



**AMS F1-I
INTAKE
MANIFOLD**

The section header is centered on the page. It consists of three lines of text: 'AMS F1-I', 'INTAKE', and 'MANIFOLD'. The text is in a large, bold, black, sans-serif font. In the background, there is a large, faded watermark of the AMS logo, including the air filter icon and the 'AMS' text, which is semi-transparent.

The goal of AMS is to provide the highest quality, best performing products available. By utilizing research and development, and rigorous testing programs AMS will never compromise the quality or performance of our products. In addition, AMS will only provide the finest customer service offering only parts and advice that are in the best interests of the customer. AMS was built on a foundation of integrity. This is who we are; this is what you can count on.

A vehicle modified by the use of performance parts may not meet the legal requirements for use on public roads. Federal and state laws prohibit the removal, modification, or rendering inoperative of any part or element of design affecting emissions or safety on motor vehicles used for transporting persons or property on public streets or highways. Use or installation of performance parts may adversely affect the drivability and reliability of your vehicle, and may also affect or eliminate your insurance coverage, factory warranty, and/or new OEM part warranty. Performance parts are sold as-is without any warranty of any type. There is no warranty stated or implied due to the stresses placed on your vehicle by performance parts and our inability to monitor their use, tuning, or modification.

These instructions are provided as a guide only as there are many variables that cannot be accounted for concerning your particular vehicle, including but not limited to model year differences, model differences, the presence of non-OEM parts, and modifications that may already be or were previously installed. A basic knowledge of automotive parts and systems is helpful but a better understanding of the parts and systems on your particular vehicle may be required.

If you have any questions or issues at any time during the installation of your AMS product(s) please call us for technical assistance. The AMS tech line can be reached at 847-709-0530 for AMS products only.

Tools Required:

Wrenches	Sockets	Specialty
10mm 12mm 14mm	10mm 12mm 14mm	NONE

Packing List:

- 1 - F1-I Intake Manifold
- 1 - Dipstick Tube
- 1 - Intake Manifold Gasket
- 2 - 65mm M8X1.25 Fuel Rail Bolts and Washers
- 2 - Fuel Rail Stand-offs
- 5 - Brass Fittings
- 2 - 16mm M6x1 Bolts for Throttle Bracket
- 1 - Intake Manifold Support Bracket
- 1 - Throttle Bracket Spacer
- 24 Inches of Water line (Only if your manifold is for a stock throttle body)
- 1 - Stock Throttle Body Gasket (Only if your manifold is for a stock throttle body)
- 2 - EVO 9 Lift Hook and Alternator Spacers
- 1 - 16mm M8x1.25 Bolt and Washer
- 1 - 16mm M10x1.25 Bolt and Washer

IMPORTANT!!!

Before installing your F1-I intake manifold inspect it thoroughly inside and out for packing materials and/or debris.

Installation Instruction:

1. Disconnect battery.
2. Remove strut tower bar.
3. Disconnect upper IC piping from throttle body.
3. Disconnect throttle cable from intake manifold and throttle body, unclip cable from brackets on valve cover and move out of the way.
4. Remove spark plug cover to get access to connectors for coil packs, o2 sensor, and crank angle sensor.
5. Disconnect wiring from all sensors and injectors and move out of way over tranny.
6. Disconnect fuel feed and return lines, remove vacuum line from fuel pressure regulator, and remove fuel rail and injectors.
7. Remove 8mm bolt holding oil dipstick tube to intake manifold and remove dipstick tube by pulling it straight up and out of the block. Remove dipstick from old tube as you will reuse it with the new tube.
8. Drain coolant (don't need to drain entire system), and disconnect coolant hoses going to throttle body from the water pipe that runs along the back of the block.
9. Remove all vacuum and emission lines going to intake manifold.
10. Remove two 10mm bolts holding intake manifold bracket to intake manifold. They are on the underside of the intake manifold plenum and are tedious to get to.
11. Remove black brackets on each end of the intake manifold head flange. You will not reuse these on the new intake manifold.
12. Remove 7 8mm bolts, 1 10mm bolt, and 2 10mm nuts and washers holding intake manifold to head. At this point you should be able to remove old intake manifold by pulling it away from head and straight up out of the car.

13. Once intake manifold is off, you can then remove the bracket from the block and disconnect any more vacuum hoses or wiring from it and remove it. You will not be reusing the old bracket.

14. Remove the two 10mm studs from head by using a stud removal tool or double nutting the stud using two 10mm nuts. This makes it easier to slide the new intake manifold on.

15. Install new oil dipstick tube into block and attach using an 6mm bolt to the bung welded to the outside of runner #1.

16. Remove throttle body from old intake manifold and attach to new manifold using supplied new gasket. We suggest the use of copper spray on the new metal gaskets for a sure seal.

17. Cut supplied black coolant hose into two 12" pieces and attach to coolant fittings on the bottom of the throttle body.

18. Reroute throttle cable along firewall and around abs module. Attach to throttle cable bracket on new intake manifold and throttle body before installing intake manifold. This is much easier than trying to reach the bolts after it's installed.

19. Install new intake manifold using new gasket and tighten all bolts.

20. Route coolant lines from throttle body to water pipe and tighten.

21. Install new intake manifold bracket from intake to block using supplied 8 and 10mm bolts and washers. This can be easier to get to from bottom of car.

22. Install brass NPT fittings into back of intake manifold using teflon tape or paste to properly seal threads.

23. Run new vacuum lines from the F1-I to your FPR solenoid, evap solenoid, BOV, boost controller, boost gauge, etc. Vacuum routing will vary from car to car. You may choose to eliminate the FPR and evap solenoids at this time though in doing so you will throw a CEL unless your car is equipped with a stand-alone EMS.

24. Reinstall fuel rail opposite of removal and reattach all wiring to injectors, coil packs, o2 sensor and crank angle sensor.

25. Reinstall upper IC piping. You will probably have to modify the piping due to the different in placement of the throttle body with the new manifold.

26. If you are running a ford 5.0L style throttle body, you will have to wire in new TPS plug into existing wiring using the diagram below.

<u>TPS Harness Color</u>	<u>Stock</u>
<u>Color</u>	
Black	Black
Red	Grey
Green	Green

27. Reinstall strut tower bar, refill and bleed cooling system, and reconnect battery.

28. We highly suggest doing a boost leak test to ensure there are no leaks.

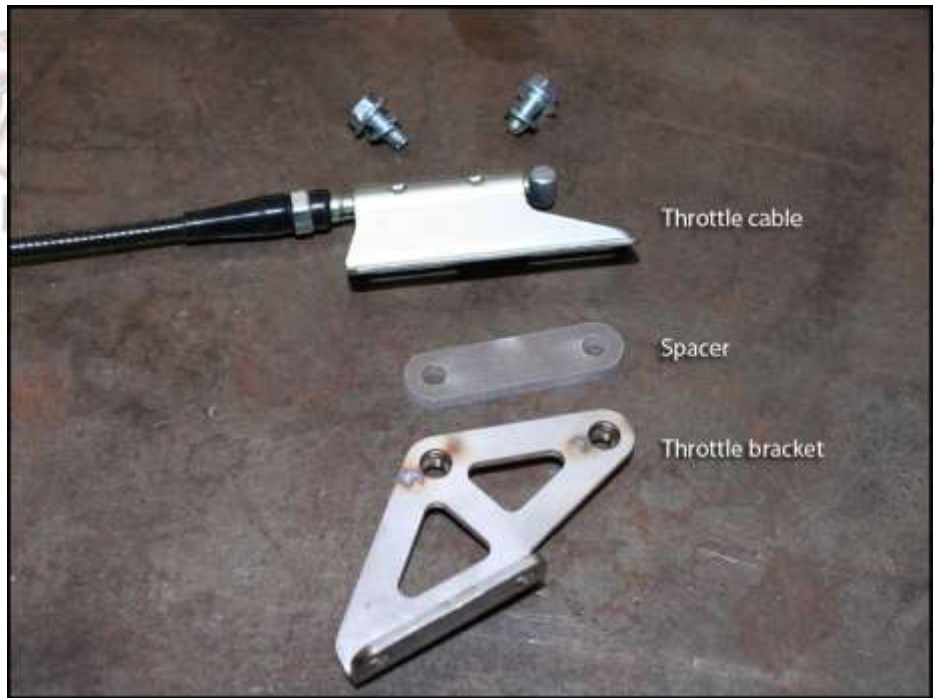
*****NOTE*****

If you are running a stock ECU you will need to drill a 3/8 hole in the center of the machined hole to run the stock map sensor. **You must wash out debris from drilling.**

*****NOTE*****

If you are using 75mm throttle body make sure to install stop under throttle pedal before driving. You can utilize the stud under the pedal to make this, otherwise you may break throttle shaft.

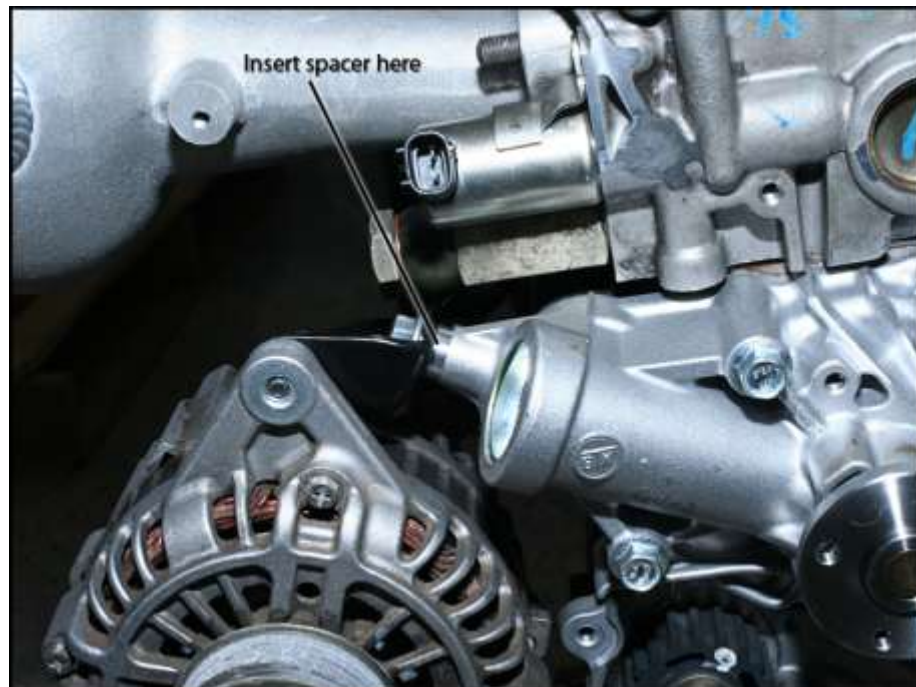






***NOTE ***

If you have an Evo 9 you will need to install the supplied spacers in order for the engine lift bracket and the alternator bracket to fit correctly. (see following pictures)



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NOTE

There are two fuel rail stand-offs. One with a machined edge and one that is completely round. The un-machined fuel rail stand-off is to be used on the driver's side. The machined fuel rail stand-off is to be installed on the passenger side with the machined edge facing away from the F1-I.

