11th Gen Civic

Clutch Master Cylinder Install Guide

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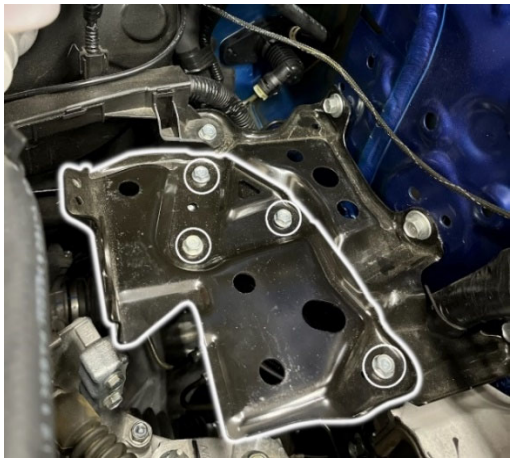
IMPORTANT SAFETY DISCLAIMER: When working on your car, always follow proper safety procedures. This includes, but is not limited to, letting your car cool down, using the correct tools and protection, jacking/lifting your car correctly, and in general being careful about what you are doing. If you do not feel confident doing something, do not attempt it! Instead, have someone else with more experience try or hire a professional. SiriMoto (and any reseller) cannot be held responsible for any incidental or direct damages, injuries, or additional costs caused by installing any of the parts in this kit.

PART NUMBER	DESCRIPTION/CONTENTS	QUANTITY
SM-HC22-N1-CMCK	**11th Gen Civic N1 Clutch Master Cylinder Kit**	1
	SiriMoto spec. Wilwood Engineering 5/8” Master Cylinder	1
015-SS-0019	N1 CMC Clevis	1
46911-S70-003	Cotter Pin	1
M8125-HXNT-JIS	M8x1.25 JIS Jam Nut	1
SM-HC22-N1-HY-CL	**11th Gen Civic FK8 N1 Hydraulic Clutch Line**	**1**
018-03-0029	Stainless-Steel Braided Hose	1
03824-BBHS-075	3/8”-24 Banjo Bolt, ¾” Length	1
M10-WASH-CP	Flat (Crush) Washer, M10 (3/8"), Copper	2
VD-LC038-SS	3/8" ID Damping Loop Clamp, Stainless / EPDM Rubber	2
M6100-HHS-SZ-14W	M6x1.0 Hex Head Bolt with Washer, 14mm Length	2
M6100-SWHN-SZ	M6x1.0 Hex Head Nut with Washer	1

I. Removing OE Clutch Master Cylinder and Plumbing

a. Removing the Battery & Metal Battery Tray

1. Disconnect the Negative Battery Terminal **first**, then the Positive Battery Terminal (10mm).
2. Remove the Battery Tie-Down by loosening the 2x 10mm Hex Nuts, as well as the electrical harness clip by pulling up on the plastic 10mm Hex.
3. Pull the (Plastic) Battery Box forward and remove the Battery, then remove the Plastic Battery Box.
4. Remove the upper section of the Metal Battery Tray held by four 10mm Hex Bolts.

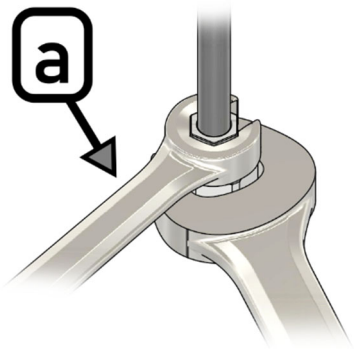


5. Remove the lower section of the battery tray held by three 12mm, and one 10mm, bolts.

b. Removing the Airbox Assembly

1. Loosen the Inlet Panel (Scoop): remove the 2x 10mm (Black) Hex Bolts fastened to the radiator support; 1x 10mm (Silver) Hex Bolt near the radiator hose; 1x plastic Push Clip.
2. Remove the Upper "Air filter" Section and Inlet Hose: loosen the Hose Clamp at the Turbo Inlet Pipe (TIP) with a Phillips driver; disconnect the MAF sensor; release the 2x Retaining Springs.
3. Remove the Lower Airbox Assembly: loosen the 1x 10mm Hex Head Bolt located at the driver-side frame rail, between the ECU and Air Box; at this point, the assembly is only held by a rubber grommet, pull vertically (with force) and the assembly should come loose.

c. Clutch Line/Hose Removal



Notes and Recommendations:

- Use of a 10mm Flare Nut Wrench (a) is highly recommended.

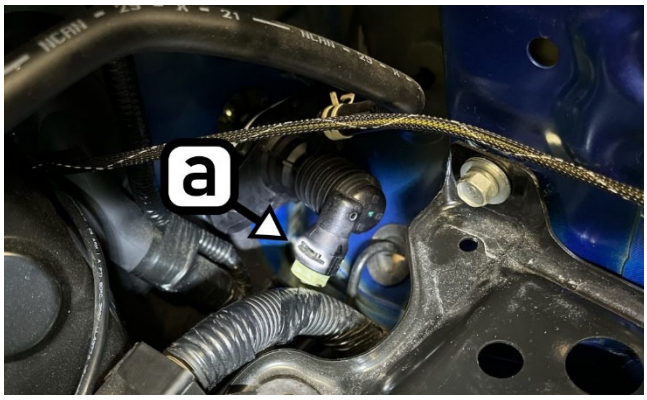
- Clamp off the fluid inlet hose with hose pinch pliers.

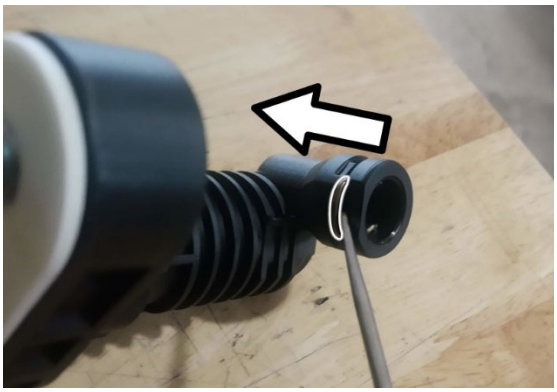
- Use rubber caps to plug any lines/fittings to prevent spills.

- Use paper towels or shop rags to catch fluid spills when disconnecting <u>any fittings/hoses</u>.

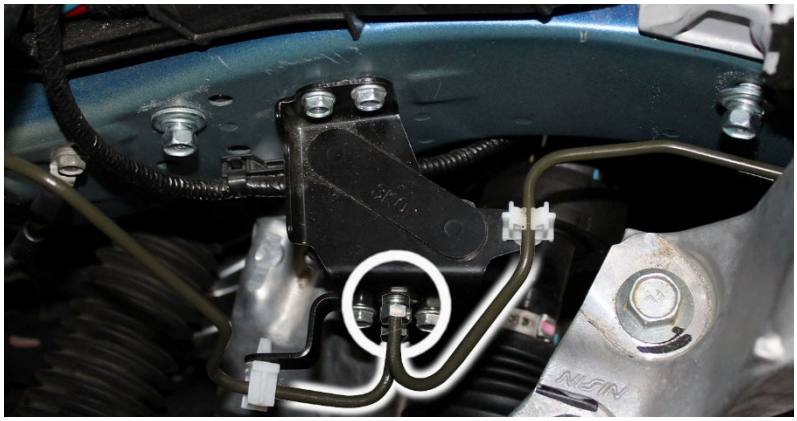
- If brake fluid gets on the paint or plastic, wash it off immediately with water.

1. Disconnect the Clutch Line at the Master Cylinder Outlet: use a pick or small tool to move the retaining clip (a) back, towards the firewall.



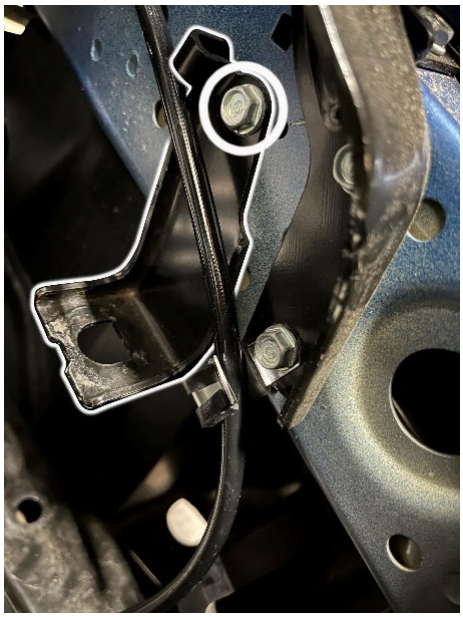


2. Disconnect the Lines at the Clutch Damper, using a 10mm Flare Wrench to loosen both lines.
   - NOTE: Use rubber caps to plug the ends and prevent spills.



3. Remove the Line going to the Master Cylinder (only).

4. Remove the Clutch Damper & Bracket assembly: held in place by 2x 10mm Hex Head Bolts.



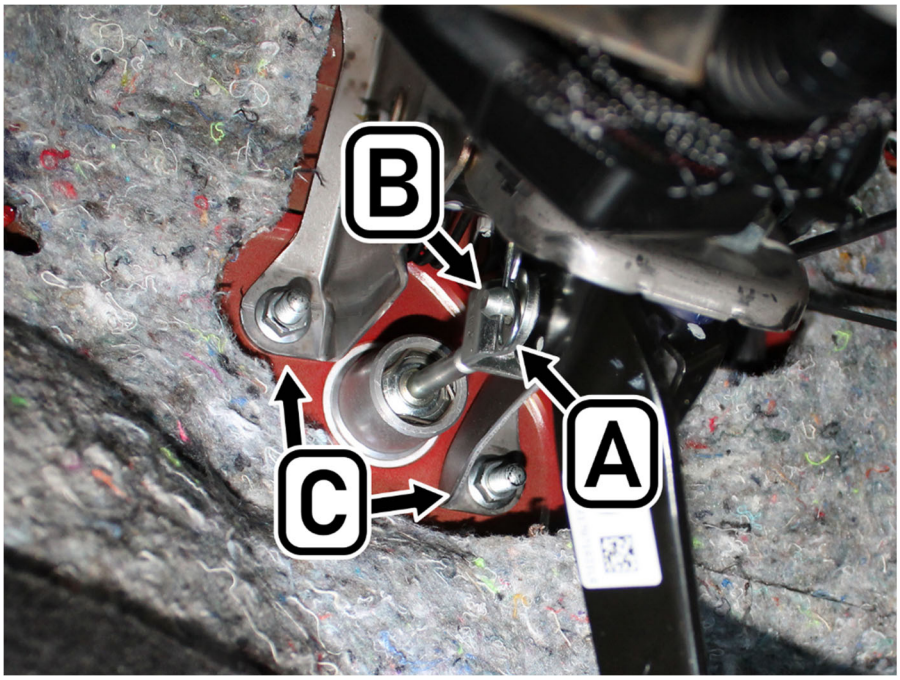
5. Unbolt the Clutch Line Bracket (on driver-side frame rail near airbox): held in place by 1x 10mm Hex Bolt.

6. Disconnect the Rubber Hose at the Slave Cylinder Line: use a 10mm Flare Nut Wrench to loosen the tube-nut, and pliers or a screwdriver to remove the Retaining Clip holding the hose fitting to the slave cylinder line Bracket.
   - Note: Retaining Clip will be reused, <u>use caution when removing</u>.

7. Remove the Line/Hose assembly.

d. Master Cylinder Removal

1. At the Clutch Pedal, remove the Clevis Cotter Pin (A) followed by the Clevis Pin (B). Then proceed by removing the 2x 12mm Hex Nuts (C). *(Note: these parts will be reused)*



2. From the engine bay, disconnect the rubber Reservoir Hose at the inlet port with a set of pliers, and remove the Clutch Master Cylinder Assembly.

II. <u>Installing SiriMoto N1 Clutch Master Cylinder Upgrade Kit</u>

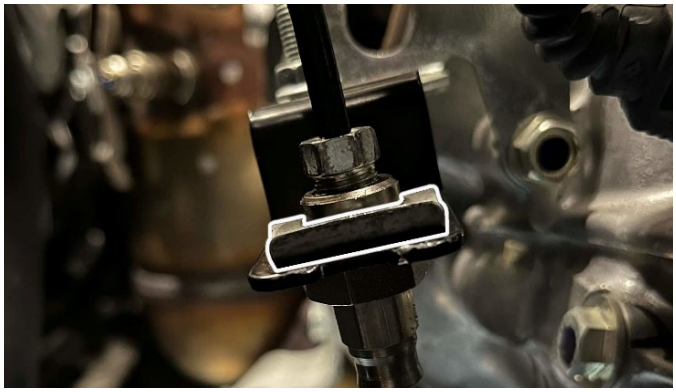
a. Routing the N1 Hydraulic Clutch Line

- *NOTE: The replacement line installs one way; female union goes to clutch slave cylinder hard-line; banjo fitting goes to the master cylinder outlet (3/8-24 UNF Thread, ¾" Bolt-length).*

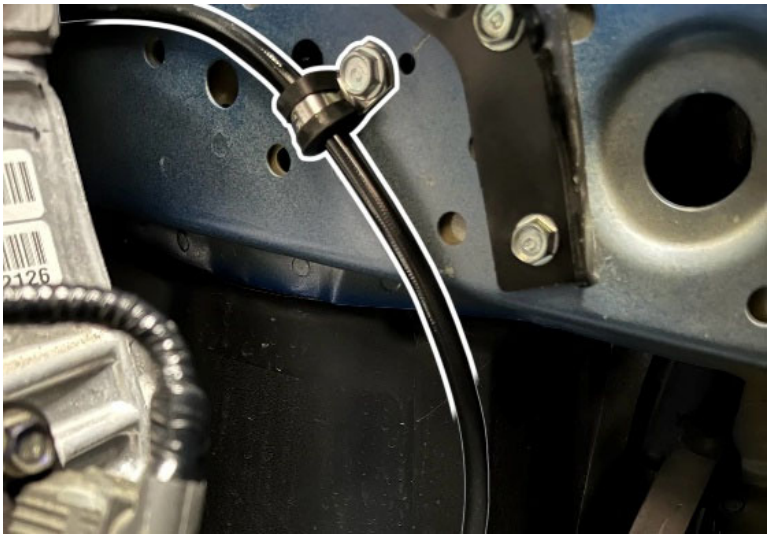
1. (Starting at the Master Cylinder area) Route the female-end of the N1 Clutch Line and follow a similar path as the OEM Line/Hose to the Slave Cylinder Line.

2. Thread the tube-nut on the Slave Cylinder Line to the Female Union; <u>do not tighten</u> until the N1 Master Cylinder is also installed.

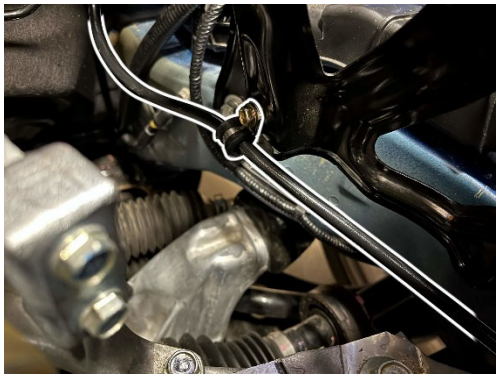
3. Install the previously removed Retaining Clip, to hold the Female Union on the metal bracket.



4. Mount the N1 Clutch Line to the driver-side frame-rail using one of the provided Dampening Loop Clamps and M6 Bolts; use the threaded hole that previously held the OEM Clutch Line Bracket, but do not tighten all the way.
   - NOTE: With pliers, close the Loop Clamp to help align the bolt holes on the clamp. This helps deform the clamp slightly and make installation of the bolt much easier.

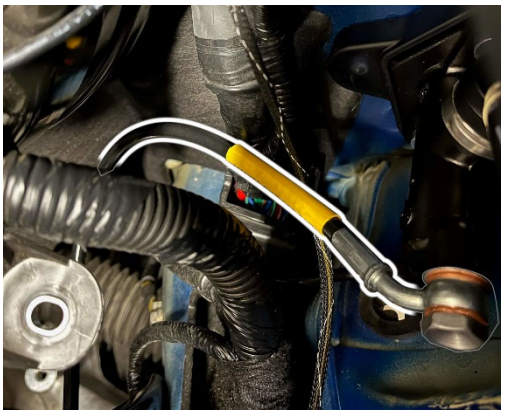


5. Use the second Vibration Loop Clamp to mount the N1 Line to the lower battery tray, using a M6 Bolt and Nut combination.
   - NOTE: Start by passing the bolt through the loop clamp and battery tray hole. Once the bolt threads are through, thread the nut onto the bolt by hand, leaving it finger tight.



b. Installing the N1 Clutch Master Cylinder

1. At the engine bay, mock-fit the N1 Master Cylinder. *(Note: Clevis is not installed at this point)*
2. Connect the banjo fitting to the Master Cylinder outlet using the provided Banjo-Bolt and *(Copper)* Crush Washers, making sure that the 45° bend points towards the firewall. Leave the hardware loose for the time being.



3. Connect the Reservoir Hose to the master cylinder inlet, reuse the original hose clamp.
4. Mount the N1 Master Cylinder with the original 12mm Hex Nuts, leaving the hardware loose for the time being.
5. Install the provided N1 CMC Clevis onto the Master Cylinder push-rod, threading the clevis far enough to line up with the pedal without any preload or tension.
6. Tighten the 12mm Hex Nuts (from step 4) to 20lb/ft.

7. Install the Clevis Pin and Cotter Pin that were previously removed.
   - If using the provided cotter pin, it is best to have it centered on the middle “locking” position rather than all the way through the pin. This provides the most snug fit.
8. Check the push-rod adjustment to make sure there is no tension or preload at the clevis (1-2mm of axial play is expected), tighten the Jam nut to 13lb/ft.
   - If there is preload, adjust the length by turning the push-rod until no preload is present.
9. Tighten the Banjo Bolt at the Master Cylinder outlet to 8lb/ft.
10. Tighten the M10 Tube Nut at the female-end of the clutch hose to 11lb/ft.
11. Adjust the hose position to its optimal position (avoid hard bends, strain or tension) and tighten all the Loop Clamp Bolts to 6lb/ft that you left loose.

c. Bleeding and Final Checks

1. With all the parts installed and fastened, bleed the hydraulic system and check for proper actuation along with checking for any potential leaks at any of the connection points.
2. Install any remaining parts in reverse order (airbox, battery, etc.).
3. Tighten any remaining hardware that was left loose.

Congratulations! Installation of our SiriMoto N1 Clutch Master Cylinder Upgrade is complete, and you can now enjoy the crisp pedal feel & clutch actuation this system brings.

From the SiriMoto Team, we thank you for choosing this kit, as countless hours were put into the development of this kit along with real-world track testing.

Best Regards,

TEAM SIRIMOTO