

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.

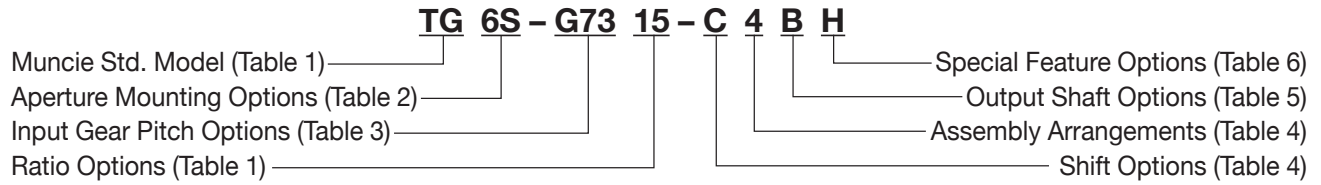


TABLE 1 MUNCIE STD. MODEL W/RATIO OPTIONS – LESS SHIFTER & INPUT GEAR

Part No.	
TG6S-Kit 04 — X * # X	* Assembly Arrangements: (1, 2, 3 or 4)
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)
TG6S-Kit 12 — X * # H	
TG6S-Kit 13 — X * # H	
TG6S-Kit 15 — X * # H	
TG6S-Kit 18 — X * # H	
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.	
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.	

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

NOTE* Input Gears in *italics* and marked with an asterisk are obsolete and no longer available.

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.

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.

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**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

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

16MK3820-A

Cable Shift

16MK3788-A

16MK3789-A

Lectra Shift

16MK3867-A

16MK3868-A

This option includes the pulse generator.

Assy.

(1 & 4)

(2 & 3)

(3 & 3)

(1 & 4)

(1 & 4)

(2 & 3)

V — U60 Input Gear, use gasket pack 52MK1001. Install Clearance Cap Kit (15MK33977), and attach 3M35665TC to visor decal.