# Fitting Instructions

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|---|---|
| Vehicle: | Ford Focus RS Mk3 |
| Product: | Gear Shifter Assmebly |
| Part number: | ATMSFO168 |




**Kit Contents:**

| | |
|---|---|
| 1x AIRTEC Motorsport Gear Shifter Assembly | 4x M5x4mm Set Screws |
| 1x AIRTEC Motorsport Shifter Surround Panel | 4x M4 Set Screws |
| 2x Cable End Caps | 4x M3x5mm Set Screws |
| 4x M6x 8mm Hexagon Socket Head Bolts | 3x Allen Keys: 1.5mm/2mm/5mm |
| 4x M6 Washers | 1x Thead Lock |

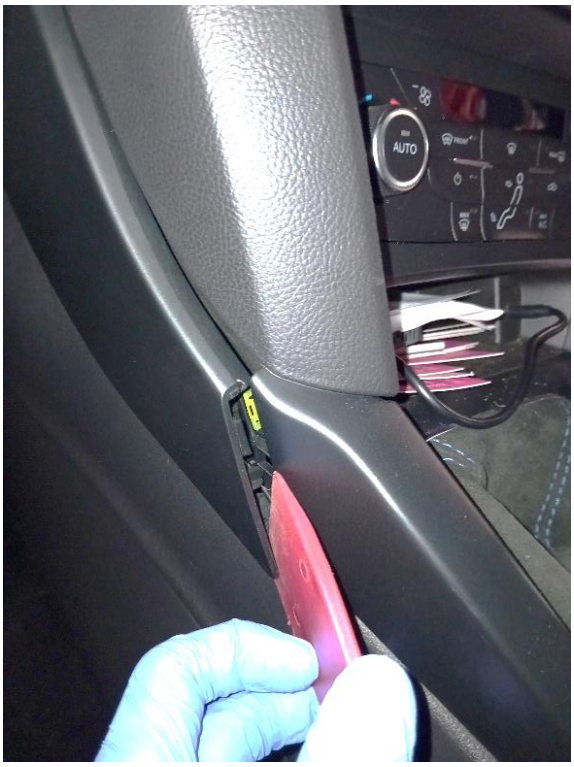
**Tools Required:**

| | |
|---|---|
| Ratchet and Socket Set | Torx Sockets |
| Trim Removal Tool Set | Dremel Tool (or any suitable cutting tool) |
| Allen Key Set | |

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

# Instructions:

1. Start by using a trim removal to unclip the trim piece on left-hand side of the upper centre console that routes behind the glove box. Then open the glove box and release the last clips to remove the trim piece.






2. Now remove the panel surrounding the gear lever and running up the right-hand side of the centre console




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3. Use a trim tool to unclip the panel underneath the radio.




4. Unclip the shifter gaiter from the plastic surround by carefully pulling it up and then lift it over the gear knob, out of the way.

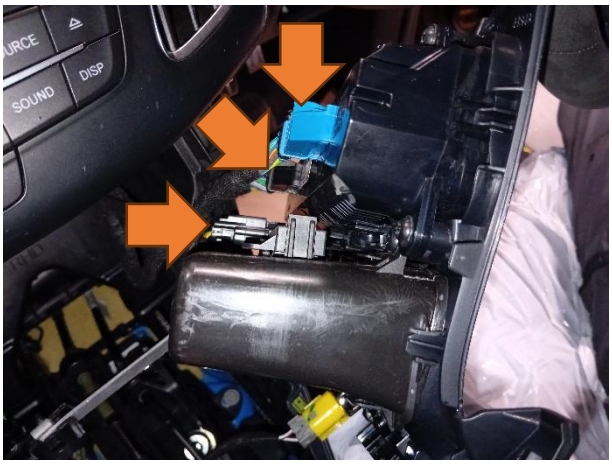


5. Remove the two T25 Torx screws securing the top of the centre console panel and the single T25 Torx screw at the bottom. Then lift the panel over the gear stick and disconnect the five plugs on the back to remove.

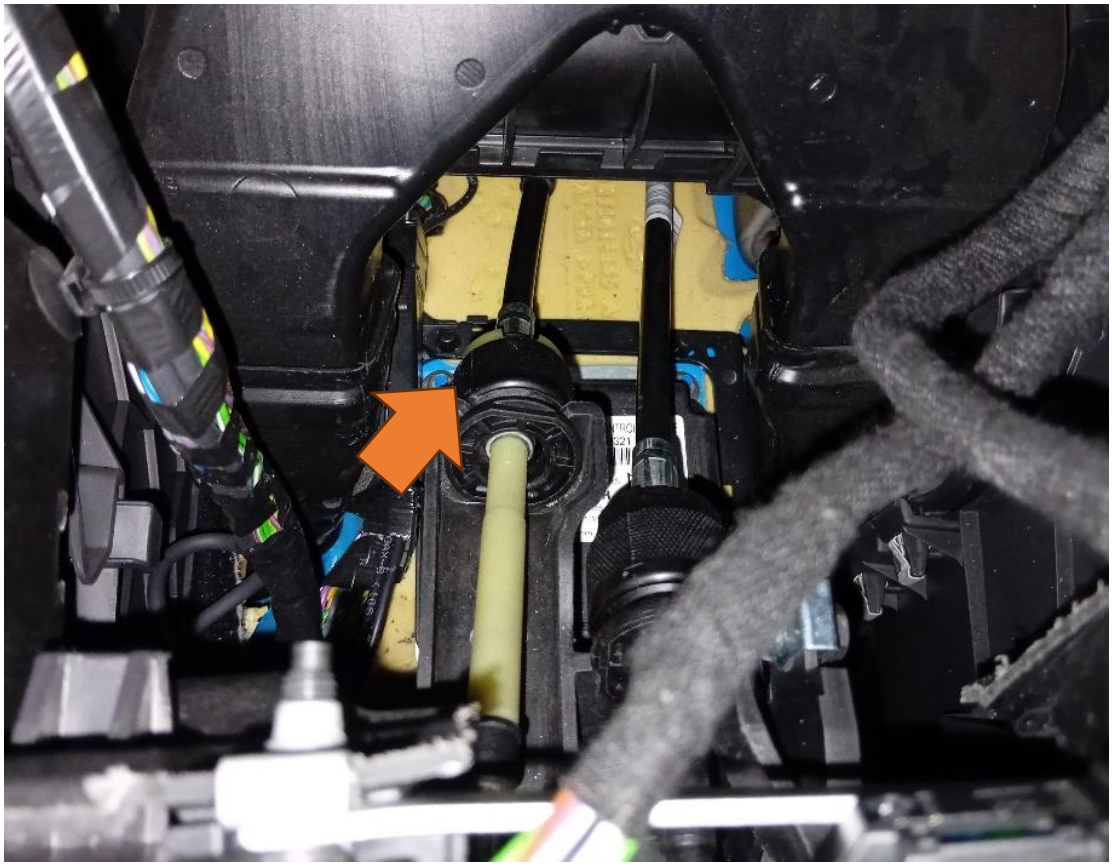




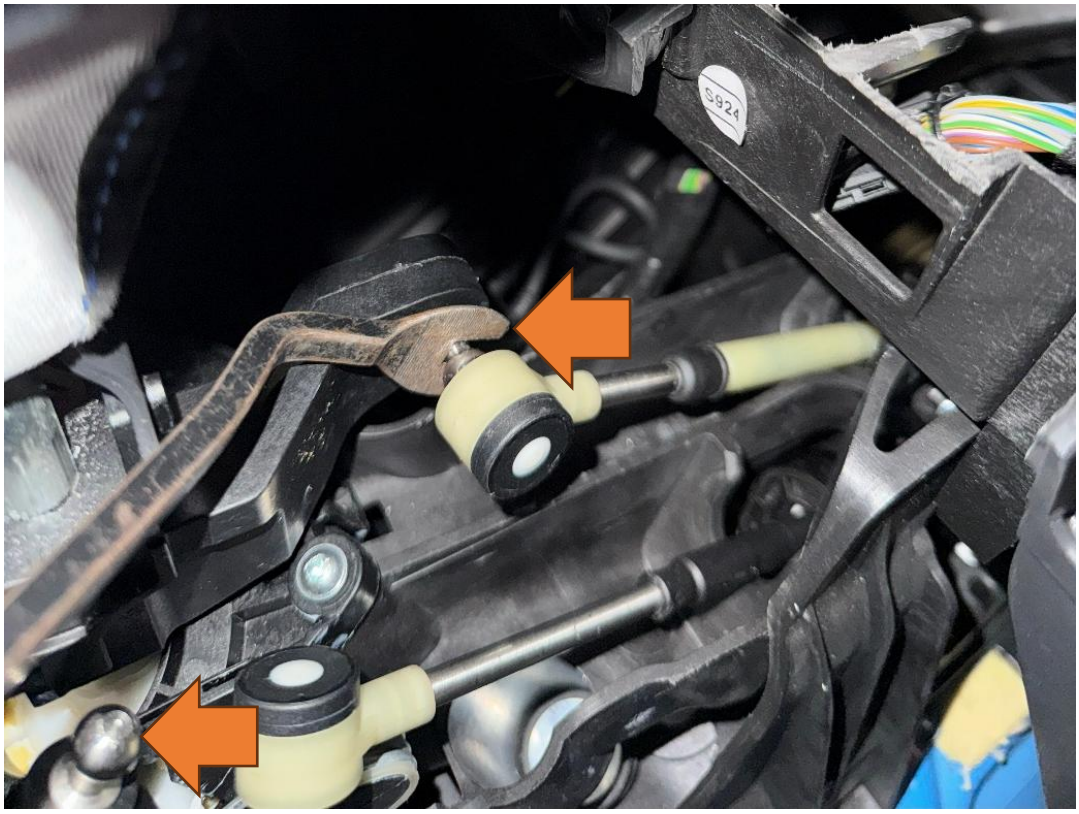


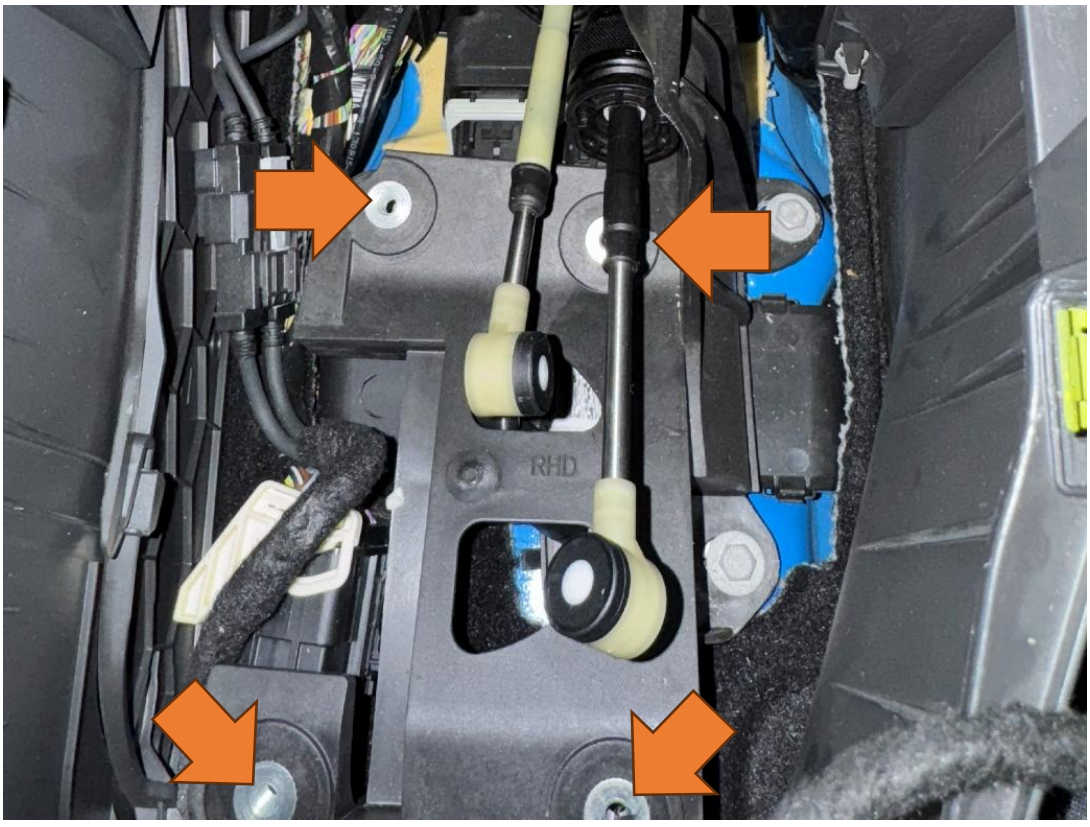

6. Locate the shifter cables and release them by simultaneously pushing each of the collars towards the front of the car and lifting the cables out of their guide slots.



7. Disconnect the cables from the shifter ball joints using a suitable levering tool.

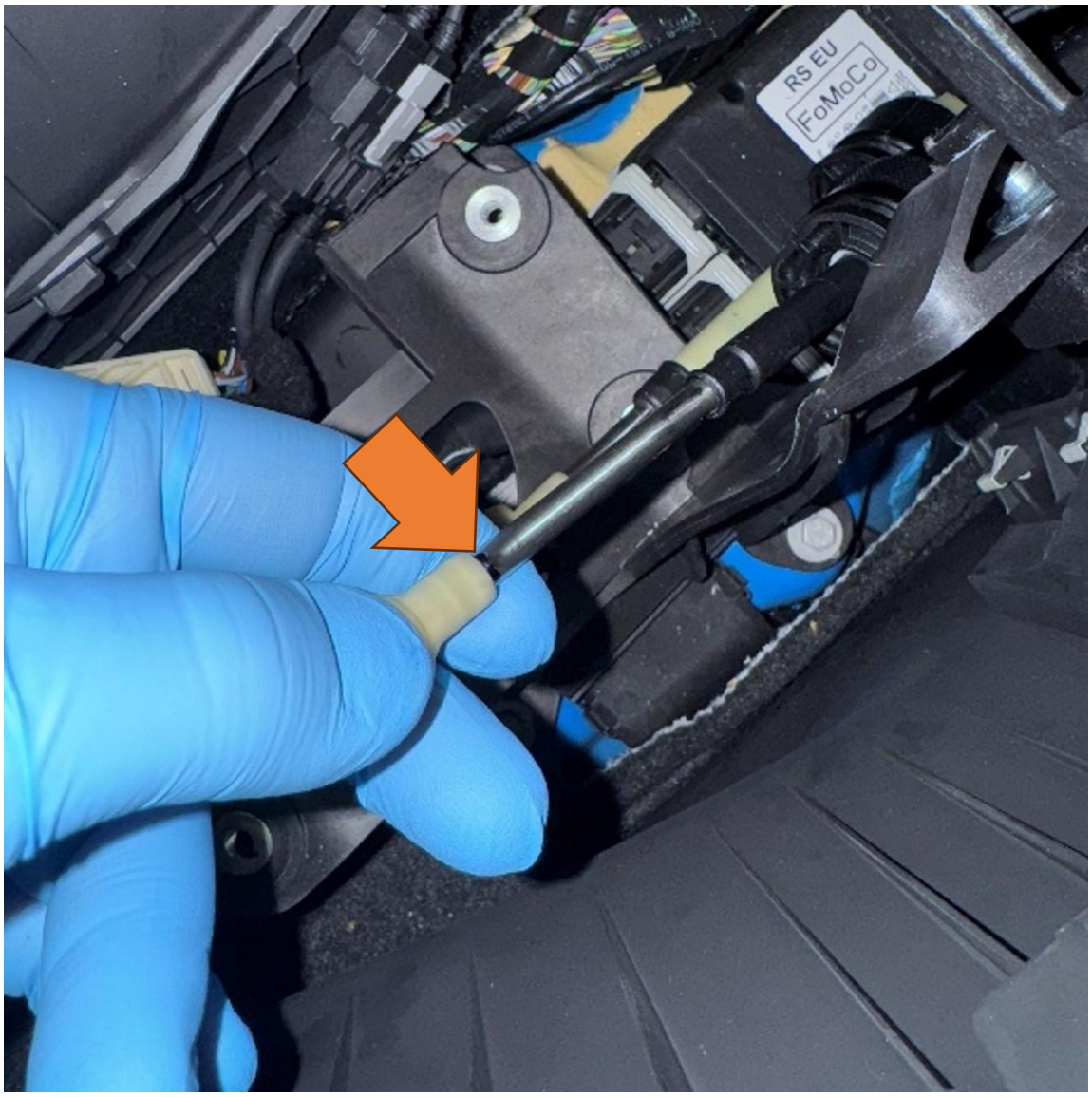


8. Remove the four 8mm bolts attaching the shifter to the lower plastic mount. The shifter can then be lifted out of the centre console.



9. Now use a permanent marker pen to mark the position of where the original end caps locate on both of the shifter cables (orange arrow).

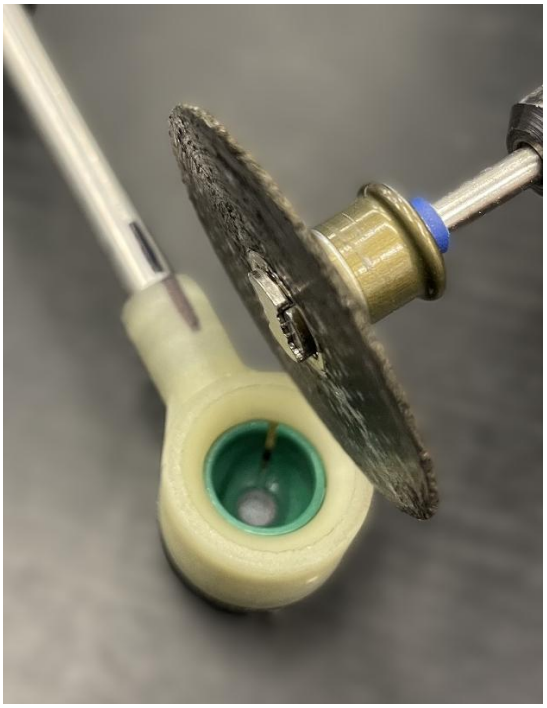
   **PLEASE NOTE:** Make sure you mark it all the way round the shifter cable including underneath, not just on the top.

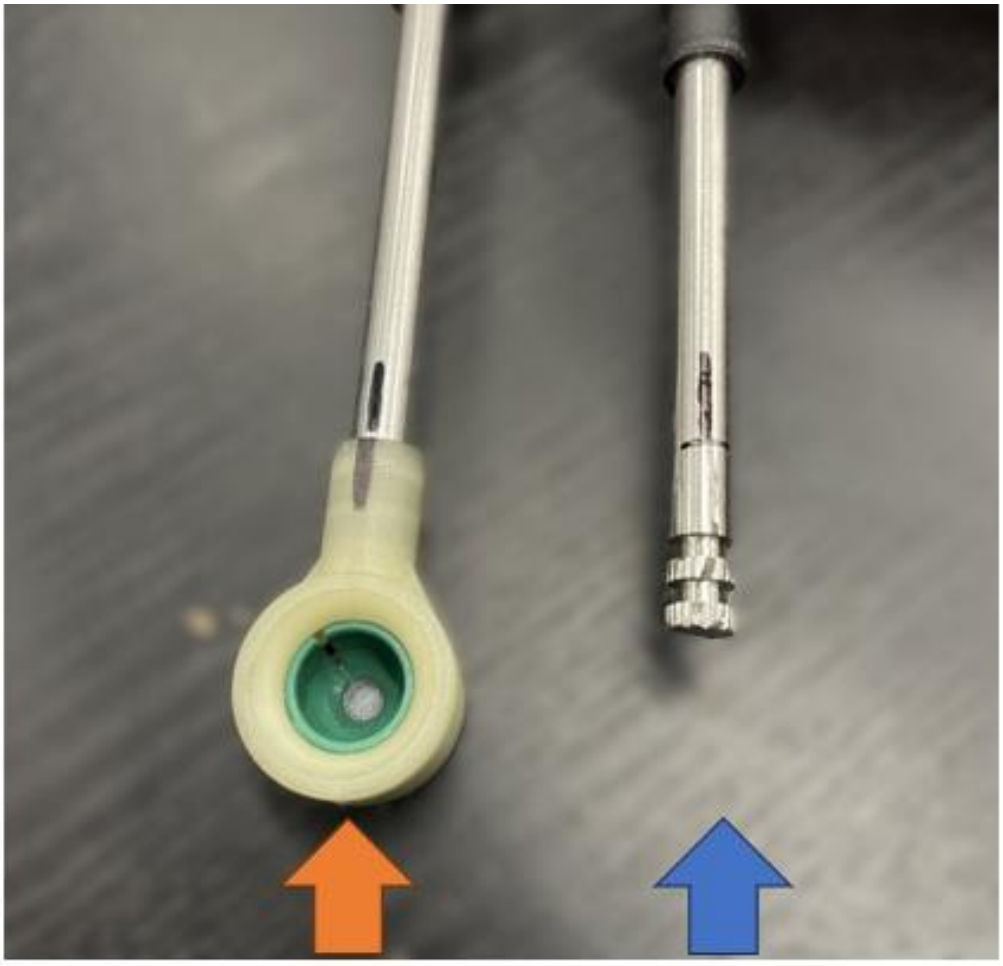



**PLEASE NOTE:** The following steps have been carried out with the cables removed from the car **only** to better demonstrate exactly what needs to be done. You do **not** need to remove the cables from the car for these steps**.**

10. Now mark what way the end cap was located on the shifter cable by drawing a line on both.
    You then need to carefully cut each of the plastic end caps off of the shifter cables (orange arrow), to expose the ridged metal underneath (blue arrow). **DO NOT CUT THE CABLE ITSELF.**
    **PLEASE NOTE:** The plastic is very hard and will require a Dremel-type cutting tool or similar to remove.







BEFORE AFTER

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11. Before fitting the new end caps supplied in the kit, the ridged metal shifter cable needs to be filed down on one side to create a flat surface for the new end cap's grub screws to secure to (see next step for further clarification). Use a Dremel-type grinding tool for this.

    **PLEASE NOTE: It's VERY important that the cable is filed down ONLY on the side where the pen mark was made in Step 10. This will ensure the new end cap will face the same way as the old end cap when fitted.**







12. Fit the new end cap onto the shifter cable using the mark made in Step 9 to locate how far down it goes.

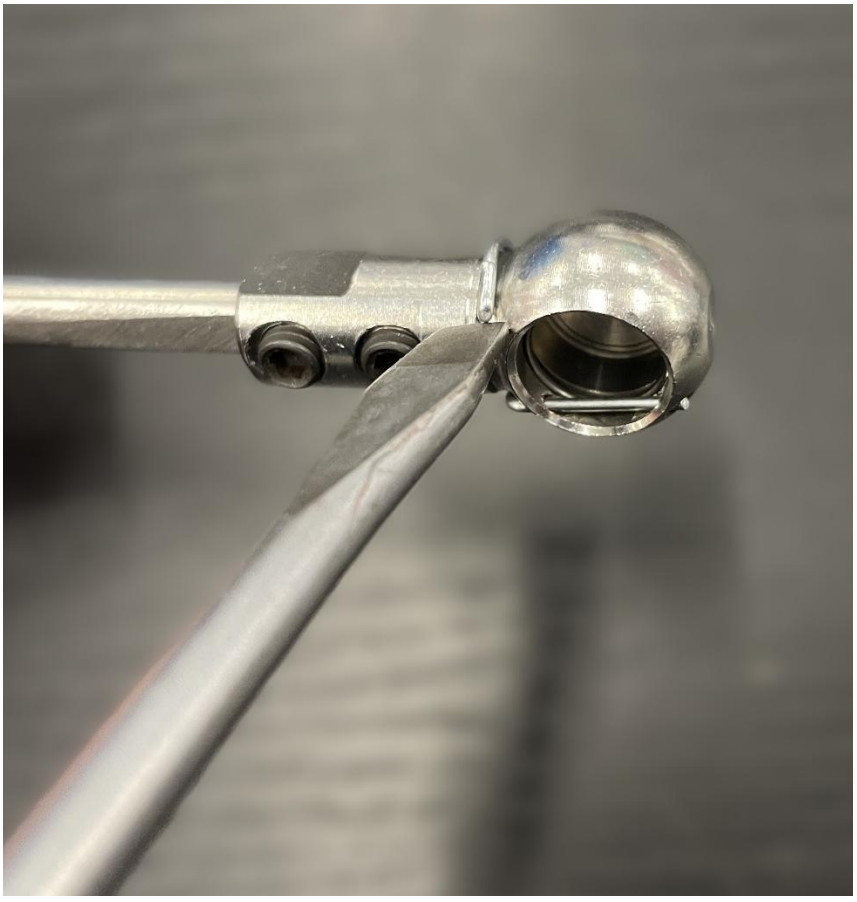
    Before installing, remove the grub screws and apply the thread lock provided. Then refit the grub screws and tighten them down onto the flat surface created in the last step (orange arrow).

    The grub screws should make at least one and a half turns; if they don't then you will need to file the cable down further.






13. Now carefully remove the securing clips from each end cap using a small, sharp flat-head screwdriver. **Be very careful not to lose the clips.**



14. You should be left with this in your car.

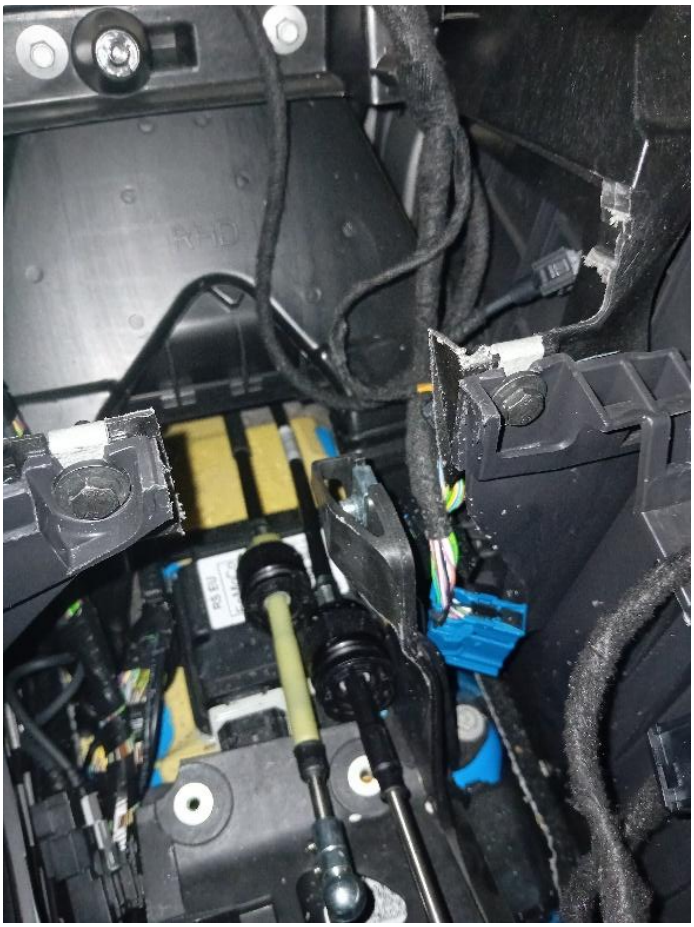


15. Locate the bolt holding the lower mount to the plastic dash frame (orange arrow) and remove it.

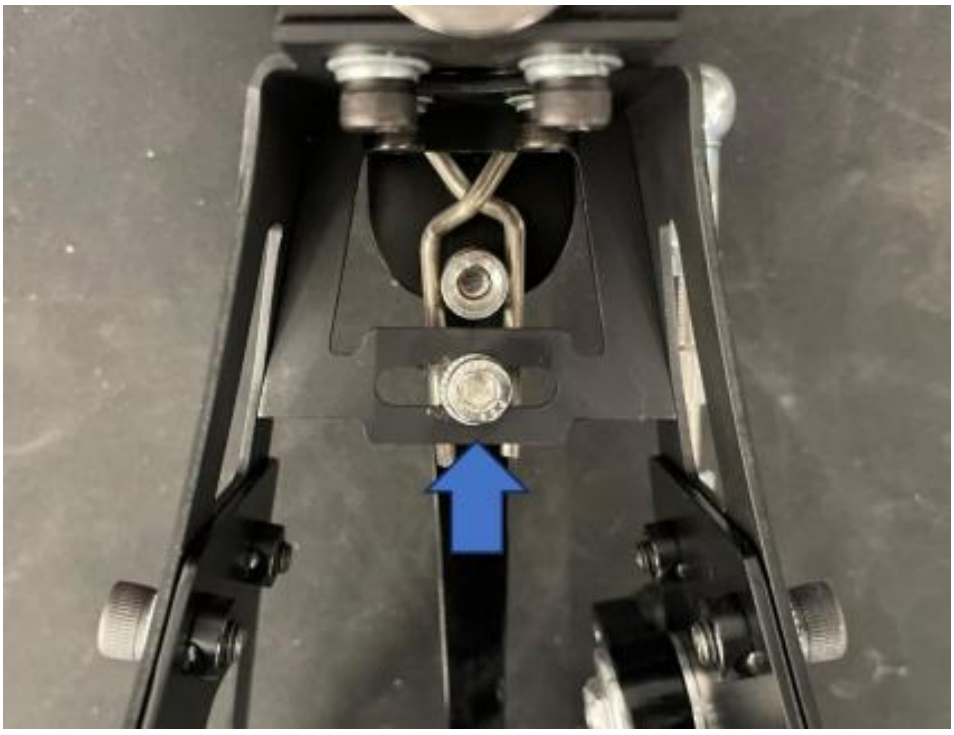


16. Using a suitable cutting tool, now cut away the plastic section between the two 10mm bolts (blue region).

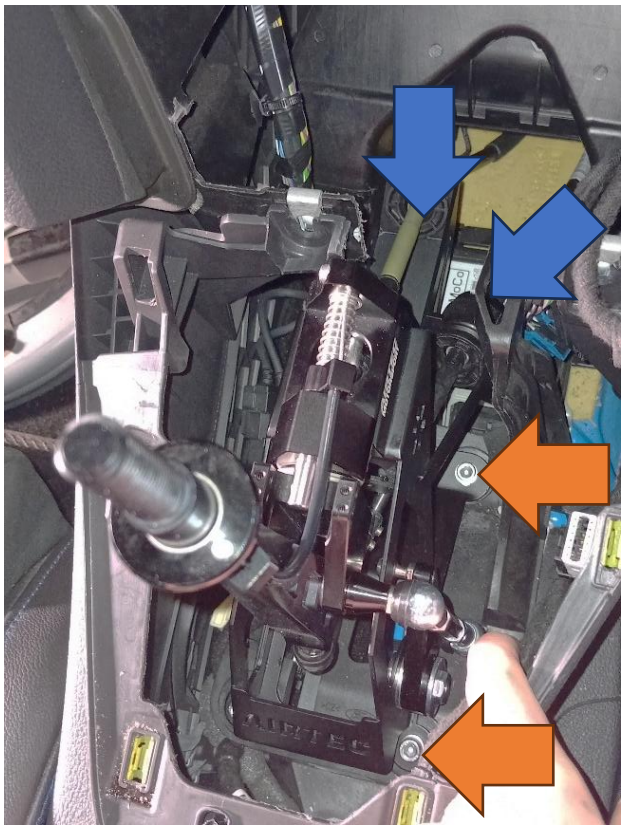


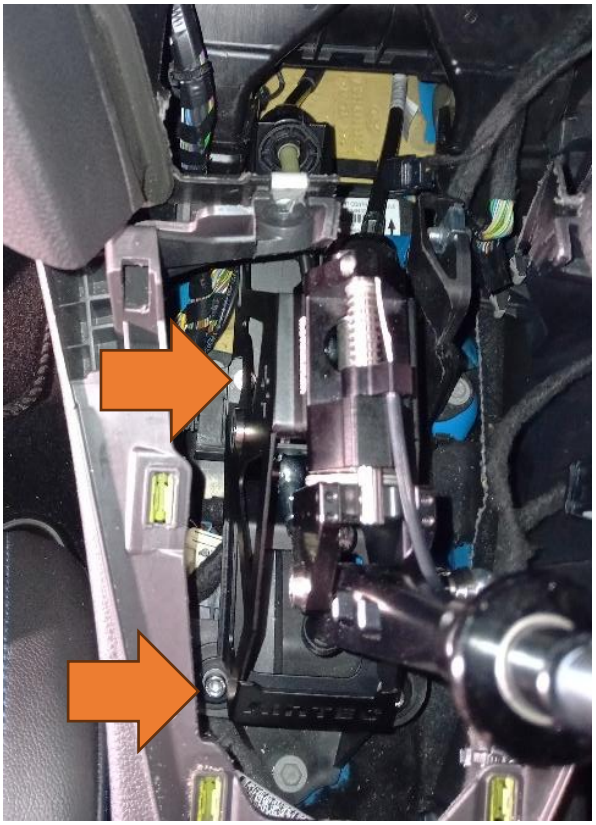




17. To begin the installation process, your new AIRTEC Motorsport shifter now needs centring. If the lever is not already centred, loosen the 5mm Allen key bolt and gently move the lever over to centre it. **Do not loosen the bolt more than two turns**. Once the lever is centred, retighten the bolt.

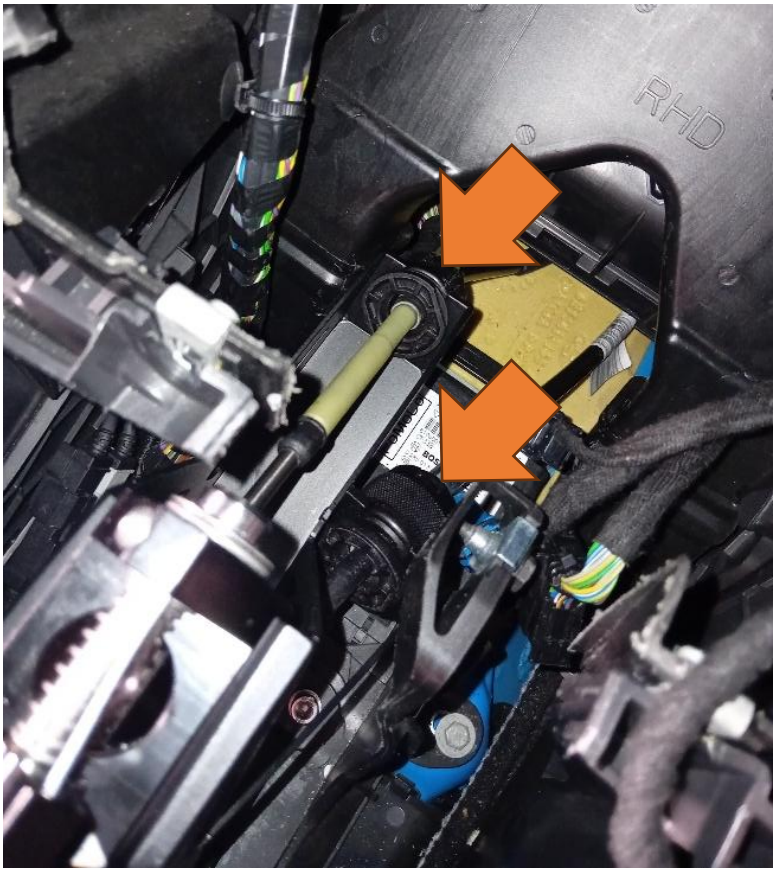


18. Insert the shifter into the console. Ensure that the gear cable end caps sit inside the shifter through the relevant holes in the frame (blue arrows), **but do not secure the cables yet**. Then secure the shifter in place using the four supplied M6 bolts and washers (orange arrows).





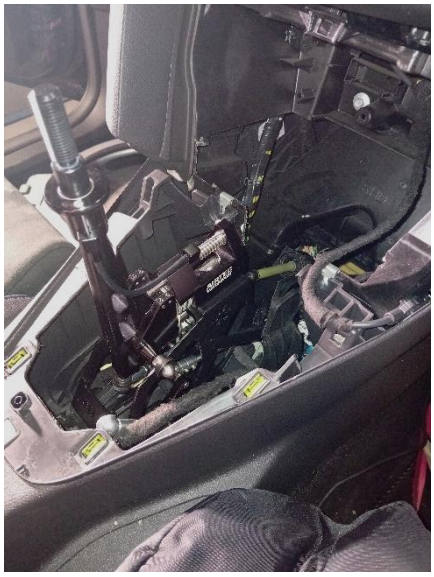
19. Slide the cable connection blocks into the guides, then pull the collar towards the front of the car and push the cable over the lip on the frame. Attach the shifter cable end caps to the ball joints on the shifter and secure with the clips removed in Step 13.



20. Now, to begin calibrating the shifter, 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 top 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 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. Ensure that the linkage is secured properly with the spring clip.



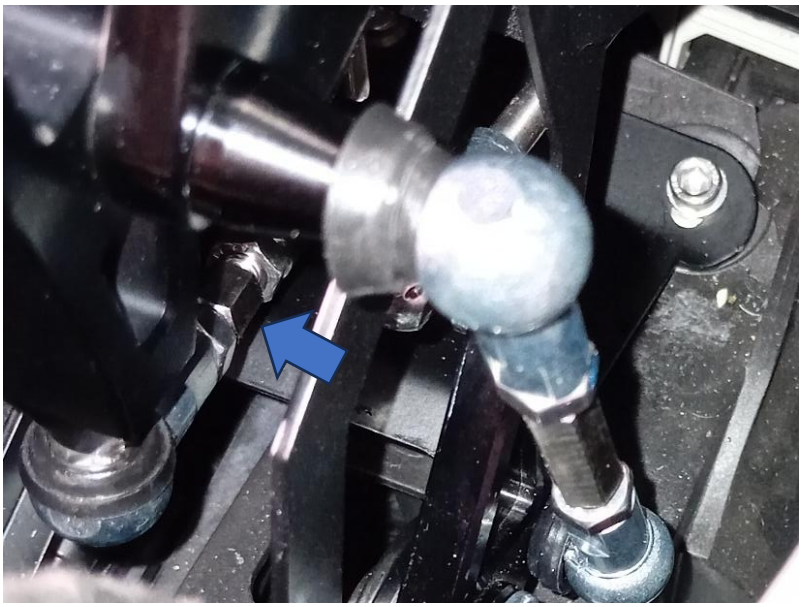




21. The gear engagement linkage now needs to be adjusted. Check that the lever does not collide with the cable that governs side-to-side movement, full range of motion is allowed and that you are happy with the lever's position relative to the steering wheel.

    If adjustment is needed for any of these reasons, loosen the lock nuts and wind the adjuster in or out until this problem has been remedied.

    **Please note:** Due to the space limitations imposed by the centre console, properly adjusting the linkage can be difficult when the lever is in certain positions. If the adjuster cannot be adequately rotated or the lock nuts cannot be properly loosened/tightened, the shifter should be removed from the vehicle where there is more clearance for adjustment, then replaced once adjustment is completed.



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

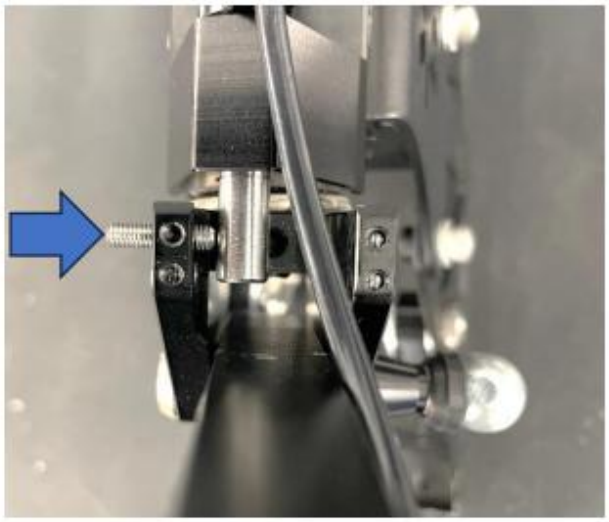
    First select reverse gear and wind a supplied grub screw using the supplied Allen Key in one of the upper holes. If reverse is next to first or second gear, use the **right-hand** upper hole. If reverse is next to fifth or sixth gear, use the **left-hand** upper hole.

    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.**

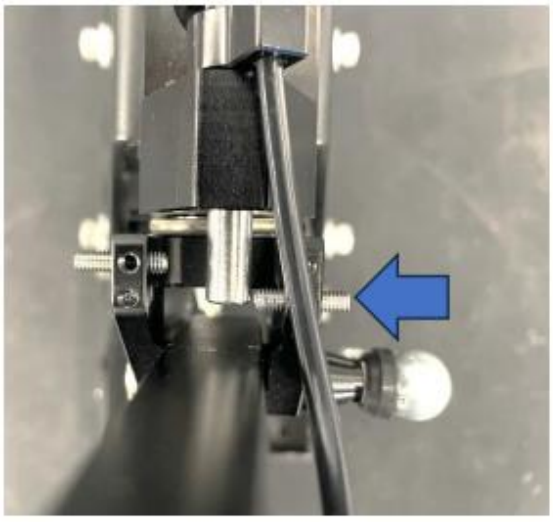
    Then select first gear and wind another grub screw in the **lower right-hand hole** and repeat the process.

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

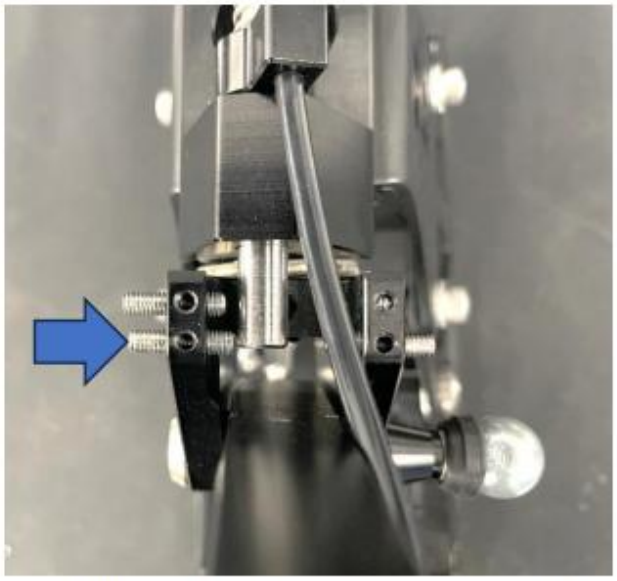
    Once they have been set, ensure you can select reverse gear by lifting the gear lever's safety collar enough to pull the centre bar back to clear the lower grub screw.



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.

23. 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 thread lock into the top thread hole and to the grub screw itself before winding them in.

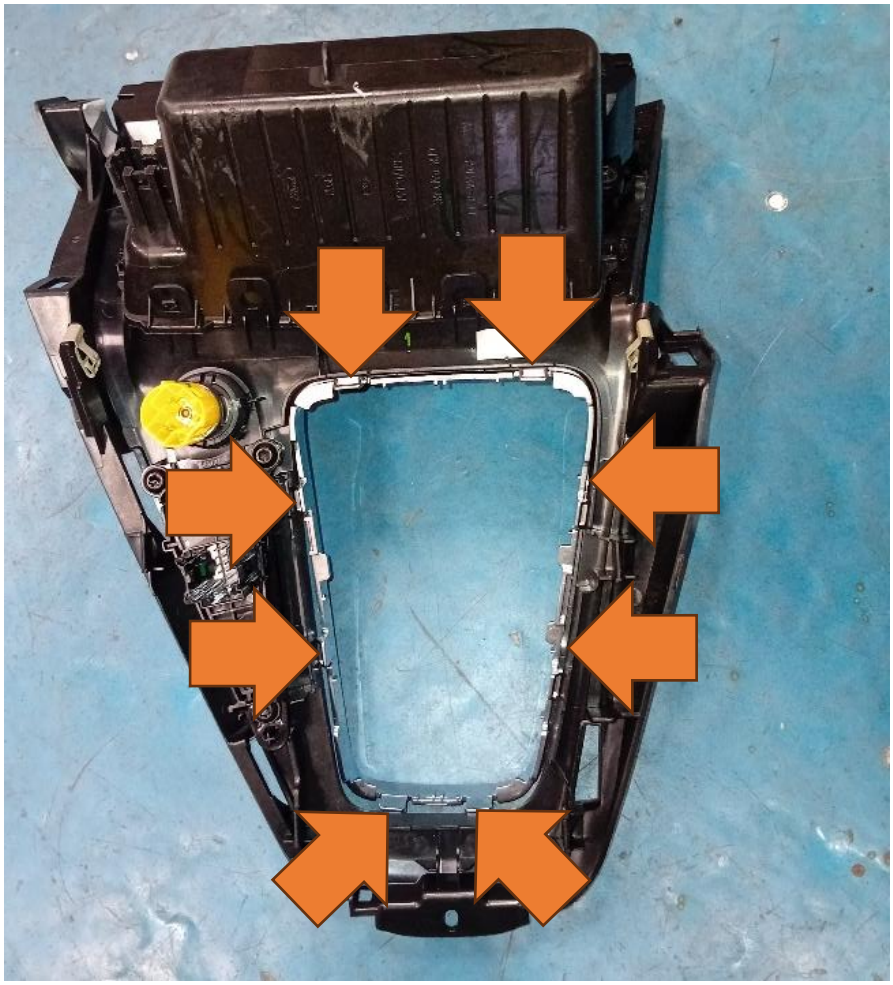



Apply a good amount of Lock Thread to each of the holes.




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

24. Unclip the gaiter surround from the detached console by releasing the hooks, then reinstall your console/trims in the reverse of installation. Ensure that all wiring is plugged back in to the correct location.



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25. Finally Check the security of all components, then insert the supplied surround around the shifter lever.



**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 lubricating with white grease.

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