

GReddy Turbo Kit

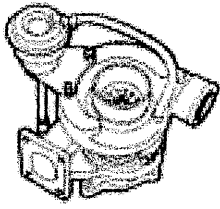
'96-00 Honda Civic EX TD04-19T Turbo Kit

'96-00 Honda Civic EX TD04-19T Turbo Kit

| | | | | |
|-----|------------------------|-----------------------------------|-----------------------|-------|
| 1. | Turbocharger | TD_04H19T8.5cm ³ P380 | | 1 |
| 2. | Exhaust Manifold | (Cast) | | 1 |
| 3. | Down Pipe Adapter | (Cast) | | 1 |
| 4. | Down Pipe | (Steel 50φ) | | 1 |
| 5. | Suction Pipe | S_1 | (Aluminum 60φ) | 1 |
| 6. | Compression Pipe | C_1 | (Aluminum 50φ) | 1 |
| 7. | " | C_2 | (Aluminum 50φ) | 1 |
| 8. | " | C_3 | (Aluminum 60φ) | 1 |
| 9. | Oil Pressure Hose | SUS 1000mm | | 1 |
| 10. | " | Banjo Fitting Small male & female | | 1 set |
| 11. | " | Copper Wassher 10φ (t = 1.0mm) | | 2 |
| 12. | " | Three Way fitting | | 1 |
| 13. | " | Fitting | 1/8PT_1/8PT | 1 |
| 14. | " | Fitting | 1/8PT_1/8PF | 1 |
| 15. | Oil Return Flange Tube | 19φ | (Turbo Side) TK_40_6 | 1 |
| 16. | " | 19φ | (Engine Side) TK_40_5 | 1 |
| 17. | Rubber Hose | 9φ × 400mm | (Blow By) | 1 |
| 18. | " | 19φ × 300mm | (Oil Return) | 1 |
| 19. | Silicone Hose | 50φ × 70mm | | 2 |
| 20. | " | 60φ × 70mm | | 1 |
| 21. | Reducer Hose | 50φ_60φ | | 1 |
| 22. | " | 60φ_65φ | | 1 |
| 23. | Hose Clamp | 10φ | #5 | 2 |
| 24. | " | 19φ | #12 | 2 |
| 25. | " | 50φ | #32 | 5 |
| 26. | " | 60φ | #36 | 5 |
| 27. | " | 65φ | #40 | 1 |

| | | | | | | | | | | |
|-----|------------------|--------------------------------|-------------|---|-----|----|---|--------------------------|--|----|
| 28. | Gasket | Turbo I N | (TD_04H) | | | | | | | 1 |
| 29. | " | Turbo O U T | (TD_04H) | | | | | | | 1 |
| 30. | " | Down Pipe Adapter | (TD_05 I N) | | | | | | | 1 |
| 31. | " | Down Pipe | 50 φ | | | | | | | 1 |
| 32. | " | Oil Return | T D Small | | | | | | | 2 |
| 33. | Heat Shield | | | | | | | | | 1 |
| 34. | Thermo Cloth | 100×1000mm | | | | | | | | 1 |
| 35. | Zip Ties | 200mm | | | | | | | | 10 |
| 36. | Airinx | A Y_M | (Blue) | | | | | | | 1 |
| 37. | " | adapter | (M60 φ) | | | | | | | 1 |
| 38. | Compression Pipe | C-3 bracket | | | | | | | | 1 |
| 39. | e_m_a_n_a_g_e | (Unit & Harness) | | | | | | | | 1 |
| 40. | Injectors | (310cc & harness hardware kit) | | | | | | | | 1 |
| 41. | M6×15mm | P=1.0 | Stainless | B | S/W | _ | _ | (Turbo Side Oil return) | | 3 |
| 42. | M6×15mm | P=1.0 | Stainless | B | S/W | FW | N | (Engine Side Oil return) | | 2 |
| 43. | M8 | P=1.25 | Stainless | _ | S/W | _ | N | (Exhaust Manifold) | | 9 |
| 44. | M8×15mm | P=1.25 | Stainless | B | S/W | FW | _ | (Heat shield) | | 3 |
| 45. | M8×15mm | P=1.25 | Stainless | B | S/W | FW | N | (Pipe Bracket) | | 1 |
| 46. | M8×30mm | P=1.25 | Stainless | B | S/W | _ | N | (Turbo I N) | | 4 |
| 47. | M8×35mm | P=1.25 | Stainless | B | S/W | _ | _ | (Turbo O U T) | | 3 |
| 48. | M8×38mm | P=1.25 | Stainless | B | S/W | _ | N | (Down Pipe) | | 3 |
| 49. | M8×70mm | P=1.25 | Stainless | B | S/W | FW | _ | (Turbo O U T) | | 1 |

Parts List



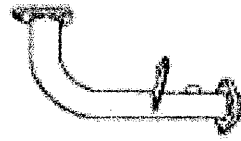
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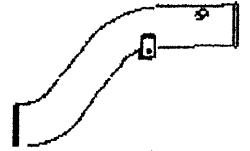
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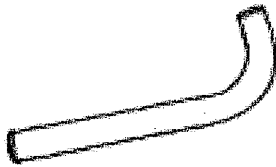
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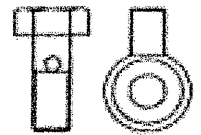
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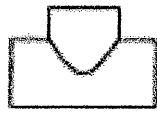
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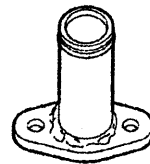
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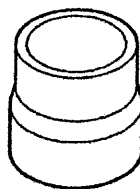
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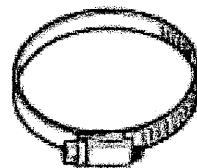
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19, 20



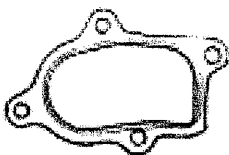
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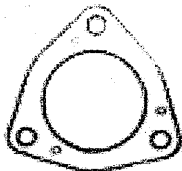
23_27



28



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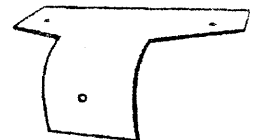
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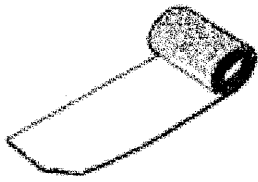
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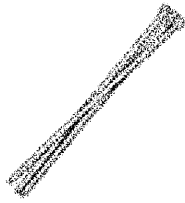
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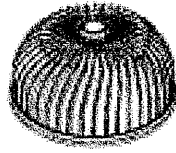
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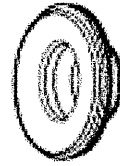
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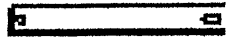
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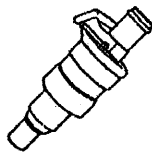
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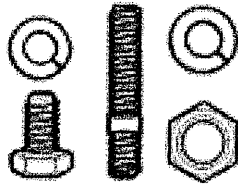
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2. Removal of Stock Parts

When removing the stock parts, make sure you read over the factory repair manual for proper procedures.

2-1 Disconnect the negative side of the battery, and remove the engine undercover.

2-2 Drain the engine oil and coolant.

2-3 Remove the air cleaner box with all the brackets, air intake tube, and breather/water pipe.

2-4 Remove the O₂ Sensor and the exhaust manifold.

2-5 Remove the lower transmission cover and the oil pan.

2-6 Remove the A/C condenser fan and the radiator fan.

2-7 Disconnect the upper radiator hose.

3. Kit Installation

3-1 Oil Pan Modification

- (1) Drill three holes to the oil pan that was removed, and install the oil return flange tube. Install the oil return flange so that the pipe points to the transmission side of the pan.
(See the illustrations)

- * Apply some sealant to the oil return flange tube mounting bolts.

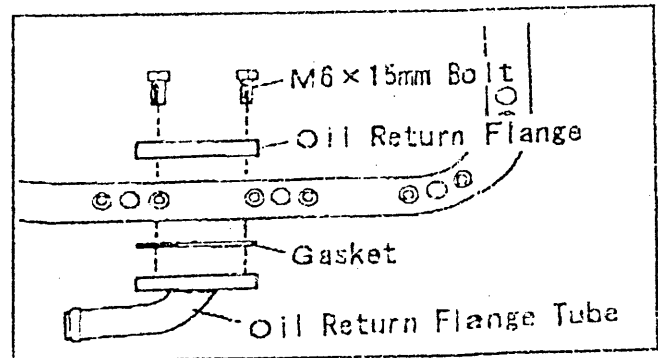
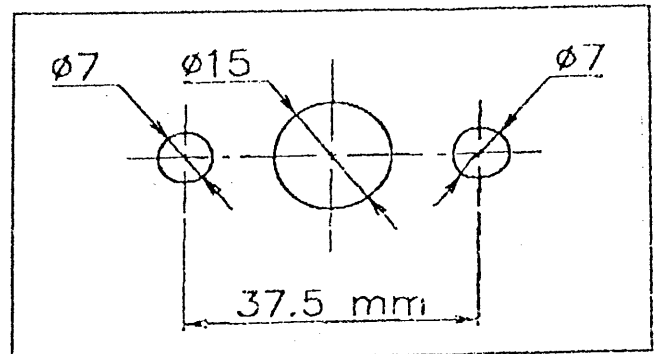
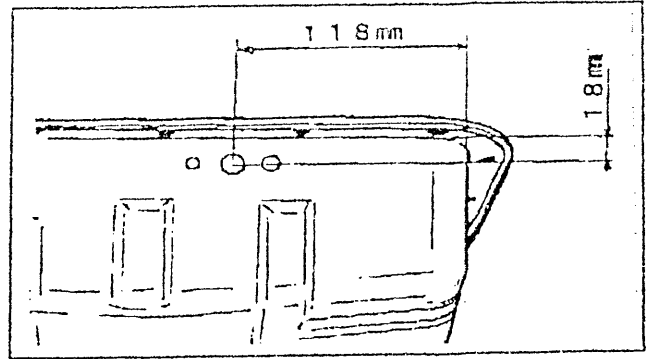
CAUTION

When cutting, grinding, or drilling, make sure you wear a safety glasses, or a facemask for protection.

(Parts used #23, 24, 47, 53)

- (2) Reinstall the modified oil pan back on to the engine block.

- * Use a new oil pan gasket.
- * Be sure to clean the oil pan thoroughly before reinstallation.



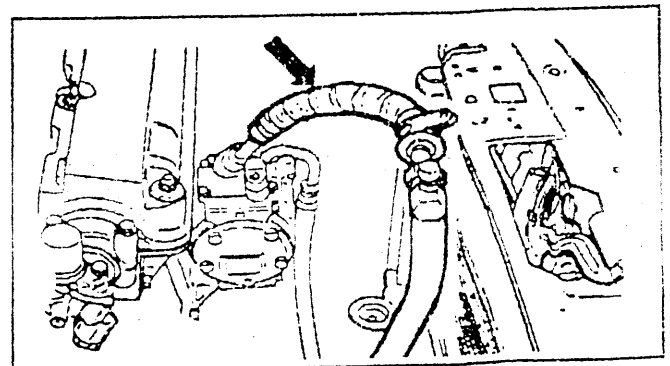
3-2 Thermo-cloth Installation

Wrap the A/C line with the provided Thermo-cloth as shown.

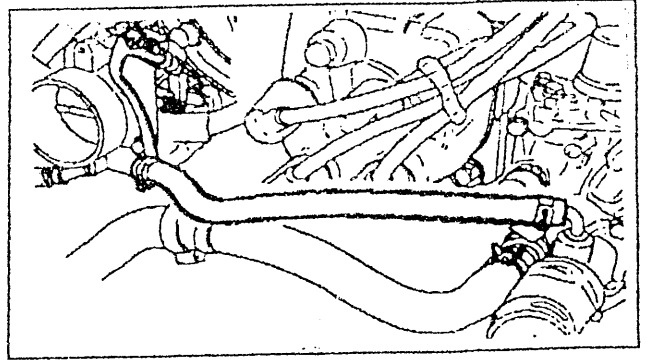
CAUTION

Make sure to use the thermo-cloth properly to prevent damage and fire.

(Parts used #49)

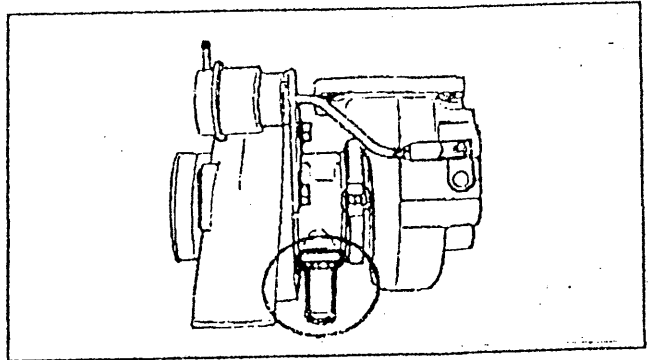


- 3-3 Throttle Body Water Line Installation**
Install the water by-pass hose from the water by-pass tube to the throttle body.
(Parts used #26,35)

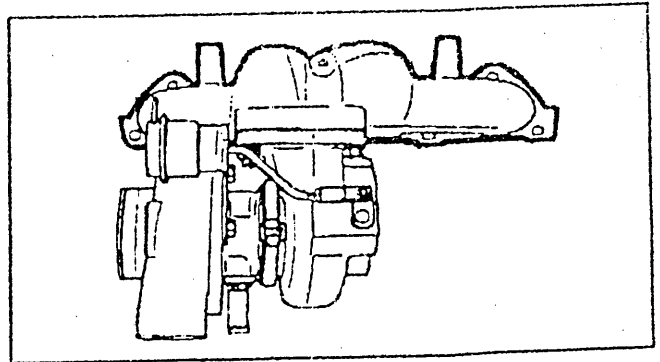


3-4 Turbocharger Assembly

- (1) Install the oil return flange tube to the turbocharger using the provided gasket.
(Parts used #1, 22, 47, 55)



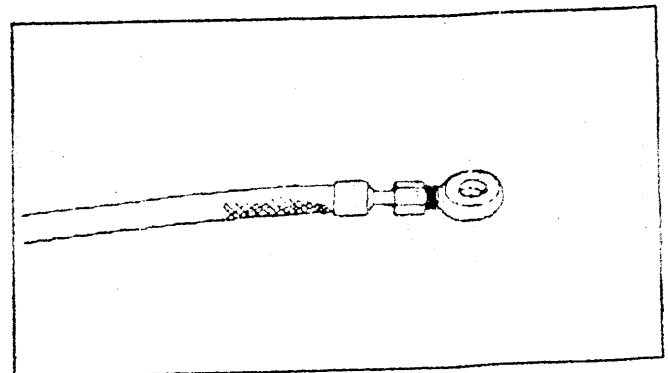
- (2) Install the provided stud bolts on to the turbo manifold and mount the turbocharger to the manifold using the provided gasket.
(Parts used #2, 43, 53)



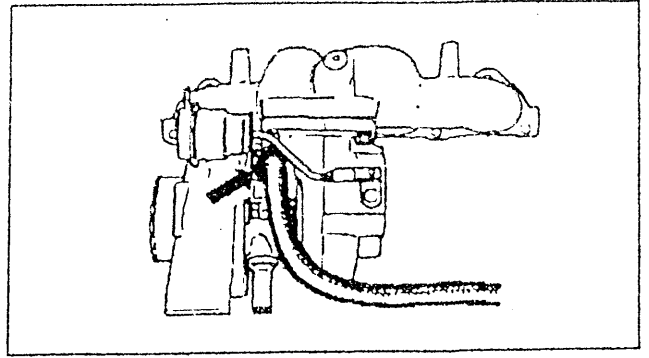
- (3) Install the provided oil pressure line to the turbocharger.

- ① Install the female banjo union to one end of the oil pressure line.
(Parts used #16,17)

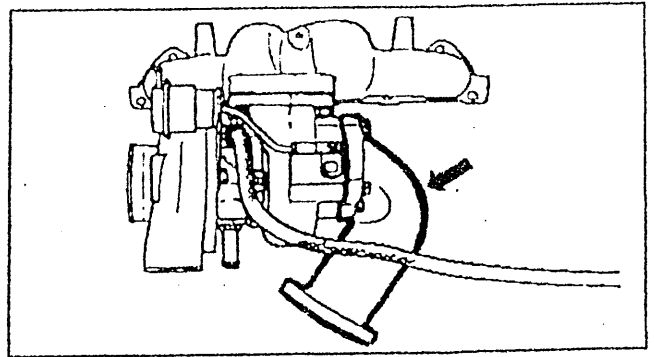
- * It is impossible to tighten the banjo union after it is installed on to the turbo, so make sure it is installed tight.



- ② Install the oil pressure line to the turbocharger using banjo union fitting, and copper washers.
(Parts used #18)



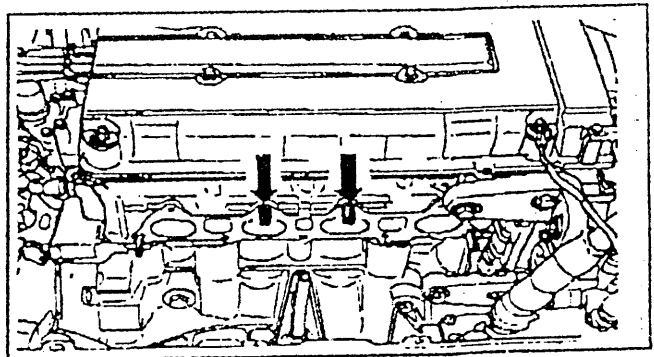
- (4) Install stud bolts to the turbine housing and install the down pipe adapter with provided gasket.
(Parts used #3,44,56)



3-5 Turbocharger Assembly Installation

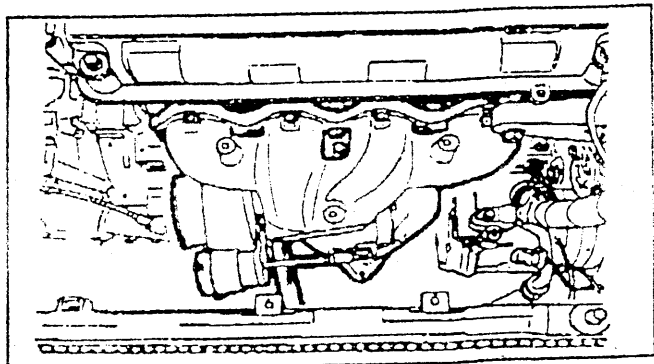
- (1) Install 2 stud bolts to the two center holes above the exhaust ports as shown.

* (Parts used #55)



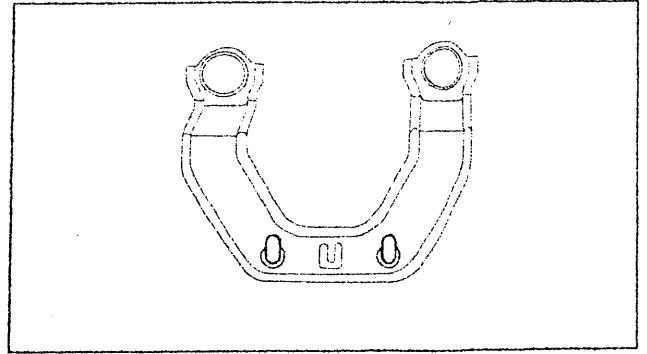
- (2) Push the oil level gauge guide tube back slightly to avoid contact with the turbocharger assembly, then install the turbocharger assembly.

* Use 5 stock bolt for the manifold, and factory exhaust gasket.

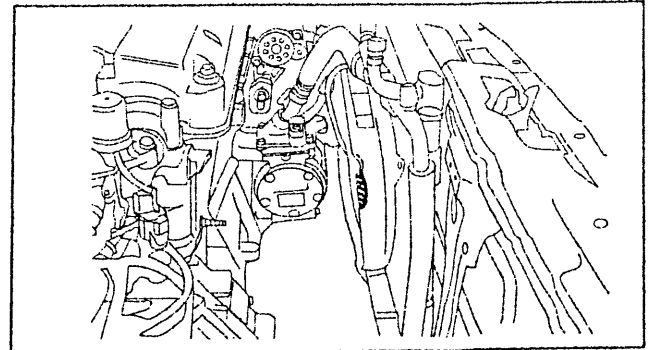


3-6 Radiator Installation

- (1) Slot out the hole on the upper A/C condenser bracket, then position the A/C condenser as far forward as possible.



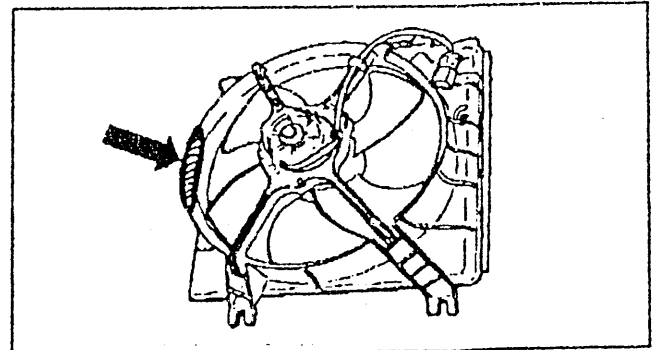
- (2) Trim small part off the A/C fan to avoid it from contacting the actuator on the turbocharger, then reinstall the A/C condenser fan.



- (3) Trim small part off the radiator fan to avoid it from contacting the turbocharger, then install the fan and connect the radiator hoses.

CAUTION

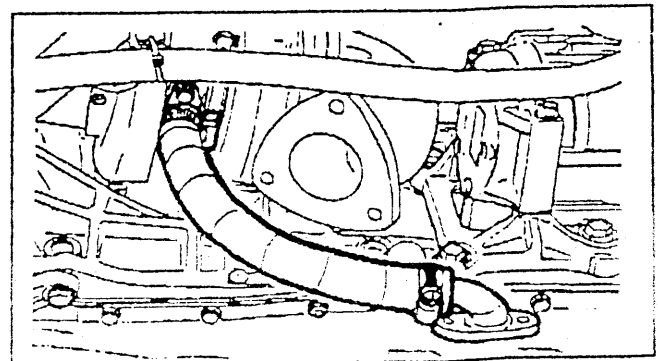
When cutting, grinding, or drilling, make sure you wear a safety glasses, or a facemask for protection.



3-7 Oil Return Connection

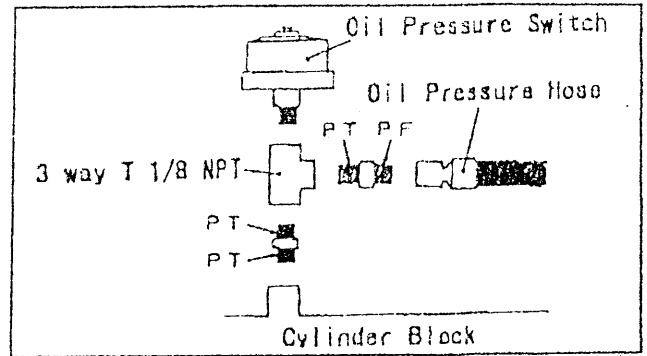
Cut the provided 16Ø hose to a length of 280mm, then connect the turbo oil return to the oil pan.

- ✧ Wrap the oil return hose with the provided thermo-cloth.
(Parts used #28, 37, 49)

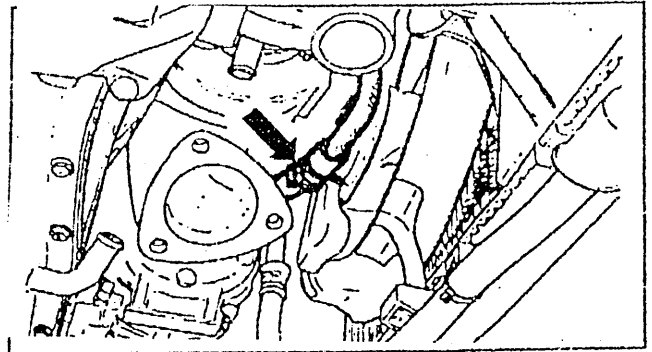


3-8 Oil Pressure Line Connection

- (1) Remove the factory oil pressure switch located on the left side of the oil filter, then install the oil pressure union and the three way fitting as shown.
(Parts used #19, 20, 21)

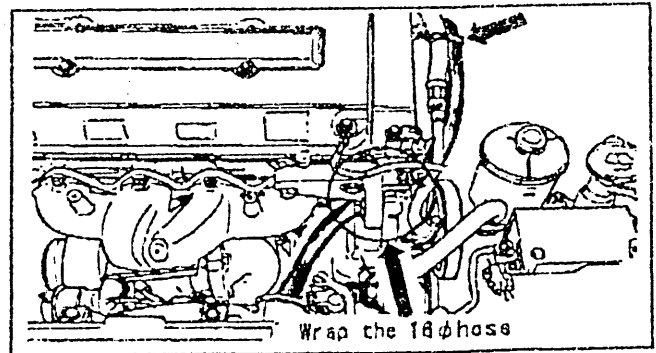


- (2) Connect the oil pressure line from the turbo to the three way fitting.
 - * Route the oil pressure line to the back of the engine along with the power steering line. (Pulley side of the engine) Make sure that the line will not rub up on the actuator rod, by securing it on to the A/C condenser fan frame as shown. (Wrap the line with 16Ø hose before securing it to the fan.)
 - * Apply some Teflon tape to the PT side of the union fitting.
(Parts used #28, 50)



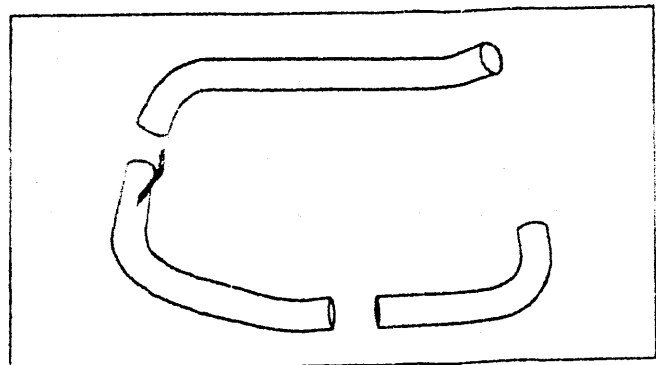
CAUTION
Improper connection of the oil pressure line can damage the turbocharger. When applying Teflon tape, make sure not to get it in side the line. Only on the threads.

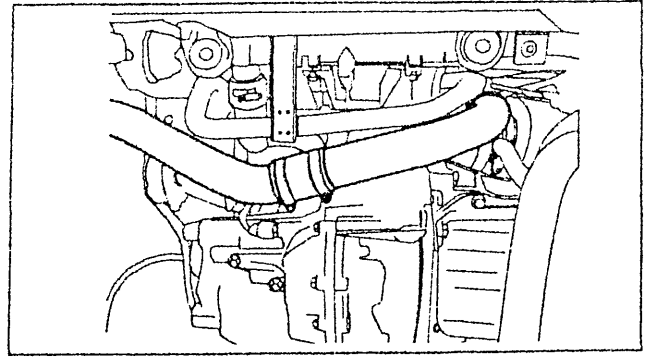
CAUTION
If the oil pressure line rubs up on the actuator rod, it will interfere with actuator operation and can damage the engine.



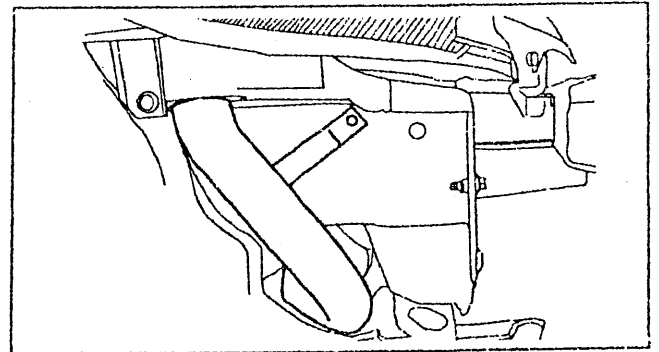
3-9 Compression Pipe Installation

- (1) Install the Compression pipe C-1, C-2 and C-3 between the turbo and the throttle body.
(Parts used #7, 8, 9, 30, 33, 34, 39, 40, 41)



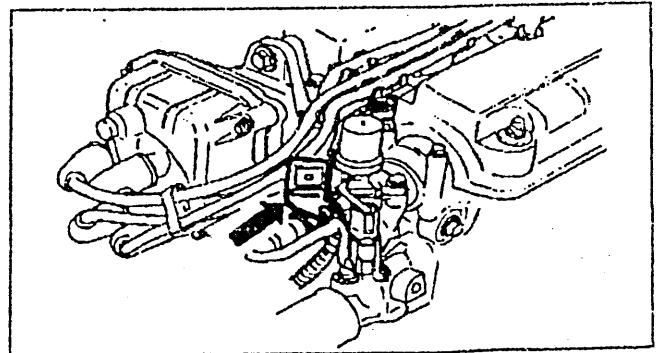


- (2) Secure the compression pipe C-2 to the chassis as shown .



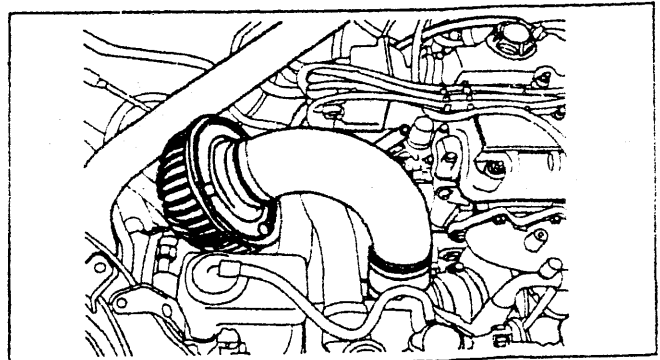
3-10 Suction Pipe Installation

- (1) Remove the VTEC Solenoid Valve connector harness bracket. Secure the harness down with a zip tie.
(Parts used #50)

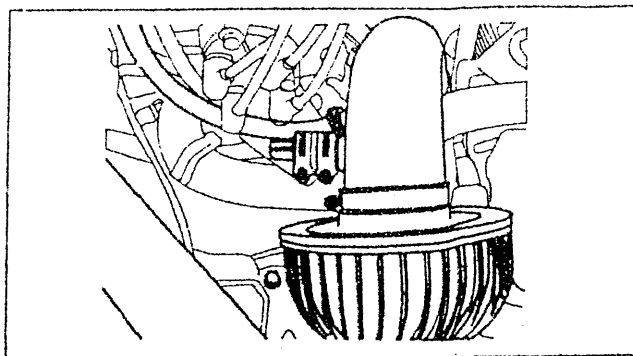


- (2) Install the Airinx adapter to the Airinx air filter using the provided 6mm cap bolt.
(Parts used #10, 11)

- (3) Install the Airinx, Suction pipe S-1, and S-2 to the inlet of the turbo. Secure the S-2 bracket to the VTEC Spool Valve base.
- * Push down and back the clutch line tube to avoid contact with the suction pipe.
 - * Use the 80Ø X 60mm hose (Part # 31) between S-1 and turbo.
- (Parts used #5, 6, 31, 32, 42)



- (4) Connect the 10Ø blow-by hose from the valve cover and install the intake temp. sensor to the suction pipe S-2. Use the supplied harness extension for the sensor, and Route the blow-by hose under the distributor.
(Parts used #27, 36,52)

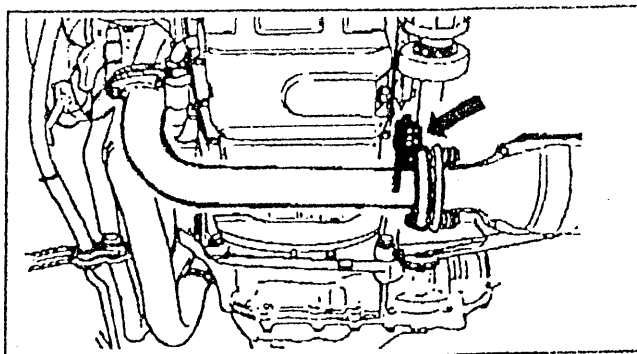


3-11 Down Pipe Installation

Install the down pipe with the provided gaskets.

- * Reuse the factory hardware at the catalytic converter and the down pipe bracket.

(Parts used #4, 45, 46, 57)



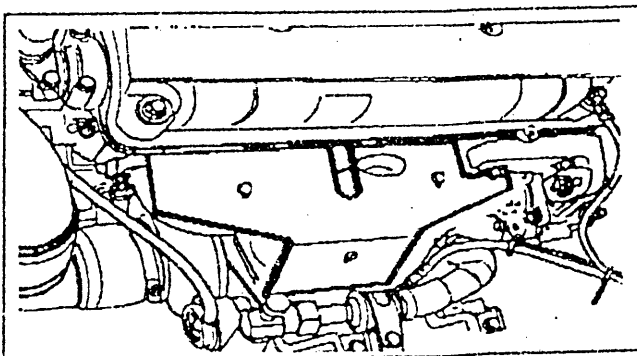
3-12 Heat Shield Installation

Reinstall the oil level gauge, then install the heat shield.

CAUTION

The exhaust manifold gets extremely hot! Without the heat shield, it can damage the vehicle or even cause fire in the engine room. Make sure you use the provided heat shield.

(Parts used #48, 54)



3-13 Actuator Vacuum Line Installation

Share the vacuum port on the back of the intake manifold using the three way vacuum tee, and connect the provided vacuum hose between the three way tee and the actuator.

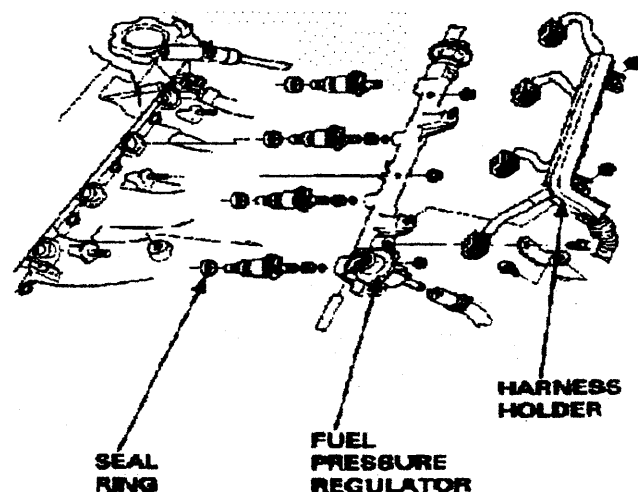
- * Secure the vacuum hose so that it will not rub up on the radiator fan.

(Parts used #25, 50, 51)

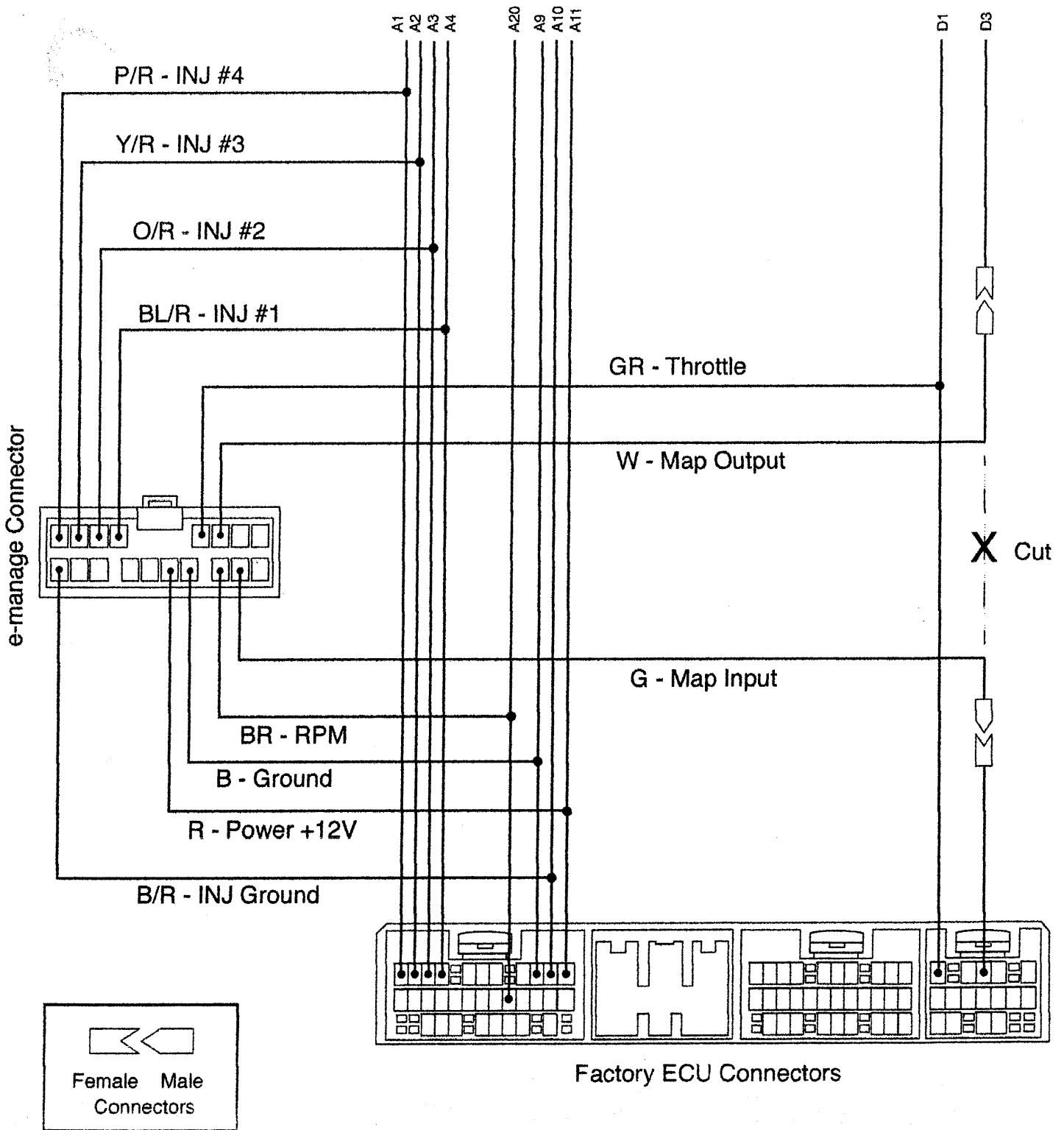
GReddy/RC Engineering Injector Installation

1. Remove factory injectors as specified in a Honda factory service manual.
2. Installation of GReddy/RC Injectors:
 - A. Cut factory injector harness to remove factory injector plugs.
 - B. Install provided RC Engineering injector plugs by soldering them to the factory injector wires (*When installing, make sure to connect all the plugs the same with the factory + and - wires corresponding)
 - C. Carefully position RC injectors into the fuel rail making sure that the top O-rings are seated into the rail
 - D. Seat lubricated sealing rings (provided with injectors) into the intake manifold
 - E. Slightly lubricate the injector casings and position injectors onto the intake manifold; Seat the injector/fuel rail assembly into the sealing rings already in the intake manifold making sure that the injectors go in straight
 - F. Loosely affix the three set nuts to hold the fuel rail in place, then alternate tightening until the rail is fully set
 - G. At that point, the injectors should be fully seated into the intake manifold
3. Attach the injector clips to the injectors making sure that all the wires correspond to one another

*Note: The injectors included in this kit have a larger casing than the factory units (it will be a tight fit), but if you follow these instructions, you should not have any problems with the injectors not seating or sealing properly.



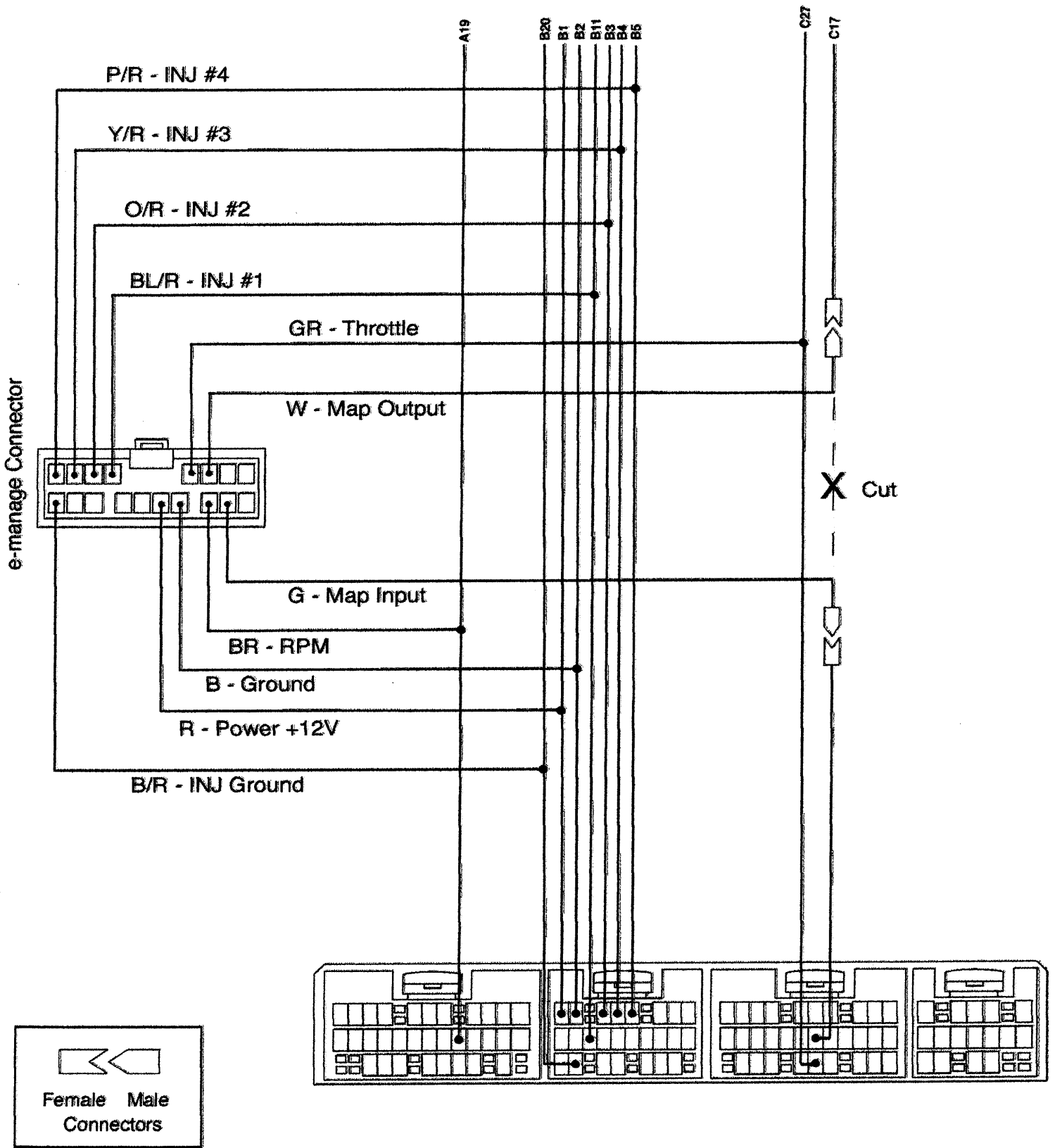
'96 - '98 Honda Civic EX Coupe Turbo Kit e-Manage Diagram



Color Codes

R - Red B - Black BL - Blue BR - Brown O - Orange Y - Yellow P - Purple
 G - Green GR - Grey W - White

'99-00 Civic EX Coupe Turbo Kit e-Manage Diagram



Color Codes
 R - Red B - Black BL - Blue BR - Brown O - Orange Y - Yellow P - Purple
 G - Green GR - Grey W - White