## Part Number: PTS21-52084

## **Light Guide Kit Contents**

Item #	Quantity Reqd.	Description
1	1	Controller Board, 4 color
		programmed
2	1	RGB, LED Engine wire harness
3	2	14mm Light Rod, 8" Length
4	1	Push button switch, momentary
		Туре
5	1	RGB Cup holder wire harness
6	1	Power harness with fuse
7	1	Installation hardware kit
8	1	Installation instructions

## Hardware Kit Contents

Item #	Quantity Reqd.	Description
1	4	Foam pad with adhesive (38.1 x
		38.1 x 4.75mm)
2	2	#8-32 x 3/8" pan head Phillips
		machine screw
3	2	Front mounting bracket, angled.
		Black zinc
4	6	Wire ties (101.6mm)
5	4	Wire ties (177.8mm)
6	2	Front Mounting bracket, Black
		zinc
7	2	Spacer 6.3mm
8	2	#8-32 x <sup>1</sup> /2" pan head Phillips
		machine screw
9	1	Push button switch mounting
		hardware
10	1	Cup holder mounting hardware
11	1	"Illumination" switch bezel
12	1	Switch installation tool
13	2	T-taps

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

	1	
Item #	Quantity Reqd.	Description

#### Conflicts

None

#### **Recommended Tools**

Personal & Vehicle	Notes
Protection	
Safety Glasses	
Safety Gloves	Optional
Vehicle Protection	Blankets, Part Boxes,
	Masking Tape
Special Tools	Notes
Switch installation tool	In hardware kit
0-50 in/lbs Torque Wrench	For Battery Terminals
Drill templates (DIO)*	See Appendix 1
Drill templates (PPO)**	IADS# SXB08-034

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**NOTE:** Part number of this accessory may not be the same as the part number shown.

<b>Installation Tools</b>	Notes
Nylon Panel Removal Tool	
Ratchet	
Socket	10 mm
Wire Cutters	
Phillips screwdriver	
Drill motor	
<sup>1</sup> / <sub>2</sub> " Drill bit	Uni-bit or step drill rec.
5/16" Drill bit	
#20 Drill bit	
Center punch	
Non-scratch wiping cloth	
Scissors	
Pliers	
Deburring Tool	
<b>Special Chemicals</b>	Notes
3M <sup>TM</sup> Prep Solvent 70	DIO*
VDC Approved Cleaner	PPO**

### **General Applicability**

2008 SCION - xB

## **Recommended Sequence of Application**

If any other accessories are to be installed, it is recommended they be installed in the order described below to ease installation and/or avoid redundant work.

Item #	Accessory
1	
2	
3	

## 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.
 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.

\*DIO: Dealer Installed Option

**\*\*PPO:** Post Production Option (port installed)

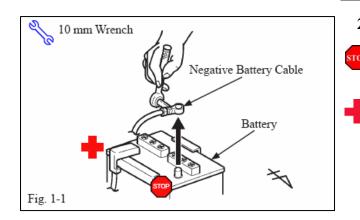
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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.).

Please see your Toyota dealer for a copy of this document.

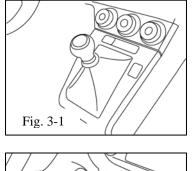


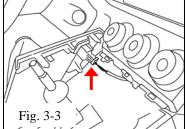
#### 1. Check Kit Contents

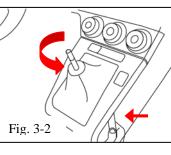
(a) Check kit for content and damage.

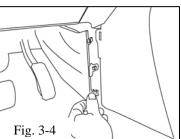
### 2. Vehicle Disassembly

- (a) Remove the battery cover from the passenger side luggage compartment. (Fig. 1-1)
- (b) Do not touch the positive terminal with any tool when removing cable.
- (c) Remove the negative battery cable. (Fig. 1-1)









## 3. Removal of shifter panels.

Note: Figures show model with manual transmission. Removal of panel is similar on models with automatic transmission.

- (a) For manual transmission set brake and remove shift knob (counter clockwise). (Fig. 3-1)
- (b) Use nylon removal tool to remove top panel shown. (Fig. 3-2)
- (c) Disconnect the connectors from top panel. (Fig. 3-3)
- (d) Remove Driver side foot well panel. (Fig. 3-4)



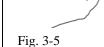
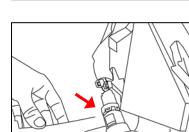
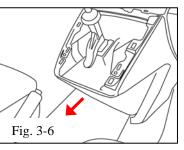
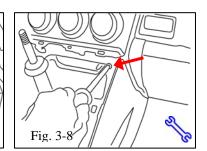


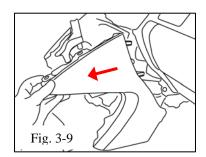
Fig. 3-7

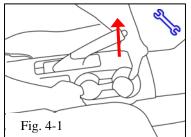




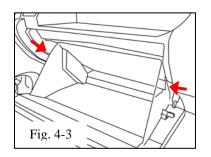


- **INTERIOR LIGHTING UPGRADE**
- (e) Remove Passenger side foot well panel. (Fig. 3-5)
- (f) Remove front panel with power point by pulling straight back. (Fig. 3-6)
- (g) Disconnect the power point connector from the panel. (Fig. 3-7) Set panel aside.
- (h) Use Philips screw driver to remove screws from left and right side trim panels. (Fig. 3-8)
- (i) Remove both left and right side trim panels. (Fig. 3-9)

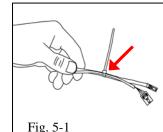


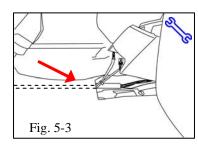


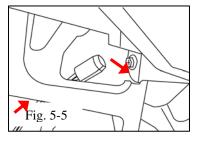


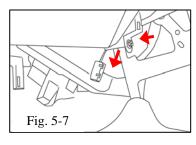


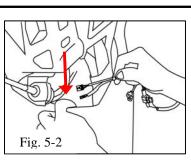
- 4. Removal of Cup Holder Console & Glove Box.
  - (a) Use a nylon removal too to loosen console top. Pull straight up to remove. Set console top aside and remove three 6 mm bolts securing the lower console to vehicle with a 10 mm socket. (Fig. 4-1)
  - (b) Open glove box and disconnect the glove box strut. (Fig. 4-2)
  - (c) Pinch together the sides of the glove box to free the glove box assembly from the IP & set aside. (Fig. 4-3)

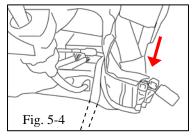


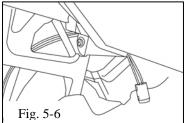










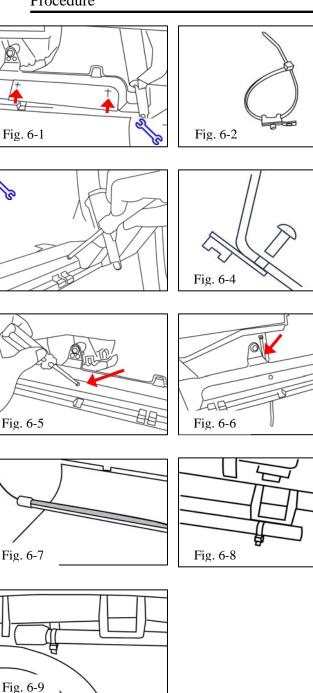


# 5. Installation of Power Harness and Light Engine Harness.

- (a) Locate both the power harness and light engine harness. Using a (4 in.) wire tie, tie both harnesses together approximately 2-3 in. from the connectors as shown. (Fig. 5-1) (Cut off excess wire tie)
- (b) From under the IP on the passenger side run the power harness and light engine harness under the carpet toward the center console.(Fig. 5-2) Unclip floor carpet from front fastener to ease installation.
- (c) Harnesses shown under carpet below center console. Reinstall the lower console mounting bolts using 10mm wrench.
   (Fig. 5-3)
- (d) Attach T-taps to power point wire that was attached to front panel. Locate power harness. Attach power harness white wire to grey wire of power point harness. Attach power harness black wire to white wire with black strip of power point harness. Use pliers to make sure the T-taps are securely fastened. (Fig. 5-4)

**NOTE**: Install light engines. Locate light engine with the 2 wires attached to it. Feed the light engine over black duct and behind the metal support into the passenger side foot well. (Fig. 5-5)

- (e) Light engine shown in passenger side in foot well area. (Fig. 5-6)
- (f) Install the light engine with 1 wire on it across the black duct into the driver side foot well as shown. (Fig. 5-7)



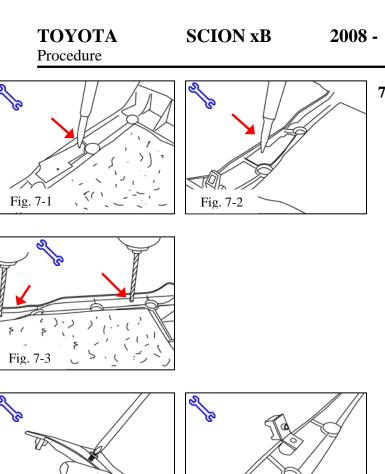
## 6. Installation of Passenger Side Light Rod.

- (a) Align the drill template to the right side of the glove box opening. Use a center punch / scribe to mark the center of the holes to be drilled. (DO NOT DRILL THROUGH THE TEMPLATE) (Fig. 6-1)
- (b) Drill the center mark using a # 20 Drill bit.
- (c) To ease installation of the right side bracket.Pre-assemble the bracket and 7" wire tie as shown. (Fig. 6-2)
- (d) The bracket / plastic mount faces toward the front of the car with the plastic mount on top. Tighten the 8-32 (3/8 in. Length) screw being careful not to over tighten. (Fig. 6-3) (Fig. 6-4)
- (e) Install the left side bracket / plastic mount. Tighten the 8-32 screw; be careful not to over tighten. (Fig. 6-5)
- (f) Install (7 in.) wire tie thru the plastic mount."Loops" of the plastic mount. (Fig. 6-6)
- (g) Install the passenger side light engine to the light guide. The reflector end of the light guide should face toward outside of the vehicle. Insert light guide into right side mount with (7 in.) wire tie already installed. Tighten wire tie just enough to hold light guide. Tighten left side wire tie. Light guide should be orientated with the white reflector at the top. Fully tighten the wire ties and cut off excess. (Fig. 6-7)

## NOTE:

Passenger side / Right mounting shown looking up from floor. (Fig. 6-8)

Passenger side / Left looking up from floor. (Fig. 6-9)



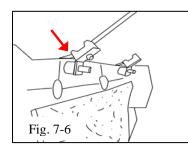


Fig. 7-4

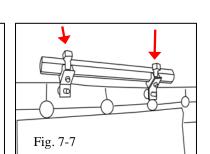
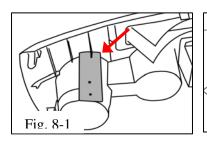
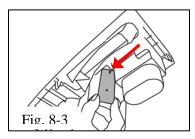


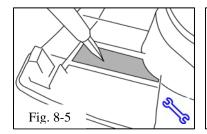
Fig. 7-5

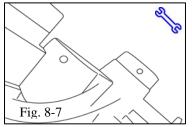
# 7. Mounting of Driver Side Light Rod.

- (a) Locate driver foot well panel.
- (b) Align mounting hole drill template on driver side panel. Use a center punch / scribe to mark the center of the holes to be drilled.
  (Fig. 7-1) (Fig. 7-2)
- (c) Drill mounting hole using a # 20 drill bit.(Fig. 7-3) Deburr holes.
- (d) Insert 8/32 (1/2 in. Length) screws into cover. (Fig. 7-4)
- (e) Install 1/4 in. round spacer onto the screw. Locate the mounting bracket with the 45° bend and tighten the 8-32 screws into brackets, being careful not to over tighten. (Fig. 7-5)
- (f) Insert a (7 in.) wire tie into plastic mount. Be sure the wire tie goes through both "loops" of the plastic mount. (Fig. 7-6)
- (g) Insert the 8 in. light guide into the mounts. The light guide should be oriented with the white "reflector" at approximately a 45° angle as shown. The reflector end of the light guide should be toward the front of the vehicle. Fully tighten the wire ties and cut off excess. (Fig. 7-7)









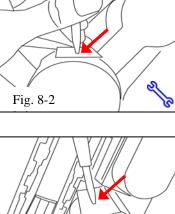
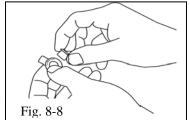




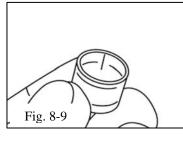
Fig. 8-6

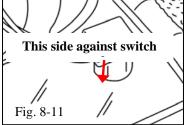


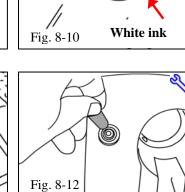
# 8. Installation of Switch and Cup Holder Lights on center console.

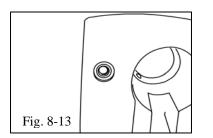
- (a) Align the cup lighting drill template slot on the underside of console top to the third rib of the front cup holder toward driver's side as shown. (Fig. 8-1)
- (b) Use a center punch / scribe to mark the center of the hole to be drilled. (Fig. 8-2)
- (c) Align the drill template slot to rib for rear cup holder next to E-brake slot as shown.(Fig. 8-3)
- (d) Use a center punch / scribe to mark the center of the hole to be drilled. (Fig. 8-4)
- (e) Pilot Drill the center mark using a # 20 drill bit.
- (f) Align the switch hole drill template flush with the bottom of the pocket and use a center punch / scribe to mark the center of the hole to be drilled. (Fig. 8-5)
- (g) Pilot drill the center mark using a # 20 drill bit. Use a ½ in. drill bit (Uni-bit or step drill is highly recommended) to drill the switch hole. (Fig. 8-6) (Deburr Holes)
- (h) Enlarge cupholder light holes using a 5/16" drill bit. (Fig. 8-7)
- (i) Before installing bezel. Wipe the application area clean with 3M prep solvent – 70 and a clean no-scratch cloth.
- (j) Rinse the application area clean with distilled water and a clean no-scratch cloth.
- (k) Dry the installation area using a clean, dry, lint free cloth.
- Insert the switch bezel into the switch plate. (Fig. 8-8)

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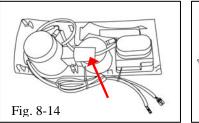
(m)Using the pull-tab, remove the tape liner from back of the switch plate.

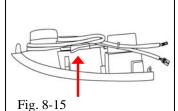
**CAUTION**: Avoid finger contact with the adhesive surface.

- (n) Using the bezel as a guide, install the switch plate / bezel into the previously drilled <sup>1</sup>/<sub>2</sub> in. hole.
- (o) Align the printing "ILLUMINATION" square to the console.
- (p) Once aligned, press down firmly, to adhere the tape.
- (q) Install the sleeve to the bezel. The "white" ink end of the sleeve must be installed against the back side of the console cover.(Fig. 8-9) (Fig. 8-10)
- (r) Install the switch to the bezel as shown.(Fig. 8-11)
- (s) Tighten bezel to switch using white installation tool. Be careful not to over tighten. (Fig. 8-12)
- (t) Install Switch Button.

**NOTE**: Shown is the installed switch assembly. (Fig. 8-13)

(u) Install cup lights by removing tape liner from cup holder lenses. From inside the cup holder insert the lenses into the previously drilled holes. From the back of the cup holder install lens lock washer. Install the LED with the short single extension into the rear cup holder. Firmly secure the LED to the lens by turning clockwise. Ensure the LED and lens is fully engaged. Hold lens from inside the cup holder. Install front cup holder led.

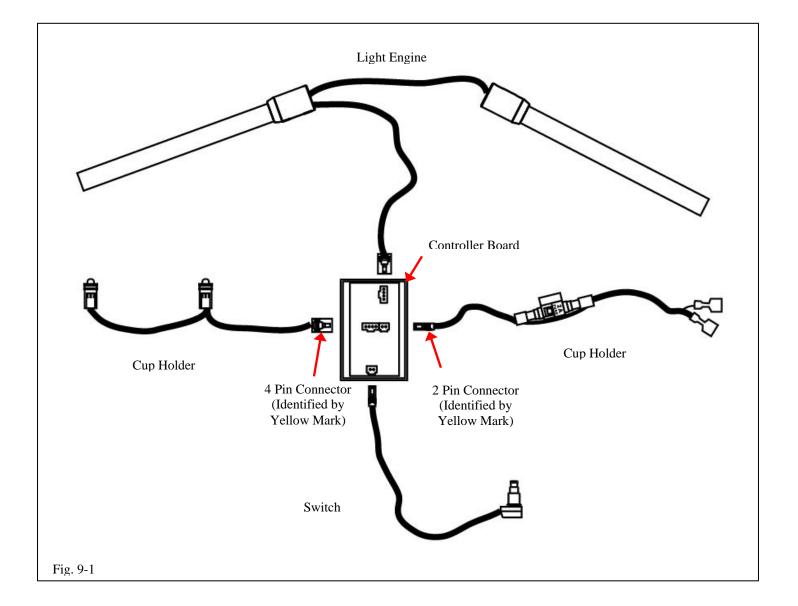


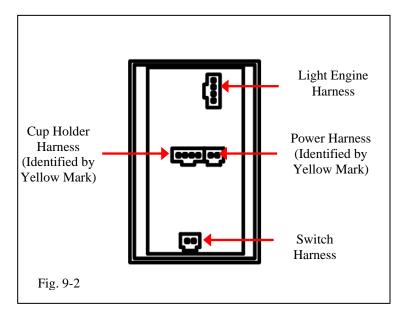


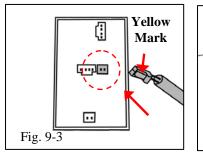
(v) Secure short section of cup harness with a foam pad as shown. Route switch harness and cup holder harness together around the front cup holder and away from emergency brake opening. Bundle harnesses with a (4 in.) wire tie so the connectors extend approximately 2-3 in. past the rear of console top. (Fig. 8-14) (Fig. 8-15)

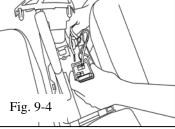
## 9. Installation of Controller Board.

(a) Review wire harness. (Fig. 9-1)









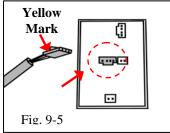


Fig. 9-7

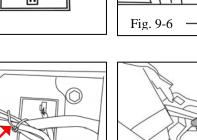
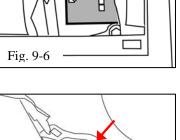
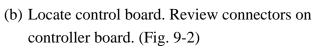


Fig. 9-8





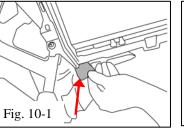
- (c) Plug in the light engine harness and the power harness (Power harness is identified by a yellow mark). (Fig. 9-3)
- (d) Position console top in position shown.
  (Fig. 9-4) So the switch harness and cup holder harness connectors can be installed.
  (Cup holder connector identified by a yellow mark) (Fig. 9-5)
  - **CAUTION**: Failure to correctly follow these steps will result in permanent damage to light engine assemblies.

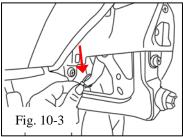
**NOTE**: Shown is the placement of the controller board. (Fig. 9-6)

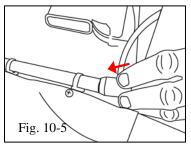
- (e) Remove tape liner from backside of controller board. Position controller board with colored cap toward the driver's side of vehicle.
- (f) Install controller board at the rear of console.
   Secure to vehicle metal pan, away from emergency brake mechanism and cable.
- (g) Secure the harnesses to vehicle harness with (4 in.) wire ties (Fig. 9-7)
- (h) Secure cup holder and power harness to inside of lower console with a foam pad. Snap upper console top to lower console. (Fig. 9-8)

Fig. 10-2









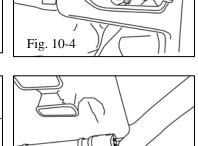
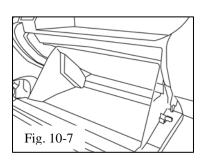


Fig. 10-6



## 10. Reassembly.

- (a) On Passenger side secure light engine wire harness with foam pad next to air vent. Be sure foam pad is not visible. (Fig. 10-1)
- (b) Secure light engine wire harness to vehicle harness with a (4 in.) wire tie as shown.(Fig. 10-2) (Passenger Side)
- (c) Secure light engine wire harness to vehicle harness with a (4 in.) wire tie as shown.(Fig. 10-3) (Driver Side)
- (d) Secure light engine harness to black plastic vent in center of IP using a foam pad as shown. (Fig. 10-4)
- (e) Reinstall left and right trim panels on center IP.
- (f) Reconnect power point connector to front trim panel and install panel.
- (g) Reinstall driver side foot well panel.
- (h) Install the engine onto the light rod installed to driver side panel and reinstall panel.(Fig. 10-5)

**NOTE**: Photo of driver side panel and light engine installed. (Fig. 10-6)

- (i) Reinstall passenger side foot well panel.
- (j) Reinstall glove box. (Fig. 10-7)

## 11. Post installation.

- (a) Reconnect negative battery terminal and torque to 36 in/lbs.
- (b) Clean light guide using approved cleaner and non-scratch cloth.
- (c) Cycle test the system with key in ACC or ON. The cycle may start from any step below but should cycle as follows:
  - (1) System advances in color with each push of the button. Note there are 4 colors (Red, Green, Blue, & Orange).

(2) Off.

Section III – Functional Verifications

### Check:

Accessory Function Checks Partial Operation

No Operation

Vehicle Function Checks

Cigarette Lighter Not Operational

Look F	or:
	Full engagement of affected wire harness connector at the controller board.
•	Correct installation of harness locations at the controller board.
	Note: positioning the light engine harness connector in the wrong location will result in permanent damage to the light engines.
•	Confirm light guide has been installed with the reflector on the end opposite the light engine.
•	Vehicle key in the ACC or On Position.
•	Vehicle battery connection.
•	Full engagement of power harness connector at the controller board.
•	Full engagement of power harness connector at the cigarette lighter.
•	Blown cigaretter lighter fuse (see vehicle owner's manual for Amperage and location).
•	Blown light kit fuse (2A mini blade)
•	Full engagement of switch harness connector at the controller board.
•	Blown cigarette lighter fuse (see vehicle owner's manual for Amperage and location).
•	Cigarette lighter connections not reestablish.

