

Rope Seal Alternatives

From Terry and Annie Garmey

I have used with 100% success, I cut pieces of wood in the general shape of the slots in the main cap. I fill the slots with RTV and (carefully) drive the wood down into the slot after the main has been fitted.

Once dry , trim the wood ends flush with pan rail.

From Joe Alexander:

Have you got Kas' last book? It has a chapter on "avoiding oil leaks in wet sleeve engines". It discussed the real seals and rope seals

Commercial Message: We have that book at a very low price to FOT. And we just received a batch of Viton Seals. Will discount.

We also have new runs of front and rear engine plates in aluminum.

From Dennis DeLap

Hondabond

From John Styduhar

Hondabond and acetone

From Fred Hodgson

I went to RTV. I'd use the tapered snout on the tube to get it down in the slot & gradually bring it up to the top. Then, I'd take a straight section of coat hanger wire & stick it down into the slot & work it around to make sure it coated all sides of the slot.

Had no more problems from that source any more

From Jerry Van Vlack

Phil, on the advise of another FOT I used "The Right Stuff" along with the rope and pounded it in well until I could see it bleed out of the gap between the cap and the block. That and along with Joe's / Chris Marx Viton seal. Things stay dry.

I cut the strips into 1/2 inch lengths and shoot some Good Stuff into the hole and then pound the rope in dry with a rod that just fits the hole.

Repeat until the seal hole is filled and you can't pound any more into the hole. The pounding forced the Good Stuff into the rope and at the same time forcing the Good Stuff out through the gaps. Made a mess but once it hardened I cut the excess away with a razor blade. I'm convinced that those who blame their leaks on the crank scroll seal overlook the real leak path between the cap and the block. The Viton seal is a good secondary seal on the crank to the scroll. Block and cap need to be free of any oil to get the Right Stuff to adhere to them.

Must be careful the flywheel bolt ends don't interfere with the Viton seal aluminum housing.

From Dave Hogye

I recently disassembled the engine from my TR3 and the rear main area was dry. This was my first TR engine build. I used the orange RTV and carefully watched it just squeeze through gaps and cracks around the bearing cap as I installed the rope covered in RTV. That is the only place I used the orange RTV on the engine or anywhere else. I made a rope install tool just like Kas suggests in his book. What I did find was that the front engine plate was leaking between the plate and engine at the bottom. Oil from this leak makes it's

way all over the oil pan and drips off the bolts and back from there. Also, my trans front seal was leaking and that slings fluid around inside the bell housing then drips out the hole at the bottom. The slinging oil also finds it's way out around the clutch fork shaft exiting the bell housing. These two leaks made it difficult to tell if the rear main was leaking or not. I also found trans fluid coming from one of the bolts holding the tail housing on. These obviously need to be sealed up better than they were. At least the rear main wasn't leaking. I'll be more confident installing the rope seal this time around.

From Bob Kramer

Isn't the leak from the trans front oil seal a short term solution for lubing the cross shaft? I have yet to keep one of these totally dry.

From Roger Williams

I use the rope seal for a Mercedes diesel 6 cylinder engine. You soak them in oil and stuff them in place using a steel bar to roll them to the thickness you need. They are still made of the deadly stuff that has been outlawed in the US. Your results may vary.

It is important to note that when building these engines you have the crank grinder make the main journals tight. I like to no more than .001 to .0015 clearance. This tends to reduce the amount of oil getting past the bearings to the rear seal area and it keeps the oil pressure up. Turning the crank to the larger factory spec in most cases will get you there.

From Pete MacCarthy

We made up a special snout for the RTV tubes so that the RTV can be applied first to the bottom of the trapezoidal hole and then gradually fill the hole, bringing the end of the snout up as the hole fills, thus avoiding air holes.