AIRTEC Motorsport Shifter for Toyota Yaris GR (Gen 1) Fitting Instructions

Tools Required:

- Ratchet and Socket Set
- Trim Removal Tool
- White grease
- Thread lock

Kit Contents:

- 1x AIRTEC Motorsport Shifter
- 1x AIRTEC Motorsport Gear Knob

  Fitting Kit:
  - 4x M8x20mm Button Head Bolts
  - 4x M8 Spring Washer
  - 4x M4x12mm Grubscrew
  - 4x M3x5mm Grubscrew
  - 5mm Allen Key
  - 2mm Allen Key
  - 1.5mm Allen Key

PLEASE THOROUGHLY READ THESE INSTRUCTIONS AND MAKE SURE YOU ARE FAMILIAR WITH THE STEPS BEFORE CARRYING THEM OUT

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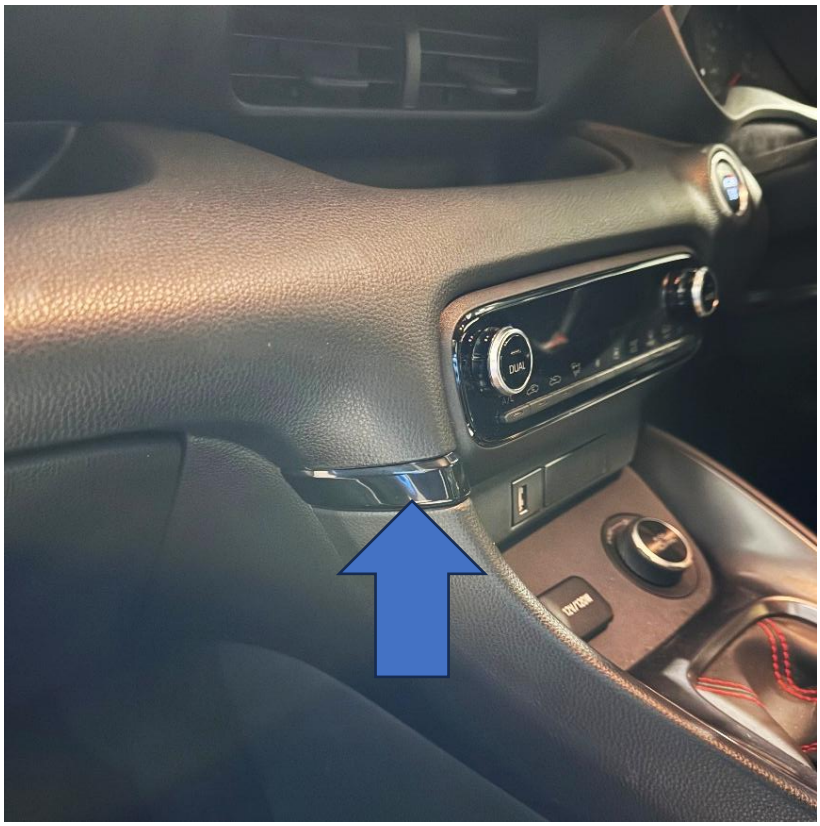
Instructions:

1. Start by removing the small section of trim by pulling it outwards towards the centre of the car.



2. Unscrew and remove the gear knob followed by the white locking collar and spring.

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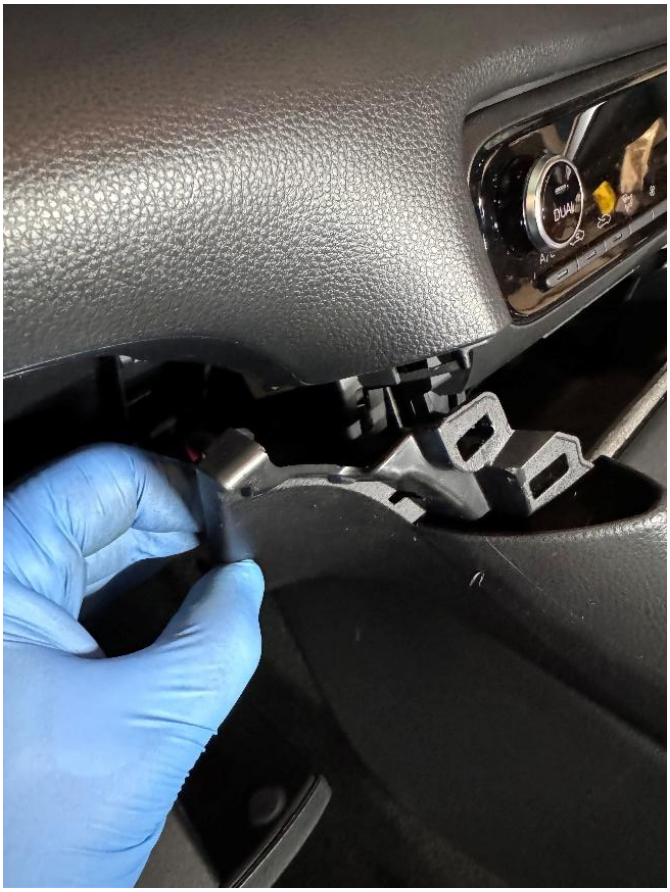
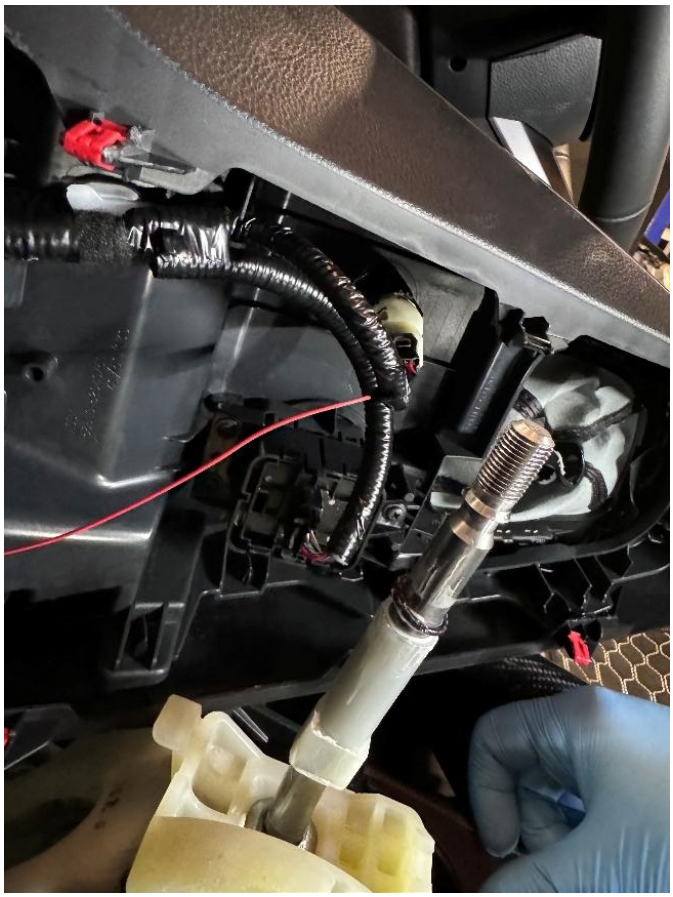
3. Use a trim removal tool to release the panel containing the USB connector, then undo the two electrical connectors and place it aside.

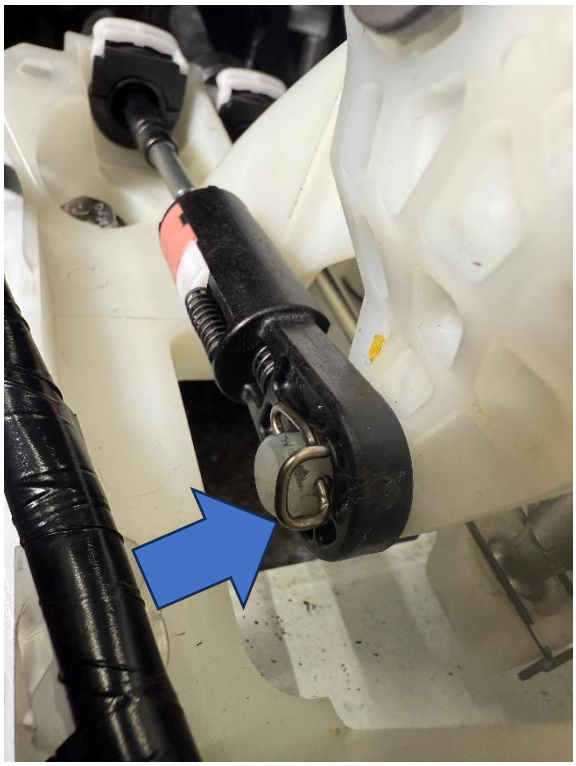
4. To remove the centre console, firmly pull up to release the trim clips and then carefully unhook the inner section under the dashboard by the glove box. You can then work round lifting the edges of centre console to release it. Once you have access, undo the two electrical connectors underneath along with the wiring harness clip.

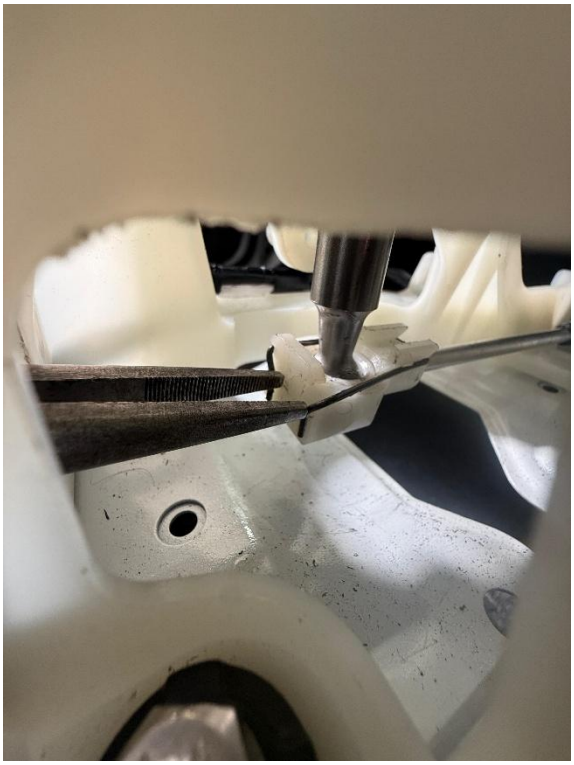




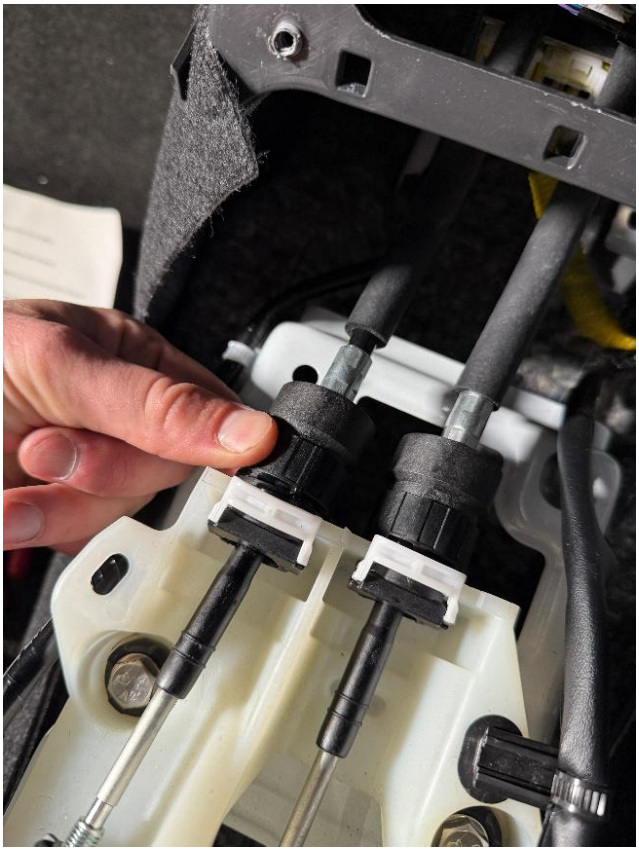
5. Now loosen the rear section of the centre console by carefully but firmly lifting it up from the back first and then the front to release the trim clips. You can then rotate it around the handbrake to move it out of the way.

6. Now release the R-Clip to remove the outside cable. To remove the cable attached to the central lever, place a pair of closed pliers inside the clip and gently open them to release the clip and move it back allowing the gear cable to drop.

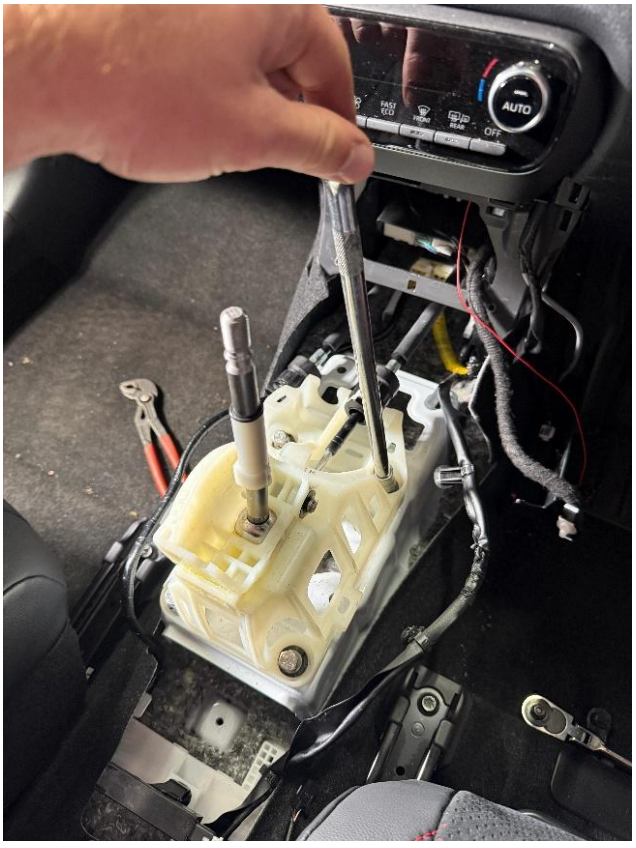




7. Where the gear cables connect to the original gear lever housing unscrew them by twisting them clockwise as you look at them. When it is loose enough for the cable to lift up, push the white connector down; this will hold the connectors in the unlocked position, making reinstallation easier.

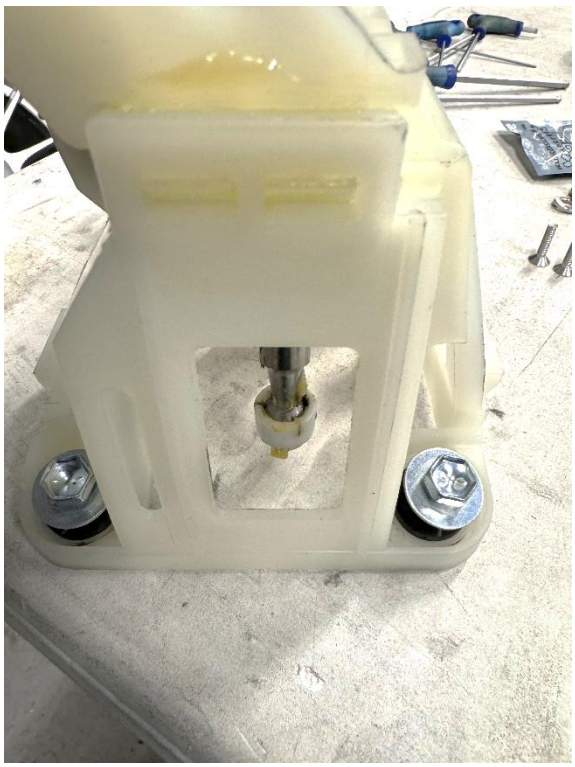


8. Now the gear lever assembly can be removed by undoing the four 10mm bolts. Then remove the wiring harness clips and lift the assembly out of the car.



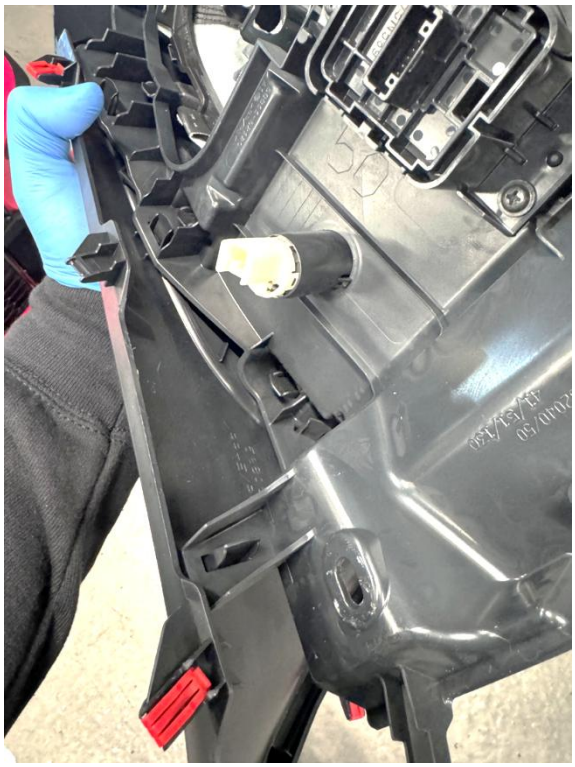
9. With the assembly out of the car use a flat-blade screwdriver and a small hammer to carefully remove the plastic cup from the bottom of the gear lever. You can then install it onto your new AIRTEC Motorsport shifter.

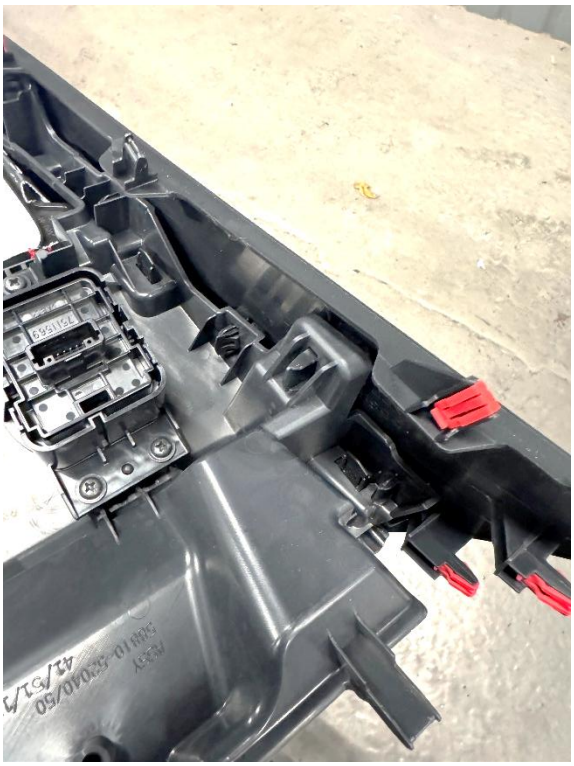
   Please note: we recommend applying white grease to the ball joint before installing.



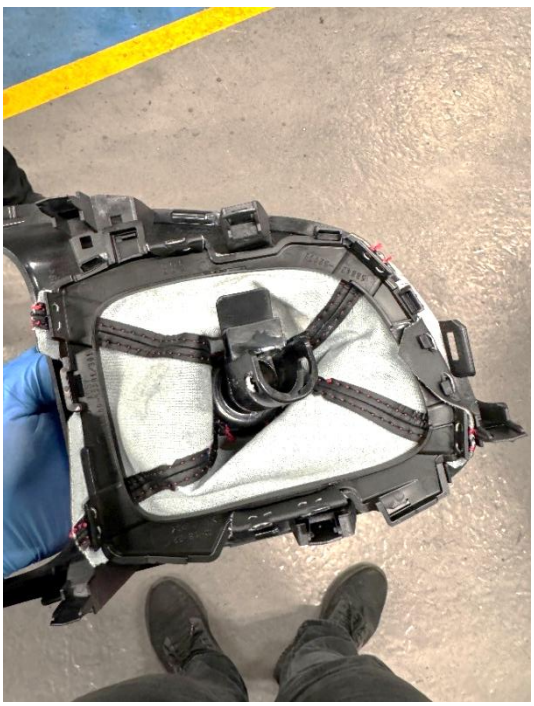
10. To remove the gear gaiter, you will need to dismantle the centre console. First unclip the upper rear plastic and then unclip the anthracite trim piece.

    Please note: one of these clips is plastic welded so you will need to break it to remove it. When putting it back together it is still firmly held in place without the plastic welded clip.





11. Now release the clips holding the gear gaiter in place from underneath and remove it. You will then be left with three parts as shown. These can now be built back up again.


12. Install the shifter section into the car using the supplied bolts and spring washers. Clip the wiring harness back into the provided cut outs and proceed to connect the cables to the shifter arms.

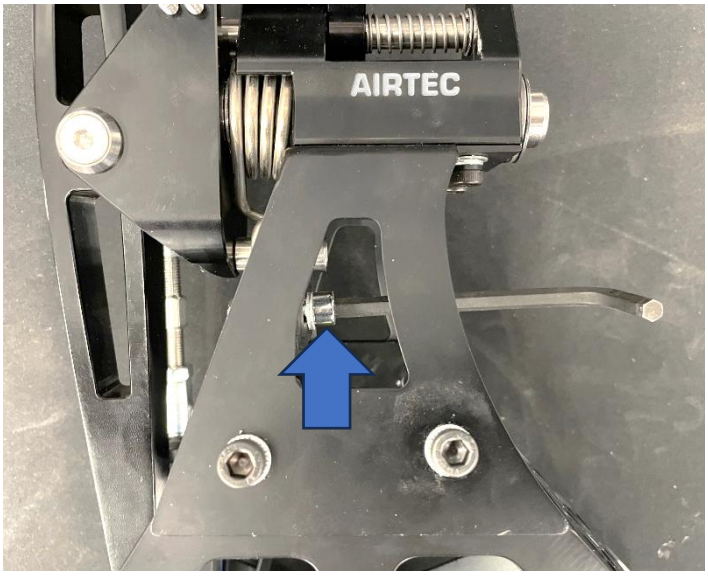

Shifter Adjustment

Once the shifter is installed and the gear cables connected it will need setting up.
Follow this guide to understand how to adjust the shifter for perfect selection of all gears.

STEP 1 – CENTERED

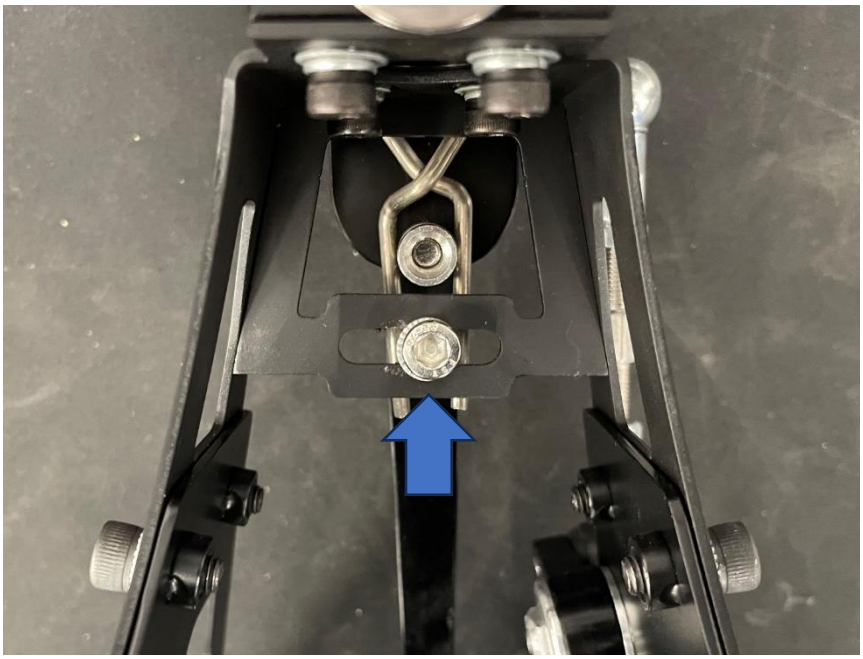
First, ensure the lever is perfectly centred in the gate by checking it easily moves up and down to select both 3rd and 4th gears with **no** sideways resistance. If there is **any** form of sideways movement required of the gear lever to engage 3rd or 4th gears, then loosen the rear-facing Allen Key bolt as shown, **but do NOT unscrew more than two turns under any circumstance**.

Once loose, gently move the lever over to centre it, re-tighten the bolt and check for resistance again. Repeat this process until there is no sideways resistance.



Side view of bolt to adjust with Allen Key in place.

Rear view of bolt to adjust with Allen Key in place.



There is adjustment in the bracket to move the bolt left and right.

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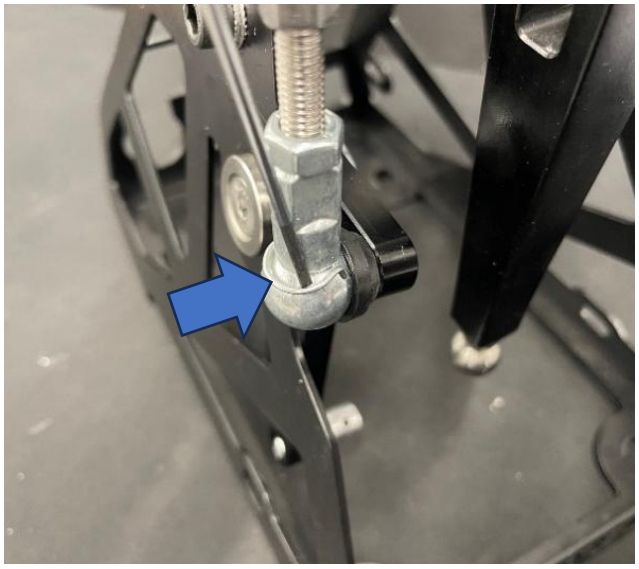
STEP 2 - PRE-LOAD

Secondly, check there is no pre-load on the gear linkage. To do this, use a small flat-blade screwdriver to carefully release the locking spring clip from the bottom ball joint - **be careful not to lose this clip**.

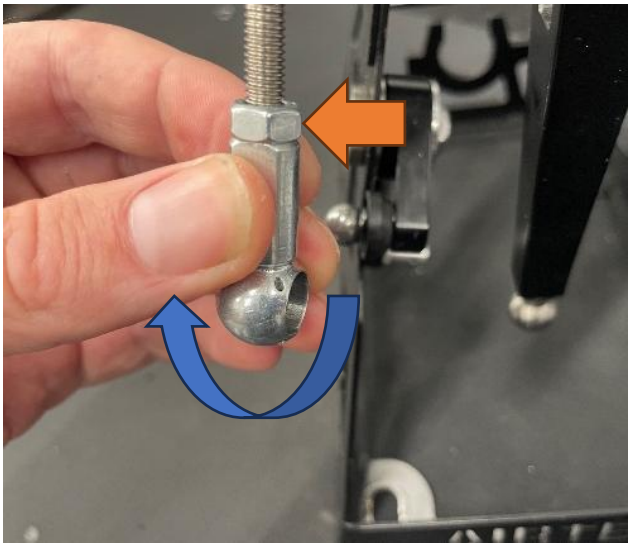
The ball joint should separate from the linkage arm without the gear cable moving backwards or forwards and should fit back onto the linkage arm without moving backwards or forwards. If you have to push or pull the linkage arm to get the ball joint on, then it will need adjustment.

To do this, loosen the one of the lock nuts and wind the adjuster in or out until the ball joint lines up perfectly and the gear cable does not move when attaching it. You can then tighten the lock nuts fully using 8mm and 10mm spanners.

Please note: Each end of the adjuster is an opposite thread, so one side is a right-hand thread and one is a left-hand thread.



Carefully release the spring clip and pop the ball joint apart. The two parts should line up perfectly without moving up or down to disconnect or reconnect. If you have to push or pull the linkage arm, it will need some adjustment.



Loosen the lock nut (orange arrow) and then wind the adjuster up or down until the ball joint lines up perfectly. You can then use 8mm and 10mm spanners or tighten the lock nuts up and stop the adjuster moving position.

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STEP 3 – SETTING TRAVEL LIMITS

Use the supplied grub screws to limit how far the gear lever can travel left-to-right and for reverse gear.

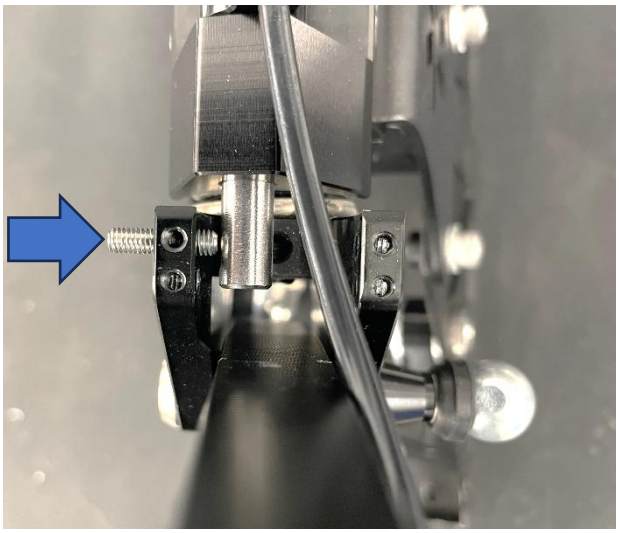
First select reverse gear and wind a supplied grub screw using the supplied Allen Key in one of the **upper** holes. If reverse is next to first or second gear, use the **right-hand** upper hole. If reverse is next to fifth or sixth gear, use the **left-hand** upper hole.

Wind the grub screw in until it touches the centre bar – **then unwind half a turn so there is a small gap. Please note: You MUST leave a small gap, it should not touch.**

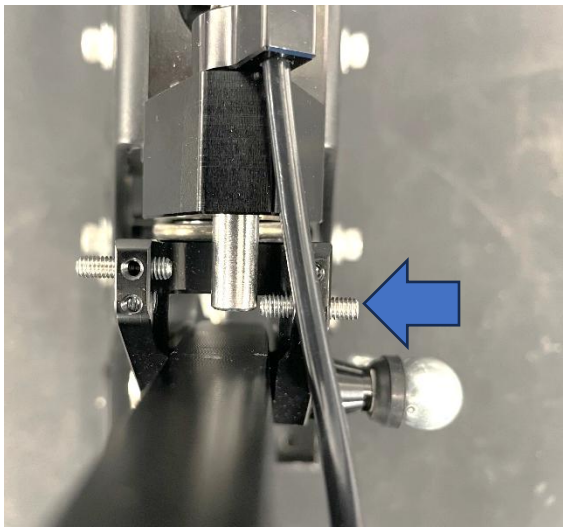
Then select first gear and wind another grub screw in the **lower right-hand hole** and repeat the process.

Then select sixth gear and wind another grub screw in the **lower left-hand hole** and repeat the process.

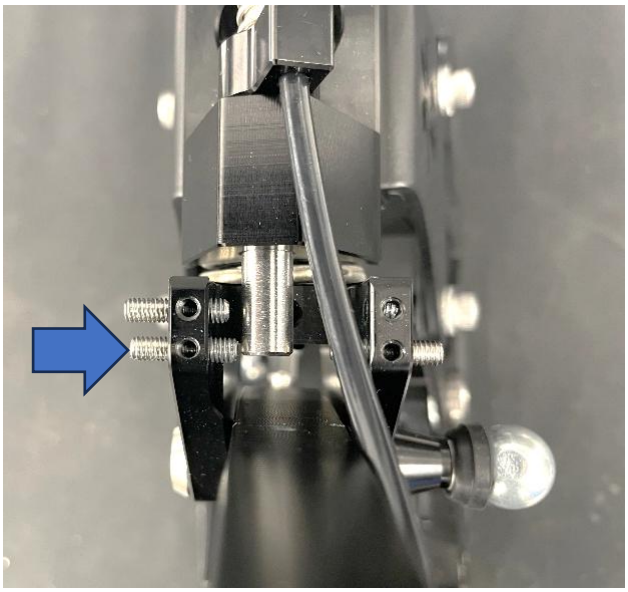
Once they have been set, ensure you can select reverse gear by lifting the gear lever's safety collar enough to pull the centre bar back to clear the lower grub screw.



Select reverse, insert a grub screw until it reaches the centre bar and unwind half a turn.



Select first, insert a grub screw in the lower right hole until it reaches the centre bar and unwind half a turn.



Select sixth, insert a grub screw in the lower left hole until it reaches the centre bar and unwind half a turn.

When you lift the lever's reverse collar the centre bar should move back to allow reverse to engage.

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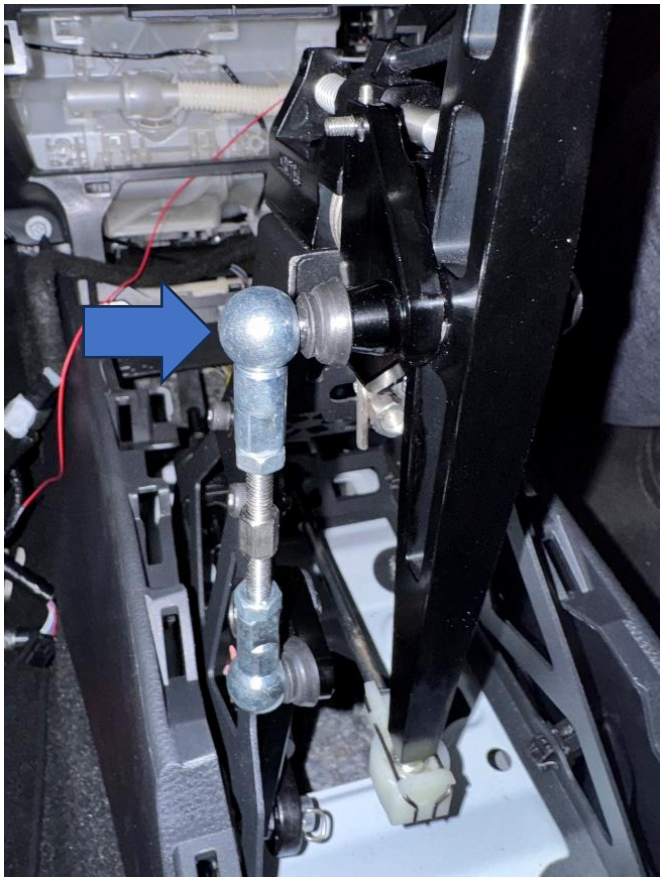
STEP 4 – LOCKING IN POSITION

Finally, once you have set all your grub screws, use the smaller supplied grub screws to lock them in place. Before doing so, apply a good amount of the supplied Lock Thread into the top thread hole and to the grub screw itself before winding them in.

Apply a good amount of Lock Thread to each of the holes.

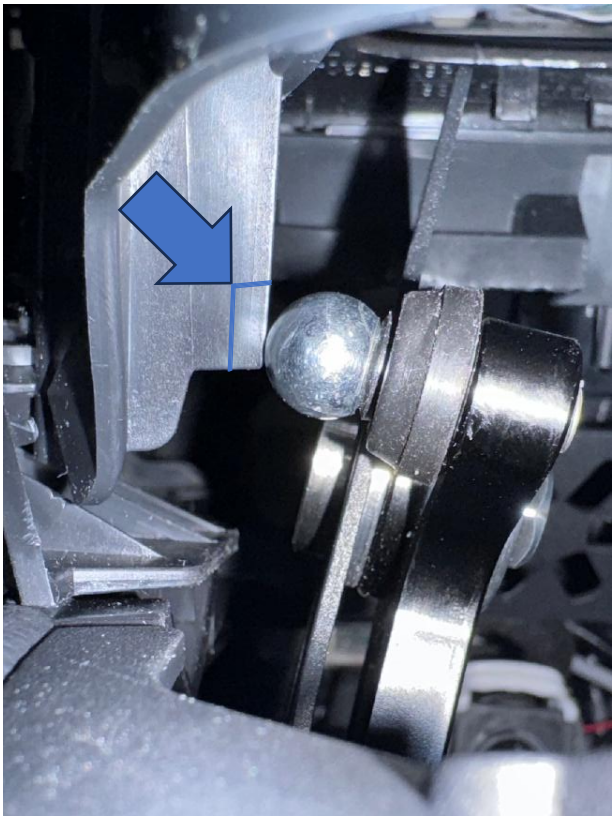
Use the supplied Allen Key to screw in the top grub screws.

13. Once completed successfully, the interior plastics can be reinstalled in reverse of removal. To refit the centre console, you will need to undo the upper section of the shifter from the base and remove it from the car. To do so, release the small spring clip holding the ball joint and remove it.



14. Remove the two bolts (blue arrows) on each side that join the top and bottom sections together. Then disconnect the lower gear cable (orange arrow).

15. Before reinstalling the final interior parts, you will need to trim this piece of plastic to allow for clearance of the shifter.



16. Finally, ensure you have reconnected any electrical connections and then the top of the shifter can be refitted to the car, ensuring to install the small clip onto the ball joint cap.

Please note: We recommend periodically checking the tightness of all moving parts, as under harsh conditions fittings may need retightening and the joints may need regreasing with white grease.

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