

## 2018-2021 Mustang 5.0L Cold Air Intake

# Installation Instructions P/N: 422086 (131850-9600)

EO:D-418-42

**Application:** 2018-2021 Ford Mustang 5.0L Manual or Automatic Transmission

Important Note:

Before installing the ROUSH Performance Product, please read through the installation procedure and verify that all items are present. If you are missing hardware or have any questions, please contact ROUSH Performance at 1-800-59-ROUSH, 9:00 AM to 5:00 PM EST.





## 2018-2021 Mustang 5.0L Cold Air Intake

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#### PACKING LIST FOR MUSTANG 5.0L COLD AIR INTAKE

Description	Part Number	Quantity
Upper Air Box Cover	1318-9643	1
Lower Air Box Tray	131550-9A612	1
MAF Tube - 5.0 mm	131550-12B579	1
MAF Insert - 98 mm	131850-9G899	1
Dirty Air Duct	1315-9F763	1
EO Label	D41842-9A095EO	1
Tube Assembly, Clean Air with Fittings	131850-9B659	1
Clean Air Tube	131850-9B660	1
Grommet	1150-58GRMT	2
Clamp (90-110 mm-12mm) Stainless	01267702100	2
Clamp - Worm Drive 100-120 /12 Mm	R07130028-13	2
EPDM Coupler MAF to CAT	131850-9B661	1
EPDM Coupler - CAT to T-Body 5.0	131850-9B662	1
PCV Fitting - 5/8"	13119N285	1
Filter with Clamp	131550-9601R	1
ROUSH Sticker	131550-9600STK	3
Installation Manual	1315-P1INST	1
Hardware Kit - AIS	131550-CAKHWK	1
Bolt - MAF Tube to Air Box (M8 x 1.25 x 25)	W500224-S437	2
Grommet - Boom Tube Delete	W651016	1
Push Nut- ROUND NO. 6 (Hydrocarbon Trap Retention)	94800A705	4
Self Tapping Screw (M6 x 25 mm)	W506976-S437	1

#### **EQUIPMENT AND SUPPLIES REQUIRED**

- 10 mm Socket
- Pliers
- Flat-head Screwdriver
- Trim Tool
- Torx Screwdriver

If you are missing any items, please call us toll free at 1-800-59-ROUSH.



#### LIMIT OF LIABILITY STATEMENT

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. ROUSH Performance Products (RPP) reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

#### SAFETY PRECAUTIONS



STOP

## CAREFULLY READ THE IMPORTANT SAFETY PRECAUTIONS and WARNINGS BEFORE PROCEEDING WITH THE INSTALLATION!

Appropriate disassembly, assembly methods and procedures are essential to ensure the personal safety of the individual performing the kit installation. Improper installation due to the failure to correctly follow these instructions could cause personal injury or death. Read each step of the installation manual carefully before starting the installation.

- · Always wear safety glasses for eye protection.
- Place ignition switch in the OFF position.
- Always apply the parking brake when working on a vehicle.
- Block the front and rear tire surface to prevent unexpected vehicle movement.
- If working with a lift, always consult vehicle manual for correct lifting specifications.
- Operate the engine only in well-ventilated areas to avoid exposure to carbon monoxide.
- Do not smoke or use flammable items near or around the fuel system.
- Use chemicals and cleaners in well-ventilated areas.
- Batteries produce explosive gases, which can cause personal injury. Therefore, do not allow flames, sparks or flammable substances to come near the battery.
- Keeps hands and any other objects away from the radiator fan blades.
- Keep yourself and your clothing away from moving parts when the engine is running.
- Do not wear loose clothing or jewelry that can get caught in rotating parts or scratch surface finishes.
- Allow the engine, cooling system, brakes and exhaust to cool before working on a vehicle.

#### **WORK SAFELY!**

Perform this installation on a good clean level surface for maximum safety and with the engine turned off.



#### **SECTION A - REMOVAL**

The following section will guide you through the removal of the stock components. Special care should be taken to label fasteners and parts that are taken off during this procedure since many will be reused.

- 1. Cover both fenders with fender covers to protect the vehicle finish.
- 2. Disconnect the battery ground cable.
- 3. Remove the strut brace if equipped.



4. Remove the plastic caps exposing the fasteners holding the cover down. Unbolt the cover and pull up to remove it from the grommets.



5. Disconnect the MAF sensor connector.

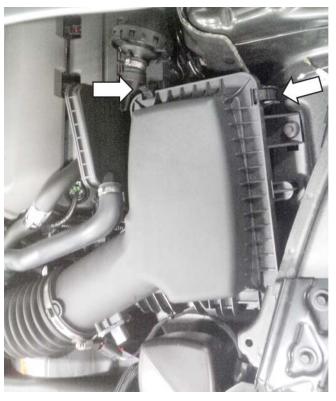


Loosen the clamp at the air box from the intake tube.



7. Release the two (2) latches holding the box lid to the lower box.

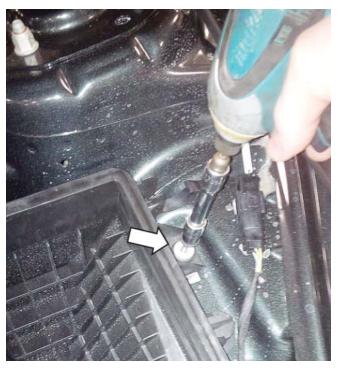




8. Remove the air box lid and filter. Retain the lid for use during installation.



Using the 10 mm socket, remove the bolt holding the air box to the inner fender. Retain the bolt as it will be used during installation.

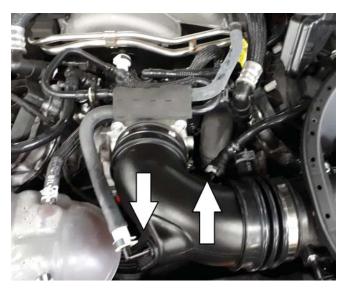


10. Remove the air box tray and dirty air inlet from the vehicle.



11. Remove the three (3) clips shown on the inner fender to give the slack needed in the wiring harness.





12. Remove the hose clamp and two (2) quick connect fittings from the clean air tube.



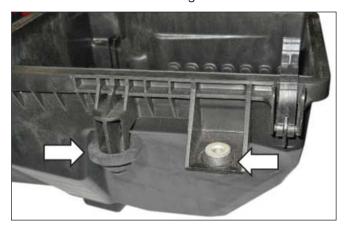
 Using a 10 mm wrench or deep-well socket, remove the nut retaining the induction resonance tube to the firewall behind the driver side cylinder head.



14. Using a trim tool, pry up on the push pin retaining the induction resonance tube and remove the tube from the vehicle.



15. Remove the steel bushing followed by the two (2) rubber grommet from the stock air box tray. Retain these for use during installation.



16. Remove the rubber isolator from the bottom of the stock air box tray and retain for use during installation.





#### **SECTION B - INSTALLATION**

1. Install the resonance tube delete grommet (P/N: W651016) into the firewall.



2. Install the grommet and sleeve that was removed from the stock air box into the ROUSH air box (P/N: 131550-9A612). **TIP:** Install the rubber grommet first, then install the steel bushing.



3. Install the second grommet onto the air box (P/N: 131550-9A612).



4. Install the rubber isolator into the bottom of the air box (P/N: 131550-9A612).



5. Insert the dirty air inlet (P/N: 1315-9F763-A) into the air box (P/N: 131550-9A612).





6. Insert the air box assembly into the vehicle.



7. Using a 10 mm socket and the bolt removed from the stock air box, attach the air box to the vehicle. Torque to 8 Nm.



8. Loosely attach the air filter (P/N: 131550-9601R) to the filter tube, leave the clamp loose so you can hide it once installed on the vehicle. Make sure the arrow on the filter is 90 degrees to the MAF sensor boss as shown.



 Slide the filter tube assembly into the air box (P/N: 131550-9A612), making sure the sensor boss is pointed toward the front of the vehicle. Using a 10 mm socket, install the two (2) bolts (P/N: W500224). Torque to 10 Nm. Rotate the air filter clamp to a suitable location and torque to 3 Nm.

NOTE: Hand start bolts and make sure both bolts are started in the airbox before torquing them down.



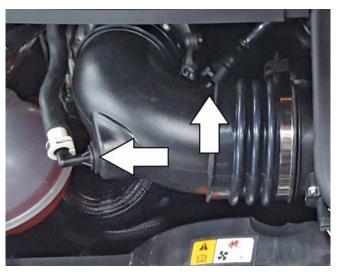
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10. Install the clean air tube assembly (P/N: 131550-9R504) onto the throttle body first and then the filter tube. Tighten the clamps to 3 Nm.



11. Reconnect the two (2) hoses with quick connect fittings to the mating push-on barbs.



12. Remove the MAF sensor from the factory air box by removing the two (2) T-15 torx screws.



13. Re-install the MAF sensor into the ROUSH filter tube (P/N: 131550-12B579). Reattach the connector. Torque screws to 2 Nm.

NOTE: The MAF tube has an inner/outer structure. If they are not lined up, you may need to spin the inner spacer until the MAF cutouts line up.



**14.** Install the lid onto the airbox assembly (P/N: 1318-9643) Use six (6) self tapping screws (P/N: W506976-S437) to secure the lid.

Note\* IF THE ROUSH AIRBOX LID DOES NOT HAVE A HYDROCARBON TRAP ON THE UNDERSIDE OF THE LID, REFER TO APPENDIX A AT THE END OF THIS DOCUMENT ON PAGE 13.



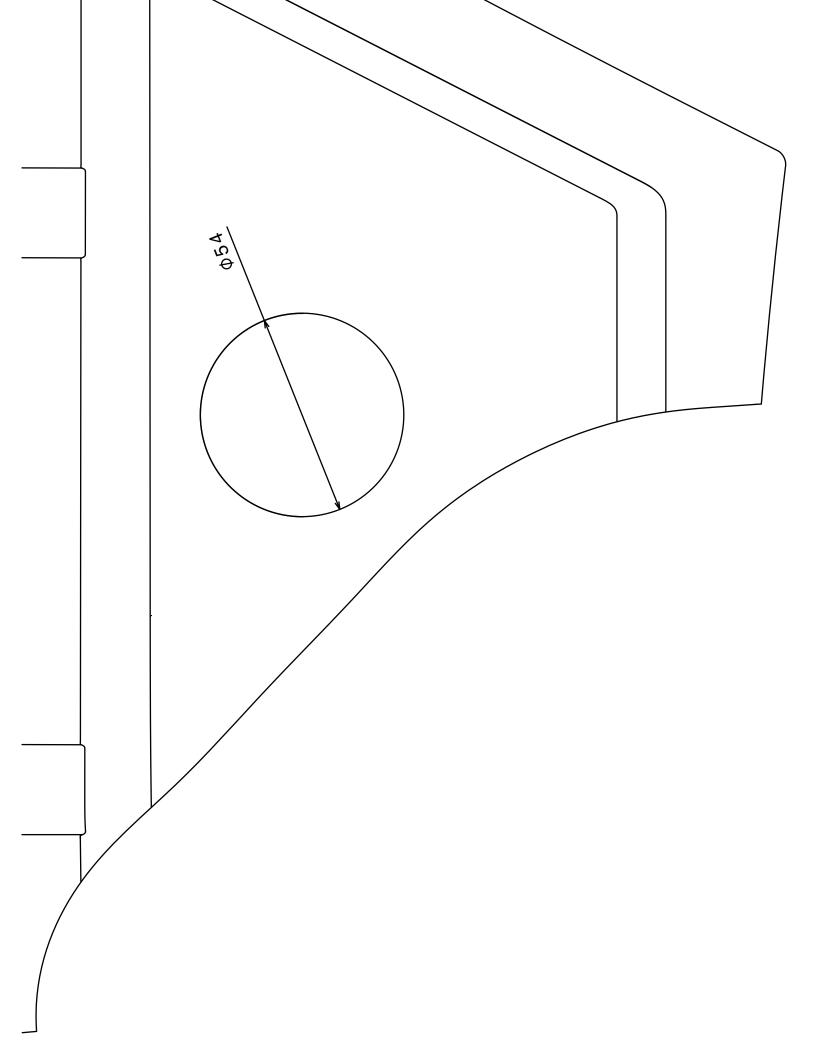




15. Use template on the back page to trim the engine cover. (Use the measurement on the diameter to verify template sizing.)



16. Re-install the engine cover and strut tower brace. Torque to engine cover to 10 Nm and the strut brace to 55 Nm.



### Appendix A – Hydrocarbon Trap Relocation



#### **APPENDIX A - HYDROCARBON TRAP**

 Locate the stock airbox. Remove the Hydrocarbon Trap from the lid by either Drilling out / Cutting off the four corners of the plastic welds holding on the stock hydrocarbon trap. Note: Drill bit size 1/4" (Fraction) or 7 mm (Metric). BE CAREFUL TO NOT DRILL THRU THE HYDROCARBON TRAP.



2. Carefully remove the hydrocarbon Trap from the stock Ford airbox lid.



3. Transfer this hydrocarbon trap onto the Roush airbox lid as shown. Make sure the four corners of the hydrocarbon trap align with the Roush airbox lid pins, push the hydrocarbon trap onto the Roush airbox lid.



4. Using one Round Push Nut (94800A705) found in the Air Induction Hardware kit and place one onto each of the four pins with prongs facing upwards.



5. Using a 6mm socket to push and secure the hydrocarbon trap onto the Roush airbox lid as shown.



- 6. Repeat steps 4-5 for the other 3 pins.
- 7. Make sure the hydrocarbon trap is secured in place as shown, test it by hand, it should be secure onto the Roush airbox lid.

