

MOSS

Hondata Upgrade Installation Instructions

For 06-08 Honda Civic Si with Xede

PART # 989-326

MOSS MOTORS, LTD.

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Tools required: 10mm, 12mm and 18mm sockets, 5mm Allen wrench, 38mm or 1 1/2" open end wrench or large adjustable wrench or a strap wrench, wire cutters, soldering gun and solder, torque wrench, 7/8" combo wrench or O2 sensor socket, safety glasses.

Note: You will be disconnecting the fuel rail, so work in a well ventilated area. Keep any sources of ignition or open flame away from the vehicle (water heaters, cigarettes, faulty wiring, etc.).

1) Using a 10mm socket, remove the battery from the vehicle. Remove the cover from the ECU, by pushing the two tabs at the bottom and pulling up on the cover. Illustration 1a.



Illustration 1a



Illustration 1a cont

Remove the three bolts that hold the ECU in place using a 10 mm. Illustration 1b.



Illustration 1b

Locate the three large connectors on the back of the ECU and remove them by pushing down on the center tab and then flipping the lever back. Illustration 1c.

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Illustration 1c



Remove the 1" layer of pink foam from the ECU shipping box. Place your ECU in the cut out of the foam and replace the 1" layer. Fill out the warranty card and the ECU reprogramming information form and place them in the box with the ECU. Ship the box to Hondata. We suggest UPS or Fed Ex overnight delivery to minimize vehicle down time. Illustration 1d.



Illustration 1d

2) Since the Xede will no longer be used as your vehicles engine management, you need to remove it and the harness that ties it into your vehicles electronics. This is a time consuming process but it is straight forward. Cut all the wires from the Xede harness where they meet the vehicles harness. Solder all of the wires in the vehicle (that the Xede was connected to) back to their original corresponding wires. Use the supplied shrink wrap to cover the solder connections. To repair the vtec solenoid wire, remove the center cowl. To remove the cowl, use a small flat blade screw driver to remove the two push in style fasteners (one on each side of the center cowl). Pull straight up firmly on each side of the cowl; it has push in style fasteners holding it to the vehicle. Next remove the metal cowl using 10mm, 12mm sockets and a ratchet. Make the necessary repairs to the wire and replace both cowls. Don't forget to plug the vtec oil pressure switch and the vtec solenoid. back in. Illustration 2.

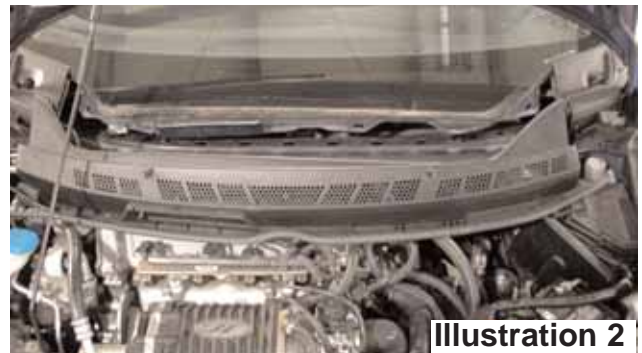


Illustration 2



Illustration 2 cont



3) Loosen the bolt on the tensioner pulley using a 14mm wrench. Loosen the locknut using a 10mm wrench and remove the M6 x 70mm tensioning bolt. Remove the belt from the vehicle. Remove the manual tensioner from the vehicle using a 12mm socket. The old tensioner and belt will no longer be used. Illustration 3.



Illustration 3



Illustration 3 cont

4) Remove the supercharger pulley. Use a 38mm or 1 1/2" wrench to hold the pulley and an 18mm socket to remove the nut. If you do not have a 38mm wrench, use a large adjustable wrench or a strap wrench. If the pulley doesn't just slide off of the supercharger, you will need to use a puller. Never pry or hammer on the pulley or nose of the supercharger. It will cause the bearings to fail. Illustration 4.



Illustration 4

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Illustration 4 cont



32.5mm bolt is specially machined so that it will not protrude through the tensioner plate. Lightly coat the shaft of the supercharger with anti seize and slip on the new 3.2" pulley. Put a drop of blue thread locker on the threads of the shaft and start the nut. Once again hold the pulley with a 38mm wrench and tighten the nut to 45ft lbs.

Illustration 5.

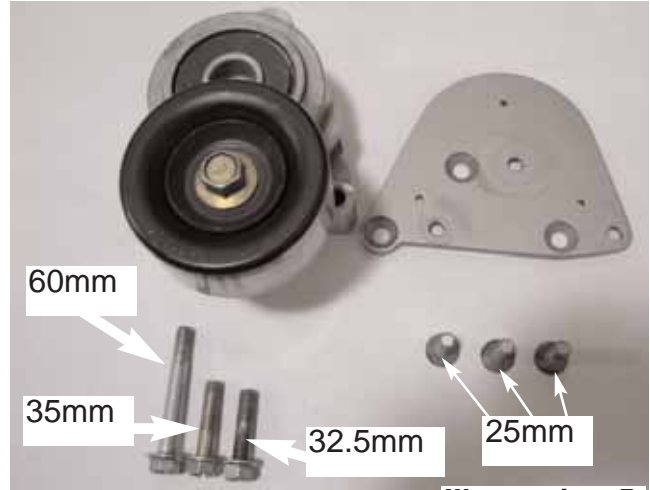


Illustration 5

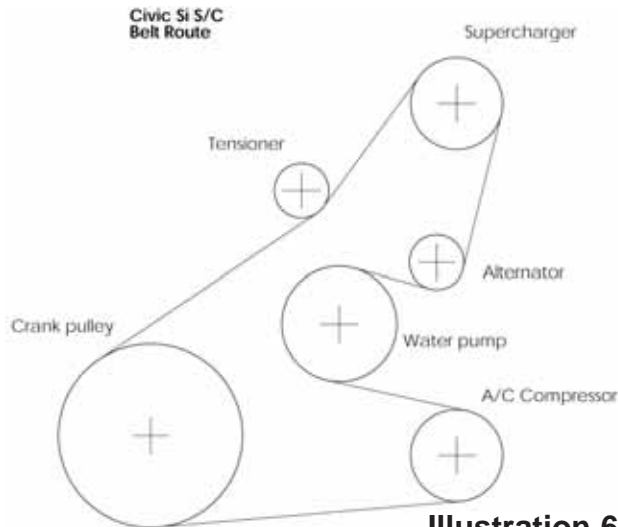
5) Gather the new belt tensioner, tensioner plate, three M8 x 25mm flat head bolts, one M8 x 60mm flange bolt, one M8 x 35mm flange bolt and the special M8 x 32.5mm flange bolt. Install the tensioner plate to the engine in the area you previously removed the old tensioner. Tighten the three flat head bolts to 18 ft-lbs using a 5mm Allen wrench. Next attach the new tensioner to the plate using the remaining M8 bolts. The 60mm bolt goes through the center hole in the tensioner. The 35mm bolt goes in the forward hole of the tensioner and the special 32.5mm bolt goes through the rear hole. Start all three bolts before tightening them to 18 ft-lbs. If you install the 35mm bolt in the rear hole, it will penetrate through the plate and pry the plate away from the engine causing belt alignment problems. The





Illustration 5 cont

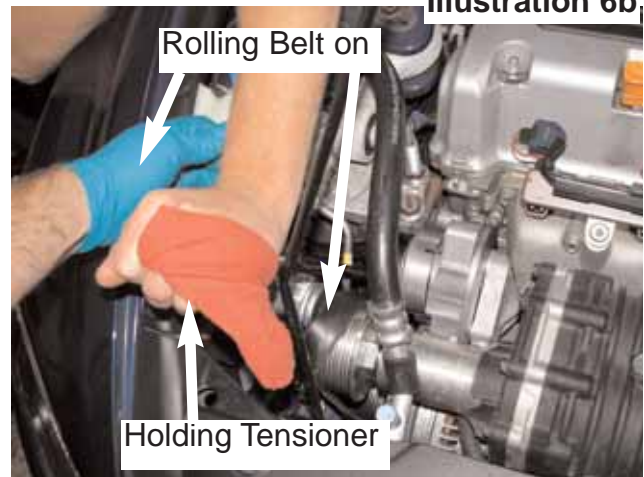
6) Route the belt counter clockwise from the crank to the a/c compressor, back around the water pump, around the alternator, up to the supercharger and finally down past the tensioner to the crank pulley. Illustration 6a.



You need to roll the belt on to the supercharger pulley. To roll the belt on, first wrap it around all of the pulleys except the supercharger pulley. Get a friend to pull the tensioner back to its stop using a long 14mm wrench. While the tensioner is being held back, use an 18mm to turn the supercharger pulley while you guide the belt up on to it. Do not put your hand or fingers in between the tensioner pulley and the supercharger pulley. Serious injury could occur if the wrench slips off of the tensioner. Roll the engine over several times to make sure the belt is aligned on all the pulleys. Illustration 6b.



Illustration 6b



7) Remove the secondary (downstream) O2 sensor from the exhaust using a 7/8" wrench or O2 sensor socket. Remove the O2 sensor spacer from the exhaust and replace the sensor. You no longer need the O2 sensor spacer. Illustration 7

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Illustration 7



8) With the Xede piggy back engine management, the MAP sensor did not measure boost. With the Hondata re-flash, it is critical that the MAP does measure boost. Remove the hose from the MAP sensor to the supercharger inlet manifold (non boosted side of supercharger). Remove a vacuum cap from one of the unused ports on the intake manifold and place it on the port that you removed the MAP sensor hose from. Route the new vacuum hose from the MAP sensor to the port on the intake manifold (boosted side of supercharger). Use the supplied zip ties to secure both ends of the hose. Illustration 8.

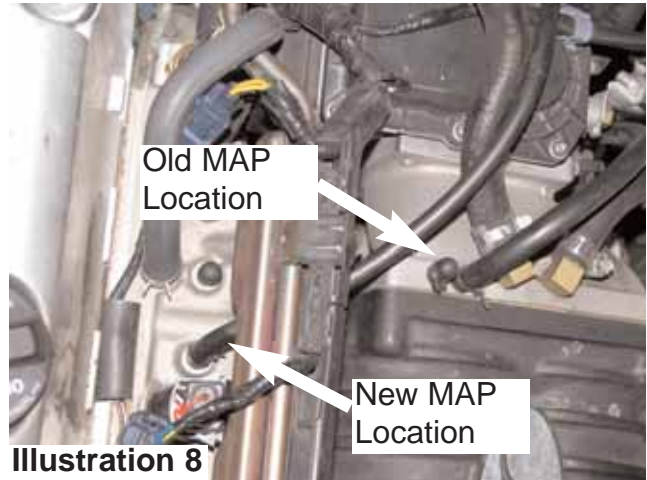


Illustration 8

9) Replace the stock 550 injectors with the supplied 650 injectors. Remove the gas cap from the vehicle to relive gas fuel tank pressure. Use caution and eye protection. The fuel rail is under pressure. Squeeze the tabs on the fitting together, wrap a rag around the connection and separate the fuel line from the fuel rail. Remove the two nuts securing the fuel rail to the manifold using a 12mm socket. Remove the fuel rail and injectors from the vehicle. Swap the 550's in the rail with the supplied 650's. Reinstall the fuel rail. To avoid damaging the injector o-rings during installation, lightly lube them with oil. Reinstall the gas cap.

10) When you get the ECU back, install it in the vehicle by reversing step one. All of the systems in the computer that run your vehicle's engine have been recalibrated to work seamlessly with the supercharger. In addition, the recalibration will support a cold air intake and cat-back exhaust system. The recalibration will not support aftermarket "race headers" that remove the catalytic converter, under drive pulleys, cams or any other internal engine modifications. Enjoy your new big boost kit!