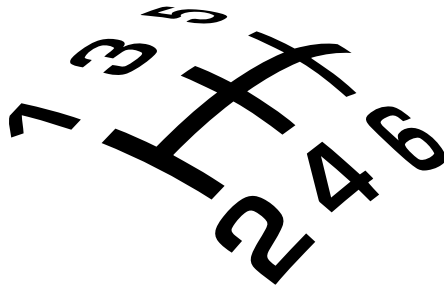


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4H-TECH Short Shifters. **Power shifters for quicker and shorter gear changes**

Fitting instructions for 4H-TECH TS-Shift Short Shifter kit



#### Protected design

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The following fitting guide is made on an Alfa Romeo 156 2.0 16V Twin Spark. But you can use this guide also on other Alfa Romeo, Fiat and Lancia vehicles with the same transmission fitted. Fitting might differ a little bit from this guide in that case, but fitting the TS-shifter on these other cars is basically the same.



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Open the bonnet, and remove the air intake hose and battery .  
Unclip the front- and rear connectors from the battery tray.  
Unbolt the battery tray from the chassis. (mind the bolt below the tray underneath)  
Remove battery tray.

Find the original shifter located on top of the transmission.  
The following pictures are made from the gearbox removed from the car to make the fitting of the short shifter much more clearer to see:



Original situation, gearbox with OEM shifter.





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Unclip the shift cable from the shifter arm with the use of a 13mm spanner.

**Important:** The following modification is only to be made on a removable ball head joint. If your cable has a rigid joint, which is not removable, please skip the following 10 pictures:



Use 2 spanners of 10mm and remove the original ball head from the shift cable.



Fit the new MTECH ball head joint to the shifter cable and tighten the nuts.

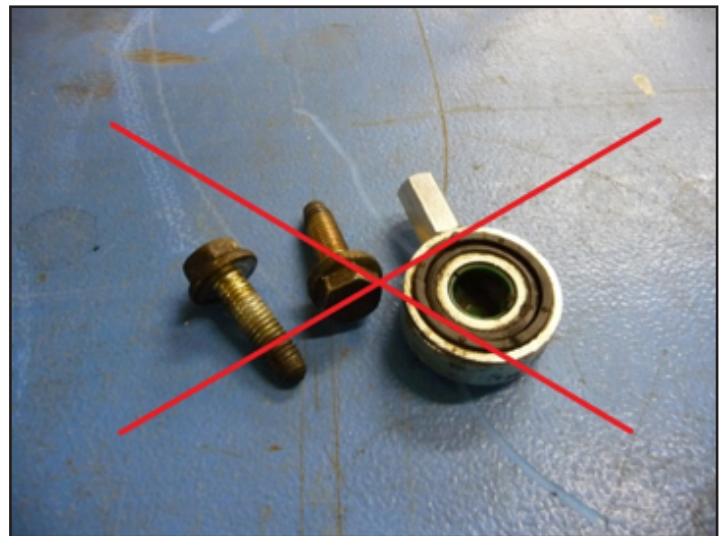




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Unbolt the shift weight on the back with a 13mm spanner.



Fit the TS-Shift to the shift mechanism, together with the original shifter weight and tighten the 2x M8 bolts. (support shifter while tightening)



Put some grease on the bolt head, and press the shifter cable on it.





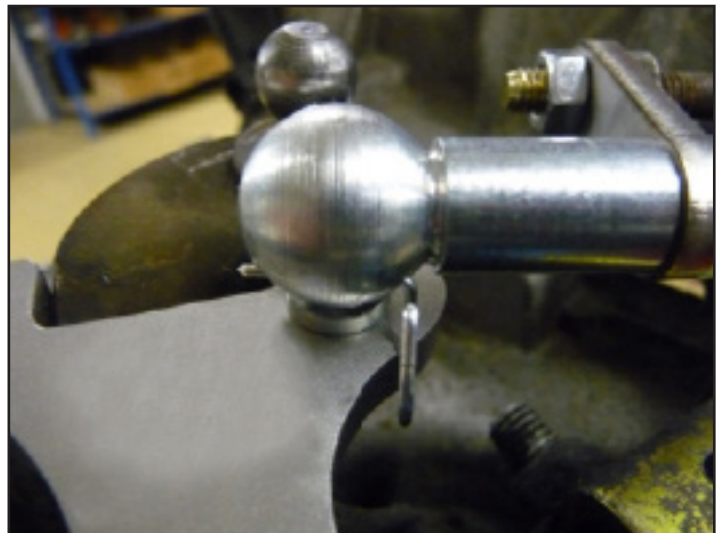
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For cars with non removable head joints:



Press the original ball head joint on the ball joint of the new shifter.  
(move cable toward ball head of new shifter)

The following pictures are only for the removable ball head joint versions. (most cases)





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Fit the secure pin to the bolt head as shown in the 4 pictures above.



Check if the gear stick is in the middle position with no gears selected.  
Adjustments of the gear stick position can be made as follow:

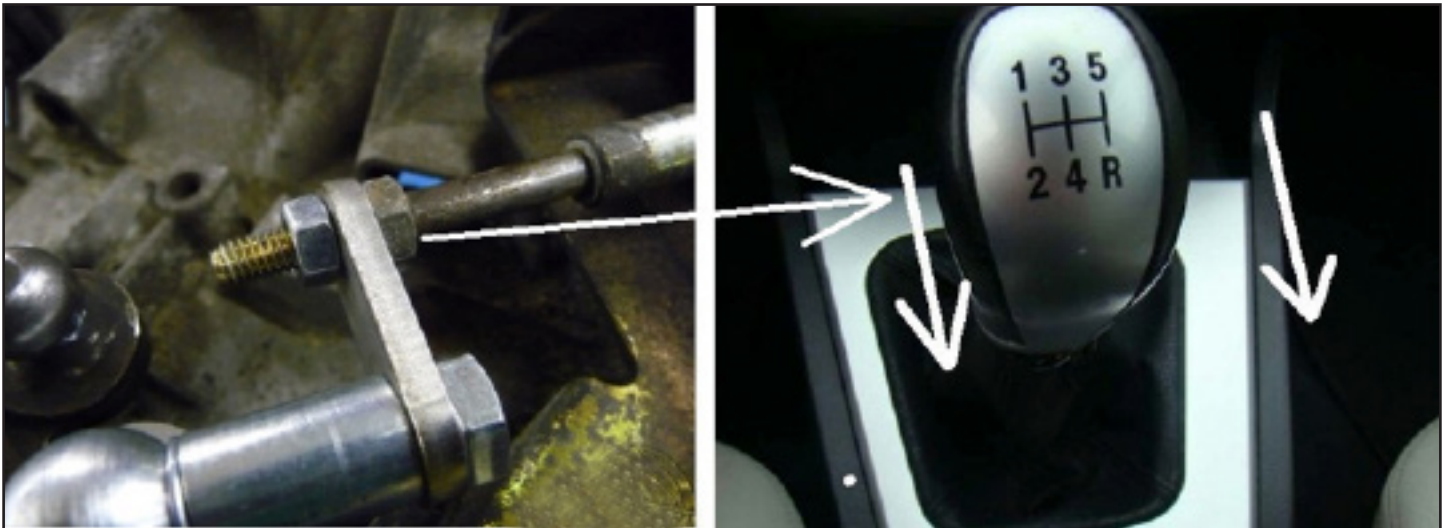
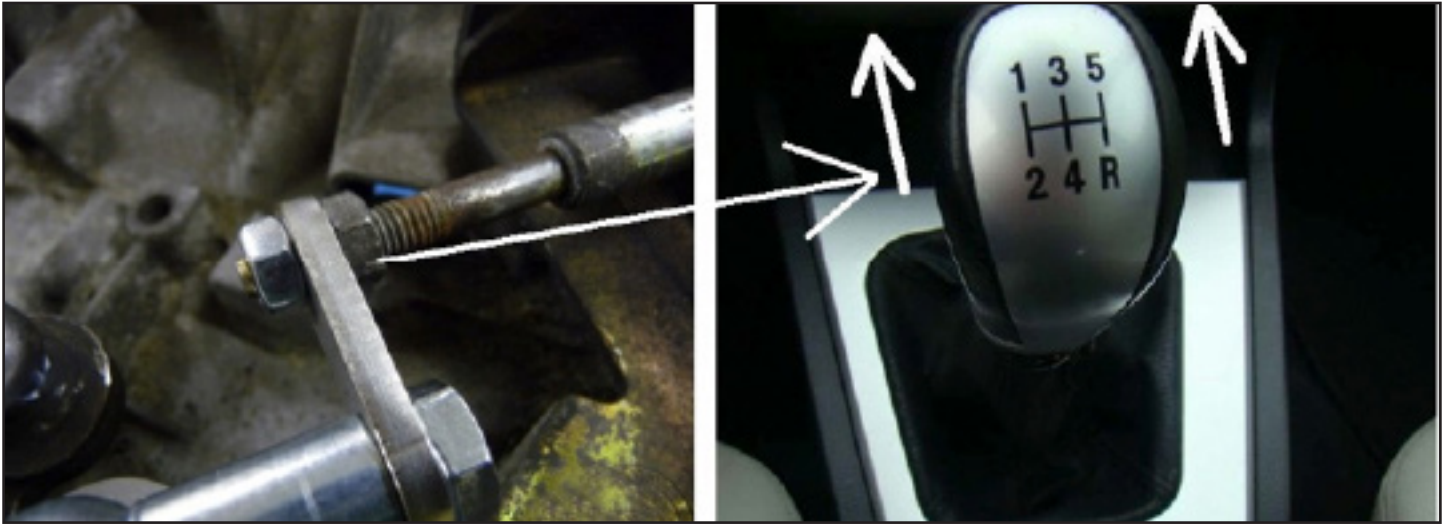






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You can adjust the gear stick position with the mechanism shown in the above picture.



Use loctite to secure the 2x M6 nuts! (these bolts can come loose, and damage the cable)



Ready, Fitt all car parts back in reverse order.





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Extra specifications for the Alfa Romeo 147 and GT versions only:



These cars have a special weight fitted to the shift cable. Remove the cable from the original shifter and unscrew the 2 bolts which holds the two halves together.



These weight can be removed and are not needed any more.



Fit the short shifter tot he shift mechanism and click the shift cable on the new bolt head.





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For all cars:

Make a test drive and check if all gears can be engaged. Enjoy 30% less gear throw and that lovely ``Klick-klack`` feeling. Now your car shifts like a racecar, but always remember to be safe and don't get overly excited on the public roads out there.



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