

Accord V6 Supercharger Installation Instructions

4717 GOLDEN FOOTHILL BLVD • EL DORADO HILLS, CA 95762 • 916.933.1080 • FAX 916.939.9196 • www.comptechusa.com • M-F 8:00 AM-5:00 PM PST

INS-094 VERSION: 10.2

Thank you for purchasing the Comptech Supercharger kit for the 1998-2002 Honda Accord V6. All components have been designed and manufactured utilizing the latest in technology and materials.

Please take a moment to read this instruction manual and warranty information page thoroughly before starting any work. Comptech recommends the use of a Genuine 1998-2002 Honda Accord Service Manual and the Genuine 1998-2002 Honda Accord V6 Supplemental Service Manual to supplement these instructions.

All Comptech products are intended to be installed by a professional installer. Many stock parts are reused during installation. Do not damage or discard any pieces during disassembly or installation. We recommend marking any hose or wire before disconnecting to avoid confusion during reassembly.

Remember to always use jackstands to support the vehicle when a car lift is not available. Always work in a clean environment and use the appropriate safety equipment and tools to avoid any potential damage or injuries.

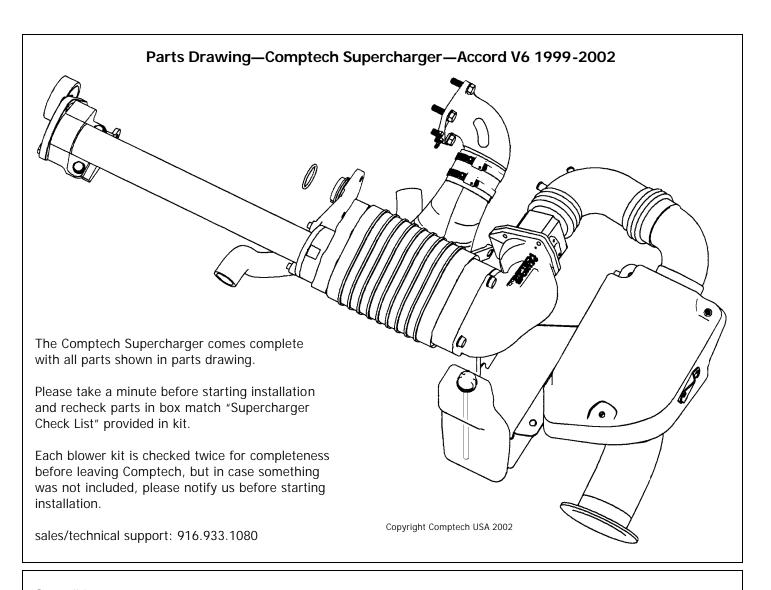
**Before starting, Comptech recommends locating the radio code for your particular vehicle and write down the frequencies for the radio's preset buttons, so that the radio can be reactivated and restored after completion of this installation.

Comptech highly recommends the use of the Comptech Transmission Cooler Kit and Redline High Temp ATF fluids in your transmission for best performance & longevity.

Additional items needed before starting installation:

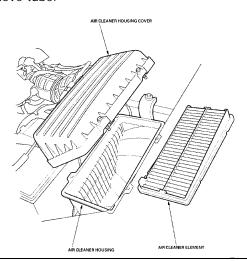
- Torque wrench
- · Sanding disc or cut-off wheel
- Size 51R battery

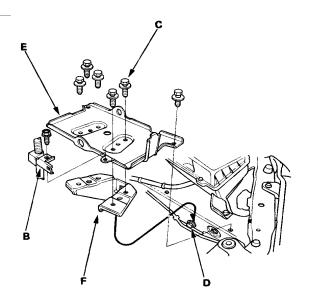




Step #1

- Disconnect Negative battery terminal
- Drain coolant from the radiator
- Remove plastic engine covers
- Disconnect Positive battery cable, battery tie-down, battery and battery tray.
- Remove stock airbox lid, filter & airbox bottom.
- Label & disconnect hoses from air inlet tube. Loosen clamp and remove tube.

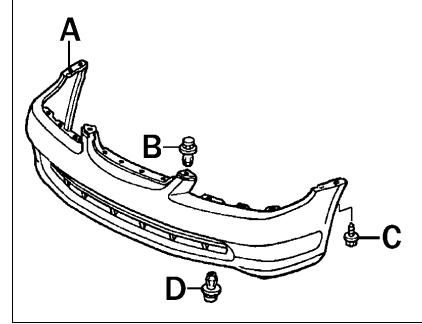


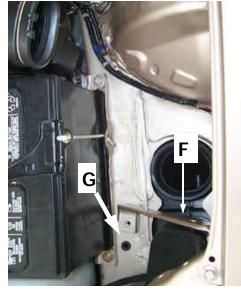


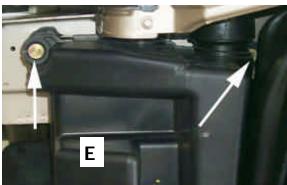
Remove wiring harness from clip (B). Remove 6 mounting bolts (C), and remove the mounting bolt (D), then remove the battery base (E) and battery base bracket (F).

Step #2- Bumper / Lower air box

- Remove front bumper cover (A), (2) screws at top corners in wheel wells (C), (4) snap clips along grill top (B), (4) snap clips underneath (D) & (2) screws at the back of bumper underneath near wheels.
- Slide cover forward from clips under headlights to remove cover & access stock lower air-box.
- Remove (2) bolts holding air-box to sub-frame (E).
- Lower & remove stock air-box
- Remove stock bracket in engine bay (F).
- Remove small rubber grommet in sub-frame next to battery (G).







Step # 3- Radiator hose

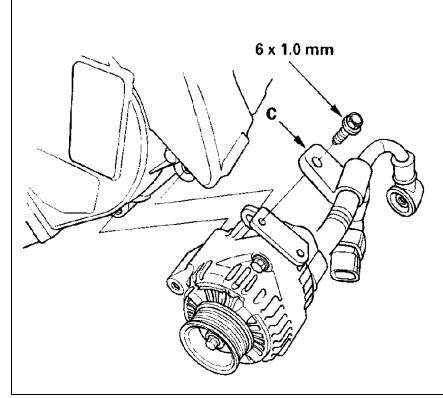
- Remove stock upper radiator hose from engine & radiator. Remove spring clamps & reuse on new silicon hose in kit. (Replacement hoses are available **exclusively** through Comptech part# 355-155)
- Replace with new silicon hose in place of stock rubber hose.
- Remove coolant bypass hose from throttle body. Do not remove manifold side until throttle body has been relocated. Mark each coolant hose as they are disconnected. **Do not cross hoses during reassembly.**
- Remove engine breather hose from valve cover.

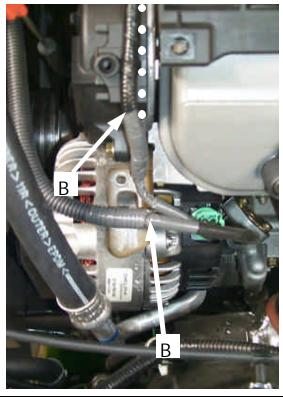




Step #4– Alternator harness

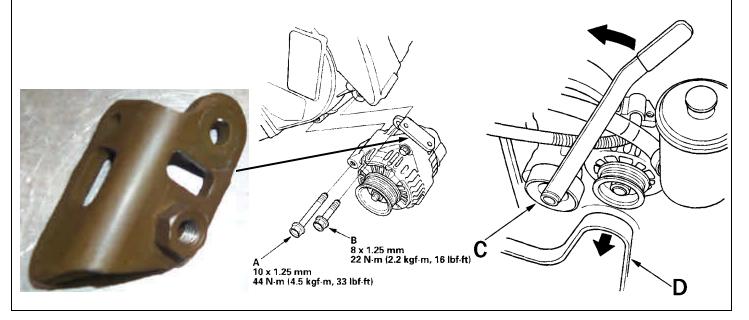
- Remove bolt holding plastic cover (c) over wiring harness. Open snap clips on plastic cover & remove from wire harness.
- These wires (B) will be rerouted along groove between plastic mount & cover.





Step #5– Preparing alternator

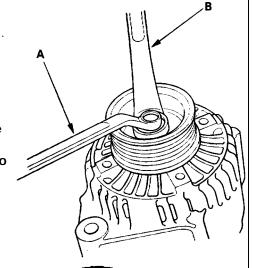
- Lift power steering reservoir up out of bracket on sub-frame rail and position out away from the belt assemblies. Remove stock power steering reservoir bracket.
- Loosen stock alternator belt tensioner (C) and remove stock alternator belt (D).
- Remove lower bolt (A) on alternator then remove upper bolt (B).
- Remove bracket attached to top of alternator. These bolts will be reused.



Step #6- Alternator pulley replacement

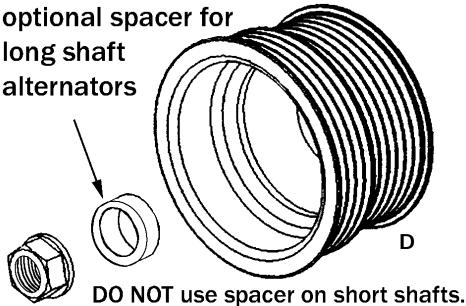
- With alternator pulley facing up remove stock alternator pulley with a
 22mm & 10mm wrench (an impact gun may need to be used for removal).
- Install new alternator pulley (See Note*) and tighten nut to 81.7 ft-lbs torque.

* Note: Honda uses two types of alternators (Delphi & Denso) on the Accord V6. These have different shaft lengths. The drive pulley supplied in your kit is designed to fit the shorter of the two shafts; there is an optional spacer included in each kit that may need to be used for the longer shafts. This spacer will go between new pulley & nut to ensure proper thread engagement & zero slop on drive pulley for alternator models with longer shaft. Test fit pulley on your alternator, and run nut all the way down, if pulley is not secured tight to alternator, you will need to remove nut and install optional spacer, then reinstall nut (SEE DIAGRAM D)





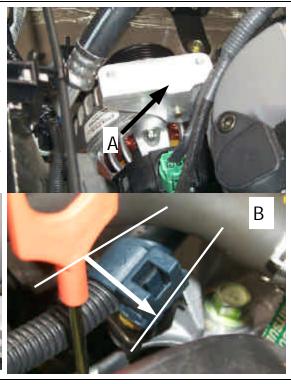




Step #7- Alternator

- Reinstall alternator in reverse order.
- Install new steel alternator/blower bracket on top of alternator using factory hardware (A). Torque to specs in Step #5.
- Replace alternator belt in stock location on inner pulley (see diagram step #5).
- Twist the loom mounting bracket toward engine to properly route wire loom (B).
- Carefully route alternator wire loom (C), along front of cam cover. (see Step #4) Keep it clear from all belts & pulleys.
- Remove oil dip stick and bend tube slightly away from engine so that, with oil dipstick in place, dipstick is on outside of wiring harness (D).





Step #8- Blower brace

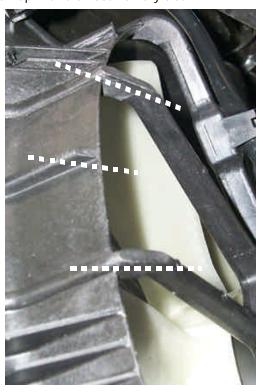
- Locate upper transmission lift bracket (A).
- Remove front stock bolt & install blower support with slotted side down & offset towards engine (B).
 Torque this bolt after installing blower and aligning

mount. (See Step #13)



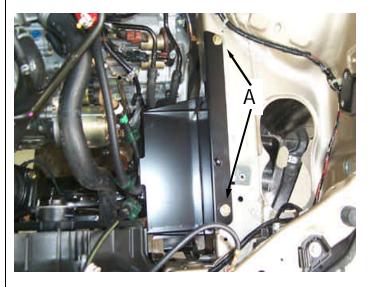
Step #9 - Fan shroud

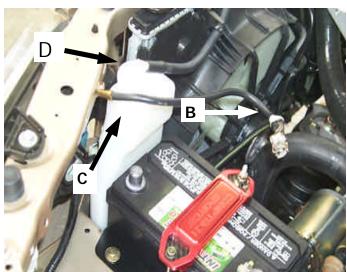
- Fan shroud requires modifications to keep from rubbing against blower under engine movement.
- Using a sanding disc or cut-off wheel, remove round corner portion of (2) main support ribs and small top rib. Sand these ribs to about a 45° angle, trim off any excess plastic with a razor knife and clean up with a smooth emery cloth.



Step #10- Battery / Overflow

- Mount battery tray using stock tray holes and bolts (A).
- Lower new "51R" battery (not supplied in kit) into tray with posts offset to inner frame rail.
- Attach Comptech battery clamp using supplied long bolt on right & long stock "J" bolt on left. Connect positive terminal only to battery.
- DO NOT CONNECT NEGATIVE TERMINAL UNTIL INSTALLATION IS COMPLETE! (B)
- Install Comptech overflow bottle on front of battery tray. Refill with appropriate coolant (C).
- Attach long siphon hose to bottom of overflow bottle lid and replace on bottle (D).





Step #11 - Blower Bracket

 Locate EGR valve, thoroughly clean area around valve and cam cover plate beside EGR valve. Remove EGR valve and cover opening.

 Remove cam cover plate beside EGR valve. This will expose camshaft, some oil may leak out, wipe with clean rag.

 Lubricate O-ring (A) on blower mounting bracket with clean motor oil, carefully install plate on cylinder head. Do not force or pinch Oring, plate must smoothly mount flush to head. Install new hardware (B) from kit do not torque yet.

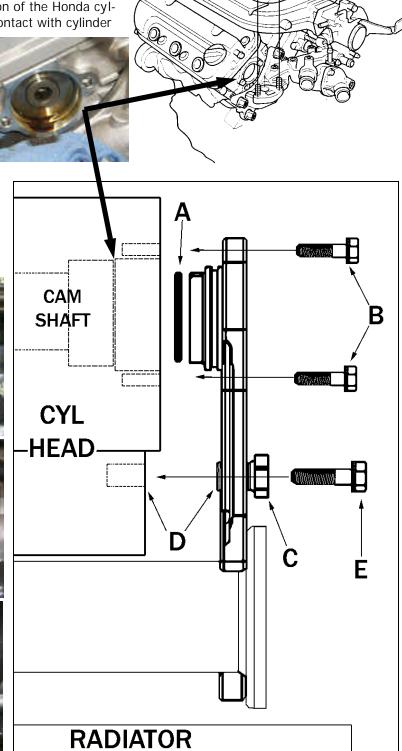
Blower mount plate has a threaded spacer (C) installed in it to make up for machining differences in production of the Honda cylinder head. Adjust this spacer to obtain light contact with cylinder

head. (see D) DO NOT tighten spacer. Make sure there is no pressure against the bracket to distort plate or push it out, this spacer is only designed to take up inconsistencies in factory head.

 While holding spacer (C) with a 19mm wrench, insert supplied 10mm bolt (E) into hole and torque bolt to 28ft-lbs.

Torque cam seal bolts (B) to 15ft/lbs.

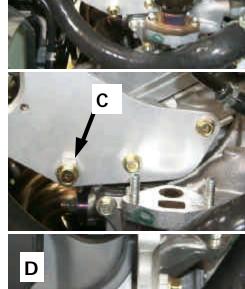
• Replace EGR valve, using supplied gasket, and torque to 15ft/lbs. Replace electrical plug.



GASKET

EXHAUST GAS RECIRCULATION

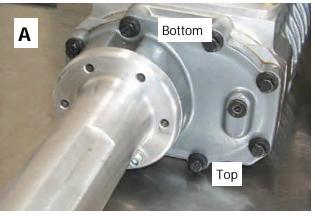
(EGR) VALVE

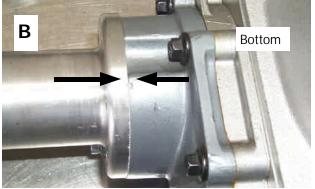


Step #12 - Blower preparation

- Blower has (6) bolts around input shaft. Lower (4) bolt will need to be removed* (A). These (4) bolt holes will be used to attach mount to blower with the (4) longer socket bolts and washers provided in kit (C).
- Photos (A&B) show blower upside down for clarity.
- *Note: DO NOT remove (2) upper (top) bolts on drive shaft & housing. Bolts around drive shaft for blower also maintain seal (B) around blower's prefilled internal oil reservoir, if this seal is broken during installation, the blower unit will need to be returned for NON-WARRANTABLE servicing to properly seal the blower.

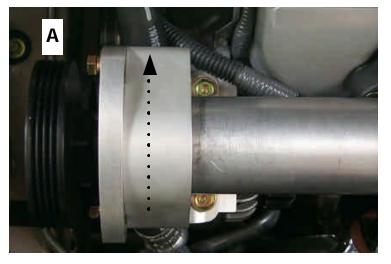


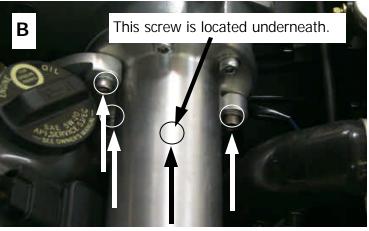




Step #13 - Blower installation

- Lower blower unit into position, lining up blower with mounting bracket on head.
- DO NOT flex shaft & blower unit, this will break the seal (Step #12-B) around blower's prefilled internal oil reservoir. If this seal is broken, blower unit will need to be returned for a NON-WARRANTABLE repair to reseal blower oil reservoir.
- On pulley side of blower shaft, align blower outer bracket with bracket on alternator. A/C hose will route between bracket and pulley (A). Mounting bracket should be on right-hand side of A/C line & tensioner arm should be on left-hand side of A/C line.
- DO NOT force A/C line to bend, this may cause hose to leak refrigerant.
- Install (2) bolts holding blower mount to alternator bracket to align shaft with rear bracket. Do not tighten.
- Install (4) long bolts from kit in main blower bracket.
- Torque bracket on alternator to 15ft/lbs
- Install upper bolt in support bracket (step #9) under blower. Torque both ends to 15ft/lbs (see Step #5)
- Once everything is aligned properly, torque (4) allen head bolts (B) to 10ft/lbs and torque (2) bolts on blower outer bracket (A) to 15ft/lbs.



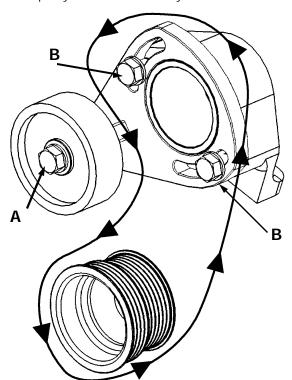


Step #14 - Blower belt installation

- Loosen blower belt idler pulley and install blower drive belt.
 Idler pulley will tension on back (smooth) side of drive belt.
 (See Diagram)
- Idler pulley mounting bolt (A) is a LEFT-HAND THREAD, this will allow using a wrench to tension idler. This bolt is threaded into aluminum, DO NOT OVERTORQUE THIS BOLT. Belt tension can be set with moderate pressure on this bolt. Once belt tension is set, torque slider bolts (B) to 15ft-lbs.



Drive pulley not shown for clarity. **DO NOT REMOVE!**



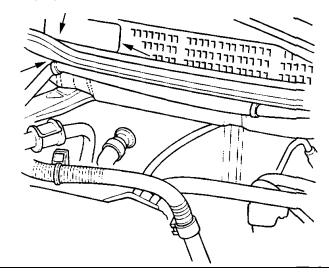
Step # 15 - P/S reservoir bracket

- Install new power steering fluid reservoir bracket supplied in kit to original mounting point
- Slide reservoir onto new bracket.
- Check all lines for clearance on pulleys and belts.



Step #16 - Comptech FPR mounting

- Locate & remove access cover, centered on cowl vent by windshield wiper arms. Locate hose routing clip inside cowl and remove. Move vacuum hose back.
- Mount Comptech FPR using this hole and supplied bolt with fuel lines on right and preload adjuster screw on left.
- Comptech FUEL Pressure Regulator comes pre-set for Accord V6 Supercharger application.
- <u>DO NOT ATTEMPT TO ADJUST</u>. This will VOID any WARRANTY and may lead to major engine problems.



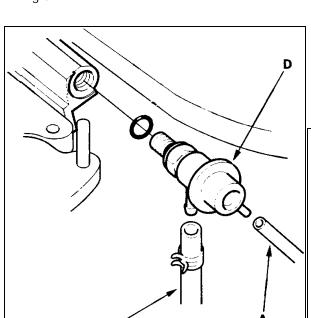


Step #17— Model year variances

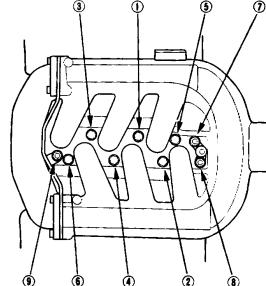
1998-1999 ONLY

Intake manifold **NEEDS** to be removed.

- Remove intake manifold and cover all intake ports.
- Wrap a rag around stock fuel pressure regulator (D) and unscrew 1/4 turn with a wrench to relieve system pressure.
- Label and disconnect vacuum line (A) and fuel return line (B) from stock unit, then unscrew stock FPR.
- Install –6 AN red aluminum fitting with crush washer in place of FPR.
- Connect supplied steel braided hose to red fitting. This line will connect to "IN" on Comptech FPR.
- Reinstall intake manifold, and torque in order specified in diagram.

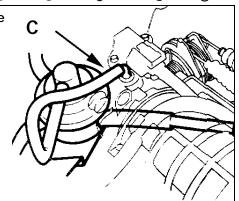


Specified torque: 8 x 1.25 mm 22 N·m (2.2 kgf·m, 16 lbf·ft)



1998-1999 Vacuum note

1998-1999 ONLY route supplied replacement vacuum line (C)
from Intake Air Bypass
Control Valve to relocated throttle body
(perform during Step
#21).



2000-2002 ONLY

Intake manifold **DOES NOT** need to be removed.

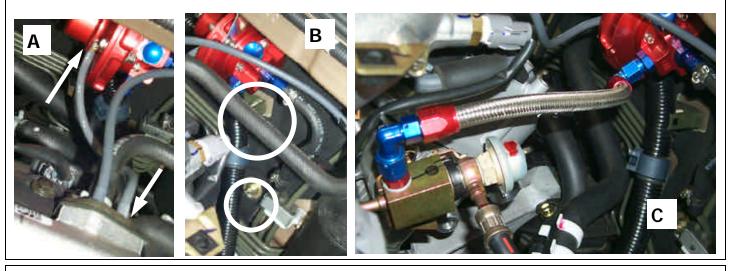
- Label and remove vacuum line from stock fuel pressure regulator.
- Wrap a rag around stock fuel pressure regulator and unscrew 1/4 turn with a wrench to relieve system pressure.
- Label and remove upper fuel return line and unscrew stock fuel pressure regulator.
- Install red aluminum –6 AN fitting with crush washer in place of FPR.
- Connect supplied steel braided hose to red fitting. This line will connect to "IN" on Comptech FPR.





Step #18 - FPR hose routing

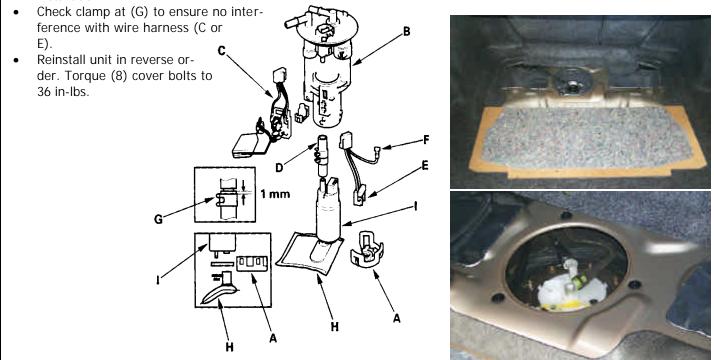
- Route vacuum line from intake manifold to brass vacuum fitting on Comptech FPR (A).
- Use provided –6 AN fitting with rubber hose slip fit to attach outlet of FPR to hard return line. Use provided hose clamps to secure rubber fuel hose to AN adapter and hard line (B).
- Attach stainless steel braided line to "IN" on Comptech FPR (C).



Step #19 - Installing fuel pump

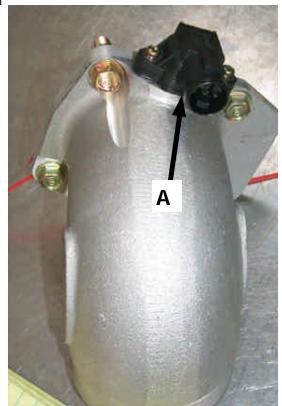
CAUTION! Fuel pump will have fuel in it, make sure to have a tray to allow the pump & sending unit to drain in. DO NOT perform installation around flame, spark or any ignition source.

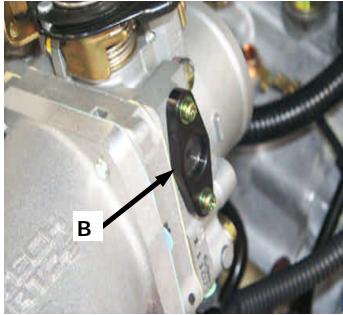
- Open trunk & fold back rear of floor carpet to access fuel tank dust cover.
- Remove (3) screws holding dust cover, disconnect plug and hoses, then remove (8) bolts holding pump unit.
- Remove entire pump / gauge sending unit from tank (B) and place in a tray to drain. Installation may need to be done in tray to contain draining fuel.
- Remove bracket (A), loosen clamps on hose (D), and disconnect wire plug (E), then remove stock pump (I). Gauge sending unit (C) only shown for clarity and does not need to be removed.
- Remove (H) suction filter and replace onto new pump (I) (make sure connection is secure).
- Reassemble in reverse order, making sure to check all connections (C, D, E, F, H & I) to the housing (B) before installation.

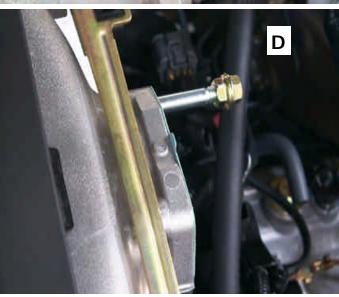


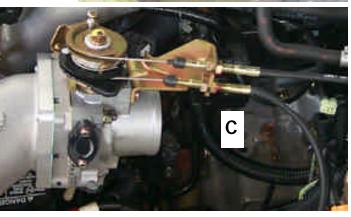
Step #20 - Throttle body

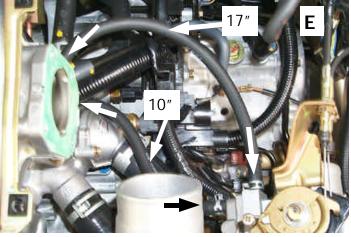
- Locate MAP sensor on side of throttle body, label and unplug sensor. Transfer sensor, screws and o-ring to blower intake elbow (A). Install block off plate (B) with o-ring and screws supplied.
- Prepare to transfer throttle body assembly from stock intake to blower intake using stock hardware and supplied gasket. Remove (2) upper studs from stock manifold (D) and install _____
 - studs on blower intake in top (2) holes.
- Install supplied throttle body gaskets onto intake manifold and blower inlet manifold.
- Carefully rotate throttle body so cables are on top (C). If hoses or wires restrict movement review instructions to identify what they are and label and remove to complete transfer. Replace and torque stock hardware to 14ft/lbs.
- Reroute both coolant lines to throttle body with new 10" and 17" lines (E). 10" line connects to horizontal line out of thermostat housing then to side (previously bottom) of throttle body, 17" line connects to vertical line out of thermostat housing then to front face of throttle body (facing firewall).





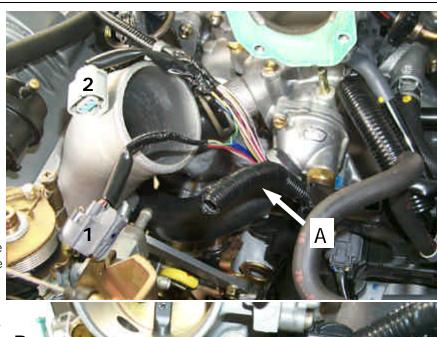


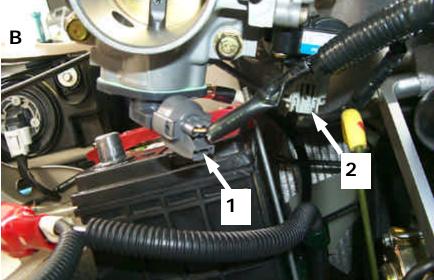




Step # 21 - Wire harness modification

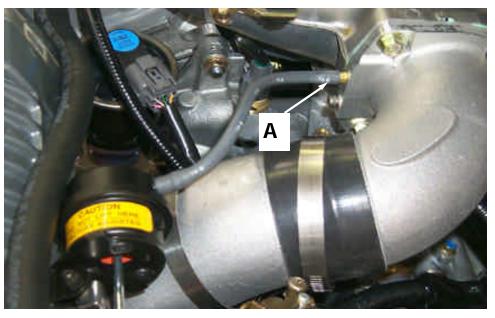
- MAP sensor / TP sensor (A-1) / IAC valve (A-2) wire loom will need to be modified.
- *Note: Use caution when trimming corrugated loom (A). Sharp knives or razor blades can cut into wires, potentially causing electrical problems in future.
- Cut electrical tape wrapped around corrugated loom and separate appropriate wires until they are long enough to reach TPS (B-1), IACV (B-2) and MAP sensors. Route TPS (B-1)/IACV (B-2) wires to plug under throttle body. Route MAP sensor wire to where blower intake elbow (Step #20-A and Step #22) and MAP sensor will be installed.
- Using a good electrical tape, wrap the exposed wire and loom. Connect sensor plugs to appropriate sensors.
- 1998-1999 models ONLY See step #17 for vacuum line note.





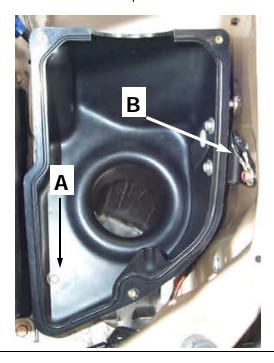
Step #22 - Blower manifold installation

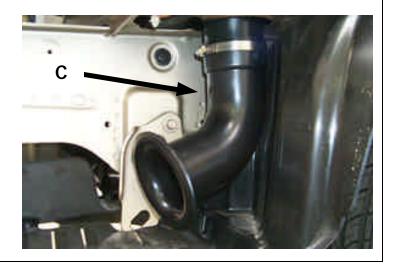
- Inspect all intake openings and tubes for any debris or objects. Install only clean inspected parts.
- Slide silicon coupler and clamps on intake elbow. Bolt cast elbow onto intake manifold using supplied hardware, torque to 14ft/lbs.
- Slide hose equally over both housings and tighten clamps.
- Connect vacuum hose from blower bypass valve to inlet fitting (A).



Step # 23- Icebox installation

- Locate ground wire on fender-well in air box area, remove bolt. Remove clips holding wire loom along fender to relocate wire for Icebox clearance.
- Remove 3-hole mounting bracket from Icebox and bolt in place with ground wire using ground bolt. Leave loose
 until Icebox is attached.
- Place Icebox in fenderwell, making sure it is slid over as closely as possible to the battery tray edge. Align hole in bottom to hole in sub-frame and start provided 8 mm bolt (A).
- Align box with side bracket (B) & insert (2) 8 mm bolts. Tighten all hardware.
- From inside lower fender-well, slide air horn over airbox bottom inlet. Orient air inlet so open end faces front of car. Tighten band clamp (C).
- Reinstall front bumper cover.





Step # 24 - Filter installation

- Prepare filter by coating it with supplied filter oil (For future service of filter order oil and filter cleaner: Comptech part# Oil 620-002 Cleaner 620-003)
- Assemble filter, adaptor elbow, large bellows, extension elbow, small bellows and clamps (loosely clamp).
- Place small end of bellows over throttle body inlet.
- Place filter in Icebox with alignment post in alignment groove (A).
- Confirm alignment of all pieces and clearance of large bellows to ABS sensor plug on shock tower (B). Tighten all band clamps and recheck alignment.
- Install Icebox lid.
- Route cruise control cable along side of Icebox using supplied clip.





Step # 25 - Recheck lines

- Connect breather hose and vacuum line to inlet elbow barb before throttle body.
- Check connection on vacuum line (A) going to throttle body for clearance on throttle cables.



Step # 26 - Trim engine covers

- Trim engine plastics to clear blower unit.
- Below are some examples of where to trim, but you will have to test fit yours to ensure proper fitment.
- We recommend the use of a cut off wheel or razor knife to trim away main portion of plastics, then trim away finer portions with a razor knife, sanding disc and emery cloth.
- Take care not to damage surface finish of plastics with sand paper or emery cloth.
- Reinstall plastics onto engine. Make sure it clears all portions of blower.









Step # 27—Installing ESM unit

• Please refer to the instructions included with the ESM unit for wiring & installation.

Step# 28 Final

- Refill radiator.
- COOLING SYSTEM MUST BE PROPERLY BLED AS DIRECTED IN SERVICE MANUAL,
- FAILURE TO DO SO COULD RESULT IN ENGINE DAMAGE.
- Recheck all connections, fittings, fluids, plugs and wires. Wipe down all parts.
- Replace negative battery terminal.
- Turn ignition key on but <u>do not start engine.</u> This will allow the fuel pump to pressurize the system. Check all fuel lines for leaks.
- Start vehicle, check for any leaks, squeaks or rubbing of components.
- After car has cooled recheck coolant level, belt tension / alignment and leaks.



Comptech Warranty

All products manufactured by Comptech USA are warranted against defects in materials and workmanship for a period of two years from date of original purchase. This warranty applies only to the original retail purchaser and is not transferable. This warranty is intended to cover Comptech Sport products when they are used in the manner for which they were originally designed. This limited warranty shall be void on all products found to have been used in racing or off-road applications, of any nature whatsoever, and on all products that show evidence of abuse, lack of maintenance, improper installation, misapplication, alteration in any way whatsoever from their original design or negligence in the use of Comptech Sport products by the original retail purchaser or by any agent of the original purchaser. The warranty specifically excludes, but is not limited to; brake pad material, brake rotors, clutch friction surfaces, belts, normal maintenance items, and those items designated as a racing part. This warranty applies only to products made by Comptech USA, and does not include claims for labor or inconvenience. This warranty does not cover consequential damages claimed as a result of the failure or use of a Comptech product. Other products distributed by Comptech USA are covered by the terms of that manufacturer's warranty.