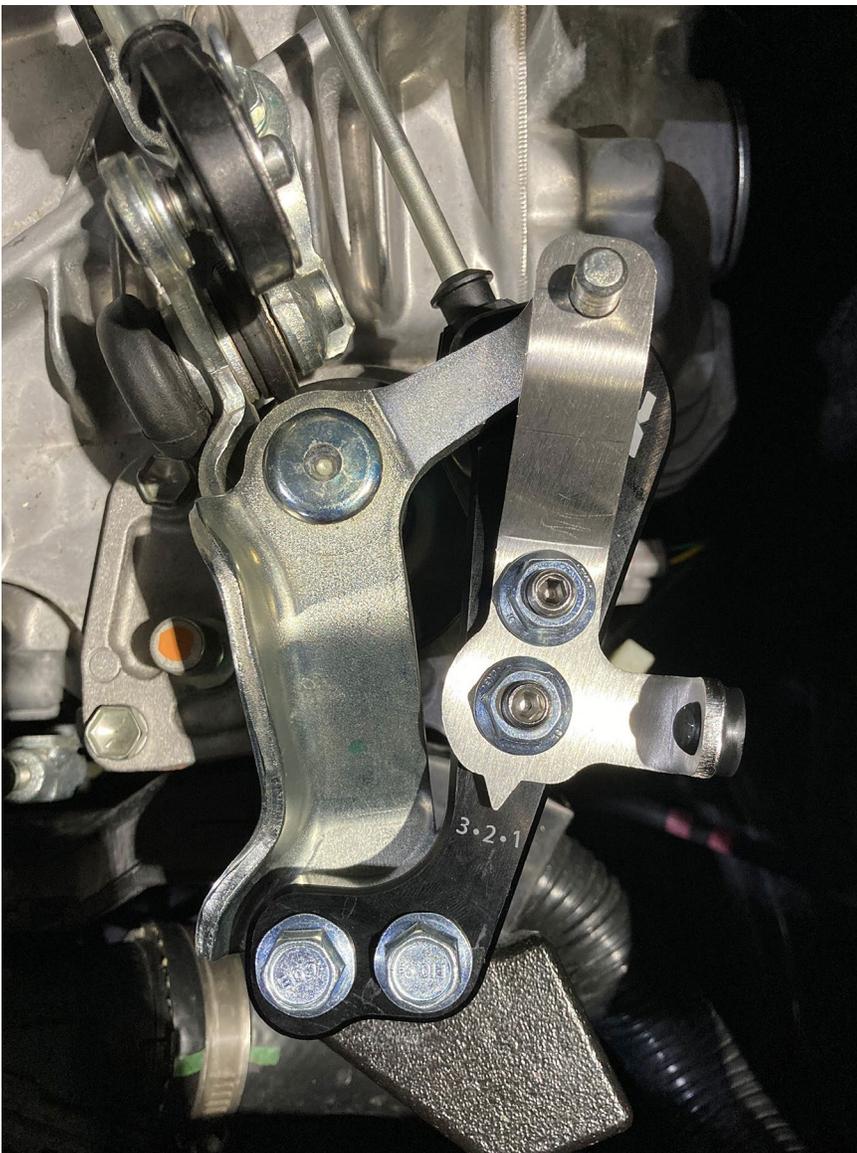


INSTALL TIME: 1 hour

DIFFICULTY LEVEL: 2

TOOLS NEEDED: socket driver
10 mm socket
12 mm socket
4 mm allen key
small flat head screwdriver (or trim removal tool)



GENERAL ASSEMBLY BEFORE INSTALLATION

Thread the M8 set screws into the short throw shifter body, once the set screws are bottomed out by hand, use a 4 mm allen key and turn an additional 1/4 turn.

Insert rubber pad into adjustment bracket. Work one side of the pad into the bracket hole, then press and turn the pad to finish setting it.

General assembly complete, start installation.



1. Start by removing the (7) plastic retaining clips on the plastic cowl. Use a small screw driver or trim removal tool to pop the center clip and then remove.

When all clips are removed, remove the plastic cowl. (Fig 1)



Figure 1

2. Loosen air box clamp using 10 mm socket. Unplug the MAF connector and remove the wire routing tab from air box. (Fig 2)

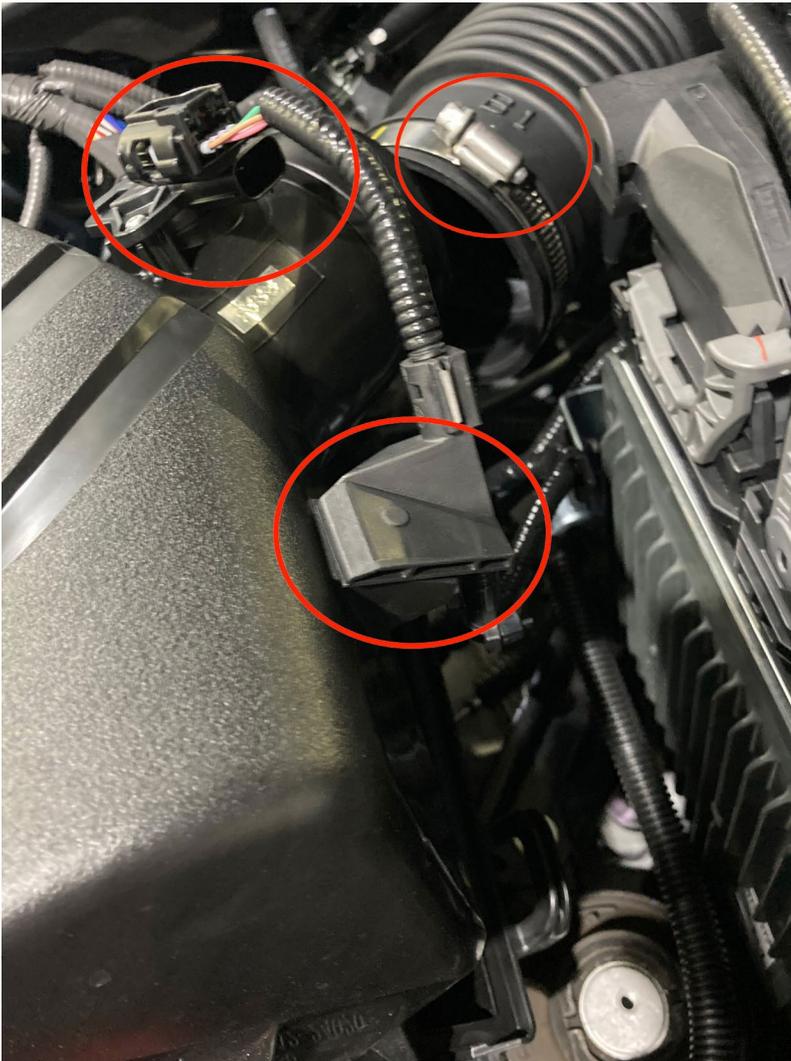


Figure 2

3. Remove (2) more plastic clips and remove the plastic air duct that routes to the OEM air box. Unplug small hose (only 1) and remove from air box routing tabs. (Fig 3)

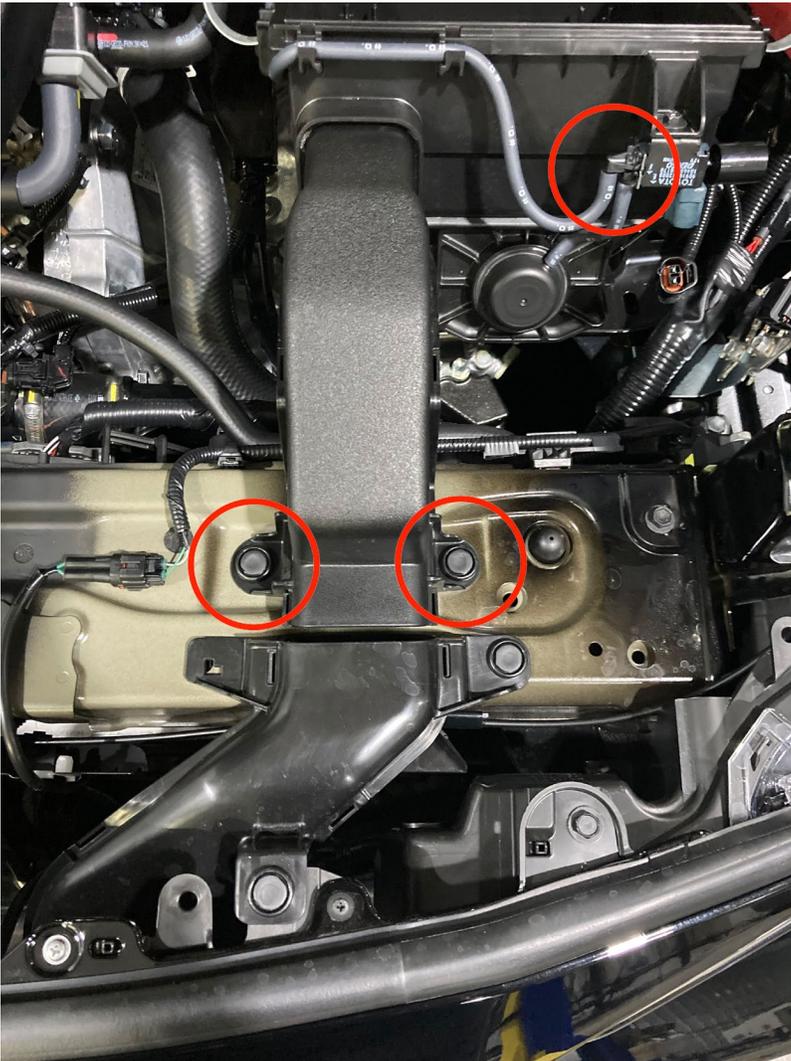


Figure 3

4. Remove upper portion of OEM air box and filter. Remove final wire routing clip on side of air box. (Fig 4)

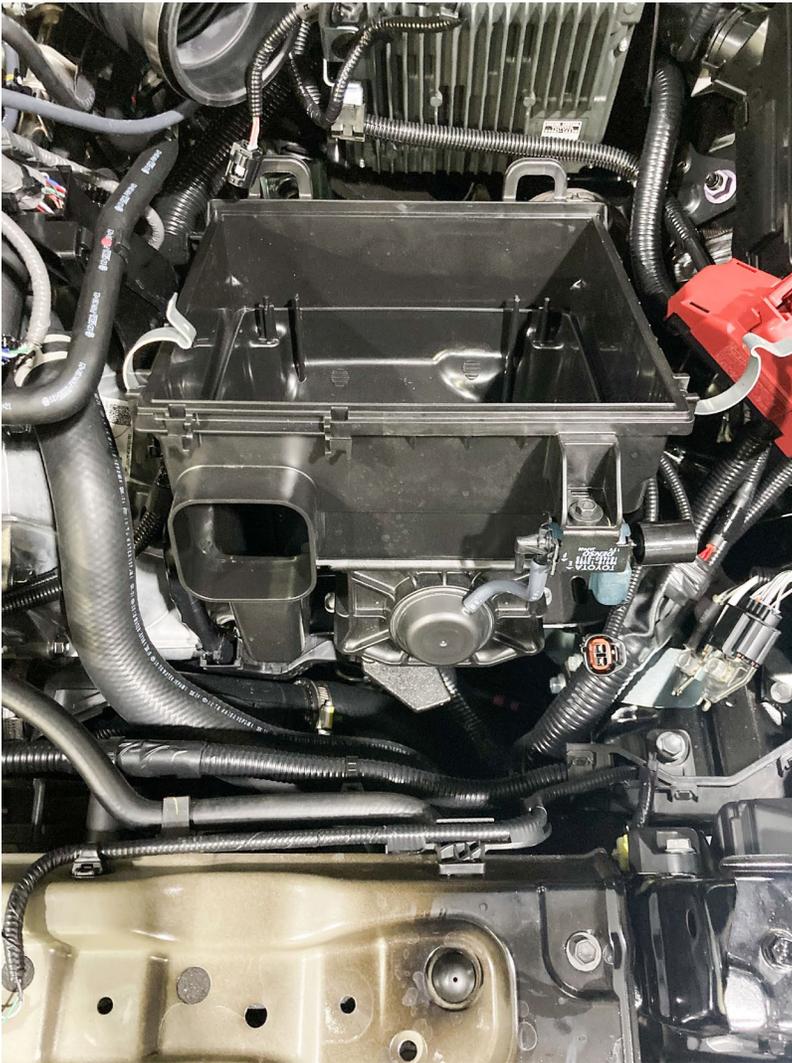


Figure 4

5. Remove lower portion of OEM air box by lifting up. It is held in by 3 mounting points. Remove the air box mount bracket using a 10 mm socket. (Fig 5)



Figure 5

6. Remove the shifter bushing from the large cable head. (Fig 6 and Fig 7)

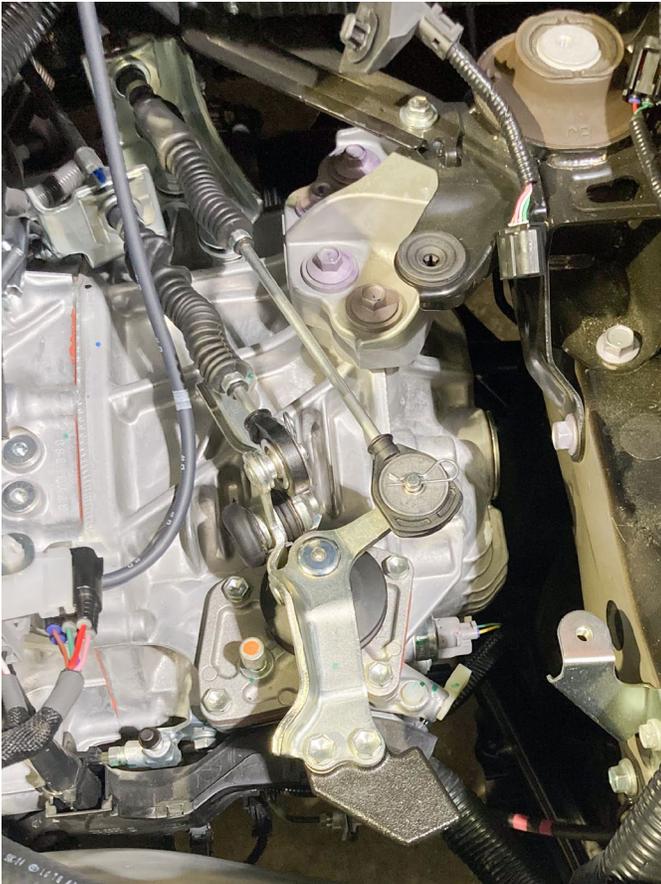


Figure 6

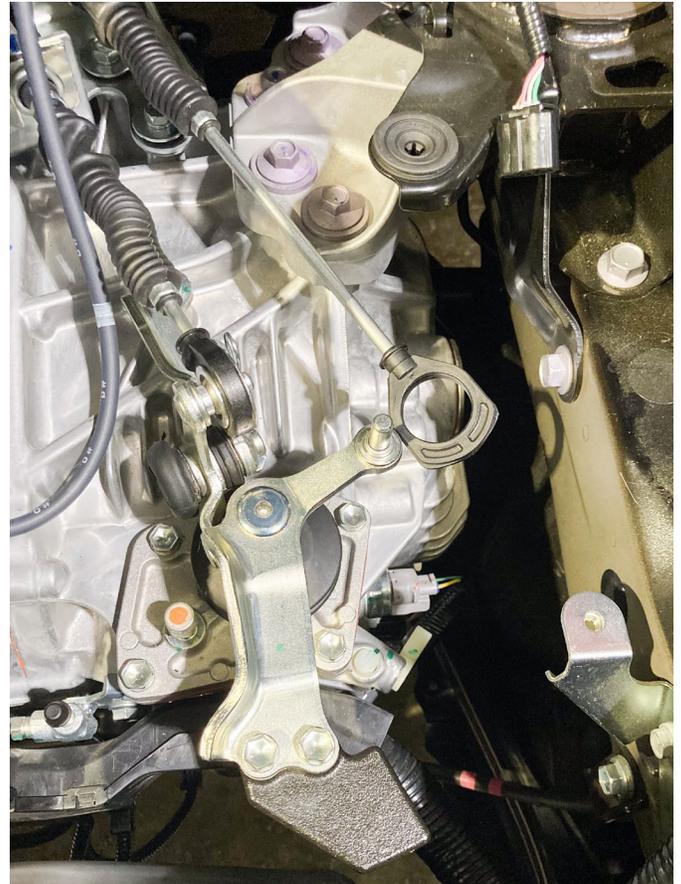


Figure 7

7. Hold the short shifter sideways and install the bushing and washers as shown in the picture. (Fig 8a & Fig 8b) **NOTE ASSEMBLY ORDER, DO NOT ASSEMBLE UNTIL STEP 8.**

For OEM and aftermarket shifter cable bushings, see step 7b.

NOTE: We recommend to use the short shifter with the Racer X shifter cable bushing kit. The bearings reduce the notchy shifter feel often associated with aftermarket short throw shifters.



Figure 8a

Racer X V2 Shifter Cable Bushing:
Order of bushings/washers:

spring
M8 flat washer
formed washer
shifter bushing
M6 deformed locking nut



Figure 8b

Racer X V1 Shifter Cable Bushing:
Order of bushings/washers:

M8 flat washer
1/8" aluminum collar
shifter bushing
large flat washer
1/8" aluminum collar
M6 deformed locking nut

7b. Hold the short shifter sideways and install the bushing and washers as shown in the picture. (Fig 9) **NOTE ASSEMBLY ORDER, DO NOT ASSEMBLE UNTIL STEP 8.**

NOTE: We recommend to use the short shifter with the Racer X shifter cable bushing kit. The bearings reduce the notchy shifter feel often associated with aftermarket short throw shifters.



**OEM or Aftermarket Shifter
Cable Bushing:**

Order of bushings/washers:

- 1/8" aluminum collar
- shifter bushing
- OEM flat washer
- M6 deformed locking nut

Figure 9

8. Racer X V2 shifter cable bushing installation:

Insert the shifter cable bushing into the cable head with the shifter bushing shoulder facing the ground. Assemble in the following order: spring, M8 flat washer, formed washer, cable head with shifter cable bushing, deformed nut. (Fig 10 & Fig 11)

Racer X V1 shifter cable bushing: follow assembly order listed in step 7, Fig 8b.

OEM/Aftermarket shifter cable bushing: follow assembly order listed in step 7b, Fig 9.

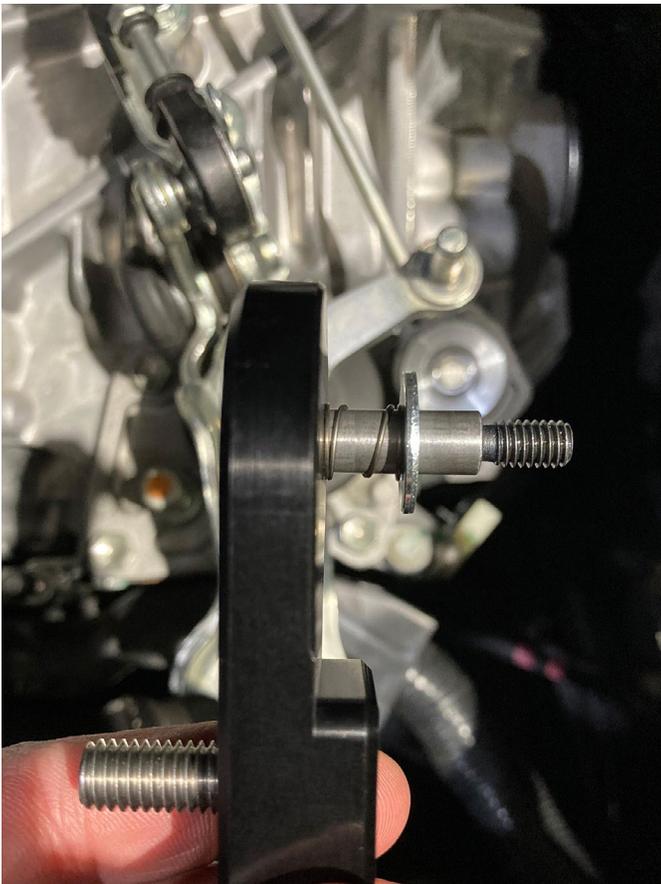


Figure 10

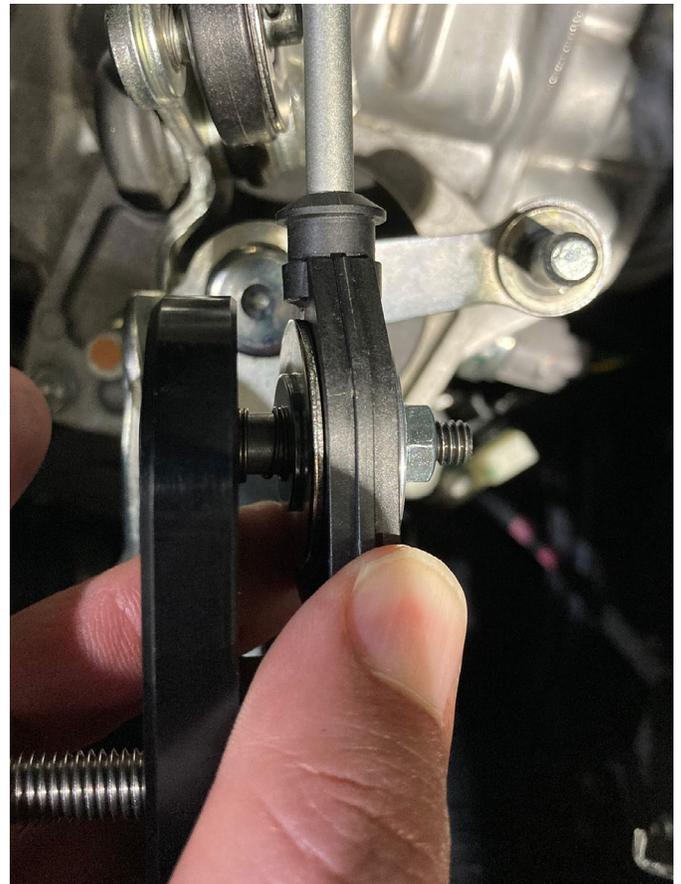


Figure 11

9. Place the short shifter to the side and remove the counter weight at the base of the bell crank using a 12 mm socket. (Fig 12)

TIP: OEM used a thread adhesive, so they are a little bit gummy on the first removal.

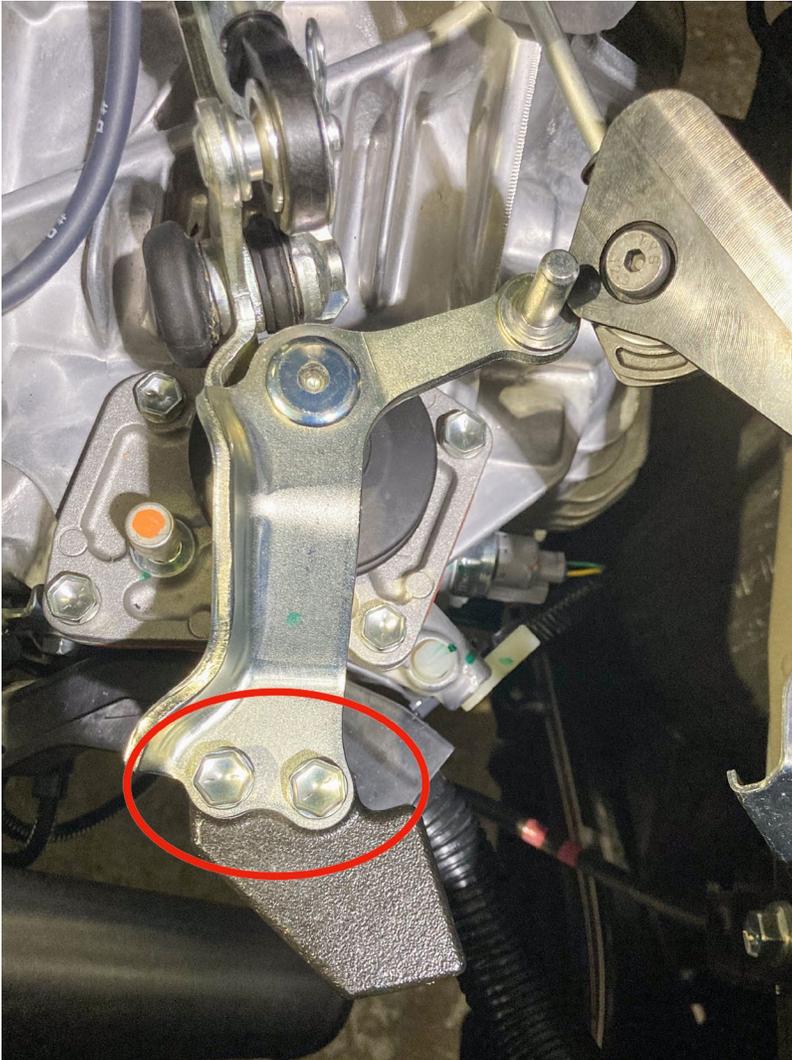


Figure 12

10. Align short throw shifter as pictured, then install M8 flange bolts through shifter body and into counter weight. Tighten bolts by hand and then back off 1/4 turn, so the shifter body can still rotate. (Fig 13 & Fig 14)

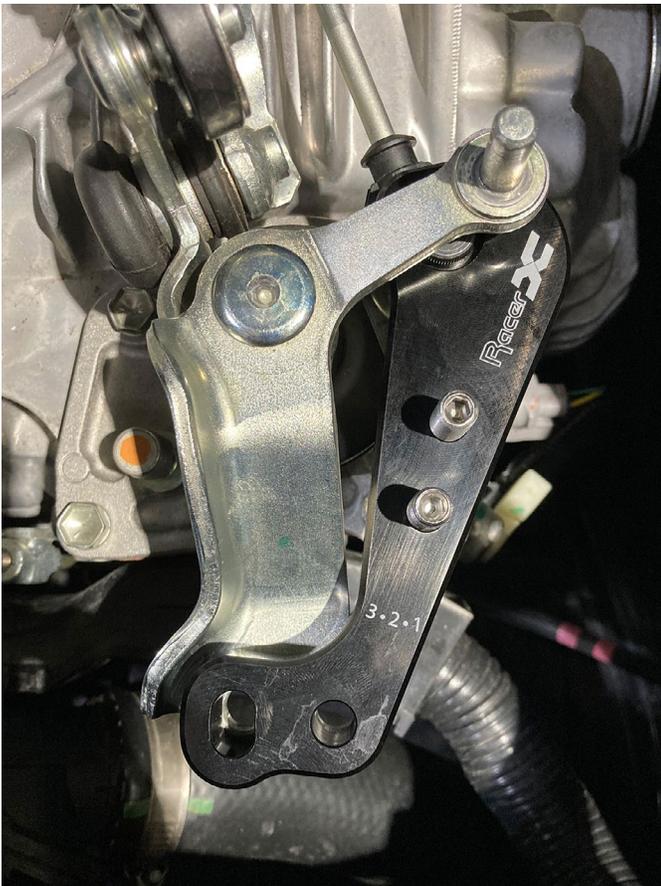


Figure 13

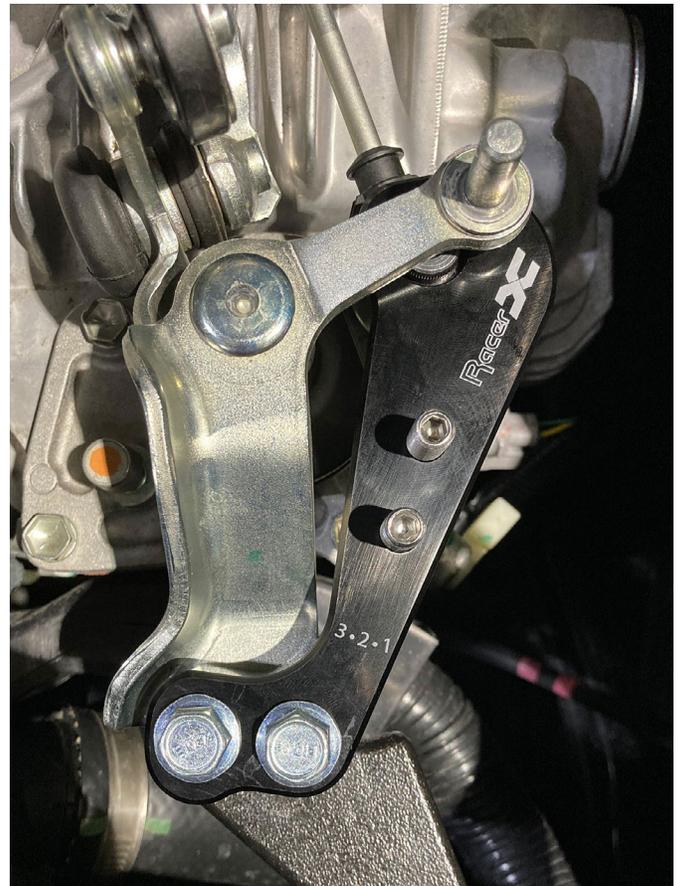


Figure 14

11. Insert (2) M8 washers on to the set screws. Then install the adjustment bracket on top of the washers. (Fig 15 & Fig 16)



Figure 15

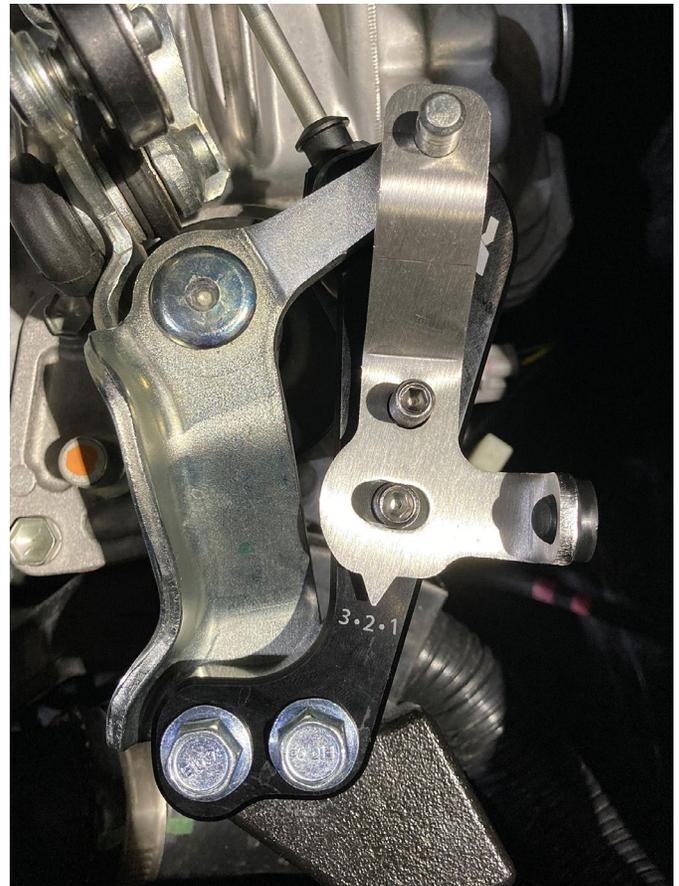


Figure 16

12. Thread M8 flange nuts onto set screws. Hand tighten and then back off 1/4 turn. (Fig 17)

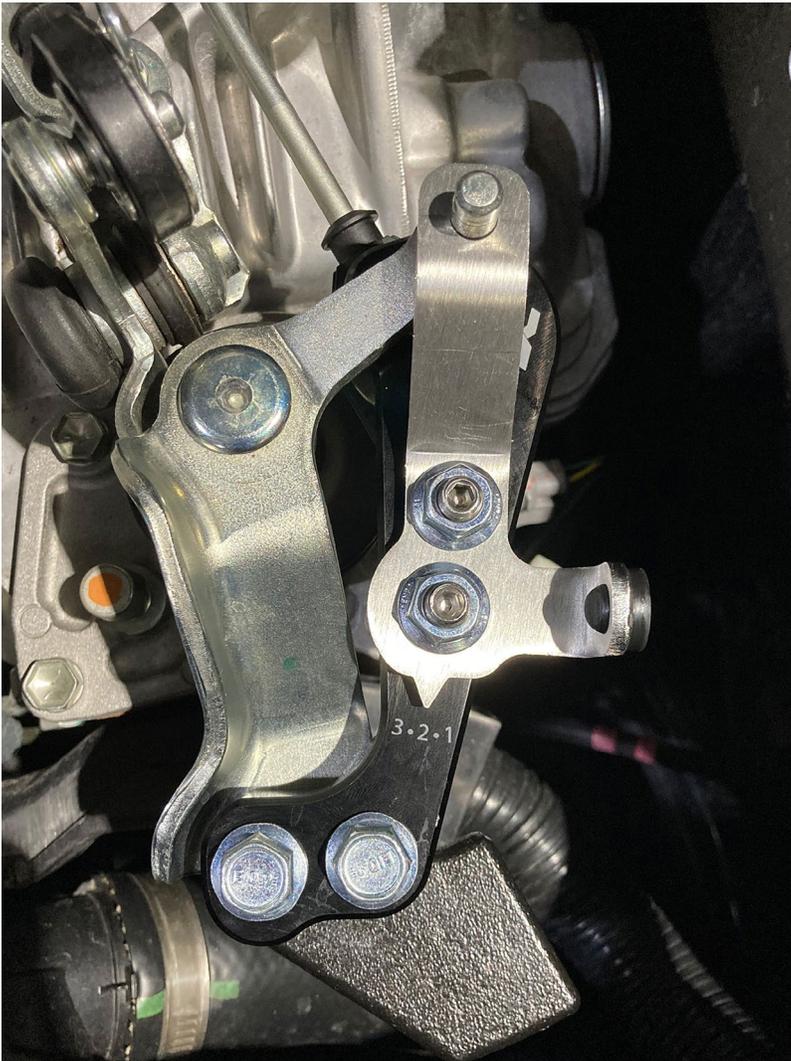


Figure 17

13. Adjust bracket to the desired setting, then tighten the (2) flange nuts and (2) flange bolts. (Fig 18)

- Setting 1: 10% reduction in throw
- Setting 2: 25% reduction in throw
- Setting 3: 40% reduction in throw

Technically, there is a small amount of adjustment beyond setting 3, which will allow for additional reduction in throw.

TIP: If you are using a short throw shift lever, try using setting 2 or 2.5. From our testing, this worked the best; while setting 3, in our opinion, was too much shifting effort.



Figure 18

14. Installation complete (Fig 19)

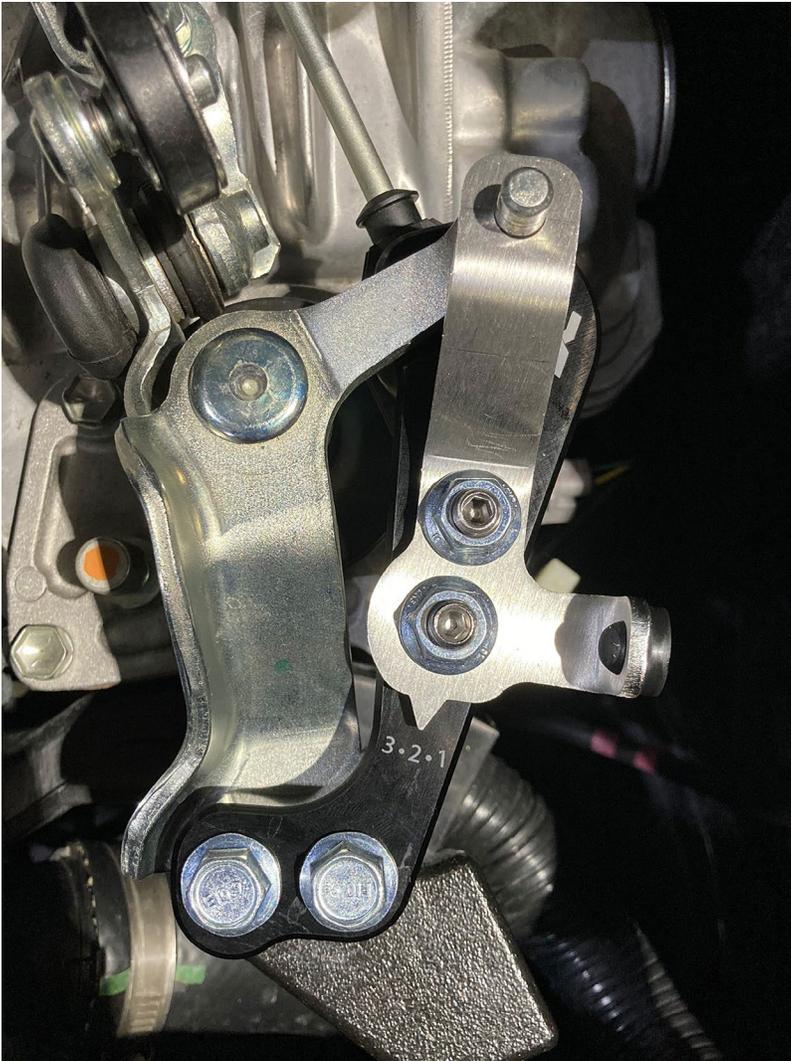


Figure 19