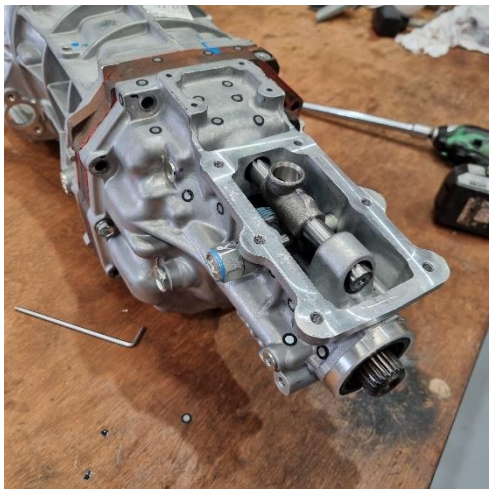
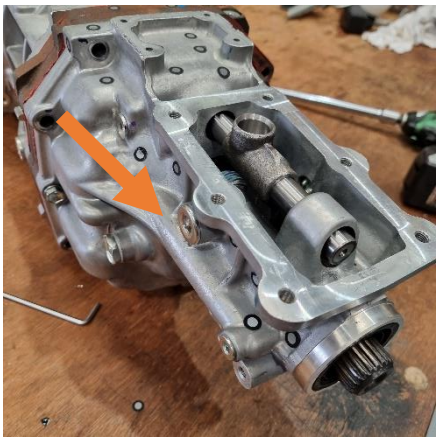
R154 Sequential installation

This Sequential shifter is to suit only the tripod style R154 gearboxes, fitment is simple and done with basic tools. The rear housing of the box does need removing but this is actually quite a simple process.

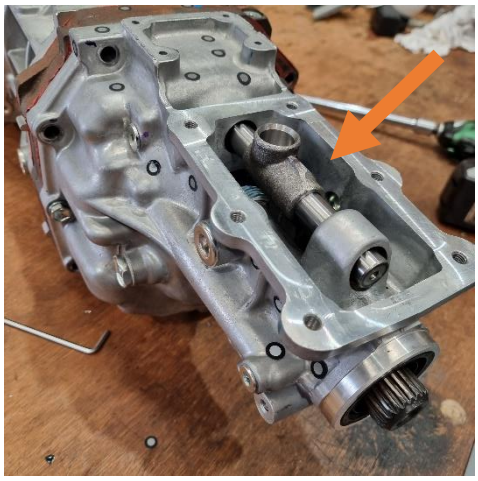
1.Remove factory shifter



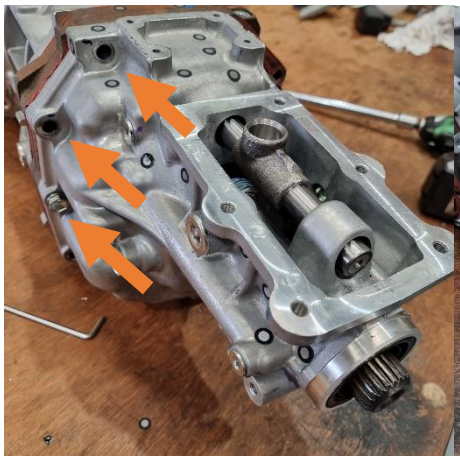
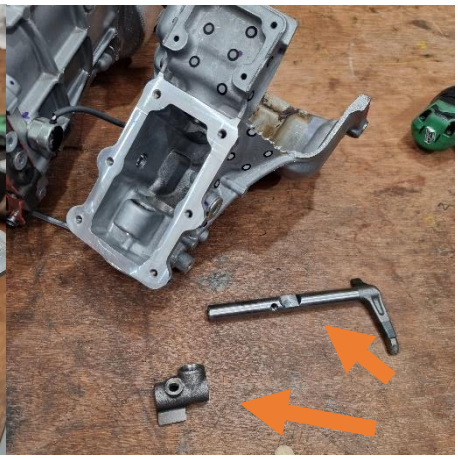
2. Remove centering plungers and replace with M18x1.5 bungs



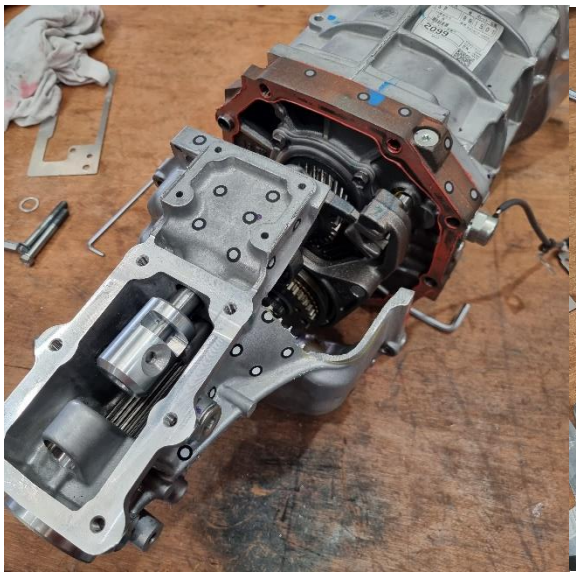
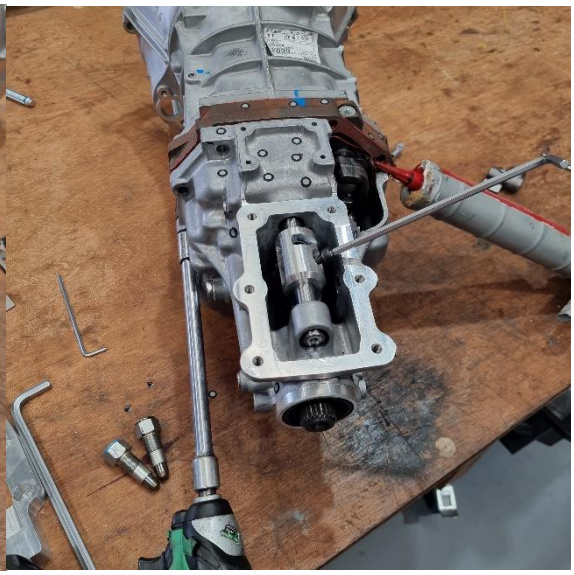
3.Remove bolt on factory fitting



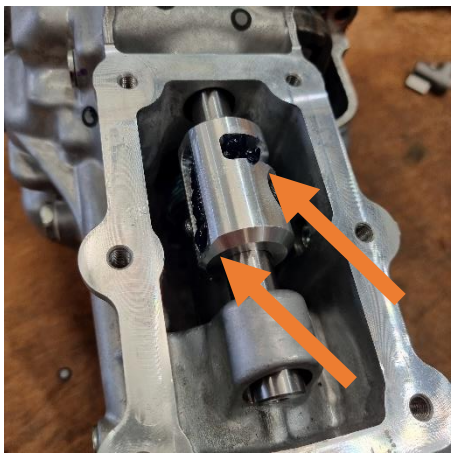
4.Remove rear housing

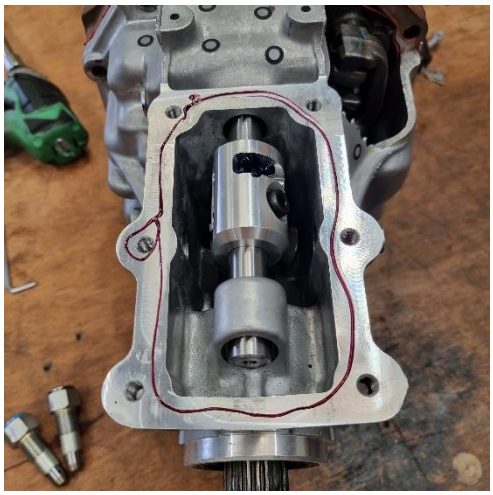
5. Slide supplied shaft fitting to the shaft , seal and refit rear housing making sure the selector arm goes back in the correct spot. Fit M8x1 custom countersunk bolt to shaft fitting

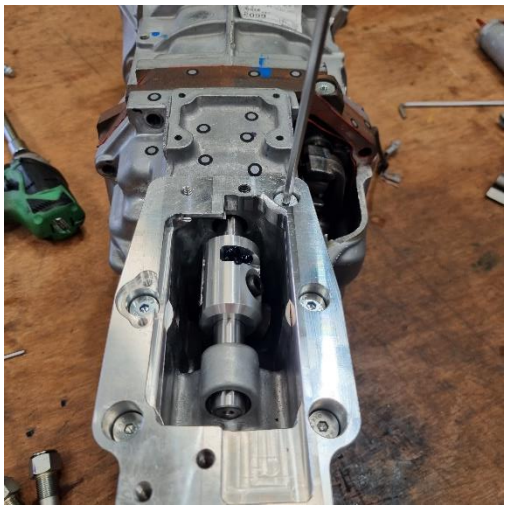
6. Apply grease to the contact points of the shaft fitting part.



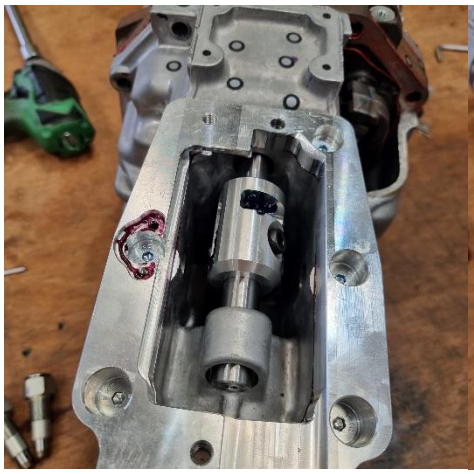
7. Apply sealant to flange surface



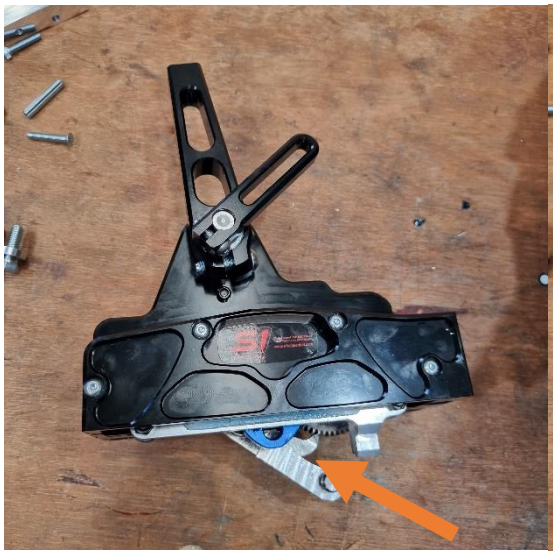
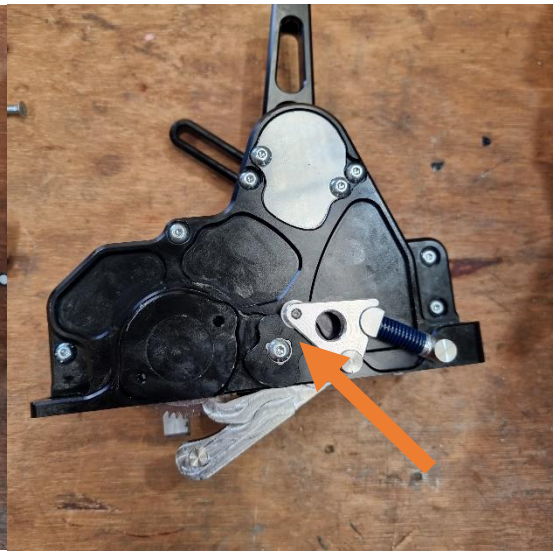
8. Fit base plate with M8x16 countersunk bolts



9. Seal and fit small cover plate on left of base plate with M4 countersunk bolts



10. Down shift to first gear with shifter, it can be hard to shift off the gearbox and I would usually wedge the front of the shifter on a wooden bench so you can apply a decent amount of force, after reaching first gear half shift back to neutral.

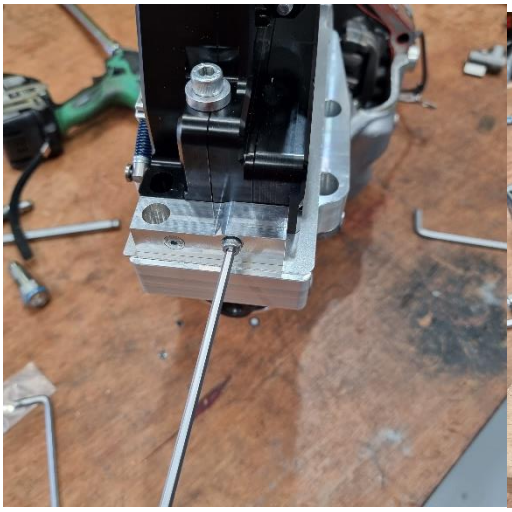
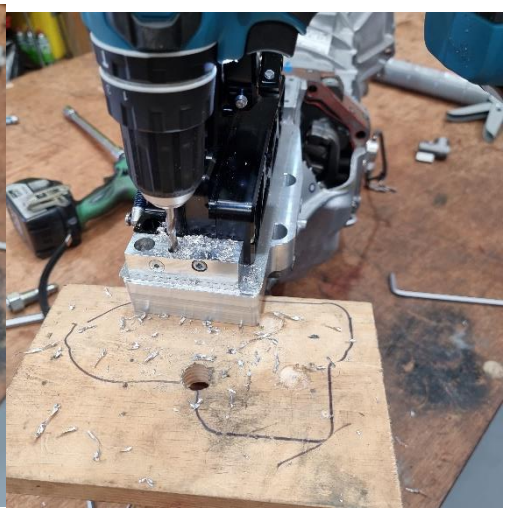



11. Place the 1mm shim (the 0.5mm may be required but most likely won't) on the base plate and fit the shifter (do not apply sealant at this stage) . When fitting ensure that the ball part goes in the groove on the left and the protrusion from the slider plate goes in the cut out. If its difficult removing the right side cover (retained by 4 x M5 bolts) and partially sliding out the slider plate might help.

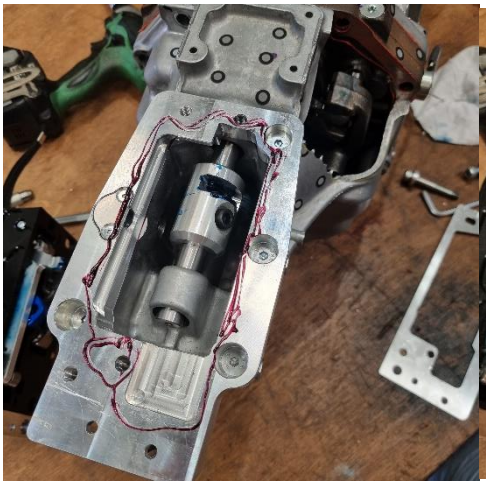
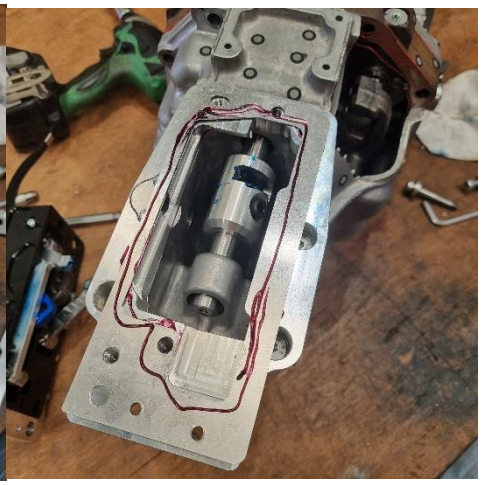

12.When positioning the shifter you will feel a small amount of free play fore and aft try to position it in the middle of this also keep the shifter parallel with the centre axis of the gearbox. Once positioned tighten down at least the 2 longer M8 bolts.

13. Fit the shift knob using the M12 stud and the shims provided to align the shift pattern.

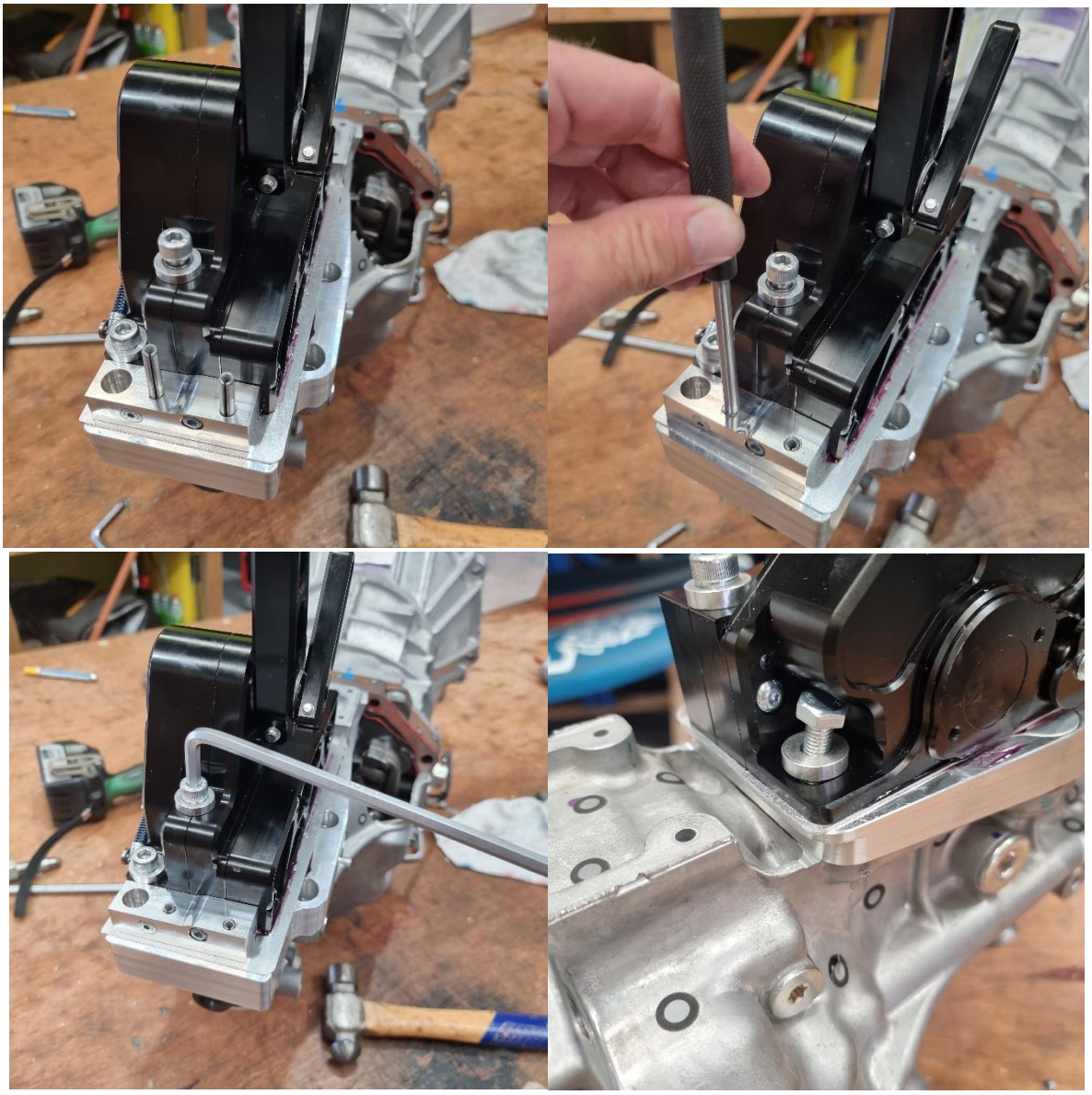
14. You can now test the shifting action, If you have the lock out lever positioned forwards as we do in the pictures lifting it up will rotate the selector to the reverse side of the gate and pushing it down will rotate it to the first gear side. Once you have pushed the reverse lock out lever down to select the 1st gear side of the gate engage 1st gear by pushing the lever forwards, after this you can upshift through the gears by pulling the lever back. If the reverse lock out lever is very stiff to move it usually means that the shifter is not quite parallel with the gearbox causing it to bind a little in the fitting or that the shifter is not centred for and aft correctly. Once the shifter is functioning correctly attach the drill square part with the M5x30 countersunk and M5x25 socket head bolts then drill 2x 6mm holes to fit the roll pins to secure the shifter. These are extremely important or else the shifter will move in use and jam up, also make sure you drill all the way through the base plate so the roll pins can be easily removed at a later date.

15. Remove the shifter and apply sealant to the base plate and shim so the shifter can be fitted for the final time.

16. fit all bolts and hammer in the roll pins, it can be a good idea to use a punch so you don’t hit the shifter its self.



17. If you are using the position sensor bolt it on the left side with the M4 button head bolts, if you are not fit the screws anyway to keep the oil in. Please see the gear indicator instructions if you are fitting this option.

18.You can not adjust the angle of the shift lever and reverse lock out lever do these bolts up firm so they do not slip on the clamps.

19. Go for a sensible test drive to check everything is working well.