

## Cummins 2007 & 2010 Engines with Rear Gear Housing Drive Air Compressors

#### Complaint -

There is an oil leak at the air compressor. Upon further investigating you can see that the flange is cracked (Figure #1). And while disassembling it is evident that there is pressure between the bracket which mounts to the engine block and the compressor flange. Which are held together with 2 "M10 X 1.50 X 20" bolts. (Item #3 in figure #2). What we have also found is that there is pressure between those brackets and in some cases the bolts have broken.

#### Cause -

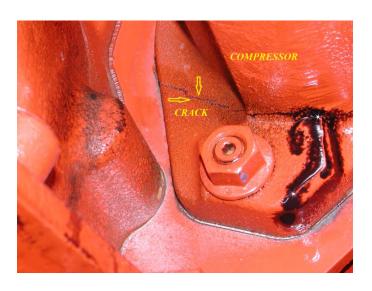
It has been our experience that when the 2 bolts are loosened, there is as much as 3/16" gap in those brackets which puts undue strain on the compressor flange causing the issue or as previously mentioned breaks the bolts.

#### Correction -

**Wha**t we have found and recommend is loosening the 2 - "M10 X 1.50 X 20" bolts to see if there is pressure between the brackets. If there is a gap which would indicate pressure we recommend the following

- Removing both support brackets from the vehicle and inspect closely (replace if necessary)
- Inspect the air compressor flange for cracks (replace if necessary)
- Using Figure #4 as a guideline INSTALL ALL THE BOLTS FINGER TIGHT AND THE TORQUE AS FOLLOWS
  - o Torque the 2 "M12 X 1.75 X 25" bolts in the block to 57 ft/lb (77n/m)
  - Torque the 2 "M10 X 1.50 X 25" compressor support bracket bolts to torque to 32 ft/lb (43n/m)
  - O Torque the 2 "M10 X 1.50 X 20" bolts between the brackets to 32 ft/lb (43n/m)

### PLEASE NOTE – It is recommended to check these bolts and brackets during your PM Inspection!!!



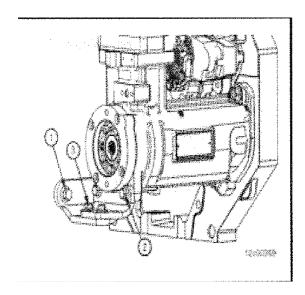


Figure #2

Figure #1



Air compressor failure can result if any of the mating surfaces are not touching prior to tightening.

Verify the air compressor support bracket is contacting the cylinder block support bracket. Adjust the brackets as necessary. If necessary, loosen the cylinder block support bracket to align the components.

Tighten the air compressor support bracket mounting capscrews (1).

If loosened, tighten the cylinder block support bracket cylinder block mounting capscrews (2).

Tighten the compressor support bracket to the cylinder block support bracket mounting capscrews (3).

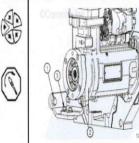




Figure #3 Figure #4

# BRACE – Air Compressor (Comp Hsg) #3955092 BRACE – Air Compressor (Eng Block) #4929461 Bolt #1 – M12 X 1.75 X 25 #3901249 Bolt #2 – M10 X 1.50 X 25 #3902460

#3903990

Bolt #3 - M10 X 1.50 X 20

#### Contact Our Service Department With Any Questions

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