

## **INSTALLATION INSTRUCTIONS**

AIR-OIL SEPARATOR P/N: 85483, MITSUBISHI EVO 10, 2008-UP

This kit has been specifically designed to fit the EVO X and includes all the necessary hardware. The stock hose shown in Figure 5 will be removed and replaced with this kit. Through the stock hose, air and oil/water vapor was drawn from the valve cover and into the air inlet tube to be burnt by the engine. With the separator installed that air and oil/water vapor will be contained and reduced before it is returned to the engine.

The air/oil separator tank will mount next to the right front strut tower. The hoses will run from the separator, along the firewall and behind the heat shield to the left side of the engine. Always use caution and good common sense when routing hoses near heat sources. MOROSO recommends using a medium strength thread locker on all fasteners. The car used in this installation is a 2011 EVO X. On older models it will be necessary to use the supplied hose reducers to adapt the hoses to the smaller fittings on the valve cover and the air inlet tube.

Once installed, the Air Oil Separator should be drained when it is half-full. This will vary with seasonal temperatures and driving distances. For normal day-to-day driving, check every 1,000 miles until you establish how long it takes to reach half-full. For track usage it should be drained after every outing. The ball valve is to remain closed at all times unless draining the tank.

PARTS LIST			
DESCRIPTION	QTY	DESCRIPTION	QTY
SEPARATOR TANK	1	1/4-20 x 5/8 LG CAP SCREW	2
BILLET CLAMP	1	1/4-20 x 1 LG CAP SCREW	1
BRACKET	1	LOCK NUT	1
BALL VALVE	1	HOSE REDUCER	2
SWEPT 90° HOSE FITTING	1	3/8" ID HOSE	1FT
90° BARBED HOSE FITTING	2	1/2" ID HOSE	8FT
RUBBER CAP	1	(BLANK)	



Figure 1



Figure 2

### **SEPARATOR AND BRACKET PREPERATION:**

- 1. Screw Fittings into the Separator Body. (Figure 2)
  - A. Use thread sealant or Teflon® tape on all.
  - B. Screw in tight both 90° barbed hose fittings and position as shown.
  - C. Install the Ball Valve, the Swept 90° Hose Fitting and the Rubber Cap.
- 2. Install stainless steel 1/4-20 x 1 LG Cap Screw into the Billet Clamp. Do not tighten.
- 3. Fasten the Billet Clamp to the Bracket.
  - A. Use 1/4-20 x .62 Cap Screws
  - B. Orient the Billet Clamp on the Bracket so the 1 LG Cap Screw will face the front of the vehicle.





Figure 3 Figure 4



Figure 5

#### **HOSE INSTALLATION:**

**CAUTION:** YOU must route the hoses safely away/around all heat sources so that YOU eliminate the risk of YOU catching YOUR car on fire. Use additional heat protection for the hoses if need be.

- 1. Remove the hose (Figure 5) that connects the valve cover (Figure 3) to the air inlet tube (Figure 4).
- 2. Straighten the supplied 1/2" Hose than fold it in half (this will eliminate having to route two separate hoses).
- 3. From the right front strut tower, route hose around heat shield and through the bracket on the firewall.
  - A. Push the folded end through first.
  - B. Leave enough hose on both sides to ease the install.
  - C. Cut the folded center of the hose so that it leaves you with two separate 4 foot pieces.
- 4. For older models (before 2011) you must make short adapter hoses.
  - A. Use the 3/8" ID Hose and the Hose Reducers.
  - B. Keep adapters as short as possible, but long enough so they do not kink and can be easily assembled.
  - C. Install adapters into hose ends.
  - D. Using a small amount of oil will make this easier.
- Install the two hoses (or adapters) to the valve cover and to the air inlet tube.
  - A. The fitting on older model valve covers may be 90° pointing towards the firewall.

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- 6. Pull excess hose towards passenger side.
- 7. Wire tie hoses as needed.
- Do not kink hoses.



Figure 6

#### **FINAL INSTALLATION:**

- 1. Loosen the strut tower/firewall bolt so the Bracket can slide in behind it.
- 2. Remove wire harness clip from firewall and move the harness safely out of the way.
- 3. Remove plastic nut that holds sound dampening material to firewall (this will not be re-used).
- 4. Hold the Bracket roughly in the installed position and place Separator Body into Clamp.
- 5. Slide bracket behind bolt and over sound dampening holding stud.
- 6. Install the supplied Lock Nut on the sound dampening holding stud.
- 7. Level bracket and tighten the tower/firewall bolt and Lock Nut.
- 8. Shorten the excess hose leaving enough length so that the hoses will not become kinked.
- 9. Push hoses onto the 90° Barbed Hose Fittings.
  - A. Using a small amount of oil will make this easier.
  - B. It does not matter which hose goes onto which fitting
  - C. Check hose routing and wire tie if necessary.
  - D. YOU must route the hoses safely away/around all heat sources so that YOU eliminate the risk of YOU catching YOUR car on fire. Use additional heat protection for the hoses if need be.
- 10. Re-install the wire harness clip to the firewall.
  - A. Spin the wire harness clip so that it is above the wire harness.
  - B. Be sure the harness is not touching the Bracket.

# For Technical Assistance, Call Moroso's Tech Line at (203) 458-0542, (203) 458-0546 8:30am-5:00pm EST

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