

# PLEASE READ CAREFULLY BEFORE PROCEEDING WITH INSTALL

# **Product Disclaimer**

• There is no warranty stated or implied due to the unusual stress placed on competition product(s) and/or the inability to monitor their modification, installation, and use. The entire risk of quality, performance, and defect is with the purchaser and not the manufacturer, distributor, or retailer. Should any product(s) prove to be defective for any reason under any circumstance, the purchaser and not the manufacturer, distributor, or retailer will assume financial responsibility for any consequential damages, repairs/service, and any other liability.

• A vehicle modified by the use of competition product(s) for use on public roadways may not meet local, state, or federal regulations. Installation and use of this competition product(s) may also affect vehicle insurance coverage. It is the purchaser's responsibility to meet and comply with regulations and policies before operating vehicle on public roadways.

• Group-A Autosports, Inc., recommends the following performance products to maximize power gains:

- a. Header, high-flow exhaust system
- b. Cold-air intake system
- c. Fuel pressure regulator
- d. Camshafts/adjustable cam gears
- e. ECU upgrade (For OBD II equipped vehicles)

• Return of product(s) will be accepted ONLY if product(s) is in resellable condition. All accepted returns will be subjected to a 20% restocking fee. ABSOLUTELY NO RETURNS ON USED PRODUCTS. For more information on return policy, please call 951-808-9888.

# Part # 307-05-0300 Racing Intake Manifold - 1992-2001 Honda Prelude (H22A) \*\*\*\*\*\*FOR OFF ROAD USE ONLY\*\*\*\*\*\*\* THIS INTAKE MANIFOLD IS NOT EMISSIONS COMPLIANT.

Parts list (Please make sure all parts are included in the kit before proceeding with installation.)

- (1) Skunk2 intake manifold
   (1) EGR valve bracket
   (1) IAC valve bracket
   (2) IAC air bypass brackets
   (1) Throttle cable bracket
   (4) hose clamps
   (4) 12mm flange nuts
- (2) 5/16" hose 22" length
  (1) 5/16" hose 10" length
  (1) 1/4" hose 10" length
  (1) 5/32" hose 30" length
  (2) 12mm bolts 5/8" length
  (2) 12mm bolts 3/4" length
  (4) washers

\*\*\*\*\* For optimum performance, we recommend replacing the intake manifold gasket and the throttle body gasket.\*\*\*\*

#### INSTALLATION - Please refer to factory service manual if available. It is recommended that this product be installed by an experienced automotive mechanic / technician

Note: Before installation, thoroughly flush manifold with water and let completely dry. Check condition of all hoses, gaskets and O-rings. Replace as needed. Do not smoke during the work. Keep open flames away from work area.

#### Removal of factory intake manifold:

- 1. Disconnect the negative terminal from the battery.
- 2. Drain the engine coolant.
- 3. Relieve fuel pressure by loosening the banjo bolt on top of the fuel filter.
- 4. Remove the intake pipe.
- 5. Remove the fuel, brake booster, and evaporative emissions hoses.
- 6. Remove the throttle cable from the throttle body.
- 7. Remove the throttle cable bracket from the fire wall. This bracket will not be used with the Skunk2 manifold.
- 8. Disconnect the four fuel injector connectors.
- 9. Disconnect the intake air temperature (IAT) sensor.
- 10. Disconnect the idle air control (IAC) valve.
- 11. Disconnect the exhaust gas recirculation valve (EGR) valve lift sensor.
- 12. Disconnect the ignition coil and connector.
- 13. Remove the water bypass hoses from the intake manifold assembly.
- 14. Remove the two 12mm bolts, then remove the lower bracket.
- 15. Remove the nine 12mm nuts from the intake manifold and remove the intake manifold.

#### Assembly continued

11. On the transmission side of the fuel rail, install the Skunk2 IAC valve bracket with the 10mm nuts (diagram 5).

- **12.** Install the water bypass hoses to the IAC valve, then install the IAC valve on to the Skunk2 IAC bracket with the factory IAC valve bolts and the supplied Skunk2 12mm nuts (diagram 6).
- 13. Diagram 7 shows the parts used to secure the IAC valve to the Skunk2 IAC valve bracket.
- 14. On the other IAC air bypass valve bracket, install the 22" length 5/16" hoses with the hose clamps facing the bracket (dia. 8).
- 15. Install the IAC valve bracket to the back of the Skunk2 intake manifold with the supplied 12mm bolts.
- 16. Befrore installing the throttle body, bend the fuel line (going to the fuel filter) downwards (diagram 9).
- 17. Remove the throttle body studs from the factory intake manifold and install them on to the Skunk2 intake manifold.

18. Install the new factory throttle body gasket, throttle body, and the water bypass hose using the 10" length 5/16" hose (dia. 10)

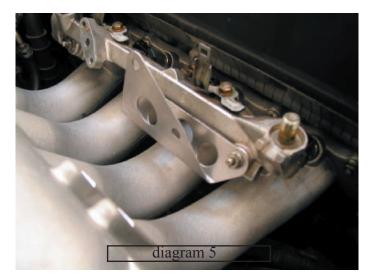






diagram 7

diagram 6



diagram 8



diagram 9

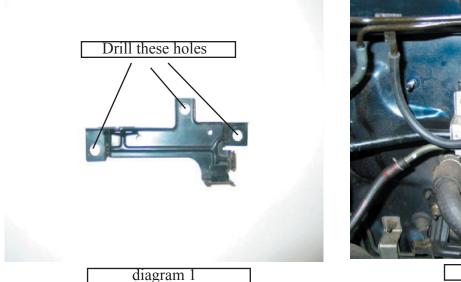


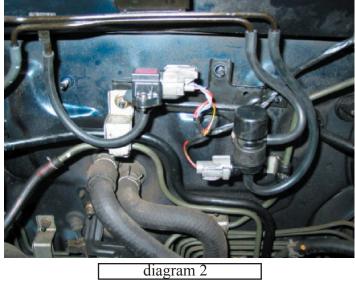
diagram 10

### Assembly

- 1. For 92-95 Preludes only. If installing the Skunk2 manifold onto a 96-00 Prelude, proceed to step 2. Remove the MAP sensor bracket. Using a 3/8" drill bit, redrill the three existing holes (diagram 1). Relocate the MAP sensor bracket to the lower right stud which holds the fuel line bracket, then fit the 5/32" vacuum hoses (diagram 2).
- 2. Remove the brake booster bracket. Bend the tab upwards then cut the tab off (diagram 3). Then install the brake booster bracket upside down by moving it to the right where the clutch line bracket is located (diagram 4).
- 3. Install the intake air temperature (IAT) sensor on the Skunk2 manifold.
- 4. Install the new factory intake manifold gasket.
- 5. Install the Skunk2 intake manifold onto the engine.
- 6. Insert the fuel injectors into the fuel rail.
- 7. Coat the ring spacers and seal rings with clean engine oil and press them into the Skunk2 intake manifold.
- 8. Remove the three studs from the factory intake manifold and install them onto the Skunk2 intake manifold.
- 9. Install the three fuel rail spacers.
- **10.** Install the fuel injectors and fuel rail assembly onto the Skunk2 intake manifold.

# **Reference Diagrams**





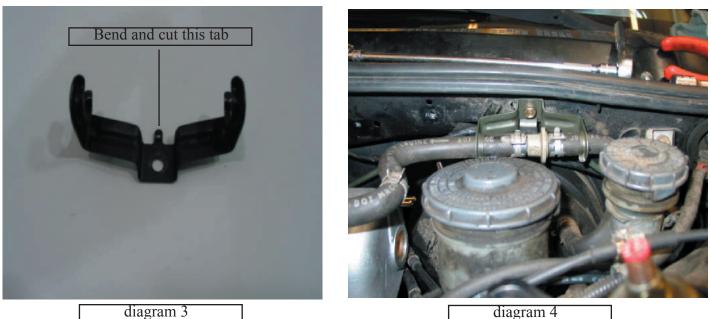


diagram 4

# Assembly continued

- **19.** Install the 5/16" hoses to the IAC valve bracket with the supplied hose clamps. Installing the clamps inward for throttle cable clearance is recommended (diagram 11).
- 20. Install the fuel line and fuel regulator.
- 21. For intake air temperature (IAT) sensor clearance, bend the front brake line back 3/4" (diagram 12).
- 22. Install the four fuel injector connectors, the intake air temperature (IAT) sensor, and the idle air control (IAC) valve.
- 23. Install the MAP sensor and emissions hoses (diagram 13).
- 24. Remove the three 10mm bolts from the ignition coil and install the Skunk2 EGR bracket between the coil and the coil bracket (diagram 14).
- 25. Install the coil to its stock location then connect the electrical connector and the coil wire (diagram 15).
- 26. Install the EGR valve using the original 12mm nuts and the supplied bolts.
- **27.** Connect the 3-pin connector and vacuum hose to the EGR valve.
- **28.** Install the intake pipe and emissions hose.
- **29.** Add coolant, start car and check for leaks.

### \*\*\*NOTE: If the intake pipe makes a deep base noise, flip the IAC valve hoses.



diagram 11



diagram 12



diagram 13



diagram 15

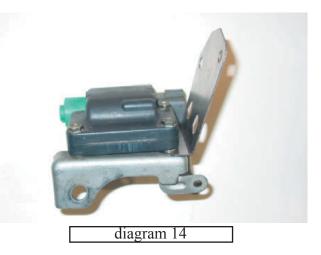




diagram 16