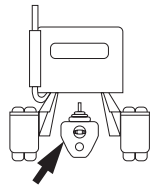
FORD TRANSMISSION

LEFT SIDE ONLY

8-BOLT OPENING

TORQSHIFT 10R140 10-SPEED
2024 & LATER F-650 & F-750 DIESEL
Footnotes (1, 2, 3, 4, 5)

PTO DRIVE GEAR DATA:
46T 12.16P 19.1° PA SPUR
LOCATION: Front **PLMF: 1.748**
PLV: 1,356 FPM **RPM: 1,130**



6-BOLT TYPE	PTO MODEL NUMBER	FOOT NOTES	SHAFT ROTATION	ENGINE % HI	ENGINE % LO	ENGINE % REV	ADAPTER	SPACER	STUD KIT	SHIFT TYPE	INTERMITTENT RATING @ 1,000 RPM of PTO TORQUE	INTERMITTENT RATING @ 1,000 RPM of PTO HP
SINGLE SPEED MULTI GEAR	F22-F1312-DX51XPX		Opp	130					Included	Power	261	50
	F22-F1312-DX5TNPX		Opp	130					Included	Power	261	50
	F22-F1312-DX5BAPX		Opp	130					Included	Power	261	50
	F22-F1312-DX5BBPX		Opp	130					Included	Power	261	50

FOOTNOTES:
1. Engine driven direct drive PTO gear.
2. Rating shown is for stationary applications only.
3. Direct Mount Pump Output - see charts below for hydraulic pump applications. Max pump RPM shown at 0 in.Hg.
4. Compatible with SPD-2000 Series overspeed protection device. Sold separately.
5. Available with Muncie Start®. Order shift code DS for Muncie Start®.
6. Hoist pump applications must be air shifted. Truck must be equipped with air compressor.

CAUTION: MAXIMUM OUTPUT SHAFT SPEED NOT TO EXCEED 2,500 RPM.

Pump Selection Example:

a. Understand the flow and pressure requirement of your application.
b. Find the closest pump output flow from the chart that is based on the most appropriate engine speed for 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.
c. Example: if your system required 8 GPM to operate, then you would look for 8 GPM in the columns. Finding the first one under the pump PF4-502 would give you a pump which will deliver the 8 GPM at 1,300 RPM. You would also get 8 GPM if you select the PF4-368 pump, but you would need to operate the engine at 1,700 RPM.
d. After the Pump Series and size is selected for your application, then complete pump model number can be ordered.

The PF Series would follow the model code: PF4-*-16QSRL. The PH Series would follow the model code: PH1-**-02ASRL (Size 03, 05, 07, 08, 09, 11 GPM) for the "BA" output option.**

MODEL PF4-***-16QSRL (PTO OUTPUT "TN") APPROXIMATE PUMP OUTPUT FLOW* AND MAXIMUM PRESSURE

	PF4-870 2.01 cu.in./Rev		PF4-818 1.83 cu.in./Rev		PF4-714 1.71 cu.in./Rev		PF4-606 1.4 cu.in./Rev		PF4-502 1.16 cu.in./Rev		PF4-424 0.98 cu.in./Rev	
ENGINE SPEED	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI
900	10.2	2,320	9.2	2,900	8.8	2,900	7.1	3,625	5.9	3,625	5.0	3,625
1,000	11.3	2,320	10.2	2,900	9.6	2,900	7.9	3,625	6.5	3,625	5.5	3,625
1,100	12.4	2,320	11.3	2,900	10.5	2,900	8.7	3,625	7.2	3,625	6.1	3,625
1,200	13.6	2,320	12.3	2,900	11.5	2,900	9.5	3,625	7.8	3,625	6.6	3,625
1,300	14.7	2,320	13.3	2,900	12.5	2,900	10.2	3,625	8.5	3,625	7.2	3,625
1,500	17.0	2,320	15.4	2,900	14.4	2,900	11.8	3,625	9.8	3,625	8.3	3,625
1,700	19.2	2,320	17.5	2,900	16.3	2,900	13.4	3,625	11.1	3,625	9.4	3,625
1,900	21.5	2,320	19.5	2,900	18.2	2,900	15.0	3,625	12.4	3,625	10.5	3,625
2,100									13.7	3,625	11.6	3,625
2,300									15.0	3,625	12.7	3,625
2,500												

	PF4-368 0.85 cu.in./Rev		PF4-290 0.73 cu.in./Rev		PF4-264 0.61 cu.in./Rev		PF4-212 0.49 cu.in./Rev		PF4-160 0.37cu.in./Rev	
ENGINE SPEED	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI
900	4.3	3,625	3.6	3,625	3.1	3,625	2.5	3,625	1.9	3,625
1,000	4.8	3,625	4.1	3,625	3.4	3,625	2.8	3,625	2.1	3,625
1,100	5.3	3,625	4.5	3,625	3.8	3,625	3.0	3,625	2.3	3,625
1,200	5.7	3,625	4.9	3,625	4.1	3,625	3.3	3,625	2.5	3,625
1,300	6.2	3,625	5.3	3,625	4.5	3,625	3.6	3,625	2.7	3,625
1,500	7.2	3,625	6.1	3,625	5.1	3,625	4.1	3,625	3.1	3,625
1,700	8.1	3,625	6.9	3,625	5.8	3,625	4.7	3,625	3.5	3,625
1,900	9.1	3,625	7.8	3,625	6.5	3,625	5.2	3,625	4.0	3,625
2,100	10.0	3,625	8.6	3,625	7.2	3,625	5.8	3,625	4.3	3,625
2,300	11.0	3,625	9.4	3,625	7.9	3,625	6.3	3,625	4.8	3,625
2,500										

*** Theoretical Flow Shown.** **Speed shown for pump at 0 in.Hg. vacuum.**

EXCEEDS MAX RPM

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 you apply that pump to this application.

To calculate the PTO output speed:

Engine speed × 130% = PTO output speed. Example: Engine speed of 1,400 RPM would yield the following:

1,400 × 1.30 = 1,820 RPM PTO

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

1.4 × 1,820/231 = 11.0 GPM

CAUTION: MAXIMUM OUTPUT SHAFT SPEED NOT TO EXCEED 2,500 RPM.

MODEL PH1-**-02ASRL (PTO OUTPUT "BA") APPROXIMATE PUMP OUTPUT FLOW AND MAXIMUM PRESSURE

ENGINE SPEED	PH1-11 2.48 cu.in./Rev		PH1-09 2.17 cu.in./Rev		PH1-08 1.86 cu.in./Rev		PH1-07 1.55 cu.in./Rev		PH1-05 1.24 cu.in./Rev		PH1-03 0.62 cu.in./Rev	
	GPM	MAX. PSI	GPM	MAX.PSI	GPM	MAX.PSI	GPM	MAX.PSI	GPM	MAX.PSI	GPM	MAX.PSI
900	12.6	2,500	11.0	2,900	9.4	3,250	7.9	3,500	6.3	3,500	3.1	3,500
1000	14.0	2,500	12.2	2,900	10.5	3,250	8.7	3,500	7.0	3,500	3.5	3,500
1100	15.4	2,500	13.4	2,900	11.5	3,250	9.6	3,500	7.7	3,500	3.8	3,500
1200	16.7	2,500	14.7	2,900	12.6	3,250	10.5	3,500	8.4	3,500	4.2	3,500
1300	18.1	2,500	15.9	2,900	13.6	3,250	11.3	3,500	9.1	3,500	4.5	3,500
1500	20.9	2,500	18.3	2,900	15.7	3,250	13.1	3,500	10.5	3,500	5.2	3,500
1700	23.7	2,500	20.8	2,900	17.8	3,250	14.8	3,500	11.9	3,500	5.9	3,500
1900	26.5	2,500	23.2	2,900	19.9	3,250	16.6	3,500	13.3	3,500	6.6	3,500

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 you apply that pump to this application.

To calculate the PTO output speed:

Engine speed × 130% = PTO output speed. Example: Engine speed of 1,400 RPM would yield the following:

1,400 × 1.30 = 1,820 RPM PTO

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

1.4 × 1,820/231 = 11.0 GPM

MODEL S2AD1-**-02BPRL (PTO OUTPUT "BB") APPROXIMATE PUMP OUTPUT FLOW AND MAXIMUM PRESSURE

ENGINE SPEED	S2AD1-15 3.94 cu.in./Rev		S2AD1-11 2.96 cu.in./Rev		S2AD1-06 1.47 cu.in./Rev	
	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI
900	20.0	2,500	15.0	3,000	7.4	3,000
1,000	23.3	2,500	16.7	3,000	8.3	3,000
1,100	24.4	2,500	18.3	3,000	9.1	3,000
1,200	26.6	2,500	20.0	3,000	9.9	3,000
1,300	28.8	2,500	21.7	3,000	10.8	3,000
1,500	33.3	2,500	25.0	3,000	12.4	3,000
1,700	37.7	2,500	28.3	3,000	14.1	3,000
1,900	41.1	2,500	31.7	3,000	15.7	3,000

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 you apply that pump to this application.

To calculate the PTO output speed:

Engine speed × 130% = PTO output speed. Example: Engine speed of 1,400 RPM would yield the following:

1,400 × 1.30 = 1,820 RPM PTO

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

1.4 × 1,820/231 = 11.0 GPM

*** Theoretical Flow Shown.**

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

Note: S Series pumps must be air shifted due to space constraints. Truck must be ordered with factory air compressor, or after-market unit must be installed for hoist pump actuation.

MODEL PKS1-**-02BSBB OR PK1-**-02BSBB (PTO OUTPUT "BB") APPROXIMATE PUMP OUTPUT FLOW AND MAXIMUM PRESSURE

ENGINE SPEED	PK1-17 3.94 cu.in./Rev		PK1-15 3.45 cu.in./Rev		PK1-13 2.96 cu.in./Rev		PK1-11 2.46 cu.in./Rev		PK1-08 1.97 cu.in./Rev		PK1-06 1.47 cu.in./Rev		PK1-04 0.98 cu.in./Rev	
	GPM	MAX.PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI	GPM	MAX. PSI
900	20.0	2,500	17.5	2,500	15.0	3,000	12.5	3,000	10.0	3,000	7.4	3,000	5.0	3,000
1,000	23.3	2,500	19.4	2,500	16.7	3,000	13.8	3,000	11.1	3,000	8.3	3,000	5.5	3,000
1,100	24.4	2,500	21.4	2,500	18.3	3,000	15.2	3,000	12.2	3,000	9.1	3,000	6.1	3,000
1,200	26.6	2,500	23.3	2,500	20.0	3,000	16.6	3,000	13.3	3,000	9.9	3,000	6.6	3,000
1,300	28.8	2,500	25.2	2,500	21.7	3,000	18.0	3,000	14.4	3,000	10.8	3,000	7.2	3,000
1,400	31.9	2,500	27.2	2,500	23.3	3,000	19.4	3,000	15.5	3,000	11.6	3,000	7.7	3,000
1,500	33.3	2,500	29.1	2,500	25.0	3,000	20.8	3,000	16.6	3,000	12.4	3,000	8.3	3,000
1,700	37.7	2,500	33.0	2,500	28.3	3,000	23.5	3,000	18.8	3,000	14.1	3,000	9.4	3,000
1,900	41.1	2,500	36.9	2,500	31.7	3,000	26.3	3,000	21.1	3,000	15.7	3,000	10.5	3,000

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 you apply that pump to this application.

To calculate the PTO output speed:

Engine speed × 130% = PTO output speed. Example: Engine speed of 1,400 RPM would yield the following:

1,400 × 1.30 = 1,820 RPM PTO

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

1.4 × 1,820/231 = 11.0 GPM

*** Theoretical Flow Shown.**

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

MODEL PT2-025-21IBRL (PTO OUTPUT "UU") APPROXIMATE PUMP OUTPUT FLOW AND MAXIMUM PRESSURE

ENGINE SPEED	PT2-025 1.56 cu.in.³/Rev	
	GPM	MAX. PSI
900	7.90	6,525
1,000	8.78	6,525
1,100	9.66	6,525
1,200	10.54	6,525
1,300	11.41	6,525
1,500	13.17	6,525
1,700	14.93	6,525
1,900		

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 you apply that pump to this application.

To calculate the PTO output speed:

Engine speed × 130% = PTO output speed. Example: Engine speed of 1,400 RPM would yield the following:

1,400 × 1.30 = 1,820 RPM PTO

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

1.4 × 1,820/231 = 11.0 GPM

EXCEEDS MAX RPM

*** Theoretical Flow Shown.**