

# **SERVICE MANUAL**

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## **SERVICE MANUAL SECTION**

**CAB - MXT**

**Model: MXT**

**S16036**

**07/28/2006**



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## 1. GENERAL PROCEDURES FOR CAB REMOVAL

The removal of the cab from chassis can be performed provided an overhead crane and cab lifting fixture are available. Removal procedures may vary for various models depending on the type of equipment and accessories.

**NOTE – Refer to the correct sections in the Master Service Manual for the component being removed and replaced.**

The following steps may be used as a guide.

1. Block wheels of truck and engage parking brake.
2. Tilt or remove hood.
3. Disconnect battery ground cable.
4. Drain cooling system and disconnect heater hose.
5. Disconnect steering shaft at gear.
6. Disconnect accelerator linkage and cruise control if so equipped.
7. Disconnect electrical connections and ground wire.
8. Disconnect clutch linkage.
9. Disconnect brake system.



**WARNING – Refrigerant must be recovered from the air conditioning system before any components of the system are removed or replaced. Removing components while pressure is in the system will cause personal injury or death.**

10. Disconnect air conditioning lines.

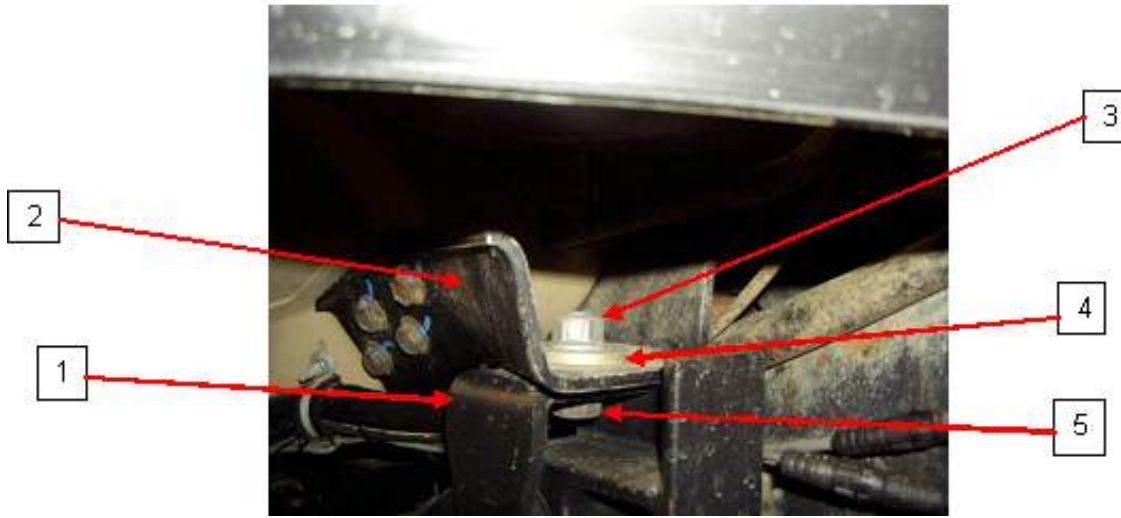


**WARNING – Always use approved refrigerant recycling equipment when working with R-134a. Federal and state laws require that refrigerant be recovered and recycled to help protect the environment.**



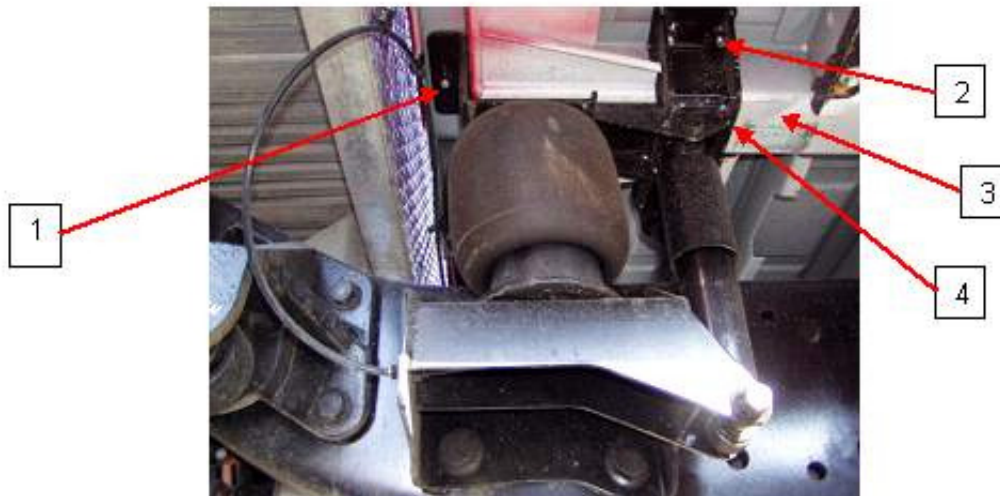
**WARNING – Do not vent refrigerant into the atmosphere. The use of R-12 is a worldwide environmental concern. Because of the absence of chlorine in the molecular structure of R-134a, the use of R-134a refrigerant will not have any harmful effects on the ozone layer of the atmosphere. Because there is not enough evidence to determine the “greenhouse” effect of R-134a, recycling of R-134a is recommended. Effective November 1995, recovery of R-134a is required by law.**

11. Remove shift lever from transmission.
12. Remove the mounting bolt (Item 5, Figure 1), washer (Item 4), and hex nut (Item 3), from the frame mounting bracket (Item 1) and the front cab bracket (Item 2) on the passenger side.
13. Repeat step 12 for the driver side cab mounting.



**Figure 1 Cab Mounting Detail**

1. FRAME MOUNTING BRACKET
  2. FRONT CAB MOUNTING BRACKET
  3. HEX NUT
  4. WASHER
  5. MOUNTING BOLT
14. Remove three nuts from the three rear cab air bag carriage bolts (Item 2, Figure 2) protruding through the cab floor (Item 3). All three carriage bolts will remain with the cab underbody sill and cab floor when cab is lifted off the rear cab air suspension assembly.

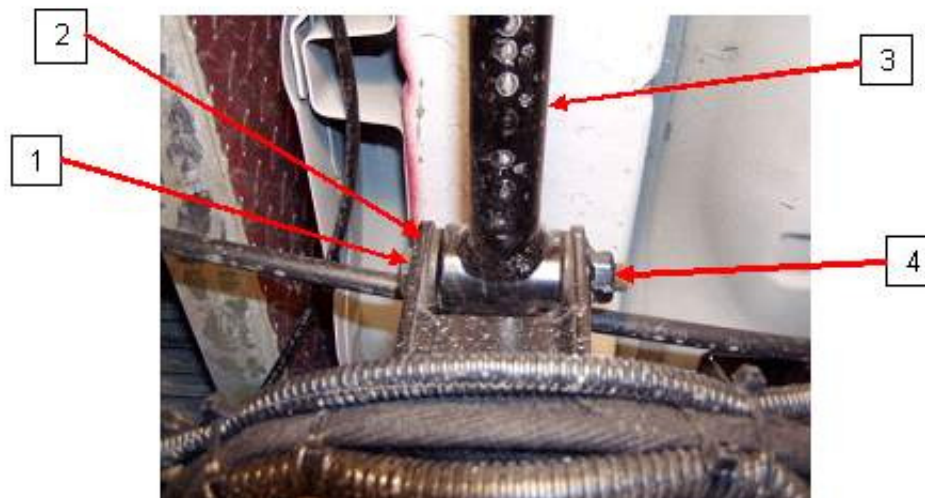


**Figure 2 Rear Cab Air Bag Mounting Detail**

1. REAR BRACKETS
2. CARRIAGE BOLTS
3. CAB FLOOR
4. REAR CAB AIR SUSPENSION

15. Repeat procedure to remove the opposite side rear cab air bag mounting hardware.

16. Remove nut (Item 4, Figure 3) and bolt (Item 1) from the torsion bar bracket (Item 2) on frame. Swing the torsion bar (Item 3) away from the bracket (Item 2).



**Figure 3 Torsion Bar Bracket and Torsion Bar**

1. HEX HEAD BOLT
2. TORSION BAR BRACKET
3. TORSION BAR
4. HEX NUT

17. Disconnect the nut (Item 2, Figure 4) and cable (Item 1) from the parking brake cable bracket (Item 3).



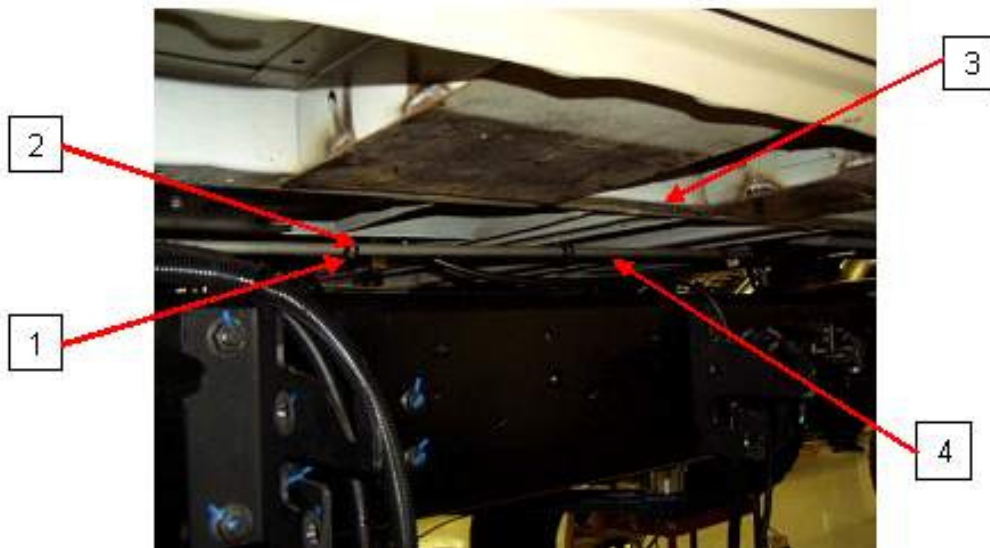
**Figure 4 Parking Brake Cable Bracket and Cable Mounting**

- 1. PARKING BRAKE CABLE
- 2. PARKING BRAKE CABLE NUT
- 3. PARKING BRAKE CABLE BRACKET

**NOTE – Prior to performing Step 18 drain the fluid from the ABS brake line or clamp the end of the line to prevent air from entering the system.**

18. Remove the four screws (Item 1, Figure 5), four clamps (Item 2) and the Master Cylinder to ABS Module reservoir line (Item 4) from the underside of the cab floor (Item 3).

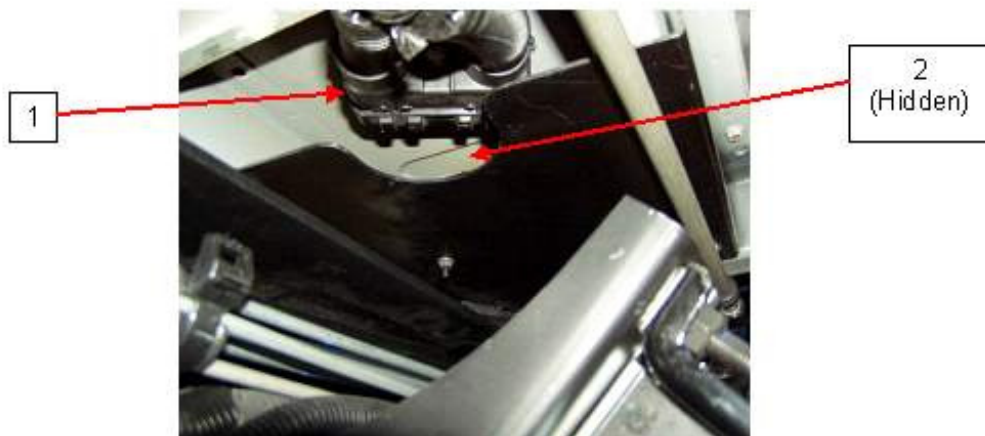




**Figure 5 ABS Module Reservoir Line**

1. SCREW
2. CLAMP
3. CAB FLOOR
4. ABS MODULE RESERVOIR LINE

19. Disconnect the transmission module connector (Item 1, Figure 6) from the transmission module (Item 2).



**Figure 6 Transmission Module Connector**

1. TRANSMISSION MODULE CONNECTOR
2. TRANSMISSION MODULE

20. Using an overhead crane and cab lifting fixture, carefully lift cab from frame. If removing cab from overhead crane, set it on a suitable surface to protect painted surfaces.

## 2. CAB SQUARING

Cab squaring is the centering and perpendicular positioning of the cab structure to the frame. The cab must be squared whenever the cab has been removed from the chassis for repair, or if a new cab is being mounted.

The cab must be properly squared to the frame as this will affect the relationship between the cab and hood. Improper squaring may result in unacceptable appearance and interference between the cab and hood. **Be sure the chassis is on a level surface before squaring.**

Center cab on frame rail by measuring from inside of cab cowl to outside of frame rail on both sides. Measurement should be equal on both front and rear sides.

## 3. CAB INSTALLATION

1. Using an overhead crane and cab lifting fixture, lift cab over frame.

**CAUTION – Do not put all cab weight on chassis until all mounting bolts are tightened.**

**CAUTION – Inspect all cab to frame attaching points to be sure they are aligned properly or damage can result.**

2. Carefully lower cab down over front and rear mounting locations, making sure that cab floor carriage bolts at rear and front cab mounting brackets are aligned properly as cab is lowered onto frame.
3. Install hex flange nut onto the threaded stud of the front cab chassis mounting bracket.
4. Repeat step 3 for opposite side front mounting. Tighten both nuts but do not torque yet.
5. Install three hex flange nuts onto the three carriage bolts (Item 2, Figure 2) protruding through rear bracket (Item 4, Figure 2) on underside of cab floor (Item 3, Figure 2). Tighten all nuts but do not torque yet.
6. Repeat Step 5 for opposite side mounting. Tighten all nuts but do not torque yet.
7. Torque both front mounting hex flange nuts to 142 to 175 lbf-ft (193 – 213 Nm).
8. Torque all rear mounting hex flange nuts to 88 to 106 lbf-ft (119 to 144 Nm)
9. Connect the transmission module connector (Item 1, Figure 6) to the transmission control module (Item 2, Figure 6).
10. Install the ABS module reservoir line (Item 4, Figure 5) to the underside of the cab floor (Item 3, Figure 5) and secure with four clamps (Item 2, Figure 5) and four screws (Item 1, Figure 5).
11. Install the parking brake cable (Item 1, Figure 4) to the parking brake cable bracket (Item 3, Figure 4) and secure with parking brake cable nut (Item 2, Figure 4).
12. Install the torsion bar (Item 3, Figure 3) to the torsion bar bracket (Item 2, Figure 3) with the hex head bolt (Item 1, Figure 3) and hex nut (Item 4, Figure 3).

13. Using the appropriate service manual replace all items that were disconnected prior to removing the cab.
14. Road test vehicle. Be sure all vehicle components are operating properly before putting vehicle back into operation.

## 4. WINDSHIELD WASHER RESERVOIR AND/OR PUMP MOTOR

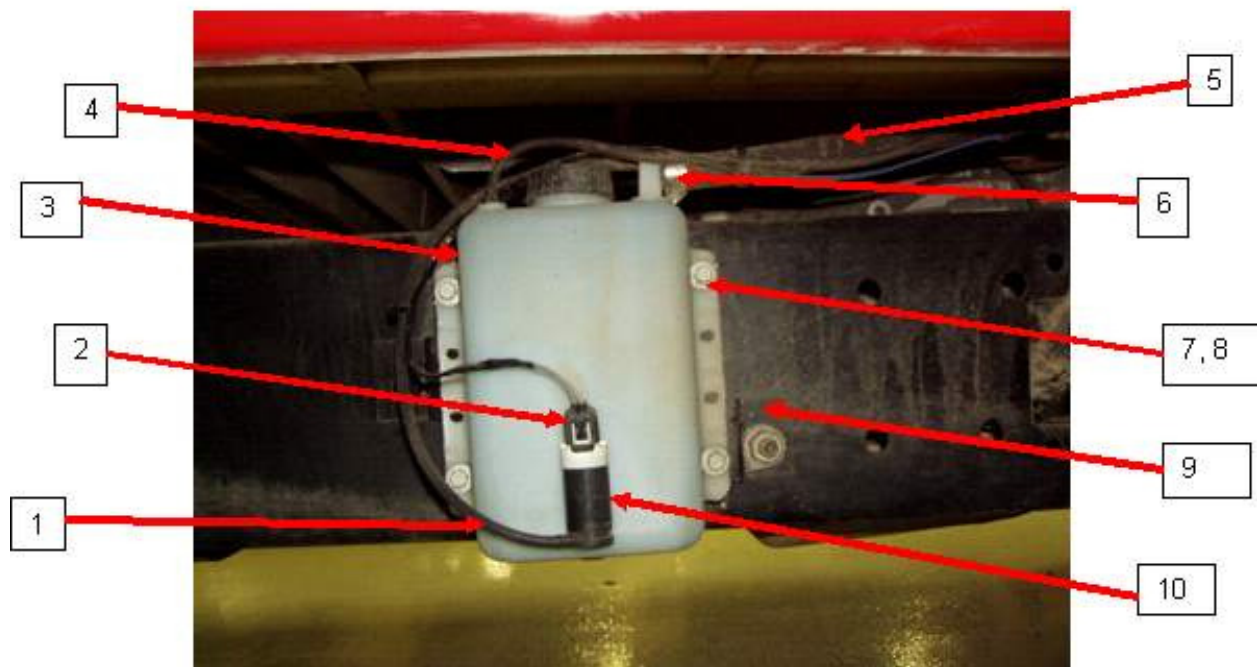
### 4.1. REMOVAL

Refer to Figure 7 for items in parentheses.

1. Disconnect electrical connector (Item 2) from pump motor (Item 10).

**NOTE – Use a suitable container to drain windshield washer solvent from reservoir when disconnecting the hoses from reservoir.**

2. Remove washer solvent supply hose (Item 1) from pump motor (Item 10).



**Figure 7**

1. WINDSHIELD WASHER FLUID SUPPLY HOSE
2. ELECTRICAL CONNECTOR
3. WINDSHIELD WASHER FLUID RESERVOIR
4. VENT TUBE
5. FILL TUBE
6. CLAMP
7. MOUNTING NUTS
8. MOUNTING BOLTS
9. RESERVOIR BRACKET
10. PUMP MOTOR

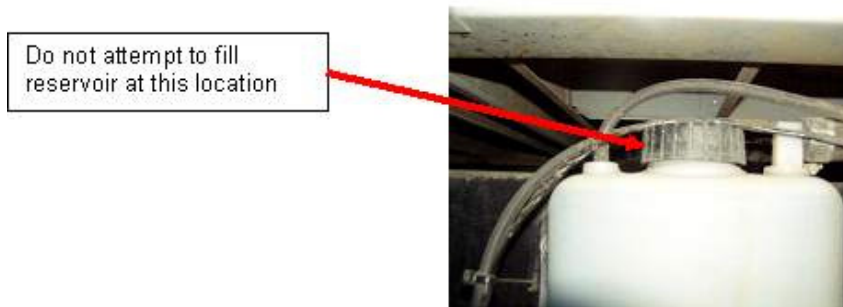
3. Loosen clamp (Item 6) and remove fill tube (Item 5) from windshield washer reservoir (Item 3).
4. Remove vent tube (Item 4) from reservoir (Item 3).
5. Remove four nuts (Item 7), four bolts (Item 8) and reservoir (Item 3) from reservoir bracket (Item 9).
6. Remove pump motor (Item 10) from reservoir (Item 3).

## 4.2. INSTALLATION

Refer to Figure 7 for items in parentheses.

1. Install pump motor (Item 10) on reservoir (Item 3).
2. Install reservoir (Item 3) on reservoir bracket (Item 9) and secure with four bolts (Item 8) and four nuts (Item 7).
3. Install vent tube (Item 4) on reservoir (Item 3).
4. Install fill tube (Item 5) to reservoir (Item 3) and tighten clamp (Item 6).
5. Install washer fluid supply hose (Item 1) to pump motor (Item 10).
6. Connect electrical connector (Item 2) to pump motor (Item 10).

**NOTE – Do not attempt to fill the reservoir by removing the cap at the top of the reservoir. It is difficult to remove the cap at that location and you may damage the reservoir. Use the remote fill located in the engine compartment.**



**Figure 8**

7. Fill reservoir with Windshield washer solvent at the remote fill location located in the engine compartment and check for leaks and proper system operation.