

SERVICE MANUAL

SERVICE MANUAL SECTION

HOOD, GRILLE, FENDERS AND BUMPER - 4200, 4300, 4400

Truck Model: 4200

Truck Model: 4300

Truck Model: 4400

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Table of Contents

1. DESCRIPTION.....	1
1.1. BUMPER.....	1
1.2. HOOD.....	1
1.3. SPLASH PANELS.....	2
1.4. MUD GUARDS.....	3
1.5. GRILLE.....	4
1.6. AIR INTAKES.....	4
1.7. FENDERS.....	5
1.8. FENDER EXTENSIONS.....	6
1.9. HOOD SEAL.....	6
2. REMOVE AND INSTALL.....	7
2.1. 42/43/4400 SERIES BUMPER.....	7
Bumper Removal.....	7
Bumper — Install.....	8
2.2. 42/43/4400 SERIES HOOD.....	8
42/43/4400 Model Hood —Removal.....	8
42/43/4400 Series Model Hood — Install.....	13
2.3. SPLASH PANELS.....	14
Splash Panel— Removal.....	14
Splash Panel - Install.....	15
2.4. MUD GUARDS.....	16
Mud Guard — Removal.....	16
Mud Guard — Install.....	17
2.5. GRILLE.....	17
Grille — Removal.....	17
Grille — Install.....	18
2.6. AIR INTAKES.....	19
Air Intakes — Remove.....	19
Air Intakes — Install.....	20
2.7. FENDERS.....	20
Fender Lower Section — Removal.....	21
Fender Valance — Install.....	22
Headlight — Removal.....	22
Headlight Install.....	23
Clearance Light — Removal.....	24
Clearance Lights — Install.....	24
Hood Latch Upper— Remove.....	25
Upper Hood Latch — Install.....	25
2.8. FENDER EXTENSIONS.....	26
Fender Extension — Remove.....	26
Fender Extension — Install.....	27
Hood Latch Lower Assembly — Remove.....	28
Lower Hood Latch — Install.....	29
2.9. HOOD SEAL.....	29
Hood Seal— Removal.....	29
Hood Seal— Install.....	30

3. ADJUSTMENTS.....	31
3.1. HOOD ADJUSTMENT AND ALIGNMENT.....	31
3.2. HOOD STOP ADJUSTMENT.....	31
3.3. HEADLIGHT ADJUSTMENT.....	32
3.4. HEADLAMP REPLACEMENT.....	33
TORQUE.....	35

1. DESCRIPTION

1.1. BUMPER

The 42/43/4400 series front bumper is a stylized steel bumper assembly. The wrap around design allows access for the tow eyes, and enhances the air flow to the radiator for better engine cooling.

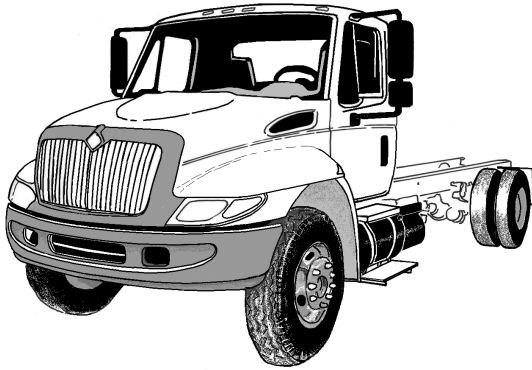


Figure 1 42/43/4400 Series Cab

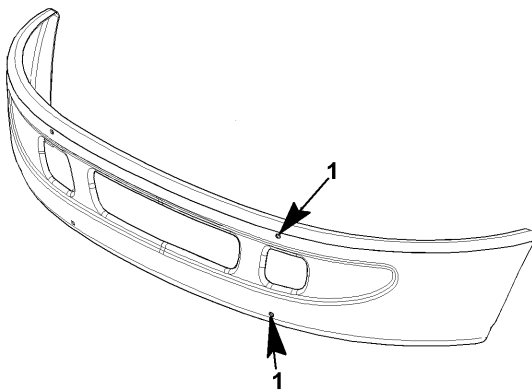


Figure 2 Bumper

1. BUMPER MOUNTING HOLES

The front bumper is a one-piece, aerodynamically styled steel bumper.

1.2. HOOD

The fiberglass hood is a sculptured hood with bonded fender sections. The hood is a tilting type. The narrowed, streamlined, tilting, fiberglass hoods provide aerodynamics, Figure 3, and functional design styling, while still enclosing the air cleaner.

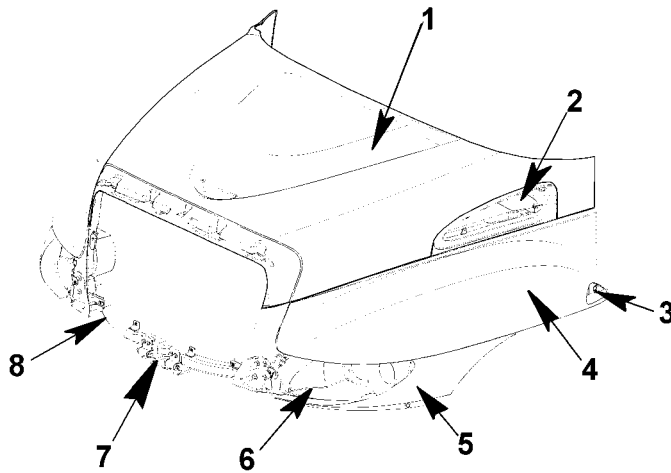


Figure 3 42/43/4400 Series Hood

1. 42/43/4400 HOOD
2. AIR INTAKE
3. MARKER LIGHT
4. UPPER FENDER ASSEMBLY (BONDED TO HOOD)
5. FENDER VALANCE (BOLT ON SECTION)
6. HEADLIGHT HOUSING
7. HOOD HINGE
8. HOOD HINGE MOUNTING BAR

1.3. SPLASH PANELS

The splash panels on all models minimize splash and mud, protecting vital engine systems from corrosion and malfunction (Figure 4).

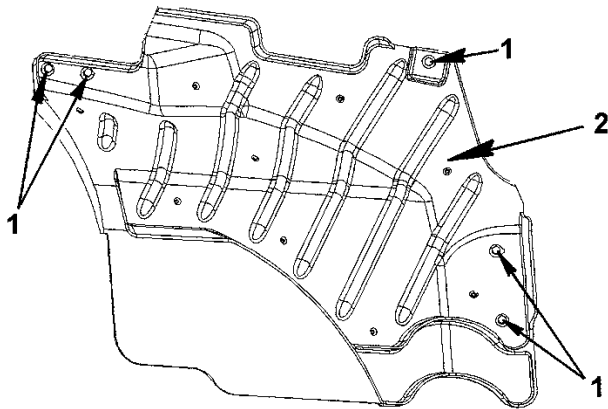


Figure 4 42/43/4400 Series Hood Splash Panel (Drivers Side Shown)

- 1. MOUNTING BOLTS
- 2. SPLASH PANEL

1.4. MUD GUARDS

The mud guards behind the front wheel, mounted on the hood/fender or fender extension on all models, minimize stone, gravel, splash and mud from damaging the lower edge of the cab (Figure 5).

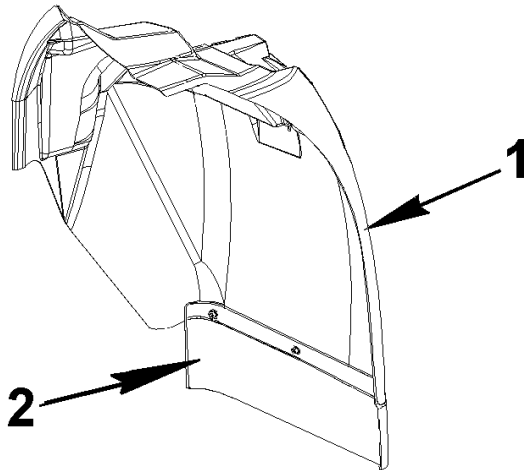


Figure 5 42/43/4400 Series Mud Guards (Drivers Side Shown)

- 1. FENDER EXTENSION
- 2. MUD GUARD

1.5. GRILLE

The grille on the 42/43/4400 series is a one-piece fiberglass assembly bolted to the hood. The grille and shroud assembly is a one-piece chrome assembly (Figure 6). The grille on the 42/43/4400 series model can be removed without removing the hood.

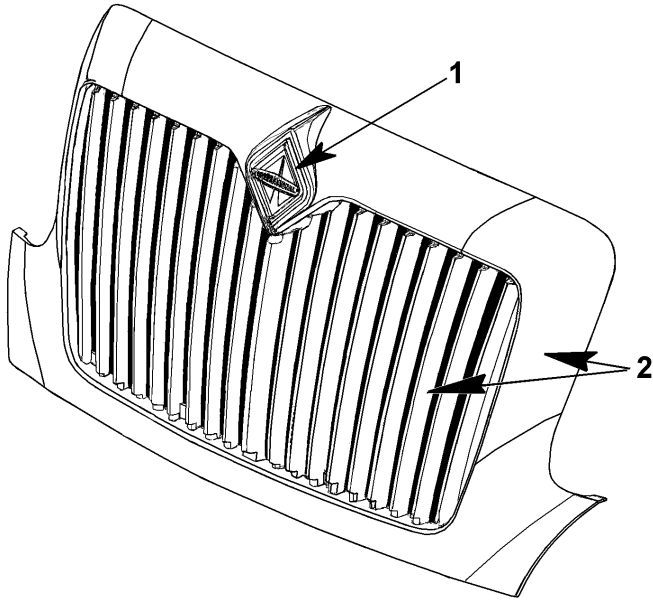


Figure 6 42/43/4400 Model Grille

- 1. INTERNATIONAL NAMEPLATE
- 2. GRILLE AND SHROUD ASSEMBLY

1.6. AIR INTAKES

On the 42/43/4400 series, air is taken in at the air intake vent located on the drivers side of the hood above the fender. The intake air is routed through molded duct work attached to the underside of the hood assembly and routed to the air cleaner (Figure 7).

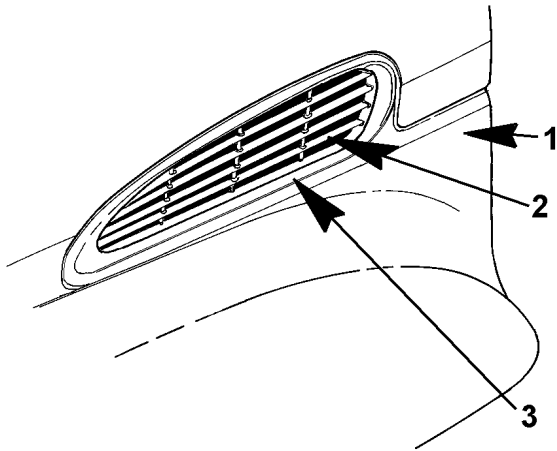


Figure 7 42/43/4400 Series Air Intake

1. UPPER FENDER SECTION
2. INTAKE GRILLE
3. INTAKE GRILLE FRAME

1.7. FENDERS

Fenders are part of the two-piece bonded tilt type hood assembly on the 42/43/4400 series vehicles (Figure 3 and Figure 8). All model hoods have fender extensions which are mounted to the fender section and lower cab section.

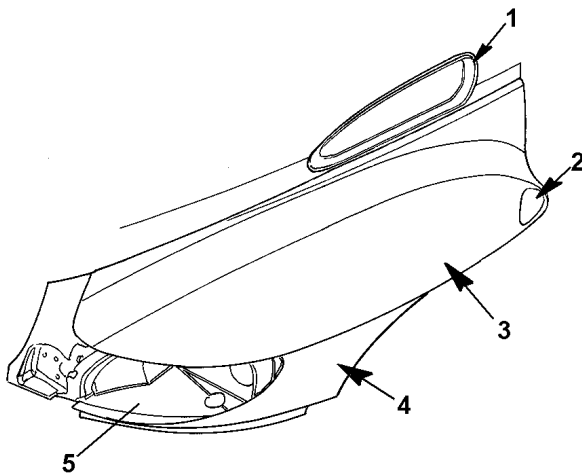


Figure 8 42/43/4400 Series Fender (Driver Side Shown)

1. AIR INLET FRAME
2. MARKER LIGHT
3. FENDER ASSEMBLY— UPPER
4. HEADLIGHT VALANCE PANEL
5. HEADLIGHT OPENING

1.8. FENDER EXTENSIONS

Fender Extensions are an integral part of the fender system on the 42/43/4400 series vehicles. The fender extensions have been designed to provide splash and spray protection. This protects the lower front of the cab from splash and road debris kicked up by the front tires, and it also keeps the step cleaner (Figure 9).

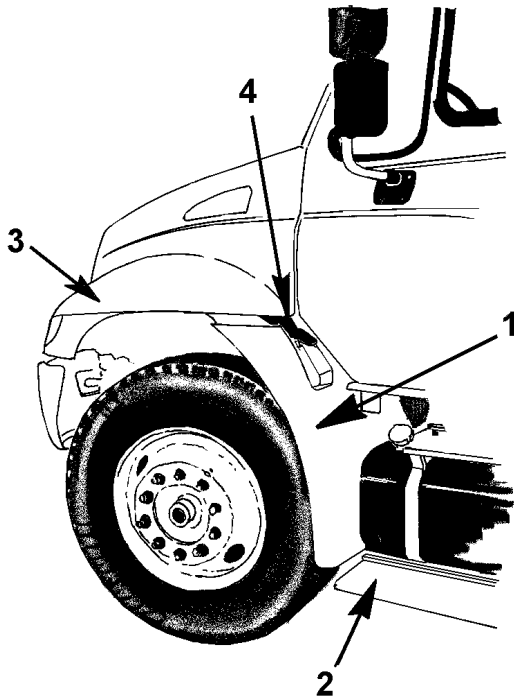


Figure 9 42/43/4400 Series Fender Extension

- 1. FENDER EXTENSION
- 2. CAB STEP
- 3. FENDER
- 4. HOOD LATCH

1.9. HOOD SEAL

The hood seal is located on the leading edge of the cowl tray. The cowl tray is mounted to the upper fire wall below the windshield. The cowl tray seal forms a seal between the hood section and the cowl tray.

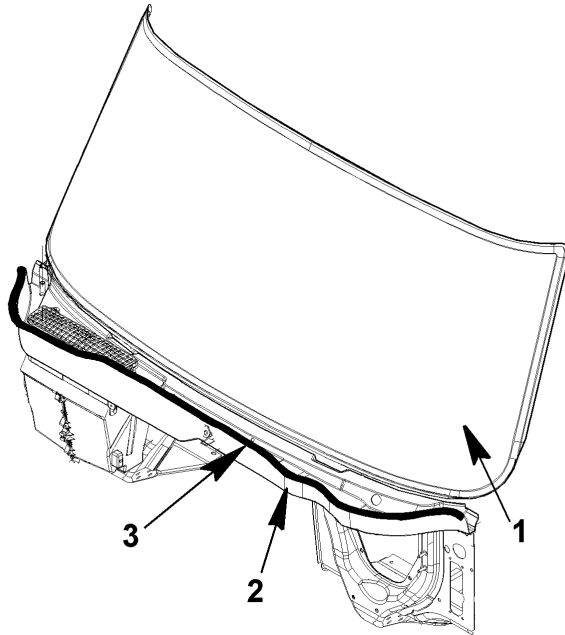


Figure 10 Hood Seal

- 1. WINDSHIELD
- 2. COWL TRAY
- 3. HOOD SEAL

2. REMOVE AND INSTALL

2.1. 42/43/4400 SERIES BUMPER

Bumper Removal

The 42/43/4400 Series aerodynamic bumper is attached to the chassis bumper mounting brackets utilizing (4) four bolts. Beginning at the upper two bolts, loosen bolts. Loosen and remove both lower bumper bolts. Supporting the bumper, remove the two remaining bolts. Remove bumper.

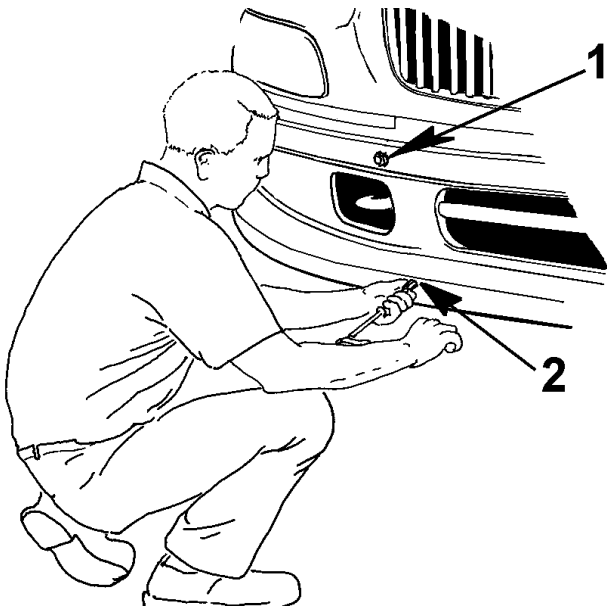


Figure 11 Bumper Removal

1. UPPER BUMPER MOUNTING BOLT
2. LOWER BOLT LOCATION (PASSENGER SIDE SHOWN)

Bumper — Install

Beginning at the upper bolt hole of the steel bumper:

1. Locate the bumper mounting holes with the mounting bracket holes.
2. Insert bolts in the upper holes, one driver side, one passenger side. Hand tighten.
3. Locate the lower bumper mounting holes and insert lower bolts, and hand tighten.
4. Finish tightening the bumper bolts with socket to the torque requirement as designated in the torque chart.

2.2. 42/43/4400 SERIES HOOD

42/43/4400 Model Hood —Removal

1. Place wheel chocks at wheels as required. Release hood latches on each side of the hood and tilt the hood assembly to a 45 degree angle. Support the tilted hood with a floor stand to relieve tension on the support spring assemblies.
2. Disconnect front end pigtail connectors from the front end wire harness connector (Item 2, Figure 12) located at the top of the frame rail on the drivers side and passenger side of the radiator. Remove wire harness clips and loop clamps securing the harness between dash panel and hood, as necessary. (The harness stays with the hood.)

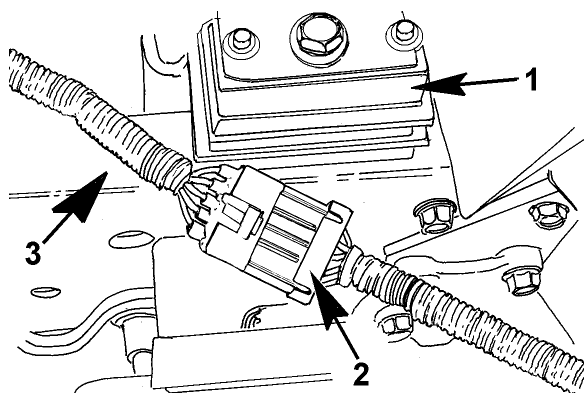


Figure 12 Harness Connections (Each Side at Radiator)

1. RADIATOR MOUNTING BLOCK
2. HEADLIGHT/DIRECTIONAL PIG TAIL
3. TOP OF FRAME RAIL

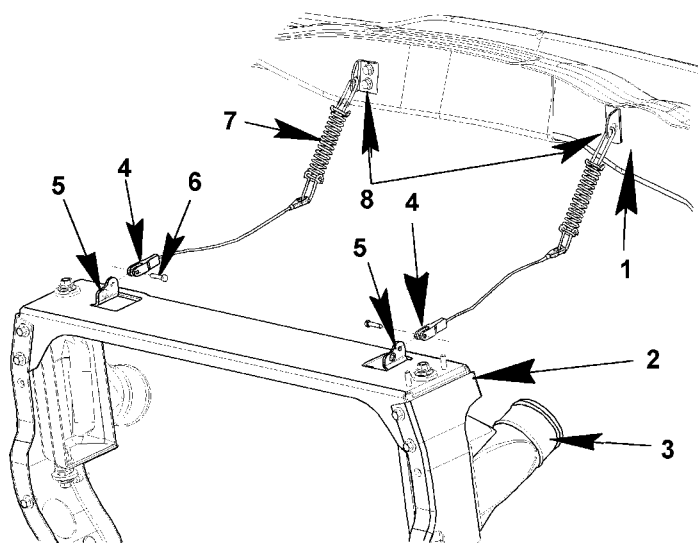


Figure 13 Hood Cable Stops

1. HOOD SUPPORT REINFORCING AND AIR VENT DUCTING
2. RADIATOR TOP FRAME
3. CHARGE AIR CLEANER DISCHARGE PIPING
4. CLEVIS
5. RADIATOR CLEVIS ATTACHMENT BRACKET
6. RETAINING PIN
7. SPRING STOPS
8. SPRING CABLE BRACKETS

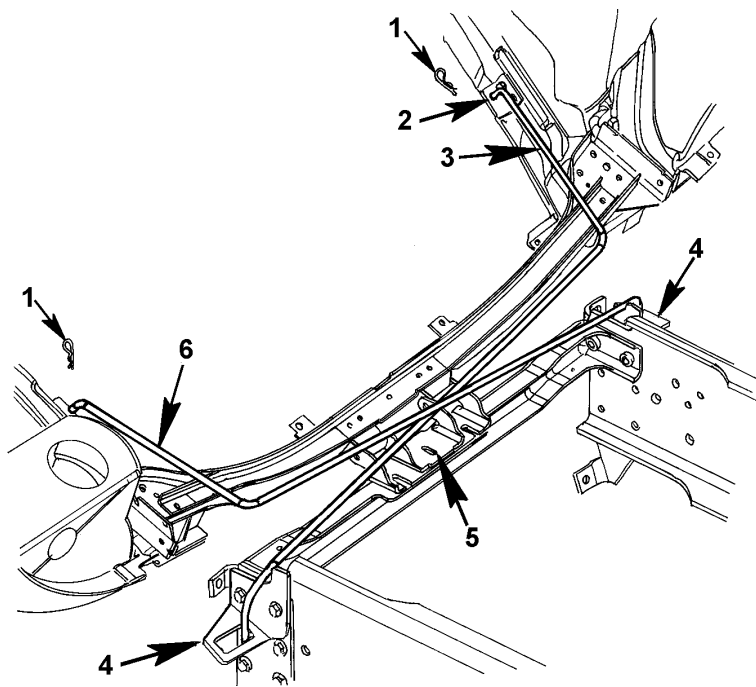


Figure 14 42/43/4400 Series Tilt Assist Assembly

1. RETAINING PIN
2. TILT ASSIST HOOD BRACKET (EACH SIDE)
3. PASSENGER SIDE TORSION ASSIST BAR
4. FRAME TORSION BAR RETAINER BRACKET
5. HOOD HINGE ASSEMBLY
6. DRIVER SIDE TORSION ASSIST BAR

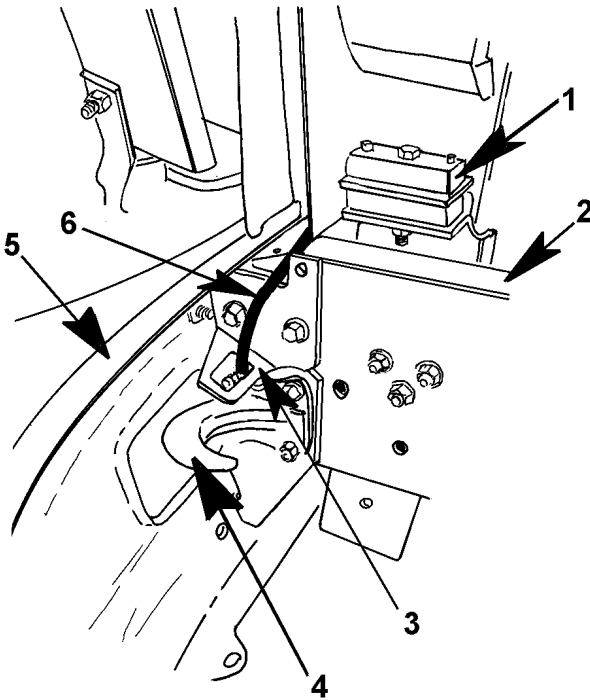


Figure 15 Torsion Bar Bracket (Drivers Side Shown)

1. RADIATOR MOUNTING BRACKET AND BUSHING
2. FRAME RAIL
3. FRAME TORSION BAR RETAINER BRACKET
4. DRIVERS SIDE TOW HOOK
5. FRONT BUMPER
6. TORSION ROD

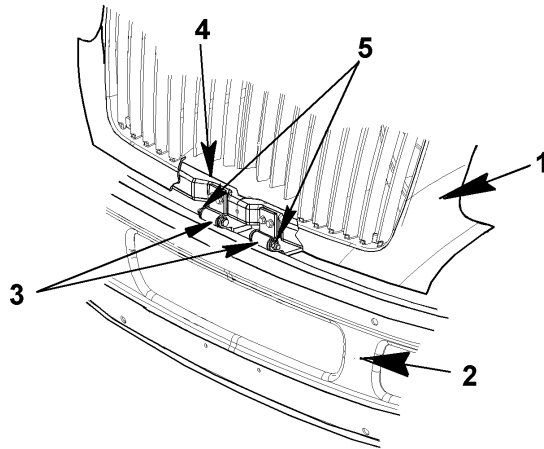


Figure 16 42/43/4400 Model Hood Hinge

1. HOOD AND GRILLE ASSEMBLY
2. BUMPER
3. HOOD HINGE
4. HOOD HINGE BOLT/PIN
5. HEX NUTS

Refer to Figure 13 for Items in parentheses.

3. Remove the retaining pin (Item 6) from the spring stop (Item 7). Remove the clevis (Item 4) from the radiator clevis attachment bracket (Item 5) on the radiator top frame (Item 2), driver and passenger side.

Refer to Figure 14 for Items in parentheses.

4. Locate the torsion bar hood tilt assist assembly upper brackets (Item 2). Remove the retaining pin (Item 1) that secures the torsion assist bar (Item 3 and 6) to the hood tilt assist bracket (Item 2) driver and passenger side.
5. Remove the torsion assist bars (Item 3 and 6) from the chassis torsion bar retainer bracket (Item 4).
6. With an assistant tilt the hood back to the original position.

Refer to Figure 16 for Items in parentheses.

7. Locate the hood hinge pin and hex nut (Items 4 and 5) on the hinge assembly (Item 3).
8. Loosen and remove the hinge bolt/pin flat washers and hex nuts.
9. With an assistant, remove the hood assembly (Figure 17). Place the hood on an appropriate padded surface to protect painted surfaces.

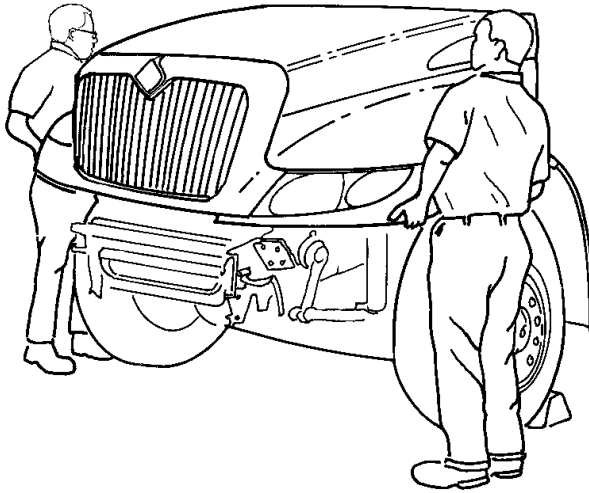


Figure 17 Remove and Install Hood

42/43/4400 Series Model Hood — Install

If required, assemble tilt assist and support spring assemblies, splash panels, insulator panels and the hood hinge plates to the hood before installing it.

Refer to Figure 16 for Items in parentheses.

1. Place a padded work stand in front of the vehicle. With an assistant, rest the hood assembly on the work stand. Position the hood hinge section in place at the chassis hinge section (Item 3). Install the hood hinge pins and flat washers (Item 4) from the outboard side into each hinge.
2. Install flat washers and hex nuts (Item 5) on each of the hinge pins inboard side (Item 4) and tighten.
3. With an assistant tilt the hood forward and rest on a padded floor stand.
4. Locate and replace the hood torsion assist bars in the frame torsion bar retainer bracket (Item 3, Figure 15) at each side of the frame rail.

Refer to Figure 14 for Items in parentheses.

5. Locate the tilt assist hood bracket (Item 2). Insert the end of the torsion assist bar (Items 3 and 6) into the assist hood brackets. Install retaining pins (Item 1) in the torsion rod ends.
6. Raise the hood to approximately a 45 degree angle and support it, to allow for reconnection of the spring cable stops.

Refer to Figure 13 for Items in parentheses.

7. Place the clevis (Item 4) over the radiator clevis attachment bracket (Item 5). Insert the retaining pin (Item 6) through the clevis and clevis retaining bracket.
8. Reconnect front end wire harness connectors and ground connections to the appropriate chassis harness pig tails. Secure the wire harness with the clips and loop clamps provided, as necessary.

9. Close the hood and latch the hood on both sides.

2.3. SPLASH PANELS

Splash Panel- Removal

The splash panels (Figure 18) on the 42/43/4400 series minimize splash and mud, protecting vital engine systems from corrosion and malfunction.

Splash Panel Removal: Passenger Side

Refer to Figure 19 for Items in parentheses.

1. Tilt the hood assembly forward and locate the attachment bolts (Item 6) at the forward lower section of the splash guard mounting bracket (Item 7).
2. Locate the rear splash panel mounting bracket (passenger side shown) (Item 2). Remove the mounting bolts (Items 1 and 3) from the mounting bracket (Item 2).
3. Remove the splash panel.

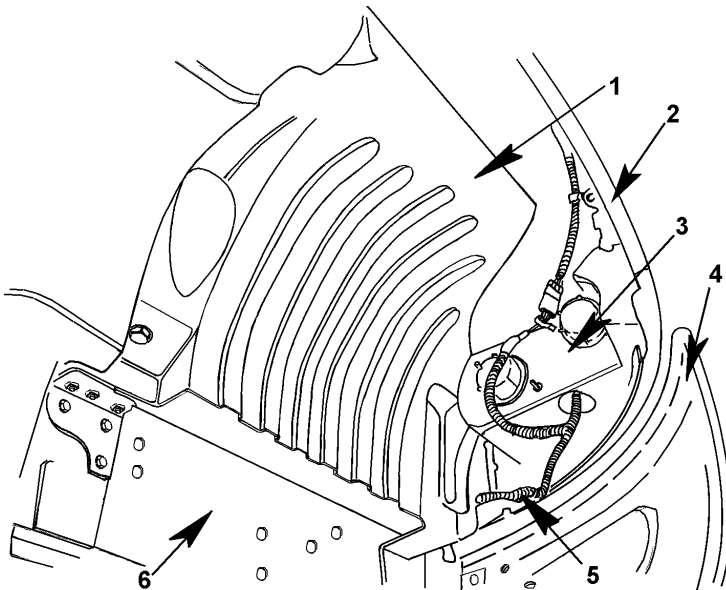


Figure 18 Splash Panel —Passenger Side Shown

1. SPLASH PANEL — PASSENGER SIDE
2. LOWER FENDER SECTION
3. HEADLIGHT HOUSING
4. BUMPER
5. HEADLIGHT AND CLEARANCE LIGHT HARNESS
6. CHASSIS FRAME

Splash Panel Removal - Drivers Side

1. With the hood tilted locate the driver side 2 forward mounting bolts (Item 2, Figure 20) attaching the splash panel to the front hood assembly.
2. Remove the bolts and lock washers.

3. Remove the 2 rear splash panel mounting bolts and lock washers located along the upper edge of the splash panel.
4. Remove the splash panel assembly.

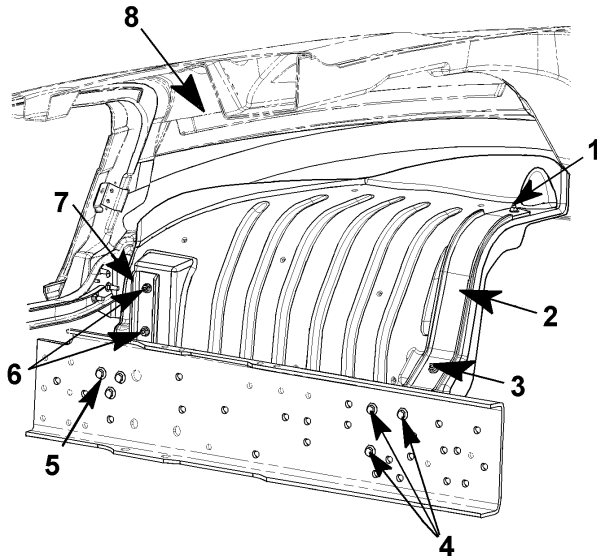


Figure 19 Splash Panel Removal (Passenger Side Shown)

1. SPLASH PANEL MOUNTING BOLTS
2. SPLASH PANEL MOUNTING BRACKET
3. SPLASH PANEL MOUNTING BOLTS
4. FRAME RAIL SPLASH PANEL BRACKET MOUNTING POINTS, REAR
5. FRAME RAIL SPLASH PANEL BRACKET MOUNTING POINTS, FRONT
6. MOUNTING BOLTS
7. FRONT SPLASH PANEL MOUNTING BRACKET
8. HOOD

Splash Panel - Install

Beginning on the passenger side:

1. Align the splash panel mounting holes with the mounting brackets and insert the mounting bolts and lock washers.
2. Hand tighten only.
3. Align the rear mounting holes with the mounting bracket assemblies.
4. Insert the mounting bolts and lock washers.
5. Tighten the splash panel mounting bolts.

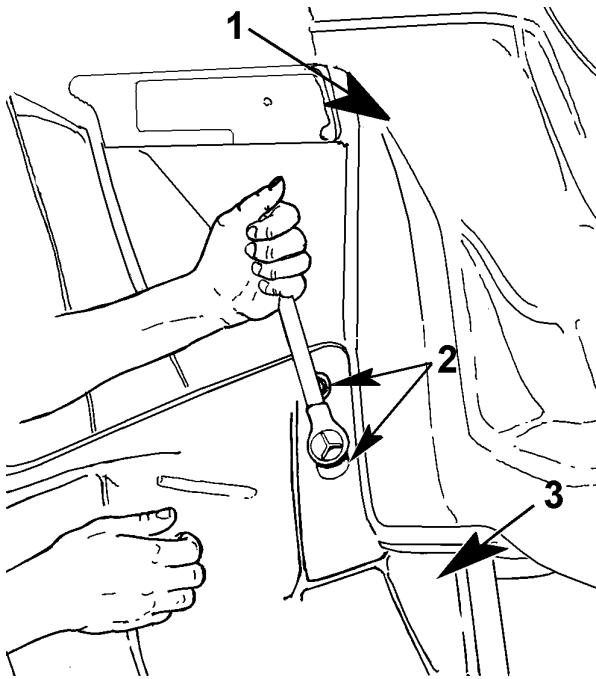


Figure 20 Splash Panel Install (Drivers Side Shown)

1. HOOD TILTED UPPER DRIVERS SIDE SECTION
2. TWO UPPER SPLASH SHIELD MOUNTING BOLTS
3. SPLASH PANEL

6. Position the hood/fender splash panel on the inner fender of the hood/fender assembly (Item 2, Figure 20). Install the 2 forward mounting bolts and lock washer to the hood/fender assembly.
7. Position the 2 rear splash panel mounting holes in place on the hood and install the mounting bolts and lock washers, securing it to the hood assembly.
8. Tighten the bolts to the required torque.
9. Close hood and lock hood latches.

2.4. MUD GUARDS

Mud Guard — Removal

Mud guards are attached to the lower fender extension assembly. The mud guards protect the lower cab and step area from stones and mud.

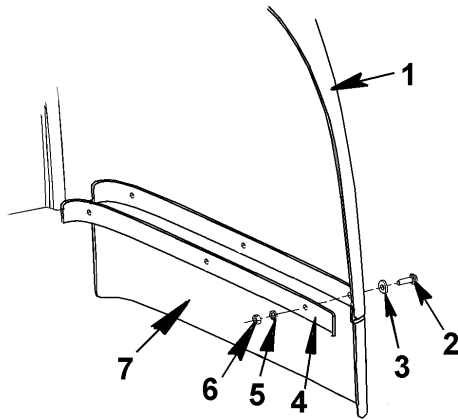


Figure 21 42/43/4400 Series Mud Guards

1. FENDER EXTENSION
2. HEX BOLT
3. FLAT WASHER
4. REINFORCEMENT
5. LOCKWASHER
6. HEX NUT
7. MUD GUARD

Reference Figure 21 for Items in parentheses.

1. Remove lock washers and hex nuts (Items 5 and 6). Remove the mud guard reinforcement (Items 4 and 7) and the mud guard.
2. Remove the hex head bolts and flat washers (Items 2 and 3).
3. Repeat the procedure to remove the opposite side mud guard and reinforcement.

Mud Guard — Install

Beginning on the drivers side of the vehicle.

1. Position the mud guard and reinforcement on the lower section of the fender extension. Insert the hex head bolt and flat washer through the fender extension, mud guard and reinforcement.
2. Install the lock washer and hex nut.
3. Tighten to 125 to 145 lbf-in. (14 to 16 N.m).

2.5. GRILLE

Grille — Removal

The grille is a one piece injection molded assembly, designed with an aerodynamic styling to enhance the overall appearance of the 42/43/4400 series truck chassis.

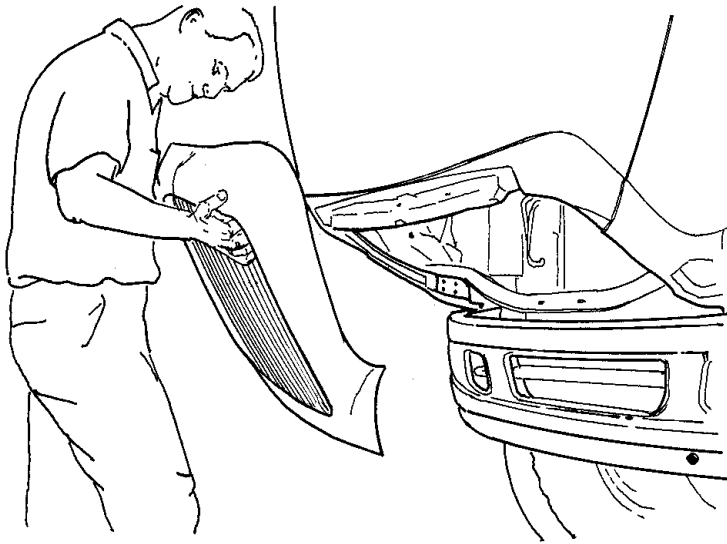


Figure 22 Grille And Shroud Removal

Refer to Figure 23 for all Items in parentheses.

1. Locate the four lower grille and shroud mounting screws on the grille assembly (Item 3).
2. Loosen and remove the screws.
3. To remove the grille assembly, lift the grille and shroud assembly up and out to release the insert tabs from the grille mounting tab inserts (Item 1).

Grille — Install

Prior to installing the grille and shroud assembly, inspect the mounting tabs on the inner upper surface of the shroud. Insure that all tabs are functional and in place.

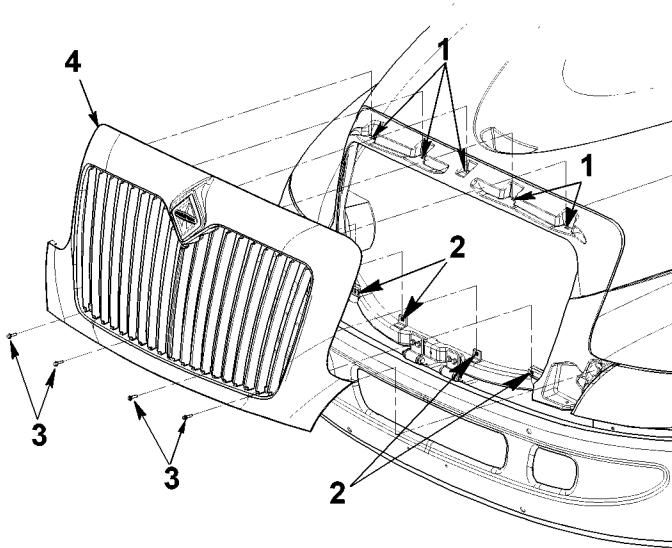


Figure 23 Grille Installation

1. GRILLE MOUNTING TAB INSERT HOLES
2. LOWER GRILLE MOUNTING POINTS
3. LOWER GRILLE MOUNTING SCREWS
4. GRILLE INSERT AND SHROUD

1. Align the mounting tabs with the tab insert holes.
2. Set the grille/shroud mounting tabs in the insert holes and tilt grille inward and down to locate the lower screw mounting holes.
3. Insure the alignment of the screw mounting holes, insert the four mounting screws in the assembly and tighten.

IMPORTANT – Do not overtighten the mounting screws.

2.6. AIR INTAKES

Air Intakes — Remove

The air intake assembly is located on the drivers side of the front hood/fender assembly. The air intake grille assembly is a removable item (Item 2, Figure 24).

1. Locate the upper and lower four mounting screws.
2. Loosen the four mounting screws and remove the air inlet grille assembly.

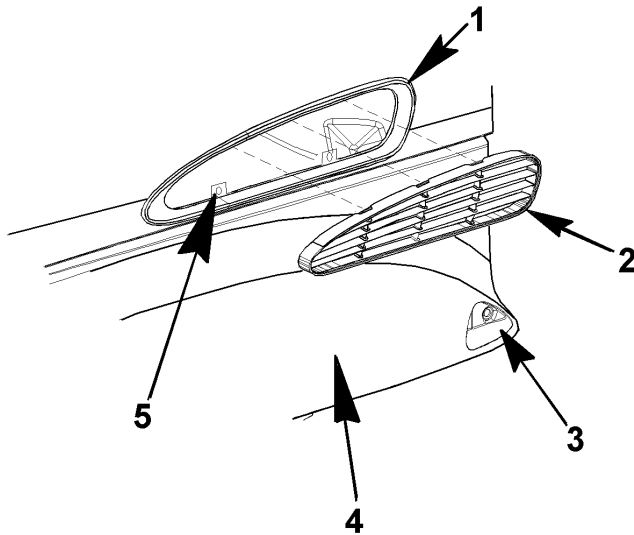


Figure 24 Air Intake Grille (Driver side)

1. AIR INLET FRAME
2. AIR INLET GRILLE
3. CLEARANCE LIGHT
4. FENDER
5. AIR INLET GRILLE MOUNTING HOLES

Air Intakes — Install

1. Locate the grille assembly and place into the air inlet frame (Item 1, Figure 24).
2. Align the grille assembly mounting holes with the air frame assembly mounting tabs.
3. Insert the four mounting screws and tighten.

2.7. FENDERS

The 42/43/4400 Series fender assemblies are comprised of multiple components: the air intake frame, the upper fender section, the wheel well opening "valance", headlights, clearance lights and lower hood latch. To remove the valance and headlight assemblies, the grille and shroud should be removed first.

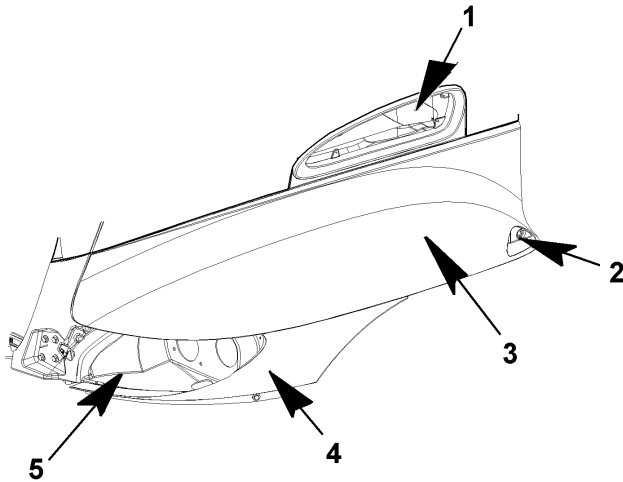


Figure 25 Fender Assembly

1. AIR INLET
2. CLEARANCE LIGHT HOUSING
3. BONDED UPPER FENDER SECTION
4. FENDER VALANCE PANEL (REMOVABLE)
5. HEADLIGHT HOUSING

Fender Lower Section — Removal

The 42/43/4400 series fender upper section is bonded to the hood assembly. The lower fender section or “valance” encapsulates the headlight housing and wheel well. The valance is a separate assembly and can be removed. The air inlet frame is an integral part of the upper fender section which is bonded component of the hood assembly. The upper fender section is removed with the hood assembly.

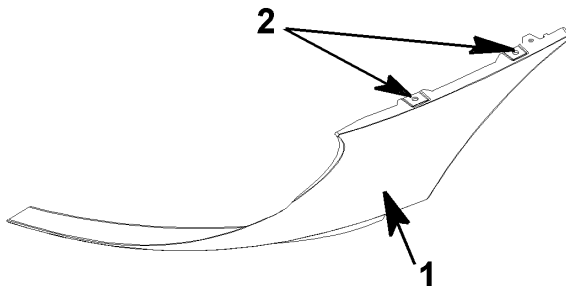


Figure 26 Fender Valance— Lower Section

1. FENDER VALANCE PANEL
2. FENDER VALANCE ATTACHMENT POINTS

Valance — Removal

1. Tilt the hood to the forward open position.
2. Disconnect the chassis harness (Item 2, Figure 12) to the headlight assembly and the connection between the clearance light and headlight harness.
3. Locate the valance mounting screws along the fender flange, and headlight assembly attachment screws attaching the headlight assembly mounting holes in the valance assembly (Item 3, Figure 27).
4. Remove the (2) headlight assembly mounting screws located along the lower edge of the valance.
5. Remove the valance mounting screws located in the mounting holes (Item 2, Figure 26) along the inside flange between the fender flange and the valance flange assembly.
6. Follow the same procedure for the opposite side valance removal.

Fender Valance — Install

1. Beginning with the valance assembly, locate the mounting holes in the fender flange. Align the valance assembly mounting holes (Item 2, Figure 26) in position with the holes in the fender flange.
2. Insert the screws and tighten.
3. Align the valance and headlight assembly lower mounting holes and insert the mounting screws into the valance and headlight assembly.
4. Tighten the two mounting screws.

Headlight — Removal

To remove the headlight assembly refer to the procedure for removing and installing the grille and shroud. The grille and shroud must be removed prior to removing the headlight assembly.

1. Tilt the hood assembly forward, disconnect the headlight and clearance light harness (Item 2, Figure 12).
2. Loosen and remove the two (2) headlight assembly mounting nuts from the headlight assembly mounting studs (Item 2, Figure 40) on the rear of the headlight housing.
3. Tilt hood to original position. Loosen and remove the headlight assembly mounting bolt (Item 5, Figure 27) from the fender assembly mounting hole (Item 7, Figure 27).
4. Remove headlight assembly.
5. To remove the opposite side headlight assembly follow the procedures as listed above.

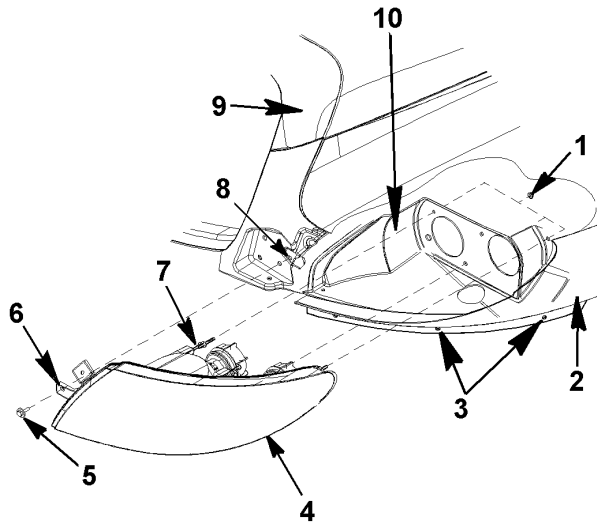


Figure 27 Headlight Assembly

1. HEADLIGHT ASSEMBLY MOUNTING NUT
2. LOWER FENDER/VALANCE ASSEMBLY
3. LOWER HEADLIGHT ASSEMBLY MOUNTING HOLES
4. HEADLIGHT ASSEMBLY
5. MOUNTING BOLT
6. HEADLIGHT ASSEMBLY TAB
7. HEADLIGHT ASSEMBLY MOUNTING STUD
8. HEADLIGHT MOUNTING BOLT HOLE
9. HOOD AND FENDER ASSEMBLY
10. HEADLIGHT HOUSING FENDER OPENING

Headlight adjustment is addressed in **ADJUSTMENTS** section.

Headlight Install

The grille and shroud assembly should have been previously removed.

Refer to Figure 27 for Items in parentheses.

1. Insert the headlight assembly (Item 4) into the headlight housing opening (Item 9), aligning the mounting studs (Item 7) with the mounting holes in the headlight housing (Item 2).
2. Insert the headlight assembly mounting bolt (Item 5) into the headlight mounting tab and headlight assembly bolt hole (Item 8).
3. Tilt the hood forward.
4. Install the headlight assembly mounting nuts on the mounting studs (Item 2, Figure 40) located on the rear of the headlight housing. Tighten nuts to torque value on torque chart.
5. Insert the lower headlight assembly mounting screws through mounting holes in the valance assembly and tighten.

6. Reconnect the clearance light harness into the headlight harness. Plug the headlight harness into the chassis harness located above the frame rail section at the radiator mounting block.
7. Tilt the hood back and secure the hood latches.
8. Re-install shroud and grille assembly.

Clearance Light — Removal

The clearance light is located at the rear of the fender hood section above the hood latching mechanism.

1. Tilt the hood forward.
2. Locate the clearance light assembly plug.
3. Twist bulb assembly and remove socket from clearance light assembly.
4. Loosen and remove Phillips head screw on outboard side of housing.
5. Loosen and remove torque head screw at back section of housing.
6. Remove clearance light assembly.
7. Follow same procedure for removal of opposite side clearance light.

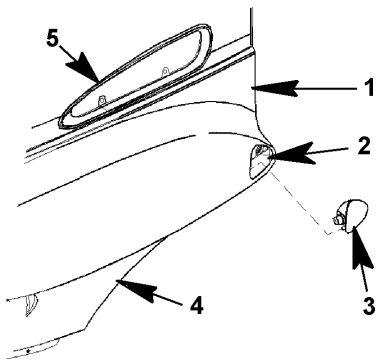


Figure 28 Clearance Lights — Driver Side Shown

1. UPPER FENDER SECTION
2. CLEARANCE LIGHT HOUSING
3. CLEARANCE LIGHT ASSEMBLY
4. FENDER VALANCE
5. AIR INLET

Clearance Lights — Install

With hood tilted insert the clearance light assembly into the clearance light housing at rear of fender section.

1. Align and insert torque head screw forward mounting hole in clearance light housing.
2. Insert Phillips head screw in outboard mounting hole and tighten.

3. Place bulb and socket assembly in clearance light assembly and twist to lock.
4. Plug harness into headlight assembly harness.

Hood Latch Upper— Remove

The hood latching mechanism consists of two assemblies: the upper hood/ fender assembly latch and the lower fender extension lock.

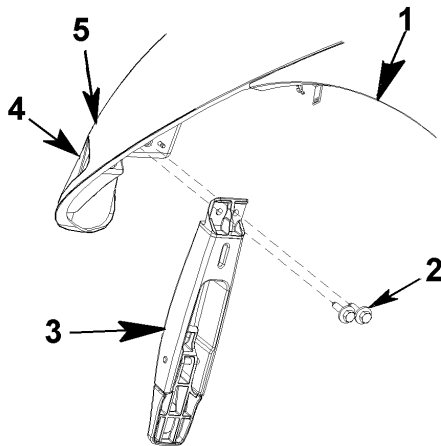


Figure 29 Upper Hood/ Fender Latch Attachment —Passenger Side Shown

1. FENDER VALANCE
2. MOUNTING BOLTS
3. UPPER FENDER LATCHING ATTACHMENT
4. CLEARANCE LIGHT HOUSING
5. UPPER FENDER SECTION

The upper hood/fender latch attachment assembly is located at the rear section of the fender assembly (Item 3, Figure 29). The assembly swings down, latches on the lower catch assembly and secures the hood in position. To remove the latch assembly:

1. Release the latching mechanism both sides of the hood and tilt hood forward.
2. Loosen and remove the hood latch mounting bolts, lock washers and latch on the fender assembly.
3. Follow same procedure for removal of opposite side.

Upper Hood Latch — Install

Release the latching mechanism both sides of hood and tilt hood forward.

1. Position the upper latching mechanism and align the mounting holes of the latch assembly with the mounting holes in the fender assembly.

2. Insert the mounting bolts and lock washers and tighten.
3. Lower hood and latch both sides of the hood.
4. Follow same procedure for installation on opposite side.

2.8. FENDER EXTENSIONS

Fender Extension — Remove

The fender extensions are part of the body splash protection system. The wheel well openings in the fender extensions have been designed to provide splash and spray protection. These protect the lower front of the cab from splash and road debris kicked up by the front tires, and it also keeps the step cleaner (Figure 9).

1. Release hood latches on each side of the hood and tilt the hood assembly.

Refer to Figure 31 for all Items in parentheses.

2. Locate the fender extension mounting bolts and nuts on the fender extension assembly (Items 1, 2 and 3).
3. Loosen and remove the three mounting bolts (Items 1 and 3) on the rear surface of the fender extension.
4. Loosen and remove the stud mounting nut (Item 2) from the fender extension mounting stud.
5. Remove the fender extension.
6. Follow same procedure to remove opposite side fender extension.

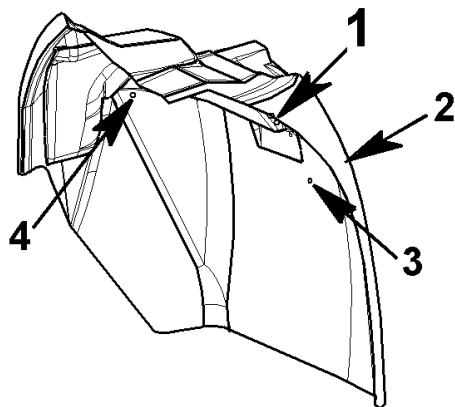


Figure 30 Fender Extension (Drivers Side Shown)

1. MOUNTING HOLES (2)
2. FENDER EXTENSION
3. LOWER FENDER EXTENSION MOUNTING HOLE
4. CAB STUD FENDER EXTENSION MOUNTING HOLE

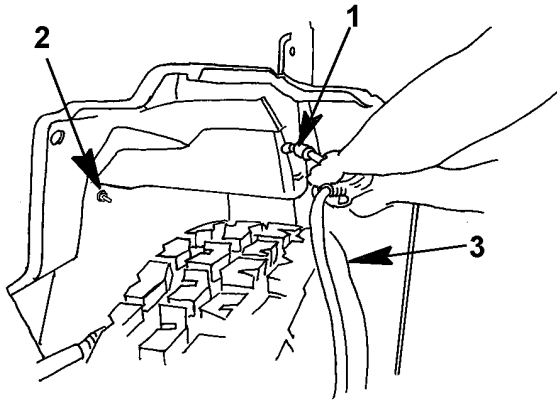


Figure 31 Fender Extension Removal

1. MOUNTING BOLTS (2)
2. MOUNTING STUD WITH NUT
3. MOUNTING BOLT

Fender Extension — Install

With hood in the tilted position, locate the fender extension mounting stud on the cab lower forward structure (Item 3, Figure 32).

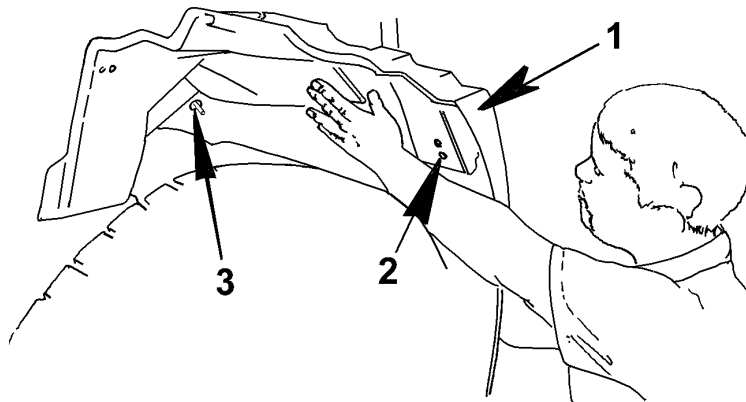


Figure 32 Fender Extension Installation

1. FENDER EXTENSION
 2. FENDER EXTENSION BOLT MOUNTING HOLES
 3. MOUNTING STUD
1. Align the fender extension mounting hole on the mounting stud (Item 3, Figure 32), and install mounting nut. Hand tighten.
 2. Align the mounting holes on the fender extension with the mounting holes on the lower cab structure.
 3. Install mounting bolts and lock washers and tighten.
 4. Tighten the mounting nut on the fender extension mounting stud.

5. Torque the mounting bolts. See torque chart.

Hood Latch Lower Assembly — Remove

The hood latching mechanism consists of two parts. The lower lock portion of the latching mechanism is located on the fender extension assembly (Item 1, Figure 34).

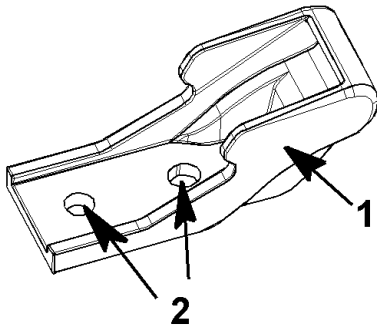


Figure 33 Lower Hood Latch

- 1. LOWER HOOD HATCH CLIP
- 2. BOLT MOUNTING HOLES

Hood latch clip removal:

1. Release hood latch both sides and tilt hood forward.
2. Locate mounting bolts, hex nuts and washers, loosen and remove.
3. Remove hatch clip assembly.
4. Follow same procedure on opposite side for lower latch clip assembly removal.

Lower Hood Latch — Install

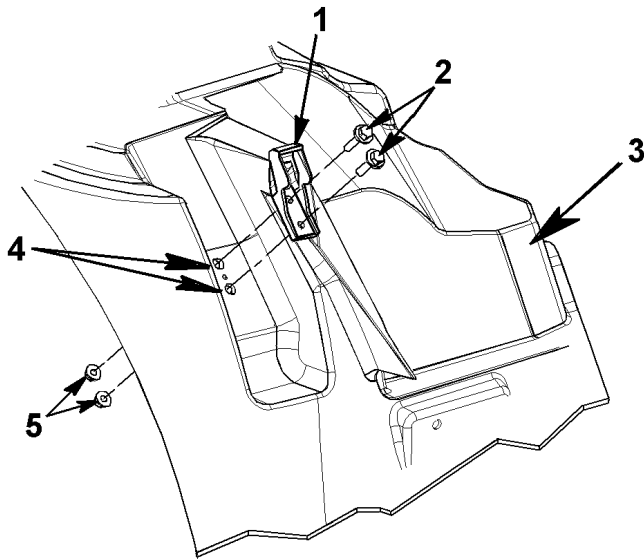


Figure 34 Lower Hood Latch

1. LOWER HOOD LATCHING ATTACHMENT
2. MOUNTING BOLTS AND FLAT WASHERS
3. FENDER EXTENSION
4. FENDER EXTENSION LATCH MOUNTING HOLES
5. HEX HEAD NUTS AND LOCK WASHERS

1. Tilt the hood assembly forward and locate the latch clip mounting holes (Item 4, Figure 34).
2. Position the latch clip on the fender extension aligning the mounting holes with the holes in the fender extension.
3. Insert mounting bolts and flat washers through the latch clip assembly and fender assembly mounting holes (Item 2, Figure 34).
4. Install the hex nuts and lock washers on the mounting bolts and tighten.
5. Torque nuts per torque chart.

2.9. HOOD SEAL

Hood Seal— Removal

Release the hood latches on each side and raise the hood to the full tilt position. Locate the hood seal on the forward edge of the cowl tray (Item 2, Figure 35).

1. Beginning on the passenger side of the cowl tray, grip the hood seal and lift in upward direction.
2. Pull upward to remove the seal (Item 1, Figure 36) from the entire lip of the cowl tray across the front of the cab.

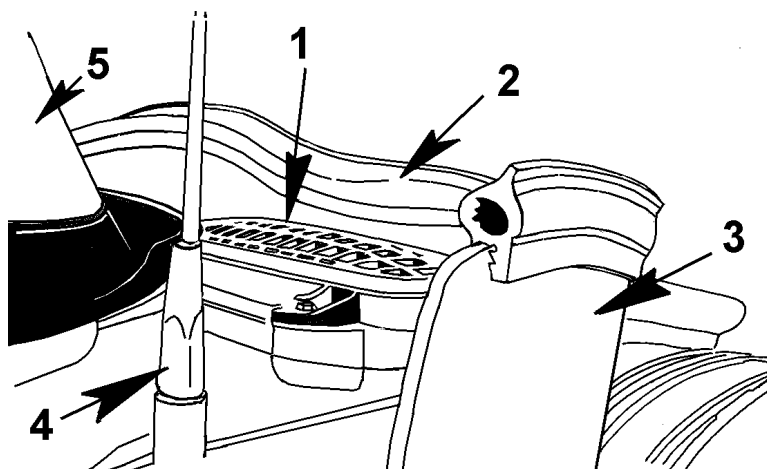


Figure 35 Hood Seal Removal — Passenger Side Shown

1. HVAC AIR INLET
2. HOOD SEAL
3. COWL TRAY
4. RADIO ANTENNA
5. WINDSHIELD

Hood Seal— Install

To install the hood seal, release the hood latches both sides and tilt hood forward.

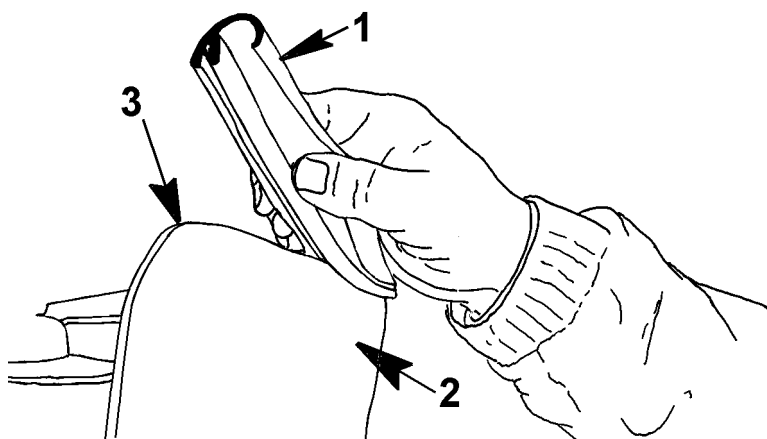


Figure 36 Hood Seal — Install

1. HOOD SEAL
2. COWL TRAY
3. COWL TRAY FORWARD EDGE

1. Place hood seal material on the forward edge of the cowl tray on the passenger side and press down on seal causing the trim lock portion to secure on the cowl tray edge.
2. Continue across the entire forward edge of the cowl tray with the hood seal material.
3. Check that seal is pushed down on edge as far as is allowable. Lower hood and latch hood release.

3. ADJUSTMENTS

3.1. HOOD ADJUSTMENT AND ALIGNMENT

The 42/43/4400 series front hood adjustment is done by moving the hinge plate attachment located at the front crossmember.

1. To adjust the hood left to right
 - a. Loosen the hinge attachment bolts and slide the hinge plate assembly left or right.
 - b. Check the alignment with the hood contour lines. If the hood alignment is proper, tighten the hinge plate bolts. Torque to required value.
2. To adjust hood forward and back (reference Figure 37), loosen the hinge mounting bolts at the mounting plate on the front cross member.
 - a. Slide the hood forward or aft as required.
 - b. Check the distance between the rear edge of hood and clearance to windshield.
 - c. Tighten the hinge mounting bolts and torque to required values.

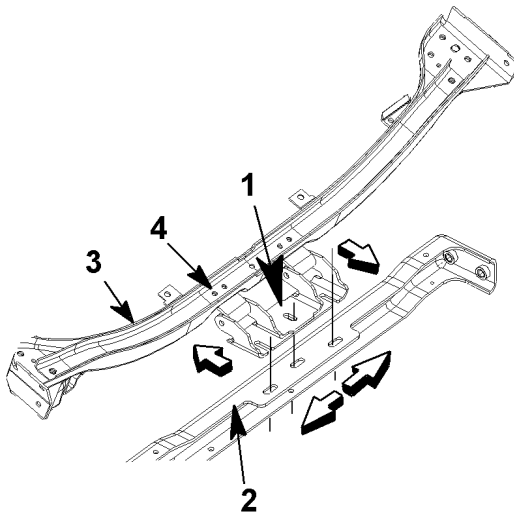


Figure 37 Hood Hinge Adjustment

1. HINGE MOUNTING PLATE
2. CHASSIS FRONT CROSSMEMBER
3. HOOD SUPPORT CROSS BAR
4. HINGE MOUNTING LOCATION ON CROSSBAR

3.2. HOOD STOP ADJUSTMENT

Hood height adjustment at the cowl and rear edge of hood is adjusted by moving the hood stop either up or down.

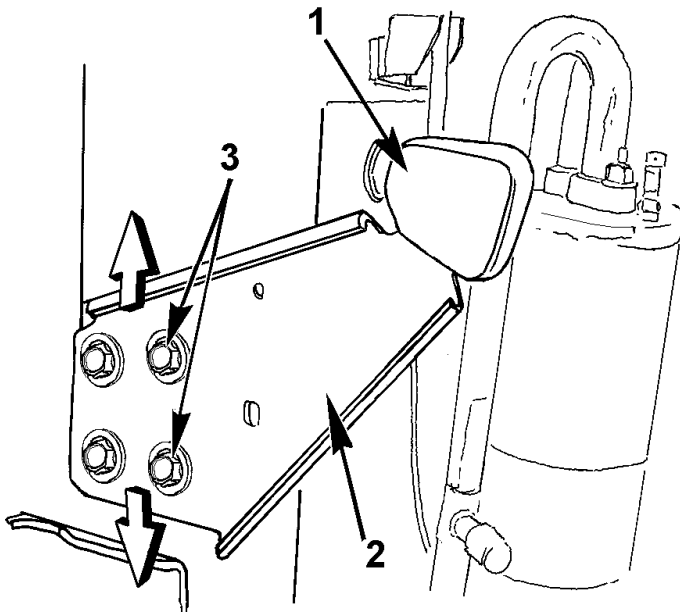


Figure 38 Hood Stop (Passenger Side Shown)

1. HOOD STOP BUSHING
2. HOOD STOP BRACKET
3. FOUR (4) EACH BOLT AND WASHER

Refer to Figure 38 for Items in parentheses.

1. Unlatch hood and tilt hood forward.
2. To adjust hood in either direction, loosen the four bolts (Item 3) located at the hood stop bracket.
3. Slide the bracket (Item 2) upward or down to set desired height.
4. Lower the hood and rest hood on hood stop bushings. Check rear edge alignment with cowl.
5. Raise the hood and re-tighten the bolts (Item 1) to secure the hood stop at the desired location.
6. The same procedure should be applied to adjust the opposite side of hood.

3.3. HEADLIGHT ADJUSTMENT

To adjust the headlight direction, release hood latch and tilt hood forward.

1. Locate adjustment control stem on rear of headlight housing (Item 2, Figure 39).
2. Rotate the adjustment screw clockwise or counter-clockwise to adjust the height of the headlight beam.

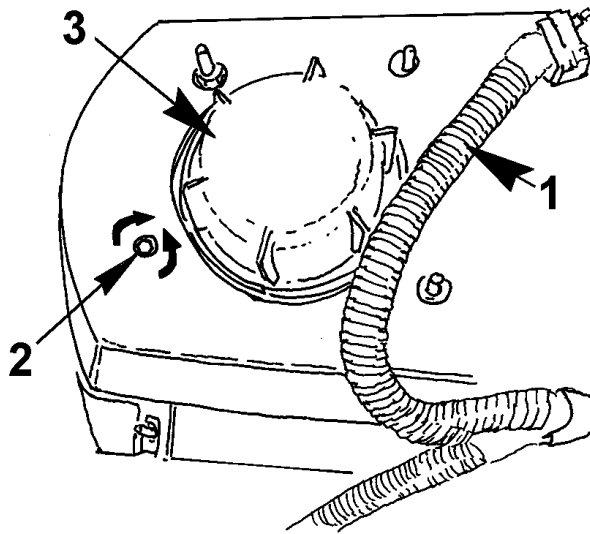


Figure 39 Headlight Adjustment

1. HEADLIGHT HARNESS
2. ADJUSTMENT SCREW
3. BULB / SOCKET COVER

3.4. HEADLAMP REPLACEMENT

To replace head lamp and directional bulbs, unlatch hood on both sides and tilt hood forward.

1. Locate the rear side of the headlight housing.
2. Turn the socket cover and remove.
3. Remove light socket pigtail plug.

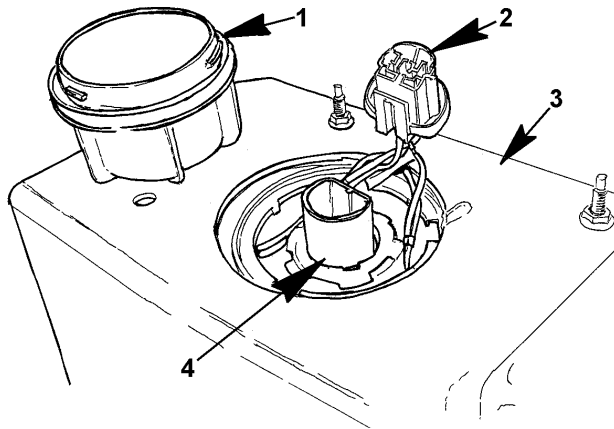


Figure 40 Head Lamp Replacement

1. SOCKET COVER
2. HEADLIGHT ASSEMBLY MOUNTING STUD WITH NUT
3. SOCKET
4. HEADLIGHT HOUSING

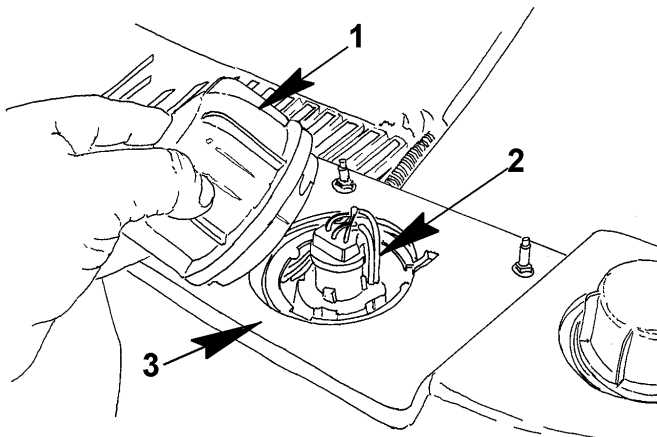
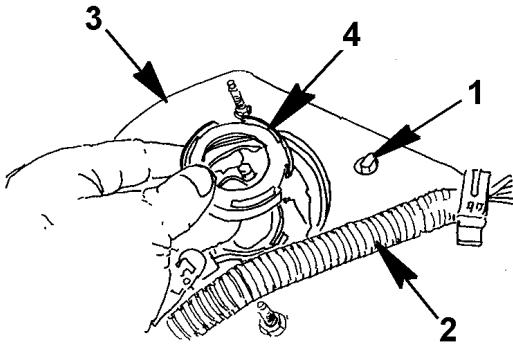


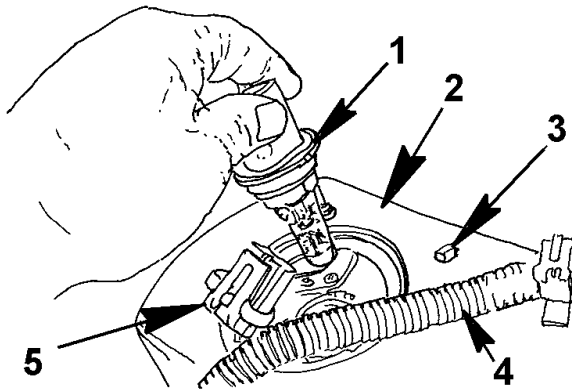
Figure 41 Harness Removal

1. SOCKET COVER
2. HEAD LAMP PLUG
3. HEADLIGHT HOUSING

4. Twist bulb retainer and lift up.
5. Remove bulb.

**Figure 42 Seal Removal**

1. HEADLIGHT ADJUSTMENT SCREW
2. HEADLIGHT HARNESS
3. HEADLIGHT HOUSING
4. SOCKET SEAL

**Figure 43 Bulb Removal**

1. HEADLIGHT HALOGEN BULB
2. HEADLIGHT HOUSING
3. ADJUSTMENT SCREW
4. HEADLIGHT HARNESS
5. HEAD LIGHT PLUG

TORQUE

Table 1 Torque Chart

Item No.*	Location (Figure No.)	lbf-ft/-in	Nm
4,5	Hex Hinge Pin Bolts and Hex Lock Nuts (Figure 16)	50 to 55 lbf-ft	68 to 75
1,3,6	Front Splash Panel at Front Splash Panel Bracket Hex Mounting Bolts (Figure 19)	34 to 38 lbf-ft	46 to 51

Table 1 Torque Chart (cont.)

Item No.*	Location (Figure No.)	lbf-ft/-in	Nm
2	Driver Side Splash Panel Front and Top (Figure 20)	34 to 38 lbf-ft	46 to 51
2,6	Mud Guard Hex Mounting Bolts and Hex Nuts (Figure 21)	125 to 140 lbf-in	14 to 16
2	Upper Hood Latch Mounting Hex Bolts (Figure 29)	34 to 38 lbf-ft	46 to 51
2,5	Lower Hood Latch Mtg. Hex Bolts and Hex Nuts (Figure 34)	34 to 38 lbf-ft	46 to 51
*Refer to Figures specified in the location column.			