

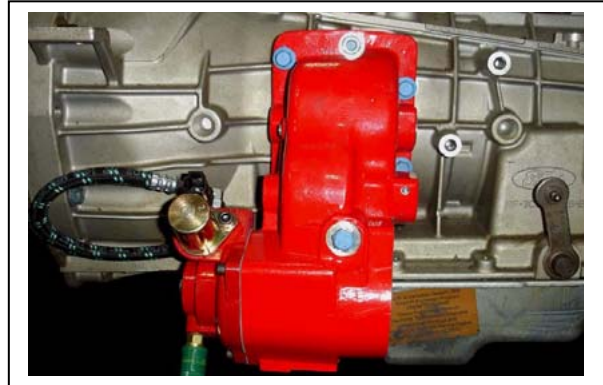
## New 247 Series for the Ford TorqShift Transmission

Installing a power take-off on the Ford TorqShift automatic transmission has now become less time consuming. Units shipped on or after June 16, 2008 will be the 247 Series as the 246 Series goes obsolete. With this change we have reduced the number of loose installation parts required to install the P.T.O. on the Ford Super Duty Trucks, saving installation time.

246 Series



247 Series



### Features of the New 247 Series

- Direct Replacement for the 246 Series
- Same Torque Rating as the 246 Series and Pump Options
- Same Chelsea Application Page as the 246 Series – FRD-9 (see back of bulletin)
- Pricing Remains the Same as the 246 Series
- Reduced Installation Time
- Integrated Cartridge Valve and Pressure Switch Eliminates the Manifold Block and Fittings
- One Hose to Connect to the P.T.O. vs. Four on the Muncie FR Series plus remote solenoid valve
- New Chelsea Supplied Controlled Compression Gasket Reduces Possible Leak Paths of Current OE Supplied Transmission Aperture Gasket (Do Not Use OE Supplied Gasket)



22-P-104 (OE Supplied)



22-P-120 (Chelsea Supplied)

OVER

FRD-9

FORD

**CHELSEA®**

TORQSHIFT

**LEFT SIDE ONLY** **NO RIGHT SIDE APPLICATIONS AVAILABLE**

**TRANSMISSION GEAR DATA:**  
 L.H. 6-Bolt Opening Gear REAR of Centerline  
 121 Teeth - SPUR  
**PITCH LINE TO APERTURE FACE:**  
 1.3390" (33.7800MM)

**Caution: Application Approval Required for P.T.O. Output Shaft Speeds Above 2500 R.P.M.**

LEFT Side P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit	P.T.O. Model	Inter. Torq.	Dir. Rot.	Engine %		Filler Block	Adapter Assy.	Stud Kit
			Hi	Rev							Hi	Rev			

**ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)**

247FMKSP-*2 (A) (1) 120	Opp	154	Furnished
247FMKSP-*4 (B) (1) 120	Opp	154	Furnished

**Chelsea CGP-P11 Series Pump Specifications for 4x4 or 4x2 Vehicles (3/4"-11 Tooth Pump Spline)**

Order Code	Chelsea Pump Model	Displacement	GPM (1)	Pump (1)	Torque (1)	Continuous Pressure	Max Speed
		in <sup>3</sup> /rev		HP	ft-lbs		
16	CGP-P11A016-5FC	0.37	2.9	6.0	17.0	3500	4000
26	CGP-P11A026-5FC	0.61	4.9	10.0	28.3	3500	3600
32	CGP-P11A032-5FC	0.73	5.8	12.0	34.0	3500	3300
37	CGP-P11A037-5FC	0.85	6.8	14.0	39.7	3500	3300
42	CGP-P11A042-5FC	0.98	7.8	16.0	45.3	3500	3000
55	CGP-P11A055-5FC	1.28	10.3	17.9	51.0	3000	2800
61	CGP-P11A061-5FC	1.40	11.3	18.0	51.2	2750	2800
71	CGP-P11A071-5FC	1.65	13.2	18.1	51.4	2350	2400
82	CGP-P11A082-5FC	1.89	15.1	18.5	52.7	2100	2300

**Chelsea FGP-P17 Series Pump Specifications for 4x2 Vehicles Only (7/8"-13 Tooth Pump Spline)**

Order Code	Chelsea Pump Model	Displacement	GPM (1)	Pump (1)	Torque (1)	Continuous Pressure	Max Speed
		in <sup>3</sup> /rev		HP	ft-lbs		
50	FGP-P17A050-2AN	1.16	9.3	19.6	55.8	3625	3300
66	FGP-P17A066-2AN	1.53	12.2	25.8	73.4	3625	3100
87	FGP-P17A087-2AN	2.01	16.1	34.1	96.8	3625	3100
10	FGP-P17A100-2AN	2.32	18.6	39.2	111.5	3625	3000
14	FGP-P17A137-2AN	3.17	25.4	43.0	122.1	2900	2600

**NOTE: FGP-P17 Pumps have a special housing design for mounting to the Ford TorqShift transmission.**

**Chelsea P16 Series Pump Specifications for 4x2 Vehicles Only (7/8"-13 Tooth Pump Spline)**

Order Code	Chelsea Pump Model	Displacement	GPM (1)	Pump (1)	Torque (1)	Continuous Pressure	Max Speed
		in <sup>3</sup> /rev		HP	ft-lbs		
18	P16-180A-2D1	3.511	28.1	36.1	102.5	2200	2500
20	P16-200A-2D1	3.902	31.2	36.4	103.5	2000	2000

(1)GPM & Pump Input HP @ 1200 Engine RPM & 1848 P.T.O. Output Shaft RPM

**WARNING:** To guarantee full torque capability at the automatic transmission P.T.O. gear, and the P.T.O., the TorqShift transmission torque converter must be locked (Engine RPM @ 1200 RPM), and hydraulic line pressure to the P.T.O. clutch must be elevated to a minimum of 110 psi. On Diesel engines the Stationary Elevated Idle Control (SEIC) strategy is 1200 RPM and on the Gas engines Stationary Elevated Idle Control (SEIC) strategy is 900 RPM. Therefore for stationary operations a discrete signal, which is supplied with Chelsea 247 wire harness 329598X, must be used to elevate engine idle to a minimum of 900 or 1200 RPM. Battery voltage must be applied to the P.T.O. circuit to begin SEIC strategy for both mobile and stationary applications. Failure to follow these procedures may lead to P.T.O. clutch wear and internal damage to the P.T.O./Transmission. See Chelsea Owner's/Installation Manual HY25-1715-M1/US or Contact Chelsea Technical Services (662-895-1052) for complete details.

**NOTE (A):** 247FMKSP-\*2 -- 4 x 2 applications, all output options and all pumps listed in the pump chart are available.

**NOTE (B):** 247FMKSP-\*4 -- 4 x 4 applications only and will come with a modified GGP-P11 (CGP-P11) pump attached to the P.T.O. from the factory when one of the following output option codes is ordered: 16,26,32,37,42,55,61,71,82. (See Pump Chart)

**NOTE:** Standard Parker GGP-P17 pumps may interfere with the transmission shift lever, order Chelsea FGP-P17 Series pumps to assure shifter clearance.

**NOTE:** The P.T.O. mounting gasket is supplied with the P.T.O. It is the correct thickness and material so that the customer does not have to set backlash. Do not use gasket supplied with the transmission under the 6-bolt cover plate.

**NOTE:** Ford provides an option for the use of one of the "Upfitter" Switches to be used as a P.T.O. switch. Chelsea does not recommend the use of the UNPROTECTED switch for P.T.O. function, but if required, contact Chelsea Technical Services for assistance.(662-895-1052)

(1) Input Gear Part No. 5-P-1387

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