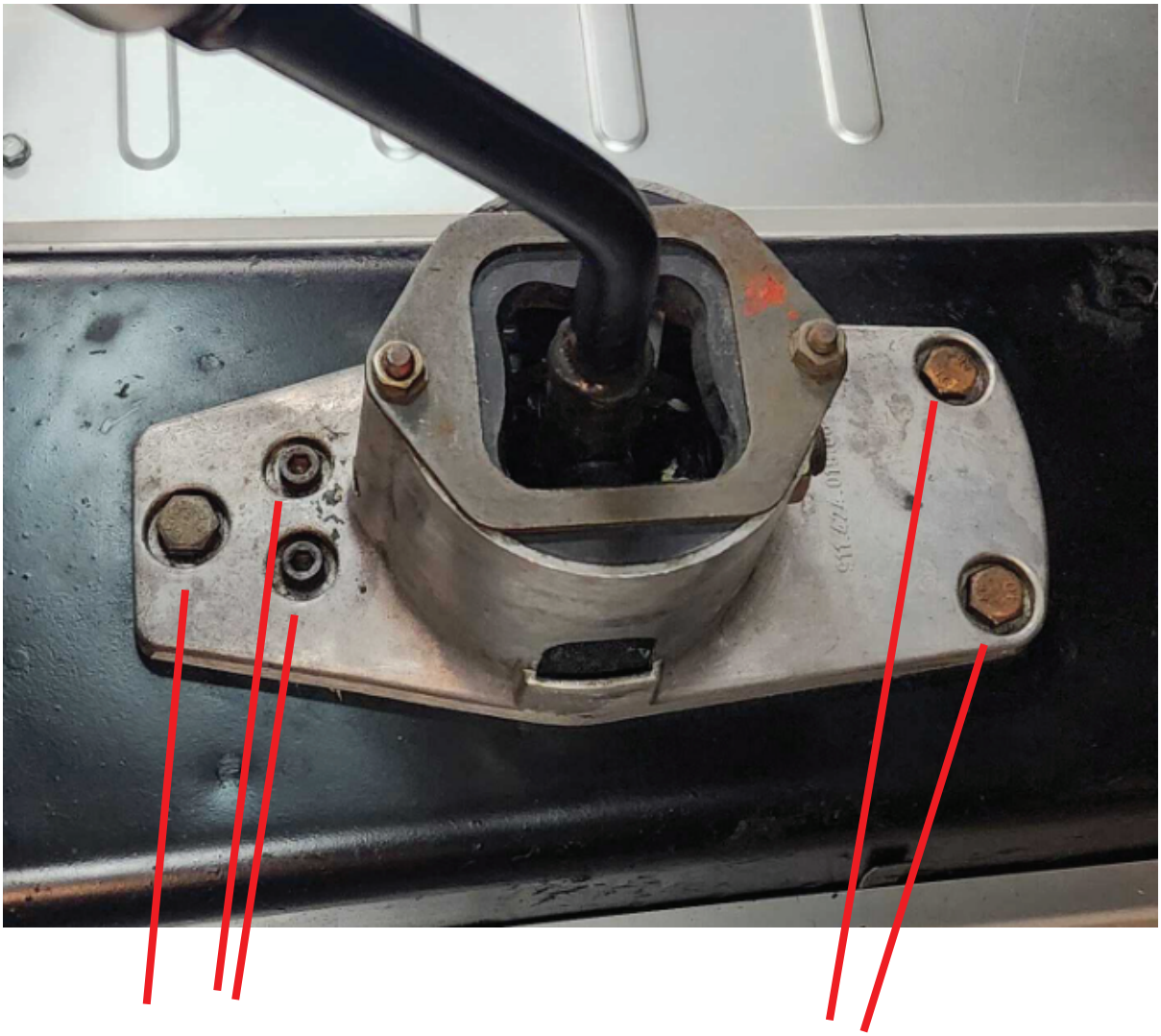
Installation Instructions

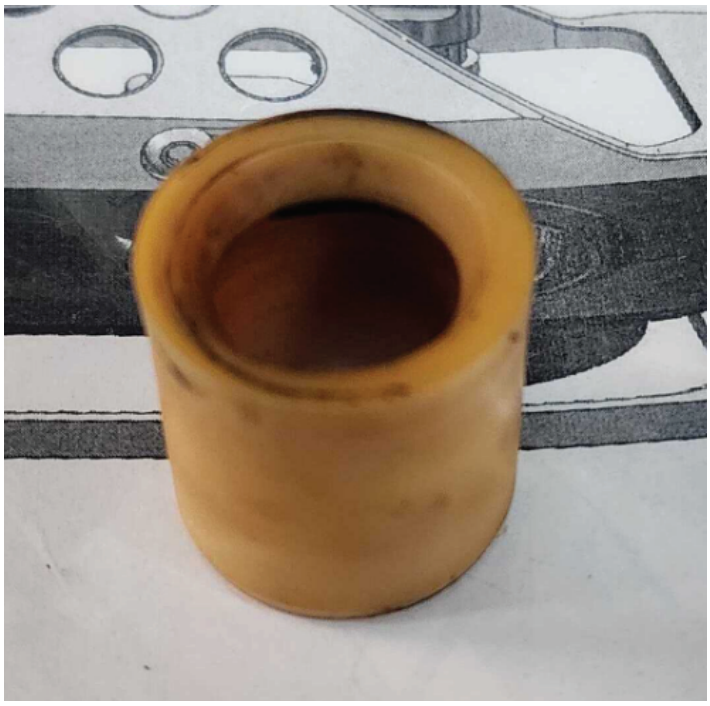
STEP 1 - REMOVE OEM SHIFTER



Start this installation by removing these bolts and these Hex head screws. Once removed you can pull upwards to remove the shifter end from it's socket. Please note that over time this cup can be stuck inside and become difficult to remove. If you are not careful the shifter can release very quickly and damage interior parts of the car.

STEP 2 - REMOVE SOCKET

Remove this socket piece from the car if it did not get removed with the shifter.
Replace this part if it is in bad shape.
OEM # 91142413900



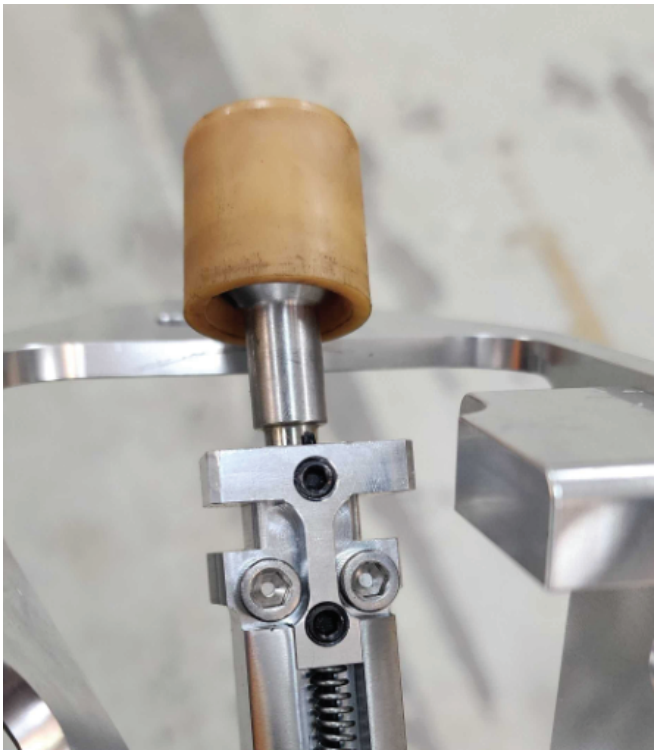
As well, the Shift Rod Bushing should be inspected for damage or is worn.
OEM# 91442422400
This is located on this carrier plate and would require the shifter coupling to be removed to gain access.
If the shifter coupling is removed consider new bushings for the most optimal performance.

STEP 3 - PREPARE FOR INSTALLATION

There is two different approached to installing the coupler. You can install the ball into the socket before hand or install the socket into the shaft on the car. Both has their pros and cons. Typically I would recommend installing the socket onto the coupler first. We will be demonstrating this install with the socket on the car side as a visual aid.

To start this step lubricate both the inside and outside of this socket. Use a thin/light grease and do not over apply inside, the ball socket will not push on all the way in if there is too much lubrication inside.

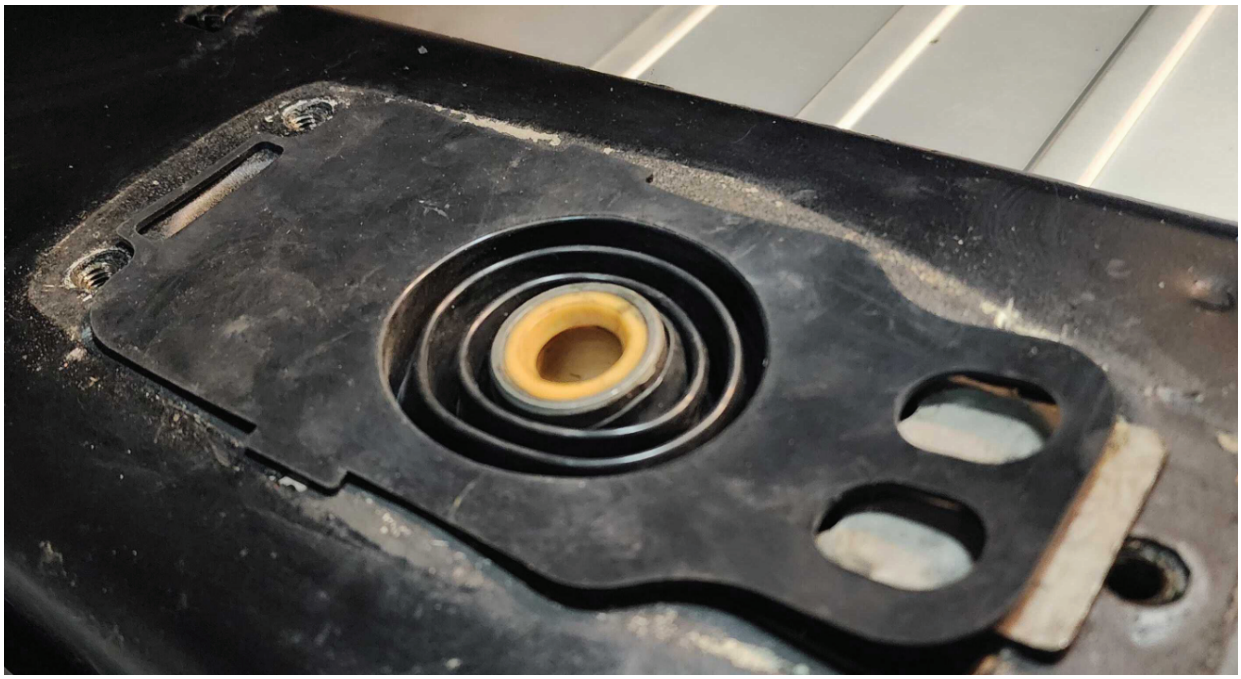
Refer to the adjustment section in the back of this doc to ensure that the shift ball is in the correct location.

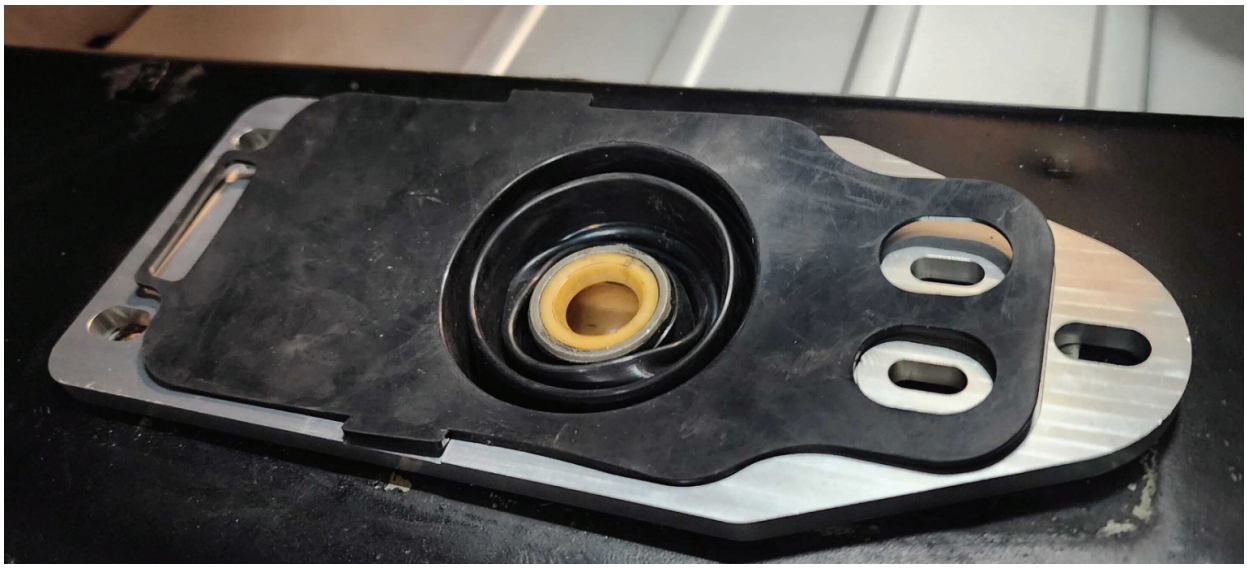


STEP 4 - INSTALL THE BELLOWS

In this step install the bellows by stretching the opening around the tunnel shaft. It is easier to install the bellows first and then add the spacer plate below after. The shifter base plate has an indentation and groove that holds the bellows. When the shifter gets installed last it will sandwich the bellows and stop any movement.

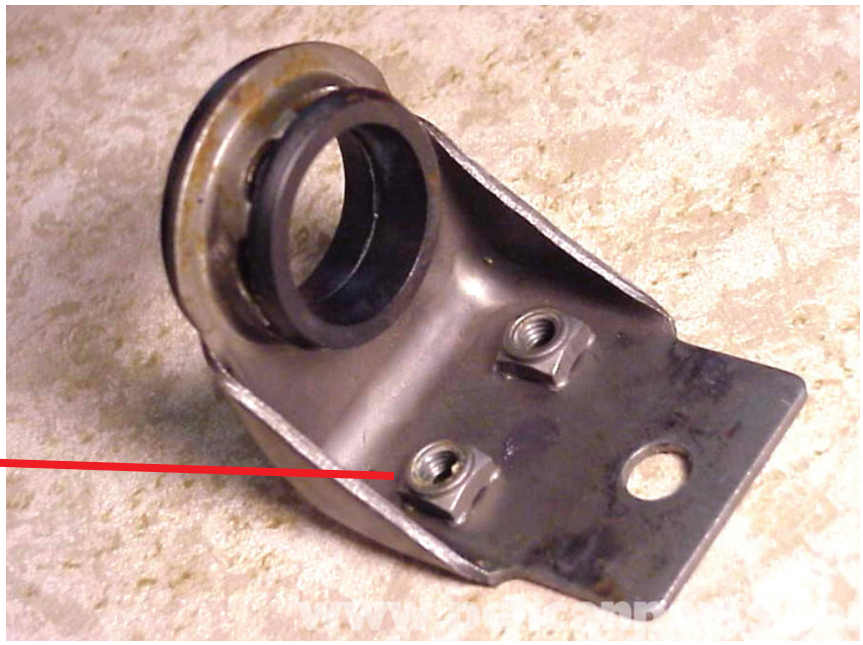
The shift carrier should be installed underneath the tunnel. This makes the shifter slightly more difficult to install but provides a clean look to the installation.





STEP 5 - INSTALL THE SHIFTER

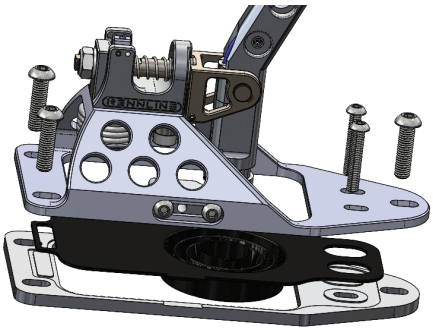
When installing the shifter reference the image to the right to understand the screw order.



Install the two smaller screws first through the shifter and the baseplate. They will thread in the location on the right.

When tightening these two up you want to align the bottom center screw up with the hole so when you inset and tighten the shifter down the screw goes through the carrier plate and does not bend it.

Insert the other screws and tighten firmly. The shifter mounting holes have slots to allow forward and backwards adjustment.



(Image shown without bellows for ease of photos)

STEP 6 - TEST SHIFTER

Once installed you should cycle through all the gears to check if the shifter needs to be adjusted. Refer to the following pages for an adjustment guide.

NOTES:

The install of this shifter was done on a 930 4-speed transmission which has reverse on the opposite side. Because the car has a natural reverse lockout feature the TR04 Lockout feature was removed for this application.

TR04 Adjustments

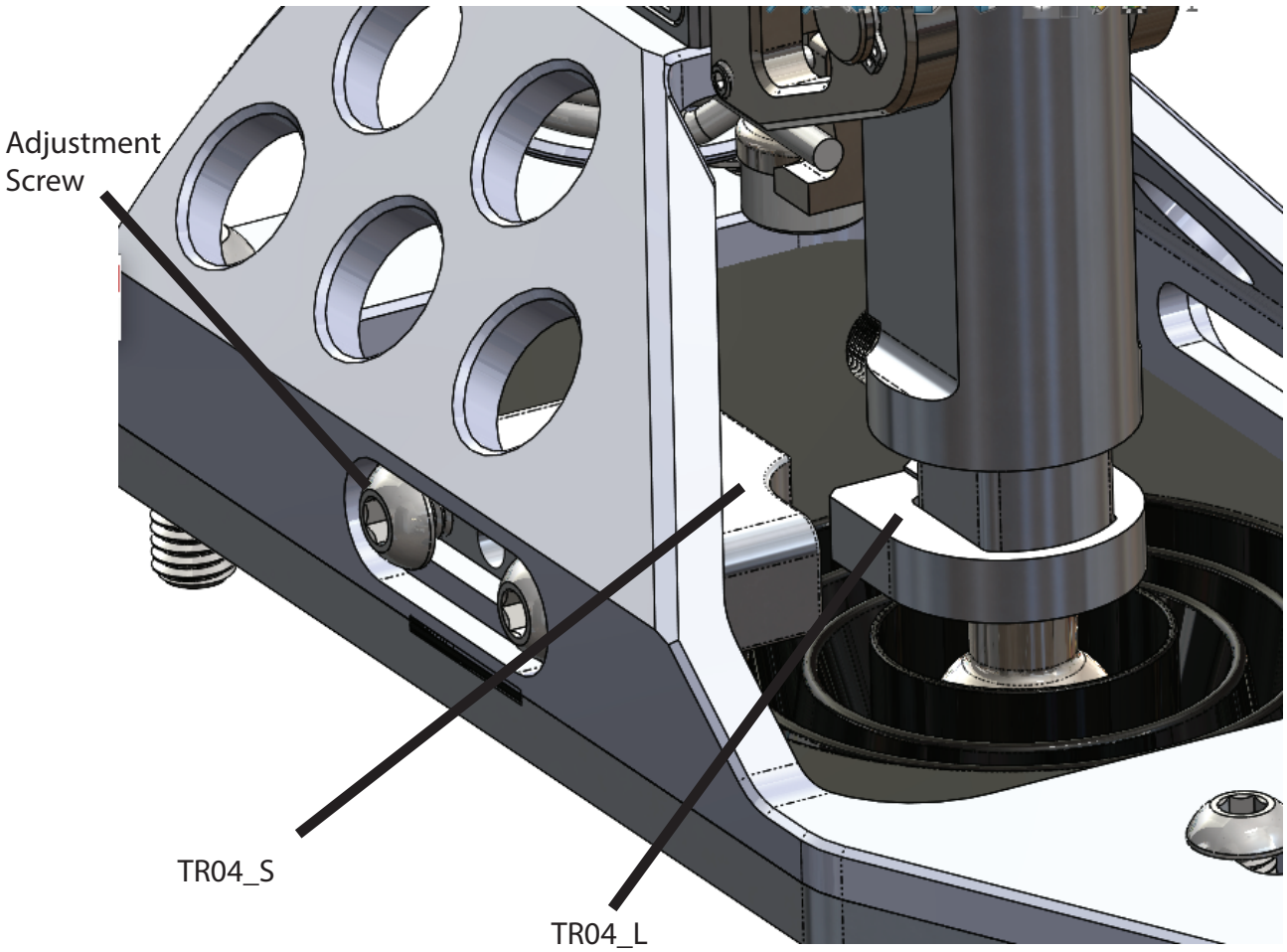
TR04 has several adjustable parts to ensure best fit for each individual use case. These shifters have been adjusted for use with most applications but may need further adjustment for your scenario. Below we will go over the three different adjustments to this shifter.

Reverse Lockout

Referring to the parts diagram - locate TR04_S on the left side of the shifter body. This should be already installed. This block is your interference block for the reverse lockout.

To adjust this block you should perform this in the car. There are two screws that fasten this block to the side, ensure this is loose. To set this position you want to move the block forward or back based off how the collar interferes with the bottom of the shifter. To find this out you want to pull the reverse lockout shoulder and try to put the car in reverse. Set the adjustment to where the collar can be pulled and the car will enter reverse but will not when the collar is released.

When this location is found tighten both side screws to lock into place.



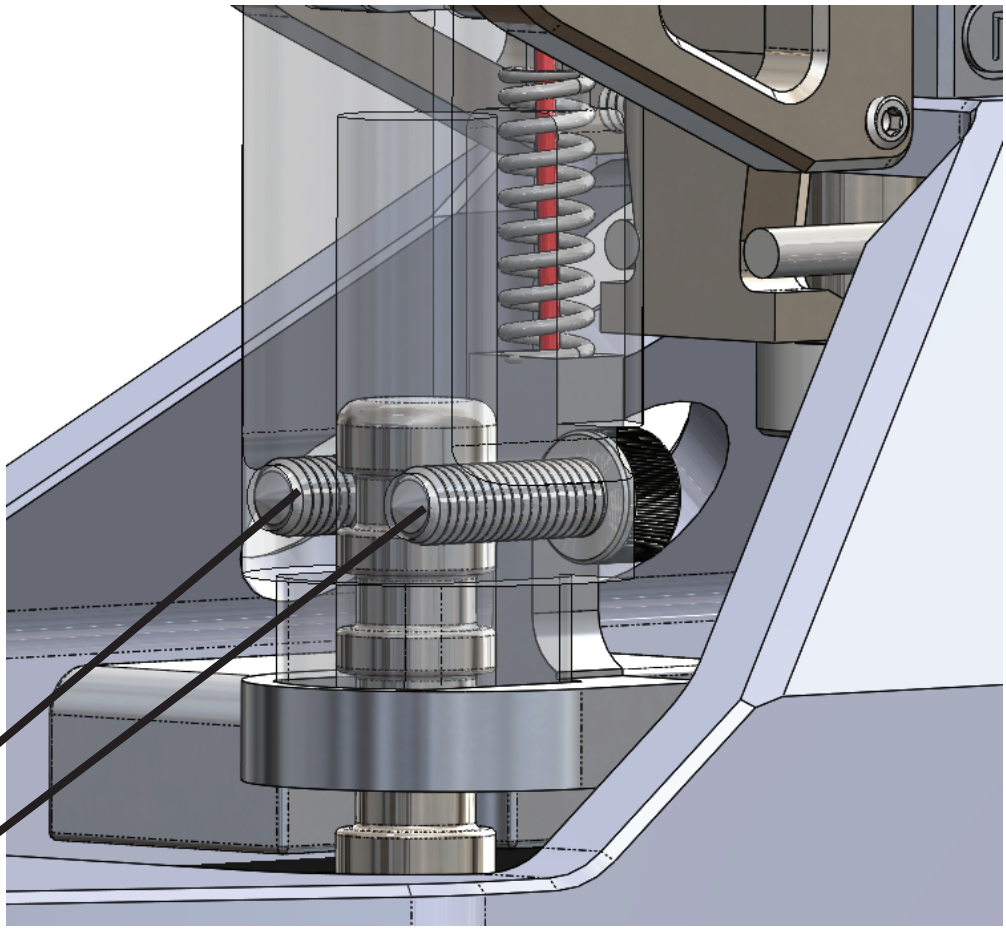
Ball Socket

The second level of adjustments is the ball that fits inside the shifter socket.

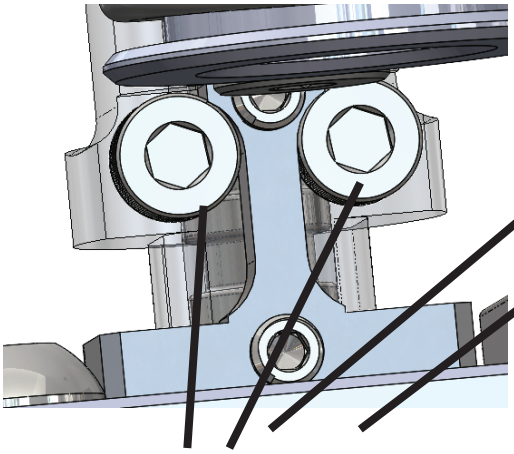
This adjustment is to compensate for the differences between cars and how the shifter is mounted. To adjust remove the two screws and move the ball either up or down. If the ball socket is adjusted the shifter coupling may need to be adjusted as well.

This part has 4 levels of adjustments. Adjustments are set with the screws on the shifter shaft. The shifter will come with the set screw in the standard notch.

Most cars should have the screws set at this location.



TR04_K

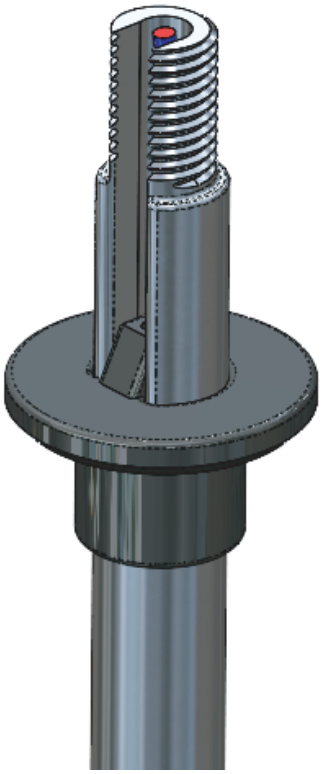


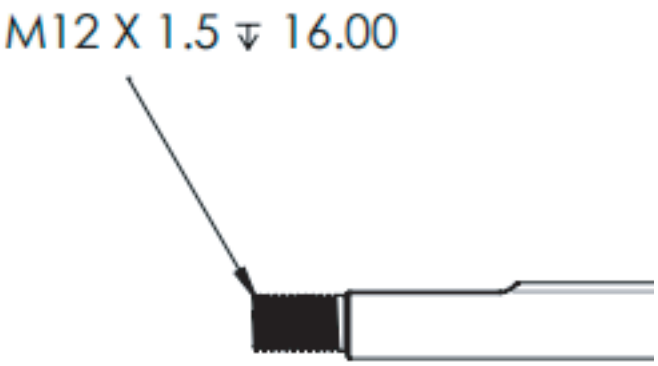
Remove screws to fully adjust.

Shift Knob

TR04 comes equipped with your choice of aluminum shift knob finishes. To open up the possibility of more knob options, we have added a threaded section to fit aftermarket style knobs in M12 x 1.5 Thread.

The shift knob that comes with your Shifter (along with other Rennline shift knobs) will attach with a set screw.





Install Instruction for ExactShift Billet Shifter

To attach to Rennlines's ExactShift Billet Shifter - line the set screw up with the shift rod groove.

Since this shift knob is height adjustable - ensure that the knob is not set at the lowest point to restrict the ability for the reverse lock out to function.