

# Racing Suction Reloaded Intake Kit 70020-AM011

## MITSUBISHI GALANT FORTIS / GALANT FORTIS SPORTBACK

Model: DBA-CY4A / DBA-CX4A Engine Type: 4B11 Model Year: 2007/8-2009/11 / 2008/12-2009/11 Ver. 20100315

#### **NOTICE**

This manual assumes that you have and know how to use the tools and equipment necessary to safely perform service operations on your vehicle. This manual assumes that you are familiar with typical automotive systems and basic service and repair procedures. Do not attempt to carry out the operations shown in this manual unless these assumptions are correct. Always have access to a factory repair manual. To avoid injury, follow the safety precautions contained in the factory repair manual.

#### **SAFETY PRECAUTIONS**

#### **WARNING**

- To prevent electrical damage/burns/fires, always:
  - Disconnect the negative terminal of the battery before beginning installation.
  - When disconnecting wires/connectors, take extra care to avoid breaking/snapping the wires.

#### **CAUTION**

- Do not misuse this product.
  - Misuse of this product may lead to engine damage.
  - Misuse of this product may lead to loss of original function.
- Prior to beginning installation, check to make sure that the engine bay temperature has cooled to approximately 40 /104°F
  - Failure to let the engine cool down properly can lead to severe burns.
- Insert clean rags into open piping to prevent waste from entering the pipes.
  - If neglected, waste in the piping can lead to engine damage.
- Make sure that all of the parts listed in the Parts List are included in the kit.
- Reference the factory service manual for the vehicle when removing factory parts.
- Be careful when handling this product; avoid dropping or subjecting it to excessive impacts. Failure to do so may result in product damage or improper installation.
- Use the proper tools when tightening nuts and bolts. If over tightened, the bolts may become damaged.
- Keep the removed factory parts in a safe place for ease of re-installation at a later date (if necessary).
- Replace the filter element at regular intervals:
  - (Recommended) Replace every 3,000~5,000km/2,000-3,200miles or every 3~6 months.
  - Replacement filter elements are sold separately.
  - \*Do not wash the filter elements as the filtration properties will be degraded.
- However, there are certain conditions where, depending on dirt buildup, the filter may need to be replaced earlier than the above recommended intervals.
- If the vehicle and the product are not maintained properly as mentioned above, the product may not perform properly and the airflow meter sensor may not be able to detect the intake air volume accurately; it can lead to engine damage or bad conditions.

#### **INSTALLATION PROCEDURE**

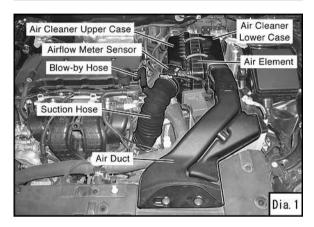
#### 1. REMOVAL OF FACTORY PARTS

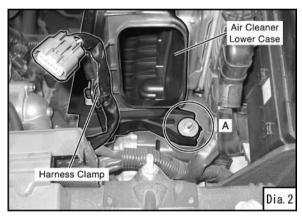
Advice: If the airflow meter sensor is secured with Torx screws (see the illustration on the right), A Torx head size T20 must be used to remove the screws.

- 1) Disconnect the negative terminal of the vehicle's battery.
- Disconnect the connecter from the airflow meter sensor. (Dia.1)
- 3) Disconnect the blow-by hose from the suction hose. (Dia.1)
- 4) Remove the air element. (Dia.1)
- 5) Loosen the hose clamp to remove the air cleaner upper case and the suction hose together. (Dia.1)
- 6) Remove 2 clips to remove the air duct from the air cleaner lower case. (Dia.1)
- 7) Disconnect the harness clamp from the air cleaner lower case. (Dia.2)
- 8) Remove the bolts to remove the air cleaner lower case. (Dia.2)
- 9) Remove the airflow meter sensor from the air cleaner upper case. (Dia.1)

The head shape of the Torx Screw







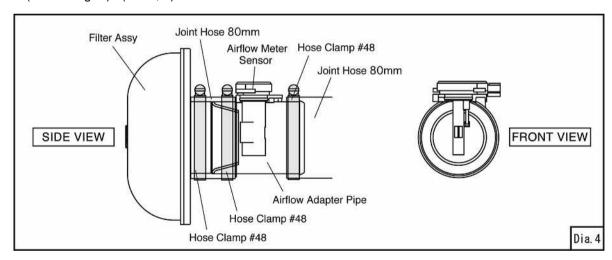
#### 2. INSTALLATION OF THE KIT

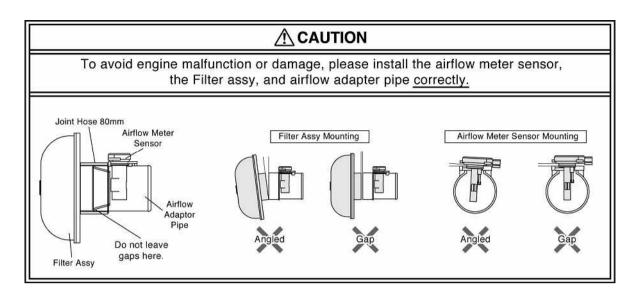
1) Install the supplied 12mm hose fitting. To prevent air leakage, wrap the threaded section with Teflon tape. (Dia.3)

Advice: After tightening the hose fitting by hand, tighten it another one to two turns with an appropriate tool. (It is not necessary to tighten the fitting to the point where the nuts touches the pipe.)



2) Assemble the components as illustrated in Diagram 4. Ensure that the factory airflow meter sensor's factory O-Ring is seated correctly, while making sure it does not get pinched in the airflow adapter pipe. Tighten with the supplied M4 screws. Do not over-tighten. Tightening torque: 2.0~3.0 N-m (0.2~0.3 kg-m). (Dia.4, 6)

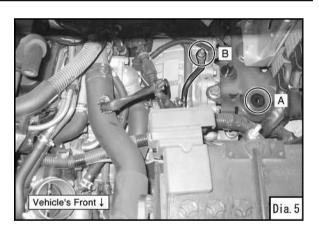




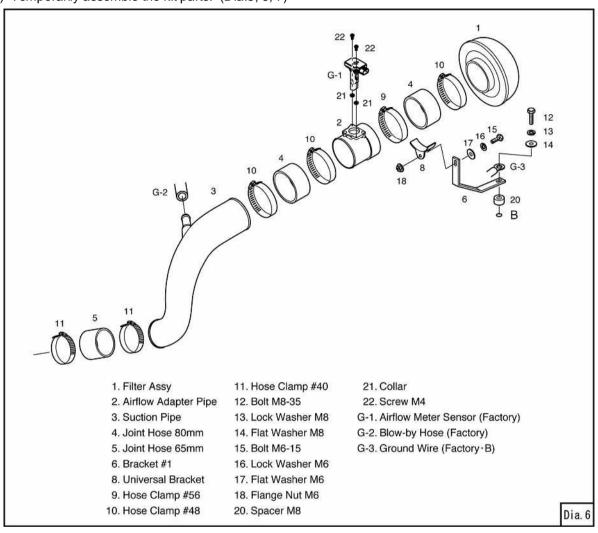
### **⚠** CAUTION

Do not remove the airflow adapter attachment. The seal can become degraded, which can lead to engine trouble or damage.

3) Remove the bolt from section B and temporarily install bracket #1. (Dia.5)



4) Temporarily assemble the kit parts. (Dia.5, 6, 7)



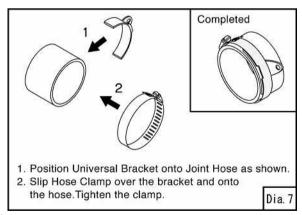
5) Position the assembly to the vehicle avoiding unnecessary contact with other parts of the vehicle. Once the position is determined, secure the assembly to the vehicle using the supplied hose clamps and bolts. Do not over-tighten the clamps and bolts. (Dia.10)

#### ADVICE:

Use of proper tools can help avoid overtightening of the hose clamps. Screw drivers are recommended.

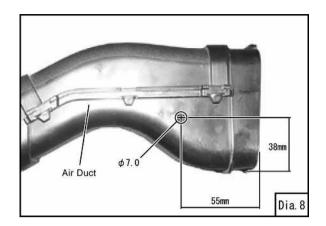
Do not use boxed wrenches since they tend to tighten with more force. If over-tightened, the filter assy may bend or become damaged.

(Tightening torque: 2.0~3.0 N-m {0.2~0.3 kg-m})

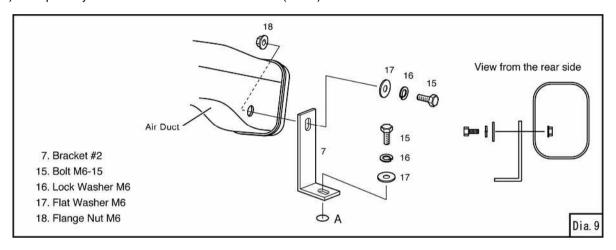


6) Drill a 7mm hole on the air duct referring to diagram 8.

The measurements on the diagram are just for reference. Before drilling the hole, place the air duct on to the vehicle to measure the proper location.



7) Temporarily install bracket #2 to the air duct. (Dia.9)



- 8) Install the air duct. (Dia.5, 9, 10) (Reuse the factory clips)
- 9) Reconnect the airflow meter sensor connector.
- 10) Reconnect the negative terminal to the vehicle's battery.



#### **Confirmation after installation**

Check the following after the installation process is complete.

- (1) Check the following before starting the engine:
  - Make sure pipes and hoses are routed and connected correctly.
  - Make sure hose clamps are tightened.
  - Make sure the negative cable terminal is securely connected to the battery.
  - Make sure all bolts and nuts are tightened.
  - Make sure all installed components do not come in contact with other parts.

#### (2) Start the engine and check the following:

- Make sure air is not leaking.
- Make sure the RPM rises smoothly when revving the engine 2-3 times while in neutral.
- Make sure the installed parts are not hitting each other.
- Make sure there are no issues idling.
- Make sure there are no loose parts after the engine is stopped

#### MAINTENACE

Proper daily maintenance of this product is necessary in order to maintain the safety, reliability, and function of this product.

Maintenance is the responsibility of the driver/owner.

- If work needs to be performed outside the scope of this manual, consult a professional.
- If the vehicle becomes damaged, have the repairs performed by a professional.
- If you experience abnormal noises, scents, or vibrations from the vehicle while driving, reference the vehicle's Owner's Manual.
- If this product is ever sold, please give this Instruction Manual to the new owner.
- When removing this product from the vehicle, please consult a professional.

#### **PARTS LIST**

No.	Description	Qty	Image	Remarks
1	Filter Assy	1	0	200- 80mm
2	Airflow Adaptor Pipe	1	9	
3	Suction Pipe	1	P	
4	Joint Hose	2	$\Diamond$	80mm L=55
5	Joint Hose	1	0	65mm L=70
6	Bracket #1	1		
7	Bracket #2	1		
8	Universal Bracket	1	8	80mm
9	Hose Clamp	1		#56

No.	Description	Qty	Image	Remarks
10	Hose Clamp	3		#48
11	Hose Clamp	2		#40
12	Bolt	1		M8-35
13	Lock Washer	1	G	M8
14	Flat Washer	1	0	M8
15	Bolt	3	0	M6-15
16	Lock Washer	3	0	M6
17	Flat Washer	3	0	M6
18	Flange Nut	2	2	M6

No.	Description	Qty	Image	Remarks
19	Hose Fitting	1		12mm
20	Spacer	1	9	M8
21	Collar	2	0	
22	Screw	2	OFF	M4-10
23	Tie Wrap	5	1	
24	Sticker	1	RESULTION	
25	Instruction Manual	1		
26	Instruction Manual	1		English
27				