

TECHNICAL BULLETIN

RICO TECHNICAL BULLETIN: DESCRIPTION: ISSUE DATE: ISSUED BY: REVISION: ESTIMATED BOOK LABOR: VEHICLES EFFECTED: 2012-01 Emergency Disconnect Plunger Plug February 1, 2012 Brian Willingham-Service Manager REV. 2 3.0 Hour(s) E-30929, E-30991, E-30977, E-30978, E-30979, E-30995, E-30999, E-31001, E-31010, E-31013, E-30898, E-30923, E-30929, E-30919, E30912, E-30903, E-30904, E-30905

SUMMARY: The emergency disconnect plunger plug was found to be hollow in the center and is required to be made from a solid plug. The hollow plug does not provide the required flame path protection distance from the main electrical box to the outside environment.

Failure to have this modification installed could result in electrical spark exposure.

PARTS SUPPLIED BY RICO Quantity 1, RICO part number 90500027

Should you experience any difficulty performing this work, please contact:

Brian Willingham Service Manager RICO Manufacturing, Inc. 691 W. Liberty Street Medina, OH 44256 USA

Phone: 330-723-4050 Ext: 219 Fax: 330-722-6980

> Office Hours Monday through Friday 8AM to 5PM EST



EMERGENCY DISCONNECT PLUNGER PLUG INSPECTION

Before performing any service on model DSD-EX the vehicle must be moved to a safe non-hazardous location.

DISASSEMBLY INSTRUCTIONS

1. Disengage emergency disconnect contactor by pressing down on button, thus opening the contactor in main electrical box. Unplug battery connector to eliminate the power to electrical components.



2. Remove counter weight cover to access plunger assembly next to the main electrical box.



3. Locate uni-ball connected to the emergency disconnect pivot arm that is on the side of electrical box.





- 4. Loosen jam nut that locks the uni-ball in place.
- 5. Remove cotter pin and clevis pin that attaches the uni-ball to disconnect linkage pivot arm.



6. Remove 3/8 socket head shoulder bolt that retains disconnect pivot arm to chassis.

7. Remove uni-ball and jam nut from plunger rod and mark the plunger plug location to electrical box. This will be used to aid in re-installing plunger plug if the plug is made from solid material.



8. Remove plunger plug and inspect the plug body to see if plug is hollow or solid.





INSPECTION INSTRUCTIONS

1. Hollow body plugs are to be removed and returned to Rico. These plugs are to be noted on the inspection warranty report in section 2 and replaced with the supplied solid plug.



2. Solid body plugs are to be re-installed back into electrical box by following reassembly instructions. These plugs are to be noted on the inspection warranty report in section 1 and the report sent back to Rico.





REASSEMBLY INSTRUCTIONS

1. Reinstall solid plunger plug over the plunger rod and tighten plug into electrical box. When tightening plug, plug threads must achieve a minimum thread engagement of 5 full thread counts into the electrical box housing. Solid plugs that are marked in disassembly stage need to be lined up with the marking on the box to ensure plunger hole realignment.

2. Reinstall plunger rod jam nut and tighten down until jam nut has bottomed out on the threaded rod.

3. Reinstall uni-ball onto the plunger rod until the uni-ball contacts the jam nut.

4. Reinstall disconnect linkage pivot arm with the shoulder bolt to chassis.

5. Adjust uni-ball on plunger rod for proper alignment with disconnect pivot arm hole. Insert clevis pin through the pivot arm hole continuing through the uni-ball hole as well. Install cotter pin through clevis pin hole. Bend the cotter pin leg 90 degrees to ensure clevis pin is retained. Lock jam nut onto uni-ball locking uni-ball in place.





TESTING DISCONNECT

1. Remove electrical box cover to view disconnect contactor and store box lid in a secure manner to prevent damage to the machined lid face. This surface must be protected from scratches and dents.



2. Unbolt electrical front pivot plate inside electrical box to access emergency disconnect contactor.





3. Locate emergency disconnect contactor inside the electrical box. The contactor is directly on the other side of the plunger plug assembly you have just installed on the outside of the electrical box.



4. Test emergency disconnect contactor by disengaging (pushing down) on the emergency disconnect button and engaging (pulling up) on the button to ensure proper movement. You should be able to hear the movement of the contactor tips connecting or disconnecting mechanically.



5. Visibly inspect the position of the contactor tips to see if they are in the open or closed position.
a) Emergency disconnect contactor will be in the fully opened position when the emergency disconnect push button is pressed down (disengaged). This will disconnect the power at the contactor.





b) Emergency disconnect contactor will be in the fully closed position when the emergency disconnect push button is pulled up (engaged). This will reconnect the contactor tips by closing them and restoring power.



6. Repeat this testing process until you have verified the disconnect function is fully operational and the contactor is working properly. Now restore power by plugging the battery in and testing this same process.

7. Once you have achieved proper operation of the emergency disconnect contactor you are ready to install the electrical enclosure cover. Reinstall the 3/8 x 16 HH bolts and torque evenly across the lid to 22 foot pounds each.





10. Reinstall the counter weight cover and tighten bolts.



WARRANTY CLAIM REIMBURSEMENT INSTRUCTIONS

- 1. Follow all instructions for assembly, reassembly, and testing.
- 2. Return hollow plugs back to BPR-RICO Manufacturing within 7 days of repair.
- 3. Fill out warranty claim information sheet that has been provided by BPR-RICO Manufacturing Customer Service Department.

4. Your account will be credited or paid out within 30 days of the return of all paperwork and/or parts when required.