TOYOTA NAVIGATION SYSTEM

TNS 300

TOYOTA NAVIGATION SYSTEM

LC 120 (LHD)

EINBAUANLEITUNG
INSTALLATION INSTRUCTIONS
INSTRUCTIONS D’INSTALLATION

FÜR - FOR - POUR

**J12*L

TEILENUMMER - PART NUMBER - NUMERO DE PIECE

NAVIGATIONSSATZ
NAVIGATION KIT
KIT DE NAVIGATION

08545-00805
PRECAUTIONS

PLEASE READ THOROUGHLY THESE PRECAUTIONS FOR THIS SYSTEM INSTALLATION

- Be sure to disconnect the negative (-) lead from the battery terminals.

- Do not pinch the rear wiring or harness in the tightened part.

- When passing the wires through the bulkhead or other panels, use a grommet to ensure waterproofing.
  - Protect the wiring with tape when it is passed through a hole.

- When disconnecting the connectors, be sure to grip the connector body. Do not tug on the wiring.

- Do not forcibly pull any car wiring harness. Rough tugging may result in opened connections, or a broken wire or harness.

- Confirm that lamps, horn, wiper and other car accessories operate normally.

- Protect your car with wing covers, seat and so on.

- Use the correct tool when tightening bolts or nuts.

- Before drilling a hole, check that the rear of the mounting wall is clear.

- Be sure to firmly tighten connectors and terminals.

- Before connecting the power wiring to the battery, check the wiring connections, harness, etc. to see that they are properly secured.

- Check body and trim near area of installation to be certain no dirt or scratches resulted from the installation.

INSTALLATION PRECAUTIONS

Before installing:

1. Always make sure to disconnect the (-) battery cable.
2. Place a cover on the vehicle to protect it from scratches or damages during installation work.

Installation of parts:

1. Select a slit for installation work that does not impair operation and offers adequate comfort.
2. Always check to make sure there are no objects present on the reverse side when drilling mounting holes.
3. When tightening parts using bolts, nuts or other fasteners on the vehicle, never attempt to use those involved in the steering or brake systems.
4. When tightening parts, make sure not to pinch the wire harness on the reverse side.

Wiring:

1. Do not pull with excessive force on the vehicle’s wire harness. this can cause connectors to become disconnected or damage to the wire harness.
2. Gather the wire harness of the vehicle together in a bundle so that they do not hang loose, and fasten in position using clamps.
3. Do not pass wires through locations in contact with hot parts or parts that move in linking motion due to vibrations.
4. When passing wire through a hole, the lead wire must be protected.
5. Make sure that connectors and terminals are securely connected.
6. When handling connectors, hold onto the connector with the connector body and do not pull on the lead wire.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precautions</td>
<td>2</td>
</tr>
<tr>
<td>TNS 300 Navigation System Assy</td>
<td>4</td>
</tr>
<tr>
<td>System Layout</td>
<td>5</td>
</tr>
<tr>
<td>How to Connect</td>
<td>6</td>
</tr>
<tr>
<td>Vehicle Disassembly</td>
<td>7</td>
</tr>
<tr>
<td>GPS Antenna Installation</td>
<td>13</td>
</tr>
<tr>
<td>Wire Harness Installation</td>
<td>15</td>
</tr>
<tr>
<td>Computer Installation</td>
<td>20</td>
</tr>
<tr>
<td>System Start Up</td>
<td>23</td>
</tr>
<tr>
<td>Final Check</td>
<td>24</td>
</tr>
</tbody>
</table>

**REMARK:**

Be sure to read the General Installation Instructions (Common Section) before installing TNS 300.
TNS 300 NAVIGATION SYSTEM ASSY

<table>
<thead>
<tr>
<th>NO.</th>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>COMPUTER</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>WIRE HARNESS</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>GPS ANTENNA</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>NAVIGATION DISC (*1)</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>COMPUTER BRACKET</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>BOLT (M5 x 8)</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>CORD CLAMP</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>FOAM TAPE</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>WIRE TIE</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>EARTH PLATE</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>ADHESIVE TAPE</td>
<td>4</td>
</tr>
</tbody>
</table>

*1: NAVIGATION DISC (DVD-ROM) ☞ is not included in the navigation kit.
Refer to the repair manual for information on removal vehicle parts, installation methods, tightening torque and so forth.
VEHICLE DISASSEMBLY

1. Remove the console finish panel (L) and (R).

2. Remove the integration panel (L) and (R).

3. Remove the ashtray.
4. Remove the heater control panel.

5. Remove the front door scuff plate (R).

6. Remove the cowl side panel (R).
7. Remove the passenger’s seat.

8. Remove the instrument panel under cover (R).

9. Remove the glove compartment door and instrument panel cluster moulding (R).
10. Remove the foot rest.

11. Remove the front door scuff plate (L).

12. Remove the cowl side panel (L).
13. Remove the instrument panel under cover (L).

14. Remove the instrument panel cluster moulding (L).

15. Remove the ignition switch bezel and instrument panel finish lower panel.
16. Remove the front console panel side cover (R).

17. Remove the meter cluster panel.
FOAM TAPE CUT PROCEDURES

a) Cut the foam tape into 3 large pieces, 9 middle pieces and 12 small pieces as shown in the illustration.

<Large piece>
- For computer
- For computer corner cover

<Middle piece>
- For wire harness & antenna cord routing
- For extra length of reverse & speed sensor wire

<Small piece>
- For antenna cord routing
- For reverse sensor wire routing
- For speed sensor wire routing

ADHESIVE TAPE CUT PROCEDURES

a) Cut the adhesive tape into 1 large piece and 2 small pieces as shown in the illustration.

<Large piece>
- For bracket (Adhesive tape)

<Small piece>
- For earth plate (Adhesive tape)

1. Using a knife, to cut off the weather strip of the antenna cord.

CAUTION: Be careful not to damage the antenna cord.
2. Remove the release paper of the earth plate ⑩ and apply the adhesive tape ⑪.

3. Attach the earth plate ⑩ to the meter cluster panel as shown and mount the GPS antenna ③ to the earth plate ⑩. **CAUTION**: Make sure to clean the installation position surface before attaching the earth plate ⑩.

4. Fix the antenna cord ③ using the foam tapes ⑬.

5. Route the antenna cord ③ as shown in the illustration.

6. Return the meter cluster to its original position, without rubbing GPS antenna ③ against the instrument panel. **CAUTION**: Be careful not to slip away GPS antenna ③ from the earth plate ⑩.
1. Remove the driver side J/B.

2. Route the wire harness ② and antenna cord ③ as shown in the illustration.

SPLICING CONNECTOR CONNECTION PROCEDURES

a) Remove appropriate amount of vinyl tube or tape wrapping the vehicle side harness to be connected.

b) Insert the vehicle harness to be connected securely into the guide slit.

c) After inserting the vehicle side harness into the guide slit, fix the splicing connector, and lock it securely using a pair of pliers or alike until the connector clicks.
3. Route the speed sensor wire as shown in the illustration, and secure the speed sensor wire using the foam tapes.

4. Disconnect the 16P connector (White)

5. Connect the speed sensor wire (Violet / White) of the wire harness to the 16P connector (White) terminal 11 harness.

6. Reconnect the 16P connector (White) to driver side J/B.
7. Route the reverse sensor wire as shown in the illustration, and secure the reverse sensor wire using the foam tapes.

8. Disconnect the 13P connector (White).

9. Connect the reverse sensor wire (Red/Blue) of the wire harness to the 13P connector (White) terminal 1 harness.

10. Reconnect the 13P connector (white) to the connector block.

11. Disconnect the 12P connector (White).
12. Connect the TX- sensor wire (Yellow / Black) of the wire harness ② to the 12P connector (White) terminal 9 harness.
13. Connect the TX+ sensor wire (Yellow) of the wire harness ② to the 12P connector (White) terminal 10 harness.
14. Reconnect the 12P connector (white) to the heater control panel.

15. Secure the wire harness ② to the vehicle wire harness using the wire tie ③.
16. Secure the extra length of the wire harness ② (speed sensor wire and reverse sensor wire) as shown in the illustration using the foam tapes ③.
17. Connect the wire harness ② 10P connector (White) to the vehicle side 10P connector (White).

18. Refit the heater control panel.
19. Route the wire harness ② and antenna cord ③ to the computer ① installation area and attach them with foam tapes ⑧.

20. Secure the extra length of the wire harness ② and antenna cord ③ as shown in the illustration using the foam tapes ⑧.
1. Fit the computer brackets ⑤ to the computer ① using the bolts ⑥.

2. Attach the rest of the adhesive tapes ⑩ used to fix install the plate, to the bottom of the computer bracket ⑤ as shown.

3. Attach the foam tape ⑧ to the computer ① as shown in the illustration.

   **CAUTION:** Do not remove the release paper on the under side of the adhesive tapes ⑩ yet.

4. Cut the floor carpet in the computer ① installation area as shown in the illustration.
5. Route the Vehicle wire harness.

6. Connect 1P connector (GPS antenna ③), 8P connector and 13P connector (wire harness ③) to the computer ①.
CAUTION: Put the computer ①, after adjusting it in a horizontal position.

7. Install the computer ① on the predetermined position.

CAUTION: When affixing the computer ①, make sure to carefully wipe off any dirt, moisture or oil from the surface of the location where it is to be affixed.
**SYSTEM START UP**

**POST-INSTALLATION INSPECTION**

1. Inspect the wiring and installation for abnormalities.

2. Check particularly closely for any locations where the vehicle harness, wire harness or divergency harness is being pushed, pulled or pinched with excessive force. Also check again that clamps and bands have not shifted out of position and that all parts have been tightened.

**OPERATION CHECK**

1. Attach the (-) terminal of the battery and turn the key to the ACC or ON position or start the engine.

2. Press the NAVI switch and confirm that the navigation screen is displayed.

3. Adjust the volume by following the section on "Adjusting the Volume of the Guide Voice" in the TNS 300 Owner's Manual, and confirm that the sound from the speakers changes.

4. Perform the "auto-compensation" procedure by following the section on "When Tires are Replaces" in the TNS 300 Owner's Manual.

When an abnormality is suspected, perform trouble-shooting based on the "Toyota Genuine Navigation System Service Manual".

**DVD-ROM INSERTION INTO THE COMPUTER**

a) Connect the battery and turn the ignition switch to ACC position.

b) Slide the eject switch on the computer to the left to open the disc insertion slot.

c) With the label side of the disc facing up, insert the disc into the disc insertion slot.

*The disc will be pulled into the computer automatically.*

d) Slide the eject switch on the computer to the right to close the disc insertion.
RESTORATION WORK

Return all vehicle parts that have been removed to their original locations. Especially make sure to attach trim and other interior materials properly so that they do not have a detrimental effect on the function of the vehicle. During restoration, make sure that wires are not pinched and all bolts and screws are tightened.

FINAL CHECK

1. Check that there are no locations where harnesses are pinched or abnormalities in attachment of vehicle parts.
2. Check that there are no abnormalities in vehicle functions, including light switches, front wiper and washer switches, meters, indicator lamps and warning lamps.