ILLUSTRATION
REMOVAL

1. REMOVE WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY
   (a) Remove the windshield wiper motor and link assembly.

2. REMOVE COWL BODY MOUNTING REINFORCEMENT LH

3. REMOVE OUTER COWL TOP PANEL SUB-ASSEMBLY

4. DRAIN COOLANT (for Engine)

5. REMOVE NO. 2 CYLINDER HEAD COVER

6. REMOVE AIR CLEANER CAP SUB-ASSEMBLY

7. REMOVE INLET AIR CLEANER ASSEMBLY

8. REMOVE AIR CLEANER CASE

9. REMOVE EGR PIPE ASSEMBLY

10. REMOVE EGR COOLER SUB-ASSEMBLY

(a) Disconnect the connector, wire harness clamp and 4 water hoses.

Text in Illustration

*1 Stud Bolt and Nut

(b) Remove the 4 nuts and bolt.

(c) Using an E8 "TORX" wrench, remove the 4 stud bolts and EGR valve with cooler assembly.

(d) Remove the gasket.
(e) Remove the 2 nuts, EGR cooler sub-assembly and gasket.
1. INSTALL EGR COOLER SUB-ASSEMBLY

(a) Temporarily install the EGR cooler sub-assembly with the 2 nuts (A and B).

(b) Set a new gasket and EGR valve with cooler assembly.

(c) Using an E8 "TORX" wrench, install the 4 stud bolts.

Torque: **9.5 N·m (97 kgf·cm, 84in·lbf)**

(d) Temporarily install the 2 nuts (C) and bolt.

(e) Tighten the nut (A).

Torque: **21 N·m (214 kgf·cm, 15ft·lbf)**

(f) Tighten the 3 nuts (B and C) and bolt.

Torque: **21 N·m (214 kgf·cm, 15ft·lbf)**

NOTICE:

Make sure that all installation surfaces of the EGR valve with cooler assembly are in even contact when tightening the bolts and nuts.

(g) Connect the connector, wire harness clamp and 4 water hoses.
2. INSTALL EGR PIPE ASSEMBLY
3. INSTALL AIR CLEANER CASE
4. INSTALL INLET AIR CLEANER ASSEMBLY
5. INSTALL AIR CLEANER CAP SUB-ASSEMBLY
6. INSTALL NO. 2 CYLINDER HEAD COVER
7. ADD COOLANT (for Engine)
8. INSPECT FOR COOLANT LEAK (for Engine)
9. INSTALL OUTER COWL TOP PANEL SUB-ASSEMBLY
10. INSTALL COWL BODY MOUNTING REINFORCEMENT LH
11. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY
(a) Install the windshield wiper motor and link assembly.
ILLUSTRATION
REMOVAL

1. REMOVE WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY
   (a) Remove the windshield wiper motor and link assembly.

2. REMOVE COWL BODY MOUNTING REINFORCEMENT LH

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4. DRAIN COOLANT (for Engine)

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6. REMOVE AIR CLEANER CAP SUB-ASSEMBLY

7. REMOVE INLET AIR CLEANER ASSEMBLY

8. REMOVE AIR CLEANER CASE

9. REMOVE EGR PIPE ASSEMBLY
   (a) Disconnect the 2 wire harness clamps.

   (b) Remove the bolt and wire harness support.

   (c) Remove the 4 bolts, EGR pipe assembly and 2 gaskets.
10. REMOVE EGR VALVE ASSEMBLY

(a) Disconnect the connector, wire harness clamp and 4 water hoses.

(b) Remove the 4 nuts and bolt.

(c) Using an E8 "TORX" wrench, remove the 4 stud bolts and EGR valve with cooler assembly.

(d) Remove the gasket.

(e) Remove the 2 nuts, EGR valve assembly and gasket.

11. REMOVE WIRE HARNESS CLAMP BRACKET
(a) Remove the bolt and wiring harness clamp bracket.
1. INSPECT EGR VALVE ASSEMBLY

(a) Measure the resistance according to the value(s) in the table below.

### Standard Resistance

<table>
<thead>
<tr>
<th>Tester Connection</th>
<th>Condition</th>
<th>Specified Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 (B1) - 4 (S1)</td>
<td>20°C (68°F)</td>
<td>18 to 22 Ω</td>
</tr>
<tr>
<td>5 (B1) - 6 (S3)</td>
<td>20°C (68°F)</td>
<td>18 to 22 Ω</td>
</tr>
<tr>
<td>2 (B2) - 1 (S4)</td>
<td>20°C (68°F)</td>
<td>18 to 22 Ω</td>
</tr>
<tr>
<td>2 (B2) - 3 (S2)</td>
<td>20°C (68°F)</td>
<td>18 to 22 Ω</td>
</tr>
</tbody>
</table>

If the result is not as specified, replace the EGR valve assembly.
INSTALLATION

1. INSTALL WIRE HARNESS CLAMP BRACKET

(a) Install the wiring harness clamp bracket with the bolt.

2. INSTALL EGR VALVE ASSEMBLY

(a) Temporarily install the EGR valve assembly with the 2 nuts (A and B).

Text in Illustration

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>*1</td>
<td>Bolt</td>
</tr>
<tr>
<td>*2</td>
<td>Stud Bolt and Nut</td>
</tr>
</tbody>
</table>

(b) Set a new gasket and EGR valve with cooler assembly.

(c) Using an E8 "TORX" wrench, install the 4 stud bolts.

Torque: 9.5 N·m (97 kgf·cm, 84in·lbf)

(d) Temporarily install the 2 nuts (C) and bolt.

(e) Tighten the nut (A).

Torque: 21 N·m (214 kgf·cm, 15ft·lbf)

(f) Tighten the 3 nuts (B and C) and bolt.
Torque: 21 N·m (214 kgf·cm, 15ft·lbf)

NOTICE:

Make sure that all installation surfaces of the EGR valve with cooler assembly are in even contact when tightening the bolts and nuts.

(g) Connect the connector, wire harness clamp and 4 water hoses.

3. INSTALL EGR PIPE ASSEMBLY

(a) Install 2 new gaskets and EGR pipe assembly with the 4 bolts.

Torque: 10 N·m (102 kgf·cm, 7ft·lbf)

NOTICE:

Make sure to tighten the 4 bolts evenly until the flanges of the EGR pipe assembly contact with the installation surfaces.

(b) Install the wire harness support with the bolt.

(c) Connect the 2 wire harness clamps.
4. INSTALL AIR CLEANER CASE

5. INSTALL INLET AIR CLEANER ASSEMBLY

6. INSTALL AIR CLEANER CAP SUB-ASSEMBLY

7. INSTALL NO. 2 CYLINDER HEAD COVER

8. ADD COOLANT (for Engine)

9. INSPECT FOR COOLANT LEAK (for Engine)

10. INSTALL OUTER COWL TOP PANEL SUB-ASSEMBLY

11. INSTALL COWL BODY MOUNTING REINFORCEMENT LH

12. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY

   (a) Install the windshield wiper motor and link assembly.