

# INTAKE AND EXHAUST

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**SPECIFICATIONS**

**GENERAL SPECIFICATIONS**

E15CA--

Items	Engine	
	4G93, 4G63, 4G64	4D65, 4D68
Air cleaner Element	Unwoven cloth type	Unwoven cloth type
Exhaust system		
Front exhaust pipe	Dual type	Single type
Muffler	Expansion resonance type	Expansion resonance type
Coupling	Flat coupling	Flat coupling
Suspension system	Rubber hangers	Rubber hangers

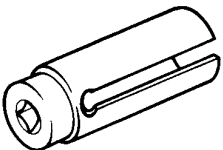
**SERVICE SPECIFICATIONS**

E15CB--

Items	Standard value	Limit
Intake manifold and air intake plenum Distortion of the installation surface	mm (in.) 0.15 (0.006) or less	0.2 (0.008)
Turbocharger Waste gate actuator activation pressure	kPa (kg/cm <sup>2</sup> , psi)	
<4D65>	Approx. 63 (0.63, 7.0)	—
<4D68>	Approx. 67 (0.67, 10.0)	—

**SPECIAL TOOL**

E15DA--

Tool	Number	Name	Use
	MD998770	Oxygen sensor wrench	Removal/Installation of oxygen sensor

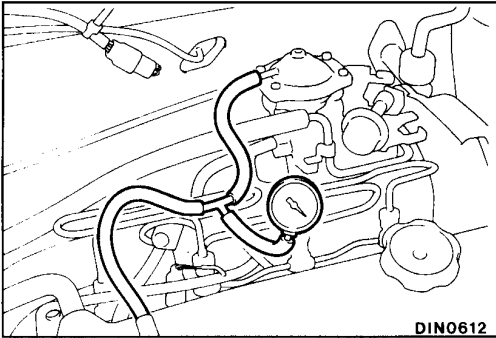
**SERVICE ADJUSTMENT PROCEDURES**

**TURBOCHARGER SUPERCHARGING INSPECTION**  
**<4D65, 4D68>**

E15FDAE

**Caution**

**Conduct the driving test in a location where driving at full acceleration can be done with safety. Two persons should be in the vehicle when the test is conducted; the person in the passenger seat should read the indications shown by the pressure meter.**



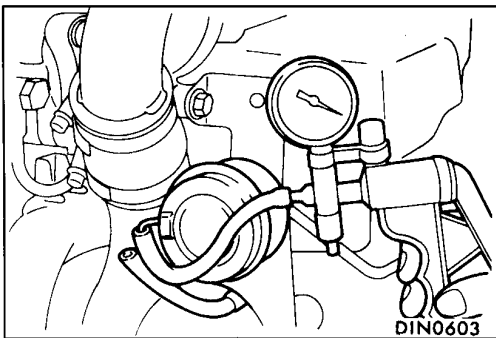
- (1) Remove the boost compensator hose from the fuel injection pump, and install a pressure gauge as shown in the illustration.
- (2) Drive at full-throttle acceleration in second gear and then measure the supercharging when the engine speed is about 3,000 r/min.

When the indicated supercharging does not become positive pressure, check the following items.

- Malfunction of the waste gate actuator.
- Leakage of supercharging pressure.
- Malfunction of the turbocharger.

When the indicated supercharging is 75 kPa (0.75 kg/cm<sup>2</sup>, 10.7 psi) or more, supercharging control may be faulty therefore check the followings.

- Disconnection or cracks of the waste gate actuator rubber hose.
- Malfunction of the waste gate actuator.
- Malfunction of the waste gate valve.



### WASTE GATE ACTUATOR INSPECTION <4D65, 4D68>

E15FEAFa

- (1) Connect a manual pump (pressure-application type) to nipple A.
- (2) While gradually applying pressure, check the pressure that begins to activate [approx. 1 mm (0.04 in.) stroke] the waste gate actuator rod.

**Standard value:**

- <4D65> Approx. 63 kPa (0.63 kg/cm<sup>2</sup>, 7.0 psi)
- <4D68> Approx. 67 kPa (0.67 kg/cm<sup>2</sup>, 10.0 psi)

**Caution**

In order to avoid damage to the diaphragm, do not apply a pressure of 88 kPa (0.88 kg/cm<sup>2</sup>, 12.5 psi) <4D65>, or 105 kPa (1.05 kg/cm<sup>2</sup>, 14.9 psi) <4D68> or higher.

- (3) If there is a significant deviation from the standard value, check the actuator or the waste gate valve; replace if necessary.

**INTAKE MANIFOLD <4G93>**

**REMOVAL AND INSTALLATION**

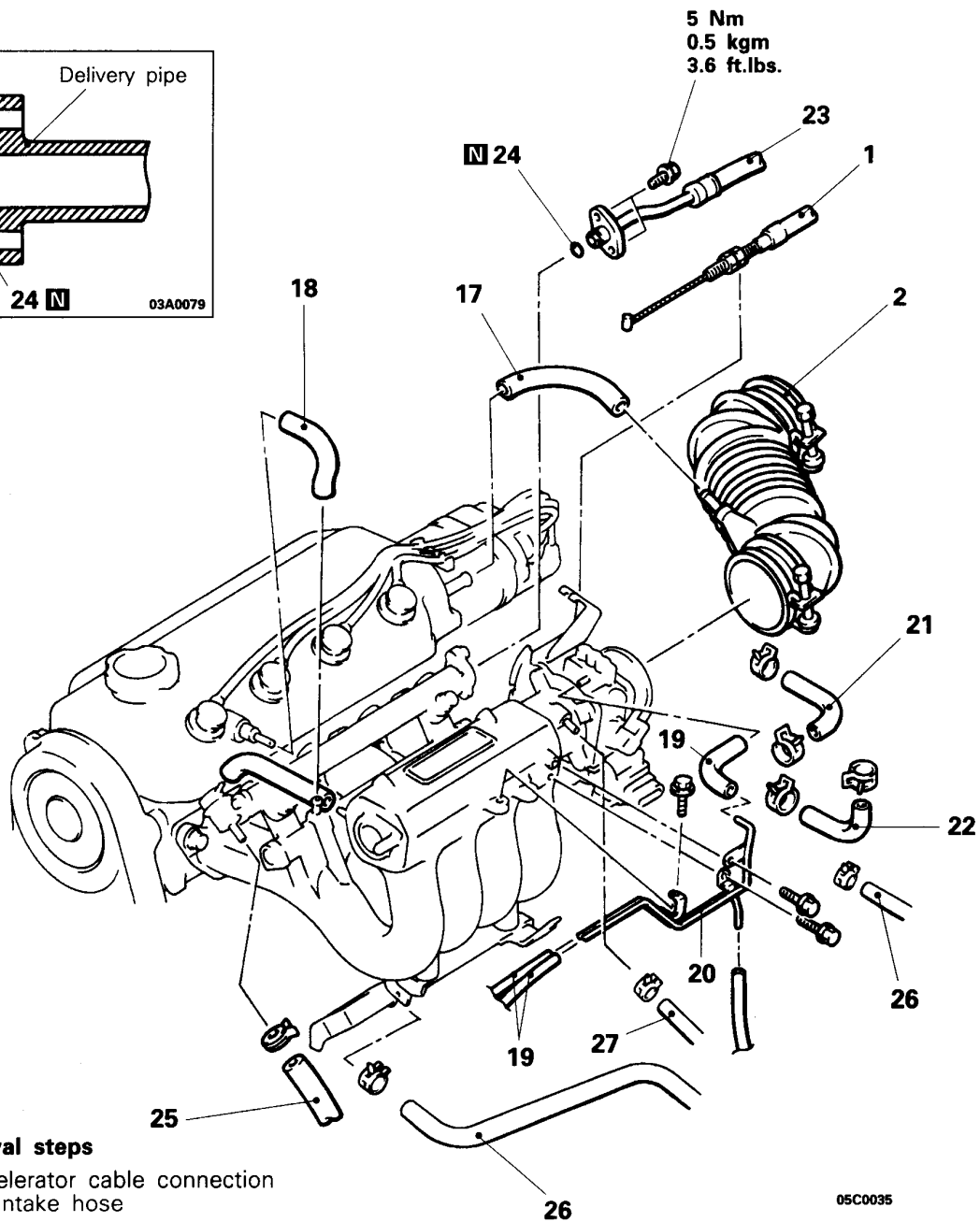
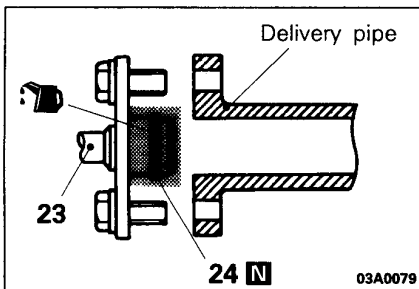
E15MA--

**Pre-removal Operation**

- Draining of Coolant (Refer to GROUP 14 – Service Adjustment Procedures.)
- Releasing of Residual Fuel Pressure (Refer to GROUP 13 – Service Adjustment Procedures.)

**Post-installation Operation**

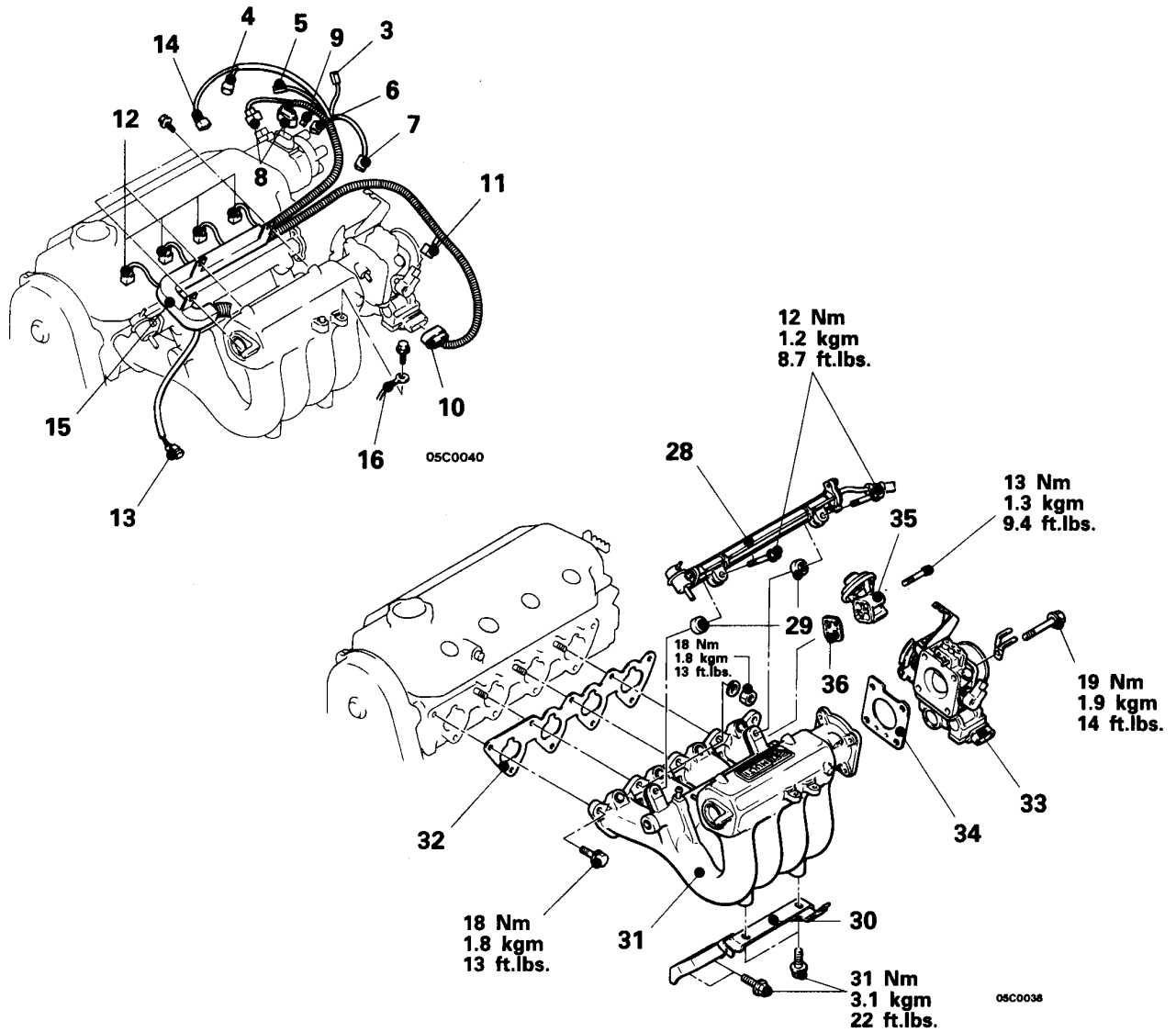
- Supplying of Coolant (Refer to GROUP 14 – Service Adjustment Procedures.)



**Removal steps**

- ◆◆ 1. Accelerator cable connection
- 2. Air intake hose

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- |   |   |   |
|---|---|---|
| 3. Engine coolant temperature switch (A/C) connector        |   | 22. Water hose connection (Throttle body → Water inlet fitting) |
| 4. Oxygen sensor connector                                  | ↔ | 23. High-pressure fuel hose connection                          |
| 5. Oil pressure switch connector                            |   | 24. O-ring  |
| 6. Water temperature gauge connector                        |   | 25. Fuel return hose connection                                 |
| 7. Engine coolant temperature sensor connector              |   | 26. Heater hose connection                                      |
| 8. Distributor connector                                    |   | 27. Brake booster vacuum hose connection                        |
| 9. Condenser connector                                      | ↔ | 28. Delivery pipe, injector and pressure regulator assembly     |
| 10. ISC connector   |   | 29. Insulator   |
| 11. TPS connector   |   | 30. Intake manifold stay  |
| 12. Injector connector                                      |   | 31. Intake manifold   |
| 13. Detonation sensor connector                             |   | 32. Intake manifold gasket                                      |
| 14. Engine coolant temperature switch (Engine control)      |   | 33. Throttle body   |
| 15. Control harness assembly                                |   | 34. Throttle body gasket  |
| 16. Earth wire  |   | 35. EGR valve (Vehicles without catalytic converter)            |
| 17. Breather hose connection                                |   | 36. EGR valve gasket (Vehicles without catalytic converter)     |
| 18. PCV hose connection                                     |   |   |
| 19. Vacuum hose connection                                  |   |   |
| 20. Vacuum pipe   |   |   |
| 21. Water hose connection (Thermostat case → Throttle body) |   |   |

**SERVICE POINTS OF REMOVAL**

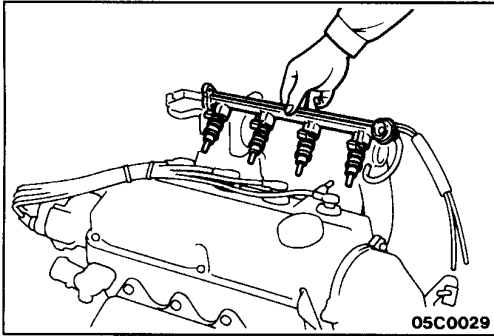
E15MBAD

**23. DISCONNECTION OF HIGH PRESSURE FUEL HOSE**

Relieve pressure in the fuel pipe line to prevent fuel outflow. (Refer to GROUP 13 – Service Adjustment Procedures.)

**Caution**

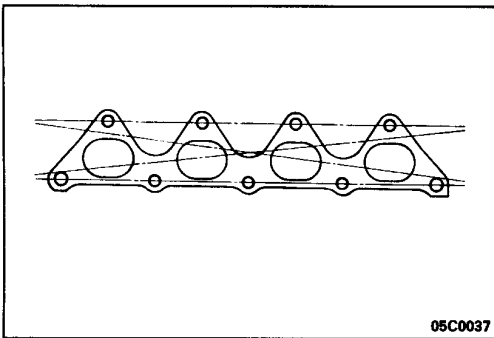
**Cover fuel pipe line with rag after relieving pressure as certain pressure may still remain.**

**28. REMOVAL OF DELIVERY PIPE, FUEL INJECTOR AND PRESSURE REGULATOR**

Remove delivery pipe with fuel injector and pressure regulator on.

**Caution**

**Do not drop injector when removing delivery pipe.**

**INSPECTION**

E15MBBA3

Check the following points; replace the part if a problem is found.

**INTAKE MANIFOLD**

1. Check for damage or cracking of any part.
2. Check for obstruction of the negative pressure (vacuum) outlet port, and for obstruction of the water passage or gas passage.
3. Using a straight edge and a thickness gage, check for distortion of the cylinder head installation surface.

**Standard value: 0.15 mm (0.006 in.) or less**

**Limit: 0.2 mm (0.008 in.)**

**SERVICE POINTS OF INSTALLATION**

E15MBAP

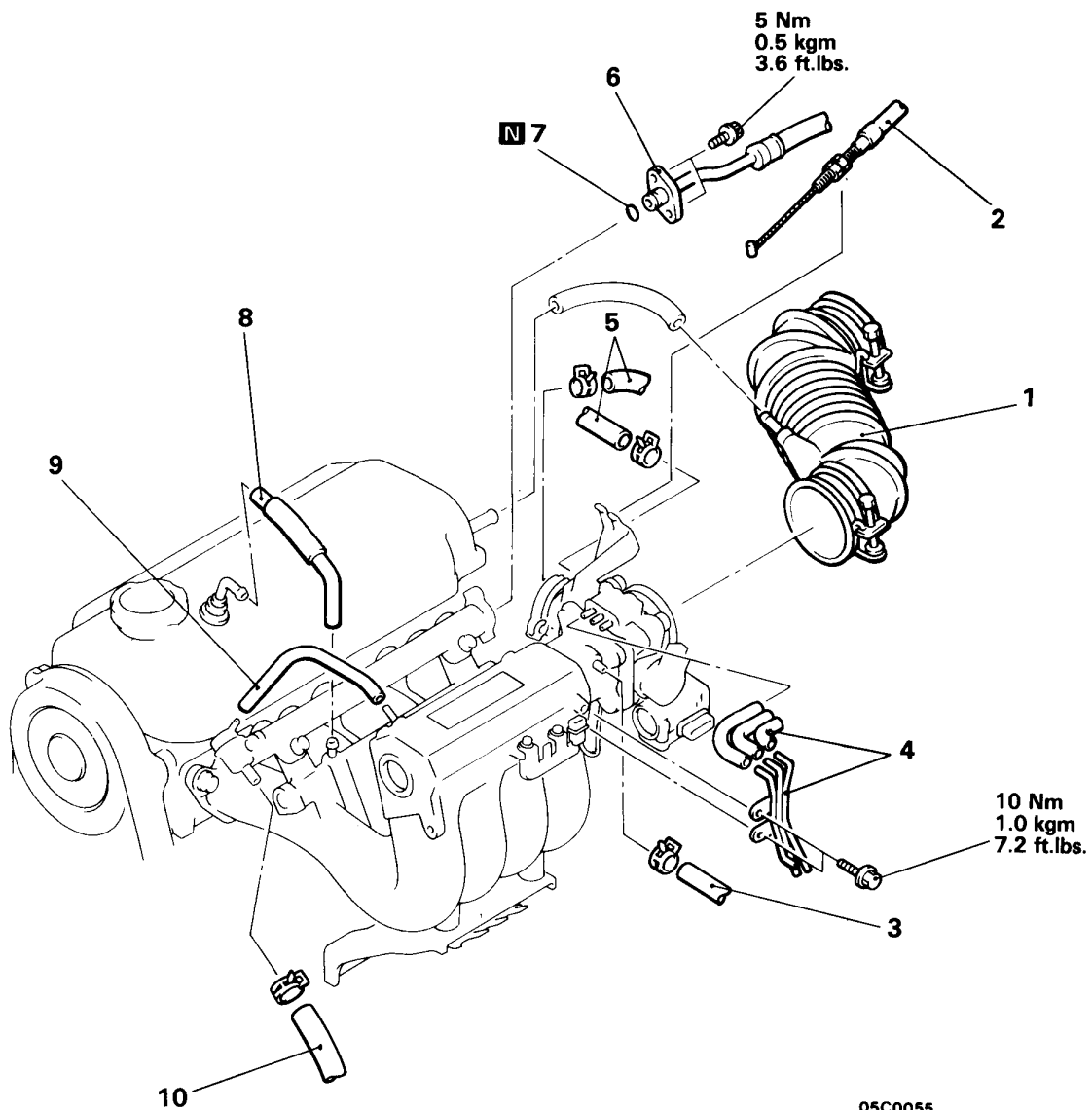
**1. INSTALLATION OF ACCELERATOR CABLES**

Refer to GROUP 13 – Service Adjustment Procedures.

**INTAKE MANIFOLD <4G63, 4G64>**

**REMOVAL AND INSTALLATION**

E15MA--



**Removal steps**

1. Air intake hose
2. Connection for accelerator cable
3. Connection for brake booster vacuum hose
4. Connection for vacuum pipe and hose assembly
5. Connection for water hose
6. Connection for fuel high pressure hose
7. O-ring
8. PCV hose
9. Connection for vacuum hose
10. Connection for fuel return hose

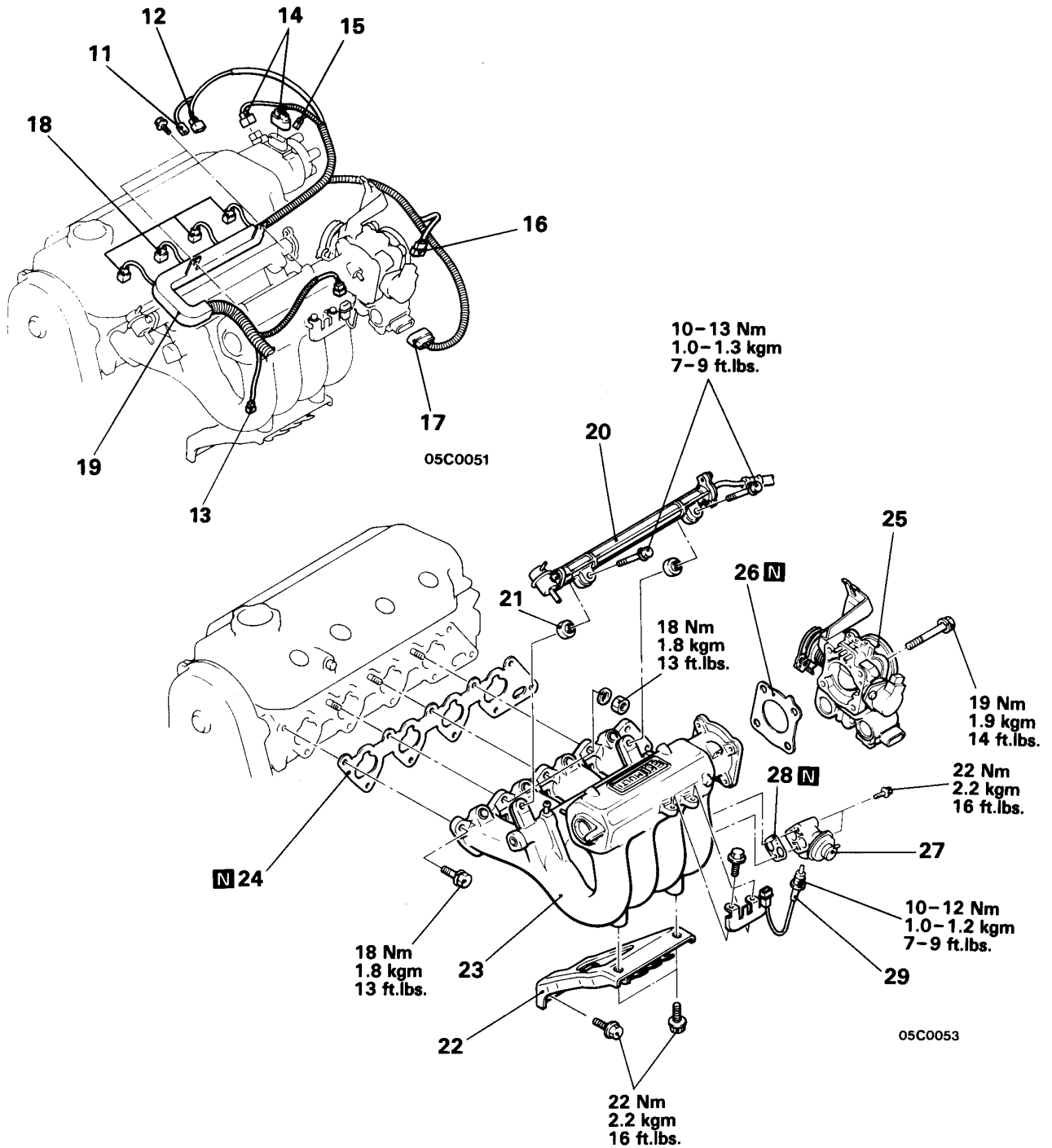


**Pre-removal Operation**

- Draining of Engine Coolant  
(Refer to GROUP 14 – Service Adjustment Procedures.)

**Post-installation Operation**

- Filling of Engine Coolant  
(Refer to GROUP 14 – Service Adjustment Procedures.)
- Adjustment of Accelerator Cable  
(Refer to GROUP 13 – Service Adjustment Procedures.)
- Inspection of Fuel Pressure  
(Refer to GROUP 13 – Service Adjustment Procedures.)



- 11. Engine coolant temperature gauge unit connector
- 12. Engine coolant temperature sensor connector
- 13. Oxygen sensor connector
- 14. Distributor connector
- 15. Condenser connector
- 16. TPS connector
- 17. ISC connector
- 18. Injector connector
- 19. Control harness

- ◆◆◆◆ 20. Fuel rail, injector and pressure regulator assembly
- 21. Insulator
- 22. Intake manifold stay
- 23. Intake manifold
- 24. Intake manifold gasket
- 25. Throttle body
- 26. Throttle body gasket
- 27. EGR valve
- 28. EGR gasket
- 29. EGR temperature sensor <4G64>



**SERVICE POINTS OF REMOVAL**

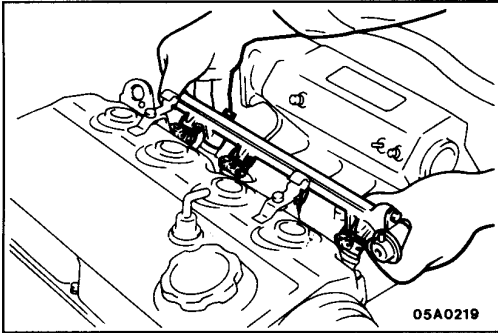
15MBAD1

**6. DISCONNECTION OF FUEL HIGH PRESSURE HOSE**

Relieve pressure in the fuel pipe line to prevent fuel outflow. (Refer to GROUP 13 – Service Adjustment Procedures.)

**Caution**

**Cover fuel pipe line with rag after relieving pressure as certain pressure may still remain.**

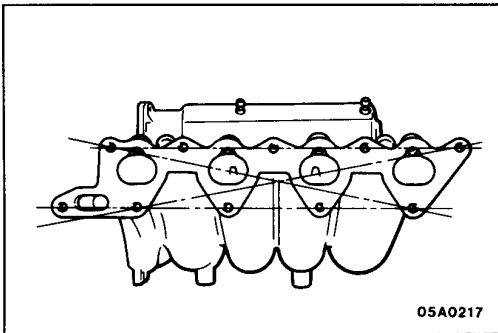


**20. REMOVAL OF DELIVERY PIPE, FUEL INJECTOR AND PRESSURE REGULATOR**

Remove delivery pipe with fuel injector and pressure regulator on.

**Caution**

**Do not drop injector when removing delivery pipe.**



**INSPECTION**

E15MBBA4

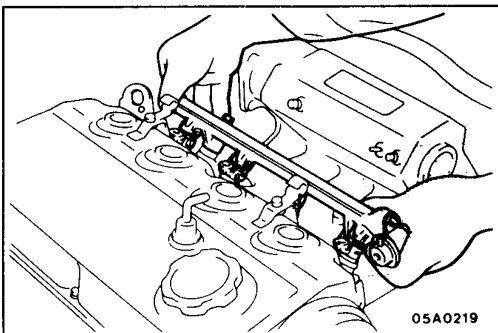
Check the following points; replace the part if a problem is found.

**INTAKE MANIFOLD**

1. Check for damage or cracking of any part.
2. Check for obstruction of the negative pressure (vacuum) outlet port, and for obstruction of the water passage or gas passage.
3. Using a straight edge and a thickness gauge, check for distortion of the cylinder head installation surface.

**Standard value: 0.15 mm (.006 in.) or less**

**Limit: 0.3 mm (.012 in.)**



**SERVICE POINTS OF INSTALLATION**

E15MBAP1

**20. INSTALLATION OF DELIVERY PIPE, FUEL INJECTOR AND PRESSURE REGULATOR**

**Caution**

**Be careful not to drop the injector when the delivery pipe is installed.**

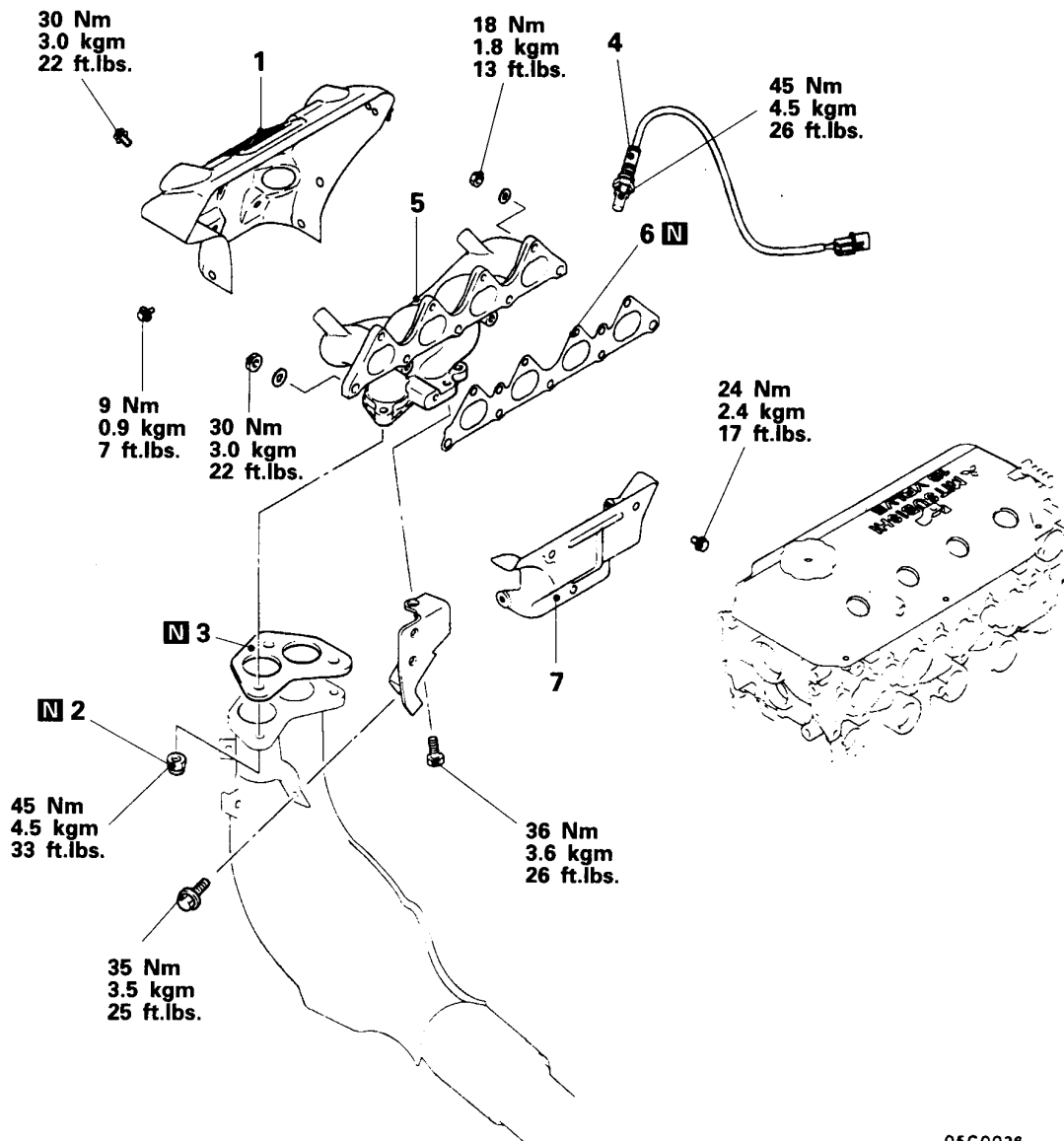
**15-6-4**

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**NOTES**

**EXHAUST MANIFOLD <4G93>  
REMOVAL AND INSTALLATION**

E15NA-

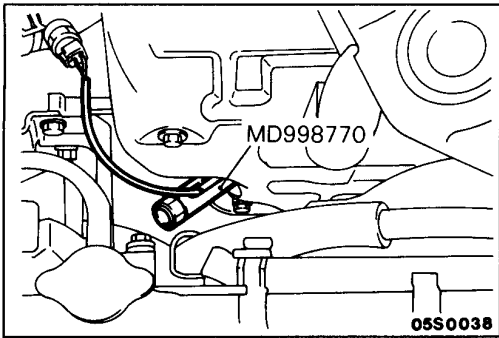


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**Removal steps**

1. Exhaust manifold cover A
2. Self locking nut
3. Gasket
4. Oxygen sensor
5. Exhaust manifold
6. Exhaust manifold gasket
7. Exhaust manifold cover B





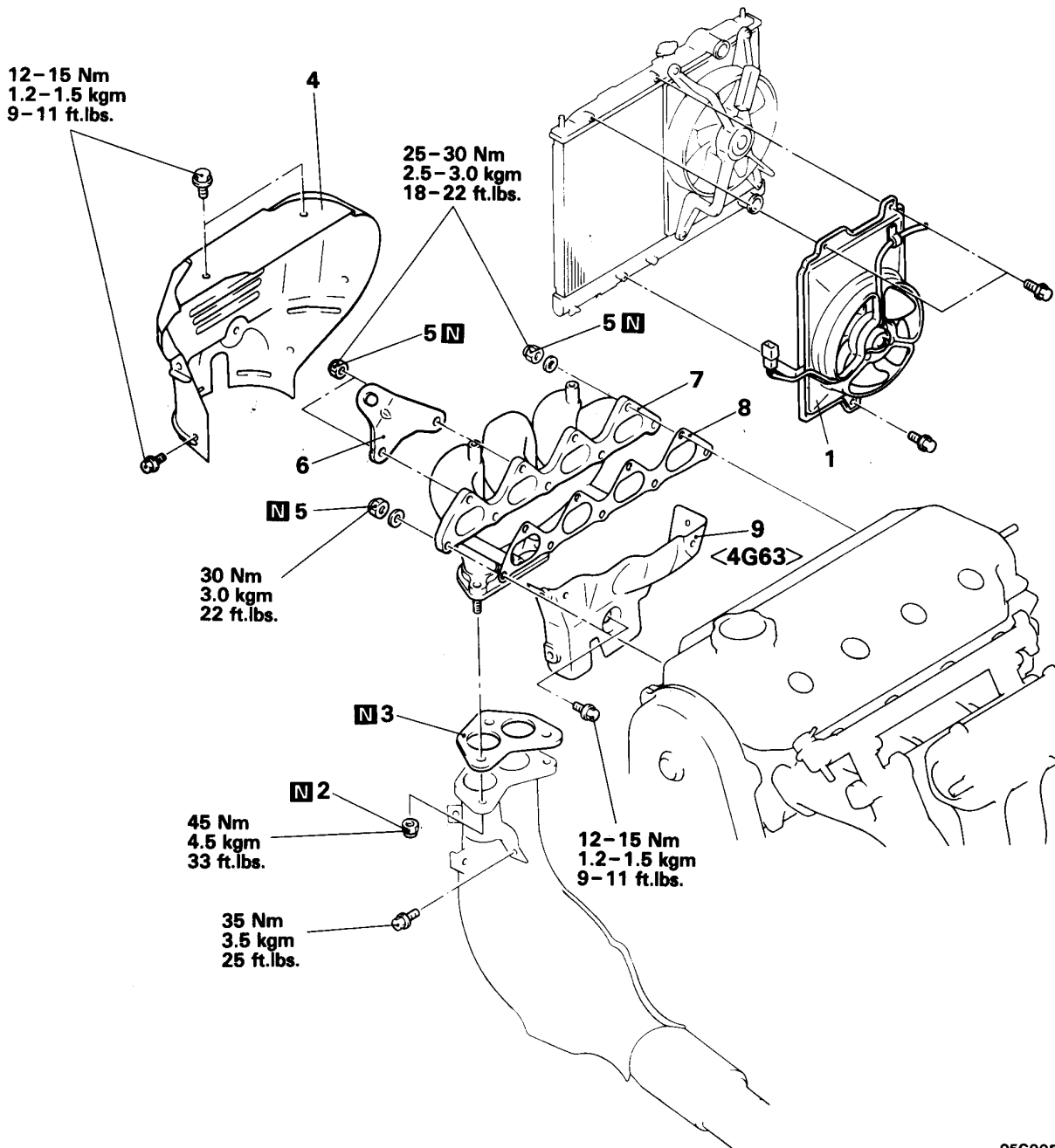
**SERVICE POINTS OF REMOVAL**  
**4. REMOVAL OF OXYGEN SENSOR**

E15NBAG

**EXHAUST MANIFOLD <4G63, 4G64>**

**REMOVAL AND INSTALLATION**

E15NA--



05C0052

**Removal steps**

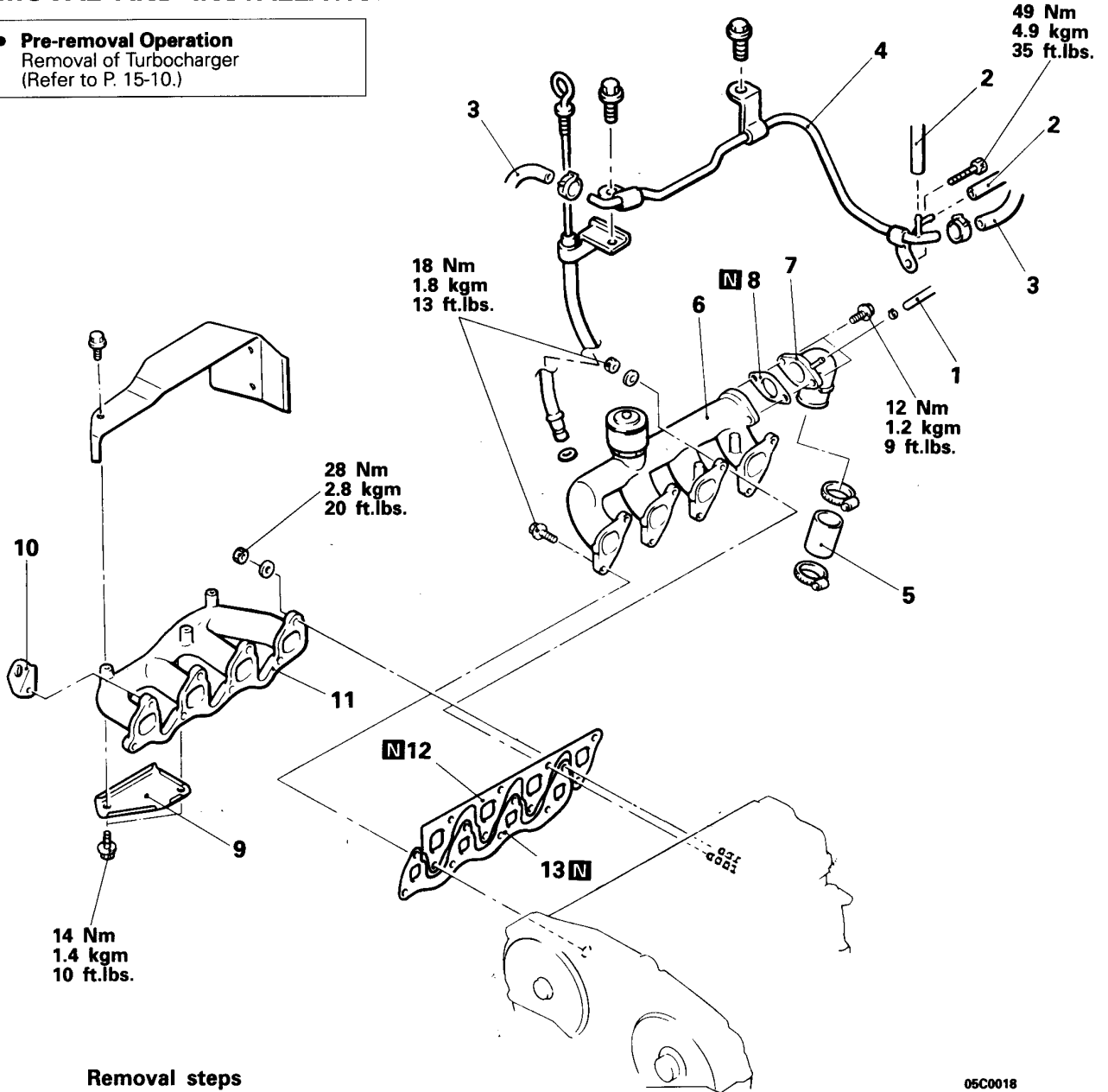
1. Condenser fan motor (Vehicles with air conditioner)
2. Self locking nut
3. Gasket
4. Exhaust manifold cover (A)
5. Self locking nut
6. Engine hanger
7. Exhaust manifold
8. Exhaust manifold gasket
9. Exhaust manifold cover (B) <4G63>

**INTAKE AND EXHAUST MANIFOLD**  
 <4D65>

E15UA--

**REMOVAL AND INSTALLATION**

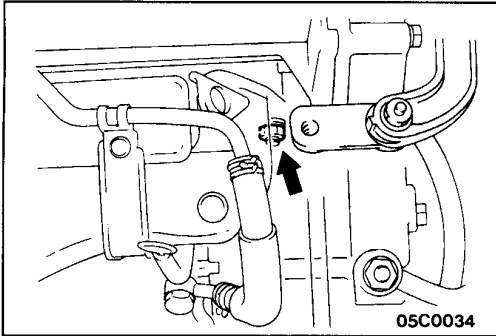
- **Pre-removal Operation**  
 Removal of Turbocharger  
 (Refer to P. 15-10.)



**Removal steps**

1. Breather hose connection
2. Breather hose connection
3. Brake booster vacuum hose connection
4. Brake booster vacuum pipe
5. Air hose
6. Intake manifold
7. Air inlet fitting
8. Gasket
9. Heat protector (B)
10. Engine hanger
11. Exhaust manifold
12. Intake manifold gasket
13. Exhaust manifold gasket

05C0018



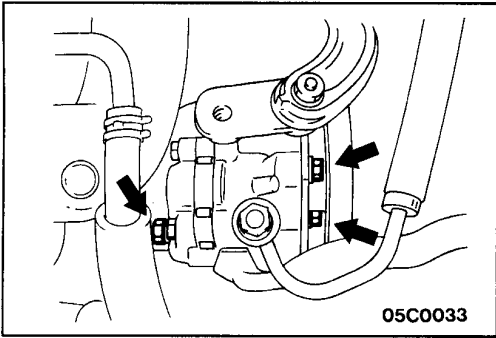
**SERVICE POINTS OF REMOVAL**

E15UBAA

**11. REMOVAL OF EXHAUST MANIFOLD**

Follow the procedures described below in order to remove the nut shown in the figure, and then remove the nut.

(1) Remove the power steering oil pump's V-belt.



(2) Remove the power steering installation bolt, and then remove the power steering oil pump (with the hose attached) from the oil pump bracket.

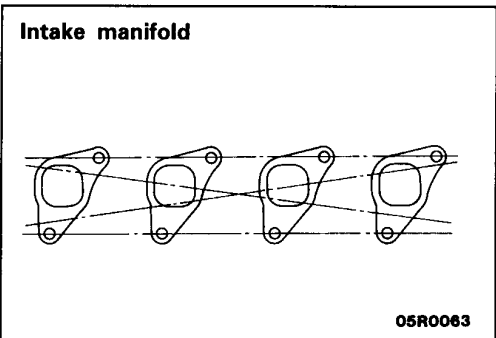
**NOTE**

Place the power steering oil pump in the proper position.

**INSPECTION**

E15UCAG

Check the following points; replace the part if a problem is found.

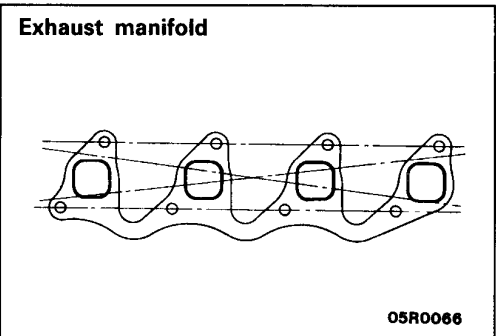


**INTAKE AND EXHAUST MANIFOLD**

- (1) Check for damage or cracking of any part.
- (2) Using a straight edge and a thickness gauge, check for distortion of the cylinder head installation surface.

**Standard value: 0.15 mm (0.006 in.) or less**

**Limit: 0.2 mm (0.008 in.)**



**EXHAUST MANIFOLD**

Check for damage or cracking of any part.

**EXHAUST MANIFOLD GASKET**

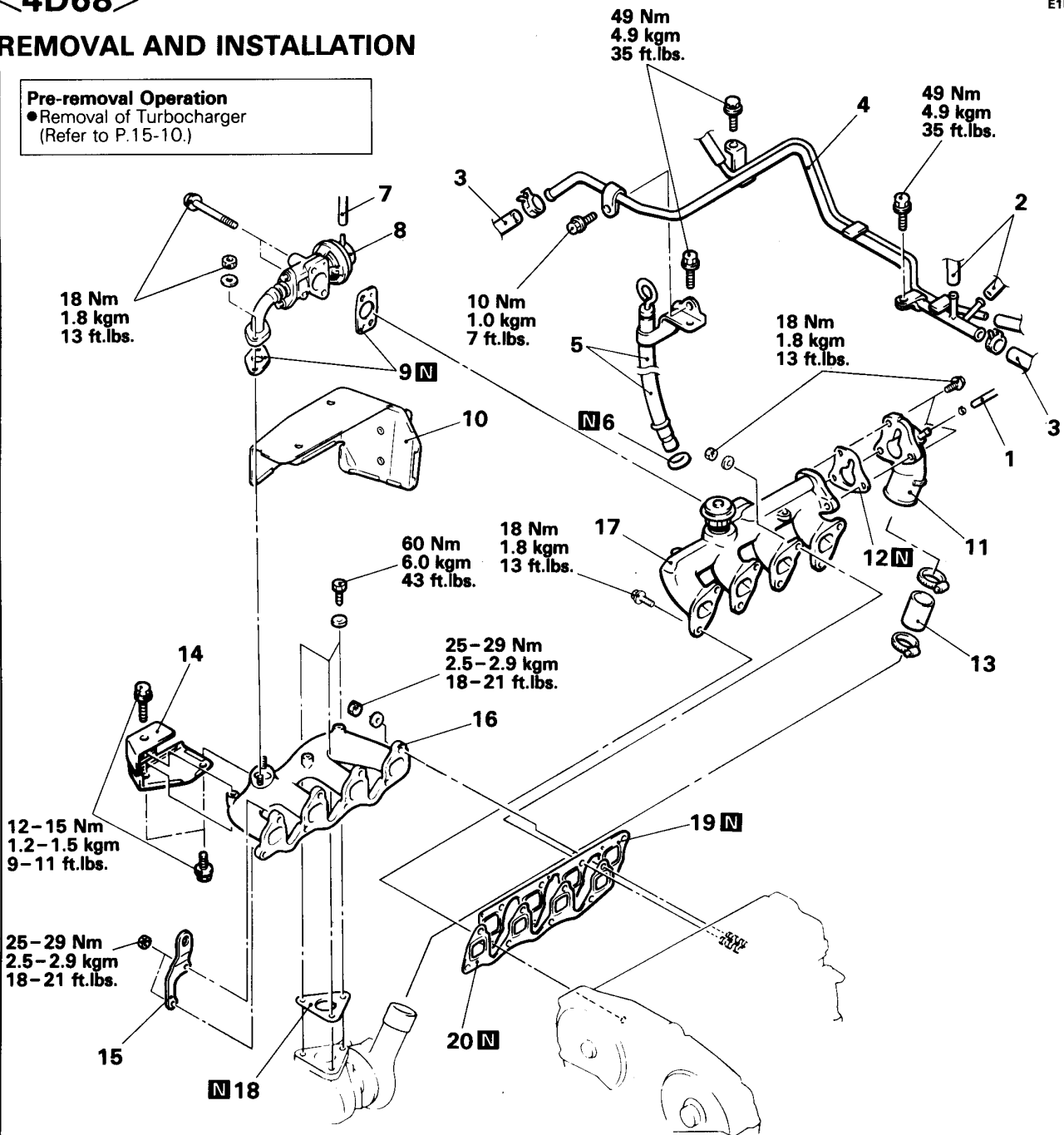
Check for flaking or damage of the gasket.

**INTAKE AND EXHAUST MANIFOLD**  
 <4D68>

E16UA--

**REMOVAL AND INSTALLATION**

**Pre-removal Operation**  
 ● Removal of Turbocharger  
 (Refer to P.15-10.)

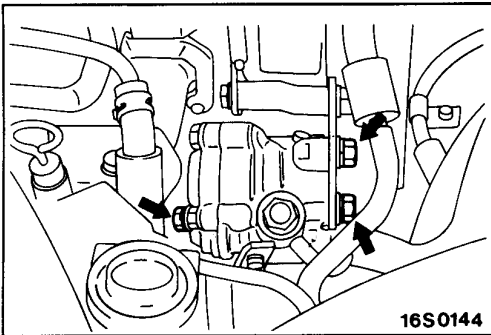
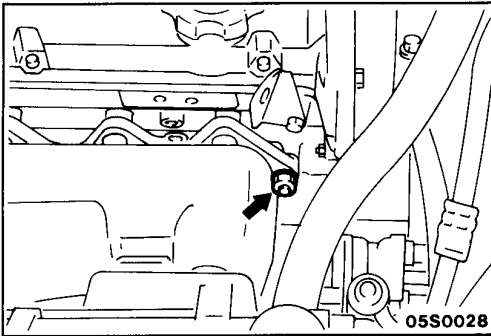


05S0072

**Removal steps**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>1. Breather hose connection</li> <li>2. Breather hose connection</li> <li>3. Brake booster vacuum hose connection</li> <li>4. Brake booster vacuum pipe</li> <li>5. Oil level gauge guide assembly</li> <li>6. O-ring</li> <li>7. Vacuum hose</li> <li>8. E.G.R valve and pipe assembly</li> <li>9. Gasket</li> <li>10. Heat protector (A)</li> </ul> | <ul style="list-style-type: none"> <li>11. Air inlet fitting</li> <li>12. Gasket</li> <li>13. Air hose</li> <li>14. Heat protector (B)</li> <li>15. Engine hanger</li> <li>16. Exhaust manifold</li> <li>17. Intake manifold</li> <li>18. Gasket (A)</li> <li>19. Intake manifold gasket</li> <li>20. Exhaust manifold gasket</li> </ul> |
|--|--|





**SERVICE POINTS OF REMOVAL**

E15UBAA

**16. REMOVAL OF EXHAUST MANIFOLD**

Follow the procedures described below in order to remove the nut shown in the figure, and then remove the nut.

(1) Remove the power steering oil pump's V-belt.

(2) Remove the power steering installation bolt, and then remove the power steering oil pump (with the hose attached) from the oil pump bracket.

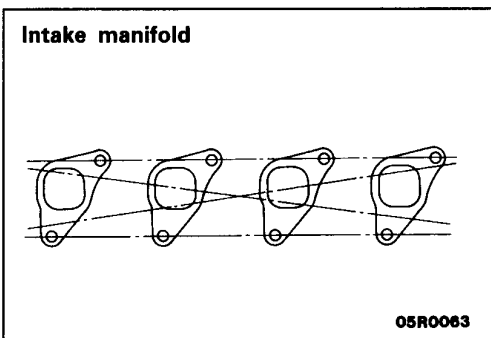
**NOTE**

Place the power steering oil pump in the proper position.

**INSPECTION**

E15UCAG

Check the following points; replace the part if a problem is found.

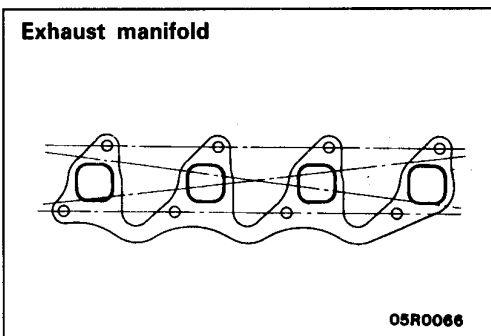


**INTAKE AND EXHAUST MANIFOLD**

- (1) Check for damage or cracking of any part.
- (2) Using a straight edge and a thickness gauge, check for distortion of the cylinder head installation surface.

**Standard value: 0.15 mm (0.006 in.) or less**

**Limit: 0.2 mm (0.008 in.)**



**EXHAUST MANIFOLD**

Check for damage or cracking of any part.

**EXHAUST MANIFOLD GASKET**

Check for flaking or damage of the gasket.

**TURBOCHARGER <4D65>**

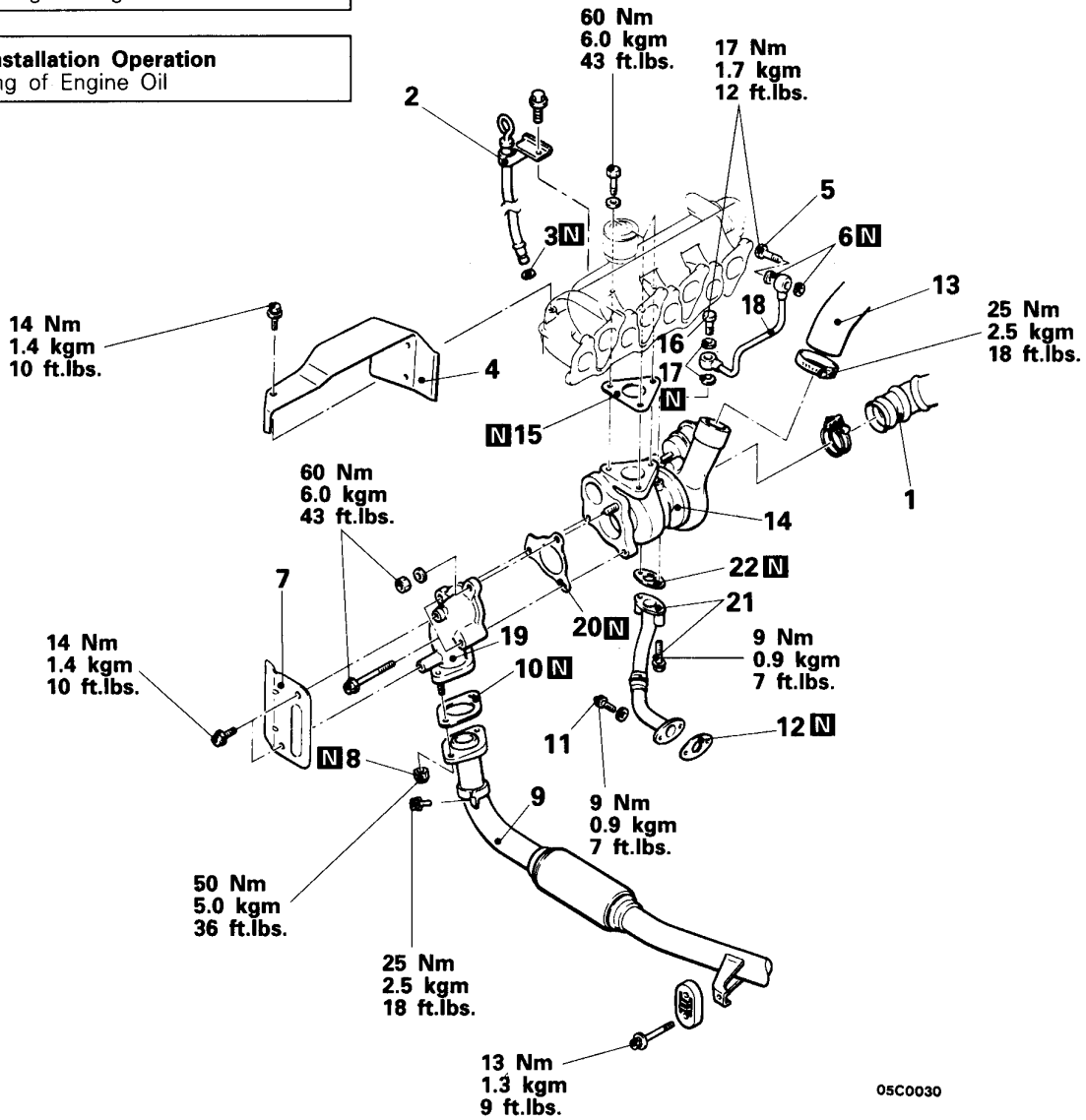
**REMOVAL AND INSTALLATION**

**Pre-removal Operation**

- Draining of Engine Oil

**Post-installation Operation**

- Filling of Engine Oil



**Removal steps**

- ◆◆ 1. Air intake hose connection
- ◆◆ 2. Oil level gauge guide
- 3. O-ring
- 4. Heat protector (A)
- 5. Eye bolt
- 6. Gasket
- 7. Heat protector (C)
- ◆◆ 8. Self locking nut
- ◆◆ 9. Front exhaust pipe
- ◆◆ 10. Gasket
- ◆◆ 11. Oil return pipe mounting bolts

- 12. Gasket
- 13. Air hose connection
- ◆◆◆◆ 14. Turbocharger assembly
- ◆◆◆◆ 15. Gasket (A)
- ◆◆◆◆ 16. Eye bolt
- ◆◆◆◆ 17. Gasket
- ◆◆◆◆ 18. Oil pipe
- ◆◆◆◆ 19. Exhaust fitting
- ◆◆◆◆ 20. Gasket (B)
- ◆◆◆◆ 21. Oil return pipe
- ◆◆◆◆ 22. Gasket

**SERVICE POINTS OF REMOVAL**

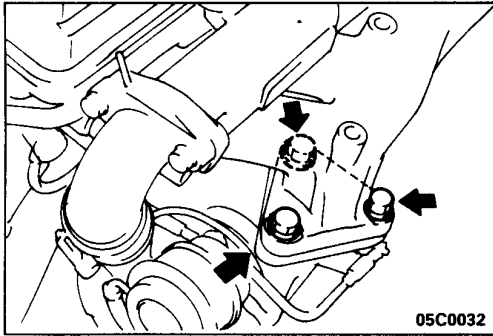
E15LBCB

**9. REMOVAL OF FRONT EXHAUST PIPE**

Remove the front exhaust pipe's clamp part installation bolt and hanger part installation bolt, and then, using a wire, suspend the front exhaust pipe from the body.

**NOTE**

This is so that the turbocharger assembly can be taken out from the lower part of the body.



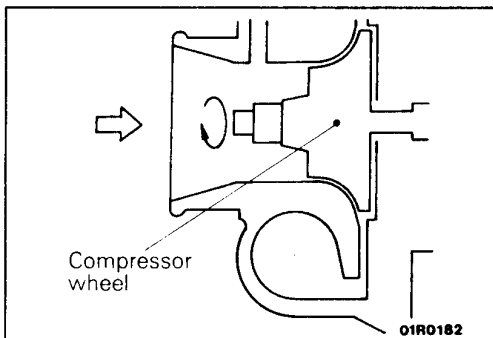
**14. REMOVAL OF TURBOCHARGER ASSEMBLY**

Take out the turbocharger assembly (with the exhaust fitting and the oil-return pipe attached) from the lower part of the body.

**18. REMOVAL OF OIL PIPE**

**Caution**

After disconnecting the oil pipe, take care that foreign material does not enter the oil passage hole of the turbocharger assembly.



**INSPECTION**

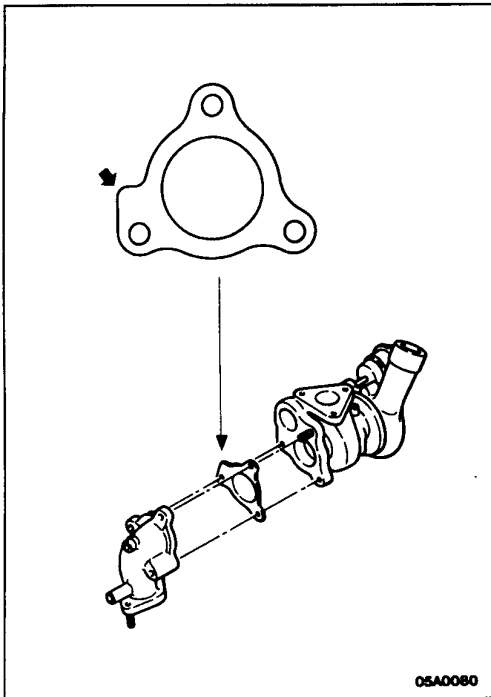
E15LCAD

**TURBOCHARGER ASSEMBLY CHECK**

- (1) Visually check the turbine wheel and the compressor wheel for cracking or other damage.
  - (2) Check whether the turbine wheel and the compressor wheel can be easily turned by hand.
  - (3) Check for oil leakage from the turbocharger assembly.
  - (4) Check whether or not the waste gate valve remains open.
- If any problem is found, replace the part after disassembly.

**OIL PIPE AND OIL-RETURN PIPE CHECK**

Check the oil pipe and oil-return pipe for clogging, bending, or other damage. If there is clogging, clean it.

**SERVICE POINTS OF INSTALLATION**

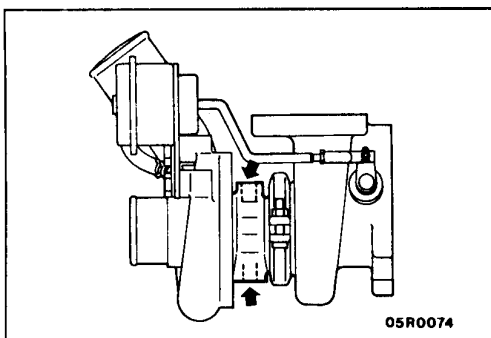
E15LDCC

**20. INSTALLATION OF GASKET (B)**

When installing gasket (B), be sure that it is installed to face in the correct direction.

**18. INSTALLATION OF OIL PIPE**

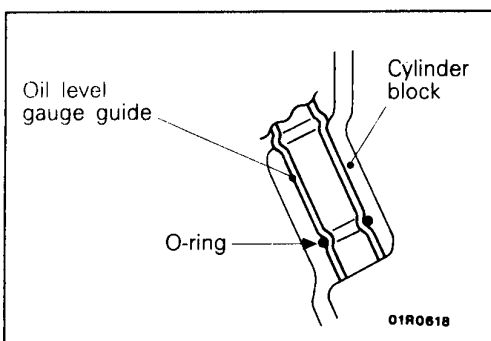
Supply clean engine oil through the oil pipe installation hole of the turbocharger assembly.

**14. INSTALLATION OF TURBOCHARGER ASSEMBLY**

Clean the alignment surfaces shown in the illustration.

**Caution**

**When cleaning, care must be taken so that a piece of the gasket does not enter the oil passage hole.**

**2. INSTALLATION OF OIL LEVEL GAUGE GUIDE ASSEMBLY**

Apply engine oil when inserting the O-ring into the oil level gauge guide, or when inserting the oil level gauge guide with the O-ring attached into the cylinder block.

**Caution**

**When inserting the oil level gauge guide into the cylinder block, be careful not to damage the O-ring.**

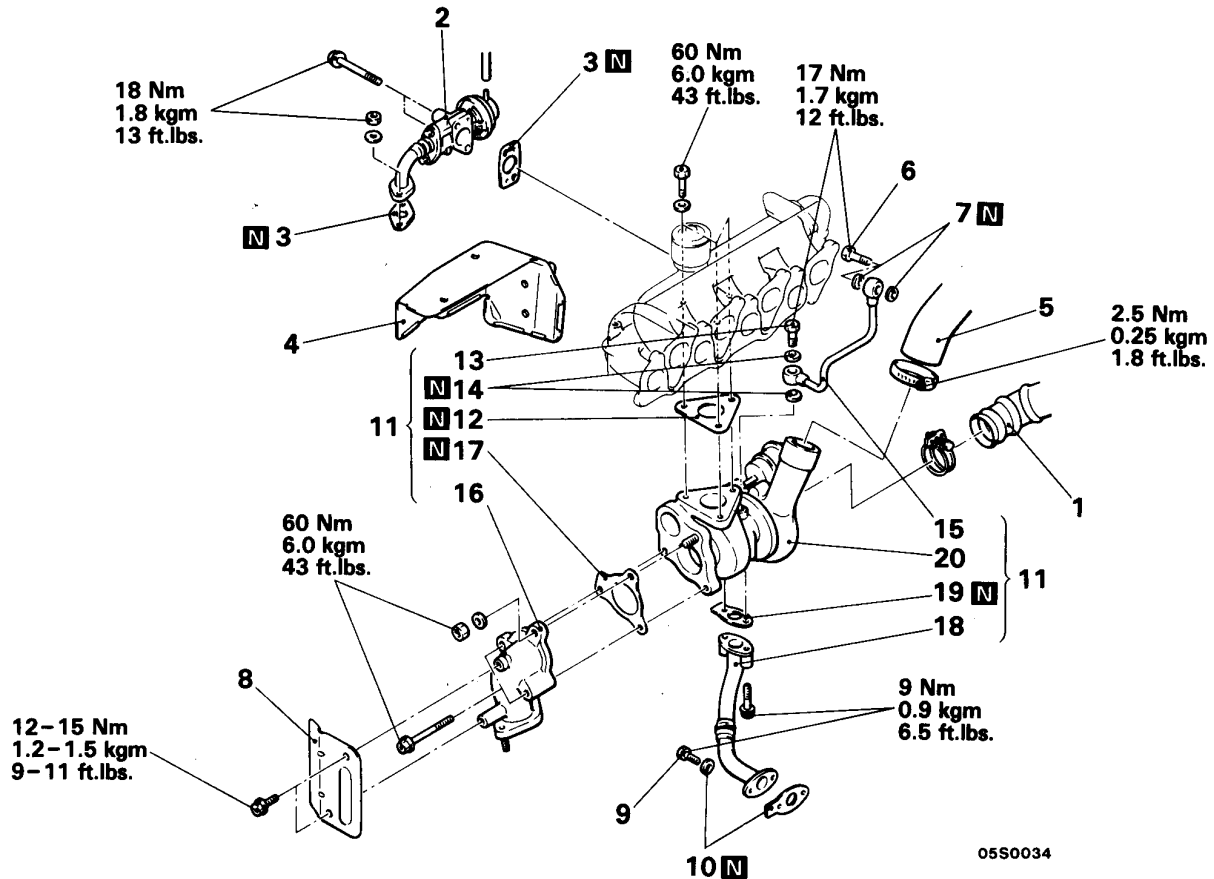
**TURBOCHARGER <4D68>**

**REMOVAL AND INSTALLATION**

E16LA--

**Pre-removal and Post-installation Operation**

- Draining and Supplying Engine Oil
- Removal and Installation of Front Exhaust Pipe (Refer to P. 15-17.)



05S0034

**Removal steps**

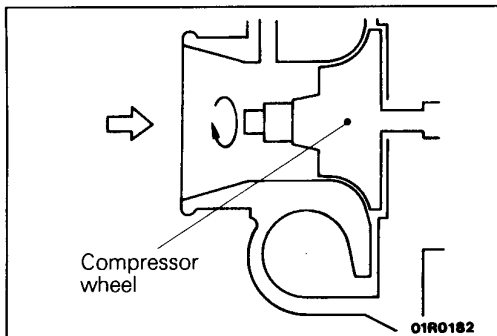
- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Air intake hose connection</li> <li>2. E.G.R. valve and pipe assembly</li> <li>3. Gasket</li> <li>4. Heat protector (A)</li> <li>5. Air hose connection</li> <li>6. Eye bolt</li> <li>7. Gasket</li> <li>8. Heat protector (B)</li> <li>9. Oil return pipe mount bolt</li> <li>10. Gasket</li> </ol> | <ol style="list-style-type: none"> <li>11. Turbocharger assembly</li> <li>12. Gasket (A)</li> <li>13. Eye bolt</li> <li>14. Gasket</li> <li>15. Oil pipe</li> <li>16. Exhaust fitting</li> <li>17. Gasket (B)</li> <li>18. Oil return pipe</li> <li>19. Gasket</li> <li>20. Turbocharger</li> </ol> |
|--|---|

**SERVICE POINTS OF REMOVAL**

E15LBCC

**15. REMOVAL OF OIL PIPE****Caution**

After disconnecting the oil pipe, take care that foreign material does not enter the oil passage hole of the turbocharger assembly.

**INSPECTION**

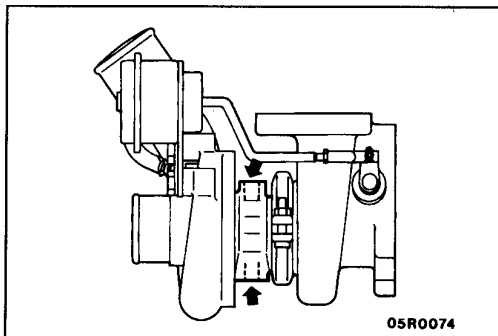
E15LCAD

**TURBOCHARGER ASSEMBLY CHECK**

- (1) Visually check the turbine wheel and the compressor wheel for cracking or other damage.
- (2) Check whether the turbine wheel and the compressor wheel can be easily turned by hand.
- (3) Check for oil leakage from the turbocharger assembly.
- (4) Check whether or not the waste gate valve remains open. If any problem is found, replace the part after disassembly.

**OIL PIPE AND OIL-RETURN PIPE CHECK**

Check the oil pipe and oil-return pipe for clogging, bending, or other damage. If there is clogging, clean it.

**SERVICE POINTS OF INSTALLATION**

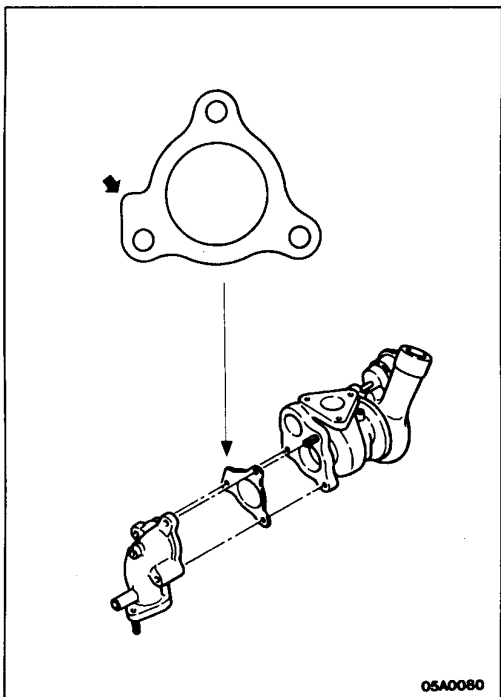
E15LDCD

**20. INSTALLATION OF TURBOCHARGER**

Clean the alignment surfaces shown in the illustration.

**Caution**

When cleaning, care must be taken so that a piece of the gasket does not enter the oil passage hole.



**17. INSTALLATION OF GASKET (B)**

When installing gasket (B), be sure that it is installed to face in the correct direction.

05A0080

**15-12-4**

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**NOTES**

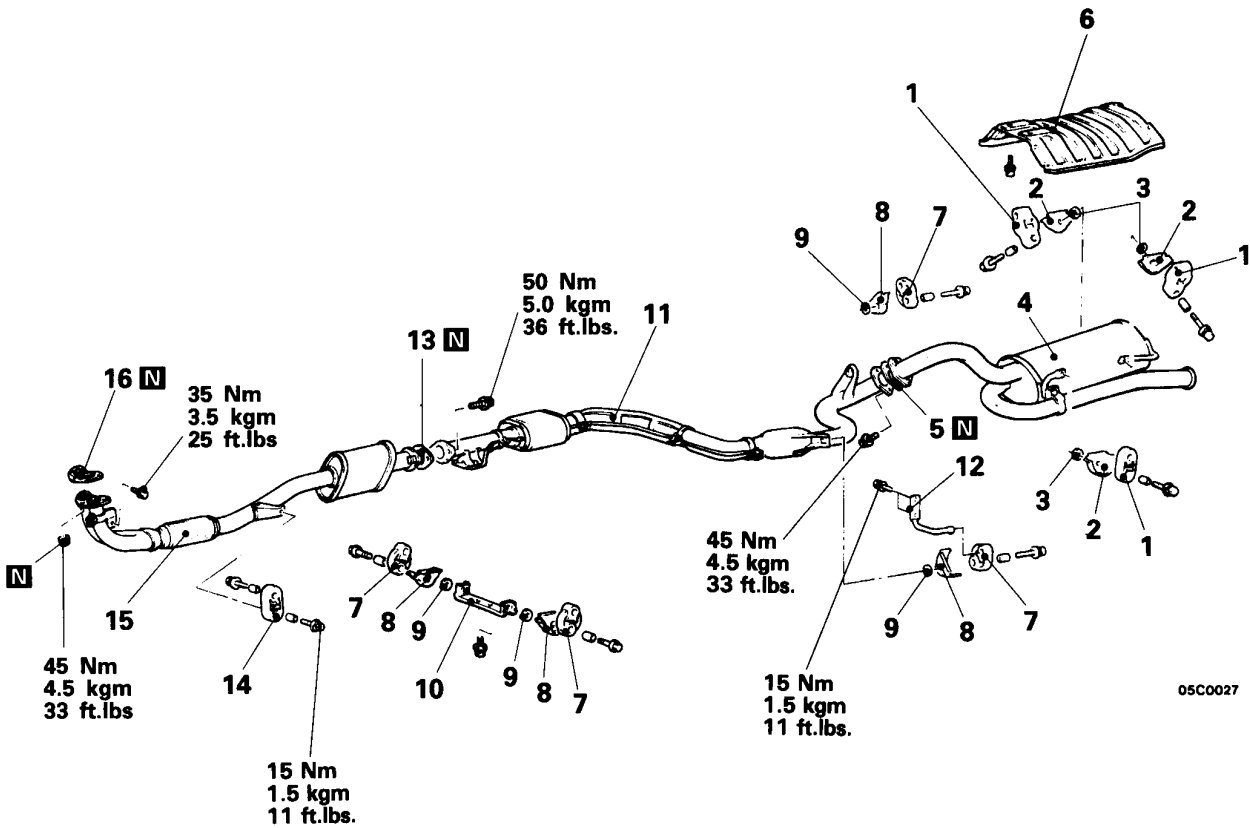


**EXHAUST PIPE AND MAIN MUFFLER  
<PETROL-POWERED VEHICLES>**

E16RA--

**REMOVAL AND INSTALLATION <SPACE RUNNER>**

Vehicles without Catalytic Converter



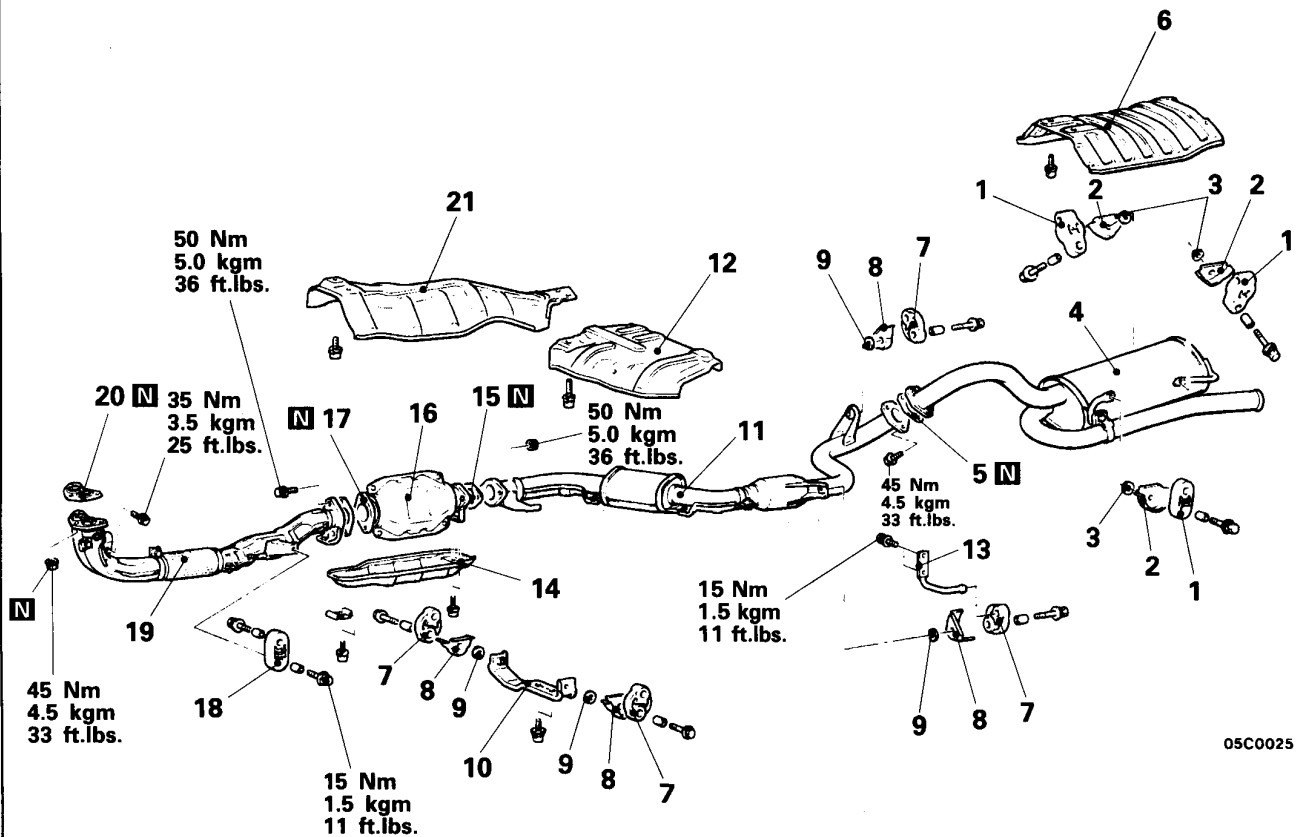
05C0027

**Removal steps**

1. Hanger
2. Protector
3. Seat
4. Main muffler
5. Gasket
6. Rear floor heat protection panel
7. Hanger
8. Protector
9. Seat
10. Bracket
11. Center exhaust pipe
12. Hanger bracket
13. Gasket
14. Hanger
15. Front exhaust pipe
16. Gasket

**REMOVAL AND INSTALLATION <SPACE RUNNER>**

**Vehicles with Catalytic Converter**



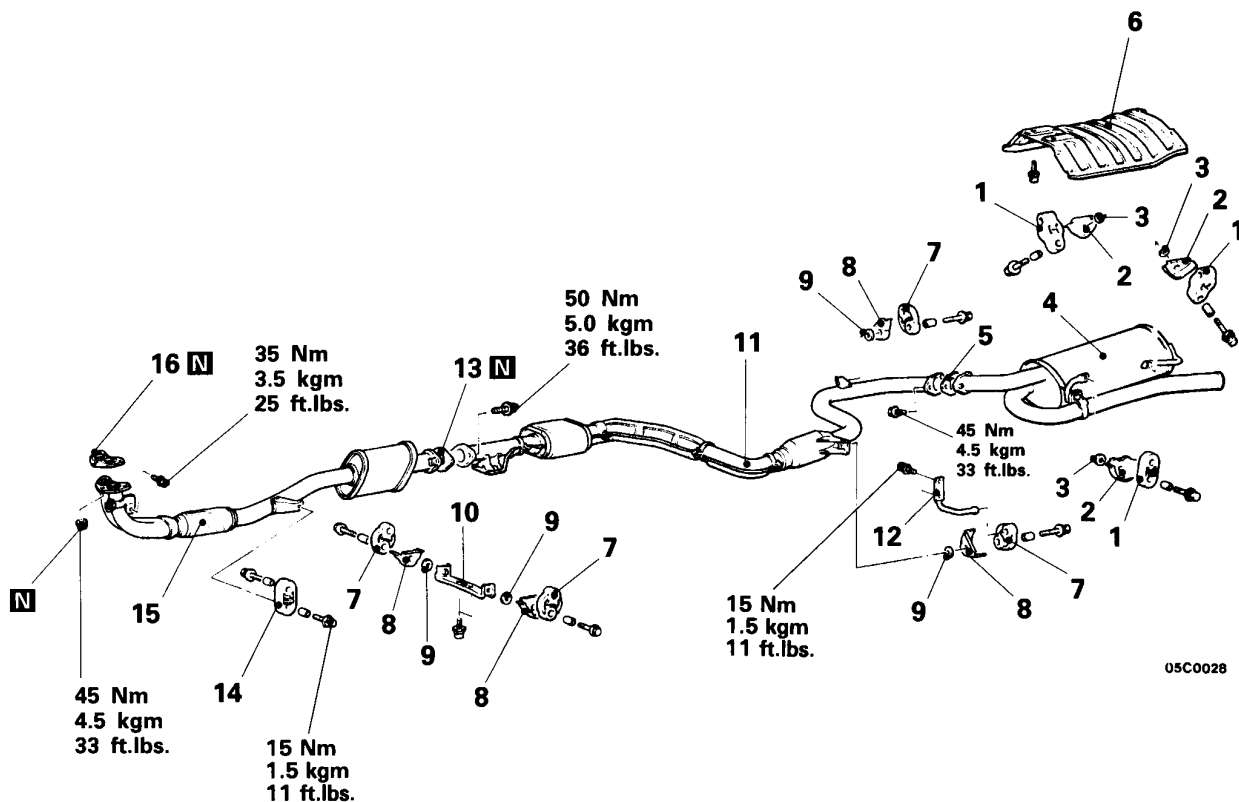
05C0025

**Removal steps**

1. Hanger
2. Protector
3. Seat
4. Main muffler
5. Gasket
6. Rear floor heat protection panel
7. Hanger
8. Protector
9. Seat
10. Bracket
11. Center exhaust pipe
12. Center heat protection panel
13. Hanger bracket
14. Catalytic converter heat protection panel
15. Gasket
16. Catalytic converter
17. Gasket
18. Hanger
19. Front exhaust pipe
20. Gasket
21. Front floor heat protector

REMOVAL AND INSTALLATION <SPACE WAGON>

Vehicles without Catalytic Converter

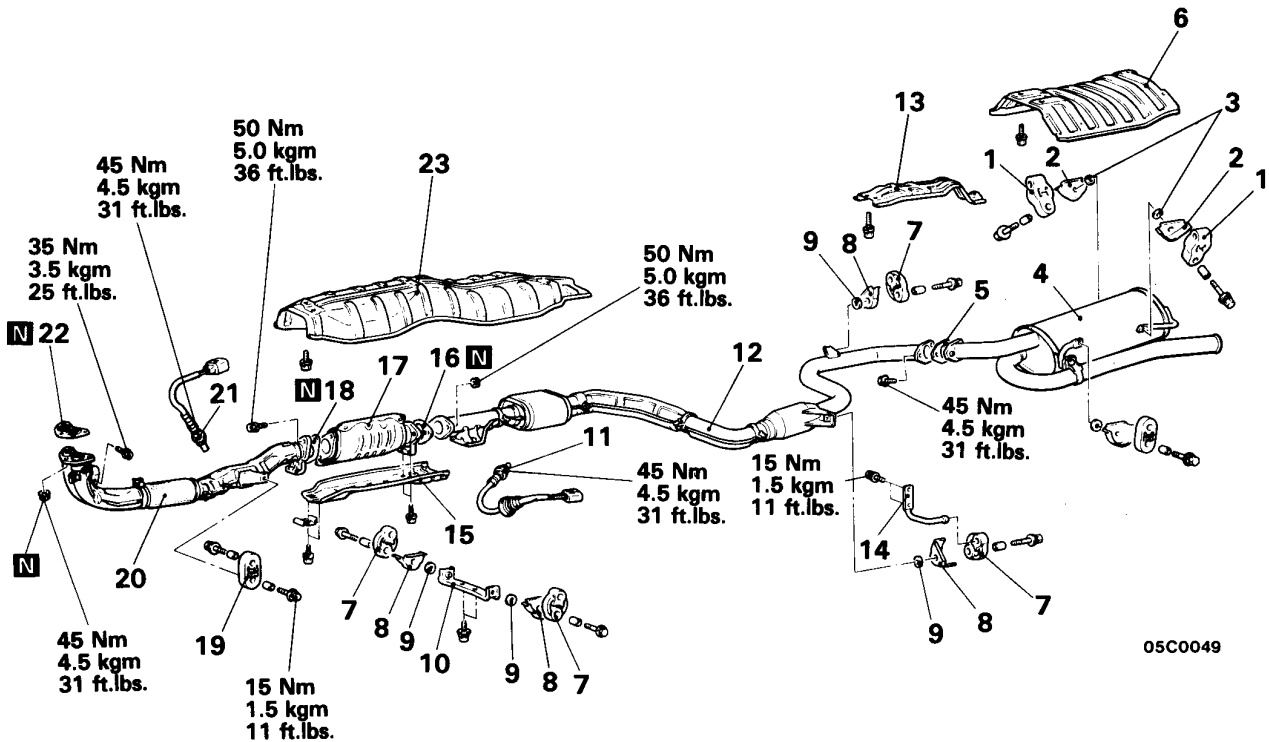


**Removal steps**

1. Hanger
2. Protector
3. Seat
4. Main muffler
5. Gasket
6. Rear floor heat protection panel
7. Hanger
8. Protector
9. Seat
10. Bracket
11. Center exhaust pipe
12. Hanger bracket
13. Gasket
14. Hanger
15. Front exhaust pipe
16. Gasket

**REMOVAL AND INSTALLATION <SPACE WAGON>**

Vehicles with Catalytic Converter



**Removal steps**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>1. Hanger</li> <li>2. Protector</li> <li>3. Seat</li> <li>4. Main muffler</li> <li>5. Gasket</li> <li>6. Rear floor heat protection panel</li> <li>7. Hanger</li> <li>8. Protector</li> <li>9. Seat</li> <li>10. Bracket</li> <li>11. Oxygen sensor &lt;4G64 only&gt;</li> <li>12. Center exhaust pipe</li> </ul> | <ul style="list-style-type: none"> <li>13. Center heat protection panel (4WD)</li> <li>14. Hanger bracket</li> <li>15. Catalytic converter heat protection panel</li> <li>16. Gasket</li> <li>17. Catalytic converter</li> <li>18. Gasket</li> <li>19. Hanger</li> <li>20. Front exhaust pipe</li> <li>21. Oxygen sensor &lt;4G63, 4G64&gt;</li> <li>22. Gasket</li> <li>23. Front floor heat protection panel</li> </ul> |
|--|---|

**SERVICE POINTS OF REMOVAL**

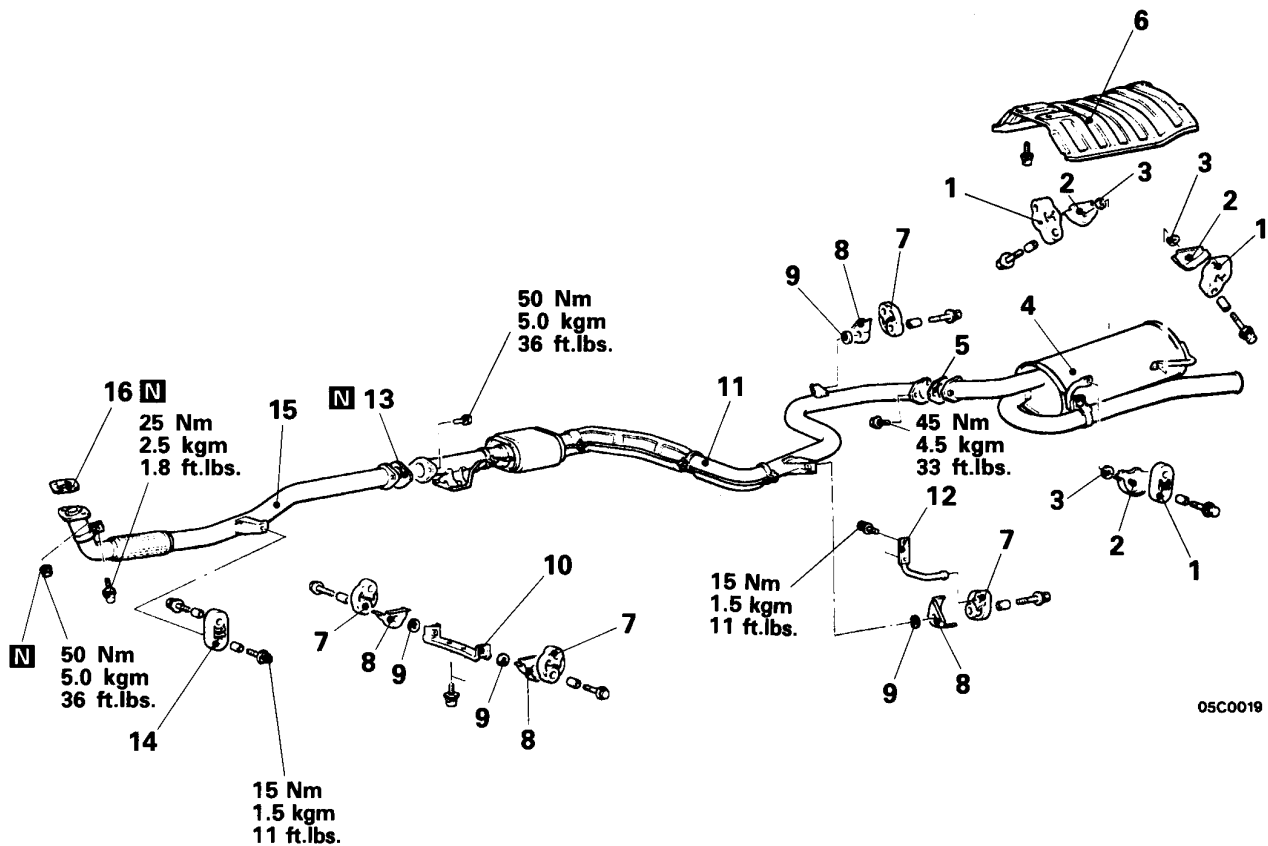
**11./21 REMOVAL OF OXYGEN SENSOR**

Using the special tool (MD998770), remove the oxygen sensor.

**EXHAUST PIPE AND MAIN MUFFLER**  
**<DIESEL-POWERED VEHICLES>**

E15RA-C

**REMOVAL AND INSTALLATION <SPACE WAGON>**

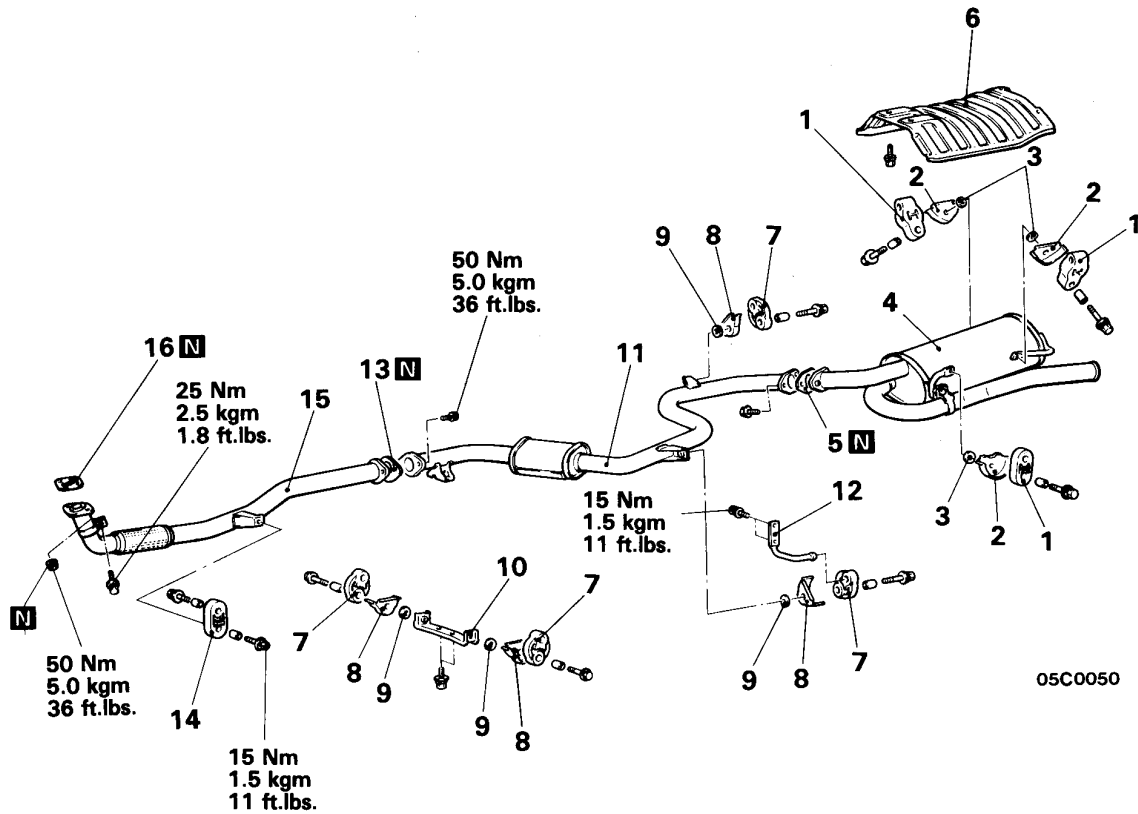


05C0019

**Removal steps**

1. Hanger
2. Protector
3. Seat
4. Main muffler
5. Gasket
6. Rear floor heat protection panel
7. Hanger
8. Protector
9. Seat
10. Bracket
11. Center exhaust pipe
12. Hanger brakcet
13. Gasket
14. Hanger
15. Front exhaust pipe
16. Gasket

REMOVAL AND INSTALLATION <SPACE RUNNER>



**Removal steps**

1. Hanger
2. Protector
3. Seat
4. Main muffler
5. Gasket
6. Rear floor heat protection panel
7. Hanger
8. Protector
9. Seat
10. Bracket
11. Center exhaust pipe
12. Hanger bracket
13. Gasket
14. Hanger
15. Front exhaust pipe
16. Gasket