FUJITSU TEN

FaxBack Document Retrieval System for TVIP Installation Instructions, Owner's Guides, etc.

Thank you for using the Fujitsu Ten FaxBack document retrieval system! This system is configured to send no more than four faxes per month to a particular phone number. If you need technical assistance, please call (800) 237-5413 and ask for TVIP technical assistance.

TOYOTA VIP))) — VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

Troubleshooting information for each system starts with the pin-outs for the ECU, then is followed by the complaint, cause and check sections.

1. RS3200
   - Camry
   - Celica
   - Echo
   - Rav4
   - Corolla

2. RS3200 PLUS
   - Avalon
   - Camry
   - Solara
   - Highlander
   - Sienna
   - Corolla
   - Celica
   - 4Runner

3. GBS
   - Avalon
   - Camry
   - Land Cruiser
   - Sequoia
   - Prius
   - Highlander

4. Remote Keyless Entry (RKE)
   - Tundra
   - Tacoma
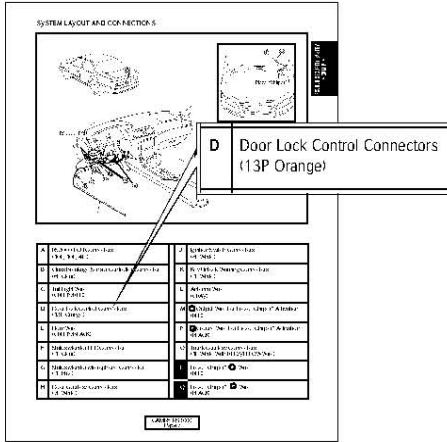   - MR2-Spyder

5. RS3200 PLUS for RKE Upgrade
   - MR2-Spyder
   - Tacoma
   - Tundra

2003 MODEL YEAR PART NUMBER LIST

VEHICLE MODEL	RS3200	RS3200 PLUS	GBS KIT	RS3200PLUS for RKE Upgrade
Avalon	N/A	08586-41880	08586-41870	N/A
Camry	08586-3T920	08586-3T860	08586-3T870	N/A
Celica	08586-2D860	08586-2D870	N/A	N/A
Corolla	08586-02860	08586-02850	N/A	N/A
Echo	08586-52950	N/A	N/A	N/A
Highlander	N/A	08586-48010	08586-48020	N/A
Land Cruiser	N/A	N/A	08586-6C820	N/A
MR2-Spyder	N/A	N/A	N/A	08586-17950
Prius	N/A	N/A	08192-47010-AA	N/A
Rav4	08586-4A870	08586-4A840	N/A	N/A
Sequoia	N/A	N/A	08586-0C860	N/A
Sienna	N/A	08586-08881	N/A	N/A
Solara	N/A	08586-06950	N/A	N/A
Tacoma	N/A	N/A	N/A	08586-04820
Tundra	N/A	N/A	N/A	08586-0C830
4Runner	N/A	08586-3D870	N/A	N/A

TOYOTA

VIP

VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

SYSTEM LAYOUT AND CONNECTIONS

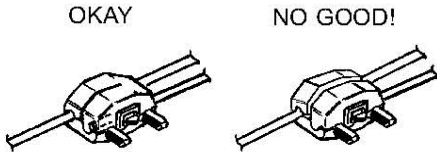| D | Door Lock Control Connectors (13P Orange) |

THE BASICS

Refer to the installation instructions. Splice location and connector location information is listed in the installation instructions and will help speed your search. Also, circuit information (what's controlled by the system, etc.) is listed here.
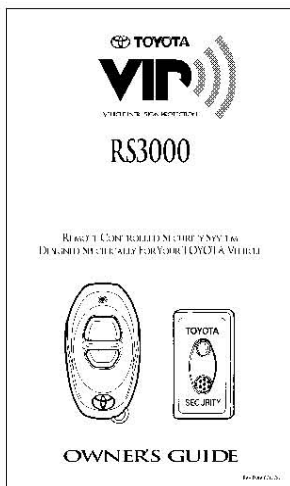
OKAY   NO GOOD!

Check the spliced connections. Many problems can be traced back to the splice connections. Verify the splice locations and make sure the splice connectors are closed securely on the wires
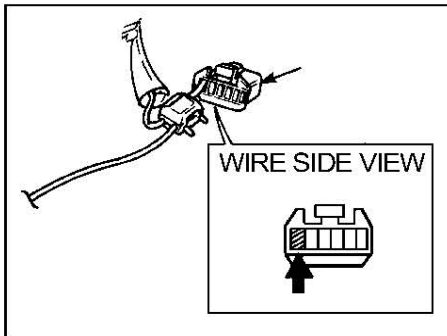
WIRE SIDE VIEW

Wire side view. Although this description is used in every manual, many people seem to overlook it. Simply put, when counting spaces on the connector to locate the correct wire for splicing, turn the connector so the wires face you.

Count spaces, not wires. Because a mid-grade vehicle may not have the same wires as a low-grade vehicle, the instructions call out wire locations as a number of spaces from the left or right.
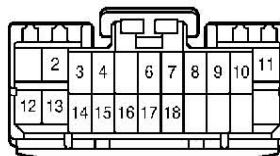
TOYOTA

VIP

VEHICLE INTRUSION PROTECTION

RS3000

REMOTE CONTROLLED SECURITY SYSTEM
DESIGNED SPECIFICALLY FOR YOUR TOYOTA VEHICLE

TOYOTA

SECURITY

OWNER'S GUIDE

Refer to the owner's guide. Become familiar with the system and know the ins and outs of its operation. Some "problems" arise from the customer not understanding how the system operates, or in some cases, the customer may have accidentally programmed the system for unintended operation. All programming information is located in the owner's guides.

TOYOTA
VIP)))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200 CAMRY/ CELICA/ RAV4/ ECHO/ COROLLA SECURITY SYSTEM

CONNECTOR 1	CIRCUIT	MEASUREMENT
1	N/C	
2 - Ground	Trunk Courtesy Input	Continuity at all times.
3 - Ground	Rear Door Courtesy Input	Approx. 12V when rear door closed, continuity when open (switch closed).
4 - Ground	Driver Door Courtesy Input	Approx. 12V when driver s door closed, continuity when open (switch closed).
5 - Ground	Passenger Door Courtesy Input	Approx. 12V when passenger s door closed, continuity when open (switch closed).
6 - Ground	Key Unlock Warning Input	Continuity when key is in the ignition switch
7 - Ground	Trunk Key Input	Continuity at all times.
8 - Ground	Door Key Lock Input	Continuity when door locked by key
9 - Ground	Driver Door Unlock Input	Continuity when door unlocked by driver s key
10 - Ground	Passenger Door Key Unlock Input	Continuity when door unlocked by passenger s key
11 - Ground	+B Power (Dome)	Always approx. 12V
12 - Ground	Antenna	
13 - Ground	IG Input	Approx. 12V when ignition switch is in ON position
14 - Ground	Driver Door Position Input	0V during driver door knob unlocked
15 - Ground	Passenger Door Position Input	0V during passenger door knob unlocked
16 - Ground	Rear Door Position Input	0V during rear door knob unlocked
17 - Ground	G.B.S. (Microphone) Ground	Continuity.
18 - Ground	G.B.S. (Microphone) Signal	0V pulsed when window hit.
19	N/C	
20	N/C	
21	N/C	
22	N/C	

CONNECTOR 1

TOYOTA
VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

RS3200 CAMRY/ CELICA/ RAV4/ ECHO/ COROLLA SECURITY SYSTEM

CONNECTOR 2	CIRCUIT	MEASUREMENT
1 - Ground	SUB +B Power (Door)	Always Approx. 12V
2 - Ground	Piezo + Output	Approx. 12V when Piezo Chirper is active
3	N/C	
4 - Ground	Door Unlock Output	0V (pulsed) upon remote disarming (unlocking)
5	N/C	
6 - Ground	Status Monitor LED Output	Approx. 1.8V when LED on, 0V when LED off
7 - Ground	ECU Ground	Continuity
8	N/C	
9	N/C	
10 - Ground	Head Light Output	0V (Pulsed) for Head Light activation during triggering
11 - Ground	Tail Light Output	0V (Pulsed) for exterior light activation
12 - Ground	Horn Output	0V (Pulsed) for Horn activation during triggering

CONNECTOR 3	CIRCUIT	MEASUREMENT
1	N/C	
2 - Ground	Door Lock Motor Output	Approx. 12V when Driver s door unlocked
3 - Ground	Starter Cut Input	Approx. 12V when ignition switch at ST position, 0V during triggering
4 - Ground	Door Lock Motor Output	Approx. 12V when Driver s door unlocked
5	N/C	
6 - Ground	Dome Light Output	Continuity during interior light activation after disarming
7	N/C	
8 - Ground	Starter Cut Output	Approx. 12V when ignition switch is in ON position

CONNECTOR 2

CONNECTOR 3

TOYOTA
VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

RS3200 SECURITY SYSTEM

Complaint: System Inoperative (No Remote Arming/Disarming)

Common causes for this complaint:

Mis-spliced Key Unlock Warning wire, mis-spliced door courtesy wire, connectors not plugged in securely, fuse or shorting pin not installed in vehicle, blown fuse in vehicle, blown fuse in RS3200 harness (does not apply to all vehicles), weak or dead battery in remote, remote programmed improperly (see KNOWN ISSUES page), remote not programmed

What to Ask and Verify		What to Check
Does the door ajar warning sound when remote arming is attempted?	Yes	Check and correct any courtesy (door, trunk, etc.) circuit wire s splice location (does not apply to all vehicles.) Check and correct for pinched wires
	No	Check for panic mode operation.
Does the panic mode operation work?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles.) Verify the splice connector was applied properly. Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary. Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output). Check the automatic door locking/unlocking function.
Does the automatic door locking/unlocking function of the RS3200 work?	Yes	Check and correct the key unlock warning wire splice location (does not apply to all vehicles). Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Check the RS3200 harness ECU connector 3 at pin 11 for constant +12V; if no voltage, check the RS3200 harness for a blown fuse, then the vehicle s dome or door fuse. Check the RS3200 ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY. Check the vehicle s door lock function
Do the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles). Verify the splice connector was applied properly. Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Confirm the door lock control connectors are plugged in securely. Disconnect the RS3200 harness Door Lock Control connectors and reconnect the vehicle s connectors, then try again. If there is no function, there is probably a problem with one vehicle s components.

TOYOTA
VIP
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200 SECURITY SYSTEM

Complaint: Remote Control Has Short Range

Common causes for this complaint:

The system s performance does not meet the customer s expectations, weak or dead battery in the remote control, the RS3200 harness ECU connector 3 is not plugged in securely

What to Ask and Verify		What to Check
Does the remote control operate the system consistently from 15 feet or further?	Yes	There may be no problem. The customer may expect a 50 foot operating range; the owner s guide states *up to* 50 feet remote control range. Check the remote control performance by walking in circles around the vehicle. Typically, you will find the performance is better at some angles than others, and that objects between you and the vehicle will also affect the range; you may need to demonstrate this to the customer. *Changing the ECU will not help to improve the range in most cases!*
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary. Verify the RS3200 harness ECU connector 3 is plugged in securely and that there is continuity between the tip of the antenna wire and pin 1 of connector 3.
Has the operation been consistent prior to the problem?	Yes	Check the remote control for signs of liquid damage. Although the remotes are water resistant, they usually do not do well going through a washing machine. If damaged, replace the remote. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary.

TOYOTA
VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200 SECURITY SYSTEM

Complaint: No Head Light Function

Common causes for this complaint:
Mis-spliced head lamp wire, connectors not plugged in securely, blown head lamp fuse.

What to Ask and Verify		What to Check
Does the Head light switch in the vehicle work?	Yes	Check and correct the head lamp wire's splice location (applies to most vehicles). Verify the splice connector was applied correctly. Check for continuity between the RS3200 ECU connector and the head lamp circuit connection.
	No	Check the vehicle's head lamp fuse and replace if necessary. Confirm that the combination switch connector for the head lamp is plugged in securely.
Is there continuity between pin 10 of the RS3200 harness ECU connector 2 and the head lamp circuit?	Yes	Activate the panic mode and check pin 10 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the Remote Keyless Entry ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a ware harness problem. Fix as necessary.

TOYOTA

VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200 SECURITY SYSTEM

Complaint: Remote Control Inoperative

Common causes for this complaint:

Mis-connected Key Unlock Warning wire, weak or dead battery in remote, remote programmed improperly, remote not programmed, connectors not plugged in securely.

What to Ask and Verify		What to Check
Does the panic mode operation work?	Yes	Check and correct the key unlock warning connector location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
		Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary.
		Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
		Check the automatic door locking/unlocking function.
Does the automatic door locking/unlocking function of the RS3200 work?	Yes	Check and correct the key unlock warning connector location (does not apply to all vehicles).
		Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Check the RS3200 harness ECU connector 1 at pin 11 for constant +12V; if no voltage, check the RS3200 harness for a blown fuse, then the vehicle s dome or door fuse.
		Check the vehicle s door lock function.
Does the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning connector location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
		Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Confirm the door lock control connectors are plugged in securely.

TOYOTA

VIP **TROUBLESHOOTING INFORMATION**

VEHICLE INTRUSION PROTECTION

RS3200 SECURITY SYSTEM

Complaint: No Piezo Chirper Function		
Common causes for this complaint:		
Piezo function defeated, mis-spliced Piezo Chirper wires		
What to Ask and Verify		**What to Check**
Does the Piezo Chirper work for the Door Ajar Warning function?	Yes	Refer to the owner s guide programming section and reprogram the system.
	No	Verify the splice connectors were applied properly. If they were, check for voltage at the RS3200 harness ECU connector 1 pin 4 during the door ajar warning.
Is there +12V at pin 2 of the RS3200 harness ECU connector 2 during the door ajar warning?	Yes	Check for continuity between connector 2, pin 2 and the Piezo Chirper + output wire. If no continuity, check and fix the RS3200 harness. If there is continuity there, check for continuity between the RS3200 harness Piezo Chirper ground wire and ground pin 7 of connector 2; if no continuity check and fix the RS3200 harness. If there is continuity for both wires, replace the Piezo Chirper .
	No	Check the RS3200 ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY.

RS3200 SECURITY SYSTEM

Complaint: No Tail Light Or Marker Light Operation		
Common causes for this complaint:		
Mis-spliced Tail Light wire, connectors not plugged in securely, blown fuse		
What to Ask and Verify		**What to Check**
Do the vehicle s tail lights work ?	Yes	Check and correct the tail light wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Verify the RS3200 harness tail light circuit connectors are plugged in securely. Check for continuity between the RS3200 ECU connector and the tail light circuit connection.
	No	Confirm that the vehicle s connector for the tail light circuit is plugged in securely. Disconnect the the RS3200 harness tail light circuit connectors and reconnect the vehicle s connectors, then check the tail light function again. If they work, check the RS3200 harness. If not, the problem is vehicle-related. (applies to some vehicles)
Is there continuity between pin 11 of the RS3200 harness ECU connector 1 and the tail light circuit connection? (usually a spliced GREEN/RED wire, but may be jumper connectors)	Yes	Activate the panic mode and check pin 11 for pulsed continuity to ground. If there is continuity, check the RS3200 ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	Check and fix the RS3200 harness.

TOYOTA
VIP))))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200 SECURITY SYSTEM

Complaint: No Horn Function

Common causes for this complaint:

Mis-spliced Horn wire, connectors not plugged in securely, blown horn fuse

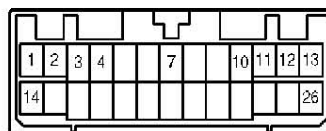| What to Ask and Verify		What to Check
Does the horn switch in the vehicle work?	Yes	Check and correct the horn wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Check for continuity between the RS3200 ECU connector and the horn circuit connection.
	No	Check the vehicle s horn fuse and replace if necessary. Confirm that the combination switch connector for the horn circuit is plugged in securely.
Is there continuity between pin 12 of the RS3200 harness ECU connector 2 and the horn circuit connection? (Usually a spliced GREEN/BLACK wire)	Yes	Activate the panic mode and check pin 12 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the RS3200 ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a wire harness problem. Fix as necessary.

RS3200 SECURITY SYSTEM

Complaint: LED Inoperative (No blinking, No turning on)

Common causes for this complaint:

Mis-spliced LED wire, mis-spliced door courtesy wire, connectors not plugged in securely.

What to Ask and Verify		What to Check
Does the LED turn on when remote arming is attempted?	Yes	No problem.
	No	Check the trunk key switch was installed properly. If not correct, LED may not turn on. Verify the splice connector was applied properly.
Does the LED blink during arming?	Yes	No problem.
	No	Check the trunk key switch was installed properly. If not correct, LED may not turn on. Verify the splice connector was applied properly.

TOYOTA
VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS AVALON/ CAMRY/ HIGHLANDER SECURITY SYSTEM

CONNECTOR1	CIRCUIT	MEASUREMENT
1 - Ground	SUB +B Power (Dome)	Always Approx. 12V
2 - Ground	+B Power (Dome)	Always Approx. 12V
3	Trunk Key Input	Continuity when key turned to open
4 - Ground	Key Unlock Warning Input	Continuity when key is in the ignition switch
5	N/C	
6 - Ground		
7 - Ground	GBS Input	0V (Pulsed) when window hit
8 - Ground	N/C	
9 - Ground	N/C	
10	MPX signal	
11 - Ground	ECU Ground	Continuity
12 - Ground	LED Output	Approx. 1.8V when LED on, 0V when LED off 0V during triggering
13 - Ground	Starter Cut Input	Approx. 12V when ignition switch at ST position, 0V during triggering
14 - Ground	IG Input	Approx. 12V when ignition switch is in ON position
15	N/C	
16	N/C	
17	N/C	
18	N/C	
19	N/C	
20	N/C	
21	N/C	
22	N/C	
23	N/C	
24	N/C	
25	N/C	
26 - Ground	Starter Cut Output	Approx. 12V when ignition switch is in ON position

CONNECTOR 1

TOYOTA
VIP
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS AVALON/ CAMRY/ HIGHLANDER SECURITY SYSTEM

Complaint: Remote Control Inoperative

Common causes for this complaint:

Mis-spliced Key Unlock Warning wire, weak or dead battery in remote, remote programmed improperly (see *KNOWN ISSUES* page), remote not programmed, connectors not plugged in securely

What to Ask and Verify		What to Check
Does the panic mode operation work?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
		Clear the remote control codes from the ECU, then reprogram both *(or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary.
		Clear the remote control codes from the ECU, then reprogram both *(or all)* remotes (they may have accidentally been programmed for second channel output).
		Check the automatic door locking/unlocking function.
Do the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
	No	Confirm the door lock control connectors are plugged in securely.

RS3200PLUS AVALON/ CAMRY/ HIGHLANDER SECURITY SYSTEM

Complaint: System Inoperative (No Remote Arming/Disarming)

Common causes for this complaint:

Mis-spliced Key Unlock Warning wire, mis-spliced door courtesy wire, connectors not plugged in securely, fuse or shorting pin not installed in vehicle, blown fuse in vehicle, blown fuse in RS3200PLUS harness (does not apply to all vehicles).

What to Ask and Verify		What to Check
Do the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
	No	Confirm the door lock control connectors are plugged in securely.
		Disconnect the RS3200PLUS harness Door Lock Control connectors and reconnect the vehicle s connectors, then try again. If there is no function, there is probably a problem with one vehicle s components.

TOYOTA

TROUBLESHOOTING
INFORMATION

RS3200PLUS AVALON/ CAMRY/ HIGHLANDER SECURITY SYSTEM

Complaint: No Head Light Function

Common causes for this complaint:

Mis-spliced Head Lamp wire, connectors not plugged in securely, blown Head Lamp fuse

What to Ask and Verify		What to Check
Does the head lamp switch in the vehicle work?	Yes	Check and correct the head light wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Check for continuity between the RS3200PLUS ECU connector and the head lamp circuit connection.
	No	Check the vehicle s head lamp fuse and replace if necessary. Confirm that the combination switch connector for the head lamp circuit is plugged in securely.
Is there continuity between pin 10 of the RS3200PLUS harness ECU connector?	Yes	Activate the panic mode and check pin 10 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a wire harness problem. Fix as necessary.

RS3200PLUS AVALON/ CAMRY/ HIGHLANDER SECURITY SYSTEM

Complaint: No Horn Function

Common causes for this complaint:

Mis-spliced Horn wire, connectors not plugged in securely, blown horn fuse

What to Ask and Verify		What to Check
Does the horn switch in the vehicle work?	Yes	Check and correct the horn wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Check for continuity between the RS3200PLUS ECU connector and the horn circuit connection.
	No	Check the vehicle s horn fuse and replace if necessary. Confirm that the combination switch connector for the horn circuit is plugged in securely.
Is there continuity on pin 10 of the RS3200PLUS harness ECU connector?	Yes	Activate the panic mode and check pin 10 for pulsed continuity to ground. If there is continuity, check fix the wire harness or check BODY ECU signal. Check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a wire harness problem. Fix as necessary.

TOYOTA
VIP
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

RS3200PLUS AVALON/ CAMRY/ HIGHLANDER SECURITY SYSTEM

Complaint: No Tail Light Or Marker Light Operation

Common causes for this complaint:

Mis-spliced Tail Light wire, connectors not plugged in securely, blown fuse

What to Ask and Verify		What to Check
Do the vehicle s tail lights work?	Yes	Check and correct the tail light wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Verify the RS3200PLUS harness tail light circuit connectors are plugged in securely. Check for continuity between the RS3200PLUS ECU connector and the tail light circuit connection.
	No	Confirm that the vehicle s connector for the tail light circuit is plugged in securely. Disconnect the RS3200PLUS harness tail light circuit connectors and reconnect the vehicle s connectors, then check the tail light function again. If they work, check the RS3200PLUS harness. If not, the problem is vehicle-related. (applies to some vehicles)
Is there continuity on pin 10 of the RS3200PLUS harness ECU connector?	Yes	Activate the panic mode and check pin 10 for pulsed continuity to ground. If there is continuity, check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	Check and fix the RS3200PLUS harness.

RS3200PLUS AVALON/ CAMRY/ HIGHLANDER SECURITY SYSTEM

Complaint: LED Inoperative (No blinking, No turning on)

Common causes for this complaint:

Mis-spliced LED wire, mis-spliced door courtesy wire, connectors not plugged in securely.

What to Ask and Verify		What to Check
Does the LED turn on when remote arming is attempted?	Yes	No problem.
	No	Check trunk key switch was installed properly. If not correct, LED may not turn on. Verify the splice connector was applied properly.
Does the LED blink during arming?	Yes	No problem.
	No	Check trunk key switch was installed properly. If not correct, LED may not turn on. Verify the splice connector was applied properly.

TOYOTA

VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS AVALON/ CAMRY/ HIGHLANDER SECURITY SYSTEM

Complaint: System Inoperative (Duplicate Panic Alarm)

Common causes for this complaint:

Mis-connection of Panic signal wire with terminal, mis-spliced panic signal wire, connector not plugged in securely.

What to Ask and Verify		What to Check
Does the duplicate panic mode operation work?	Yes	Check the panic signal wire s splice location. (Does not apply to all vehicles). Verify the splice connector was applied properly. Confirm the panic signal wire with terminal location. Check door lock control connector is plugged in securely.
	No	No problem.

TOYOTA

VIP

VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS SIENNA/CELICA/SOLARA SECURITY SYSTEM

CONNECTOR 1	CIRCUIT	MEASUREMENT
1 - Ground	Rear Door Courtesy Input	Approx. 12V when rear door closed, continuity when open (switch closed).
2 - Ground	Trunk Courtesy Input	Approx. 12V when trunk or tailgate closed, continuity when open (switch closed).
3	N/C	
4 - Ground	Driver Door Courtesy Input	Approx. 12V when driver s door closed, continuity when door open (switch closed).
5	N/C	
6 - Ground	Key Unlock Warning Input	Continuity when key is in the ignition switch
7 - Ground	Trunk Key Input	Continuity when key turned to open
8 - Ground	Door Key Lock Input	Continuity when door locked by key
9 - Ground	Driver Door Key Unlock Input	Continuity when door unlocked by driver s key
10 - Ground	Passenger Door Key Unlock Input	Continuity when door unlocked by passenger s key
11 - Ground	+B Power (Dome)	Always Approx. 12V
12	N/C	
13 - Ground	IG Input	Approx. 12V when ignition switch is in ON position
14 - Ground	Driver Door Position Input	0V during driver door knob unlocked
15 - Ground	Passenger Door Position Input	0V during passenger door knob unlocked
16 - Ground	Rear Door Position Input	0V during rear door knob unlocked
17	N/C	
18	Panic Signal	Approx. 12V after IG off
19 - Ground	GBS Input	0V (Pulsed) when window hit
20	N/C	
21	N/C	
22	N/C	
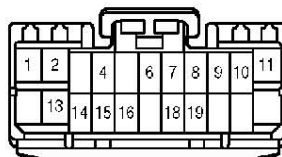
CONNECTOR 1

TOYOTA
VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS SIENNA/CELICA/SOLARA SECURITY SYSTEM

CONNECTOR 2	CIRCUIT	MEASUREMENT
1 - Ground	SUB +B Power (Door)	Always Approx. 12V
2	Hatch Courtesy Output	Approx. 1.8V when hatch closed, continuity when open
3	N/C	
4	N/C	
5 - Ground	Starter Cut Input	Approx. 12V when ignition switch at ST position, 0V during triggering
6 - Ground	LED Output	Approx. 12V when ignition switch is in ON position
7	N/C	
8 - Ground	Starter Cut Output	Approx. 12V when ignition switch is in ON position
9 - Ground	N/C	
10 - Ground	Head Light Output	0V (Pulsed) for Head Light activation during triggering
11 - Ground	Tail Light Output	0V (Pulsed) for exterior light activation
12 - Ground	Horn Output	0V (Pulsed) for Horn activation during triggering

CONNECTOR 2

TOYOTA

VIP

VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS SIENNA/ CELICA/ SOLARA SECURITY SYSTEM

Complaint: Remote Control Inoperative

Common causes for this complaint:

Mis-spliced Key Unlock Warning wire, weak or dead battery in remote, remote programmed improperly (see *KNOWN ISSUES* page), remote not programmed, connectors not plugged in securely

What to Ask and Verify		What to Check
Does the panic mode operation work?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
		Clear the remote control codes from the ECU, then reprogram both *(or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary.
		Clear the remote control codes from the ECU, then reprogram both *(or all)* remotes (they may have accidentally been programmed for second channel output).
		Check the automatic door locking/unlocking function.
Do the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
	No	Confirm the door lock control connectors are plugged in securely.

RS3200PLUS SIENNA/ CELICA/ SOLARA SECURITY SYSTEM

Complaint: System Inoperative (No Remote Arming/Disarming)

Common causes for this complaint:

Mis-spliced Key Unlock Warning wire, mis-spliced door courtesy wire, connectors not plugged in securely, fuse or shorting pin not installed in vehicle, blown fuse in vehicle, blown fuse in RS3200PLUS harness (does not apply to all vehicles).

What to Ask and Verify		What to Check
Do the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
	No	Confirm the door lock control connectors are plugged in securely.
		Disconnect the RS3200PLUS harness Door Lock Control connectors and reconnect the vehicle s connectors, then try again. If there is no function, there is probably a problem with one vehicle s components.

TOYOTA

VIP)))

VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS SIENNA/ CELICA/ SOLARA SECURITY SYSTEM

Complaint: No Head Light Function

Common causes for this complaint:

Mis-spliced Head Lamp wire, connectors not plugged in securely, blown Head Lamp fuse

What to Ask and Verify		What to Check
Does the head lamp switch in the vehicle work?	Yes	Check and correct the head light wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Check for continuity between the RS3200PLUS ECU connector and the head lamp circuit connection.
	No	Check the vehicle s head lamp fuse and replace if necessary. Confirm that the combination switch connector for the head lamp circuit is plugged in securely.
Is there continuity between pin 10 of the RS3200PLUS harness ECU connector 2 and the head lamp circuit connection?	Yes	Activate the panic mode and check pin 10 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a wire harness problem. Fix as necessary.

RS3200PLUS SIENNA/ CELICA/ SOLARA SECURITY SYSTEM

Complaint: No Horn Function

Common causes for this complaint:

Mis-spliced Horn wire, connectors not plugged in securely, blown horn fuse

What to Ask and Verify		What to Check
Does the horn switch in the vehicle work?	Yes	Check and correct the horn wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Check for continuity between the RS3200PLUS ECU connector and the horn circuit connection.
	No	Check the vehicle s horn fuse and replace if necessary. Confirm that the combination switch connector for the horn circuit is plugged in securely.
Is there continuity between pin 12 of the RS3200PLUS harness ECU connector 2 and the horn circuit connection? (usually a spliced GREEN/BLACK wire)	Yes	Activate the panic mode and check pin 12 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a wire harness problem. Fix as necessary.

TOYOTA VIP))) TROUBLESHOOTING INFORMATION

RS3200PLUS SIENNA/ CELICA/ SOLARA SECURITY SYSTEM

Complaint: No Tail Light Or Marker Light Operation

Common causes for this complaint:

Mis-spliced Tail Light wire, connectors not plugged in securely, blown fuse

What to Ask and Verify		What to Check
Do the vehicle s tail lights work?	Yes	Check and correct the tail light wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Verify the RS3200PLUS harness tail light circuit connectors are plugged in securely. Check for continuity between the RS3200PLUS ECU connector and the tail light circuit connection.
	No	Confirm that the vehicle s connector for the tail light circuit is plugged in securely. Disconnect the RS3200PLUS harness tail light circuit connectors and reconnect the vehicle s connectors, then check the tail light function again. If they work, check the RS3200PLUS harness. If not, the problem is vehicle-related. (applies to some vehicles)
Is there continuity between pin 11 of the RS3200PLUS harness ECU connector 2 and the tail light circuit connection? (usually a spliced GREEN/RED wire, but may be jumper connectors)	Yes	Activate the panic mode and check pin 11 for pulsed continuity to ground. If there is continuity, check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	Check and fix the RS3200PLUS harness.

RS3200PLUS SIENNA/ CELICA/ SOLARA SECURITY SYSTEM

Complaint: LED Inoperative (No blinking, No turning on)

Common causes for this complaint:

Mis-spliced LED wire, mis-spliced door courtesy wire, connectors not plugged in securely.

What to Ask and Verify		What to Check
Does the LED turn on when remote arming is attempted?	Yes	No problem.
	No	Check trunk key switch was installed properly. If not correct, LED may not turn on. Verify the splice connector was applied properly.
Does the LED blink during arming?	Yes	No problem.
	No	Check trunk key switch was installed properly. If not correct, LED may not turn on. Verify the splice connector was applied properly.

TOYOTA

VIP)))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS SIENNA/ CELICA/ SOLARA SECURITY SYSTEM

Complaint: System Inoperative (Duplicate Panic Alarm)

Common causes for this complaint:

Mis-connection of Panic signal wire with terminal, mis-spliced panic signal wire, connector not plugged in securely.

What to Ask and Verify		What to Check
Does the duplicate panic mode operation work?	Yes	Check the panic signal wire s splice location. (Does not apply to all vehicles). Verify the splice connector was applied properly. Confirm the panic signal wire with terminal location. Check door lock control connector is plugged in securely.
	No	No problem.

TOYOTA
VIP))

VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

CONNECTOR 1	CIRCUIT	MEASUREMENT
1	N/C	
2 -GROUND	+B Power (Dome)	Always Approx. 12V
3	N/C	
4	N/C	
5 -GROUND	Horn Output	0V (Pulsed) for Horn activation during triggering
6 -GROUND	Head Light Output	0V (Pulsed) for Head Light activation during triggering
7	N/C	
8 -GROUND	Hazard Light Output	0V (Pulsed) for Hazard Light activation during triggering
9 -GROUND	Dome Light Output	Continuity during interior light activation during triggering
10 -GROUND	IG Input	Approx. 12V when ignition switch is in ON position
11 -GROUND	G.B.S Input	0V (Pulsed) when window hit
12 -GROUND	Key Unlock Warning Input	Continuity when key is in the ignition switch
13	N/C	
14	N/C	
15	N/C	
16 -GROUND	Door Key Lock Input	Continuity when door locked by key
17 -GROUND	Driver Door Unlock Input	Continuity when door unlocked by driver's key
18 -GROUND	Passenger Door Key Unlock Input	Continuity when door unlocked by passenger's key
19 -GROUND	Passenger Door Courtesy Input	Approx. 12V when passenger's door closed, continuity when open (switch closed)
20	N/C	
21 -GROUND	Starter Cut Output	Approx. 12V when ignition switch at ST position, 0V during triggering
22	N/C	
23	N/C	
24	N/C	
25 -GROUND	LED Output	Approx. 1.8V when LED on, 0V when LED off
26	N/C	
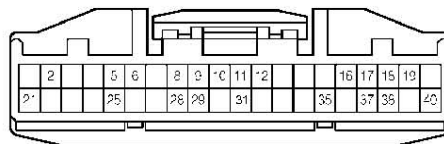
CONNECTOR 1

TOYOTA
VIP))))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

CONNECTOR1	CIRCUIT	MEASUREMENT
27	N/C	
28	TVSS SIG	
29	ECU Ground	Continuity
30	N/C	
31	MPX SIGNAL	
32	N/C	
33	N/C	
34	N/C	
35	Trunk Courtesy Input	Approx. 12V when trunk or tailgate closed, continuity when open (switch closed)
36	N/C	
37	Driver Door Position Input	0V during driver door knob unlocked
38	Passenger Door Position Input	0V during passenger door know unlocked
39	N/C	
40	Driver Door Courtesy Input	Approx. 12V when driver's door closed, continuity when open (switch closed)

TOYOTA
VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

Complaint: Remote Control Inoperative

Common causes for this complaint:

Mis-spliced Key Unlock Warning wire , weak or dead battery in remote, remote programmed improperly (see *KNOWN ISSUES* page), remote not programmed, connectors not plugged in securely.

What to Ask and Verify		What to Check
Does the panic mode operation work?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
		Clear the remote control codes from the ECU, then reprogram both (or all) remotes (they may have accidentally been programmed for second channel output).
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary.
		Clear the remote control codes from the ECU, then reprogram both (or all) remotes (they may have accidentally been programmed for second channel output).
		Check the automatic door locking/unlocking function.
Do the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
		Clear the remote control codes from the ECU, then reprogram both (or all) remotes (they may have accidentally been programmed for second channel output).
	No	Confirm the door lock control connectors are plugged in securely.

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

Complaint: System Inoperative (No Remote Arming/Disarming)

Common causes for this complaint:

Mis-spliced Key Unlock Warning wire , mis-spliced door courtesy wire, connectors not plugged in securely, fuse or shorting pin not installed in vehicle, blown fuse in vehicle, blown fuse in RS3200PLUS harness (does not apply to all vehicles).

What to Ask and Verify		What to Check
Do the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning wire s splice location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
	No	Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
		Confirm the door lock control connectors are plugged in securely.
		Disconnect the RS3200PLUS harness Door Lock Control connectors and reconnect the vehicle s connectors, then try again. If there is no function, there is probably a problem with one vehicle's components.

TOYOTA
VIP
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

Complaint: No Head Light Function

Common causes for this complaint:

Mis-spliced Head Lamp wire , connectors not plugged in securely, blown Head Lamp fuse.

What to Ask and Verify		What to Check
Does the head lamp switch in the vehicle work?	Yes	Check and correct the head light wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Check for continuity between the RS3200PLUS ECU connector and the head lamp circuit connection.
	No	Check the vehicle s head lamp fuse and replace if necessary. Confirm that the combination switch connector for the head lamp is plugged in securely.
Is there continuity between pin 6 of the RS3200PLUS harness ECU connector and the head lamp circuit connection?	Yes	Activate the panic mode and check pin 6 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a wire harness problem. Fix as necessary.

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

Complaint: No Horn Function

Common causes for this complaint:

Mis-spliced Horn wire , connectors not plugged in securely, blown horn fuse.

What to Ask and Verify		What to Check
Does the horn switch in the vehicle work?	Yes	Check and correct the horn wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Check for continuity between the RS3200PLUS ECU connector and the horn circuit connection.
	No	Check the vehicle s horn fuse and replace if necessary. Confirm that the combination switch connector for the horn circuit is plugged in securely.
Is there continuity between pin 5 of the RS3200PLUS harness ECU connector and the horn circuit connection? (Usually a spliced GREEN/BLACK wire)	Yes	Activate the panic mode and check pin 5 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a wire harness problem. Fix as necessary.

TOYOTA

VIP

VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

Complaint: No Hazard Light

Common causes for this complaint:

Mis-spliced Hazard Light wire , connectors not plugged in securely, blown fuse.

What to Ask and Verify		What to Check
Do the vehicle s hazard lights work?	Yes	Check and correct the hazard light wire s splice location (applies to most vehicles). Verify the splice connector was applied properly. Verify the RS3200PLUS harness hazard light circuit connectors are plugged in securely. Check for continuity between the RS3200PLUS ECU connector and the hazard light circuit connection.
	No	Confirm that the vehicle s connector for the hazard light circuit is plugged in securely. Disconnect the RS3200PLUS harness hazard light circuit connectors and reconnect the vehicle s connectors, then check the hazard light function again. If they work, check the RS3200PLUS harness. If not, theproblem is vehicle-related. (applies to some vehicles)
Is there continuity between pin 8 of the RS3200PLUS harness ECU connector and the hazard light circuit connection? (Usually a spliced GREEN/RED wire, but may be jumper connectors)	Yes	Activate the panic mode and check pin 8 for pulsed continuity to ground. If there is continuity, check the RS3200PLUS ECU for signs of liquid damage; it may be necessary to open the ECU case LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	Check and fix the RS3200PLUS harness.

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

Complaint: LED Inoperative (No blinking, No turning on)

Common causes for this complaint:

Mis-spliced LED wire, mis-spliced door courtesy wire, connectors not plugged in securely.

What to Ask and Verify		What to Check
Does the LED turn on when remote arming is attempted?	Yes	No problem.
	No	Check trunk key switch was installed properly. If not correct, LED may not turn on. Verify the splice connector was applied properly.
Does the LED blink during arming?	Yes	No problem.
	No	Check trunk key switch was installed properly. If not correct, LED may not turn on. Verify the splice connector was applied properly.

TOYOTA
VIP)))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

RS3200PLUS 4RUNNER/ COROLLA/ MATRIX SECURITY SYSTEM

Complaint: System Inoperative (Duplicate Panic Alarm)

Common causes for this complaint:

Mis-connection of Panic signal wire with terminal, mis-spliced panic signal wire, connector not plugged in securely.

What to Ask and Verify		What to Check
Does the duplicate panic mode operation work?	Yes	Check the panic signal wire s splice location. (Does not apply to all vehicles). Verify the splice connector was applied properly. Confirm the panic signal wire with terminal location. Check door lock control connector is plugged in securely.
	No	No problem.

TOYOTA
VIP)))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

G.B.S SECURITY SYSTEM

CONNECTOR 1	CIRCUIT	MEASUREMENT
1 - Ground	+B Power(ECU-B)	Always Approx. 12V
2 - Ground	N/C	
3 - Ground	G.B.S Output	0V (Pulsed) when window hit
4 - Ground	G.B.S(Microphone) Input	0V (Pulsed) when window hit
5	G.B.S(Microphone) Ground	Continuity
6 - Ground	GND	Continuity
7 - Ground	N/C	
8 - Ground	IG Input	Approx. 12V when ignition switch is in ON position

CONNECTOR 1

G.B.S SECURITY SYSTEM

Complaint: G.B.S Inoperative (No alarm when window is hit)		
Common causes for this complaint:		
G.B.S signal terminal not plugged in securely, sensitivity adjustment not properly set.		
What to Ask and Verify		**What to Check**
Does the alarm go off?	Yes	No problem.
	No	Check the volume of G.B.S unit.
		Confirm the microphone location.
		Verify the connection of G.B.S signal wire.

TOYOTA VIP)))
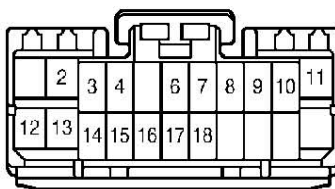### VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

REMOTE KEYLESS ENTRY SYSTEM FOR MR2-SPYDER/ TACOMA/ TUNDRA

REMOTE KEYLESS SYSTEM

CONNECTOR 1	CIRCUIT	MEASUREMENT
1	N/C	
2 - Ground	Trunk Courtesy Input	Continuity at all times.
3 - Ground	Rear Door Courtesy Input	Approx. 12V when rear door closed, continuity when open (switch closed).
4 - Ground	Driver Door Courtesy Input	Approx. 12V when driver s door closed, continuity when open (switch closed).
5 - Ground	Passenger Door Courtesy Input	Approx. 12V when passenger s door closed, continuity when open (switch closed).
6 - Ground	Key Unlock Warning Input	Continuity when key is in the ignition switch
7 - Ground	Trunk Key Input	Continuity at all times.
8 - Ground	Door Key Lock Input	Continuity when door locked by key
9 - Ground	Driver Door Unlock Input	Continuity when door unlocked by driver s key
10 - Ground	Passenger Door Key Unlock Input	Continuity when door unlocked by passenger s key
11 - Ground	+B Power (Dome)	Always approx. 12V
12 - Ground	Antenna	
13 - Ground	IG Input	Approx. 12V when ignition switch is in ON position
14 - Ground	Driver Door Position Input	0V during driver door knob unlocked
15 - Ground	Passenger Door Position Input	0V during passenger door knob unlocked
16 - Ground	Rear Door Position Input	0V during rear door knob unlocked
17	N/C	
18	N/C	
19	N/C	
20	N/C	
21	N/C	
22	N/C	

CONNECTOR 1

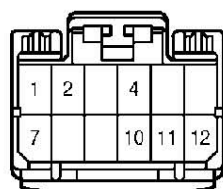# TOYOTA
VIP)))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

REMOTE KEYLESS ENTRY SYSTEM FOR MR2-SPYDER/ TACOMA/ TUNDRA

REMOTE KEYLESS SYSTEM

CONNECTOR 2	CIRCUIT	MEASUREMENT
1 -Ground	SUB +B Power (Door)	Always Approx. 12V
2 - Ground	Piezo + Output	Approx. 12V when Piezo Chirper is active
3	N/C	
4 - Ground	Door Unlock Output	0V (pulsed) upon remote disarming (unlocking)
5	N/C	
6 - Ground	N/C	
7 -Ground	ECU Ground	Continuity
8	N/C	
9	N/C	
10 - Ground	Head Light Output	0V (Pulsed) for Head Light activation during triggering
11 - Ground	Tail Light Output	0V (Pulsed) for exterior light activation
12 - Ground	Horn Output	0V (Pulsed) for Horn activation during triggering

CONNECTOR 3	CIRCUIT	MEASUREMENT
1	N/C	
2 - Ground	Door Lock Motor Output	Approx. 12V when Driver s door unlocked
3 - Ground	N/C	
4 - Ground	Door Lock Motor Output	Approx. 12V when Driver s door unlocked
5	N/C	
6	N/C	
7	N/C	
8	N/C	

CONNECTOR 2
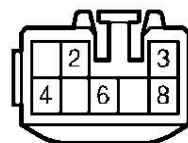
CONNECTOR 3

TOYOTA

VIP))))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

REMOTE KEYLESS ENTRY SYSTEM FOR MR2-SPYDER/ TACOMA/ TUNDRA

REMOTE KEYLESS SYSTEM

Complaint: System Inoperative (No Remote Locking/ Unlocking)

Common causes for this complaint:

Mis-connected Key Unlock Warning wire, mis-connected door courtesy wire, connectors not plugged in securely, fuse or shorting pin not installed in vehicle, blown fuse in vehicle, blown fuse in Remote Keyless Entry harness (does not apply to all vehicles), weak or dead battery in remote, remote programmed improperly remote not programmed.

What to Ask and Verify		What to Check
Does the door ajar warning sound when remote locking is attempted?	Yes	Check and correct any courtesy (door, trunk, etc.) circuit wire's connector. Check and correct for pinched wires.
	No	Check for panic mode operation.
Does the panic mode operation work?	Yes	Check and correct the key unlock warning connector. Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary. Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output). Check the automatic door locking/unlocking function.
Does the automatic door locking/unlocking function of the Remote Keyless Entry work?	Yes	Check and correct the key unlock warning wire connector location does not apply to all vehicles). Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Check the Remote Keyless Entry harness ECU connector 3 at pin 11 for constant +12V; if no V9 voltage, check the Remote Keyless Entry harness for a blown fuse, then the vehicle s dome or door fuse. Check the Remote Keyless Entry ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY. Check the vehicle s door lock function.
Do the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning connector location (does not apply to all vehicles). Verify the splice connector was applied properly. Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Confirm the door lock control connectors are plugged in securely. Disconnect the Remote Keyless Entry harness Door Lock Control connectors and reconnect the vehicle s connectors, then try again. If there is no function, there is probably a problem with one vehicle s components.

TOYOTA VIP))

VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

REMOTE KEYLESS ENTRY SYSTEM FOR MR2-SPYDER/ TACOMA/ TUNDRA

REMOTE KEYLESS SYSTEM

Complaint: No Head Light Function

Common causes for this complaint:

Mis-spliced head lamp wire, connectors not plugged in securely, blown head lamp fuse.

What to Ask and Verify		What to Check
Does the Head light switch in the vehicle work?	Yes	Check and correct the head lamp wire's splice location (applies to most vehicles). Verify the splice connector was applied correctly. Check for continuity between the Remote Keyless Entry ECU connector and the head lamp circuit connection.
	No	Check the vehicle's head lamp fuse and replace if necessary. Confirm that the combination switch connector for the head lamp is plugged in securely.
Is there continuity between pin 10 of the Remote Keyless Entry harness ECU connector 2 and the head lamp circuit?	Yes	Activate the panic mode and check pin 10 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the Remote Keyless Entry ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGE ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a ware harness problem. Fix as necessary.

TOYOTA
VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

REMOTE KEYLESS ENTRY SYSTEM FOR MR2-SPYDER/ TACOMA/ TUNDRA

REMOTE KEYLESS SYSTEM

Complaint: Remote Control Inoperative

Common causes for this complaint:

Mis-connected Key Unlock Warning wire, weak or dead battery in remote, remote programmed improperly, remote not programmed, connectors not plugged in securely.

What to Ask and Verify		What to Check
Does the panic mode operation work?	Yes	Check and correct the key unlock warning connector location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
		Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary.
		Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
		Check the automatic door locking/unlocking function.
Does the automatic door locking/unlocking function of the Remote Keyless Entry work?	Yes	Check and correct the key unlock warning connector location (does not apply to all vehicles).
		Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Check the Remote Keyless Entryharness ECU connector 1 at pin 11 for constant +12V; if no voltage, check the Remote Keyless Entry harness for a blown fuse, then the vehicle s dome or door fuse.
		Check the vehicle s door lock function.
Does the vehicle s door locks work with the door switches or key?	Yes	Check and correct the key unlock warning connector location (does not apply to all vehicles).
		Verify the splice connector was applied properly.
		Clear the remote control codes from the ECU, then reprogram *both (or all)* remotes (they may have accidentally been programmed for second channel output).
	No	Confirm the door lock control connectors are plugged in securely.

TOYOTA
VIP)))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

REMOTE KEYLESS ENTRY SYSTEM FOR MR2-SPYDER/ TACOMA/ TUNDRA

REMOTE KEYLESS SYSTEM

Complaint: Remote Control Has Short Range

Common causes for this complaint:

The system s performance does not meet the customer s expectations, weak or dead battery in the remote control, the Remote Keyless Entry harness ECU connector 3 is not plugged in securely

What to Ask and Verify		What to Check
Does the remote control operate the system consistently from 15 feet or further?	Yes	There may be no problem. The customer may expect a 50 foot operating range; the owner s guide states *up to* 50 feet remote control range. Check the remote control performance by walking in circles around the vehicle. Typically, you will find the performance is better at some angles than others, and that objects between you and the vehicle will also affect the range; you may need to demonstrate this to the customer. *Changing the ECU will not help to improve the range in most cases!*
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary. Verify the Remote Keyless Entry harness ECU connector 3 is plugged in securely and that there is continuity between the tip of the antenna wire and pin 1 of connector 3.
Has the operation been consistent prior to the operation?	Yes	Check the remote control for signs of liquid damage. Although the remotes are water resistant, they usually do not do well going through a washing machine. If damaged, replace the remote. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	Open the remote control(s) and carefully clean the battery and contacts, then check the battery for a minimum 2.7V during remote operation. Replace the battery if necessary.

TOYOTA

VIP)))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

REMOTE KEYLESS ENTRY SYSTEM FOR MR2-SPYDER/ TACOMA/ TUNDRA

REMOTE KEYLESS SYSTEM

Complaint: No Piezo "Chirper" Function		
Common causes for this complaint:		
Piezo function defeated, mis-connected Piezo Chirper wires		
What to Ask and Verify		**What to Check**
Does the Piezo Chirper work for the Door Ajar Warning function?	Yes	Refer to the owner s guide programming section and reprogram the system.
	No	Verify the splice connectors were applied properly. If they were, check for voltage at the Remote Keyless Entry harness ECU connector 1 pin 4 during the door ajar warning.
Is there a +12V at pin 2 of the Remote Keyless Entry harness ECU connector 2 during the door ajar warning?	Yes	Check for continuity between connector 2, pin 2 and the Piezo Chirper + output wire. If no continuity, check and fix the Remote Keyless Entry harness. If there is continuity there, check for continuity between the Remote Keyless Entry harness Piezo Chirper ground wire and ground pin 7 of connector 2; if no continuity check and fix the Remote Keyless Entry harness. If there is continuity for both wires, replace the Piezo Chirper .
	No	Check the Remote Keyless Entry ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY.

REMOTE KEYLESS SYSTEM

Complaint: No Tail Light Or Marker Light Operation		
Common causes for this complaint:		
Mis-spliced Tail Light wire, connectors not plugged in securely, blown fuse		
What to Ask and Verify		**What to Check**
Do the vehicle s tail lights work ?	Yes	Check and correct the tail light wire's splice location (applies to most vehicles).
		Verify the splice connector was applied correctly.
		Verify the Remote Keyless Entry harness tail light circuit connectors are plugged in securely.
		Check for continuity between the Remote Keyless Entry ECU connector and the tail light circuit connection.
	No	Confirm that the vehicle s connector for the tail light circuit is plugged in securely.
		Disconnect the the Remote Keyless Entry harness tail light circuit connectors and reconnect the vehicle s connectors, then check the tail light function again. If they work, check the Remote Keyless Entry harness. If not, the problem is vehicle-related. (applies to some vehicles).
Is there continuity between pin 11 of the Remote Keyless Entry harness ECU connector 2 and the tail light circuit connection?	Yes	Activate the panic mode and check pin 11 for pulsed continuity to ground. If there is continuity, check the Remote Keyless Entry ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	Check and fix the Remote Keyless Entry harness.

TOYOTA
VIP))
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING
INFORMATION

REMOTE KEYLESS ENTRY SYSTEM FOR MR2-SPYDER/ TACOMA/ TUNDRA

REMOTE KEYLESS SYSTEM

Complaint: No Horn Function

Common causes for this complaint:

Mis-spliced Horn wire, connectors not plugged in securely, blown horn fuse.

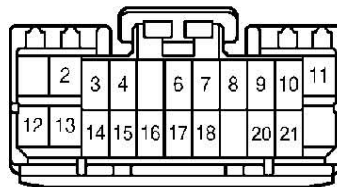| What to Ask and Verify		What to Check
Does the horn switch in the vehicle work?	Yes	Check and correct the horn wire's splice location (applies to most vehicles). Verify the splice connector was applied properly. Check for continuity between the Remote Keyless Entry ECU connector and the horn circuit connection.
	No	Check the vehicle s horn fuse and replace if necessary. Confirm that the combination switch connector for the horn circuit is plugged in securely.
Is there continuity between pin 12 of the Remote Keyless Entry harness ECU connector 2 and the horn circuit connection? (Usually a spliced GREEN/ BLACK wire)	Yes	Activate the panic mode and check pin 12 for pulsed continuity to ground. If there is continuity, check fix the wire harness. Check the Remote Keyless Entry ECU for signs of liquid damage; it may be necessary to open the ECU case. LIQUID DAMAGED ITEMS ARE NOT COVERED UNDER WARRANTY.
	No	If no continuity, there is a wire harness problem. Fix as necessary.

TOYOTA
VIP
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

RS3200PLUS SECURITY SYSTEM FOR RKE UPGRADE OF MR2-SPYDER/ TACOMA/ TUNDRA

RS3200 PLUS SECURITY SYSTEM

CONNECTOR 1	CIRCUIT	MEASUREMENT
1	N/C	
2 - Ground	Trunk Courtesy Input	Continuity at all times.
3 - Ground	Rear Door Courtesy Input	Approx. 12V when rear door closed, continuity when open (switch closed).
4 - Ground	Driver Door Courtesy Input	Approx. 12V when driver s door closed, continuity when open (switch closed).
5 - Ground	Passenger Door Courtesy Input	Approx. 12V when passenger s door closed, continuity when open (switch closed).
6 - Ground	Key Unlock Warning Input	Continuity when key is in the ignition switch
7 - Ground	Trunk Key Input	Continuity at all times.
8 - Ground	Door Key Lock Input	Continuity when door locked by key
9 - Ground	Driver Door Unlock Input	Continuity when door unlocked by driver s key
10 - Ground	Passenger Door Key Unlock Input	Continuity when door unlocked by passenger s key
11 - Ground	+B Power (Dome)	Always approx. 12V
12 - Ground	Antenna	
13 - Ground	IG Input	Approx. 12V when ignition switch is in ON position
14 - Ground	Driver Door Position Input	0V during driver door knob unlocked
15 - Ground	Passenger Door Position Input	0V during passenger door knob unlocked
16 - Ground	Rear Door Position Input	0V during rear door knob unlocked
17	N/C	
18	N/C	
19	N/C	
20 - Ground	Radar Sensor Input	0V when Radar triggers intrusion (MR2-Spyder Only)
21 - Ground	Radar Sensor Switch Input	0V during Radar Sensor switch is ON (MR2-Spyder Only)
22	N/C	

CONNECTOR 1

TOYOTA VIP
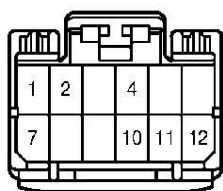
VEHICLE INTRUSION PROTECTION

TROUBLESHOOTING INFORMATION

RS3200PLUS SECURITY SYSTEM FOR RKE UPGRADE OF MR2-SPYDER/ TACOMA/ TUNDRA

RS3200 PLUS SECURITY SYSTEM

CONNECTOR 2	CIRCUIT	MEASUREMENT
1 - Ground	SUB +B Power (Door)	Always Approx. 12V
2 - Ground	Piezo + Output	Approx. 12V when Piezo Chirper is active
3	N/C	
4 - Ground	Door Unlock Output	0V (pulsed) upon remote disarming (unlocking)
5	N/C	
6 - Ground	Status Monitor LED Output	Approx. 1.8V when LED on, 0V when LED off
7 - Ground	ECU Ground	Continuity
8	N/C	
9	N/C	
10 - Ground	Head Light Output	0V (Pulsed) for Head Light activation during triggering
11 - Ground	Tail Light Output	0V (Pulsed) for exterior light activation
12 - Ground	Horn Output	0V (Pulsed) for Horn activation during triggering

CONNECTOR 3	CIRCUIT	MEASUREMENT
1	N/C	
2 - Ground	Door Lock Motor Output	Approx. 12V when Driver s door unlocked
3 - Ground	Starter Cut Input	Approx. 12V when ignition switch at ST position, 0V during triggering
4 - Ground	Door Lock Motor Output	Approx. 12V when Driver s door unlocked
5	N/C	
6 - Ground	Dome Light Output	Continuity during interior light activation after disarming
7	N/C	
8 - Ground	Starter Cut Output	Approx. 12V when ignition switch is in ON position

CONNECTOR 2

CONNECTOR 3

TROUBLESHOOTING INFORMATION

**RS3200PLUS SECURITY SYSTEM FOR MR-2 SPYDER, TACOMA, TUNDRA
FOR GENERAL TROUBLESHOOTING INFORMATION, SEE RS3200 SECURITY SYSTEM
TROUBLESHOOTING INFORMATION.
FOR MR-2 SPYDER RADAR SENSOR TROUBLESHOOTING INFORMATION ONLY, SEE
BELOW.**

RS3200 PLUS SECURITY SYSTEM

Complaint: No Radar Function

Common causes for this complaint:
Connectors not plugged in securely, sensitivity adjustment not properly set, incorrect radar sensor mounting.

What to Ask and Verify		What to Check
Does the alarm go off?	Yes	No problem.
	No	Confirm Radar sensor installation. Verify the connector of Radar sensor. Check if security system still operates without radar sensor function by triggering the alarm (such as opening a door from the inside). If the alarm does not activate, refer to the general troubleshooting information for the security system.