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Subject: Updated Heavy-Duty Solo Clutch In-Vehicle Resetting Procedure

Document Number: CLIB0026

Date: February 11, 2013

Updated:

Issue Description:

The Eaton Heavy-Duty Solo Clutch Technical Support Team worked with truck dealership technicians to identify confusion with the current published process of the product's In-Vehicle Resetting Procedure.

The In-Vehicle Resetting Procedure for Heavy-Duty Solo Clutch published in the Eaton Heavy-Duty Clutch Service Manual, *CLSM0200* (May 2012), has been reviewed. Changes to *CLSM0200* are scheduled for Q2 of 2013 and will include the procedure outlined in this bulletin. Technicians are encouraged to use this procedure if they need to reset an Eaton Heavy-Duty Solo Clutch.

Revised Process:

The following process should improve the resetting experience if there is a need to reset an Eaton Heavy-Duty Solo Clutch. If additional assistance is required with resetting, please contact the Roadranger Support Line at 1-800-826-HELP (4357) or your local Eaton Roadranger Service Representative.

Solo Advantage Self-Adjusting Clutches

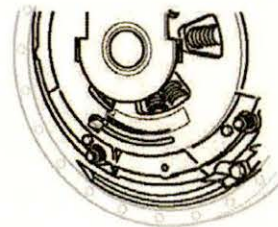
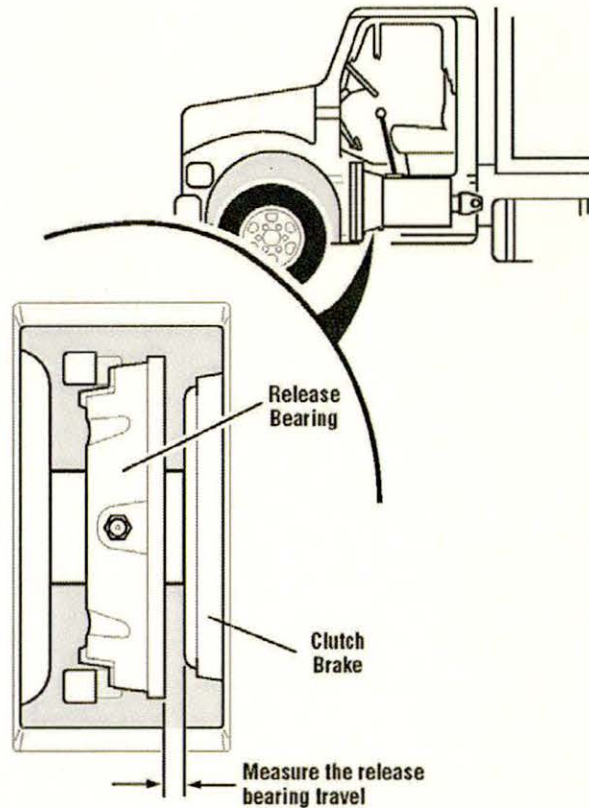
In-Vehicle Resetting Procedure

- 1** Determine if the release bearing travel is correct. Measure the distance between the clutch brake and the release bearing with the clutch pedal up. If the measurement is between 0.490" and 0.590", the Solo has set itself correctly.
- 2** If the release bearing travel is less than 0.490" the Solo must be reset. A common cause of this is the transmission was pulled in with the release arm during clutch installation.
- 3** Rotate the engine so that the cam tab can be reached through the transmission inspection opening.
- 4** Push the clutch pedal to the floor. While the clutch pedal is pushed to the floor have someone push the cam tab to the new position using finger pressure. Once the cam tab is pushed to the new position you can release the clutch pedal.

Note: If using a tool to assist with movement of the cam to the new position, use a blunt tool that will not damage the cam.

Note: If the cam tab does not move, there is not enough release bearing travel to allow the cams to separate. In this case, loosen the transmission and install 1/2" spacers between the flywheel housing and bell housing.

With the spacers in place push the clutch pedal to the floor while someone pushes the cam tab to the new position. Once the tab is in the raised area at the new position, release the clutch pedal and remove the spacers. Torque the transmission mounting bolts.



Solo Advantage Self-Adjusting Clutches

- 5** Install (4) shipping bolts and progressively tighten until they bottom out.

⚠ Caution: Only use hand tools to tighten shipping bolts. Do not use air tools.

Rotate the engine to access all 4 bolts:

- 15 1/2" Solo use 7/16 x 14 UNC x 1 3/4"
- Stamped 14" Solo use 3/8 x 16 UNC x 1 1/4"

Note: This will reset the pressure plate separator sleeves and allow the clutch to release after installation.

- 6** Remove the (4) shipping bolts. The release bearing and sleeve will move forward towards the engine when the bolts are removed. The Solo is now in the new position.

Note: If the procedure was performed correctly, the gap between the release bearing and clutch brake should be about 0.750 inches.

- 7** With the free pedal removed push the clutch pedal down at least 5 times. Make sure the clutch release bearing contacts the clutch brake.

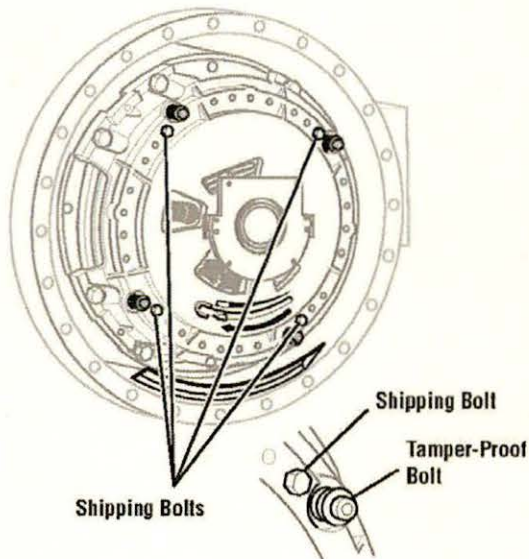
Note: For mechanical linkage, while engaging and releasing the clutch, the cab free pedal will increase. This indicates the Solo is adjusting to the environment.

Note: For hydraulic linkage, be sure to stroke the clutch pedal all the way to the floor, ensuring that the release bearing is being stroked far enough for the clutch to make an adjustment. With a hydraulic release system there will be no change in free pedal when the Solo clutch makes an adjustment.

- 8** Measure the distance between the clutch brake and the release bearing. It should be between 0.490" and 0.590".

- 9** If the release bearing travel is still greater than 0.590" between the clutch brake and the release bearing, repeat **Steps 7 and 8**.

- 10** For mechanical linkages, adjust the clutch linkage to achieve 1/8" clearance between the release yoke and the release bearing. Verify proper clutch brake squeeze.



Resetting

Solo Advantage Self-Adjusting Clutches

Verify Clutch Brake Squeeze

⚠ WARNING

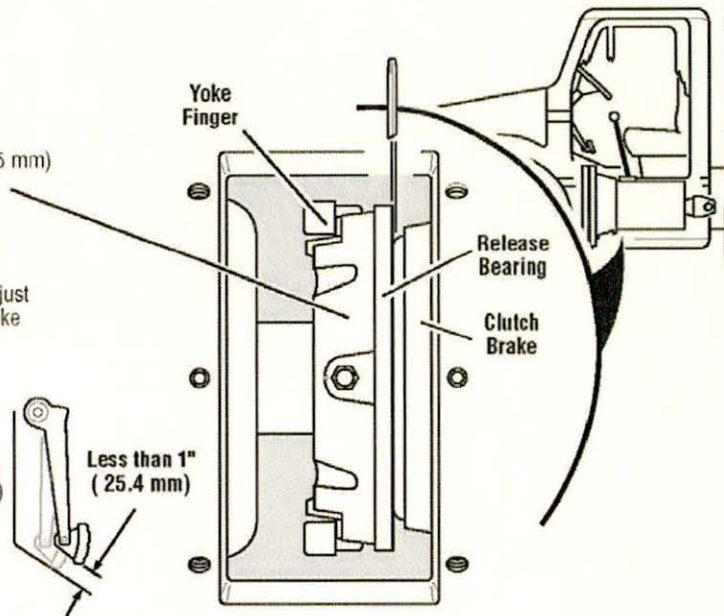
Use a gauge long enough to keep hands away from moving parts.

- 1 Have an assistant insert 0.010" (0.25 mm) feeler gauge between the release bearing and the clutch brake. Press the pedal down to the floor to clamp the gauge:

- If the gauge does not clamp, readjust the truck linkage and move the yoke finger closer to the bearing.

- 2 Slowly let up on the pedal and measure the pedal position at the moment the gauge can be removed:

- If pedal is more than 1" (25.4 mm) from the floor, readjust the truck linkage to move the yoke fingers further from the release bearing. Repeat **Step 1**.



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