



Muncie<sup>®</sup>  
Power  
Products

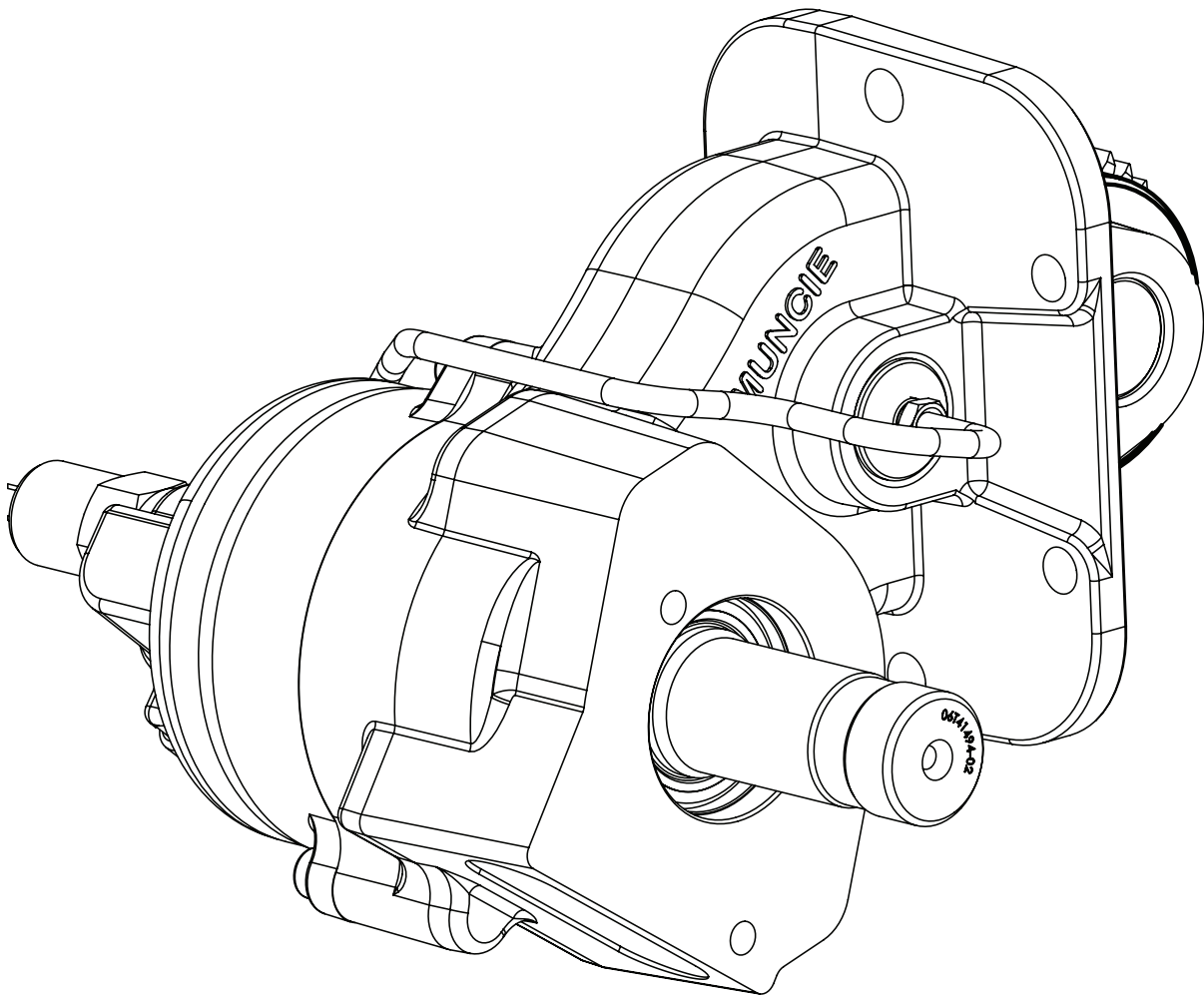
# FR66 SERIES POWER TAKE-OFF

---

PARTS LIST AND SERVICE MANUAL

---

NOTE: FOR UNITS BUILT AFTER JUNE 2013



# MODEL NUMBER CONSTRUCTION

## FR66 - F12 09 - 6 3 N X

**Model**

FR66 - Ford 6 Bolt

**Transmission Gear**

F12 - Ford 12.18P

**Ratio**

09 - 0.90:1

**Shift Type**

- 6 - Elec/Hyd 2016 & Later F650/750 Diesel  
2017 & Later F250 - F550 Diesel
- F - Elec/Hyd 2016 & Later F650/750 Gas  
2017 & Later F250 - F550 Gas
- D - Elec/Hyd 2016 & Earlier F250 - F550 Diesel
- G - Elec/Hyd 2016 & Earlier F250 - F550 Gas
- R - Special (Wiring Harness - 34T41141)

**Special Features**

- X - None
- B - Stationary and Mobile  
(Diesel Only)

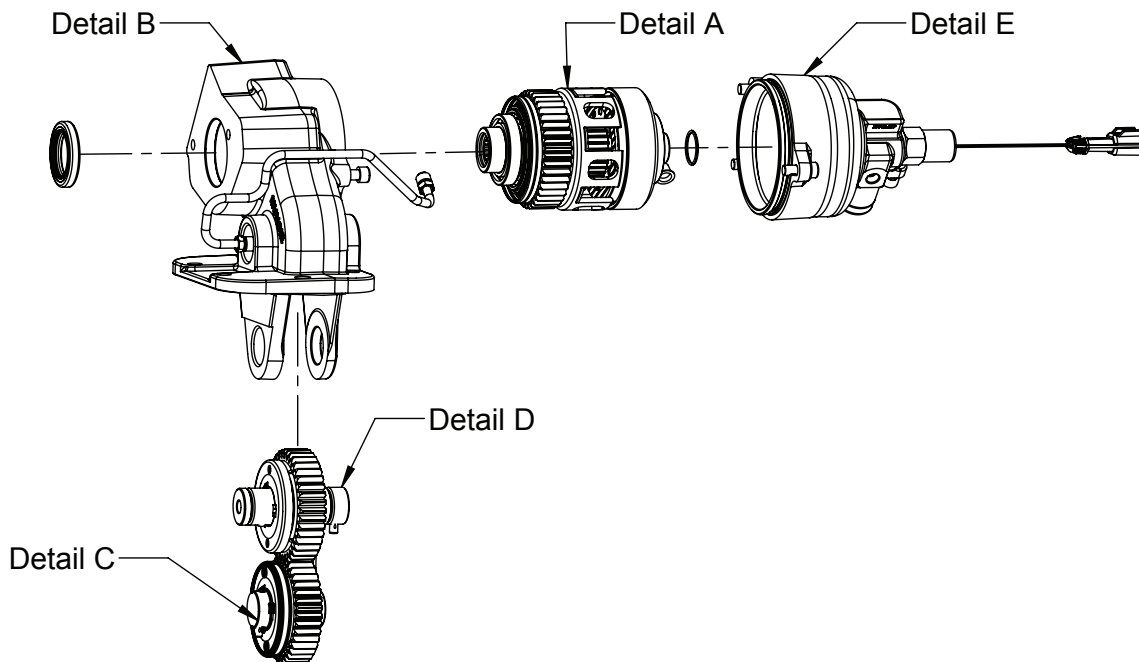
**Output Type**

- B - 1¼" Round Shaft w/  
⅝" Key (4x2 Only)
- N - ¾"-11T Spline Shaft
- Q - SAE "A" 2-Bolt ⅞"-13T  
(4x2 Only)
- T - SAE "A" 2-Bolt ¾"-11T  
(4x2 Only)
- L - Special GBFR Mounting

**Assembly Arrangement**

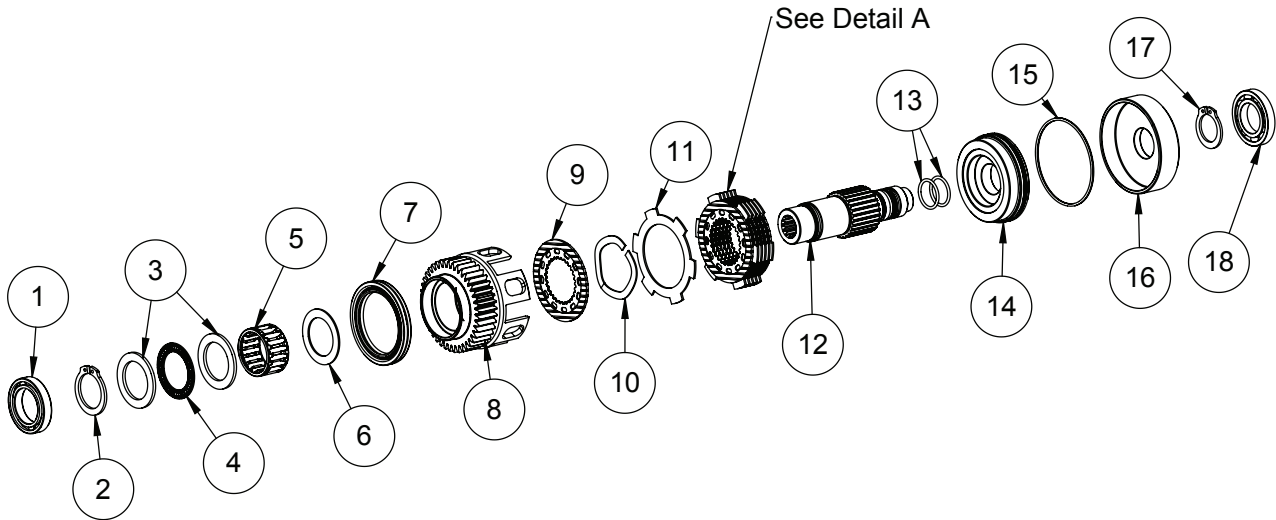
3

## FR66 EXPLODED VIEW



Other FR66 Literature	
IN10-01	Installation and Operator's Manual
MP15-08	Specifications Brochure
SP10-06	Service Parts for units built prior to 6/2013
i3179	Supplement instruction for IN10-01

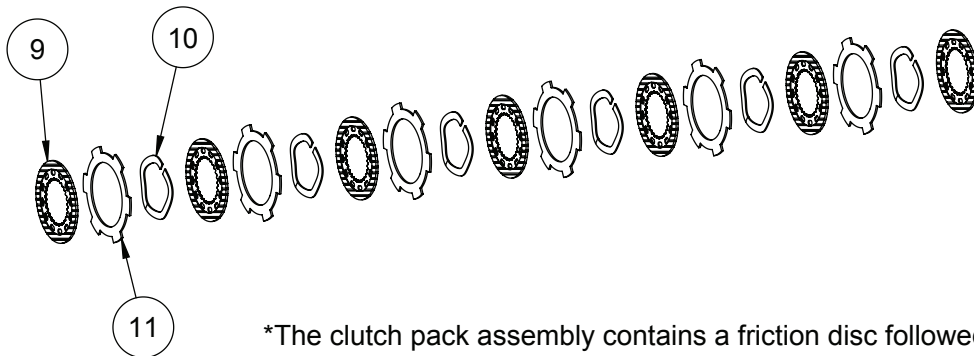
## Detail A - Output Shaft Assembly



ITEM	QTY	PART NO.	DESCRIPTION
1	1	10T39147	Bearing
2	1	24T35480	Retaining Ring
3	2	21T29017	Thrust Washer
4	1	10T37009	Thrust Bearing
5	1	10T37008	Needle Bearing
6	1	21T37085	Thrust Washer
7	1	11T41953	Seal - "D", "R", "6"
8	1	02TA5231	Output Gear
9	7	49T36259	Friction Disc
10	6	27T36286	Wave Spring
11	6	49T36258	Spacer Disc

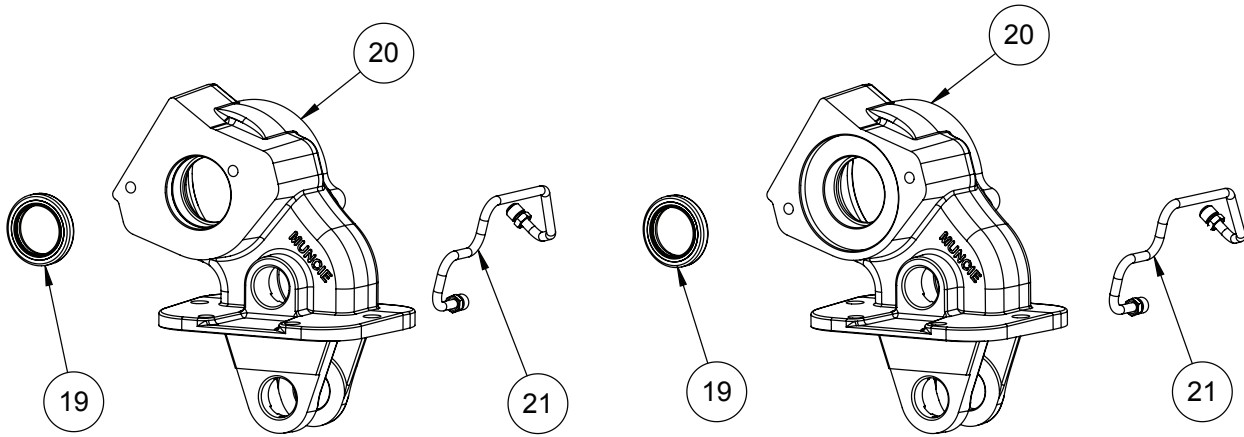
ITEM	QTY	PART NO.	DESCRIPTION
12	1	06T41494	Output Shaft - "B"
	1	06T41493	Output Shaft - "N", "T"
	1	06T39183	Output Shaft - "Q", "L"
13	2	12T39023	O-Ring
14	1	49T38881	Piston
15	1	12T36540	O-Ring
16	1	49T39022	Piston Cup
17	1	24T39182	Retaining Ring
18	1	10T39072	Bearing
N.S.	1	26T01627	Woodruff Key - "B"
N.S.	1	25T37387	Cap Plug

## Detail A - Output Shaft Assembly



\*The clutch pack assembly contains a friction disc followed by a spacer disc and spring. The assembly should start with a friction disc.

## Detail B - PTO Housing

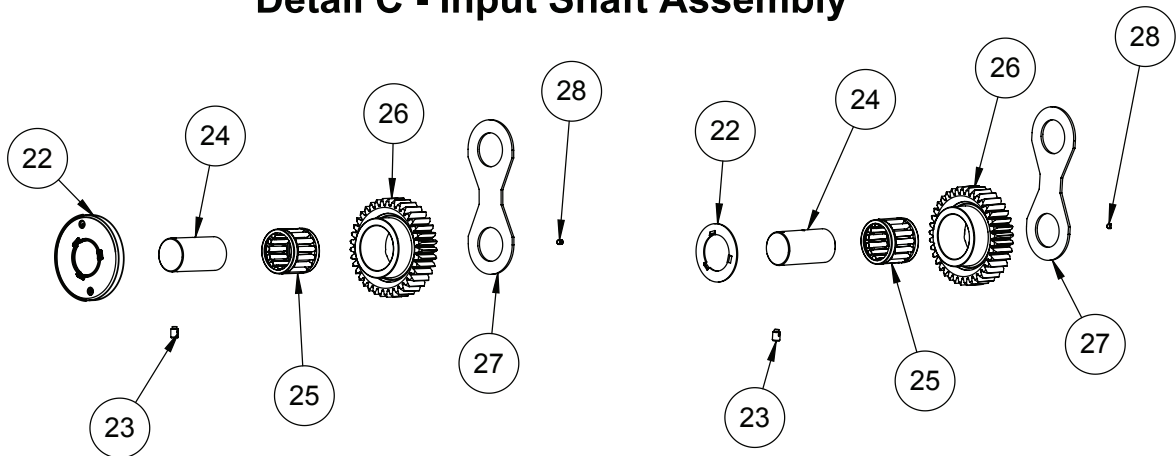


“B”, “N”, Output

“Q”, “T” Output

ITEM	QTY	PART NO.	DESCRIPTION
19	1	11T37790	Shaft Seal
20	1	01T41944	Housing - “B”, “N”, “L”
	1	01T42758	Housing - “Q”, “T”
21	1	43T42664	Tubing Assembly

## Detail C - Input Shaft Assembly

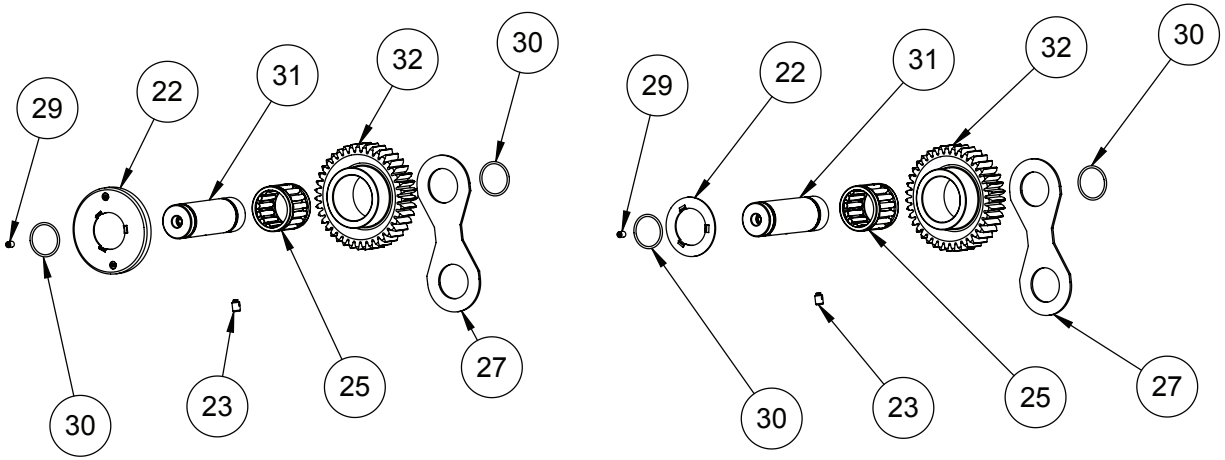


“D”, “R”, “6” Shift Option Input Shaft

“G”, “F” Shift Option Input Shaft

ITEM	QTY	PART NO.	DESCRIPTION
22	2	49TA5304	Drag Seal - “D”, “R”, “6”
	2	21T43348	Thrust Washer - “G”, “F”
23	2	19T34789	Set Screw
24	1	07T42755	Input Shaft
25	2	10T39145	Bearing
26	1	03T41958	Input Gear
27	1	10T42016	Thrust Plate
28	1	25T41375	Plug

## Detail D - Idler Shaft Assembly



**“D”, “R”, “6” Idler Shaft Assembly**

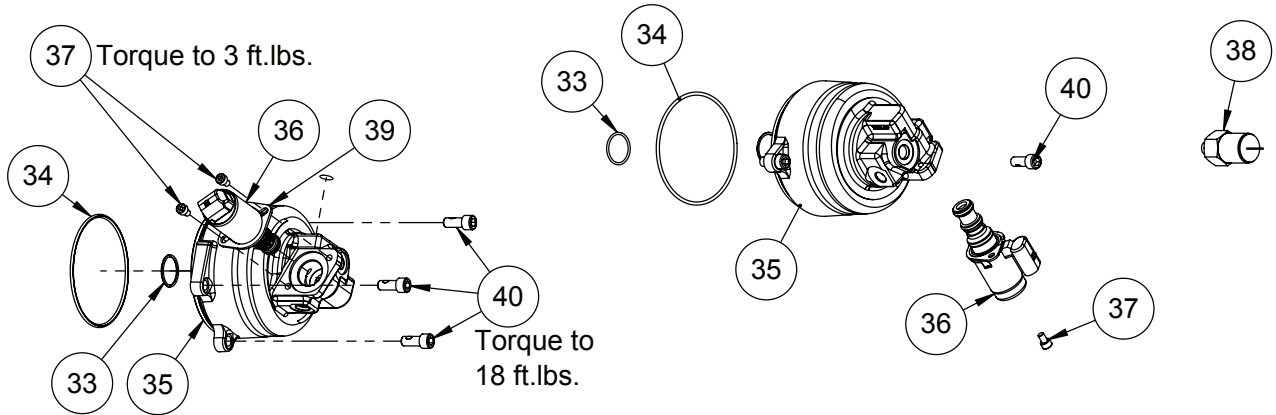
**“G”, “F” Idler Shaft Assembly**

ITEM	QTY	PART NO.	DESCRIPTION
22	2	49TA5304	Drag Seal - “D”, “R”, “6”
	2	21T43348	Thrust Washer - “G”, “F”
23	2	19T34789	Set Screw
25	2	10T39145	Bearing
27	1	10T42016	Thrust Plate
29	1	43T42757	Orifice
30	2	12T35577	O-Ring
31	1	08T42756	Idler Shaft
32	1	04T41957	Idler Gear

## Detail E - Rear Cover Assembly

**Units Built On or After 4/2017**

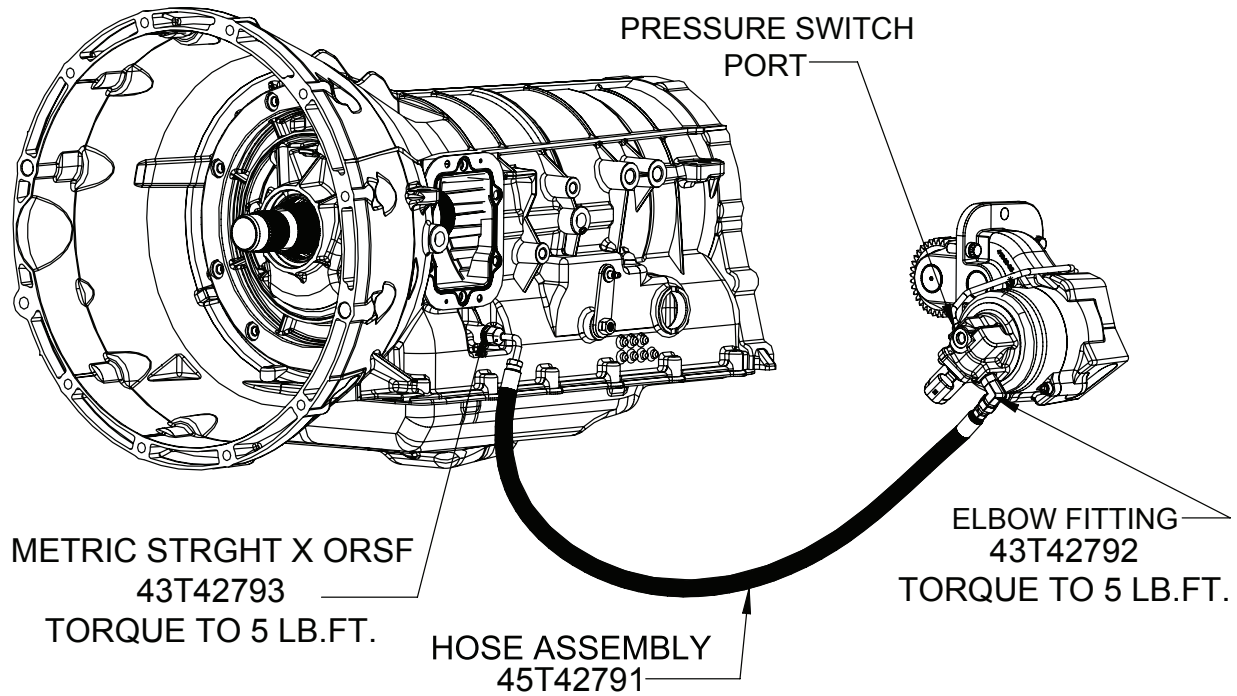
**Units Built Before 4/2017**



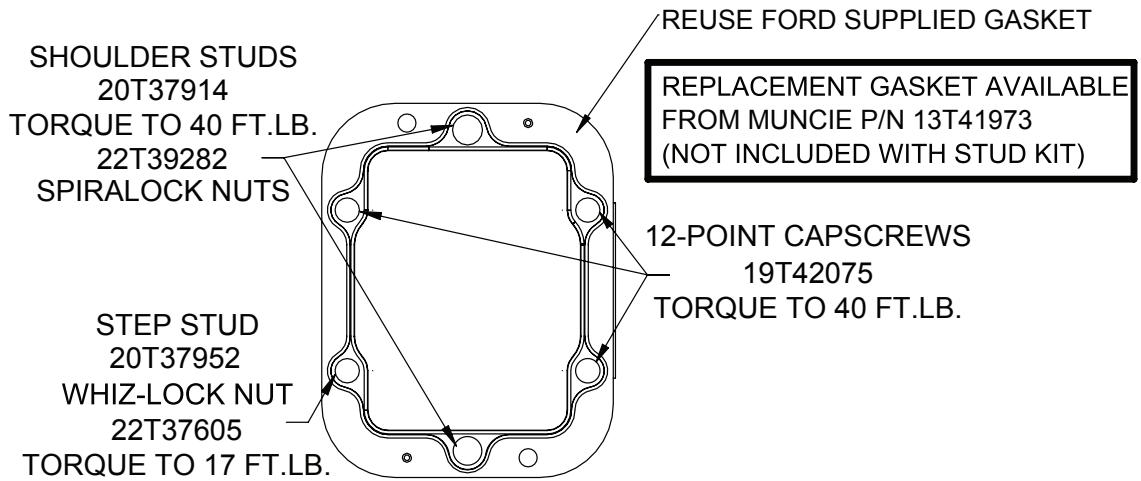
ITEM	QTY	PART NO.	DESCRIPTION	ITEM	QTY	PART NO.	DESCRIPTION
33	1	12T36280	O-Ring	37	2	19T62950	Capscrew (current)
34	1	12T36863	O-Ring		2	19T40859	Capscrew (pre 4/2017)
35	1	15T62484	Cover (current)	38	1	30T60223	Pressure Switch - “D”, “R”, “6”
	1	15T42720	Cover (pre 4/2017)		1	30T60228	Pressure Switch - “G”, “F”
36	1	35T43600	Solenoid (current)	39	1	49T62436	Valve Retaining Ring
	1	35T40860	Solenoid (pre 4/2017)	40	3	19T35237	Capscrew

# FR66 INSTALLATION KITS

## FR66 Electric/Hydraulic Shift System - Activation Kit Common Componentry



## Stud Kit (20TK5215) Installation Details

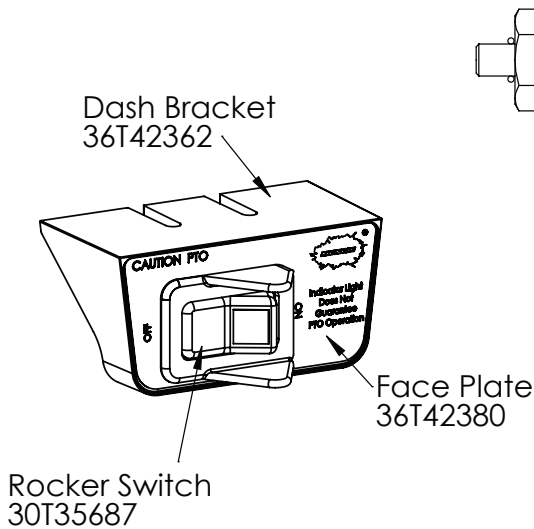


**SEE IN 10-01 FOR MOUNTING DETAILS**

## ACTIVATION KIT – STATIONARY OR MOBILE

43TK5209 - Elec/Hyd Shift System “DX”

48TK5684 – Elec/Hyd Shift System “6X”



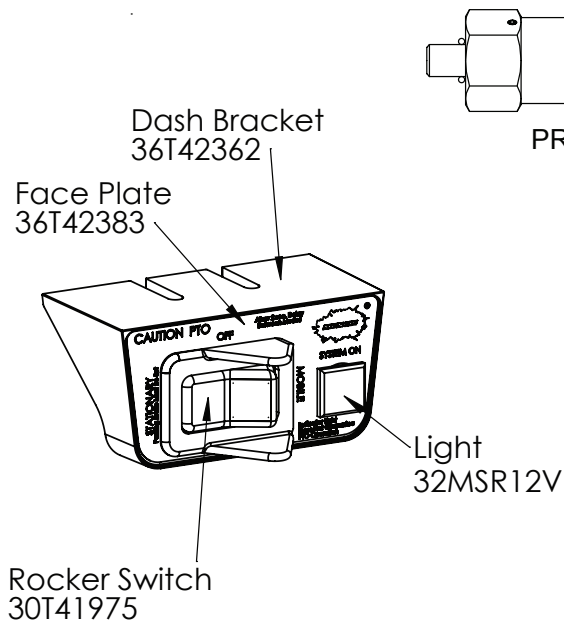
PRESSURE SWITCH WITH -2 SAE FITTING  
30T60223

NOT SHOWN -  
28T35442 - CABLE TIES (6 PCS)  
36MK1007 - DASH BRACKET BOLT KIT  
37T35674 - GROMMET

## ACTIVATION KIT – STATIONARY AND MOBILE

43TK5247 - Elec/Hyd Shift System “DB”

48TK5682 – Elec/Hyd Shift System “6B”



PRESSURE SWITCH WITH -2 SAE FITTING  
30T60223

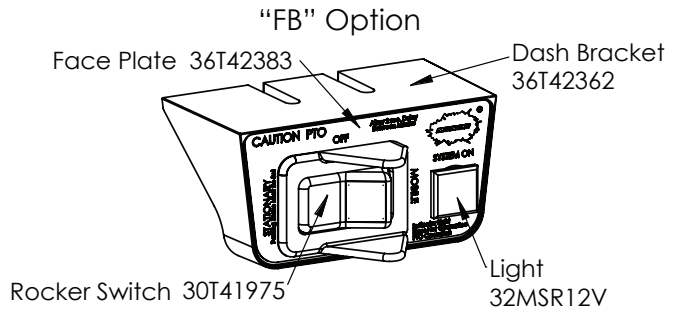
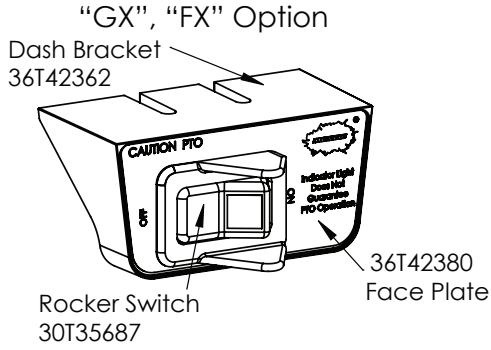
NOT SHOWN -  
28T35442 - CABLE TIES (6 PCS)  
36MK1007 - DASH BRACKET BOLT KIT  
37T35674 - GROMMET  
36T41941 - VISOR DECAL

# ACTIVATION KIT – STATIONARY OR MOBILE

43TK5392 - Elec/Hyd Shift System "GX"      48TK5680 – Elec/Hyd Shift System "FX"

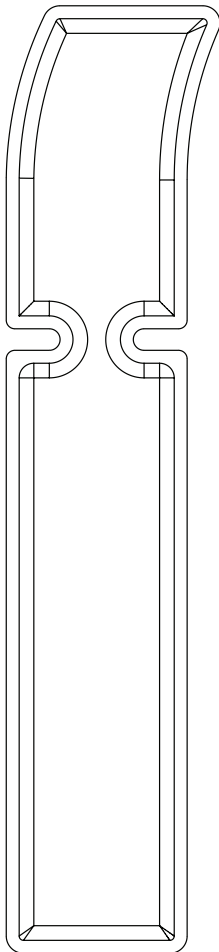
# ACTIVATION KIT – STATIONARY AND MOBILE

43TK5676 - Elec/Hyd Shift System "FB"

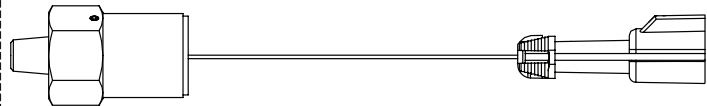


43TK5527 - Remote Mount Pressure Switch  
(Items in border) Included with 43TK5392, 48TK5680, and 43TK5676

49TK5533 - HEAT SHIELD KIT  
Included with 43TK5392, 48TK5680, and 43TK5676

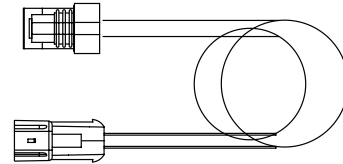


INCLUDES:  
49T43320 - HEAT SHIELD  
48TK5557 - FASTENERS

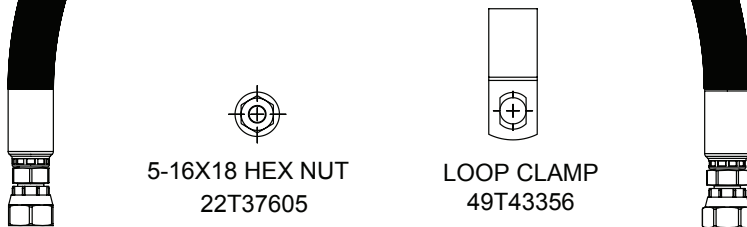


PRESSURE SWITCH WITH 1/8" NPT FITTING  
30T60228

WIRE EXTENSION  
48TK5470



STAINLESS STEEL BRAIDED HOSE 18"  
45T43308



5-16X18 HEX NUT  
22T37605

LOOP CLAMP  
49T43356

STRAIGHT -4 MALE JIC  
X 1/8" FEMALE NPT FITTING  
43T43215

5-16X18-3/4" HEX BOLT  
19M10001

SAE O-RING  
90 X -4 JIC  
43M68014

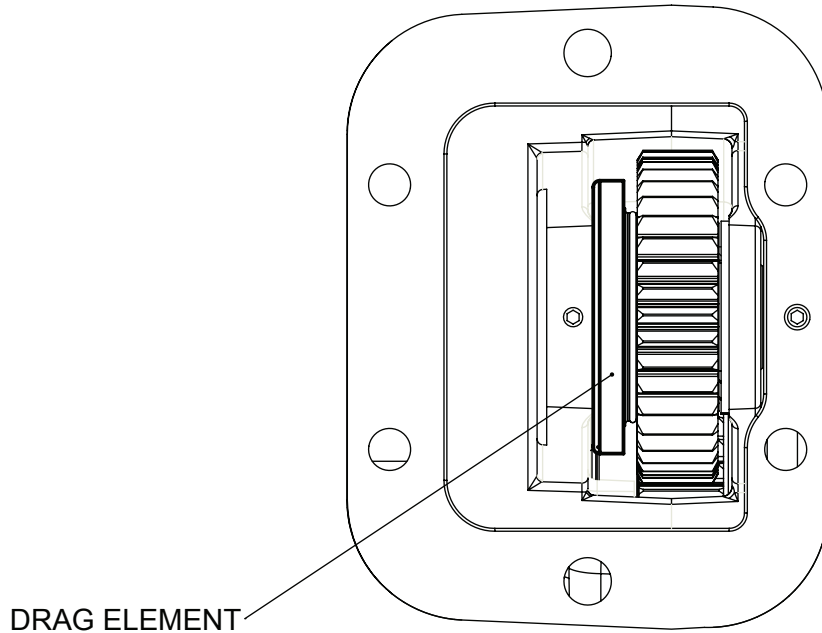
**NOT SHOWN** - 28T35442 - CABLE TIES (6 PCS)  
36MK1007 - DASH BRACKET BOLT KIT      37T35674 - GROMMET



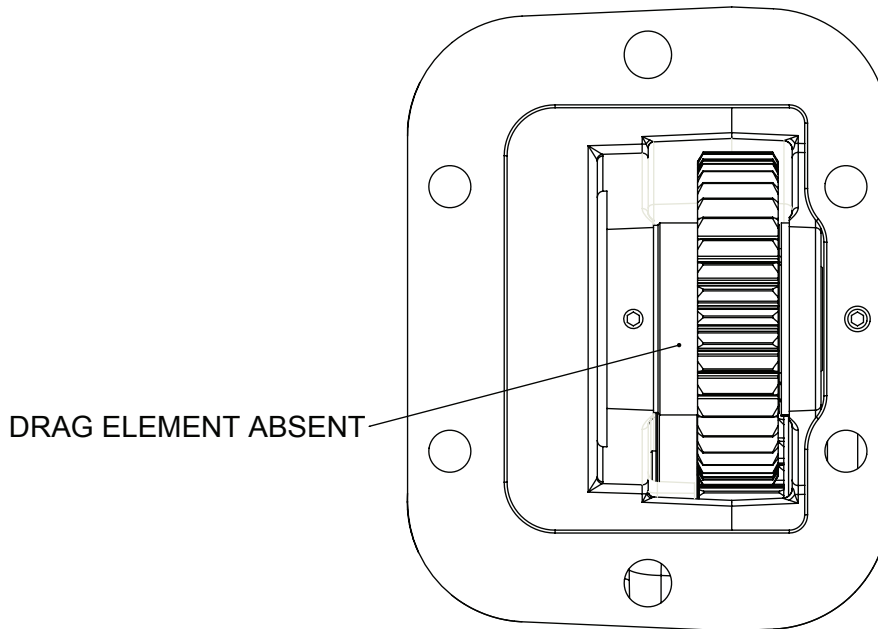
<b>Replacement Wiring Harness P/Ns</b>			
<b>PTO Shift Code</b>	<b>Wiring Harness P/N</b>	<b>Application</b>	<b>Mode</b>
D3*X	34T41671	2016 & Earlier F250-550 Diesel	Stationary OR Mobile
D3*B	34T41940	2016 & Earlier F250-550 Diesel	Stationary AND Mobile
G3*X	34T43359	2011-2015 F650 Gas	Stationary ONLY
63*X	34T43730	2017 & Later F250 - 750 Diesel	Stationary OR Mobile
F3*X	34T43735	2017 & Later F250 - 550 Gas 2016 & Later F650/750 Gas	Stationary OR Mobile
63*B	34T43740	2017 & Later F250 - 750 Diesel	Stationary AND Mobile
F3*B	34T43745	2017 & Later F250 - 550 Gas 2016 & Later F650/750 Gas	Stationary AND Mobile

**\*\*FOR WIRING INSTRUCTIONS REFER TO IN10-01\*\***

# HOW TO TELL THE DIFFERENCE BETWEEN GAS AND DIESEL



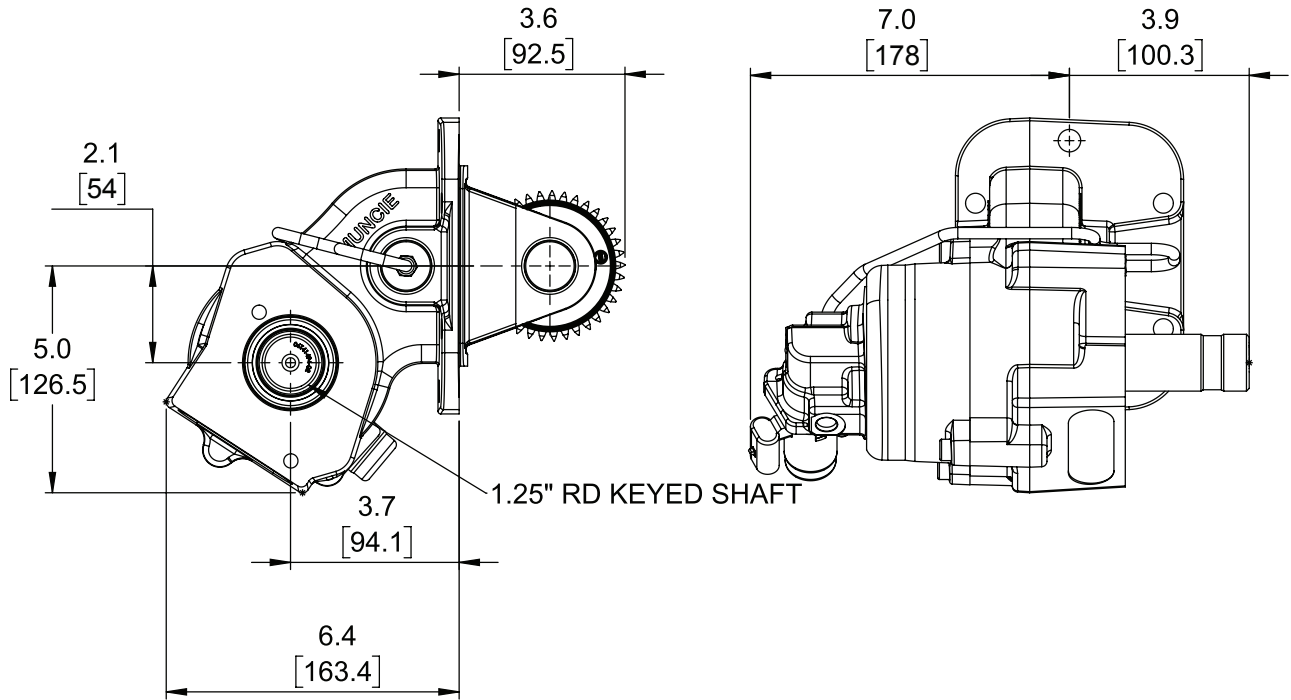
**“D” OR “6” SHIFT OPTION**



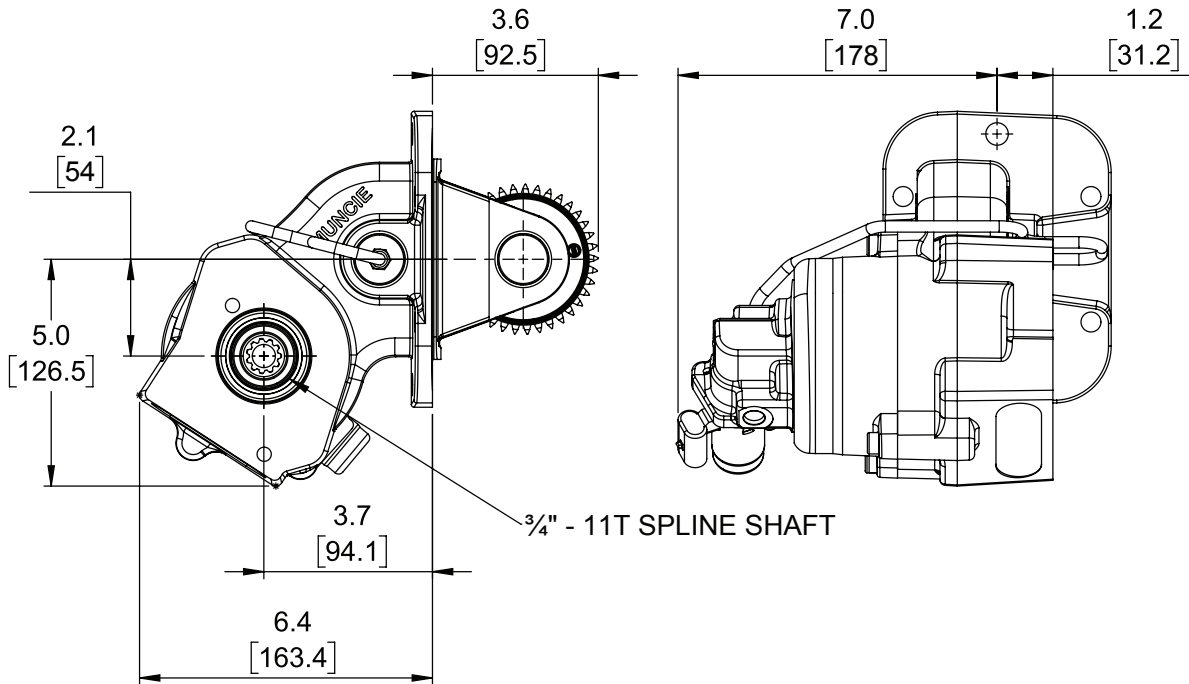
**“G” OR “F” SHIFT OPTION**

# DIMENSIONS/OUTPUT TYPES

## FR66-F1209-\*3B\*

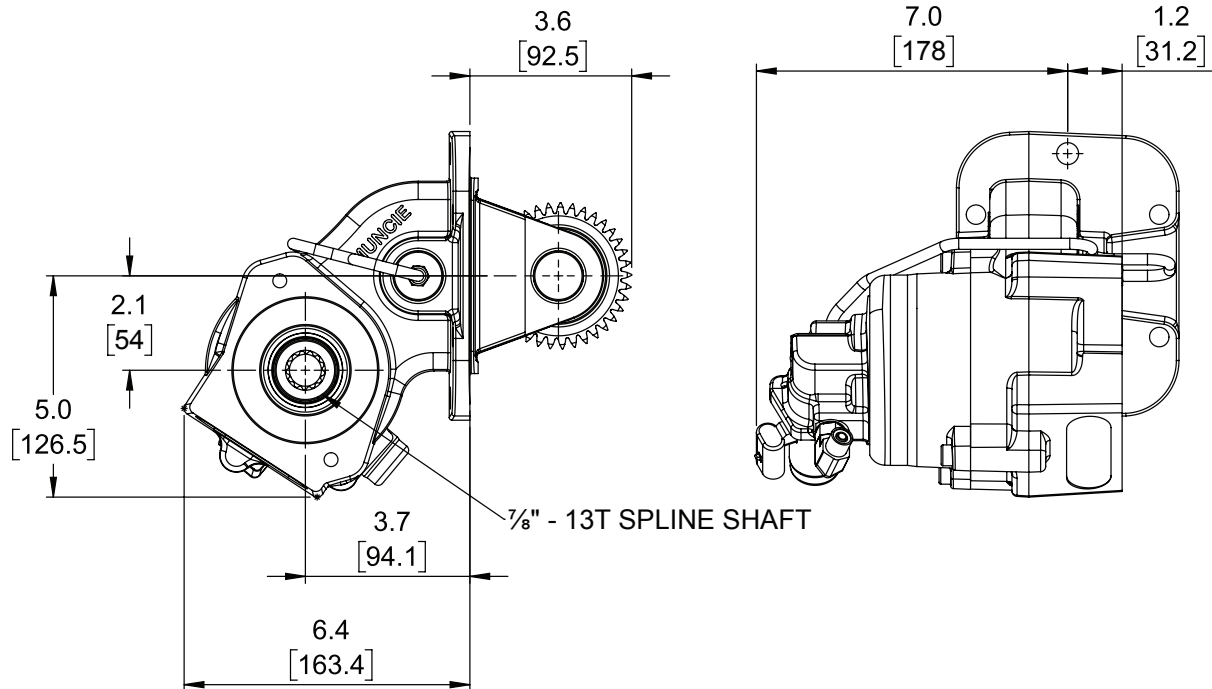


## FR66-F1209-\*3N\*



# DIMENSIONS/OUTPUT TYPES

## FR66-F1209-\*3Q\*



## FR66-F1209-\*3T\*

