

W124 adjustable steering column retrofit

My car is a 1992 model without adjustable steering column. Therefore I took one from a 1990 car along with the steering wheel.

It is very important to look at ETM and wire everything BEFORE starting the job. It took me three attempts to have it working. Check all connections with a multimeter for continuity and solder whatever you can. I soldered one end of each wire, so that I could swap the remaining end if needed. Turned out to be very useful! Use your car battery to test proper operation before starting.

You need the seat control unit, which is to be found under driver's seat on the donor car. You need to make 3 connections: switch to control unit, then control unit to steering column motor and to position sensor. The position sensor connection is necessary for voltage reversal and telescoping in the other direction!

Save all connectors and bolts from the donor car. Photograph everything. Read this tutorial before the job to gather necessary tools.



1. Disconnect the battery.

2. Remove trim around ignition and light switch prying towards left side. For the light switch, first pull the knob towards yourself until it detaches, then use 24mm socket to unscrew the switch from the trim. THEN remove the trim.







3. Remove 8mm bolts holding the kick panel. There are 2 bolts down towards the pedals too.
4. Remove parking brake cable and hood cable.
5. Pull the kick panel out.
6. Use Torx T30 to loosen the airbag from behind the steering wheel, then disconnect it.
7. Use allen 10mm socket with extension to detach the steering wheel. Do it while holding the wheel with your other hand and knees.









8. Unscrew 3 small Philips screws, remove the plate. Disconnect its cable near the cruise amplifier (red connectors).





9. Undo 3 bigger Philips screws. Follow the cables and disconnect connectors. Pull the whole plastic cover with signal controls out.







10. Undo 2 10mm nuts holding the jacket tube (steering column) to the shaft. At this point, you have to remove the instrument cluster completely and use a deep 10mm socket to remove two bolts holding the steering column to the upper frame.

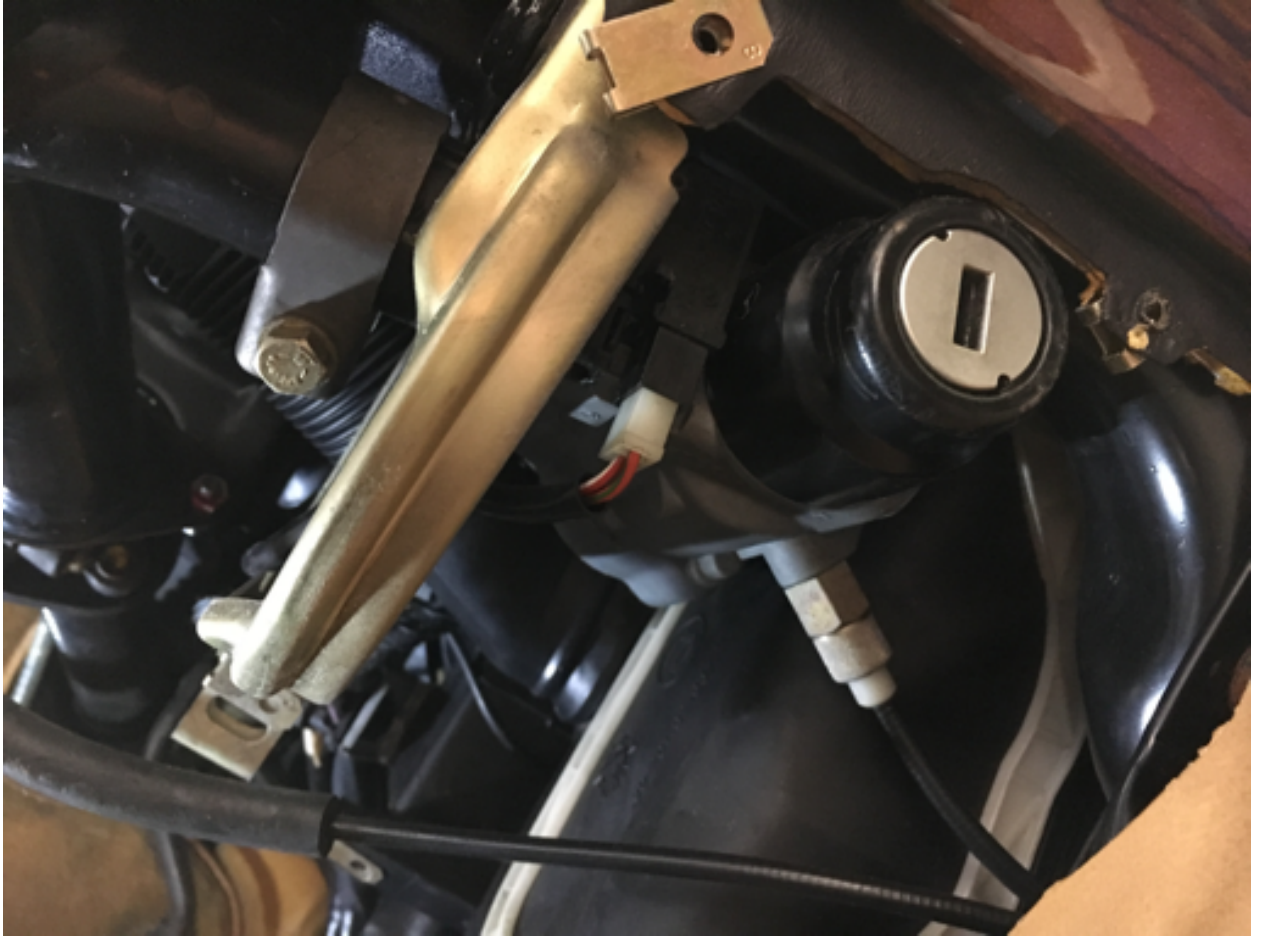








11. Put the key in ignition and turn to position 1. Place a screwdriver in the security hole and push button therein. It can be hidden behind a metal clamp (use 10mm socket to loosen it and move). You should be able to wiggle the whole ignition off.





12. At this point, jack the driver side of your car up, secure on jack stand and go under. Locate the 6mm allen bolt connecting the lower steering column to the steering box coupler. Spray with penetrating oil and remove. DO NOT STRIP IT.

13. Now you should be able to pull the jacket tube out with minimal force. Be careful not to bend it.



As you can see in the picture above, the original black jacket tube has a welded two-bolt flange. The adjustable one has a detachable one (lacking here).

14. Installation is reversal of removal. Couple notes here:
- Use blue threadlocker on the steering coupler bolt (19ft lbs torque) and steering wheel bolt (59ft lbs torque). Other bolts/nuts require 15 ft lbs torque, but after breaking one in half, I torqued everything by hand. Consult the factory manual.
 - I removed the cruise amplifier with its mounting plate and just slid the seat control unit there.
 - Cables from the seat control unit to all three connectors need to be 30-40cm long **at most**.
 - Tapping into power was the most problematic. I tapped into thick red-yellow cable coming out of the fuse box. Connected ground into one of the cruise connector cables.
 - You can use protective cable sleeve over your cables to organize them.
 - The swap resulted in a gap between the plastic surround of jacket tube and my dash. The black piece of plastic that should go in between is not a direct fit. Probably the kick panel has to be swapped as well.

