



## COBB 3-Port Electronic Boost Control Solenoid



### Mitsubishi Evolution X / Ralliart

Congratulations on your purchase of the COBB Tuning 3-Port Electronic Boost Control Solenoid. The following instructions will assist you through your installation process. Please read them first **BEFORE** beginning the install and familiarize yourself with the steps and tools needed. If you feel that you cannot properly perform this installation, we **HIGHLY** recommend you take the vehicle to a qualified and experienced automotive technician.

**Warning!** The installation of this 3-port solenoid requires proper tuning. The use of a COBB OTS map with a 3-port solenoid installed in interrupt mode will result in overboosting situations!

#### Part List

- 1 x COBB EBCS
- 1 x COBB Mounting Bracket
- 50" 4mm Silicone Vacuum Line
- 2 x M3 x 20 SS Socket Head Screw
- 1 x M6 SS Hex Bolt
- 1 x 6mm SS Washer
- 6 x 4" Zip Ties

#### Tools Needed

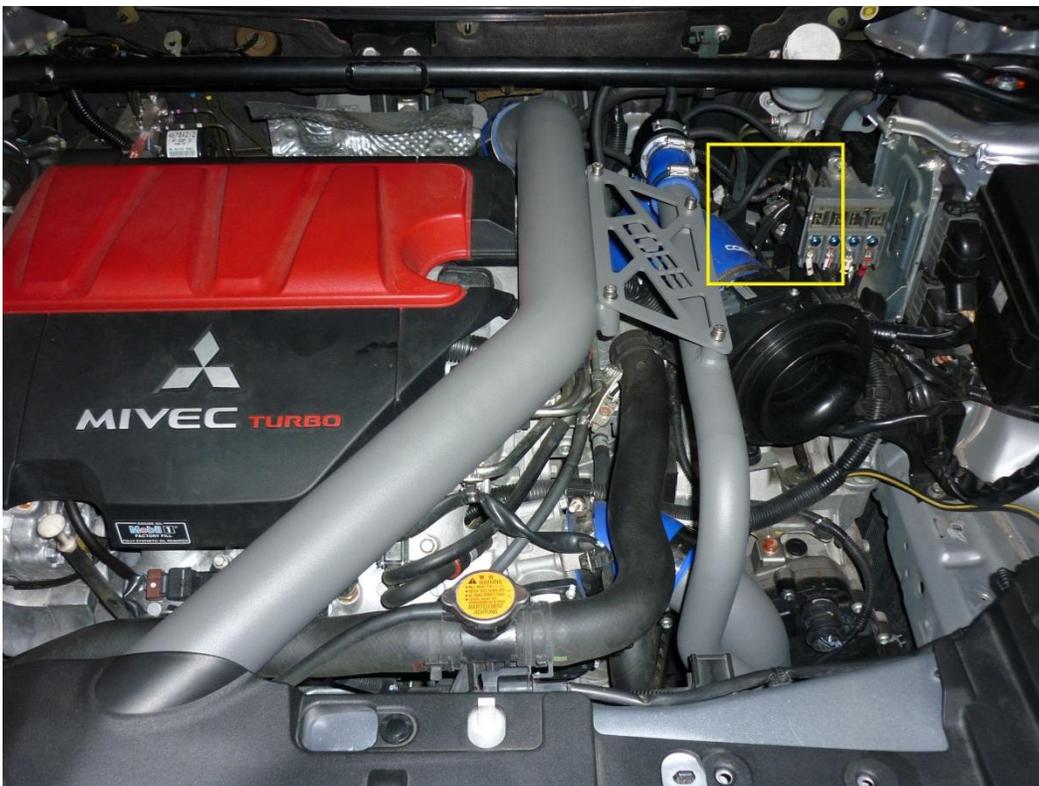
- 10mm Socket
- Flat Head Screwdriver
- Ratchet
- Needle Nose Pliers
- Scissors



**Important!** Before beginning work, make sure the engine is cool to the touch! You will be working very near/touching the turbocharger!

### Mitsubishi Evolution X

1. Locate the factory boost control solenoid near the master cylinder up towards the firewall on the driver's side of the vehicle.



2. Unplug the two connectors from the solenoids, one brown and one black, from the factory wiring harness plugs.
3. Remove the vacuum lines currently installed on both of the factory solenoids.
4. Using a 10mm socket, remove the two bolts that hold the bracket for mounting the factory solenoids.



5. Remove the top solenoid with the brown connector from the bracket and leave the lower solenoid with the black connector installed on the bracket.
6. Loop a piece of vacuum hose from one port to the other on the remaining factory solenoid, essentially blocking the ports.
7. Install your new COBB EBCS as shown in the picture below and plug it into the factory wiring harness (brown connector). Reconnect the black plugged factory solenoid back into the factory wiring harness.



8. Remove factory vacuum lines that were previously installed onto the factory boost control solenoid from the vehicle and replace them as outlined in the following steps.
9. Using the supplied 4mm vacuum hose, connect the line to the port found on the intake pipe and route it back to the COBB EBCS. Cut the vacuum line to an appropriate length and press the end of the line onto PORT 1 on the COBB solenoid.
10. Using the supplied 4mm vacuum hose, press one end over the nipple found on the wastegate and route the hose back to the COBB solenoid. Cut the vacuum line to an appropriate length and press the end of the line onto PORT 2 on the COBB solenoid.



11. Using the supplied 4mm vacuum hose, press one end over the high pressure boost source found at the compressor housing nipple and route the hose back to the COBB solenoid. Cut the vacuum line to an appropriate length and press the end of the line onto PORT 3 on the COBB solenoid.
12. Ensure all lines are neatly routed and tucked with no kinks in the line all while being fully seated onto the barbs of all the connections and secure them with the included 4" zip ties. Trim the ends of the ties with scissors.
13. Go back and tighten the 10mm nuts that secure the bracket to the vehicle.
14. Enjoy the reduced response time and greater precision of your new COBB EBCS!

**Remember!** You MUST properly tune for the installation of a 3-port EBCS. Using an off-the-shelf tune will result in overboosting!

### Ralliart

1. Locate the factory boost control solenoid near the master cylinder up towards the firewall on the driver's side of the vehicle. It will be attached to the factory airbox.



2. Unplug the connector from the solenoid.



3. Remove the vacuum lines currently installed to the factory solenoid.
4. Use a pair of pliers, unclip the MAF sensor wiring to the bracket that holds the factory solenoid.



5. Using a 10mm socket, remove the two bolts that hold the bracket for mounting the factory solenoid to the airbox.



6. Remove the solenoid from the bracket using a 10mm socket.



7. Install your new COBB EBCS as shown in the picture below.



8. Reattach the bracket with solenoid to the factory airbox using the two bolts you removed and a 10mm socket.
9. Re-clip the MAF sensor wiring to the bracket and plug the COBB EBCS into the factory wiring harness.
10. Remove the factory vacuum lines that were previously installed onto the factory boost control solenoid from the vehicle and replace them as outlined in the following steps.
11. Using the supplied 4mm vacuum hose, connect the line to the port found on the turbo inlet pipe and route it back to the COBB EBCS. Cut the vacuum line to an appropriate length and press the end of the line onto PORT 1 on the COBB solenoid.





12. Using the supplied 4mm vacuum hose, press one end over the nipple found on the wastegate and route the hose back to the COBB solenoid. Cut the vacuum line to an appropriate length and press the end of the line onto PORT 2 on the COBB solenoid.
13. Using the supplied 4mm vacuum hose, press one end over the high pressure boost source found on the upper intercooler pipe right at the compressor housing to intercooler pipe connection and route the hose back to the COBB solenoid. Cut the vacuum line to an appropriate length and press the end of the line onto PORT 3 on the COBB solenoid.



14. Ensure all lines are neatly routed and tucked with no kinks in the line all while being fully seated onto the barbs of all the connections and secure them with the included 4" zip ties. Trim the ends of the ties with scissors.
15. Enjoy the reduced response time and greater precision of your new COBB EBCS!

**Remember!** You MUST properly tune for the installation of a 3-port EBCS. Using an off-the-shelf tune will result in overboosting!



### External Wastegate Installation

1. Hook up vacuum lines as outlined below.
  - a. Port 1 is T-ed to the bottom port of the external wastegate (not on the top) and the compressor housing (boost pressure source).
  - b. Port 2 is routed to the top port of the external wastegate.
  - c. Port 3 is routed to the intake.

