

# CorkSport

MAZDA PERFORMANCE



## CorkSport 86-91 RX-7 Short Throw Shifter Install Instructions

### Tools Required

- 10mm Socket ¼ or 3/8 Drive
- 12mm Socket ¼ or 3/8 Drive
- ¼ or 3/8 Drive Ratchet
- Ultra Grey or Equivalent Silicone Sealant (optional)
- 75W-90 or equivalent Gear Oil
- 5mm Allen Head Wrench or Socket
- Torque Wrench

### Contents

- 1 Short Shifter Handle with shifter boot, 3 tab wave washer, white bushing, and nylon insert assembled.
- 1 Black Bottom Shifter Bushing
- 1 Bottom Wave Washer
- 3 M6 Allen Head 30mm Long Bolts
- 3 M6 Lock Washers
- 8 Page Installation Instructions
- 1 Transmission Tower Shifter Spacer
- 1 Shifter Bushing Spacer
- 1 Three Hole Transmission Tower Spacer Gasket

### WARNING

Thank you for your purchase. If you have any questions please call Cork Sport at 360 260 CORK

This product requires the use of a M10 x 1.25 thread pitch shift knob, which comes standard on the 89-91 RX-7. A new shift knob will need to be purchased if installing on 86-88 RX-7.

NOTE: These install instructions were created using a 91 RX-7. Installation on an 86-90 will be similar.

Step 1: Unscrew shift knob (aftermarket knob shown) from factory shifter.



Step 2: Gently pull up and remove shift boot plate.



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Step 3: Remove sound deadening material from around shifter. Remove 4 10mm head bolts from transmission tunnel cover.

Note: The transmission tunnel cover is often torn as it is with the test vehicle. CorkSport recommends replacement if the cover is damaged. If replacement isn't going to be done, you may be able to skip down to step for of the instructions as was done in these instructions.



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Step 4: Remove 3 10mm head bolts from shifter seal to transmission. Gently pull up and remove shifter from transmission.



Step 5: Remove lower shifter bushing from tower and install the supplied shifter spacer/insert with the slot over the pin sticking in the tower.



Pictures continued on next page.

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Step 6: Install supplied bottom wave washer followed by new black bottom shifter bushing into shifter tower on top of the previously installed spacer. Apply a small amount of silicone sealant (optional) to the top of the shift tower followed by supplied transmission tower gasket.



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Step 7: Install supplied transmission tower spacer to top of tower and align holes in the spacer to holes in the tower, making sure that the alignment pin is at the front of the tower. Apply a small amount of silicone sealant (optional) to top of spacer.



NOTE: At this time, top off the transmission shifter tower with gear oil to the bottom of the lower bushing.



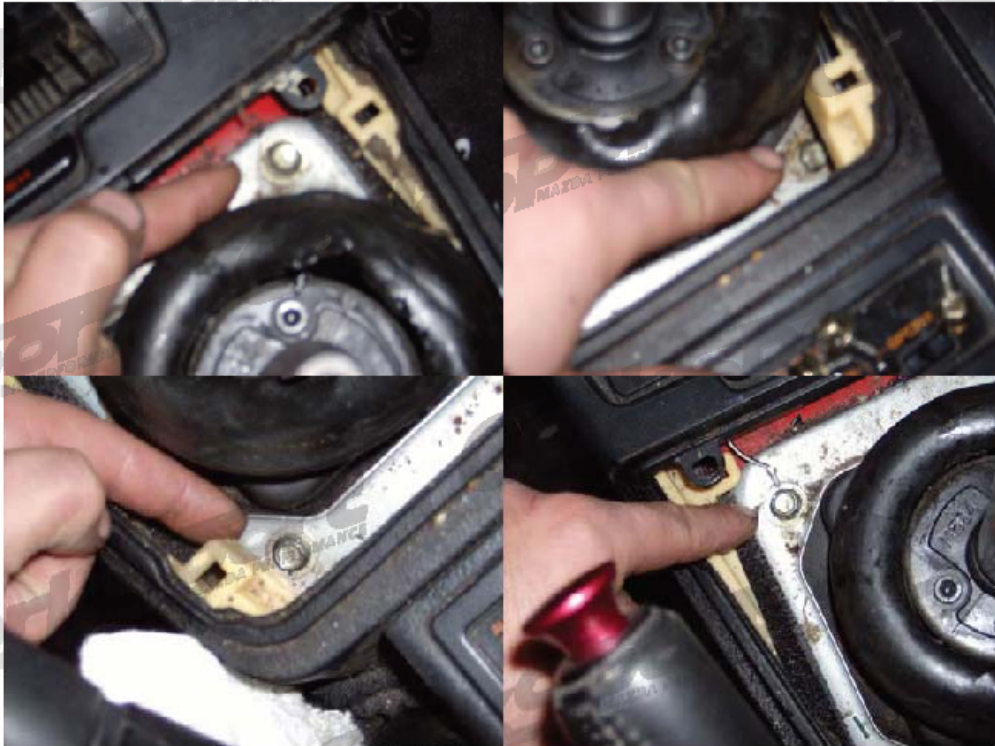
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Step 8: Install CorkSport shifter into transmission tower, with notch in ball of shifter lined up with the pin in the spacer. Install supplied 6mm allen head bolts with lock washers through shifter tower seal, spacer and into shifter tower and tighten to 12-15ft/lbs of torque

NOTE: After shifter is installed, move shifter through shift pattern of transmission. The engagement of the shift pattern may be stiffer than original shifter, however, there should be no binding of the shifter. The vehicle may need to be started and clutch pedal depressed to accomplish this.



Step 9: Reinstall transmission tunnel cover with original 4 10mm head bolts. Reinstall sound deadening material around shifter.



Pictures continued on next page.

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Step 10: Reinstall shifter boot and cover by pressing down on cover until it clips into place and install shift knob.



Tip: Weighted shift knobs. The addition of a weighted shift knob helps offset the stiffer feel due to the loss of leverage with the installation of a short shifter.

Comment: The shorter throw shifters require more effort due to loss of leverage. This should not require extra effort to engage gears though. There is an adjustment period for most drivers to acclimate to the stiffer shift.

Note: Shifter may initially have a hard time engaging in to one or more gears. This is normal. You will need to drive the car around a parking lot or a few city blocks and go through the gears (including reverse). This will work out any air bubbles that may have entered the shift linkages.

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