## S1 Sequential

Sequential shifter

CD/JK

## **Updated instructions 1st June 2024**



## **Short style**

instructions in tech help section

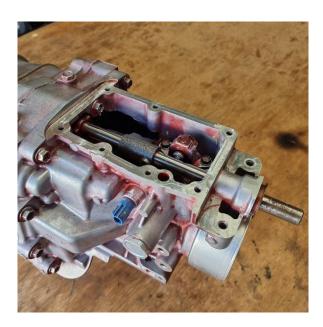
Contents and assembly instructions

## **Installation**

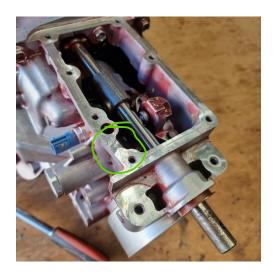
1. Remove the old shifter bracket and linkage rod, The linkage rod will usually have 2 roll pins one inside the other, its easier to remove them individually than both at once.



2. Remove top cover plate.

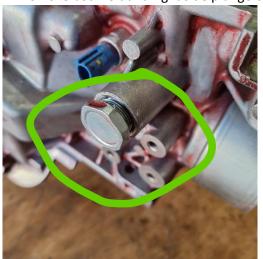


3. Remove bearing and spring





4. Remove both left and right side plungers and refit cover using a 27mm socket.





5. Remove centering plunger and fit the supplied aluminum spacers underneath, these will apply a rotational force to keep the shifter at the 1<sup>st</sup> or reverse side of the gate when needed



**6.** File top of casing where coloured yellow for clearance of base plate.

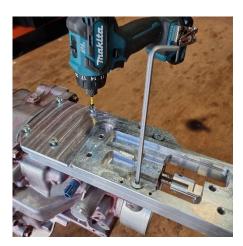


7. Fit shaft fitting using original roll pins.



8. Fit base plate with sealant to stop oil leaks from gearbox, do not reuse the factory gasket. Remember to place the larger spacers at rear where the M8 bolts are between the base plate and gearbox. The front bolts are M6x20 or 25 and the rear are M8x30 countersunk. Then fit the small cover plate with the countersunk M4 bolts. The large aluminium washers pictured on the left fit between the base plate and the gearbox under the countersunk M8 bolts seen with the allen key fitted in the second picture below.







9. Fit the reverse lock out lever, this can be set at any angle that suits you.

We require this lever to take up the slack of the shaft it is mounted to so to do this make sure it slides on with no effort. If the clamp is to tight on the shaft to slide freely you can remove the bolts and insert it from the threaded side then place a scrap of metal in the gap, with this set up it will open the clamp when tightened.

Once the lever slides on easily lift it from the end so the uneven force causes It to lift the shaft with it then reseat down and tighten the bolt. We must not have any preload here but also no significant free movement.











10. Fit the shift knob. 2x M12x1.75mm studs are provided the long one should be wound into the shift knob (there is a socket in one end) the shorter one is used if you choose to use the spacer for might lever height or leverage. The shims provided are so you can align the shift pattern.







11. Check that the shifter is in neutral between gears one and two. To do this down shift all the way then up shift half a shift. The indexing into gears is strong so you will most likely not be able to hold it in your hands and do this, its best to wedge the end of the shifter into a wooden bench and shift like this. Getting the shifter to stop between gears one and two can be hard with the shifter not mounted to the gearbox, when you get it the main shift cam should be in a position like pictured below in green.



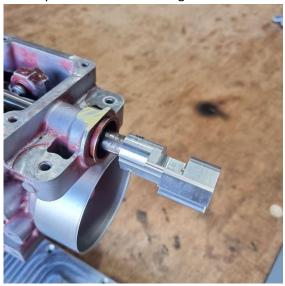


Once the cam is in the position between first and second gears the reverse lock out lever should be free to move which will also move the side shift arm that is the steel part under the shifter with the ball like fitting on the end.

12. Fit the 1mm shim plate. (the 1mm shift is all we have need in testing with multiple gearboxes but it is there so its possible to adjust for variations between gearboxes)



13. Apply grease to all parts of the shaft fitting where contact will occur.



14. Fit shifter making sure you slide the ball part into the groove and seat the slider part into the coupling. This is best done by rotating the shaft fitting clockwise with your hand and fitting the shifter in the angle pictured.





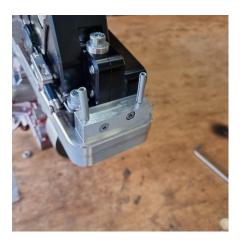
15. Bolt down the shifter with the aluminium washes fitted so it will still be free to move a bit of not centred perfectly. Shift though the gears to check operation. Once everything is working mark the shifter position with a scribe to make any refitment easier.



16. Fit the drill square part the rear of the shifter. Using the socket and countersunk M5 screws.

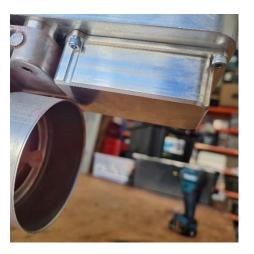


17. Drill 6mm holes for the roll pins through the drill square part and the base plate. Once fitted these will stop the shifter from moving under high driving loads. THESE MUST BE FITTED do not try an alternative method this is the correct one.



18. Fit the base cover using the M5 bolts with sealant on the yellow areas highlighted in the picture.





There are separate instructions in the tech help section of the website for the gear indicator and sensor but if you do not fit them its best to fit the M4 bolts to cover the holes.

