## Installation Instructions

**Part Number:** 0000-8E-R09  
**Applicable Models:** 2017 > CX-5 (GAS 2.5L)

### Supplemental Trailer Hitch Harness

**Package Contents:**
- Installation Instructions (QTY 1)
- Foam Tape (QTY 1)
- 15A Mini Fuse (QTY 1)
- Large Tie Wraps (QTY 7)
- Tie Wraps (QTY 6)
- Grommet (QTY 1)
- Female Connector (QTY 1)
- 4-Flat Trailer Harness (QTY 1)

### Tools Required

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
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</thead>
<tbody>
<tr>
<td>Panel Removal Tool</td>
<td>Small Flathead Screwdriver</td>
<td>Trim Panel Remover</td>
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<tr>
<th>D</th>
<th>E</th>
<th>F</th>
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<tbody>
<tr>
<td>Phillips Screwdriver</td>
<td>10mm Socket Wrench</td>
<td>Wire Cutters</td>
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<table>
<thead>
<tr>
<th>G</th>
<th>H</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Needle Nose Pliers</td>
<td>Drill &amp; 6mm Drill Bit</td>
<td>Tape Measure</td>
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</table>

### Before Installation

1. Read installation instructions before proceeding.
2. Be careful not to damage vehicle paint or kit components.
3. Do not over tighten bolts, tighten to specified torque.
4. Record customers preset radio stations (if applicable).
5. Using a 10mm socket, remove negative (-) battery terminal.
A  ACCESS STORAGE COMPARTMENTS

1. Lift rear hatch door and lower passenger seats behind driver seat as shown.
2. Temporarily remove floor deck panel.
3. Temporarily remove jack and tow bar foam inserts.
4. Temporarily remove floor deck corner panel.

B REMOVE REAR THRESHOLD PLATE & LIFT RUBBER SEAL

Tools Needed:

1. Locate left and right push nut pins on threshold plate and temporarily remove using a small flathead screw driver.
2. Firmly pull up on the threshold plate and temporarily remove from vehicle.
3. Temporarily lift away rubber seal along rear hatch as shown.

4. Temporarily lift away rubber seal along passenger door, behind driver’s seat.

3. Driver’s side panel

4. Behind driver’s seat

C ACCESS WIRE HARNESS BEHIND DRIVER’ SIDE TRIM PANEL

1. Locate driver’s side interior trim panel and follow sequence to remove. (a-b-c-d-e)
   a.) Temporarily remove push nut pin of trim panel using a small flathead screwdriver for sequence (a).
   b.) Remove trim panel piece (b). Lift cover to access bolt and remove using a 10mm socket wrench. (Torque Spec 9.0 - 12.0 N·m).
c.) Remove trim panel piece (c). Access bolt by lifting cover. Use a 10mm socket wrench to remove bolt. *(Torque Spec 9.0 - 12.0 N·m)*.

d.) Remove trim panel piece (d). Carefully release latch cover using a small flat head screwdriver. Remove phillips head screw securing the lift handle to the vehicle.

e.) Remove trim panel piece (e), using a phillips head screw driver.

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**Tools Needed:**
- 10mm Socket Wrench
- Small Flathead Screwdriver
- Phillips Screwdriver

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**REMOVE LEFT HAND SIDE TRIM PANEL**

1. Remove kick plate on the driver side rear door using a panel removal tool to release trim panel.

2. Carefully lift trim panel starting from inside driver side rear door area behind driver’s seat using trim panel remover tool.

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**Tools Needed:**
- Panel Removal Tool
- Trim Panel Remover

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**Panel Removal Tool**

**Note:** Wrap end of trim panel remover in soft tape/clothe tape to prevent damage.

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**Continues on next page**
3. Use trim panel remover tool to disengage two locking pin locations along trim panel side. Revert to the panel removal tool to disengage locking pin locations along top portion of trim panel.

4. Push forward, rotate, and pull out the release latch cover through trim panel opening and set aside.

5. Temporarily remove trim panel from vehicle using a rotating and pulling motion as shown in image.

Note: Wrap end of trim panel remover in soft tape/clothe tape to prevent damage.
1. Using wire cutters, trim tie wraps located at the three tie mounts holding the 4-Flat Harness at specified locations.

2. Using wire cutters cut tie wrap around foam tape and remove foam tape. Remove the 4-Flat harness connector to the module connector by depressing connector tab and pull connectors apart.

3. Cut wires behind 4-pin connector on 4-Flat trailer harness using wire cutters and discard the connector.
4. Underneath vehicle, cut all existing tie wraps attaching 4-Flat trailer harness to vehicle using wire cutters.

5. Unseat floor grommet and pull wires from interior of vehicle and discard 4-Flat trailer harness.
1. Locate attachment point (a) on the bumper fascia to measure the drill point for the tie wrap attachment. Measure 40mm towards the receiver tube of the hitch and 15mm upwards. Drill a 6mm hole at the drill point.
Due to the extreme high temperatures produced by the exhaust, a minimum clearance of 50mm must be maintained between exhaust and harness. Failure to do so will result in severe damage to harness and loss of trailer functions, such as brake light and turn signal lights.

1. After performing Step 2, verify that a minimum of 50mm has been achieved between exhaust and harness. If not, remove tie wrap and repeat Step 2 above using a new tie wrap. If 50mm has been achieved, move on to Step 3.

2. Secure the 4-FLAT trailer connector into the hitch bracket as shown. Route the wiring towards the drilled hole (a). Use a large tie wrap to fully secure the wire harness ensuring a 50mm clearance from the indented section of the exhaust closest to the harness as shown in the measurement photo and make sure to remove all slack. It's important that the corrugated tube is routed over the edge of the bracket for protection.

Critical Step:
See Caution prior to performing step.

It's important that the corrugated tube is routed over the edge of the bracket for protection. Damage to harness may occur otherwise.
3. After the distance verification trim the tie wrap using the wire cutters and rotate the tie wrap head up so it is not visible from the rear of the vehicle to avoid injury.

4. Route the harness behind fascia support bracket making sure the harness is routed between the bumper fascia and bracket (b). Use a large tie wrap to secure the harness to the fascia. Tighten the tie wrap and trim the tie wrap tail with wire cutters.

5. Use a large tie wrap (c) to secure the harness to the bottom of the cross member of the hitch. Tie wrap should be located 100mm from cross member end. Remove all slack, tighten the tie wrap and trim the tie wrap tail with wire cutters.
6. Route the harness near the rear most hitch attachment bolt (d). Use a large tie wrap to secure the harness to the hitch attachment bracket. Remove all slack, tighten the tie wrap and trim the tail using wire cutters.

7. Route the harness to the wire attachment point near the grommet. This is located on the rear side of the bumper deflector (e). Use a large tie wrap to secure the harness to the attachment point. Remove all slack, tighten the tie wrap and trim the tie wrap tail using wire cutters.

1. Route the four terminated wires through the exposed opening. Use care to prevent any damage being done to wires.
2. Slide the supplied grommet over the four terminated wires and seat the grommet into the vehicle opening.
3. Confirm corrugated tubing successfully meets with installed grommet underneath vehicle.
1. Route 4-Flat harness near existing module location near tie wrap mount locations.
2. Use three small tie wraps to secure 4-Flat harness to existing tie mount locations. Do not tighten at this time.
3. Check to ensure corrugated tube meets grommet prior tightening tie wraps.
4. Tighten the tie wraps and trim tie wrap tails using wire cutters.

2. Insert the provided female connector to the four terminated wires. Firmly push terminal lock into the locked position.

Attach the 4-Flat harness connector to the module connector. The wires should match color to color at the connectors. (reference illustration).
1. Use one piece of foam tape to protect connectors and to prevent rattle.
2. Use a tie wrap to secure connectors wrapped in foam tape to the main harness’s mounting component as shown.
3. Cut excess tie wrap used in prior step with wire cutters.

1. Seal the replacement grommet with silicon to prevent any possible water intrusion.
2. Reinstall all trim, tie down, and interior panels in reverse order of removal, ensuring all fasteners are properly installed.
3. Clean vehicle.
4. Vacuum and clean any debris caused by installation.
5. Replace fuse.
6. Connect negative (-) battery terminal.

**Fig. 1 - Replace Fuse**

Fuse Cover Panel

Remove fuse relay box cover panel from underneath the dashboard on the driver side of the vehicle.

Fuse Relay Box

15 amp fuse will be located in cavity labeled ESCL of the fuse relay box. Replace fuse with newly supplied 15 Amp fuse.
TOOL REQUIRED
TEST LIGHT

METHOD
1. Attach the test light ground connection to the male pin of the harness’s 4-flat connector.
2. Probe each of the female pins individually to confirm correct circuit operation.

See Fig. 1 page 13
## INSTALLATION INSPECTION

**PART NUMBER:** 0000-8E-R09  
**APPLICABLE MODELS:** 2017 > CX-5 (GAS 2.5L)

**TRAILER HITCH WIRING KIT**

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*Inspect the installed / reinstalled parts for the following items:*

<table>
<thead>
<tr>
<th>Inspection Items</th>
<th>Inspection Parts</th>
<th>Clearance/Fit</th>
<th>Scratches/Dirt/Harness Interference</th>
<th>Installation/Tightening/Engagement</th>
<th>Operation Check</th>
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</thead>
<tbody>
<tr>
<td>50mm Between Exhaust &amp; Harness</td>
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<tr>
<td>Tow Harness Functions</td>
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<td>Tow Harness</td>
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<tr>
<td>Tow Harness Module Ground Screw</td>
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<tr>
<td>Driver’s Side Left Rear Interior Trim Panel</td>
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<td>Passenger Side Right Rear Interior Trim Panel</td>
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<td>Rear Threshold Plate</td>
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<td>Rear Foam Inserts</td>
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<td>Rear Floor Covering</td>
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<td>Vehicle Negative Power Cable</td>
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<tr>
<td>4-FLAT Harness</td>
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**Notes:**

1. Verify signal functionality at the trailer harness plug using the test procedure on page 14.
2. Ensure tow harness module ground bolt is torqued to 7.0 N·m.
If the battery is disconnected, the DSC may stop operating.
(The DSC OFF indicator will flash at this time, and the TCS/DSC operation indicator will illuminate.)
1. Turn the ignition switch to “OFF” and then turn it back to “ON”.
2. Turn the steering wheel clockwise as far as it will go, and then turn it back counterclockwise as far as it will go.
3. Check that the TCS/DSC operation indicator is turned off.
4. Turn the ignition switch to “OFF” and then turn it back to “ON”.
5. Check that the TCS/DSC operation indicator is turned off. If the TCS/DSC operation indicator is still illuminated or the DSC indicator is not turned off when the ignition switch is turned back to “ON”, contact your Mazda dealer.

If the battery is disconnected, the power windows may no longer fully open or fully close automatically.
1. Turn the ignition key to the “ON” position.
2. Press the power window switch to fully open the power windows.
3. Lift up the power window switch to fully close the power windows, and keep it pulled up for approximately 2 seconds.
4. Position the engine switch at “OFF”, and then at “ON” again. When the function doesn’t work after these procedures, please contact your Mazda dealer.

Due to the extreme high temperatures produced by the exhaust, a minimum clearance of 50mm must be maintained between exhaust and harness. Failure to do so will result in severe damage to harness and loss of trailer functions, such as brake light and turn signal lights.
1. After performing Step 2 on page 9, verify that a minimum of 50mm has been achieved between exhaust and harness. If not, remove tie wrap and repeat Step 2 using a new tie wrap. If 50mm has been achieved, move on to Step 3.