

Basic Install Instructions

These install instructions are limited since I don't have pictures or an instruction set for removing the center console. However, the more crucial and complicated steps are well detailed. Additions, corrections, and suggestions are welcome!!

Be cautious of sharp edges. We take great care to deburr parts and use machining methods and tools which leave minimal burrs, but even deburred edges can be sharp. Just be careful!

Your kit will include the following:

- One stainless steel shifter body (long, round, with a half- ball on the bottom)
- One aluminum shifter clamp (small, rectangular)
- One tall, skinny spring (green)
- One 12mm rubber O-ring
- One 12mm snap ring
- One white plastic half-ball
- One small white plastic bushing
- One metal ring
- One M6x 25mm allen-head bolt
- Two ball socket halves
- One brass bushing

In addition you may have a short, wide spring. I intended to ship this with every kit, but Audi doesn't consider it a maintenance item and I have used up the world's supply of these springs! If you didn't get one, just re-use the old one. There will be no ill effects from doing so!

Tools required:

- Medium-large flat-bladed screwdriver
- Metric wrenches
- Metric sockets 8, 10, 13mm
- Snap ring pliers
- Grease, such as white lithium grease or generic "spray grease"
- Pry bar?
- Vise?
- Dremel tool or small file
- 5mm Allen wrench

1. Remove shift knob by unscrewing counter-clockwise.
2. Remove console or at bare minimum, shift boot. Shift boot simply snaps out of place on most vehicles. If you remove the shift boot only, it is a rather tight fit but it IS doable.

The small brackets on the console will be the toughest obstacle and many chose to simply delete them.

3. Remove sound insulation.

4. Unbolt linkage arm to transmission (10mm nut and bolt).

5. Unbolt large gold-colored surround. This is tough to get out if you are leaving the console in. Yes, it can come out without removing the side brackets, but is really tough. Watch out, it has sharp edges! I cut my thumbs up pretty badly on this piece once.

6. By now you should be looking at a funny plastic linkage disappearing into a ball socket. Using a combo of screwdrivers and possibly a pry bar, remove the thin metal retaining ring holding everything in there.

7. Pull up with much gusto! Use the screwdriver/prybar around the black rubber retainer to get the entire assembly to slide out. It will take quite a bit of effort, since this is a tight fit. If the ball pops out first, no worries, just remember to pull it all out.

8. Pull the top snap ring off the shift rod/linkage you have just removed. Begin tearing down this assembly until you are left with just a rod. You will have to pull the ball out of its socket, but when the socket is out of the car, it flexes easily. Here is where I think a bench vise comes in handy to hold the parts steady.

9. Replace the inner ball socket shells with new pieces. Spread grease everywhere you feel like...you can't use too much!

10. Test fit the new shifter body on your recently-liberated shaft. Chances are you will find resistance when you approach the reverse lockout tab. Audi got sloppy. The reverse lockout tab is just jammed into the shaft at the factory and they leave some nasty burrs. It's not an issue with the OEM plastic pieces because they are so sloppy they slide right over the burrs. Here's a [close up picture](http://www.billzcat1.com/Shifter2/rodburrs.jpg) of the burrs you may need to file or grind with a Dremel.(<http://www.billzcat1.com/Shifter2/rodburrs.jpg>). The body should slide freely over the shaft without hangups or snagging.

11. Assemble your new shaft assembly in this order, from bottom to top: O-ring, shifter body, green spring, plastic bushing, snap ring. Be sure to put some grease on the shaft. The skinny spring will sit in the recessed portion on the very top, and the assembly looks like this (exploded view):



and will end up like this:



12. Use short, wide spring and new plastic half-ball like so:



then hold tight by hand and press into your freshly renewed shifter ball socket. Use grease liberally here.

13. Press the socket back into the receptacle in the car. Here is where you can make a decision. Maximum reduction can only happen when a small tab is removed from the base of the entire assembly. You'll see it in there: a tab about 2 cm long right in front of where the ball socket rests. This piece is now a vestigial part from the old days of plastic linkage. In theory, when pulled back into 4th gear violently, the plastic piece could break. Also, it aided in reducing side-to-side stress on the plastic linkage for 1st, 2nd, 5th, 6th and Reverse. The new stainless linkage is about 500 times stronger. If you cut the tab off, you will be able to utilize the full 30% reduction, otherwise you are limited to about 20%.

14. Decide what to do there, then install the metal retaining ring on top of the rubber ball. This metal retaining ring is only used on the Ur-S4, Ur-S6, and S8 6-speed.

15. Reinstall large gold bracket assembly in car, clean exterior of shifter of grease, then place the shifter clamp loosely onto the shifter body. Orientation is not important; there's no top or bottom to the clamp. However, it will quickly become evident which end is the front!

16. Install brass bushing into the shifter clamp using liberal amounts of grease on the inside and outside. Keep the rear and center of the clamp free of grease. Install the 6mm allen bolt in the rear of the shifter clamp. This bolt comes with blue loctite pre-applied.

17. Reuse original bolt on linkage arm and bolt linkage arm to shifter clamp.

18. Adjust to desired shift reduction and tighten with 5mm allen wrench. The allen bolt is tightening into a stainless steel threaded insert so you needn't worry about stripping it unless you really abuse the parts. The bottom-most setting is stock throw, whereas the top-most setting is approximately 30% reduction. Some models may have transmission tunnel clearance problems. I recommend raising it until it stops, then back off just a hair. Test throw in each gear including reverse before completing re-assembly. You may want to test drive the car with the console/boot out just to make sure everything is functioning properly.

19. Reinstall sound insulation, console/boot and knob. Enjoy!!