ROTO-FAB

2016-up Camaro SS Supercharged Cold Air Intake System Installation Instructions

For part #

10161062	10161067
10161063	10161068
10161066	10161069

DUE TO INCREASED AIR FLOW, THIS SYSTEM REQUIRES A TUNE SPECIFIC TO YOUR VECHICLE.

Supercharged Camaro SS
Cold Air Intake System Parts List

IMPORTANT- The air straightener is precisely located in the MAF housing and is not servicable. Never tamper with the four buttonhead screws retaining it. Tampering will result in poor performance and void the warranty.

Component	qty
1) Air box assembly	1
2) MAF sensor housing	1
3) Inlet elbow	1
4) Air filter	1
5) 4 5/8” hump hose	1
6) 4-4 1/4” step hose	1
7) 110-130 mm hose clamps	2
8) 100-120 mm hose clamps	2
9) Hose clamp, 5/8”	1
10) 1/4” NPTx3/8” hose 90	1
11) 3/8” ID hose (length may vary)	1
12) Bulb seal 29 1/8” long	1
13) Bulb seal 12 1/8” long	1
14) 10-32x1/2” philips screws	5
15) M4 SS philips MAF sensor screws	2
16) Large cable tie	8
17) Breather fitting adapter	1

Straight 4 1/4” coupler for larger throttle body sold separately

Due to increased air flow, this system requires a tune specific to your vehicle.

Tools/items needed

7 MM socket
8 MM socket
10 MM socket
1/4” socket
T20 torx bit
4 mm hex wrench
Pliers or sidecuts
Small screwdriver
Philips screwdriver
Lubricant (Windex)

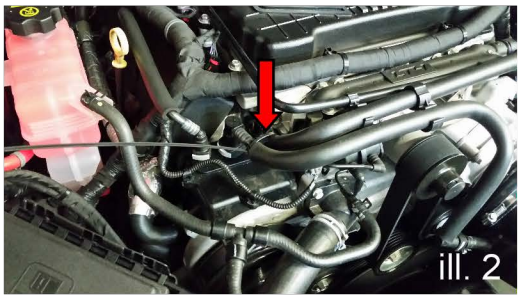
This product has not been CARB tested

Air intake disassembly may vary depending on your current components

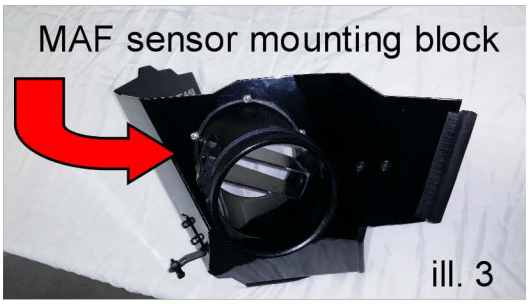
Position a supplied #16 cable tie just above the existing retainer going around the two hoses and the A/C line as shown in ill. 1. DO NOT PULL THE TIE TIGHTLY! The cable tie should tighten enough to secure the lines away from the pulley while retaining a gap between the hoses as shown. These hoses must be able to move for motor rock. If overtightened, carefully cut the tie and use another.


ill. 1

Use a #16 cable tie just before the protective sheath to secure the two lines shown in ill. 2. Do not pull tight. Leave appr. 1/8” gap between the two lines. Snip the end once secured.


ill. 2

Locate the #1 air box assembly, the #2 MAF sensor housing and the five #14 10-32x1/2” philips screws. Insert the MAF housing through the large hole in the air box such that the larger 6” diameter clamping surface is on the inside of the air box. When viewing the air box as shown in ill. 3, the MAF sensor mounting block should be aligned with the bolt hole in approximately the 10 o’clock position. BE CERTAIN THE MAF BLOCK IS IN THIS POSITION.



ill. 3

Insert the screws through the air box starting all five screws in the threaded inserts of the MAF housing. Once all are started, work back and forth to draw the MAF housing tight to the air box. Tighten all five screws.

Locate the #13 bulb seal 12 1/8” long. Starting from the bottom as shown in ill. 4, install it on the large radius. Push firmly to be sure it is completely seated.

ill. 4

Locate the #5 4 5/8” black hump hose coupler and one of the #7 110-130 mm hose clamps. (largest clamp) Slide the clamp over the end of the MAF housing with the head pointing upwards as shown in ill. 5. Fully engage the hump hose coupler onto the MAF sensor housing. Align the clamp head with the sensor mounting block. Tighten. Do not overtighten. IMPORTANT-with all coupler connections, be sure there is coupler material on both sides of the clamp band. Take extra care to inspect the bottom side of all clamp joints to be sure of this as well. Don’t clamp flush with the end of the hose as the crush within the hose aids in hose retention. **The following steps may vary depending on your supercharger.** For LT4,


ill. 5


ill. 6

Locate the #10 small 90 degree fitting, #11 3/8” OD x 1 11/16” long fuel hose and the #9 5/8” hose clamp. You will also need the #17 breather adapter. Assemble as shown in ill. 6 making sure the fittings fully engage the hose. Note the 90 degree fitting doesn’t require a hose clamp. Use a 1/4” socket to tighten the hose clamp.


ill. 7

Locate the #3 inlet elbow. Install the breather assembly into the brass fitting on the elbow. Note the fitting is NPT (tapered pipe thread) and not designed to bottom out. Once hand tight, tighten one more revolution and align with mark on tube.


ill. 8

Locate the #6 4-4 1/4” step hose and one of the #8 100-120mm hose clamps.(smaller clamp) Slide the hose clamp over the throttle body with head facing upwards as shown in ill. 8. Fully engage the small end of the step hose onto the throttle body. Locate the hose clamp as shown and tighten. Be sure to check the bottom side to verify the hose clamp is properly located. Do not overtighten.


ill. 9

Locate the #1 air box assembly. apply a small amount of lubricant around the beveled area of all three mounting studs on the air box. Set the air box in place in the car with all three studs resting on top of the respective rubber mounting grommets. Using both hands as shown in ill. 9, press firmly and uniformly to seat the studs into the grommets simultaneously.

Look closely at each grommet to be sure each stud is fully engaged.

Locate the remaining #7 110-130mm (larger) hose clamp. Slide it over the hump hose on the MAF sensor housing with the head oriented the same as the installed clamp. Likewise, locate the remaining #8 hose clamp and slide it over the large end of the step hose on the throttle body. Place a shop rag in the area shown. Install the inlet elbow by engaging the hump hose with the throttle body end pointing straight up. Note the small breather assembly will end up on the bottom side when the elbow is installed. Engage the hump hose until the other end is approximately in line with the throttle body. Rotate the elbow downward to engage the step hose. Once the elbow is fully engaged in the step hose, press inward firmly to fully engage the step hose. Rotate the tube to achieve optimum alignment, then press inward towards the throttle body again. Locate and tighten both hose clamps. Be sure the hose clamp on the throttle body end is located between the end of the hose and the barb that can be seen bulging through the step hose. Inspect the bottom to ensure proper engagement all the way around.

ill. 10

ill. 11


ill. 12

Re-connect the breather fitting by engaging and pushing inward until you feel it “click” into position. Re-clocking of the 90° fitting may be necessary to gain clearance on the accessory drive components, **because these are tapered pipe threads, the only way to adjust is to tighten.**

ill. 13

Locate the #15 MAF screws M4x.7x8mm long. Carefully slide the MAF sensor into the mounting block. Start the top screw, then the lower screw. Insert your philips screwdriver under the breather hose as shown in ill. 11 to achieve proper alignment with the screw. Tighten both screws securely.

Locate the #12 hood seal 29 1/8” long. Starting from the front, engage the top edge of the air box and continue to work towards the opposite corner. Press down firmly to ensure the seal is fully seated through it’s entire length. Locate the #4 air filter. Orient the clamp so the screw head will be facing upwards when located as shown in ill. 13. Engage the filter onto the clamping surface until the filter flange is contacting the top air box seal. Rotate the filter as necessary to clear the chassis and ensure the filter is not placing excessive downward pressure on the inner fender.(It may be resting on the inner fender.) Use an 8mm driver to tighten the filter clamp.

Check all the way around each hose clamp to ensure proper seating of the hose clamp. Check to be sure all hose clamps are tight. Be sure the shop rag has been moved away from the engine compartment.
Re-connect the negative terminal on the battery and install the battery access panel.

Congratulations, your install is now complete! Please remember. this system does require a tune custom to your vehicle. All clamps should be checked for tightness after a few drive cycles and periodically thereafter. Inspect hose clamps for tightness at each oil change. Inspect the filter approximately every third oil change-more often in dusty climates. Service filter as necessary.