#### TOYOTA AVALON

2015

#### **DUAL USB POWERPORT**

07/29/15

Part Number: 00016-00222 Accessory Code: CP1000



### **Conflicts**

Note:			

#### **Kit Contents**

ltem#	Quantity Req'd	Description
1	1	Dual USB Power Port
2		

#### **Hardware Bag Contents**

Item#	Quantity Req'd	Description
1	2	RED #951 Female T -Taps
2	1	BLUE #952 Female T -Tap (not used)
3	2	Foam Tape Squares 2" x 2"
4	4	Zip Ties 8"

#### **Additional Items Required For Installation**

ltem #	Quantity Req'd	Description
1		

#### **Recommended Tools**

Safety Tools	
Safety Glasses	Safety Gloves
Special Tools	
<b>Installation Tools</b>	
Tape Measure	Trim Panel Removal Tool
Wire Fishing Tool	Needle Nose Pliers
Step Drill Bit ( 1")	Side Cutters
Ratchet/Driver	Torque Wrench (48 in*lbs)
Socket (10mm)	China Marker
Protective Blankets	Padded Work Surface
<b>Special Chemicals</b>	

### **General Applicability**

#### **Recommended Sequence of Application**

	ltem#	Accessory	Description
	1		
ĺ	2		

\*Mandatory

#### Legend



STOP: Damage to the vehicle may occur. Do not proceed until process has been complied with.



**OPERATOR SAFETY:** Use caution to avoid risk of injury.



<u>CAUTION:</u> A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.



<u>TOOLS & EQUIPMENT:</u> Used in Figures calls out the specific tools and equipment recommended for this process.



**REVISION MARK:** This mark highlights a change in installation with respect to previous issue.



7 <u>SAFETY TORQUE:</u> This mark indicates that torque is related to safety.

#### SPECIAL NOTE: Installation Sequences

After TMS and Safety mandated preparatory steps have been taken, the installation sequence is the suggested method for completing the accessory installation. In some instances the suggested sequence is written for one associate to install and in others the sequence is given as part of a team accessory installation. Unless otherwise stated in the document, the associates may perform the installation steps in any order to make the installation as efficient as possible while maintaining consistent quality.

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

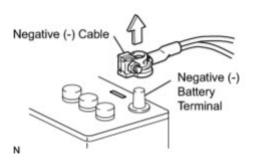


Figure 1

1. Remove the NEGATIVE (-) battery terminal before starting any disassembly. See Figure 1.



DO NOT touch the positive terminal.

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

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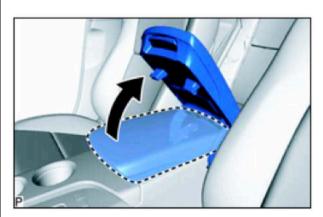


Figure 2

# REMOVE FRONT UPPER PANEL GARNISH

2. Open the console box door. See Figure 2.

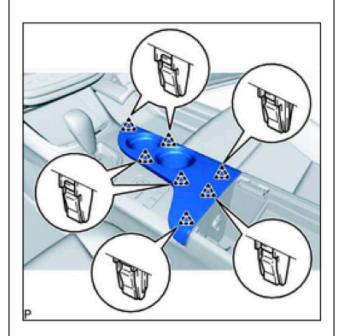
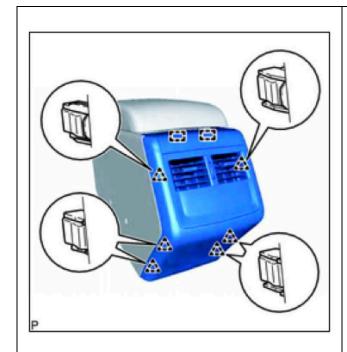


Figure 3

# REMOVE FRONT UPPER PANEL GARNISH

- 3. Disengage the 7 clips and remove the front upper panel garnish. See Figure 3.
- 4. With illumination disconnect the 2 connectors.



REMOVE CONSOLE REAR END PANEL SUB-ASSEMBLY

- 5. Disengage the 6 clips and 2 guides and remove rear end panel sub-assembly. See Figure 4.
- 6. Disconnect the connector.

Figure 4

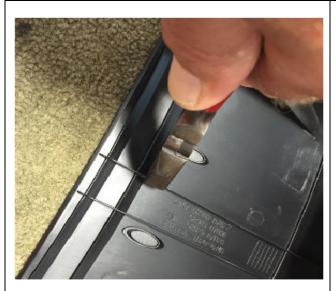


Figure 5a



Figure 5b

LOCATE AND DRILL 1" DIAMETER HOLE INTO CONSOLE REAR END PANEL

Perform these steps on a padded surface to avoid damaging the part.

- 7. Orient the console rear end panel so that the inside surface is facing you and the HVAC vents are at the top.
  Using pliers, remove the two vertical rib reinforcement strips around the hole to allow the USB Powerport to seat flush against the surface.
- 8. Measure 3 & 1/4" across horizontally from the LH side bottom clip and mark the hole's vertical centerline.
- 9. Scribe the vertical centerline through this mark. See Figures 5a & 5b.



Figure 6

LOCATE AND DRILL 1" DIAMETER HOLE INTO CONSOLE REAR END PANEL

10. Along the vertical centerline that was just made in Step 8, measure 1 & 5/8" up from the bottom edge of the console rear end panel and mark the hole's horizontal centerline. See Figure 6.



Figure 7

LOCATE AND DRILL 1" DIAMETER HOLE INTO CONSOLE REAR END PANEL

11. Drill a 1" diameter hole into the console rear end panel at the point where the vertical and horizontal centerlines meet.



Use a step drill bit.



Remove any shavings in the hole. Figure 7.



MOUNT USB POWERPORT INTO CONSOLE REAR END PANEL

Perform these steps on a padded surface to avoid damaging the part.

12. Feed the power and ground wires through the 1" hole from the outside of the console rear end panel. See Figure 8.

Figure 8



### Figure 9

### MOUNT USB POWERPORT INTO CONSOLE REAR END PANEL

13. Feed the power and ground wires through the lock washer and nut. The lock washer goes on first. See Figure 9.



# MOUNT USB POWERPORT INTO CONSOLE REAR END PANEL

14. Hand-tighten the nut until snug. See Figure 10.

Align the flat, horizontal surface (where the power and ground wires exit) at the end of the USB Powerport with the bottom surface of the console rear end panel. The result should look as shown in Figure 10.

Figure 10



Figure 11

## ROUTE USB POWERPORT'S POWER & GROUND WIRES

15. Loosely position the console rear end panel sub-assembly with the USB Powerport in place back in the vehicle. See Figure 11.



Figure 12

# ROUTE USB POWERPORT'S POWER & GROUND WIRES

16. Reconnect the connector and secure the harness to the clip. See Figure 12.





Figure 13

Use a wire fishing tool in this procedure.

- 17. Route the wire fishing tool along the RH side of the center console from the front upper panel garnish location through the back of the center console.
- 18. Secure the USB Powerport's power and ground wires to the wire fishing tool with a zip tie. See Figure 13.

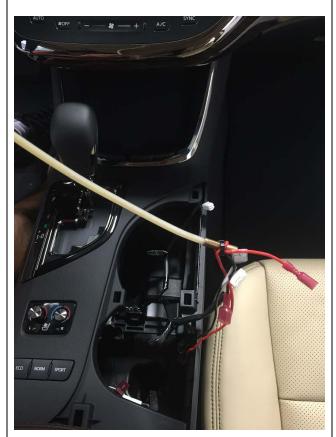


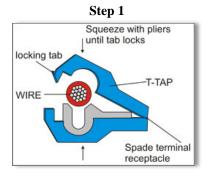
Figure 14

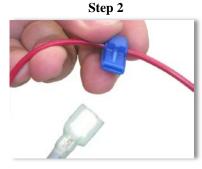
# ROUTE USB POWERPORT'S POWER & GROUND WIRES

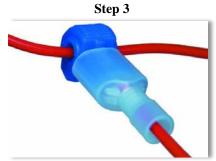
19. Using the wire fishing tool, pull the power & ground wires through the RH side of the center console up to front upper panel garnish location. See Figure 14.

#### T-TAP INSTALLATION

When installing the female T-Tap connectors, be sure the wire is located inside the wire channel of the female T-Tap connector before closing the connector over the wire with pliers.







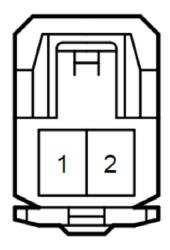
#### **CONNECTOR D32: No. 2 Power Outlet Socket Assembly**

Location: Center console – front upper panel (cup holders)

USB POWER DOCK
Black - Ground
Red - Power

VEHICLE
PIN
White/Black 2
Red
Red
1
Red

NO. 2 POWER OUTLET SOCKET ASSEMBLY
D32
WHITE





### T-TAP LOWER NO. 2 POWER OUTLET'S POWER & GROUND WIRES

- 20. Locate the white CLA power outlet socket assembly D32 (2 pin) in the front upper panel garnish location. See Figure 15.
- 21. Pull back the protective tape, if necessary to expose at least 1" of the power & ground wires behind the connector on the vehicle side.
- 22. Separate the RED power wire from the WHITE/BLACK ground wire.
- 23. T-Tap the RED power wire (Pin 1) & the WHITE/BLACK ground wire (Pin 2) from connector D32 using the supplied RED #951 T-Tap female connectors. See Figure 15.

Figure 15

### T-TAP LOWER NO. 2 POWER OUTLET'S POWER & GROUND WIRES

Before connecting, make sure the male spade T-Taps are not bent to one side to ensure they insert securely into their corresponding female T-Taps.

- 24. Connect the male spade T-Tap of the USB Powerport's RED power wire to the D32 connector's RED power wire (Pin 1).
- 25. Connect the male spade T-Tap of the USB Powerport's BLACK ground wire to the D32 connector's WHITE/BLACK ground wire (Pin 2).



# SECURE USB POWERPORT'S POWER & GROUND WIRES

- 26. Reconnect the white CLA power outlet socket assembly D32.
- 27. Bundle and secure the power & ground wires of the USB Powerport using the supplied 8" zip tie to the factory wire harness.
- 28. Snip the excess zip tie length. See Figure 16.

Figure 16

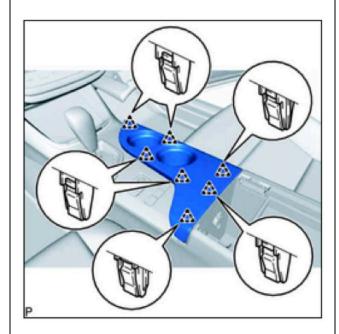
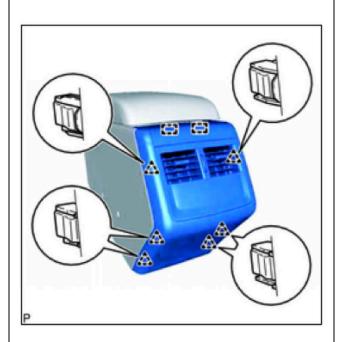


Figure 17

### RE-INSTALL FRONT UPPER PANEL GARNISH

- 29. With illumination reconnect the 2 connectors.
- 30. Re-engage the 7 clips and remove the front upper panel garnish. Press down firmly on the panel. See Figure 17.

#### 



# RE-INSTALL CONSOLE REAR END PANEL SUB-ASSEMBLY

31. Re-engage the 6 clips and 2 guides and reinstall the rear end panel sub-assembly. Press firmly on the assembly. See Figure 18.

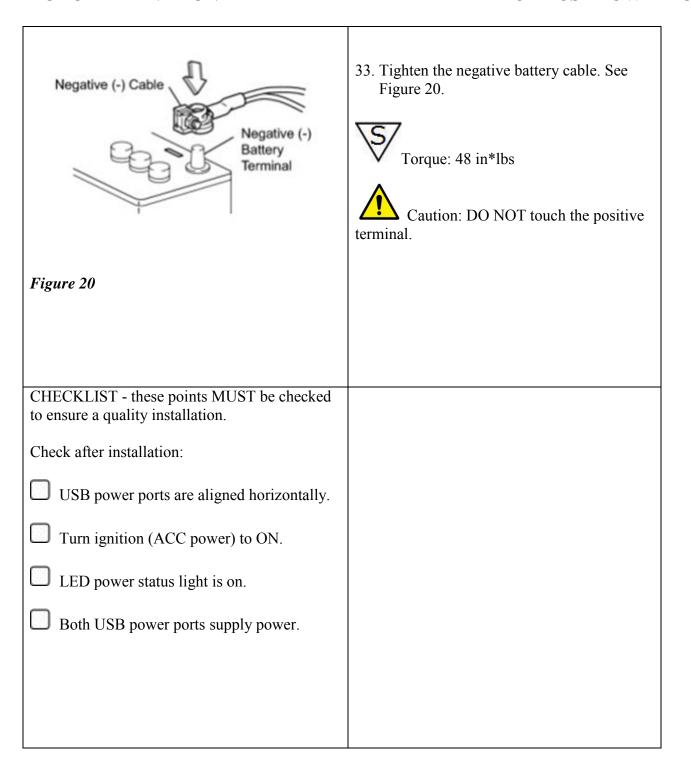
Figure 18

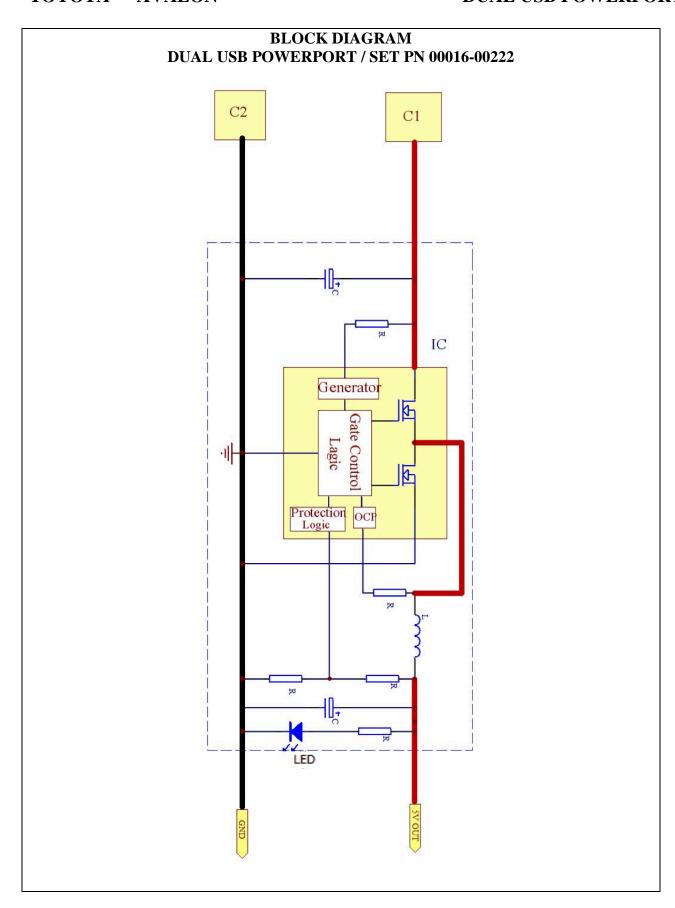


### RE-INSTALL CONSOLE REAR END PANEL SUB-ASSEMBLY

32. The USB Powerport's protective flip cap should open downward so that the POWER ONLY / NO AUDIO notice faces up. See Figure 19.

Figure 19







### **Connector C1**

Pir	Wire Color	Test Reference	Proper Operation
1	Red	Pin 1 to Ground	Approximately 0 VDC when ignition switch is OFF +12 VDC when ignition switch is ON



### **Connector C2**

Pin	Wire Color	Test Reference	Proper Operation
1	Black	Pin 1 to Ground	Approximately 0 VDC

### VEHICLE CONNECTOR D32 POWER & GROUND CIRCUITS

