

TG SERIES KIT PROGRAM

Stocking the Muncie Powerflex® PTO in a kit form can reduce your inventory requirements. To use the program decide on the correct model number of the PTO from the application catalog and assemble using the tables below.

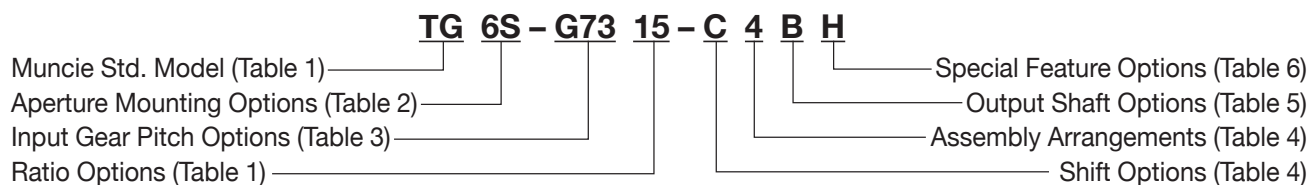


TABLE 1 MUNCIE STD. MODEL W/RATIO OPTIONS – LESS SHIFTER & INPUT GEAR

| | | | |
|--|--|--|--|
| Part No. | | | |
| TG6S-Kit 04 – X * # X | * Assembly Arrangements: (1, 2, 3 or 4) | } | The PTO application catalog typically shows the arrangement for PTOs with the output shaft pointed to the rear and below the centerline of the opening. The TG Kit should be stocked in popular arrangements to minimize the need to physically rearrange a PTO. |
| TG6S-Kit 05 – X * # X | | | |
| TG6S-Kit 06 – X * # X | | | |
| TG6S-Kit 07 – X * # X | | | |
| TG6S-Kit 08 – X * # X | | | |
| TG6S-Kit 09 – X * # X | # Output Shaft Options: (Table 5) | } | The TG Kit should be stocked in the popular output shafts to minimize the need to change output. Flange Kits shown in Table 5 should be stocked for the uncommon assemblies used. |
| TG6S-Kit 12 – X * # H | | | |
| TG6S-Kit 13 – X * # H | | | |
| TG6S-Kit 15 – X * # H | | | |
| TG6S-Kit 18 – X * # H | | | |
| Ratio Sets | | | |
| 04 Ratio— 02T34278 (36T) 04T34277 (13T) | 06 Ratio— 02T34440 (31T) 04T34441 (19T) | 08 Ratio— 02T35185 (26T) 04T35186 (23T) | 13 Ratio— 02T35362 (21T) 04T35363 (27T) |
| 05 Ratio— 02T34276 (34T) 04T34275 (16T) | 07 Ratio— 02T34272 (29T) 04T34271 (21T) | 09 Ratio— 02T34398 (26T) 04T34399 (24T) | 15 Ratio— 02T39172 (20T) 04T34598 (29T) |
| | | 12 Ratio— 02T35162 (23T) 04T35155 (26T) | 18 Ratio— 02T34601 (18T) 04T34605 (31T) |

TABLE 2 TG APERTURE MOUNTING OPTIONS

| Part No. | Part No. |
|--|---|
| 6S – SAE 6-Bolt Std. Mtg. – Use TG6S-Kit | 8S – SAE 8-Bolt Std. Mtg. – Use TG8S-Kit |
| 6D – SAE 6-Bolt Non-Std. Mtg. – Use TG6S-Kit. Input gear design will change mounting depth of PTO. This is <u>NOT</u> a Housing change. | 8D – SAE 8-Bolt Non-Std. Mtg. – Use TG8S-Kit Input gear design will change the mounting depth of the PTO. This is <u>NOT</u> a Housing change. |
| 6N – Non-Standard Housing* | 8M – SAE 8-Bolt Extra Deep Mount – This type is not stocked as a kit. Stock the special housing (01T35032) then change the housing as needed. |
| 6A – SAE 6-Bolt Std. Mtg. w/29TK3863 – Use TG6S-Kit and 03T35730 (N56) gear only. | 8B – Same as 8S – Use metric Stud Kit 20MKM800 (RL8), 20MKM801 (TG, SH8, CS8), or 20MKM802 (82 or 83) |
| 6B – Same as 6S – Replace Stud Kit with metric 20MKM602 | 8C – Same as 8D – Use metric Stud Kit 20MKM801 (TG, CS8), or 20MKM802 (82) |
| 6C – Same as 6D – Replace Stud Kit with metric 20MKM602 | 8K – Same as 8D – Without Stud Kit |
| 6K – Same as 6D – Without Stud Kit | 8L – Same as 8S – Without Stud Kit |
| 6L – Same as 6S – Without Stud Kit | |
| 6F – Non-Standard Housing# | |

Note: * Not sold as kit without gear. Can only be used w/03T35350 (I85), 03T35540 (S71) or 03T37918 (S73).
Not sold as kit without gear. Can only be used w/03T37740 (F84).

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TABLE 3

TG INPUT GEAR PITCH OPTIONS

U60 04

| ITEM 12 | | | | ITEM 12 | | | |
|------------|-------|-------|------|------------|-------|-------|------|
| INPUT-GEAR | TEETH | TRANS | NOTE | INPUT GEAR | TEETH | TRANS | NOTE |
| 03T38783 | (30T) | A69 | 3 | 03T37655A | (35T) | N10 | 9 |
| 03T34810 | (18T) | C57 | | 03T35730 | (16T) | N56 | 7 |
| 03T34452 | (23T) | C60 | | 03T39158 | (24T) | N70 | 5 |
| 03T34454 | (20T) | C61 | | 03T35489A | (30T) | N79 | 8, 9 |
| 03T34453 | (24T) | C70 | | 03T35488A | (28T) | N80 | 8, 9 |
| 03T34455 | (28T) | C76 | | 03T34457 | (28T) | N81 | |
| 03T40079 | (37T) | D94 | | 03T34286 | (21T) | S60 | |
| 03T64783 | (27T) | E70 | | 03T96746 | (22T) | S61 | |
| 03T62715 | (33T) | E80 | 10 | 03T38184 | (22T) | S63 | |
| 03T94192 | (42T) | F10 | | 03T94243 | (26T) | S68 | |
| 03T35189 | (42T) | F11 | | 03T34287 | (24T) | S70 | |
| 03T35031 | (21T) | F61 | | 03T35540 | (29T) | S71 | |
| 03T35613 | (25T) | F62 | | 03T37918 | (28T) | S73 | |
| 03T35024 | (24T) | F63 | | 03T38546 | (29T) | T81 | |
| 03T35025 | (25T) | F65 | | 03T35650 | (28T) | T82 | |
| 03T38140 | (24T) | F66 | | 03T34451 | (20T) | U57 | |
| 03T37657 | (26T) | F70 | | 03T34285 | (24T) | U60 | 1 |
| 03T96626 | (29T) | F75 | | 03T39495 | (24T) | U62 | |
| 03T37740 | (28T) | F84 | 2 | 03T34284 | (24T) | U68 | |
| 03T43207 | (31T) | F89 | | 03T34326 | (31T) | W80 | 6 |
| 03T34325 | (27T) | G73 | | 03T96773 | (24T) | X68 | |
| 03T35180 | (30T) | G85 | | 03T17306A | (38T) | Z10 | 9 |
| 03T37328 | (34T) | I84 | | 03T39491A | (32T) | Z90 | 9 |
| 03T34597 | (26T) | M65 | | 03T37260A | (32T) | Z92 | 9 |
| 03T38530 | (31T) | M80 | 4 | 03T35935A | (37T) | Z98 | 9 |
| 03T38531 | (30T) | M83 | | 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- Item 12:

- 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.

TABLE 4
TG SHIFT KIT/ASSEMBLY
ARRANGEMENT OPTIONS

| KIT NO. | | ASSY. |
|---|--|---------|
| A – Manual Air | 16MK3803-A | (1 & 4) |
| | 16MK3804-A | (2 & 3) |
| <i>Kit includes shift cover, installation parts bag, & indicator light switch.</i> | | |
| C – Cable Control | 16MK3735-14-A | (1 & 4) |
| | 16MK3735-23-A | (2 & 3) |
| <i>Kit includes shift cover, cable, knob, hook-up kit, indicator light kit, & indicator light switch.</i> | | |
| D – Double Acting Air | 16TA3955 and 30T38111 | (1 & 4) |
| | 16TA3955 and 30T38110 | (2 & 3) |
| <i>Kit also requires 48M61261-A activation kit.</i> | | |
| E – 12 V Electric Air | 16MK0200-A | (1 & 4) |
| | 16MK1200-A | (2 & 3) |
| <i>Kit includes shift cover, installation parts bag, & indicator light switch.</i> | | |
| N – Special Electric-Shift (N56 only) | 16TA3803 and 30T38111 or | (1 & 4) |
| | 16TA3804 and 30T38110 | (2 & 3) |
| | <i>This kit also requires 48TK4516 (2003 MY) or 48TK4517 (1999-2002 MY) installation parts bag. Sold separately.</i> | |
| P – Air Shift (Cover only) | 16MK3803-PA | (1 & 4) |
| | 16MK3804-PA | (2 & 3) |
| <i>Kit includes the indicator light switch and connector.</i> | | |
| R – Lever Control | 16MK3919-14-A | (1 & 4) |
| | 16MK3919-23-A | (2 & 3) |
| <i>Kit includes the shift cover, indicator light kit, & indicator light switch.</i> | | |
| S – Lectra Shift | 16MK3848-A | (1 & 4) |
| | 16MK3849-A | (2 & 3) |
| <i>Kit includes shift cover, installation parts bag, wiring harness with relay, & indicator light switch.</i> | | |
| T – E-Hydra Shift | 16TK5024 | (1 & 4) |
| | 16TK5025 | (2 & 3) |
| | 16TK5026 | (1 & 4) |
| | 16TK5027 | (2 & 3) |
| Z – Cable Shift Allison 1000-2000 | 16TK4060-14-A | (1 & 4) |
| | 16TK4061-23-A | (2 & 3) |
| <i>Kit includes shift cover, installation parts bag, & indicator light switch.</i> | | |
| 4 – Air Shift Allison 1000-2000 | 16TK4063-A | (1 & 4) |
| | 16TK4064-A | (2 & 3) |
| <i>Kit includes shift cover, installation parts bag, & indicator light switch.</i> | | |
| 5 – Elect/Air Shift Allison 1000-2000 | 16TK4018-A | (1 & 4) |
| | 16TK4019-A | (2 & 3) |
| <i>Kit includes shift cover, installation parts bag, & indicator light switch.</i> | | |
| 6 – Lectra Shift Allison 1000-2000 | 16TK4066-A | (1 & 4) |
| | 16TK4067-A | (2 & 3) |
| <i>Kit includes shift cover, installation parts bag, wiring harness with relay, & indicator light switch.</i> | | |

TABLE 5
TG OUTPUT SHAFT OPTIONS

| SHAFT TYPE |
|--|
| B – Standard Shaft 1¼" Round, 5/16" Keyway |
| C – 1410 Companion Flange (14TA3975) |
| F – SAE "A" 2-Bolt ¾" RD 3/16" Keyway (14TA4527) |
| G – Special 7/8" -13T Spline (14TA4528) |
| I – DIN 5462 36mm -8T Spline (14TA4422) |
| K – SAE "B" 2- & 4-Bolt 7/8" -13T Spline (14TA4531) |
| K"G" – SAE "B" 2- & 4-Bolt 7/8" -13T Greasable Opt (14TA4551) |
| L – SAE "B" 2- & 4-Bolt 7/8" RD ¼" Keyway (14TA4550) |
| M – SAE "A" 2- & 6-Bolt 5/8" -13T Spline (14MA4553) |
| N – 6-Bolt ¾" RD 3/16" Keyway (14TA4554) |
| P – SAE "BB" 2- & 4-Bolt 1" -15T Spline (14TA4532) |
| P"G" – SAE "BB" 2- & 4-Bolt 1" -15T Greasable Opt (14TA4552) |
| Q – SAE "A" 2-Bolt 7/8" -13T Spline (14TA4529) |
| R – SAE "A" 2-Bolt 5/8" -9T Spline (14TA4541) |
| S – SAE "B" 2-Bolt 7/8" -13T Spline (14TA4530) |
| T – SAE "A" 2-Bolt ¾" -11T Spline (14TA4533) |
| X – 1.3 -21T Spline |
| Z – SAE "B" 2- or 4-Bolt 1¼" -14T – Spline (14TA4423) |
| 2 – DIN 100 Companion Flange (14TA3975) |
| 6 – SAE "B" 2-Bolt 7/8" -13T Spline |

TABLE 6 TG SPECIAL FEATURE OPTIONS

| OPTIONS | Assy. |
|---|---------|
| X – None | |
| A – Reverse Shifter Mounting (Air, Electric/Air, or Lectra Shift only). Use cover kit from table 4 and kit #16TK3837 | |
| E – U60 Input Gear , use gasket pack 52MK1001, attach 36M35665TC to visor decal | |
| F – Special Clearance Cap 15K35351 | |
| G – Greaseable Shaft (see output shaft options above) | |
| H – High Torque (standard on 12, 13, 15, and 18 Ratios) | |
| I – Dual Terminal Indicator Switch 30M91113 N.O. (1 or 4 Assembly) 30M92247 N.C. (2 or 3 Assembly) | |
| J – High Torque – Pressure Lube (12, 13, 15, and 18 Ratios) | |
| M – Milled Idler Cap Install Clearance Cap Kit (15MK33977) | |
| P – Pressure Lubed – Install Kit (43MK3734) | |
| Q – High Torque with Milled Idler Cap Combine option "M" with option "H" | |
| S – Pulse Generator – Pressure Lube Combine option "U" and option "P" | |
| T – Pulse Generator – High Torque Combine option "U" and option "H" | |
| U – Pulse Generator. Change shift cover assembly to: | |
| Air Shift | |
| 16MK3819-A | (1 & 4) |
| 16MK3820-A | (2 & 3) |
| Cable Shift | |
| 16MK3788-A | (3 & 3) |
| 16MK3789-A | (1 & 4) |
| Lectra Shift | |
| 16MK3867-A | (1 & 4) |
| 16MK3868-A | (2 & 3) |
| This option includes the pulse generator. | |
| V – U60 Input Gear , use gasket pack 52MK1001. Install Clearance Cap Kit (15MK33977), and attach 3M35665TC to visor decal. | |