Link to CF Thread

Fawn Deuce

Changing water pump in my '62; special tips?

Hi,

I see traces of antifreeze around the weep hole, so I figure time to get it rebuilt...

I plan to support the block from underneath, any other special tricks or tips to replacing the pump?

Thanks,

Paul

PS I do have the ST-12 on order with Paragon, but still not here yet.

JohnZ

Check both sides of the engine mount bracket carefully for pits or corrosion damage at the pump leg locations; it won't seal there if it's badly pitted.

Use a film of RTV or gasket sealer on both sides of both gaskets on each side (you need four gaskets, not two). To assemble the "sandwich" of parts without smearing off the sealer, get a couple of 3/8"-16 studs, put one in each top water pump bolt hole in the block, and install the gaskets, motor mount bracket, gaskets, and pump on the studs; then install the bottom two bolts, remove the studs, and install the top two bolts. Use thread sealer on all the bolts - they go into the water jacket and will leak through the threads if they're not sealed.

Don't jack under the pan to support the engine; make a "saddle" out of wood scraps that will support it on the pan rails. The base is a 2x6, and the sides are 1x6, tall enough to provide 1" clearance between the bottom of the pan and the base of the saddle.



https://www.corvetteforum.com/forums/c1-and-c2-corvettes/1409019-c1-bracket-in-front-of-engine.html

K2 Post 17#

I've posted the procedure several times before but here it is again for those who missed it. Note: If your motor mount shows significant amount of corrosion around the water passages, purchase a new motor mount before doing this procedure. Unfortunately I didn't take pictures of my installation when I did it but I have made a sketch, from memory, of the approximate location of the dowels. You should be able to figure out best dowel placement from the sketch and description.

- 1- With the water pump and motor mount removed look at the two areas on the block where the water pump legs mount. Select one spot on the flat machined bosses on each side where there is room to place a 5/16" dowel and which also would pass through the motor mount plate without getting too close to the water passage or edge of motor mount.
- 2- Obtain two $5/16 \times 1/2$ " dowel pins and a new 5/16" HSS drill bit.
- 3- Bolt motor mount to front of block with two 3/8" bolts and centerpunch the dowel pin locations you have selected
- 4- Match drill the motor mount and block to a depth that allows you to drive the roll pin in just shy of flush (thickness of gasket) with the face of the motor mount plate. Note: For greater accuracy it may be beneficial to drill an 1/8" hole first and then redrill to 5/16.
- 5- Remove motor mount, apply some loctite and tap the dowels into block.
- 6- Punch holes or partial holes in one set of gaskets to allow them to fit over dowels.
- 7- Trial fit gasket and mounts to make sure dowels do not protrude proud of the motor mount. It they do, simply grind or sand them down flush.
- 8- Use Gaskacinch to seal gaskets and assemble motor mount and water pump as normal.

I did this on my motor many many years ago and am currently running 400+ hp and have never had a leak or a seep from my water pumps and the bolts stay tight too.

If you need further coaching feel free to pm me.

Last edited by K2; 06-04-2006 at 09:20 PM.

JohnZ Post #20

Short of doweling the bracket to the block, you can also reef the bracket clockwise (as viewed from the front) against the bolts (while they're still loose) to take up the clearance in the holes before torquing the bolts; that's the same direction the force of engine torque will apply, so there won't be any shear movement between the bracket and the block under torque application. I've done that to all my C1's, and never had any of them leak.