

# INSTALLATION INSTRUCTIONS

## EXTENDED SHAFT SERIES WITH WET SPLINE OUTPUT FLANGE

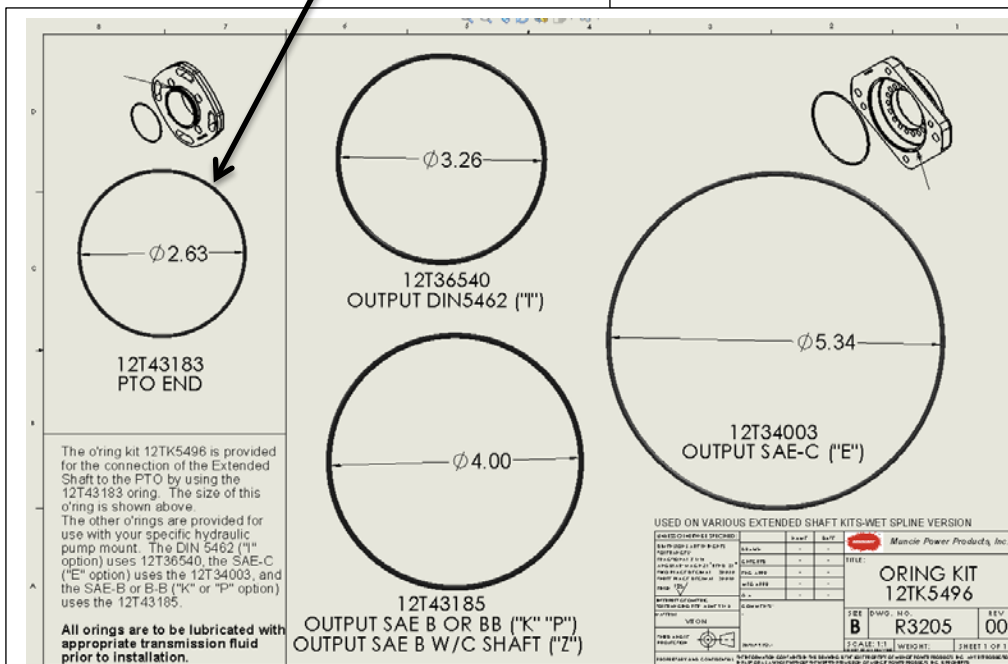
This extended shaft requires a PTO with an output flange option code "V" and will not connect to any other PTO version.

### Step 1

Install PTO. The PTO should be installed using its included instruction manual IN95-02.

### Step 2

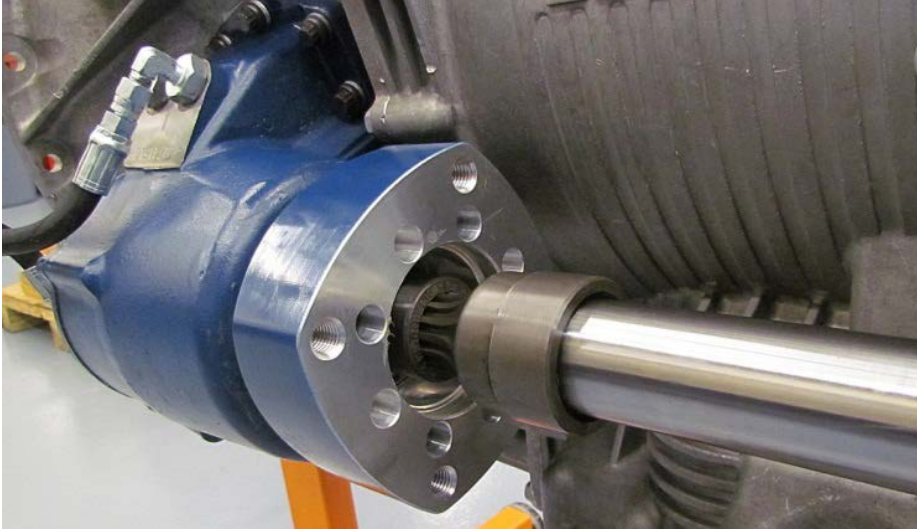
Remove the components from the extended shaft carton. This should include an installation kit with a 12TK5496 oring kit. Referring to the drawing R3205 locate the PTO end oring 12T43183. Lubricate and install O-Ring (12T43183) onto O-Ring groove of the input flange on the extended shaft housing as shown.



Locate Oring Kit sheet R3205 for description of o'rings.

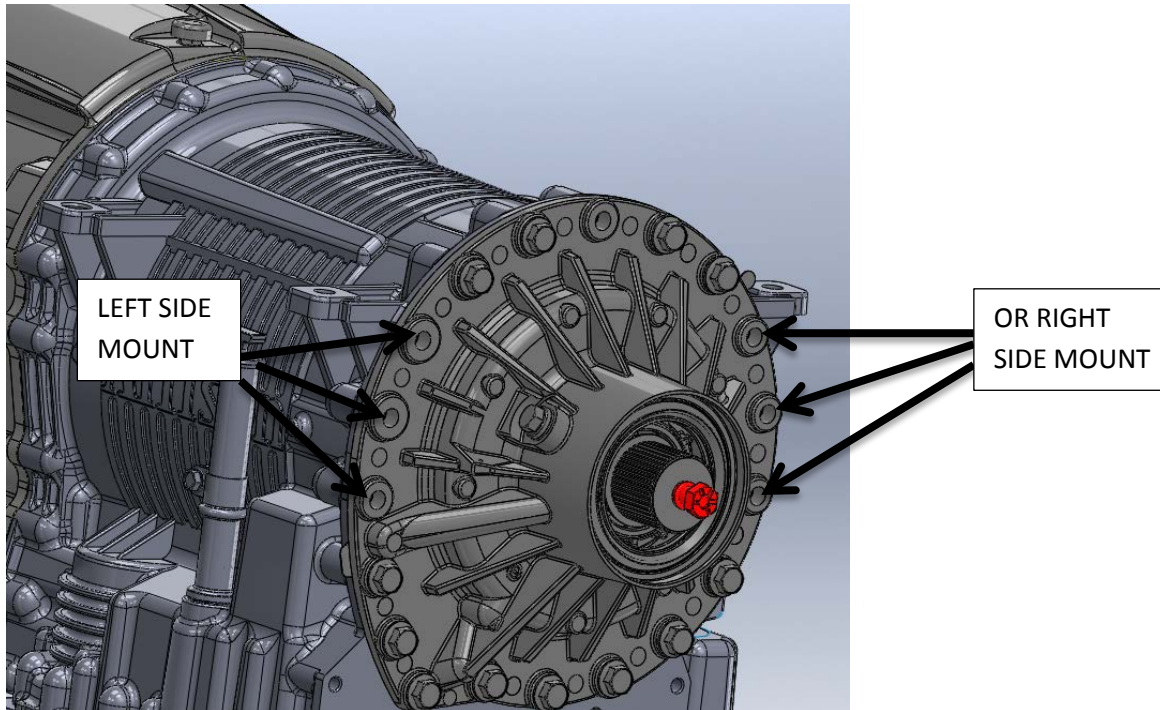
**Step 3**

Remove the cap plug from the PTO output shaft. Locate the thru-shaft from the Extended Shaft kit. Align the splines of this shaft with the PTO output shaft. Slide the splines of this shaft into PTO shaft as far as it will go.



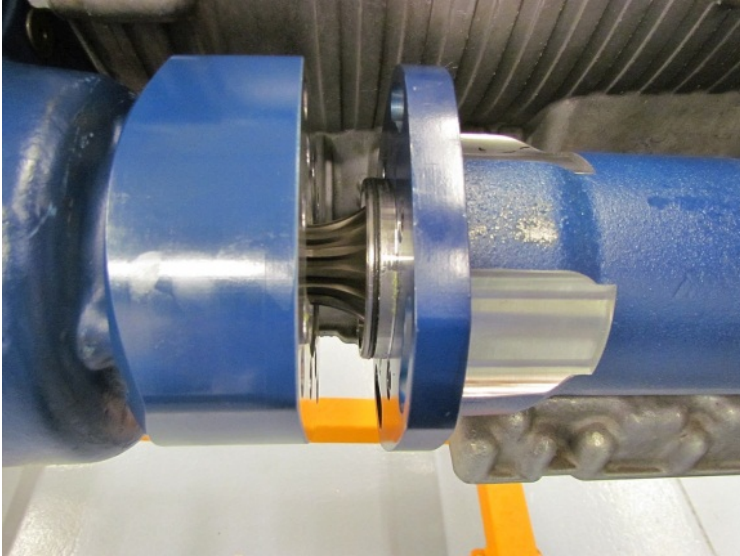
**Step 4**

Remove the transmission capscrews from the rear of the transmission in the locations where the mounting bracket will install.



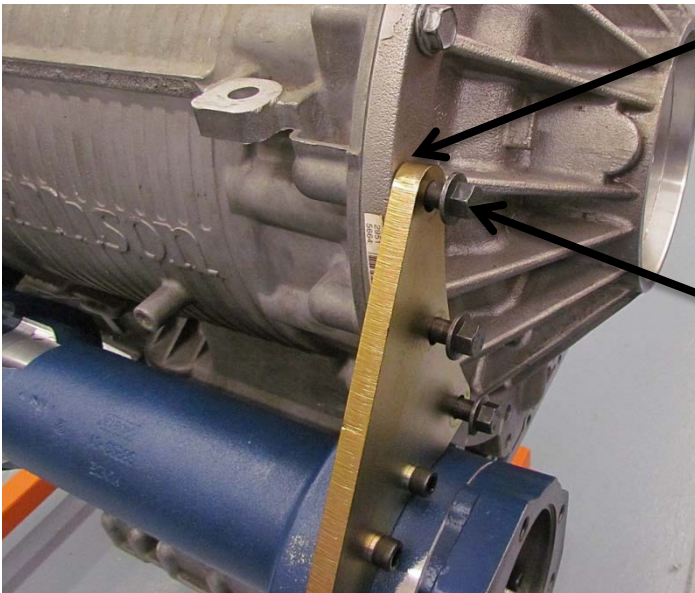
**Step 5**

Slide the Extended Shaft housing over the shaft and mate with the PTO flange.



**Step 6**

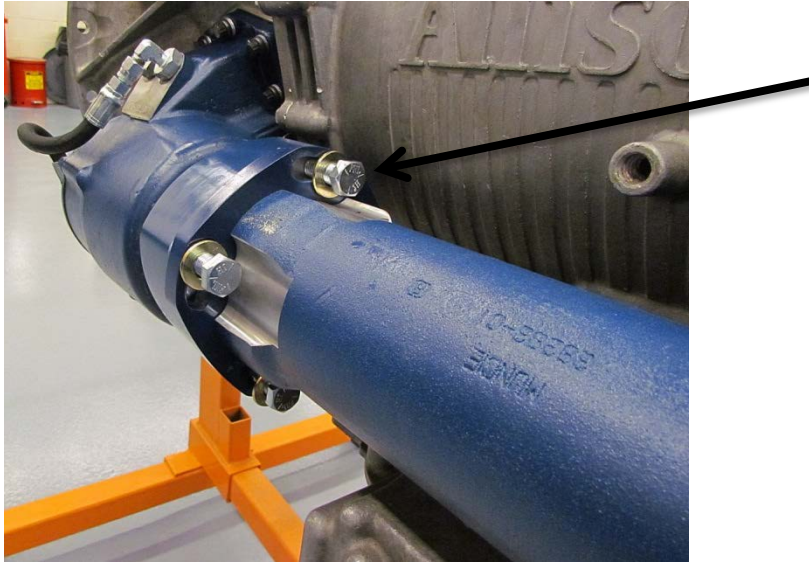
For installations on the Allison 3000 series, locate 3 spacers, 3 capscrews, and the Extended Shaft bracket. Install bracket bolts through the bracket and the spacers. For the Allison 4000 series, these spacers are not needed. (Torque 68 FT-LBS).



Spacers are installed between the bracket and transmission on 3000 series transmissions.

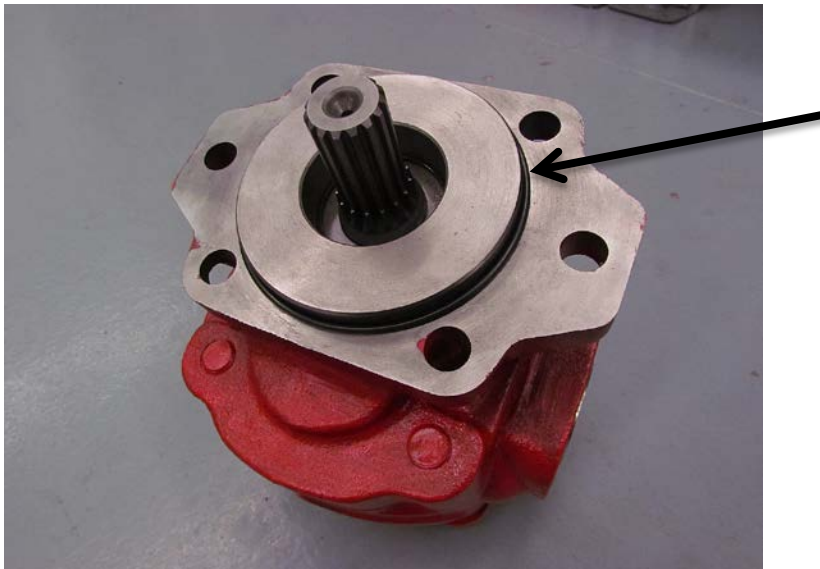
**Step 7**

Locate the 4 capscrews and flat washers. Install input flange bolts as shown (Torque 35 FT-LBS).



**Step 8**

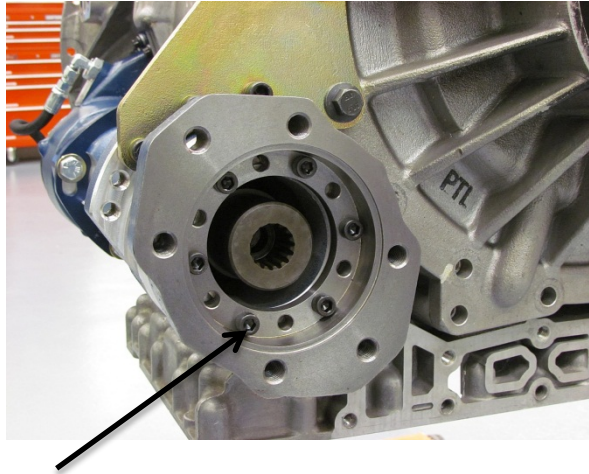
Hydraulic Pump installations: it is recommended that the pumps mounted to wet spline applications be design for use with wet spline outputs. This is because the extended shaft is open to the transmission oil. Lubricate and install the correct O-Ring out of O-Ring kit (12TK5496) around pump pilot. Use the diagram R3205 for selection of the proper oring.



NOTE: if a hydraulic pump is not being installed, then the rear of the extended needs to be covered with an appropriate flange cover to prevent transmission oil leaking.

### **Step 9**

Install pump.



Extended shaft output flanges can be oriented for clearance by removing the capscrews and the flange to the extended shaft housing. Orient the flange and align the bolt holes. Re-install the capscrews and torque to 25 ft.lb.

The extended shaft is supplied with the transmission bracket installed on the kit. If this is removed and reinstalled, then the capscrews would be torqued to 25 ft.lb.

### **Step 10**

The Muncie Extended Shaft requires additional oil level checks after the PTO and pump installation. Once the hydraulic pump is adequately connected to allow circulation of oil, operate the engine. After an appropriate amount of time check the oil level and add the correct transmission fluid as is necessary.