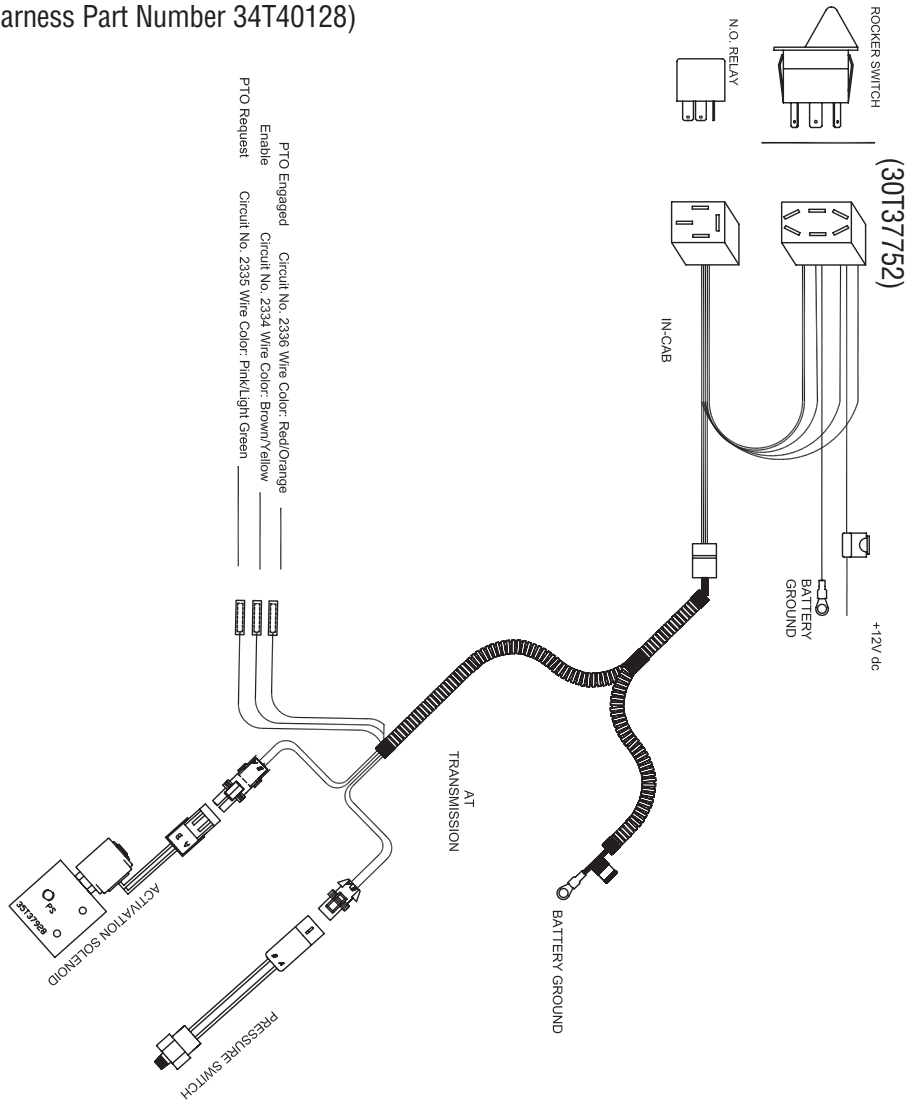


PTO WIRING FOR CF SERIES WITH FORD MOTOR COMPANY AUTOMATIC TRANSMISSION

(Harness Part Number 34T40128)



SUPPLEMENT INSTRUCTIONS for FR SERIES PTO (IN03-01)

WARNING:

Installing a transmission-mounted PTO without the required PTO wiring may result in transmission failure.

Required PTO Wiring for CF Series with Ford Motor Company Automatic Transmission

GENERAL INFORMATION

To minimize the risk of transmission damage, PTO controls must be integrated into the vehicle wiring.

Applying vehicle battery voltage to the "PTO Request" wire will

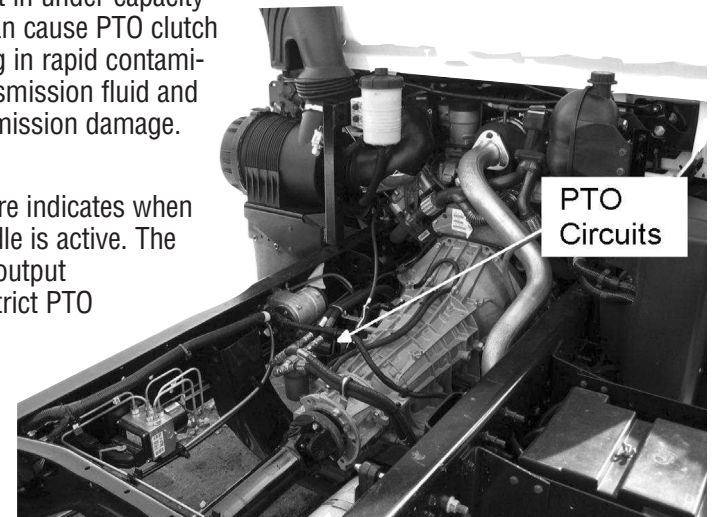
- (1) place the transmission in PTO mode and
- (2) elevate idle engine speed when certain conditions (described below) are met.

This connection is part of the Muncie PTO control system; failing to connect will result in under-capacity of PTO and can cause PTO clutch wear, resulting in rapid contamination of transmission fluid and internal transmission damage.

The output wire indicates when the elevated idle is active. The "PTO Enable" output is used to restrict PTO operation to stationary only.

An input wire is to control the PTO lamp in the instrument cluster. Applying vehicle battery voltage to the "PTO Engaged" wire will illuminate the PTO lamp.

PTO Request, PTO Enable, and PTO Engaged are blunt cut wires supplied with the vehicle and are located behind the cab on the left frame rail near the transmission. The Muncie wiring harness provided will allow you to make these connections.



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Elevated Idle Operation

(1) When the PTO Request input transitions from open circuit to vehicle battery voltage and

(2) When the conditions in Table 1 are met, the engine will ramp to 1200 RPM and the PTO Enable output will be activated.

While in this mode, normal engine hand controls are available; however, the engine will maintain an engine speed between 1200 and 2400 RPM. The engine will remain in this mode until either

(1) the PTO Request input is an open circuit or

(2) one or more of the conditions in Table 1 are no longer met.

NOTE: The transition of the PTO Request input is required to initiate the elevated idle mode.

PTO Elevated Idle Conditions:

Park Brake Applied

Service Brake released

Vehicle in Park

Accelerator Pedal not pressed

Vehicle speed is 0

Engine speed is below 1200RPM

Table 1

Circuit Intent	Wire Name	Description
Input (VPWR)	PTO Request	Blunt cut wire Circuit No. 2335 Wire Color: Pink/Light Green Applying vehicle battery voltage to this wire will request the transmission enter PTO mode and will elevate engine speed if conditions are met.
Output PTO	Enable	Blunt cut wire Circuit No. 2334 Wire Color: Brown/Yellow A low-side driver, changing from "open-circuit" to "ground" indicating elevated idle (PTO) is active. Intended for turning on a relay coil. Maximum current is 1 amp.
Input (VPWR)	PTO Engaged	Blunt cut wire Circuit No. 2336 Wire Color: Red/Orange Applying vehicle battery voltage to this wire will activate the PTO lamp in the instrument cluster, and removing vehicle battery voltage will deactivate the PTO lamp.

CF SERIES - PTO WIRING INSTRUCTIONS

1. Follow installation instructions for FR Series PTO IN03-01 until step 41
2. Locate a 12V dc source in under the dash and connect the fused Red wire. Locate a battery ground and attach the black wire with the ring terminal to the ground.
3. Disconnect the 4-wire connector and feed the connector through the firewall. reconnect making sure connector is indexed correctly and that all terminals are making contact.
4. Route the PTO harness away from rotating components and heat sources. Locate the blunt cut wires in a loom near the transmission PTO opening.
5. The Muncie wiring harness has matching color coded wires with butt splice connectors attached. Strip the Ford/International wires and connect Pink/Lt Green wire to Pink/Lt. Green wire, Brown/Yellow wire to Brown/Yellow wire and Red/Orange wire to the Red/Orange wire.
6. Attach the Black wire with ring terminal on the Muncie harness to a battery ground. See diagram on back page.
7. Plug the Metri-Pack connector into the pressure switch and connect the Weather-Pack connector to the activation solenoid.
8. Continue the PTO installation as described in the IN03-01 installation manual from step #45.

PTO SCHEMATIC WIRING FOR CF SERIES WITH FORD MOTOR COMPANY AUTOMATIC TRANSMISSION

Example Wiring Diagram for stationary PTO operation

