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### FORD TRANSMISSION INDEX

Transmission Make and Model	P.T.O. Appl. Number	Number Forward Speeds	Teeth in P.T.O. Driver
S5-47 (FORD SUPER DUTY)	ZF-4	5	L45-R45
S6-650 (Ford Truck Models Prior to January 2007)	ZF-45	6	L39
S6-650 (Ford Trucks Models After January 2007)	ZF-50	6	L39
TORQSHIFT (Ford Super Duty MY2010 and Prior - Gas Only for MY2011)	FRD-9	5	L121
TORQSHIFT 6 (Ford Super Duty MY2011 and Later - Diesel Only)	FRD-10	6	L52
TORQSHIFT 6 (Ford Medium Duty F-650 MY2013 and Later - Gas Engine)	FRD-11	6	L52



Parker Chelsea

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission P.T.O. Driver & Aperatures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side

For transmission not listed, contact your authorized Chelsea Distributor.

	LEFT S									
		ATA:								
121 Teeth		or bendenine								
1.3390" (3	3.7800MM)	AE FACE.								
Cautio	n: Application	Approval I	Require	ed for F	P.T.O. 0	utput Sh	aft Spee	ds Ab	ove 2500	R.P.M.
LEFT Sid	de Inter. Dir. En	gine %	Adapter			Inter.	Dir. Engine	%	Adapt	er
P.T.O. Mo	odel <sup>Torq.</sup> Rot. Hi	Rev Filler Bloc	<sup>K</sup> Assy.	Stud Kit	P.T.O. N	lodel <sup>Torq.</sup>	Rot. Hi I	Rev	r Block Assy	Stud Kit
	ONE	SPEED -	TWO G	EAR -	POWE	RSHIFT	HYDRAU	JLIC)		
247FMKSP-*	2 (A) (1) 120 Opp 154			Furnished	l		-			
247FMKSP-*	4 (B) (1) 120 Opp 154			Furnished						
Chelsea	CGP-P11 Serie	s Pump Spec	cificatio	ns for 4>	<b>(4 or 4x</b> 2	<b>Vehicles</b>	(3/4" - 11 T	ooth P	ump Splir	ie)
Order Code	Chelsea Pump	Displacement	GPM (1)	Pump (1)	Torque (1)	Pressu	ure PSI	Max S	peed RPM	Max Pump
16		0.37	2.06	63	17.8	3000	3625	2500	2073	FIOW GPIN
26	CGP-P11A026-5FC	0.61	4.89	10.3	29.4	3990	3625	3400	2208	9.0
32	CGP-P11A032-5FC	0.73	5.85	12.4	35.1	3990	3625	2500	1623	7.9
37	CGP-P11A037-5FC	0.85	6.81	14.4	40.9	3990	3625	2500	1623	9.2
42	CGP-P11A042-5FC	0.98	7.85	16.6	47.1	3990	3625	2350	1526	10.0
55	CGP-P11A055-5FC	1.28	10.25	20.4	57.9	3480	3410	1850	1201	10.3
61	CGP-P11A061-5FE	1.40	11.20	21.3	60.6	3410	3265	2750	1786	16.7
71	CGP-P11A071-5FE	1.65	13.21	21.2	60.3	2900	2755	2350	1526	16.8
82	CGP-P11A082-5FE	1.89	15.13	21.1	60.0	2465	2395	2100	1364	17.2
86	CGP-P11A087-5FE	2.01	16.10	21.1	60.0	2320	2250	2000	1299	17.4
Chelsea	FGP-17 Series	Pump Specif	ications	o for 4x2	Vehicles	s Only (7/8	8" - 13 Toot	h Pum	p Spline)	
Order Code	e Chelsea Pump	Displacement	GPM (1)	Pump (1)	Torque (1)	Pressu	ure PSI	Max S	peed RPM	Max Pump
w/ PTO	Model	in³/rev		HP	Lbsft.	Intermittent	Continuous	Pump	Engine (2)	Flow GPM
50	FGP-P17A050-2AN	1.15	9.21	19.5	55.3	3625	3625	3300	2143	16.4
66	FGP-P17A066-2AN	1.53	12.25	25.9	73.6	3625	3625	3100	2013	20.5
87	FGP-P17A087-2AN	2.01	16.10	34.0	96.7	3625	3625	3100	2013	27.0
10	FGP-P1/A100-2AN	2.32	18.58	39.3	111.6	3625	3625	3000	1948	30.1
NOTE: FGI	P-P17 Pumps have a s	oecial housing de	≤25.15	42.5 unting to th	e Ford Toras	I 2900 Shift transmiss	2900 ion.	2600	1000	30.3
Ohalaaa	D1C Ostine Dur								- I! <b>\</b>	
Cheisea	PT6 Series Pun	ip Specificat	tions for	4x2 ver	ncies Or	11 <b>y</b> (7/8° -	13 100th P	ump S	pline)	Man
Urder Code	Cheisea Pump	Displacement	GPM (1)	Pump (1)	lorque (1)	Pressi	Continuous	Max S	Engine (2)	Flow CDM
W/PI0	Woder	in-/rev	00.40		LDSIT.	mermittent	Continuous	Pump		
1 10	1016 1000 0001	261			1/1/2				י גינישר ו	-2011

(1) GPM & Pump Input HP @ 1200 Engine RPM & 1850 P.T.O. Output Shaft RPM & Continuous Pressure Rating

(2) Max Engine Speed = (Max Pump Speed) / (1.54) for P.T.O. Ratio Increase

(3) For Pump Codes 61, 71, 82 & 86- 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X

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 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-MI/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 PGP-P11 (CGP-P11) pump with 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, 87 (See Pump Chart). Or one of the following output shafts "XD", "XE", "XP" or "AD".

NOTE: Standard Parker PGP-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 (22-P-120) 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

January 2012

4.7.2

		LEF	TS	IDE O	NLY								
TRANSM L.H. 06-Bol 52 Teeth - PITCH L	ISSION O t Opening G SPUR INE TO A	GEAR ear FC	R DA DRWA	TA: ARD of C	Centerline								
3.4550" (87	.7640MM)												
Caution	n: Appli	cati	on	Appr	oval I	Requir	ed for I	P.T.O. (	Dutput Sh	aft Spee	eds Ab	ove 2500	) R.P.M.
LEFT Sid P.T.O. Mod	e <sub>Inter.</sub> del <sup>Torq.</sup>	Dir. Rot.	Eng Hi	ine % Rev	Filler Bloc	k Adapte Assy.	r Stud Kit	P.T.O.	Inter. Torq.	Dir. Engin Rot. Hi	ne % Fill	er Block Adapt	ter J. Stud Kit
		0	NE	SPE	ED - 1		EAR -	POWE	RSHIFT			I	
249FMLLX-*2 249FMLLX-*4	(A) (1) 200 (B) (1) 200	Opp Opp	124 124	<u> </u>			Furnishe Furnishe	d d			<u> </u>		
Chelsea	CGP-P1	1 Se	ries	Pum	p Spec	cificatio	ns for 4	x4 or 4x	2 Vehicles	(3/4" - 11	Tooth F	oump Splir	ne)
Order Code w/ PTO (3)	Chelsea	a Pum Idel	пр	Displa	acement <sup>3</sup> /rev	GPM (1)	Pump (1) HP	Torque (1	I) Press	ure PSI	Max 9	Speed RPM	Max Pump Flow GPM
16 26 32 37 42 55 61 71 82 87	CGP-P11A CGP-P11A CGP-P11A CGP-P11A CGP-P11A CGP-P11A CGP-P11A CGP-P11A CGP-P11A	x016-5 x026-5 x032-5 x037-5 x042-5 x042-5 x061-5 x061-5 x071-5 x082-5 x087-5		0 0 0 0 1 1 1 1 2	.37 .61 .73 .85 .98 .28 .40 .65 .89 .01	1.99 3.27 3.92 4.56 5.26 6.87 7.52 8.86 10.15 10.79	4.2 6.9 8.3 9.6 11.1 13.7 14.3 14.2 14.2 14.2	17.8 29.3 35.1 40.9 47.1 57.9 60.6 60.3 60.0 60.0	3990 3990 3990 3990 3990 3480 3410 2900 2465 2320	3625 3625 3625 3625 3625 3625 3625 3410 3265 2755 2395 2250	3500 3400 2500 2500 2100 1600 2750 2350 2100 2000	2823 2742 2016 2016 1694 1290 2218 1895 1694 1613	5.6 9.0 7.9 9.2 8.9 8.9 16.7 16.8 17.2 17.4
Chelsea	PGP-315	5 Sei	ries	Pum	p Spec	ificatio	ns for 4	x2 Vehic	les Only (3	/4" - 11 To	oth Pu	mp Spline	)
Order Code	Chelsea	a Pum	۱p	Displa	acement	GPM (1)	Pump (1)	Torque (1	) Press	ure PSI	Max	Speed RPM	Max Pump
08 09 11	CGP-P31E CGP-P31E CGP-P31E	3081-5 3094-5 3107-5	5AG 5AG 5AG	1 2 2	.86 .17 .48	9.98 11.65 13.31	19.2 19.7 19.4	81.4 83.5 82.2	3300 2900 2500	3300 2900 2500	3000 3000 3000	2419 2419 2419 2419	24.2 28.2 32.2
Chelsea	P16 Seri	ies F	oum	p Spe	ecificat	ions fo	r 4x2 Ve	hicles O	nly (7/8" - "	13 Tooth F	oump S	pline)	
Order Code w/ PTO	Chelsea	a Pum del	пр	Displa	acement <sup>3</sup> /rev	GPM (1)	Pump (1) HP	Torque (1	Dintermittent	Ure PSI Continuous	Max 9	Speed RPM Engine (2)	Max Pump Flow GPM
15 18 20	P16-150A- P16-180A- P16-200A-	2D1 2D1 2D1 2D1		2 3 3	.93 .51 .90	15.73 18.85 20.95	27.5 24.2 24.4	116.6 102.5 103.5	3000 2200 2000	3000 2200 2000	2800 2500 2200	2258 2016 1774	35.5 38.0 37.2
(1) GPM & F (2) Max Eng (3) For Pum <u>CAUTION</u> : Mo at the P.T.O. ( Maximum Load	Pump Input I jine Speed = p Codes 61, bile and Station Dutput. If the P. d (Torque) is 25	HP @ = (Max , 71, 8 hary Mc T.O. Fe 50 Ft.lbs	1000 C Pum 2 & 8 ode Op eature s at the	) Engine pp Spee 7- 45 de erations a is Used fo e Transm	RPM & d) / (1.24 egree fitti are Support or Extended ission P.T.C	1240 P.T.O ) for P.T.O. ngs are re- ed. The Maxi Periods of T D. Gear and 2	D. Output Sh Ratio Incre quired to co imum Load (T ime Without V 200 Ft.lbs at th	aft RPM & base onnect hydra orque) Allowal (ehicle Movern ie P.T.O. Outp	Continuous Pre aulic hoses for o ole for Mobile Mode ent it is Recommendat.	essure Rating clearance. Or e is 150 Ft.lbs at nded to Switch to	der Kit nur the Transmis Stationary N	nber 329667X ssion P.T.O. Gear Mode. In Stationar	and 120 Ft.lbs y Mode

NOTE (A): 249FMLLX-\*2 -- 4 x 2 applications, all output options and all pumps listed in the pump chart are available.

NOTE (B): 249FMLLX-\*4 -- 4 x 4 applications only and will come with a modified PGP-P11 (CGP-P11) pump with the P.T.O. from the factory when one of the following output option codes is ordered; 16,26,32,37,42,55,61,71,82,87 (See Pump Chart). Or one of the following output shafts "XD", "XP" or "AD".

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-1436



249GMLLX-\*2 (A) (1) 200 Opp

TORQSHIFT 6 (Ford Medium Duty F-650 MY2013 and Later - Gas Engine)

		LEF	T SI	DE (	ONLY										
TRANSMISS	SION ening	<b>GEAI</b> Gear F	<b>R DA</b> ORWA	TA: RD of	Centerline										
52 Teeth - SPUR PITCH LINE TO APERTURE FACE: 3.4550" (87.7640MM)															
Caution: A	\ppl	icati	on <i>i</i>	Арр	roval Re	quire	d for P	.T.O. Outpu	it Sh	naft \$	Spe	eds	Above	2500 R	.P.M.
LEFT Side	Inter.	Dir.	Engi	ine %		Adapter	Official Kite		Inter.	Dir.	Eng	ine %	Eller Die ele	Adapter	Other d Kite
P.T.O. Model	Torq.	Rot.	Hi	Rev	Filler Block	Assy.	Stud Kit	P.T.O. Model	Torq.	Rot.	Hi	Rev	Filler Block	Assy.	Stud Kit
		$\sim$		CDE					IFT	/1 1\/F			<b>^</b> \		

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)
124
Furnished

Chelsea CGP-P11 Series Pump Specifications for 4x2 Vehicles (3/4" - 11 Tooth Pump Spline)												
Order Code	Chelsea Pump	Displacement	GPM (1)	Pump (1)	Torque (1)	Pressu	Ire PSI	Max S	peed RPM	Max Pump		
w/ PTO (3)	Model	in <sup>3</sup> /rev		HP	Lbsft.	Intermittent	Continuous	Pump	Engine (2)	Flow GPM		
16	CGP-P11A016-5GC	0.37	1.99	4.2	17.8	3990	3625	3500	2823	5.6		
26	CGP-P11A026-5GC	0.61	3.27	6.9	29.3	3990	3625	3400	2742	9.0		
32	CGP-P11A032-5GC	0.73	3.92	8.3	35.1	3990	3625	2500	2016	7.9		
37	CGP-P11A037-5GC	0.85	4.56	9.6	40.9	3990	3625	2500	2016	9.2		
42	CGP-P11A042-5GC	0.98	5.26	11.1	47.1	3990	3625	2100	1694	8.9		
55	CGP-P11A055-5GC	1.28	6.87	13.7	57.9	3480	3410	1600	1290	8.9		
61	CGP-P11A061-5GE	1.40	7.52	14.3	60.6	3410	3265	2750	2218	16.7		
71	CGP-P11A071-5GE	1.65	8.86	14.2	60.3	2900	2755	2350	1895	16.8		
82	CGP-P11A082-5GE	1.89	10.15	14.2	60.0	2465	2395	2100	1694	17.2		
87	CGP-P11A087-5GE	2.01	10.79	14.2	60.0	2320	2250	2000	1613	17.4		

#### Chelsea PGP-315 Series Pump Specifications for 4x2 Vehicles (3/4" - 11 Tooth Pump Spline)

Order Code	Chelsea Pump	Displacement	GPM (1)	Pump (1)	Torque (1)	Pressu	Ire PSI	Max S	Max Pump			
w/ PTO	Model	in <sup>3</sup> /rev		HP	Lbsft.	Intermittent	Continuous	Pump	Engine (2)	Flow GPM		
08	CGP-P31B081-5AG	1.86	9.98	19.2	81.4	3300	3300	3000	2419	24.2		
09	CGP-P31B094-5AG	2.17	11.65	19.7	83.5	2900	2900	3000	2419	28.2		
11	CGP-P31B107-5AG	2.48	13.31	19.4	82.2	2500	2500	3000	2419	32.2		

Chelsea P16 Series Pump Specifications for 4x2 Vehicles (7/8" - 13 Tooth Pump Spline)												
Order Code	Chelsea Pump	Displacement	GPM (1)	Pump (1)	Torque (1)	Pressu	Ire PSI	Max S	peed RPM	Max Pump		
w/ PTO	Model	in <sup>3</sup> /rev		HP	Lbsft.	Intermittent	Continuous	Pump	Engine (2)	Flow GPM		
15	P16-150A-2D1	2.93	15.73	27.5	116.6	3000	3000	2800	2258	35.5		
18	P16-180A-2D1	3.51	18.85	24.2	102.5	2200	2200	2500	2016	38.0		
20	P16-200A-2D1	3.90	20.95	24.4	103.5	2000	2000	2200	1774	37.2		

(1) GPM & Pump Input HP @ 1000 Engine RPM & 1240 P.T.O. Output Shaft RPM & Continuous Pressure Rating

(2) Max Engine Speed = (Max Pump Speed) / (1.24) for P.T.O. Ratio Increase

(3) For Pump Codes 61, 71, 82 & 87- 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X

CAUTION: Only Stationary Mode Operations are Supported. The Maximum Load (Torque) In Stationary Mode is 250 Ft.lbs at the Transmission P.T.O. Gear and 200 Ft.lbs at the P.T.O. Output.

NOTE: Ford Does Not Recommend P.T.O. Operation At or Below 900 rpm for the 6.8L Gas Engine. Minimum Engine Speed 910 rpm and Maximum 2400 rpm. Reference Ford Bulletin Q-215 for Latest Information.

NOTE: For MY2013 Ford F650 4 x 2 w/Gas engine will come with a 6R140 transmission. This will require a heat shield (329790X) to protect the P.T.O. from the exhaust. Also a new Chelsea wiring harness (329789X) will be required. These are included with the P.T.O. when ordering the 249"G" mounting option.

NOTE: (A): 249GMLLX-\*2 -- 4 x 2 applications, all output options and all pumps listed in the pump chart are available.

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).



### **CHELSEA**®

S6-650 6S-650

6S-750

		LEF	T S	IDE C	ONLY										
TRANSMIS	SION	GEA	R DA	TA:											
L.H. 06-Bolt Op	ening	Gear F	ORWA	ARD of	Centerline										
39 Teeth - R H	HELIX														
			тпр		· E ·										
0.9330" (23.698	2MM)		IUK		<b>JC</b> .										
Caution: A	Appl	icati	on	Арр	roval Re	equire	d for P	.T.O. Outpu	ut Sh	aft	Spe	eds	Above	2500 F	R.P.M.
LEFT Side	Inter.	Dir.	Eng	ine %		Adapter			Inter.	Dir.	En	gine %		Adapter	
P.T.O. Model	Torq.	Rot.	Hi	Rev	Filler Block	Assy.	Stud Kit	P.T.O. Model	Torq.	Rot.	Hi	Rev	Filler Block	Assy.	Stud Kit
			C	<b>NE</b>	SPEED	- TWO	O GEA	R - MECHA	NIC	AL	SH	IFT			
442XLHYX-*5 (1)	250	Орр	65				Furnished								
442XQHYX-*5 (1)	225	Орр	70				Furnished								
442XRHYX-*5 (1)	225	Орр	81				Furnished								
442XSHYX-*5 (1)	200	Орр	96				Furnished								
442XUHYX-*5 (1)	195	Орр	115				Furnished								
442XWHYX-*5 (1)	175	Орр	135				Furnished								
442XXHYX-*5 (1)	140	Орр	160				Furnished								
			(	ONE	SPEED	) - TW	O GEA	AR - POWE	RS⊦	IIFT	<b>(</b> A	IR)			
236XDHYX-*5 (1)	250	Орр	53				Furnished								
236XKHYX-*5 (1)	250	Орр	67				Furnished								
236XQHYX-*5 (1)	250	Орр	91				Furnished								
236XUHYX-*5 (1)	225	Орр	104				Furnished								
					ONE SI	PEED	- FOR	WARD & R	EVE	RS	E				
340XFHYX-*5 (2)	200	Орр	46	48			Furnished								
352XSHYX-*5 (1)	140	Орр	98	126			Furnished								
					0	NE SP	PEED -	DUAL SHA	١FT						
452XSHYX-*5 (1)	140	Орр	98				Furnished								
						GEA	RED A	DAPTERS							
626XHYX-*4JB	250						Furnished								
630XHYX-*4JB	250	Eng					Furnished								
645XHYX-*4JB	250						Furnished								

FORD

NOTE: A "5" assembly is shown here, but other assembly arrangements may work better depending on the chassis setup, whether or not a direct mount pump is to be used, and whether or not a geared adapter is to be used. Chelsea P16-45 and -65 pumps can be direct mounted rearward if the P.T.O. is a "3" assembly (bulge up), uses the XK pump flange, and is the L,R,S or U ratio. All other combinations will have interference problems. Chelsea P16-45 and -65 pumps can be direct mounted forward if a "4" assembly is used (bulge down), an XK pump flange is used, and is the L,R,S, or U ratio. All other combinations will have interference problems. Other ratios, assemblies, pump flanges and pumps may work if a geared adapter is used, but the P.T.O. may be the lowest component on the truck. It would be vulnerable to damage.

NOTE: The 236 series cannot be used on this transmission unless the truck is equipped with an auxiliary air supply.

NOTE: If a 626, 630 or 645 series geared adapter is used, the P.T.O. input gear is the 5-P-1244 JB gear, and the HY gear is used in the adapter. If a 626XHY, 630XHY or 645XHY Series geared adapter is going to be used, the P.T.O. must be a deep mount (ex: 442Z\*JB). Use a 7-A-125 filler block, gaskets to establish .006" -.012" backlash, and a 328170-76X stud kit to mount the P.T.O. to the adapter. Be aware that using a geared adapter will change the direction of P.T.O. rotation, but will not affect the speeds shown above.

NOTE: Ford Super Duty MY 2005 applications with the 6.8L gas engine may have P.T.O. to engine exhaust pipe interference problems. It is recommended that you use an assembly arrangement "3". This still leaves the P.T.O. close to the engine exhaust pipe. Route cable and wiring away from the exhaust pipe. Heat may be an issue for P.T.O. operation due to the proximity of the engine exhaust pipe.

NOTE: Refer to Ford Body Builders Book (Power Take-Off Applications SEIC/PTO) for information on removal of a tab on the M60D transmission case. This will help in direct mount pump installations.

(1) Input Gear Part No. 5-P-1237 (2) Input Gear Part No. 5-P-1245

January 2012

**ZF-45** 



4.7.5

#### **ZF-50**

6S-650

6S-750

140

442XXKXX-\*5 (1)

		LEF	T S	DE C	ONLY										
TRANSMIS	SION	GEAI	R DA	TA:											
L.H. 06-Bolt Op	ening	Gear F	ORWA	RD of	Centerline										
39 Teeth - R.H.	HELIX														
<b>PITCH LINE</b> 0.9330" (23.698	<b>TO /</b> 2MM)	<b>APER</b>	TUR	E FAG	CE:										
Caution:	<b>\ppl</b>	icati	ion /	Арр	roval Re	equire	d for P	.T.O. Outpu	ut Sh	naft S	Spe	eds	Above 2	2500 F	R.P.M.
LEFT Side	Inter.	Dir.	Eng	ine %		Adapter			Inter.	Dir.	Engi	ine %		Adapter	<b>.</b>
P.T.O. Model	Torq.	Rot.	Hi	Rev	Filler Block	Assy.	Stud Kit	P.T.O. Model	Torq.	Rot.	Hi	Rev	Filler Block	Assy.	Stud Ki
			C	<b>NE</b>	SPEED	- TWO	) GEA	R - MECHA	ANIC	AL :	SHI	FT			
442XLKXX-*5 (1)	250	Орр	65				Furnished								
442XQKXX-*5 (1)	225	Орр	70				Furnished								
442XRKXX-*5 (1)	225	Орр	81				Furnished								
442XSKXX-*5 (1)	200	Орр	96				Furnished								
442XUKXX-*5 (1)	195	Орр	115				Furnished								
442XWKXX-*5 (1)	175	Орр	135				Furnished								
442XXKXX-*5 (1)	140	QqQ	160				Furnished								

	ONE SPEED - TWO GEAR - POWERSHIFT (	(AIR)
53	Furnished	

Furnished

Furnished

Furnished

236XKKXX-*5 (1) 250 Opp 67 236XQKXX-*5 (1) 250 Opp 91 236XUKXX-*5 (1) 225 Opp 104	236XDKXX-*5 (1)	250	Орр	53		
236XQKXX-*5 (1) 250 Opp 91 236XUKXX-*5 (1) 225 Opp 104	236XKKXX-*5 (1)	250	Орр	67		
236XUKXX-*5 (1) 225 Opp 104	236XQKXX-*5 (1)	250	Орр	91		
	236XUKXX-*5 (1)	225	Орр	104		

# ONE SPEED - FORWARD & REVERSE

352XSKXX-*5 (1)	140	Орр	98	126	Furnished	
					ONE SPEED - DUAL SHAFT	
452XSKXX-*5 (1)	140	Орр	98		Furnished	
					GEARED ADAPTERS	
626XKXX-*4KY (1)	250	Eng			Furnished	
630XKXX-*4KY (1)	250	Eng			Furnished	
645XKXX-*4KY (1)	250	Eng			Furnished	

CAUTION: This ZF transmission model is the same as the model in Ford MY05 & MY06 trucks except for the change in the Pressure Angle (PA) of the 39 tooth P.T.O. transmission drive gear. The PA was changed from 20 degrees to 22 degrees. P.T.O. models from ZF-45 ("HY" Input Gear) application page "CAN NOT' be used on this transmission

NOTE: Refer to Ford Body Builders Book (Power Take-Off Installations) for information on removal of a tab on the M60D transmission case. This will help in direct mount pump installations.

NOTE: A "5" assembly is shown here, but other assembly arrangements may work better depending on the chassis setup, whether or not a direct mount pump is to be used, and whether or not a geared adapter is to be used. Chelsea P16-45 and -65 pumps can be direct mounted rearward if the P.T.O. is a "3" assembly (bulge up), uses the XK pump flange, and is the L,R,S or U ratio. All other combinations will have interference problems. Chelsea P16-45 and -65 pumps can be direct mounted forward if a "4" assembly is used (bulge down), an XK pump flange is used, and is the L,R,S, or U ratio. All other combinations will have interference problems. Other ratios, assemblies, pump flanges and pumps may work if a geared adapter is used, but the P.T.O. may be the lowest component on the truck. It would be vulnerable to damage

NOTE: The 236 Series cannot be used on this transmission unless the truck is equipped with an auxiliary air supply.

NOTE: If a 626, 630 or 645 Series geared adapter is used, the P.T.O. input gear is the 5-P-1412, KY gear, and the 5-P-1411, KX gear is used in the adapter. If a 626XKX, 630XKX or 645XKX Series geared adapter is used, the T-TO-input gear and the control of the transformation of the transfo

NOTE: Refer to Ford Body Builders Book (Power Take-Off Applications SEIC/PTO) for information on removal of a tab on the M60D transmission case. This will help in direct mount pump installations.

(1) Input Gear Part No. 5-P-1411



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FORD