Doc. 03.112.00 06/19/18



Southeast Toyota Distributors, LLC Accessory Installation Instructions

2019 Corolla Remote Keyless Entry

Year & Model	2019 Corolla
Part Number	00016-32912
Accessory Code	KE1000
PIO/DIO	PIO & DIO
Business Partner	L95

Conflicts

Note: N/A		
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General Applicability

Fits Models:	
1.	2019 Corolla

Additional Items Required For Installation

Item#	Description
1.	N/A

Sequence of Application

Item#	Accessory
1.	N/A
2.	N/A

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.

Recommended Tools

Safety Tools		
Seat and Floor Covers	Blankets	
Installation Tools		
Phillips Screwdriver	Pencil	
Ratchet w/ Extension	10mm Socket	
Wire Cutters	Common Pliers	
Flashlight	Nylon Trim Tool	
Torque Wrench (48 in-lbf)	Clip Removal Tool	
Needle Nose Pliers		
Special Chemicals		
VDC Approved Cleaner		

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. These points will be audited on a completed vehicle installation.



TOOLS & EQUIPMENT: Use best practice.



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



SAFETY TORQUE: This mark indicates that torque is related to safety.

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Kit/Hardware Bag Contents

Kit Contents			
Item #	Quantity	Description	
1	1	Main Control Module	
2	2	Transmitters	
3	1	Main Harness	
4	1	Owner's Card	
5	2	Hardware Bag	
7	2	24" Cable Tie	
8	1	Hex Bolt and Nut	

Hardware Bag Contents			
Item#	Quantity	Description	
1	8	Black T-Taps	
2	2	Blue T-Taps	
3	8	Red T-Taps	
4	1	Yellow T-Tap	
5	1	Valet Programming Switch	
4	1	2 1/4" x 2 1/4" Foam Pad	
5	6	8" Black Cable Ties	

Parts for Installation

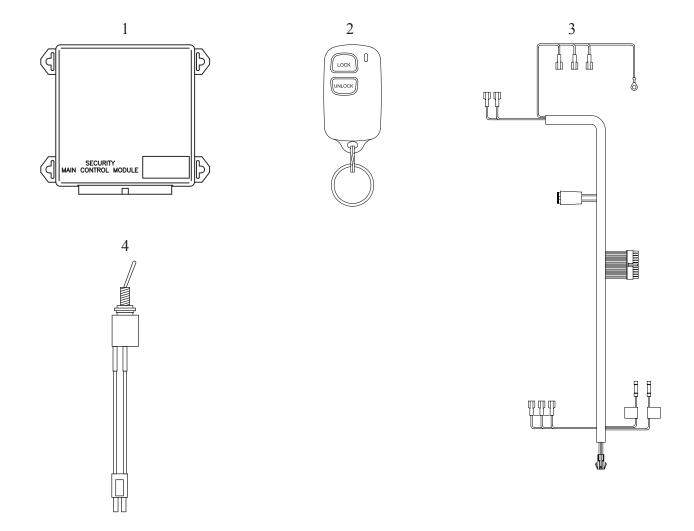
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

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, re-checking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Item #	Quantity	Description Part Number	
1	1	Main Control Module 00016-00063	
2	2	Transmitter 00016-32912-05	
3	1	Main Harness 00016-32901-01	
4	1	On/Off Toggle Switch 00016-30960-56	



Service & Warranty Information:

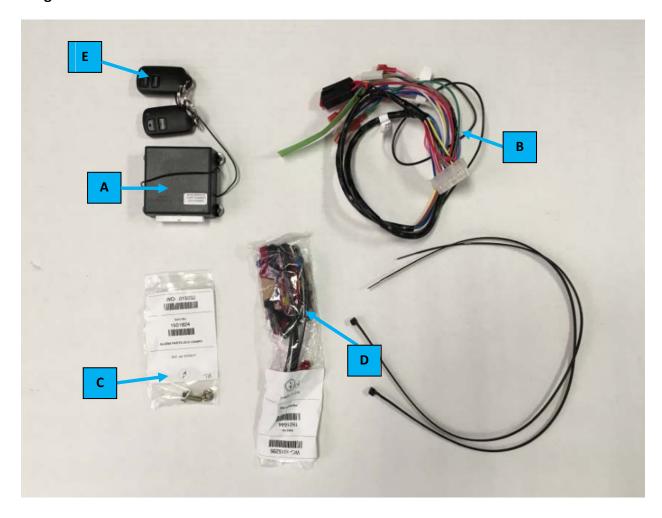
Imaga	Parts information		Warranty Information	
Image Part Number Description		Description	Warranty Time	Labor Op. Code
N/A	00016-32912	Keyless Entry Kit	N/A	N/A
A	00016-00063	Keyless Entry Module	0.5	AKE011
В	00016-32901-01	CE Keyless Harness	0.5	AKE041
C	00016-32901-02	CE Keyless Hardware	N/A	N/A
D	00016-32901-03	T-Tap Kit Bag	N/A	N/A
Е	00016-32912-05	Key Fob	0.2	AKE021- Replace AKE023 - Reprogram
N/A	N/A	Fob Battery	0.1	AKE031
N/A	00016-32902	H-Lamp Relay Box Assy	N/A	N/A
N/A	N/A	TDS Remote Start Switch	N/A	N/A

Note: Combo A applicable to AKE021 and AKE023 for additional 0.1 when replacing or reprogramming two key fobs.

Labor times include consideration for diagnosis and Administration time.

If you are a dealer located outside of the Southeast Region, please contact the SET Accessory Warranty Department at (888) 851-2722 or email accessory.warranty@setoyota.com for claim payment instructions.

Image:



A. Pre-Installation Precaution



1. Use Seat and Floor protectors to avoid damage to surfaces.

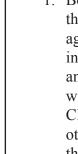


2. Please review and familiarize yourself with this document and refer to TIS before installation to check for updates to any installation procedures or techniques included in this document.

B. Battery Disconnect CAUTION:



- Certain systems need to be initialized after disconnecting and reconnecting the cable to the negative (-) battery terminal.
- Before starting the engine, make sure that the ground point is installed to the body with the bolts.
- After the ignition switch is turned off, the navigation receiver assembly records various types of memory and settings. As a result, after turning the ignition switch off, make sure to wait at least 60 seconds before disconnecting the cable from the negative (-) battery terminal. (for Navigation System)
- After the ignition switch is turned off, the radio and display receiver assembly records various types of memory and settings. As a result, after turning the ignition switch off, make sure to wait at least 80 seconds before disconnecting the cable from the negative (-) battery terminal. (for Audio and Visual System)



Figure

В1

1. Before performing work on electronic components, disconnect the cable from the negative (-) battery terminal to prevent damage to the electrical system or components. When disconnecting the cable, turn the ignition switch and headlight switch off and loosen the cable nut completely. Perform these operations without twisting or prying the cable. Then disconnect the cable. Clock settings, radio settings, audio system memory, DTCs and other data will be cleared when the cable is disconnected from the negative (-) battery terminal. Write down any necessary data before disconnecting the cable. (Figure B1)

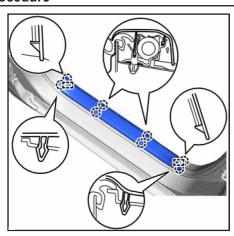


Figure C1

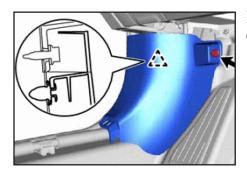
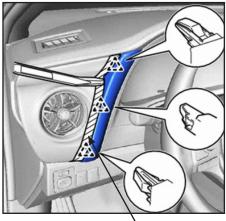


Figure C2

Figure

C3a



Protective Tape



Figure C3b

C. Disassemble Vehicle Trim

1. Remove Front Door Scuff Plate LH.

a. Disengage the (8) claws and (2) guides to remove the front door scuff plate LH. (Figure C1)

2. Remove Cowl Side Trim Board LH.

- a. Remove the clip.
- b. Disengage the clip to remove the cowl side trim board LH. (Figure C2)

3. Remove the No. 1 Hood Meter Cluster.

- a. Apply protective tape to the area shown in the illustration. (Figure C3a)
- b. Using a moulding remover, disengage the 3 clips and remove the No. 1 meter hood cluster. (Figure C3a)

b. Disengage the 4 clips and remove the No. 1 instrument panel register assembly. (Figure C3b)



Figure C4a



Figure C4b

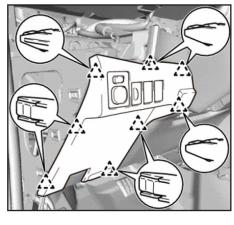


Figure C4c



Figure C5b

Figure

C5a



4. Remove Fuse Box Opening Cover.

a. Using a screwdriver, disengage the (2) claws and remove the cover. (Figure C4a)

HINT: Tape the screwdriver before use.

b. Remove the screw. (Figure C4b)

c. Disengage the (8) clips.

d. Disconnect each connector and remove the fuse box opening cover. (Figure C4c)

5. Remove Lower Steering Column Cover.

a. Remove the 2 screws. (Figure C5a)

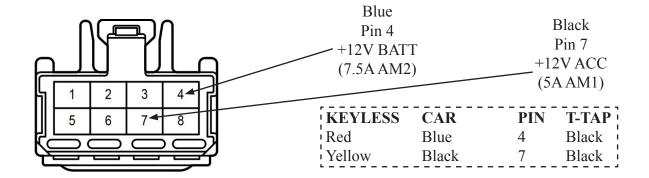
b. Disengage the 5 claws and remove the lower steering column cover. (Figure C5b)

D. CONNECTION DETAILS

All Connectors Show Terminal View

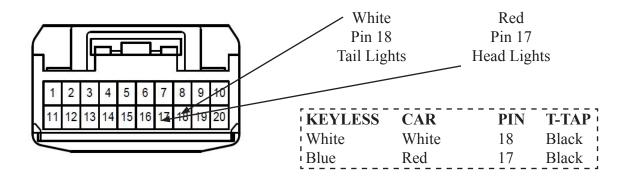
1. CONNECTOR E4: Ignition Switch

Location : Steering Column



2. CONNECTOR E10: Tail Lights / Head Lights

Location: Lower Steering Column Cover Area

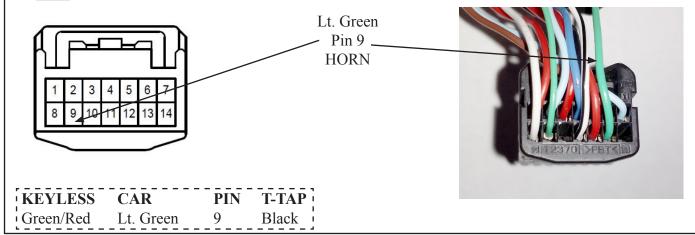


3. CONNECTOR E8: Horn

Location : Lower Steering Column Cover Area



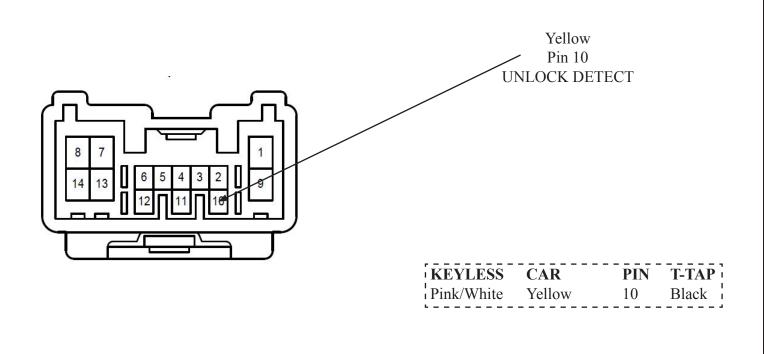
THERE ARE 2 LT. GREEN WIRES IN CONNECTOR E8. ENSURE CONNECTION IS MADE TO THE LARGER LT. GREEN WIRE IN PIN 9, NOT THE SMALLER LT. GREEN WIRE IN PIN 13. DAMAGE TO THE MODULE WILL OCCUR IF CONNECTED TO THE WRONG WIRE!



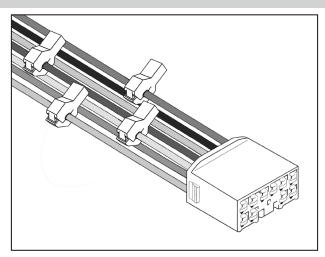
CONNECTION DETAILS All Connectors Show Terminal View 4. CONNECTOR HE1: Door Locks Location: Driver's Kick Panel Area Black Pin 1 Unlock Motor *See Detail A Yellow Pin 3 Unlock Switch Blue - Pin 4 Lock Switch DETAIL "A" DRIVER'S DOOR UNLOCK CIRCUIT KEYLESS **CAR** PIN T-TAP Harness Pink Blue 4 Black Wires Cut the BLACK WIRE in connector HE1, location ! Pink/White Yellow 1. Strip the insulation from both sides of the 3 Black cut wire, and crimp the WHITE WIRE from the ! White keyless harness to the HARNESS side of the cut Black 1 Lock Side wire. Crimp the BLUE/WHITE WIRE from the keyless harness to the CONNECTOR side of the Blue/White Black ECU Side Existing cut wire. Wire

5. CONNECTOR HE2 - Unlock Detect

Location: Driver's Kick Panel Area



STAGGER ALL T-TAPS WHEN MULTIPLE CONNECTIONS ARE ON A COMMON CONNECTOR



When applying multiple T-Taps to a common connector, the T-Taps must be staggered to avoid excessive stress/strain on the wires. T-Taps must also be applied at least 1 inch away from the connector housing.

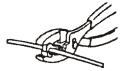
T-TAP INSTALLATION

When installing T-Tap connectors, be sure the wire is located inside the wire channel of the T-Tap connector before closing the connector over the wire with pliers. When possible, install T-Taps at least 1" away from connector.

Step A



Step B



Sten C





IMPORTANT! After installation, inspect and ensure that Keyless System Harnesses are clear of all HOT, SHARP or MOVING objects.

IMPORTANT! Care must be exercised when using the Black T-Taps. To avoid damage and broken wires, please note:

- Ensure there is NO tension on the T-Tap connection when securing the harness. The wire should be slack.
- Excessive manipulation and/or stress on the wire connection could lead to wire breakage.
- Center the wire in the metal insert, NOT the plastic side of the T-Tap. Misalignment of the wire against the metal insert could lead to cutting the wire.
- It is recommended to close the T-Tap with your fingers (Step A above). After the T-Tap has been closed with your fingers, applying light pressure with a set of pliers will complete the connection.

E. INSTALLING THE SECURITY SYSTEM

IMPORTANT! Make sure that the brake pedal, accelerator pedal, and accelerator pedal linkages are free and clear of all security harnesses.



Figure E1

Factory Harness

SET Harness

Sharp Edge

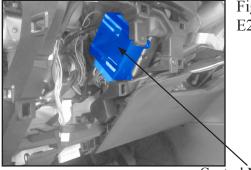


Figure E2

Control Module

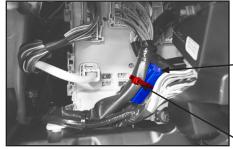
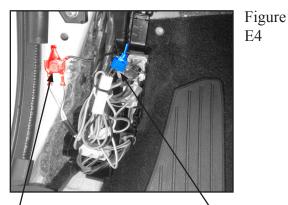


Figure E3

Fuse Holder

Wire Tie



Factory Ground
Point EA

Southeast Toyota Distributors, LLC

Toggle Switch

Mounting the Main Control Module:

1. Fully extend and lift the tilt and telescoping steering column. Route the main wiring harness to the control module. Use caution when routing to avoid any hot, sharp, or moving objects. Route the main wiring harness BEHIND the factory harness to avoid the harness shorting against the dash brace, as pictured. (Figure E1)



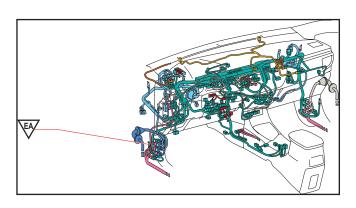
NOTE: Do not secure the keyless entry harness to the air bag harness.

- 2. Apply provided adhesive pad to the side of the control module. Using the adhesive pad, mount the control module to the factory dash brace (to the left of the steering column).
- 3. Secure the control module to the factory brace with 1 long wire tie. (Figure E2)
- 4. Secure the fuse holder to the factory harness with 1 wire tie. (Figure E3)

Connecting the Security System Harness:

SECURING MODULE GROUND:

1. Locate the factory ground lug in the driver's kick panel area. Secure the black ground wire to the 10mm ground lug, Factory Ground point EA. Set Toggle Control Switch to OFF position. Secure excess wiring, Black ground wire, and the Toggle Control Switch to the factory wiring harness with a wire tie as pictured. (Figure E4)



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Figure F1a

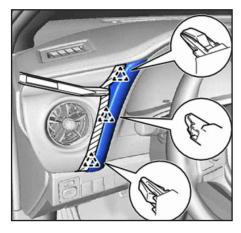


Figure F1b

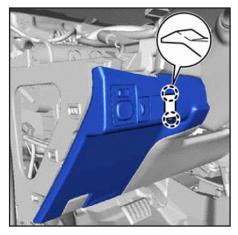


Figure F2

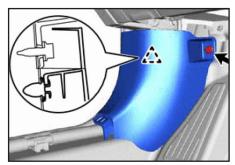


Figure F3

F. Vehicle Reassembly

1. Install the No. 1 Hood Meter Cluster.

- b. Engage the 4 clips and install the No. 1 instrument panel register assembly. (Figure F1a)
- b. Engage the 3 clips and install the No. 1 meter hood cluster. (Figure F1b)

2. Install the Fuse Box Opening Cover

- a. Connect each connector.
- b. Engage the (8) clips.
- c. Install the fuse box opening cover with the screw.
- d. Engage the (2) claws to install the cover. (Figure F2)

3. Install Cowl Side Trim Board LH.

- a. Engage the clip.
- b. Install the cowl side trim board LH with the clip. (Figure F3)

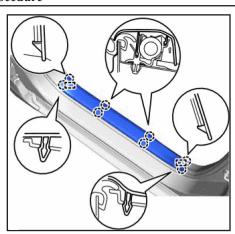


Figure F4







Figure F5b

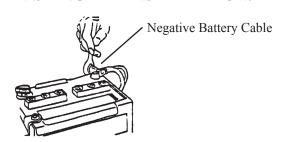
4. Install Front Door Scuff Plate LH.

a. Engage the (8) claws and (2) guides to install the front door scuff plate LH. (Figure F4)

- 5. Install Lower Steering Column Cover.
 - a. Engage the 5 claws to install the lower steering column cover. (Figure F5a)

b. Install the 2 screws (Figure F5b)

FINISHING THE INSTALLATION:





- 1. Reconnect the negative battery terminal. **Torque to 48 in-lbf.**
- 2. Place the owner's card in the glove compartment.
- 3, Note: (DIO Only) Print Warranty Statement & Place in glove compartment.

Note: Verify the 30A DC CUT fuse is installed prior to testing the system.

TESTING THE SYSTEM:

Prior to delivering the vehicle, test all features of the system according to the owner's manual included.

LOCK - Press and release the LOCK button on the transmitter. All doors should lock, headlights should come on.

UNLOCK - Press and release the UNLOCK button on the transmitter. The driver's door should unlock, headlights should come on.

Press and release the UNLOCK button again. All doors should unlock.

Press and hold the PANIC button for approximately 3 seconds. The horn should sound and the parkings lights should flash.

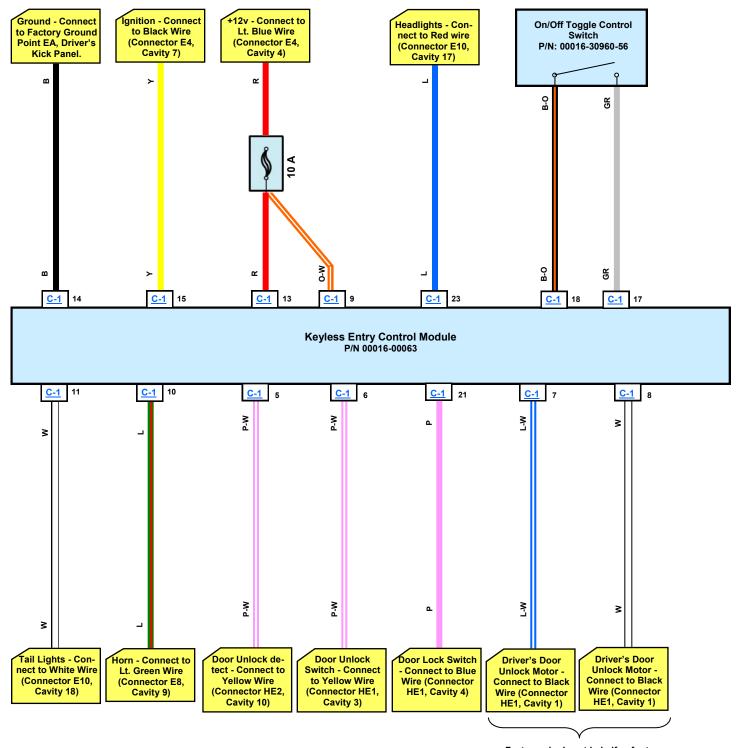
Press and release the PANIC button to silence the horn.

NOTE: Be sure to test both transmitters that were included in the kit.

VEHICLE FUNCTION CHECKLIST

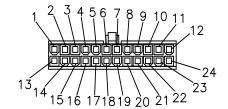
	Head Light If the warning lights remains on, it may		Place Warranty Statement in Glove Compartment (PIO Only)
	indicate a system malfunction.		Power Side Mirrors (if equipped)
	High Beams		Side Mirror Defogger (if equipped)
	Turn Signal Lights		Front Windshield Defogger (if equipped)
	Tail Lights		
	Stop Lights		Navigation System (if equipped)
$\overline{\Box}$	Backup Lights		Rear Sunshade (if equipped)
	•		Cruise Control Light (if equipped)
	Hazard Lights		Steering Wheel Audio Control (if
	Marker Lights		equipped) HVAC
	Dome/Courtesy Lights	Ш	nvac
	Panel/Switch Illumination		Power Locks (if equipped)
	Accessory Controls/Illumination (if equipped)		Power Windows (if equipped)
	Rear Window Defogger (if		Gauges
$\overline{}$	equipped) Key Sensor Buzzer		Front Wiper/Washer
Ш	Rey Sensor Buzzer		Hood Latch Release
	Fog Lights (if equipped)	Ш	nood Laten Release
	Day Time Running Lights (if equipped)		Passenger Air Bag Switch (if equipped)
	Trunk/Tailgate/Bed Lights (if		Rollover Side Curtain Air Bag Switch (RSCA)
	equipped) Glove Box Light (if equipped)		Horn
Ш	Giove Box Light (il equipped)		
	ABS Light (if equipped)		Seat Belt Warning Light If the warning lights remains on, it may
	Rear Wiper/Washer (if		indicate a system malfunction.
ш	equipped)		Air Bag Warning Light
	Clock (if equipped)		If the warning lights remains on, it may indicate a system malfunction.
	Accessory Power Socket (if		Lamp Failure Sensor
	equipped)		If the warning lights remains on, it may indicate a system malfunction.
Ш	Starter		Track/Skid Control Light (if equipped)
	Audio/Video (if equipped)		If the warning lights remains on, it may indicate a system malfunction.
	Power Sliding Door (if		Tire Pressure Monitoring System (TPMS)
Ш	equipped)		Prior to TPMS activation and Pre-Delivery Service (PDS) of the vehicle the TPMS light will blink when
	Convenience Memory Settings (if equipped)		IG is turned on. After TPMS activation and PDS of the vehicle the TPMS light will illuminate for a few seconds and go off when IG is turned on.
	Heated Seats (if equipped)		seconds and go off when 10 is turned on.

Block DiagramKeyless Entry System:



Checking the Harness Pinouts:

Connector C-1: Keyless Entry Harness Connector Connector End View



Cand UNLOCK press) Cand UNLOCK press)	Pin	Wire Color	Wire Function	Test Reference	Proper Operation
3 No Wire N/A	1	No Wire	N/A	N/A	N/A
4 No Wire N/A N/A 5 PinkWhite Unlock All Doors Pin 5 to Ground. 6 PinkWhite Unlock All Doors Pin 6 to Ground. 6 PinkWhite Unlock Detect Pin 6 to Ground. 7 BlueWhite ECU Side Pin 7 to Ground. 8 White Driver's Unlock Motor ECU Side Pin 8 to Ground. 9 Oranger/White Active Out Pin 9 to Ground. 10 Green/Red Horn Chirp / Panic Pin 10 to Ground. 11 White Tail Light Flash Pin 11 to Ground. 12 No Wire N/A N/A 13 Red Battery Pin 13 to Ground. 14 Black Ground Pin 14 to Ground. 15 Yellow Ignition Pin 15 to Ground. 16 Pin 16 to Ground. 17 Gray Programming Switch Pin 18 to Pin 17. 18 Iblack/Orange Programming Switch Pin 18 to Pin 17. 19 No Wire N/A	2	No Wire	N/A	N/A	N/A
Pink/White	3	No Wire	N/A	N/A	N/A
PinkWhite Unlock All Doors Pin 5 to Ground. Continuity to Ground (pulsed) when driver's unlock with e NILOCK press).	4	No Wire	N/A	N/A	N/A
6 Pink/White Unlock Detect Pin 6 to Ground. Pin 6 to Ground. Pin 7 to Ground. Pin 7 to Ground. Pin 7 to Ground. Pin 7 to Ground. Pin 8 to Ground. Pin 9 to Ground. Pin 10 to Ground. Pin 10 to Ground. Pin 11 to Ground. Pin 12 to Ground (pulsed) when keyless UNLOG to trest. Continuity to Ground (pulsed) when horn pad is press horking. Pin 11 to Ground. Pin 11 to Ground. Pin 11 to Ground. Pin 12 to Ground (pulsed) when keyless UNLOG to trest. Pin 11 to Ground. Pin 12 to Ground (pulsed) when keyless UNLOG to Press. Pin 11 to Ground. Pin 12 to Ground (pulsed) when keyless UNLOG to Press. Pin 11 to Ground. Pin 12 to Ground (pulsed) when keyless UNLOG to Press. Pin 11 to Ground. Pin 12 to Ground (pulsed) when keyless UNLOG to Press. Pin 11 to Ground. Pin 12 to Ground (pulsed) when keyless UNLOG to Press. Pin 13 to Ground. Pin 14 to Ground. Pin 15 to Ground. Pin 15 to Ground. Pin 16 to Ground. Pin 17 to Pin 18. Programming Switch Pin 17 to Pin 18. Programming Switch Pin 18 to Pin 17. Programming Switch Pin 18 to Pin 17. Programming Switch Pin 18 to Pin 18. Programming Switch Pin 18. Programming Switch Pin 19. Programming Switch Pin 19. Programming Switch	5	Pink/White	Unlock All Doors	Pin 5 to Ground.	 Continuity to Ground (pulsed) when driver's unlock switch is in the UNLOCK position or if keyless UNLOCK function is active
Pin 7 to Ground. Pin 7 to Ground. Approximately 12 VDC (pulsed) when driver's unlock pressed.	6	Pink/White	Unlock Detect	Pin 6 to Ground.	Approximately 12 VDC at rest. Continuity to Ground (pulsed) when driver's unlock switch is in the UNLOCK position or if keyless UNLOCK function is active (2nd UNLOCK press).
Approximately 0 VDC at rest. Approximately 12 VDC. Tail Light Flash Pin 11 to Ground. No Wire N/A Pin 12 to Ground. No Wire N/A Programming Switch Pin 18 to Pin 18. Black/Orange Programming Switch Pin 18 to Pin 17. No Wire N/A	7	Blue/White	Driver's Unlock Motor ECU Side	Pin 7 to Ground.	 Approximately 12 VDC (pulsed) when driver's unlock switch is
Approximately 12 VDC at rest.	8	White		Pin 8 to Ground	tion is activated (first UNLOCK press).
10 Green/Red Horn Chirp / Panic Pin 10 to Ground. Continuity to Ground (pulsed) when horn pad is press honking.	9	Orange/White	Active Out	Pin 9 to Ground.	Always 12 VDC.
11 White Tail Light Flash Pin 11 to Ground. 12 No Wire N/A	10	Green/Red	Horn Chirp / Panic	Pin 10 to Ground.	 Continuity to Ground (pulsed) when horn pad is pressed /
13 Red Battery Pin 13 to Ground. 14 Black Ground Pin 14 to Ground. 15 Yellow Ignition Pin 15 to Ground. 16 No Wire N/A N/A 17 Gray Programming Switch Pin 18 to Pin 17. 18 Black/Orange Programming Switch Pin 18 to Pin 17. 19 No Wire N/A N/A 19 No Wire N/A N/A 20 No Wire N/A N/A 21 Pink Lock Pin 21 to Ground. 23 Blue Headlight Pin 13 to Ground. Pin 13 to Ground. Pin 14 to Ground. Pin 15 to Ground. Pin 15 to Ground. Pin 15 to Ground. Pin 15 to Ground. Pin 16 Ground. Pin 17 to Pin 18. Pin 17 to Pin 18. Pin 18 to Pin 17. Always continuity to Ground when programming switch is in the position. Approximately 12 VDC at rest. Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. Pin 23 to Ground. Pin 23 to Ground. Pin 23 to Ground. Pin 23 to Ground. Papproximately 12 VDC at rest. Continuity to Ground for 30 seconds after LOCK or Ut operation performed on keyless system. Continuity to Ground when Head Light Hi-Beam FLAS	11	White	Tail Light Flash	Pin 11 to Ground.	Continuity to Ground (pulsed) when keyless is active Continuity to Ground (solid) tail lights are switched to ON at
14 Black Ground Pin 14 to Ground. 15 Yellow Ignition Pin 15 to Ground. 16 No Wire N/A N/A N/A 17 Gray Programming Switch Pin 17 to Pin 18. 18 Black/Orange Programming Switch Pin 18 to Pin 17. 19 No Wire N/A N/A N/A 10 No Wire N/A N/A N/A 11 Pink Lock Pin 21 to Ground. 21 Pink Lock Pin 21 to Ground. 22 No Wire N/A N/A N/A Blue Headlight Pin 23 to Ground. 4 Always continuity less than 1 ohm. 5 Approximately 12 VDC when the key is turned to the Continuity to Ground when key is turned OFF. 6 Continuity to Ground when programming switch is in the position. 8 Always continuity to Ground when programming switch is in the position. 9 Approximately 12 VDC at rest. 10 Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. 11 Approximately 12 VDC at rest. 12 Continuity to Ground or 30 seconds after LOCK or Unoperation performed on keyless system. 12 Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. 13 Approximately 12 VDC at rest. 14 Continuity to Ground for 30 seconds after LOCK or Unoperation performed on keyless system. 15 Yellow Ignition 1 Approximately 12 VDC at rest. 16 Continuity to Ground when Head Light Hi-Beam FLAS	12	No Wire	N/A	N/A	N/A
15 Yellow Ignition Pin 15 to Ground. 16 No Wire N/A N/A N/A 17 Gray Programming Switch Pin 17 to Pin 18. 18 Black/Orange Programming Switch Pin 18 to Pin 17. 19 No Wire N/A N/A N/A 19 No Wire N/A N/A N/A N/A 20 No Wire N/A N/A N/A N/A 21 Pink Lock Pin 21 to Ground. 22 No Wire N/A	13	Red	Battery	Pin 13 to Ground.	Approximately 12 VDC.
15 Yellow	14	Black	Ground	Pin 14 to Ground.	Always continuity less than 1 ohm.
Programming Switch Pin 17 to Pin 18. Pin 17 to Pin 18. Pin 17 to Pin 18. Pin 18 to Pin 17. Always continuity to Ground when programming switch is in to position. Always continuity to Ground. Always continuity to Ground. Pin 18 to Pin 17. Always continuity to Ground. N/A N/A N/A Pin 18 to Pin 17. Always continuity to Ground. N/A N/A N/A Pin 20 No Wire N/A N/A Pin 21 to Ground. Pin 21 to Ground. Approximately 12 VDC at rest. Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. N/A Approximately 12 VDC at rest. Continuity to Ground for 30 seconds after LOCK or Ut operation performed on keyless system. Continuity to Ground when Head Light Hi-Beam FLAS	15	Yellow	Ignition	Pin 15 to Ground.	position.
17 Gray Programming Switch Pin 17 to Pin 18. 18 Black/Orange Programming Switch Pin 18 to Pin 17. 19 No Wire N/A N/A N/A 20 No Wire N/A N/A N/A 21 Pink Lock Pin 21 to Ground. 22 No Wire N/A N/A N/A Blue Headlight Pin 23 to Ground. Pin 17 to Pin 18. Pin 18 to Pin 17. Always continuity to Ground. Always continuity to Ground. Approximately 12 VDC at rest. Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. Approximately 12 VDC at rest. Continuity to Ground for 30 seconds after LOCK or UI operation performed on keyless system. Continuity to Ground when Head Light Hi-Beam FLAS	16	No Wire	N/A	N/A	N/A
19 No Wire N/A N/A N/A N/A 20 No Wire N/A N/A N/A 21 Pink Lock Pin 21 to Ground. 22 No Wire N/A N/A N/A N/A Pin 21 to Ground. N/A Approximately 12 VDC at rest. Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. N/A N/A Approximately 12 VDC at rest. Continuity to Ground for 30 seconds after LOCK or UI operation performed on keyless system. Continuity to Ground for 30 seconds after LOCK or UI operation performed on keyless system. Continuity to Ground when Head Light Hi-Beam FLAS	17	Gray	Programming Switch	Pin 17 to Pin 18.	 No Continuity to Ground when programming switch is in the
20 No Wire N/A N/A N/A 21 Pink Lock Pin 21 to Ground. 22 No Wire N/A N/A Blue Headlight Pin 23 to Ground. N/A N/A Approximately 12 VDC at rest. Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. N/A N/A Approximately 12 VDC at rest. Continuity to Ground for 30 seconds after LOCK or UI operation performed on keyless system. Continuity to Ground when Head Light Hi-Beam FLAS	18	Black/Orange	Programming Switch	Pin 18 to Pin 17.	Always continuity to Ground.
21 Pink Lock Pin 21 to Ground. • Approximately 12 VDC at rest. • Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. 22 No Wire N/A N/A N/A • Approximately 12 VDC at rest. • Continuity to Ground for 30 seconds after LOCK or UI operation performed on keyless system. • Continuity to Ground when Head Light Hi-Beam FLAS	19	No Wire	N/A	N/A	N/A
21 Pink Lock Pin 21 to Ground. • Continuity to Ground when driver's lock switch is in the position or if keyless LOCK function is active. 22 No Wire N/A N/A N/A • Approximately 12 VDC at rest. • Continuity to Ground for 30 seconds after LOCK or UI operation performed on keyless system. • Continuity to Ground when Head Light Hi-Beam FLAS	20	No Wire	N/A	N/A	N/A
Blue Headlight Pin 23 to Ground. Approximately 12 VDC at rest. Continuity to Ground for 30 seconds after LOCK or UI operation performed on keyless system. Continuity to Ground when Head Light Hi-Beam FLAS	21	Pink	Lock	Pin 21 to Ground.	 Continuity to Ground when driver's lock switch is in the LOCK
23 Blue Headlight Pin 23 to Ground. • Continuity to Ground for 30 seconds after LOCK or UI operation performed on keyless system. • Continuity to Ground when Head Light Hi-Beam FLAS	22	No Wire	N/A	N/A	N/A
	23	Blue	Headlight	Pin 23 to Ground.	Continuity to Ground for 30 seconds after LOCK or UNLOCK operation performed on keyless system. Continuity to Ground when Head Light Hi-Beam FLASH is
24 No Wire N/A N/A	24	No Wire	N/A	N/A	N/A

PROGRAMMING NEW or REPLACEMENT TRANSMITTERS TO THE SECURITY MODULE:

IMPORTANT NOTE: Once you enter the programming mode, if 30 seconds elapse with no activity on the system, the programming mode will be terminated. If this happens, simply start over.

STEP 1

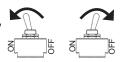
To get started, disarm the module by first locating the silver toggle switch in the driver's kick panel.



1. Insert the key into the ignition key cylinder and turn to the ON position



3. Flip the toggle switch ON, then OFF.

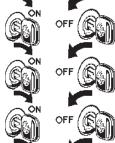


4. Turn the ignition key to the OFF position



STEP 2

Turn the vehicle's ignition key ON then OFF 7 times at 1 second intervals.....



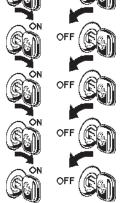






....Ending in the OFF position.

The vehicle will respond by sounding the horn in a SHORT-LONG pattern to confirm you have entered programming mode.



STEP 3

Press the Lock button on the transmitter. The horn will chirp to confirm it has learned the transmitter.

STEP 4

Repeat Step 3 for all transmitters that you need to program to operate the vehicle.

(Maximum of 4 transmitters per vehicle)

STEP 5

When all transmitters have been programmed, turn the ignition key ON then OFF to exit the program mode.





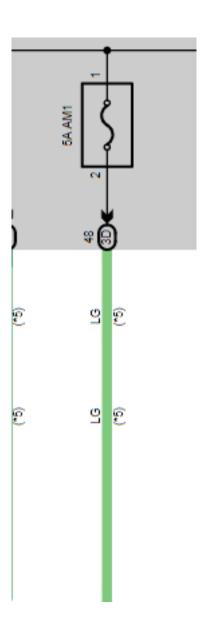
The vehicle will respond by sounding the horn in a SHORT-SHORT-LONG pattern to confirm programming mode has been termindated.

The programming mode will automatically terminate after 30 seconds of inactivity. This will be confirmed by the horn sounding a SHORT-SHORT-LONG pattern. If this happens, start over at step 1 to program transmitters.

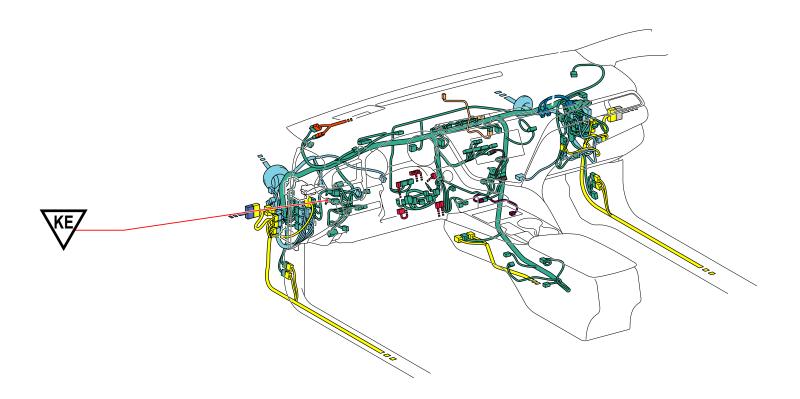
Vehicle Connector E4 Constant +12 VDC

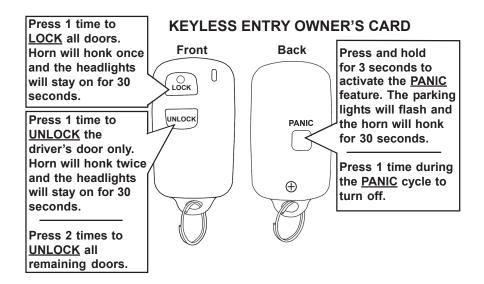


Vehicle Connector E4 Ignition

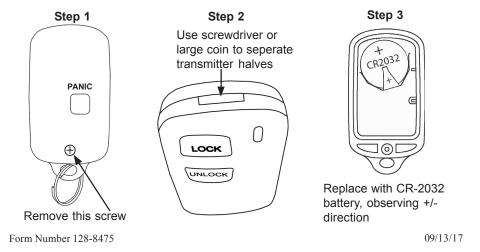


Ground Point KE Ground





HOW TO REPLACE THE TRANSMITTER BATTERY



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LIMITED WARRANTY - SOUTHEAST TOYOTA

SOUTHEAST TOYOTA DISTRIBUTORS, LLC ("we," "our" and "us") provides the following limited warranty on our accessories, excluding tires, ("Accessories" or "Accessory") installed on a Toyota. This limited warranty is not provided by and does not bind or provide benefit to the vehicle dealer, the manufacturer, or Toyota Motor Sales, U.S.A., Inc. This limited warranty does not apply to tires; please consult the tire manufacturer and/or its materials accompanying the vehicle for any warranty terms concerning tires. This limited warranty also does not apply to ToyoGuard Exterior Paint Sealant and ToyoGuard Interior Protector; please consult the ToyoGuard Limited Warranty Certificate for the warranty terms concerning those products.

SCOPE OF LIMITED WARRANTY:

A. Protection:

- i. Accessories Installed by Southeast Toyota Distributors, LLC on a new Toyota vehicle. We warrant that, for a period of 36 months or 36,000 miles, whichever occurs first, we will repair or replace (includes labor), free of charge, any defect in such an Accessory due to faulty material or workmanship, or, at our option, provide a full refund of the purchase price of the Accessory. The warranty period begins on the vehicle's In-Service Date, which is the first date the new vehicle is either delivered to an ultimate purchaser, leased, or used as a company car or demonstrator. Accessories installed by Southeast Toyota Distributors, LLC are identified on the vehicle's window sticker (Monroney Label).
- ii. Accessories Installed by a Toyota Dealer on a Toyota vehicle. We warrant that, for 12 months, regardless of mileage, from the date such an Accessory was installed on the vehicle or the remainder of the Toyota new vehicle warranty, whichever is longer, we will repair or replace (includes labor), free of charge, any defect in the Accessory due to faulty material or workmanship, or, at our option, provide a full refund of the purchase price of the Accessory. For a new vehicle, the warranty period begins on the vehicle's In-Service Date, which is the first date the new vehicle is either delivered to an ultimate purchaser, leased, or used as a company car or demonstrator.
- iii. Accessories purchased from a Toyota Dealer but not installed by the Toyota Dealer. We warrant that, for a period of 12 months, regardless of mileage, from the date the accessory was purchased, we will repair or replace (does not include labor), free of charge, any defect in the Accessory due to faulty material or workmanship, or, at our option, provide a full refund of the purchase price of the Accessory.
- B. Limitation of Warranty. This limited warranty does not apply to, and we will not repair, replace, or reimburse you for: (1) wheel balancing and wheel alignments, except for one wheel balancing or alignment during the first 12 months or 12,000 miles, whichever occurs first, from the vehicle's In-Service Date, as defined above, (2) abrasions or dents, whatever their cause, and any failure or damage resulting directly or indirectly from accidents, collisions, impacts from foreign objects, fire, theft, larceny, explosion, malicious mischief, vandalism, civil commotion, riots, war, or any other similar causes, (3) any failure or damage resulting directly or indirectly from lightning, windstorms, hail, water, floods, subfreezing temperatures, airborne chemicals, tree sap, dust, salt, and any other environmental conditions or similar causes, (4) any failure or damage caused by: (a) a failure of any part, other than the Accessory, (b) any misuse, abuse, improper towing, negligence or lack of maintenance of the vehicle or Accessory, (c) the alteration, modification or repair of the Accessory by anyone other than persons expressly authorized by us to perform such alteration, modification or repair, or (d) the use of the vehicle for commercial purposes, competitive driving or racing, (5) any failure or damage, if the Accessory has not been installed according to instructions, (6) any failure or damage occurring outside of Canada, the United States of America, its territories or possessions, (7) except to the extent required by the state whose laws govern this limited warranty, any consequential, secondary, or unreasonable costs that may be suffered as a result of the need to repair or replace the Accessory, including without limitation any loss of use of the vehicle, road service, towing, storage charges, inconvenience, loss of wages and/or income, additional expense incurred, loss of transportation, rental car expense, or any derivative damage to persons or things other than the Accessory, including other parts of the
- C. Exclusive Remedy. If there is a valid claim under this limited warranty for a defect due to faulty material or workmanship in the Accessory, we will, at our option, either: (i) repair, (ii) replace or (iii) provide a full refund of the purchase price of the Accessory. We have no other obligations under this limited warranty. Refunds will be made to the vehicle owner. If the vehicle is leased, the refund will be made to the leasing company.

HOW TO MAKE A CLAIM: In the event of a warranty claim, please contact the nearest Toyota dealer to arrange for repairs. The dealership must receive our prior authorization before making repairs covered by this limited warranty. The dealer will contact Southeast Toyota Distributors, LLC at 1-888-851-2722, select option #5 (Warranty Department), then option #4 (Repairs), for instructions on processing a warranty claim, if they are not already familiar with the process. If you have any questions or concerns regarding repairs covered by this limited warranty, please contact our Customer Assistance Hotline at 1-800-301-6859.

OUR DISPUTE RESOLUTION PROGRAM: Your satisfaction is our highest priority. In keeping with that focus, in the event that an issue arises related to this Limited Warranty, we invite you to call our Customer Assistance Hotline at 1-800-301-6859 to discuss it. In most cases, we expect that a satisfactory resolution of your issue can be reached through engagement with that Department. If our Customer Loyalty Department is unable to resolve your issue to your satisfaction, we offer a dispute resolution program administered by the National Center for Dispute Settlement (NCDS) ("the Program"). The purpose of the Program is to resolve disputes in an informal setting before an impartial arbitrator. The Program is free of charge to you (although you must bear the cost of any expert witness or attorney you elect to employ). You are required to complete the Program before exercising rights or seeking remedies under the federal Magnuson-Moss Warranty Act, 15 U.S.C. § 2301 et seg. ("the Act"). If you choose to seek remedies that are not created by the Act, you are not required to use the Program before pursuing such remedies - although the Program is still available to you to resolve the dispute. When utilizing the Program, you will need to provide (a) the vehicle identification number of your vehicle, (b) the identity of your selling and servicing dealerships, (c) the mileage on your vehicle at relevant times, (d) the date and nature of any relevant repairs, (e) legible copies of repair orders and other relevant documents, (f) a summary of the unresolved issue and the requested action, and (g) your contact information. In most cases, the dispute resolution process under the Program will be completed within forty (40) days of your submission of your request and will consist of steps such as an initial eligibility determination, an opportunity for you and us to submit information in writing relating to your claim, an oral hearing, and a decision from the arbitrator. A decision will be binding on you only if you choose to accept it. You may submit a request to NCDS by telephone at their toll free number: (877)-276-8848 or in writing at P.O. Box 463196, Mt. Clemens, MI 48046. You may obtain additional information regarding the Program at www.ncdsusa.org. In the event that the NCDS does not exist or no longer handles disputes for us at the time that you seek to submit a request, you may contact our Customer Assistance Hotline at 1-800-301-6859 to obtain current information about our dispute resolution programs.

Rev. 12/01/16

GENERAL LIMITATION OF WARRANTY: THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES OR LIABILITIES. IN NO EVENT SHALL WE BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY. SOME STATES DO NOT ALLOW THE EXCLUSIONS OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE INFORMATION OR EXCLUSION MAY NOT APPLY. NO EXPRESS WARRANTY OF FITNESS OR MERCHANTABILITY IS GRANTED BY THIS LIMITED WARRANTY. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THOSE DESCRIBED IN THIS DOCUMENT. ANY IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. WHICH MAY BE APPLICABLE BY OPERATION OF LAW SHALL BE LIMITED TO THE PERIOD OF THIS WRITTEN LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS MAY NOT APPLY. THIS LIMITED WARRANTY PROVIDES SPECIFIC LEGAL RIGHTS, AND THERE MAY BE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. ANY ACTION FOR BREACH OF ANY WARRANTY HEREUNDER, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, MUST BE BROUGHT WITH IN A PERIOD NOT EXCEEDING 12 MONTHS AFTER EXPIRATION OF THIS LIMITED WARRANTY. THE REMEDIES SPECIFIED HEREIN AND THOSE SPECIFIED BY APPLICABLE LAW ARE THE ONLY REMEDIES AVAILABLE. WE ASSUME NO OTHER OBLIGATION OR RESPONSIBILITY WITH REGARD TO THE ACCESSORY. WE NEITHER ASSUME, NOR AUTHORIZE ANYONE TO ASSUME FOR US, ANY ADDITIONAL LIABILITY IN CONNECTION HEREWITH. GENERAL: This limited warranty describes the complete and exclusive rights that result from the purchase of Accessories. No oral representations or statements may be relied upon. This limited warranty may not be amended or modified, and additional rights may not be granted, unless in a written statement signed by one of our officers. This limited warranty shall be governed by the laws of the state where the vehicle is purchased, excluding laws concerning conflicts of law. We may delegate the performance of our duties and obligations and assign our rights and benefits hereunder. For inquiries regarding this limited warranty, we can be contacted directly at Customer Assistance Hotline at 1-800-301-6859, or by mail to: Southeast Toyota Distributors, LLC, Attention: Customer Loyalty Department, 100 Jim Moran Boulevard, Deerfield Beach, Florida 33442. Rev. 12/01/16