



FR66 Gear Box (GBFR)

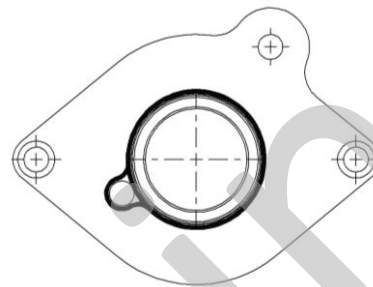
Installation Supplement to IN10-01

Please read the FR66 Installation & Owner's Manual (IN10-01) and this supplement before beginning the installation process. Once you have read through each of these documents, this installation will begin with step 1 in the IN10-01 Manual. Once step 8 has been completed, begin with step 1 from this supplement.

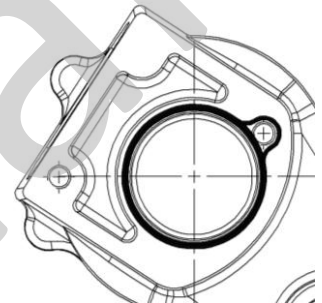
Note: The installation kit referenced in the IN10-01 (step 6) is 43TK5209 and the installation kit received with the FR66 PTO is 43TK5280.

1. Remove the components from the installation kit (43TK5280) provided with the FR66 PTO and locate the GBFR Adapter (14T41964), the (3) 1.00" 3/8-16 Socket Head Capscrews (19M38100) and the (1) 0.75" 3/8-16 Socket Head Capscrew (19T42020).

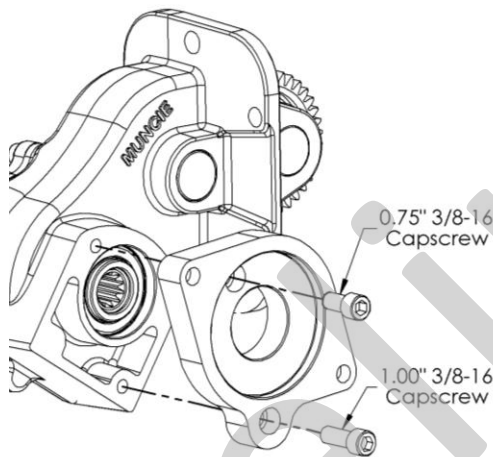
2. Place a small ring of RTV sealant around the adapter **OR** around the PTO output face as shown.



Adapter - Rear View

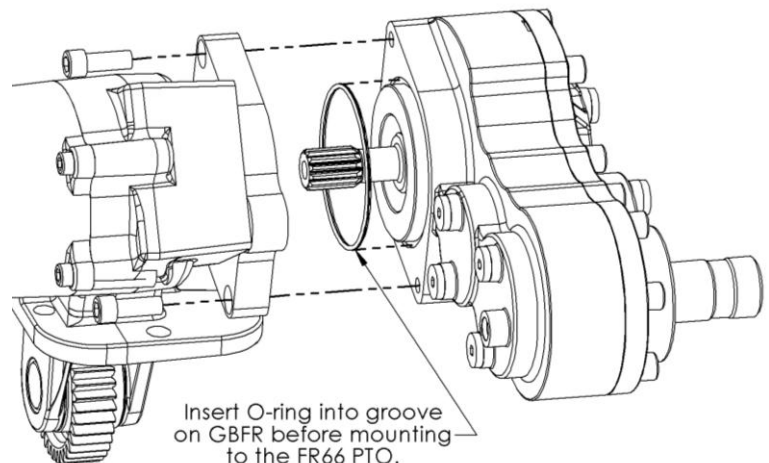


PTO Output Face - Front View



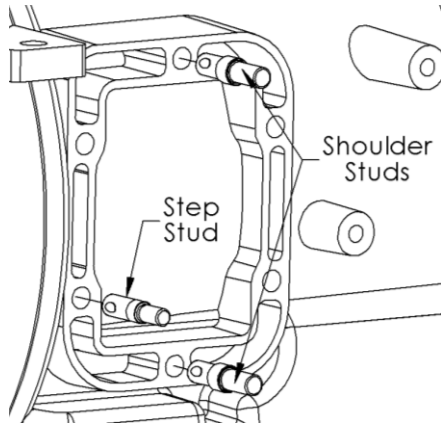
3. Place the adapter onto the output face of the PTO and align the bolt hole locations as shown. Insert the 1.00" 3/8-16 capscrew into the bottom-right hole location and 0.75" 3/8-16 capscrew into the upper-left hole location. Torque each capscrew to **35 Ft. Lb.**

4. Once the GBFR adapter is mounted onto the FR66 PTO, locate and insert the o-ring (12T36540) into the groove in the GBFR housing. Next, align the flange of the GBFR with the adapter flange. Position the GBFR so once the FR66 is mounted onto the transmission, the GBFR is pointed downward and the output shaft of the GBFR is pointed towards the rear of the vehicle.



Insert O-ring into groove on GBFR before mounting to the FR66 PTO.

5. Once aligned insert a 1.00" 3/8-16 Capscrew into each bolt hole location as shown. Torque each of the capscrews to **35 Ft. Lb.**



6. Locate the (2) shoulder studs (20T37914), (2) spirallock nuts (22T39282), (1) step stud (20T37952) and (1) whiz-lock nut (22T37605). Install the (2) shoulder studs into the top and bottom locations and install the (1) step stud into the lower left location of the PTO opening.

7. Locate and place the transmission gasket (see step 11b in the IN10-01 manual) over the studs and PTO opening.

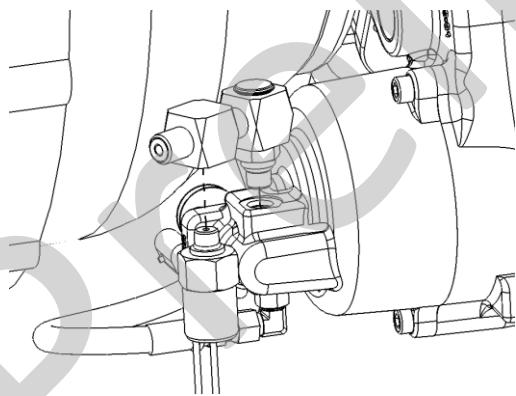
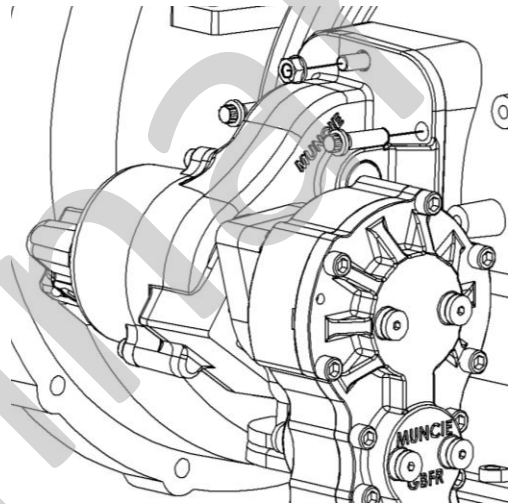
Note: It is important to check the gaps between the PTO and the transmission; making sure the gear teeth are properly meshed before tightening any capscrews or nuts.

8. Hold the FR66 PTO with attached GBFR in position and install the (2) spirallock nuts onto the (2) shoulder studs and install the (1) whiz-lock nut onto the (1) step stud. Locate the (3) 12 point capscrews (19T42075) and install them in the remaining hole locations. Proceed to torque the (2) spirallock nuts to **40 Ft. Lb.**, (1) whiz-lock to **17 Ft. Lb.** and the (3) capscrews to **30 Ft. Lb.**

Note: Checking the backlash is not required when using the approved Ford furnished gasket. Never use silicone type sealant on PTO/transmission mounting surface, as proper backlash cannot be attained.

9. Locate and install the 90° JIC Fitting, if it is not already installed in the PTO, (see step 13 in the IN10-01 manual).

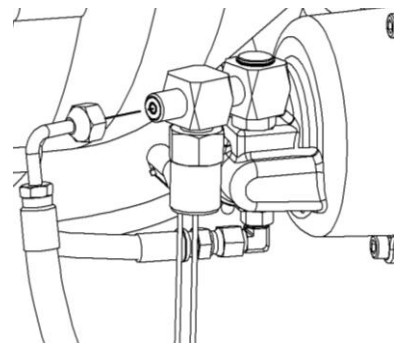
10. Install the JIC Swivel hose onto the 90° JIC Fitting (see step 15 in the IN10-01 manual) that is installed in the PTO. Use cable ties to route the hose away from the exhaust and away from any rotating components (see step 16 in the IN10-01 manual).

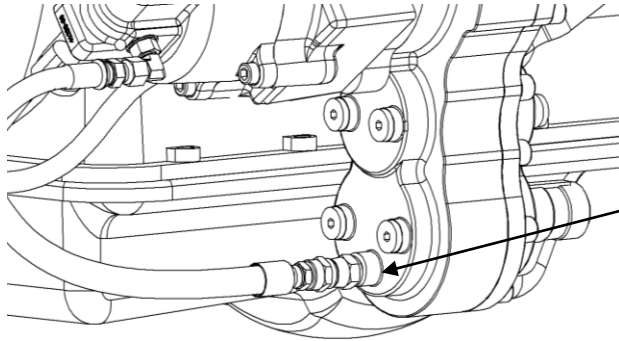


11. Remove the red plastic cap plug and locate the M-ORFS to F-ORB to M-ORB fitting (43T42369). Install the male ORFS end into the orifice of the FR66 end cover and position the fitting as shown.

12. Locate and install the pressure switch into the female ORB orifice of the fitting as shown.

13. Locate the 15" hose assembly (45T42349) and insert the 90° ORFS swivel onto the male ORB end of the fitting installed in the step 11.





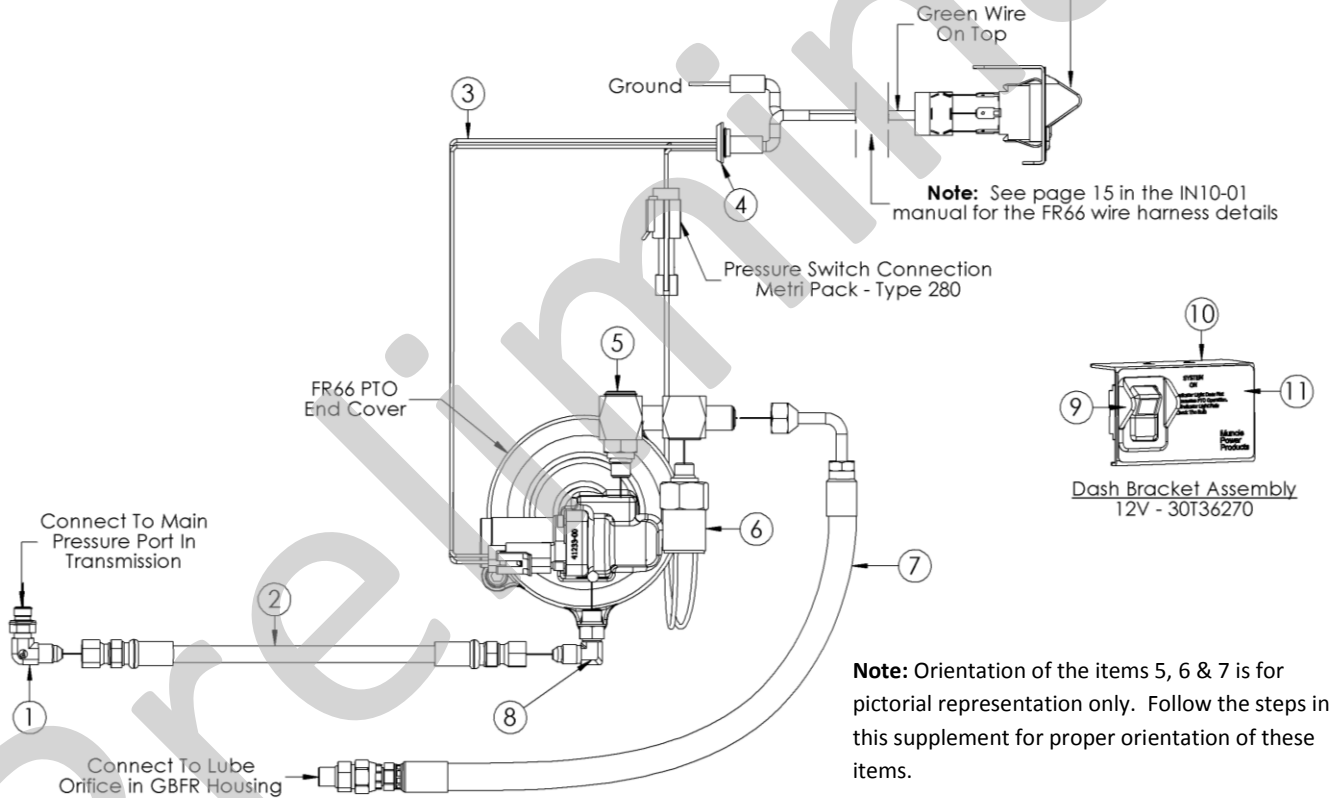
14. Insert the straight ORB swivel into the lube orifice port of the GBFR housing as shown.

15. Proceed to step 17 in the IN10-01 manual to finalize the installation of the FR66 PTO. Reference the kit (43TK5280) below when installing the activation kit.

FR66 Activation Kit – 43TK5280

FR66 Electric/Hydraulic Shift System – “D” Activation Kit (GBFR)

Note: Green light in the rocker switch is to turn "ON" when the PTO is engaged and turn "OFF" when the PTO is disengaged.



| ITEM | QTY | PART NO | DESCRIPTION |
|------|-----|-----------|------------------------------------|
| 1 | 1 | 43T41572 | Fitting 90° (-4) M-JIC/10mm M-ORB |
| 2 | 1 | 45T39186 | 17" Hose Assembly F-JIC/F-JIC |
| 3 | 1 | 34T41671 | FR66 Wire Harness |
| 4 | 1 | 37T35674 | Rubber Grommet |
| 5 | 1 | 43T42369 | Fitting (-4) M-ORFS/F-ORB/M-ORB |
| 6 | 1 | 30T41642 | Pressure Switch |
| 7 | 1 | 45T42349 | 15" Hose Assembly 90° F-ORFS/M-ORB |
| 8 | 1 | 43M68014* | JIC 90° Fitting |
| 9 | 1 | 30T35687 | Rocker Switch 12V |
| 10 | 1 | 36MA1005 | Switch Bracket |
| 11 | 1 | 36T36271 | Face Plate |
| N.S. | 1 | 36MK1007 | Dash Bracket Bolt Kit |

*This fitting is included with the PTO and not included in the installation kit 43TK5280.