



**99-04* 3.8L V6 Mustang “Shaker” - CDC# 105117
Components Check List:**

****03 Model requires new hood***

CDC Inspected	Installer Check	Quantity – Descriptions
<input type="checkbox"/>	<input type="checkbox"/>	1- Hood Appliqué
<input type="checkbox"/>	<input type="checkbox"/>	1- Aluminum Shaker Scoop
<input type="checkbox"/>	<input type="checkbox"/>	1- Lower Air Box w/drain tube fittings (2)
<input type="checkbox"/>	<input type="checkbox"/>	1- Upper Air Box w/CDC nameplate
<input type="checkbox"/>	<input type="checkbox"/>	1- Air Tube
<input type="checkbox"/>	<input type="checkbox"/>	3- Ball Stud Sockets & Brackets (Y & Z)
<input type="checkbox"/>	<input type="checkbox"/>	1- 2pc. Intake bracket
<input type="checkbox"/>	<input type="checkbox"/>	4- M-6-1.0 Ball Studs
<input type="checkbox"/>	<input type="checkbox"/>	1- 3/8" ID Driver Side Drain Tube
<input type="checkbox"/>	<input type="checkbox"/>	2- 3/8" Drain Tubes (18" length)
<input type="checkbox"/>	<input type="checkbox"/>	4- 4.8-1.6 x 15mm" Phillips Head Screws
<input type="checkbox"/>	<input type="checkbox"/>	8- 5/16" Thread Cutting Nuts
<input type="checkbox"/>	<input type="checkbox"/>	3- M-6-1.0 X 70mm Hex Head Screws
<input type="checkbox"/>	<input type="checkbox"/>	1- M-6-1.0 X 75mm Hex Head Screw
<input type="checkbox"/>	<input type="checkbox"/>	5- M-6-1.0 X 10mm Hex Head Screws
<input type="checkbox"/>	<input type="checkbox"/>	7- M-6 Washers
<input type="checkbox"/>	<input type="checkbox"/>	4- M6-1.0 X 18.5mm Hex Head Bolts
<input type="checkbox"/>	<input type="checkbox"/>	2- 1/4" Washers
<input type="checkbox"/>	<input type="checkbox"/>	4- #8 x 3/4" Self Tapping Screws
<input type="checkbox"/>	<input type="checkbox"/>	1- Weather Seal, 60" long
<input type="checkbox"/>	<input type="checkbox"/>	1- 6mm nut
<input type="checkbox"/>	<input type="checkbox"/>	1- Hood Cutout Template
<input type="checkbox"/>	<input type="checkbox"/>	1- Filter housing to air tube extension
<input type="checkbox"/>	<input type="checkbox"/>	1- Forward bracket with ball stud socket
<input type="checkbox"/>	<input type="checkbox"/>	1- Air Filter Cover Cutout Template
<input type="checkbox"/>	<input type="checkbox"/>	Instructions

CDC inspected by _____ Date _____



99-04* Mustang V6 "Shaker" System Instructions

**03 Model requires new hood*

Note: To ensure the quality of the vehicle and product, have your Shaker Appliqué painted by a qualified professional automotive painting facility. Product is Injection Molded ABS Plastic and recommended bake temperature is 130° F or below.

Tool List For Appliqué:

- ❑ Template
- ❑ Tape
- ❑ Center Punch
- ❑ 1" Hole Saw
- ❑ Saber Saw
- ❑ 1/8" Pilot Drill Bit
- ❑ 5/16" Drill Bit
- ❑ 3/8" Drill Bit
- ❑ Scissors for cutting Template
- ❑ Drill Motor
- ❑ Phillips Head Screw Driver
- ❑ Eye Protection

Tool List For Shaker & Shaker Brackets:

- ❑ 8mm Socket
- ❑ 10mm Socket
- ❑ 11mm Socket
- ❑ 1/4" or 3/8" Drive Ratchet
- ❑ T40 (Torx Bit)
- ❑ IN. LB. Torque Wrench
- ❑ Removable Loctite
- ❑ 1/2" Socket, 1/4" Drive
- ❑ 1/4" Drive Nut Driver

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Installing Hood Appliqué:

Figure 1

A) Raise Hood, Remove under hood blanket (and production hood scoop if installed on car) 7 nuts, 9mm
(*Figure 1*)

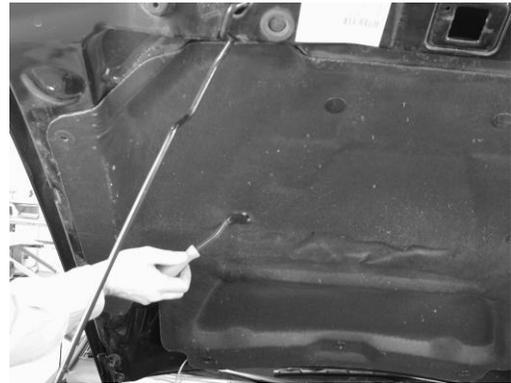
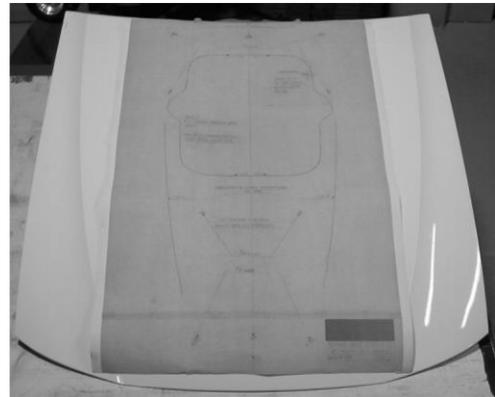


Figure 2

B) Close hood - Align template with hood feature lines as noted on template. Tape template securely to outside hood surface (*Figure 2*)



*During the drilling and cutting process, elevate hood far enough to ensure no damage will occur to engine components

*****Note: Do not remove template from hood until steps B-F are complete.***

C) Using a center punch, transfer the (11) screw hole locations to the hood. Drill with a 1/8" pilot hole through template, hood and inner reinforcement. (NOTE: Make sure holes A, B, C, D, E are drilled through hood inner reinforcement)

D) Raise hood – Using a 1" hole saw, drill holes called out as A, B, C, D, and E in the hood inner reinforcement (*Figure 4 & 5*). **DO NOT DRILL THROUGH THE HOOD OUTER WITH HOLE SAW!**

E) Close hood. Finish drilling the 10 pilot holes with the drill size indicated on the template

F) Drill a starter hole for the shaker opening with a 1" hole saw as shown on template. Use a saber saw to cut out the Shaker opening (*Figure 6*)

G) Open hood.

Figure 3

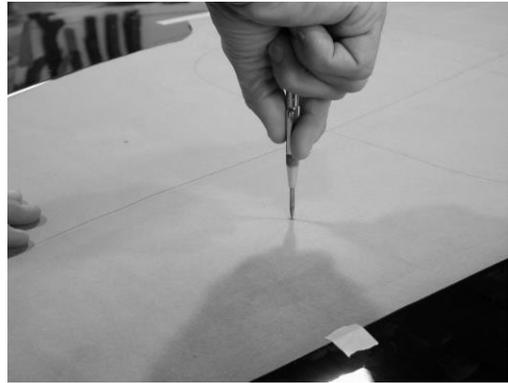


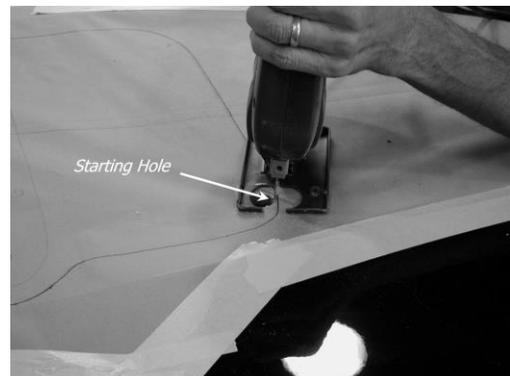
Figure 4



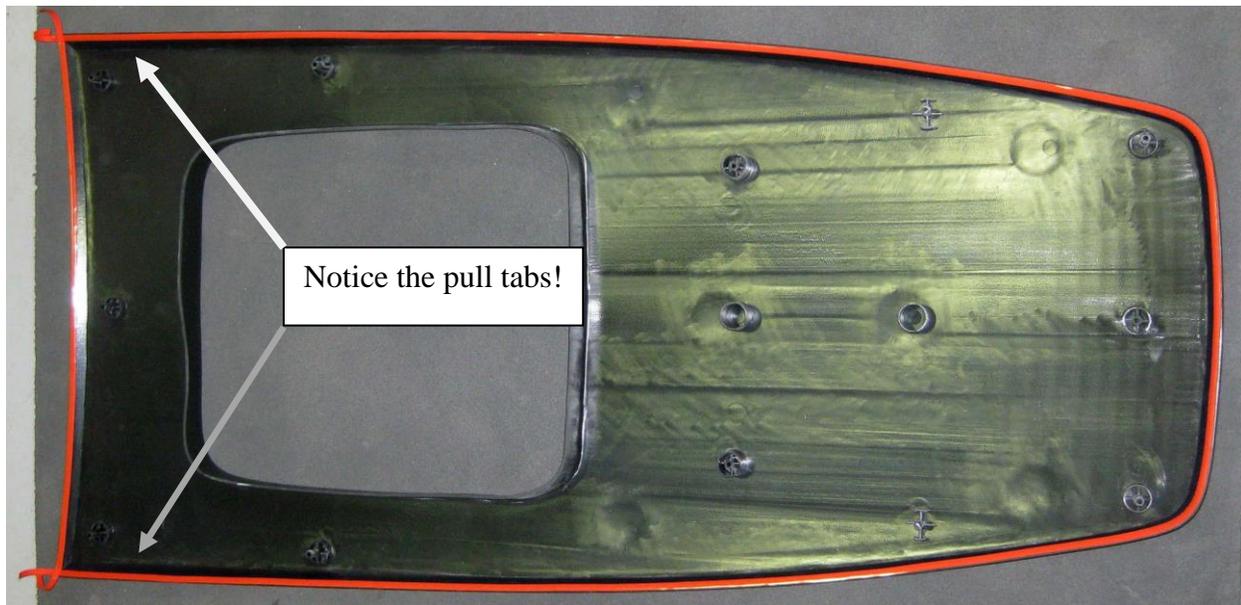
Figure 5



Figure 6



- H) Apply 3m Tape to the underside perimeter of Applique'. For best results, lightly sand (120 grit sand paper or Scotchbrite) the tape surface to remove any waxes and or paint, clean with alcohol pad (allow to dry), apply 3M adhesion promoter (allow to dry), then apply the 3M tape. **Note:** Leave an extra couple inches of the red backing to create "pull tabs" (as shown in pics). Firmly press the tape to activate the pressure sensitive adhesive.



- I) Clean top surface of hood (around Applique' tape mating surface) with Alcohol pack and allow to dry.
- J) Install Applique'. Place on top of hood so that Applique' is sitting flush to hood. Start removing the red backing from the 3M tape working around the entire perimeter. Press firmly to activate the tape adhesive. Attach appliqué to hood using (7) 5/16" Thread Cutting Nuts and (4) 4.8-1.6 x 15mm Phillips head screws. Use Phillips head screws at attachment points just forward of hood scoop opening. **Note: Do not over tighten appliqué attachment nuts & screws! Install thread cutting nuts with a 1/2" socket on a nut driver to hand tight. Torque Nuts to 20-25 inch pounds.**

Figure 7

- K) Reinstall hood blanket using original fasteners. (Figure 7)

- L) Cut hood blanket to fit appliqué opening. (Figure 7)

- M) Install weather strip and cut to size to opening as shown. Weather strip sandwiches appliqué, hood outer and blanket together (Figure 7)

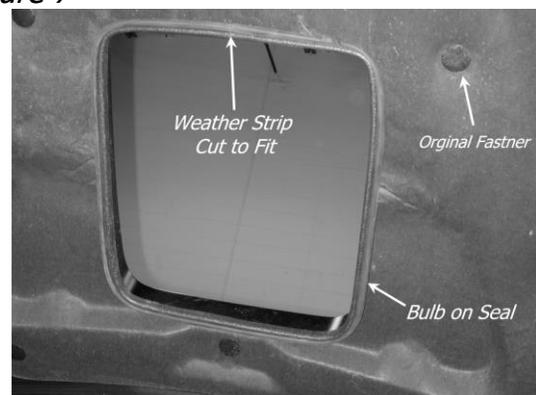


Figure 8

****Note: Bulb on seal should be on outside of opening.**

Assembling Air Tube:

A) Remove stock air filter housing and rubber air snorkel from vehicle.

B) Grind fins from air filter housing, starting at top clamp remove 6 fins leaving 2.

C) Cut out air filter housing template.

Note: Follow instructions on template

D) Place template on air filter housing following instructions

E) Mark hole location onto air filter housing and cut out as shown.

F) Drill a 5/16" hole in bottom of stock air filter housing at its lowest point for drainage.

G) Attach Shaker air tube extension to air filter housing use 4 self tapping screws (*Figure 8*)

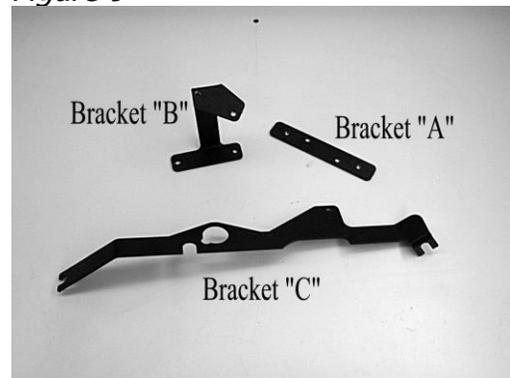
H) Attach air tube to extension, fit is tight, use care.



Note:

When reconnecting the filter housing to the mass air flange, it is imperative that the union is properly sealed to prevent a false reading from the mass air sensor

Figure 9



Mounting Shaker Air box:

- A) Attach bracket "C" to alternator bolt and air conditioner compressor bolt. (*Figure 10*)
- B) Assemble brackets "A" & "B" (*Figure 10.5*)
- C) Attach "A" & "B" Bracket assembly to intake using factory bolts *Figure 11*
Torque bolts to *factory specification*
- D) Install ball studs into brackets "A" & "C", use a thread locker.

NOTE: Torque ball studs to 40-inch lbs pounds, over tightening will damage ball stud.

Figure 10

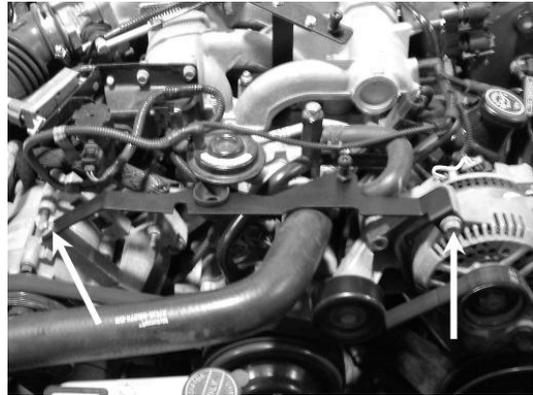
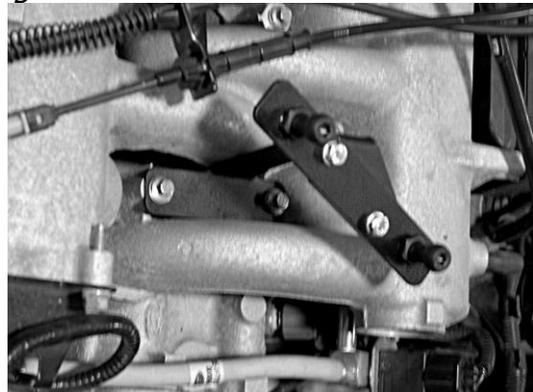


Figure 10.5



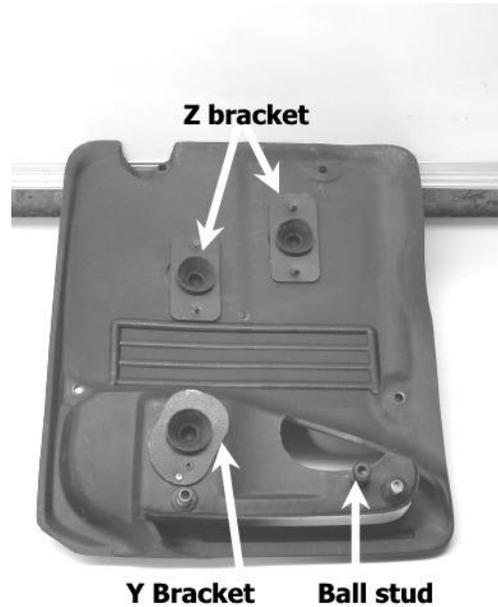
Figure 11



Shaker Air Box Assembly

A) Loosely install Z brackets with ball stud caps to lower air box using M6-1.0 x 18.5mm bolts. Install ball stud with m6-1.0 nut (DO NOT TIGHTEN). Loosely install "y" bracket with ball stud cap to lower air box using M6-1.0 x 10mm hex head screw with 6mm flat washer (Figure 12)

Figure 12



B) Place upper air box and aluminum scoop onto lower air box (no hardware) and snap unit to brackets on motor by firmly pushing onto ball studs. (Figure 13)



C) Close hood gently and align shaker scoop in center of hood opening.

Figure 13



D) Once the aluminum scoop is aligned, with the hood closed, remove only the aluminum scoop from the upper air box and tighten brackets Y and Z and ball stud nut (Figure 14)

Figure 14

E) Open hood to remove the entire Shaker air box assembly from motor brackets.

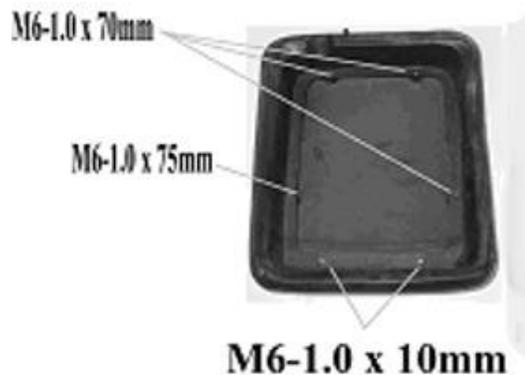


F) Assemble Shaker aluminum scoop to upper air box using two M6-1.0 x 10mm bolts. (Figure 15)

Figure 15

G) Assemble lower air box to Shaker aluminum scoop using three M6-1.0 x 70mm and one M6-1.0 x 75mm.

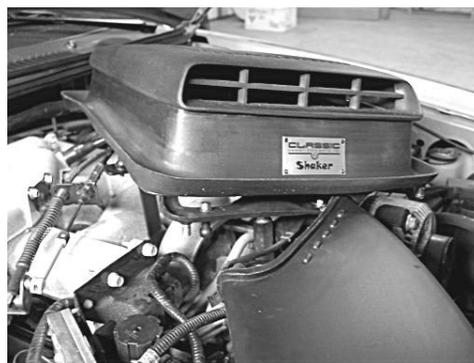
(Figure 15) DO NOT OVERTIGHTEN. Snug two rear bolts, all other bolts tighten to 25 inch pounds, use thread locker



H) Install stock air filter housing with Shaker air tube and extension back into vehicle.

Figure 16

I) Slide entire Shaker air box assembly onto the air tube already assembled in vehicle. Once air tube is inserted into the Shaker air box, snap air box assembly down onto ball studs to lock in place (Figure 16)



J) Attach drain tubes to Shaker Air Box assembly.

DRAIN TUBES:

Route drain tubes, down each side of motor. Be sure to **avoid all hot and moving parts** of the engine secure drain tubes to hose fittings with tie straps.



Thank you for choosing Classic Design Concepts for your restyling needs. If you have any questions or concerns regarding installation, please contact Tech@cdcdetroit.com or call 866-624-7997.