

Part Number
[ES2207815](#)
for VW MKV/MKVI
Golf, GTI,
JETTA, GLI, JSW

[ES4351](#)
for VW MKIV
Golf, Jetta, R32, and
New Beetle

Short Shifter

This tutorial is provided as a courtesy by ECS Tuning.

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

Although this material has been prepared with the intent to provide reliable information, no warranty (express or implied) is made as to its accuracy or completeness. Neither is any liability assumed for loss or damage resulting from reliance on this material. SPECIFICALLY, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY IS MADE OR TO BE IMPLIED WITH RESPECT TO THIS MATERIAL. In no event will ECS Tuning, Incorporated or its affiliates be liable for any damages, direct or indirect, consequential or compensatory, arising out of the use of this material.



Components

- adjustable shift lever
- shifter pin
- retaining nut
- lock washer
- counterweights (5)
- counterweight bolts (10)

Tools

- ratchet
- long extension
- 13mm socket
- 13mm wrench
- 3mm allen wrench
- 5mm allen bit
- T20 torx
- large pliers
- flat-head screwdriver
- flashlight

Installation overview

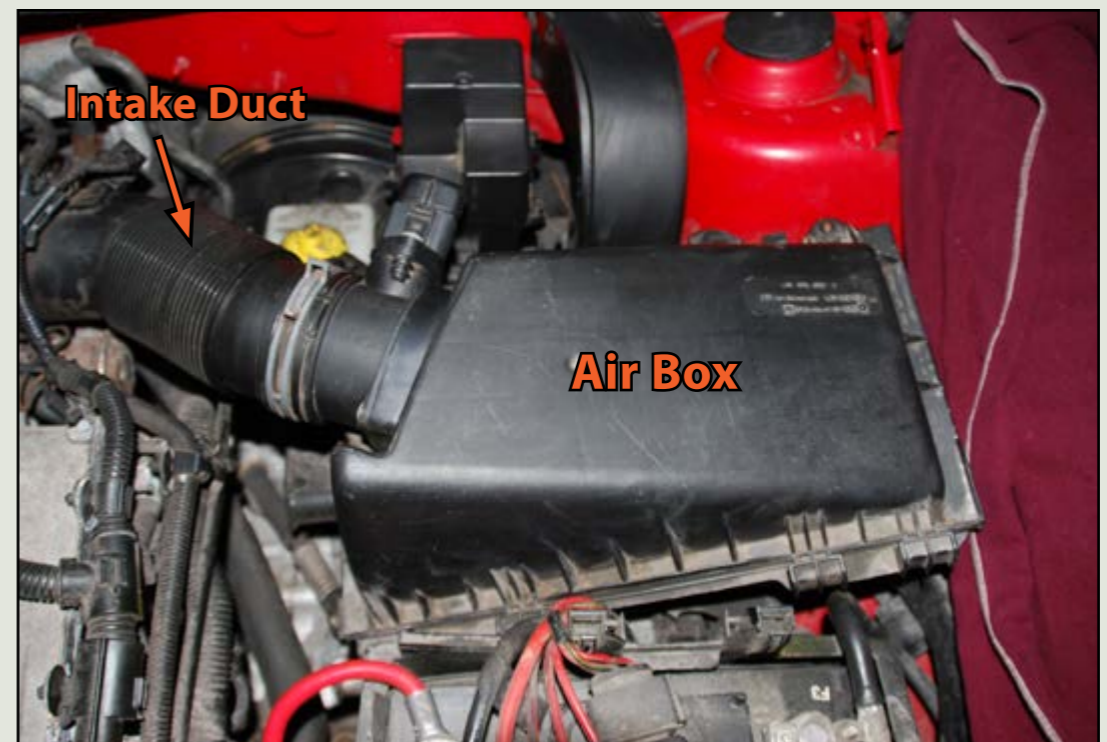
- (1) Remove airbox to access shift lever
- (2) Remove OE shifter
- (3) Install ECS adjustable short shifter and reassemble car

Section 1: Air box removal

You must first remove the original air box or intake system in order to gain access to the shifter mechanism. With some aftermarket intake systems, such as the one shown here on this MKIV, you may already have enough access to perform the installation.



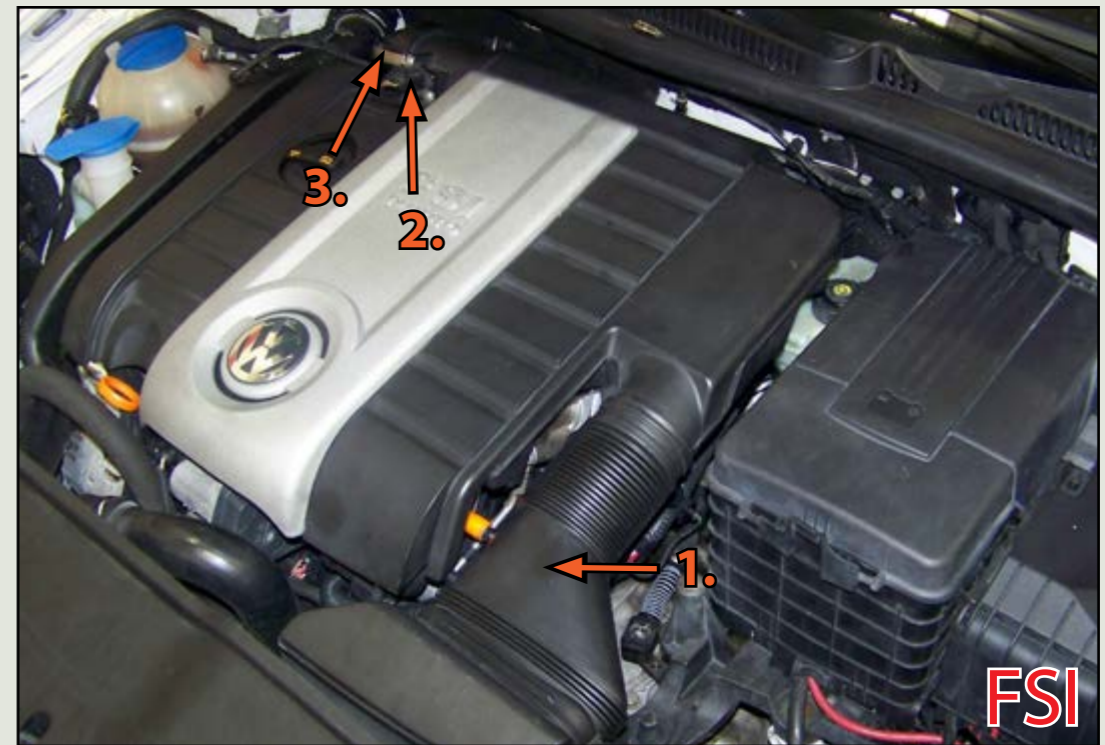
On a MKIV with the original air box, you will need to remove it along with the flexible intake duct to gain the access you need.



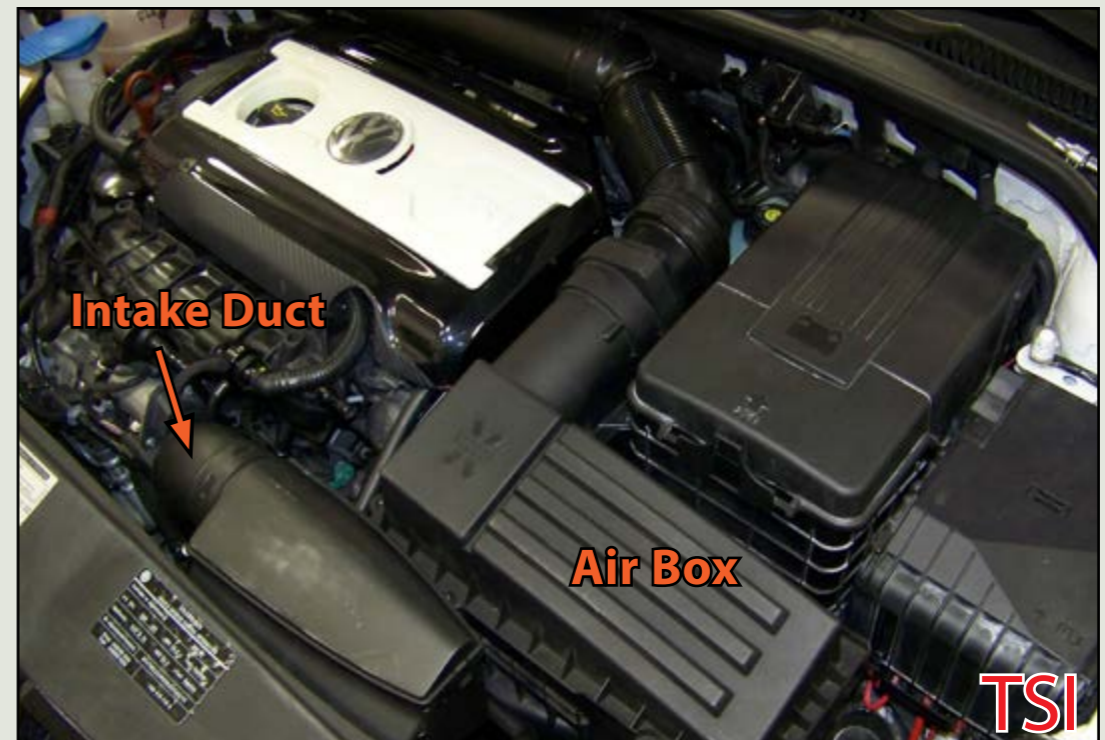
Section 1: Air box removal

On a MKV FSI, you will need to remove the entire air box/engine cover assembly to gain access:

1. Remove the intake duct
2. Disconnect the MAF sensor
3. Unclip the intake tube
4. Pull the air box upward and remove

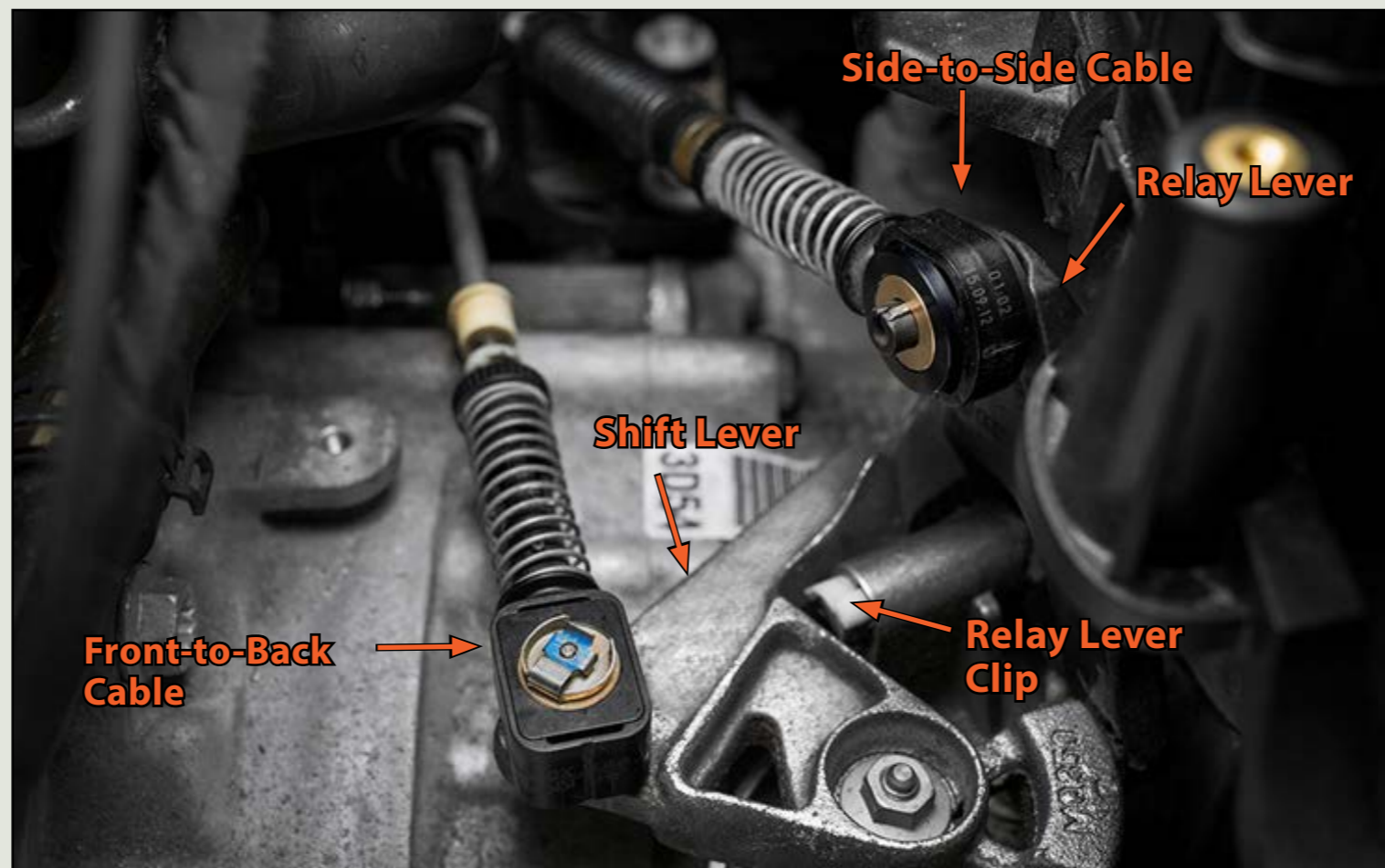


On a MKVI with a TSI, the air box and intake duct will need to be removed.



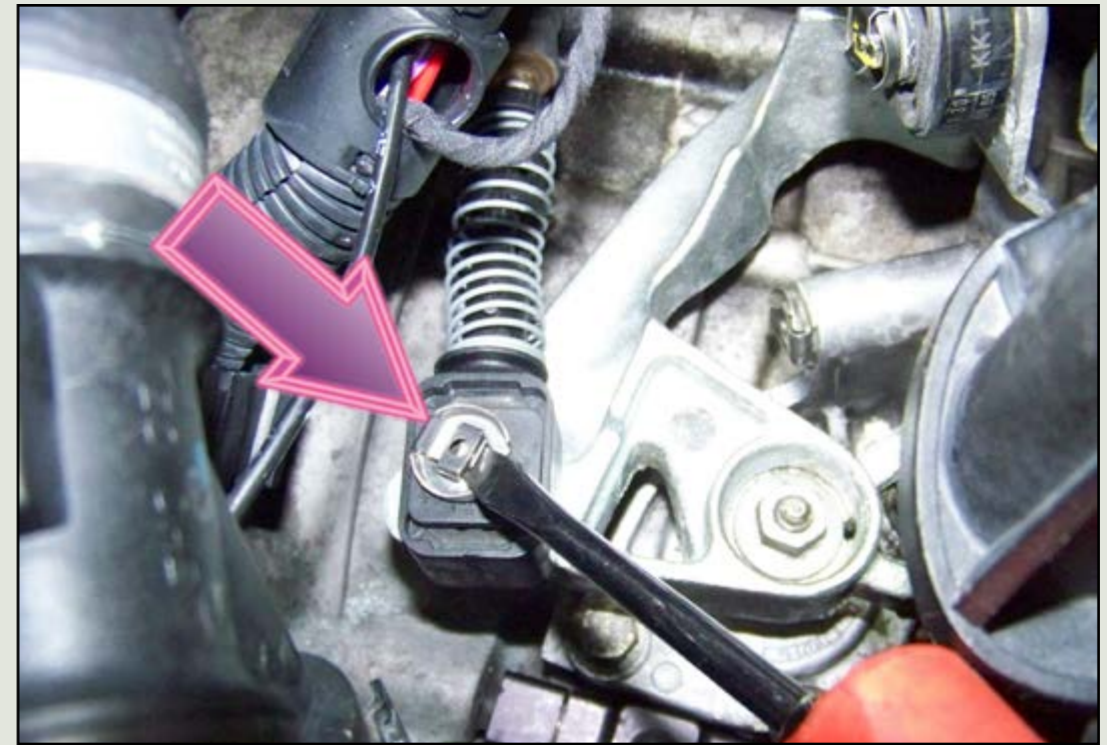
Shifter Cable Identification

Although there are minor differences between the shifters on a MKIV, MKV, or MKVI, the overall procedure is the same for all. All Volkswagen 6-speed transmission shifter cables will have this orientation, regardless of the end style of the shift cable. The Front-to-Back cable is the lower of the two cables, mounted onto the vertical pin of the shift lever. The Side-to-Side cable is the higher of the two cables, mounted onto the horizontal pin of the relay lever.

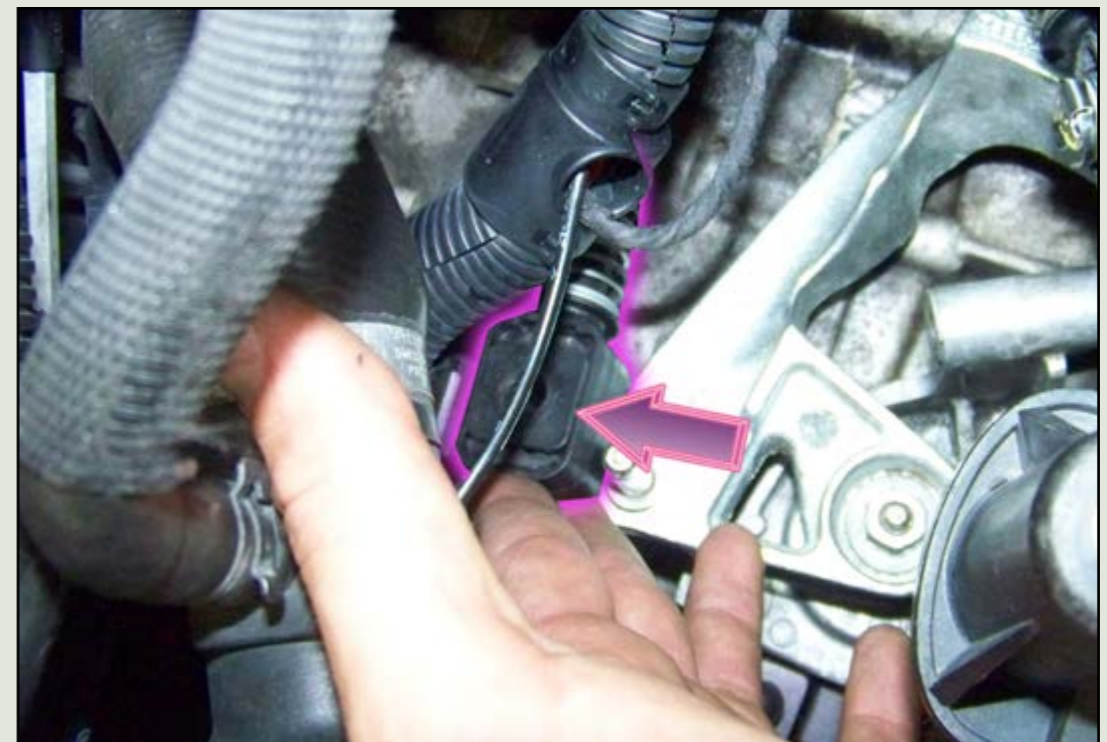


Section 2: OE Shift Lever Removal

First, remove the retaining clip on the front to back shifter cable. Be careful not to lose it in the engine bay.



Pull the front-to-back shifter cable end off of the shift lever.



Section 2: OE Shift Lever Removal

Remove the relay lever clip.



Slide the relay lever out of its pivot so it disengages from the shift lever.



Section 2: OE Shift Lever Removal

Remove the shift lever retaining nut with a 13mm socket on a long extension.



Rotate the shift lever so that you can pull upward on it to disengage it from the splined selector shaft. After a couple quick pulls (like a slide hammer), it should come free.

If it is especially stuck, use a penetrant and let it sit for a while to break up any corrosion that may have formed.

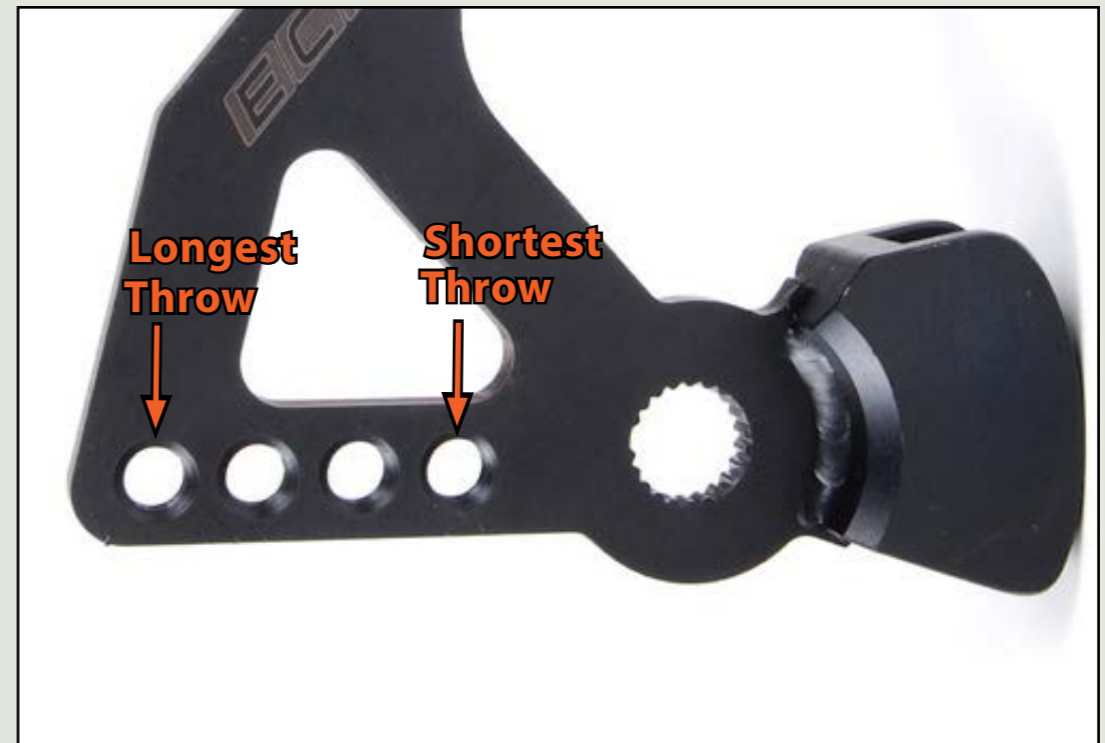
Remove the shift lever from the car.



Section 3: Short Shifter Installation

The ECS Tuning short shifter is adjustable to suit your tastes and driving style.

The four holes for the shifter pin go from left (longest throw) to right (shortest throw).



The short shifter kit is packaged with five weights and five pairs of bolts. Select anywhere from no weights to all five weights, depending on the level of shifter “weight” you want to feel.



Section 3: Short Shifter Installation

Once you decide what shift throw and weight you want, assemble the shift lever.

Place the lock washer on the end of the shift pin, then thread it into the throw location you have chosen.



Tighten the shift pin with a 13mm wrench.



Section 3: Short Shifter Installation

Select the correct length bolts to fasten the weights you have chosen to the shift lever. Use a 3mm allen wrench to tighten them.

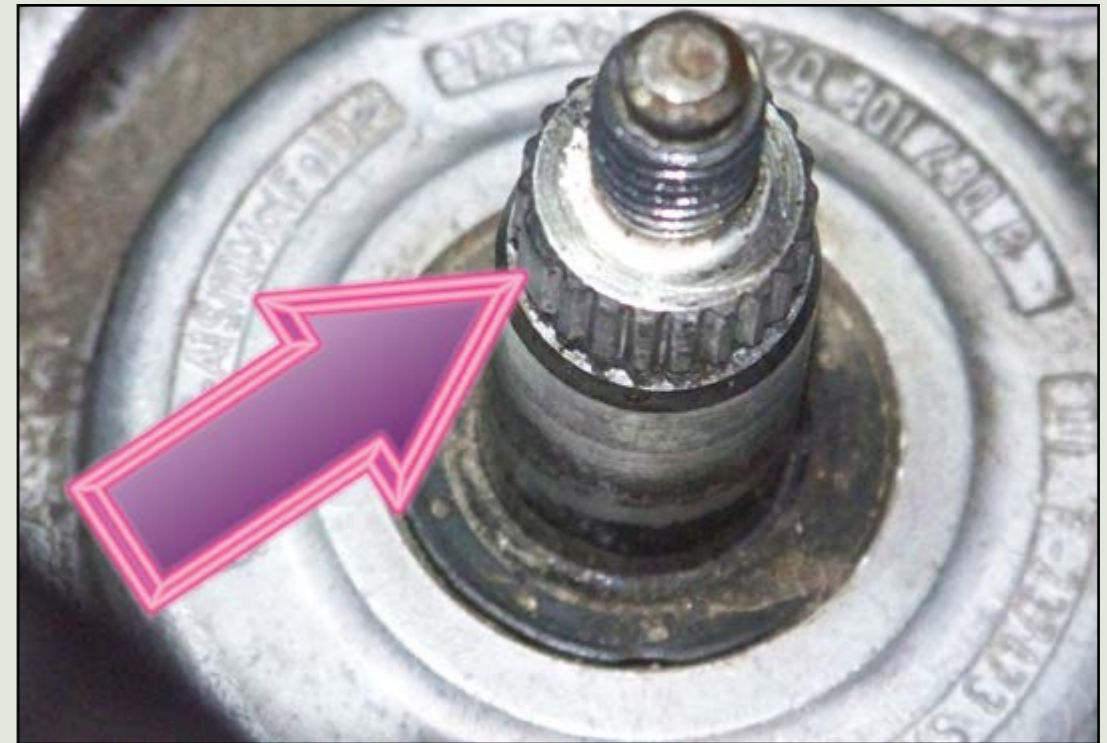


Before you attempt to install the shift lever, take note of the wide space in the splines, pointed out in the picture. This wide space will be aligned with a wide spline on the transmission selector shaft.



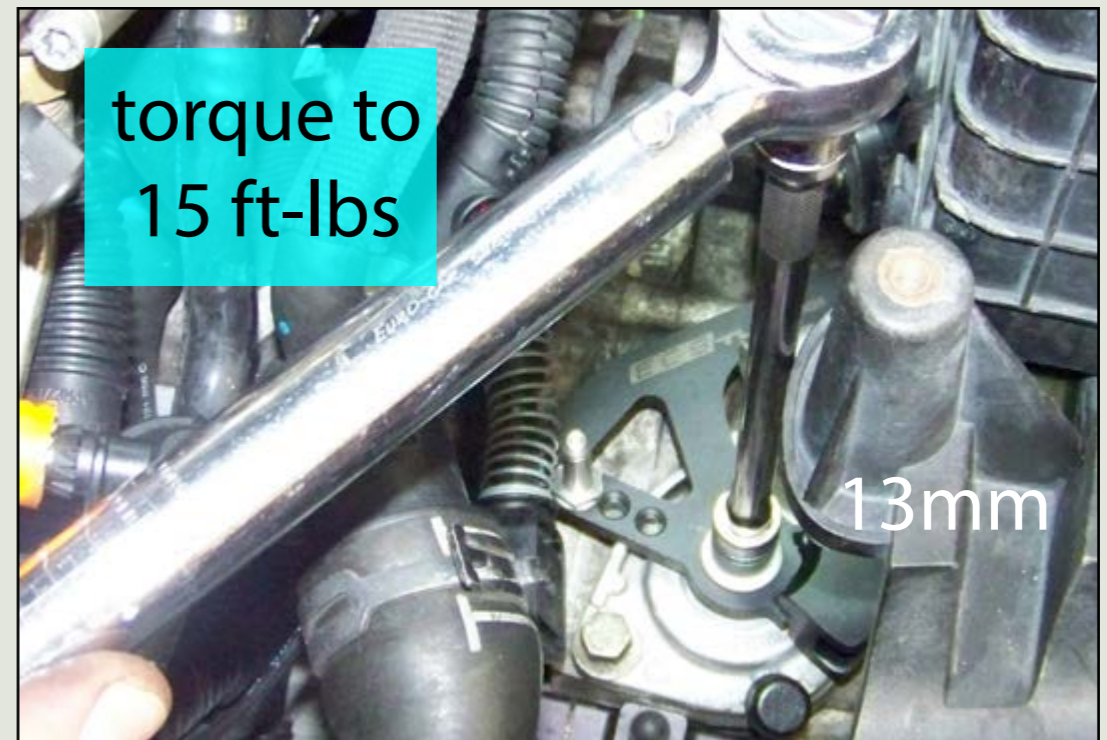
Section 3: Short Shifter Installation

The wide spline on the transmission selector shaft is pointed out in the photo. Make sure the shift lever is aligned before attempting to press it in place.



Press the short shifter onto the shaft and install the new retaining nut with a 13mm socket and long extension.

Torque the retaining nut to 15 ft-lbs.



Section 3: Short Shifter Installation

Reinstall the front-to-back shifter cable and clip.



Slide the relay lever back into place and install the retaining clip.

Check shifter operation. If adjustment is required, proceed to Section 4: Shifter Adjustment.

Reinstall the air box or intake system.

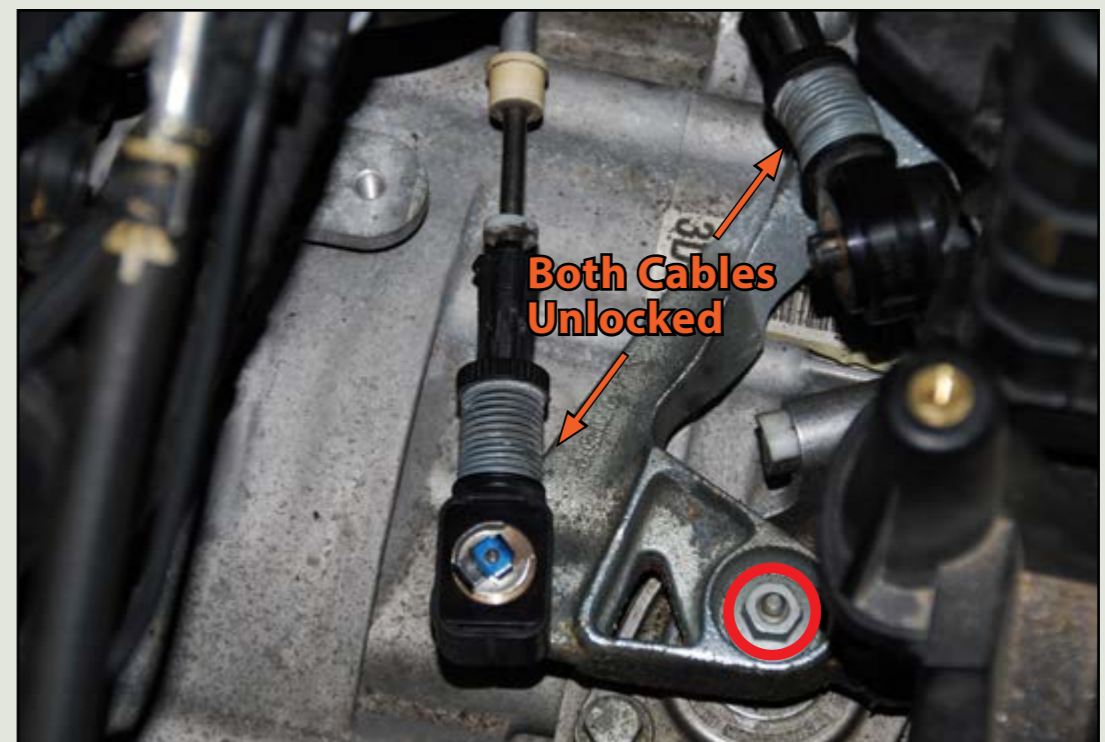


Section 4: Shifter Adjustment

We are performing this shifter adjustment on a MKVI. Different models may appear slightly different but the procedure is exactly the same.

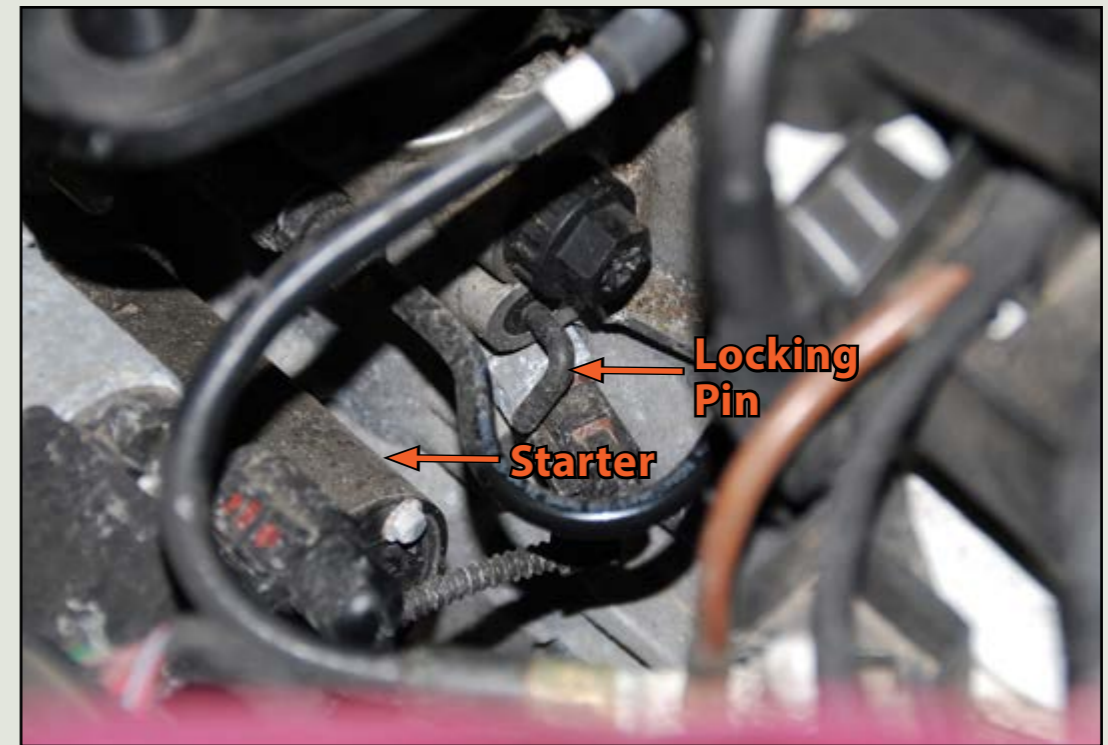
Unlock both shifter cable ends. The procedure is the same for both: Grasp the knurled round end of the cable lock mechanism and pull it forward until the spring is completely compressed. Then simply turn it about 1/8 of a turn to the left and it will lock in place. It is properly locked when you release your grip and the spring remains compressed.

Both cable ends should be unlocked, as shown on the right. Also note here the top of the selector shaft where it is secured to the shift lever (red circle).



Section 4: Shifter Adjustment

Locate the selector shaft locking pin in the transmission housing. It is located on the LH (Driver's) side, just behind the starter.



The transmission should be in neutral and you should be able to move the selector shaft up and down with ease. Push down on the top of the selector shaft (see page 14) until it is approximately in the middle of its travel. Push in on the locking pin and gently move the selector shaft up and down until the pin engages the alignment hole in the selector shaft and pushes into the transmission. Turn the locking pin upward slightly and release the pressure on the selector shaft. When properly engaged, the pin will stay in place and you will not be able to move the selector shaft.



Section 4: Shifter Adjustment

Inside the car, gently pry up the shifter boot, then lift it over the shift knob.



Lift up the insulator underneath the shift boot.



Section 4: Shifter Adjustment

Insert the Volkswagen alignment pin or a similar tool through the alignment hole in the shifter stick and into the alignment hole in the base of the shifter.

Note: Any round tool such as a drill bit or punch can be used, but the fit must be very snug or the shifter adjustment will not be successful.

Back under the hood, lock both cable ends by turning the knurled ends to the right until they release and the springs are expanded.

Pull out the locking pin in the transmission housing.

Pull the alignment pin out of the shifter.

Reinstall the shifter insulator and boot.



This completes the installation of the ECS Tuning Short Shifter Kit.

We hope this installation guide has been helpful and informative.

Thanks for reading!

