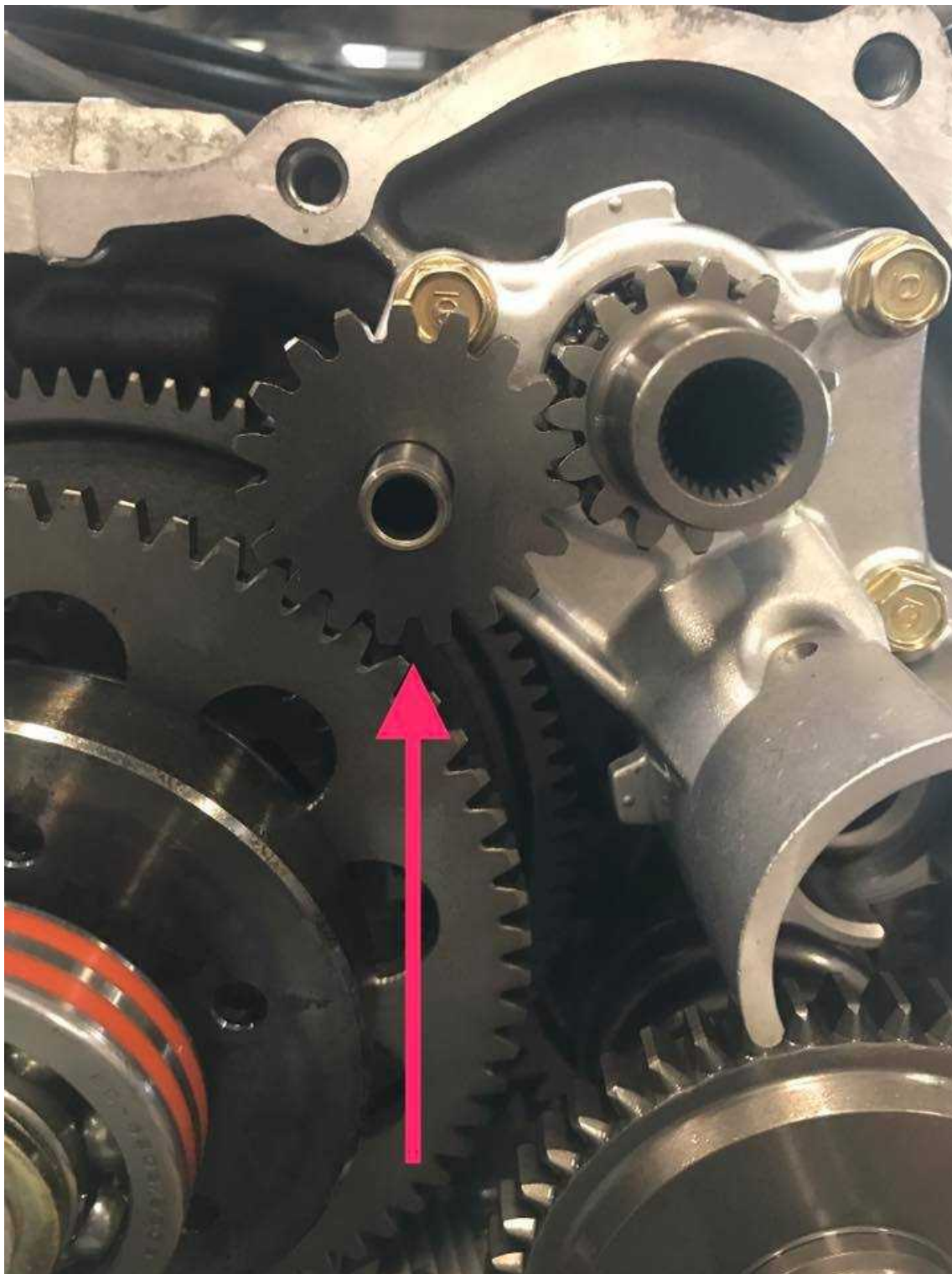


Hydrolock repair (Part 1)

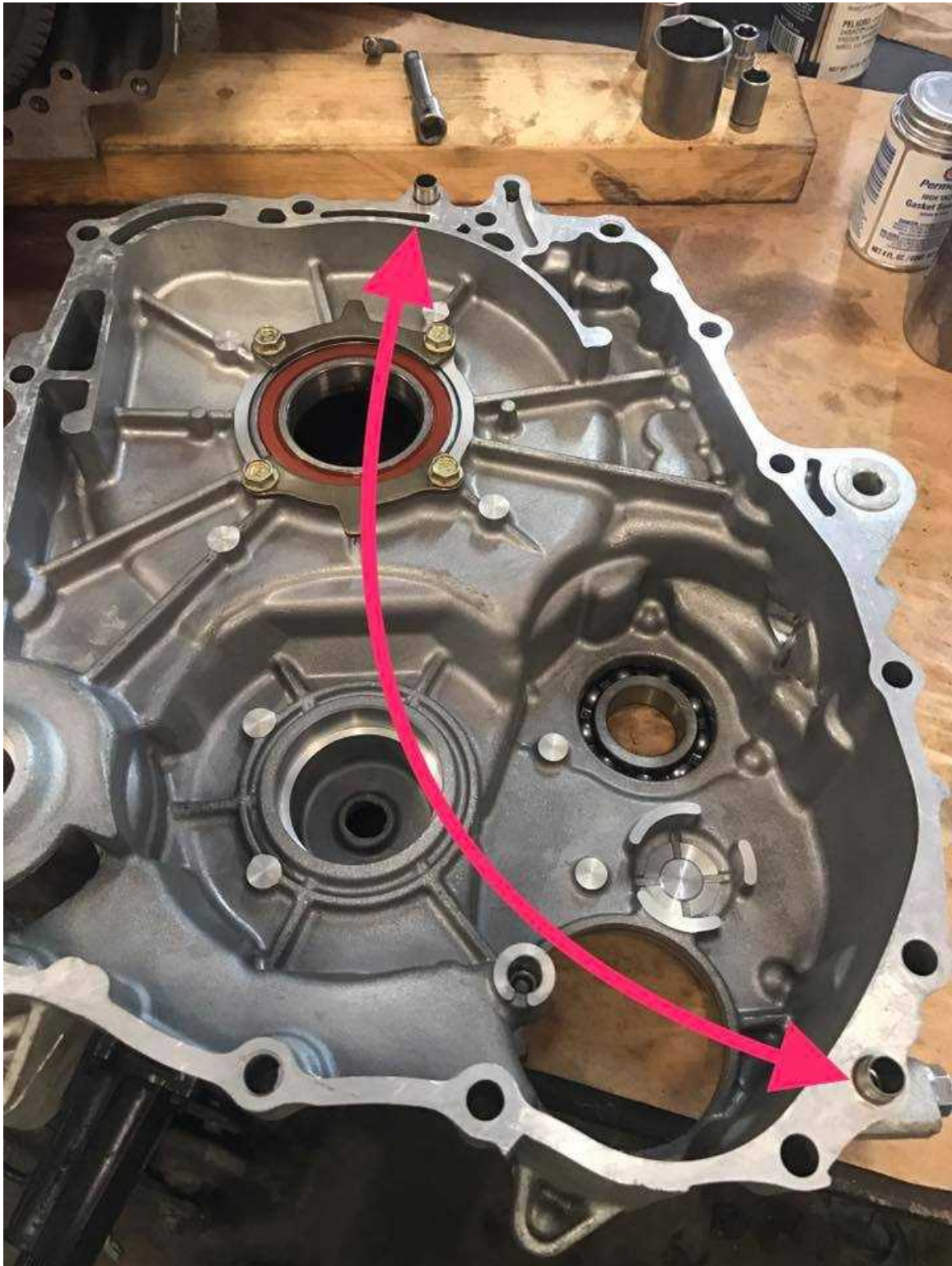
Got it all tore apart and ready to go back together



All this work for an \$18 gear that broke due to Hydrolock caused when gas leaks from the OEM petcock from a tear or debris in the diaphragm or Ethanol that has sat deforms the diaphragm cause it to malfunction



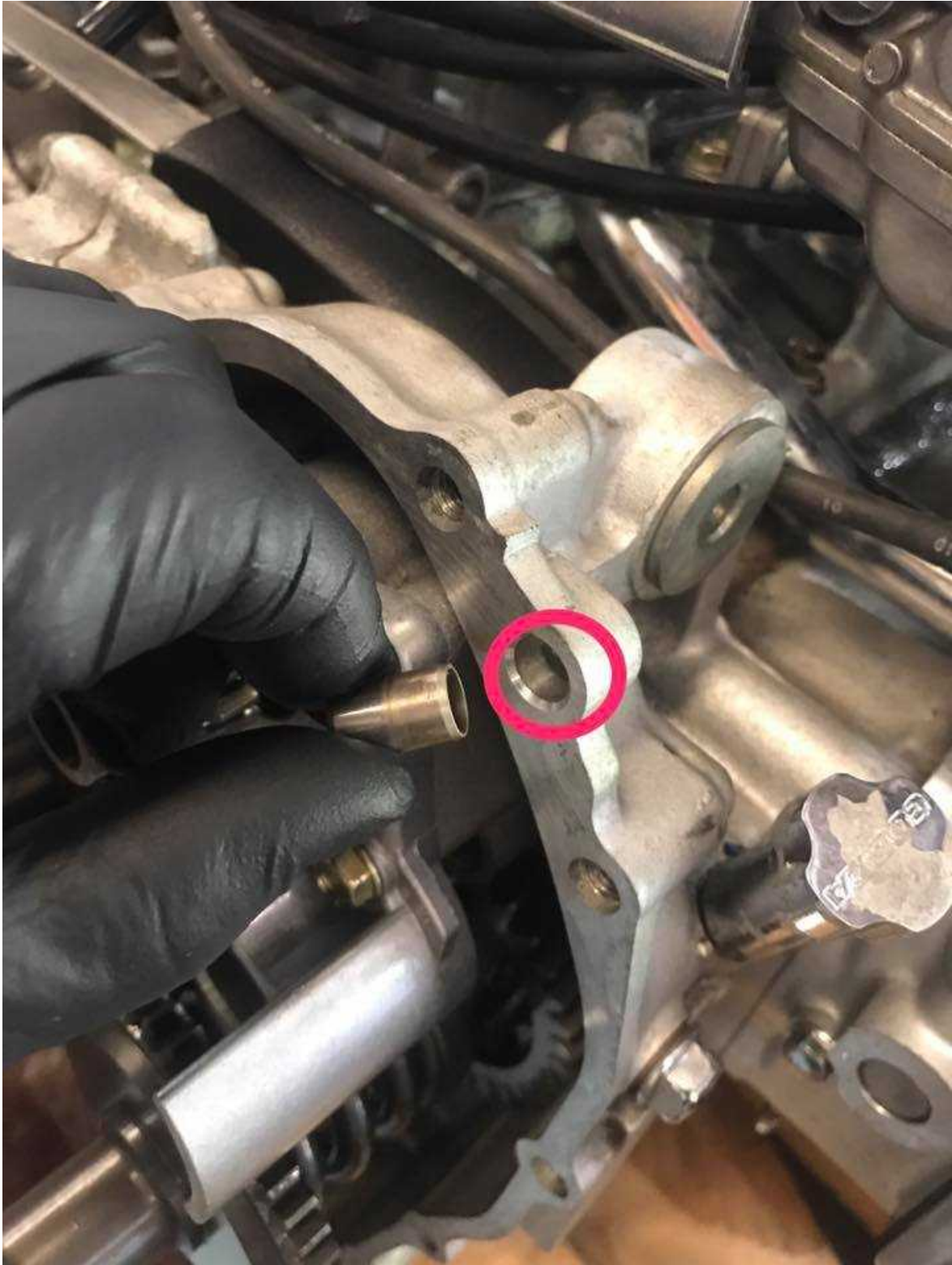
Remove these 2 dowel pins to install in the motor



Should just twist out with pliers but be careful not to deform them



Place in the dowel holes opposite of the placement they were in the case removed from



I'm using a High Tack sealant to hold the gasket for install



Brushed a layer on around the outer edge where the 2 parts meet



Installed the new gasket

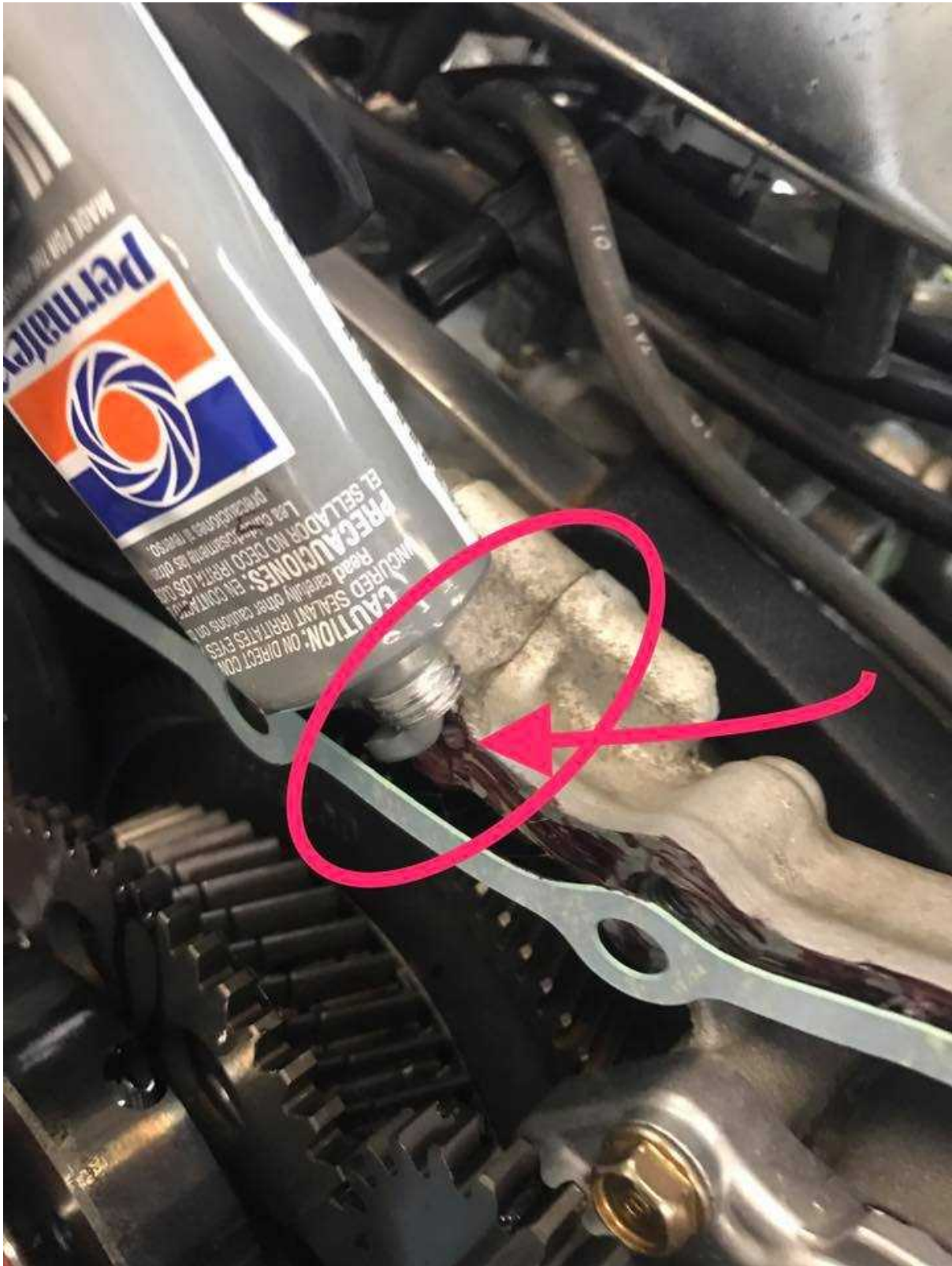




Have to use another sealant to cover the manufactures mold split in the case



Add a small dab at the seam in the block



Same thing at the bottom of the motor



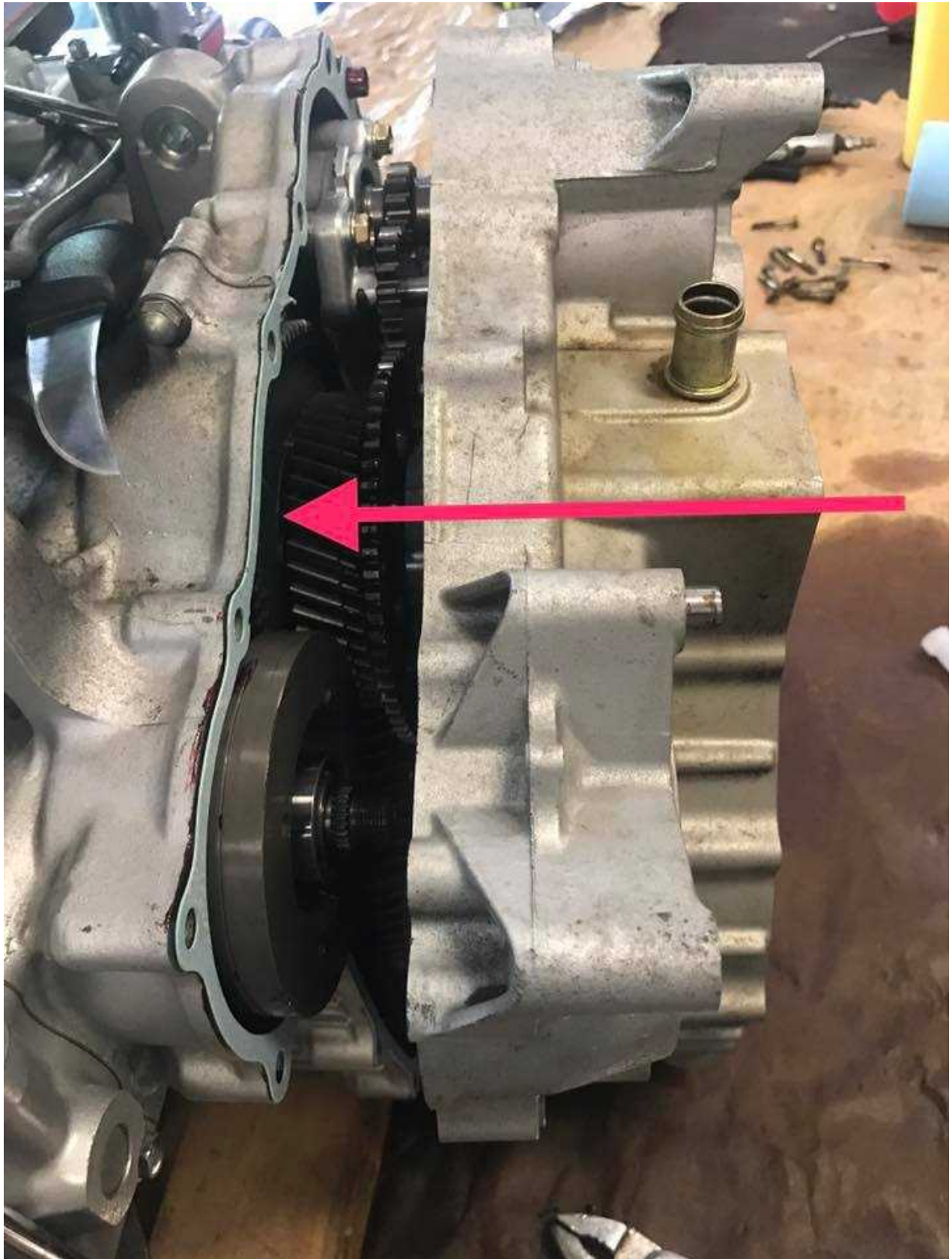
Ready to install the outside cover



Double checking the oil passage holes to be sure they are clear



Line up the dowels and shafts through the case holes and push it on



May need a little influence from a rubber hammer to get the dowel pins inserted

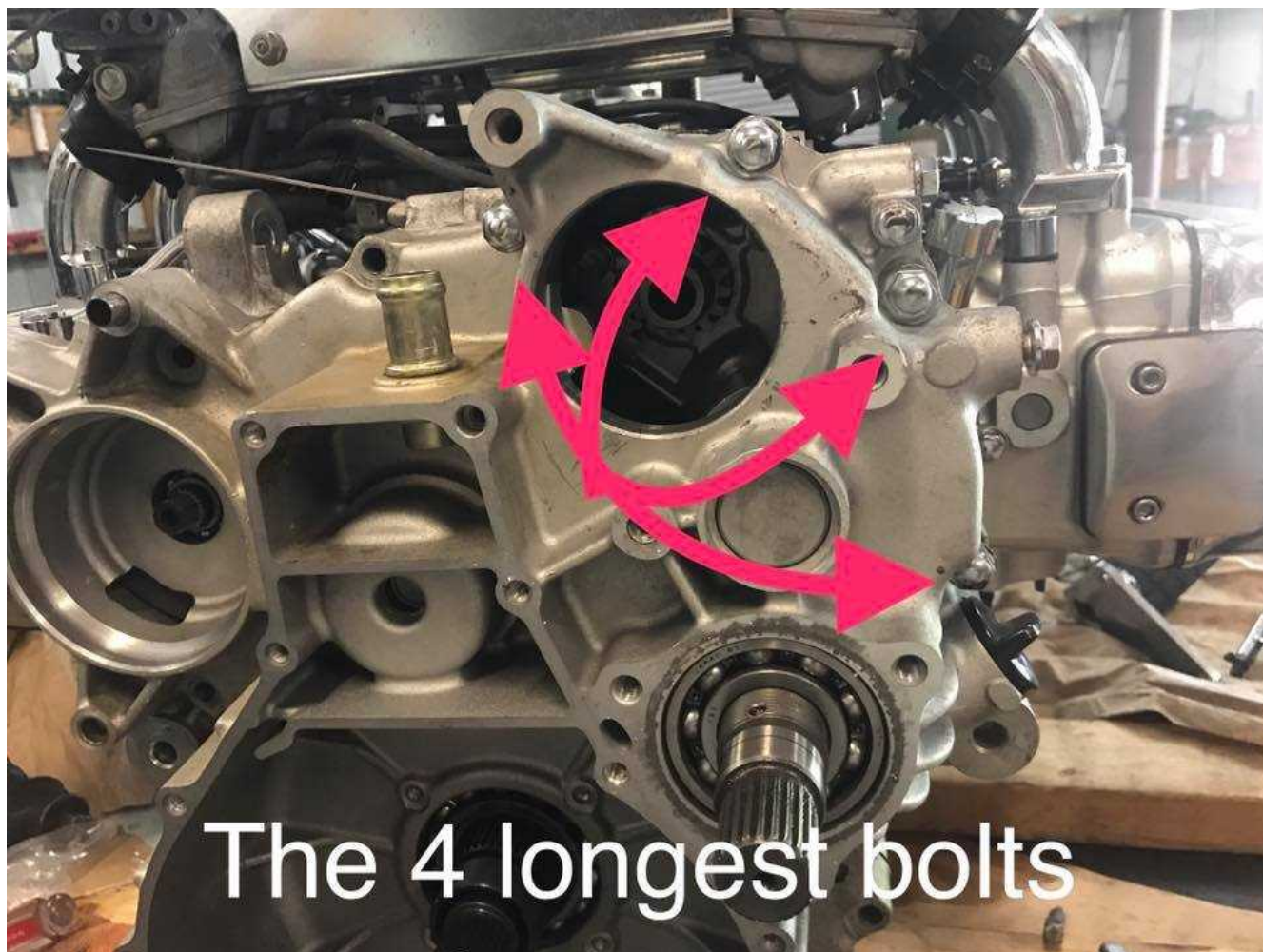


There are 4 bolts that are longer than the rest



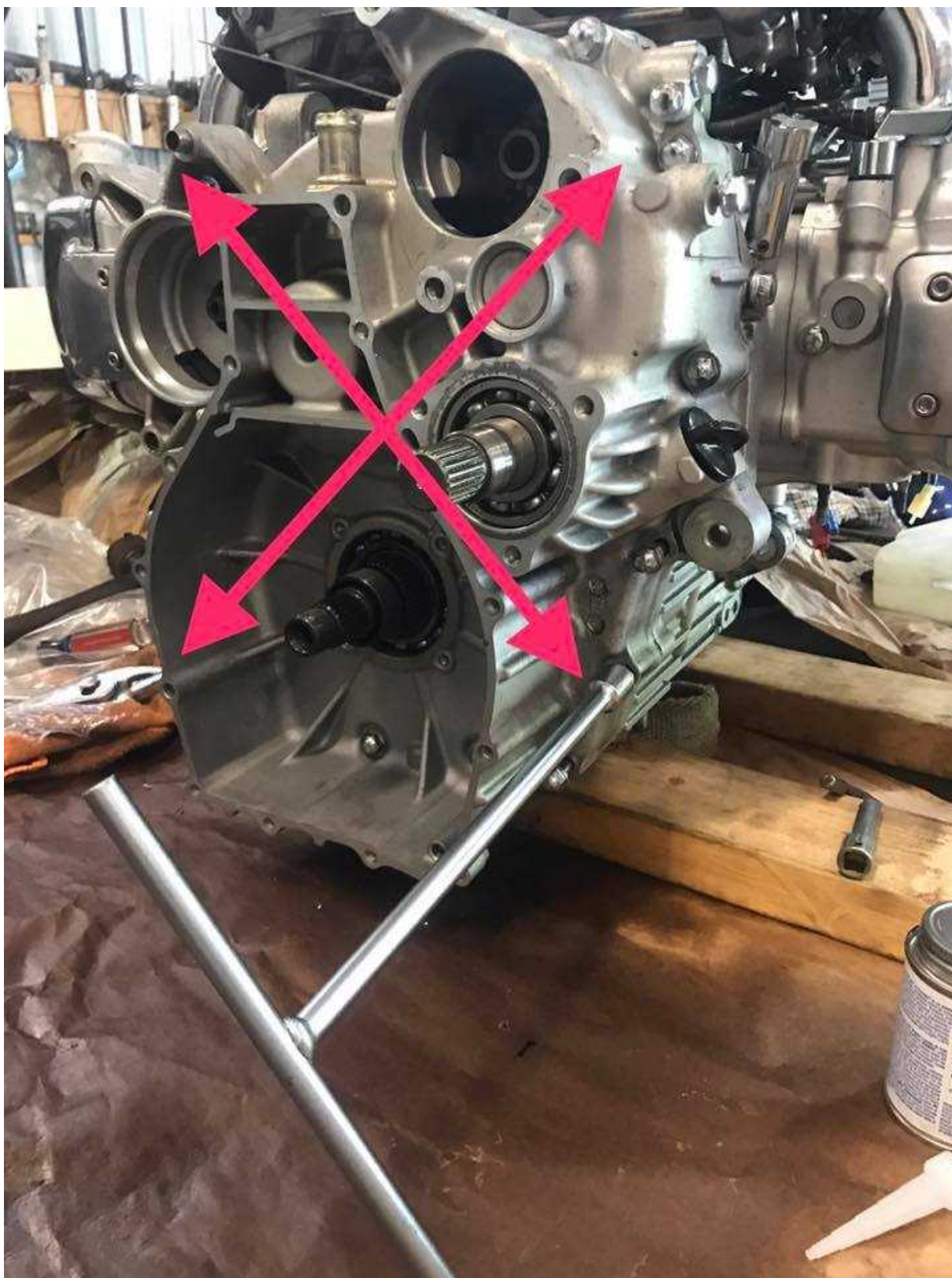


This is where they go



The 4 longest bolts

Snug them all up in a criss cross pattern a little at a time so the case goes on straight and evenly

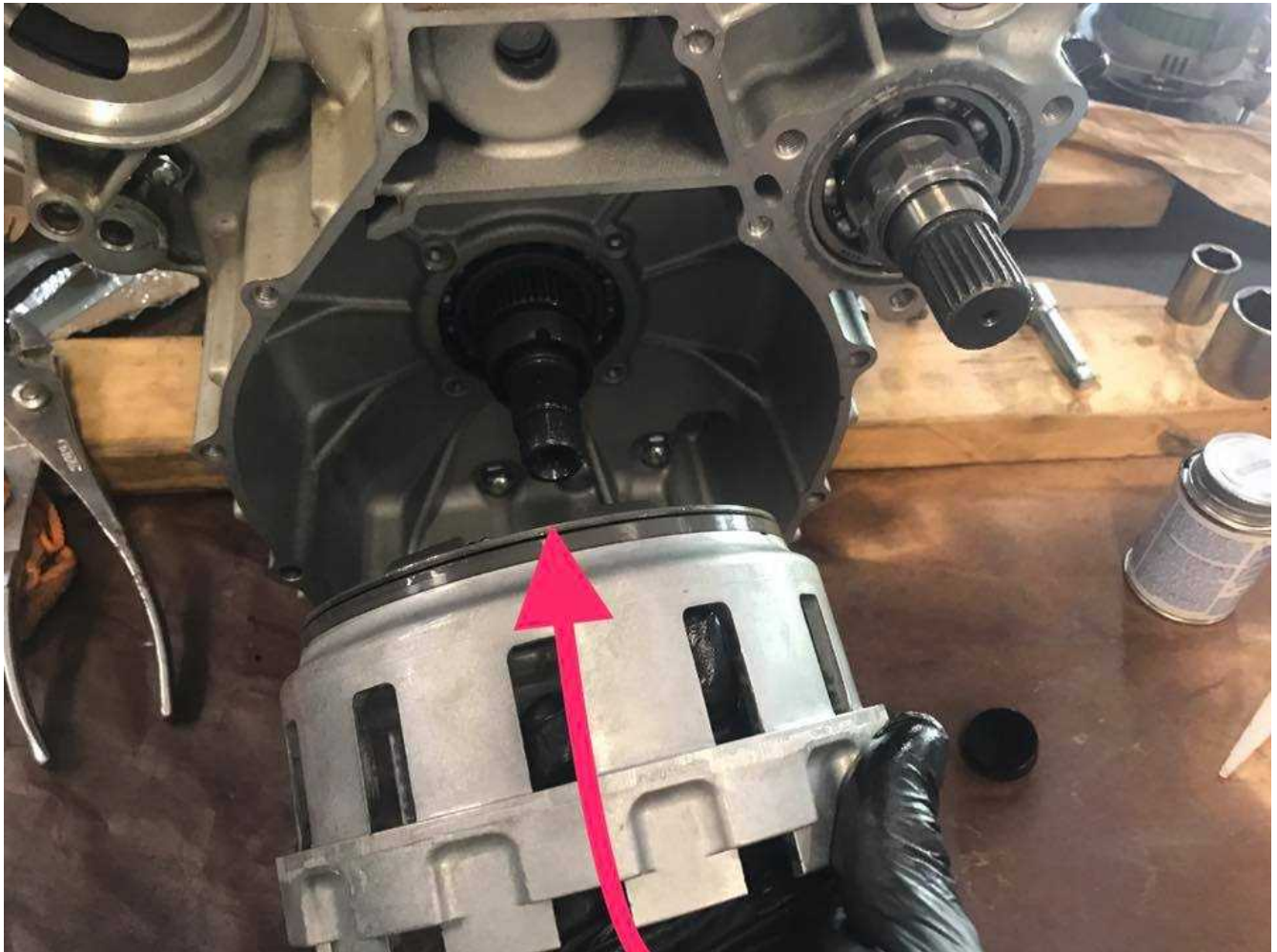


Then torque them all to 22 Ft lbs in the same criss cross pattern



Torque bolts to 22 ft lbs

Next the Clutch outer basket gets installed



The washer is marked but this was very hard to see "Outside"



Barely readable but marked  
"Outside"

Outside mark goes out



Next the lock nut



Put some serviceable Loctite on it first





Then torque it down to 137 ft. Lbs. with an 1-13/16" deep socket.

I had to make a holder to hold the basket from turning while I torqued it.

More Honda special tools now Wood Butcher special tools 😊

I named this one

WBCBHTB

Stands for: Wood Butchers Clutch Basket Holding Thingama Bob 🙏



The WBCBHTB worked great



Once the nut is torqued stake the 2 sides to lock it in place



Stake nut on both sides

Add the inside splined washer



Install the scavenge pump filter



Holes down



Install the Clutch pack



May have to turn the output shaft some to line the splines on the Clutch pack as you are pushing it on





Install the washer



Add some loctite to the nut



I used a 1-1/4" socket

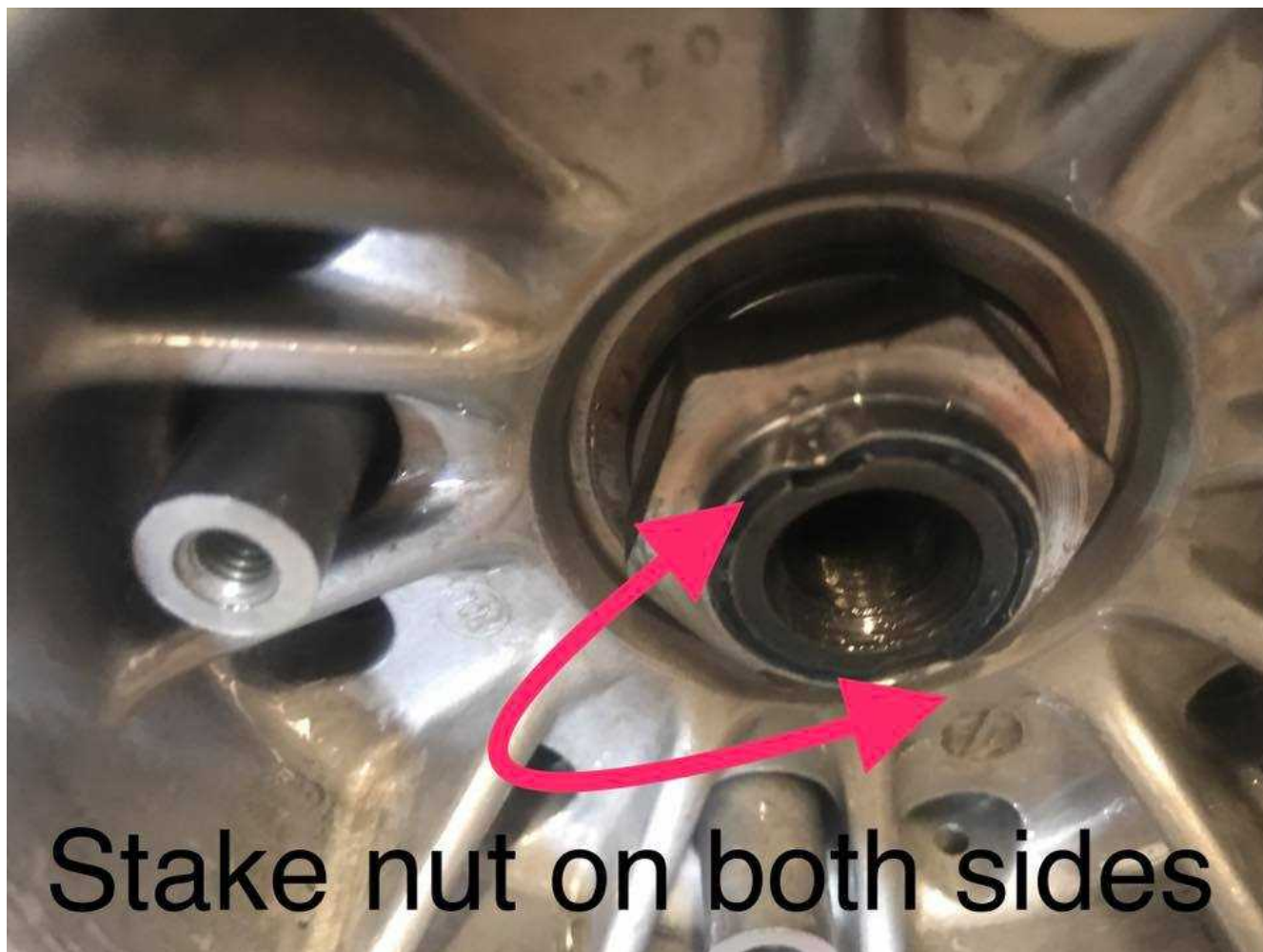


And had to use the u joint and pry bar method on the output shaft to hold it from turning as I torqued it to 94 Ft. Lbs.



Torque to 94 Ft. Lbs.

Once it's torqued, stake the nut on both sides to lock it

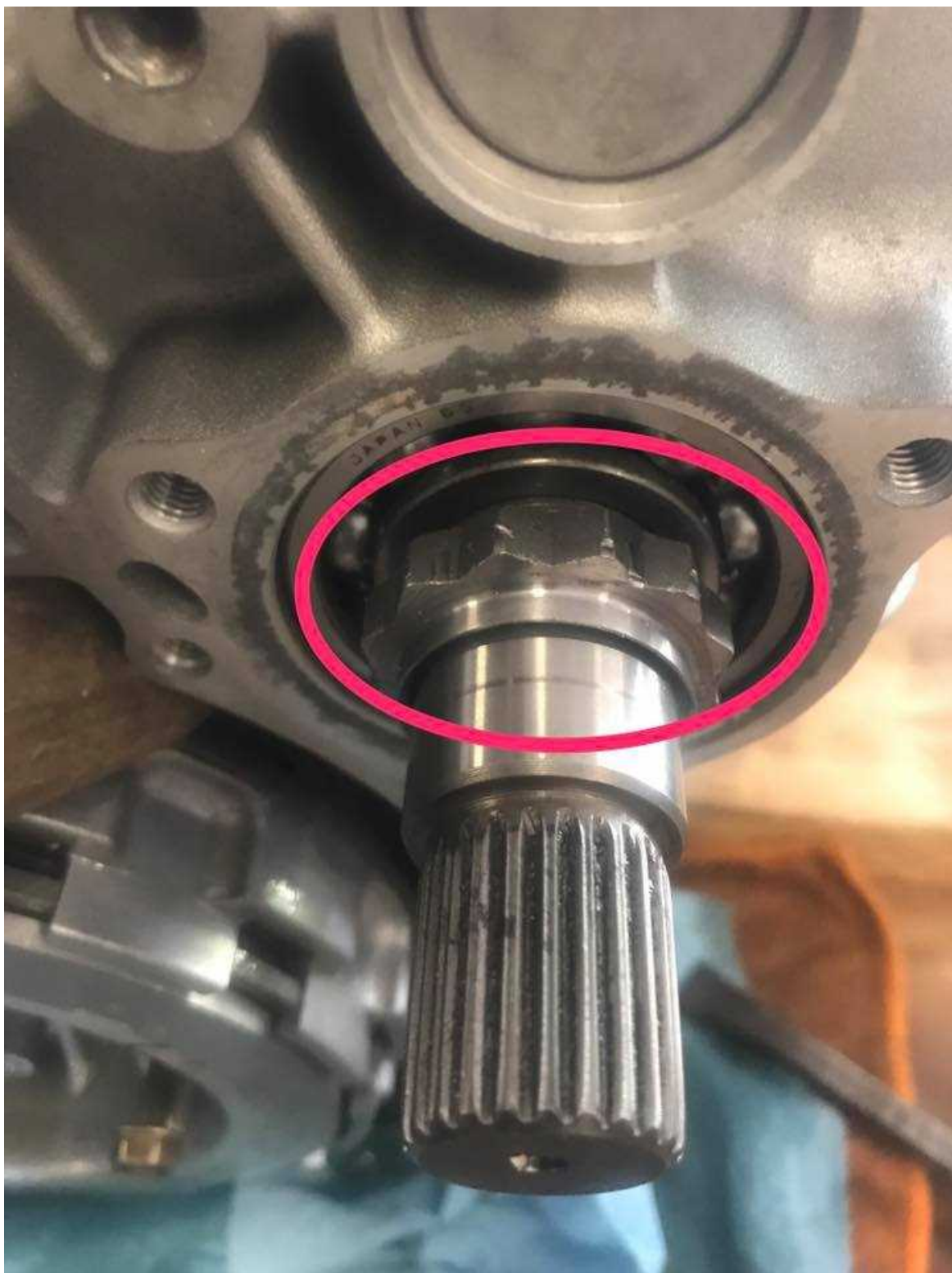


**Stake nut on both sides**

Add some loctite to the output shaft nut next



And get it started on the output shaft



I ran out of options here and used the handle of a wire brush wedged in the Clutch basket to hold it while torquing the output shaft. I should have torqued this before putting the Clutch pack in I reckon?

