 58T38789     | 19T34462          | 12T36751       | 25T35724         | 24T23937          | 13T38542       |

| LRG OD SHAFT | TG KIT   | FLG. W/SEAL QTY (1) | SHAFT QTY (1) | RING QTY (1)       | CAP SCREW QTY (4) | O-RING QTY (1)     | CAP PLUG QTY (1)       | SNAP RING QTY (2) | GASKET QTY (1) |
|--------------|----------|---------------------|---------------|--------------------|-------------------|--------------------|------------------------|-------------------|----------------|
| I **         | 14TA4422 | 14TA4424            | 06T38261      | 18T38246           | 19T96512          | NA                 | 25T38309               | 24T23937          | 13T38542       |
| Z **         | 14TA4423 | 14TA4425            | 06T38242      | 18T38246           | 19T96512          | NA                 | 25T35936               | 24T23937          | 13T38542       |
| LRG OD SHAFT | TG KIT   | FLG. W/SEAL QTY (1) | SHAFT QTY (1) | COMP. FLG. QTY (1) | CAP SCREW QTY (4) | KEY/WASHER QTY (1) | FLG. CAP SCREW QTY (1) | SNAP RING QTY (2) | GASKET QTY (1) |
| B **         | NA       | 15TA5220            | 06T36857      | NA                 | 19T41756          | 26T01627           | NA                     | 24T23937          | 13T38542       |
| C **         | 14TA3974 | 15TA5220            | 06T41757      | 14T37357           | 19T41756          | 21T20092           | 19T38266               | 24T23937          | 13T38542       |
| 2 **         | 14TA3975 | 15TA5220            | 06T41757      | 14T37378           | 19T41756          | 21T20092           | 19T38266               | 24T23937          | 13T38542       |
| X **         | NA       | 15TA5220            | 06T41757      | NA                 | 19T41756          | 21T20092           | 19T38266               | 24T23937          | 13T38542       |

| Flange Only w/Seal | TG SERIES | FLG. ONLY | SEAL     |
|--------------------|-----------|-----------|----------|
| K, L, P Flg w/Seal | 14TA4535  | 14T39163  | 11T37790 |
| Q,R Flg w/Seal     | 14TA4536  | 14T39166  | 11T37790 |
| G Flg w/Seal       | 14TA4537  | 14T39165  | 11T37790 |
| S Flg w/Seal       | 14TA4538  | 14T39162  | 11T37790 |
| V Flg w/Seal       | Obsolete  |           |          |
| M Flg w/Seal       | 14TA4555  | 14T39167  | 11T37790 |
| 6 Flg w/Seal       | NA        | 14T39528  | 11T37790 |
| I Flg w/Seal       | 14TA4424  | 14T38259  | 11T38247 |
| Z Flg w/Seal       | 14TA4425  | 14T38244  | 11T38247 |
| B, C, 2, X w/Seal  | 15TA5220  | 15T41683  | 11T37790 |

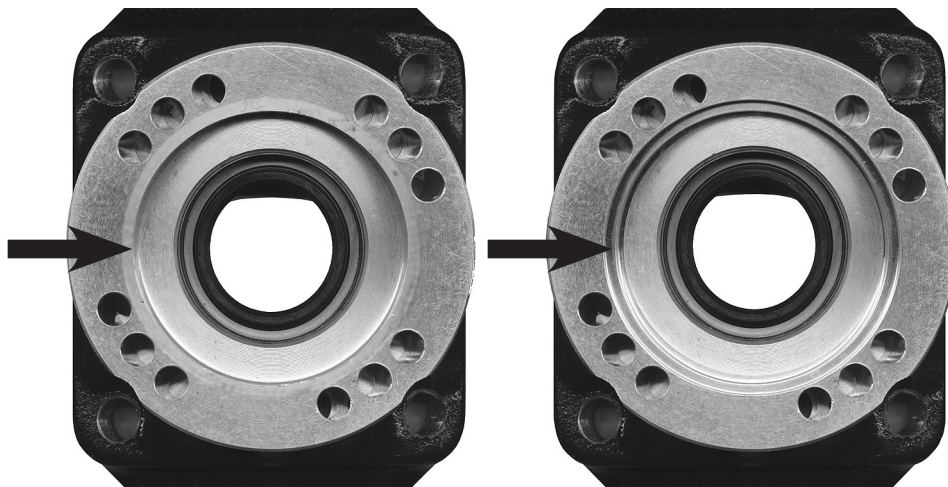
**Note:** \*\* These flanges still require the 13T38542 gasket and do not have the O-Ring groove.

## TG SERIES SEAL KIT OR REBUILD KIT

### FOR UNITS WITH DIRECT MOUNT PUMP FLANGE

Examine the under side of the hydraulic mounting flange. If there is an O-Ring groove as shown then use the O-Ring 12T36751 provided in the kit. If groove is not present, then use the 2nd gasket provided (13T38542).

Lubricate seals and O-Rings prior to installation. Place the O-Ring around the output shaft bearing which protrudes from the housing before installing the output flange.

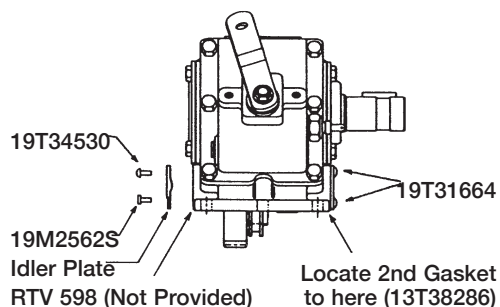


**NO GROOVE IN FLANGE**  
(USE 13T38542 GASKET)

**GROOVE FOR O-RING**  
(USE 12T36751 O-RING)

## TG SERIES CLEARANCE IDLER CAP

1. The "Clearance Idler Cap" is to be installed on the TG Series in the location where interference occurs (typically on the side opposite of the output shaft).
2. If an idler cap already exists, remove the cap and gasket.
3. On the side with the "Standard Cap" mount with two gaskets.
4. Use RTV # 598 Black recommended (not provided). Place gasket material in a small bead around the surface close to the bearing leaving a gap to prevent RTV from getting into the bearing.
5. Install "Clearance Cap" with flat head cap screw closest to mounting pad and button-head cap Screw in upper position. Torque the flathead screw to 6 ft.lbs. and the button head to 8 ft.lbs.



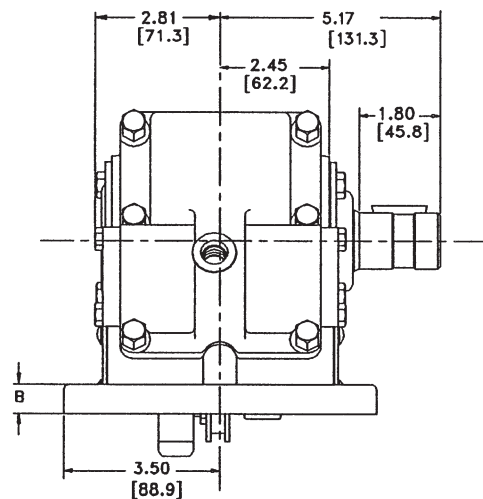
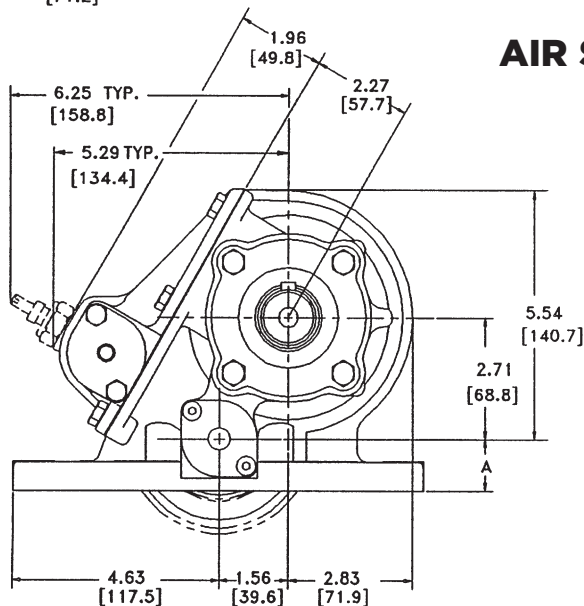
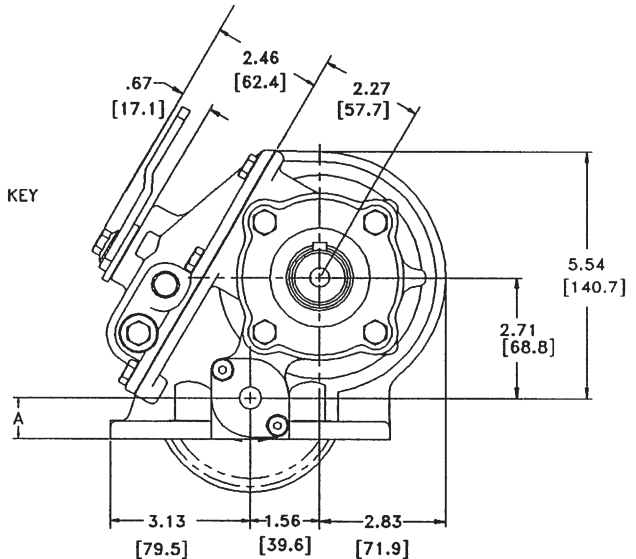
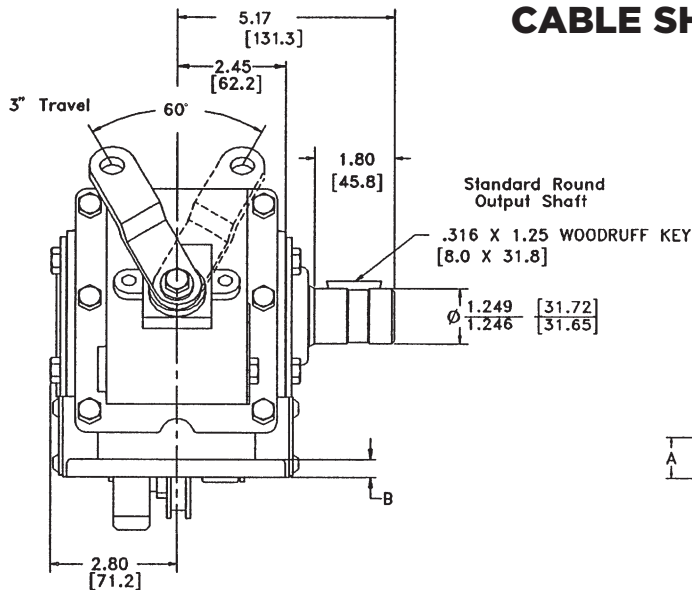
# MOUNTING DIMENSIONS

IN INCHES (MM)

Shift covers (cable, air, lever, and Lectra Shift) are interchangeable with 6-Bolt or 8-Bolt housings as shown.

| 6-BOLT | DESIGNATOR | A            | B          |
|--------|------------|--------------|------------|
|        | TG6S       | .895 (22.73) | .42 (10.7) |
|        | TG6N       | .826 (20.98) | .35 (8.9)  |

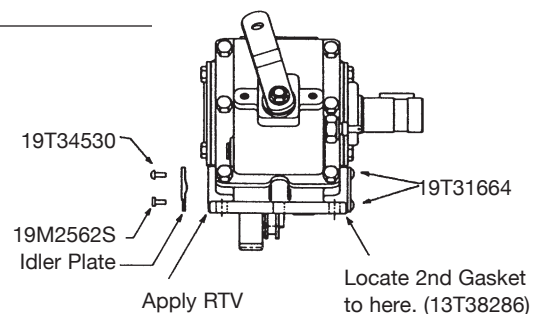
| 8-BOLT | DESIGNATOR | A             | B          |
|--------|------------|---------------|------------|
|        | TG8S       | 1.168 (29.67) | .66 (16.8) |
|        | TG8M       | 1.068 (27.13) | .56 (14.2) |



## SPECIAL IDLER PLATE INSTALLATION

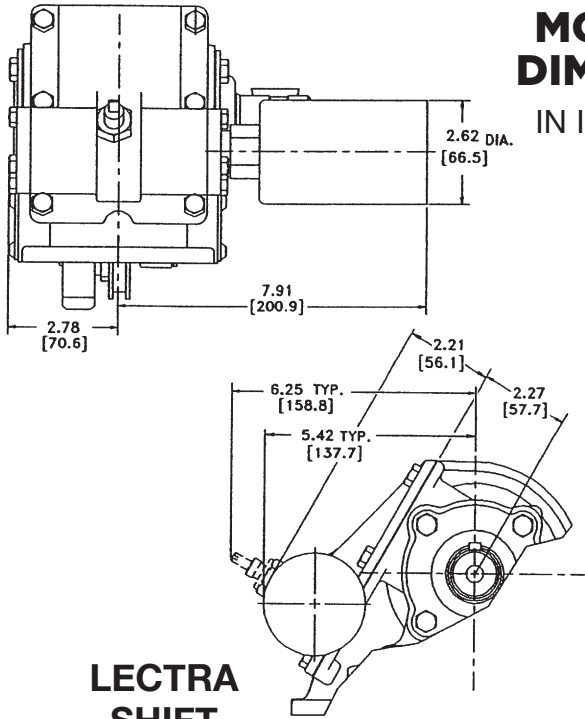
| CONVERSION KIT | IDLER PLATE | CODE        | CAP SCREW                 |
|----------------|-------------|-------------|---------------------------|
| 15MK33977      | 15T35074    | M, Q, E, V  | (3) 19T34530/(1) 19M2562S |
| 15MK35351      | 15T35351    | F, TG6N-I85 | See Illustration          |
| N.A.           | 15T35612    | TG6N-S71    | (4) 19T31664              |

Locate onto appropriate side with interference at PTO mounting pad.

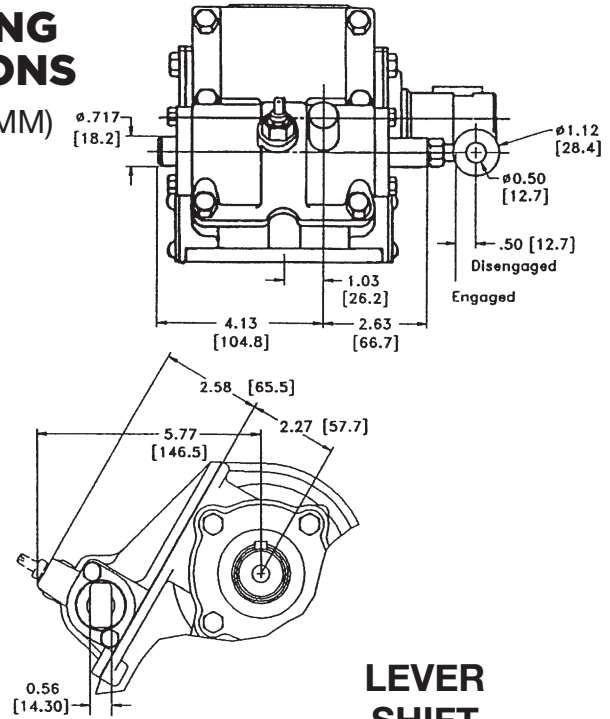


## MOUNTING DIMENSIONS

IN INCHES (MM)

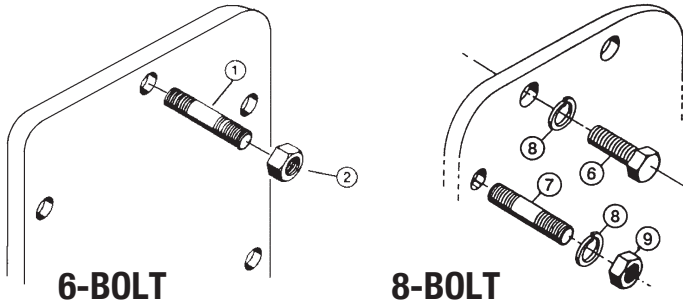


**LECTRA  
SHIFT**



**LEVER  
SHIFT**

## MOUNTING KITS AND GASKET PACKS



**6-BOLT**

**8-BOLT**

### 6-BOLT MOUNTING KITS

| ITEM                                           | QTY. | PART NO. | DESCRIPTION       |
|------------------------------------------------|------|----------|-------------------|
| <b>20MK6700 TG6S, TG6D, TG6N-S71, TG6N-S73</b> |      |          |                   |
| 1                                              | 6    | 20M38150 | Stud              |
| 2                                              | 6    | 22T39282 | Hex Nut           |
| <b>20MKM602 TG6B, TG6C</b>                     |      |          |                   |
| 1                                              | 6    | 20M39040 | 40mm Stud         |
| 2                                              | 6    | 22T39282 | Hex Nut           |
| <b>20MKM104 TG6N-I85</b>                       |      |          |                   |
| 1                                              | 4    | 20M39040 | 40mm Stud         |
| 1                                              | 2    | 20M39045 | 45mm Stud         |
| 2                                              | 6    | 22T39282 | Hex Nut           |
| <b>20TK4074 TG6B-I84</b>                       |      |          |                   |
| 1                                              | 6    | 20T37990 | Stud, 1.5"        |
| 2                                              | 6    | 22T39282 | Hex Nut           |
| N.S.                                           | 1    | IN99-06  | Instruction Sheet |

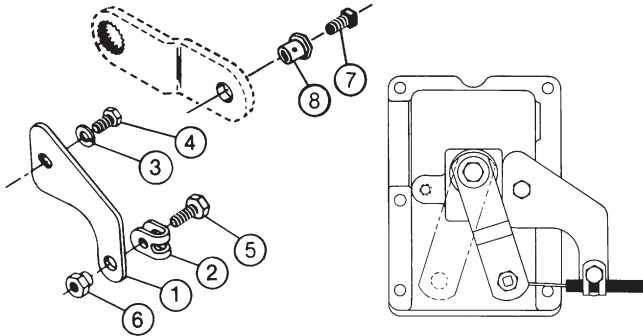
### 8-BOLT MOUNTING KITS

| ITEM                             | QTY. | PART NO. | DESCRIPTION |
|----------------------------------|------|----------|-------------|
| <b>20MK8801 TG8S, TG8D, TG8M</b> |      |          |             |
| 6                                | 6    | 19M44138 | Cap Screw   |
| 7                                | 2    | 20M44200 | Stud        |
| 8                                | 8    | 21ML4375 | Lockwasher  |
| 9                                | 2    | 22MX4420 | Nut         |
| <b>20MKM802 TG8B, TG8C</b>       |      |          |             |
| 7                                | 8    | 20M47055 | 55mm Stud   |
| 8                                | 8    | 21ML4375 | Lockwasher  |
| 9                                | 8    | 22MX4420 | Nut         |
| <b>20TK6221 TG8F</b>             |      |          |             |
| 7                                | 8    | 20T64324 | 64mm Stud   |
| 8                                | 8    | 21ML4375 | Lockwasher  |
| 9                                | 8    | 22MX4420 | Nut         |

### GASKET PACKS

| QTY                                                                            | PART NO. | DESCRIPTION    |
|--------------------------------------------------------------------------------|----------|----------------|
| <b>52TK4443 TG6S, TG6D, TG6B, TG6C (w/Std Input Gears), TG6N-S71, TG6N-S73</b> |          |                |
| 1                                                                              | IN84-03  | PTO Manual     |
| 1                                                                              | 13M35091 | .010" Gasket   |
| 1                                                                              | 13M35092 | .020" Gasket   |
| 1                                                                              | 13T64246 | Shifter Gasket |
| 1                                                                              | 36M111NP | Nameplate      |
| <b>52TK4444 TG6S-U60, TG6B-A68</b>                                             |          |                |
| 1                                                                              | IN84-03  | PTO Manual     |
| 1                                                                              | 13M13541 | .030" Gasket   |
| 1                                                                              | 13T64246 | Shifter Gasket |
| 1                                                                              | 36M111NP | Nameplate      |
| <b>52TK4447 TG6N-I85</b>                                                       |          |                |
| 1                                                                              | IN84-03  | PTO Manual     |
| 2                                                                              | 13T35198 | .010" Gasket   |
| 1                                                                              | 13T35199 | .020" Gasket   |
| 1                                                                              | 13T64246 | Shifter Gasket |
| <b>52TK4445 TG8S, TG8D, TG8B, TG8C (w/Std Input Gears)</b>                     |          |                |
| 1                                                                              | IN84-03  | PTO Manual     |
| 1                                                                              | 13M35151 | .010" Gasket   |
| 2                                                                              | 13M35152 | .020" Gasket   |
| 1                                                                              | 13T64246 | Shifter Gasket |
| 1                                                                              | 36M111NP | Nameplate      |
| <b>52TK4470 TG6B-A69</b>                                                       |          |                |
| 1                                                                              | IN84-03  | PTO Manual     |
| 2                                                                              | 13M35091 | .010" Gasket   |
| 5                                                                              | 13M35092 | .020" Gasket   |
| 1                                                                              | 13T64246 | Shifter Gasket |
| 1                                                                              | 36M111NP | Nameplate      |

### CABLE MOUNTING KIT 47M13802



| ITEM | QTY. | PART NO. | DESCRIPTION       |
|------|------|----------|-------------------|
| 1    | 1    | 28MZ5017 | Flat Bracket      |
| 2    | 1    | 28MZ5019 | Swivel Bracket    |
| 3    | 1    | 21M10000 | Lock Washer       |
| 4    | 1    | 19M10001 | Cap Screw         |
| 5    | 1    | 19M10000 | Cap Screw         |
| 6    | 1    | 28MZ5018 | Shoulder Nut      |
| 7    | 1    | 28M15020 | Sq. Hd. Set Screw |
| 8    | 1    | 22MZ8019 | Pivot Pin         |
| *    | 1    | 28MCC120 | 10' Cable         |
| *    | 1    | 28MK0155 | Knob              |

\* Not included in Kit. Included with PTO with Cable Shift option.

## OPTIONAL ACCESSORIES

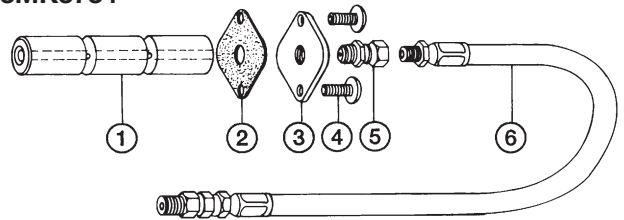
AWS-CT-12V Audible warning to indicate PTO engagement. Chime tone has various loudness (Db) adjustment. Attaches to standard PTO switch, not included.

47MGM165-3, 47MGM85-3, 47MGM55-3 Heavy duty cable shift bracket kits for push-pull type shift cables.

43MK8205 Lubrication Pump/Cooler System includes 12 V lube pump, oil cooler, temperature switch, hoses, connectors. For continuous duty applications on manual transmissions or transfer cases. 43TK6065P Same as above without oil cooler.

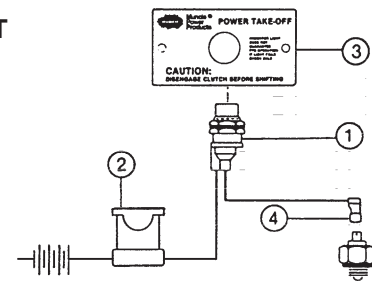
TG-RPS-A Air Pressure Switch Kit for indicator light when standard switch interferes with vehicle frame. Replaces mechanical switch on air shifted TG PTO with a pneumatic switch.

### PRESSURE LUBE KIT 43MK3734



| ITEM | QTY. | PART NO. | DESCRIPTION     |
|------|------|----------|-----------------|
| 1    | 1    | 07T34511 | Idler Shaft     |
| 2    | 2    | 13T38286 | Gasket          |
| 3    | 1    | 15T34475 | Cover Cap       |
| 4    | 2    | 19T37907 | Cap Screw       |
| 5    | 1    | 43T37385 | Orifice Fitting |
| 6    | 1    | 45M4R536 | Hose            |

### DASH LIGHT KIT 36MK1210-A



| ITEM | QTY. | PART NO. | DESCRIPTION      |
|------|------|----------|------------------|
| 1    | 1    | 32M12001 | Indicator Light  |
| 2    | 1    | 33T36299 | Fuse Holder      |
| 3    | 1    | 36M16818 | Dash Face Plate  |
| 4    | 1    | 34T38163 | Booted Connector |

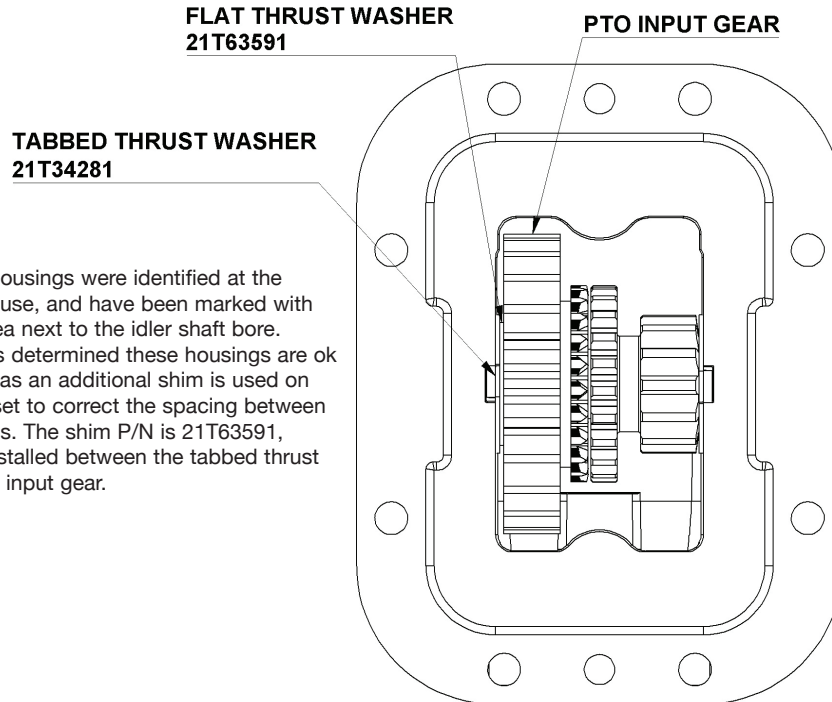
### LABEL PACKETS

| QTY.                                              | PART NO. | DESCRIPTION  |
|---------------------------------------------------|----------|--------------|
| <b>LABEL PACKET (STD) 36MK3841</b>                |          |              |
| 2                                                 | 36M35644 | Frame Label  |
| 1                                                 | 36T38634 | Visor Label  |
| 1                                                 | 36M35652 | Dash Label   |
| <b>LABEL PACKET (I84, I85, A69, U60) 36TK4667</b> |          |              |
| 2                                                 | 36M35644 | Frame Label  |
| 1                                                 | 36T38634 | Visor Label  |
| 1                                                 | 36M35652 | Dash Label   |
| 2                                                 | 36T39562 | Safety Label |
| 1                                                 | IN91-05  | Instructions |



## TG8 HOUSING WITH “W” MARKED

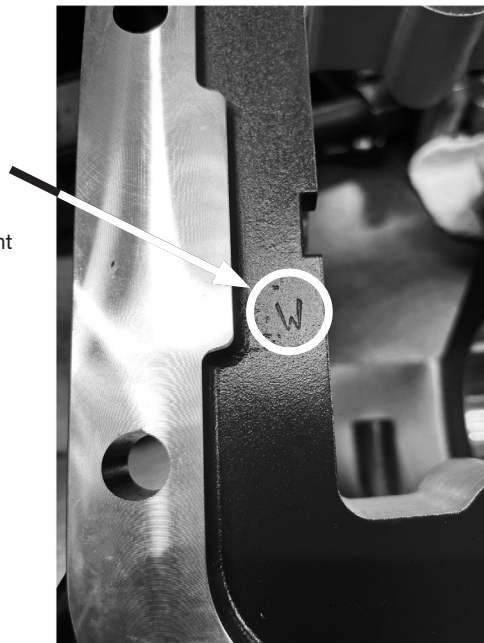
Muncie Power has identified a limited number of TG8 housings that have been found to have excessive width between the two surfaces where the input gear set thrust washers seat against the housing the affected housing P/N is 01T34461.



All discrepant housings were identified at the factory prior to use, and have been marked with a “W” in the area next to the idler shaft bore. Engineering has determined these housings are ok to use, as long as an additional shim is used on the input gear set to correct the spacing between the two surfaces. The shim P/N is 21T63591, and it will be installed between the tabbed thrust washer and the input gear.

Any PTO that bears the “W” mark in the are shown will always require the washer. The “W” was added internally on the PTO to help insure that the mark was protected and would be present when the PTO was disassembled.

For more information, contact Muncie Power Products Customer Service.



**Muncie®  
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Products**

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