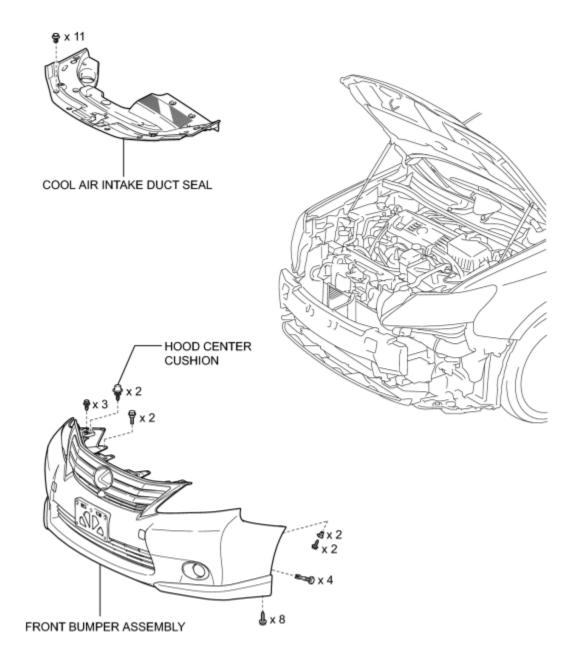
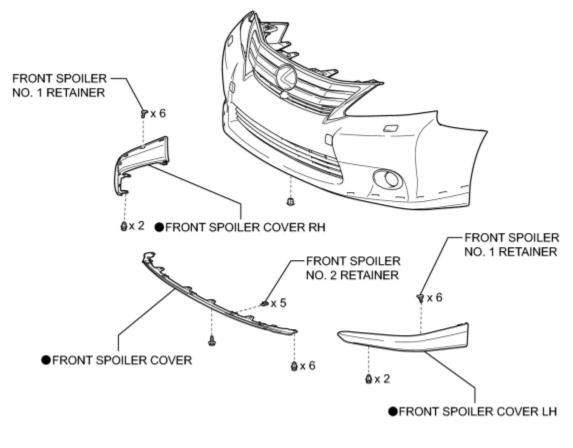
Last Modified: 5-25-2010	6.4 K	<b>From:</b> 200907
Model Year: 2010	Model: HS250H	<b>Doc ID:</b> RM000003W5A009X
Title: EXTERIOR PANELS / TRIM: FRONT BUMPER: COMPONENTS (2010 HS250H)		

# **COMPONENTS**

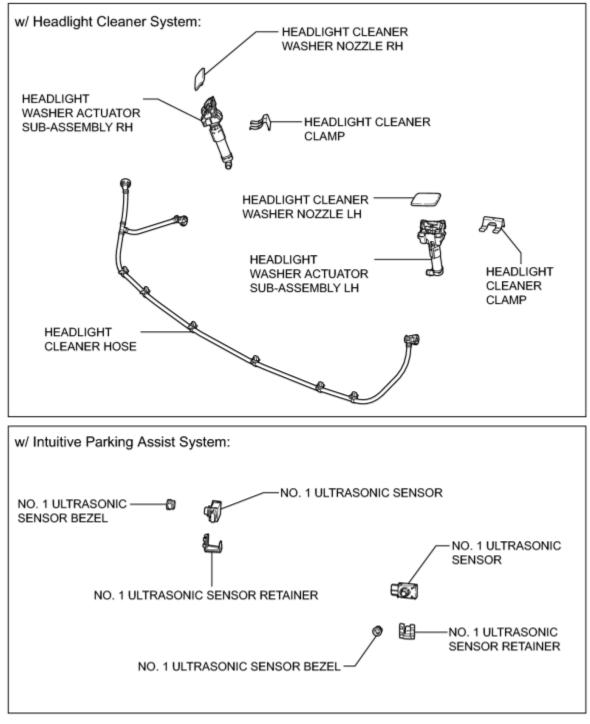


Ρ

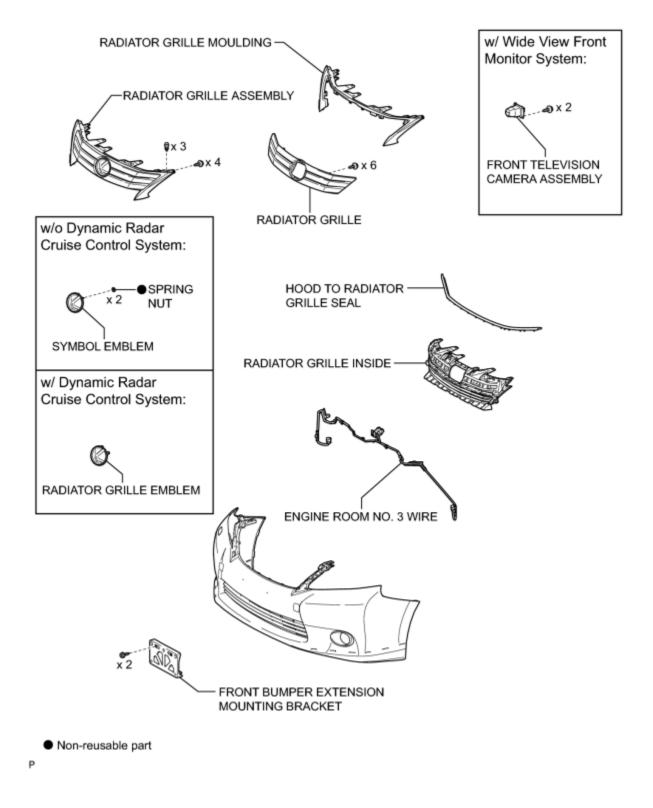


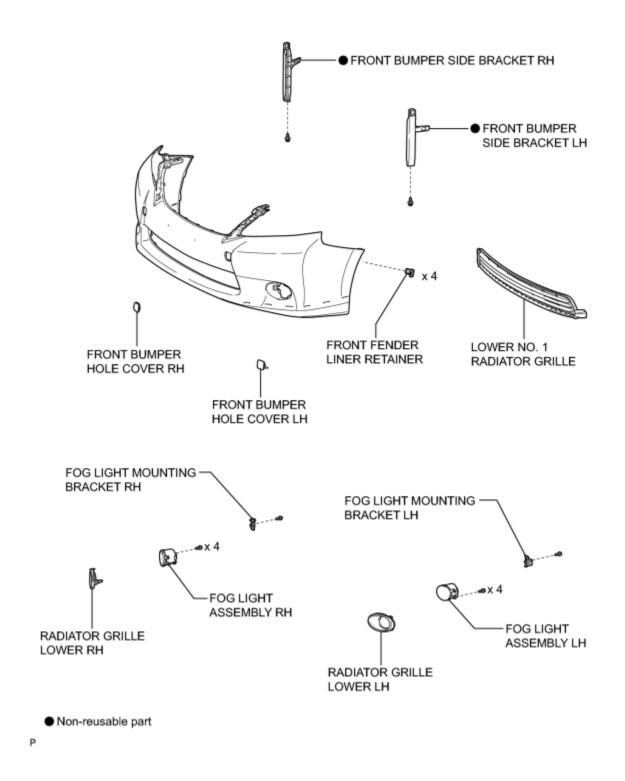
Non-reusable part

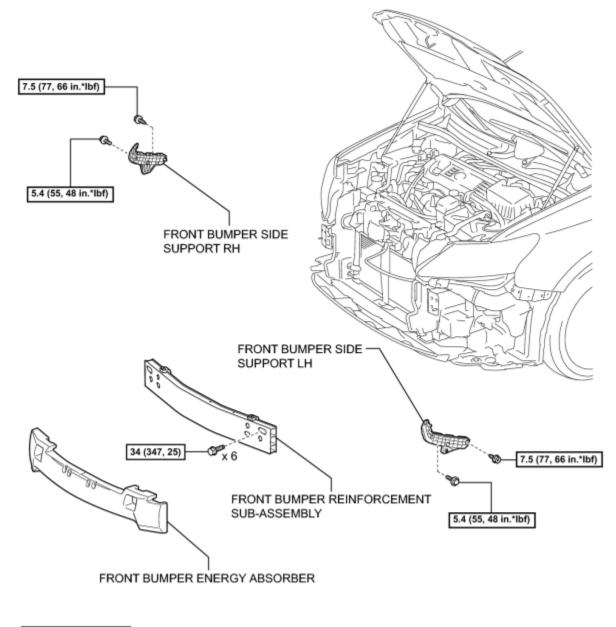
Ρ



Ρ





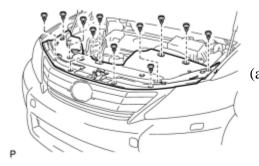


N*m (kgf*cm,	ft.*lbf)	: Specified torque
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Last Modified: 5-25-2010	6.4 A	From: 200907
Model Year: 2010	Model: HS250H	Doc ID: RM0000034WR00MX
Title: EXTERIOR PANELS / TRIM: FRONT BUMPER: REMOVAL (2010 HS250H)		

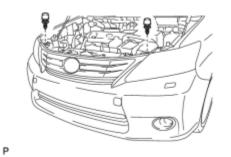
# REMOVAL

1. REMOVE COOL AIR INTAKE DUCT SEAL



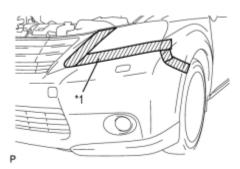
(a) Remove the 11 clips and cool air intake duct seal.

2. REMOVE HOOD CENTER CUSHION



(a) Remove the 2 hood center cushions.

# 3. REMOVE FRONT BUMPER ASSEMBLY



(a) Put protective tape around the front bumper assembly.

Text in Illustration	Protective Tape
*1	-

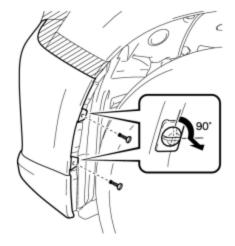
HINT:

Use the same procedure for the RH side and LH side.

(b) Using a screwdriver, turn the pins 90 degrees and remove the 2 pin hold clips.

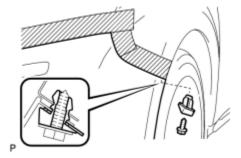
#### HINT:

Use the same procedure for the RH side and LH side.



(c) Remove the screw and front bumper seal bracket.

### NOTICE:



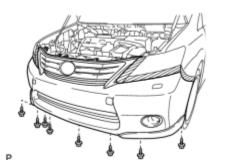
Ρ

Ρ

Do not pull the front bumper assembly until the front bumper seal bracket is removed, or the front bumper assembly may be damaged.

HINT:

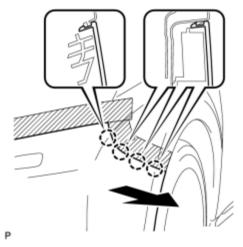
Use the same procedure for the RH side and LH side.



(d) Remove the 8 screws.

(e) Remove the 2 bolts.

(f) Using a clip remover, remove the 3 clips.



(g) Disengage the 4 claws.

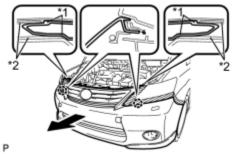
NOTICE:

Make sure that the front bumper seal bracket is removed, or the front bumper assembly may be damaged.

HINT:

Use the same procedure for the RH side and LH side.

(h) Disconnect the hood to radiator grille seal.

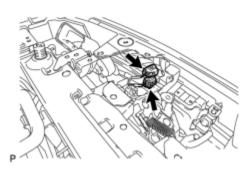


Text in Illustration	Hood to Radiator Grille Seal
*1	
*2	Headlight Protector

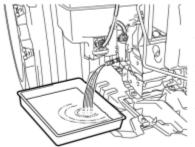
(i) Disengage the 2 claws and disconnect the front bumper assembly as shown in the illustration.



(j) Disconnect the connector. (w/o Wide View Front Monitor System)



(k) Disconnect the 2 connectors. (w/ Wide View Front Monitor System)



(1) Disconnect the headlight cleaner hose and drain the washer fluid. (w/ Headlight Cleaner System)

HINT:

Use a container to collect the washer fluid.

Ρ

(m) Remove the front bumper assembly.

Φτογοτα		
Last Modified: 5-25-2010	6.4 A	From: 200907
Model Year: 2010	Model: HS250H	Doc ID: RM000003CVF00EX
Title: EXTERIOR PANELS / TRIM: FRONT BUMPER: DISASSEMBLY (2010 HS250H)		

# DISASSEMBLY

- 1. REMOVE FRONT SPOILER COVER LH\_
- 2. REMOVE FRONT SPOILER COVER RH

# HINT:

Use the same procedure as for the LH side.

3. REMOVE FRONT SPOILER COVER\_

4. REMOVE HEADLIGHT CLEANER WASHER NOZZLE LH (w/ Headlight Cleaner System)

5. REMOVE HEADLIGHT CLEANER WASHER NOZZLE RH (w/ Headlight Cleaner System)

HINT:

Use the same procedure as for the LH side.

6. REMOVE HEADLIGHT WASHER ACTUATOR SUB-ASSEMBLY LH (w/ Headlight Cleaner System)\_\_\_\_\_

7. REMOVE HEADLIGHT WASHER ACTUATOR SUB-ASSEMBLY RH (w/ Headlight Cleaner System)

HINT:

Use the same procedure as for the LH side.

8. REMOVE NO. 1 ULTRASONIC SENSOR RETAINER (w/ Intuitive Parking Assist System)

9. REMOVE NO. 1 ULTRASONIC SENSOR (w/ Intuitive Parking Assist System)

10. REMOVE NO. 1 ULTRASONIC SENSOR BEZEL (w/ Intuitive Parking Assist System)

11. REMOVE FOG LIGHT ASSEMBLY LH\_

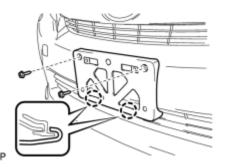
12. REMOVE FOG LIGHT ASSEMBLY RH

HINT:

Use the same procedure as for the LH side.

13. REMOVE FRONT TELEVISION CAMERA ASSEMBLY (w/ Wide View Front Monitor System)

14. REMOVE FRONT BUMPER EXTENSION MOUNTING BRACKET



(a) Remove the 2 screws.

(b) Disengage the 2 claws and remove the front bumper extension mounting bracket.

#### 15. REMOVE RADIATOR GRILLE ASSEMBLY

(a) Put protective tape around the radiator grille assembly.



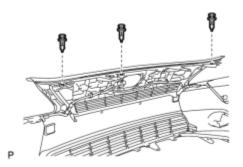
# **Text in Illustration**

Protective Tape

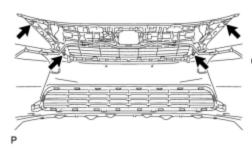
\*1

HINT:

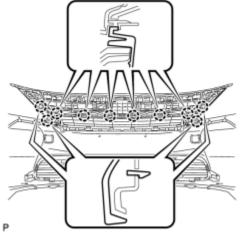
Use the same procedure for the RH side and LH side.



(b) Using a clip remover, remove the 3 clips.



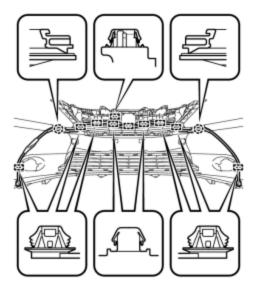
(c) Remove the 4 screws.



(d) Disengage the 10 claws and remove the radiator grille assembly.

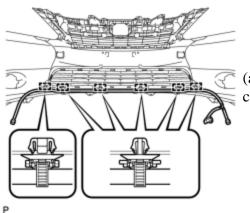
16. REMOVE ENGINE ROOM NO. 3 WIRE

(a) Disengage the 10 clamps.



- Ρ
- (b) Disengage the 2 claws and remove the engine room No. 3 wire.

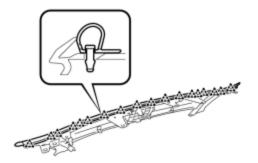
# 17. REMOVE HEADLIGHT CLEANER HOSE (w/ Headlight Cleaner System)



(a) Disengage the 6 clamps and remove the headlight cleaner hose.

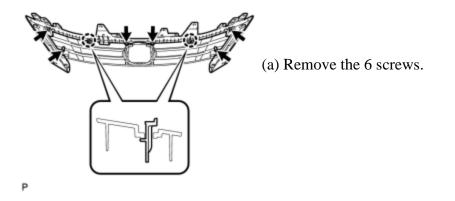
# 18. REMOVE HOOD TO RADIATOR GRILLE SEAL

(a) Disengage the 18 clips and remove the hood to radiator grille seal.



Ρ

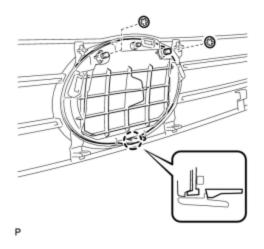
### 19. REMOVE RADIATOR GRILLE MOULDING



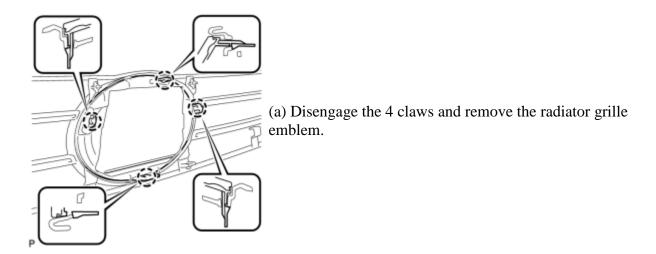
(b) Disengage the 2 claws and remove the radiator grille moulding from the radiator grille.

20. REMOVE SYMBOL EMBLEM (w/o Dynamic Radar Cruise Control System)

(a) Remove the 2 spring nuts.

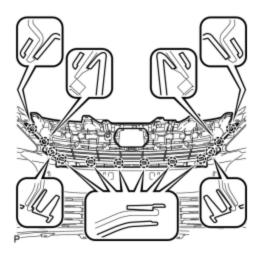


- (b) Disengage the claw and remove the symbol emblem.
- 21. REMOVE RADIATOR GRILLE EMBLEM (w/ Dynamic Radar Cruise Control System)

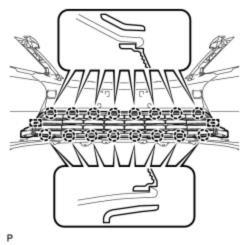


22. REMOVE RADIATOR GRILLE INSIDE

(a) Disengage the 12 claws and remove the radiator grille inside.

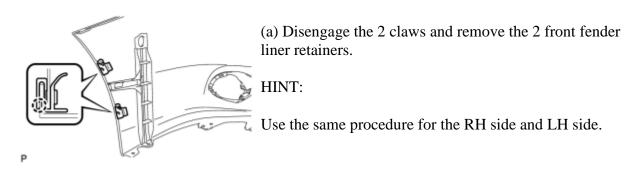


# 23. REMOVE LOWER NO. 1 RADIATOR GRILLE

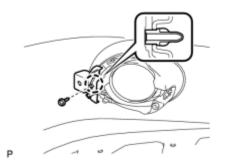


(a) Disengage the 16 claws and 2 guides, remove the lower No. 1 radiator grille.

#### 24. REMOVE FRONT FENDER LINER RETAINER



# 25. REMOVE FOG LIGHT MOUNTING BRACKET LH



(a) Remove the screw.

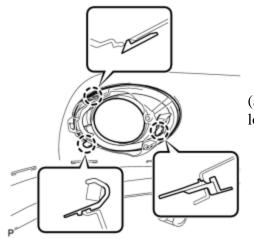
(b) Disengage the claw and remove the fog light mounting bracket LH.

#### 26. REMOVE FOG LIGHT MOUNTING BRACKET RH

#### HINT:

Use the same procedure as for the LH side.

#### 27. REMOVE RADIATOR GRILLE LOWER LH



(a) Disengage the 3 claws and remove the radiator grille lower LH.

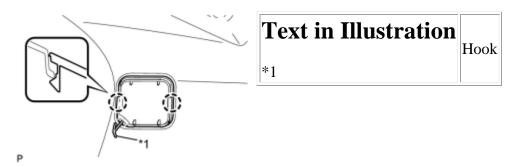
#### 28. REMOVE RADIATOR GRILLE LOWER RH

#### HINT:

Use the same procedure as for the LH side.

#### 29. REMOVE FRONT BUMPER HOLE COVER LH

(a) Disengage the 2 claws.



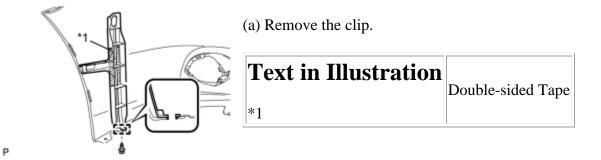
(b) Disengage the hook and remove the front bumper hole cover LH.

30. REMOVE FRONT BUMPER HOLE COVER RH

#### HINT:

Use the same procedure as for the LH side.

### 31. REMOVE FRONT BUMPER SIDE BRACKET LH



(b) Disengage the guide and remove the front bumper side bracket LH.

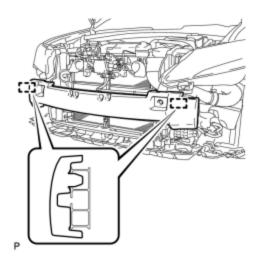
## 32. REMOVE FRONT BUMPER SIDE BRACKET RH

#### HINT:

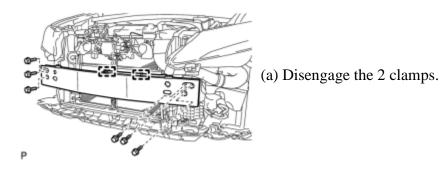
Use the same procedure as for the LH side.

## 33. REMOVE FRONT BUMPER ENERGY ABSORBER

(a) Disengage the 2 guides and remove the front bumper energy absorber.

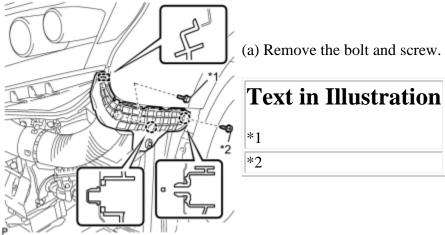


# 34. REMOVE FRONT BUMPER REINFORCEMENT SUB-ASSEMBLY



(b) Remove the 6 bolts and front bumper reinforcement sub-assembly.

# 35. REMOVE FRONT BUMPER SIDE SUPPORT LH



Text in Illustration	Bolt
*1	
*2	Screw

(b) Disengage the 2 claws and guide, and remove the front bumper side support LH.

### 36. REMOVE FRONT BUMPER SIDE SUPPORT RH

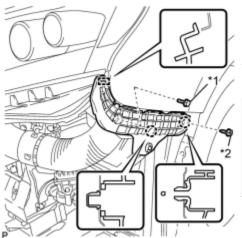
#### HINT:

Use the same procedure as for the LH side.

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Model Year: 2010	<b>Model:</b> HS250H	Doc ID: RM000003CVG00EX
Title: EXTERIOR PANELS / TRIM: FRONT BUMPER: REASSEMBLY (2010 HS250H)		

# REASSEMBLY

### 1. INSTALL FRONT BUMPER SIDE SUPPORT LH



(a) Engage the guide and 2 claws, and install the front bumper side support LH.

Text in Illustration	Bolt
*1	
*2	Screw

(b) Install the bolt and screw.

Bolt - Torque: 5.4 N·m (55 kgf·cm, 48in·lbf)

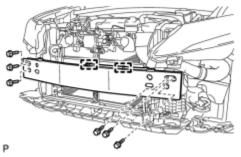
Screw - Torque: 7.5 N·m (77 kgf·cm, 66in·lbf)

#### 2. INSTALL FRONT BUMPER SIDE SUPPORT RH

### HINT:

Use the same procedure as for the LH side.

# 3. INSTALL FRONT BUMPER REINFORCEMENT SUB-ASSEMBLY

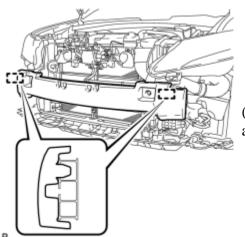


(a) Install the front bumper reinforcement sub-assembly with the 6 bolts.

Torque: 34 N·m (347 kgf·cm, 25ft·lbf)

(b) Engage the 2 clamps.

### 4. INSTALL FRONT BUMPER ENERGY ABSORBER



(a) Engage the 2 guides to install the front bumper energy absorber.

## 5. INSTALL FRONT BUMPER SIDE BRACKET LH

#### HINT:

When installing the front spoiler cover, heat the front bumper using a heat light.

Heating Temperature

item iemperature
------------------

Front Bumper	20 to 30°C (68 to 86°F)
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#### NOTICE:

Do not heat the front bumper excessively.

- (a) Clean the front bumper surface.
- (1) Using a heat light, heat the front bumper surface.
- (2) Remove the double-sided tape from the front bumper.
- (3) Wipe off any tape adhesive residue with cleaner.

(b) Install the front bumper side bracket LH.

Text in Illustration	Double-sided Tape
*1	

(1) Remove the release paper from the front bumper side bracket LH.

#### HINT:

After removing the release paper, keep the exposed adhesive free from foreign matter.

(2) Engage the guide and install a new front bumper side bracket LH.

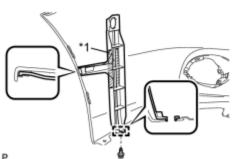
NOTICE:

Make sure that the front bumper side bracket LH is installed in the lines as shown in the illustration.

(3) Lightly press the front surface of the front bumper side bracket LH to ensure a close fit.

HINT:

Press the front bumper side bracket LH with a force of 49 N (5 kgf, 11.0 lbf) or more.



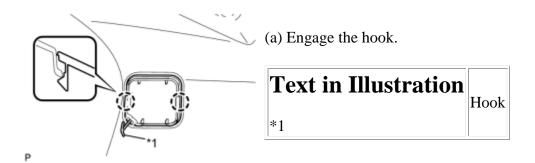
(4) Install the clip.

## 6. INSTALL FRONT BUMPER SIDE BRACKET RH

### HINT:

Use the same procedure as for the LH side.

# 7. INSTALL FRONT BUMPER HOLE COVER LH



(b) Engage the 2 claws and install the front bumper hole cover LH.

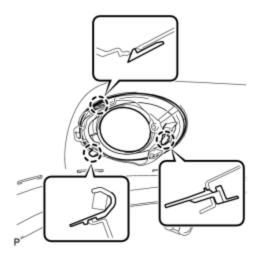
# 8. INSTALL FRONT BUMPER HOLE COVER RH

## HINT:

Use the same procedure as for the LH side.

## 9. INSTALL RADIATOR GRILLE LOWER LH

(a) Engage the 3 claws and install the radiator grille lower LH.

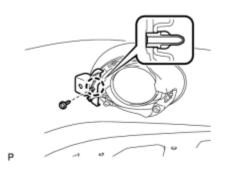


### 10. INSTALL RADIATOR GRILLE LOWER RH

HINT:

Use the same procedure as for the LH side.

#### 11. INSTALL FOG LIGHT MOUNTING BRACKET LH



(a) Engage the claw and install the fog light mounting bracket LH.

(b) Install the screw.

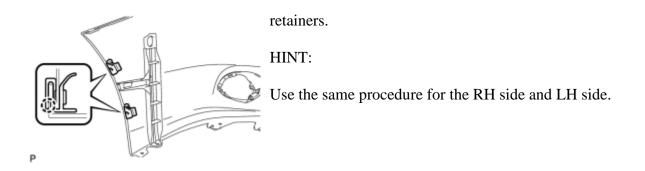
### 12. INSTALL FOG LIGHT MOUNTING BRACKET RH

HINT:

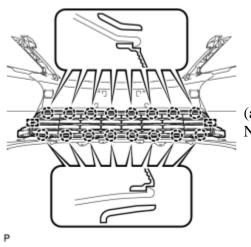
Use the same procedure as for the LH side.

#### 13. INSTALL FRONT FENDER LINER RETAINER

(a) Engage the 2 claws and install the 2 front fender liner

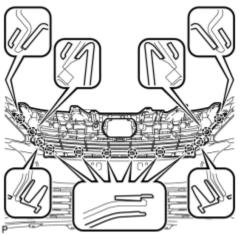


### 14. INSTALL LOWER NO. 1 RADIATOR GRILLE



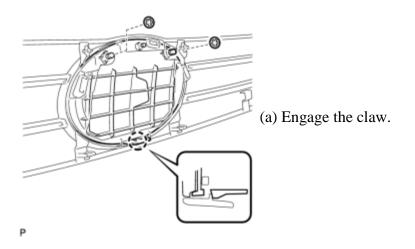
(a) Engage the 2 guides and 16 claws to install the lower No. 1 radiator grille.

# 15. INSTALL RADIATOR GRILLE INSIDE



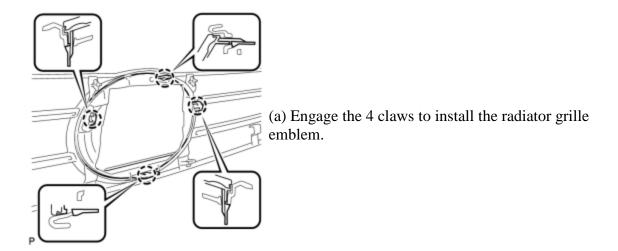
(a) Engage the 12 claws and install the radiator grille inside.

16. INSTALL SYMBOL EMBLEM (w/o Dynamic Radar Cruise Control System)



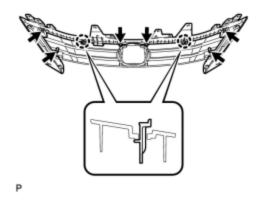
(b) Install the symbol emblem with 2 new spring nuts.

## 17. INSTALL RADIATOR GRILLE EMBLEM (w/ Dynamic Radar Cruise Control System)



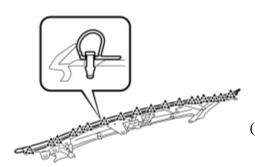
#### 18. INSTALL RADIATOR GRILLE MOULDING

(a) Engage the 2 claws and install the radiator grille moulding.



(b) Install the 6 screws.

### 19. INSTALL HOOD TO RADIATOR GRILLE SEAL

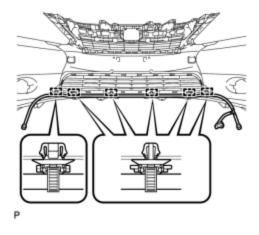


(a) Install the hood to radiator grille seal with the 18 clips.

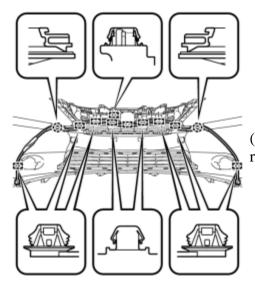
Ρ

20. INSTALL HEADLIGHT CLEANER HOSE (w/ Headlight Cleaner System)

(a) Engage the 6 clamps to install the headlight cleaner hose.



21. INSTALL ENGINE ROOM NO. 3 WIRE

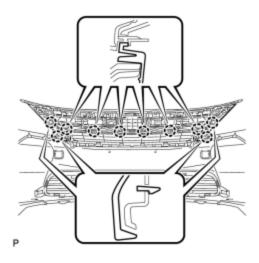


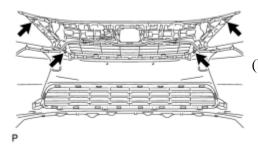
Ρ

(a) Engage the 2 claws and 10 clamps to install the engine room No. 3 wire.

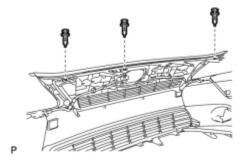
#### 22. INSTALL RADIATOR GRILLE ASSEMBLY

(a) Engage the 10 claws and install the radiator grille assembly.





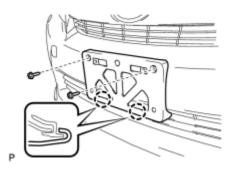
(b) Install the 4 screws.



(c) Install the 3 clips.

# 24. INSTALL FRONT BUMPER EXTENSION MOUNTING BRACKET

(a) Install the 2 claws and install the front bumper extension mounting bracket.



(b) Install the 2 screws.

25. INSTALL FOG LIGHT ASSEMBLY LH

26. INSTALL FOG LIGHT ASSEMBLY RH

HINT:

Use the same procedure as for the LH side.

27. INSTALL NO. 1 ULTRASONIC SENSOR BEZEL (w/ Intuitive Parking Assist System)

28. INSTALL NO. 1 ULTRASONIC SENSOR (w/ Intuitive Parking Assist System)

29. INSTALL NO. 1 ULTRASONIC SENSOR RETAINER (w/ Intuitive Parking Assist System)\_\_\_\_\_\_

30. INSTALL HEADLIGHT WASHER ACTUATOR SUB-ASSEMBLY LH (w/ Headlight Cleaner System)\_\_\_\_\_\_

31. INSTALL HEADLIGHT WASHER ACTUATOR SUB-ASSEMBLY RH (w/ Headlight Cleaner System)

HINT:

Use the same procedure as for the LH side.

32. INSTALL HEADLIGHT CLEANER WASHER NOZZLE LH (w/ Headlight Cleaner System)\_\_\_\_\_\_

33. INSTALL HEADLIGHT CLEANER WASHER NOZZLE RH (w/ Headlight Cleaner System)

#### HINT:

Use the same procedure as for the LH side.

34. INSTALL FRONT SPOILER COVER\_

35. INSTALL FRONT SPOILER COVER LH

36. INSTALL FRONT SPOILER COVER RH

### HINT:

Use the same procedure as for the LH side.

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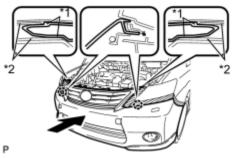
TOYOTA

Last Modified: 5-25-2010	6.4 A	From: 200907	
Model Year: 2010	Model: HS250H	Doc ID: RM0000034WP00MX	
Title: EXTERIOR PANELS / TRIM: FRONT BUMPER: INSTALLATION (2010 HS250H)			

# **INSTALLATION**

## 1. INSTALL FRONT BUMPER ASSEMBLY

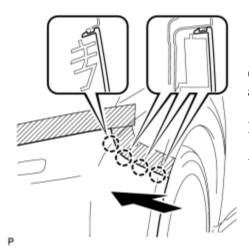
- (a) Connect the headlight cleaner hose. (w/ Headlight Cleaner System)
- (b) Connect the connector. (w/o Wide View Front Monitor System)
- (c) Connect the 2 connectors. (w/ Wide View Front Monitor System)



(d) Engage the 2 claws and install the front bumper assembly as shown in the illustration.

Text in Illustration	Hood to Radiator Grille Seal
*1	
*2	Headlight Protector

(e) Connect the hood to radiator grille seal.



(f) Engage the 4 claws to install the front bumper assembly.

HINT:

Use the same procedure for the RH side and LH side.

- (g) Install the 3 clips.
- (h) Install the 2 bolts.
- (i) Install the 8 screws.
- (j) Install the front bumper seal bracket.

#### NOTICE:

Do not pull the front bumper assembly after the front bumper seal bracket is installed, or the front bumper assembly may be damaged.

#### HINT:

Use the same procedure for the RH side and LH side.

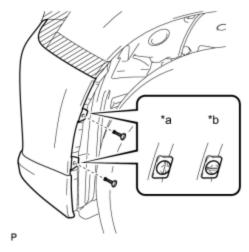
(k) Install the screw.

## HINT:

Use the same procedure for the RH side and LH side.

(1) Install the 2 pin hold clips.

<b>Text in Illustration</b> *a	Correct
*b	Incorrect



NOTICE:

Insert the pin hold clip with the slot aligned vertically. Do not rotate the clip after inserting it. After installation, confirm that the slot is aligned vertically.

HINT:

Use the same procedure for the RH side and LH side.

# 2. INSTALL HOOD CENTER CUSHION

(a) Install the 2 hood center cushions.

# 3. INSTALL COOL AIR INTAKE DUCT SEAL

(a) Install the cool air intake duct seal with the 11 clips.

4. ADD WASHER FLUID (w/ Headlight Cleaner System)

## 5. ADJUST FOG LIGHT AIMING

(a) Adjust the fog light aiming.

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Этоуота