

SPRINTEX® HONDA JAZZ / FIT 1.5L SUPERCHARGER SYSTEM 244D1011



INSTALLATION INSTRUCTIONS

Kit Serial #			
Supercharger S	erial #	 	
ECU Serial #		 	



Table of Contents

INTELLECTUAL PROPERTY USED IN THIS PUBLICATION	،		
IMPORTANT INFORMATION			
SAFETY WARNING	(
CHANGES TO FACTORY SPECIFICATIONS	(
TOOLS AND CONSUMABLES REQUIRED TO COMPLETE INSTALLATION_			
RECORD OF AMENDMENTS			
PARTS SUPPLIED (FULL SYSTEM, NON-EGR)			
PARTS SUPPLIED (FULL SYSTEM WITH EGR)	1		
PARTS SUPPLIED (HARDWARE ONLY, NON-EGR)	1		
PARTS SUPPLIED (HARDWARE ONLY WITH EGR)	1		
DISASSEMBLY INSTRUCTIONS	1		
1. PREPARATION AND DISASSEMBLY			
2. RELIEVE FUEL PRESSURE AND DISCONNECT BATTERY			
3. WIPER ARM REMOVAL			
4. COWL COVER REMOVAL	- 17 -		
5. UNDER COWL REMOVAL	- 18 -		
6. AIR BOX REMOVAL	- 19 -		
7. THROTTLE BODY REMOVAL	- 20 -		
8. INTAKE MANIFOLD REMOVAL	- 21 -		
9. FUEL LINE REMOVAL (OPTIONAL- IF SUPPLIED)			
10. FUEL RAIL MODIFICATION	- 23 -		
11. ENGINE ACCESSORY DRIVE BELT REMOVAL 23 -			
INSTALLATION INSTRUCTIONS	2		
1. INSTALL AND SECURE NEW PCV VALVE LINE	- 25 -		
2 INSTALL T MAD SENSOD TO THE MANIEOLD (ODTIONAL TE SUDDITED)	25		



	3.	- 25 -	AKDWAK	E ONLY KII
	4.	INSTALL SUPERCHARGER MANIFOLD	- 26 -	
	5.	INSTALL SUPERCHARGER ASSEMBLY TO MANIFOLD	- 27 -	
	6.	FIT SUPERCHARGER INTAKE PIPE TO ASSEMBLY	- 27 -	
	7.	ATTACH THROTTLE BODY TO INTAKE PIPE	- 28 -	
	8.	FIT FUEL LINE (OPTIONAL- IF SUPPLIED)	- 29 -	
	9.	FIT AIR BOX ASSEMBLY	- 29 -	
	10.	SUPPLEMENTARY ECU AND HARDWARE (OPTIONAL- IF SUPPLIED)	- 30 -	
	11.	CONNECT PCV VALVE HOSE TO INTAKE HOUSING	- 33 -	
	12.	MOUNT IDLER BRACKET ASSEMBLY	- 33 -	
	13.	FIT NEW ACCESSORY DRIVE BELT	- 34 -	
	14.	RELOCATE FRONT ENGINE EARTH STRAP	- 34 -	
	15.	FIT EGR VALVE TO THE EGR BLOCK (IF EQUIPPED)	- 35 -	
PRE	TES	T-DRIVE INSPECTION		36 -
	1.	PRE-START INSPECTION	- 37 -	
	2.	ENGINE WARM UP	- 37 -	
	3.	ROAD TEST VEHICLE	- 37 -	
	4.	USE OF GENERIC SCAN TOOL	- 38 -	
MAIN	ITEN	NANCE INSTRUCTIONS		39 -
	1.	SUPERCHARGER DRIVE BELT REPLACEMENT	- 40 -	
	2.	SUPERCHARGER REMOVAL	- 40 -	
	3.	SUPERCHARGED JAZZ/FIT LUBRICATION SERVICE	- 40 -	
	4.	SPARK PLUGS	- 40 -	

Intellectual Property used in this Publication

This document is copyright of **Sprintex Ltd**, a company incorporated in Australia. This document may not be re-sold, copied or distributed in any way without prior written authorisation of Sprintex Ltd.

Copyrights / Trademarks:

Sprintex® is a registered trademark of Sprintex Limited, an Australian company ACN: 106 337 599 ("Sprintex"). Sprintex has patents for its superchargers. Any unauthorised copying or modification of the system may result in legal action.

Loctite® and Grey Maxx® are a registered trademark of Henkel KGaA, a company incorporated in Germany. Other than commercial supply arrangements, Henkel KGaA do not have any association with Sprintex®.

RedLine® is a registered trademark of RedLine Synthetic Oil Corporation, a company incorporated in United States of America. Other than commercial supply arrangements, Redline and RedLine Synthetic Oil Corporation do not have any association with Sprintex®.

Honda, Honda Jazz, Honda Fit are registered trademarks of Honda Motor Co, a company incorporated in Japan (http://world.honda.com/automobile)

SAE is a trademark of SAE International (<u>www.sae.org</u>), global technology information and standards setting resource organisation for the design, manufacturing, operation, and maintenance industry.

Gates is a registered trademark of the Gates Rubber Company, a subsidiary of Tomkins Plc, incorporated in London, United Kingdom. Other than commercial supply arrangements, Gates and Tomkins Plc do not have any association with Sprintex Limited.



IMPORTANT INFORMATION

PRODUCT WARNING

Installation of the Sprintex Supercharger kit on your Honda Jazz / Fit vehicle may void all or parts of Honda's Warranty. Customers should consult their Honda dealer for details.

Sprintex makes no representation that installation and use of the Sprintex supercharger system is legal for public road use worldwide. Customers should check that installation and use of the Sprintex supercharger system on their vehicle is legal by contacting the relevant statutory authority in their jurisdiction prior to use on roads.

Sprintex supports safe driving. Always remember to observe all speed limits and road rules relevant to your state, city or other local jurisdiction.

Provided in this installation manual are detailed instructions to the installer on how to install the Sprintex supercharger kit to the Honda Jazz and Honda Fit vehicles. The instructions are aimed at being simple yet informative, and are aided with well-presented pictures to make installations as simple, fast, and problem free as possible. **Please read the entire instruction manual prior to beginning the installation procedure.** Pictures and descriptions may vary slightly from model to model.

It is recommended that all wiring harness connectors, and vacuum hoses are labelled at the time of removal for easy and correct refitting. Some components that are removed and are to be refitted are fragile, and should be stored safely to prevent damage to these components.

Sprintex recommends performing the following vehicle checks prior to installing the supercharger.

- 1) Check that the factory fuel system is operating correctly.
- 2) Inspect the factory exhaust catalyst for blocks or damage.
- **3)** Check fuel quality in fuel tank ensuring that it is not stale or low octane fuel. Replace with a higher octane, Premium Unleaded Gasoline / Fuel (Refer details on the next page) as required. It is also recommended to replace the fuel filter if the vehicle has travelled more than 50,000 Km.

Sprintex will not be liable for any loss, damage, payment, costs, expenses or other liability, not expressly stated in this document. In particular, Sprintex shall not be liable to any person for any consequential, indirect or economic loss or punitive or exemplary damages of any kind.

Sprintex reserves the right to change specifications from time to time and will not be liable to any person for doing so. Sprintex believes that information in this document is correct at time of print. Sprintex limits its liability to the maximum extent permissible at law with regard to the reliance which any person places on anything in this document.

THIS SPRINTEX INSTALLATION REQUIRES THAT YOUR VEHICLE BE FITTED WITH A STANDARD HONDA FACTORY ECU AND CALIBRATION. FAILURE TO ENSURE THIS WILL AFFECT THE PERFORMANCE AND MAY VOID YOUR WARRANTY.

SHOULD YOU BE UNSURE, RETURN YOUR MOTOR VEHICLE TO YOUR NEAREST HONDA DEALER TO ENSURE THE STANDARD CALIBRATION HAS BEEN REINSTATED AND IS OPERATING CORRECTLY.



SAFETY WARNING

No unauthorised service or alteration may be undertaken to the Sprintex supercharger. Installation should be carried out in a workshop which is a safe and ventilated working environment with equipment and procedures compliant with local authority guidelines and legal requirements. Installers should ensure adequate hearing, eye, and physical protection is used at all times during the installation process. Installers should take reasonable precautions to avoid fatigue and closely follow the installation instructions during every installation. Sprintex recommends installation should not be carried out unsupervised. Sprintex, its directors, employees and agents will not accept liability for damage accident or injury resulting from the installation process. Safety warnings are also provided throughout this document.

California residents:

California Proposition 65 entitles California to special warnings for products that contain chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.



WARNING

This product can expose you to chemicals including Cumene, which is known to the State of California to cause cancer or birth defects or other reproductive harm.

For more information, visit

www.P65Warnings.ca.gov.

CHANGES TO FACTORY SPECIFICATIONS

<u>FUEL:</u> MINIMUM 95 OCTANE PREMIUM UNLEADED GASOLINE/FUEL TO BE USED AT ALL TIMES. NEVER ALLOW THE ENGINE TO KNOCK OR DETONATE AS SERIOUS ENGINE DAMAGE MAY OCCUR.

RECOMMENDED MINIMUM FUEL SPECIFICATION

China Minimum 93 OCTANE Premium Unleaded Gasoline / Fuel USA Minimum 93 OCTANE Premium Unleaded Gasoline / Fuel

Europe Minimum 95 RON Premium Unleaded Petrol Australia Minimum 95 RON Premium Unleaded Petrol New Zealand Minimum 95 RON Premium Unleaded Petrol

WARNING

TUNE SUPPLIED IS BASED ON 95 OCTANE PREMIUM UNLEADED PETROL. SPRINTEX ADVISES THAT THE USE OF ETHANOL BLENDED FUELS MAY CAUSE DAMAGE TO YOUR ENGINE AND THEREFORE USE OF ETHANOL BASED FUELS IS NOT RECOMMENDED.

IN CIRCUMSTANCES WHERE ETHANOL BLENDED FUELS ARE UNAVOIDABLE, SPRINTEX RECOMMENDS THAT THE USER MODIFIY THEIR DRIVING STYLE ACCORDINGLY AS WARRANTY DOES NOT EXTEND TO DAMAGE CAUSED BY THE USE OF ETHANOL BLENDED FUELS.

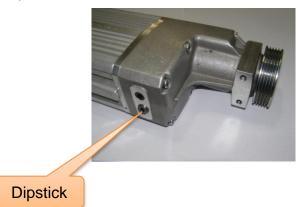
SPARK PLUGS: NGK IZFR6K13 SPARK PLUGS (GAP SET AT FACTORY).

REQUIRED SERVICE: (SEE MAINTENANCE SECTION OF MANUAL)



- 1. INSPECT SUPERCHARGER DRIVE BELT AT EVERY ROUTINE SERVICE AND REPLACE WHEN REQUIRED.
- 2. DRAIN & REPLACE SUPERCHARGER OIL EVERY 40,000 km or 2 YEARS (whichever is earlier).
 - USE 54ml OF A QUALITY FULLY SYNTHETIC SAE 75W-90 GEAR OIL, SPECIFICATIONS: API GL5, MT1 SUCH AS: REDLINE 75W90 NS GEAR OIL (factory fill), CASTROL SYNTRAX UNIVERSAL PLUS 75W-90, LUCAS SYNTHETIC SAE 75W-90 GEAR OIL OR EQUIVALENT.
 - CHECK OIL LEVEL WITH THE DIPSTICK PROVIDED IN THE SUPERCHARGER ASSEMBLY.
 - TIGHTEN DIPSTICK FULLY AND THEN CHECK THE OIL LEVEL.
- 3. OIL LEVEL SHOULD BE CHECKED WITH THE DIPSTICK PERIODICALLY (RECOMMENDED EVERY WEEK AND ALSO BEFORE & AFTER A LONG JOURNEY).





Tools and Consumables Required to Complete Installation

Metric Wrenches and Socket sets	Cable Ties	Electrical circuit tester
Flat and Philips Screwdrivers	Electrical Tape	Rubber grease
Metric Allen Keys	Sealant, thread locker	Pliers and Side Cutters

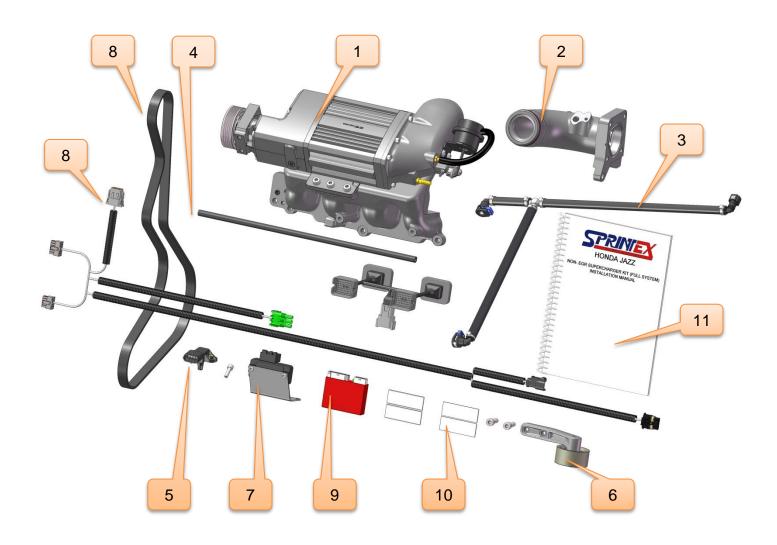
Record of Amendments

No.	Revision	Action	Date	Completed by	Approved by
1	1.00	New installation manual document created for the Concept- 2 Honda Jazz / FIT supercharger kit.	6/10/2014	DEEPAK	JAY UPTON
2	1.01	California Proposition 65 Warning added	03/05/2017	J.Stephens	

ABBREVIATIONS

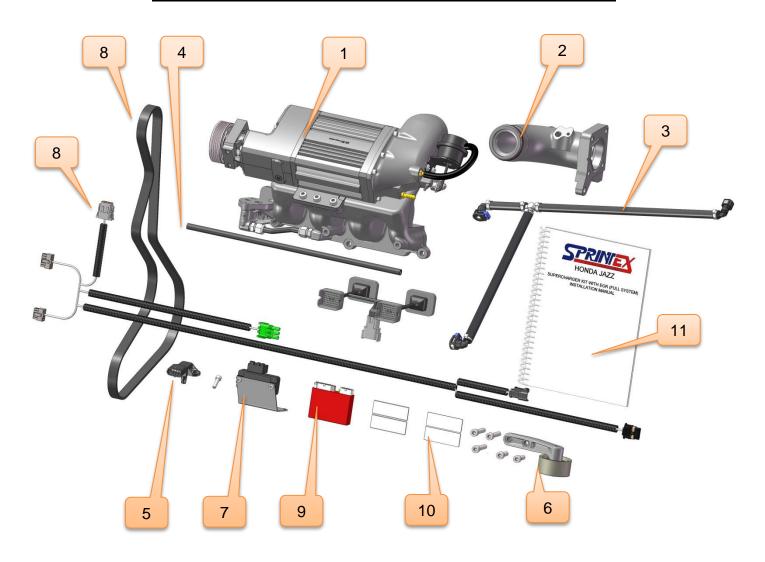
Abbreviations (Symbols)	Reference		
SHCS	Socket Head Cap Screw		
PGM- FI	Programmed Fuel Injection		
PCV	Positive Crankcase Ventilation		
ECM	Engine Control Module		
PCM	Powertrain Control Module		
MAP	Manifold Absolute Pressure		
DTC	Diagnostic Trouble Codes		

PARTS SUPPLIED (FULL SYSTEM, NON-EGR)



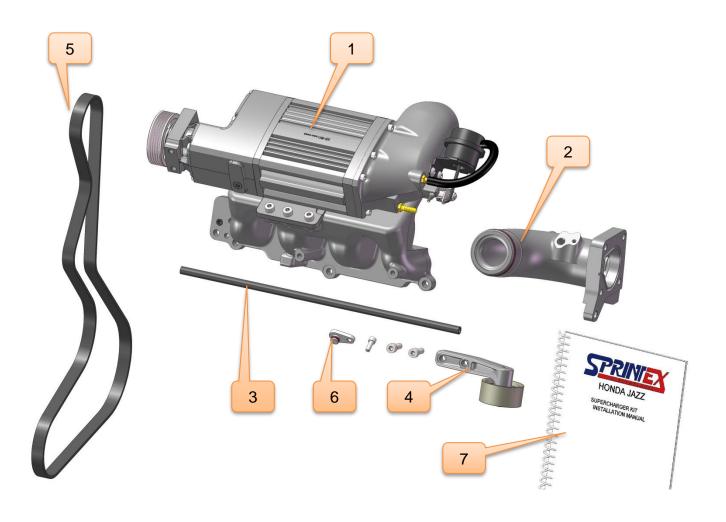
1	Sprintex® Supercharger, intake & plenum assembly with idler bracket assembly	7	1 bar MAP sensor with bracket
2	Inlet pipe assembly with supplementary fuel injector	8	Drive belt
3	Fuel line assembly	9	Wiring harness and supplementary ECU controller.
4	PCV valve hose.	10	Bag with Velcro and fasteners
5	T-MAP sensor	11	Installation manual
6	Idler bracket assembly		

PARTS SUPPLIED (FULL SYSTEM WITH EGR)



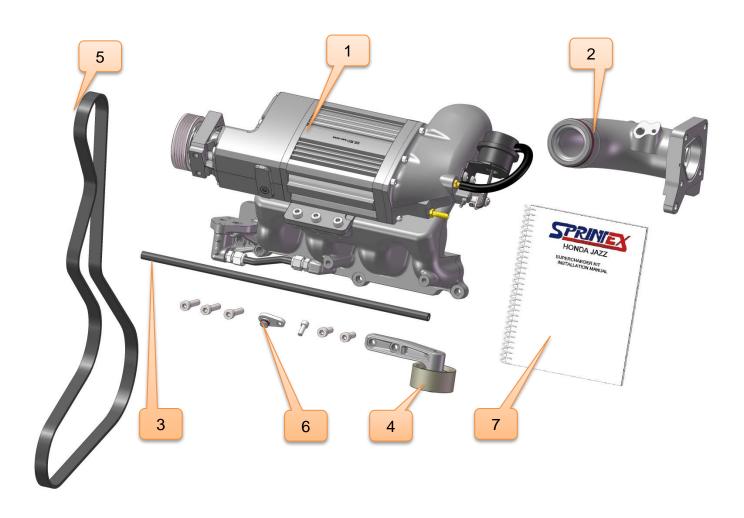
1	Sprintex® Supercharger, intake & plenum assembly with EGR mount and idler bracket assembly	7	1 bar MAP sensor with bracket
2	Inlet pipe assembly with supplementary fuel injector assembly	8	Drive belt
3	Fuel line assembly	9	Wiring harness and supplementary ECU controller.
4	PCV valve hose.	10	Bag with Velcro and fasteners
5	T-MAP sensor	11	Installation manual
6	Idler bracket assembly		

PARTS SUPPLIED (HARDWARE ONLY, NON-EGR)



1	Sprintex® Supercharger, intake & plenum assembly with idler bracket assembly	5	Drive belt
2	Inlet pipe assembly with supplementary fuel injector assembly	6	Blanking plug and fastener
3	PCV valve hose.	7	Installation manual
4	Idler bracket assembly		

PARTS SUPPLIED (HARDWARE ONLY WITH EGR)



1	Sprintex® Supercharger, intake & plenum assembly with EGR and Idler bracket assembly	5	Drive belt
2	Inlet pipe assembly with supplementary fuel injector assembly	6	Blanking plug and fasteners
3	PCV valve hose.	7	Installation manual
4	Idler bracket assembly		

HONDA JAZZ / FIT 1.5L SUPERCHARGER SYSTEM

SECTION 1

DISASSEMBLY INSTRUCTIONS

SAFETY WARNING

No unauthorised service or alteration may be undertaken to the Sprintex supercharger. Installation should be carried out in a workshop which is a safe and ventilated working environment with equipment and procedures compliant with local authority guidelines and legal requirements. Installers should ensure adequate hearing, eye, and physical protection is used at all times during the installation process. Installers should take reasonable precautions to avoid fatigue and closely follow the installation instructions during every installation. Sprintex recommends installation should not be carried out unsupervised. Sprintex, its directors, employees and agents will not accept liability for damage accident or injury resulting from the installation process. Safety warnings are also provided throughout this document.



1. Preparation and disassembly

- Ensure that all components required to install the supercharger are available. Refer to the Parts supplied section provided earlier.
- Ensure that all required tools are available.
- Please read the entire instruction manual prior to beginning the installation procedure.
- Ensure vehicle is located in a secure position with vehicle tyres secured and handbrake applied.
 Sprintex® recommends to avoid injury you should use a vehicle lift or axle stands when the vehicle is required to be lifted for access. Stands should be positioned as per the Manufacturers Owners Handbook.

SAFETY WARNING: Use personal protective equipment such as safety glasses, gloves etc. when necessary.

SAFETY WARNING: Allow engine to cool prior to proceeding with disassembly to prevent scalding.

SAFETY WARNING: The fuel system is under high pressure. Ensure to take care and follow procedures as mentioned in the vehicle's workshop manual while working with the fuel system.

Note: During disassembly and removal of components, take notes and ensure to label and store them safely; this will help with the reassembly.

Note: Many of the photos shown in this document are of a typical Honda Jazz right hand drive vehicle and are similar to a typical Honda Fit right hand drive vehicle and also both the Honda Jazz and Honda Fit left hand drive vehicles. Vehicle used for this manual is a right hand drive.



2. Relieve fuel pressure and disconnect battery

Note: It is advisable that the vehicle is checked for any existing engine fault codes, before proceeding to the installation process.

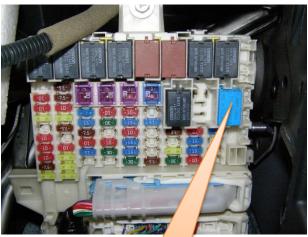
- 1. Remove the PGM-FI main relay from the under dash fuse/relay box.
- 2. Start engine and let it idle until it stalls.
- 3. Turn the ignition switch to LOCK (O).
- 4. Remove the fuel fill cap to relieve the pressure in the tank.

WARNING: Some system store data in memory will be lost when the battery is disconnected. Follow the procedures given below before disconnecting battery.

- 5. Write down the anti-theft codes for the audio and/or navigation system and also write down the audio presets.
- 6. Ensure the ignition lock is in LOCK (O).
- 7. Disconnect negative terminal from the battery.

TIP: There is no need to completely remove battery during installation.





PGM-FI main relay



3. Wiper arm removal

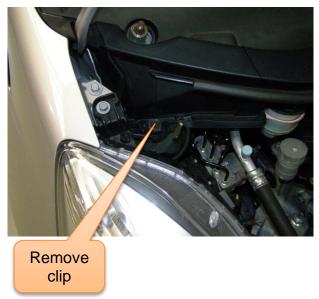
- **1.** Before removal and installation set the wiper arms to the auto stop position.
- 2. Pull up the driver's side wiper arm first.
- **3.** Remove the caps, the nuts and wiper arms.





Cowl cover removal

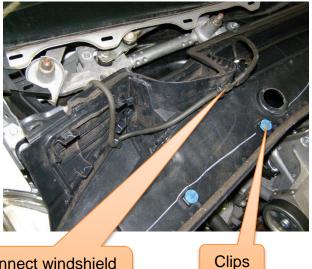
1. Using clip remover or pry tool, detach the two clips at outer edges of the cowl cover.



- 2. Detach remaining clips by carefully pulling the windshield side edge of the cowl cover upward and then remove the cover.
- 3. Disconnect the windshield washer tube.





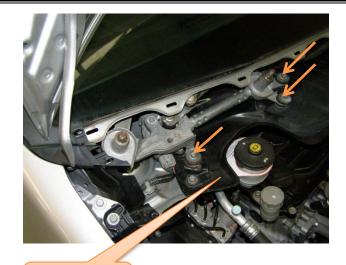


Disconnect windshield washer tube

5. <u>Under cowl removal</u>

1. Remove wiper motor assembly bolts (3x).

Note: Some models may have four bolts securing wiper motor.



Remove under Cowl

2. Remove six M6 bolts and remove under cowl.

TIP: It is easier to leave centre brace attached to the under cowl.



6. Air Box Removal

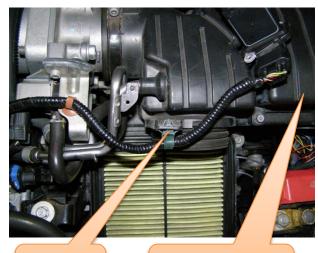
- 1. Disconnect the MAF/IAT sensor connector
- 2. Then remove air cleaner cover



Disconnect MAF
/ IAT sensor
connector

Remove Air cleaner cover

- 3. Remove the air cleaner chamber
- **4.** Detach green harness retaining clip from air box body



Detach clip

Remove Air cleaner chamber

- **5.** Remove M6 screws from the air box.
- **6.** Loosen air box clamp screw and remove steel engine breather pipe from air box body.
- 7. Turn and remove the air cleaner case as shown.

Loosen





7. Throttle Body removal

- 1. Disconnect the engine wire harness connectors and wire harness clips from the intake manifold chamber, including the throttle actuator connector & Manifold absolute pressure (MAP) sensor connector.
- **2.** Disconnect the brake booster vacuum hose and harness clamp
- **3.** Remove the water bypass hose from retaining clip
- 4. Remove the throttle body without disconnecting the water bypass hoses and put the bolts to one side, these will be re-used later. Remove the O-Ring from the OEM plastic manifold.



Remove throttle body



8. Intake Manifold removal

- 1. Disconnect the EGR valve connector (if equipped).
- 2. Remove the front harness holder including support clip and put the bolts and clip to one side, these will be reused later.
- 3. Disconnect PCV hose



Disconnect EGR valve connector (if equipped)



- **4.** Remove M8 screws (7x) from the manifold flange
- 5. Remove the intake manifold assembly and put the bolts and gasket to one side, these will be reused later.
- **6.** Remove hose from PCV valve, this will be replaced later.

Remove PCV hose

Remove front harness holder



Remove M8 screws (7x)

Remove intake manifold assembly

9. <u>Fuel line removal (Optional- if supplied)</u>

Safety Warning: The fuel system is under high pressure. To prevent uncontrolled fuel spray during disassembly, it is required to purge system of high pressure. Refer to procedure outlined on page-15 of this manual.

- 1. Remove the quick-connect fitting cover from the fuel rail.
- **2.** Check the quick-connect fitting for dirt, clean it if needed.
- **3.** Place a rag or shop towel under quick-connect fitting, to catch any residual fuel.
- 4. Disconnect the quick-connect fitting by holding the connector with one hand and squeeze the retainer tabs with the other hand to release them from locking tabs.
- **5.** Pull the connector off.

NOTE: Be careful not to damage fuel line or other parts.

If the connector does not move, keep the retainer tabs pressed down, and alternately pull and push the connector until it comes off easily.

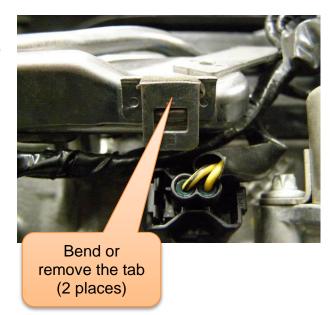
6. Repeat above procedure for the other end of fuel line, the factory line will be replaced with the line supplied in the supercharger kit.



Remove quick connect fitting from the Fuel rail

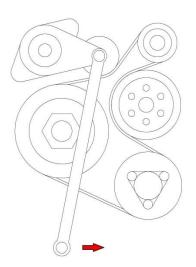
10. Fuel rail modification

- 1. Unclip injector harness from fuel rail and remove plastic casing from harness; this will be left off to create clearance behind supercharger manifold.
- 2. Undo nuts (2x) and remove fuel rail.
- 3. Remove injectors from fuel rail.
- **4.** Bend tabs downwards or remove to provide clearance behind supercharger manifold.
- **5.** Re-fit fuel rail to engine and plug in harness.



11. Engine accessory drive belt removal

Remove drive belt under vehicle panels, place a long series 19mm wrench over hexagon on tensioner and move in direction shown and store it in a safe location. This will be replaced later.



HONDA JAZZ / FIT 1.5L SUPERCHARGER SYSTEM

SECTION 2

INSTALLATION INSTRUCTIONS

SAFETY WARNING

No unauthorised service or alteration may be undertaken to the Sprintex supercharger. Installation should be carried out in a workshop which is a safe and ventilated working environment with equipment and procedures compliant with local authority guidelines and legal requirements. Installers should ensure adequate hearing, eye, and physical protection is used at all times during the installation process. Installers should take reasonable precautions to avoid fatigue and closely follow the installation instructions during every installation. Sprintex recommends installation should not be carried out unsupervised. Sprintex, its directors, employees and agents will not accept liability for damage accident or injury resulting from the installation process. Safety warnings are also provided throughout this document.

1. <u>Install and secure new PCV</u> valve line

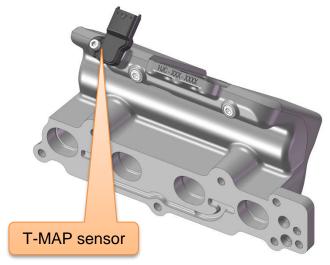
Install new PCV valve line and secure to front engine harness casing with cable tie. The hose requires to be secured in such a way as to avoid chafing on the thermostat housing.

NOTE: The cable tie should only be tightened enough to secure the hose without collapsing it.



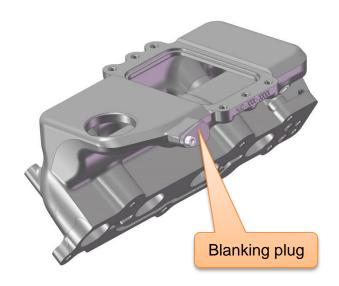
2. <u>Install T- MAP sensor to the Manifold (Optional- if supplied)</u>

Install the supplied T- MAP sensor to the manifold and secure it with the supplied SHCS M6 x 20. Tighten to 9Nm.



3. Install blanking to the manifold (Optional- supplied with hardware only kits)

Install supplied blanking plug with the O-Ring to the manifold and secure it with the supplied SHCS M6 x 16. Tighten to 11Nm.

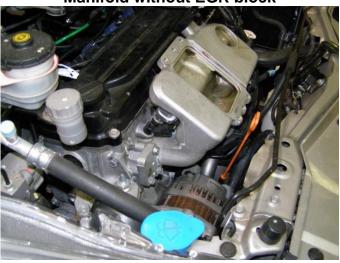




4. Install supercharger manifold

- a. The supercharger system is shipped as an assembly, in order to fit the supercharger manifold it is recommended that the supercharger assembly, be separated from the manifold for ease of fitment.
- b. Once the manifold has been separated, fit the front harness casing support clip to the manifold and fit the manifold to the engine using the original gasket and bolts. Tighten screws to 23 Nm (17 ft-lb).

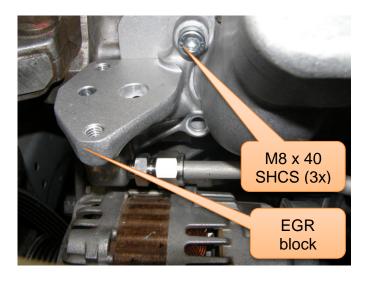




Manifold with EGR block



c. OPTIONAL for vehicles with EGR: Replace the factory screws (3x) with the supplied M8 x 40 SHCS to clamp over the EGR block. Tighten screws to 23 Nm (17 ft-lb).

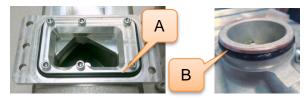


d. Secure front harness casing to manifold using original shoulder bolt.



5. <u>Install supercharger assembly to manifold</u>

a. Check that discharge O-Ring is in place, apply rubber grease to spigot O-Ring and engage supercharger assembly with the manifold. Final fitment will require a firm push with the right hand, to encourage the spigot O-Ring to seat in bypass port hole.



b. Secure the supercharger with the six M8 x 25 SHCS. Tighten to 23 Nm (17 ft-lb).

6. <u>Fit supercharger intake pipe to</u> assembly

- **a.** Remove silicon throttle body gasket and factory MAP sensor from factory intake plenum. Transfer these to supercharger intake pipe.
- **b.** Apply rubber grease to intake pipe O-Ring and fit to supercharger assembly, secure with original bolts and tighten M6 to 11Nm (8 ft-lb) and M8 to 23 Nm (17 ft-lb).



c. Connect brake booster hose to supercharger intake pipe.

Tip: During this process it is helpful to slacken the M8 bolt securing the rear support bracket.

Connect brake booster hose

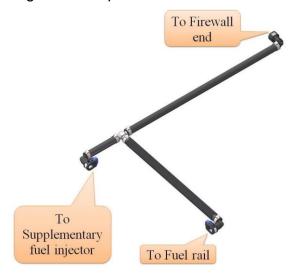


Attach throttle body to supercharger intake pipe using original M8 bolts, tighten to 23 Nm (17 ft-lb).



8. Fit fuel line (Optional- if supplied)

- **a.** Fit the fuel line assembly supplied to supplementary injector.
- **b.** Clip inlet and outlet ends of fuel line into place on the fuel rail and firewall respectively. Refit original crash protection cover at fire wall end.





9. Fit air box assembly

Fit the air box by reversing the procedure described on page 19 of this document.



10. Supplementary ECU and hardware (OPTIONAL- if supplied)

The engine tuning for the Sprintex Honda supercharger kit, is controlled by interrupting and modifying engine signals, as well as signals taken from sensors supplied by Sprintex. It is most important that the ECU in your vehicle is **standard**, if you are uncertain of the status of your vehicles tuning, take it to your local dealer and have them re-flash your ECU with the latest Dealer tune.

The tune map embedded in the supplementary controller is optimised for 95 RON fuel (US 91 Octane). The use of 98 RON fuel (US 93 Octane) is recommended for better driveability and power yield.

The supplementary controller comes pre-programmed with a basic calibration. Final calibration is the responsibility of the customer.

Supplementary controller and wiring loom



a. <u>Fit altitude compensation MAP</u> <u>sensor (1 bar)</u>

Fix the supplied MAP sensor bracket with the MAP sensor to the air filter box cover using existing screws (2x).

NOTE:

1 bar MAP sensor does not need any hose connection to the hose barb.



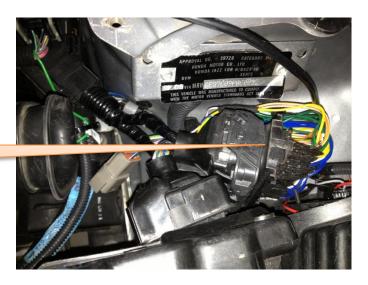
1 bar MAP sensor



b. Install the Plug & Play wiring harness (intermediate)

Connect one end to ECU adaptors B & C and the other end to vehicle ECU plugs B & C.

Plug & play ECU wiring harness



c. Install the SMT

Install the provided SMT (supplementary ECU) to the rear side of the ECU box as shown in the picture using the supplied hook & loop Velcro.

SMT



d. Install the main wiring harness

Connect the plugs for T-MAP sensor, 1 bar MAP sensor, supplementary fuel injector, SMT, Deutsch plug to intermediate wiring harness.

NOTE: The cables need to be secured with cable ties, in such a way that they will not chafe against other components.



T- MAP sensor



1 bar MAP sensor



Supplementary fuel injector plug



SMT & Deutsch plug



11. Connect PCV valve hose to intake housing

PCV valve



12. Mount idler bracket assembly

Mount idler bracket assembly to supercharger extension using the supplied M8x25 SHCS (2x) and tighten to 23 Nm (17 ft-lb).

Idler bracket assembly



13. Fit new accessory drive belt

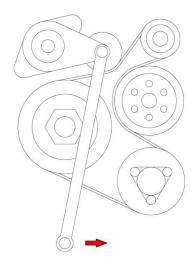
To fit new belt, remove under vehicle panels & place a long series 19mm wrench over hexagon on tensioner and move in direction shown.

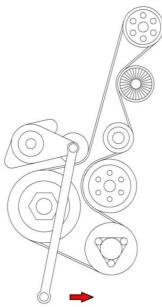
Fit new accessory drive belt **5PK-1660** (Gates No.K050653).

Note: If you find that the drive belt does not run across the idler pulley in a straight line, it is possible to correct alignment of the idler bracket by slackening mounting bolts slightly and tapping assembly to correct alignment.

Note: Diagram shows standard belt routing.

SUPERCHARGER BELT ROUTING





14. Relocate front engine earth strap

Relocate front engine earth strap from tab on right front body panel, to right hand inner guard as shown.



15. Fit EGR valve to the EGR block (if equipped)

Fit the original EGR valve to the EGR block using the factory screws (2x). Connect the wiring plug to EGR valve.

Ensure the factory gasket is in place between EGR valve and EGR mounting block.





HONDA JAZZ / FIT 1.5L SUPERCHARGER SYSTEM

SECTION 3

PRE TEST-DRIVE INSPECTION

SAFETY WARNING

Ensure adequate steps are taken to prevent injury, spillage or fire.

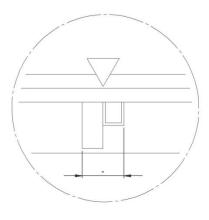
1. Pre-Start inspection

- Ensure coolant is at correct level.
- Ensure engine oil is at correct level.
- Ensure vehicle has fresh 95 Octane fuel.
- Ensure the belt is aligned.
- Ensure the air filter is clean
- Check & replace spark plugs if necessary. Set the gaps to factory spec.

WARNING: The Honda Jazz / Fit have <u>Electric Power Assisted Steering</u>; this circuit can draw as much as 60 AMPS of power. <u>It is most important that the battery earth lead is secured correctly at all times.</u>

2. Engine Warm Up

- Start the engine and allow it to run until it reaches normal operating temperature.
- Check for oil leaks.
- With engine stopped, check the position of the auto-tensioner indicators.
 - Ensure belt tension service indicator is within the standard range.
- Check the engine coolant level & top up if necessary.



TENSIONER INDICATOR

3. Road test vehicle

- Road test the vehicle.
- Recheck all joints and connections for leaks & rectify if required.

NOTE: The HONDA fuel system is a non-return system. It is important that during the initial test dive, mild applications of the throttle are employed. This will enable the fuel system to self-purge any air from the supplementary injector line.



4. Use of generic scan tool

If a generic scan tool is used to clear DTCs, be aware that there is only one setting for clearing the ECM / PCM and it clears all DTCs and learned values at the same time. (CKP pattern learn, idle learn, freeze data, on-board snapshot and DTC's). After clearing all commands, the following procedures need to be carried out in order.

a) Idle Control System learn procedure

- 1. Make sure all electrical items (A/C, audio, lights, etc.) are off.
- 2. Reset the ECM / PCM.
- 3. Turn the ignition switch to ON (II) and wait 2 seconds.
- Start the engine. Hold the engine speed at 3,000 rpm without load (A/T in P or N, M/T in neutral) until the radiator fan comes on, or until the engine coolant temperature reaches 90°C (194°F).
- 5. Let the engine idle for about 5 minutes with the throttle fully closed.

NOTE: If the radiator fan comes on, do not include its running time in the 5 minutes.

b) <u>CKP pattern learn procedure (crankshaft position sensor) without HDS (Honda Diagnostic System)</u>

- 1. Start the engine. Hold the engine speed at 3,000 rpm without load (A/T in P or N, M/T in neutral) until the radiator fan comes on.
- 2. Test-drive the vehicle on a level road. Decelerate (with the throttle fully closed) from an engine speed of 2,500 rpm down to below 1,000 rpm (with the A/T in position 2, or the M/T in 1st gear).
- 3. Repeat step-2 several times.
- 4. Turn the ignition switch to LOCK (O).
- 5. Turn the ignition switch to ON (II) and wait 30 seconds. The CKP patterns learn procedure is complete.

NOTE: The procedures described above will not stop the vehicle from running correctly. They mainly impact on the lean running fuel economy mode, which is one of the features designed into the Honda factory tune. If you are not confident with these procedures, take the vehicle to your Honda dealer and have the ECU reset with the Honda diagnostics tool.



HONDA JAZZ / FIT 1.5L SUPERCHARGER SYSTEM

SECTION 4

MAINTENANCE INSTRUCTIONS

1. Supercharger Drive Belt Replacement

- a) It is recommended that the supercharger drive belt be checked at every regular service and be replaced at 50,000 km or 2 years, whichever occurs first.
- b) Refer page- 32 of this manual for belt replacement.

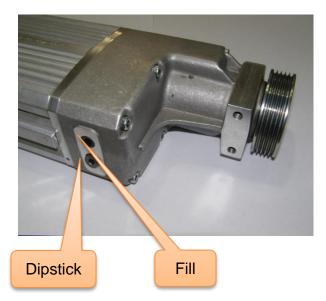
2. Supercharger Removal

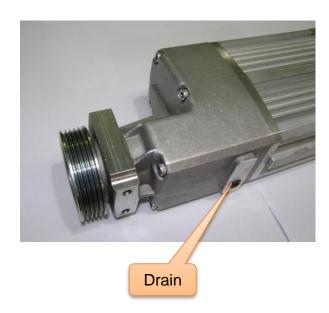
This is the reversal of installation steps.

3. Supercharged Jazz/Fit Lubrication Service

- a) Vehicle Oil: It is recommended that the Honda service schedule and interval be adhered to.
- b) **Supercharger Oil**: Drain & replace Supercharger oil every 40,000 Km or 2 years (whichever is earlier).
 - i) Drain oil via lower drain plug at front of supercharger.
 - ii) Replenish with <u>54ml</u> of a quality fully synthetic SAE 75W-90 gear oil, specifications: API GL5, MT1 such as: Redline 75W90 NS gear oil (factory fill), Castrol Syntrax Universal Plus 75W-90, Lucas synthetic SAE 75W-90 gear oil or equivalent. Check oil level with the dipstick provided in the Supercharger assembly. **Tighten dipstick fully and then check the oil level.**

OIL LEVEL SHOULD BE CHECKED WITH THE DIPSTICK PERIODICALLY (RECOMMENDED EVERY WEEK AND ALSO BEFORE & AFTER A LONG JOURNEY).





4. Spark plugs

Replace spark plugs every 50,000 Km. Use NGK IZFR6K13 spark plugs.