



# Technical Service Bulletin

**Technical Service Bulletin:** TSB220216

**Released Date:** 01-Nov-2022

**C500D6RE Exhaust Bellow Cracking Issue**

## C500D6RE Exhaust Bellow Cracking Issue

### Warranty Statement

The information in this document authorizes specific changes to the repair practice for failures covered under product warranty coverages.

### Contents

#### Product Affected

- C500D6RE

#### Issue

Symptom:

- Melted downpipe blanket
- Melted insulation panels from hot exhaust
- Exhaust gas leaking inside enclosure

Root Cause:

- Assembly issue putting pressure on the exhaust bellow causing it to crack

#### Verification/Confirmation

Inspect both ends of the exhaust insulation for soot. If soot is found remove the insulation and inspect the bellow.

Inspect the ceiling area and exhaust insulation above the radiator. If any melting is observed, proceed to the resolution to replace the exhaust bellow.

#### Resolution

On generator sets that experience exhaust bellow failure, the damaged exhaust pipe assembly will be removed and replaced with new Girtz supplied parts. Careful attention must be paid when assembling the new exhaust assembly to ensure that the bellow is installed in a neutral state.

Refer to the service instructions for repair steps and the service parts availability for part numbers and steps to get parts.

### Service Instruction

#### Step 1: Remove Roof

- A. Two roof panels of the enclosure need to be removed to allow access to the exhaust assembly
- B. Cut caulk between roof panels



Figure 1, Roof Removal

- C. Remove exhaust support bracket from roof - **Note** : Only the bottom nut needs to be removed from the all-thread rod (the rod can remain attached to the roof)

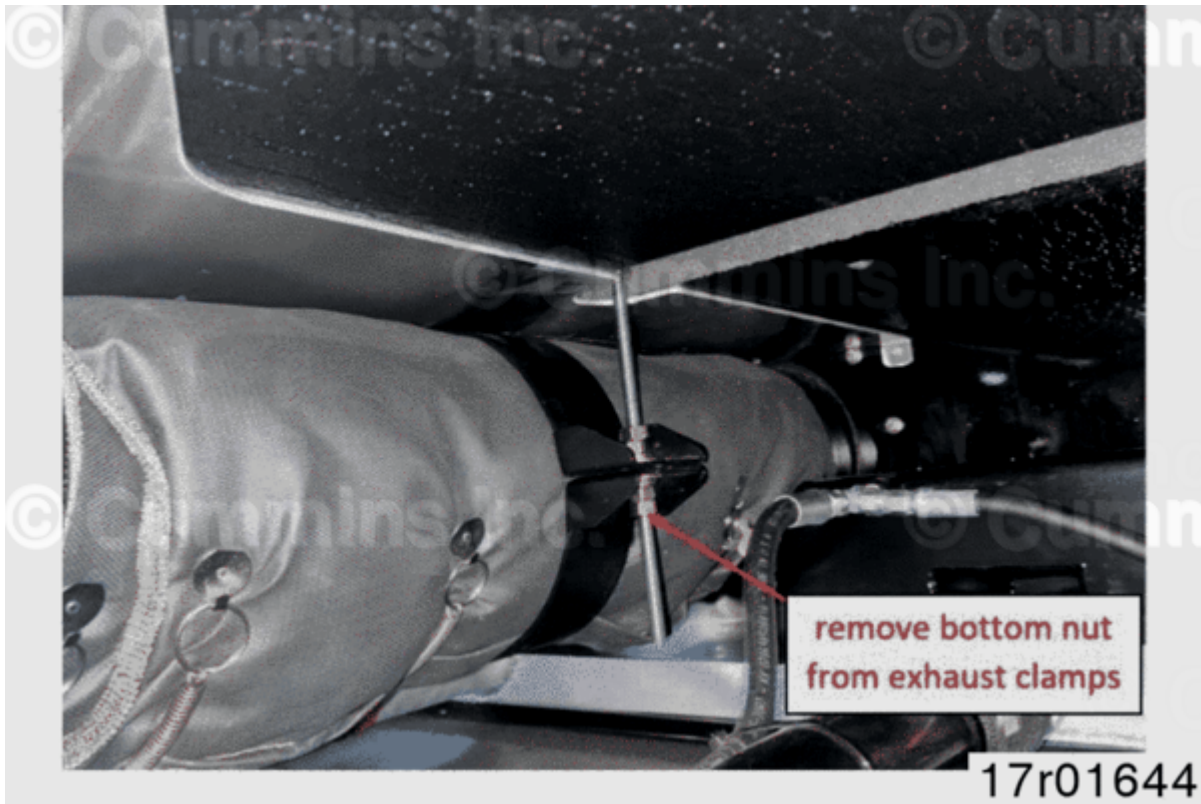


Figure 2, Exhaust Clamp Removal

D. Remove all necessary bolts – **Note:** Enclosure hardware will be reused



Figure 3, Exterior Roof Mounting Bolts

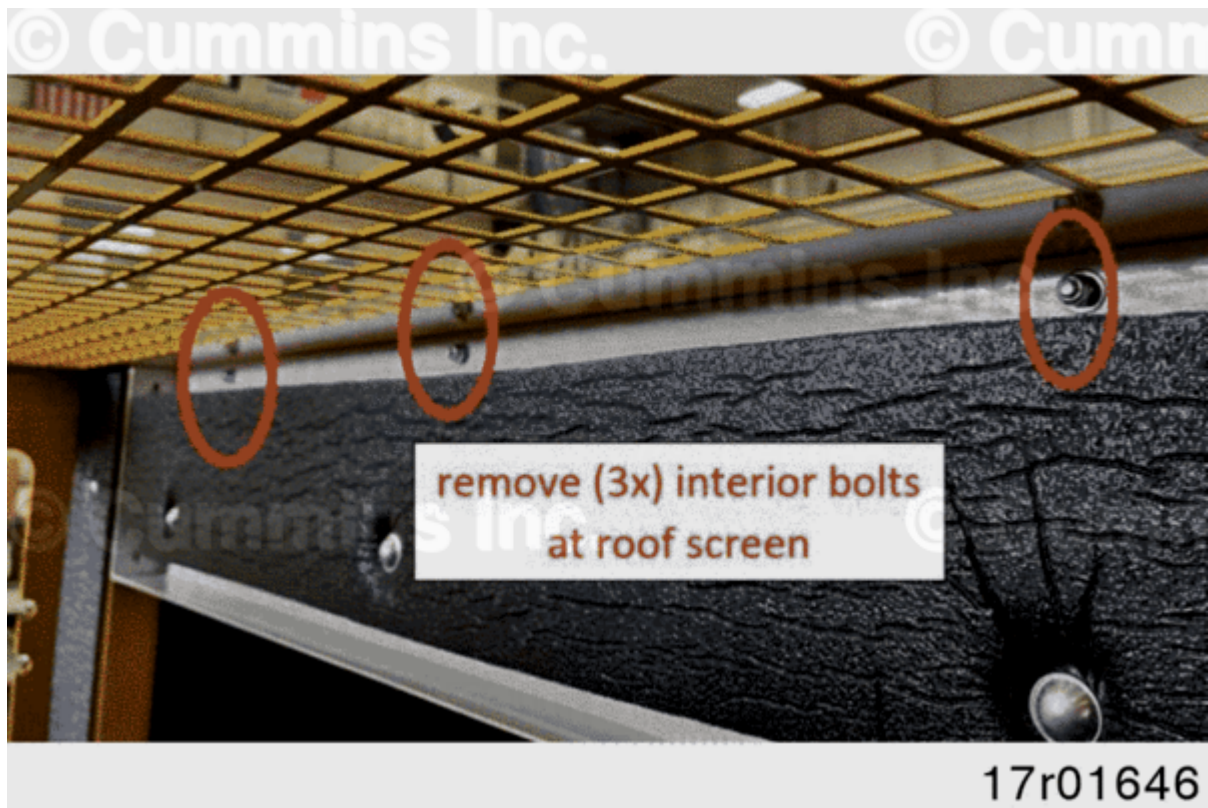


Figure 4, Interior Roof Mounting Bolts





Figure 5, Hidden Interior Roof Mounting Bolts

E. Lift roof off unit – **Note:** Panels can be separated or lifted together as shown

**Warning: Use caution when lifting. Follow all local lifting regulations.**



Figure 6, Removing Roof

**Step 2:** Remove damaged pipe assembly

- A. Drill out rivets holding heat shield to divider wall and remove heat shield



Figure 7, Heat Shield Mounting Rivet

- B. Remove insulation wrap from pipes
- C. Remove SS band clamp at turbo elbow



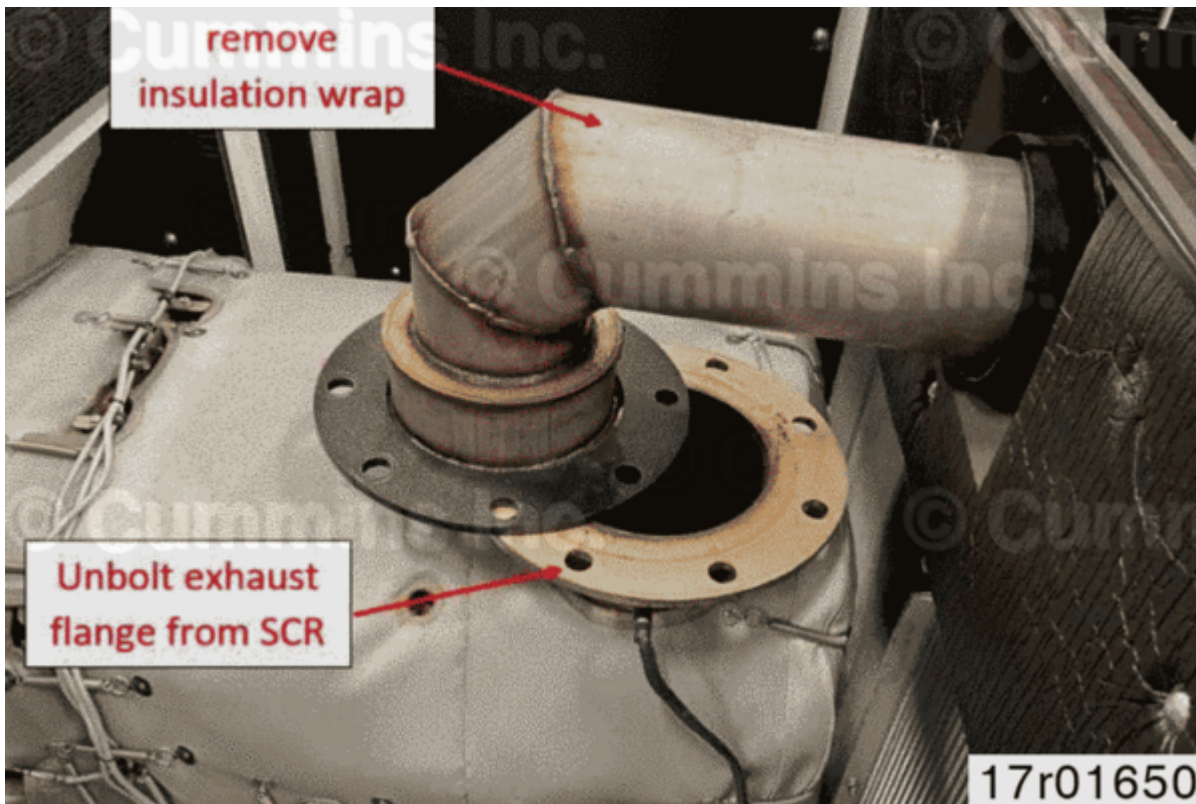


Figure 8, Remove Insulation Wrap on Exhaust

D. Remove SS band clamp between pipe assemblies

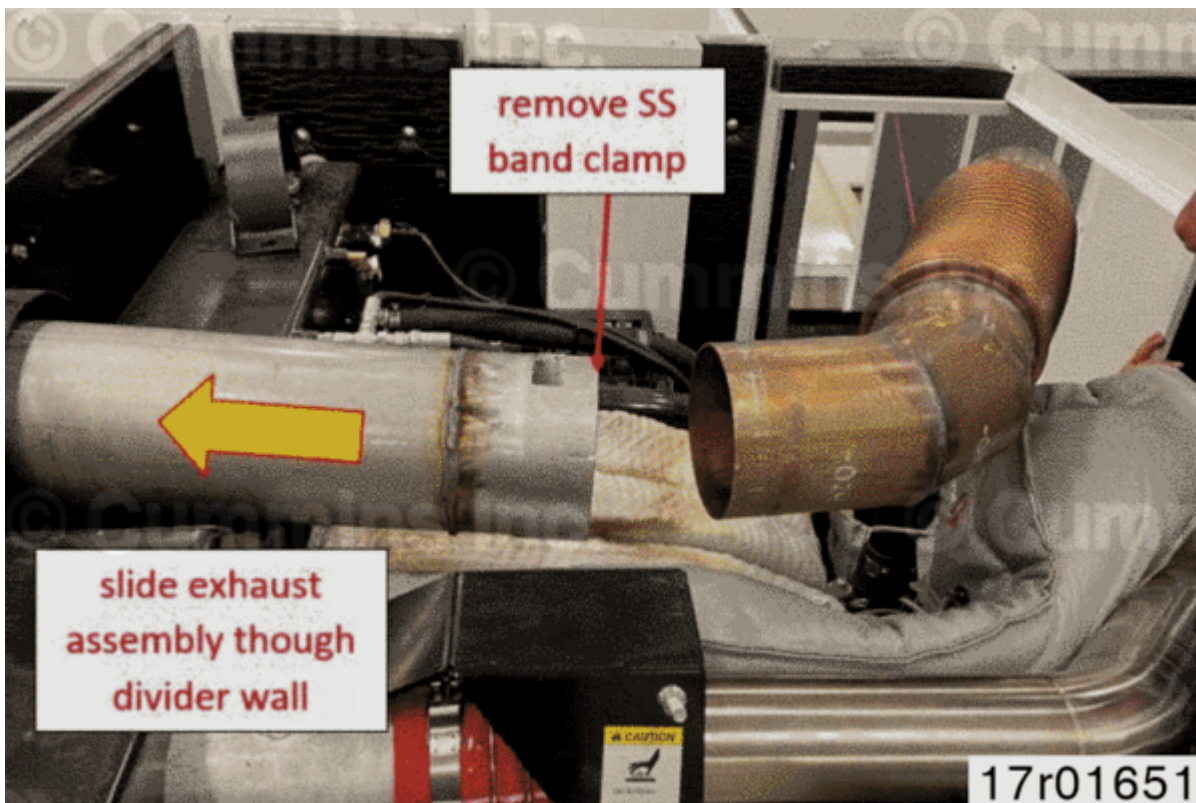


Figure 9, Exhaust Joint



## E. Unbolt exhaust assembly from SCR (Selective Catalytic Reduction)

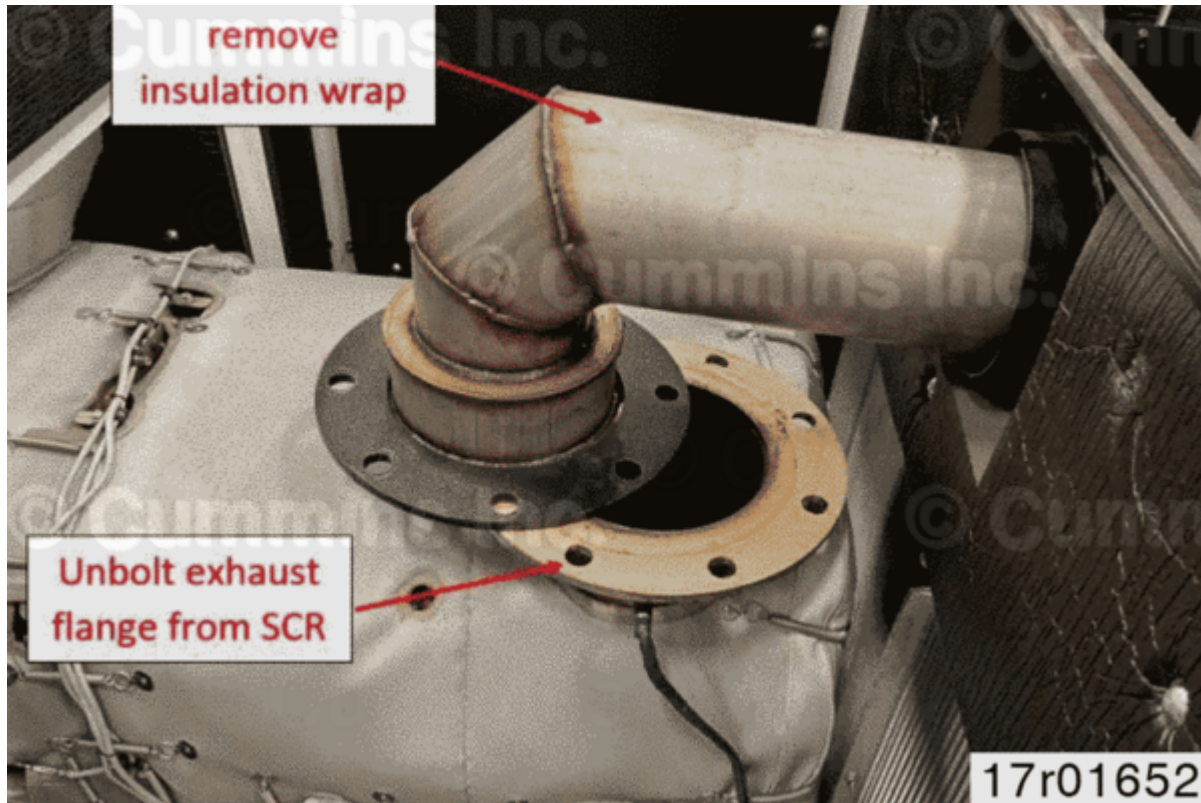


Figure 10, Unbolt Exhaust from SCR

**Step 3:** Install new pipe assembly (**Note:** Assembly order needs to be followed to ensure bellows is in neutral position)

A. Slide **EXT29-0002-W11** through divider wall



Figure 11, New Exhaust Section

- B. Bolt **EXT29-0002-W11** to SCR with **GSK-ANS08-T-STK** exhaust gasket
- C. Slide **EXT29-0002-W10** into **EXT29-0002-W11** (Do NOT install Riker Band Clamp at this point)

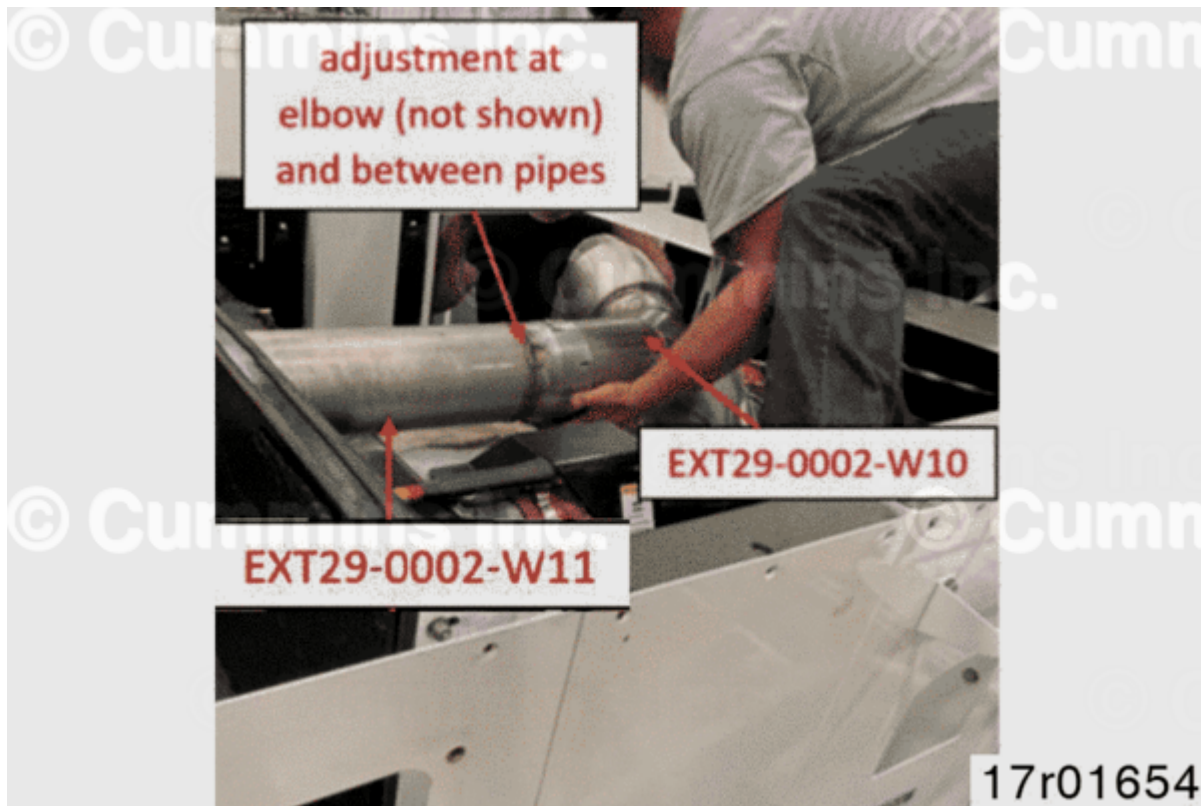


Figure 12, New Exhaust Adjustment

D. Slide **EXT29-0002-W10** over turbo elbow (Do NOT install Riker Band Clamp at this point)

**Note:** ensure bellow is in a neutral position – If centerline of bellows is not in-line with adjacent tubing, adjust assemblies at the overlap joints until all offsets are removed



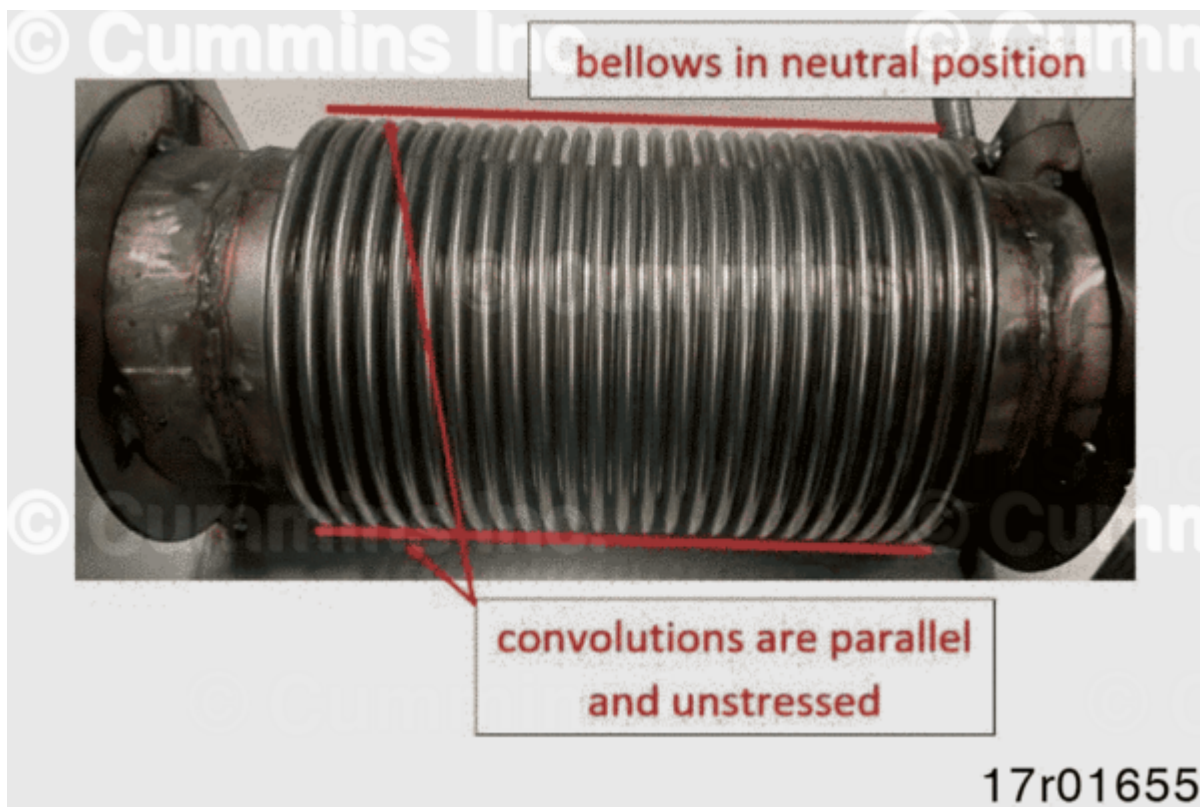


Figure 13, Neutral Bellow Reference

- E. Install **RIKER-TEC600** at each joint
- Ei. Evenly tighten bolts and torque to 50lbs
- F. Double check bellows is still in neutral position

**Step 4: Reassemble**

- A. Install insulation wrap
- B. Install top portion of exhaust clamp under heat shield
- C. Rivet heat shield to divider wall
- D. Install roof panels

**Warning: Use caution when lifting. Follow all local lifting regulations.**

- E. Caulk roof seam
- F. Install exhaust support clamp

End of repair

**Warranty Claim filing instructions:**

For failures claimed before August 2022, parts will be provided by Girtz without a Purchase Order (PO). For failures after August 2022 but within product warranty, a PO to purchase parts from Girtz will be required. Include PO amount in warranty claim.

Fail Code: OXEUBR

Account Code: 67

Applicable SRTs:

00-901: 0.4 hours- Administrative time (shop)

99-999: 16 hours- Exhaust bellow repair

To order replacement parts outside of warranty, contact Girtz via email at sales@girtz.com

**Note: repairs and parts outside of warranty will not be covered by Cummins Inc. and responsibility of the customer.**

**Service Parts Availability**

Service parts are to be ordered from Girtz via email at warranty@girtz.com

See Table 1 for part numbers.

**Table 1, Service Parts**

Part Description	Part Number
6" Exhaust Assembly (engine side)	EXT29-0002-W10
6" Exhaust Assembly (SCR side)	EXT29-0002-W11
6" Stainless Steel Band Clamp	RIKER-TEC600
8" Exhaust Gasket	GSK-ANS08-T-STK
Exhaust Wrap (if necessary)	EXT29-0002-R01
Rivet	RIV.AL.T.187-3_8
Caulk	DOWSIL 700 INDUSTRIAL GRADE SILICONE SEALANT

**Document History**

Date	Details
2022-10-21	Module Created

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**Last Modified: 01-Nov-2022**

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