NOTICE: If installing a new air conditioning compressor due to an internal failure of the old unit, you must carry out the following procedures to remove contamination from the air conditioning system.

- If A/C flushing equipment is available, carry out flushing of the air conditioning system prior to installing a new air conditioning compressor. For additional information, refer to Section 412-00.
- If A/C flushing equipment is not available, carry out filtering of the air conditioning system after a new air conditioning compressor has been installed. For additional information, refer to Section 412-00.
- Install a new thermostatic expansion valve, as directed by the A/C flushing or filtering procedure.
- Install a new receiver/drier as directed by the A/C flushing or filtering procedure.

NOTE: Installation of a new receiver/drier is not required when repairing the air conditioning system except when there is physical evidence of system contamination from a failed A/C compressor or damage to the receiver/drier.

NOTE: If installing a new A/C compressor, the A/C clutch disc and hub, A/C compressor pulley and A/C clutch field coil must be inspected and transferred from the old unit to the new unit if suitable for reuse.

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to Section 100-02.
2. If flushing of the air conditioning system has not been carried out, recover the refrigerant. For additional information, refer to Section 412-00.
3. Remove the 3 A/C compressor pulley shield bolts and the A/C compressor pulley shield (if equipped).
4. Remove the drive belt. For additional information, refer to Section 303-05.
5. Remove the cooling fan assembly. For additional information, refer to Section 303-03.
6. Remove the lower radiator splash shield.
7. Remove the lower compressor nut.
   - To install, tighten to 25 Nm (18 lb-ft).
8. Completely loosen the lower compressor stud.
   - To install, tighten to 9 Nm (80 lb-in).
9. Completely loosen the lower compressor bolt.
   - To install, tighten to 25 Nm (18 lb-ft).

Removal and Installation

<table>
<thead>
<tr>
<th>Item</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>W520413</td>
<td>Compressor nut (2 required)</td>
</tr>
<tr>
<td>2</td>
<td>W704795</td>
<td>Compressor stud (2 required)</td>
</tr>
<tr>
<td>3</td>
<td>W701626</td>
<td>Compressor bolt (2 required)</td>
</tr>
<tr>
<td>4</td>
<td>12B637</td>
<td>Field coil electrical connector</td>
</tr>
<tr>
<td>5</td>
<td>W704577</td>
<td>Compressor manifold bolt</td>
</tr>
<tr>
<td>6</td>
<td>12B637</td>
<td>A/C pressure transducer electrical connector</td>
</tr>
<tr>
<td>7</td>
<td>19703</td>
<td>A/C compressor</td>
</tr>
<tr>
<td>8</td>
<td>19E889</td>
<td>O-ring seal (2 required)</td>
</tr>
</tbody>
</table>
10. Disconnect the A/C pressure transducer electrical connector.

11. Disconnect the field coil electrical connector.

12. Loosen the compressor manifold bolt and position the compressor manifold aside.
   - Discard the O-ring seals.
   - To install, tighten to 21 Nm (15 lb-ft).

13. Remove the upper compressor nut.
   - To install, tighten to 25 Nm (18 lb-ft).

14. Completely loosen the upper compressor stud.
   - To install, tighten to 9 Nm (80 lb-in).

15. Completely loosen the upper compressor bolt.
   - To install, tighten to 25 Nm (18 lb-ft).

16. Remove the 2 compressor studs and the 2 compressor bolts.

17. **NOTE:** The A/C compressor must be removed through the opening between the coolant pump and upper radiator support.

   Remove the A/C compressor.

18. To install, reverse the removal procedure.
   - If a new A/C compressor is to be installed, the clutch assembly must be transferred from the old unit to the new unit. For additional information, refer to **Clutch and Clutch Field Coil** in this section.
   - Install new O-ring seals.
   - If filtering of the refrigerant system is not to be carried out, lubricate the refrigerant system with the correct amount of clean PAG oil. For additional information, refer to **Section 412-00**.

19. If filtering of the refrigerant system is not to be carried out, evacuate, leak test and charge the refrigerant system. For additional information, refer to **Section 412-00**.