

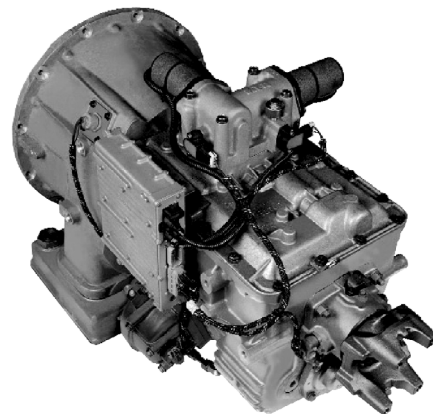


## SUPPLEMENT INSTRUCTIONS:

# RS4S-P86EM-A1CX PTO

on the Eaton/Fuller Ultra-Shift 6-speed transmission

- 1.** The Eaton Ultra Shift transmission is an automated manual transmission with an electronic controller mounted on the left side above the left side PTO opening. On this PTO opening is mounted an inertia brake which must remain installed on this opening.



- 2.** The Muncie **RS4S-P86EM-A1CX PTO** is designed to mount to the rear countershaft opening located directly below the rear output shaft of the transmission. Refer to the PTO owner's manual IN84-03 for applying safety labels and for installation procedures not shown here.



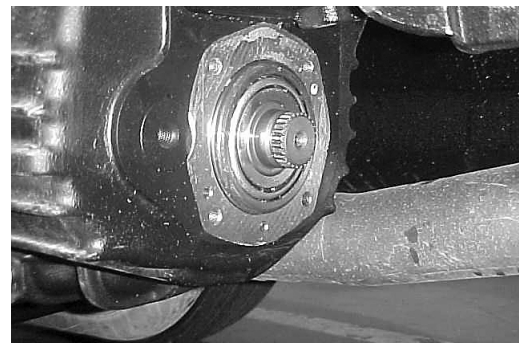
- 3.** The 6 speed Ultra shift must be supplied with the PTO mounting adapter kit from Eaton as shown in this photo. This can be ordered with the vehicle at time of purchase or can be installed by the dealer.

Locate the mounting studs and insert 4 studs into the transmission. Slide the gasket supplied over the studs and mount the PTO with the nuts provided. Tighten the nuts to 30-35 lb.ft.

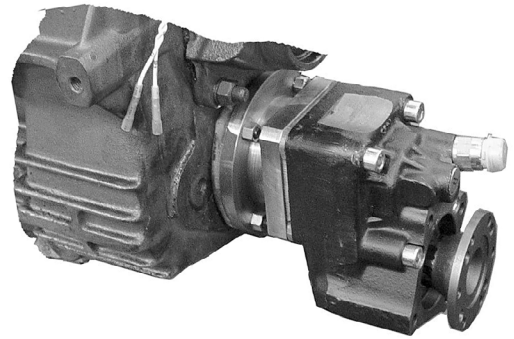


- 4.** Shown is rear countershaft bearing exposed. **Do NOT install** PTO without the PTO adapter.

The Muncie PTO cannot be properly mounted without this adapter.



**5. NOTE:** Be sure that there is adequate transmission driveshaft/yoke clearance to the PTO before proceeding. If main vehicle driveline series is too large for the installation then this PTO cannot be used.

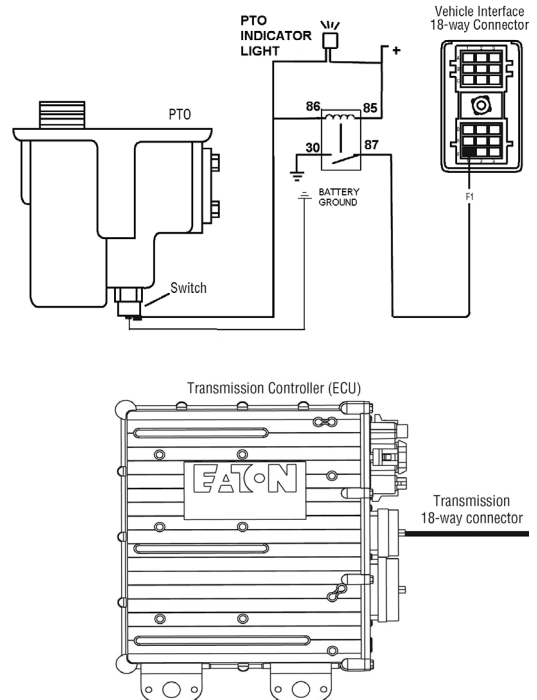


**6.** The transmission is designed to be used without the use of a clutch pedal. This requires that the PTO signal the transmission to activate the clutch to engage the counter shaft of the transmission with the vehicle stationary and in neutral.

This is accomplished by making an electrical connection to the transmission control module at the center connector and pin F1 as shown here. Check with vehicle dealer or body builder's manual for location of wiring harness connection to this location. If none is available then you will need to insert a new terminal into this cavity. Instructions for doing this are available from the dealer or on the Eaton website <http://www.roadranger.com> Under: *transmission/literature/installation guides*; see #TRIG-0082

We are showing the use of an automotive relay to activate this signal and to also activate a dash light for PTO engagement indication. The relay is not provided. A PTO indicator light must be installed in the vehicle cab in clear view of the operator while seated in the driver's seat.

The RS4S-P86EM series PTO is air shifted. It can be shifted using the manual air valve "A" shift option or electrically shifted using the "E" shift option. Connections for the air lines are the same as the TG Series shown on page 2.9 of the PTO owner's manual IN84-03



**7.** Follow the instructions in IN84-03 for the placement of warning labels supplied. Use the instructions found in IN84-03 for driveline installation.

