

Equipped with AEM<sup>®</sup> Dryflow<sup>™</sup> Filter No Oil Required!

## INSTALLATION INSTRUCTIONS PART NUMBER 21-778C (Gup Motal Grav Einish)

# 21-778C (Gun Metal Gray Finish)

2015 MITSUBISHI 2016 MITSUBISHI LANCER LANCER 2.0/2.4L MANUAL TRANSMISSION

ALL

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	5-5010	HOSE; 1/2"ID X 10"L	1
2	9440	HOSE CLAMP, 2.15-3.00"	1
3	5-253-54	HOSE, ADAPTER 2.50/3.0" X2.50"	1
4	9444	HOSE CLAMP, 2.31-3.25"	2
5	9-6791	UPPER PIPE, LANCER 08 2.0L,MT, ROTO-MOLDED	1
6	9448	1/2" BNDHOSE CLAMP,2.56"-3.50"	2
7	5-281	ELBOW, 2.75/3.00 x 90 OFFSET	1
8	444.460.04	NUT; M6 HEX SERRATED	2
9	08160	WASHER; 1"D X 1/4 HOLE FENDER	2
10	1228599	MOUNT, RUBBER 1" X 6MM	1
11	8-197-1	EXTENSION HARNESS; 5 PIN 18" DENSO	1
12	1-2101	BATTERY TIE DOWN; M6 J-HOOK	1
13	409	SUPER GLUE, 3G DRIP PROOF	1
14	69801	WRENCH; TORX T20 T/R, L-KEY	1
15	1-2051	BOLT; BTN HD M4-0.7 X 6MM	2
16	2-1557C	INTAKE TUBE; 2.75"OD X 15", 21-778, GUNMETAL GRAY	1
17	9-21070	MAF INSERT; AIR STRAIGHTNER PLASTIC	1
18	21-2027DK	AIR FILTER; 2.75" X 7" DRYFLOW	1



Read and understand these instructions <u>BEFORE</u> attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the intake tube, throttle body and engine.

#### 1. Preparing Vehicle

- a. Make sure vehicle is parked on level surface.
- b. Set the parking brake.
- c. If engine has run in the past two hours, let it cool down.
- d. Disconnect negative battery terminal.
- e. Do not discard stock components after removal of the factory system.
- f. Open the air intake kit package and make sure all parts are included.

Tools Needed:	
Phillips Screwdriver	Jack
Flat Head Screwdriver	Jack Stands
10 & 21 MM socket	
Socket Driver	
Side Cutters	

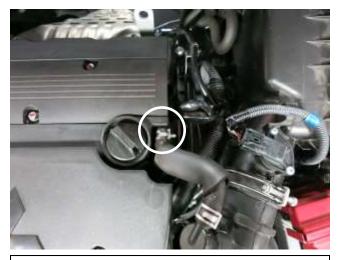
#### 2. Removal of stock system



a. Remove the two Phillips fasteners that secure the fresh air duct to the core support and remove the fresh air duct com the engine compartment.



c. Loosen the hose clamp on the intake hose at the throttle body.



b. Release the spring clamp and remove the PCV hose from the crankcase side.



d. Unclip the hose from the air box retainer.



e. Detach the MAF sensor wiring clip from air box.



g. Remove the bolt that holds the factory air box in the engine compartment.



i. Remove the factory J-hook on the front side of the battery tie down. Push the battery toward the back of the vehicle. The nut will be re-used in step 3a.



f. Unplug the electrical connector from the mass air sensor.



h. Remove the factory intake from the vehicle. Note: Do not discard any of your stock equipment.



j. Raise the front of the vehicle with a jack. Refer to your owner's manual for proper jack and jack stand placement to properly support vehicle. Support your vehicle using properly rated jack stands before wheel removal or while working under the vehicle. NEVER WORK UNDER A VEHICLE WITHOUT USING JACK STANDS. Remove the plastic trim underneath the front of the vehicle on the driver side.



k. Remove the front drivers side wheel with a 21mm socket. This will be re-installed in step 3n.



m. Remove the MAF sensor with the supplied T20 L-Key. This will be re-used in step 3d.



I. Remove the driver side fender well liner, it is secured to the wheel well with plastic clips and a 10mm hex bolt. This will be re-installed in step 30.



n. Remove the two springs clamps circled. These will be reused in step 3m.

### 3. Installation of AEM<sup>®</sup> intake system.

a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



a. Replace the factory j-hook with the shorter j-hook supplied for the battery hold-down and tighten the with the nut that was removed in step 2i.



c. Install the rubber mount in the indicated hole, secure with a provided washer and nut.



b. Install the supplied coupler and hose clamps onto the throttle body. Tighten the hose clamp circled at this time.



d. Install the MAF that was removed in step 2m. into the AEM intake tube and secure with the supplied hardware.



e. Install the supplied MAF insert into the AEM intake tube as shown. Note: Apply a few drops of super glue to the lip of the MAF insert to secure it in position



g. Route the intake tube down through the wheel well opening as shown.



i. Connect the extension harness to the factory connector and route the MAF sensor harness down into the wheel well area.



f. Attach the 90° elbow coupler onto the upper intake tube (side opposite of the nipple). Slide the supplied hose clamps onto each end of the coupler.



h. Insert the upper intake tube (9-6791) into the throttle body coupler. Use the supplied hose clamp to loosely secure in place.



j. Plug the MAF extension harness into the MAF sensor.



k. Route the lower intake tube through the bottom of the fender well. Align the intake tube's bracket onto the rubber mount and secure in place with the supplied washer and nut. Tighten the hose clamp on the coupler.



m. Attach the suppleed PCV hose onto the crankcase inlet and intake pipe nipple. Secure each end with the spring factory clamps removed in step 2n.



n. Re-install the wheel that was removed in step 2k. onto the vehicle and torque the lug nuts to the manufactures torque specifications.



 Install the AEM air filter onto the lower end of the intake tube and secure with the supplied hose clamp (9444). Once both tubes and filter are properly aligned go back and tighten all the hose clamps throughout the intake system.



n. Re-install the wheel well liner with the existing hardware that was removed in step 2i.



n. Re-install the plastic trim with hardware that was removed in step 2j. Remove the jack stands and lower the vehicle back onto the ground.



STOCK INTAKE INSTALLED



AEM INTAKE INSTALLED

#### 4. Reassemble Vehicle

- a. Position the inlet pipes for the best fitment. Be sure that the pipes or any other components do not contact any part of the vehicle.
- b. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- c. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- d. Reconnect negative battery terminal and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### 5. Service and Maintenance

- a. AEM Induction Systems requires cleaning the intake system's air filter element every 100,000 miles. When used in dusty or off-road environments, our filters will require cleaning more often. We recommend that you visually inspect your filter once every 25,000 miles to determine if the screen is still visible. When the screen is no longer visible some place on the filter element, it is time to clean it. To clean, purchase our Synthetic air filter cleaner, part number 1-1000 and follow the easy instructions.
- b. Use window cleaner to clean your powder coated AEM<sup>®</sup> intake tube. NOTE: DO NOT USE aluminum polish on powder coated AEM<sup>®</sup> intake tubes.