

SERVICE MANUAL

SERVICE MANUAL SECTION

HOOD, GRILLE, FENDERS, BUMPER AND RUNNING BOARDS - MXT

Model: MXT

S09013

10/25/2007

Table of Contents

1. DESCRIPTION.....	1
1.1. BUMPER.....	1
1.2. HOOD.....	1
1.3. SPLASH SHIELDS.....	2
1.4. AIR DEFLECTORS.....	2
1.5. GRILLE.....	3
1.6. AIR INTAKE.....	3
1.7. HEADLIGHT, SEALED BEAM AND TURN SIGNAL ASSEMBLY.....	4
1.8. HOOD LATCH.....	4
1.9. FENDER EXTENSIONS.....	5
1.10. HOOD SEAL.....	5
1.11. PICK-UP BOX.....	6
1.12. REAR BUMPER, TOW HOOKS AND TRAILER HITCH.....	6
1.13. RUNNING BOARDS.....	7
2. REMOVE AND INSTALL.....	7
2.1. FRONT BUMPER.....	7
Front Bumper Removal.....	7
Bumper — Installation.....	8
2.2. HOOD.....	9
Hood — Removal.....	9
Hood — Installation.....	13
2.3. SPLASH PANELS.....	14
Splash Panel— Removal.....	14
Splash Panel - Installation.....	17
2.4. AIR DEFLECTORS.....	18
Air Deflectors — Removal.....	18
Air Deflectors — Installation.....	19
2.5. GRILLE.....	19
Grille — Removal.....	19
Grille — Install.....	20
2.6. AIR INTAKE.....	21
Air Intake — Removal.....	21
Air Intake — Installation.....	21
2.7. HEADLIGHT, SEALED BEAM AND TURN SIGNAL ASSEMBLY.....	22
Headlight and Sealed Beam — Removal.....	22
Headlight and Sealed Beam — Installation.....	27
2.8. HOOD LATCH.....	27
Hood Latch — Removal.....	27
Hood Latch — Installation.....	28
2.9. FENDER EXTENSIONS.....	28
Fender Extension — Removal.....	28
Fender Extension — Installation.....	30
2.10. HOOD SEAL.....	31
Hood Seal— Removal.....	31
Hood Seal— Installation.....	31
2.11. PICK UP BOX.....	32

Pick Up Box — Removal.....	32
Pick Up Box — Installation.....	33
2.12. REAR BUMPER, TOW HOOKS, AND TRAILER HITCH.....	34
Rear Bumper and Tow Hooks — Removal.....	34
Rear Bumper and Tow Hooks — Installation.....	35
2.13. RUNNING BOARDS.....	35
Running Boards — Removal.....	35
Running Boards — Installation.....	36
3. ADJUSTMENTS.....	37
3.1. HOOD ADJUSTMENT AND ALIGNMENT.....	37
3.2. HOOD STOP/FENDER EXTENSION ADJUSTMENT AND ALIGNMENT.....	39
3.3. HEADLIGHT ADJUSTMENT.....	40
TORQUE.....	41
SPECIAL SERVICE TOOLS.....	42

1. DESCRIPTION

1.1. BUMPER

The front bumper is a one piece steel bumper assembly designed to allow air flow up around the bumper ends and into the radiator area to allow for better engine cooling.

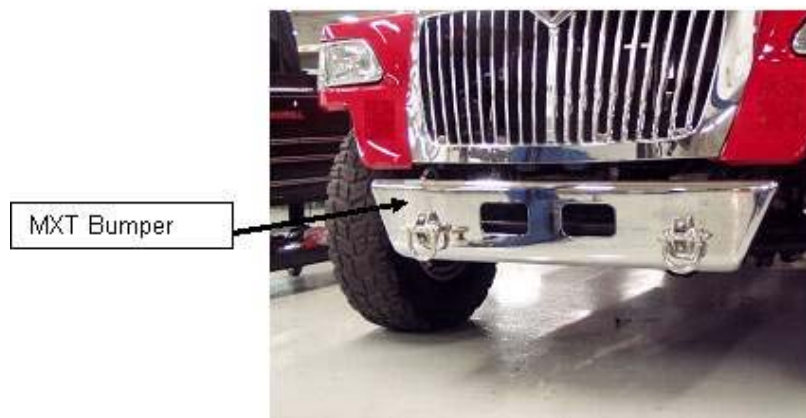


Figure 1 Front Bumper

1.2. HOOD

The hood is a one piece, fiberglass sculptured, structure with bonded fender sections and an integral air duct. The hood is hinged at the front, latches on both sides at the rear, and tilts forward allowing easy access to the engine and engine accessories.



Figure 2 Hood

1.3. SPLASH SHIELDS

The four splash shields are mounted two per side to the underside of the hood and fender extensions and help to prevent corrosion and debris from entering the engine compartment.



Figure 3 Splash Shields

1.4. AIR DEFLECTORS

The two air deflectors are mounted on the inside of the hood on either side of the grille next to the front splash shields.

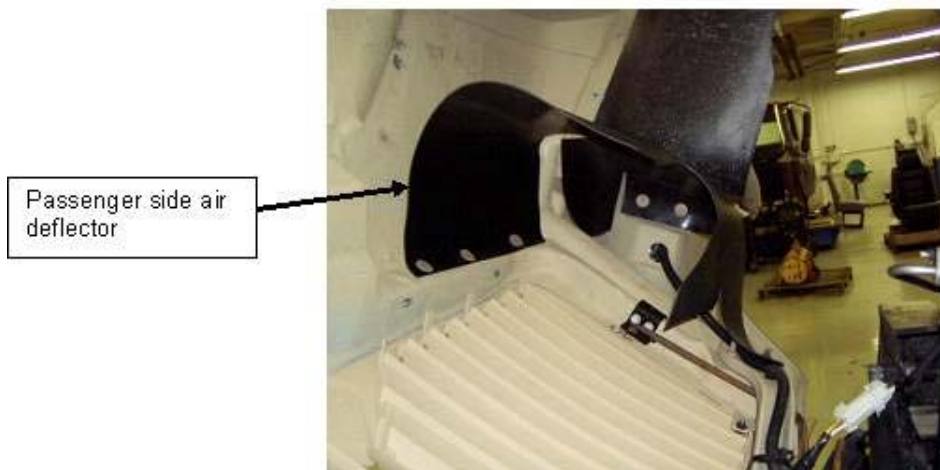


Figure 4 Air Deflectors

1.5. GRILLE

The MXT grille is a one piece injection molded plastic assembly bolted to the hood. The headlights are mounted on either side of the grille.



Figure 5 Grille

1.6. AIR INTAKE

The MXT air intake is located on the driver side of the hood just above the fender. Intake air flows through the molded duct work on the underside of the hood and is routed to the air cleaner passing through a gland seal, permitting the air passage to be sealed when the hood is closed.

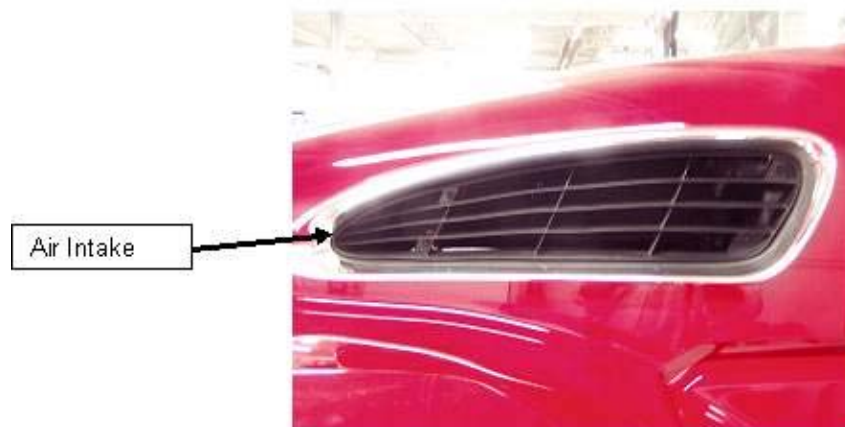


Figure 6 Air Intake

1.7. HEADLIGHT, SEALED BEAM AND TURN SIGNAL ASSEMBLY

The combined headlight and turn signal assembly are located on both sides of the grille.



Figure 7 Fender and Turn Signal Assembly

1.8. HOOD LATCH

The hood latches are located on either side of the hood and provide a locking mechanism for the hood.



Figure 8 Hood Latch

1.9. FENDER EXTENSIONS

The fender extensions are mounted to the cab and are designed to provide splash and spray protection for the cab and cab steps

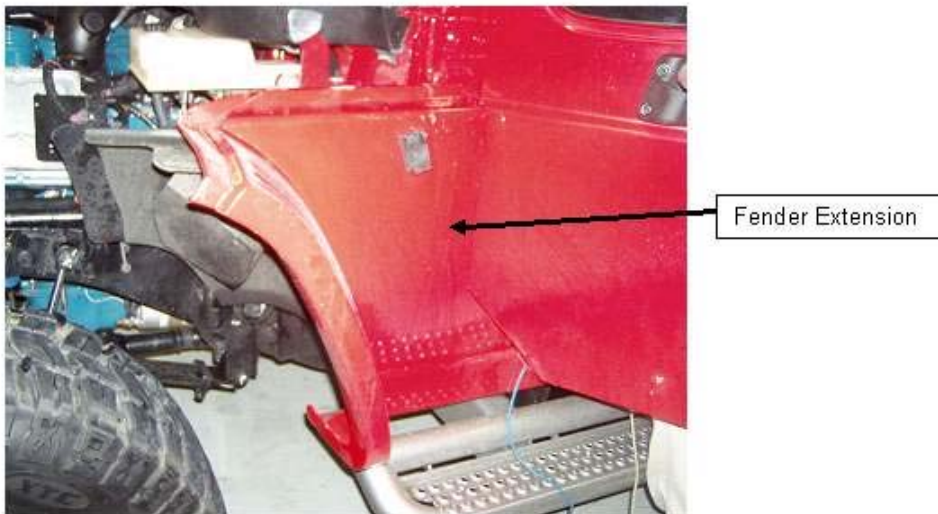


Figure 9 Fender Extension

1.10. HOOD SEAL

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



Figure 10 Hood Seal

1.11. PICK-UP BOX

The Pick-Up Box is located behind the cab and is mounted on the frame.



Figure 11 Pick-Up Box

1.12. REAR BUMPER, TOW HOOKS AND TRAILER HITCH

The rear bumper is mounted to the rear frame members along with the tow hooks and trailer hitch.

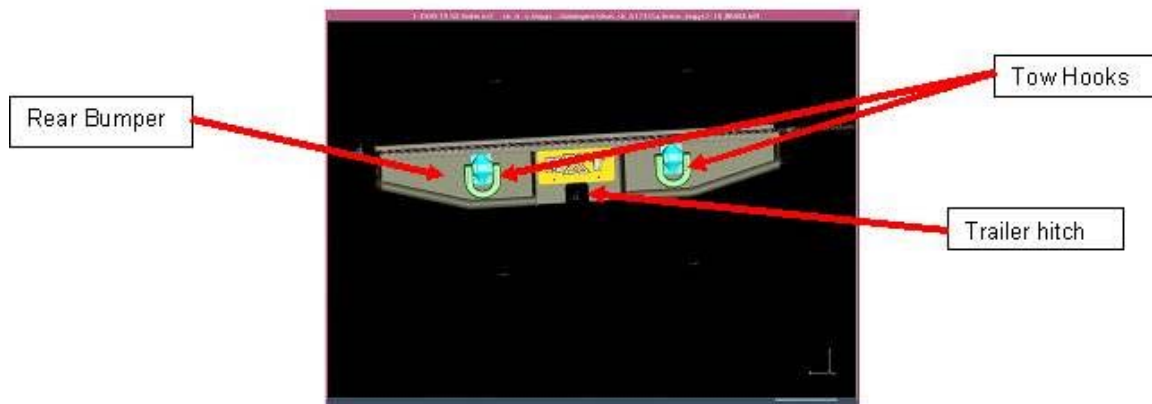


Figure 12 Rear Bumper

1.13. RUNNING BOARDS

The Running Boards are mounted on either side of the cab and run the length of the cab from the front to the rear wheel well.

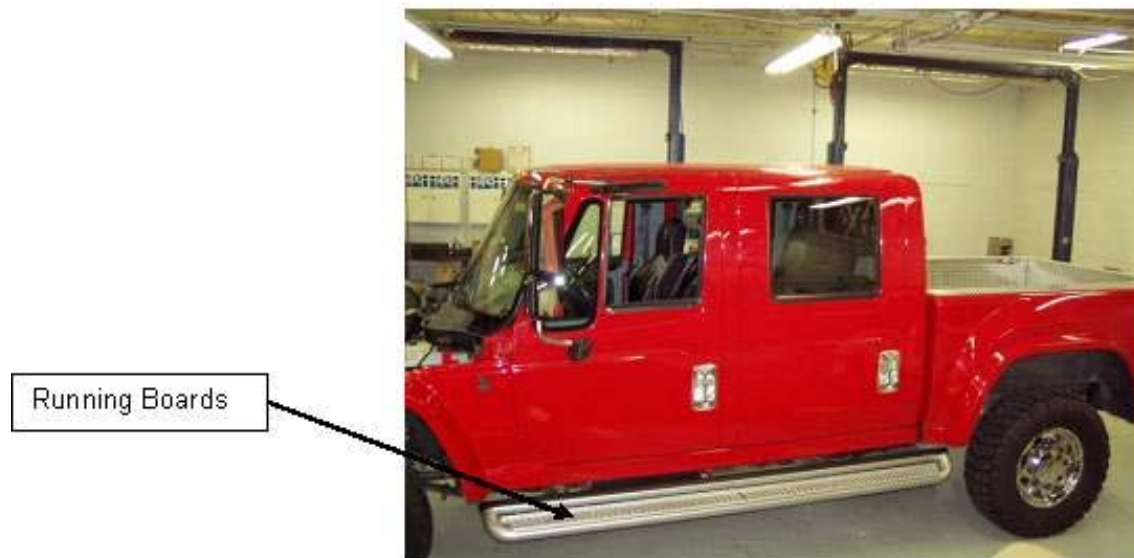


Figure 13 Running Boards

2. REMOVE AND INSTALL

2.1. FRONT BUMPER

Front Bumper Removal

Reference Figure 14 for items in parentheses.

1. Loosen but do not remove four upper bolts (Item 1) from bumper (Item 3).
2. Remove four lower bolts (Item 1) from bumper (Item 3).
3. Remove four remaining upper bolts (Item 1) and two tow hooks (Item 2) while supporting bumper (Item 3).
4. Remove bumper (Item 3).

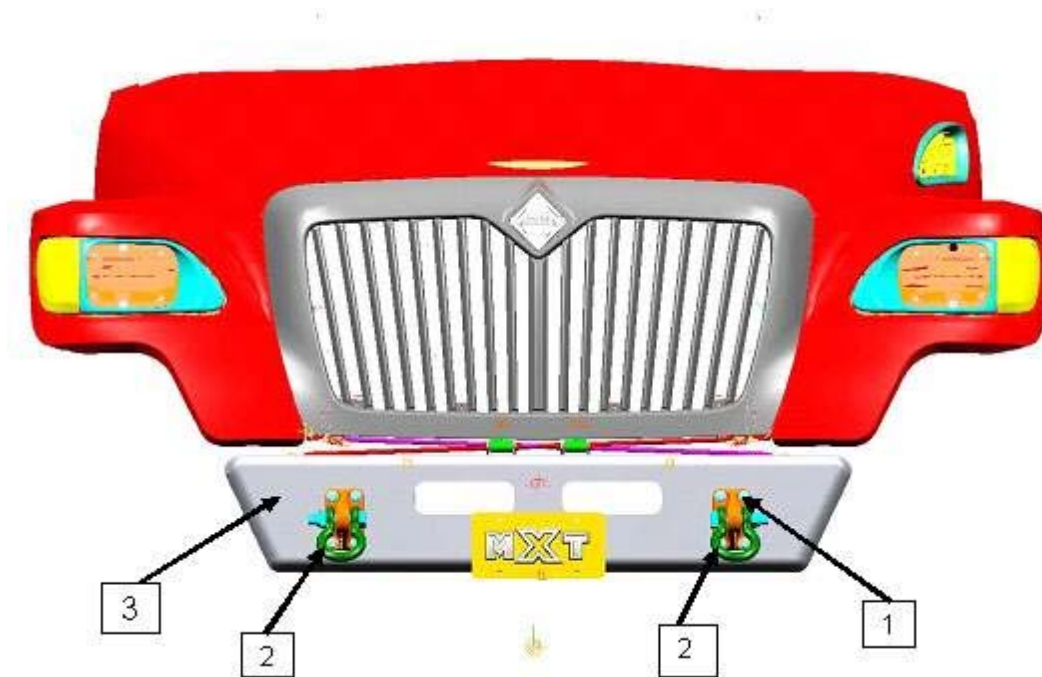


Figure 14 Bumper Removal

- 1. BUMPER MOUNTING BOLTS
- 2. TOW HOOKS
- 3. BUMPER

Bumper — Installation

Reference Figure 14 for items in parentheses.

1. Line up the bumper (Item 3) and locate the bumper mounting holes with the mounting bracket holes.
2. Insert bolts (Item 1) through tow hooks (Item 2) and bumper (Item 3) and into the upper holes, one driver side, one passenger side, of the bumper (Item 3). Hand tighten.
3. Locate the lower bumper mounting holes and insert lower bolts (Item 1), and hand tighten.
4. Finish tightening the bumper bolts with socket to the torque requirement as designated in the torque chart.

2.2. HOOD

Hood — Removal

Reference Figure 15 for items in parentheses.

1. Chock wheels as required.
2. 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.
3. Disconnect headlight assembly pigtail connectors from the front end wire harness connector (Item 2) located at the top of the frame rail (Item 3) on the driver and passenger side at the radiator mounting blocks (Item 1).
4. Cut and remove two tie wraps securing headlight wiring harness into "U" channel of hood hinge bar.

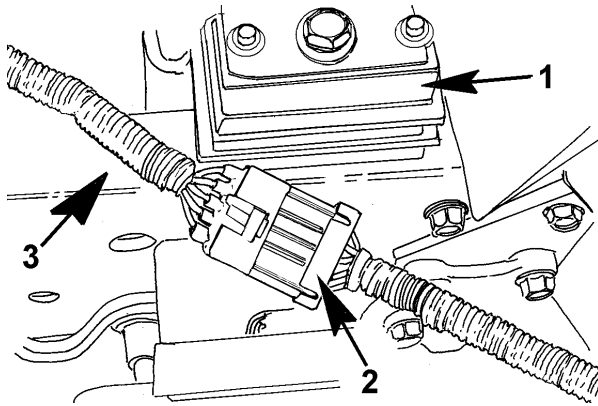


Figure 15 Harness Connections (Each Side at Radiator)

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

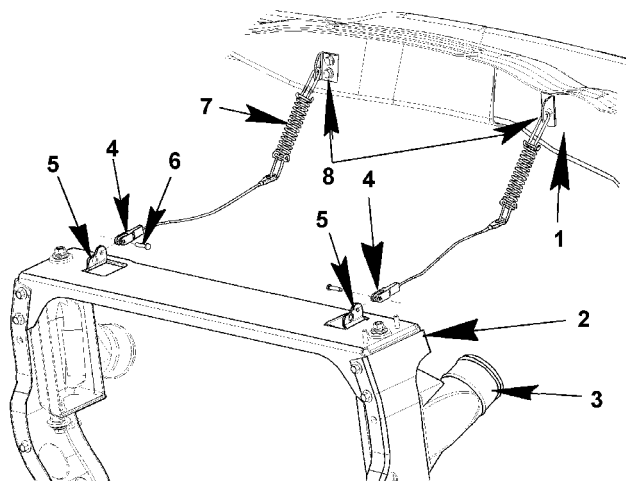


Figure 16 Hood Cable Stops

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

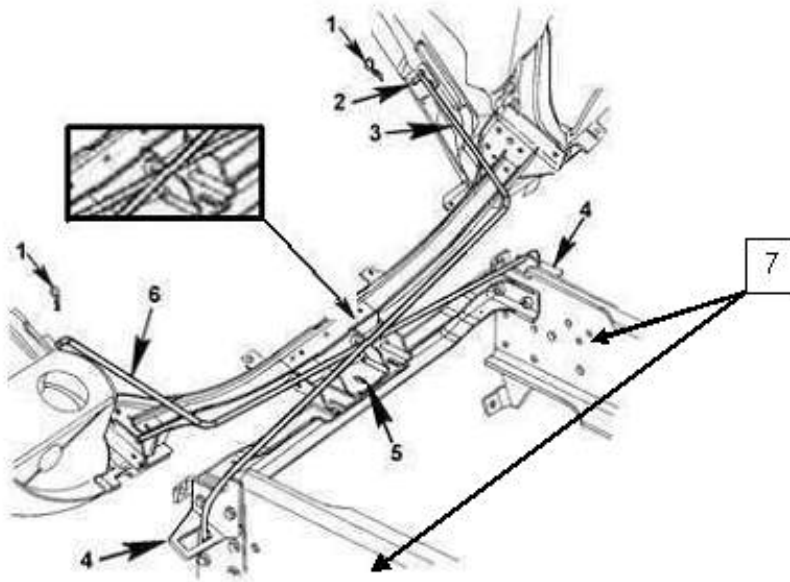


Figure 17 Tilt Assist Assembly

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
7. FRAME RAIL

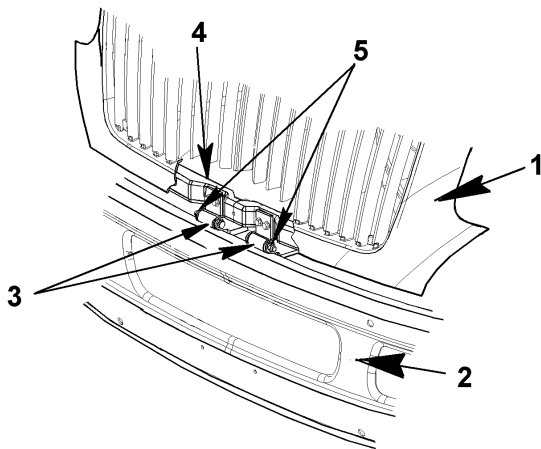


Figure 18 MXT Hood Hinge

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

Refer to Figure 16 for items in parentheses.

5. 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 17 for items in parentheses.

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

Refer to Figure 18 for items in parentheses.

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

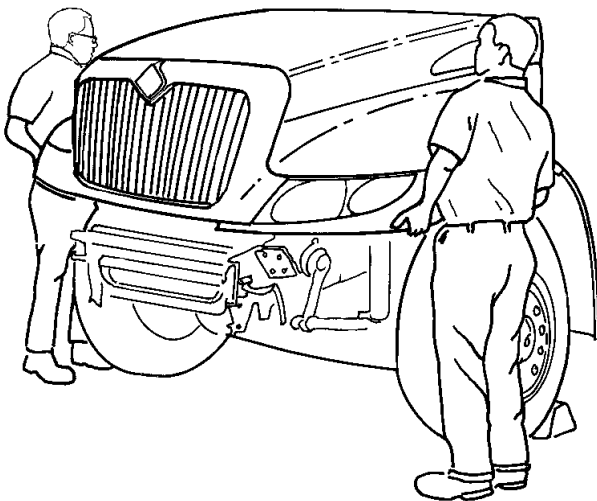


Figure 19 Remove and Install Hood

Hood — Installation

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 18 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. Place the hood near the chassis so that the hood hinges line up with the hinges on the chassis. Install the two hood hinge pins (Item 4) from the outboard side into each hinge (Item 3).
2. Install two 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.

Refer to Figure 17 for Items in parentheses.

4. Locate and replace the two torsion assist bars (Items 3 and 6) in the frame torsion bar retainer bracket (Item 4) at each side of the frame rail (Item 7).
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 two retaining pins (Item 1) in the torsion rod ends (Items 3 and 6) of hood.
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 16 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 (Item 4) and clevis retaining bracket (Item 5).
8. Reconnect front end wire harness connector (Item 2, Figure 15) to the appropriate chassis harness connector. Secure the wire harness with the clips and loop clamps provided, as necessary.
9. Close and latch the hood on both sides.

2.3. SPLASH PANELS

Splash Panel– Removal

The splash panels (Figures 20-23) on the MXT minimize splash and mud, protecting vital engine systems from corrosion and malfunction.

Splash Panel Removal: Passenger Side Forward

Refer to Figure 20 for Items in parentheses.

1. Tilt the hood assembly (Item 1) forward and locate the four splash panel mounting bolts (Item 2) at the forward section of the hood (Item 1).
2. Remove the four mounting bolts (Item 2) from the hood (Item 1).
3. Remove the forward splash panel (Item 3).

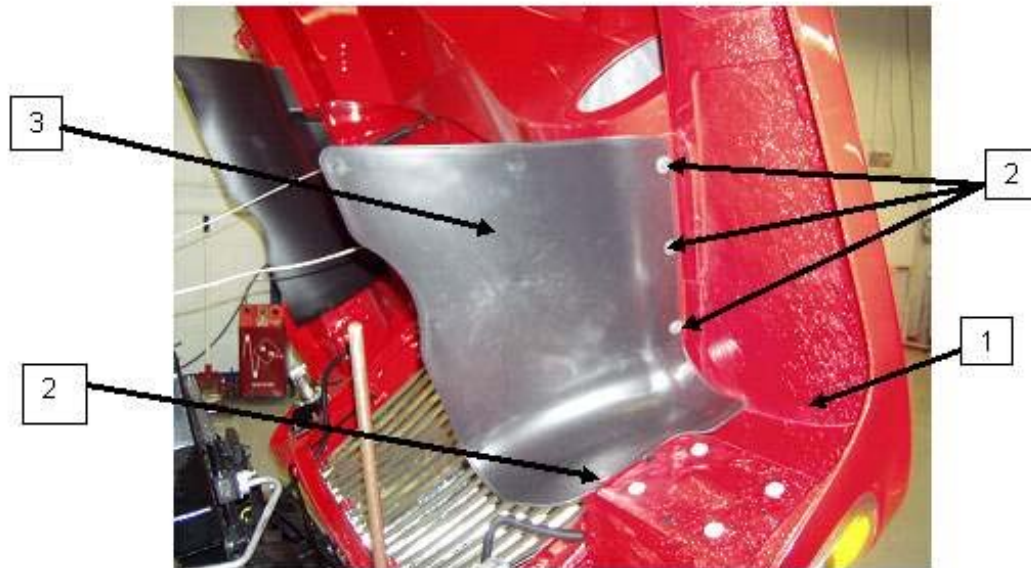


Figure 20 Splash Panel — Passenger Side Forward Shown

1. HOOD ASSEMBLY
2. PASSENGER SIDE FORWARD SPLASH PANEL MOUNTING BOLTS
3. PASSENGER SIDE FORWARD SPLASH PANEL

Splash Panel Removal - Passenger Side Rear

Refer to Figure 21 for Items in parentheses.

1. With the hood still tilted forward, locate the four splash panel mounting bolts (Item 1).
2. Remove three mounting bolts (Item 1) from the rear splash panel (Item 2) and the two splash panel brackets (Item 3).
3. Remove the remaining mounting bolt (Item 1) from the panel (Item 2) and the fender extension (Item 4).
4. Remove the splash panel (Item 2).

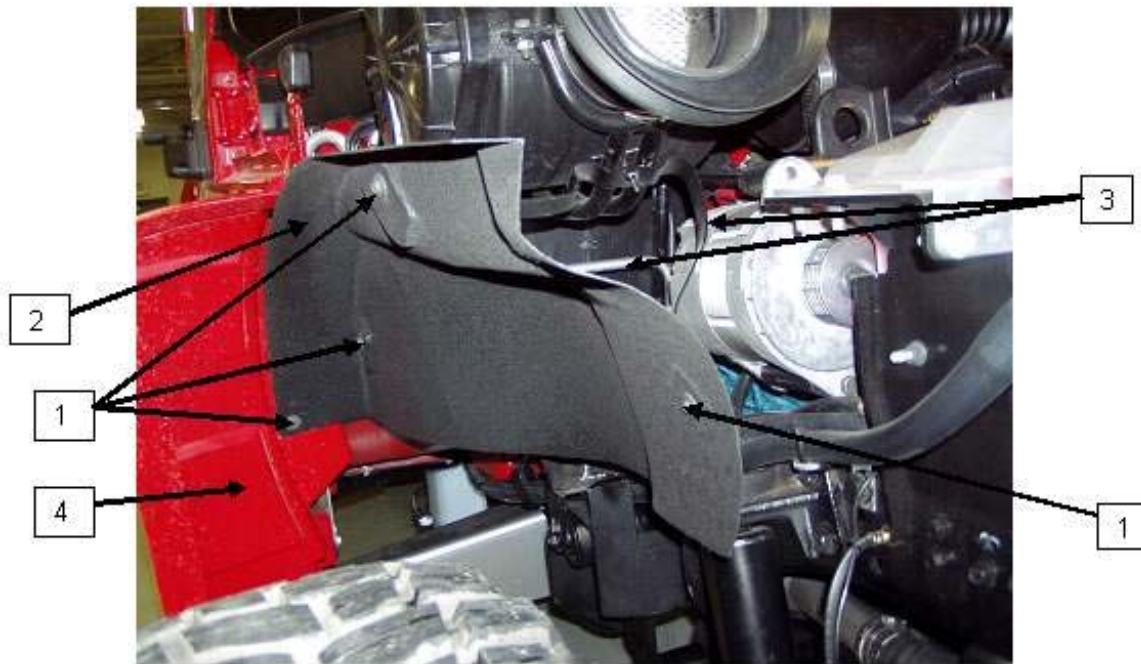


Figure 21 Splash Panel (Passenger Side Rear Shown)

1. SPLASH PANEL MOUNTING BOLTS
2. PASSENGER SIDE REAR SPLASH PANEL
3. PASSENGER SIDE REAR SPLASH PANEL BRACKETS
4. FENDER EXTENSION

Splash Panel Removal - Driver Side Forward

Refer to Figure 22 for Items in parentheses.

1. Tilt the hood (Item 1) forward and locate the five Driver side forward mounting bolts (Item 2).
2. Remove the five mounting bolts (Item 2) from the driver side forward splash panel (Item 3).
3. Remove the splash panel (Item 3).



Figure 22 Splash Panel (Driver Side Forward Shown)

1. HOOD
2. DRIVER SIDE FORWARD MOUNTING BOLTS
3. DRIVER SIDE FORWARD SPLASH PANEL

Splash Panel Removal - Driver Side Rear

Refer to Figure 23 for Items in parentheses.

1. With the hood still tilted forward, locate the three splash panel mounting bolts (Item 2).
2. Remove two mounting bolts (Item 2) from the Driver side rear splash panel (Item 1) and fender extension (Item 3).
3. Remove the remaining mounting bolt (Item 2) from the rear splash panel (Item 1) and mounting bracket (Item 4).

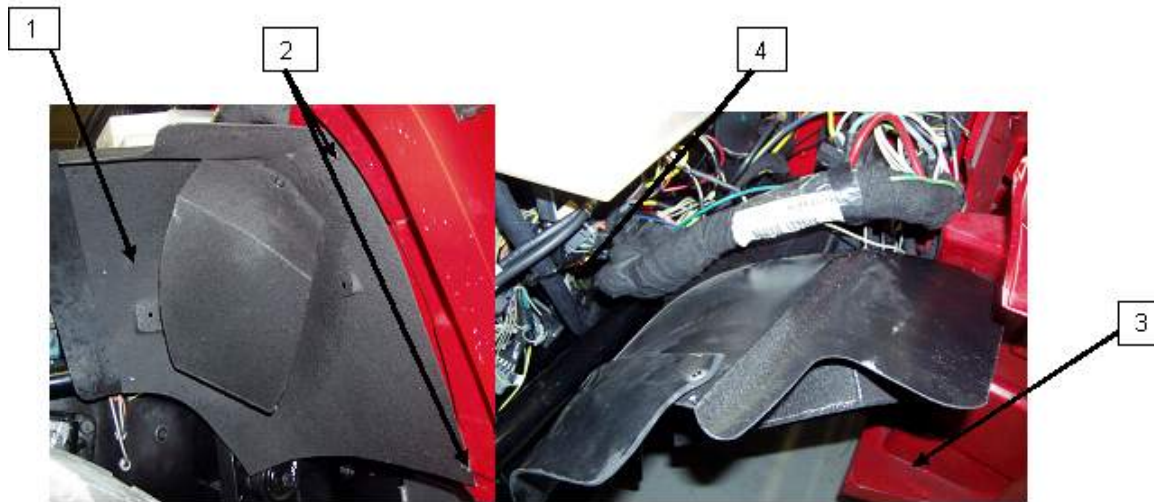


Figure 23 Splash Panel (Driver Side Rear Shown)

1. DRIVER SIDE REAR SPLASH PANEL
2. DRIVER SIDE REAR SPLASH PANEL MOUNTING BOLTS
3. FENDER EXTENSIONS
4. MOUNTING BRACKET

Splash Panel - Installation

Splash Panel Installation: Passenger Side Forward

Refer to Figure 20 for Items in parentheses.

1. Tilt the hood assembly (Item 1) forward.
2. Locate the four forward splash panel mounting bolt holes in the hood and align the forward splash panel (Item 3) with the holes.
3. Insert the mounting bolts (Item 2) through the splash panel (Item 3) and into the mounting bolt holes in the hood.
4. Do not tighten bolts at this time

Splash Panel Installation: Passenger Side Rear

Refer to Figure 21 for Items in parentheses.

1. Locate the four mounting bolt holes in the two splash panel brackets (Item 3) and the fender extension (Item 4) and align the rear splash panel (Item 2) with the holes.
2. Insert the mounting bolts (Item 1) through the splash panel (Item 2) and into the mounting bolt holes in the fender extension (Item 4) and splash panel brackets (Item 3).
3. Do not tighten bolts at this time.

Splash Panel Installation: Driver Side Forward

Refer to Figure 22 for Items in parentheses.

1. Locate the five mounting holes for the forward splash panel (Item 3) in the hood (Item 1).
2. Insert the five mounting bolts (Item 2) through splash panel (Item 3) and into the mounting bolt holes in the hood (Item 1).
3. Do not tighten bolts at this time.

Splash Panel Installation: Driver Side Rear

Refer to Figure 23 for Items in parentheses.

1. Locate the three mounting holes for the rear splash panel (Item 1) in the fender extension (Item 3) and mounting bracket (Item 4).
2. Insert the three mounting bolts (Item 2) through the splash panel (Item 1) and into the fender extension (Item 3) and mounting bracket (Item 4).
3. Tighten all sixteen bolts to the required torque.
4. Close hood and lock hood latch.

2.4. AIR DEFLECTORS

Air Deflectors — Removal

The air deflectors are designed to deflect air into the engine cooling unit mounted on the radiator.

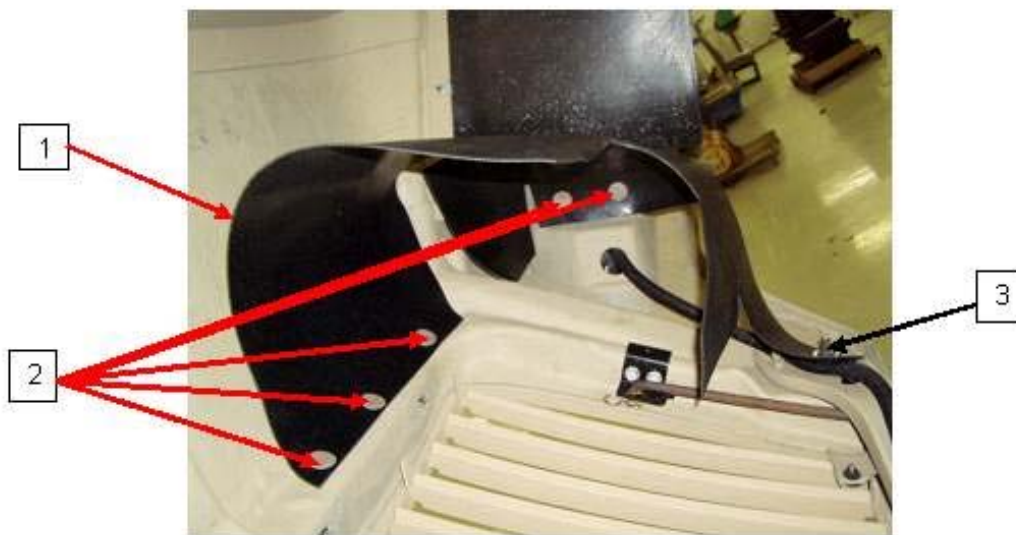


Figure 24 Air Deflector

1. AIR DEFLECTOR
2. PUSH PINS
3. MOUNTING NUT AND WASHER

See Figure 24 for Items in parentheses.

1. Remove the five Push Pins (Item 2) that secure the air deflector (Item 1) to the hood.
2. Remove the nut and washer (Item 3) and the air deflector from the hood.

Air Deflectors — Installation

See Figure 24 for Items in parentheses.

1. Install the air deflector (Item 1) on the hood and secure with mounting nut and washer (Item 3)
2. Install the five push pins (Item 2) and the air deflector (item 1) to the hood.

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 MXT.

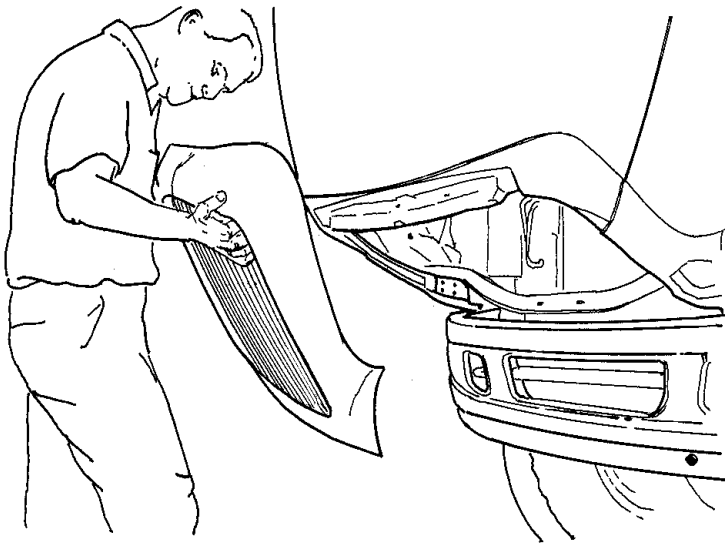


Figure 25 Grille And Shroud Removal

Refer to Figure 26 for all Items in parentheses.

1. Locate the four lower grille and shroud mounting screws (Item 3) on the grille assembly (Item 4).
2. Loosen and remove the screws (Item 3).
3. Lift the grille and shroud assembly with a sharp upward jerk to release the grille (Item 4) 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.

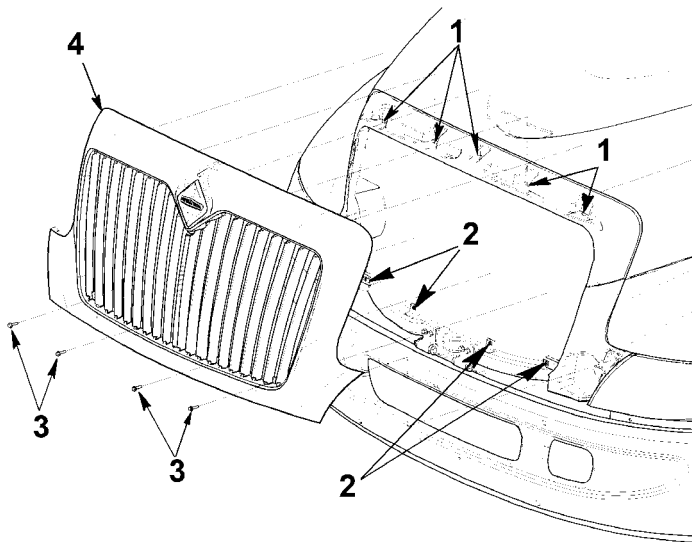


Figure 26 Grille Installation

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

1. Align the grille (Item 4) with the tab insert holes (Item 1) and insert grille (Item 4) into insert holes (Item 1). Thump grill down over each clip to set grill tabs in slots properly.
2. Tilt grille (Item 4) inward and down to line grille (Item 4) up with the lower grille mounting points (Item 2).
3. Insert the four mounting screws (Item 3) in the grille (Item 4) and grille mounting points (Item 2) and tighten.

NOTE – Do not overtighten the mounting screws.

2.6. AIR INTAKE

Air Intake — Removal

The MXT air intake is located on the driver side of the hood just above the fender. Intake air flows through the molded duct work on the underside of the hood and is routed to the air cleaner.

Refer to Figure 27 for items in parentheses.

1. Locate the two upper and two lower mounting screws (Item 3).
2. Remove the four mounting screws (Item 3), the air inlet grille (Item 2), and the frame assembly (Item 1).



Figure 27 Air Intake Grille (Driver side)

1. AIR INLET FRAME
2. AIR INLET GRILLE
3. MOUNTING SCREWS

Air Intake — Installation

1. Place the air inlet grille (Item 2) into the air inlet frame (Item 1).
2. Align the mounting holes on the air inlet grille (Item 2) with the mounting tabs on the air frame (Item 1).
3. Insert the four mounting screws (Item 3) and tighten.

2.7. HEADLIGHT, SEALED BEAM AND TURN SIGNAL ASSEMBLY

The headlight/turn signals are mounted on the front of the hood on either side of the grille.

Headlight and Sealed Beam — Removal

1. Tilt the hood assembly forward.

Refer to Figure 28 for items in parentheses.

2. Disconnect the headlight wiring harness connector (Item 1) from chassis harness connector (Item 2).



Figure 28 Headlight Connector

1. HEADLIGHT WIRING HARNESS CONNECTOR
2. CHASSIS WIRING HARNESS CONNECTOR

Refer to Figure 29 for items in parentheses.

3. Remove four headlight mounting bolts (Item 3) from underside of hood.

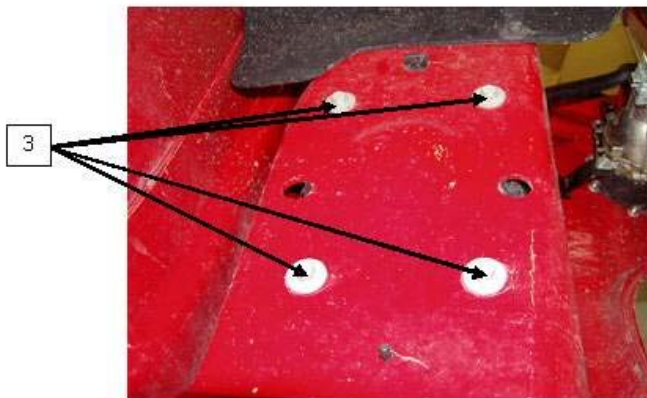


Figure 29 Headlight Assembly Mounting Bolts

3. HEADLIGHT MOUNTING BOLTS

4. To remove the remaining headlight assembly follow steps 2-3 above.

Refer to Figure 30 for items in parentheses.

5. Remove four screws (Item 2) from headlight bezel (Item 1).

6. Remove bezel (Item 1).



Figure 30 Headlight Bezel Removal

- 1. HEADLIGHT BEZEL
- 2. BEZEL MOUNTING SCREWS

Refer to Figure 31 for items in parentheses.

7. Remove four screws (Item 1) and the bezel plate (Item 2) from around the sealed beam (Item 3).



Figure 31 Bezel Plate Removal

- 1. MOUNTING SCREWS
- 2. BEZEL PLATE
- 3. SEALED BEAM

Refer to Figure 32 for items in parentheses.

8. Remove sealed beam (Item 1) from sealed beam housing (Item 2).



Figure 32 Sealed Beam Removal

1. SEALED BEAM
2. SEALED BEAM HOUSING

Refer to Figure 33 for items in parentheses.

9. Remove harness connector (Item 2) from sealed beam (Item 1).



Figure 33 Harness Removal

1. SEALED BEAM
2. HARNESS CONNECTOR

Turn Signal Bulb Replacement

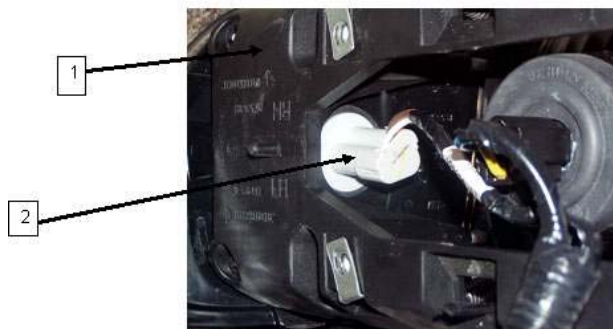


Figure 34 Turn Signal Connector

1. HEADLIGHT ASSEMBLY
2. TURN SIGNAL CONNECTOR

Refer to Figure 34 for items in parentheses.

1. Remove the turn signal connector (Item 2) from the headlight assembly (Item 1) by twisting it counterclockwise and pulling straight out.



Figure 35 Turn Signal Bulb

1. TURN SIGNAL BULB
2. TURN SIGNAL CONNECTOR

Refer to Figure 35 for items in parentheses.

2. Remove the bulb (Item 1) from the connector (Item 2).
3. Install a new bulb (Item 1) into the connector (Item 2)

Refer to Figure 34 for items in parentheses.

4. Install the turn signal connector (Item 2) into the headlight assembly (Item 1) and twist it clockwise until it locks.

Headlight Bulb Replacement

NOTE – Perform this procedure only if vehicle is not equipped with a sealed beam.

Refer to Figure 36 for items in parentheses.

1. Remove the harness connector (Item 1), and rubber boot (Item 2) from the headlight assembly (Item 3)

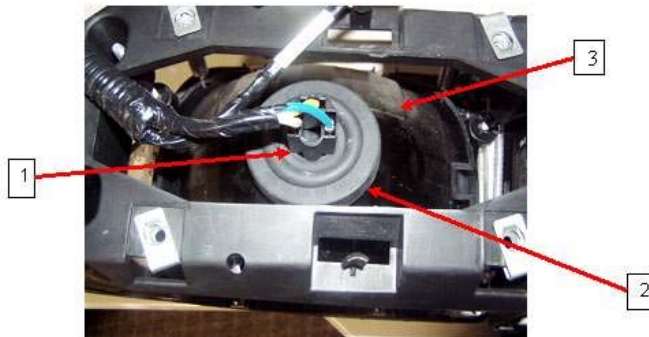


Figure 36

1. HARNESS CONNECTOR
2. RUBBER BOOT
3. HEADLIGHT

Refer to Figure 37 for items in parentheses.

2. Loosen the mounting spring (Item 4) and remove the HB2 bulb assembly (Item 5).

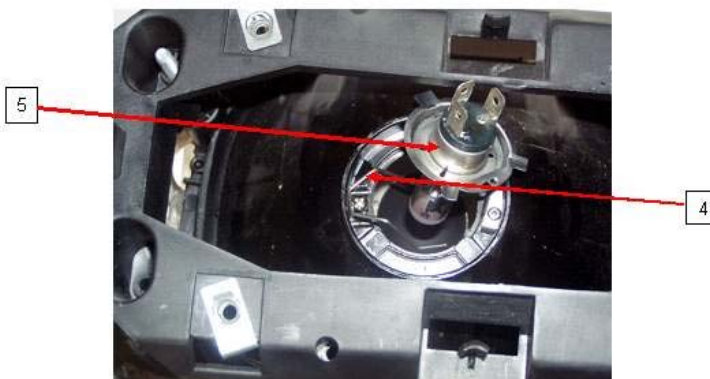


Figure 37

4. MOUNTING SPRING
5. HEADLIGHT BULB ASSEMBLY

3. Replace the HB2 bulb assembly (Item 5) and secure with the mounting spring (Item 4).

Refer to Figure 36 for items in parentheses.

4. Install the rubber boot (Item 2) and harness connector (Item 1) to the headlight assembly (Item 3).

Headlight and Sealed Beam — Installation

1. Connect harness connector (Item 2, Figure 33) to sealed beam (Item 1, Figure 33).
2. Install sealed beam (Item 1, Figure 32) into sealed beam housing (Item 2, Figure 32).
3. Install the sealed beam (Item 3, Figure 31) to the bezel plate (Item 2, Figure 31) with four screws (Item 1, Figure 31).
4. Install headlight bezel (Item 1, Figure 30) with four screws (Item 2, Figure 30).
5. Secure headlight assembly from the back with four headlight mounting bolts (Item 3, Figure 29).
6. Connect the headlight wiring harness (Item 2, Figure 28) to the connector (Item 1, Figure 28).
7. Tilt the hood back and secure with the hood latches.

2.8. HOOD LATCH

Hood Latch — Removal

The hood latching mechanism consists of two assemblies: the upper latch mounted on the hood and the lower latch mounted on the fender extension.



Figure 38 Hood Latch Assembly

1. HOOD
2. UPPER LATCH MOUNTING BOLTS
3. UPPER LATCH MOUNTING NUTS
4. UPPER LATCH ASSEMBLY
5. LOWER LATCH MOUNTING BOLTS
6. LOWER LATCH MOUNTING NUTS
7. LOWER LATCH ASSEMBLY
8. FENDER EXTENSION

Refer to Figure 38 for items in parentheses.

1. Release the latching mechanism on both sides of the hood (Item 1).

2. Remove the two upper latch mounting bolts (Item 2), nuts (Item 3), and upper latch assembly (Item 4) from the hood (Item 1).
3. Tilt hood forward if necessary.
4. Remove the two lower latch mounting bolts (Item 5), nuts (Item 6), and lower latch (Item 7) from the fender extension (Item 8).
5. Follow same procedure for removal of opposite side.

Hood Latch — Installation

Refer to Figure 38 for items in parentheses.

1. Position the upper latching assembly (Item 4) on the hood (Item 1) and align the mounting holes of the latch assembly with the mounting holes on the hood (Item 1).
2. Install the upper latch assembly (Item 4) with two mounting bolts (Item 2) and nuts (Item 3).
3. Position the lower latch assembly (Item 7) on the fender extension (Item 8) and align the mounting holes of the latch assembly with the mounting holes on the fender extension (Item 8).
4. Install the lower latching assembly (Item 7) with two mounting bolts (Item 5) and nuts (Item 6).
5. Follow same procedure for installation on opposite side.

2.9. FENDER EXTENSIONS

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.

Fender Extension — Removal

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



Figure 39 Fender Extension

1. FENDER EXTENSION

2. Remove the two lower fender extension bolts (Item 2, Figure 40) from bracket (Item 3, Figure 40).



Figure 40 Lower Fender Extension Bracket and Bolts

2. LOWER FENDER EXTENSION MOUNTING BOLTS
3. LOWER FENDER EXTENSION MOUNTING BRACKET

3. Remove the centering bolt (Item 4, Figure 41) from bracket (Item 5, Figure 41).

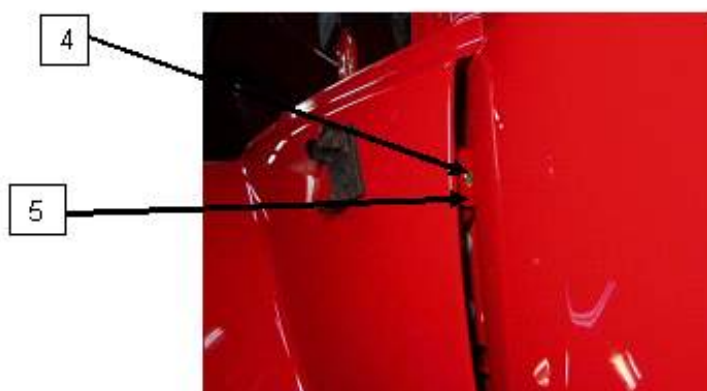


Figure 41 Fender Extension Centering Bolt

4. FENDER EXTENSION CENTERING BOLT
5. FENDER EXTENSION BRACKET

4. Remove the top fender extension mounting bolt (Item 6, Figure 42) and fender extension (Item 1, Figure 42) from vehicle.



Figure 42 Top Fender Extension Mounting Bolt

- 1. FENDER EXTENSION
- 6. TOP MOUNTING BOLT

5. Follow same procedure to remove opposite side fender extension.

Fender Extension — Installation

NOTE – The fender extension installation procedure should be done in conjunction with 3.2 HOOD STOP/FENDER EXTENSION ADJUSTMENT.

1. Install fender extension (Item 1, Figures 39 and 42) on vehicle and secure with top mounting bolt (Item 6, Figure 42).
2. Align the fender extension with the mounting holes on the lower fender bracket (Item 3, Figure 40) and secure with two mounting bolts (Item 2, Figure 40).
3. Install centering bolt (Item 4, Figure 41) into bracket (Item 5, Figure 41).
4. Torque the mounting bolts. See torque chart.

2.10. HOOD SEAL

The hood seal is mounted along the cowl tray and forms a protective seal between the engine compartment and the cowl tray.

Hood Seal— Removal

1. Release the hood latches on each side and tilt the hood forward all the way.
2. Grip the hood seal (Item 1, Figure 43) and lift in upward direction and remove entire length of seal (Item 1, Figure 43) from cowl tray (Item 2, Figure 43).



Figure 43 Hood Seal Passenger Side Shown

1. HOOD SEAL
2. COWL TRAY

Hood Seal— Installation

1. Place hood seal (Item 1, Figure 43) on the forward edge of the cowl tray (Item 2, Figure 43) 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. Press seal down on edge as far as is allowable. Lower hood and latch hood release.

2.11. PICK UP BOX

The pick up box is mounted to the rear frame behind the crew cab.

Pick Up Box — Removal

1. Disconnect electrical connector (Item 1, Figure 44) from taillight wiring harness connector (Item 2, Figure 44).



Figure 44 Electrical Connection

1. ELECTRICAL CONNECTOR
2. TAIL LIGHT WIRING HARNESS CONNECTOR

Reference Figure 45 for items in parentheses.

2. Remove two screws and access plate (Item 3) from fuel fill hose protective cover (Item 4)
3. Remove the four screws that attach the fuel fill hose (Item 5) to the protective cover (Item 4). Move the fill hose down below the level of the protective cover.
4. Remove nut, two rubber box mounts, and bolt (Item 1) securing the forward portion of the pick up box (Item 2) to the frame (Item 7).
5. Remove three bolts and six rubber box mounts (Item 6) securing the middle and rear of the pick up box (Item 2) to the frame (Item 7).

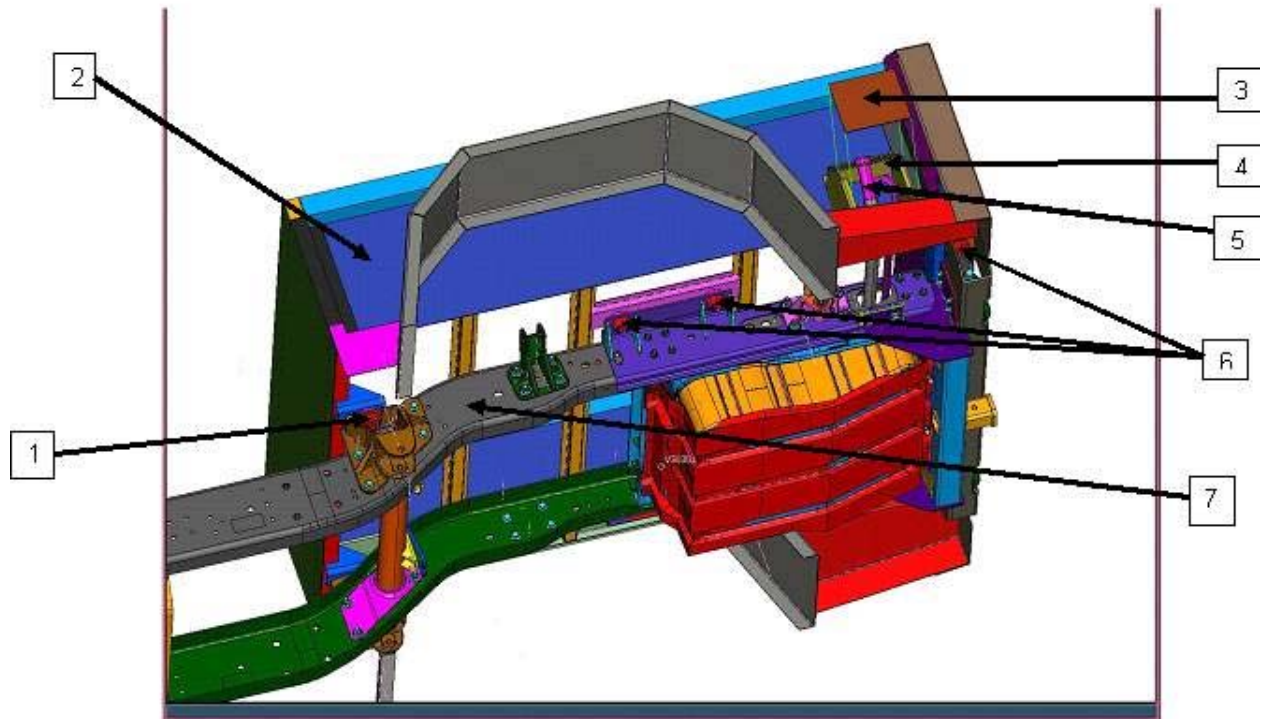


Figure 45 Pick Up Box

1. FORWARD BOLT, RUBBER BOX MOUNTS AND NUT
2. PICK UP BOX
3. ACCESS COVER
4. FUEL FILL HOSE PROTECTIVE COVER
5. FUEL FILL HOSE
6. REAR BOLTS, RUBBER BOX MOUNTS AND NUTS
7. FRAME

6. Repeat steps 4-5 on opposite side of frame.
7. Using a lifting device lift the pick up box (Item 2) up off the frame (Item 7) only enough to separate frame and box. Adjust the fuel fill hose neck (Item 5) down towards the driver side and move the pick up box towards the driver side enough so the fuel fill hose (Item 5) will clear the hole on the side of the box. When the pick up box is clear of the fuel fill hose, the pick up box may be lifted clear.
8. Place the pick up box on a padded surface to prevent damage to the painted surfaces of the box.

Pick Up Box — Installation

Reference Figure 45 for items in parentheses.

1. Install the pick up box (Item 2) onto the frame (Item 7) ensuring that the fuel fill hose (item 5) from the fuel tank fits through the hole on the side of the box (Item 2).
2. Install the three bolts and six rubber box mounts (Item 6) securing the middle and rear of the pick up box (Item 2) to the frame (Item 7).

3. Install nut, two rubber box mounts, and bolt (Item 1) securing the forward portion of the pick up box (Item 2) to the frame (Item 7).
4. Repeat steps 2-3 for the opposite side of the pick up box (Item 2).
5. Install the four screws that attach the fuel fill hose (Item 5) to the protective cover (Item 4).
6. Install two screws and access plate (Item 3) from the fuel fill hose protective cover (Item 4).
7. Connect electrical connector (Item 1, Figure 44) to Taillight wiring harness connector (Item 2, Figure 44).

2.12. REAR BUMPER, TOW HOOKS, AND TRAILER HITCH

Rear Bumper and Tow Hooks — Removal



Figure 46

1. TOW HOOKS
2. MOUNTING BOLTS, NUTS AND WASHERS
3. REAR BUMPER

1. On the driver's side remove the four nuts, washers and bolts (Item 2, Figure 46) securing the tow hook (Item 1, Figure 46) to the rear bumper (Item 3, Figure 46). Remove the tow hook.

CAUTION – Support the rear bumper prior to Step 2 to prevent it falling.

2. On the passenger side, repeat step 1. Remove the tow hook (Item 1, Figure 46) and the rear bumper (Item 3, Figure 46) from the vehicle.

3. Remove the two nuts, washers, and bolts (Item 1, Figure 47) securing the trailer hitch (Item 4, Figure 47) to the frame bracket (Item 2, Figure 47) on the driver side.
4. Repeat step 3 for the passenger side of the trailer hitch (Item 4, Figure 47). Remove the trailer hitch (Item 4, Figure 47) from the vehicle.



Figure 47

1. MOUNTING BOLTS, NUTS AND WASHERS
2. FRAME BRACKET
3. FRAME
4. TRAILER HITCH

Rear Bumper and Tow Hooks — Installation

1. Install the trailer hitch (Item 4, Figure 47) to the driver and passenger side frame brackets (Item 2, Figure 47) with the mounting bolts, washers and nuts (Item 1, Figure 47).
2. Line up the rear bumper (Item 3, Figure 46) and the tow hooks (Item 1, Figure 46) with the holes in the frame and trailer hitch and secure with the eight mounting bolts, washers and nuts (Item 2, Figure 46).

2.13. RUNNING BOARDS

The running boards are located on both sides of the cab from the front wheel well to the rear wheel well.

Running Boards — Removal

CAUTION – The running boards are very heavy. Support the running boards with a suitable lifting device prior to removal. Failure to comply could result in serious injury to personnel or damage to equipment.

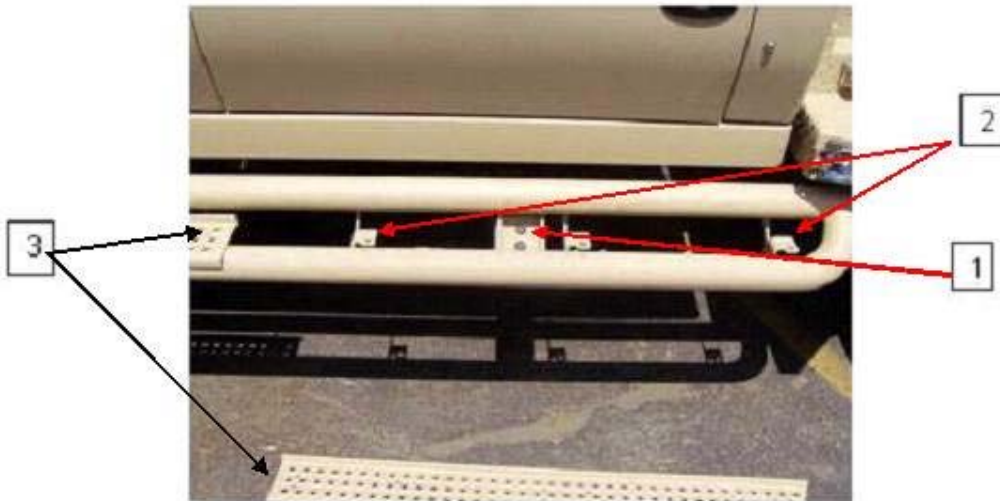


Figure 48 Running Boards

1. MOUNTING BOLTS AND NUTS
2. RUNNING BOARD BRACKETS
3. RUNNING BOARD

1. Remove four bolts and nuts (Item 1, Figure 48) from the running board front bracket (Item 2, Figure 48).
2. Remove the remaining four bolts and nuts (Item 1, Figure 48) from the running board rear bracket (Item 2, Figure 48). Remove the running board.
3. Repeat steps 1 and 2 for the remaining running board.

Running Boards — Installation

Refer to Figure 48 for items in parentheses.

CAUTION – The running boards are very heavy. Support the running boards with a suitable lifting device prior to installation. Failure to comply could result in serious injury to personnel or damage to equipment.

1. Align the running board front and rear brackets (Item 2) in position on the frame and secure with one nut and bolt in the front and rear brackets to secure the running board (Item 3).
2. Install the remaining six nuts and bolts (Item 1) in the front and rear running board brackets (Item 2).
3. Repeat steps 1 and 2 for the remaining running board.

3. ADJUSTMENTS

3.1. HOOD ADJUSTMENT AND ALIGNMENT

The MXT hood can be adjusted by moving the hinge plate attachment located at the front cross member.

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 49), loosen the hinge mounting bolts at the mounting plate (Item 1) on the chassis front cross member (Item 2).
 - a. Slide the hood forward or aft as required.
 - b. Check the distance between the rear edge of hood and clearance to windshield.
 - c. Verify that the two front snubbers (Item 1, Figure 50) are impacting on the mega brackets (Item 2, Figure 50) when hood is closed.
 - d. Tighten the hinge mounting bolts and torque to required values.

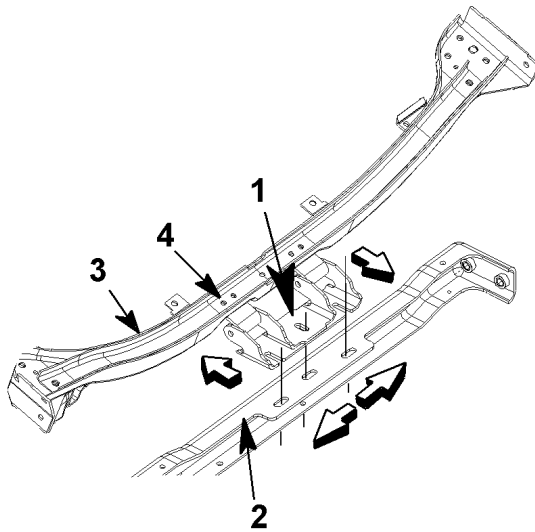


Figure 49 Hood Hinge Adjustment

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

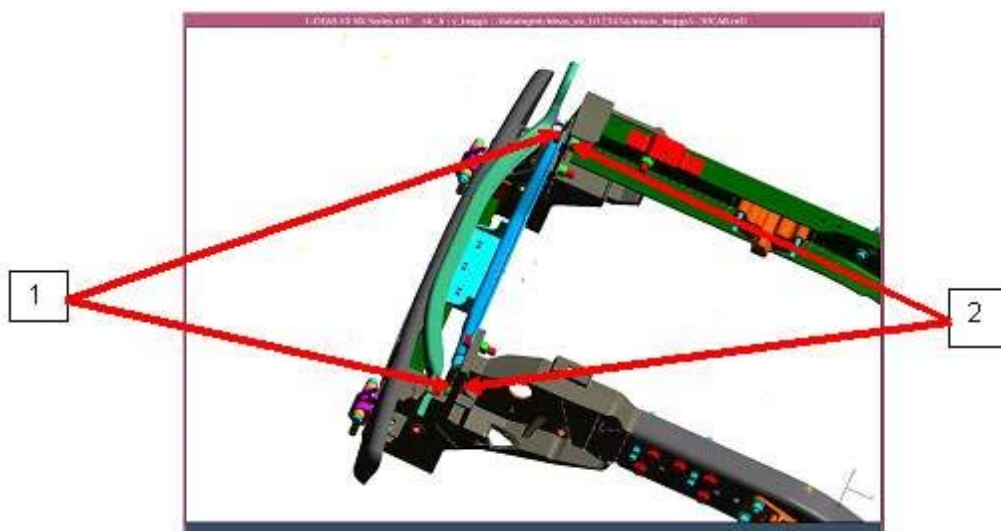


Figure 50 Snubber Detail (Hood Removed for Clarity)

- 1. SNUBBERS
- 2. MEGA BRACKETS

3.2. HOOD STOP/FENDER EXTENSION ADJUSTMENT AND ALIGNMENT

The Hood Stop brackets precisely control the location of the two hood stops and the adjustment of the fender extensions relative to the doors.

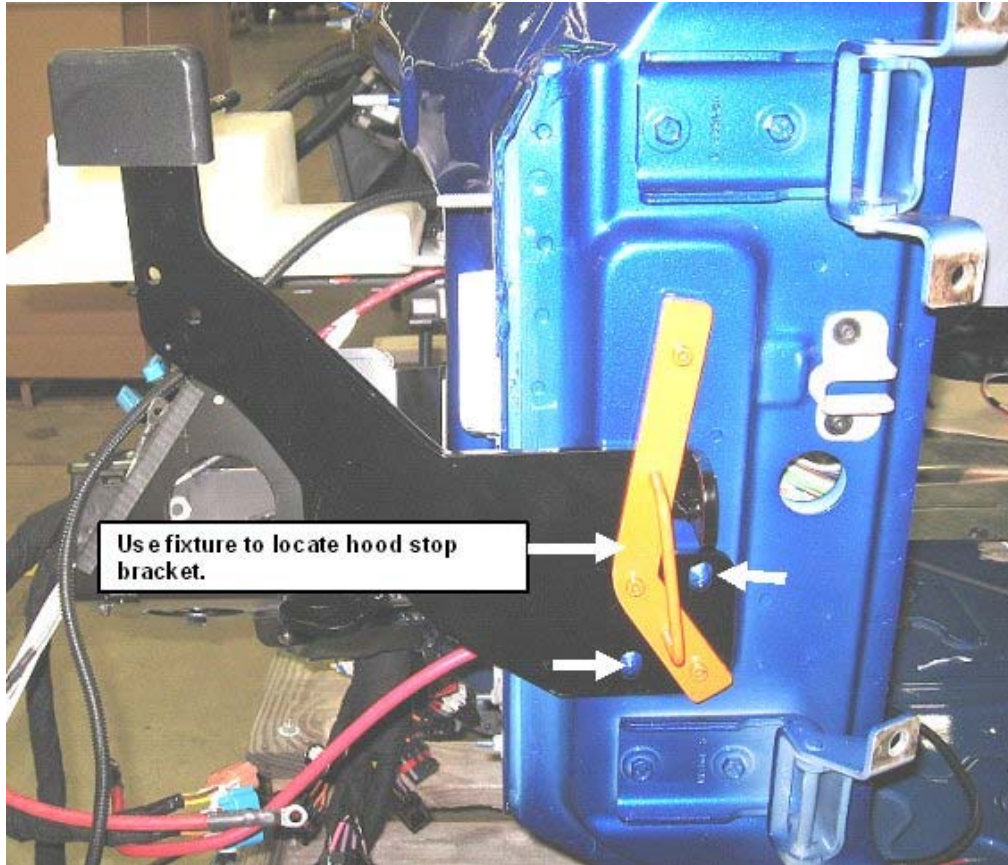


Figure 51 Hood Stop (Driver Side Shown)

Refer to Figure 51 for the following procedure.

1. Unlatch hood and tilt hood forward.
2. Locate the hood stop bracket using the locating fixture as shown.

NOTE – Hood stop bracket bolts must be loosened and 2 bolts removed to insert the fixture.

3. Tighten the 2 hood stop bracket bolts not removed.
4. Remove the locating fixture. Install and tighten the remaining 2 hood stop bracket bolts previously removed.
5. The same procedure should be applied to mount the opposite side hood stop bracket.

3.3. HEADLIGHT ADJUSTMENT

The following procedure must be followed in order to adjust the headlights.

Reference Figure 52 for items in parentheses.

1. Locate adjustment screws on both sides of headlight housing (Items 3 and 2).
2. Rotate the vertical adjustment screw (Item 2) clockwise or counter-clockwise to adjust the up or down orientation of the headlight beam.
3. Rotate the horizontal adjustment screw (Item 3) clockwise or counter-clockwise to adjust the side to side orientation of the headlight beam.



Figure 52 Headlight Adjustment

1. HEADLIGHT
2. VERTICAL ADJUSTMENT SCREW
3. HORIZONTAL ADJUSTMENT SCREW

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
2	Front Splash Panel at Front Splash Panel Bracket Hex Mounting Bolts (Figure 18)	34 to 38 lbf-ft	46 to 51
2	Driver Side Splash Panel Front and Top (Figure 20)	34 to 38 lbf-ft	46 to 51
2	Upper Hood Latch Mounting Hex Bolts (Figure 32)	34 to 38 lbf-ft	46 to 51
5, 6	Lower Hood Latch Mtg. Hex Bolts and Hex Nuts (Figure 32)	34 to 38 lbf-ft	46 to 51
—	Hood Stop Bracket (Figure 51)	38 to 43 lbf-ft	52 to 58
*Refer to Figures specified in the location column.			

SPECIAL SERVICE TOOLS

The following Special Tools are required. The following drawings provide the necessary details required to locally source/make these tools.

Hood Stop/Fender Extension Adjustment/Alignment Tool

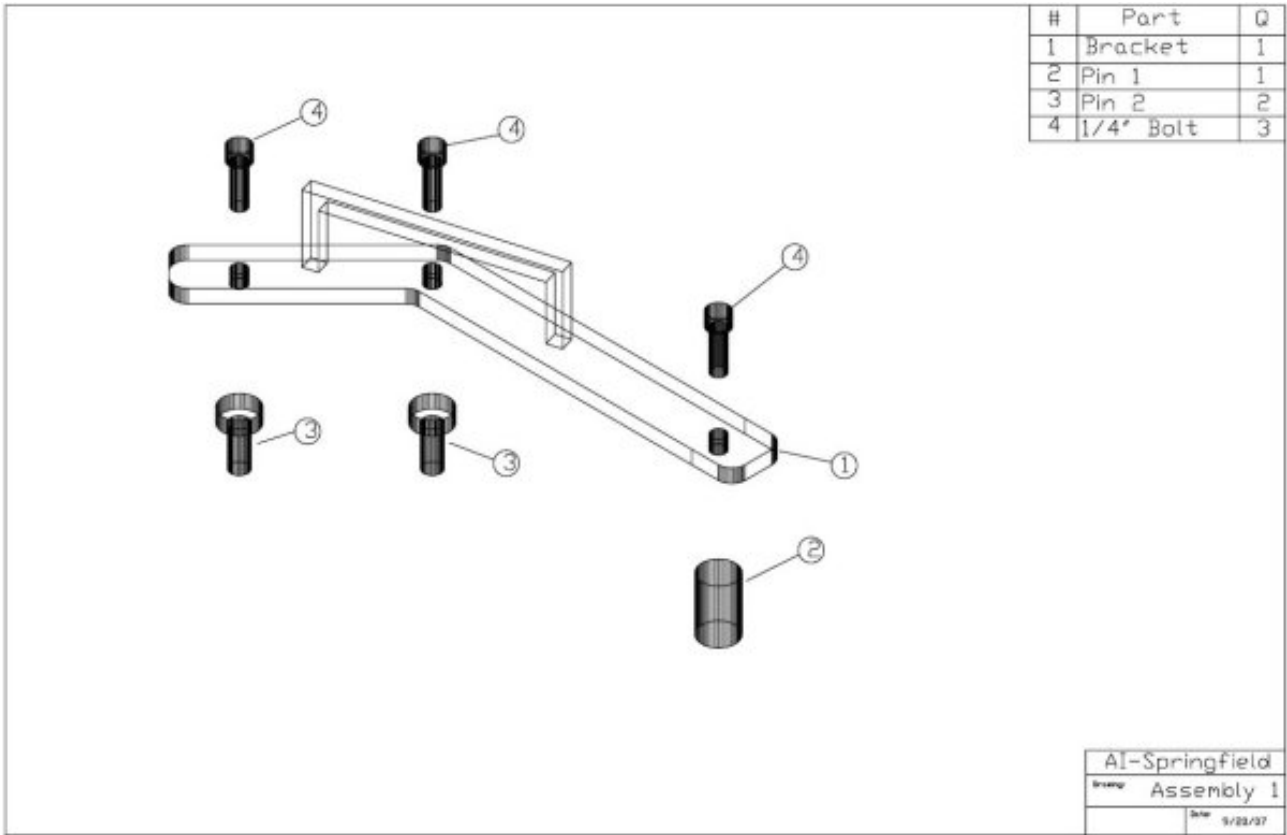


Figure 53

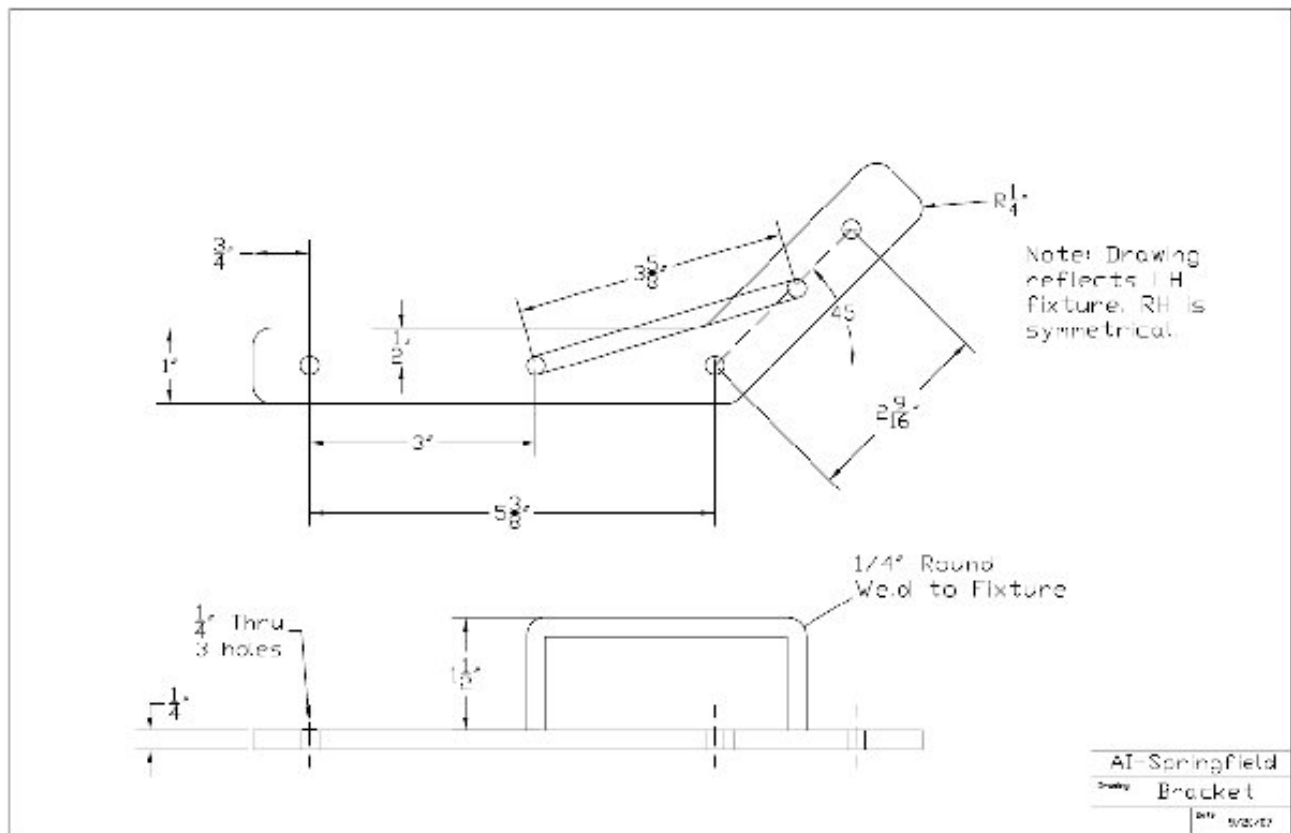


Figure 54

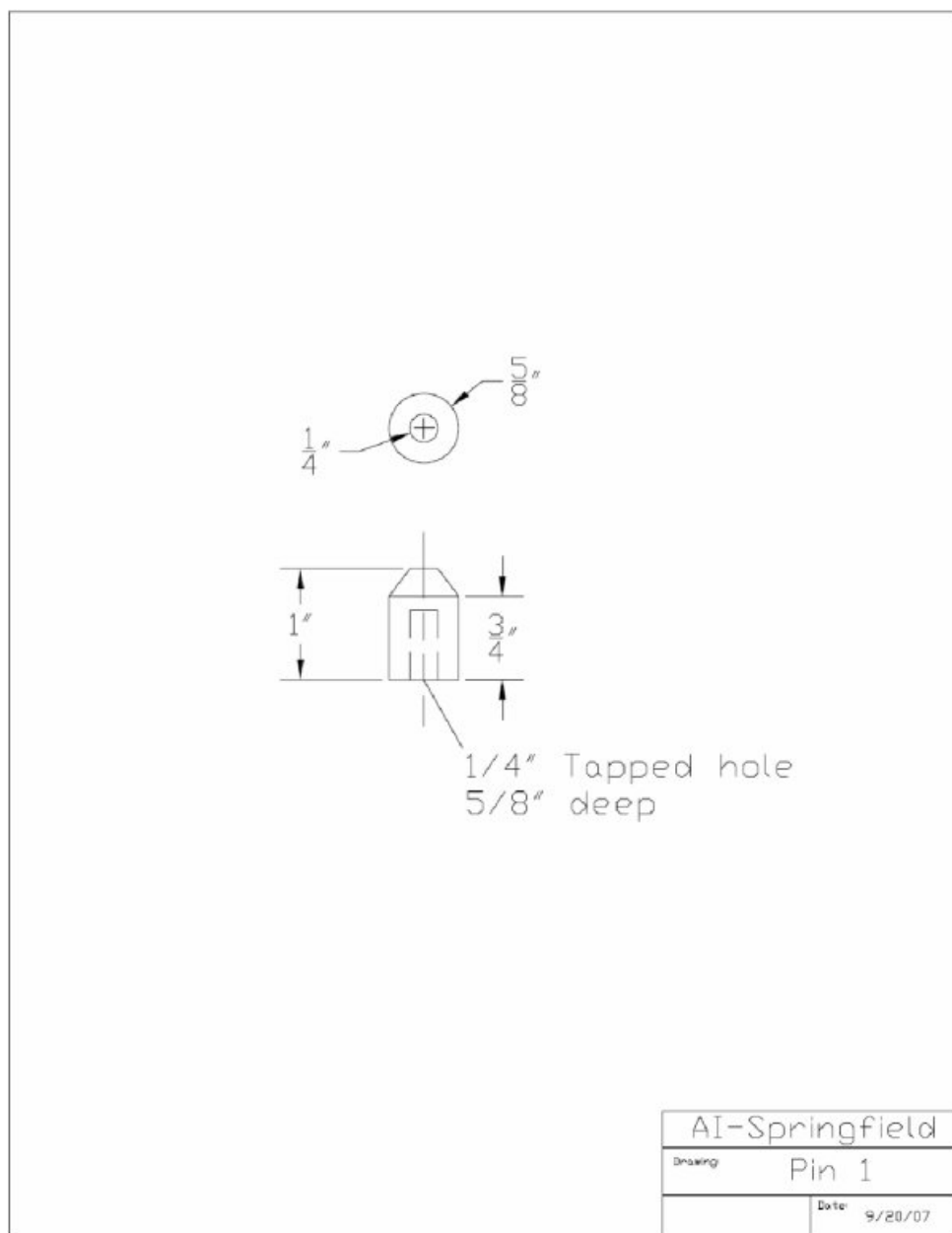


Figure 55

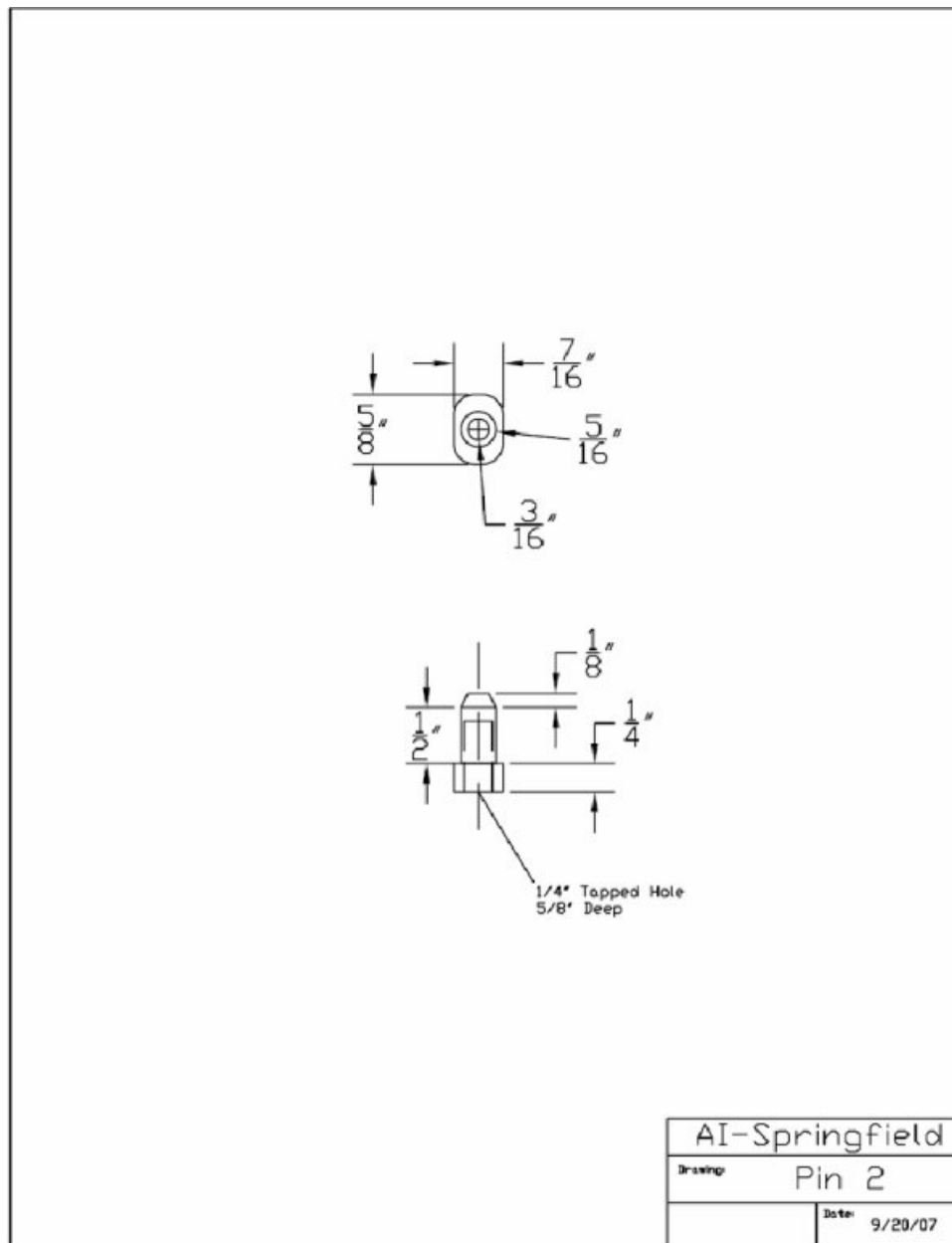


Figure 56