

Forge Motorsport Adjustable Quick Shifter components.

Please thoroughly read through and familiarize yourself with these instructions in their <u>entirety</u> prior to beginning any part of the installation process for any component. Please also ensure that the vehicles engine has cooled down sufficiently to avoid risking skin burns or other injury. Work gloves and protective eyewear are recommended.

Tools Required: 13mm socket 16mm <u>deep well</u> socket and/or 16mm wrench/spanner Socket extensions

Begin by parking the vehicle on level ground, and engaging the parking/emergency brake, leaving the shift lever in the cabin in the neutral position.

Open the hood/bonnet of the vehicle and remove the factory airbox or aftermarket intake to gain access to the shift linkage. You may also wish to remove the battery and battery tray for extra room to work, but this is generally not necessary.



Once you have gained access to the shift linkage, begin by removing the two circular clips securing the black plastic cable ends to the linkage.





Also remove the small circular clip from the center pivot of the side-to-side linkage component.



Once all of these clips are removed and the shift cable ends are disconnected from their respective pivot shafts, you can remove the side-to-side linkage component. Begin by sliding out the white plastic center pivot bushing from the pivot mount as shown below. You will then need to tilt the side-to-side linkage back towards the firewall. To facilitate this, you will need to twist the front-to-back linkage on its shaft and slide the side-to-side link out of its mount to free the white plastic guide of the side-to-side linkage.





Once the white plastic guide has been freed from the front-to-back linkage and the side-to-side linkage has been tilted back against the transmission casing, it can be removed from the pivot mount. Please be certain that you also remove the second white plastic center pivot bushing as both of them will be reused later.

You will now need to remove the 13mm nut securing the front-to-back linkage to the selector shaft.



Once the 13mm nut is removed, slide the front-to-back linkage up off of the splined selector shaft. This will take some force and it is recommended to rock the linkage from side to side very slightly in order to loosen it, but please do not use a hammer or anything else to pound or tap the shaft out of the bottom of the linkage as this may lead to damage to various components. Though it will take some effort, the linkage will certainly come loose within a short time.

Once both OEM linkage components are removed, you will need to assemble the Forge replacement linkage components that you intend to install.

For the front-to-back linkage, select the cable shaft that matches the size and shape of the shaft on your OEM linkage and secure it to the Forge replacement linkage with the supplied locking nut. The locknut will be captive in the groove on the underside of the linkage and the shaft will thread into it from the top. Use your 16mm deep well socket or a 16mm wrench to secure the cable shaft at your desired adjustment level.

Moving the shaft closer to the splined cutout will shorten the throw. Moving it away will lengthen the throw.



For the side-to-side linkage, the procedure is the same. You will need to select the cable shaft that matches your OEM linkage and attach it using the supplied 13mm lock nut. Position the shaft at your desired adjustment location and tighten it securely in that position.

Moving the cable shaft closer the center pivot shaft will shorten the side-to-side throw while moving it further away will lengthen the throw.



Once you have finished assembling the linkage components to your desired adjustment level, they will be reinstalled in the reverse order that they were removed.

Please be certain that you have swapped over one of the white plastic center shaft bushings to the new side-to-side linkage as this is required for reinstallation.



Reinstall the replacement front-to-back linkage by sliding it onto the splined selector shaft. There is a singular large locator spline that will only allow you to install the linkage in only one position. It may take some maneuvering to find this locator spline and slide the linkage onto it, but it is not difficult.

You will also need to simultaneously reinstall the side-to-side linkage making sure that the "E" shaped white plastic guide is properly positioned into the slot in the front-to-back linkage as shown below. Use a moderate amount of the supplied grease to lubricate these parts prior to installation.



Once both linkage components are reinstalled and the "E" shaped guide is positioned properly, insert the second white plastic center shaft bushing into the pivot mount as shown below.



Reconnect the small metal circular clip to the center shaft of the side-to-side linkage to secure it in place and tighten the 13mm nut onto the threads of the splined selector shaft for the front-to-back linkage.



The linkage will twist clockwise when retightening this 13mm nut, thus engaging 3rd gear, so please return this linkage to its "neutral" position. In its neutral position, you will be able to freely push the linkage up and down into the transmission casing with very gentle effort. DO NOT reattach the black plastic cable ends yet as they still need to be adjusted.

Go into the cabin of the vehicle and lift up the shift boot to expose the shift lever underneath the shift knob.

For MK4 6-speed applications, this is accomplished by pushing in and pulling up slightly on the lower edge of the shift boot trim ring. For MK5 6-speed applications, this is done by moving the shift lever into 3rd gear, pushing the lever down, and using your fingers to disengage the clips underneath the shift boot towards the front side of the trim ring.



Position the shift lever so that the two alignment holes allow you to position the included nail into the holes as show below thus locking the lever in place.



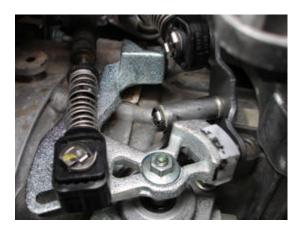
Returning to the engine bay and the shift linkage components, for MK4 VW 6-speed applications, you will need to press down slightly on the linkage from its neutral position as well as locate a small black pin on the side of the transmission just below the linkage.

This pin will need to be pushed in locking the linkage in place. Pushing in the pin and moving the linkage up and down simultaneously, you will feel the pin slide into a slot on the selector shaft once engaged and the linkage will then fail to pop back up to its normal neutral position.



(For MK5 applications, this locking pin is not incorporated on the transmission casing so the linkage will need to be kept in its normal neutral position.)

One the transmission linkage is located in its locked or neutral position, and the shift lever in the cabin is locked in place as well, reattach the plastic cable ends to the shafts on the linkage components and secure them with the circular clips previously removed.



Keeping the actual shift linkage in its locked or neutral position, loosen BOTH black plastic cable ends by pulling the knurled ring against the spring tension towards the end of the cable and twisting it which will lock it into its "open" position.



This loosening process alone should release any tension on the shift cables from misalignment due to the new shorter throw of the new linkage components.

Again, keeping both the interior shift lever and the under hood linkage in their locked or neutral positions depending upon your application, reattach the cable ends by untwisting the knurled ring and allowing it to slide back down into place locking the cable ends to the cables.

Once the cable ends have been reattached securely to the shift cables, return to the cabin and remove the nail from the alignment holes on the shift lever thus unlocking the mechanism and allowing it to return to its normal neutral positon.

Also, for MK4 6-speed applications only, return to the engine bay, slightly push down on the linkage and pull out the small black pin that was previously pushed in to lock the linkage in place. Do not pull the pin out all the way. Pull it out just enough to allow the linkage to return to the normal neutral position in which it will lift up and down freely as before.

The installation and adjustment should now be complete.

Please be sure to cycle through the gears with the lever in the cabin making sure that all forward and reverse gears can be engaged just as easily as with the OEM shift linkage.

Everything should operate as smoothly and seamlessly as before, only with shorter throws of the shift lever.

If you experience any difficulty engaging any forward or reverse gear, please go back and read through the instructions again to ensure that every step was followed properly and completed successfully.

For MK4 6-speed applications only, the shortest adjustment level of the front-to-back linkage **may** be too much and may cause slight issues engaging 2nd, 4th, and 6th forward gears and possibly reverse. The gears will engage, but it will take a bit of extra effort. This is not the case on every single vehicle, so you may not experience this problem, however, if you do, please select an adjustment level just shy of the absolute shortest level.

If you are still experiencing difficulty, please feel free to contact your local or preferred Forge Motorsport dealer, or you may always contact us directly.