

For required circuit revision please see the last page. This revision is required for the PTO to auto resume

The chassis cabs offer a hard wired remote start system. This must be ordered and is part of the PTO prep package. It is available only on diesels with automatic transmissions. Note: The truck cannot have the optional keyless remote start (option code XBM). Ram provides a circuit (wire) under-hood alongside the PDC to control the start and stop functionality. This is circuit T754 and is a dark green/gray tracer (DG/GY) wire, see pages following for exact location. This wire (and others) are terminated with black heat shrink tubing on its end. It is on the driver side front of the engine compartment along side of the PDC (Black Box). This circuit is looking for a momentary ground signal to stop and/or start the vehicle. Even though you can order this feature it will still come from the factory disabled.

The key must be in the RUN position for the feature to operate.

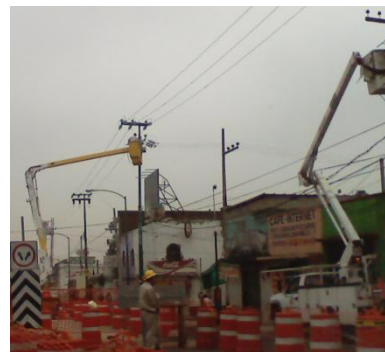
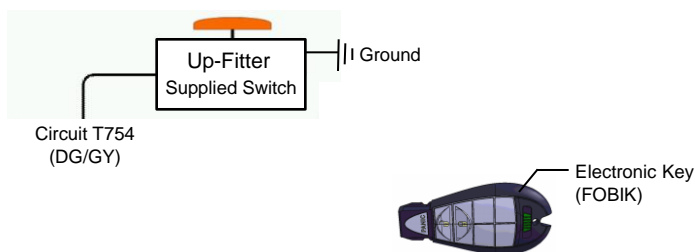
Note: Using this feature puts the vehicle in remote start mode. A safety feature of remote start mode prohibits driving the vehicle. If you try to drive the vehicle it will turn off. In order to drive the vehicle, you must cycle the key off and turn the vehicle back on. This takes the vehicle out of remote start mode.

Feature and System Description

The wired remote start feature used on aerial lift applications will only operate on a vehicle with an automatic transmission.

Ram 3500 chassis cab

Ram 4500/5500 chassis cab



Enabling/Disabling the Wired Remote Start Feature (Note: Changed from 2012 Model Year)

The RFHM module will be shipped with the "wired remote start" feature disabled within its electronics to prevent inadvertent starts on vehicles which have not been up-fitted. The feature must be enabled by the aftermarket up-fitter using the following procedure (This enabling/disabling procedure will be allowed on automatic vehicles only):

Connect Wired Remote Start (WRS) button (or jumper wire) to allow opening/shorting the up-fitter circuit connected to RFHM

For rotary ignition system insert a valid FOBIK into the IGNM and turn it to the RUN position

For Keyless Go ignition system turn the ignition to RUN state by pushing the Start/Stop button

Press and hold brake pedal

Move the shifter out of Park

Press and hold "WRS" button

Move the shifter to Park

Release "WRS" button

Within 30 seconds of releasing "WRS" button:

Move the shifter out of Park

Press and hold "WRS" button

Move the shifter to Park

Release "WRS" button

Release the brake pedal

For rotary ignition system turn the FOB/IK back to Off position and remove it

For Keyless Go ignition system turn the ignition Off by pressing Start/Stop button

Once the brake pedal is released, the state of the wired remote start feature will toggle (i.e., if previously disabled it will now be enabled, or if previously enabled it will now be disabled). The immobilizer telltale in the cluster will blink at one Hz rate to indicate the status of the Wired Remote Start feature. If the procedure enabled the feature, the telltale will blink for four seconds; if the procedure disabled the feature, it will blink for two seconds. The RFHM will control this blinking by setting the RFHUB_A2|ImmHMIRReq = 3h for four or two seconds depending on the feature is enabled or disabled.

The enabling/disabling process may be terminated at any time before completion by moving the ignition out of the RUN state.

Notes:

The up fitter's equipment must be able to sink 40 mA with a closed circuit voltage of 200 mV or less for the RFHM to operate properly. This is not expected to be a problem, since the output of the up fitter's equipment is likely to be a mechanical solenoid closure contact.

The "KG Automatic Ignition OFF" feature (see section 18 of the Keyless Go System requirements document version 2.15 or later) shall remain inactive during a Wired Remote Start event.

The RFHM is already receiving all CAN signals required for this feature.

Engine start

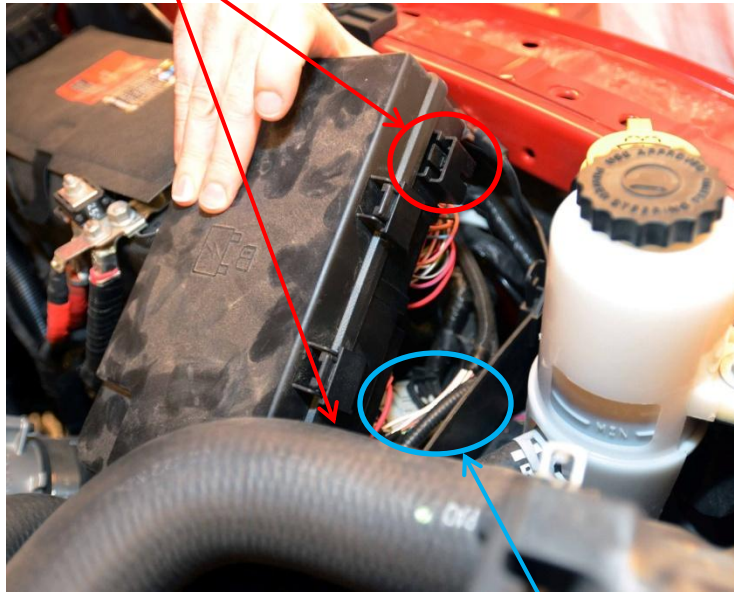
- From the overhead bucket, the operator would use the up-fitter's switch to close the circuit and hold it closed (0.5 seconds or longer) until the engine begins cranking. Once the engine is cranking the up-fitter's system can be released and the vehicle's "TIP start" feature completes the starting event.

Engine Shut Off

- If the engine was already running when the up-fitter's circuit closes, the engine will shut off.
- If the engine is cranking but not yet started (TIP start) and the up-fitter's circuit closes, cranking will stop.

Location of wire used for hard wired remote start:

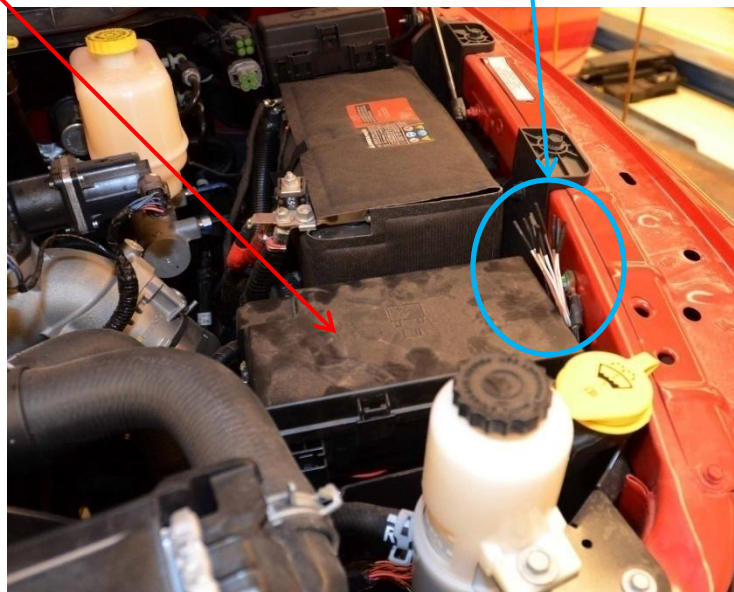
Release tabs to move box



Wires located in front of PDC

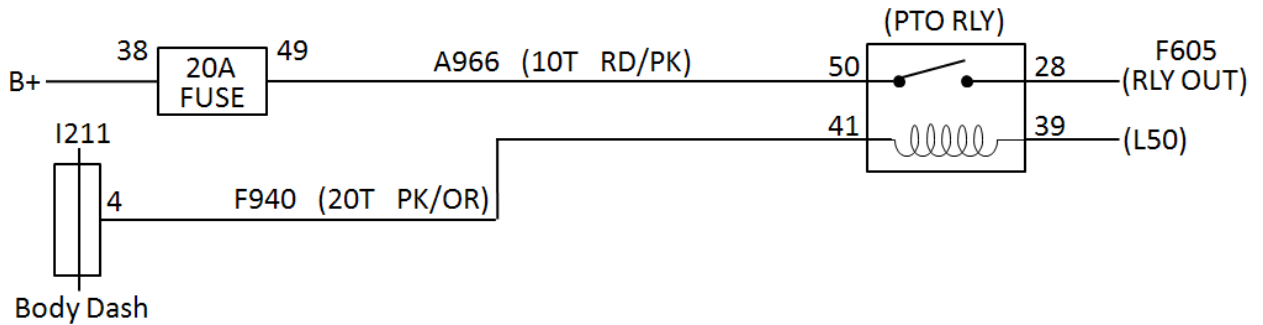
PDC

Pull wires up

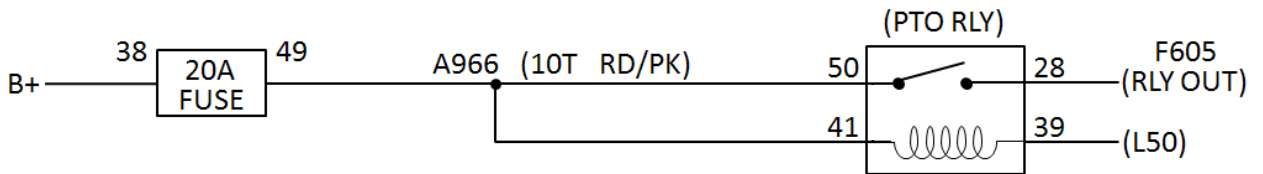


Circuit revision required for PTO with hard wired remote start
This revision enables auto resume.

Before:



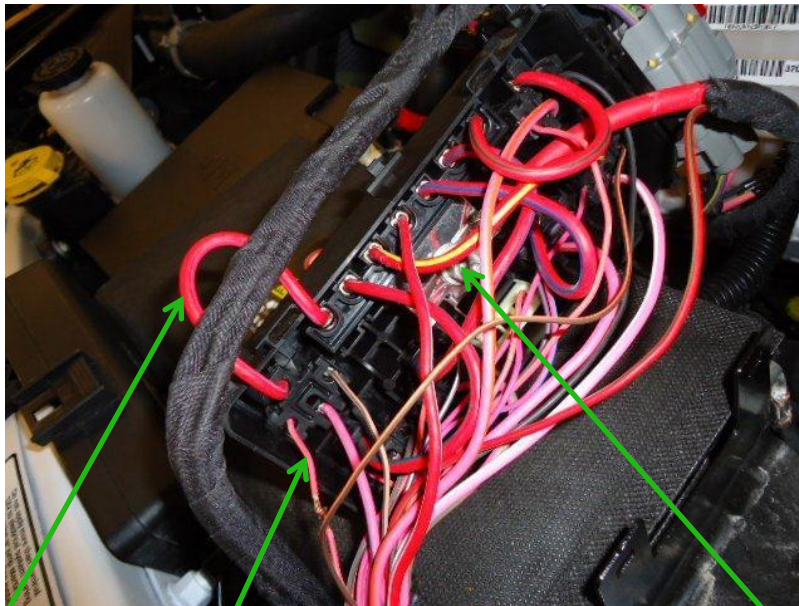
After:





F940

A966



A966

F940

Alternate connection to connect circuit F940. This is the center stud.

Emergency Engine Shut Off Switch Installation Procedure

The following is a procedure for installing an emergency engine shut off switch in to 2013 and 2014 Ram 3500, 4500 and 5500 chassis/cab trucks equipped with gasoline and diesel engines. This procedure involves cutting the ignition run/start circuit and splicing wires that will be routed to the desired location of the up fitter provided switch.

1. Identify PDC located at the front left corner of the engine compartment (Image 1) and remove it from the bracket.
2. Remove the "C" connector from the PDC. This will be the large connector with the black shell. (Image 2)
3. To make the next few steps easier, push the bail back to the "locked" position after the connector is removed.
4. Identify the wire in cavity 28 of the connector. Note that the cavity numbers are marked on the back of the shell. (Image 3) The wire you are looking for is pink with a light green tracer. Note that there are 2 pink/light green wires very close to each other in this row of cavities. Cavity 28 is the one closer to the larger gage red/green wire.
5. Cut the wire approximately 2 inches from the connector and strip both ends.
6. Solder splice extension wire to each end and cover splice with sealing heat shrink tube. Note that wire gage should be 18 gage minimum. If total length of added circuit is 10 feet or more, extension should be 16 gage minimum.
7. Tie wires back to create a good strain relief and drip loop. Route extension wires out from under PDC along the harness bundle
8. Install "C" connector into PDC.
9. Install PDC into bracket.
10. Route extension wire to desired location. Be careful to isolate wires from areas that could cut or chafe the wires.
11. Install switch. Switch should be a single pole single throw or equivalent with contacts rated for 5 amps at 13.5 volts minimum.

Opening this circuit (switch) is not considered to be a normal mode of operation. Using this switch as a normal method of stopping the engine should not be done as some fault codes may be set depending upon engine type and key switch position while this circuit is open. This should be used for emergency only. Once the circuit (switch) is closed, the engine/starting system will start to function properly and any stored faults will eventually mature out.

Image 1

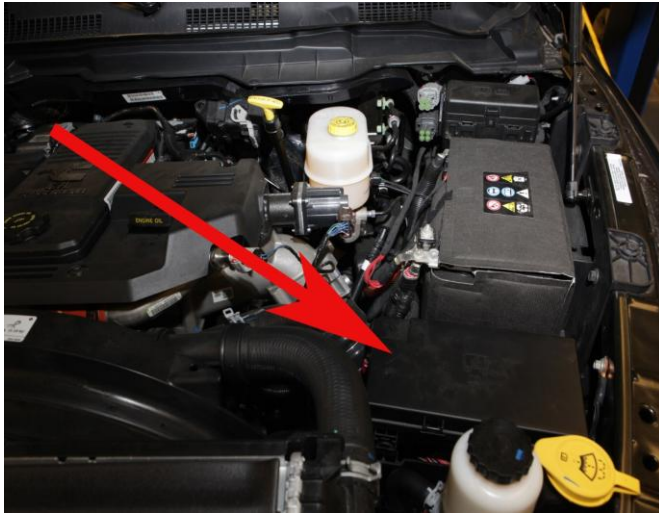


Image 2



Image 3

