



RS-Style Shift Rod Installation

Congratulations on your purchase of the Golden Rodtm. We wish you many miles of crisper, more precise shifting.

Everything is done via the underside of the car; nothing inside the car needs to be touched. *Note: The photos in these instructions are all from 2WD cars. Turbo and C4 993s have the same exact steps. The torque tube acts as the shift box so it will look a bit different.*

What you need:

- 10 mm wrench/socket
- 13mm wrench/socket
- Needle nose pliers
- Medium-large channel-lock pliers
- 19mm open end wrench or equivalent tool for prying
- Small standard screw driver
- WD-40®
- Optional but recommended: Medium-strength thread locker such as Loctite[®] 242

Removing Original Rod

Remove the center tunnel cover.

Remove the small cover near the front passenger side that overlaps the center cover. You can also remove the front transmission cover (not shown) but this is not required.



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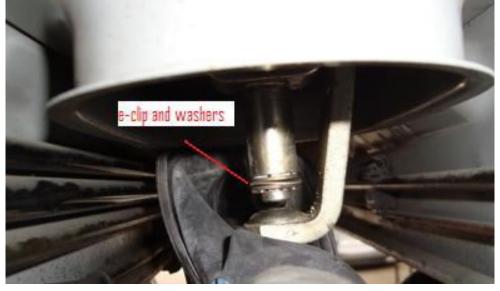
Removing Original Rod – continued

Pull the rubber boot loose from the bottom of the shift box to expose the shift lever and fork. Use a "pickle fork" or 19mm open end wrench to separate the ball/cup joint. Slip the wrench in between the cup at the end of the forward, fixed rod and the shift lever (see below). Keep continuous pressure on while prying downward and it will slowly pop off.



Slide the shift lever (ball end) forward to expose the bottom of the shift fork. This is hard to explain, but move stuff around and it will make sense.

Use a small screw driver to pry off the e-clip. There will be 3 washers (2 flat and 1 wavy washer). The wavy washer is sandwiched between the 2 flat washers and keeps tension on the e-clip and bushings.





Removing Original Rod – continued

Slide the shift rod off of the shift fork.

Go to the transmission end of the shift rod and slide the dust boot forward (forward = front of car) to expose the shoulder bolt that holds the rod on the transmission shift shaft. Remove the bolt. We designed the Golden Rodtm so that it will reuse the same bolt so keep it! (Porsche's RS rod uses a different bolt)

Note: Photo below shows the new rod already in place. Pretend this is your original rod.



Slide the rod off of the shift shaft. The tolerances are pretty tight and the shift shaft may move. This is okay. No damage can be done and it can end up in any position. The shift lever follows whatever position the shaft is in.

Remove the shift box boot from the rod by working the shift rod through the rubber boot. It will be fairly tight.

Remove the shift shaft dust boot (at the transmission end) and slip it onto the Golden Rodtm. The smaller opening in the boot goes on the shift rod end.



Installing the New Shift Rod

Slide the Golden Rodtm into the rubber boot at the shift box. The shift shaft boot (at the other end) should already be on the rod.

Before sliding the new rod onto the transmission shift shaft, be sure that both parts are very clean. A little WD-40[®] helps to keep things loose and aids in aligning the bolt hole.

Align the hole.

Optional but recommended: Apply a medium strength thread locker (such as Loctite[®] 242) to the shoulder bolt threads. Slip bolt into rod, wiggle shift rod a bit if necessary to push the bolt into place. This will be a pretty snug fit (as it should be). If desired, you can torque the shoulder bolt to 13 ft lbs or... "tight" is good, too.



Slide the shift shaft dust boot into place. One end goes over the shift shaft seal on the transmission, the other on the Golden Rodtm.





Installing the New Shift Rod – continued

At the other end of the rod:

Remove the top and bottom bushings from the original rod, reinstall on new rod. You may want to add some new white grease here but usually it is still in good shape.

Note: Often the top bushing is still on the fork in the car.

Slip the shift rod onto the shift fork. Slide washers onto the shift fork (flat washer/wavy washer/flat washer). Use needle nose pliers to reinstall the e-clip. You are using the pliers to squeeze the clip into place with one jaw on the shift fork and the other on the clip. Be very sure it's in its groove! Note: This can be a little tricky as you need to compress the wavy washer to get the clip back into the groove on the fork.

Use medium-large channel lock pliers to squeeze/compress the ball/socket joint at the base of the shift lever. Steady, constant pressure gets it done.

Optional:

This step is not required, but you can adjust the position of the shift lever if you want to. This adjustment changes the position of the shift lever inside the car. If your shift throws are not centered in the console, this is how you can adjust it. 2^{nd} and 5^{th} gear positions are the two you want to pay attention to when making this adjustment.

The fixed forward rod (attaches to bottom of shift lever with a ball/cup joint) has a jam nut at the front with a threaded rod end.



You'll need to remove the front under cover to do this step. Pop the FRONT ball/cup joint apart. Loosen the jam nut. Lengthen or shorten the rod. Lengthening the rod moves the shift lever forward; shorten it to move the lever (in car) rearward. Adjust and then tighten the jam nut.

Note: When tightening, it is important to ensure the front rod end is on the same plane as the cup at the shift lever (the other end).