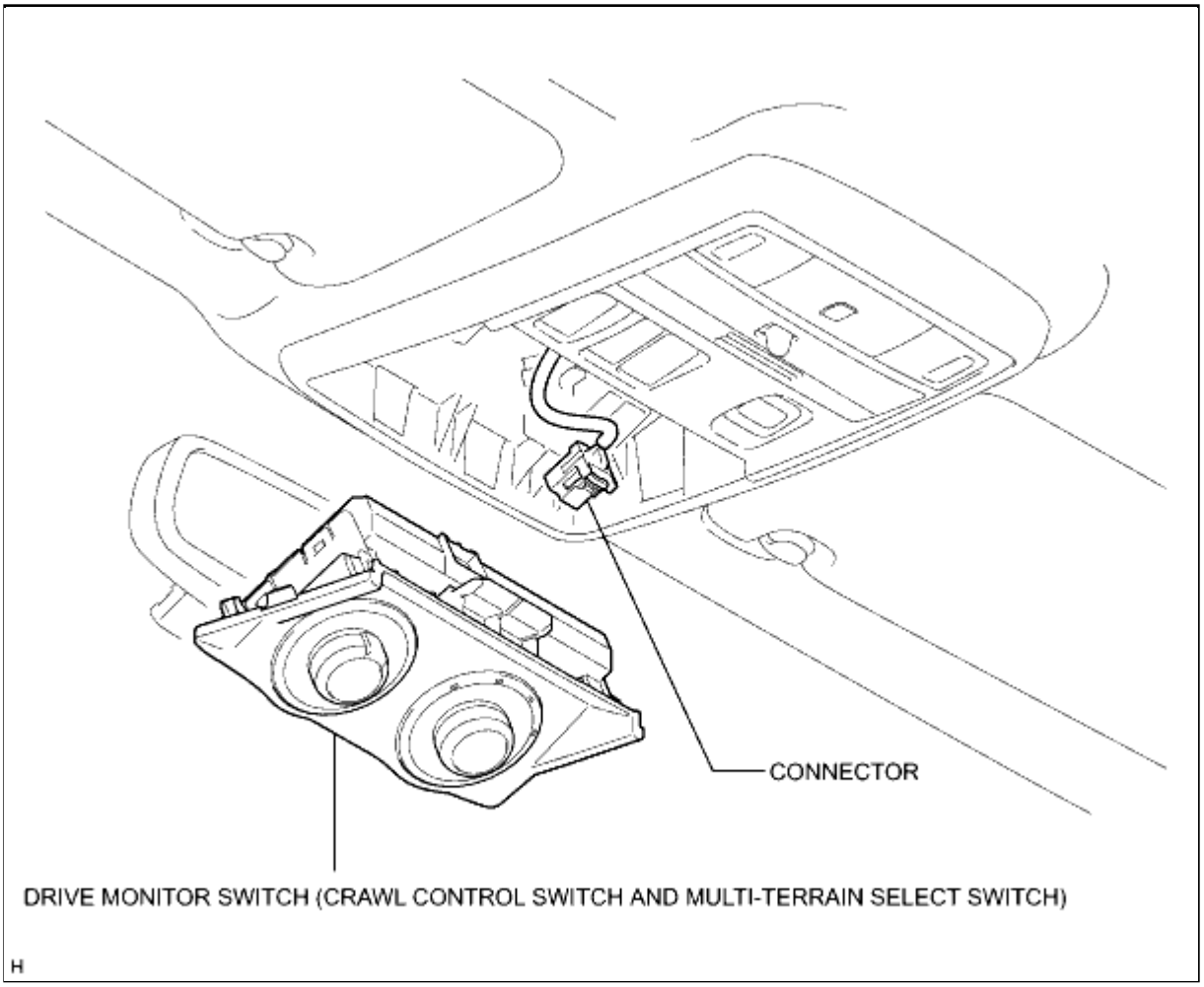
Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000003C4D00AX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: CRAWL SWITCH: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION



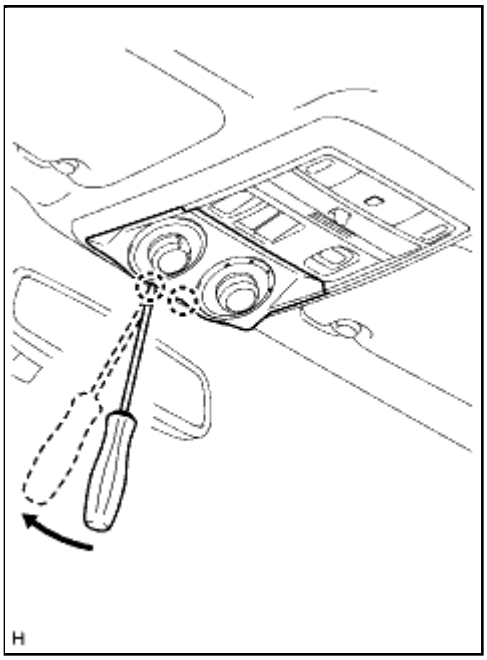
DRIVE MONITOR SWITCH (CRAWL CONTROL SWITCH AND MULTI-TERRAIN SELECT SWITCH)

H

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000003C4A00AX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: CRAWL SWITCH: REMOVAL (2010 4Runner)		

REMOVAL

1. REMOVE DRIVE MONITOR SWITCH (CRAWL CONTROL SWITCH AND MULTI-TERRAIN SELECT SWITCH)



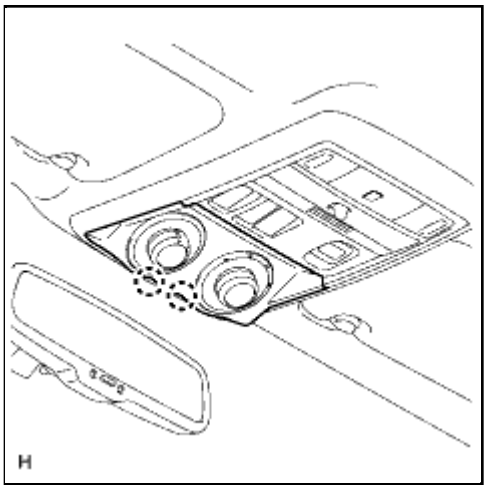
(a) Detach the 2 claws and remove the drive monitor switch (CRAWL control switch and multi-terrain select switch) from the map light assembly.

(b) Disconnect the connector.

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000003C4C00AX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: CRAWL SWITCH: INSTALLATION (2010 4Runner)		

INSTALLATION

1. INSTALL DRIVE MONITOR SWITCH (CRAWL CONTROL SWITCH AND MULTI-TERRAIN SELECT SWITCH)



(a) Connect the connector.

(b) Attach the 2 claws to install the drive monitor switch (CRAWL control switch and multi-terrain select switch).

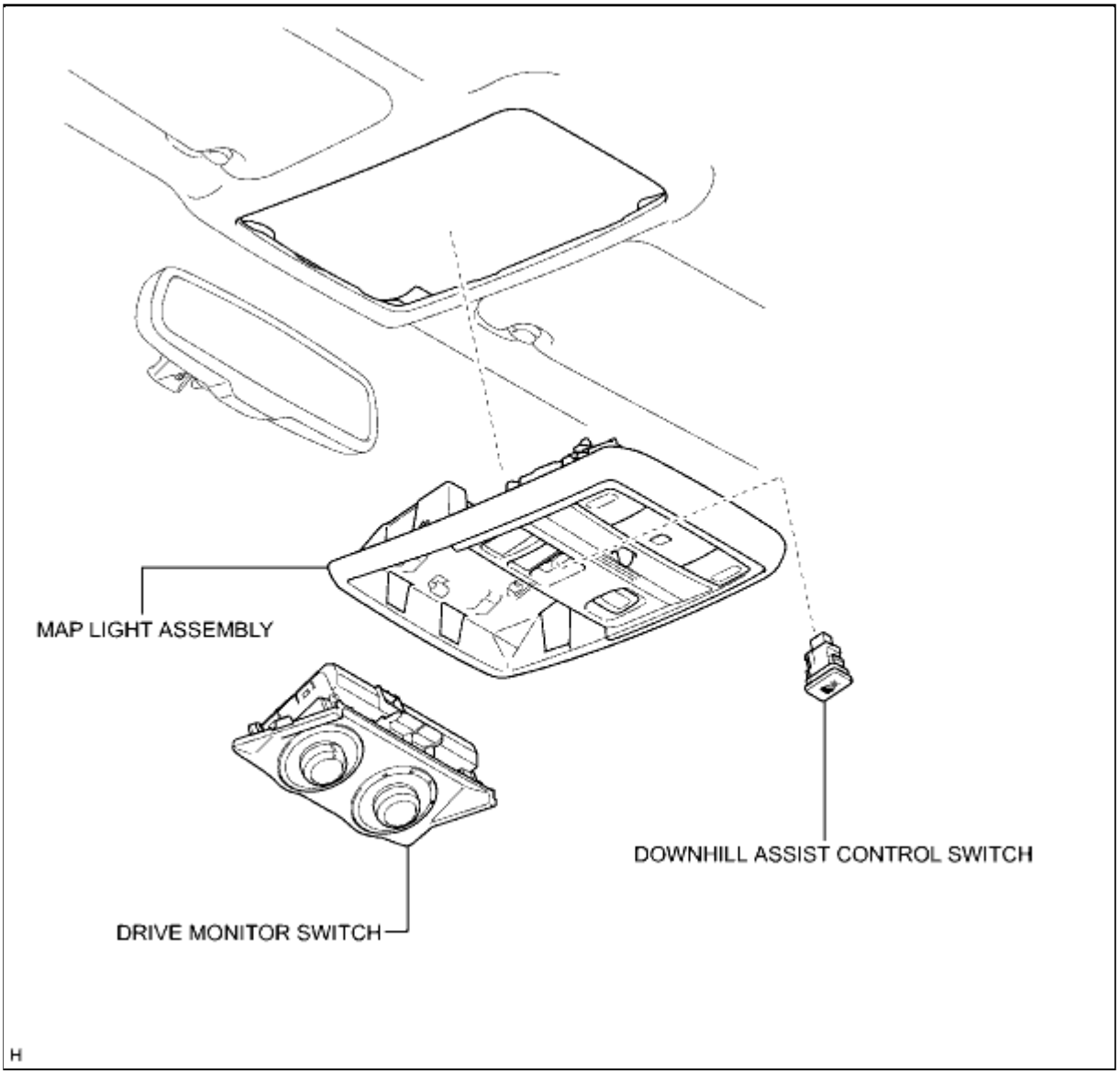
2. PERFORM CRAWL CONTROL CALIBRATION

(a) Perform crawl control calibration INFO .

Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001PBZ00GX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: DOWNHILL ASSIST CONTROL SWITCH: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION



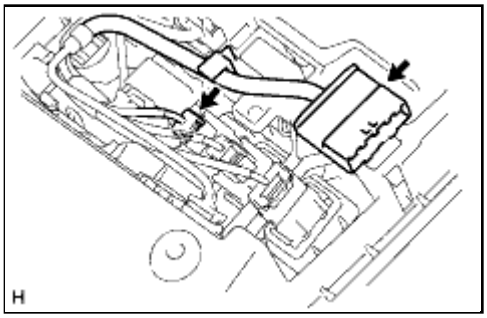
Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001PC000GX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: DOWNHILL ASSIST CONTROL SWITCH: REMOVAL (2010 4Runner)		

REMOVAL

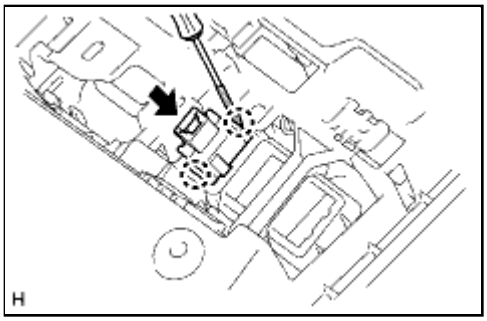
1. REMOVE DRIVE MONITOR SWITCH INFO

2. REMOVE MAP LIGHT ASSEMBLY INFO

3. REMOVE DOWNHILL ASSIST CONTROL SWITCH



(a) Disconnect the 2 connectors.



(b) Using a screwdriver, detach the 2 claws and remove the downhill assist control switch from the map light assembly.

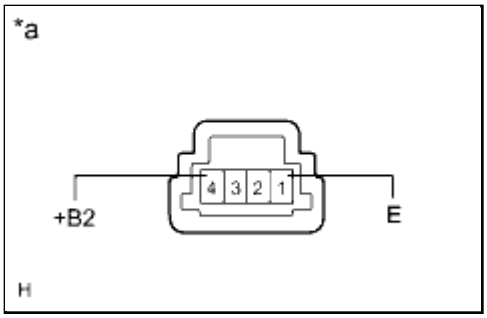
HINT:

Tape the screwdriver tip before use.

Last Modified: 5-10-2010	6.4 G	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WZ0018X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: DOWNHILL ASSIST CONTROL SWITCH: INSPECTION (2010 4Runner)		

INSPECTION

1. CHECK DOWNHILL ASSIST CONTROL SWITCH



(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	SWITCH CONDITION	SPECIFIED CONDITION
1 (E) - 4 (+B2)	Pressed	Below 1 Ω
	Not pressed	10 kΩ or higher

Text in Illustration

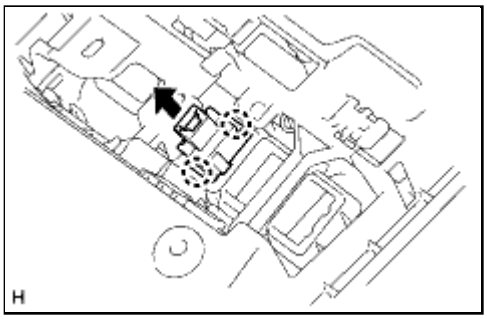
*a	Component without harness connected (Downhill Assist Control Switch)

If the result is not as specified, replace the downhill assist control switch.

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001PBY00GX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: DOWNHILL ASSIST CONTROL SWITCH: INSTALLATION (2010 4Runner)		

INSTALLATION

1. INSTALL DOWNHILL ASSIST CONTROL SWITCH



(a) Attach the 2 claws to install the downhill assist control switch to the map lamp assembly.

(b) Connect the 2 connectors.

2. INSTALL MAP LIGHT ASSEMBLY INFO

3. INSTALL DRIVE MONITOR SWITCH INFO

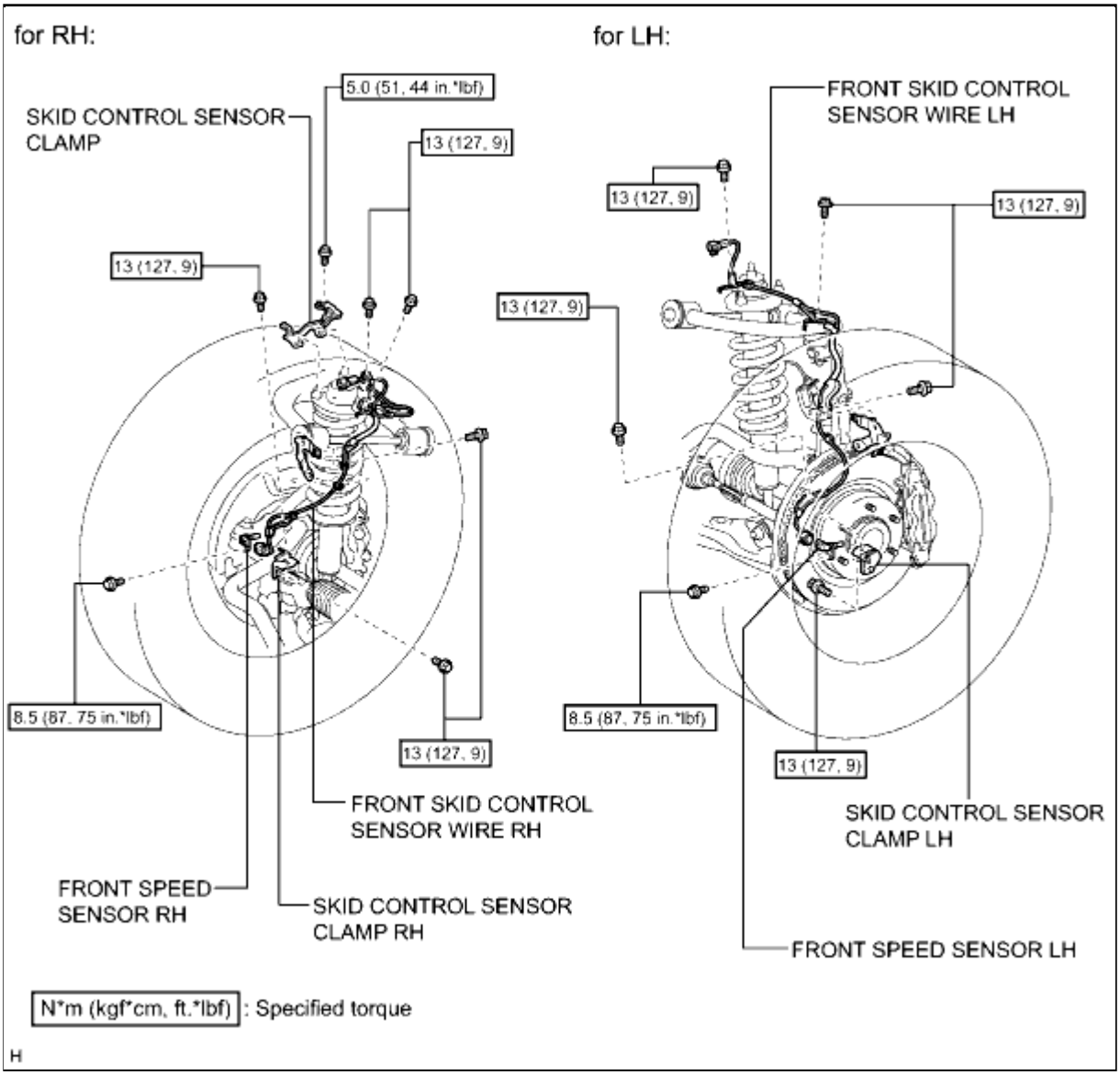
4. PERFORM DOWNHILL ASSIST CONTROL CALIBRATION

(a) Perform downhill assist control switch calibration INFO .

Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001B2I00OX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: FRONT SPEED SENSOR: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION



Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001B2J00OX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: FRONT SPEED SENSOR: REMOVAL (2010 4Runner)		

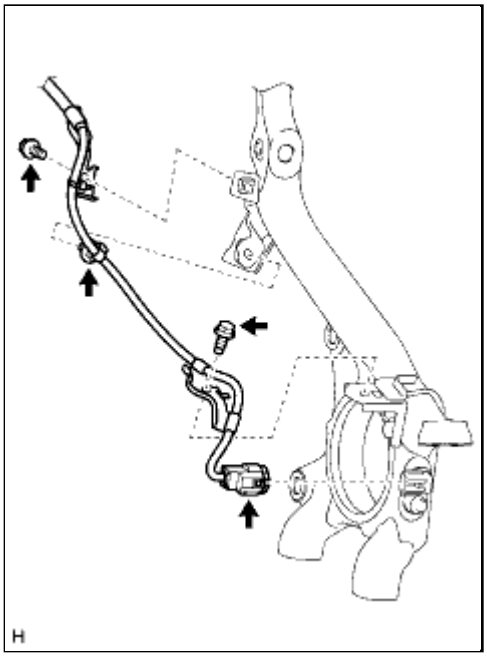
REMOVAL

HINT:

- The procedure listed below is for the LH side.
- Other than areas where instructions are provided, use the same procedures for the RH and LH sides.

1. REMOVE FRONT WHEEL

2. REMOVE FRONT SKID CONTROL SENSOR WIRE

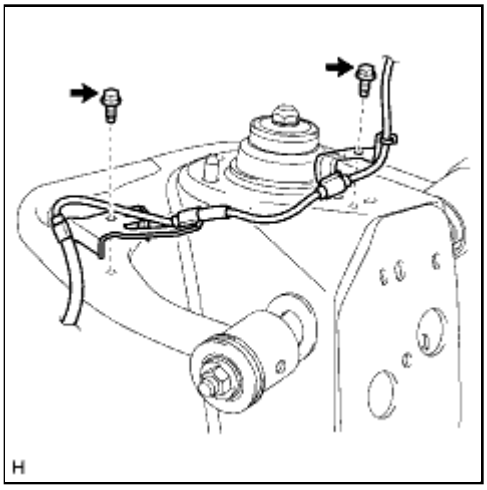


(a) Disconnect the connector from the front speed sensor.

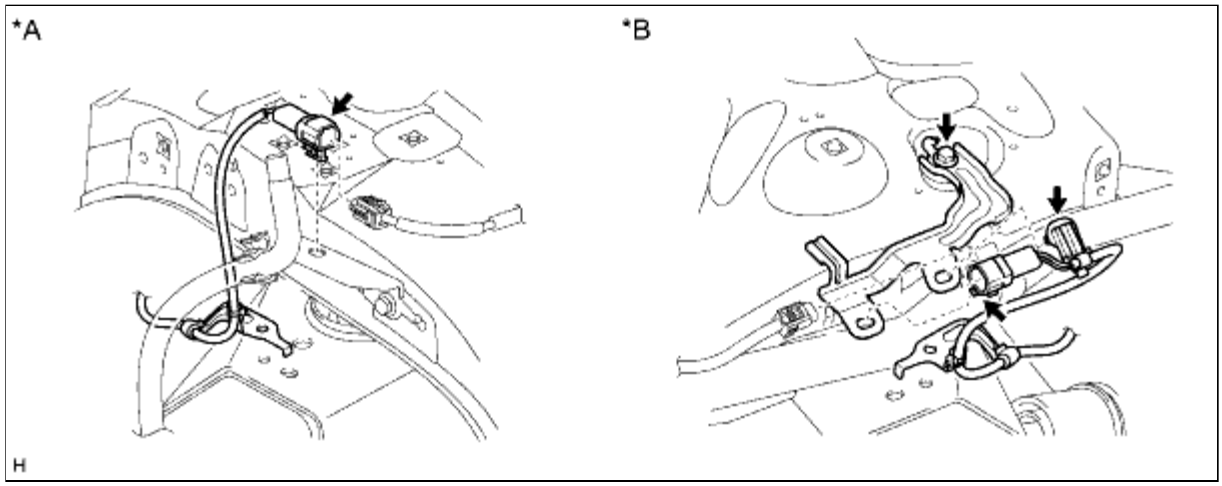
(b) Remove the 2 bolts and 2 harness clamps.

(c) Detach the clip.

(d) Remove the 2 bolts and 2 harness clamps.



(e) Disconnect the connector as follows.



Text in Illustration

*A	for LH	*B	for RH

(1) for LH:

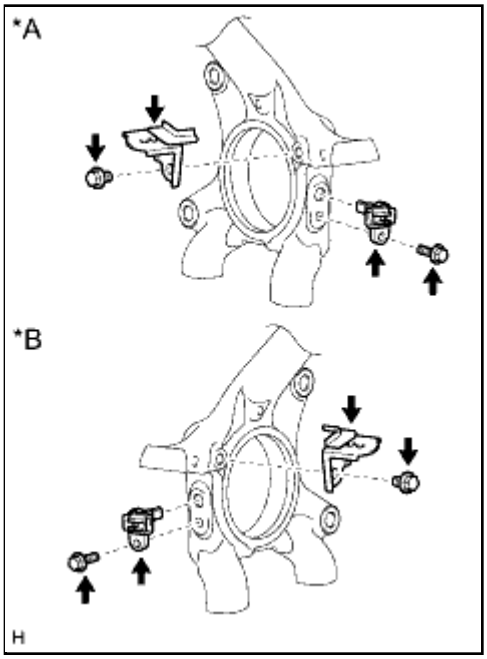
1. Disconnect the connector.
2. Detach the connector.

(2) for RH:

1. Disconnect the connector.
2. Detach the connector from the skid control sensor clamp.
3. Detach the clip.
4. Remove the bolt and skid control sensor clamp.

3. REMOVE SKID CONTROL SENSOR CLAMP

(a) Remove the bolt and skid control sensor clamp from the knuckle.



Text in Illustration

*A	for LH
*B	for RH

4. REMOVE FRONT SPEED SENSOR

(a) Remove the bolt and speed sensor from the knuckle.

NOTICE:

Pull out the sensor while trying as much as possible not to rotate it.

Last Modified: 5-10-2010	6.4 G	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM0000034QY00GX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: FRONT SPEED SENSOR: INSPECTION (2010 4Runner)		

INSPECTION

1. CHECK FRONT SPEED SENSOR

(a) Check the sensor.

Under any of the following conditions, replace the sensor with a new one:

- The surface of the sensor is cracked, dented or chipped.
- The connector is scratched, cracked or damaged.
- The sensor has been dropped.

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001B2H00OX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: FRONT SPEED SENSOR: INSTALLATION (2010 4Runner)		

INSTALLATION

HINT:

- The procedure listed below is for the LH side.
- Other than areas where instructions are provided, use the same procedures for the RH and LH sides.

1. INSTALL FRONT SPEED SENSOR

(a) Install the speed sensor with the bolt.

Torque: 8.5 N·m (87 kgf·cm, 75in·lbf)

NOTICE:

- Make sure there are no pieces of iron or other foreign matter attached to the sensor tip.
- While inserting the speed sensor into the knuckle hole, do not strike or damage the sensor tip.
- After installing the speed sensor, make sure there is no clearance or foreign matter between the sensor stay part and the knuckle.
- Make sure there is no foreign matter attached to the speed sensor rotor.

2. INSTALL SKID CONTROL SENSOR CLAMP

(a) Install the skid control sensor clamp with the bolt.

Torque: 13 N·m (127 kgf·cm, 9ft·lbf)

NOTICE:

Install the clamp so that the rotation stopper touches the knuckle.

3. INSTALL FRONT SKID CONTROL SENSOR WIRE

(a) Connect the connector as follows.

(1) for LH:

1. Attach the connector, and then connect the connector.

NOTICE:

Securely connect the connector.

(2) for RH:

1. Install the skid control sensor clamp with the bolt.

Torque: 5.0 N·m (51 kgf·cm, 44in·lbf)

NOTICE:

Make sure the clamp rotation stopper touches the installation position.

2. Attach the connector, and then connect the connector.

NOTICE:

- Securely connect the connector.
- When connecting the connector, do not twist the wire harness.

3. Attach the clip.

(b) Install the 2 harness clamps with the 2 bolts.

Torque: 13 N·m (127 kgf·cm, 9ft·lbf)

NOTICE:

- When installing the clamps, do not twist the wire harness.
- Make sure the clamp rotation stopper touches the installation position.

(c) Install the 2 harness clamps with the 2 bolts.

Torque: 13 N·m (127 kgf·cm, 9ft·lbf)

NOTICE:

- When installing the clamps, do not twist the wire harness.
- Make sure the clamp rotation stopper touches the installation position.

(d) Attach the clip.

(e) Connect the connector.

NOTICE:

Securely connect the connector.

4. INSTALL FRONT WHEEL INFO

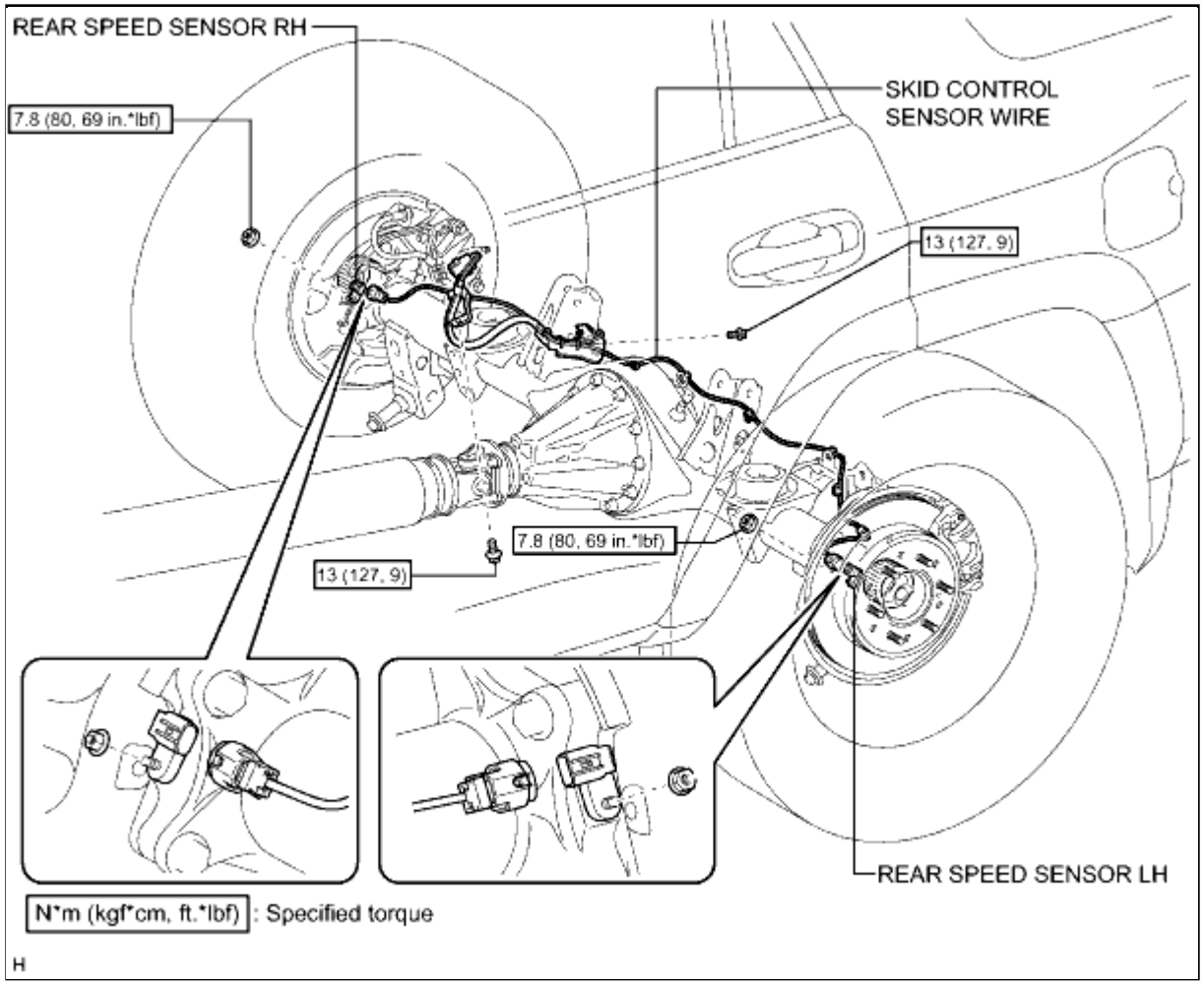
5. CHECK SPEED SENSOR SIGNAL

(a) Check the speed sensor signal INFO .

Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001B2F00OX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: REAR SPEED SENSOR: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION

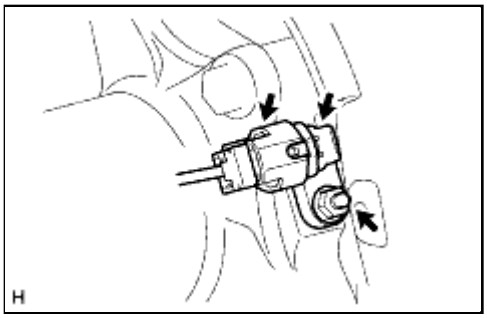


Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001B2G00OX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: REAR SPEED SENSOR: REMOVAL (2010 4Runner)		

REMOVAL

1. REMOVE REAR WHEEL

2. REMOVE REAR SPEED SENSOR LH



(a) Disconnect the speed sensor connector.

(b) Remove the nut and speed sensor.

NOTICE:

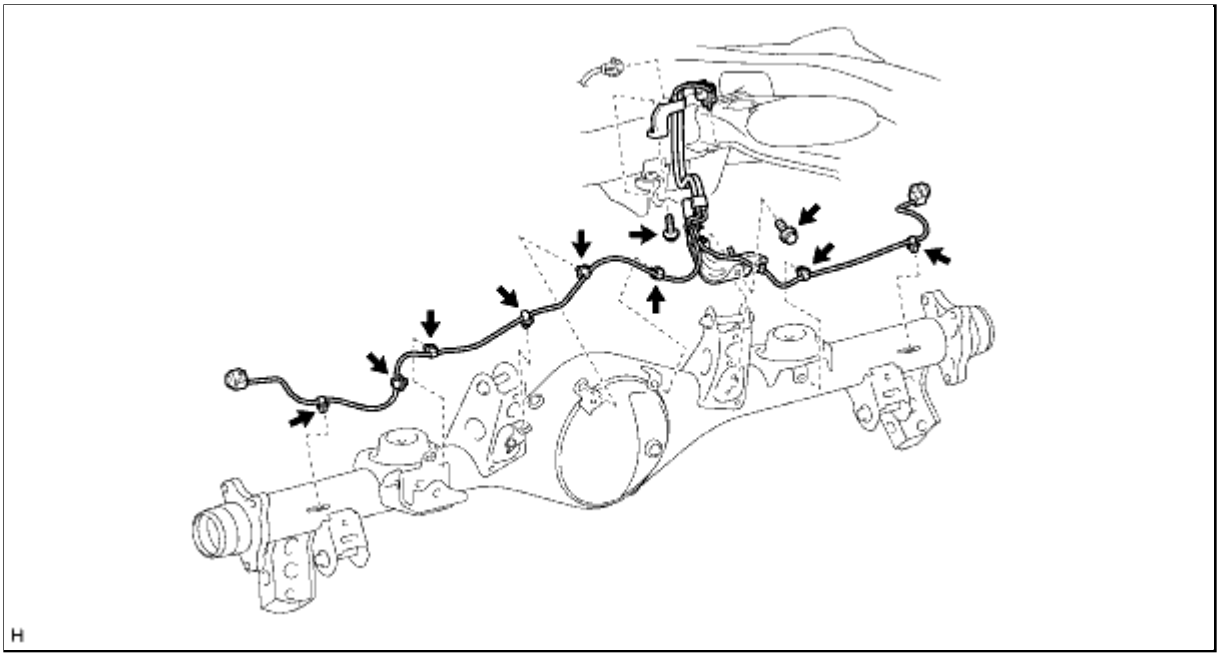
Pull out the sensor while trying as much as possible not to rotate it.

3. REMOVE REAR SPEED SENSOR RH

HINT:

Use the same procedure described for the LH side.

4. REMOVE SKID CONTROL SENSOR WIRE



(a) Disconnect the connector.

(b) Detach the connector.

(c) Detach the 8 clamps.

(d) Remove the 2 bolts and 2 sensor clamps.

Last Modified: 5-10-2010	6.4 G	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000000SRZ016X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: REAR SPEED SENSOR: INSPECTION (2010 4Runner)		

INSPECTION

1. CHECK REAR SPEED SENSOR

(a) Check the sensor.

Under any of the following conditions, replace the sensor with a new one:

- The surface of the sensor is cracked, dented or chipped.
- The connector is scratched, cracked or damaged.
- The sensor has been dropped.

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001B2E00OX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: REAR SPEED SENSOR: INSTALLATION (2010 4Runner)		

INSTALLATION

1. INSTALL SKID CONTROL SENSOR WIRE

(a) Install the 2 sensor clamps with the 2 bolts.

Torque: 13 N·m (127 kgf·cm, 9ft·lbf)

NOTICE:

Make sure the clamp rotation stopper touches the installation position.

(b) Connect the connector.

NOTICE:

Securely connect the connector.

(c) Attach the connector.

(d) Attach the 8 clamps.

NOTICE:

When attaching the clamps, do not twist the wire harness.

2. INSTALL REAR SPEED SENSOR LH

(a) Install the speed sensor with the nut.

Torque: 7.8 N·m (80 kgf·cm, 69in·lbf)

NOTICE:

- Make sure there are no pieces of iron or other foreign matter attached to the sensor tip.
- While inserting the speed sensor into the axle hole, do not strike or damage the sensor tip.
- After installing the speed sensor, make sure there is no clearance or foreign matter between the sensor stay part and the axle.
- Make sure there is no foreign matter attached to the speed sensor rotor.

(b) Connect the speed sensor connector.

NOTICE:

Securely connect the connector.

3. INSTALL REAR SPEED SENSOR RH

HINT:

Use the same procedure described for the LH side.

4. INSTALL REAR WHEEL INFO

5. CHECK SPEED SENSOR SIGNAL

(a) Check the speed sensor signal INFO .

Last Modified: 5-10-2010	6.4 G	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM0000307I00IX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: RELAY: ON-VEHICLE INSPECTION (2010 4Runner)		

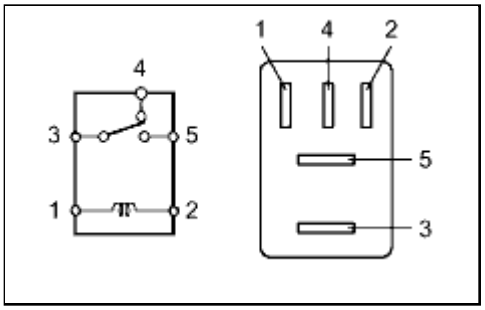
ON-VEHICLE INSPECTION

1. CHECK STOP LIGHT CONTROL RELAY

(a) Remove the stop light control relay from the engine room relay block.

(b) Measure the resistance according to the value(s) in the table below.

Standard Resistance:



TESTER CONNECTION	CONDITION	SPECIFIED CONDITION
3 - 4	Battery positive (+) voltage not applied to terminal 1 and battery negative (-) voltage applied to terminal 2	Below 1 Ω
	Battery positive (+) voltage applied to terminal 1 and battery negative (-) voltage to terminal 2	10 kΩ or higher
3 - 5	Battery positive (+) voltage not applied to terminal 1 and battery negative (-) voltage applied to terminal 2	10 kΩ or higher
	Battery positive (+) voltage applied to terminal 1 and battery negative (-) voltage to terminal 2	Below 1 Ω

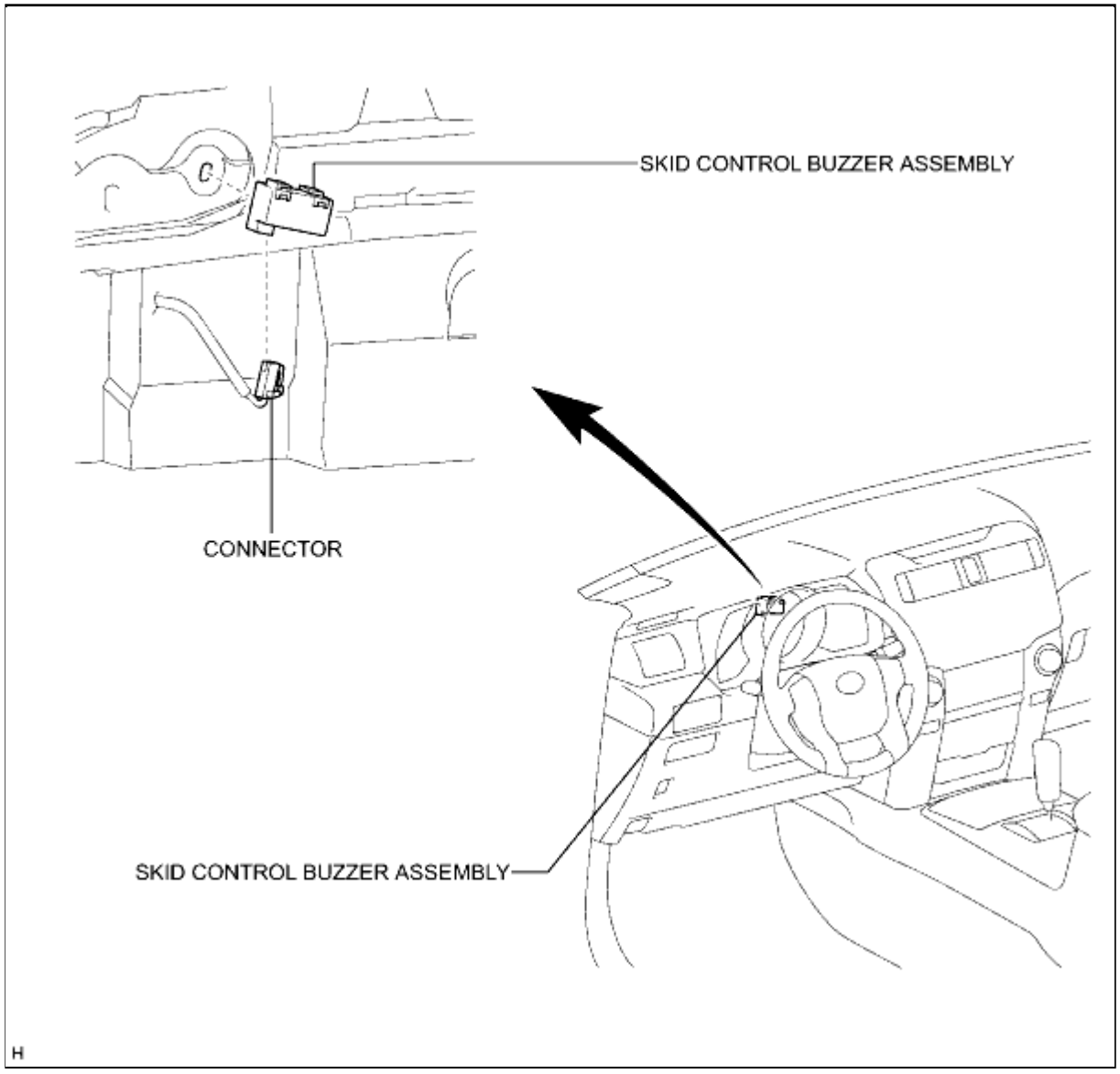
If the result is not as specified, replace the relay.

(c) Install the stop light control relay.

Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001PCR015X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: SKID CONTROL BUZZER: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION



Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WYY01LX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: SKID CONTROL BUZZER: REMOVAL (2010 4Runner)		

REMOVAL

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

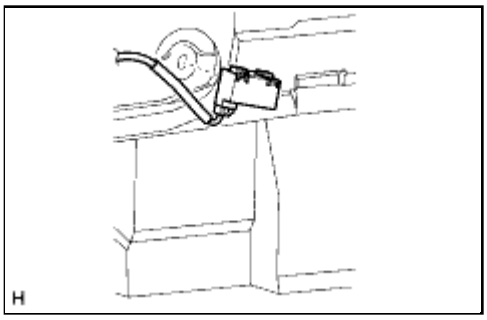
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected INFO .

2. REMOVE INSTRUMENT PANEL SAFETY PAD SUB-ASSEMBLY

(a) Remove the instrument panel safety pad sub-assembly INFO .

3. REMOVE SKID CONTROL BUZZER ASSEMBLY



(a) Detach the clamp and remove the buzzer.

(b) Disconnect the connector.

Last Modified: 5-10-2010	6.4 G	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WYW01CX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: SKID CONTROL BUZZER: INSPECTION (2010 4Runner)		

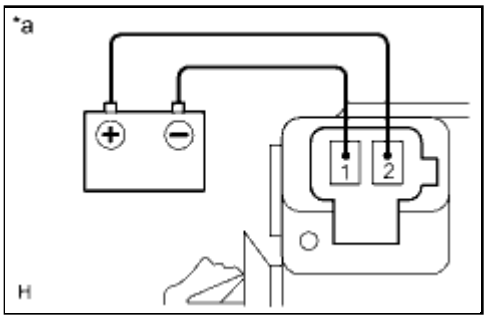
INSPECTION

1. INSPECT SKID CONTROL BUZZER ASSEMBLY

(a) Apply battery voltage to the skid control buzzer and check that the buzzer sounds.

OK:

MEASUREMENT CONDITION	SPECIFIED CONDITION
Battery positive (+) voltage → Terminal 2	Skid control buzzer sounds
Battery negative (-) voltage → Terminal 1	



Text in Illustration

*a	Component without harness connected (Skid Control Buzzer)

If the result is not as specified, replace the skid control buzzer assembly.

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WYV01LX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: SKID CONTROL BUZZER: INSTALLATION (2010 4Runner)		

INSTALLATION

1. INSTALL SKID CONTROL BUZZER ASSEMBLY

(a) Connect the connector.

NOTICE:

Securely connect the connector.

(b) Attach the clamp to install the buzzer.

NOTICE:

- Securely insert the clamp into the dash panel.
- If the buzzer is dropped, replace it.

2. INSTALL INSTRUMENT PANEL SAFETY PAD SUB-ASSEMBLY

(a) Install the instrument panel safety pad sub-assembly INFO .

3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

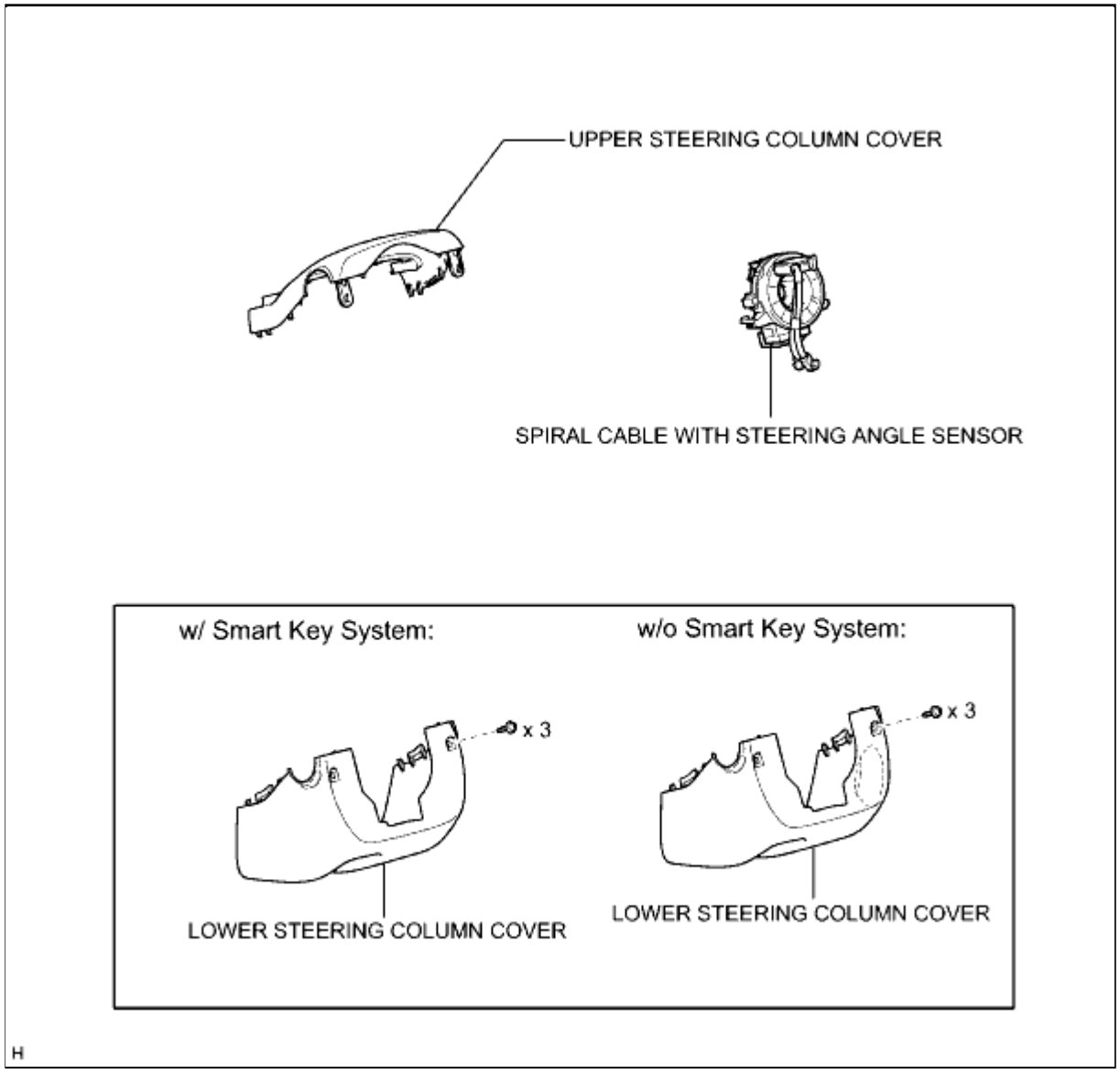
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected INFO .

Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM0000014R300ZX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: STEERING ANGLE SENSOR: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION



Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000000SS9033X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: STEERING ANGLE SENSOR: REMOVAL (2010 4Runner)		

REMOVAL

1. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected INFO **.**

3. REMOVE STEERING WHEEL ASSEMBLY

(a) Remove the steering wheel assembly INFO .

4. REMOVE LOWER STEERING COLUMN COVER INFO

5. REMOVE UPPER STEERING COLUMN COVER INFO

6. REMOVE SPIRAL CABLE WITH STEERING ANGLE SENSOR

(a) Remove the spiral cable with steering angle sensor INFO .

NOTICE:

- Do not replace the spiral cable with the battery connected and the ignition switch ON.
- Do not rotate the spiral cable with the battery connected and the ignition switch ON.
- Make sure that the steering wheel is installed and aligned straight when inspecting the steering angle sensor.
- Do not remove the steering angle sensor from the spiral cable.

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000000SS6037X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: STEERING ANGLE SENSOR: INSTALLATION (2010 4Runner)		

INSTALLATION

1. INSTALL SPIRAL CABLE WITH STEERING ANGLE SENSOR

(a) Install the spiral cable with steering angle sensor INFO .

NOTICE:

- Do not replace the spiral cable with the battery connected and the ignition switch ON.
- Do not rotate the spiral cable with the battery connected and the ignition switch ON.
- Make sure that the steering wheel is installed and aligned straight when inspecting the steering angle sensor.
- Do not remove the steering angle sensor from the spiral cable.

2. INSTALL UPPER STEERING COLUMN COVER INFO

3. INSTALL LOWER STEERING COLUMN COVER INFO

4. ADJUST SPIRAL CABLE INFO

5. INSTALL STEERING WHEEL ASSEMBLY

(a) Install the steering wheel assembly INFO .

6. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected INFO .

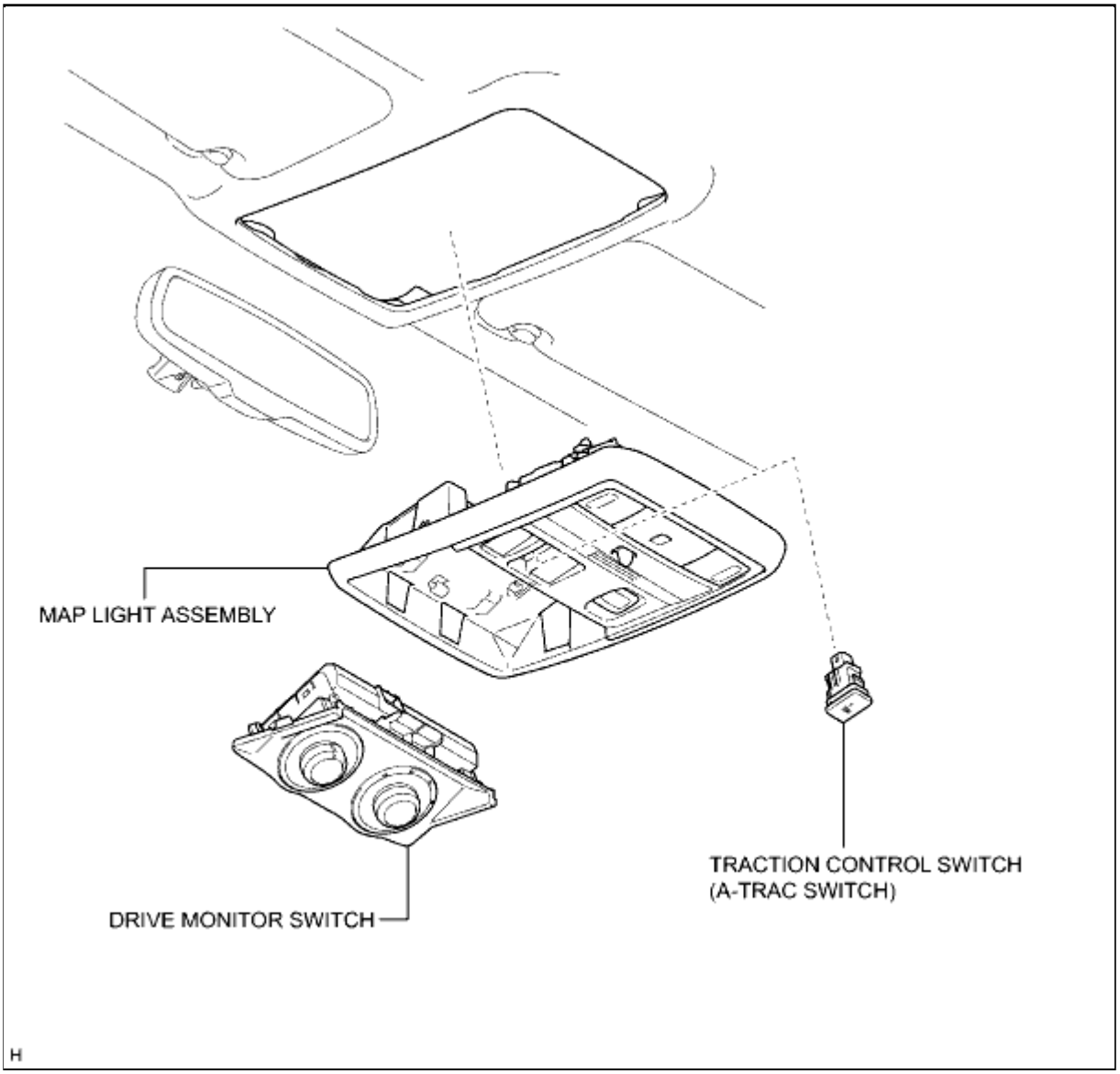
7. CHECK SRS WARNING LIGHT

(a) Check the SRS warning light INFO .

Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WZ1015X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: TRACTION OFF SWITCH: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION

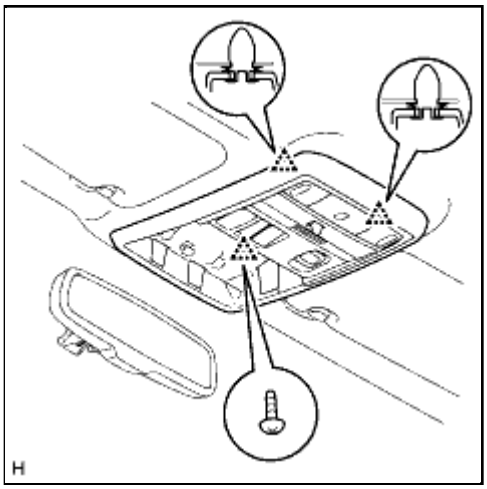


Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WZ2014X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: TRACTION OFF SWITCH: REMOVAL (2010 4Runner)		

REMOVAL

1. REMOVE DRIVE MONITOR SWITCH INFO

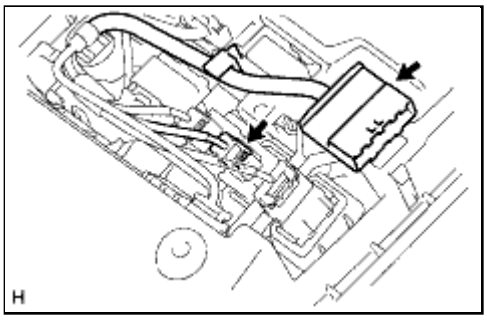
2. REMOVE MAP LIGHT ASSEMBLY



(a) Remove the screws.

(b) Detach the 2 clips and remove the map light assembly.

3. REMOVE TRACTION CONTROL SWITCH (A-TRAC SWITCH)

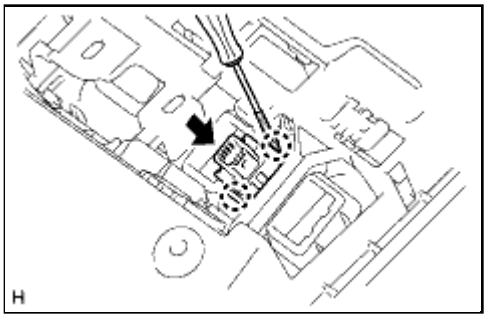


(a) Disconnect the 2 connectors.

(b) Using a screwdriver, detach the 2 claws and remove the traction control switch (A-TRAC switch) from the map light assembly.

HINT:

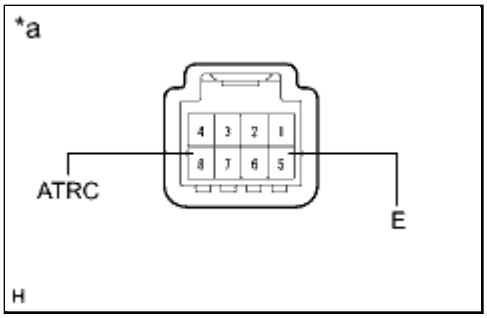
Tape the screwdriver tip before use.



Last Modified: 5-10-2010	6.4 G	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WZ0019X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: TRACTION OFF SWITCH: INSPECTION (2010 4Runner)		

INSPECTION

1. INSPECT TRACTION CONTROL SWITCH (A-TRAC SWITCH)



(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	SWITCH CONDITION	SPECIFIED CONDITION
5 (E) - 8 (ATRC)	Pressed	Below 1 Ω
	Not pressed	10 kΩ or higher

Text in Illustration

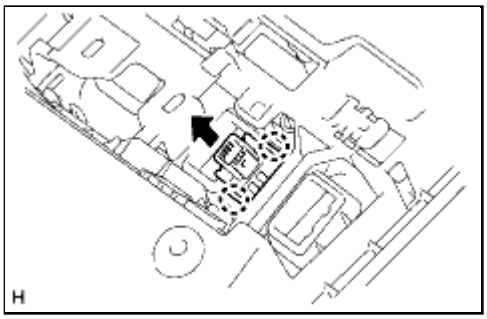
*a	Component without harness connected (A-TRAC Switch)

If the result is not as specified, replace the traction control switch (A-TRAC switch).

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WYZ014X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: TRACTION OFF SWITCH: INSTALLATION (2010 4Runner)		

INSTALLATION

1. INSTALL TRACTION CONTROL SWITCH (A-TRAC SWITCH)



(a) Attach the 2 claws to install the traction control switch (A-TRAC switch) to the map light assembly.

(b) Connect the 2 connectors.

2. INSTALL MAP LIGHT ASSEMBLY

(a) Attach the 2 clips to install the map light assembly.

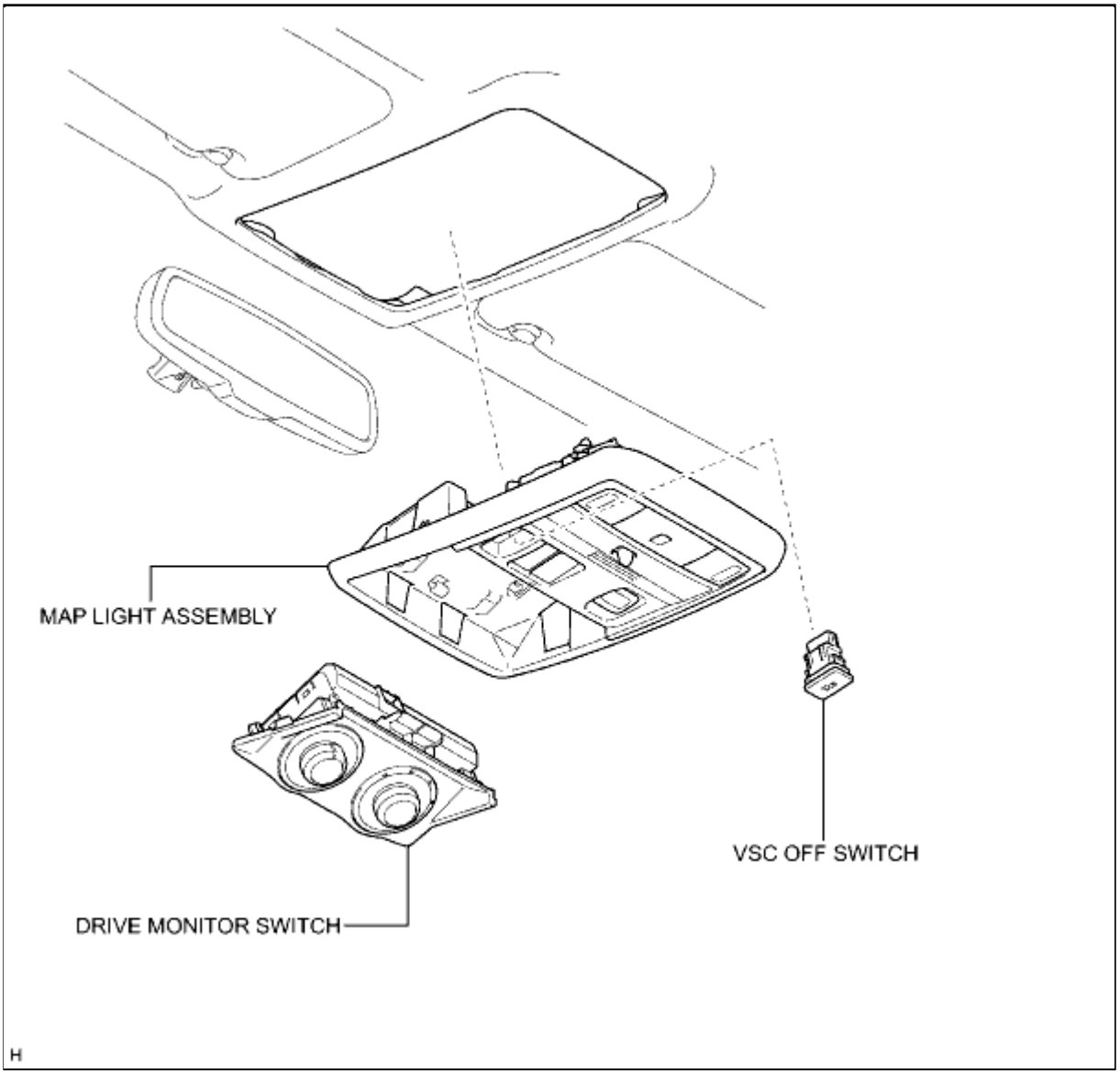
(b) Install the screws.

3. INSTALL DRIVE MONITOR SWITCH INFO

Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WZ1014X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: VSC OFF SWITCH: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION



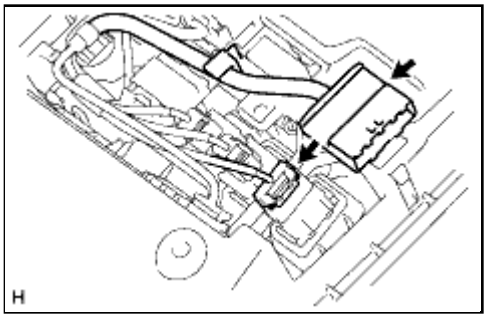
Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WZ2013X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: VSC OFF SWITCH: REMOVAL (2010 4Runner)		

REMOVAL

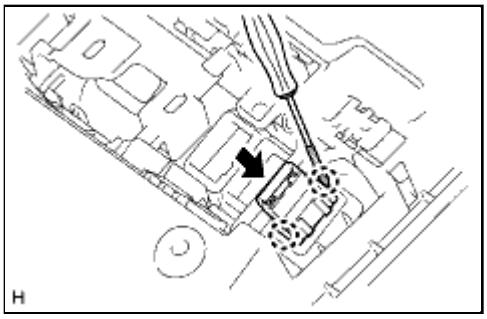
1. REMOVE DRIVE MONITOR SWITCH INFO

2. REMOVE MAP LIGHT ASSEMBLY INFO

3. REMOVE VSC OFF SWITCH



(a) Disconnect the 2 connectors.



(b) Using a screwdriver, detach the 2 claws and remove the VSC OFF switch from the map light assembly.

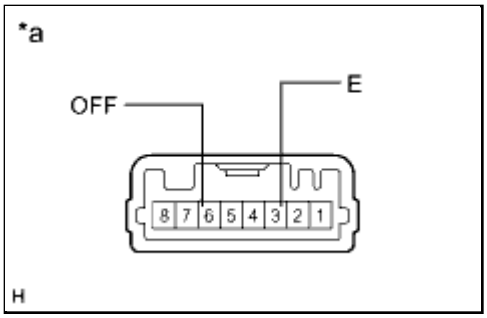
HINT:

Tape the screwdriver tip before use.

Last Modified: 5-10-2010	6.4 G	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WZ0017X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: VSC OFF SWITCH: INSPECTION (2010 4Runner)		

INSPECTION

1. INSPECT VSC OFF SWITCH



(a) Measure the resistance according to the value(s) in the table below.

Standard Resistance:

TESTER CONNECTION	SWITCH CONDITION	SPECIFIED CONDITION
3 (E) - 6 (OFF)	Pressed	Below 1 Ω
	Not pressed	10 kΩ or higher

Text in Illustration

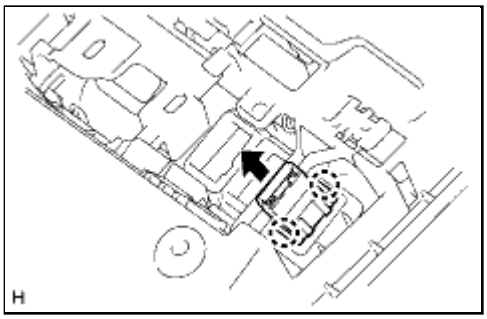
*a	Component without harness connected (VSC OFF Switch)

If the value is not as specified, replace the VSC OFF switch.

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000001WYZ013X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: VSC OFF SWITCH: INSTALLATION (2010 4Runner)		

INSTALLATION

1. INSTALL VSC OFF SWITCH



(a) Attach the 2 claws to install the VSC OFF switch to the map light assembly.

(b) Connect the 2 connectors.

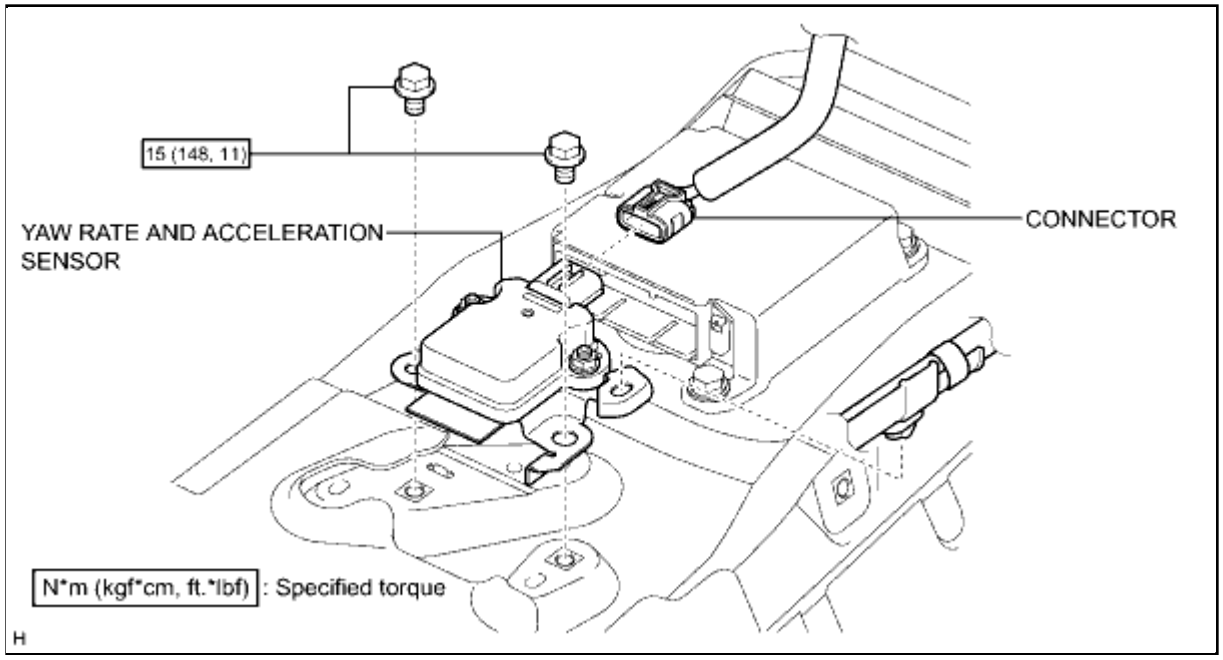
2. INSTALL MAP LIGHT ASSEMBLY INFO

3. INSTALL DRIVE MONITOR SWITCH INFO

Last Modified: 5-10-2010	6.4 K	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM0000014R4014X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: YAW RATE AND ACCELERATION SENSOR: COMPONENTS (2010 4Runner)		

COMPONENTS

ILLUSTRATION



Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000000SS5026X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: YAW RATE AND ACCELERATION SENSOR: REMOVAL (2010 4Runner)		

REMOVAL

1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION:

Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

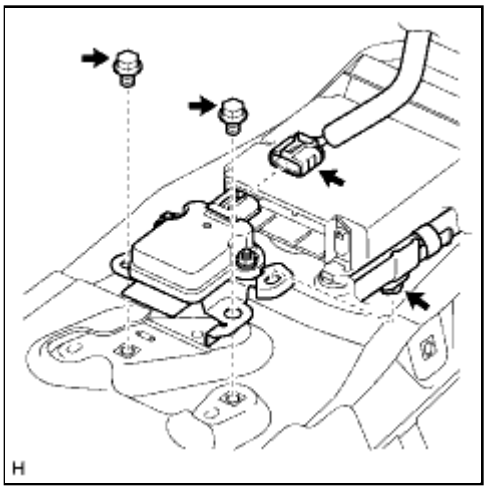
NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected INFO **.**

2. REMOVE REAR CONSOLE BOX SUB-ASSEMBLY

(a) Remove the rear console box sub-assembly INFO .

3. REMOVE YAW RATE AND ACCELERATION SENSOR



(a) Remove the 2 bolts and yaw rate and acceleration sensor.

(b) Disconnect the connector, and then detach the clamp from the sensor bracket.

Last Modified: 5-10-2010	6.4 G	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000000SS302EX
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: YAW RATE AND ACCELERATION SENSOR: INSPECTION (2010 4Runner)		

INSPECTION

1. CHECK YAW RATE AND ACCELERATION SENSOR

(a) Check the yaw rate and acceleration sensor.

Under any of the following conditions, replace the sensor with a new one:

- The surface of the sensor is cracked, dented or chipped.
- The connector is scratched, cracked or damaged.
- The sensor has been dropped.

Last Modified: 5-10-2010	6.4 A	**From:** 200908
Model Year: 2010	**Model:** 4Runner	**Doc ID:** RM000000SS2028X
Title: BRAKE CONTROL / DYNAMIC CONTROL SYSTEMS: YAW RATE AND ACCELERATION SENSOR: INSTALLATION (2010 4Runner)		

INSTALLATION

1. INSTALL YAW RATE AND ACCELERATION SENSOR

(a) Connect the connector, and then attach the clamp to the hole of the sensor bracket.

NOTICE:

Securely connect the connector.

(b) Install the yaw rate and acceleration sensor with the 2 bolts.

Torque: 15 N·m (148 kgf·cm, 11ft·lbf)

NOTICE:

- If the sensor is dropped, replace it.
- Make sure the bracket rotation stopper touches the installation position.
- Make sure that the sensor is oriented correctly.
- When installing the sensor, make sure to avoid impacts to the sensor.

2. INSTALL REAR CONSOLE BOX SUB-ASSEMBLY

(a) Install the rear console box sub-assembly INFO .

3. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

NOTICE:

When disconnecting the cable, some systems need to be initialized after the cable is reconnected INFO **.**

4. PERFORM YAW RATE AND ACCELERATION SENSOR ZERO POINT CALIBRATION

(a) Perform yaw rate and acceleration sensor zero point calibration INFO .

5. CHECK YAW RATE AND ACCELERATION SENSOR SIGNAL

(a) Check the yaw rate and acceleration sensor signal INFO .