

BODY BUILDER'S BOOK BULLETIN

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MODEL YEAR: 2008 and Later
CHASSIS MODEL: 1800HD ~ 3300
BULLETIN NUMBER: BBB Bulletin-17

SHIFT CABLE BRACKET FOR ALLISON ATM W/PTO

PURPOSE

To provide information for the installation of a revised ATM shift cable bracket and ATM shift selector arm (kit #MT9294930A) when installing a Power Take Off (PTO) unit on the drivers side of the Allison transmission.

DESCRIPTION

The clearance for the installation of a Power Take Off (PTO) assembly on the passenger (right) side of the transmission is not adequate due to the installation of the Diesel Particulate Filter (DPF) beginning with the 2008 Model Year Medium Trucks. The drivers (left) side of the transmission is the optimal location for installing the PTO assembly. However, it is necessary to replace the ATM shift cable bracket and the ATM shift selector arm to allow additional clearance between the ATM shift cable and the PTO assembly. The ATM shift cable bracket and ATM shift selector arm are available together from the NDA parts department as a complete kit, part # MT9294930A.

ATM SHIFT CABLE BRACKET AND ATM SHIFT SELECTOR ARM INSTALLATION

Before performing modification, read the entire set of instructions first.

- 1) Park truck on a level surface, put transmission in neutral, set parking brake, and chock wheels to prevent truck from rolling.
- 2) Remove the lower shield from the bottom of the truck.
- 3) Remove clip and washer from the end of ATM shift cable located on the ATM selector arm. Pull the ATM shift cable away from the transmission. (Figure 1)
- 4) Loosen the 2 large nuts that hold the ATM shift cable to the ATM shift cable bracket. (Figure 1)
- 5) Remove the 2 bolts that hold the factory ATM shift cable bracket to the transmission. (Figure 1)
- 6) Unhook the ATM shift cable from the ATM shift cable bracket and unbolt the wiring harness stay clip. Remove and scrap the ATM shift cable bracket in a manner that is consistent with local and state laws.
- 7) Loosen the four ATM shift cable clamps (2 shown) that hold the ATM shift cable parallel with the truck's frame. (Figure 1)
- 8) Pull the ATM shift cable back toward the front of the truck and reroute the last 24 inches of the ATM shift cable between the transmission and the driver's side motor mount. (Figure 2)

Important: Trucks equipped with block heaters will have wiring zip tied to the ATM shift cable. Be sure to remove wiring from ATM shift cable before performing Step #8 and re-zip tie once ATM shift cable has been rerouted.

BRACKET AND ARM INSTALLATION (CONTINUED)

- 9) Install the new ATM shift cable bracket using the bottom two holes on the side of the transmission. (Figure 2) **Torque bolts to 61 N•m (45 ft.lbs)**
- 10) Insert the ATM shift cable thru the notch in the ATM shifter cable bracket and tighten the two nuts evenly. (Figure 2)
- 11) Tighten the four ATM shift cable clamps (2 shown) that secure the ATM shift cable parallel to the frame. (Figure 2)
- 12) Remove the ATM shift selector arm from the transmission and install the new ATM shift selector arm included in the kit. (Figure 2) **Torque nut to 25 N•m (20 ft.lbs)**
Remove and scrap the ATM shift selector arm in a manner that is consistent with local and state laws.

Note: When torquing ATM shift selector nut, hold selector shaft in “N” (Neutral) position to prevent damage to the transmission.

- 13) ATM shift cable adjustment: (Figure 2)

The ATM shift cable must be adjusted to allow the transmission lever internal detent to be positioned correctly.

A) Place both the ATM shift selector and the transmission shift selector in the N (Neutral) position.

B) Adjust the ATM shift cable end to align with the hole in the ATM shift selector lever.

C) Verify that the ATM cable end does not bind in the ATM shift selector lever hole and that the detent in the transmission is positively engaged.

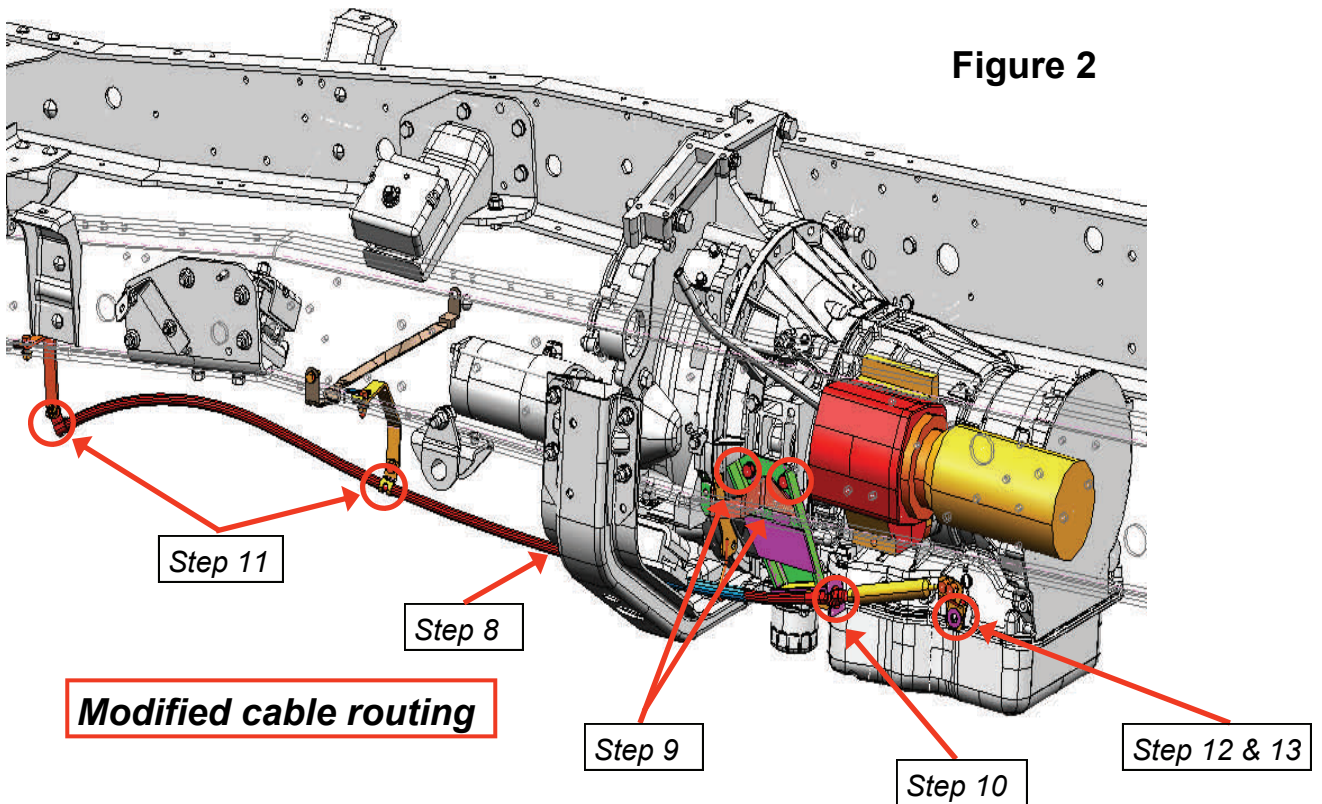
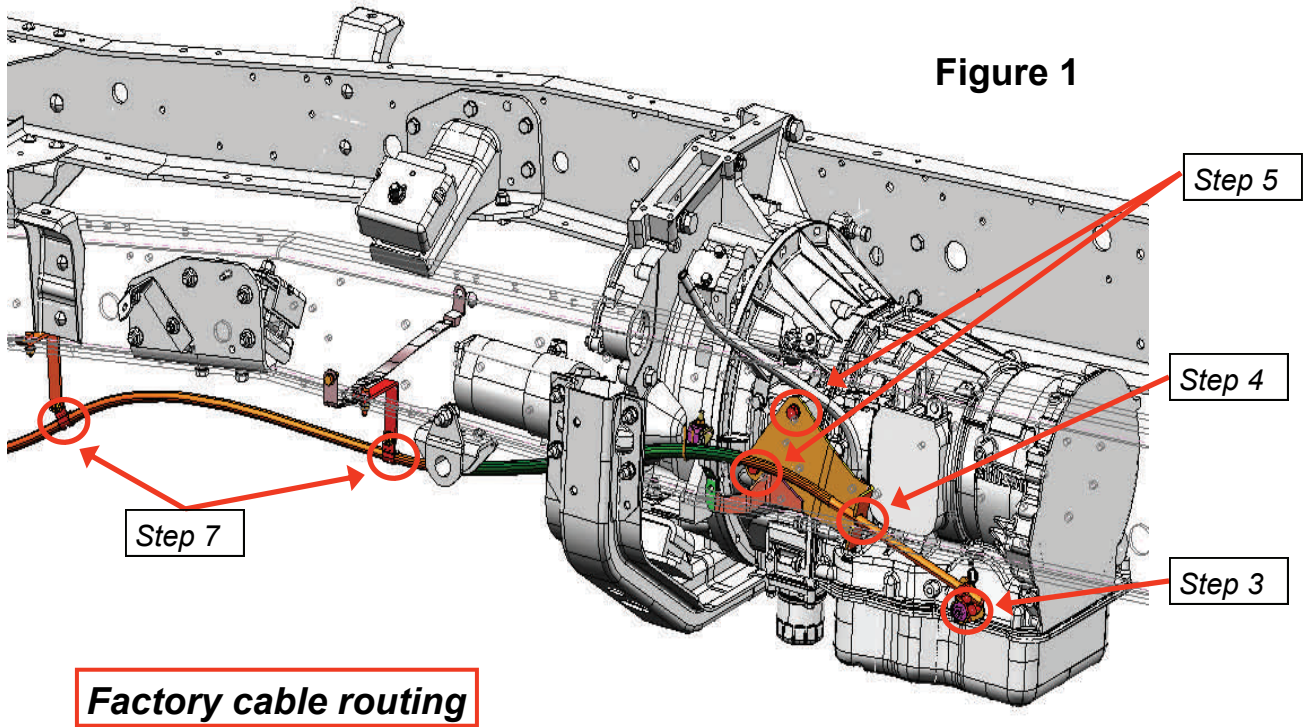
D) Move the ATM shift selector through all the range positions. Verify that the ATM cable end does not bind in the transmission selector lever in each range position and that the position of the shift lever is determined by the internal transmission detent. Secure the ATM cable end with the washer and clip.

- 14) Re-secure the wiring harness by installing a bolt in the stay clip on the ATM shift cable bracket.
- 15) Reinstall lower shield and check ATM shifter operation to complete this modification.



Completed installation above

BRACKET AND ARM INSTALLATION (CONTINUED)



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