

Short Shift Kit

Installation

The only thing that needs to be done inside the car is the removal of the shift boot/knob. Everything else is done via the underside of the car.

What you need:

- Short Shift Kit
- 17 mm wrench (x2)
- 17 mm socket (optional)
- 13 mm wrench/socket
- Needle nose pliers
- 19 mm open end wrench or equivalent tool for prying (more on this later)
- 4 mm Allen wrench
- Small standard screwdriver
- Medium strength thread locker such as Loctite® 242
- White grease or multi-purpose grease

The R&R should take about 60 to 90 minutes after the car is in the air.

There are a wide range of shift knobs out there, but all of them should have the same boot base. The knob itself is a friction fit and is just pulled off.

Note: There are some knobs that have an Allen head bolt to secure it to the shift lever.

- 1.) On the driver's side, press down on the rectangular base ring where it meets the console. You can use a soft prying device or a screwdriver softened with a thin rag (see photos on next page).
- 2.) Once the base ring on the driver's side is released from the two spring clips, pull the rectangular base ring from the passenger's side clips. The clips on the passenger's side are fixed and the ring hinges on these. Remember this when reinstalling.
- 3.) Next remove the boot base from the console in the same way you remove some window screens. One corner first, then the next. Take care to not scratch your leather!
- 4.) Once the boot base is free of the console, pull upward on the knob. On some cars this will be on there pretty snugly... be careful! When it comes loose, you may smack yourself in the face! Don't ask me how I know.
- 5.) If you have an MY02 knob (or some others) you will need to remove a set bolt that secures the knob to the shift lever.
- 6.) You are done inside the car.

Remove Shift Knob/Boot



Remove Under Panels

Remove the panel forward of the tunnel cover (*not seen in photo below*) 10mm nuts, a couple of different styles. Note location when removing.

Remove the center tunnel cover. Remove small cover near front passenger side that overlaps the center panel.

Many more 10mm nuts and a few bolts.



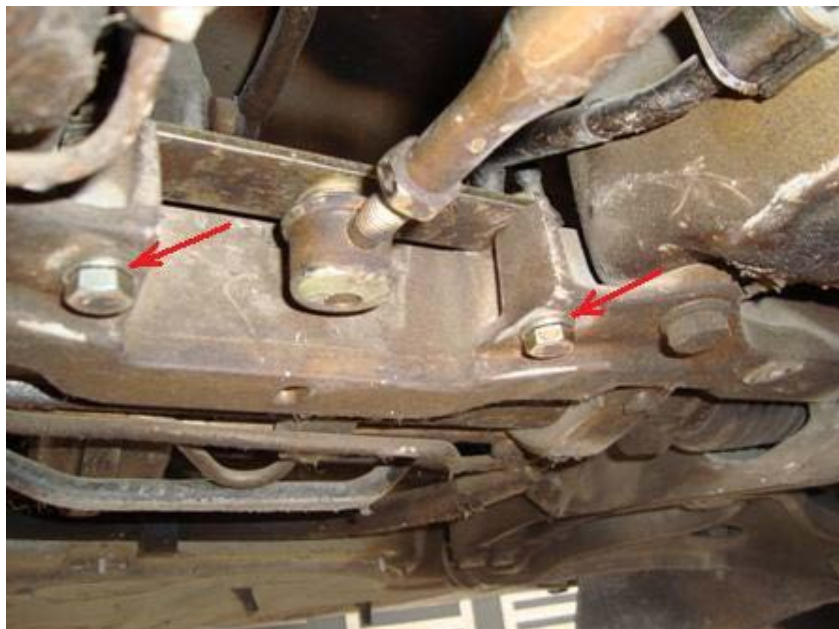
Remove Old Shift Components

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 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.

NOTE: Left side of photo below is the driver’s side of the car



At the other end of the forward rod: Remove and retain the two 13mm bolts that attach the bracket to the chassis. Remove forward rod from shift box boot and set aside. Forever. ☺



Use a small screw driver to pry off the e-clip. There will be 3 washers (2 flat and one wavy). The wavy washer is sandwiched between the 2 flat washers and keeps tension on the e-clip and bushings. Slide shift rod and rubber boot out of the way.

NOTE: Left side of photo below is the passenger's side of the car



Remove the four 4mm Allen head bolts (painted red in photo below).

OPTIONAL: Instead of removing these 4 bolts, you can remove the tube the shuttle slides on leaving the shuttle assembled. The tube needs to come out shortly in any case, so this is a good way to go. *See page 7-8 for more on removing this tube.



Separate the shuttle halves (this probably happened already). Let the lower half that is attached to the shift lever/fork drop down and slip the upper half around and remove it.



Slide the shift lever down and carefully pull from the upper rubber boot. Take this assembly to a workbench.



Remove the e-clip from the shift fork. This is exactly the same as the clips/washers you removed earlier. The photo show these clips removed. Slide the fork and shuttle half off of the shift lever.



Slide fork off of the shuttle half being careful to retain the rubber o-rings.



Reassembly

Reassemble the shuttle half onto the new RS Shift Fork and RS Shift Lever. Lightly grease the o-rings and bushings. Finish by inserting e-clip. Be very sure the e-clip is in its groove at all 3 points.

*You will likely need to press down on it in order to compress the spring washer to get it home.



Back to the car to flip the shift box bushings.

1. Remove one circle clip from the slider tube
2. Remove the tube
3. Flip the bushings
4. Slide tube back in and re-insert the circle clip.

See the photos below.





Slide the new shift lever tip into the rubber boot above the shift box.

NOTE: Shift lever goes in on the DRIVER'S side of the car!

*** If you removed the shift shuttle using the optional method on page 4, simply slide the tube carefully through the shuttle. There are nylon bushings inside the shuttle, so take care when sliding the tube in.



Install upper shuttle half. Be sure both shuttle halves are lightly greased.

Install and tighten the four 4mm Allen head bolts using Loctite® 242.



Reinstall the shift rod.

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 jaw on the clip. Be very sure it is in its groove!



Install the new forward rod bracket using the two bolts you removed earlier.



Install & Adjust SS Forward Rod

Install the new stainless steel forward rod.

1. Be sure the SS spacer is on the front bracket stud before putting the rod end on.
2. Tighten SS nylon lock nut on the shift lever.
3. Leave the nut on the front bracket loose for now.

The forward rod is adjustable and moves the shift lever forward or back on the inside of the car.

- Shortening the rod moves the shift lever rearward
- Lengthening the rod moves the shift lever forward

Adjusting forward rod:

1. Check the shift pattern inside the car.
2. Slip the front rod end off of the bracket, rotate the rod end.
3. Recheck the pattern inside the car.
4. When you reach the desired position, tighten the nylon lock nut on the front bracket.
5. Tighten the jam nut on the rod. Allow the rod to rotate as you tighten the nut. This will ensure the rod ends are aligned.
6. Use the SS nut welded onto the fixed end of the rod to get it tight.

Reinstall the under panels....

Go DRIVE!