1. DESCRIPTION: Trailer Hitch Harness Kit
2. APPLICATION: Nissan Pathfinder (2013)
3. PART NUMBER: 999T8 XZ000- Trailer Hitch Harness Kit

4. KIT CONTENTS:

<table>
<thead>
<tr>
<th>Item</th>
<th>QTY</th>
<th>Description</th>
<th>Service Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>Exterior 7-Pin Connector Harness</td>
<td>24340 3KA0A</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>Relay Box and Harness</td>
<td>24168 3JA0A</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>Misc. parts kit</td>
<td></td>
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</tbody>
</table>

5. TOOLS REQUIRED

- Trim stick
- Work gloves
- 10mm socket
- Long needle nose pliers
- Ratchet with 2" and 12" extension
- Air ratchet
- Panel Clip Removal Tool

6. PRE-INSTALLATION CAUTION/NOTES

- Dealer installation recommended. Instructions may refer to Service Manual
- Installation may require special tools
- This part is to be installed within a surface temperature range of 65-100°F

⚠️ CAUTION

- This accessory must only be installed as specified in these instructions.
- Ensure at all times that parts are securely fitted and will not compromise the safe function of vehicle systems.
7. INSTALLATION OVERVIEW

8. CRITICAL STEPS

The following steps are critical and must be performed **EXACTLY** as specified to ensure proper installation:

- Location of the harness must be followed exactly as described in this instruction.
- Test the functionality of the kit before final clean up and reinstallation of interior panels.
9. VEHICLE PREPARATION:

1) Apply parking brake
2) Confirm the vehicle is no longer in the default shipping state (Extended Storage Switch Pulled Up and BCM in Transit Mode). Failure to confirm the vehicle has been removed from this state will result in the loss of normal vehicle operation. The confirmation requires two checks:

2a) Locate the Extended Storage Switch in the cabin fuse block. Once located, check that it is in the "Customer" position. See below for reference.

2b) Turn the ignition switch from "OFF" to "ON" position. If turn indicators illuminate for approx. 1 minute, the vehicle is in shipping mode. To exit shipping mode, return the ignition switch to "OFF" position. Simultaneously push the wiper and turn signal stalks downward and hold for 2 seconds.

3) Record customer radio presets.

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<th>1</th>
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<th>4</th>
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<tr>
<td>A</td>
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<td>B</td>
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<td>C</td>
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</table>

NOTE: USE CAUTION WHEN REMOVING / RE-INSTALLING TRIM COMPONENTS TO AVOID DAMAGE, SCRATCHES, BREAKING OF CLIPS AND / OR INTERIOR TRIM PANELS. MOVE ALL TRIM COMPONENTS TO A PROTECTED AREA.

10. Order of Installation

1. Remove panels and trim. 3. Connect Wiring
2. Install Harness 4. Replace all panels

WARNING

Disconnect negative battery terminal before proceeding.
11. INTERIOR PREPARATION

1. Open rear hatch.

2. Open the rear cargo floor panel. Carefully pull up the bottom portion of the hatch door welt strip.

3. Carefully pry off the small trim panel from inside the striker loop at the center of the rear kick plate.
11. INTERIOR PREPARATION

4. Pry off the rear kick plate along the bottom of the hatch opening.

NOTE: There are six (6) clips around the edge of the trim panel. Pry off leading edge first for easier removal.

REMOVAL OF OPTIONAL SUBWOOFER

If vehicle is not equipped with subwoofer, proceed to step 8.

5. Unscrew the large retaining bolt from the top of the subwoofer assembly.

6. Carefully lift the subwoofer assembly out of the storage compartment. Disconnect the electrical plug.

7. Remove the Subwoofer assembly and set aside.
11. INTERIOR PREPARATION

8. Remove three (3) 10mm bolts from the storage compartment unit.

9. Use a clip removal tool to remove four (4) panel clips from the storage compartment unit.

10. Fold down rear seat. Lift the storage compartment assembly up and over so it rests on the rear seat backs as shown.
11. INTERIOR PREPARATION

11. Locate the two cargo loops on the driver side trim panel. Carefully pry up the access panels in the center of the loops.

12. Remove two (2) 10mm bolts from the cargo loop assemblies. Remove the cargo loop assemblies and set aside. Remove two (2) press fasteners from inside edge of panel.

13. Remove the carpeted trim panel and set aside.
11. INTERIOR PREPARATION

14. Locate the bracket along the inside rear of the driver side compartment.

**NOTE:** Work gloves are recommended for steps 13 through 18 due to sharp metal edges on the surrounding bracket.

15. Fit the new relay box mounting bracket into position as shown. Secure with two (2) 10mm bolts.

16. Move the Relay Box and harness into position near the mounting bracket. **Insert** the two connectors from the Relay Box into the existing vehicle connectors above the mounting bracket.
12. INSTALLATION

17. Due to the tight spacing inside the bracket area, the relay box assembly should be installed as follows:

1) Rotate the assembly in a clockwise direction to help move the assembly into position near the bracket.

2) Rotate the assembly back in a counter-clockwise direction before final mounting.

18. Snap the Relay Box into position on the mounting bracket as shown.

19. Install three relays as shown.

20. Open Hood. Locate relay box behind the driver side headlamp. Open cover and install two relays as shown.
12. INSTALLATION

21. **Reinstall** the carpeted trim panel and both cargo loops.

22. **Reinstall** the storage compartment unit.

23. **Reinstall** optional Subwoofer Assembly if necessary (see Fig. 5 & 6).

24. **Reinstall** the rear hatch Kick Plate and small trim panel (see Fig 3 & 4).

25. **Reinstall** the hatch door welt strip (see Fig.2)

**NOTE:** It is recommended that the vehicle be raised on a hoist at this time.

26. Locate the factory trailer harness connectors located underneath the rear passenger corner of vehicle. **Remove the sealer plugs from the connectors and discard.**

**NOTE:** Use long nose pliers or vice-grips to release the sealer plug clips.

27. Install the two (2) connectors on the accessory harness to the two (2) connectors on the factory harness.
12. INSTALLATION

28. Route the accessory harness along the hitch and attach one (1) clip to the hole in factory bracket as shown.

NOTE: Hitch assembly must be installed on vehicle before proceeding.

29. From the outside of the rear bumper, align the seven pin standard barrel connector key ways to match the hole provided in hitch. Rotate the connector 90 degrees to lock into position.

30. From the inside of the rear bumper, connect the seven pin mating connector on the connector harness to the back of the seven pin standard barrel connector.
12. INSTALLATION

OPTIONAL STEP - TRAILER BRAKE JUMPER HARNESS

31. If trailer brake is required, the Electric Trailer Brake Jumper Harness must be installed.

PART NO. 24167 7S000

Before connecting the jumper harness to the vehicle, wire it to the brake controller.

Use the instructions supplied with the brake controller.

32. The Pre-wired connector plug is located under the dash on the driver side on the main harness branch leading to the CONSULT/DDL service connector.

<table>
<thead>
<tr>
<th>Harness Wire Color</th>
<th>Note</th>
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</thead>
<tbody>
<tr>
<td>Red/Green</td>
<td>Vehicle Stop Lamp Switch to Trailer brake Controller</td>
</tr>
<tr>
<td>Black</td>
<td>Ground for Trailer Brake Controller</td>
</tr>
<tr>
<td>Brown/White</td>
<td>Trailer Brake Controller Output to Trailer Brakes</td>
</tr>
<tr>
<td>Red/Blue</td>
<td>NOT USED FOR THIS VEHICLE</td>
</tr>
<tr>
<td>Red</td>
<td>Fused 12V Power Supply for Trailer Brake Controller</td>
</tr>
</tbody>
</table>
13. CHECK OUT

(1) Inspect the vehicle for unfinished work.

(2) Reconnect battery.

(3) Utilizing a volt meter, confirm the voltage is at or near zero DC volts when checking between 'GROUND' pin on the 7 Pin Tow Connector (See Mechanization if necessary) and an unpainted and clean area of the vehicle’s body.  

SAFETY NOTE - THE REMAINDER OF THIS CHECK-OUT REQUIRES TWO INDIVIDUALS TO COMPLETE FOR SAFETY PURPOSES.

(4) Confirm the vehicle's shifter is in the PARK position and place ignition switch into "ON" position. The vehicle's engine does NOT need to be running for any of the following checks.

(5) Use a volt meter to confirm the voltage is at or near 12 DC volts when checking between 'GROUND' pin and '12V POWER' pin on the 7 Pin Tow Connector (See Mechanization if necessary).

(6) Turn the light switch located on the steering column stalk to the PARK/TAIL LAMP position.

(7) Use a volt meter to confirm the voltage is at or near 12 DC volts when checking between 'GROUND' pin and 'PARKING LAMPS & LICENSE' pin on the 7 Pin Tow Connector (See Mechanization if necessary).

(8) Apply the brakes.

(9) Use a volt meter to confirm the voltage is at or near 12 DC volts when checking between 'GROUND' pin and the 'LEFT & RIGHT TURN/STOP' pins on the 7 Pin Tow Connector (See Mechanization if necessary).

(10) Release the brakes and turn hazard switch to "ON" position.

(11) Use a volt meter to confirm the voltage oscillates between zero and 12 DC volts depending on the state of the vehicle lamps. This can be done by checking between 'GROUND' pin and the 'LEFT & RIGHT TURN/STOP' pins on the 7 Pin Tow Connector (See Mechanization if necessary).

(12) Set parking brake. Apply the brakes and shift the vehicle into the REVERSE position. Keep applying brakes during the entire time the vehicle's shifter is in the REVERSE position and is being checked by the 2nd individual.

(13) Use a volt meter to confirm the voltage is at or near 12 DC volts when checking between 'GROUND' pin and the 'REVERSE' pin on the 7 Pin Tow Connector (See Mechanization if necessary).

(14) Return the vehicle's shifter position to PARK. After confirming the shifter is in PARK position, the brake pedal can be released. The parking brake can also be released.

NOTE - CHECK-OUT STEPS 3 THRU 13 ASSUMES A TRAILER IS NOT AVAILABLE FOR VISUALLY CHECKING THE SYSTEM IS OPERATIONAL. IF A TRAILER IS AVAILABLE FOR CHECK-OUT, CONNECT THE TRAILER TO THE 7 PIN TOW CONNECTOR AND COMPLETE STEPS 3 THRU 13 WITHOUT A VOLT METER BY SIMPLY CHECKING THE LAMP STATES OF THE TRAILER. IF ANY OF THE TRAILER LAMPS FAIL TO ILLUMINATE, A VOLT METER SHOULD BE USED AS EXPLAINED ABOVE TO VERIFY THE ACCESSORY WIRING IS OPERATING CORRECTLY.

(15) If this vehicle will be returned to a dealer lot or showroom for an extended period of time, be sure the extended storage switch is placed in the "inventory" position. (Refer to section 9 - Vehicle Preparation)
### 14. BILL OF MATERIALS

#### Trailer Harness Kit - 999T8 XZ000

<table>
<thead>
<tr>
<th>Parts Contained in Bag Labelled 'Installation Kit'.</th>
<th>Qty</th>
<th>Part Number</th>
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<tbody>
<tr>
<td>1 BRKT-CLIP</td>
<td>1</td>
<td>24239 3JA2A</td>
</tr>
<tr>
<td>2 SCREW- 10MM, HEX HEAD, 16MM LENGTH</td>
<td>2</td>
<td>85-66616-2A</td>
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<tr>
<td>3 EXTERIOR SUB-HARNESS (FOR ATTACHING 7 PIN TOW CONNECTOR)</td>
<td>1</td>
<td>24340 3KA0A</td>
</tr>
<tr>
<td>4 7 PIN TOW CONNECTOR (STANDARD BARREL TYPE)</td>
<td>1</td>
<td>24340 ZR10A</td>
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<tr>
<td>5 INTERIOR SUB-HARNESS W/RELAY BOX</td>
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<td>24168 3JA0A</td>
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<td>6 RELAY-1M (MANUAL INSTALLATION INTO INTERIOR SUB-HARNESS RELAY BOX)</td>
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<td>25230 79917</td>
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<tr>
<td>7 RELAY-2M (MANUAL INSTALLATION INTO INTERIOR SUB-HARNESS RELAY BOX)</td>
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<td>25230 7996A</td>
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<tr>
<td>8 RELAY-1M (MANUAL INSTALLATION INTO VEHICLE UNDERHOOD RELAY BOX)</td>
<td>2</td>
<td>25230 79917</td>
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<tr>
<td>9 COMMON PAPER - ACCESSORY WEBSITE ADDRESS</td>
<td>1</td>
<td>999V2 AW000</td>
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<tr>
<td>10 INSTALLATION INSTRUCTIONS (Website)</td>
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<td>999T8 XZ000 II</td>
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15. MECHANIZATION