

DARKMATTERX

Preparation and Safety

Before doing any work on the vehicle, ensure that the vehicle is safely secured onto a lift or jack-stands with all safety pins or latches in place to prevent a serious injury from taking place. The vehicle needs to be high enough off the ground to crawl or stand under. When working under the vehicle, always wear eye protection to prevent foreign debris from getting into your eyes. Having a light under the vehicle is a must, and will make the install process much smoother! If you can, having an extra set of hands will speed up the process.

Technical Support

Technical support is available for you in the event that you need it! Please read through the manual before reaching out with a question. You can reach us through either of the two options listed below. We will respond as soon as possible!

1. The chat feature at the bottom of the screen on www.darkmatterx.com (fastest response time)
2. Direct email contact@darkmatterx.com

There is an install video on our YouTube channel if you wish to follow along with that, link below. Note that some steps may slightly differ between this guide and the video because of an update in the process.

<https://www.youtube.com/watch?v=SNOXDLU6jm0&t=153s>

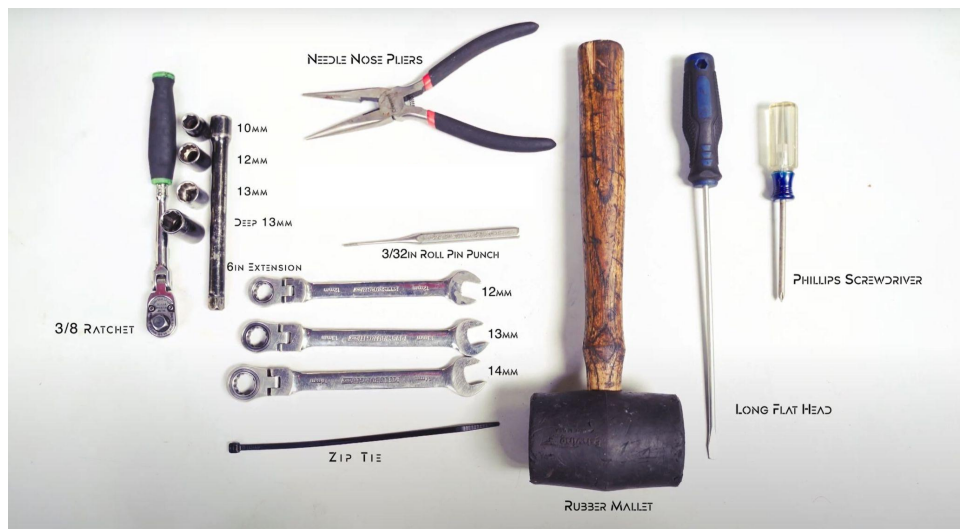
DM-1 Install Guide

- 1.) The UNDERLINED AND BOLD TIMESTAMPED steps are the step itself. If a comprehensive explanation is required, read BELOW the underlined step. If you are familiar with this area of the vehicle, you can skim the steps and pictures throughout the guide.

- 2.) Regardless of OEM or aftermarket bushing upgrades, the removal process of the OEM shifter with or without any upgrades will stay the same. No bushing that is removed from the car will be re-used.
- 3.) Below are the listed tools that are used during the install performed by Dark MatterX. Alternative tools can still complete the same install process if you are unable to source the recommended ones.
- 4.) Time stamps referencing the installation video are provided with the instruction steps in this guide.

Recommended Tools

1. Small Phillips screwdriver
2. Long flat head screwdriver
3. Rubber mallet
4. Needle nose pliers
5. 3/32 punch
6. 10,12,13,14mm wrench
7. *Zip-tie (optional)
8. $\frac{3}{8}$ Driver
9. 6" Ratchet extension
10. 10mm socket
11. 12mm socket
12. 13mm socket
13. Deep 13mm socket



Kit Contents

Locate ALL components, hardware, and tools before installing the DM-1 shifter. Descriptions are provided of all kit contents for ease of installation.

DM-1 Shifter Components

1. DM-1 Shifter
2. Reverse pull lever
3. Rear bracket
4. Passenger side bracket
5. Driver side bracket

Provided Hardware

BAG 1

1. (2) M8X1.25
2. (2) M6X1
3. (3) Thrust Washers
4. (1) Sleeve Bearing
5. (1) Metal Spacer
6. (2) SS Washers



***BAG 2 WILL VARY DEPENDING ON MODEL**

***BAG 2 (08+ STI and 08-14 WRX)**

1. (2) M8X1.25 Flanged Head
2. (2) M8X1.25 Non Flanged
3. (2) M8X1.25 Nut
4. (1) M8X1.25 Locknut



***BAG 2 (04-07 STI and 02-07 WRX)**

1. (2) M8X1.25 Flanged Head
2. (2) M6X1 Non Flanged
3. (2) M6 Lock Washer
4. (2) M6X1 Nut
5. (2) M6 Washer
6. (1) M8X1.25 Locknut



INSTRUCTIONS

Removing Center Console (01:29)

Tools required

1. $\frac{3}{8}$ Driver
2. 6" Extension for $\frac{3}{8}$ driver
3. 10mm socket for $\frac{3}{8}$ driver
4. Small phillips screwdriver

1.) Locate the two bolts inside of the rearmost part of the center console and remove them using $\frac{3}{8}$ Driver with 6" extension and a 10mm socket.



2.) Remove E-brake leather boot from the center console by pushing straight up From the bottom of the boot until the retaining clips on the bottom, disconnect From the center console.



3.) Using the Small phillips screwdriver, remove the single Phillips screw below the top right corner of the leather boot.



4.) Firmly pull up on the front of the center console until it comes free. Push the console towards the back of the car a few inches so that you expose the area behind the shift boot trim.



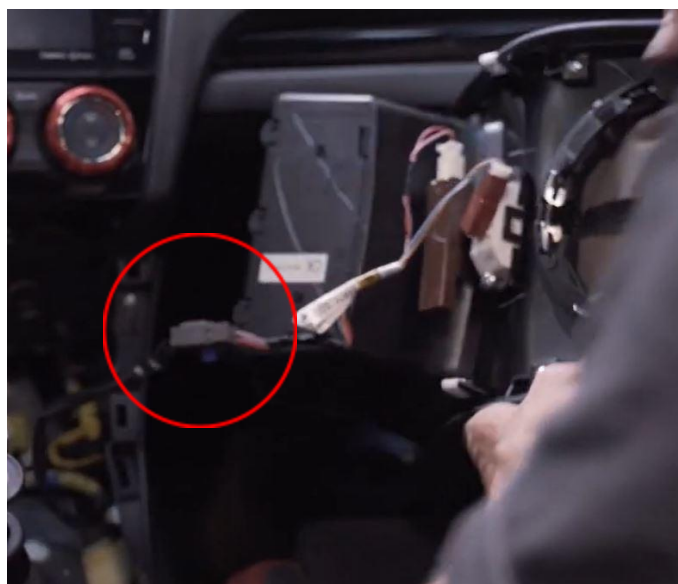
5.) Remove the shift knob off of the shifter. Using both hands, remove the section of interior trim that is surrounding the shifter and has the leather boot attached to it. Working from the edge closest to the back of the car, gently pull up and continue this motion across the edges of the trim until it becomes free.



6.) Make sure to set the trim out of the way in the car and be careful not to pull on the electrical harness that is connected into the STI logo.

INSTALL GUIDE TIP

Lowering the emergency brake can help provide additional room to work with, when removing the interior trim. **Be cautious of the state of the Vehicle.** If you started working on the car with the emergency brake on, this could not be a viable option.



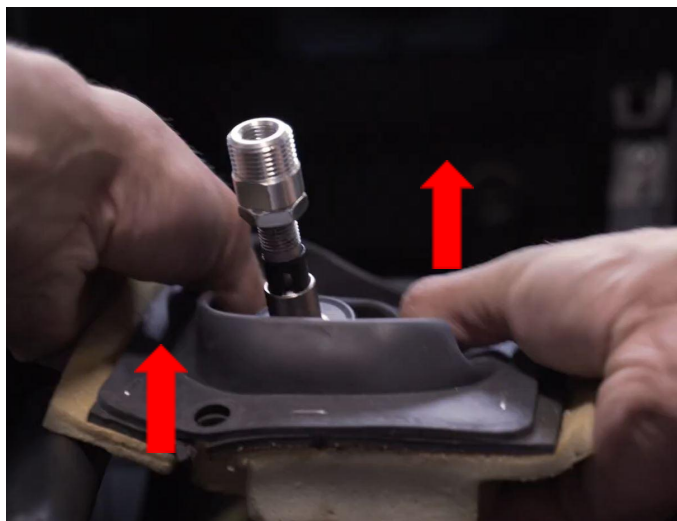
7.) Locate the two small phillips screws in the trim and use the Small phillips screwdriver to remove them.



8.) Remove the two white, plastic caps that are securing the rubber with your hands. One cap is circled in the top right, the other is at the bottom left of the boot.



9.) Remove the entire rubber boot once the two plastic caps are off by gently pulling straight up and over the OEM shifter assembly.



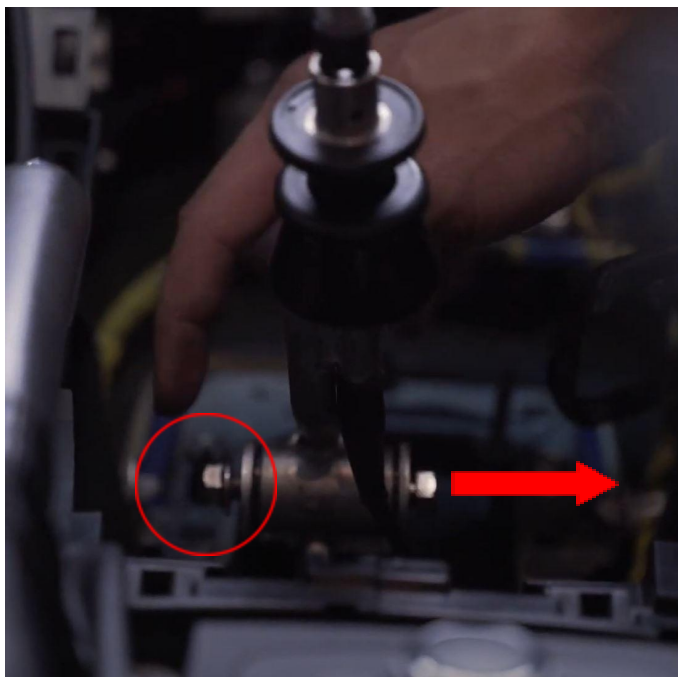
Unbolt and Remove OEM Shifter Assembly (03:57)

Tools required

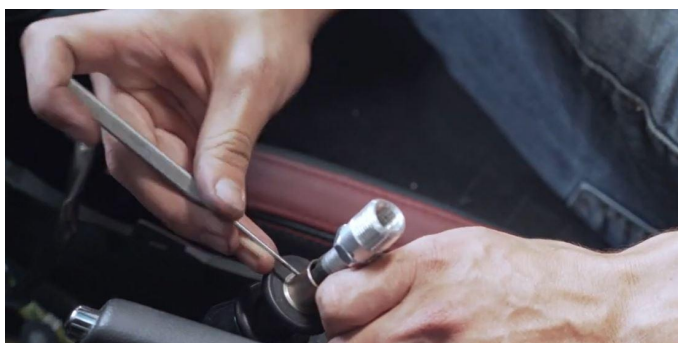
- 1.) 12mm Wrench
- 2.) $\frac{3}{8}$ Driver
- 3.) 12mm Socket for $\frac{3}{8}$ driver
- 4.) $\frac{3}{32}$ Punch
- 5.) Rubber mallet
- 6.) 6" Extension for $\frac{3}{8}$ driver

1.) Using the 12mm Wrench and 12mm socket on the $\frac{3}{8}$ driver, completely remove the 12mm bolt and nut that secure the OEM shifter into the transmission shift arm.

*Vehicles with 08+ STI transmissions will re-use only the bolt later in the install process of the DM-1. You will NOT re-use the nut. All other vehicles that do not have an 08+ STI transmission will receive a new OEM bolt if the 08+ STI shift arm is ordered.



2.) Use a $\frac{3}{32}$ punch to remove the reverse lever's roll pin. Align the end of the punch with the roll pin and tap the end of the punch with the rubber mallet, until the roll pin has been completely driven out of the other side. You will be re-installing the roll pin later.



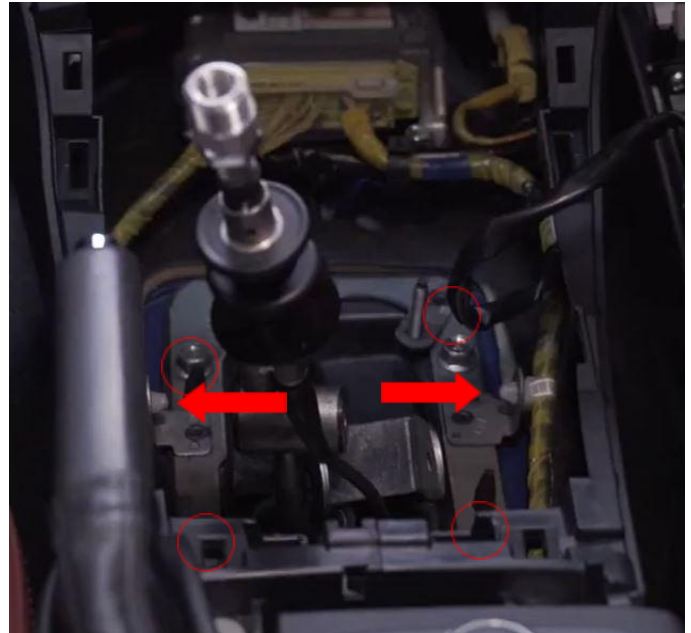
Install tip

If more force is required to remove the pin, try supporting the back side of the OEM shifter with a solid object so that the shifter does not hit the interior when tapping the pin out.

3.) Next, use the $\frac{3}{8}$ driver, with the 6" extension and a 12mm socket, to remove the four 12mm bolts that secure the metal flange onto the chassis.

4.) Once, the bolts are removed, use the needle nose pliers to close the inside of the barbs and push the white clips out of the flange. Pull the reverse cable out.

5.) The last step before moving underneath the vehicle is to pull the reverse cable out of the top of the shifter. There may be a zip-tie securing it onto the OEM shifter which will need to be cut.



Step 3 Unbolting OEM Shifter Assembly Below Vehicle (06:07)

Tools Required

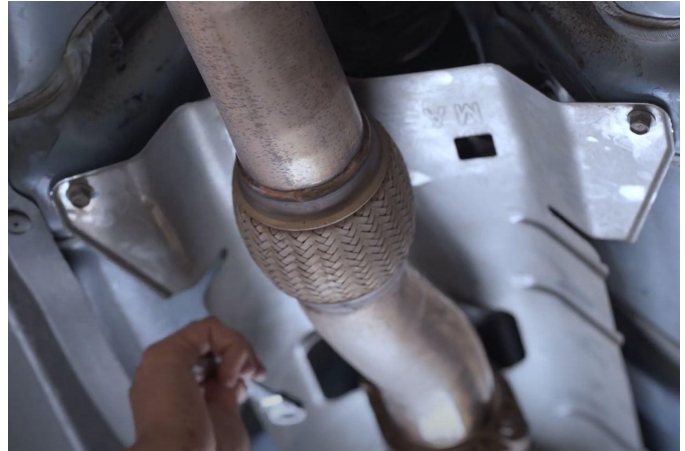
- 1.) $\frac{3}{8}$ Driver
- 2.) 6" Extension for $\frac{3}{8}$ driver
- 3.) 12mm socket for $\frac{3}{8}$ driver
- 4.) Needle nose pliers
- 5.) 13mm ratcheting wrench
- 6.) 12mm ratcheting wrench
- 7.) Long flat head screw driver

1.) Disconnect the O2 sensor that routes through the heat shield by unplugging its harness and then using the needle nose to close the barbs on the clip holding it to the car. Route the O2 sensor wire back and through the heat shield so that it is freely hanging.

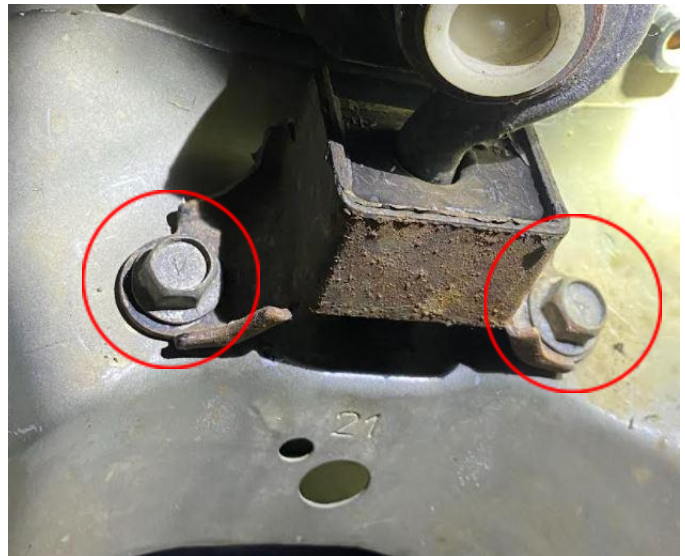


2.) Remove the heat shield by using the 12mm ratcheting wrench to remove the four bolts holding it to the car.

The heat shield is free to pull down and set out of the way



3.) Using the $\frac{3}{8}$ ratchet, with the 6" extension and 12mm socket, remove the two bolts holding the rear OEM shifter bushing the chassis.

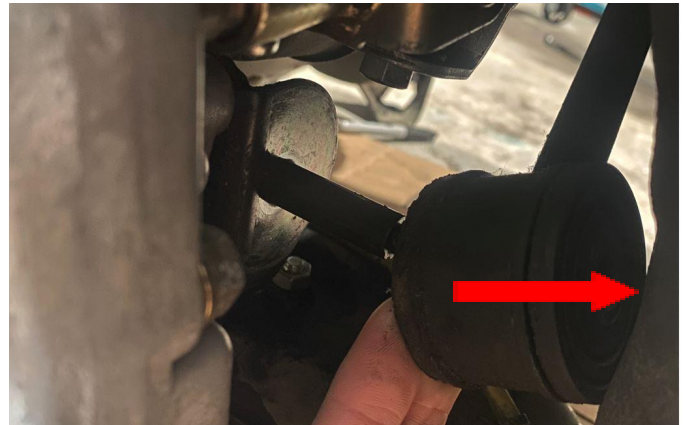


4.) Remove the bolt holding the other end of shifter to the transmission. This bolt is a 14mm on STI transmissions, and 13mm on WRX Transmissions so use either the ratcheting 13mm or 14mm wrench



5.) Pull The front section of the shifter off of the transmission where the last bolt was just removed.

6.) For 5-speed transmissions, re-install the 13mm bolt and plate on the side of the transmission that was just taken off for shifter removal. For 6-speed transmissions, grab the metal spacer tube that is provided in bag 1 and slide it over the 14mm bolt that was securing the OEM shifter and reverse cable. Re-install.

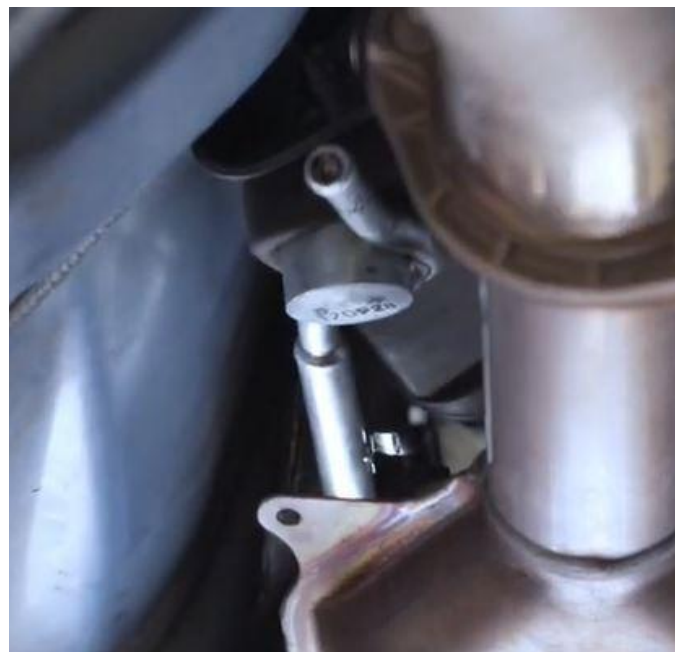


7.) Pull the entire shifter assembly down, and forward. This will allow extra space in the rear to remove the OEM bushing, pictured, that was previously tightened down with the two 12mm bolts.

8.) If you have a STI transmission, now is the time to completely pull the cable off of the shifter by removing any zip ties or straps. It should only be connected by the plate that hold it onto the transmission mount where the shifter 14mm bolt was removed from.



9.) Pull the rear of the shifter out like in the picture. Now pull the shifter towards the back of the car so that the front can clear the transmission subframe and the whole assembly can be free.



-Additional example of clearing the front of the shifter from the transmission subframe. This can require some force.



10.) Remove the OEM rubber boot by positioning the shifter below the car. The boot should be the only thing keeping it up at this point.



-The boot is secured mid way on the shift arm. Pull the boot with your hands over the area on the shift boot where it is secured from the factory, and bring it all the way to the edge of the shift arm. Using the long flat head screwdriver, stick it in one end of the boot opening and use it to pull one side of the boot over the arm, like in the picture. Once one side is removed pull the entire boot off and set the OEM shifter off to the side.

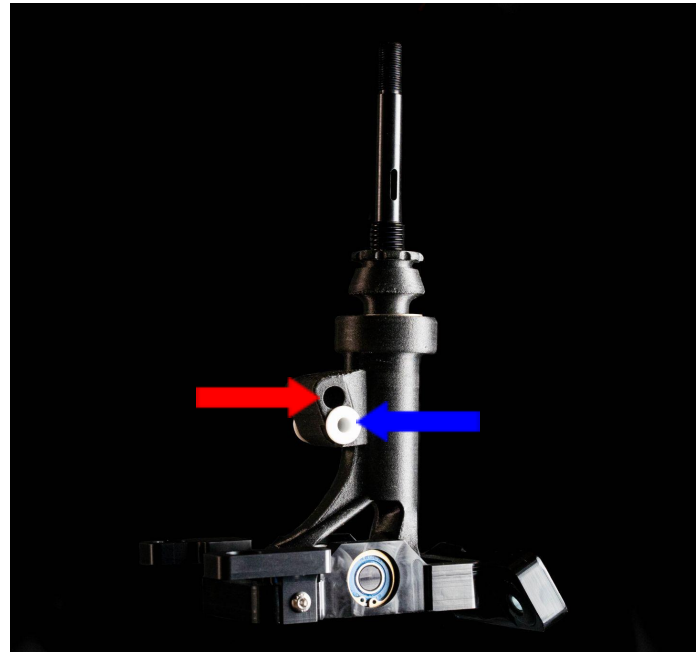


Cutting Metal Flange (10:25)

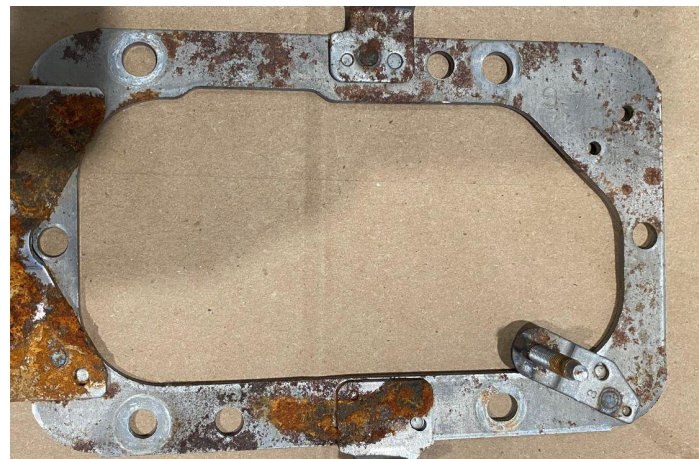
-This step is OPTIONAL for both 08+ WRX and STI models. If you wish to use the shortest throw Setting which is the hole that is closer to where the shift knob goes, then you MUST complete this step. This is also where the arrow pointing to the right is pointed at.

-If you would like to use the setting that is closer to the shifter pivot point, then you can skip to step 5 now. ALL OTHER MODELS that are not 08+ WRX or STI, must do this step, and must use the throw setting closest to the shifter pivot. This is also where the arrow pointed to the left is pointed at.

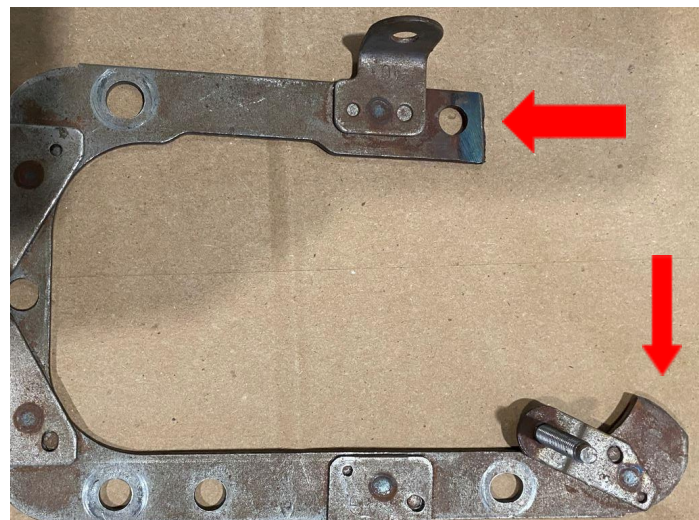
-There will be a shift arm in the near future that will allow older models to utilize both settings.



-This is a reference of what the metal flange looks like From the factory.



-This is where the metal flange needs to be cut. Keep in mind this is made of steel, be aware of surroundings when cutting.



Installing The DM-1 (11:50)

Tools Required:

- 1.) $\frac{3}{8}$ Driver
- 2.) $\frac{3}{8}$ 6" Extension
- 3.) 13mm Socket for $\frac{3}{8}$
- 4.) 10mm Ratcheting wrench
- 5.) 13mm Ratcheting wrench

1.) Re-install metal flange into the vehicle by locating (2) of the OEM M8X1.25 bolts that were originally securing it (May differ for non 08+ WRX or STI), and (2) of the M8X1.25 non flanged bolts from Bag 2.

-Install OEM bolts in two rear most holes, and the two bolts from bag 2, in the forward most hole locations for the flange. See picture for locations.



-Only thread the front two bolts from bag 2 down until they become flush with the threads on the underside of the vehicle's chassis. You will tighten this later.

-Clip the white, wire barbs back into the sides of the flange and re-install the (2) Phillips screws holding the center console into the back of the metal flange.

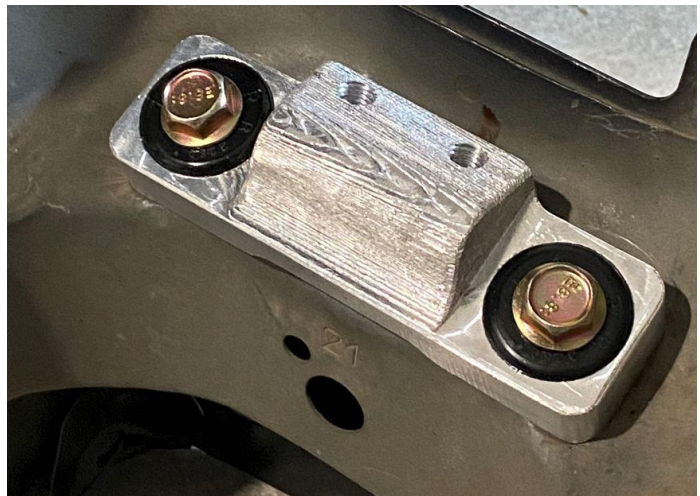


2.) Locate the rear bracket in the picture.
The Bracket is shipped in the top right foam cut-out.

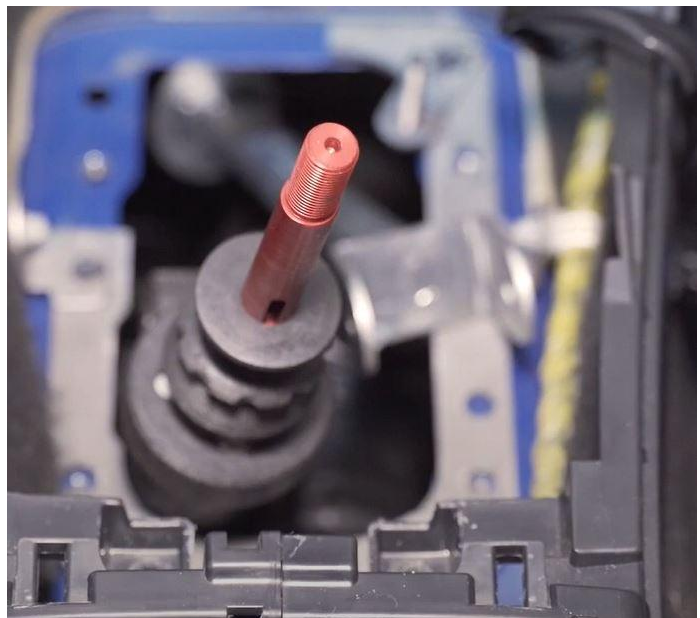


3.) Install the rear bracket using the (2) M8X1.25 Flanged Head bolts from bag "2" and the $\frac{3}{8}$ Driver with 6" extension and 13mm socket.

-Tighten bolts down until they start to depress
Into the black urethane bushings and tighten
Against the steel spacer insert.



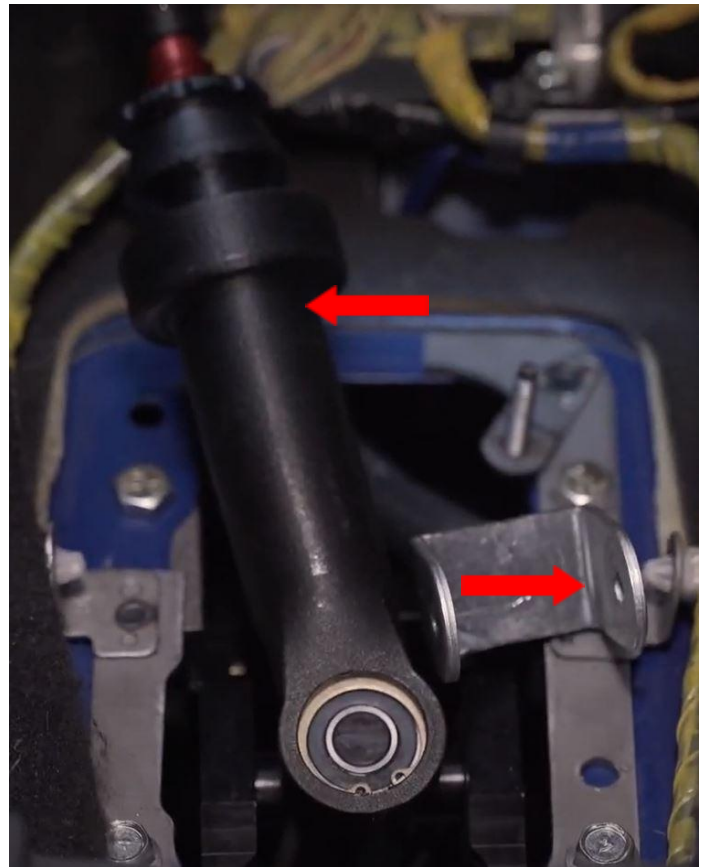
4.) Locate the DM-1 shifter assembly, the (2) M8X1.25 Flanged Head bolts from bag "1", the (2) SS Washers from bag "1", and then place the shifter like this in the Vehicle. You can gently leave it resting on the drive shaft.



5.) Line up the two holes in the back of the DM-1 shifter assembly with the two threaded holes in the rear bracket. Starting with one side, put (1) SS Washer onto (1) M8X1.25 Flanged Head bolt and hand tighten, then repeat on the other side. Do not tighten all the way down yet, leave room for the shifter to freely wiggle side-to-side on the bracket.

Install tip

Rotating the boot collar and adjusting the Shifter height down all the way will allow you to pivot the DM-1 forward and provide additional room in the back to thread in the M8X1.25 Flanged Head bolts.



6.) Locate the driver side DM-1 bracket which comes in the bottom right corner of the foam when you first open the box. Grab (1) M6X1 bolt, and place the bracket on the front driver side of the shifter where there is an unused slot and threaded hole.

-Loosley hand tighten M6X1 bolt into the shifter
And repeat with the passenger side bracket.

-Brackets should be nearly flush with the underside of the car, seated into the DM-1 assembly, and lined up with the bolts from bag "1" that are partially installed from step 1.

-Next, go back up to the top of the car.



7.) From the top of the car, thread the bolts from Bag "1" all the way down, they only need to be snug up against the chassis using the proper sized wrench. 13mm ratcheting wrench for 08+ WRX and STI models, and 10mm ratcheting wrench for previous models.

install tip

Ensure when tightening the bolts from the top of the car that you can feel them dropping down through the brackets. You can do this by placing your fingertips on the brackets and feeling for them.



8.) Next, go underneath the vehicle to finish installing the brackets by tightening on the (2) M8X1.25 nuts from bag "2". Alternatively, for non 08+ WRX/STI vehicles, stack the washer and lock washer before putting the M6 nut on from bag "2". The lock washer has a split in the middle, and should be sandwiched in between the nut and washer.

-Using the 10mm ratcheting wrench, snugly tighten the M6X1 bolts on the sides of the brackets that go into the DM-1 assembly.

-Next, finish snugly tightening the (2) M8 bolts going through the shifter and into the rear bracket using the 13mm ratcheting wrench.



STEP 6: Reverse Lock Out Cable Install (23:39)

5-Speed transmissions skip STEP 6

Tools Required:

- 1.) Rubber mallet
- 2.) 3/32nd punch

1.) Locate the end of the reverse lock out cable that was previously removed from the OEM shifter.



2.) Feed the cable up the driver side of the center of the DM-1 shifter. It helps to have the DM-1 leaning as far to the passenger side as possible.

-The cable should look something like this when Routed into the DM-1.



Install tip raising the shifter up all the way by rotating the leather boot collar, can help create a more direct path for the cable if there is trouble inserting it all the way. There is a definitive stopping point for the cable inside of the DM-1. You may need to give extra force with your hands.

-If the cable looks like it is going to rub on the drive shaft, use a zip-tie to lightly tether the cable to the lower section of the DM-1.



3.) Locate the lever on the transmission where the reverse cable ends. Either have someone else use their index finger to pull back on this, or find a small tool such as a pick, to insert into the hole on the lever to keep tension applying pressure back on the cable. The cable should be pushed back as far as possible.



-Grab the reverse pull lever from the top of the foam cut out and place it onto the shifter. Locate the roll pin that was removed with the factory assembly and push the roll pin through the reverse pull lever and through the reverse cable hole while the cable is being completely depressed under the car. It can take some patience to line all of these holes up with the pin. Once installed, pull the lever and ensure free movement and that the lever is being pulled down when you let go. The roll pin should be centered in the reverse pull lever.



STEP 7: Re-install The Heat Shield and O2 Sensor (23:59)

-Re-install the heat shield and the O2 sensor with the same hardware that was used to take it apart. Remember to do the heat shield first, then route the O2 sensor back to its harness.

STEP 8: Putting The Interior Back Together (26:05)

Tools Required:

- 1.) 12mm Ratcheting wrench
- 2.) 13mm Ratcheting wrench
- 3.) Small phillips screw driver

1.) Connect transmission arm to DM-1 at the desired throw setting. Be sure that the sleeve bearing from bag "1" is inserted into the desired hole on the DM-1 before proceeding.

-After inserting the sleeve bearing, locate the Bolt for the shift arm and the two provided thrust Washers in bag



2.) (1) thrust washer goes on each side of the DM-1 so that the thrust washer is in between the shift arm and the DM-1. Start by barely inserting the shift arm bolt, and hanging the first thrust washer on the inside of the bolt. Push the bolt through the DM-1 and insert the last thrust washer on the other side. It does not matter which way the bolt is facing inside the arm.



-When done correctly, it should look like this. There should be a thrust washer on each side of the DM-1 with the bolt going completely through and connecting the shift arm.



3.) Next, install the provided M8 Lock nut from bag "2" onto the end of the bolt. Tighten the bolt and locknut using the 12. and 13mm ratchets. Do not over tighten, this will cause premature wear of thrust washers.

Install Tip

-Only tighten just enough until pivoting the shifter left and right has no play relative to the DM-1 and shift arm. You can feel if there is play or not by placing your fingers onto both the shifter and shift arm while moving shifter left to right and feeling for movement.

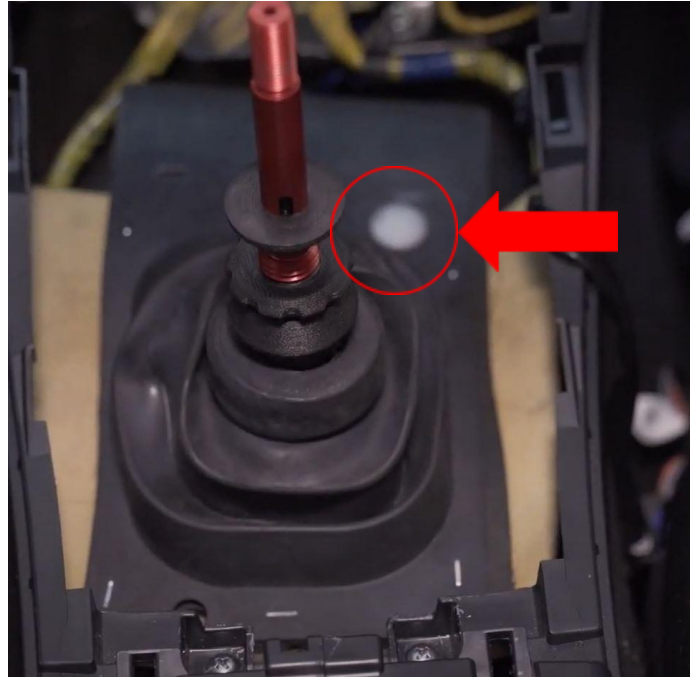


4.) Reinstall the OEM rubber NVH boot onto the DM-1. The top opening of the boot fits right over the shifter and can be fitted on just below the rotating



adjustment boot collar.

-Re-install ONE of the plastic retaining clips that originally held the boot onto the car. Install it onto the top right corner of the boot. If you install both, it will put extra resistance on the shifter from the rubber boot. This is not recommended.



5.) Next, re-install the interior trim that goes around the shifter. Insert the top section first, pushing it into the dash, and then dropping in the rear section by the E-brake.



6.) Pull the leather boot down below the collar on the DM-1. If you desire adjustment, rotate the collar left or right to raise and lower the shifter. It helps to hold the boot stationary with your fingers if you make an adjustment.

*adjusting all the shifter all the way down will give you the shortest throw respectively. Adjusting it up will give you easier shifts, and a relatively increased



throw*

DO NOT FORCEFULLY ADJUST SHIFTER PAST ITS LIMITS

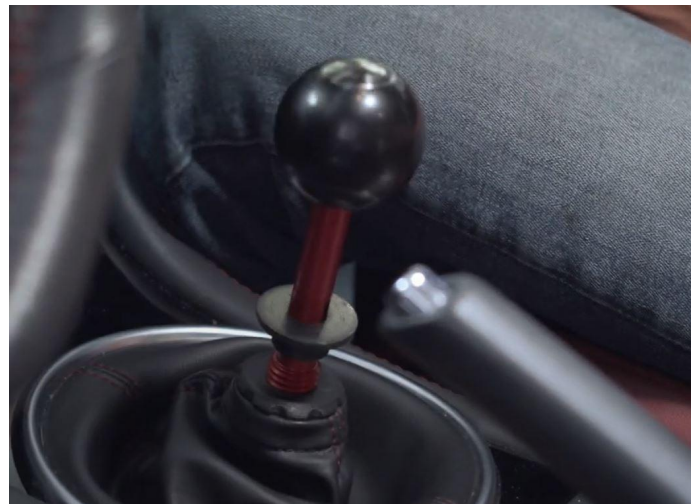
It will stop lowering when the threads have disappeared into the shifter. It also has an internal stop for raising itself. When you feel the collar can't rotate anymore, this is its limit.

7.) Bring your center console back to its original position and prepare to re-install it into the car. There are two white clips that need to be lined up with the console. When they are lined up properly, push the console into the clips. Using the small phillips screw driver, re-install the small screw that goes under the top of the leather boot.

-Re-install the two bolts from the inside cubby in the back of the center console.



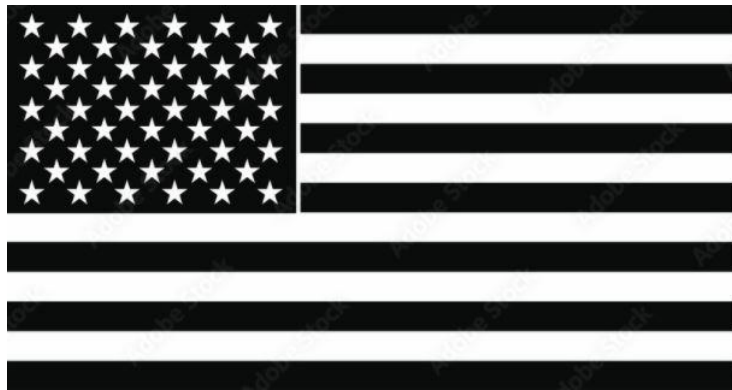
8.) Put your shift knob back on and you are done!



We love our customers feedback and want to improve your experience anywhere possible. Contact us anytime with your questions and feedback. We are here for YOU!

- 1.) The chat feature at the bottom of the screen on www.darkmatterx.com (fastest response time)
- 2.) Direct email contact@darkmatterx.com

SHIFTING RE-ENGINEERED
VETERAN OWNED, AMERICAN MADE



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