

# 42 Draft Designs

## Shifter Cable Bushings

VW Mk4 Jetta, Golf, GTI | 2002.5-2005 | 5&6 Speed

**Tools Recommended:** needle nose pliers, large flat head screwdriver, hammer

**Warning!** Hot metal burns! Always work on a cool motor.

### Contents:

- 2 round front/back bushings marked B6FB52
- 2 round side/side bushings marked B6SS51

### Before You Begin:

Set the emergency brake. Place the shifter in neutral.

The front/back endlink is square and accepts the round bushings marked B6FB52. The pin diameter is roughly 10mm. The front/back endlink connects directly to the weighted shift linkage.



The side/side endlink is square and accepts the round bushings marked B6SS51. The pin diameter is roughly 8mm. The side/side endlink connects directly to the metal side/side linkage.



### Front/Back Bushings

1. Disconnect the front/back end link from the shifter cable by grasping the plastic ring which retains the spring. Pull this ring towards you compressing the spring as you pull. When the spring is fully compressed, rotate the ring until it locks into place. The end link will now be free from the shifter cable.
2. Remove the retaining clip which holds the end link to the shifter linkage pin. Lift the center of the clip using needle nose pliers and slide off the pin. Don't lose this clip!
3. Slide the end link off the pin and off the shifter cable. Unlock and release the spring.
4. The rubber bushing in the end link is molded in place. A thin vein of plastic in each corner keeps the bushing from coming out. These veins must be broken to install the new bushings.

5. Using a large flat head screwdriver press into the rubber bushing in each corner at a 45° angle. Tap the screwdriver with a hammer or press hard to break the plastic veins. Remove the rubber bushing by pressing it out with your fingers.
6. Insert the new bushings marked B6FB52 from either side of the end link. Simply press them into place.
7. Compress and lock the spring on the end link. Re-install by first sliding the end link onto the shifter cable, then sliding the bushings over the pin. It may be necessary to wiggle the shifter linkage to slide the bushings over the pin.
8. Re-install the retaining clip by sliding it over the pin until it clicks. With the transmission still in neutral and the shift knob centered inside the car, release the spring on the end link.

### **Side/Side Bushings**

1. Disconnect the side/side end link from the shifter cable by grasping the plastic ring which retains the spring. Pull this ring towards you compressing the spring as you pull. When the spring is fully compressed, rotate the ring until it locks into place. The end link will now be free from the shifter cable.
2. Remove the retaining clip which holds the end link to the shifter linkage pin. Lift the center of the clip using needle nose pliers and slide off the pin. Don't lose this clip!
3. Slide the end link off the pin and off the shifter cable. Unlock and release the spring.
4. The rubber bushing in the end link is molded in place. A thin vein of plastic in each corner keeps the bushing from coming out. These veins must be broken to install the new bushings.
5. Using a large flat head screwdriver press into the rubber bushing in each corner at a 45° angle. Tap the screwdriver with a hammer or press hard to break the plastic veins. Remove the rubber bushing by pressing it out with your fingers.
6. Insert the new bushings marked B6SS51 from either side of the end link. Simply press them into place.
7. Compress and lock the spring on the end link. Re-install by first sliding the end link onto the shifter cable, then sliding the bushings over the pin. It may be necessary to wiggle the shifter linkage to slide the bushings over the pin.
8. Re-install the retaining clip by sliding it over the pin until it clicks. With the transmission still in neutral and the shift knob centered inside the car, release the spring on the end link.

### **What to expect:**

- Before driving, depress the clutch and try each gear. Each gear should engage smoothly. The shift knob should be centered left-right and front-back. If your shift knob is not centered, release the proper end link and adjust until centered. If shifting doesn't feel right, don't start the car. Release each end link from the shifter cables, find neutral at the transmission, and re-adjust the shift knob position.
- Upon driving, shifting should feel direct and solid. It should not be difficult to engage the gears at any point. You will feel no slack in the shifter assembly. When you push the shift knob into third, where the movement of the knob stops is third gear fully engaged.
- These bushings should give you a direct link between your hand and the synchronizers. It will not cause your shifting to feel notchy, grind, or make your gears difficult to engage.
- No lubrication of the shifter bushings is necessary or recommended.