

## Driver Instructions

### Video Instruction Available

Instructional videos are available for download at no charge at [roadranger.com](http://roadranger.com)

Videos are also available for purchase. To order, call 1-888-386-4636. Ask for item # RRSD0002

# Fuller Heavy Duty Transmissions TRDR0900 September 2007



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SUPPORT

# Reference Numbers

## Tag Information

The blank spaces provided below are for recording transmission identification data and part numbers of maintenance items. Have these reference numbers handy when ordering replacement parts or requesting service information:

Transmission Model \_\_\_\_\_

Transmission Serial Number \_\_\_\_\_

Filter Part Numbers \_\_\_\_\_

Oil Filter Kit \_\_\_\_\_

Air Filter Element \_\_\_\_\_

Oil Sump Pan Gasket \_\_\_\_\_

Every effort has been made to ensure the accuracy of all information in this brochure. However, Eaton Corporation makes no expressed or implied warranty or representation based on the enclosed information. Any errors or omissions may be reported to Technical Service, Eaton Corporation, P.O. Box 4013, Kalamazoo, Michigan 49003-4013.

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# Warnings

## Warnings and Precautions



Read the entire driver instructions before operating this transmission.

Set the parking brakes before starting a vehicle, always be seated in the driver's seat, move the shift level to neutral, and depress the master clutch.

If engine cranks in any gear other than neutral or without the master clutch depressed, service your vehicle neutral safety start circuit immediately.

Before working on a vehicle or when leaving the cab with the engine running, place the transmission in neutral and set the parking brakes.

Do not release the parking brake or attempt to select a gear until the air pressure is at the correct level.

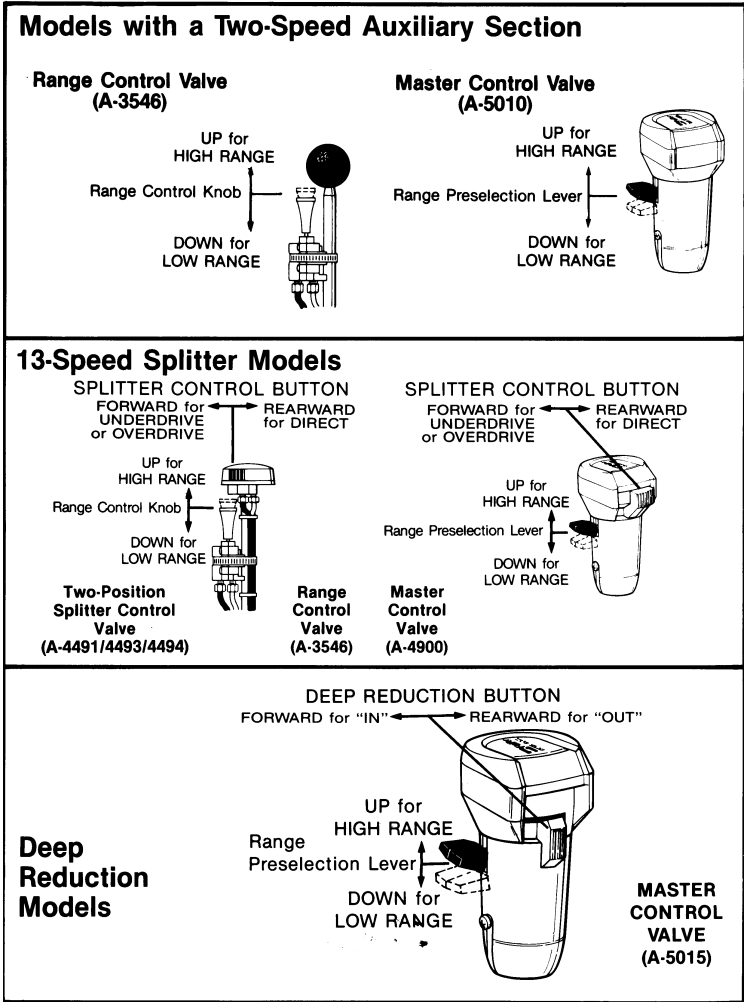
When parking the vehicle or leaving the cab, always place the shift lever in neutral and set the parking brakes.

If your vehicle is equipped with a remote throttle, before operation, the transmission must be in neutral. See the "Remote Throttle Operation" Section.

**TOWING:** To avoid damage to the transmission during towing, disconnect the driveline.

# Shifting Controls

## Shift Models



**Note:** For information contact: Eaton Corporation, Transmission Division, North American Headquarters, Applications Engineering Department, P.O. Box 4013, Kalamazoo, MI 49003-4013, (269) 342-3000

# General Information

## Introduction

The Fuller® Rear Mount Multi-Speed PTO Neutral Interlock System is designed to provide a neutral position in the auxiliary section of Fuller Roadranger® Transmission (except RT-6610/6613 and RT-8609 Series) for the purpose of using an Extended Rear Countershaft Power Take-Off (PTO) in a stationary vehicle mode. A locking mechanism which is interlocked to the neutral position of the unit's front section ensures that THE AUXILIARY SECTION CANNOT BE RE-ENGAGED TO AN IN-GEAR POSITION UNLESS THE FRONT SECTION IS IN NEUTRAL. In other words, this feature prevents accidental or inadvertent transmission operation which could result in the vehicle moving under power.

The standard Range Cylinder Assembly is modified to include a positioning piston and neutral plunger with mating ramps, for stationary mode operation. The Air Shut-Off Valve of this Neutral/Range Cylinder Assembly renders the shifting controls in the cab inoperative when the neutral DOWN, locking the range yoke bar in the centered position during stationary mode operation. Even in the event that air to the range system is accidentally restored, an air line becomes severed, or other malfunctions of the system occur, THE AUXILLIARY SECTION WILL REMAIN IN NEUTRAL. ONCE THE NEUTRAL PLUNGER IS DOWN AND LOCKED IN THE NEUTRAL POSITION, the only way it can be overcome is with a "mobile" air signal sent from the Stationary/Mobile Control Valve and directed through the Sequencing Protection Valve.

The proven design of the Fuller® Rear Mount Multi-Speed PTO Neutral Interlock System simplifies the procedure of engaging and disengaging an Extended Rear Countershaft PTO while providing the operator with the additional safety afforded by the Neutral/Range Cylinder when in the stationary mode.

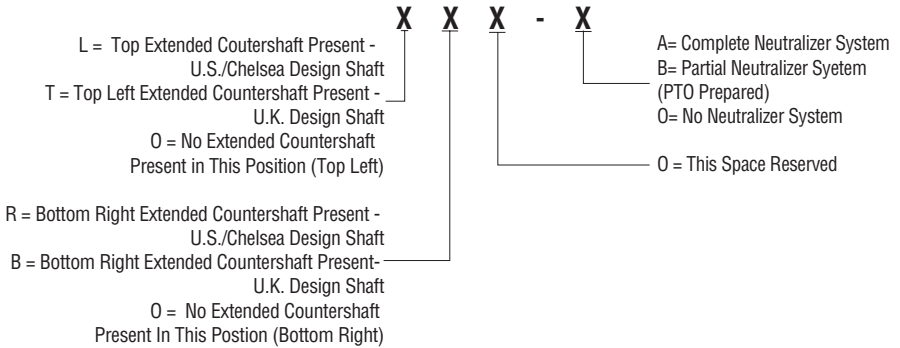


**CAUTION:** FOR ANY STATIONARY VEHICLE OPERATION OF AN EXTENDED REAR COUNTERSHAFT PTO, A FULLER® NEUTRAL INTERLOCK SYSTEM IS REQUIRED.

# General Information

## System Identification

The following code system is used to identify any Fuller® model transmission equipped with a COMPLETE Rear Mount Multi-Speed PTO Neutral Interlock System or PARTIAL system. This information is stamped in the upper right-hand corner of transmission identification tag.



# Operation

## Detailed Operating Instructions

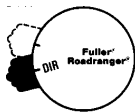
In the following instructions, it is assumed that the operator is familiar with motor trucks and tractors equipped for stationary use of an Extended Rear Countershaft PTO. Unless otherwise stated, these instructions apply to all Fuller® Roadranger® Transmissions equipped with the Rear Mount Multi-Speed PTO Neutral Interlock System.



**CAUTION:** Failure to comply with the proper shifting or operating sequences may result in premature PTO failure with possible damage to other components of the transmission.

## To Engage PTO for Stationary Operation

1. For vehicles equipped with a 13-Speed Splitter Model Transmission ONLY, flip the Splitter Control Button of the Splitter Control Valve/Master Control Valve A-4900 to the “DIRECT”/REARWARD position.



Splitter Control Button, MUST be in the “DIRECT” or REARWARD position.

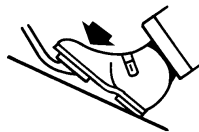


**Note:** For vehicles equipped with a Deep Reduction Model Transmission ONLY, flip the Deep Reduction Button of the Master Control Valve A-5015 to the “OUT”/REARWARD position.



Deep Reduction Button MUST be in the “OUT” or REARWARD position.

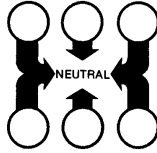
2. Bring the vehicle to a complete stop, if applicable, and disengage clutch.





# Operation

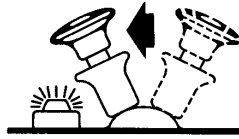
3. Set the parking brakes and move the gear shift lever to the neutral position.



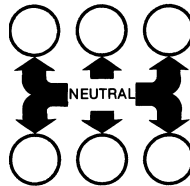
4. Switch the Stationary/Mobile Control to the "STATIONARY" position and wait for the green indicator light to appear.



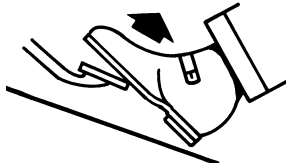
**CAUTION:** IF GREEN LIGHT FAILS TO COME ON, DO NOT PROCEED with these operating instructions as damage to the PTO and other components MAY result.



5. With the clutch STILL disengaged and the green stationary mode indicator light ON, move the shift lever from the neutral position to select the proper gear.



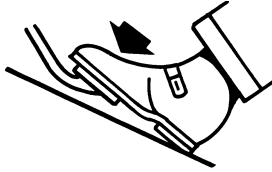
6. Move the Extended Rear Countershaft PTO Control to the "IN" position.
7. SLOWLY release the clutch pedal to engage PTO for stationary operation.



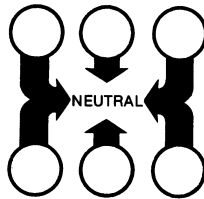
# Operation

## To Disengage PTO

1. Disengage clutch and wait momentarily for PTO to stop rotating.



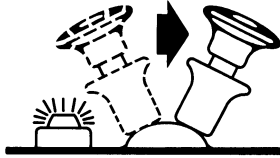
2. Move the shift lever from the in-gear selection to the neutral position.



3. Move the Extended Rear Countershaft PTO Control to the "OUT" position.

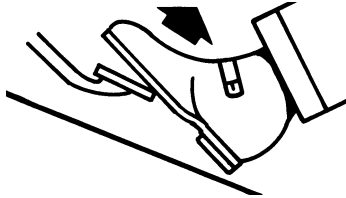
## To Regain Mobile Operation

1. With the clutch STILL disengaged, switch the Stationary/Mobile Control to the "MOBILE" position, causing the green stationary mode indicator light to go OUT.



**CAUTION:** IF THE GREEN LIGHT FAILS TO GO OFF, DO NOT PROCEED with these operating instructions as damage to the PTO and other components MAY result.

2. It is now safe to release the clutch pedal.



3. Release parking brakes to prepare for operating the vehicle in the mobile mode.



**CAUTION:** To avoid improper operation of the vehicle while in the mobile mode, READ CAREFULLY the Driver Instructions form that pertains to your particular model transmission. As a rule, good driving habits and proper shifting techniques will make driving easier and prevent unnecessary damage to the transmission.

A shift pattern and operating instructions decal should be in the vehicle equipped with the Fuller® Rear Mount Multi-Speed PTO Neutral Interlock System. If either decal has been misplaced or destroyed, a replacement may be obtained by writing to: Eaton Corporation, Transmission Division, Service Parts Department, North American Headquarters, P.O. Box 4013, Kalamazoo, Michigan 49003-4013. Please specify shifting controls used and transmission model number when making request.





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