Genuine Accessories

Vehicle Model: Tucson
Model Year: 2016 -
Part No.: D3062 ADU02

Accessory: Mirror, Auto-dim w/ HL4 &
Comp

Difficulty: (B)

Note: Difficulty stated above reflects the minimum level of expertise required to install the accessory.

( A ) Customer       ( B ) Dealer Technician       ( C ) Master Technician

Instructional Symbols / Definitions

- Denotes warnings that may lead to serious physical injury or vehicle damage.
- Denotes cautions to be taken to avoid physical injury or electronic component damage.
- Denotes cautions to be taken to avoid vehicle and component damage.
- Denotes quality processes to be checked prior to moving to the next step.
- Denotes specific tools that are necessary to complete the step.
- Denotes instructional steps necessary to complete the process.
- Denotes safety equipment required to be used such as a mask, safety glasses, gloves, and hearing protection.

Basic Required Hand Tools

- Ratchet
- 10mm Socket
- 12mm Socket
- T20 Torx Socket
- Torque Wrench
- Nylon Panel Removal Tool
- T20 Torx Driver
- #2 Phillips Screwdriver
- Side Cutters
- Pliers
- Tape Measure

FMVSS 110 Compliance Information

| Part Weight | 1.36 lbs | 0.62 kg |

All dealers must determine if the weight they have added in the form of all options or accessories, when added to the weight of all Port/Dealer Installed options or accessories, exceeds the lesser of 1.5% of GVWR or 100 lbs. If the additional weight does exceed the lesser of the indicated thresholds, a "Load Carrying Capacity Reduced" label must be installed. A black, fine-point, indelible marker must be used to write by hand onto the label, the reduced carrying capacity in kilograms or pounds, which is the total weight of all added options and accessories.

Load Label Part Number: NP070 - 09003

Notes to the Installer:

1) Read the entire installation instructions prior to beginning the installation of this accessory.
2) Make sure the vehicle is completely clean before the accessory is installed.
3) Ensure the vehicle is properly protected in the area(s) that the accessory is to be installed.
4) To prevent vehicle damage, never place tools on top of painted surfaces, seats, dash pad, console, carpet or floor mats.
5) Always wear appropriate safety gear, including gloves and safety glasses, when required.
6) Ensure transportation fuse is in "ON" position, if applicable.
**Kit Overview**

1. Mirror, Auto-dimming w/ Homelink 4 & Compass

2. Hardware Kit

<table>
<thead>
<tr>
<th>No.</th>
<th>Qty.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Mirror, Auto-dimming w/ Homelink 4 &amp; Compass</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Hardware Kit</td>
</tr>
</tbody>
</table>

* Extra components intentionally placed in kit as spares.
Please follow directions for proper placement of each component.

**Hardware Overview**

- **A**
  - 1 Mirror Harness

- **B**
  - 1 Wire Cover

- **C**
  - 1 A-Pillar Tether Clip (85815 C1000 - White)

- **D**
  - 6 Foam Tape*

- **E**
  - 3 T-Taps*

- **F**
  - 9 Wire Ties*

- **G**
  - 1 Installation Instructions

- **H**
  - 1 Quick Ref. Guide

**Hardware Total**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hardware Total</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

Revision Date
07/22/2016
Genuine Accessories
Electrical Connection Procedure

<table>
<thead>
<tr>
<th>Wire Appearance</th>
<th>Disconnecting Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wires may be solid color, or striped (tracer). The first color in the description indicates the base color of the wire; the second indicates the stripe.</td>
<td>When disconnecting the wires, grasp the connectors, not the wires.</td>
</tr>
</tbody>
</table>

Example:
- Solid color wire
- Striped Wire
  - White (Base Color)
  - Red (Stripe Color)

<table>
<thead>
<tr>
<th>Connector Diagrams</th>
<th>Connecting Connectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector diagrams show the harness side view, unless noted. The wire pin numbers are shown from the wire harness side, not the connector side.</td>
<td>When locking connectors, listen for an audible &quot;click&quot; indicating the connectors are securely locked.</td>
</tr>
</tbody>
</table>

Example: [Connector Diagram]

<table>
<thead>
<tr>
<th>T-Tap Install Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Place the T-tap on the vehicle wire</td>
</tr>
<tr>
<td>2. Using pliers, close and crimp T-tap around the vehicle wire.</td>
</tr>
<tr>
<td>3. Insert accessory harness wire with male spade terminal into the opening in T-tap.</td>
</tr>
</tbody>
</table>

**Extreme care must be take to ensure the male spade is inserted into the T-tap properly**
NOTES

1. Ensure the correct part is being installed. Verify the part number on the installation orders with the part number on the kit box label.
2. Write down all pre-set radio stations (if applicable).
3. Disconnect and isolate vehicle’s negative battery cable.

WARNING: Shock Hazard! Do not touch vehicle’s negative battery terminal to vehicle’s positive battery terminal. Serious injury and damage to the vehicle may occur.

1. Carefully pull the front of the driver-side door seal back to allow removal of the A-pillar trim panel.

1. Partially remove the A-pillar trim panel by pulling the top out towards the vehicle passenger-side, until the A-pillar tether clip catches.

WARNING: Ensure care is taken to prevent damage to the A-pillar trim panel, wire harness, sunroof drain tube, and curtain airbag.

CAUTION: If needed, use a flashlight to light behind the A-pillar trim to avoid damaging any vehicle component with the cutting tool. DO NOT cut anything other than the A-pillar tether clip.
1. Remove one (1) Phillips screw (shown) from inside of A-pillar trim.

CAUTION: Do not scratch or damage the A-pillar trim panel.

2. Remove retaining plug.

CAUTION: Do not scratch or damage the A-pillar trim panel.

NOTE: 1. Continue removing the A-pillar trim panel by pulling the top out toward the passenger side of the vehicle, until remaining three (3) clips are released.

CAUTION: Do not damage A-pillar trim panel or headliner.

NOTE: 1. Using Pliers, pull the remaining portion of the A-pillar tether clip out of the A-pillar, then discard the clip.

CAUTION: Do not damage A-pillar trim panel or headliner.

1. Grasp the clip, and slide toward the bottom of the A-pillar trim, then pull the piece out of the trim panel.

CAUTION: Do no scratch or damage the A-pillar trim panel.

NOTE: 1. Using Pliers, pull the remaining portion of the A-pillar tether clip out of the A-pillar, then discard the clip.

CAUTION: Do not damage A-pillar trim panel or headliner.

NOTE: 1. Grasp the clip, and slide toward the bottom of the A-pillar trim, then pull the piece out of the trim panel.

CAUTION: Do no scratch or damage the A-pillar trim panel.
Always install a new A-pillar tether clip in the closed position before proceeding with the disassembly.

1. Place a new tether clip in the A-pillar trim panel by aligning the slot on the trim panel with the tether clip.
2. Slide the clip upward until it locks in place.

**WARNING:** Always use a new tether clip when re-installing the A-pillar trim panel. Failure to use a new clip may result in serious injury or death in the event the airbag deploys. Do not damage the A-pillar trim panel or tether clip.

**CAUTION:** Do not damage headliner or overhead console.

1. Reach through the fuse panel opening and push the Dash Side Panel out, by dislodging the clips.
2. Remove the Dash Side Panel and set aside.

1. Remove the fuse panel cover, and set aside.
2. Reach through the fuse panel opening and push the Dash Side Panel out, by dislodging the clips.
3. Remove the Dash Side Panel and set aside.
1. Remove the three (3) Phillips screws for the driver side visor and visor clip.

**NOTE:** Do not scratch lower dash trim panel.

2. Using a T20 Torx Driver, loosen the screw on the mirror mount.

1. Gently pull the mirror upwards in a parallel direction to the windshield to remove. DO NOT pull the mirror away from the windshield.

**CAUTION:** Take care to avoid damaging the mirror mount, windshield, and headliner.

1. Remove the two (2) Phillips screws from the outside surface of the lower dash trim panel.

2. Disconnect the OBDII connector from the dash panel.

3. Using the Nylon Panel Removal Tool, release the one (1) locking tab on the dash panel.

4. Starting at the upper right side of the panel, pull the panel outward releasing the clips, moving right to left.

**NOTE:** The lower corner of the dash panel has a hidden tab located behind the driver kick panel as shown.

**CAUTION:** Do not scratch lower dash trim panel. Do not damage wires or connectors in the panel. Do not break the hidden tab behind the driver’s kick panel.
1. Wrap one (1) Foam Tape around the mirror harness connector, as shown.

2. Begin tucking the mirror harness between the headliner and the roof. Stop after the foam-taped harness connector is hidden under the headliner.

CAUTION: Use caution when working with the headliner to prevent creases or damage. Make sure hands are clean.

3. Torque the screw to: 1.76 N·m (0.18 kgf-m, 15.6 lb-in).

CAUTION: Ensure the mirror harness is not pinched between the mount and the windshield button.

WARNING: Do not over-tighten the screw. Over tightening the screw will not properly secure the mirror, and could cause the mirror to break loose and injure the occupants in an accident.

1. Plug the 5-pin connector from the provided one (1) mirror harness into the harness lead extending out from the mirror.

CAUTION: Ensure 5-pin connector is securely installed.

1. Carefully pull harness lead extending out from the mirror, through the groove in the top side of the mount.

2. Slide the new mirror over the windshield button. Hold the harness away from the windshield when sliding the mirror over the button.

CAUTION: Use caution when working with the headliner to prevent creases or damage. Make sure hands are clean.

NOTE: Use caution when working with the headliner to prevent creases or damage. Make sure hands are clean.

T20 Torx Socket and Torque Wrench

Nylon Panel Removal Tool
NOTED THROW ROUTE MIRROR HARNESS DOWN THE A-PILLAR INTO THE DASH, TOWARD THE FUSE PANEL.  ENSURE WIRE HARNESS IS ROUTED AWAY FROM THE CURTAIN AIRBAG AND SUNROOF DRAIN TUBE.

2. Secure mirror harness near the vehicle harness clips, and above the electrical connector at the bottom of the A-pillar, with four (4) Wire Ties.
3. Trim the excess Wire Tie length.

CAUTION: Ensure cover "forks" are properly seated into mirror and headliner.

NOTE: Hold the mirror harness against the headliner and wrap one (1) foam tape around the harness where it meets the corner of the A-pillar.
2. Wrap one (1) foam tape on the harness between the two previously installed foam tapes.
3. Tuck the harness with the wrapped foam tape into the headliner across from the mirror to the A-pillar.

CAUTION: Use caution when working with the headliner to prevent creases or damage.

1. Route mirror harness down the A-pillar into the dash, toward the fuse panel.
2. Route mirror harness below the fuse panel, pulling the 3 terminals toward the driver's seat.

CAUTION: Ensure harness does not catch on vehicle components, or is damaged during the routing.
1. Locate Pin 21 (GREEN w/ ORANGE wire) of Connector C.

**NOTE:** CAUTION: Ensure the correct wire is identified. NOTE: Factory wire colors are subject to change at any time. Refer to the pin number to correctly identify the circuit.

1. Pull mirror harness wires apart approximately 178mm (7in), as shown.

**NOTE:** CAUTION: DO NOT use a razor blade or any other sharp tool to separate the wires. Ensure wire is not damaged during separation.

1. Locate Connector C (51 pin connector) on the front side of the fuse panel (furthest side from the engine).

1. Attach one (1) T-tap to the wire at Pin 21 (Green w/ Orange wire).

Use Pliers to snap the T-tap together.

Refer to the Electrical Connection Procedure at the beginning of the instructions for more details.

**CAUTION:** Ensure that the wire is in the slot of the T-Tap, and that both halves of the T-Tap are snapped together properly.
1. Locate Pin 36 (GRAY w/ ORANGE wire) of Connector C.

   **CAUTION:** Ensure the correct wire is identified.
   **NOTE:** Factory wire colors are subject to change at any time. Refer to the pin number to correctly identify the circuit.

1. Insert male spade terminal of the Mirror Harness (Black w/ White wire) into the T-Tap connector (Green w/ Orange wire), for switched ignition power.

   **NOTE:** Factory wire colors are subject to change at any time. Refer to the pin number to correctly identify the circuit.

   **CAUTION:** Ensure the male spade connector is fully inserted into the T-Tap. Check that the spade did not "miss" the female slot. Check that the male spade is not visible on either side of the female connector.

1. Attach one (1) T-Tap to the wire at Pin 36 (Gray w/ Orange wire). Use Pliers to snap the T-Tap together.

   **NOTE:** Factory wire colors are subject to change at any time. Refer to the pin number to correctly identify the circuit.

   **CAUTION:** Ensure that the wire is in the slot of the T-Tap, and that both halves of the T-Tap are snapped together properly.

1. Locate Connector C (51 pin connector) on the front side of the fuse panel (furthest side from the engine).
1. Take up any excess harness slack and secure Mirror Harness to vehicle harness with two (2) Wire Ties, as shown. Trim excess Wire Tie length.

**NOTE**

1. Insert male spade terminal of the mirror harness (Black wire) into the T-Tap connector (Gray w/ Orange wire), for switched ignition power. Refer to the Electrical Connection Procedure at the beginning of the instructions for more details.

**CAUTION:** Ensure the male spade connector is fully inserted into the T-Tap. Check that the spade did not "miss" the female slot. Check that the male spade is not visible on either side of the female connector.

1. Locate the ground bolt, to the left of junction block as shown.
2. Remove the ground bolt.
3. Place ground ring of the Mirror Harness on the removed ground bolt.
4. Secure the ground bolt, and torque to 24.5~32.4 N-M (2.5~3.4 kgf-m, 18.1~23.9 lb-ft).

**CAUTION:** Ensure the ground bolt is secured with mirror harness behind it.

1. Secure Mirror Harness to vehicle harness below knee bolster with one (1) Wire Tie, as shown. Trim excess Wire Tie length.

**NOTE**

1. Take up any excess harness slack and secure Mirror Harness to vehicle harness with two (2) Wire Ties, as shown. Trim excess Wire Tie length.
1. Verify that either a direction (such as "NE" or "SW") is displayed in the display window. If not, ensure the compass feature is turned on by pressing the compass button.

**NOTE**

Function Check Preparation:
1. Reconnect the negative battery cable, and torque to: 3.93 N.m (0.40 Kgf.m, 34.8 lb-in).

**WARNING:** Shock Hazard! Do not touch vehicle’s negative battery terminal to vehicle’s positive battery terminal. Serious injury and damage to the vehicle may occur.

1. Turn the ignition to "OFF"
2. Ensure the compass display is no longer visible, and the green LED is no longer on.
3. Press each HomeLink button, one-at-a-time, and verify that the LED indicator to the right of the center button illuminates with a red LED when buttons are pressed.

1. Cover the forward-facing photocell with a dark cloth or towel.
2. Turn the ignition to "ON".
3. Verify that the green LED (light left of center) is on. If not, press and hold the power button to turn the green LED on.
4. With the dark cloth in place, and the power on, the mirror will darken.
5. Remove the dark cloth, and the mirror will return to normal.

**WARNING:** Shock Hazard! Do not touch vehicle’s negative battery terminal to vehicle’s positive battery terminal. Serious injury and damage to the vehicle may occur.

1. Turn the ignition to "OFF"
CAUTION: DO NOT spray glass cleaner or other cleaning liquid directly on the mirror, as it may damage the electronics.

NOTES:

1. Ensuring a new tether clip has been inserted into the A-pillar trim panel, begin to re-install the A-pillar trim panel.
2. Insert the A-pillar trim panel lower surface into the mating surface on the top of the dash panel.
3. Move the A-pillar trim panel closer to the A-pillar, aligning the clips with their corresponding holes. Carefully snap the panel into place.

WARNING: Always use a new tether clip when re-installing the A-pillar trim panel. Failure to use a new clip may result in serious injury or death in the event the airbag deploys. Do not damage the A-pillar trim panel or tether clip.

NOTES:

1. Re-install, in reverse order, all remaining trim panels removed during installation.
2. Place the provided one (1) Quick Reference Guide in the glove box.
3. Clean fingerprints, smudges, etc. from mirror and windshield.

CAUTION: DO NOT spray glass cleaner or other cleaning liquid directly on the mirror, as it may damage the electronics.

To calibrate the compass:

1. If the compass displays “C”, it will need to be calibrated.
2. To calibrate, drive the vehicle up to three (3) complete circles, at less than 5mph.

To adjust compass region variance:

1. To adjust for compass variance, identify your approximate compass region on the above map.
2. Press and hold the power button for more than 9 seconds, and the current compass region code will display.
3. Press the power button until your desired compass region is displayed. Release the button, and the correct compass direction will appear.
<table>
<thead>
<tr>
<th>Issue / Concern</th>
<th>Item To Be Checked</th>
</tr>
</thead>
</table>
| Mirror does not power up | Confirm constant power circuit is properly connected  
Circuit should have 12V power with ignition in “OFF”  
-Check that mirror harness is properly connected at mirror  
-Check that T-Tap is connected to the proper wire  
-Check that T-Tap is fully crimped  
-Check that male spade is correctly inserted in T-Tap.  
-Check that wire harness is not damaged |
| Homelink does not work (red LED does not illuminate) | Confirm ignition-switched power circuit is properly connected  
Circuit should NOT have power with ignition in “OFF”, but should have 12V power  
when ignition is switched to “ON”  
-Check that mirror harness is properly connected at mirror  
-Check that T-Tap is connected to the proper wire  
-Check that T-Tap is fully crimped  
-Check that male spade is correctly inserted in T-Tap  
-Check that wire is not damaged |
| Homelink does not work (red LED does not illuminate when all HL buttons pressed) | -Check that T-Tap is connected to the proper wire  
-Check that T-Tap is fully crimped  
-Check that male spade is correctly inserted in T-Tap  
-Check that GND ring terminal is seated solidly against ground bolt  
-Replace the mirror |
| Compass does not illuminate | -Check that T-tap is connected to the proper wire  
-Check that T-Tap is fully crimped  
-Check that male spade is correctly inserted in T-Tap  
-Check that GND ring terminal is seated solidly against ground bolt  
-Check vehicle interior lamp fuse |
| Auto-dimming function does not work properly (green LED does not illuminate) | -Check that T-Tap is connected to the proper wire  
-Check that T-Tap is fully crimped  
-Check that male spade is correctly inserted in T-Tap  
-Check that GND ring terminal is seated solidly against ground bolt  
-Check vehicle interior lamp fuse |
| Auto-dimming function does not work properly (green LED illuminates, but mirror does not darken) | -Replace the mirror |
# Genuine Accessories

## Visual Check

<table>
<thead>
<tr>
<th>Items To Be Checked</th>
<th>Results Of The Check</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative battery terminal re-tightened</td>
<td>Battery cable is correctly fastened to the negative terminal. Nut is properly torqued to 3.93 N.m (0.40 Kgf.m, 34.8 lb-in).</td>
</tr>
<tr>
<td>Mirror Torx screw replaced and re-tightened</td>
<td>Screw is tightened and properly torqued to 1.76 N-m (0.18 kgf-m, 15.6 lb-in).</td>
</tr>
<tr>
<td>Harness</td>
<td>Mirror harness connectors are properly connected. T-Tap spade connectors are properly seated. Harness is tucked into the headliner without causing a bulge or interference.</td>
</tr>
<tr>
<td>Sun visor hook</td>
<td>Hook is properly secured in place, and screw is tightened.</td>
</tr>
<tr>
<td>A-pillar trim panel</td>
<td>Panel is securely in place. Ensure A-pillar tether clip is properly installed and seated in the A-pillar correctly.</td>
</tr>
<tr>
<td>Door seal</td>
<td>Seal is properly replaced, and not wrinkled.</td>
</tr>
<tr>
<td>Lower dash trim panel</td>
<td>Panel is securely in place. All connectors attached are properly re-connected.</td>
</tr>
<tr>
<td>Side dash trim panel</td>
<td>Panel is securely in place.</td>
</tr>
<tr>
<td>Fuse panel access cover</td>
<td>Panel is securely in place.</td>
</tr>
<tr>
<td>Ground bolt</td>
<td>Bolt is tightened and properly torqued to 24.5<del>32.4 N-M (2.5</del>3.4 kgf-m, 18.1~23.9 lb-ft).</td>
</tr>
</tbody>
</table>
Genuine Accessories
Electrical Schematic

Smart Junction Box Connector "C"
SJB_FLRS_C

Pin 21 -
Green w/ Orange

Pin 36 -
Gray w/ Orange

Module 1 circuit
(Green w/ Orange wire)

Interior lamp circuit
(Gray w/ Orange wire)

Mirror connector

<table>
<thead>
<tr>
<th>No</th>
<th>Gauge</th>
<th>Color</th>
<th>Function</th>
<th>Circuit</th>
<th>Fuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>22</td>
<td>BLK</td>
<td>GND</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>BLK</td>
<td>+B (constant power)</td>
<td>Int. lamp</td>
<td>Int. lamp (10amp)</td>
</tr>
<tr>
<td>4</td>
<td>22</td>
<td>BLK w/ WHT</td>
<td>IG (switched power)</td>
<td>Module 1</td>
<td>Module 1 (10amp)</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
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