		FOF	RD TRA	NSMI	RIGHT SID (LEFT SIDE TL	丁							
MUR	NCIE T	20	005–2010 TORQ	0 (DIESI QSHIFT 4	EL) 2 4x2 A	.005– \UTC	·2016 )MAT	(GAS) TC	PTO DRIVE GEAR LOCATION: PLV:				
6-BOLT TYPE								-					
SINGLE GEAR													
SINGLE													
SPEED MULTI GEAR	N	O P	OT'	OF	E	NI L	IN(	G - S	EE OT	HER	S	I <b>DE</b>	<b>=</b>
SH SERIES													
CLUTCH SHIFT													
1 FWD. 1 REV.													
ADAPTER	ER TO CHANGE F	ROTATION				_				REFER TO ADAPTE	ER GEAR ASS	EMBLIES IN	INDEX
8-BOLT TYPE													
SINGLE SPEED MULTI GEAR													
1 FWD. 1 REV.													
MODEL BREAK DOWN	MODEL BREAK PTO SERIES & HOUSING DESIGNATOR ASSEMBLY ARRANGEMENT (see pages 18-19)												
EX: T	G 6S -	U68 07	7 - C	1 B X	<u> </u>		IMPC	DRTANT: FO	OOTNOTES MA	Y AFFECT	PTO	3ELEC	TION

## FORD TRANSMISSION

LEFT SIDE ONLY

# (RIGHT SIDE TURN PAGE)



## 2005–2010 (DIESEL), 2005–2016 (GAS) TORQSHIFT 4x2 AUTOMATIC

Footnote (1, 4, 5, 6, 7)

# FORD 6-BOLT OPENING

PTO DRIVE GEAR DATA: 121T 14.23P 17.9° PA SPUR

**LOCATION:** Rear **PLMF:** 1.742 **PLV:** 2226 FPM **RPM:** 1,000



6-BOLT	PTO FOOT		SHAFT		IGINE		ADAPTER	SPACER	STUD KIT	SHIFT	INTERMITTENT RATING @ 1,000 RPM of PTO	
TYPE	MODEL NUMBER	NOTES	ROTATION	HI	LO	REV				TYPE	TORQUE	HP
SINGLE SPEED MULTI GEAR	FR63-F1506-*4BX FR63-F1506-*4TX FR67-F1506-*4BX	2, 5 3, 5 7	Opp Opp Opp	126 126 126					Included Included Included	Power Power Power	190 190 190	55 55 55

#### **FOOTNOTES:**

- Minimum Engine Speed for PTO Operation = 1,200 RPM.
- 2 Remote mount 11/4" Rd output shaft.
- 3 Direct Mount Pump Output. See charts below for hydraulic pump applications ["R" option (%-9T) and "Q" option (%-13T) output shaft options are available].
- 4 PTO HP shown is based on the min. 1,200 Engine RPM and PTO output shaft at 1,512 RPM.
- 5 For gas engine chassis change shift option to "F" (ex: FR63-F1506-F4TX). (Wire harness change 34T41993) (Use for 2005-2014 model year).
- 6 Optional overspeed protection, order SPD-1001.
- 7 The FR67 has a built-in solenoid valve and requires a special wiring harness supplied with the PTO. The "D" shift option is for DIESEL engines from 2005-2010. The "G" shift option is for GAS engines 2005-2010. The "F" shift option (F4BX) is for 2011 model year GAS engines. The "F" shift option is for FR67 only and can be used for model years 2005-2011. This PTO is also available with the "N" hydraulic pump mount.

#### **EXAMPLE:**

- 1 Begin by determining the flow and pressure requirement of your application.
- 2 Next find the desired engine speed at the left of the chart and follow across to the closest pump output flow to meet your application. Follow the grid up to the top to read the basic pump series and size. This is the pump that will give you the flow you desire. You may need to alter the engine operating speed to match your desired flow.
- 3 If your system required 9 GPM to operate, then you would look for 9 GPM in the columns. Finding the first one under the pump PF4-606 would give you a pump which will deliver the 9 GPM you require at an engine speed of 1,200 RPM. You would also get 9 GPM if you select the PF4-368 pump, but you would need to operate the engine at 2,000 RPM.
- 4 After you have selected the Pump Series and size, then the complete pump model number can be ordered. The PF3 Series would follow the form of: **PF4-\*\*-16ASRL**. The PK Series would follow the form of: **PK\*\*-16ASBB** (Pump rear ports are used in this installation. Order appropriate fittings separately.)

#### PUMP OUTPUT FLOW\* AND MAXIMUM PRESSURE

PK13- PK11- PK8- PF4-870- PF4-818 PF4-714- PF4-606- PF4-502- PF4-424

		2.96 cu.in./Rev		ev 2.46 cu.in./Rev		1.97 cu.in./Rev		2.01 cu.in./Rev		1.83 cu.in./Rev		1.71 cu.in./Rev		1.40 cu.in./Rev		1.16 cu.in./Rev		0.98 cu.in./Rev	
		GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI
			3,000		3,000		3,000		2,320		2,900		2,900		3,625		3,625		3,625
ENGINE	1,200	19.4	3,000	16.1	3,000	12.9	3,000	13.2	2,320	12.0	2,900	11.2	2,900	9.2	3,625	7.6	3,625	6.4	3,625
SPEED	1,300	21.6	3,000	17.4	3,000	14.0	3,000	14.3	2,320	13.0	2,900	12.1	2,900	9.9	3,625	8.2	3,625	6.9	3,625
	1,500	24.2	3,000	20.1	3,000	16.1	3,000	16.4	2,320	14.0	2,900	14.0	2,900	11.5	3,625	9.5	3,625	8.0	3,625
	1,700	27.4	3,000	22.8	3,000	18.3	3,000	18.6	2,320	17.0	2,900	15.9	2,900	13.0	3,625	10.8	3,625	9.1	3,625
	1,900	30.7	3,000	25.5	3,000	20.4	3,000	20.8	2,320	19.0	2,900	17.7	2,900	14.5	3,625	12.0	3,625	10.2	3,625
	2,100	33.9	3,000	28.2	3,000	22.6	3,000									13.3	3,625	11.2	3,625
	2,300			30.9	3,000	24.7	3,000									14.6	3,625	12.3	3,625

EXCEEDS MAX RPM

## PUMP OUTPUT FLOW\* AND MAXIMUM PRESSURE

PF4-368- PF-290- P4-264- PF4-212- PF4-160

		<u>0.85</u> cu.in./Rev		<u>0.73</u> cu	.in./Rev	<u>0.61</u> cι	ı.in./Rev	<u>0.49</u> сւ	ı.in./Rev	<u>0.37</u> cu.in./Rev		
		GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	GPM	RATED PSI	
			3,625		3,625		3,625		3,625		3,625	
ENGINE	1,200	5,6	3,625	4.8	3,625	4.0	3,625	3.2	3,625	2.4	3,625	
SPEED	1,300	6.0	3,625	5.2	3,625	4.3	3,625	3.5	3,625	2.6	3,625	
	1,500	7.0	3,625	6.0	3,625	5.0	3,625	4.0	3,625	3.0	3,625	
	1,700	7.9	3,625	6.8	3,625	5.7	3,625	4.5	3,625	3.4	3,625	
	1,900	8.8	3,625	7.6	3,625	6.3	3,625	5.1	3,625	3.8	3,625	
	2,100	9.7	3,625	8.4	3,625	7.0	3,625	5.6	3,625	4.2	3,625	
	2,300	10.7	3,625	9.2	3,625	7.7	3,625	6.1	3,625	4.6	3,625	

# PLEASE NOTE:

If you are accustomed to ordering a hydraulic pump based on the pump model number, you may be ordering a pump larger than you require when applying that pump to this application.

#### To Calculate the PTO output speed:

Engine Speed  $\times$  126% = PTO output speed Ex: Engine speed of 1,400 RPM would yield: 1,400  $\times$  1.26 = 1,764 RPM PTO

A **6 GPM** pump (like the PF4-606) would deliver an output flow of: Disp × RPM/231

1.4 × 1,764/231 = 10.6 GPM

Speed shown for pump at 0 in.hg. vacuum.

<sup>\*</sup> Theoretical Flow shown