**Part Number: PT374-33020** Section I - Installation Preparation

### **Kit Contents**

Item #	Quantity Reqd.	Description
1	1	AD Mirror Assembly
		w/Compass
2	1	Hardware Bag
3	1	Installation Manual

**SOLARA** 

# **Hardware Bag Contents**

Item#	Quantity Reqd.	Description
1	1	T-tap Connector: Red 3M
2	1	Wire Cover
3	1	EC Wire Harness
4	6	Foam Tape
5	10	Wire Ties
6	1	Operation Instruction Card
7	1	Hex Head Bolt - 10 mm

# **Additional Items Required For Installation**

Item #	Quantity Reqd.	Description
1		

### **Conflicts**

Note: Models with side curtain air bag.

### **Recommended Tools**

Safety Tools	
Vehicle Protection	Blankets
Special Tools	
Slotted Nylon Removal Tool	*See Note below.
Nylon Panel Removal Tool	e.g. Panel Pry Tool #1 Toyota SST #00002-06001-01
<b>Installation Tools</b>	
Screwdriver	Phillips #2
Ratchet	
Socket	10 mm
Needle Nose Pliers	
Torque Wrench (2)	0-50 lbf-in., & 0-10 lbf-ft.
Torx Head Driver	T20
Side Cutters	
Dark Towel or Cloth	For Testing

\*NOTE: A suitable tool can be obtained from:-

#### **Plastic Factory**

(310) 532-8850

<b>Special Chemicals</b>	
Cleaner	3M <sup>TM</sup> Prep Solvent-70, or Household Windex

## General Applicability

Note: SE Model (Coupe and Convertible) only

**Recommended Sequence of Application** 

Item#	Accessory	
1	TVIP	
2	Satellite Receiver	P7
3	Audio	
4	EC Mirror	N1

\*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>CRITICAL PROCESS:</u> Proceed with caution to ensure a quality installation.



<u>GENERAL PROCESS:</u> This highlights specific processes to ensure a quality installation.



TOOLS & EQUIPMENT: Calls out the specific tools and equipment recommended for this process.

### Section II - Installation Procedure

### Section II - Installation Procedure

#### **NOTES:**

Removed Parts:-

Place all removed parts on a protected surface.

**SOLARA** 

Connectors:-

When disconnecting connectors, do not pull on the wires; pull on the connectors.

Wire Ties:-

When using wire ties to secure harness, clip the wire ties after securing them.

Vehicle Protection:Protect fender, floor and seats before starting.

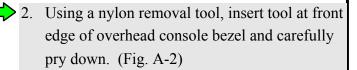
#### A. Remove Overhead Console.

1. Remove the negative battery cable. (Fig. A-1)

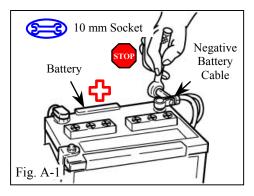


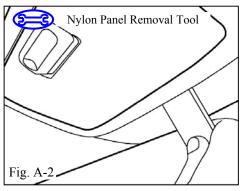
i. Do not touch the positive terminal with any tool when removing cable.

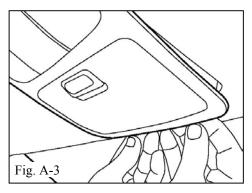
FOR COUPE VEHICLES ONLY (Steps A. 2. through A. 4.)

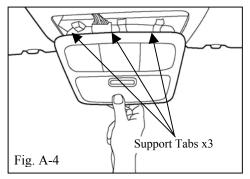


- i. With hands, carefully pull down the front edge of console bezel to release the two clips holding the console. (Fig. A-3)
- 3. Slide the overhead console bezel forward to release the three support tabs from rear of bezel from the headliner area. (Fig. A-4)







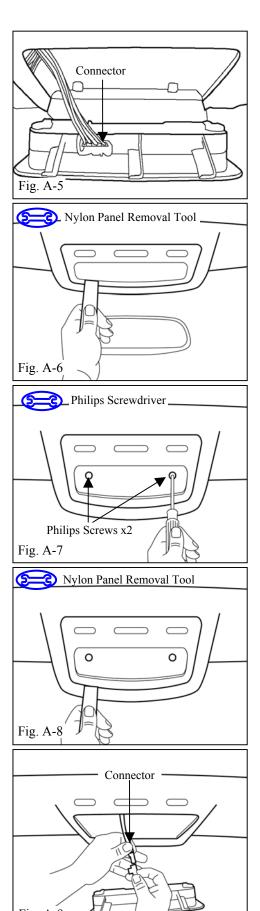


4. Disconnect connector from the overhead console and carefully store on a clean, padded surface. (Fig. A-5)

SOLARA

# FOR CONVERTIBLE VEHICLES ONLY (Steps A. 5. through A. 8.)

- 5. Using a nylon removal tool, insert tool at front edge of overhead console lens cover and carefully pry down. (Fig. A-6)
- 6. Using Philips screwdriver, remove two (2) Philips screws from overhead console. (Fig. A-7)
  - 7. Using nylon removal tool, insert tool at back corner of overhead console and gently pry down to remove. (Fig. A-8)
    - 8. Disconnect connector from overhead console and carefully store console on a clean, padded surface. (Fig. A-9)



EC REARVIEW MIRROR

# B. Remove Sun Visor and Sun Visor Clips.



1. Using a slotted nylon removal tool, rotate driver side sun visor clip 90 degrees counter clockwise. (Fig. B-1)

SOLARA



- i. Carefully pull clip away from headliner taking care not to damage clip.
- 2. Remove plastic cover from sun visor mounting base to expose two (2) screws. (Fig. B-2)
- 3. Remove two (2) screws from sun visor mounting base. (Fig. B-3)



 Disconnect vanity mirror light connector and carefully store sun visor components on a clean, padded surface.

# C. Remove Vehicle Trim Components.

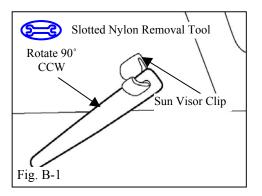
1. Carefully remove driver's side scuff plate. (Fig. C-1)

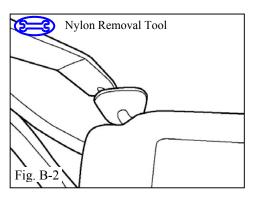


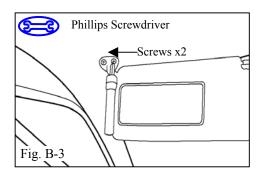
- i. Be careful not to scratch trim pieces.
- 2. Carefully remove driver's side cowl cover.

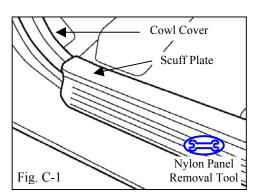


i. Be careful not to scratch trim pieces.









# FOR COUPE VEHICLES ONLY

(Steps C. 3. through C. 5.)

- 3. Carefully remove driver side assist-handle plastic covers. (Fig. C-2)
  - i. Remove the two (2) 10 mm hex head bolts. (Fig C-3)

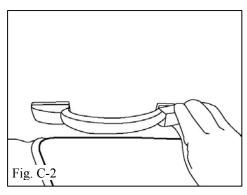
FOR VEHICLES WITH SUNROOF ONLY (Step C. 4.)

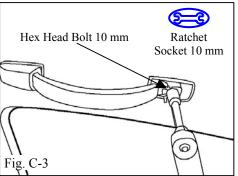


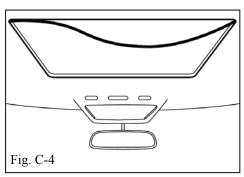
4. Carefully remove sunroof opening trim. (Fig. C-4)

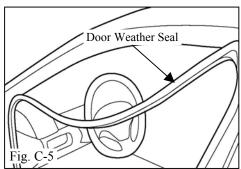


- i. Be sure hands are clean.
- 5. Carefully pull down driver's door seal to allow headliner to drop. (Fig. C-5)









# Section II - Installation Procedure

6. With a nylon removal tool, carefully pry away the top of A-pillar and remove. (Fig. C-6)



- i. Be careful not to scratch pillar.
- ii. Detach retaining plastic tab by twisting and aligning with slot. (Fig. C-7)



iii. Remove A-pillar trim.

FOR COUPE VEHICLES ONLY (Step C. 7.)



- 7. Remove lower dash panel. (Fig. C-8)
  - i. Remove the hood release lever from the cable by unsnapping the cable.
  - ii. Open plastic cover over right side screw to expose.
  - iii. Remove screw from the lower right side of the dash panel.
  - iv. Remove 10 mm hex head bolt from lower dash panel.
  - v. Carefully remove lower dash panel by pulling it rearwards then down towards the floor.
  - vi. Disconnect the (2) connectors on lower dash panel.

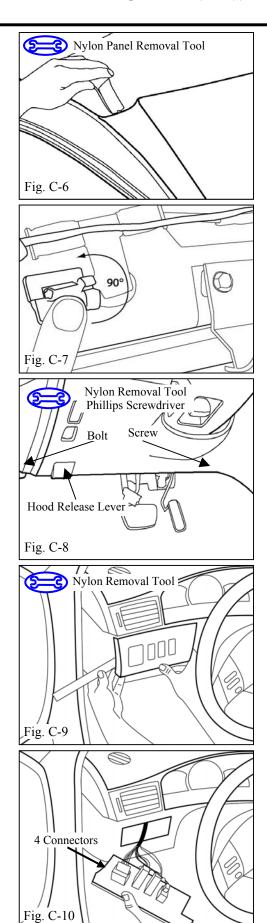


vii. Store lower dash panel on a clean padded surface.

FOR CONVERTIBLE VEHICLES ONLY (Step C. 8.)



- 8. Remove middle dash panel. (Fig. C-9)
  - i. Using nylon removal tool, gently pry away the side of middle dash panel to remove.
  - ii. Disconnect all four (4) connectors. (Fig. C-10)



# D. Remove Original Equipment (OEM) Mirror.

- 1. Using a T20 Torx head driver, remove the OEM mirror. (Fig. D-1)
- 2. Discard the OEM mirror.

### E. Mirror Installation.

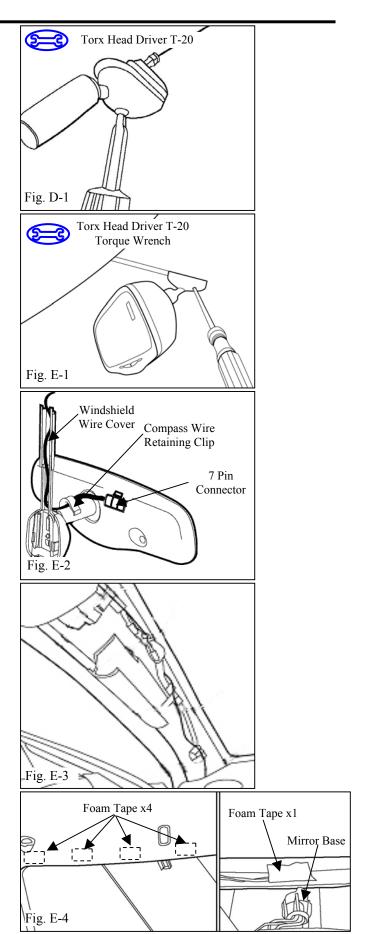
- 1. Slide the electro chromic compass mirror onto the mounting button on the windshield.
- 2. Tighten the screw on the mirror mounting bracket. (Fig. E-1)



- i. Tighten to 15.5 lbf-in (1.75 N-m).
- 3. Plug the wire harness 7-pin connector into the back of the mirror. (Fig. E-2)
  - i. Route the mirror wire harness into the groove of the windshield wire cover.
  - ii. Attach the windshield wire cover to the mirror mounting bracket and secure wire harness with retaining clip as shown.
- 4. Slide the wire cover firmly under the headliner.
  - i. Be careful not to bend headliner (windshield header for convertible).
- ➤ 5. Route the mirror wire harness into the headliner (windshield header for convertible) and down the A-pillar alongside the OEM wire harness

**NOTE**: Wire harness must allow mirror to experience full range of movement (turn full left and full right) with tension relief.

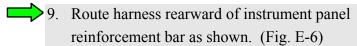
- 6. Route mirror wire harness down A-pillar as shown. (Fig. E-3)
- 7. Apply foam tape to headliner (windshield header for convertible) in four (4) places as shown. (Fig. E-4)

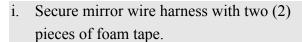


# Section II - Installation Procedure

8. Loosely secure the mirror wire harness to the OEM wire harness with four (4) wire ties along the A-pillar as shown. (Fig. E-5)

FOR COUPE VEHICLES ONLY (Step E. 9.)



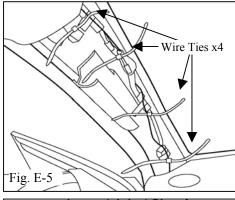


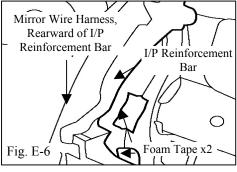
FOR CONVERTIBLE VEHICLES ONLY (Step E. 10.)

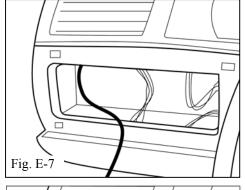
10. Route the harness through instrument panel rearward as shown. (Fig. E-7)

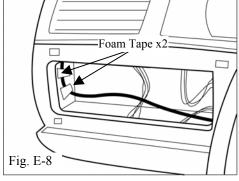


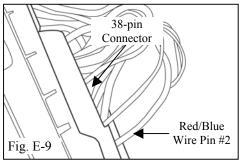
- i. Secure mirror harness with two (2) pieces of foam tape. (Fig. E-8)
- 11. Locate the 38-pin white connector on the back side of the I/P junction block.
  - 12. Locate the red blue wire in Pin #2 from the connector. (Fig. E-9)











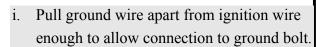
13. Apply the Red T-tap connector to the red-blue wire about one inch from connector with pliers. (Fig. E-10)

SOLARA

- ▶ 14. Make sure T-tap halves are snapped together and secure.
  - i. Plug the red connector of the mirror wire harness into the T-tap.
  - ii. Make sure the spade terminal is properly inserted into T-tap to make electrical contact.

FOR COUPE VEHICLES ONLY (Steps E. 15. through E. 16.)

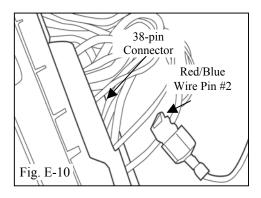
15. Locate the un-used weld nut at the lower cowl panel as shown. (Fig. E-11)

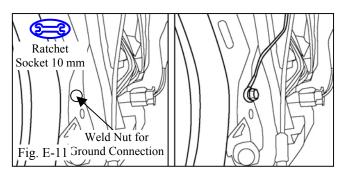


- 16. Using a 10 mm socket and ratchet, attach the ground lug of the mirror wire harness with the provided 10 mm hex head bolt to the weld nut.
  - Make sure that the bolt is secure.

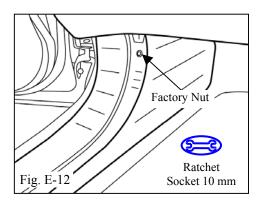
FOR CONVERTIBLE VEHICLES ONLY (Steps E. 17. through E. 18.)

- 17. Locate factory nut in driver-side cowl cover area. (Fig. E-12)
  - i. Using 10 mm socket and ratchet, remove factory nut and discard.
  - ii. Pull ground wire apart from ignition wire enough to allow connection to ground bolt.





EC REARVIEW MIRROR



18. Using 10 mm socket and ratchet, attach the ground lug of the mirror wire harness with the provided 10 mm hex head bolt and install. (Fig. E-13)

**SOLARA** 

- Make sure that the bolt is secure.
- 19. Bundle excess mirror wire harness to the vehicles main harness and secure excess with wire tie. (Fig. E-14)

# F. Testing.

- 1. Reconnect the vehicle's negative battery cable. (Fig. F-1)
- i. Position the negative terminal at an angle of 90° to the battery as shown.



ii. Tighten the nut to 4.1N-m (36 lbf-in)



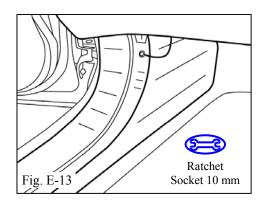
- iii. Do not touch the positive terminal with any tool when replacing the cable.
- 2. Turn the ignition switch to ON.
  - 3. With the vehicle in a fairly well-lit area, perform the following:
  - 4. Auto Dimming Feature:

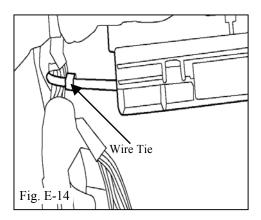


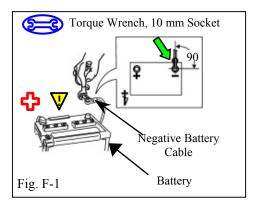
- To make sure the auto-dimming feature is on, verify that the green LED to the right of the switch is on. If it is not on, push the 'Mirror' button to turn it on. (Fig. F-2)
- ii. Cover (using dark cloth or towel) the forward-looking photocell located below the wire harness connection on the back of the mirror. (Fig. F-2)

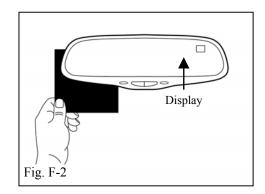


iii. After a few seconds, the mirror will begin to darken (the time may vary with ambient light levels).











iv. Remove the cover from the forward photocell and the mirror will begin to clear.

SOLARA

# 5. Compass Feature:



- Push in 'Comp' side of switch to turn compass on/off. Compass is enabled when a direction or a 'C' appears in the mirror display window.
- ii. If display reads 'C', calibrate the compass by driving the vehicle in a complete circle (360°) at less than five mph.
- iii. Refer to "operation instructions card" for calibration for your area/location. Follow procedure on card to complete calibration.
- iv. Pushing the 'Mirror' switch a second time and holding for 3 seconds will turn off the visual display.
- 6. Turn ignition key to OFF position.

# G. Final Assembly.

- 1. Reinstall sunroof opening trim (sunroof models only).
- 2. Reinstall lower dash panel, hood release handle and coin box.
- 3. Reinstall driver's side cowl cover.
- 4. Reinstall driver's side scuff plate.
- 5. Reinstall driver's side A-pillar garnish.
- 6. Reinstall sun visor, plastic cover and mounting base.
- 7. Reinstall driver side grab handle.
- 8. Reinstall sun visor clips.
- 9. Reinstall overhead console.



10. Place the operation instruction card in the vehicle glove box.



11. Remove fingerprints, smudges, dirt, etc. from mirror glass with 3M<sup>TM</sup> Prep Solvent-70 (or Household Windex.)

**SOLARA** 



 i. When cleaning with 3M<sup>TM</sup> Prep Solvent-70 follow the manufacturer's directions. Do not allow cleaner to air dry



12. Verify each reinstalled component for proper fit and function.

Issue: B 01/05/04 Page 12 of 13 pages Supplier Ref #: DIO

# **SOLARA** Section III - Functional Verifications

V	Section III - Functional Verifications	
	Check:	Look For:
Acces	sory Function Checks	
	Vehicle should be in a fairly well lit area.	
	Turn the ignition switch to ON.	Verify green LED, to the right of the
		switch, is on. If it is not on, push the
		'Mirror' button to turn it on.
	Auto-dimming feature:	
	Cover the forward-looking photo cell	Verify mirror darkens.
	(located below the wire harness	
	connection on the back of the mirror.)	
	Mirror Clears:	
	Remove cover from the photocell.	Mirror returns to clear state.
	Compass feature:	
	Push in 'Comp' side of switch.	Verify vehicle's directional heading is
	•	displayed.
	Push the 'Mirror' switch a second time and	Verify the visual display turns off.
	hold for 3 seconds.	
Vehic	le Function Checks	
<u>v cine</u>		Mon lamps should turn off
	Map lamps/Dome lamp with door closed.	Map lamps should turn off.
	Sunroof - open/close switch	Sunroof opens and closes.
	Hood release	Verify that hood latch releases.
	Traction light	Verify traction light turns on/off.
	Instrument panel light dimmer	Verify IP lights dim.
_		, <u>, , , , , , , , , , , , , , , , , , </u>