

REARSIGHT CAMERA SYSTEM

250-8147-TOY Installation Instructions

General Applicability:

Toyota – 2012-2013 Prius/Prius V, 2013 Venza, 2013 Avalon, 2013 Highlander, 2013 Tacoma with 6.1” factory touch screen

Parts Identification	Page 1
Vehicle Preparation	Page 1
System Layout	Page 2
Installation (Camera Mounting/Wiring)	Page 2
Camera Mounting Options/Gridlines	Page 3
Extension Harness Weatherproofing	Page 4
Troubleshooting	Page 4

Parts Identification


Item	Qty.	Part Number	Description
1	1	250-8147	Wedge-mount CMOS camera with extension harness
2	1	250-8552	Toyota touch screen interface harness
3	1	250-8598	Hardware service package



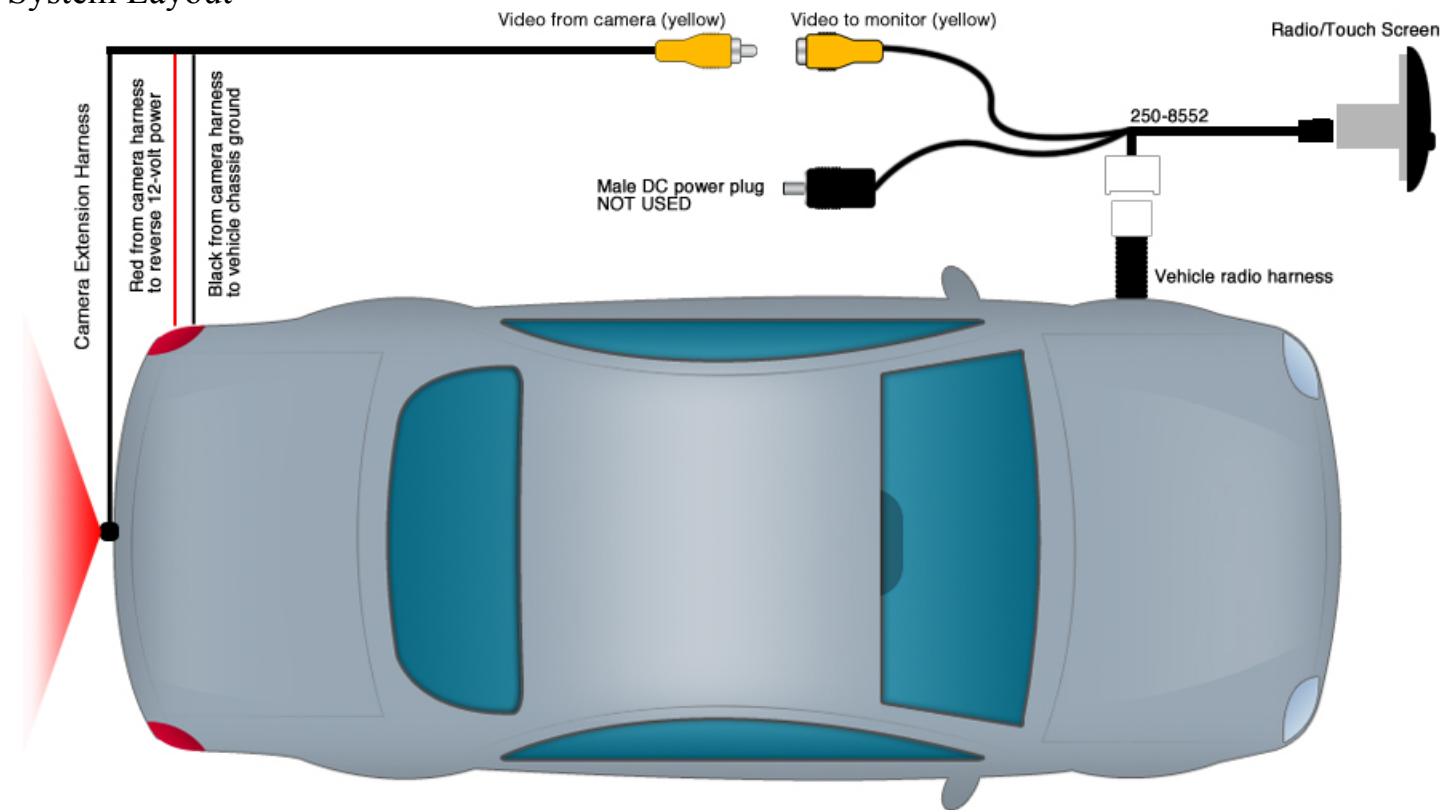
Vehicle Preparation

Before beginning your installation, familiarize yourself with the installation instructions and the RearSight camera system components.

To ensure your safety, **(A)** apply the emergency brake and **(B)** read this entire manual before beginning.

	<p>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 anti- theft radio codes prior to disconnecting.</p>
---	--

System Layout



Installation

Camera Mounting

1. Locate an area at the rear of the vehicle to mount the camera as close to the centerline of the vehicle as possible. (**Note:** Make sure that the location chosen is accessible from the interior of the vehicle to provide access to the camera extension harness and 4-pin minifit connectors.)
2. Align the supplied drill template to the desired camera mounting location and use a 5/16" (8mm) drill bit to make an opening with which to route the camera extension harness into the vehicle (**Note:** See camera mounting options on page 3).
3. Attach the pre-formed double-sided adhesive included with this kit to the camera base and insert the camera stud into the previously drilled hole. Press the camera in place lightly in order to complete the next step.
4. Route the camera extension harness through the supplied washer and nut and tighten the nut to the camera stud to securely mount it.

Camera Wiring

5. Connect the 4-pin minifit connectors of the camera and camera extension harness together (**Note:** See weatherproofing steps on page 4).
6. Using the supplied T-taps and male spade terminals, connect the Red Wire from the camera extension harness to the reverse lamp wire on the vehicle showing 12-volts when the vehicle is in reverse.
7. Using the supplied T-taps and male spade terminals, connect the Black Wire from the camera extension harness to the negative side of the vehicle's reverse lamp wiring harness.
8. Route the camera extension harness to the front of the vehicle either above the headliner, underneath the vehicle scuff plates, or outside of the vehicle using the supplied cable ties to secure it to the vehicle body along the way.
9. At the front of the vehicle, connect the male yellow RCA plug from the camera extension harness to the female yellow RCA plug of the 250-8552 touch screen interface harness.
10. Connect the touch screen interface harness 250-8552 between the vehicle's factory wiring harness and the touch screen.

NOTE: The male DC power connector of included harness 250-8552 is not used in this application.

Camera Mounting Options



Camera Mounting Option 1

If the camera orientation above is desired, make no cuts whatsoever to the green and white wires attached to the camera harness when completing the installation. This option will provide a properly oriented video feed with gridlines.



Camera Mounting Option 2

If the camera orientation above is desired, the **White Wire** from the camera harness will need to be cut and isolated in order to flip the video image upright (see below). This option will provide a properly oriented video feed with gridlines.

Camera Gridlines and Video Display Adjustment



Cut the white wire and isolate both halves of the wire to flip the video image to match the orientation of the camera (see above).



Cut the green wire and isolate both halves of the wire to disable the gridlines overlaid onto the video feed of the camera by default.

Extension Harness Weatherproofing

When the camera extension harness is routed along the exterior of the vehicle, it is important to use the weatherproofing tape included with this kit to ensure the long-term operation of the camera. Use the following steps to do so.

1. Gently bend the wires around the two minifit connectors so that the two halves of the camera harness are folded over one another and the black wire cover overlaps (Figure 1).
2. Unravel the supplied weatherproofing tape and tightly wrap it around the minifit connectors providing an approximate 2” buffer on each side (Figure 2).
3. Once wrapped, firmly press the tape together (Figure 3).
4. Wrap the weatherproofing tape in a layer of electrical tape to provide an extra buffer against the elements (Figure 4).

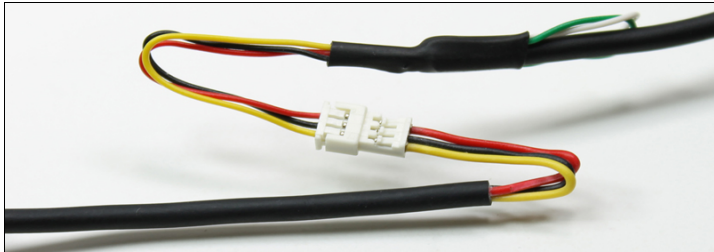


Figure 1



Figure 2



Figure 3



Figure 4

Testing and Reassembly

Testing

1. Reconnect the negative battery cable and torque to 3 ft-lbs.
2. Re-enter any theft deterrent information (if applicable).
3. Turn the ignition switch to the ON position.
4. Shift the vehicle into reverse and confirm video feed to your touch screen.

Note: If there is no picture present, re-check all harness connections.

Reassembly

1. Reinstall all trim pieces taking special care to ensure harnesses and wiring connections are properly secured.
2. Make sure no harnesses are bent or pinched by trim pieces.
3. Reconnect all disconnected bulbs and check for function.

Troubleshooting

Mirror/Monitor Not Working	No Video	No Reverse Override
Verify 12-volts to monitor red wire.	Verify extension harness connection to camera.	Check connectivity of green reverse wire.
Verify ground < 10 Ohms resistance.	Verify harnesses are mated correctly at camera.	Verify extension harness connection to camera.
Verify secure connection to monitor extension harness.	Verify 12-volts and ground connection at camera.	