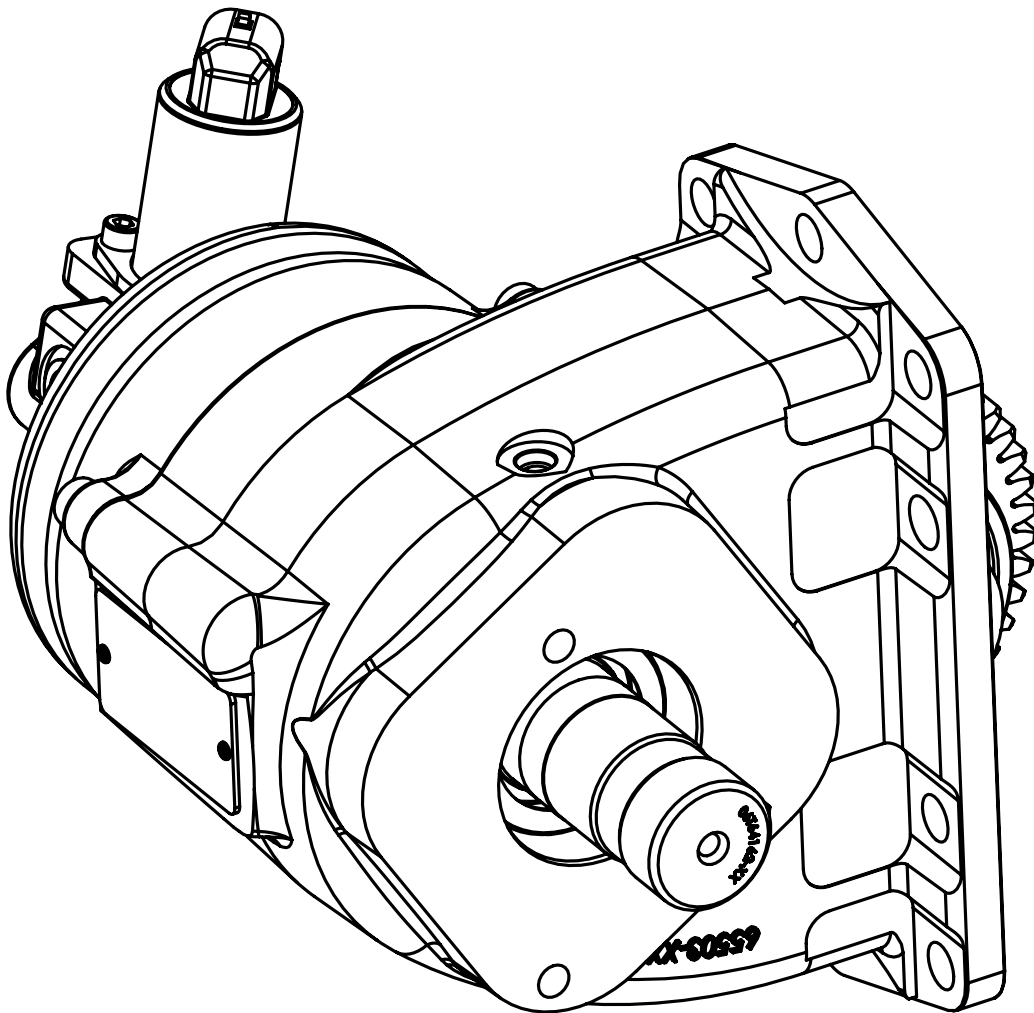




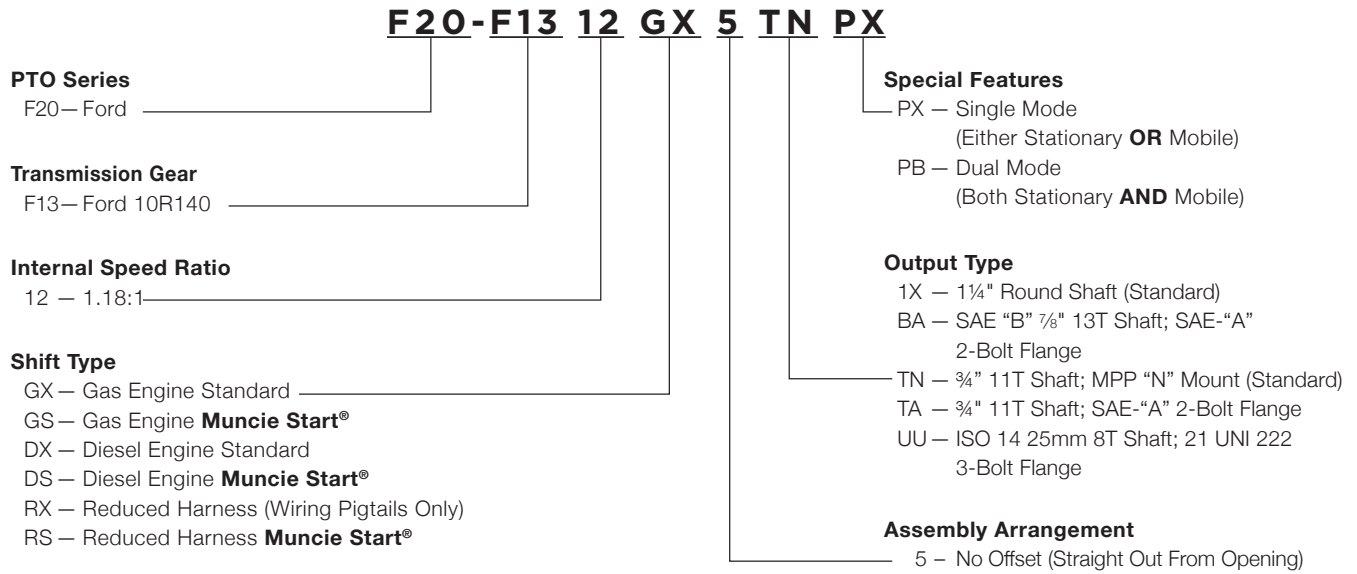
Muncie®
Power
Products

F20 PTO

PARTS LIST AND SERVICE MANUAL



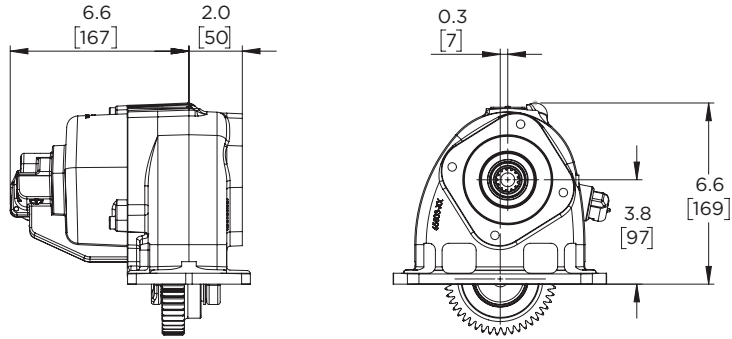
MODEL NUMBER CONSTRUCTION



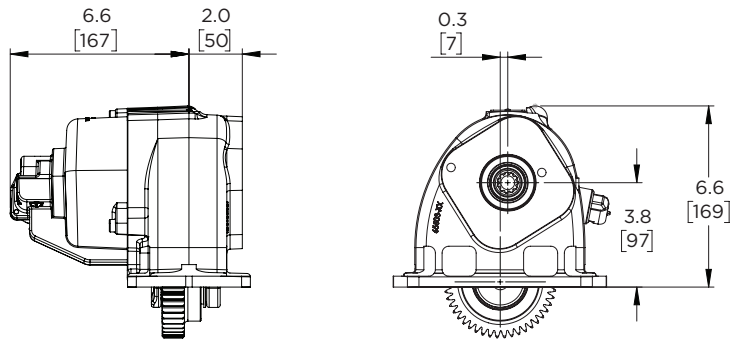
OTHER F20 LITERATURE	
IN17-04	All PTOs Operator's Manual ES
IN17-14	Muncie Start [®] Ford Installation Sheet ES
IN19-04	F20 10-Bolt Installation Instructions ES
IN19-05	F20 10-Bolt Activation Instructions ES
IN19-07	F20 10-Bolt PTO Activation Instructions ("R" Shift)
IN20-04	F20 Rebuild Instructions

DIMENSIONS

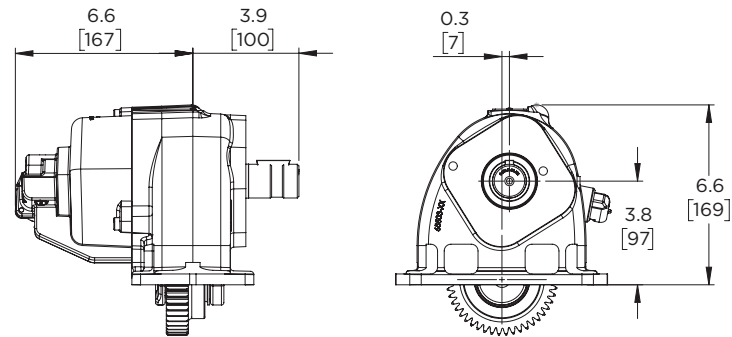
TA OUTPUT — 3/4" -11T SHAFT, SAE "A" 2-BOLT FLANGE
BA OUTPUT — 7/8" -13T SHAFT, SAE "A" 2-BOLT FLANGE



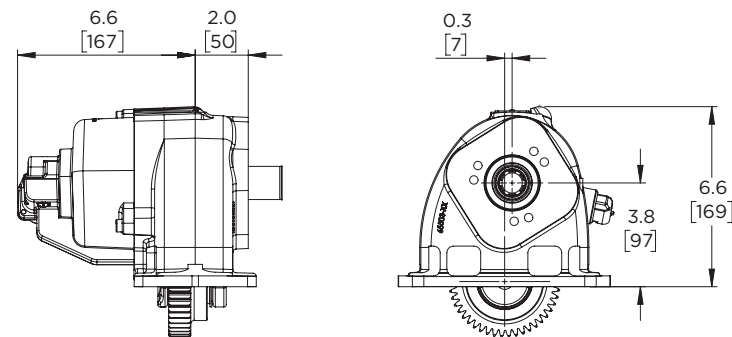
TN OUTPUT — MPP "N" MOUNT 2-BOLT FLANGE



1X OUTPUT — 1 1/4" ROUND KEYPED SHAFT

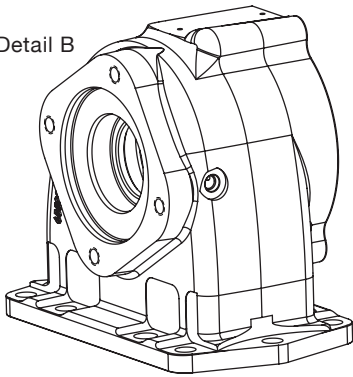


UU OUTPUT — UNI 222 MOUNT 3-BOLT FLANGE

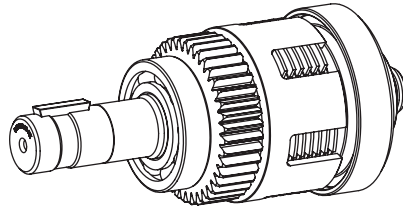


F20 EXPLODED VIEWS

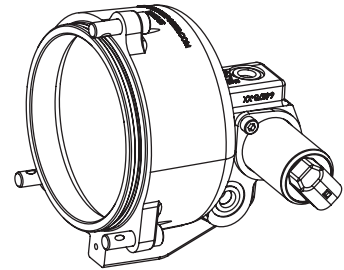
Detail B



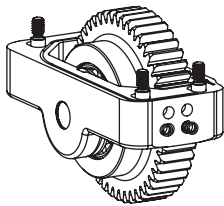
Detail A



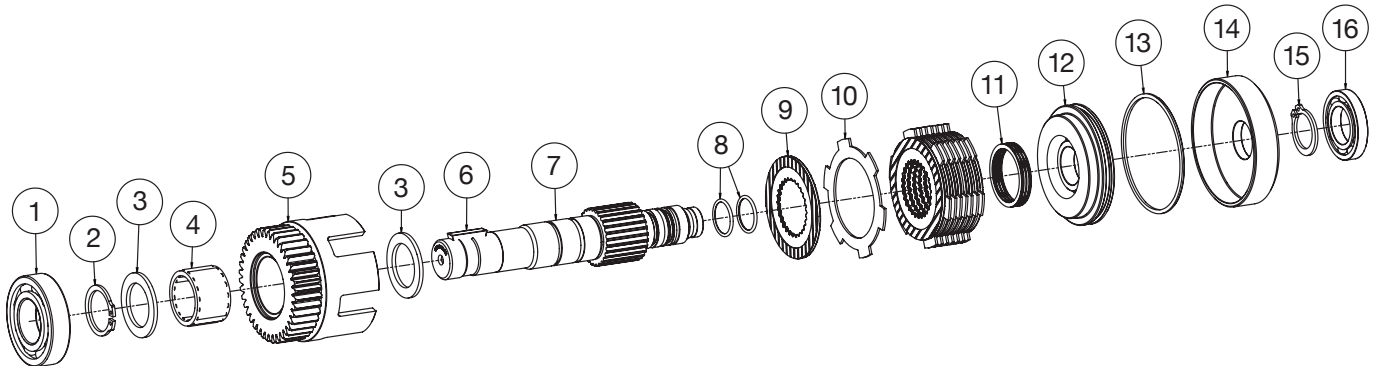
Detail D



Detail C



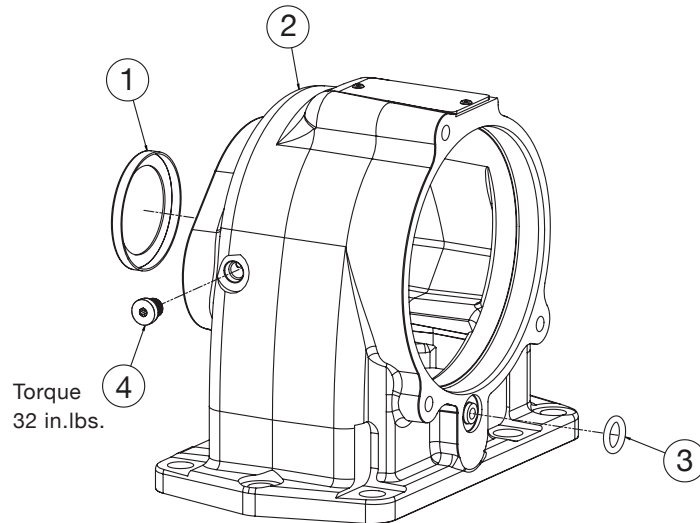
DETAIL A - OUTPUT SHAFT ASSEMBLY



ITEM	QTY.	PART NO.	DESCRIPTION
1	1	10T21017	Bearing
2	1	24T36470	Snap Ring, Output
3	2	21T62472	Thrust Washer
4	1	10T62471	Needle Bearing
5	1	02T65196	Output Gear
6	1	26T01627	Woodruff Key - 5/16"
7	1	06TA6478	Output Shaft: 1 1/4" rd., 5/16" Key
		06TA6472	Output Shaft: 3/4" -11T
		06TA6477	Output Shaft: 7/8" -13T
		06TA6630	Output Shaft: UNI

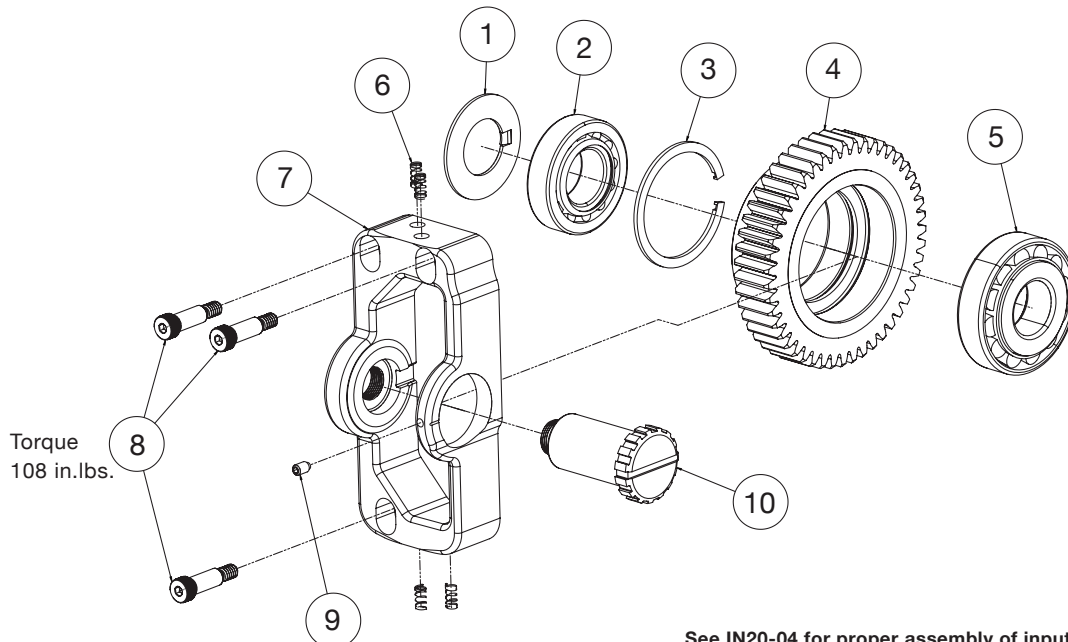
ITEM	QTY.	PART NO.	DESCRIPTION
8	2	12T39023	O-Ring
9	9	49T65367	Friction Disc
10	8	49T36258	Spacer Disc
11	1	27T61827	Piston Return Spring
12	1	49T64056	Piston
13	1	12T64059	Piston O.D. O-Ring
14	1	49T64057	Piston Cup
15	1	24T39182	Snap Ring
16	1	10T39072	Bearing

DETAIL B - HOUSING ASSEMBLY



ITEM	QTY.	PART NO.	DESCRIPTION
1	1	11T63830	Shaft Seal
2	1	01T64815	Housing: "TN"
		01TA6476	Housing: "BA", "TA", "1X"
		01TA6613	Housing: "UU"
3	1	12T36878	O-Ring
4	1	25T65492	ORB Plug (Not used on "TN")

DETAIL C - INPUT ASSEMBLY

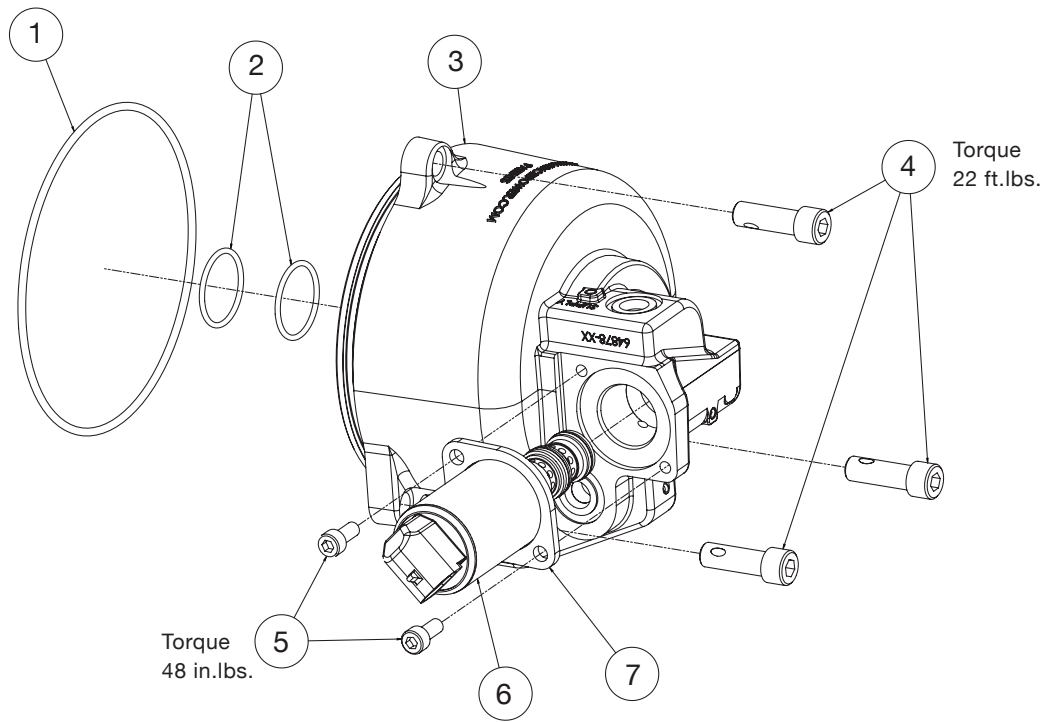


See IN20-04 for proper assembly of input subassembly

ITEM	QTY.	PART NO.	DESCRIPTION
1	1	21T62316	Tabbed Washer
2	1	10T65008	Bearing
3	1	24T65083	Snap Ring
4	1	03T64153	Input Gear (47 Tooth)
5	1	10T65009	Bearing

ITEM	QTY.	PART NO.	DESCRIPTION
6	4	27T63431	Coil Spring
7	1	49T64798	Carrier
8	3	19T65081	Shoulder Bolt
9	1	19T36846	Set Screw
10	1	07T64145	Input Shaft

DETAIL D - REAR COVER ASSEMBLY



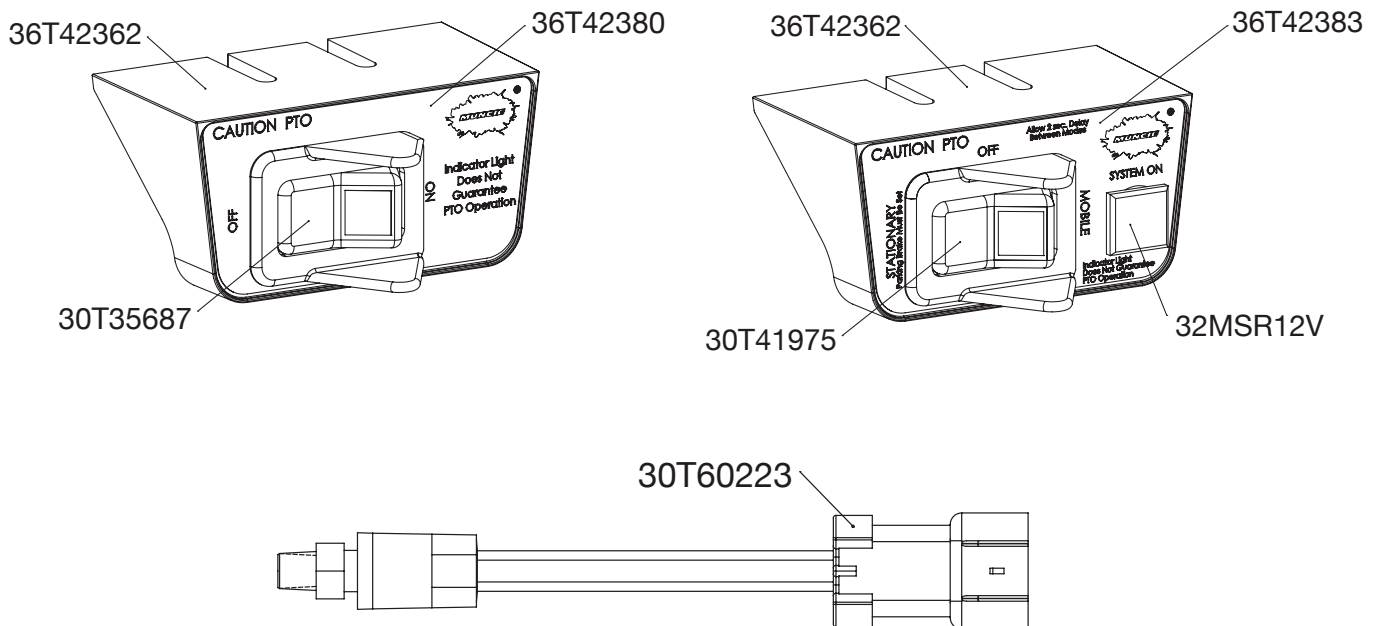
ITEM	QTY.	PART NO.	DESCRIPTION
1	1	12T36872	O-Ring
2	2	12T36280	O-Ring
3	1	15TA6474	Cover, Standard
		15TA6475	Cover, Muncie Start®
4	3	19T36588	Capscrew

ITEM	QTY.	PART NO.	DESCRIPTION
5	2	19T62950	Capscrew
6	1	35T43600	Solenoid Valve
		35T62496	Solenoid Valve (Muncie Start®)
7	1	49T62436	Solenoid Clamp Ring

PART NO.	DESCRIPTION	F20GSK (GASKET KIT)	F20RBK (REBUILD KIT)
		QTY.	QTY.
10T21017	Bearing	-	1
10T39072	Bearing	-	1
10T62471	Needle Bearing	-	1
10T65008	Bearing	-	1
10T65009	Bearing	-	1
11T63830	Shaft Seal	1	1
12T36280	O-Ring	2	2
12T36872	O-Ring	1	1
12T36878	Housing O-Ring	1	1
12T39023	O-Ring	2	2
12T64059	Piston O.D. O-Ring	1	1
13T64490	Gasket	1	1
21T62472	Thrust Washer	-	2
21T62316	Tabbed Washer	-	1
24T36470	Snap Ring, Output	-	1
24T39182	Snap Ring	-	1
24T65083	Snap Ring	-	1
27T61827	Piston Return Spring	-	1
27T63431	Coil Spring	-	4
49T36258	Spacer Disc	-	8
49T35367	Friction Disc	-	9

INSTALLATION KITS

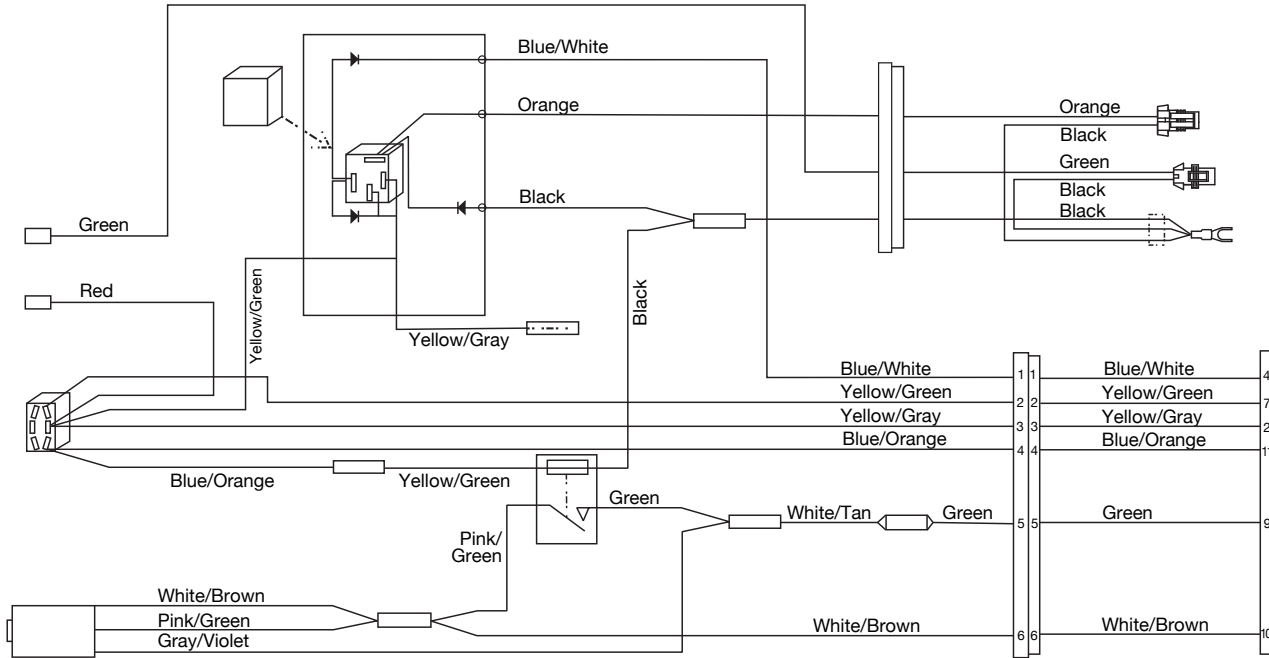
PART NO.	DESCRIPTION	QUANTITY IN KIT				
		48TK6501 DIESEL (SINGLE) D*-5**PX	48TK6502 DIESEL (DUAL) D*-5**PB	48TK6503 GAS (SINGLE) G*-5**PX	48TK6504 GAS (DUAL) G*-5**PB	48TK6516 "R" Shift R*-5**PX
13T64490	Gasket	1	1	1	1	1
19T64695	PTO Mounting Bolt	7	7	7	7	7
20T64143	M10 x M8 Stud	2	2	2	2	2
21T64303	Flat Washer	7	7	7	7	7
22T65300	M8 Nut	2	2	2	2	2
28T35442	Cable Tie	6	6	6	6	-
30T35687	Rocker Switch - Single Mode (PX)	1	-	1	-	-
30T41975	Rocker Switch - Dual Mode (PB)	-	1	-	1	-
30T60223	Pressure Switch	1	1	1	1	1
32MSR12V	12V Red Light	-	1	-	1	-
34T43730	Wire Harness - Diesel Single (PX)	1	-	-	-	-
34T44005	Wire Harness - Diesel Dual (PB)	-	1	-	-	-
34T43735	Wire Harness - Gas Single (PX)	-	-	1	-	-
34T44000	Wire Harness - Gas Dual (PB)	-	-	-	1	-
34T42527	Wire Harness - R Shift (R*)	-	-	-	-	1
36MK5660	Switch Kit Bolts	1	1	1	1	-
36T42362	Bracket	1	1	1	1	-
36T42380	Face Plate - Single Mode (PX)	1	-	1	-	-
36T42383	Face Plate - Dual Mode (PB)	-	1	-	1	-
37T35674	Grommet	1	1	1	1	-
43T42792	90° Elbow (PTO)	1	1	1	1	1
43T65280	90° Elbow (Trans)	1	1	1	1	1
45T65570	Hose Assembly	1	1	1	1	1
48TK6545	Label Kit	1	1	1	1	1



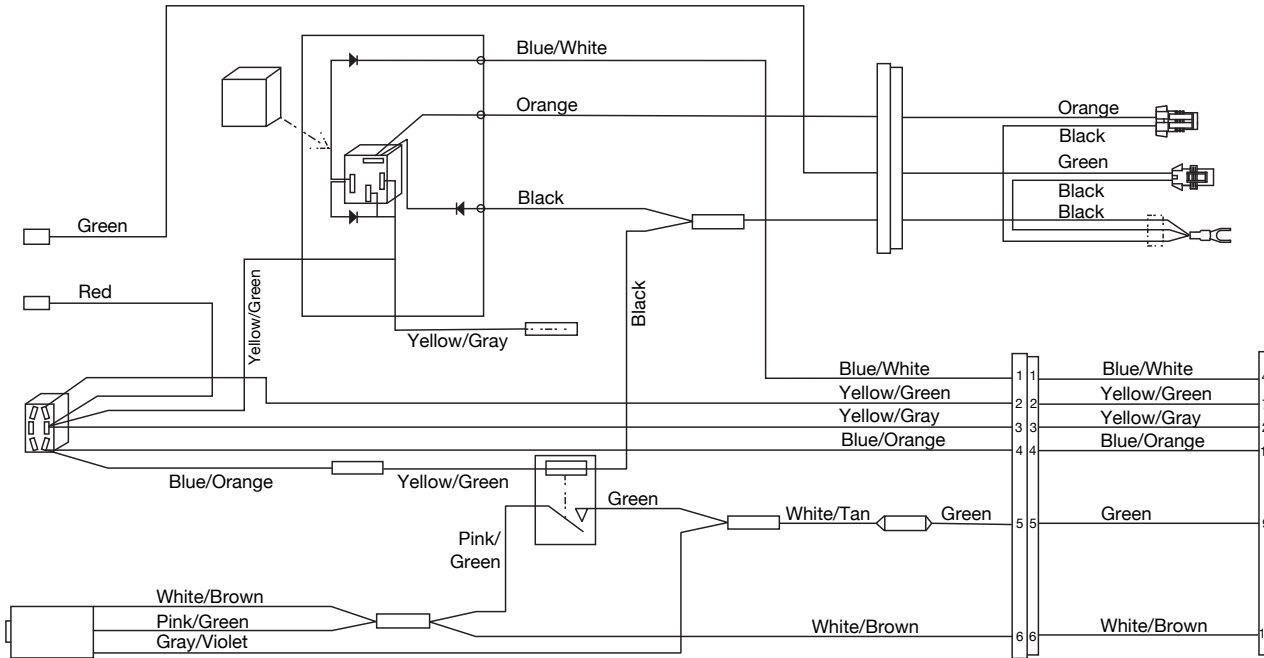
WIRING HARNESSSES

Dual Mode Harnesses (PB)

34T44005



34T44000



Diesel (34T44005)

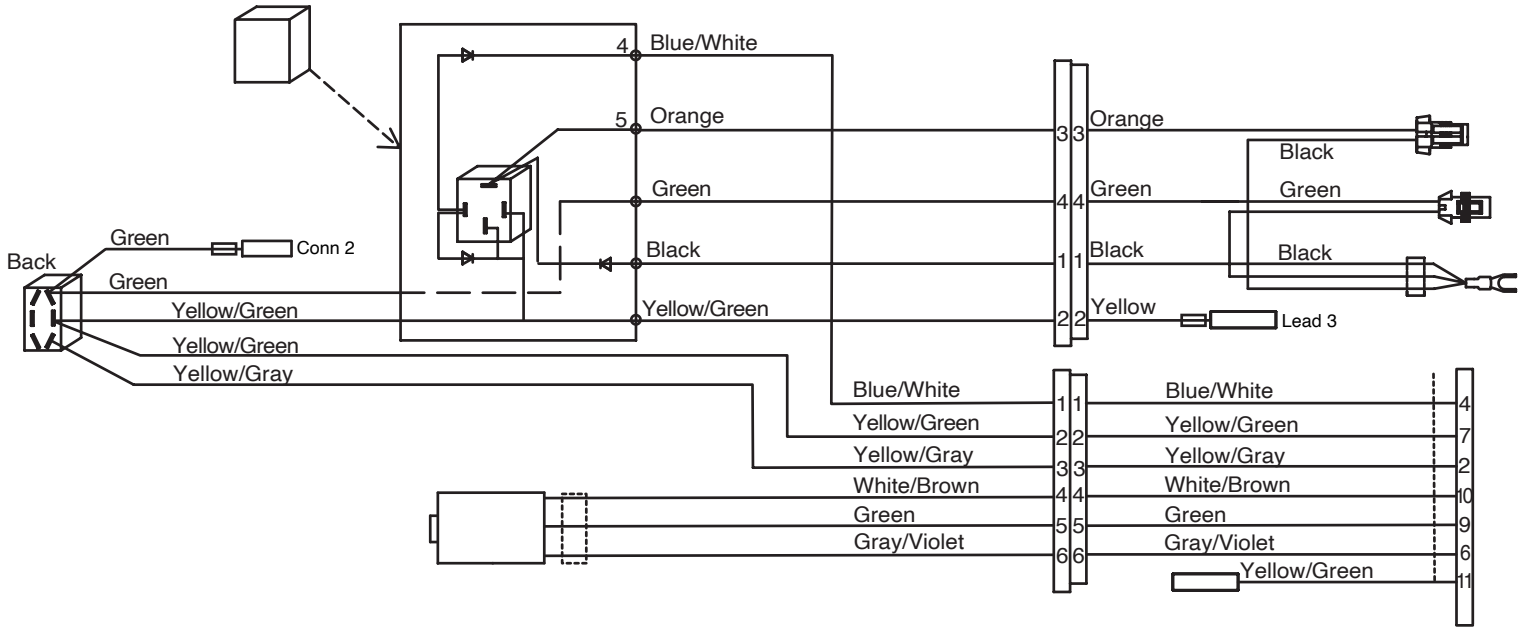
MUNCIE HARNESS COLOR	FORD WIRE COLOR	PIN#
White/Brown	White/Brown	10
Green	Green	9
Yellow/Green	STATIONARY - Yellow/Green	7
Blue/Orange	MOBILE - Blue/Orange	11
Blue/White	Blue/White	4
Yellow/Gray	Green/Orange	2

Gas (34T44000)

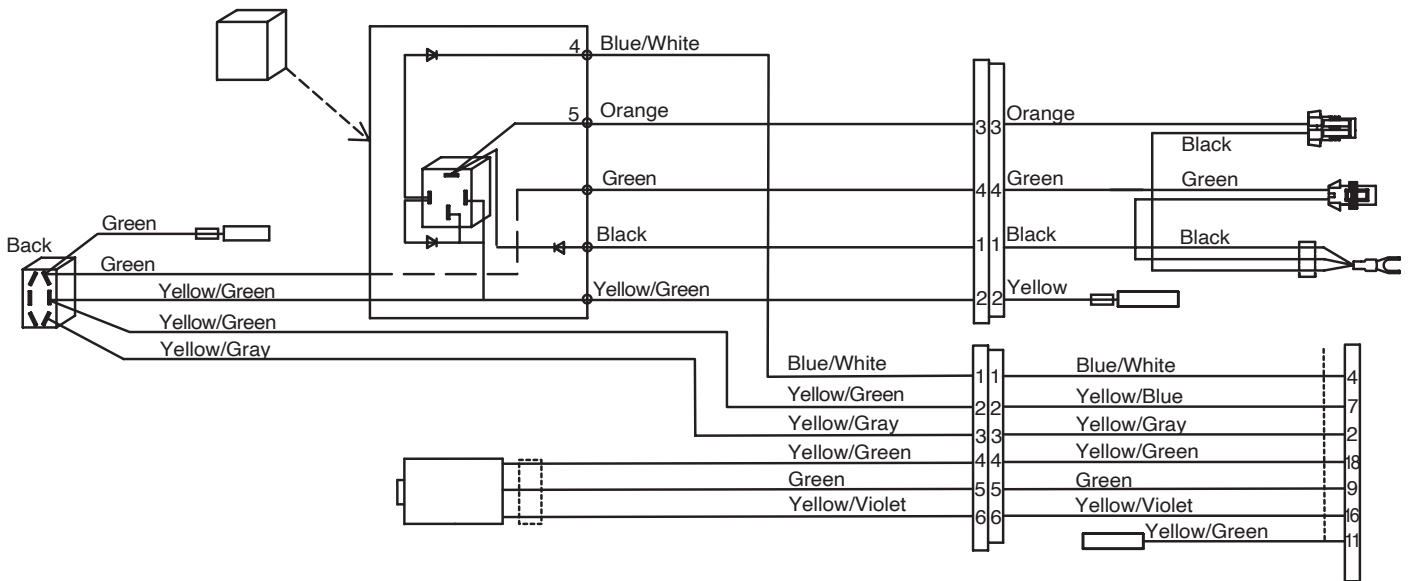
MUNCIE HARNESS COLOR	FORD WIRE COLOR	PIN#
White/Brown	Yellow/Green	18
Green	Green	9
Yellow/Green	STATIONARY - Yellow/Green	7
Blue/Orange	MOBILE - Blue/Orange	11
Blue/White	Blue/White	4
Yellow/Gray	Green/Orange	2

SINGLE MODE HARNESS (PX)

34T43730-01



34T43735-01



Diesel (34T43730)

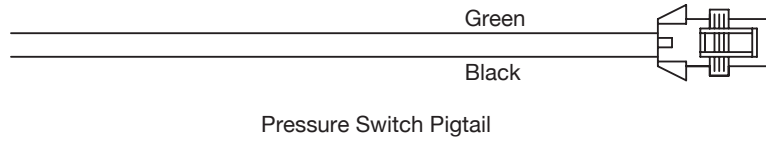
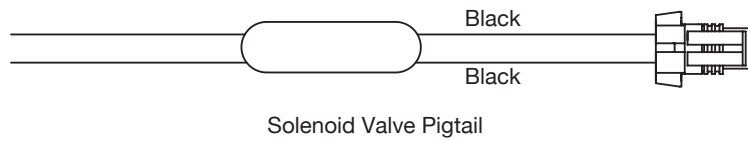
MUNCIE HARNESS COLOR	FORD WIRE COLOR	PIN#
White/Brown	White/Brown	10
Green	Green	9
Yellow/Green	STATIONARY - Yellow/Green	7
	MOBILE - Blue/Orange	11
Gray/Violet	Gray/Violet	6
Blue/White	Blue/White	4
Yellow/Gray	Green/Orange	2

Gas (34T43735)

MUNCIE HARNESS COLOR	FORD WIRE COLOR	PIN#
Yellow/Green	Yellow/Green	18
Green	Green	9
Yellow/Blue	STATIONARY - Yellow/Green	7
	MOBILE - Blue/Orange	11
Yellow/Violet	Yellow/Violet	16
Blue/White	Blue/White	4
Yellow/Gray	Green/Orange	2

R SHIFT HARNESS (R*)

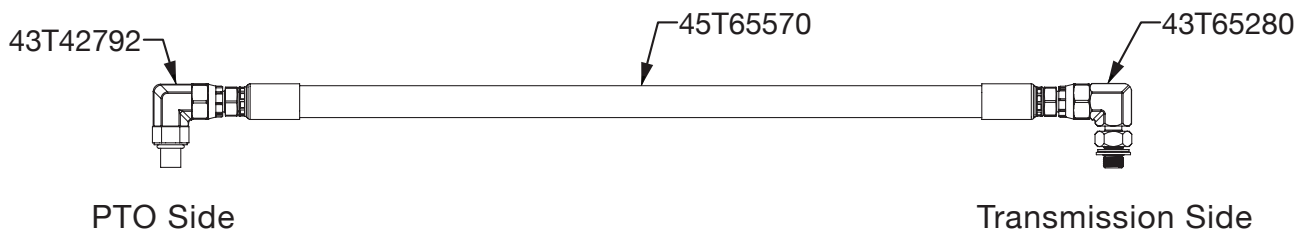
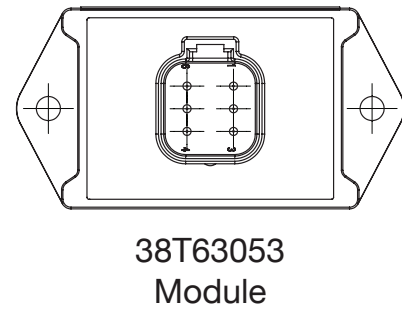
34T42527 (Includes both pigtail assemblies)



MUNCIE START KIT PARTS LIST

(GS, DS, and RS Shift ONLY; Connects to included Wire Harness)

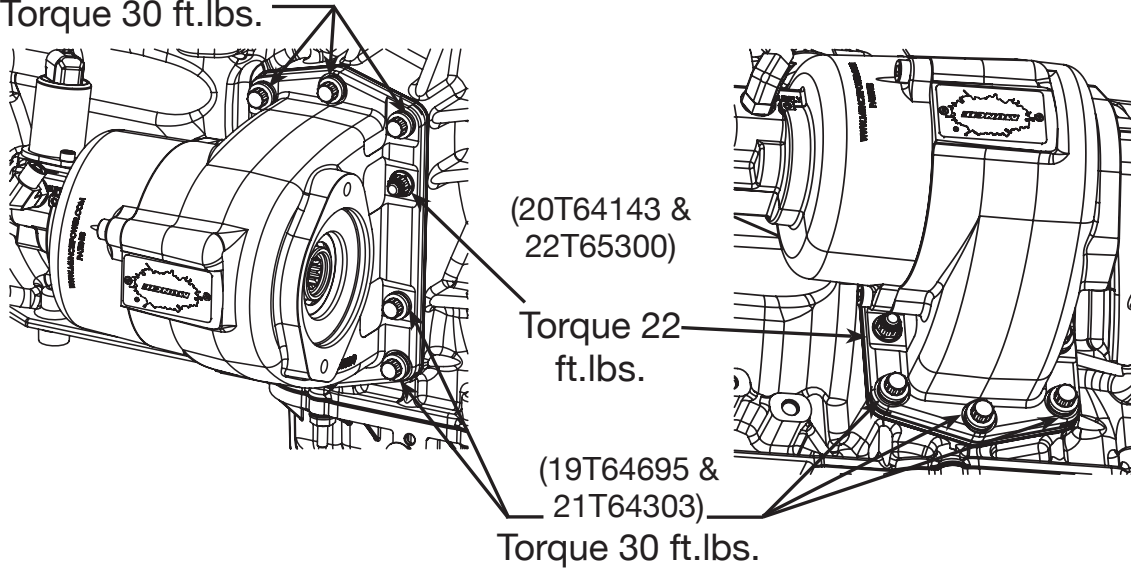
48TK6508



BOLT KIT - 20TK6546

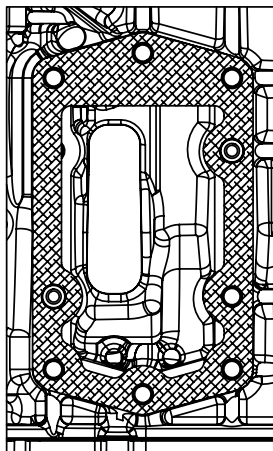
(19T64695 & 21T64303)

Torque 30 ft.lbs.



QTY.	PART NO.	DESCRIPTION
7	19T64695	PTO Mounting Bolt
7	21T64303	Flat Washer
2	20T64143	M10 x M8 Stud
2	22T65300	M8 Nut

ORIENTATION FOR GASKET (13T64490)



“UU” OUTPUT PUMP MOUNTING KIT - 48TK6631

QTY.	PART NO.	DESCRIPTION
1	12901552000	Gasket
3	19M15002	Cap Screw
4	21T20526	Lock Washer



A Member of the Interpump Group

SP19-09 (Rev. 09-24)

201 East Jackson Street, Muncie, Indiana 47305
800-367-7867 • Fax: 765-284-6991 • info@munciepower.com

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