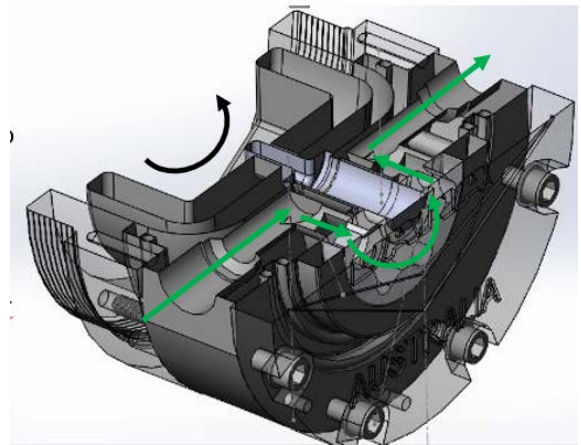


AXLE TECH BULLETIN

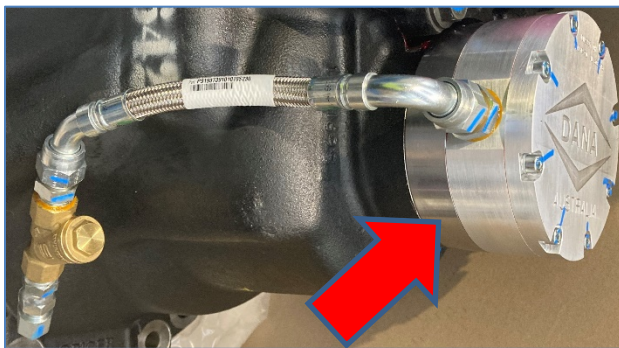
DATE: 04/04/2022

For Axle Models: D170FL & D190FL

Fitting instruction for the Full Time Pump



D170



D190

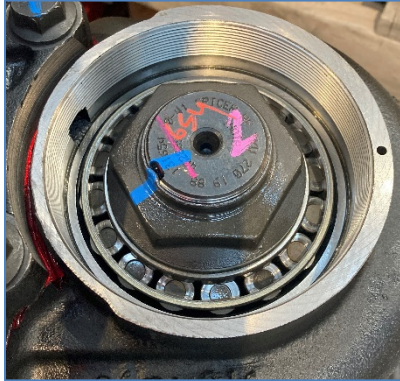


The main difference between the D170 and the D190 Full Time Pump installation, is that the D170 needs a "Pump Base" to fit the pump to the housing, the D190 does not.

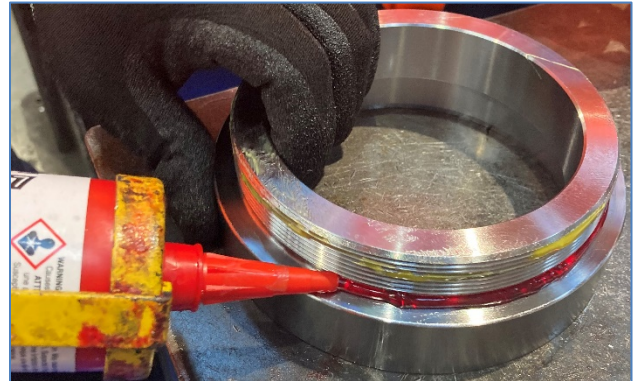
The other variation is in the suction and pressure hose design.
See the Axle **Illustrated Parts List DA0521001** for the different part numbers.

NOTE: See Bulletin DA1120002 for pump priming instructions!

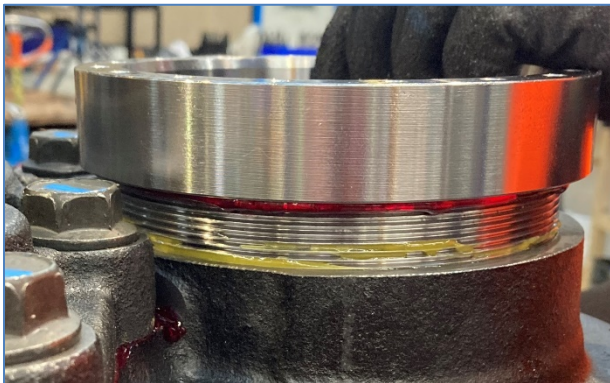
Install the Pump Base (D170 only)



Clean the thread and top surface.



Add thread sealant (Loctite 577) and surface sealant (Loctite 518) to the Pump Base.

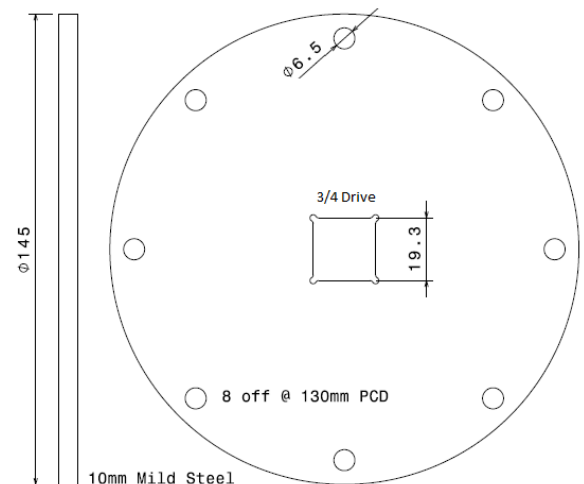


The pump base is screwed in from new.
If the pump base needs to be replacement
see the tool suggestion below.

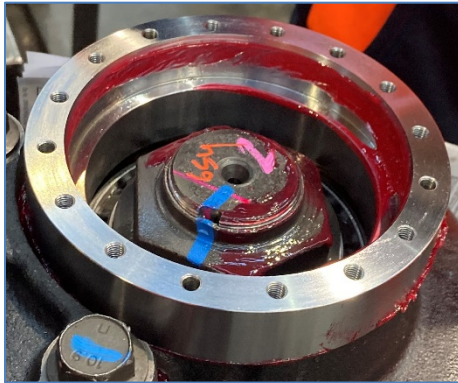


Fit the **tool plate** with 8 off M6x25mm socket head cap screws (Class 12.9) at 15-17Nm to the **pump base**.

Use a $\frac{3}{4}$ " drive torque wrench and torque the **pump base** to 90-100Nm.
DO NOT USE IMPACT GUN!

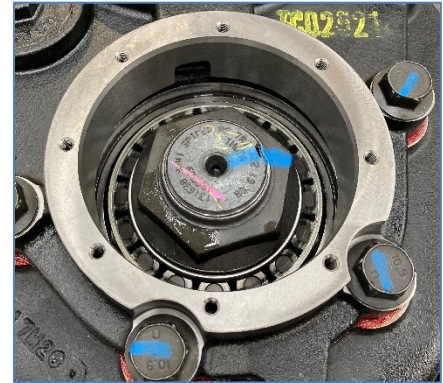


Install the Pump Body (D170 and D190)



Add Lube to the inside.

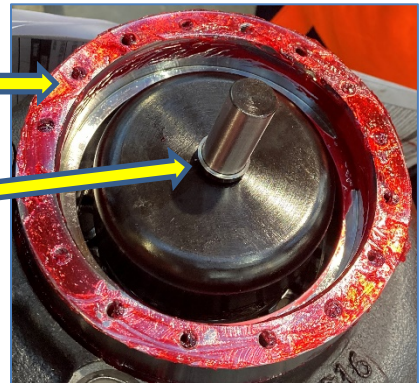
Use: Semi fluid grease
(Mobilith 007)



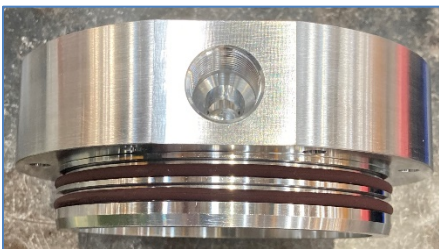
Add surface sealant, Loctite 518

Add Nut Adaptor

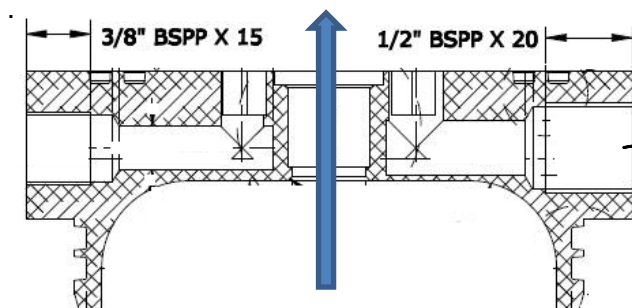
Add Pump Shaft



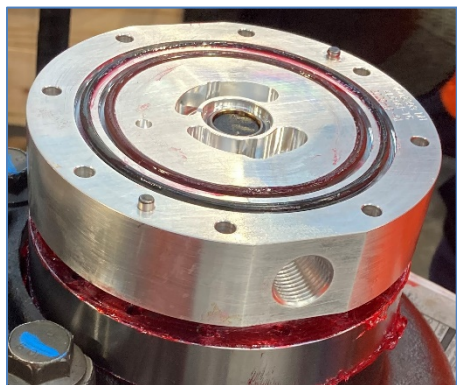
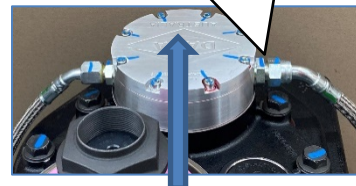
Lubricated the 4 O-rings with semi-fluid grease, before installing them to the Pump Body.



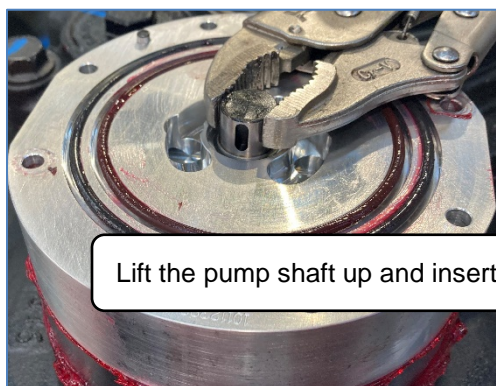
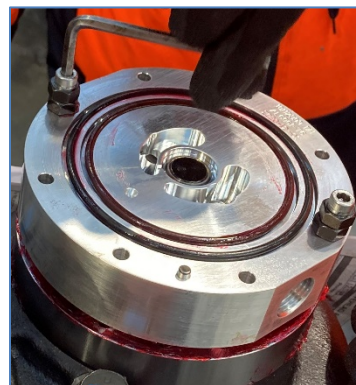
Install the body and align it to the mounting holes with two bolts and the “large hole” 1/2BSP (suction side) on the right! (installed in driving direction, looking from the top down).



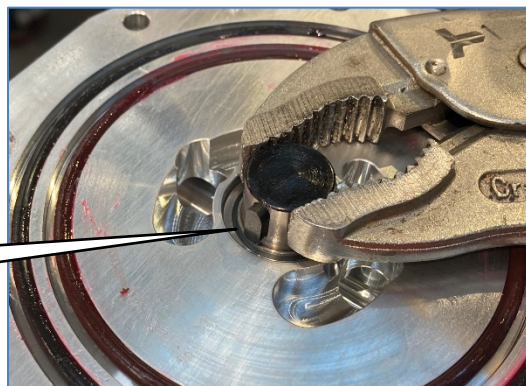
Suction side is on the right-hand side.



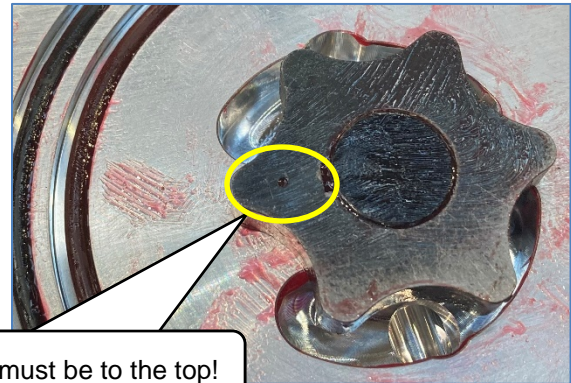
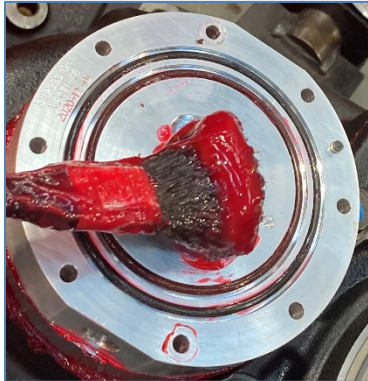
Tighten the two bolts evenly until the Pump Body is firm down on to the base.
Remove the aligning bolts.



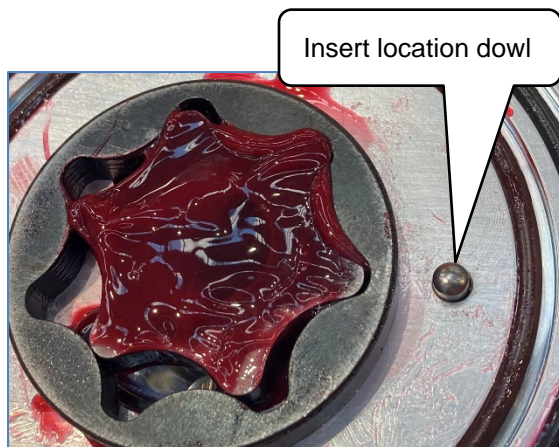
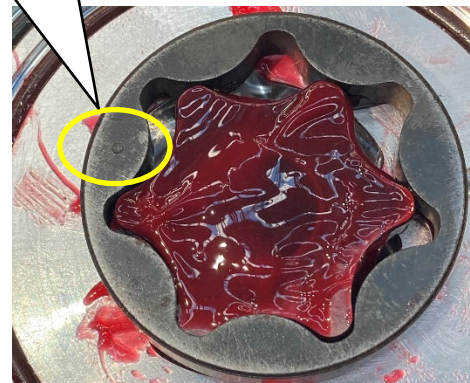
Lift the pump shaft up and insert the drive key



Add some lube before adding the gerotor inner and outer.

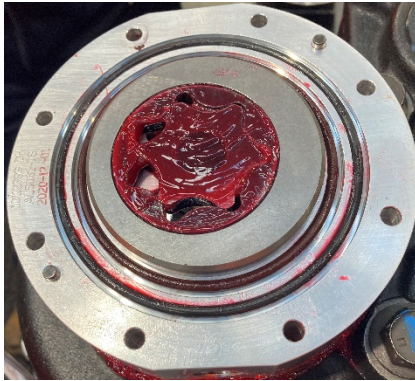


Note: Centre punch must be to the top!



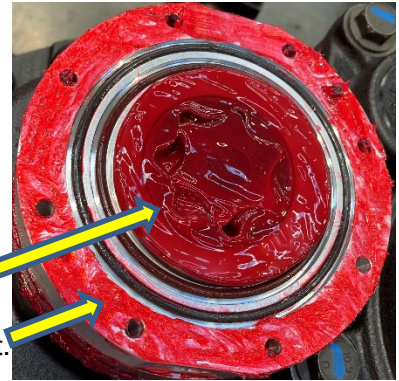
Insert location dowel





Add the gerotor-outer ring

Test drive the pump by rotating the ring gear.



Add lube and sealant.



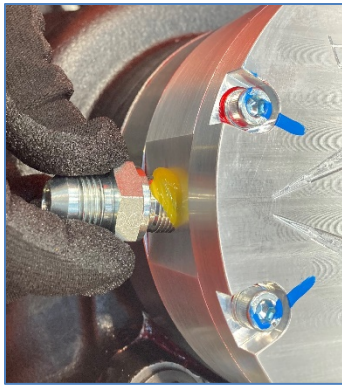
Place pump cap on to the pump body.



Add the 8 washers to the 8 bolts and Loctite 277 thread lock.

Tighten the bolts evenly in a stare pattern to **15 – 17Nm**.

Install the Suction and Pressure hose (D170 and D190)

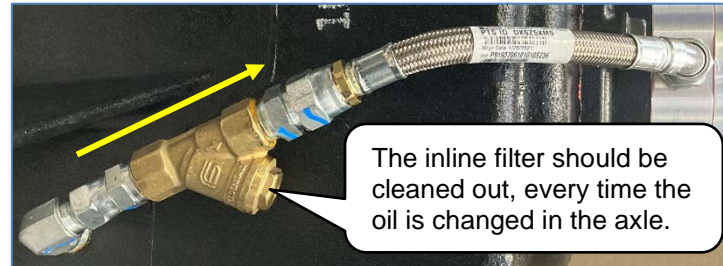


Use Thread Sealant Loctite 577.

D170

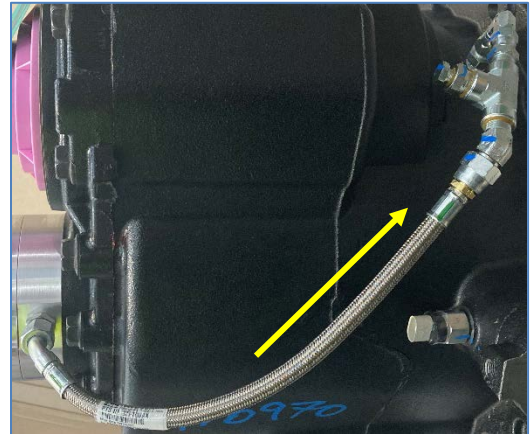
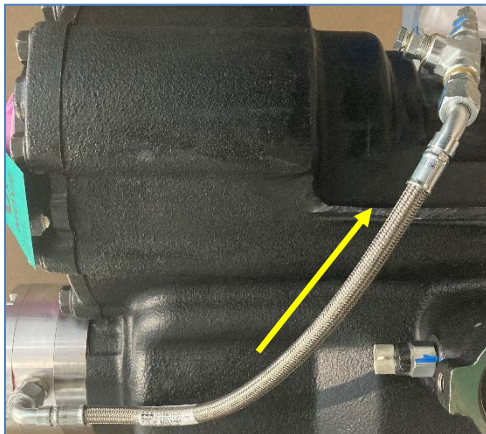
D190

Suction



Note: Make sure the hose is not twisted or kinked!

Pressure



If you have any questions, please call Dana Australia on **1300 003 262** or e-mail aus.spicer@dana.com for more information.