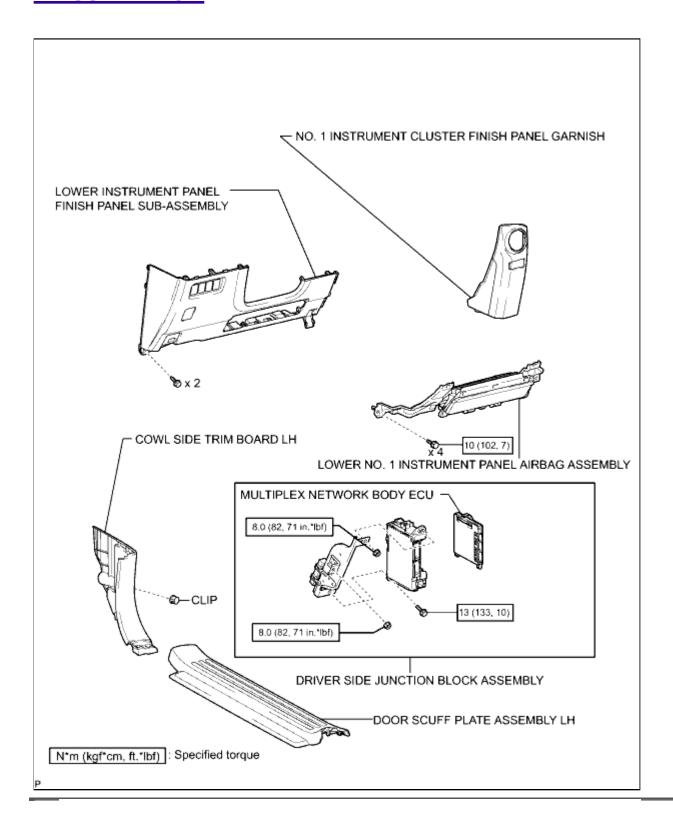
Last Modified: 5-10-2010	6.4 K	From: 200908
Model Year: 2010	Model: 4Runner	<b>Doc ID:</b> RM000003WBN009X
Title: POWER DISTRIBUTION: MAIN BODY ECU: COMPONENTS (2010 4Runner)		

## **COMPONENTS**

## **ILLUSTRATION**



Last Modified: 5-10-2010	6.4 A	From: 200908
Model Year: 2010	Model: 4Runner	<b>Doc ID:</b> RM000003WB0009X
Title: POWER DISTRIBUTION: MAIN BODY ECU: REMOVAL (2010 4Runner)		

## **REMOVAL**

#### 1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

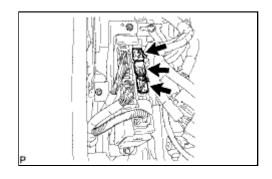
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system

### **NOTICE:**

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

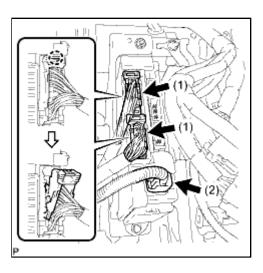


- 2. REMOVE DOOR SCUFF PLATE ASSEMBLY LH
- 3. REMOVE COWL SIDE TRIM BOARD LH
- 4. REMOVE NO. 1 INSTRUMENT CLUSTER FINISH PANEL GARNISH
- 5. REMOVE LOWER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY
- 6. REMOVE LOWER NO. 1 INSTRUMENT PANEL AIRBAG ASSEMBLY
- 7. REMOVE DRIVER SIDE JUNCTION BLOCK ASSEMBLY

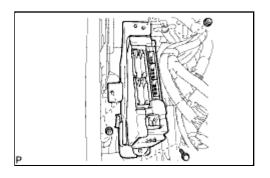


(a) Disconnect the 3 connectors.

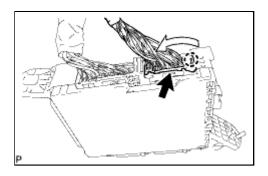
(b) Disconnect the 2 connectors labeled (1) as shown in the illustration.



(c) Disconnect the connector labeled (2).

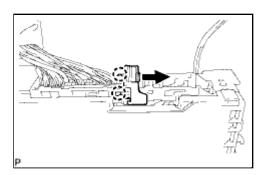


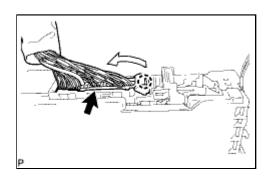
(d) Remove the bolt and 2 nuts and disconnect the driver side junction block assembly.



(e) Detach the claw and disconnect the connector as shown in the illustration.

(f) Detach the 2 claws and release the connector's lock as shown in the illustration.

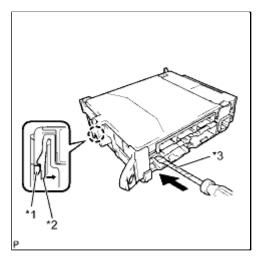




(g) Detach the claw and disconnect the connector as shown in the illustration.

(h) Remove the driver side junction block assembly.

#### 8. REMOVE MULTIPLEX NETWORK BODY ECU



(a) Press the claw of the junction block as shown in the illustration to release the lock.

## **Text in Illustration**

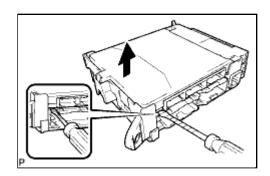
*1	Multiplex Network Body ECU
* 2	Driver Side Junction Block
* 3	Protective Tape

(b) With the junction block lock released, insert a screwdriver with its tip wrapped with protective tape horizontally between the multiplex network body ECU and junction block.

#### **NOTICE:**

Use a screwdriver with a radius of between 5.0 mm (0.197 in.) and 6.3 mm (0.248 in.) and a length of approximately 90 mm (3.54 in.).

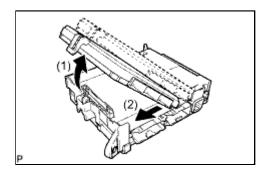
(c) Using the screwdriver, carefully raise the multiplex



network body ECU until the connector becomes disengaged.

#### **NOTICE:**

Do not twist the screwdriver to raise the multiplex network body ECU.



(d) Raise the multiplex network body ECU as shown by arrow (1), and then pull it out as shown by arrow (2) in the illustration.

#### NOTICE:

Do not touch the ECU connector.



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Model Year: 2010	Model: 4Runner	<b>Doc ID:</b> RM000003WBM009X
Title: POWER DISTRIBUTION: MAIN BODY ECU: INSTALLATION (2010 4Runner)		

## **INSTALLATION**

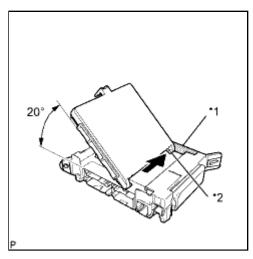
#### **HINT:**

A bolt without a torque specification is shown in the standard bolt chart

#### 1. INSTALL MULTIPLEX NETWORK BODY ECU

#### **NOTICE:**

- Make sure that no foreign objects contact the connecting surfaces.
- Do not touch the ECU connector.



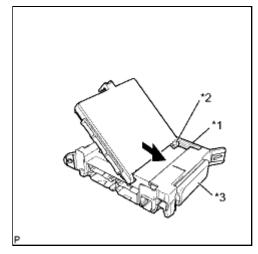
(a) Insert the multiplex network body ECU until it contacts the housing sidewall of the guide part as shown in the illustration.

## **Text in Illustration**

*1	Housing Sidewall
* 2	Guide Part

#### **HINT:**

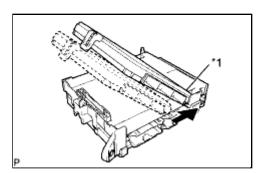
Be sure to maintain an angle of  $20^{\circ}$  or more as shown in the illustration.



(b) Slide the guide of the multiplex network body ECU along the housing sidewall toward the junction block fuses as shown in the illustration.

## **Text in Illustration**

*1	Housing Sidewall
* 2	Guide Part
* 3	Junction Block Fuse



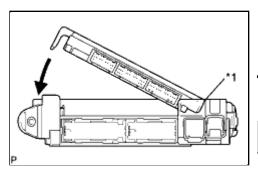
(c) Slide the multiplex network body ECU so that it contacts side A as shown in the illustration.

## **Text in Illustration**

*1	Side A
----	--------

#### **NOTICE:**

Do not apply excessive force to the multiplex network body ECU.



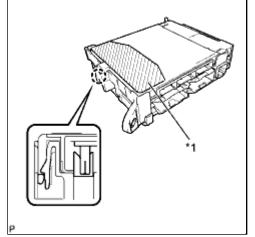
(d) With the multiplex network body ECU contacting side A of the junction block (point of rotation), rotate it downward as shown in the illustration.

#### **Text in Illustration**

*1	Side A Contact Portion
----	------------------------

(e) Press the pushing area until the claw attaches to install the multiplex network body ECU.

## **Text in Illustration**



* 1	Puching A roa
1	Pushing Area

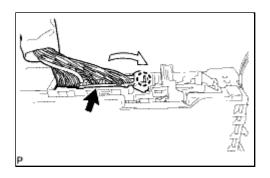
#### **NOTICE:**

- Make sure to press only the pushing area.
- Confirm the engagement of the multiplex network body ECU and junction block by listening for a lock sound.
- Do not apply excessive force to the multiplex network body ECU.

#### **HINT:**

If a lock sound cannot be heard, visually check the engagement of the lock part. The engagement can also be confirmed if the multiplex network body ECU and junction block are flush.

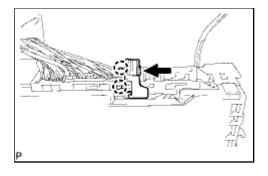
#### 2. INSTALL DRIVER SIDE JUNCTION BLOCK ASSEMBLY



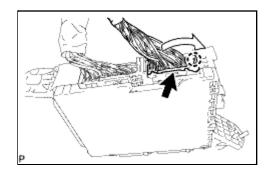
(a) Attach the claw to install the connector as shown in the illustration.

#### **NOTICE:**

Be sure to connect each connector securely.



(b) Attach the 2 claws to lock the connector lock as shown in the illustration.



(c) Attach the claw to connect the connector as shown in the illustration.

#### NOTICE:

Be sure to connect the connector securely.

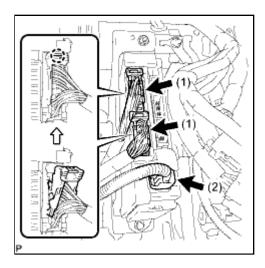
(d) Install the driver side junction block assembly with the bolt and 2 nuts.

for Bolt - Torque: 13 N·m (133 kgf·cm, 10ft·lbf) for Nut - Torque: 8.0 N·m (82 kgf·cm, 71in·lbf)

(e) Connect the connector labeled (2).

#### NOTICE:

Be sure to connect each connector securely.



(f) Connect the 2 connectors labeled (1) as shown in the illustration.

#### **NOTICE:**

Be sure to connect each connector securely.

(g) Connect the 3 connectors.

#### **NOTICE:**

Be sure to connect each connector securely.

- 3. INSTALL LOWER NO. 1 INSTRUMENT PANEL AIRBAG ASSEMBLY
- 4. INSTALL LOWER INSTRUMENT PANEL FINISH PANEL SUB-ASSEMBLY
- 5. INSTALL NO. 1 INSTRUMENT CLUSTER FINISH PANEL GARNISH
- 6. INSTALL COWL SIDE TRIM BOARD LH
- 7. INSTALL DOOR SCUFF PLATE ASSEMBLY LH
- 8. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

#### **NOTICE:**

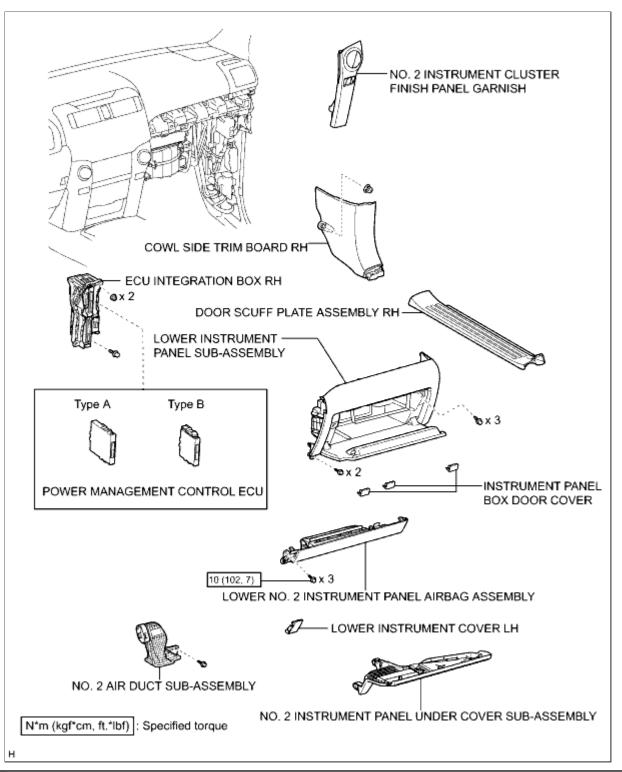
When disconnecting the cable, some systems need to be initialized after the cable is reconnected



- 9. CHECK SRS WARNING LIGHT
  - (a) Check the SRS warning light

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Model Year: 2010	Model: 4Runner	<b>Doc ID:</b> RM000003WBQ00BX
Title: POWER DISTRIBUTION: POWER MANAGEMENT CONTROL ECU: COMPONENTS (2010		

# COMPONENTS ILLUSTRATION



⊕ TOYOTA

Last Modified: 5-10-2010	6.4 A	From: 200908
Model Year: 2010	Model: 4Runner	Doc ID: RM000003WBR00EX
Title: POWER DISTRIBUTION: POWER MANAGEMENT CONTROL ECU: REMOVAL (2010 4Runner)		

## **REMOVAL**

#### 1. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

#### **CAUTION:**

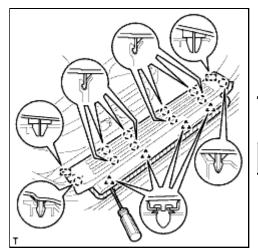
Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to disable the SRS system.

#### **NOTICE:**

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



#### 2. REMOVE DOOR SCUFF PLATE ASSEMBLY RH



(a) Put protective tape around the door scuff plate.

### **Text in Illustration**

\* 1 Protective Tape

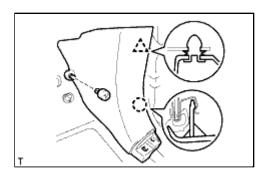
(b) Using a screwdriver, detach the 4 clips, 10 claws and 2 guides and remove the door scuff plate.

#### HINT:

Tape the screwdriver tip before use.

#### 3. REMOVE COWL SIDE TRIM BOARD RH

(a) Remove the clip.



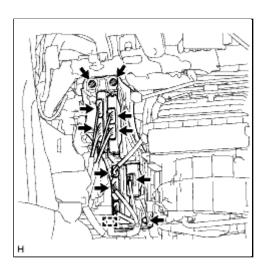
(b) Detach the clip and claw and remove the cowl side trim board.

#### 4. REMOVE NO. 2 INSTRUMENT CLUSTER FINISH PANEL GARNISH

#### **HINT:**

Use the same procedure described for the No. 1 instrument cluster finish panel garnish.

- (a) Remove the No. 2 instrument cluster finish panel garnish
- 5. REMOVE NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY
- 6. REMOVE LOWER INSTRUMENT COVER LH
- 7. REMOVE LOWER NO. 2 INSTRUMENT PANEL AIRBAG ASSEMBLY
- 8. REMOVE INSTRUMENT PANEL BOX DOOR COVER
- 9. REMOVE LOWER INSTRUMENT PANEL SUB-ASSEMBLY
- 10. REMOVE NO. 2 AIR DUCT SUB-ASSEMBLY

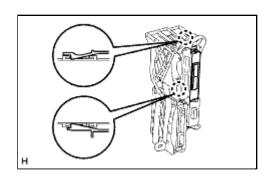


#### 11. REMOVE ECU INTEGRATION BOX RH

- (a) Disconnect all the connectors.
- (b) Detach the clamp.
- (c) Remove the 2 nuts, bolt and ECU integration box RH.

#### 12. REMOVE POWER MANAGEMENT CONTROL ECU

(a) Detach the 2 claws and remove the power management



control ECU.





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Model Year: 2010	Model: 4Runner	<b>Doc ID:</b> RM000003WBP00EX
<b>Title:</b> POWER DISTRIBUTION: POWER MANAGEMENT CONTROL ECU: INSTALLATION (2010 4Runner)		

## **INSTALLATION**

#### HINT:

A bolt without a torque specification is shown in the standard bolt chart

#### 1. INSTALL POWER MANAGEMENT CONTROL ECU

(a) Attach the 2 claws to install the power management control ECU.

#### 2. INSTALL ECU INTEGRATION BOX RH

- (a) Install the ECU integration box RH with the 2 nuts and bolt.
- (b) Attach the clamp.
- (c) Connect all the connectors.

#### NOTICE:

- Do not twist the connectors of the ECU when connecting them.
- Do not apply more force than necessary to the connectors. If more than 98 N (10 kgf, 22 lbf) of force is applied to a connector, the connector or connector holder may be damaged.
- 3. INSTALL NO. 2 AIR DUCT SUB-ASSEMBLY
- 4. INSTALL LOWER INSTRUMENT PANEL SUB-ASSEMBLY
- 5. INSTALL INSTRUMENT PANEL BOX DOOR COVER
- 6. INSTALL LOWER NO. 2 INSTRUMENT PANEL AIRBAG ASSEMBLY
- 7. INSTALL LOWER INSTRUMENT COVER LH
- 8. INSTALL NO. 2 INSTRUMENT PANEL UNDER COVER SUB-ASSEMBLY
- 9. INSTALL NO. 2 INSTRUMENT CLUSTER FINISH PANEL GARNISH

#### **HINT:**

Use the same procedure described for the No. 1 instrument cluster finish panel garnish.

(a) Install the No. 2 instrument cluster finish panel garnish

#### 10. INSTALL COWL SIDE TRIM BOARD RH

- (a) Attach the clip and claw to install the cowl side trim board.
- (b) Install the clip.

#### 11. INSTALL DOOR SCUFF PLATE ASSEMBLY RH

- (a) Attach the 4 clips, 10 claws and 2 guides to install the door scuff plate.
- 12. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

#### **NOTICE:**

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



## 13. CHECK SRS WARNING LIGHT

(a) Check the SRS warning light



