

# 350Z & G35 CD00x MANUAL TRANSMISSION SHORT SHIFT LINKAGE KIT



## INSTALLATION INSTRUCTIONS

Rev - July 2017

### **!!NOTICE!!**

LOJ CONVERSIONS CORP HAS PREPARED THESE INSTRUCTIONS TO MAKE YOUR PRODUCT INSTALLATION AS SIMPLE AND HASSLE-FREE AS POSSIBLE. INSTALLATION ISSUES EXPERIENCED AS A RESULT OF NOT FOLLOWING THESE INSTRUCTIONS ARE THE SOLE RESPONSIBILITY OF THE USER.

### **!!WARNING!!**

THE USER OF THIS PRODUCT ASSUMES ALL LIABILITY FOR ANY DAMAGES TO PERSONAL OR PUBLIC PROPERTY RESULTING FROM THE USE OR MISUSE OF THIS PRODUCT. ANY INJURIES SUSTAINED BY THE USER AND/OR ANY OTHER INDIVIDUALS ARE ALSO THE SOLE RESPONSIBILITY OF THE USER. MOTORSPORTS ACTIVITIES ARE INHERINTLY DANGEROUS AND LOJ CONVERSIONS CORP CAN NOT BE HELD RESPONSIBLE FOR ANY INCIDENTS RESULTING FROM THE USE OR MISUSE OF THIS PRODUCT.

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## BEFORE YOU BEGIN:

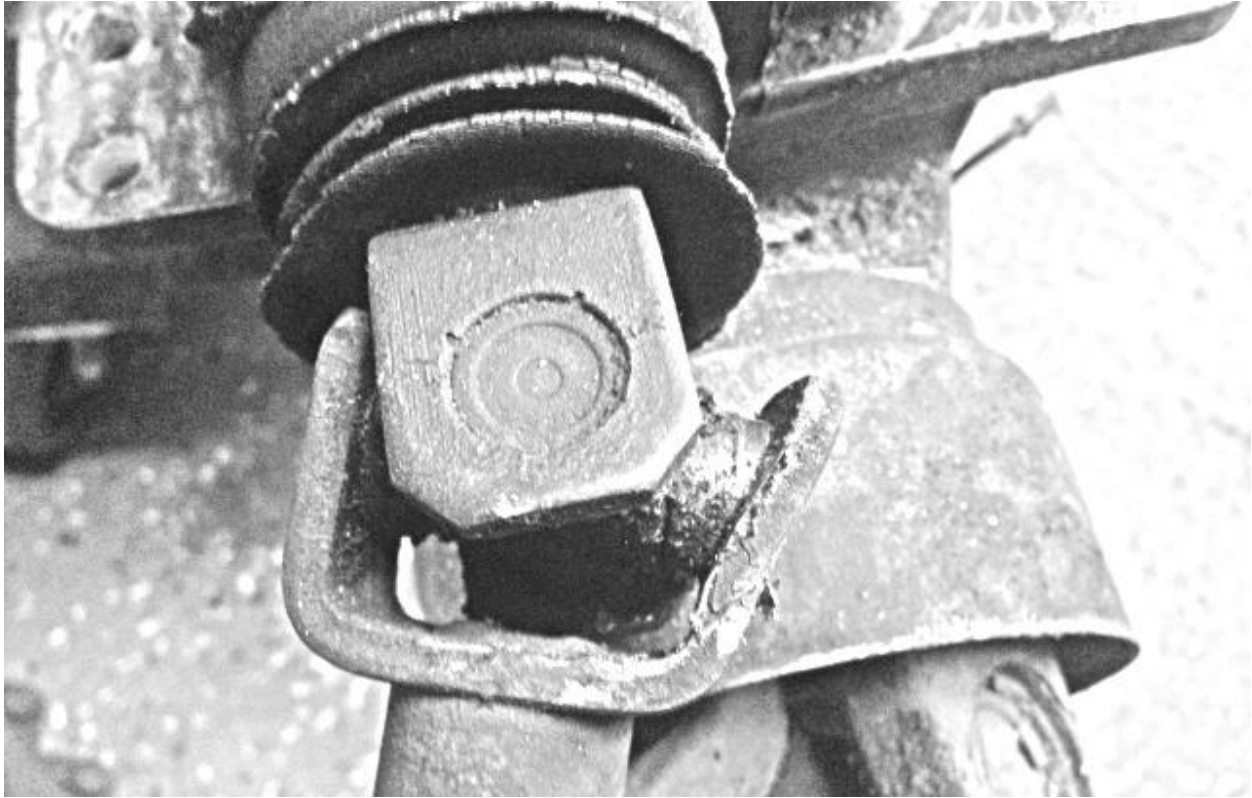
Please ensure that all of the components required for your installation have been included in your package. This will include:

- One Billet Shifter Bracket
- One Billet Stainless Steel Shifter Linkage with Hardware
- Two Bracket Mounting Bolts (M8x1.25 50mm Long Socket Head Bolts)
- Two Steel Bracket Support Struts (Powdercoated Grey)
- Four Bracket Support Strut Mounting Bolts (M8x1.25 20mm Long Flange Head Bolts)
- One Bolt and Nut for Shifter Attachment (M8x55mm Bolt)
- Two Billet AL Spacers (**NOT NEEDED FOR ALL INSTALLS**)

## INSTALLATION PROCEDURE:

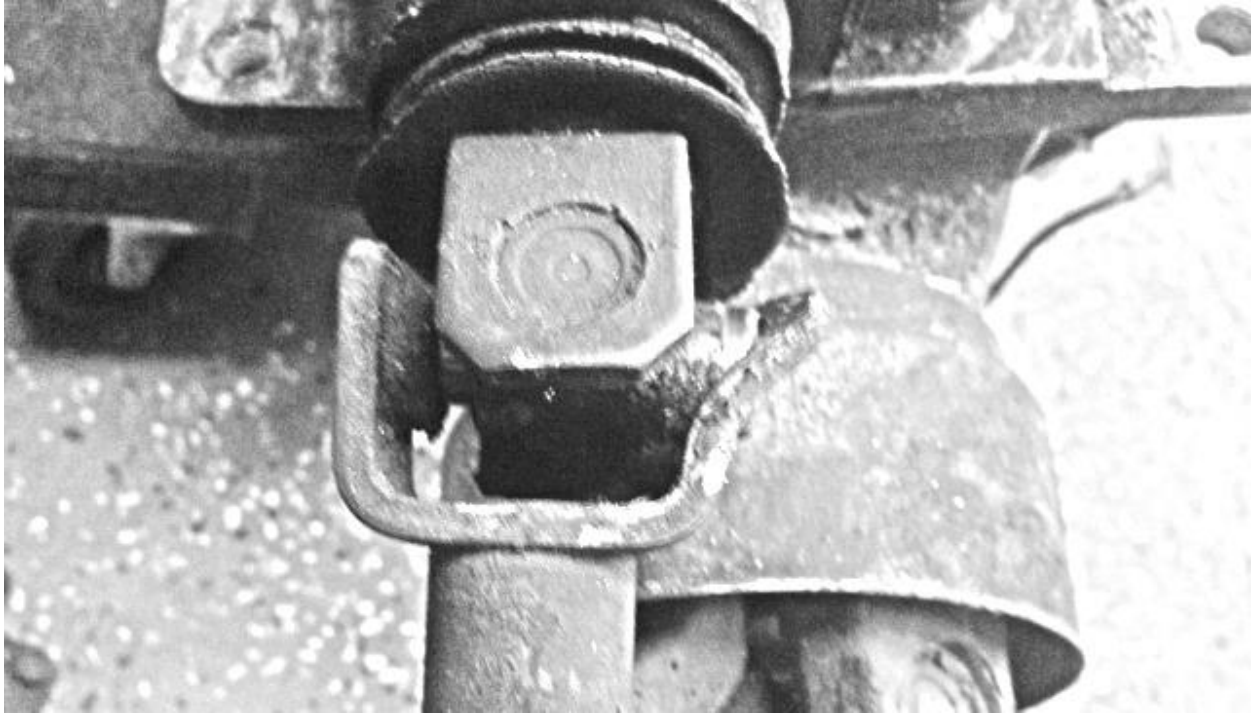
- 1) The first step for installation is to remove the stock shifter bracket and stock shifter linkage from the transmission. The stock bracket simply unbolts from the transmission, but removing the shifter linkage requires more effort.
- 2) The easiest way to remove the linkage is to use an adjustable wrench to bend the linkage off of the universal joint at the transmission. First grab the linkage with the wrench coming in from the rear of the transmission to make your first bend. Please see the following images.





3) Now move the wrench to come at the linkage from the front to complete the bend.





4) The linkage should now be bent far enough to remove from the universal.

**IMPORTANT** – The U-Joint has metal caps that contain many small needle bearings that can be lost if the cap comes off the U-Joint! Be careful not to lose these bearings as they cannot be purchased separately from Nissan!

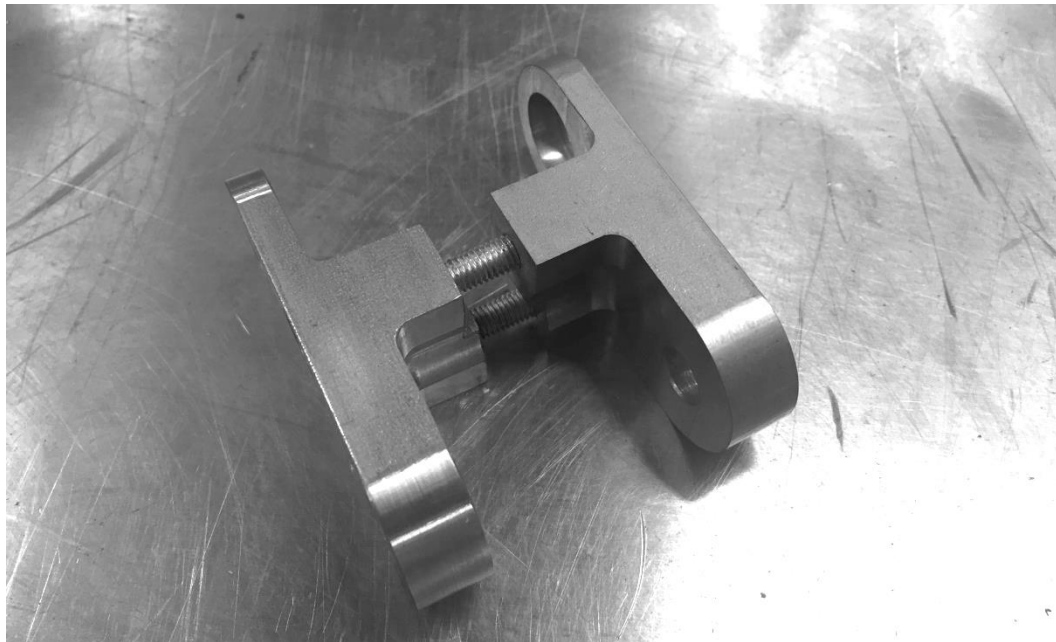






**TIP –** You will see in the images above, that one of the U-Joint cups came off with the linkage. Do not try to remove it from the linkage with a hammer. Place the linkage in a vice grabbing it in the same manner you did with the adjustable wrench and bend it to release the cup. This will make it less likely that you will lose the needle bearings inside. Then simply place the cup back on the U-Joint.

- 5) Now it is time to install the new linkage. The two halves of the linkage will be assembled as seen in the picture below. Both halves are identical, there is no left or right. Loosen the bolts to separate them as you see in this picture, as that will help with installation.



- 6) Place the linkage over the U-Joint as seen in the image below and start tightening the fasteners.  
(Z32 Linkage Shown For Reference)

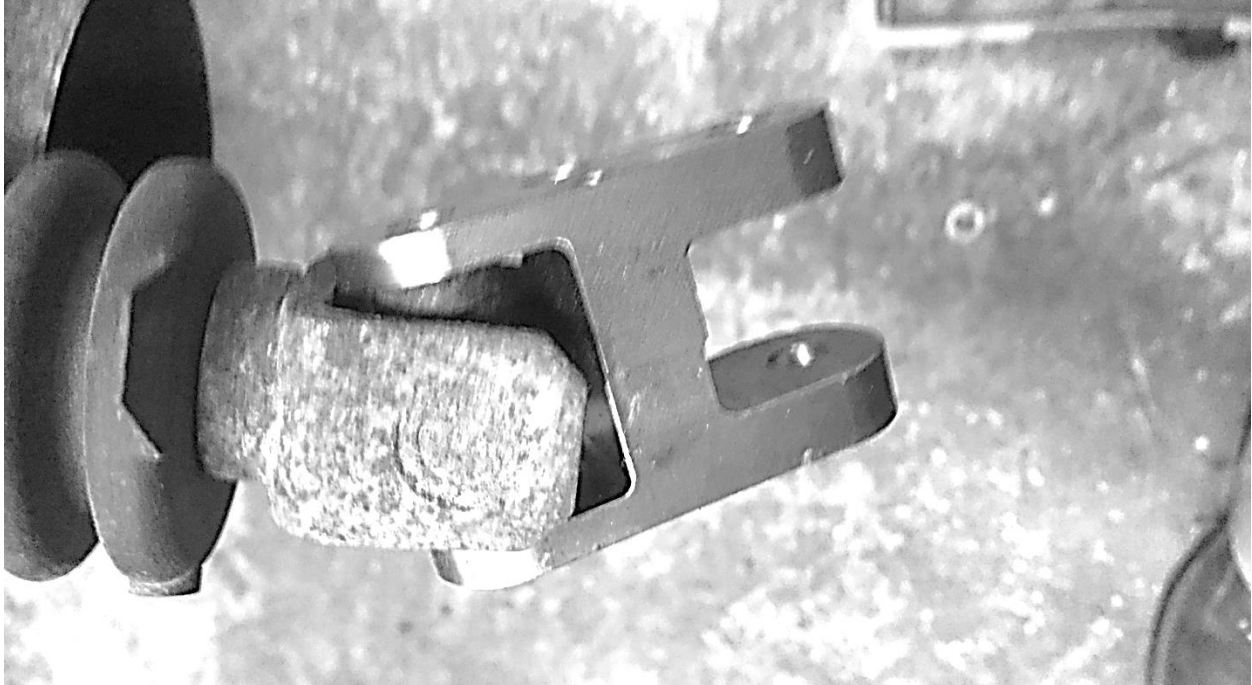


**NOTICE** – The fit between the new linkage and the U-Joint is tight! The linkage may start to bend as you tighten the fasteners. If this happens, stop tightening them and use a C-Clamp, Channel Locks, or other suitable tool to squeeze the linkage onto the U-Joint as you tighten the cap-screws.

This happens because Nissan secured the factory linkage to the U-Joint by deforming the metal with a punch. As a result, the caps are not always left perfectly round.

LOJ Conversions will NOT replace linkages bent from overtightening the fasteners without assisting the linkage seating onto the U-Joint!!!

7) This is what the linkage looks like completely installed.



8) Now it is time to install the billet shifter bracket using the supplied M8x1.25 50mm long socket head bolts. Please see the following image.

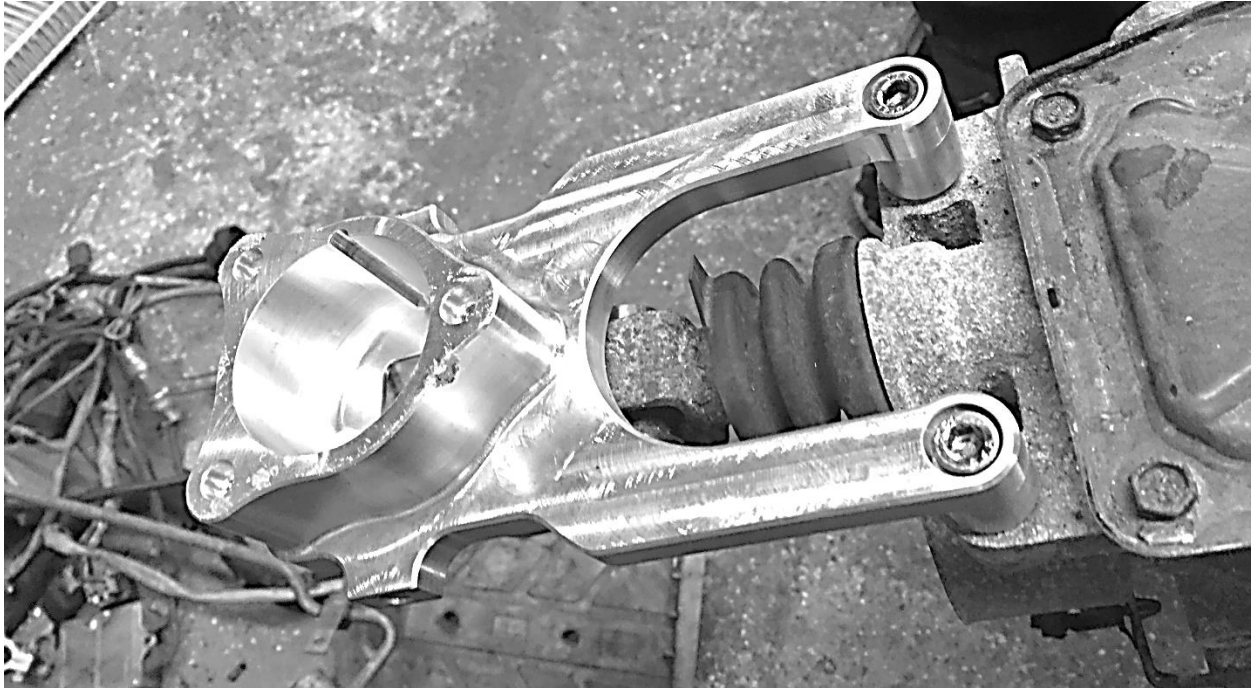
**NOTICE –** At some point in the many revisions of the CD00x series transmissions, Nissan made a switch from a rigid mounted factory shifter bracket to a bracket that has bushings.

If your transmission had a rigid mounted bracket, the billet shifter bracket bolts directly to the top of the transmission. There are factory alignment dowels that can be reused, but are not necessary.

If your transmission had the shifter bracket with rubber bushings, the supplied billet AL spacers will need to be installed between the bracket and the transmission.

If you purchased your transmission used and it did not have a factory shifter bracket, first install the bracket without the spacers. If the bracket hits the shifter linkage and the support struts do not fit, install the spacers.





- 9) Now install the support struts using the supplied M8x1.25 20mm long flange bolts. Install the end with the round hole on the transmission and leave the bolt loose enough to allow the other end to be bolted to the bracket. The strut will be at a slight angle and when you tighten the bolts and the strut will bend to shape, this is intentional.



10) Now your shifter can be installed. It is a good idea to test fit the shifter to ensure proper function. Install the shifter in accordance with the factory service manual, or supplied instructions if it is an aftermarket shifter.

**NOTICE – Remove the shifter prior to installing the transmission into the vehicle. It will allow for much more clearance while maneuvering the transmission and will prevent damage to the transmission or the shifter!**



**You installation is complete!**