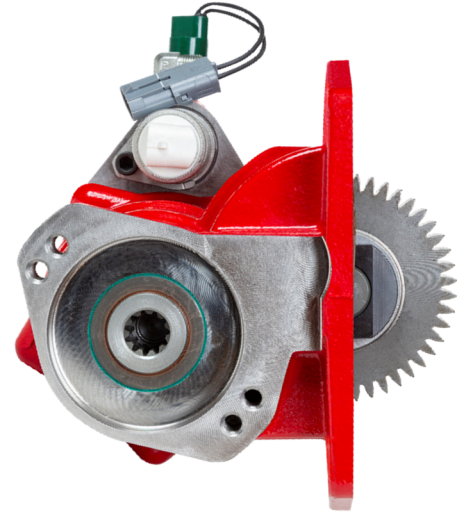


Parker Chelsea 210 Series Housing Update

Parker Chelsea Products Division is pleased to announce an update to our 210 Series PTO for the Ford 10R140 transmission on 2020+ Super Duty (F250, F350, F450, F550, and F600) chassis. This 'B' revision housing allows for fitment of larger direct mounted pumps on 4x4 applications, including Parker's P16-150-2D1 (210 Series output code '15').

A new SAE A 2-bolt mounting pattern has been added to the housing and is rotated 15° CCW as viewed from the PTO output. The new 'B' revision housing will be provided standard with all future orders (4x2 and 4x4). Pricing remains at current levels (per Price List PL HY25-5020/US). The revision 'B' went into production on February 28, 2020 and will be for all 210 Series PTO's manufactured after serial number **'0059XXXX'**.

Customers who had previously ordered special 210 assemblies for the rotated pattern only will have future orders converted to and shipped as standard 210 order codes. Note: unlike previous 210 specials, the lower secondary mounting hole no longer needs to be plugged.



Key Notes...

- The P16-150A-2D1 direct mount pump, output code '15', will allow for approximately 28 GPM at 3000 PSI on 4x4 Super Duty applications.
- For optimal fitment on most pumps, Chelsea recommends using the original mounting pattern whenever possible. (See *Figure 1 - "210 Series Housing Revision 'B' Pump Mounting Positions"*).
- F650 and F750 Medium Duty Trucks continue to ship with Ford's 6R140 transmission, and those applications will should continue to use 249 and 272 Series PTOs.
- Application data can be found on FRD-13. Consult fordbbas.com for the most current PTO ratings.

Documents Included:

- Updated 210 Series Sales Flyer – HY25-0198-B1/US

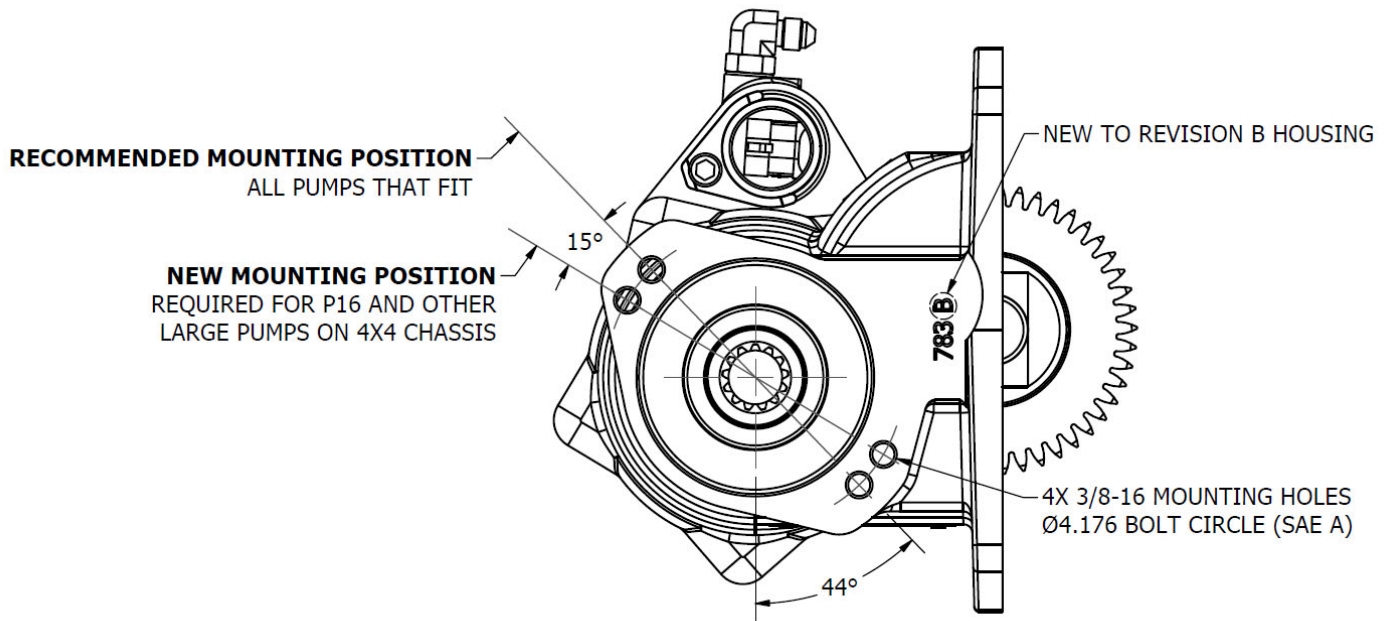
If you have questions about this bulletin or other technical questions, contact us at:

US: Chelsea Customer/Technical Services **1-888-PH4-TRUK** (1-888-744-8785)
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Stephen Uszak
Product Manager
Chelsea Products Division
Motion Systems Group

-CONT-

Figure 1 – “210 Series Housing Revision ‘B’ Pump Mounting Positions”



Chelsea® 210 Series

For Ford 10R140 Super Duty Transmission



Overview:

With the launch of the Ford 10R140 Transmission, Parker Chelsea is proud to offer our 210 Series Power Take-Off (PTO) specifically designed for this application. The 10R140 transmission features Live-Drive, which allows operators to utilize PTO functionality while the truck is in motion. The 10-Bolt housing design of the 210 Series allows for larger pump applications when compared to our 249 Series (on Ford 6R140 Transmissions). Streamlined kitting offers 17 Parker gear pump options available in the same package as the PTO. The intelligent design of our 210 Series makes it the best choice for Ford applications.

- Aerial
- Tow & Recovery
- Fire & Rescue
- Water Drilling



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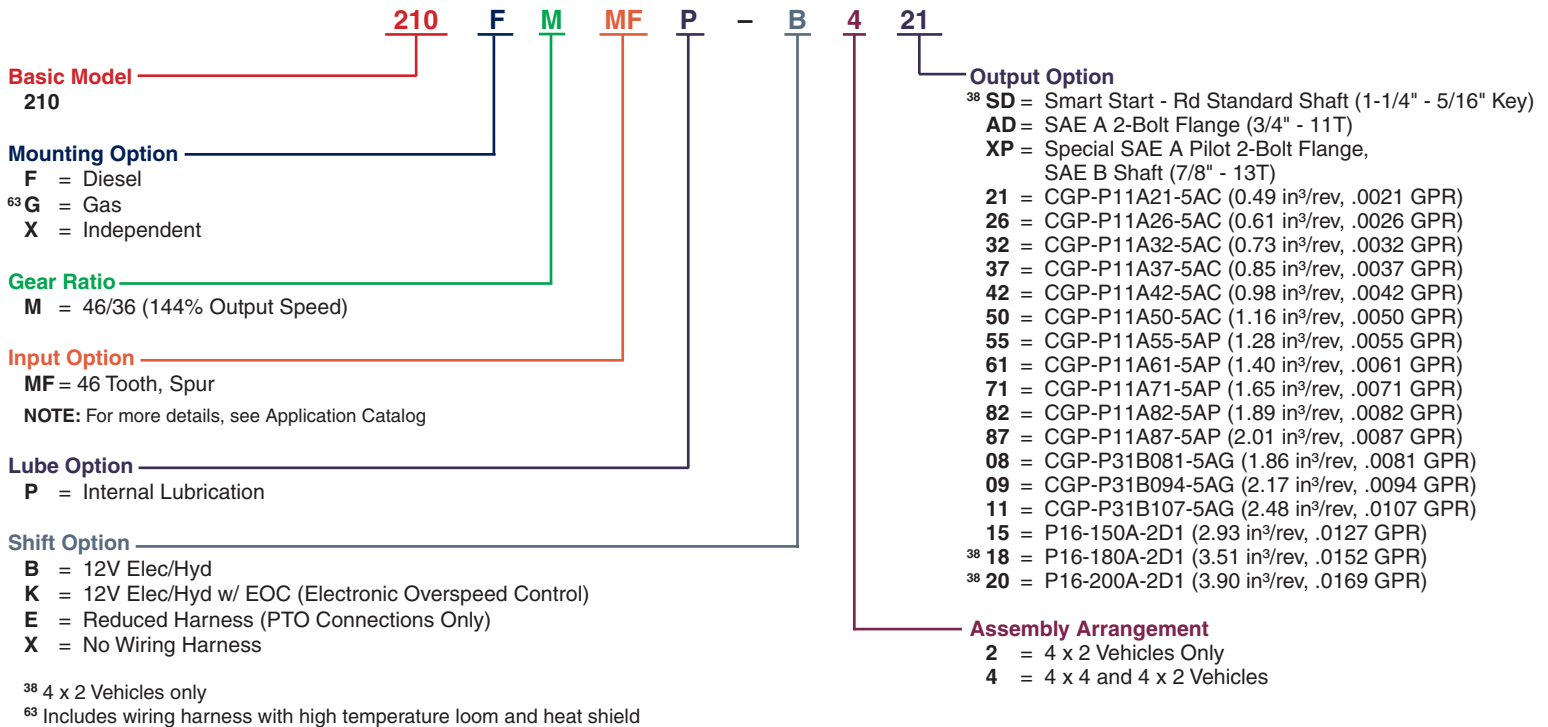
Product Features and Benefits:

- **Patent(s) Pending Noise Suppression System** – Dampens gear rattle between transmission and PTO
- **Standard Smart Start Drive Line Output** – Shock load dampening feature to protect driven equipment
- **Simplification** – Same housing can be used for 2WD and 4WD installations
- **Intermittent Torque Rating** – Up to 235 lbs-ft for driven equipment based on 144% PTO output speed.
- **Ease of Ordering** – PTO, pump, wiring harness and shift kits available under one part number and package
- **Standard SAE Output Flange and Shafts** – Allowing for wider variety of flows and pressures



ENGINEERING YOUR SUCCESS.

210 SERIES POWER TAKE-OFF SPECIFICATIONS AND TECHNICAL DATA



Chelsea CGP-P11 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in ³ /rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
21	CGP-P11A021-5AC	0.49	3.30	7.0	24.6	3988	3625	4000	1736	4.8	SAE 12	SAE 10
26	CGP-P11A026-5AC	0.61	4.11	8.7	30.7	3988	3625	3600	1736	5.9	SAE 12	SAE 10
32	CGP-P11A032-5AC	0.73	4.91	10.4	36.7	3988	3625	3500	1736	7.1	SAE 12	SAE 10
37	CGP-P11A037-5AC	0.85	5.72	12.1	42.7	3988	3625	3300	1736	8.3	SAE 12	SAE 10
42	CGP-P11A042-5AC	0.98	6.60	14.0	49.3	3988	3625	3000	1736	9.5	SAE 12	SAE 10
50	CGP-P11A050-5AC	1.16	7.81	16.5	58.3	3770	3625	3000	1736	11.3	SAE 12	SAE 10
55	CGP-P11A055-5AP	1.28	8.62	17.1	60.5	3480	3410	2800	1736	12.5	SAE 16	SAE 12
61	CGP-P11A061-5AP	1.40	9.43	18.0	63.4	3408	3265	2800	1736	13.6	SAE 16	SAE 12
71	CGP-P11A071-5AP	1.65	11.11	17.9	63.0	2900	2755	2300	1597	14.8	SAE 16	SAE 12
82	CGP-P11A082-5AP	1.89	12.72	17.8	62.8	2465	2395	2300	1597	16.9	SAE 16	SAE 12
87	CGP-P11A087-5AP	2.01	13.53	17.8	62.7	2320	2250	2000	1389	15.7	SAE 16	SAE 12

Chelsea PGP-315 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline – AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in ³ /rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
8	CGP-P31B081-5AG	1.86	12.52	24.1	85.1	3300	3300	3000	1736	18.1	SAE 16	SAE 16
9	CGP-P31B094-5AG	2.17	14.61	24.7	87.2	2900	2900	3000	1736	21.1	SAE 16	SAE 16
11	CGP-P31B107-5AG	2.48	16.70	24.4	86.0	2500	2500	3000	1736	24.2	SAE 16	SAE 16

Chelsea P16 Series Pump Specs for 4 x 2 and 4 x 4 Vehicles (7/8" - 13 Tooth Pump Spline – XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in ³ /rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM	Rear Pump Ports	
						Intermittent	Continuous	Pump	Engine (B)		Inlet	Outlet
15	P16-150A-2D1	2.93	19.73	34.5	121.9	3000	3000	2800	1736	28.5	SAE 20	SAE 16
18 ³⁸	P16-180A-2D1	3.51	23.63	30.3	107.1	2200	2200	2500	1736	34.2	SAE 20	SAE 16
20 ³⁸	P16-200A-2D1	3.90	26.26	30.6	108.1	2000	2000	2200	1528	33.4	SAE 20	SAE 16

(A) GPM & Pump Input HP @ 1200 Engine RPM (1736 PTO Output RPM - 144% Ratio) & Continuous Pressure Rating with 90% efficiency rating considered.

(B) Max Engine Speed = Minimum of (1) (Max Pump Speed) / 1.44 PTO Ratio and (2) 2500 RPM maximum PTO output speed. PTO output speeds above 2500 RPM requires application approval from Parker Chelsea.

NOTE: Minimum ideal engine speed for Ford Super Duty in stationary mode is 900 RPM (Diesel) and 700 RPM (Gas). Consult fordbbas.com

NOTE: Ford's 10R140 transmission delivers up to 300 ft-lbs to PTO. Consult fordbbas.com for power and torque limitations based on vehicle configuration.

FORMULAS:

GPM = Cu. In. x .004329 = G/Rev x 1736 RPMs x .90 efficiency

HP = (GPM x Max PSI) / 1714

Torque = (HP x 5252) / 1736 RPMs

