Toyota Avalon 2008 - Rear Sight

Part Number: 00016-00040

Code: MC1



Section I – Installation Preparation

Kit Contents

Item#	Quantity Reqd.	Description
1	1	Mirror/Monitor
2	1	Reverse Mini-Camera
3	1	Extension Harness
4	1	Sack Parts
5	1	Owner's Card
6		
7		
8		

HARDWARE BAG CONTENTS

ITEM	Qтy	DESCRIPTION
1	25	Wire Ties
2	6	Adhesive Foam
3	3	T-TAP, 18-22AWG
4	2	T-TAP, 14-18AWG
5	1	Double-sided Molding Tape
6	1	Sealing Putty
7	1	Alcohol Pad
8	1	Rubber Grommet
9		
10		

Additional Items Required for Install

ITEM	Q TY	DESCRIPTION
1	N/A	ELECTRICAL TAPE
2		
3		
4		

CONFLICTS

Note:

Recommended Tools

Necommended 100is	
Safety Tools	
Special Tools	
IR Temp Probe	
Installation Tools	
FASTENER REMOVAL TOOL	WIRE CUTTERS
TRIM REMOVAL TOOL	TORX-20 WRENCH
10-MM DEEP SOCKET	PLIERS
Torque Wrench (36 in. lb.)	
Trunk Holder	Vacuum T
Special Chemicals	
Soapy Water or Alcohol/water	
<u> </u>	

Color Applicability/Trim Level

Color Color Vehicle/Trim Color					
The state of the s					

GENERAL APPLICABILITY

All Models

RECOMMENDED SEQUENCE OF APPLICATION

LEGEND

* Mandatory

Legend

- 1	-	
181	(DP	

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



OPERATOR SAFETY: Use caution to avoid risk of injury.

CAUTION: 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.

TOOLS & EQUIPMENT: 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.

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.

PARTS IDENTIFICATION

ITEM	QUANTITY	PART NUMBER	DESCRIPTION		
1	1	00016-00040-01	REARSIGHT MONITOR/MIRROR		
2	1	00016-00040-04	Camera Extension Harness		
3	1	00016-00040-02	Rear Camera Assembly		
4	1	00016-00040-03	SACK PARTS: TIE STRAPS, T-TAPS, SEALING PUTTY		



^{*}Before beginning installation, familiarize yourself with the installation instructions and the $\mathbf{RearSight}^{\text{tm}}$ back-up camera system components.

VEHICLE PREPARATION



CAUTION: It is advisable to disconnect the negative battery cable for 3 minutes before beginning installation, to avoid unintended air bag deployment. Note and record any antitheft radio codes prior to disconnecting.

VEHICLE PREPARATION



- 1. Loosen Torx-20 windshield lug mount screw and remove existing rearview mirror. Figure 1
- 2. Remove overhead console by pulling down the map light console in the area as shown (Figure 2), releasing (2) clips and disconnecting the harness connectors.
- **3.** Remove or loosen driver side trim panels including: A-pillar trim, kick panel and door sill trim; B-pillar trim and rear door sill trim. Remove the rear seat bottom cushion.

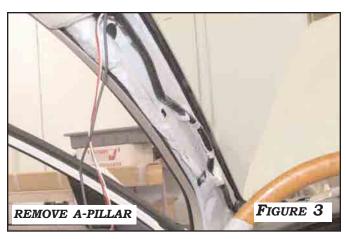
FIGURES 3-4

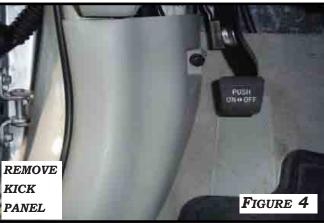
4. Remove trunk trim panels including: trunk mat, drivers side trunk trim panels and trunk finish plate.

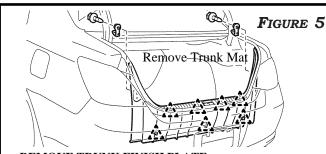
FIGURES 5-6





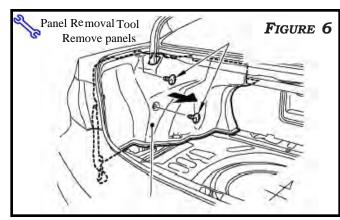






REMOVE TRUNK FINISH PLATE

- (a) Remove the 2 screws and the 2 luggage compartment trim hooks.
- (b) Disengage the 7 clips and remove the rear floor finish plate.



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INSTALLATION

INSTALLING MONITOR/MIRROR



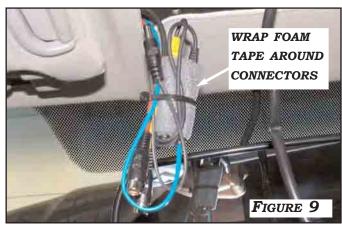
- Mount RearSight mirror on existing windshield lug and tighten screw. Figure 7
- 2. Route mirror harness up windshield and behind the headliner to console opening. Route the end of the camera extension harness marked "to mirror" with the male connectors up the center of the windshield and behind headliner to the console opening. Figure 8
- 3. Connect male RCA video connector of camera extension harness to Video 1 input (black cable) of mirror harness. Connect male DC power connector of camera extension harness to camera Power 1 output (green cable) of RearSight mirror harness. Wrap all RCA and DC Connectors with the foam tape provided. Figure 9

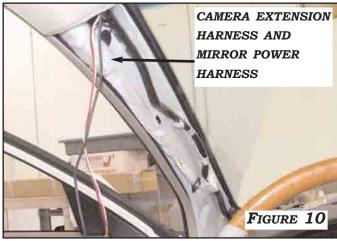


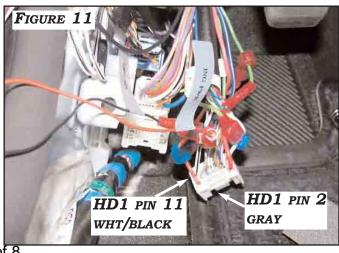
- 1. Route Camera Extension Harness and Mirror Power Harness (red, black and white wires) above headliner to driver-side A-pillar. Route harnesses down the A-pillar using the factory retaining clips or foam tape whenever possible. If the vehicle has side curtain airbags, be sure to secure the harness so that it does not interfere with airbag deployment. Route the harnesses from the A-pillar to the kickpanel. Figure 10
- 2. Locate connectors HD1 and DK1 at the driver side kickpanel. Use the supplied red T-Tap connector to connect the Red Ignition wire of the Mirror Power Harness to the Gray wire in Pin 2 of white connector HD1. Use a blue T-Tap to connect the Black Ground wire of the Mirror Power Harness to the White/Black wire in Pin 11 of connector HD1. Use the supplied red T-Tap connector to connect the White Reverse wire of the Mirror Power Harness to the Brown wire Pin 2 of white connector DK1. Secure all harnesses with wire ties. Figures 11-12
- 3. Route the camera extension harness from the kick-panel under the door sill trim, behind B-pillar trim, under the rear door sill trim and beneath/behind the rear seat bottom/side bolster to the trunk. Use the factory wire channels and retaining clips when possible. Route the harness along the floor of the trunk to join the factory wiring at the rear of the trunk. Secure the harness with wire ties or foam tape. Figures 13-14











INSTALLATION

MOUNTING CAMERA AND PCB



Installation Temperature

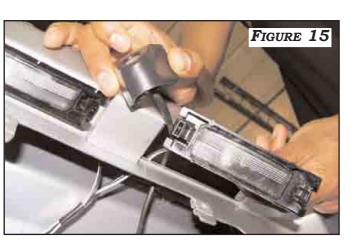


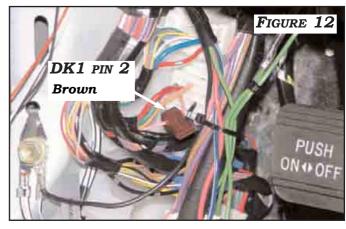
Surface temperature must be between 70^{0} F and 110^{0} F for optimum installation.

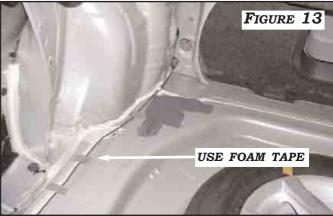
- 1. Remove the passenger side license plate light assembly by compressing the clips and pulling down. Insert the camera harness (between camera and pcb) into the lens assembly just behind the left clip as shown in **Figures 15-16**.
- 2. CLEAN THE AREA BETWEEN THE TWO LICENSE PLATE LIGHT ASSEMBLIES WITH AN ALCOHOL PAD. LOCATE THE SEAM AT THE FRONT EDGE OF THE LICENSE PLATE CAVITY. ALIGN THE FRONT EDGE OF THE CAMERA SHROUD WITH THE SEAM AND MOUNT THE CAMERA TO THE BUMPER USING THE DOUBLE-SIDED TAPE. HOLD THE CAMERA FIRMLY IN PLACE FOR 5 SECONDS AND RELEASE. REPLACE THE LICENSE PLATE LIGHT ASSEMBLY AND PULL THE SLACK OUT OF THE HARNESS.

FIGURES 17-18

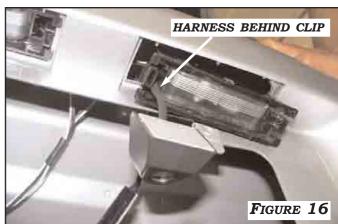
- 3. Mount the PCB to the body behind the bumper using double-sided tape as shown in Figure 18. Remove the grommet for the license plate light harness as shown in Figure 14. Route the camera harness connectors through the hole. Secure the camera harness to the light harness using electrical tape and wire ties. Cut a slit in the grommet and insert the camera harness as shown in Figure 19. Replace the grommet in the hole and seal the cut with the supplied sealing putty as shown in Figure 20.
- **4.** Connect the **RCA** connector and **DC Power** connector of the camera harness to the extension harness in the trunk. Wrap the **RCA** and **DC** Connectors with foam tape provided. Properly bundle and secure excess harness under the existing vehicle harnesses.











TESTING AND REASSEMBLY

TESTING







1. RECONNECT NEGATIVE BATTERY CABLE AND TORQUE TO 3 FT LBS. RE-ENTER ANY THEFT DETERRENT INFORMATION, IF APPLICABLE.



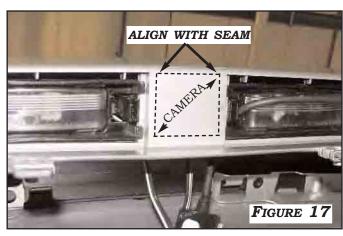
- 2. Turn the ignition switch on. Put the vehicle in REVERSE. VERIFY THAT THE REARSIGHT MIRROR IS ON AND THAT THE CAMERA'S PICTURE APPEARS.
- 3. If there is no picture, verify all connections are SECURE.

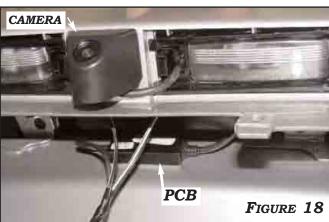
REASSEMBLY

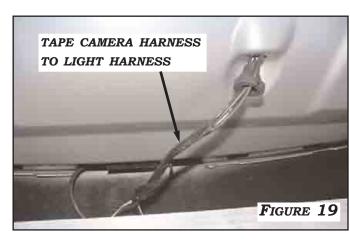
- 1. Reinstall all trim pieces taking special care to ENSURE HARNESSES AND WIRING CONNECTIONS ARE PROPERLY SECURED.
- 2. Be sure harness is not pinched or bound by trim PIECES.
- **3.** Place the Owner's card in the glove box.
- 4. RECONNECT ALL DISCONNECTED BULBS AND CHECK FOR FUNCTION.

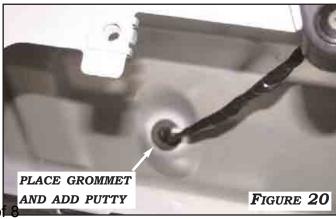


AFTER ALL PANELS, COVERS, AND COMPONENTS HAVE BEEN REINSTALLED, THAT WERE REMOVED, TEST THOROUGHLY, ALL MECHANICAL AND ELECTRICAL COMPONENTS DISCONNECTED AND OR REMOVED FROM THE VEHICLE DURING THE INSTALLATION OF THIS ACCESSORY.









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\	Section III - Functional Verifications	
•	Check:	Look For:
Acces	ssory Function Checks	
	Turn the ignition switch to ON	Verify camera picture comes on. (Image will
	and put vehicle in reverse.	disappear when vehicle is taken out of gear)
	With ignition switch ON & vehicle out of gear press "REV"	Verify camera picture comes on.
	With ignition switch ON & vehicle out of gear press "REV" again.	Verify camera picture turns off.
	AND DISPLAY THE IMAGE FROM THE BACK-UP CA REVERSE. PRESSING AND RELEASING ANY INPUT INPUT ON FOR 20 SECONDS. PRESSING AND HOLDING A	BUTTON IN UNDER 1 SECOND WILL TURN THAT ANY INPUT BUTTON FOR LONGER THAN 1 SECOND AND EFINITELY. THE INPUT CAN THEN BE TURNED OFF
Vehi	cle Function Checks	
	Overhead Map Light Operation	Map lamps should turn on/off.
	Trunk Release	Verify trunk release handle operates
\bigcap	Back Up Lights	Verify back up lights comes on when

placed in reverse.

Radio should operate normally.

reverse gear)

Radio Operation (Check by placing vehicle

APPENDIX

INSTALLING THE FUSE HARNESS

PRIOR TO CONNECTING THE RED WIRE OF THE REARSIGHT MIRROR POWER HARNESS TO THE SPECIFIED IGNITION WIRE IN THE VEHICLE, CONNECT THE SUPPLIED FUSE HARNESS TO THE RED "IGNITION" WIRE OF THE MIRROR POWER HARNESS BY MATING THE INSULATED CONNECTORS. THEN CONNECT THE OTHER END OF THE FUSE HARNESS TO THE SPECIFIED IGNITION WIRE IN THE VEHICLE.

