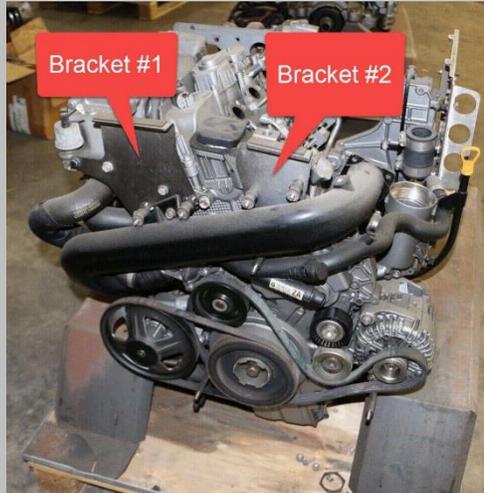


Fatigue Cracks in Yanmar 4BY2 Engine Cover Brackets

Where the problem occurred

The two brackets which support the front of the sheet metal engine dress cover developed stress cracks after 1700 hours of engine operation.

(Note: Engine shown is not mine)



Bracket #2

This bracket was fracture completely thru. It was in two pieces when disassembled.



Bracket #1

This bracket had a long fracture near the mounting holes near the bottom.



Corrective Action

<p>Bracket #1</p> <p>Drilled a thru hole at the end of the fracture to prevent further propagation. Used an Angle Grinder to bevel the edges of the fracture and then welded the two sides together</p>	
<p>Bracket #2</p> <p>Beveled edges of fracture and welded two pieces together. Welded steel piece to reinforce the area which fractured.</p>	

Replaced Vibration Isolators

- Ordered the following vibration isolators on EBay.
 - 4pcs D20 x H20 Rubber Vibration Isolator Mounts Shock Absorber M6 x 18mm Studs. Cost ~ \$12.00
 - Cut the threaded stud on each side to the desired length.

Replaced Rubber Sheet Wear Surface

- Replaced rubber sheet on the surface on which the engine cover rests with 1/8" HDPE.
- Attached with threaded fasteners which sit below flush.

