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Title: Durastar & MV Air Compressor Inlet Hose Rubbing

Applies To: Durastar & MV equipped w/Cummins ISB / B6.7

CHANGE LOG
Please refer to the change log text box below for recent changes to this article:

09/30/2021- Added bus platform
08/31/2021- Updated article adding Durastar and previous CAC routing
08/05/2021- Added vehicle assembly plant and production dates
06/30/2021- Responded to feedback updated article adding warranty group and noun
06/14/2021- Updated article reflecting steps for diagnostic trouble codes and procedures.

DESCRIPTION

Navistar has identified that in some circumstances the Air Compressor Inlet Hose from the Charge Air Cooler, may chafe due to insufficient route and clip. The description and images below offer instruction on sufficient route and clip.

SYMPTOM(s)

Diagnostic Trouble Code(s) & Dashboard Indicator Light(s):

DTC/Light	Description
SPN: 411 FMI: 2 (Cummins 1866)	EGR Differential Pressure - Data Erratic, Intermittent, or Incorrect
SPN: 102 FMI: 10 (Cummins 3361)	Intake Manifold Pressure - Abnormal rate of change
SPN: 3058 FMI: 18 (Cummins 3382)	EGR System - Data valid but below normal operating range
SPN: 3058 FMI: 10 (Cummins 3389)	EGR System - Abnormal rate of change

Customer Observations or Concerns:

- Air compressor inlet hose chaffed
- Turbo boost air leak at the air compressor inlet hose
- Check engine light

SPECIAL TOOL(s) / SOFTWARE

Tool Description	Tool Number	Comments	Instructions

N/A			

SERVICE PARTS INFORMATION

Durastar & MV (11/18/2019 to current production)

Kit Description	Part Number	Quantity	Notes
HOSE, AIR COMPRESSOR, 1 IN ID	6132813C2	1	Only required if chafed or leaking

Durastar (vehicles built between 5/31/2017 to 11/18/2019)

Kit Description	Part Number	Quantity	Notes
ELBOW HOSE	413729C1	1	Only required if chafed or leaking

DIAGNOSTIC STEP(s)

NOTE:
If an engine has experienced a failed air compressor hose and check engine light with active or inactive fault codes: 1866, 3361, 3382 and or 3389. Please refer to Cummins Inspection & Cleaning Procedure Air Intake Connection and Service Bulletin 5579934 for further information. Proceed with hose replacement after cleaning and inspection has been completed.

NOTE:
If a hose is found to be chafed or leaking with no fault codes present proceed with hose replacement and routing steps listed below.

NOTE:
Reference Cummins Inspection & Cleaning of Air Intake Connection

1. Bring vehicle into shop and park on a flat surface
2. Shift transmission into park or neutral, set parking brake, and install wheel chocks
3. Open the hood
4. Remove charge air cooler hose, cut tie straps if needed
5. Inspect air compressor inlet hose for chafing or leaks
6. If chafing or leaks are found, replace hose
7. Route and clip hose per instructions below

REPAIR STEP(s)

Note:
Vehicles built after 11/18/2019 will have the air compressor supply hose routed back to the CAC. The

CAC has been updated with a new design to include an internal snorkel.

Route and Clip Requirements: (Vehicles built after 11/18/2019 to current production)

1. Air Compressor Intake Hose clipping point on the CAC pipe shall be centered horizontally and securely fastened with a saddle & tie strap (Figure 1)

2. Air Compressor Intake Hose clipping point to the saddle tie strapped on the CAC pipe shall be centered vertically on the CAC pipe and securely fastened with a tie strap (Figure 2)

3. Air Compressor inlet hose routing shall be routed above and parallel to the fuel line, positioned in the highest clipping point in the stanchion bracket, and securely fastened with a tie strap (Figure 3)

4. Tie straps located near the driver side motor mount shall have the sharp trimmed edges of tie straps rotated away from the Air Compressor Inlet Hose so sharp edges face the motor mount (Figure 4 & 5)

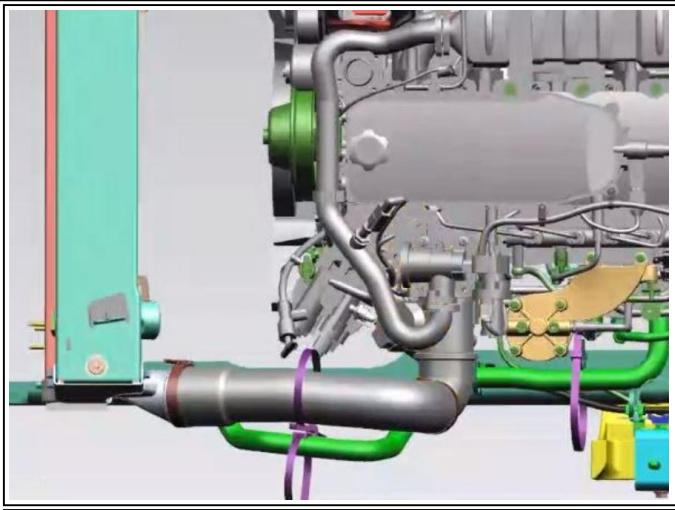

Figure 1: Top View- CAC pipe saddle & tie strap centered

Air Compressor Intake Hose clipping point on the CAC pipe shall be centered horizontally and securely fastened with a saddle & tie strap

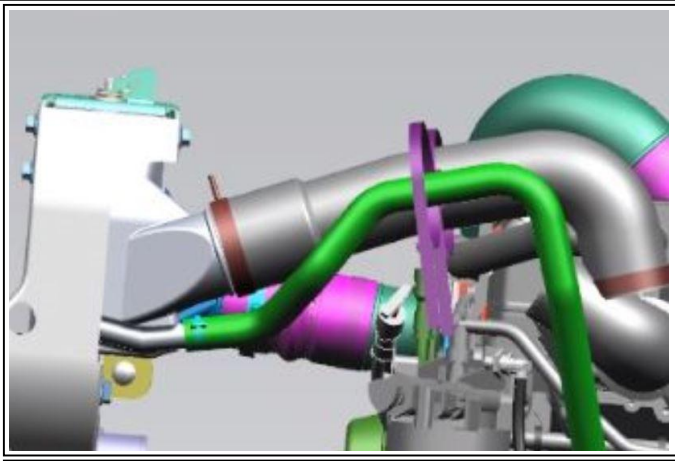

Figure 2: Side View- CAC pipe saddle & tie strap centered

Air Compressor Intake Hose clipping point to the saddle tie strapped on the CAC pipe shall be centered vertically on the CAC pipe and securely fastened with a tie strap

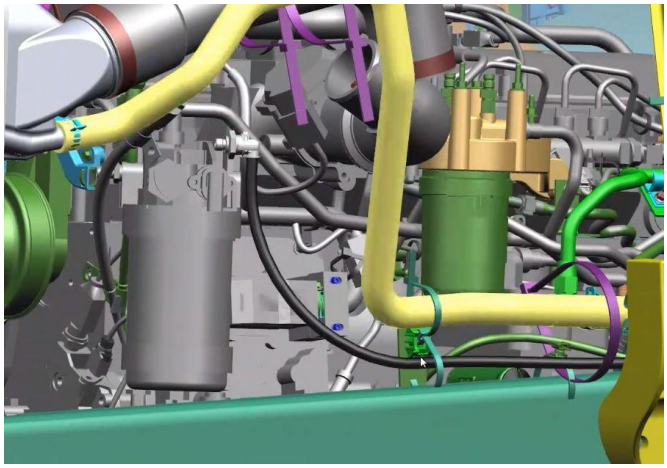

Figure 3: Air Compressor Inlet hose routed above fuel line

Air Compressor inlet hose routing shall be routed above and parallel to the fuel line, positioned in the highest clipping point in the stanchion bracket, and securely fastened with a tie strap

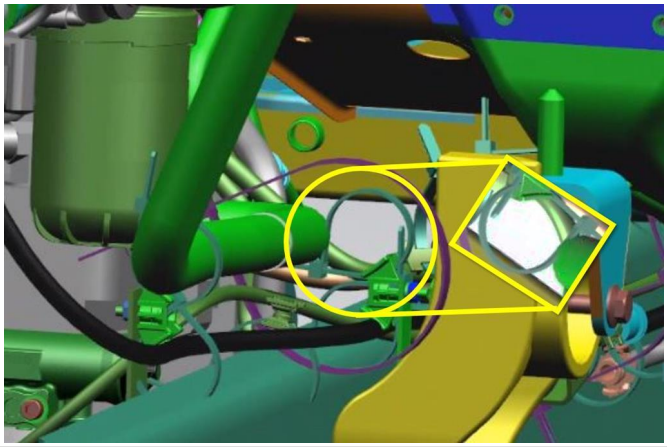

Figure 4: Rearward projection- Sharp Edge rotated to away

Tie straps located near the driver side motor mount shall have the sharp trimmed edges of tie straps rotated away from the Air Compressor Inlet Hose so sharp edges face the motor mount

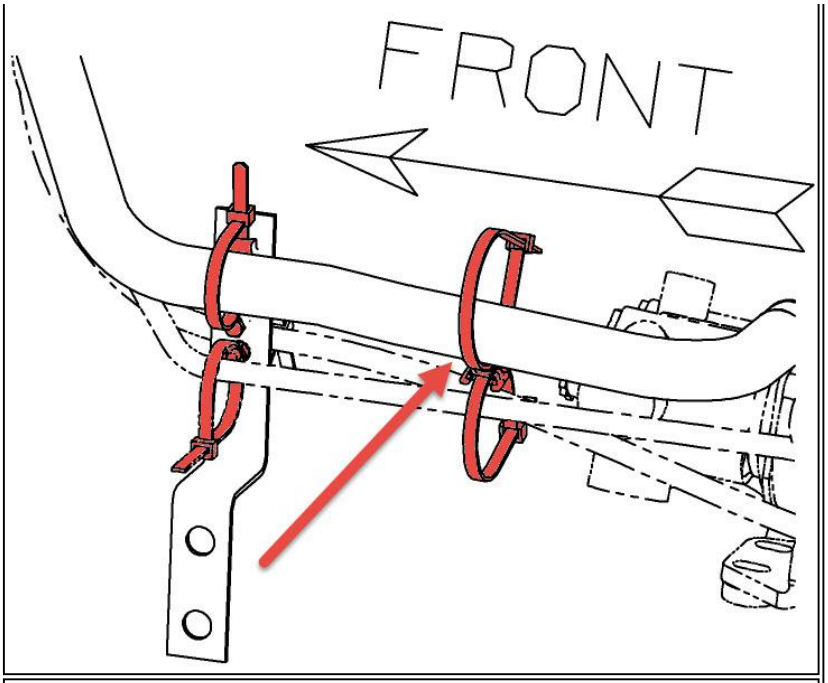

Figure 5: Air Compressor End Securement

Item 1: Ensure zip ties are located to prevent airline to hose chafing

5. Start engine and check for leaks

6. Close hood

7. Remove wheel chocks

REPAIR STEP(s)

Note:
Vehicles built between 5/31/2017 and 11/18/2019 will have the air compressor supply hose routed to the CAC piping per the images below.

1. Verify routing and clipping as followed.

Figure 5: New CAC piping installed

Figure 6: Air Compressor Inlet Hose

Item 1: Air compressor inlet hose cut and installed

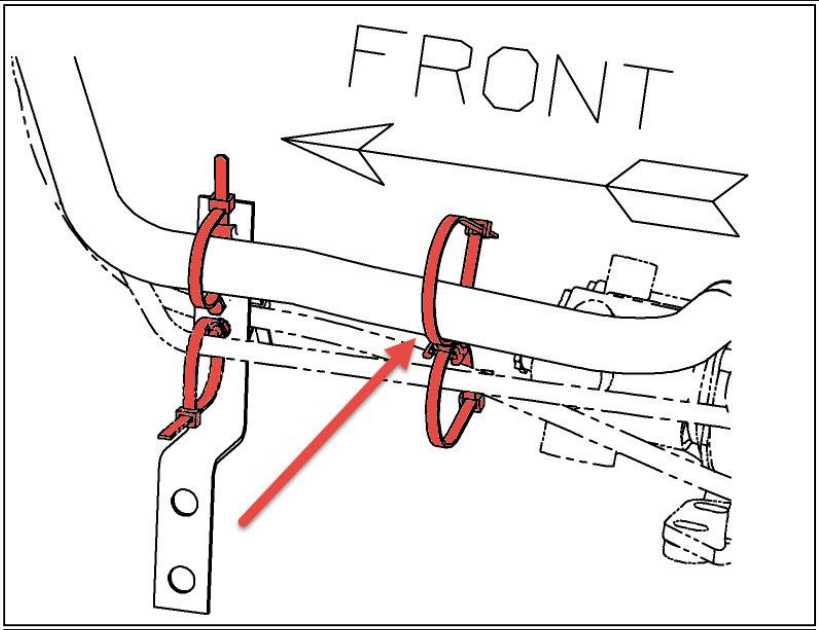

Figure 7: Air Compressor End Securement

Item 1: Ensure zip ties are located to prevent airline to hose chafing

2. Start engine and check for leaks

3. Close hood

4. Remove wheel chocks

WARRANTY INFORMATION

Warranty Claim Coding:

Refer to the Warranty Coding Manual for Group and Noun Codes.

Standard Repair Time(s):

Refer to the SRT Manual for Repair Times

Group:	04091- Air Brake System
Noun:	352

OTHER RESOURCES

Master Service Information Site

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