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Parts List:

- NM Short Shifter V2.5 partially assembled with OEM Toyota white pivot bushing (PN 33548-60040)
- NM Short Shifter V2.5 riser plate
- OEM Toyota blue shifter bushing (PN 33505-35020)
- 4x M8x50 grade 10.9 bolts, 4x M8 washers

Tools Needed:

- # 2 Philips screwdriver
- 5mm Allen key socket or key, 8mm socket and wrench, 10mm socket, 12mm socket, 2x 17mm sockets (1/4 or 3/8 drive), medium extension, and ratchet.
- Ultra Grey Silicone Permatex (PN 599003) or Ultra black Silicone (PN 59803)
- Bench vice and pipe wrench (optional but recommended)
- Lucas Red N Tacky grease (PN 10574)
- Torque wrench

Notes

The upper NM shifter post is threaded M12x1.25 to match the factory Toyota shift knob threads. This post can be cut/shortened if required. If you cut it too short and need a new one, you can replace it with ½" stainless steel rod.

Fastener List

- 4x M8x50 button head cap screws
- 4x M8 washers
- 1x M10x30 bolt
- 2x M10 washers
- 1x M10 Nylock nut
- 4x M5x22 bolts
- 4x M5 washers
- 4x M5 Nylock nuts

Installation of the NM Short Shifter

Step 1 – Removal of the cupholder tray and center console

Remove the shift knob. Remove the cup holder tray by grabbing as much of the cup holders as possible and pull upwards. Using a plastic pry stick can help if it's sticking. Remove the screws with an 8mm socket. Use a right-angle pick to pull up the fake floor in the center console to gain access to the two 10mm bolts. Pull the shifter console forward while putting your gear lever in second gear.



Step 2 – Removal of the stock shifter



Put the transmission into neutral. Remove the stock shifter by pushing down on the cup, and with a flat screwdriver, hitting the screwdriver (with your palm or a hammer) counter clockwise to release the lock pins.

Remove the OEM shifter housing from the transmission by removing the 4 bolts.

Step 3 – Disassembly of the stock shifter

You need to separate the two parts of the stock shifter assembly so you can reuse the spring parts.

Remove the top portion of the shifter (black section with shift knob threads) by clamping the lower metal part of the shifter in a vise and, with a pipe wrench on the upper section, twist upward in a clockwise motion to either rip the soft rubber isolator or break the glue holding it together.

Another option is to cut the stock shifter assembly in half, but if you do this you will need to weld it back together if you ever wish to return it to stock. If you choose to cut it, cut the lower metal part.

The parts needed from the stock shifter are the rubber boot, the top cup, the spring pivot washer, and the spring.

Step 4 – Installation of the new NM Short Shifter



Loosen the two 8mm nuts holding the NM lower shifter post in the preassembled NM Shifter. Remove the NM knuckle. Assemble (in order) the spring, spring pivot washer, and top plate onto the NM lower shifter post, just like it was on the stock shifter. Remove the OEM shifter seat from the OEM shifter housing (to be replaced with the included blue shifter seat).

Apply a light coat of grease to the shifter seat (the blue bushing) and the pins of the OEM shifter base. Install the blue shifter seat into the OEM shifter housing.

You do not have to remove the pivot bushing (the white bushing) from the NM shifter because it was lubed during assembly, but adding a light coat of grease on the outside of the pivot bushing will help with installation.

Clean the top of the transmission with brake clean on a rag (do not spray brake clean into the transmission), then apply a light coat of silicon sealant on both sides of the NM riser plate. Place the NM riser plate on top of the transmission, lining up the alignment pins and bolt holes. Install the stock shifter top onto the NM riser plate. Install and torque the 4 supplied bolts to **11 Ft-lb / 15 Nm**.

Lower the NM shifter post and the stock parts into the OEM shifter top, maneuvering the white pivot bushing into the transmission linkage. Once the NM shifter is in place, use a flat blade screwdriver pushing down clockwise to seat the spring cap. In some cases, the transmission mount will have to be adjusted from the bottom of the truck. Aging bushings can cause misalignment of the upper back bolt where it comes close to the body of the truck. If your truck has this issue, you can either bend the flange slightly to clear, or you can adjust your transmission position.

Step 5 - Reassembly



Reinstall the stock shifter rubber cap onto the NM shifter base.

Now for the fun part, installing the brand-new NM Short Shifter V2.5 knuckle. The knuckle is very tight fit to the NM lower shifter post, so it may take extra effort to install it. The shift knob position is fully adjustable by tightening/loosening the small nuts and the center bolt in the knuckle.

Recommended default shifter position: line up the gap with the front right bolt (as shown), then adjust the angle. Everyone has different length arms and seating positions, so you can adjust the shifter to your liking.

Once you are happy with your new custom shifter position, tighten all the fasteners. Do the reverse order of Step 1 to reinstall

the shifter surround. Enjoy!

Max torque rating on the center bolt is 55 ft-lb/75nm and the post clamp bolts are 60 in-lbs/7Nm

We advise against running really heavy weighted shift knobs, as this can cause undue wear on the NM shifter and the stock bushings and shift forks.