

# 2018-22 Mustang GT Shaker Cold Air Intake System Part #1811-7001-01

NOTE: Shaker system installation requires a Cold Air Intake System (Sold Separately)



#### Component Check List: Shaker Assembly:

Shaker Assembly:	<u>Part #</u>
• 1 - Aluminum Shaker Scoop	183020a
• 1 – Upper Air Box	1111-3301-01
• 1 – Water Management Tray	1111-0500-01
A. Drain Nozzle, Black	1111-3507-01
• 1 - Lower Air Box	1111-3300-01
• 2 – M6-1.0 x 60mm Bolt	30009
• 2 – M6-1.0 x 35mm Bolt	15005
<ul> <li>1 – Front Mounting "L"Bracket</li> </ul>	2111-3500-01
A. 4 - M6-1.0 x 22mm Bolt	410109
B. 2 - M6 Washer	183005
• 1 – Manifold Bracket	2111-3502-01
A. 2 – Ball Stud Receiver	183000
B. M6-1.0 Nutsert	50007
• <u>1 – Rear Mounting "Z" Bracket</u>	2111-3501-01

#### CD4II3CU CDC 2018-22 Mustang GT Shaker Separate Components:

<u>Separate Components:</u>	
• 1 –Trim Ring	2111-2106-01
• 1 – 3" Flexible Air Tube	8741
• 1 – 3" Coupler w/ clamps	115056
• 1 - Drain Tube	115058
• 1 – Hood Template	
• 1 – Installation Instructions	
<u>Hardware Kit:</u>	
• 3 – Aluminum Spacers .482"	57002
• 1 – Aluminum Spacers .4375"	57003
• 1 – Aluminum Spacers .375"	57004
• 1 – Aluminum Spacers .25"	57005
• 2 – Alcohol Packs	950006
• 1 – Adhesive Promoter	950007

<u>Note:</u> Read installation instructions before starting. Test fit components before painting. The molded Shaker Hood Trim Ring is UV Stable, ABS Plastic and does not require paint.

## **Tool List:**

- □ Masking Tape
- □ Fork Tool
- □ Flat Head Screwdriver
- □ Scissors
- □ 3/32" Drill
- □ 1/8" Pilot Drill Bit
- □ 3/8" Drill
- □ 3" Hole Saw
- Drill Motor
- □ Jig Saw with metal blade (for cutting hood)
- □ X-Acto Knife
- **D** Eye Protection
- 8mm Socket <sup>1</sup>/<sub>4</sub>" Drive
- □ 10mm Socket ¼" Drive
- □ 11 mm Socket ¼" Drive
- □ 15mm Socket 3/8" Drive
- Reverse Torx Socket
- $\Box \quad \frac{1}{4}$ " Drive 6" extension
- □ <sup>1</sup>/<sub>4</sub>" Drive Ratchet
- Tape Measure

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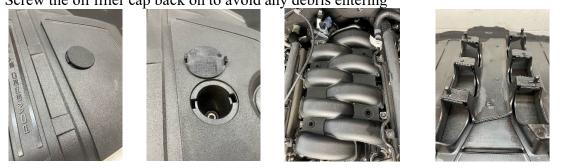
## CD4II3CU CDC 2018-22 Mustang GT Shaker <u>Preparing:</u>

1. **Disconnect Battery** – Remove battery cover by removing 3 plastic retainers holding cover in place.

Disconnect the (+) positive terminal by loosening the 10mm nut on terminal.

- 2. Remove Strut Tower Brace
  - Remove the (2) 15mm nuts on each side of the strut tower brace and set brace aside.
- 3. Remove Engine Cover

Remove Oil Filler Cap. This will be put back on immediately after removing the cover. Using a flat head screwdriver, remove the two plastic caps on each side of the front of the cover to gain access to the (2) 10mm nuts. Remove nuts holding the front of the cover. The rear of the cover is held on by 4 ball studs. Once the 2 nuts on the front of the cover are removed in the previous step, simply pull upward on the engine cover to dislodge the ball studs from their sockets. Set Engine cover aside as it will not be re-used. Screw the oil filler cap back on to avoid any debris entering



4. Remove under hood blanket, use a fork tool to remove (14) pushpin fasteners. Set hood blanket aside. The hood blanket will NOT be reinstalled.



5. Remove the center clips that secure windshield washer hose to bottom side of hood and put somewhere safe. You will reinstall one these at the end of the install.

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6. Disconnect them at the "T" (passenger side) and elbow (driver side). Hint: Twist the black plastic retainer counterclockwise to release.



- 7. Soft close the hood and wipe down with a window cleaner or alcohol NOT detail spray, in order for tape to adhere properly.
- 8. Using a high quality painters tape, tape a layout for the cut area in the center of the hood with the tape exceeding the width of the hood graphic.



9. Measure 16" from the corner of the fender where it meets the A-pillar and door jamb to the edge of the hood. It does not matter which side of the car you measure first.



10. Then move toward the front of the car and mark at 36". Keeping the tape measure anchored in the same spot as when you measured the 16" mark.



- 11. Mark the same measurements on the other side of the hood.
- 12. Mark the Center points of the hood. Start on the driver's side and anchor your measuring tape at the 16" mark then go across the hood to the other 16" marking, find the middle and mark it. Then go to the passenger side and do the same thing and mark the middle to confirm the marks match. Hint: it may be easier to measure the same distance on each side close to the middle and then find the middle between those two marks.

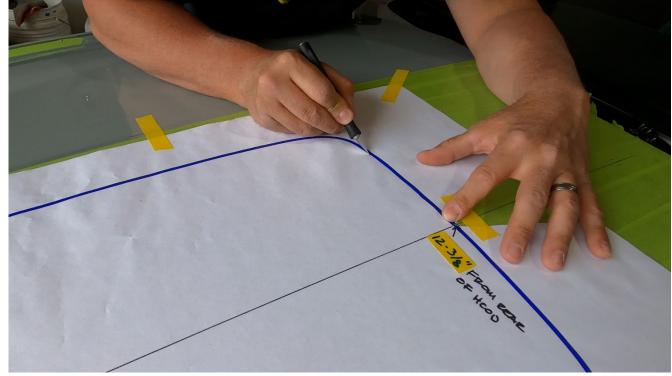


- 13. Repeat step #12 at the 36" markings.
- 14. Remove the provided template from the box and cut a "V" shape into the front of the template with the point of the "V" ending at the center of the Shaker hole cut line. Align the point of the "V" to the center line we just marked in steps #12 and #13.

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- 15. Cut the same "V" shape into the center of the rear of the template.
- 16. Now tape the template down in the center of the hood and 12 1/2" from the back (windshield) of the hood.
- 17. Using an x-acto blade, cut on the line for the shaker hole. Press hard. You are not only trying to cut the tape beneath but also score the paint below it to avoid any chipping when cutting with the saw.



18. Once you have completely cut the template out, remove all the paper and begin pulling up the tape. Only remove the tape from inside the cut area where the shaker scoop will be. You can re-stick the

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tape you are removing to the outside perimeter for extra protection when it comes time to run the saw over that area.



19. Open the hood again and place a sheet or blanket over the engine bay. This is to prevent metal shavings from getting into the engine bay. Find a wedge to keep the hood flat and prevent it from closing (4x4 chunk of wood works great). Be sure the hood is raised up far enough off the engine to avoid any contact from the drill & saw that will be used in the next steps.

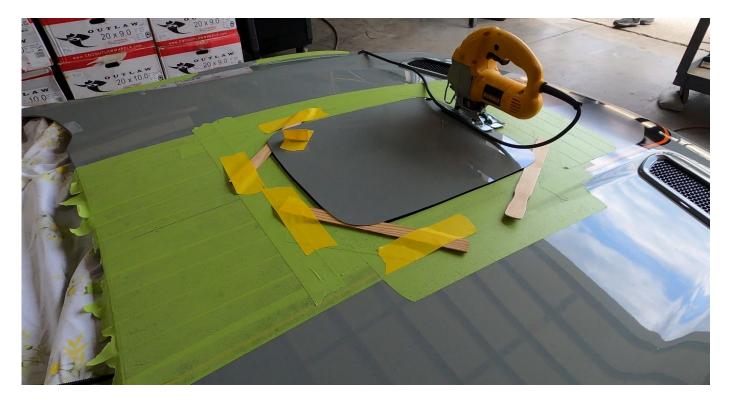


20. Drill a pilot hole for the saw blade to enter using a step bit.

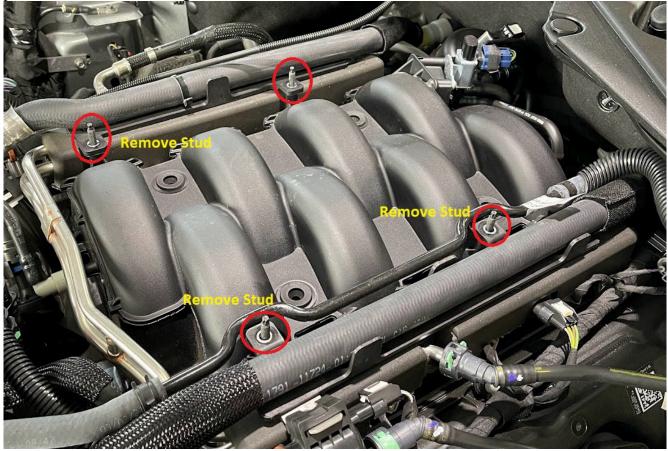
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- 21. Blow off the metal shavings from the hood surface.
- 22. Begin cutting the Shaker hole with a jig saw. Pro Tip: We highly recommend using a brand new blade. Use blade wax if available. This will help prevent aluminum from clogging the blade
  - a. After completing the first corner at about halfway to the next corner, pause to place a wedge (paint stir stick works well) beneath the corner to help avoid pinching the blade as you continue the cut. Place a new wedge as you proceed around the next corners.



- 23. Once the cut is complete. Remove the sheet from the engine bay, making sure to clean off any metal debris from the hood surface and engine bay areas.
- 24. Remove (4) 10mm Nuts on top side of the intake (circled in red in next photo). Set the nuts aside as 3 of them will be re-used.
- 25. Remove 3 of the Studs shown below (both driver side & front passenger) from the intake using reverse torx bit. Note the stud base is below the plastic rail. The stud base will be above the plastic rail when re-installing.



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26. For the **rear passenger stud** that was not removed, simply screw the provided coupler (CDC# 1111-3505-01) on to the stud.



**Rear Passenger Side** 

#### 27. Front passenger stud

- a. Set CDC# 57004 on top of the plastic rail
- b. Screw in factory stud on top of CDC# 57004
- c. Set CDC# 57002 on top of the stud base



### Front Passenger Side

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#### 28. Front Driver Side

- a. Screw in factory stud with the stud base on TOP of the plastic rail
- b. Set CDC# 57003 on top of stud base



Front Driver Side

#### 29. Rear Driver Side

- a. Set CDC# 57005 on top of plastic rail
- b. Screw in factory stud on top of CDC# 57005
- c. Set CDC# 57002 on top of stud base



**Rear Driver Side** 

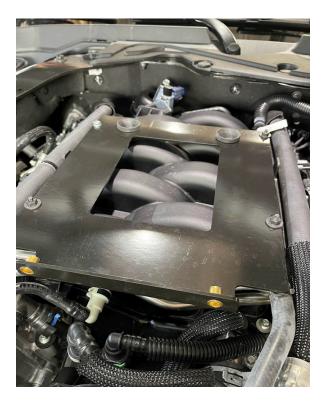
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#### 30. Mount the Shaker Bracket

Use an 8mm to remove the two black bolts from the lower black bracket from the shaker assembly. The other end of the bracket is secured by ball studs and will pop out of the socket area with a firm yank.



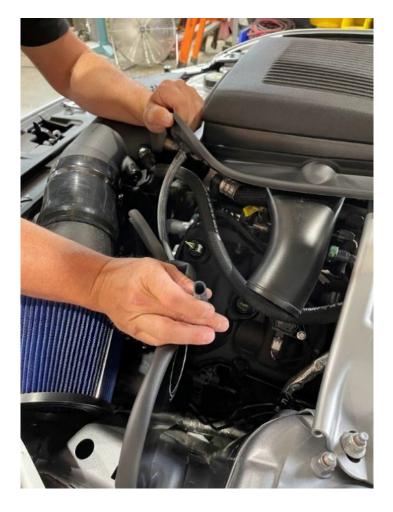
- a. Set bracket on top of studs as shown in photo below.
- b. Using the (3) 10mm nuts removed in step 24, hand tighten nuts onto factory studs on both driver side studs and the front passenger stud.
- c. Hand tighten the supplied M6-1.0x10mm bolt (CDC# 183003) into the coupler in the rear passenger location. Bolt and nuts will be loose until final fitment is completed.



31. Re-Install the Strut tower brace and torque nuts to factory spec.

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- 32. Install your aftermarket Cold Air intake (Sold Separately-Not included with CDC Shaker System)
  - *a.* Follow installation instructions provided with the Cold Air Intake. *Note: Air box shroud will need to be removed after marking air tube location in next steps.*
- 33. Next is to "dry fit" the scoop position in the hood hole. First, place the rest of Shaker scoop assembly on to the bracket then push ball studs into the joints. There is about 1/8" of forward/back adjustment in the slots on the bracket for you to make any adjustments.
- 34. Gently lower the hood to check fitment of Shaker scoop to assure it is centered in the hole location. Without removing the tape backing, set the trim ring on hood to verify fitment (sharp curves of trim ring are the front of the trim ring). Once you are satisfied with the position in relation to front and back gaps of the hole, remove the scoop portion of the shaker assembly again. Give a final tightening to the nuts securing the bracket down. Replace the scoop portion of the shaker assembly and reapply the bolts we removed in step #30.
- 35. Install Water Drain tube to the water tray coupler making sure to route away from any moving parts and to avoid any sharp bends





- 36. Connect Silicone Coupler to Shaker air tube. Only tighten the clamp at the air tube at this time. The flex tube clamp can remain loose.
- 37. Mark desired location on the center of the Cold Air Intake Shroud where the 3" hole will be drilled for the Shaker Flex tube. Once the desired location is marked, remove shroud from vehicle and drill hole using 3" Hole Saw. Clean up any sharp edges and complete the installation of the drilled shroud and cold air kit.





- 38. Install the air tube flex hose into the 3" hole of the Cold Air lit shroud. It may be easiest to screw the flex tube into the shroud. Once you have 5-6 rings of the flex tube into the shroud, insert the other end of the flex tube into the silicone coupler and tighten all clamps.
- 39. Install Shaker Trim Ring
  - a. Set trim ring on hood in desired location.
  - b. Clean the perimeter of the hole with the provided alcohol wipes. Allow time to dry.
  - c. Next we will need to apply the 3M adhesion promoter in the area where the tape will come in contact with the hood. The promoter will leave a purple haze on paint so it is important that it is not applied outside of the trim ring area. You may want to apply tape around the trim ring before applying adhesion promoter to know where to apply on the hood.
  - d. Apply 3M adhesion promoter to hood in the taped off area. Allow time to dry.
  - e. Peel a 2" portion of the 3M tape on both sides and fold them outwards. This will give you a tab to pull along as you stick down the trim ring to the hood.
  - f. Start pulling the red tabs along the bottom of the trim ring. Work only a few inches at a time, stop to push down then do the same on the other side. You will want to work up both sides simultaneously until the tabs meet that the top center.





40. The tape is pressure sensitive so make sure to spend time pressing down firmly along every inch of the trim ring. Open the hood and pull into the trim ring as well.



- 41. The next step is to reroute the squirter lines we removed earlier in the installation.
- 42. With the hood opened, find the tab near the center of the hood between the shaker hole and the windshield. Pry the tab down a  $\frac{1}{2}$ ".

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43. Drill into the tab using a 1/4" drill bit. Place blanket over engine to catch any metal debris. EXTREME CAUTION: do not let the bit crash into the bottom of the hood. It will dent the surface of the hood. (a step bit may be easiest method)



44. Move one of the black "Christmas tree" fasteners on the squirter line to align with the hole. Push the Christmas tree into the newly drilled hole.



45. Connect the Battery and install the battery cover. Close the hood and go for a drive to enjoy the view of your new Shaker Cold Air Intake System from the driver's seat.

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Send us some pictures of your completed install @classicdesignconcepts on Instagram, CDC- Classic Design Concepts on Facebook or email them to us, <u>sales@cdcdetroit.com</u>





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