



Installation Instructions

SUPERCHARGER

Civic CX, DX, LX '96-98'

Part # 989-210

C.A.R.B. E.O. D-344-8

440 Rutherford St. P.O. Box 847 Goleta, CA 93116
1-888-888-4079 • FAX 805-692-2523 • www.jacksonracing.com

Before starting, be sure the vehicle has 92 or better octane fuel in it. If you are located in high altitude areas you can run 90 octane. But, do not try and run the vehicle at full throttle with a supercharger unless the fuel tank is filled with good fuel. Failure to heed this warning can result in severe engine damage.

Special Note: Because there are so many different makes, models, and countries that we sell to, we are unable to supply a new intake gasket or throttle body gasket with your kit. We recommend buying new ones from your local Honda dealer before starting installation. If you do not have a shop manual, buy one now! It is good to have one for any repairs now and in the future.

Tools Needed: 8, 10, 12, 14, 17, and 22mm sockets and wrenches and an 11mm (7/16 inch) socket or wrench, 8mm Allen wrench, Phillips and straight blade screwdrivers, vice grip pliers, and a timing light. You will also need an impact wrench to remove the crankshaft pulley. You will need a drill motor and a 5/8 drill or UNI-Bit, or rat tail file to create a 5/8" hole in the plastic air

box for the air temperature sensor. You will also need a 21/64 drill for the vent fitting in the air box for the valve cover vent hose. Most of these tools are available at your local hardware or auto parts store.

IF YOU ARE NOT A COMPETENT MECHANIC, DO NOT ATTEMPT THIS INSTALLATION!

READ THESE INSTRUCTIONS THOROUGHLY! Follow the instructions STEP-BY-STEP, and your installation will be trouble free. If in doubt, CALL! It is also suggested that as you proceed through the installation you read a few steps ahead so that you are sure to catch all notes and hints.

During this installation process, you will reuse some parts or hardware and not reinstall others. It is recommended that you make space for those that you will reuse and a separate space for those you will not reinstall. In addition, you should save the parts that will not get reused in case you ever have reason to remove the supercharger.

Supercharger Installation Instructions

Enclosed are a set of labels that we suggest you use to label the electrical connectors and components that you will be unplugging.

If the vehicle has over 15,000 miles on the fuel filter, a new fuel filter will be required. A new fuel filter should be available at your local Honda dealer. Always use genuine Honda parts whenever possible. This is also a good time to change your oil and filter. It is a good idea to start draining the oil, oil filter, and coolant first thing. This will allow for all fluids to stop dripping before you start working under the car.

INSTALLATION

1. Very Important! Remove the negative battery cable. If you have a coded alarm on your radio, retrieve the code before removing the negative cable.

2. Put your car on jack stands. **NEVER WORK UNDER A CAR NOT SUPPORTED BY JACKSTANDS OR RAMPS.**

3. Drain the cooling system, as you will be replacing some hoses and the intake manifold.

Note: When draining the coolant, carefully blow compressed air, if available, through the top of the radiator while holding a shop towel over the top of the radiator and air blowing device. This will purge the majority of coolant from the block and keep you from getting dripped on while working under the car.

4. Remove the air temperature sensor from the side of the air box. Be very careful with

this sensor, as it can be easily damaged. Unplug the air temperature (TA) sensor plug from the TA sensor and set the sensor out of harms way. The wire colors will be red with yellow and green and with a black stripe.

5. Remove the vent hose and brackets from the valve cover and all related hardware that is connected to the air filter box.

6. Remove the large hose between the air filter box and the resonator box mounted on, near the passenger headlight. Remove the air resonator from the passenger head light area by removing one 10 mm headed bolt on the passenger shock tower and one 10 mm headed bolt, from the area low behind the passenger head light. Finish the removal by pulling the resonator up and away from the lower rubber mount. You will be installing a new air box mount to the shock tower bolt location (shorter of the two) and one longer mount to the very end of the bracket that held the resonator chamber rubber mount. You will not be reusing this resonator chamber. Remove the air box assembly from the throttle body and then install the air filter box into the area where the resonance chamber was originally located. Mount it with the original throttle body hole facing back towards the distributor and the inlet (the hole that the long plastic tube was plugged into) facing the passenger fender. The rubber grommet for the TA sensor should be facing the cooling fan and the original valve cover vent hose fitting should be facing down towards the ground. Using one of the original resonator bolts and washer, install it through the short mounting bracket, into the air cleaner box rubber mount and spacer, and then attach a 10 mm

Supercharger Installation Instructions

headed nut onto the back side of this bracket assembly. This will hold the top of the air box. Now, bolt the longer of the two brackets to the very end of the original rubber mount bracket. There is a threaded fitting in the end for a 10 mm headed bolt. Bolt the longer of the two air box brackets to the end of the rubber mount bracket. Install a bolt through the upper bracket hole, into the square hole in the bottom of the air box, and secure it with a 10mm headed bolt and nut. Remove the rubber inner liner of the

throttle body mount. You will need to install the short piece of metal tubing provided with the kit, into the area where the rubber boot original presided. You will be connecting a long flex hose from this opening to the throttle body.

7. Remove the small bracket on the driver's fenderwell that secures the main wiring

8. Remove the large plugs and wiring harness from the area near the base of the

ILLUSTRATION #1
ENGINE WIRE HARNESS

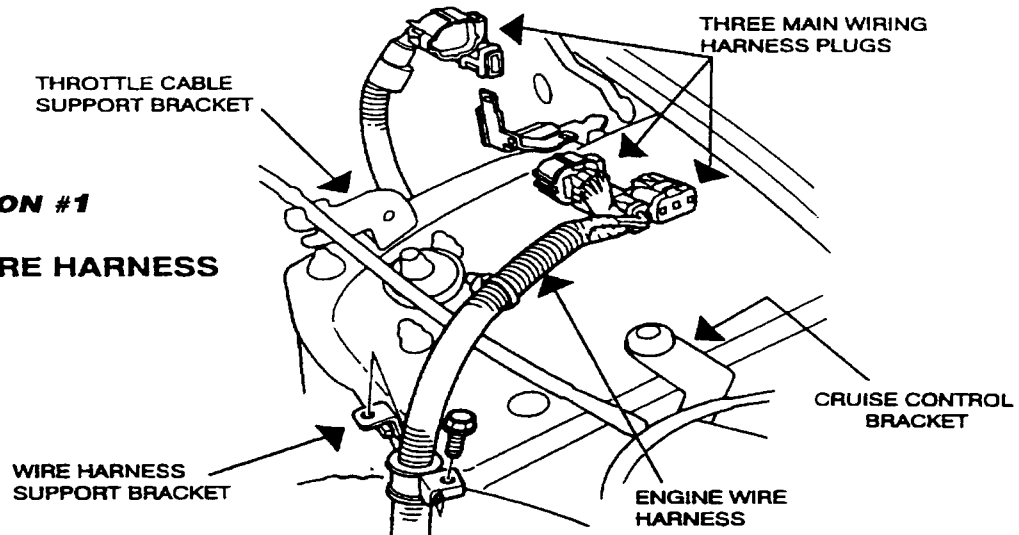
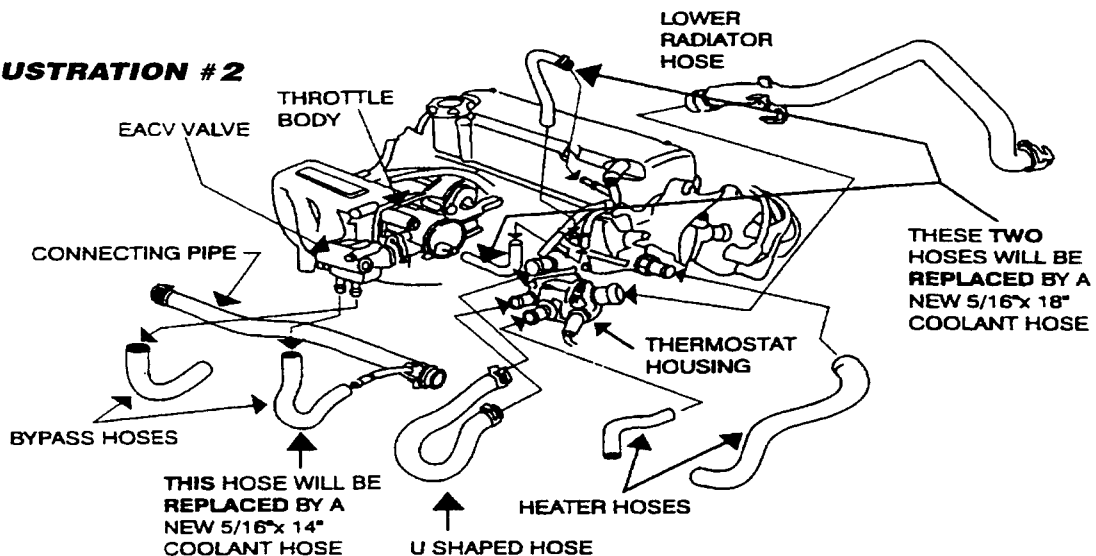


ILLUSTRATION #2



Supercharger Installation Instructions

windshield on the driver's side.

9. For power steering equipped cars, you can work around the power steering hose if you wish, but...we recommend removing the high pressure hose from the pump and setting it out of harms way. To do this, clamp the supply line from the power steering reservoir to the pump. To clamp the supply line, gently squeeze it closed with a pair of vice grip type pliers or a clamp. Remove the two 10mm headed bolts that connect the power steering hose to the pump. You will need to wrap a protective cloth around the end of the power steering hose when you remove it from the pump. Once disconnected, lay the hose out of the way near the driver's side hood pivot.

10. Disconnect the throttle cable by loosening the 12mm headed nuts holding it to the throttle cable bracket. Pull the throttle cable out of the bracket and remove it from the throttle body. Pull the throttle cable aside and lay it near the power steering hose out of the way. Remove the two 10mm headed bolts that hold the throttle cable bracket to the intake manifold. You will be reusing these bolts to hold the new Jackson Racing throttle cable bracket to the original throttle body. You will not be reusing the throttle cable bracket.

11. Disconnect the power brake hose from the back of the intake manifold.

12. On the passenger side of the throttle body you will find the Purge Cut Solenoid Valve. The Purge Cut Solenoid Valve can be identified by the wire colors black/yellow and red/yellow. You will be connecting a new black/yellow wire from the Jackson

Racing Fuel Enrichment Relay to this original black/yellow wire during the final installation procedures. This black/yellow wire will be used as a 12-volt switched power source for the Jackson Racing Fuel Enrichment Relay. Unplug the Purge Valve and unbolt it. Lay the Purge Valve with its longest hose still connected, out of harms way near the passenger shock tower for later connection.

13. You will be remounting the Purge Valve to a small "L" bracket in the final installations. Notice it has one hose that connects to the "charcoal canister", near the passenger foot well, and one that connects to the manifold vacuum. You will be replacing the shorter of the two hoses in the installation process by using a 3/8" vacuum "T" and sharing the manifold vacuum with the PCV valve. This manifold vacuum will come from a "cast-in" vacuum fitting on the side of the intake casting (gooseneck).

14. Disconnect the four fuel injector plugs from the fuel injectors and pull the harness out of the way.

15. Unplug the Manifold Absolute Pressure (MAP) sensor harness from the MAP sensor mounted directly on top of the throttle body. The wire colors are yellow/red, red/green, and green/white.

16. Unplug the Throttle Position Sensor (TPS) from the throttle body. The wire colors are yellow with a blue stripe, red with a black stripe, and green with a black stripe. This plug and the MAP sensor plug can be mistakenly interchanged. Always double-check your wire colors.

17. Remove the gas cap and retighten to

Supercharger Installation Instructions

relieve any residual pressure before moving to the next section.

WARNING! Do not smoke during these procedures!

18. From the driver's side of the manifold, remove the fuel return line from the factory fuel pressure regulator located on the fuel rail. Then, remove all brackets related to the fuel line.

19. Remove the vacuum line from the fuel pressure regulator. It will be replaced later.

20. Remove the factory fuel pressure regulator from the fuel rail. It will be replaced with an adapter during the reassembly process.

21. CAREFULLY, disconnect the high-pressure fuel supply hose from the passenger side of the fuel rail. This hose may still be under high pressure. After removing the nut, be careful not to lose the two aluminum

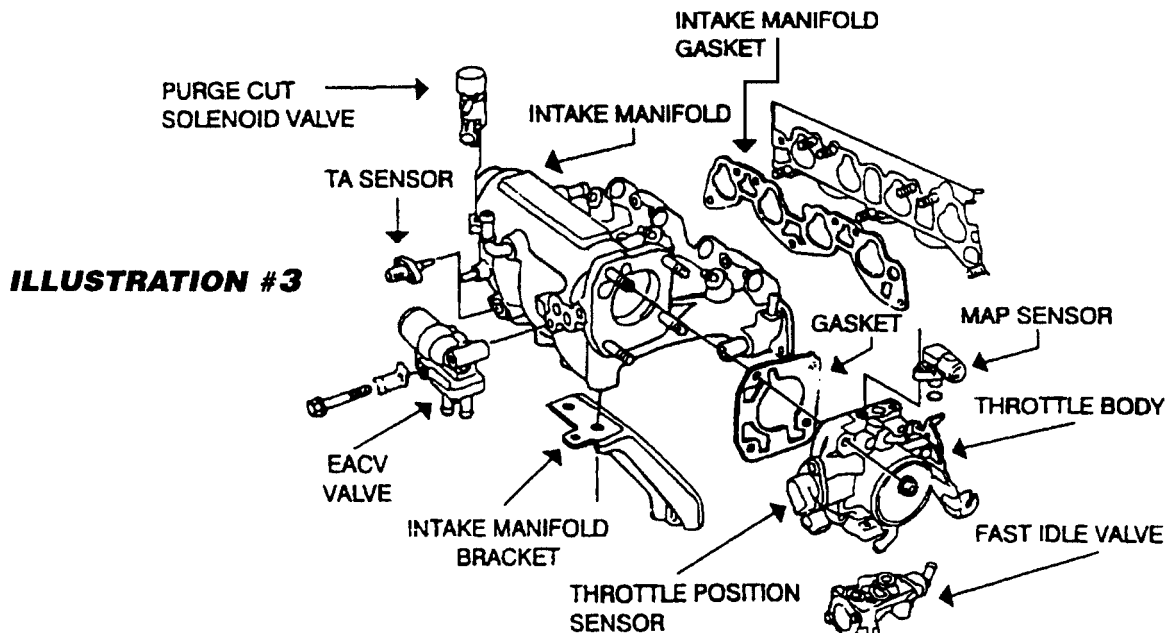
washers. Remember the order in which you removed them. Make sure that they go back on the fuel rail in the same location.

22. Remove the fuel rail from the intake manifold by removing the two 10mm headed nuts. Then, remove the four fuel injectors from the rail. Be careful not to let any debris fall into the fuel injector holes.

23. Remove the PCV hose and the small cruise control vacuum hose, if equipped.

24. Remove the one inch, "U"-shaped coolant hose on the passenger side of the intake manifold near the cylinder head's #4 intake port.

25. Remove the small coolant hose that connects from the fitting on the cylinder head near the #4 cylinder, to the double metal pipe and then to the bottom of the throttle control body. This fitting supplies coolant to the IAC (idle air control) to the throttle body. It regulates idle speed (with



Supercharger Installation Instructions

the temperature of the coolant.

26. Locate the Idle Air Control (IAC) valve that is located next to the throttle body. Unplug the wire harness with wire colors yellow/black and black/blue, (and one orange wire if equipped with an automatic transmission). Remove the bolts and nuts holding the throttle body to the intake manifold and remove the throttle body and IAC valve as an assembly.

27. From under the car remove the oil filter if you have not done so already. Have a drain pan available, as some oil will drip out.

28. Remove the bolts that hold the intake manifold support in place and remove the support. It will not be reused.

29. Back on the top of the engine, you can now remove the bolts and nuts and the stock intake manifold.

30. With the intake manifold removed, replace the stock fuel line that is connected at the base of the firewall with a new 1/4" x 17" line supplied with the kit. Secure it with one of the new clamps supplied.

31. Find the original hose that connected from the IAC (EACV) valve to the main water pipe. Replace it with the new 5/16" x 14" hose supplied with the kit.

32. Remove the original clamp from the "U"-shaped hose and replace it with one of the new #10 hose clamps provided. It will be reconnected to a 5/8" fitting on the new Jackson Racing intake manifold later.

33. On the driver's side, loosen the power

steering and air conditioning belts and remove them. You will be reusing the power steering and air conditioning belt later in the installation.

34. Remove the 12mm bolt holding the alternator on its upper bracket. You will be reusing the bolt but not the washer or bracket.

35. Remove the 14mm headed bolt holding the upper alternator adjustment bracket to the engine block. As mentioned

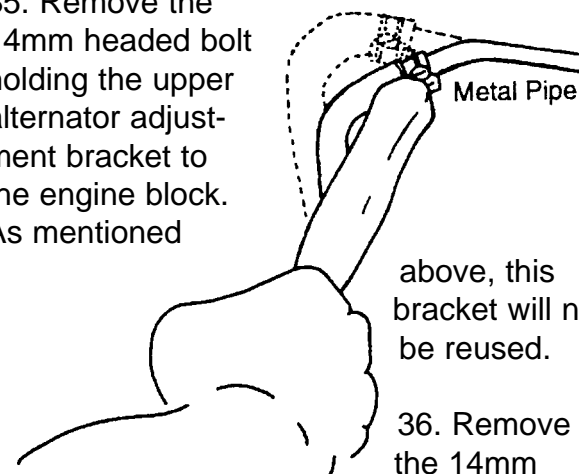


ILLUSTRATION # 2

above, this bracket will not be reused.

36. Remove the 14mm headed nut holding the alternator on its lower bracket.

37. Remove the alternator from its bracket. Do not disconnect any wires at this time.

38. With the alternator removed, it is a good time to modify the power steering metal pipe where it goes past the alternator. This metal pipe is the low-pressure return line from the steering rack. It has a rubber hose connected to it. To straighten, gently push the end of the pipe, nearest the firewall, with the butt end of a mallet. The pipe will give under pressure. It is important to move the pipe back as the supercharger drive belt will be routed through this area.

39. Remove the two 14mm headed bolts and the lower alternator bracket. The stock bracket will not be reused but the bolts will be reused. Install the new lower alternator bracket supplied with the kit.

40. Reinstall the alternator with the factory bottom mounting bolt. The bolt is long and square-headed. Make sure the square head is on the passenger side of the bracket and that it is positioned so that it will not turn when the nut is tightened.

harnesses out of harms way. It is located below the master cylinder. Remove the bracket and unplug the harnesses that were attached to the bracket. Unplug the main harnesses up where the hood rod pivot is. Unbolt the cruise control bracket assembly, and now, all three harnesses should be able to be routed forward of the shock tower. Route the wiring harnesses under the cruise control bracket and follow the windshield washer hose up and over the top of the shock tower. Re-plug all of the harnesses

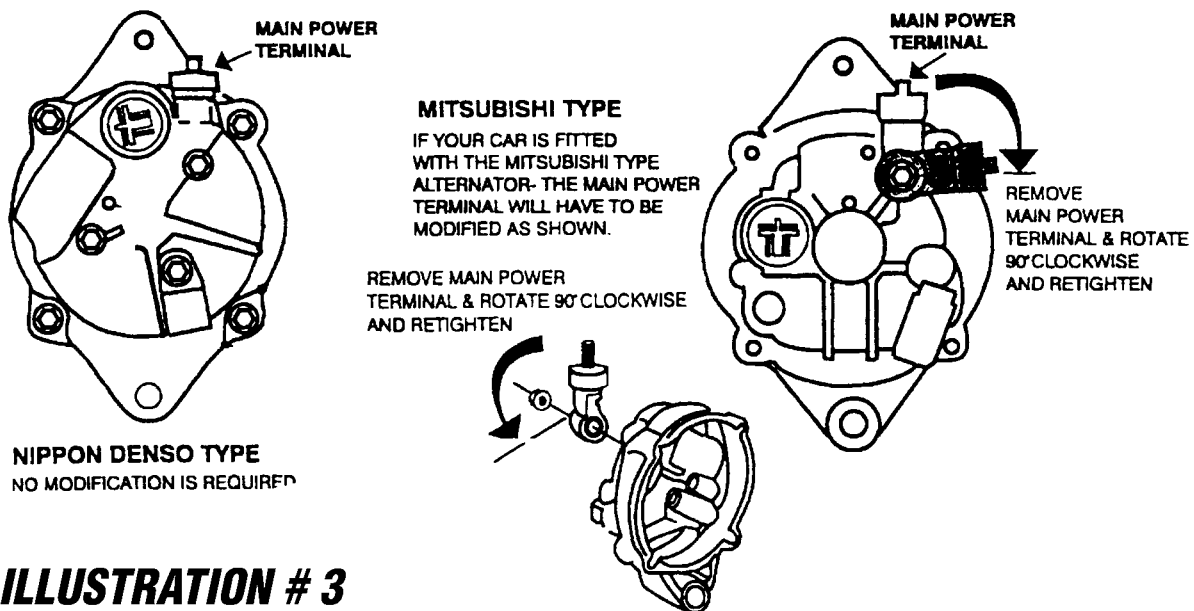


ILLUSTRATION # 3

41. Release the plastic clamp that holds the main power lead to the alternator. Disconnect the 10mm nut that holds the large white wire on top of the alternator. Rotate the wire 180° and reinstall the nut.

42. Once the intake manifold is out of the way, you can start clearing the area that the supercharger drive belt is going to inhabit. Low down on the driver's inner fender you will find a bracket that holds three wiring

back together going over the top of the shock tower assembly.

43. Release the plastic clamps that hold the power steering pressure switch wiring to the high-pressure hose. Unplug the switch and re-route the wiring behind the brake lines that run at the base of the firewall. Plug the harness back into the pressure switch.

44. If your vehicle is ABS equipped, put a

Supercharger Installation Instructions

plastic tie around the ABS sensor lead where it comes through the driver's fender well. It is identified by its orange color. Tie it tight against the brake line routed below the driver's shock tower. Secure it so that it does not interfere with the supercharger drive belt.

45. You will now need to connect a 3/8" hose from the PCV valve over towards the thermostat housing. This PCV hose should be routed from the oil breather chamber along the water supply pipe, and on top of the thermostat housing. The hose should be tied to the water pipe with a plastic tie to allow clearance and easy installation of the supercharger intake manifold onto the intake studs. The PCV hose will now go under the intake manifold over towards the transmission, so it can be connected to the intake tube later. You will also be sharing this "cast-in" fitting from the intake tube via a 3/8" vacuum "T". You will be connecting a small piece of 3/8" hose to the vacuum "T" and on to the vacant "cast-in" vacuum fitting on the "gooseneck". The other vacant end of the "T" will be connected to the open port in the Purge Cut Valve later in the installation.

46. With the intake manifold removed, you can now gain access to the plastic, main wiring harness cover. Remove the bracket where the two plugs were mounted. The plastic cover will get pushed down slightly when the supercharger is installed.

47. Reinstall the throttle body and IAC (EACV) valve onto the new Jackson Racing inlet casting using the 8 x 40 bolts, provided, for the throttle body.

48. Install the new intake gasket that you purchased from your Honda dealer and install our new intake manifold/supercharger onto the studs. Tighten all of the bolts and nuts to 16-ft lbs. Check for 3-5mm of clearance between the supercharger pulley and the inner fender. If clearance does not exist, you will need to mark the inner fender with a marker where the lack of clearance is. Remove the supercharger and create the clearance using a mallet. It is rare that we see this being necessary, but, in this mass production world with cars being built in every country, we have seen it happen.

49. Locate the new boost pressure sensor supplied with the kit and wrap the threads with Teflon tape. Install it into the new intake manifold in the hole that is tapped for the 1/8" NPT pressure switch.

50. Install the Purge Valve onto the "L" bracket provided with the kit, using one of the original Purge Valve bolts and one of the nuts from the original fuel rail mounting nuts. Mount this "L" bracket/Purge Valve assembly to the small boss on the back of the intake manifold near the "J" in Jackson Racing cast into the manifold. There is a small 5mm bolt in the kit to secure the bracket to the intake manifold. The supercharger Boost Pressure sensing switch will be threaded into the intake manifold next to the Purge Valve.

51. Install the new, aluminum belt tensioner bracket with the two idlers attached. Install the upper spacer between the top of the alternator and the inside of the belt tensioner bracket using the original mounting bolt without the flat washer that it originally came with.

Supercharger Installation Instructions

52. You will now be replacing the crankshaft drive pulley. Remove the center bolt from the crank pulley. Make sure you do not lose the key way from the crankshaft. Reinstall the new crankshaft pulley and re-torque to 134 ft lbs.

NOTE: you will be replacing the 4 rib belt system from your alternator to a 3 rib system. The 3 rib system allows more room for the supercharger belt to be replaced at a later time. We have added additional idler pulleys to our belt drive to add more degrees of belt wrap to the alternator pulley. This, in return, will make up for the narrowing of the belt. You will only be using the inner three ribs of the alternator pulley. The outer most rib, the one furthest from the alternator, will remain empty. The new, lower alternator bracket has been machined to match the distance the belt has been moved inward for belt clearance.

53. Install the new 3 rib belt on the crankshaft pulley, over the lower idler, around the alternator pulley, up and over the supercharger pulley, and down under the upper

idler adjuster pulley and back to the crankshaft. Adjust the tension by threading the belt tensioning bolt down against the "T" nut on the tension bracket until there is 90-ft lbs of tension on the belt. Do not over tighten the belt, as it will wear the belt and supercharger nose bearing prematurely. To finalize the tensioning, tighten the 17mm headed, upper adjuster, through bolt. The lower idler does not get adjusted. It is preset at the factory.

54. Reinstall the remaining power steering belt and air conditioning belts is equipped and readjust their belt tension.

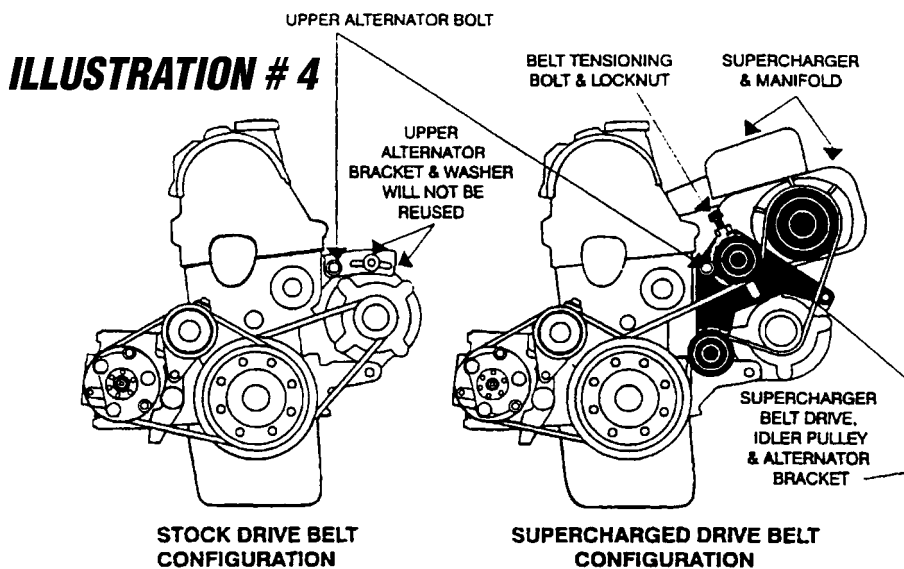
55. Looking up from under the car, check that all hoses and wires are routed so the supercharger will not chaff them. Also, make sure that everything is clear of the oil filter so that it can be easily removed for oil changes.

56. Install a new oil filter at this time.

57. From above the car, reinstall the "U"-shaped hose onto the 5/8" brass fitting on the intake manifold. Clamp it with one of the new #10 clamps provided.

58. Connect the new 5/16" hose installed earlier onto the IAC valve and the original wiring harness for the IAC valve.

59. Connect a 5/16 coolant hose directly from the intake manifold near the #4 cylinder to the bottom of the throttle body.



Supercharger Installation Instructions

60. Locate the two vacuum fittings located low on the casting between the intake tube (gooseneck) and the supercharger. One of these fittings will have the supercharger bypass hose connected to it. The other vacuum fitting will have a hose from the cruise control, if equipped, connected to it.

61. Reconnect the MAP sensor and TPS sensor wiring by checking the color codes or identification labels that you installed in the beginning.

62. Install the throttle cable bracket to the throttle body using the two new 5 mm throttle cable bracket bolts. Reinstall the throttle cable and check for full throttle operation and that the throttle returns to the idle stop.

63. Reinstall the fuel injectors in the fuel rail. Be sure to lube the “O” rings before you gently install them into the rail.

64. Transfer the lower fuel injector seals from the old manifold or, if they are stuck onto the injector, from the injectors, into the new supercharger manifold.

65. You will be installing two heat insulating, phenolic, spacers onto the two outer fuel rail mounting points. You can apply a small amount of sealer to one side of the phenolic spacers to make them stay on the intake manifold as you install the fuel rail. It is not mandatory; it just makes installation a little easier. Attach the phenolic spacers with the adhesive sealer side towards the intake manifold on the fuel rail mounts and make sure the holes are centered over the threaded holes in the Jackson Racing intake manifold.

66. Your original fuel rail was held in place with two 10mm headed nuts. These two nuts have a different centerline than the manifold we supply. The supercharger manifold used on your car fits many years and models, consequently, you must drill two simple holes in the flat area near your current fuel rail mounting holes. Measure $2\frac{3}{4}$ " in from the end of the fuel rail where the main fuel line is bolted on and make a mark. Now, measure in $11\frac{3}{8}$ " in from the same end of the fuel rail and make a mark. Measure up from the bottom of the rail $5/16$ " at each of the previous marks and you should now have a cross for the center area where you need to drill, two $1/4$ " holes for the fuel rail mounting. There is no need for the center rail mount as it is only used in some earlier models. Install the fuel injectors and rail into the new Jackson Racing intake manifold. Secure the rail to the intake manifold using the new 10mm headed bolts (6x30) and nut supplied with the kit.

67. Remove the original fuel pressure regulator and install the regulator adapter onto the fuel rail with the “O” ring and Allen bolts provided. Then, remount your original regulator to the adapter. This will allow the regulator to be rotated slightly from stock so the regulator does not interfere with the new Jackson Racing intake manifold.

68. At this point you should have a hose that runs to the Purge Valve from the charcoal canister. We must now create a source of manifold vacuum for this valve and the PCV valve. You will find a vacant, “cast-in” $3/8$ " vacuum fitting in the middle of the “gooseneck”. Using a small, 2" piece of $3/8$ " hose, connect it to the vacant vacuum fitting. Then, using the $3/8$ " vacuum “T” pro-

vided in the kit, install it into the 2" hose. Connect another longer piece of 3/8" hose from the vacant fitting on the Purge Valve to one of the vacant sides of the "T". Then, lastly, find the PCV valve hose, connected earlier to the PCV valve. Connect it to the last vacant fitting on the "T". In some cases you can be creative and reuse some of the original "formed" hoses that are not being reused in specific places, to create a smoother curve from the Purge Valve to the "T". Both of these valves are essential to keeping your car in emissions compliance. Neither of these valves have any adverse effect on Horsepower. So, please spend some time to connect them properly.

69. Reinstall the high-pressure fuel hose from the fuel filter, over the gooseneck, and onto the fuel rail. Be sure to mount it in such a way that there is plenty of clearance for engine movement and no interference with the throttle cable. Pay close attention to the routine of the fuel supply line. From the passenger fender, notice that in the original position on the fuel filter, the fuel line exits the fuel filter at a 6 o'clock position. It originally routed itself low onto the fuel rail with a pair of alignment prongs facing the fuel rail. You will be changing the fuel mounting at the fuel filter to a 3 o'clock position from it's 6 o'clock position. Then, you will route the fuel line OVER the "gooseneck" intake casting and reverse the alignment prongs so that they face away from the fuel rail. Reinstall the high-pressure supply line with the prongs reversed, using both of the original washers and retighten the supply hose. After starting the car for the first time, you will want to check for fuel leaks at each junction. Refer to the photocopy of the completed engine compartment enclosed.

70. Reconnect the fuel injector plugs onto the correct fuel injector and the Purge Cut Solenoid Valve plug onto the Purge valve.

71. Install the Jackson Racing Fuel Pressure Regulator (fuel management unit or FMU) onto the firewall by removing one of the small plastic plugs near the center of the firewall. These plugs cover threaded holes that are pre-existing. Thread a 10mm-head-ed bolt through the "P" clamp of the FMU and into the firewall with the fittings facing the driver's fender horizontally.

72. Connect the 1/4" x 17" high-pressure fuel hose, that was connected to the fitting at the base of the firewall earlier, to the CENTER fitting of the FMU. Clamp it with one of the small hose clamps provided. This is the fuel return hose. This hose was installed earlier when the intake manifold was not on the engine.

73. Connect another 1/4" x 30"inch pressure fuel hose to the OUTER fitting of the FMU and clamp it with one of the clamps provided. Connect the other end to the stock fuel pressure regulator. Clamp it with one of the small fuel line clamps provided.

74. Attach a new 18" vacuum hose from one of the small vacant vacuum fittings on the intake manifold to the stock fuel pressure regulator. Connect another 18" vacuum hose from the other vacant fitting to the Jackson Racing FMU.

75. Reconnect the large wire harness connectors to their proper place near the base of the windshield on the driver's side. Make sure the harness will not come in contact with any moving parts or belts. Reconnect

Supercharger Installation Instructions

the wire harness support bracket to the inner fender well on the driver's side.

76. Reinstall the power brake hose if it has not been done already. It connects to the large, 90°, brass fitting on the back of the intake manifold.

77. You will be relocating the air box assembly to the passenger fender area, near the area where the original resonance chamber was removed earlier. You will be installing the air box so that the original inlet to the throttle body faces the new throttle body location. Mount it with the original throttle body hole facing back towards the (distributor, and the air inlet (the hole that the long plastic tube was plugged into) facing the passenger fender. The rubber grommet to the TA sensor should be facing the cooling fan and the original valve cover vent hose fitting should be facing down towards the

ground. Using one of the original resonator bolts and washer, install it through the short mounting bracket, into the air box rubber mount and spacer, and then attach a 1.0 mm headed nut onto the back side of this bracket assembly. This will hold the top of the air box. Now, bolt the longer of the two brackets to the very end of the original resonance chamber rubber mount bracket.

There is a threaded fitting in the end for a 10 mm headed bolt. Bolt the longer of the two air box brackets to the end of the tube mount bracket. Install a bolt through the upper bracket hole into the square hole in the bottom of the air box and secure it with a 1.0mm headed bolt and nut. Remove the rubber inner liner of the throttle body mount. You will need to install the short piece of the metal tubing provided with the kit, into the area where the rubber boot originally presided. This allows the flex hose to be tightened onto the air box in it's new location.

You will be connecting this flex hose from this opening to the throttle body. Tighten the hose using the new clamps provided with the kit. Never run a supercharged car without an air filter. The internal supercharger housing-to-rotor clearance is tighter than your piston clearance in your engine, if dirt gets inside, it will ruin the supercharger and void its warranty. Always use good quality filters. We do not recommend HKS Power Flow or Greedy air 'filters as their foam pulls away from its base and allows large amounts of dirt into your engine and supercharger. Most other after market filters have shown to be reasonable in their filtering ability.

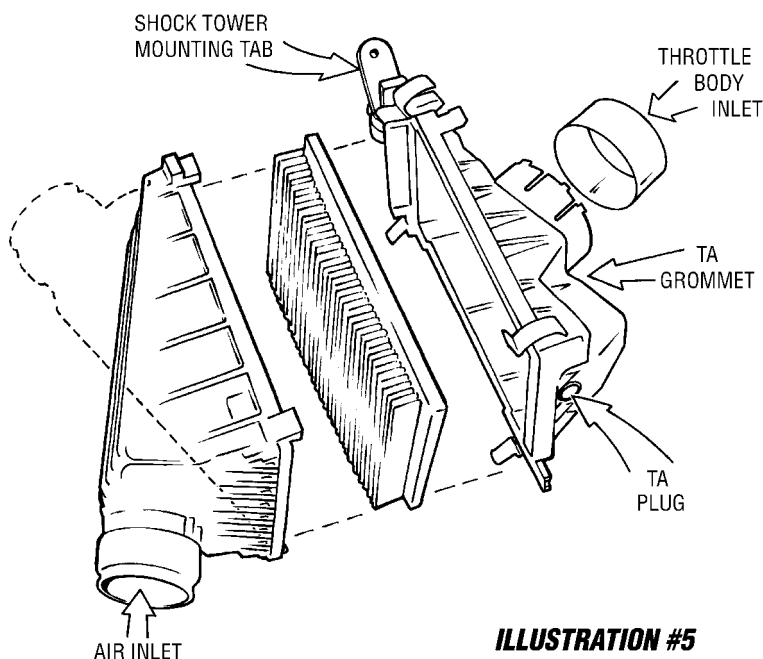


ILLUSTRATION #5

Supercharger Installation Instructions

78. Install the TA (air temperature) sensor into the new grommet in the air box. Reconnect the TA sensor harness to the TA sensor.

79. You will now be modifying the TA sensor wiring. You will be connecting the Fuel Enrichment Relay to the TA circuit. Cut the TA sensor's red/yellow wire about two inches from the plug. Each side of the newly cut wires will be connected to the Fuel Enrichment relay's matching red/yellow wires. Follow the wiring instruction in the rear of this packet. Using a "T-tap", connect the "T-tap" to the yellow/black wire that is the 12-volt switched power source for Purge Cut Solenoid Valve. Plug the yellow/black wire from the Fuel Enrichment relay into the "T-tap". And, lastly, connect the black wire, with the female spade, onto the

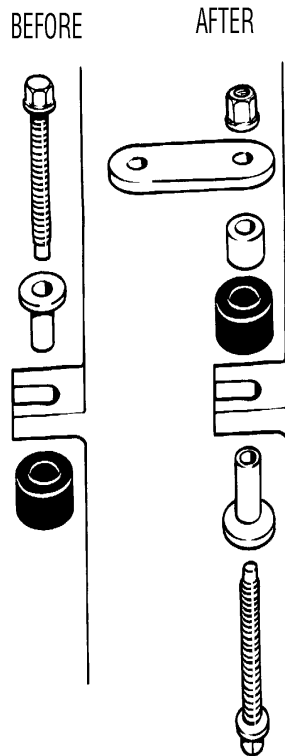


ILLUSTRATION #6

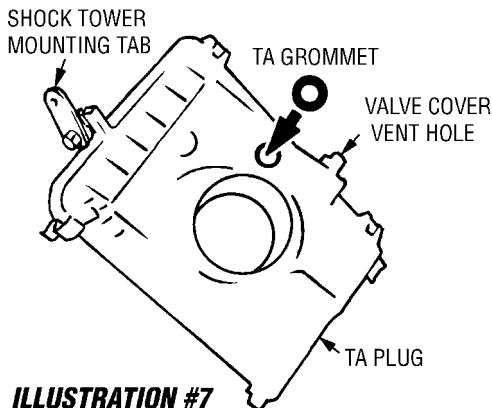


ILLUSTRATION #7

pressure switch that was threaded into the intake manifold earlier. Using a plastic wire tie, hang the Fuel Enrichment Relay from any rubber hose in the engine compartment. We recommend the rubber hose that runs from the Purge Valve to the Charcoal canister. If you mount it directly to the firewall. You will hear it CLICK every time it cycles.

80. Connect a 3/8" hose from the valve cover vent to the vent fitting in the air box. Refill the engine with oil and coolant.

81. Reattach the ground cable to the battery and reset any alarm or radio codes.

82. Run the engine for 15 minutes while resetting ignition timing to 10° before top dead center. Let the engine cool and then recheck the belt tension.

83. Recheck your fluid levels after you have let the engine cool down.

TIPS: Now that you have added substantial power to your Honda, here are some tips for best performance and long life. Please, allow it to warm up for at least 3-5 miles before you start working the engine hard. Longer in extremely cold conditions as it will take a substantial amount of time to get the oil warmed completely to operating temperature. Running an engine without the oil being up to operating temperature is very hard on your engine

Install a good oil cooler to keep your oil from getting too hot and breaking down prematurely. During our "Back to Back" SCCA Endurance Championships, we saw over 300°F of oil temperature in our race cars with, relatively close to stock, engines. It

Supercharger Installation Instructions

makes sense that with the additional power you are now generating from your supercharger, ordering one of our oil cooler kits will help maintain long engine life and additional power also.

Install one of our "Power Foam" air filters as a "drop-in" to your stock air box. It will improve air volume and will keep the air extremely clean. In supercharged engines, the cleaner the air flows in the better power it will make. The one thing you do not want to do is make the supercharger have to pull hard to get air

Although the stock Honda exhaust system is very good, a good header and cat-back system will help relieve any back pressure. The cleaner the exhaust gets out of the engine, the better the good air will get in. Keep in mind, in a supercharged engine, as the air gets through the engine better, the boost will actually go DOWN, but the power will go UP! So, don't be surprised if you start improving the intake air and exhaust system and your boost actually starts reading slightly lower than it did when it was all stock. Conversely, if your catalytic converter is starting to deteriorate, you will see higher boost than normal. But, your engine will perform poorly.

Keep your cooling system in good shape. Never run more than 50% anti-freeze coolant to water ratio in the engine, if possible. Water cools better than coolant but does not have the high resistance to boiling or ability to resist freezing. So, you must keep SOME antifreeze coolant in the engine. But try and run as little as possible. If you haven't replaced your thermostat and your car has over 30,000 miles on it, order one of our

160°F, low temperature thermostat. It will keep the operating temperature lower allowing better power and resistance to detonation.

If your car has 70,000 miles or 7 years on it, you might want to think about replacing your old radiator with a new one from Honda. We have found that the calcium deposit (from hard water) that collects on the internal cooling tubes of old radiators will actually insulate the hot coolant from the outside air, even though the radiator still has good coolant flow. No radiator repair shops that we have experienced with can remove this calcium deposit. More importantly, your stock coolant temperature gauge in your car will move to normal when the coolant temperature reaches a temperature near 160°F. But, your stock gauge will not show any change, or movement, in temperature until the engine coolant temperature reaches nearly 220°F. This means that you could be trying to operate your supercharged engine in a hostile environment that is 60° hotter than is ideal. Order a set of our colder spark plugs for summer use. This, like the thermostat, will lower the combustion chamber temperature allowing better power and less chance of detonation in hot climates.

If you are forcing more air into the engine, you want to insure you have plenty of fuel. Although the stock fuel pump works great, when new, for highway use, it, like the radiators, can grow weak with age and run out of volume in high demand, sustained (racing) loads. Our high output fuel pumps are just the ticket. Our fuel pumps fit in the original in-tank bracket for ease of installation. The design is capable of sustained high demand without losing pressure.

Do not run “Upgrade Chips” in your supercharged engine. Most “chips” have a more aggressive ignition-timing curve. This is very counterproductive in supercharged engines.

Do not run a high performance camshaft with a supercharger unless it has been specifically designed for supercharging. Most non-supercharged high performance cam shafts depend on having both intake and exhaust valves open at the same time to help fill the cylinders. This, also, is counterproductive to superchargers. Anytime that both valves are open the boost goes out the exhaust port and will never be seen again.

The stock ignition system is quite good, as it is the same ignition that is used in all models including the Type R with nearly 200 hp. This is not to say that some of the after market systems might not work well. It is just an observation. We recommend using the stock system until you encounter a problem igniting the mixture, then, try some of the ignitions that are commercially available.

Relay Switch Wiring Schematic

