# Authorized Field Change

# INTERNATIONAL

AFC G-01908

Date: June, 2001

Subject File: CAB

**Subject:** Revised step height on driver and passenger side for 4300 and 4400 Models built before April 3, 2001 with 22.5 inch wheels and 65 gallon fuel tanks

Model: 4300

Start Date: 10/24/2000 End Date: 04/03/2001

Model: 4400

Start Date: 10/24/2000 End Date: 04/03/2001

#### **DESCRIPTION**

To improve cab entry step height, replace 65 gallon fuel tank, single step with 70 gallon fuel tank, two step module on 4300 and 4400 Models built between October 24, 2000 and April 3, 2001. A new rear fuel tank hanger bracket will need to be added on the frame rail, 544 mm back from the front fuel tank hanger bracket mounting holes. If the mounting holes are not already pierced in the frame rail, it will be necessary to drill mounting holes in the frame rail.

Replace single step bracket on the battery box with a two step bracket and replace battery box front and rear side plates. The old step can be re-used on the two step bracket.

A mud flap will have to be added to the driver and passenger side fender extensions.

#### PARTS INFORMATION

**Table 1 Parts Information** 

Part Number	Description	Quantity
8000824R91	Module, 70 Gallon Two Step Fuel Tank	1
8000825R91	Kit, Fuel Tank Mounting Bracket and Mounting Hardware, Battery Box Front and Rear Side Plates, Step Mounting Brackets and Mounting Hardware, Step, Step Mounting Hardware, Mud flap and Mounting Hardware; Kit includes items listed below:	1
3534247C6	Bracket , Fuel Tank mounting (1)	
30772R2	Bolt , Fuel Tank mounting Bracket (2)	

#### PARTS INFORMATION (CONT.)

Table 1 Parts Information (cont.)

Part Number	Description	Quantity
31085R1	Nut , Fuel Tank mounting Bracket (2)	
3539597C5	Front Side Plate, Battery Box (1)	
3539598C5	Rear Side Plate, Battery Box (1)	
3548444C1	Left Side Bracket, Two Step mounting (1)	
3548445C1	Right Side Bracket, Two Step mounting (1)	
30020R1	Bolt, Two Step Bracket mounting, M10x25 (4)	
3536427C1	Nut, Two Step Bracket mounting, M10 (4)	
3541323C1	U-Nut, M8 (4)	
3536371C2	Step (1)	
3541322C1	Bolt, Step mounting, M8x25 (8)	
3552193C1	Mud Flap, Fender Extension (2)	
3545922C2	Bolt, Mud Flap mounting, M8 1.25x35 (6)	
3542142C1	Washer, Mud Flap mounting, M8 (12)	
3553000C1	Lock Washer, Mud Flap mounting, M8 (6)	
40081R1	Nut, Mud Flap mounting, M8 (6)	

#### **SERVICE PROCEDURE**

#### **REMOVING 65 GALLON ONE STEP FUEL TANK MODULE**

**Remove Passenger Side Fender Extension** 

Refer to Figure 1 for items in parentheses.

WARNING – To prevent personal injury, park the vehicle on a flat level surface and chock the wheels.

- 1. Remove hex bolt with flat washer (Item 1) from underneath the passenger side fender extension (Item 2).
- 2. Remove hex bolt with flat washer (Item 3) from underneath the passenger side fender extension (Item 2).
- 3. Remove hex flanged nut (Item 4) from underneath the passenger side fender extension (Item 2) and lift the fender extension off the threaded stud (Item 5) and lay it out of the way.

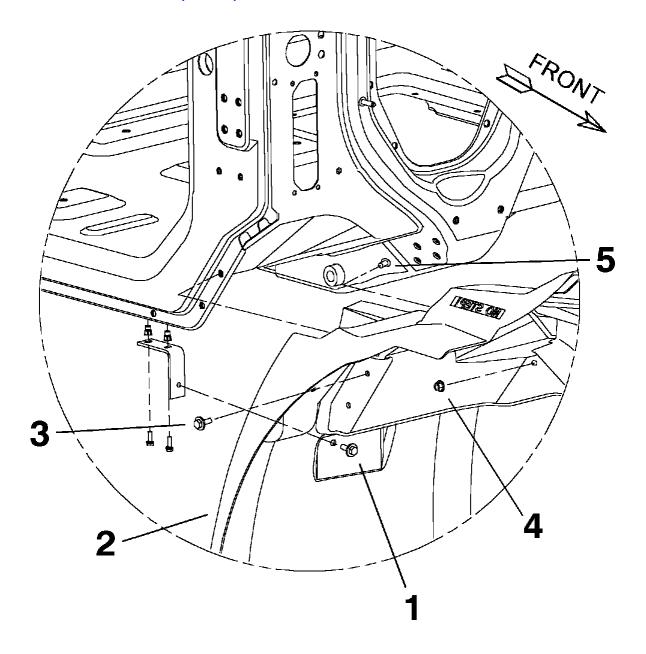


Figure 1 Removing Passenger Side Fender Extension

- 1. HEX BOLT WITH FLAT WASHER
- 2. FENDER EXTENSION
- 3. HEX BOLT WITH FLAT WASHER
- 4. HEX FLANGED NUT
- 5. THREADED STUD

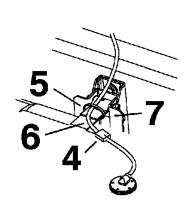
#### **Remove Fuel Tank Connections**

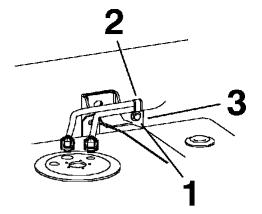
Refer to Figure 2 for items in parentheses.

1. Before starting this procedure to remove the fuel tank, drain the fuel from the tank.

WARNING – Do not drain fuel near an open flame or intense heat. To do so is a dangerous practice which would create a hazardous work area. This could lead to personal injury and/or property damage.

- 2. Remove hex flanged bolt and hex flanged nut (Item 1) and remove hose clamp (Item 2) holding fuel lines to the bracket mounted to the front fuel tank support bracket (Item 3). Save for installation on the new fuel tank module.
- 3. Disconnect electrical connector (Item 4) at the top of the fuel tank and cut the ty-wrap strap (Item 5) holding electrical cable (Item 6) to the rear fuel tank support bracket (Item 7).
- 4. Squeeze the open end of the white locking clip (Item 8) and lift quick disconnect fuel line fitting (Item 9) off the brass fitting (Item 10) in the top of the fuel tank.
- 5. Squeeze the open end of the white locking clip (Item 11) and lift quick disconnect fuel line fitting (Item 12) off the brass fitting (Item 13) in the top of the fuel tank.
- 6. Once the fuel line quick disconnect fittings have been removed, be careful to keep the openings and O-rings clean and protected until being re-installed.





# ELECTRICAL CABLE FUEL LINE **MOUNTING**

# **MOUNTING**

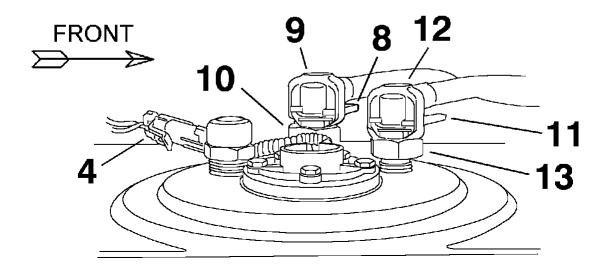


Figure 2 Removing Fuel Tank Connections

- 1. HEX FLANGED BOLT AND HEX FLANGED NUT
- 2. HOSE CLAMP
- 3. FRONT FUEL TANK SUPPORT BRACKET
- 4. ELECTRICAL CONNECTOR
- 5. TY-WRAP
- 6. ELECTRICAL CABLE
- 7. REAR FUEL TANK SUPPORT BRACKET
- 8. LOCKING CLIP
- 9. QUICK DISCONNECT FUEL LINE FITTING
- 10. BRASS FITTING
- 11. LOCKING CLIP
- 12. QUICK DISCONNECT FUEL LINE FITTING

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13. BRASS FITTING

#### Remove 65 Gallon One Step Fuel Tank Module

Refer to Figure 3 for items in parentheses.

- 1. Using a jack, support the fuel tank (Item 1) from underneath, between the rear and front fuel tank supports (Items 2 and 3).
- 2. Remove two hex flanged bolts (Item 4) and hex flanged nuts (Item 5) at the rear fuel tank mounting bracket (Item 6).
- 3. Remove two hex flanged bolts (Item 7) and hex flanged nuts (Item 8) at the front fuel tank mounting bracket (Item 9).
- 4. This will allow the fuel tank module to be lifted off the rear and front fuel tank mounting brackets (Items 6 and 9).
- 5. Using a jack, lift fuel tank module up enough to allow the two guide pins (Item 10) to clear the top of the rear and front fuel tank mounting brackets (Items 6 and 9).
- 6. With the fuel tank module lifted above the rear and front fuel tank mounting brackets (Items 6 and 9). Carefully pull the fuel tank module away from the chassis and place it out of the way.

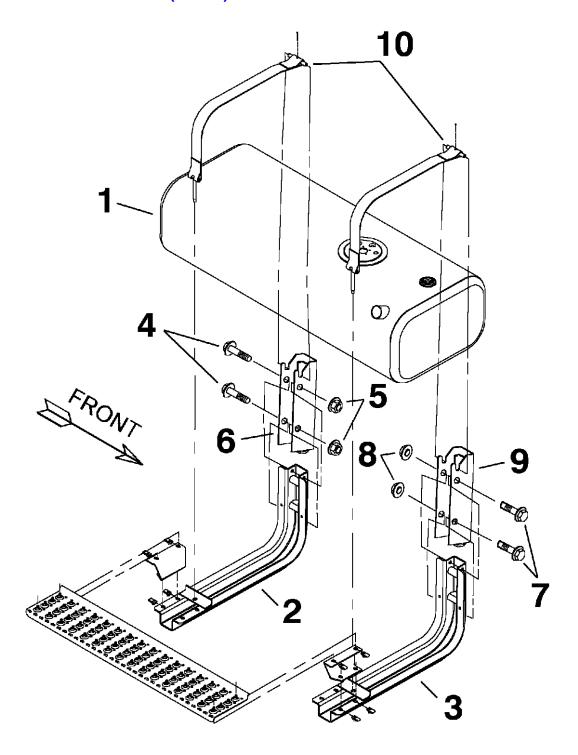


Figure 3 Removing 65 Gallon One Step Fuel Tank Module

- 1. FUEL TANK
- 2. REAR FUEL TANK SUPPORT
- 3. FRONT FUEL TANK SUPPORT
- 4. HEX FLANGED BOLT
- 5. HEX FLANGED NUT
- 6. REAR FUEL TANK MOUNTING BRACKET
- 7. HEX FLANGED BOLT
- 8. HEX FLANGED NUT
- 9. FRONT FUEL TANK MOUNTING BRACKET
- 10. GUIDE PIN

#### SERVICE PROCEDURE

#### **INSTALLING 70 GALLON TWO STEP FUEL TANK MODULE**

Drill Rear Fuel Tank Mounting Bracket Bolt Holes and Install Rear Fuel Tank Mounting Bracket

Refer to Figure 4 for items in parentheses.

- 1. If the holes for the new location of the rear fuel tank mounting bracket (Item 1) have not been pierced in the frame rail (Item 2), then the holes for the new location of the rear fuel tank mounting bracket will need to be drilled.
- 2. Refer to diagram in Figure 4 for the locating dimensions for the two 11/16 diameter mounting holes in the frame rail for the new rear fuel tank mounting bracket (Item 1).

NOTE – When drilling the two 11/16 diameter mounting holes in the frame rail, make sure that they are square to the mounting holes for the front fuel tank mounting bracket (Item 3), to insure that the new fuel tank module will fit between the front and rear fuel tank mounting brackets.

3. Using the mounting holes that were already pierced in the frame rail (Item 2) or the new mounting holes drilled into the frame rail, position the new rear fuel tank mounting bracket (Item 1) on the frame rail and make sure it is parallel to the front fuel tank mounting bracket (Item 3) before installing the mounting hardware. Install two hex flanged bolts (Item 4) from the outside of the frame rail, through the rear fuel tank mounting bracket and frame rail. Install hex flanged nuts (Item 5) from inside frame rail. Tighten to 216 to 239 lbf-ft (294 to 325 N•m). Once the new rear fuel tank mounting bracket is installed, the new two step fuel tank module (Item 6) can be installed.

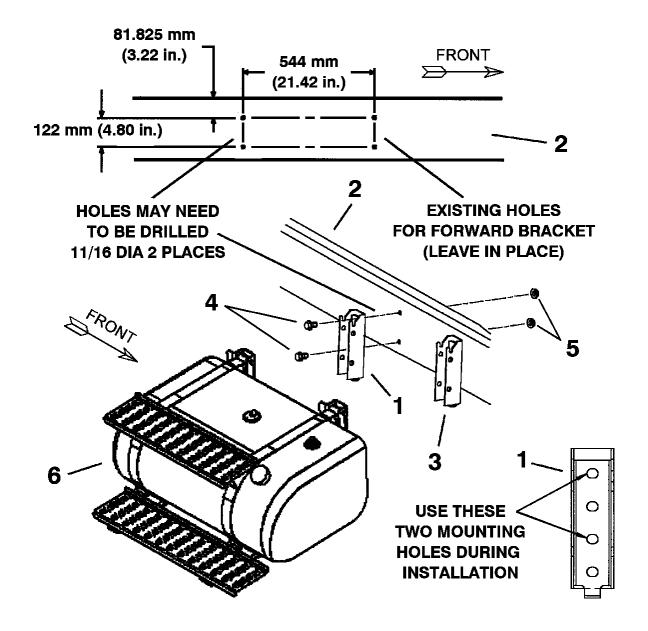


Figure 4 Drilling Rear Fuel Tank Mounting Bracket Mounting Holes and Installing Rear Fuel Tank Mounting Bracket

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- 1. REAR FUEL TANK MOUNTING BRACKET
- 2. FRAME RAIL
- 3. FRONT FUEL TANK MOUNTING BRACKET
- 4. HEX FLANGED BOLT
- 5. HEX FLANGED NUT
- 6. TWO STEP FUEL TANK MODULE

#### 70 Gallon Two Step Fuel Tank Module

Refer to Figure 5 for items in parentheses.

1. The new two step fuel tank module (Item 1), Kit number 8000824R91, consists of 1/2 inch drain plug (Item 2), cap (Item 3), vent fitting (Item 4), vent hose (Item 5), sender unit (Item 6), 3/4 inch quick disconnect brass fitting (Item 7), 3/8 inch quick disconnect brass fitting (Item 8), 3/4 inch plug (Item 9), fuel tank (Item 10), two fuel tank mounting straps (Item 11), two fuel tank supports (Item 12), top step (Item 13) and lower step (Item 14).

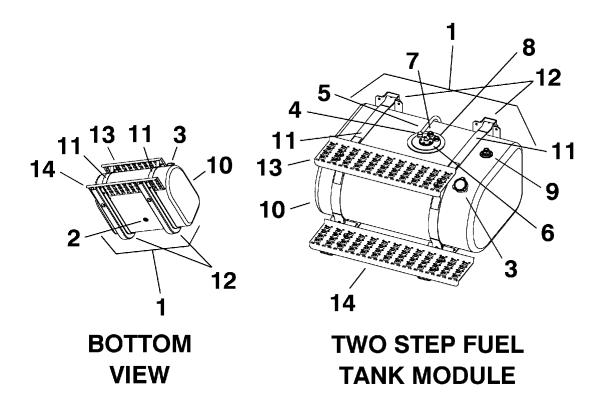


Figure 5 70 Gallon Two Step Fuel Tank Module

- 1. TWO STEP FUEL TANK MODULE
- 2. 1/2 INCH DRAIN PLUG
- 3. CAP
- 4. VENT FITTING
- 5. VENT HOSE
- 6. SENDER UNIT
- 7. 3/4 INCH QUICK DISCONNECT BRASS FITTING
- 8. 3/8 INCH QUICK DISCONNECT BRASS FITTING
- 9. 3/4 INCH PLUG
- 10. FUEL TANK
- 11. FUEL TANK MOUNTING STRAP
- 12. FUEL TANK SUPPORT
- 13. TOP STEP
- 14. LOWER STEP

#### Install 70 Gallon Two Step Fuel Tank Module

Refer to Figure 6 for items in parentheses.

- 1. Position the new two step fuel tank module (Item 1) on a jack, position jack between the rear fuel tank support (Item 2) and front fuel tank support (Item 3). Carefully move two step fuel tank module into position under the cab.
- 2. Using a jack, lift two step fuel tank module (Item 1) up enough to allow the two guide pins (Item 4) to clear the top of the rear fuel tank mounting bracket (Item 5) and front fuel tank mounting bracket (Item 6).
- 3. Carefully move two step fuel tank module (Item 1) into position with the two guide pins (Item 4) directly above the slots in the top of the rear fuel tank mounting bracket (Item 5) and front fuel tank mounting bracket (Item 6).
- 4. Carefully lower two step fuel tank module (Item 1) until the two guide pins (Item 4) are seated properly in the slots in the top of the rear fuel tank mounting bracket (Item 5) and front fuel tank mounting bracket (Item 6).
- 5. Align the holes of the rear fuel tank support (Item 2) with the holes in the rear fuel tank mounting bracket (Item 5). Install two hex flanged bolts (Item 7) through rear fuel tank mounting bracket and rear fuel tank support and install hex flanged nuts (Item 8). Do not tighten.
- 6. Align the holes of the front fuel tank support (Item 3) with the holes in the front fuel tank mounting bracket (Item 6). Install two hex flanged bolts (Item 9) through front fuel tank mounting bracket and front fuel tank support and install hex flanged nuts (Item 10). Tighten the four hex flanged bolts (Items 7 and 9) and hex flanged nuts (Items 8 and 10) to 142 to 174 lbf-ft (193 to 237 N•m).

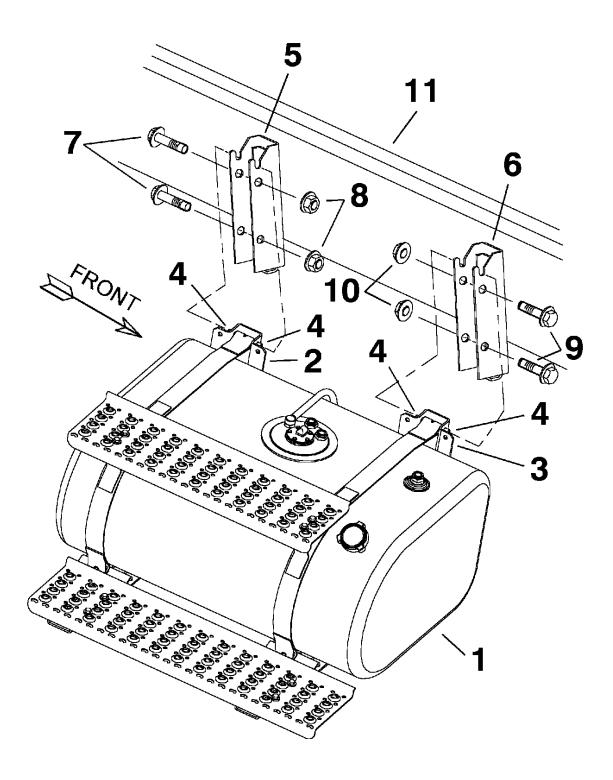


Figure 6 Installing 70 Gallon Two Step Fuel Tank Module

- 1. TWO STEP FUEL TANK MODULE
- 2. REAR FUEL TANK SUPPORT
- 3. FRONT FUEL TANK SUPPORT
- 4. GUIDE PIN
- 5. REAR FUEL TANK MOUNTING BRACKET
- 6. FRONT FUEL TANK MOUNTING BRACKET
- 7. HEX FLANGED BOLT
- 8. HEX FLANGED NUT
- 9. HEX FLANGED BOLT
- 10. HEX FLANGED NUT
- 11. FRAME RAIL

#### **Install Fuel Tank Connections**

Refer to Figure 2 (See Figure 2, page 5) for items in parentheses.

- 1. Before installing fuel line quick disconnect fitting (Items 9 and 12), verify the inside of the fittings and O-rings are free of contamination and damage before insertion.
- 2. Position quick disconnect fuel line fitting (Item 9) over the brass fitting (Item 10) in the top of the fuel tank. Push locking clip (Item 8) and quick disconnect fuel line fitting down until it locks onto the brass fitting.
- 3. Position quick disconnect fuel line fitting (Item 12) over the brass fitting (Item 13) in the top of the fuel tank. Push locking clip (Item 11) and quick disconnect fuel line fitting down until it locks onto the brass fitting.
- 4. Position hose clamp (Item 2) with the fuel lines onto the bracket mounted to the front fuel tank support bracket (Item 3) and install hex flanged bolt and hex flanged nut (Item 1). Tighten to 19 to 23 lbf-ft (26 to 32 N•m).
- 5. Install ty-wrap strap (Item 5) to hold electrical cable (Item 6) to the rear fuel tank support bracket (Item 7) and connect electrical connector (Item 4) at the top of the fuel tank.
- 6. Pump fuel back into the fuel tank.

#### SERVICE PROCEDURE

#### REMOVING ONE STEP BATTERY BOX

#### **Remove Driver Side Fender Extension**

Refer to Figure 7 for items in parentheses.

- 1. Remove hex bolt with flat washer (Item 1) from underneath the driver side fender extension (Item 2).
- 2. Remove hex bolt with flat washer (Item 3) from underneath the driver side fender extension (Item 2).
- 3. Remove hex flanged nut (Item 4) from underneath the driver side fender extension (Item 2) and lift the fender extension off the threaded stud (Item 5) and lay it out of the way.

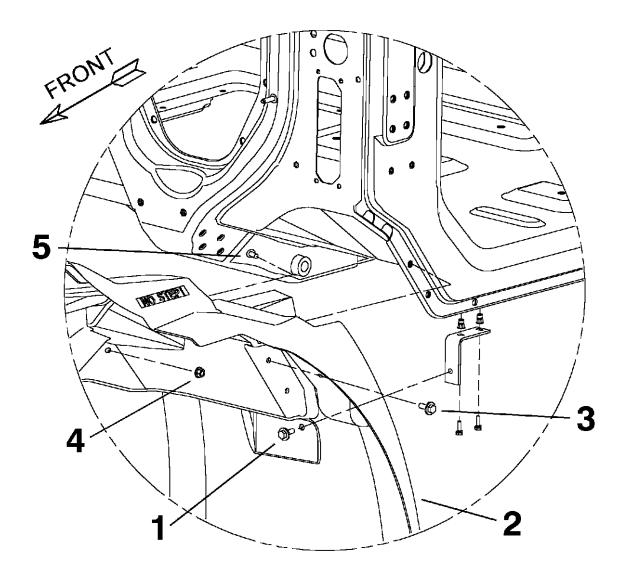


Figure 7 Removing Driver Side Fender Extension

- 1. HEX BOLT WITH FLAT WASHER
- 2. FENDER EXTENSION
- 3. HEX BOLT WITH FLAT WASHER
- 4. HEX FLANGED NUT
- 5. THREADED STUD

#### Remove Battery Box Cover and Battery Box Hold Down Clamp

Refer to Figure 8 for items in parentheses.

1. Unlatch two rubber hold down latches (Item 1) from two latch catches (Item 2) on the battery box cover (Item 3).

WARNING – Batteries expel explosive gases. Keep sparks, flames, burning cigarettes, or other ignition sources away at all times. Always wear safety glasses and a face shield when working near batteries to prevent personal injury.

- 2. Disconnect battery cables and disconnect connectors on top of the batteries.
- 3. Remove hex lock nuts (Item 4) and flat washers (Item 5) from the battery hold down hook bolts (Item 6).
- 4. Remove battery hold down clamp (Item 7) and battery hold down hook bolts (Item 6) from battery box (Item 8).
- 5. Remove pan head screw and lift the battery cable block off the battery box front side plate (Item 9) of the battery box (Item 8).

Remove Battery Box Step, U-nuts and Right and Left One Step Mounting Brackets

Refer to Figure 8 for items in parentheses.

NOTE – Before removing the step (Item 10), mark the location of the mounting bolts (Item 11) on the step to insure that the step is mounted on the new two step mounting brackets properly.

- 1. Remove four hex bolt assemblies (Item 11) from the step (Item 10). Remove step and lay out of the way and save for installation. Discard the four hex bolt assemblies, new step mounting hardware will be used during re-installation of the steps on the new two step mounting brackets.
- 2. Remove four U-nuts (Item 12) from the right and left one step mounting brackets (Items 13 and 14). Save the U-nuts for installation on the new two step mounting brackets.
- 3. Remove four hex flanged bolts (Item 15) and hex lock nuts (Item 16) and remove right and left side one step mounting brackets (Items 13 and 14). Discard the four hex flanged bolts and hex lock nuts and the right and left one step mounting brackets.

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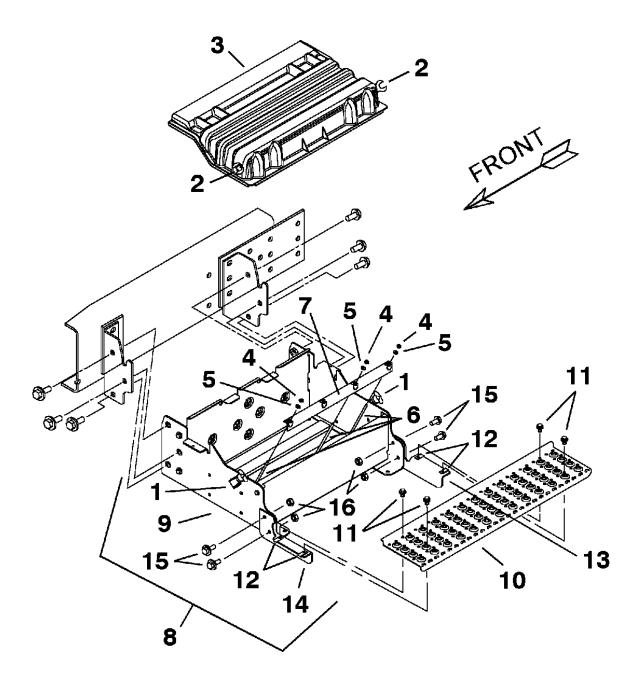


Figure 8 Removing Battery Box Cover, Battery Box Hold Down Clamp, Battery Box Step, U-nuts and Right and Left One Step Mounting Brackets

- 1. RUBBER HOLD DOWN STRAP
- 2. LATCH CATCH
- 3. BATTERY BOX COVER
- 4. HEX LOCK NUT
- 5. FLAT WASHER
- 6. BATTERY HOLD DOWN HOOK BOLT
- 7. BATTERY HOLD DOWN CLAMP
- 8. BATTERY BOX
- 9. BATTERY BOX FRONT SIDE PLATE
- 10. STEP
- 11. HEX BOLT ASSEMBLY
- 12. U-NUT
- 13. RIGHT SIDE ONE STEP MOUNTING BRACKET
- 14. LEFT SIDE ONE STEP MOUNTING BRACKET
- 15. HEX FLANGED BOLT
- 16. HEX LOCK NUT

#### **Remove Battery Box Front Plate**

Refer to Figure 9 for items in parentheses.

- 1. Remove two hex bolts (Item 1) and flat washers (Item 2) from each end of the battery box front plate (Item 3). Lift battery box front plate off the battery box (Item 4).
- 2. Remove the batteries from the battery box (Item 4).

#### **Remove Battery Box**

Refer to Figure 9 for items in parentheses.

- 1. Remove six hex flanged bolts (Item 5) securing the battery box (Item 4) to the battery box mounting brackets (Item 6) on the frame rail (Item 7).
- 2. Lift the front of the battery box (Item 4) up enough to lift the top hex bolt assembly (Item 8) on each side, securing the battery box rear plate (Item 9) to the battery box front side plate (Item 10) and battery box rear side plate (Item 11), so they clear the slot (Item 12) in the battery box mounting brackets (Item 6).
- 3. Once the battery box (Item 4) top hex bolt assemblies (Item 8) have cleared the slots (Item 12) pull the battery box out from between the two battery box mounting brackets (Item 6). Lay the battery box on a clean dry work surface for further service.

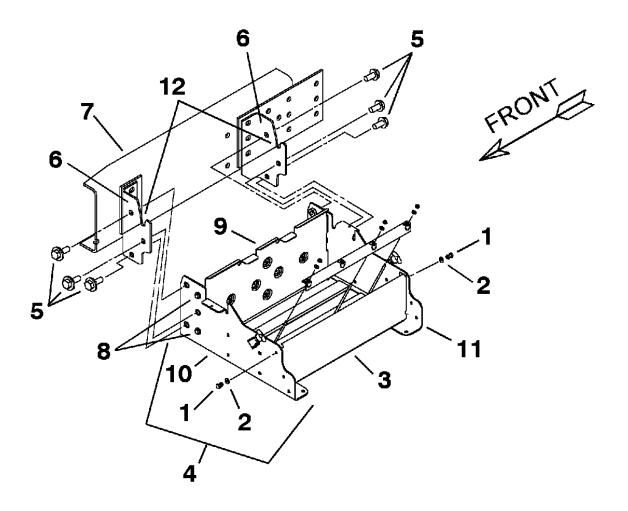


Figure 9 Removing Battery Box Front Plate and Battery Box

- 1. HEX BOLT
- 2. FLAT WASHER
- 3. BATTERY BOX FRONT PLATE
- 4. BATTERY BOX
- 5. HEX FLANGED BOLT
- 6. BATTERY BOX MOUNTING BRACKET
- 7. FRAME RAIL
- 8. HEX BOLT ASSEMBLY
- 9. BATTERY BOX REAR PLATE
- 10. BATTERY BOX FRONT SIDE PLATE
- 11. BATTERY BOX REAR SIDE PLATE
- 12. SLOT IN BATTERY BOX MOUNTING BRACKET

#### SERVICE PROCEDURE

#### CONVERTING ONE STEP BATTERY BOX TO TWO STEP BATTERY BOX

#### **Remove Old Battery Box Front Side Plate**

Refer to Figure 10 for items in parentheses.

- 1. Remove hex nut (Item 1) and lock washer (Item 2) from the mounting bolt of the rubber hold down strap assembly (Item 3). Save for installation on new battery box front side plate (Item 15).
- 2. Remove two hex bolts (Item 4) with washers (Item 5) and hex nut assemblies (Item 6) securing battery box rear plate (Item 7) to battery box front side plate (Item 8).
- 3. Remove two hex bolt assemblies (Items 9 and 10) and hex nut assemblies (Items 11 and 12) securing battery box bottom plate (Item 13) to the battery box front side plate (Item 8). Lay battery box front side plate out of the way, it will be replaced. Save the angle bracket (Item 14) and mounting hardware for installation of the new battery box front side plate (Item 15).

#### **Install New Battery Box Front Side Plate**

Refer to Figure 10 for items in parentheses.

- 1. Position new battery box front side plate (Item 15) in place under battery box bottom plate (Item 13). Position angle bracket (Item 14) over rear mounting hole and install hex bolt assembly (Item 9) from underneath through the new battery box front side plate, battery box bottom plate and angle bracket. Install hex nut assembly (Item 11). Do not tighten.
- 2. Install hex bolt assembly (Item 10) from underneath through the new battery box front side plate (Item 15) and battery box bottom plate (Item 13). Install hex nut assembly (Item 12). Do not tighten.
- 3. Install two hex bolts (Item 4) with washers (Item 5) through the new battery box front side plate (Item 15) and battery box rear plate (Item 7). Install two hex nut assemblies (Item 6). Tighten to 34 to 42 lbf-ft (47 to 58 N•m).
- 4. Tighten hex bolt assemblies (Items 9 and 10) and hex nut assemblies (Items 11 and 12). Tighten to 34 to 42 lbf-ft (47 to 58 N•m).
- 5. Install mounting bolt of the rubber hold down strap assembly (Item 3) into mounting hole in new battery box front side plate (Item 15). Install lock washer (Item 2) and hex nut (Item 1). Tighten to 14 to 17 lbf-ft (19 to 24 N•m).

#### Remove Old Battery Box Rear Side Plate

Refer to Figure 10 for items in parentheses.

- 1. Remove hex nut (Item 16) and lock washer (Item 17) from the mounting bolt of the rubber hold down strap assembly (Item 18). Save for installation on new battery box rear side plate (Item 29).
- 2. Remove two hex bolts (Item 19) with washers (Item 20) and hex nut assemblies (Item 21) securing battery box rear plate (Item 7) to battery box rear side plate (Item 22).
- 3. Remove two hex bolt assemblies (Items 23 and 24) and hex nut assemblies (Items 25 and 26) securing battery box bottom plate (Item 13) to the battery box rear side plate (Item 22). Lay battery box rear side

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plate out of the way, it will be replaced. Save the angle bracket (Item 27) and mounting hardware for installation of the new battery box rear side plate (Item 29).

4. Remove plastic plate (Item 28) from old battery box rear side plate (Item 22).

#### **Install New Battery Box Rear Side Plate**

Refer to Figure 10 for items in parentheses.

- 1. Install plastic plate (Item 28) on new battery box rear side plate (Item 29).
- 2. Position new battery box rear side plate (Item 29) in place under battery box bottom plate (Item 13). Position angle bracket (Item 27) over rear mounting hole and install hex bolt assembly (Item 23) from underneath through the new battery box rear side plate, battery box bottom plate and angle bracket. Install hex nut assembly (Item 25). Do not tighten.
- 3. Install hex bolt assembly (Item 24) from underneath through the new battery box rear side plate (Item 29) and battery box bottom plate (Item 13). Install hex nut assembly (Item 26). Do not tighten.
- 4. Install two hex bolts (Item 19) with washers (Item 20) through the new battery box rear side plate (Item 29) and battery box rear plate (Item 7). Install two hex nut assemblies (Item 21). Tighten to 34 to 42 lbf-ft (47 to 58 N•m).
- 5. Tighten hex bolt assemblies (Items 23 and 24) and hex nut assemblies (Items 25 and 26). Tighten to 34 to 42 lbf-ft (47 to 58 N•m).
- 6. Install mounting bolt of the rubber hold down strap assembly (Item 18) into mounting hole in new battery box rear side plate (Item 29). Install lock washer (Item 17) and hex nut (Item 16). Tighten to 14 to 17 lbf-ft (19 to 24 N•m).

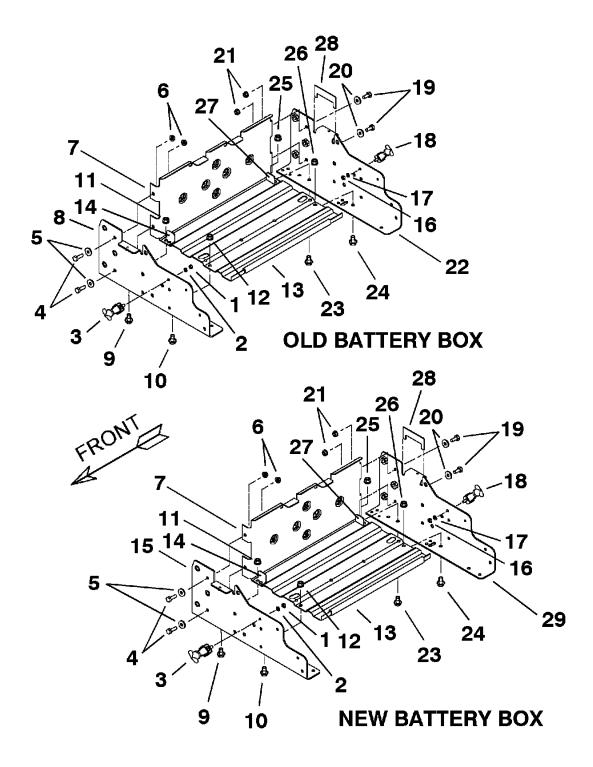


Figure 10 One Step Battery Box Conversion to Two Step Battery Box

- 1. HEX NUT
- 2. LOCK WASHER
- 3. RUBBER HOLD DOWN STRAP ASSEMBLY
- 4. HEX BOLT
- 5. WASHER
- 6. HEX NUT ASSEMBLY
- 7. BATTERY BOX REAR PLATE
- 8. BATTERY BOX FRONT SIDE PLATE
- 9. HEX BOLT ASSEMBLY
- 10. HEX BOLT ASSEMBLY
- 11. HEX NUT ASSEMBLY
- 12. HEX NUT ASSEMBLY
- 13. BATTERY BOX BOTTOM PLATE
- 14. ANGLE BRACKET
- 15. NEW BATTERY BOX FRONT SIDE PLATE
- 16. HEX NUT
- 17. LOCK WASHER
- 18. RUBBER HOLD DOWN STRAP ASSEMBLY
- 19. HEX BOLT
- 20. WASHER
- 21. HEX NUT ASSEMBLY
- 22. BATTERY BOX REAR SIDE PLATE
- 23. HEX BOLT ASSEMBLY
- 24. HEX BOLT ASSEMBLY
- 25. HEX NUT ASSEMBLY
- 26. HEX NUT ASSEMBLY
- 27. ANGLE BRACKET
- 28. PLASTIC PLATE
- 29. NEW BATTERY BOX REAR SIDE PLATE

#### **Install Battery Box**

Refer to Figure 11 for items in parentheses.

- 1. Position new battery box (Item 1) between the two battery box mounting brackets (Item 2) on the frame rail (Item 3).
- 2. Raise the rear of the battery box (Item 1) so that the top hex bolt assembly (Item 4) on both sides, slide over the slots (Item 5) in the battery box mounting brackets (Item 2).
- 3. Push the battery box (Item 1) toward the frame rail (Item 3) until both the hex bolt assemblies (Item 4) on both sides of the battery box slide down into the slots (Item 5) in the battery box mounting brackets (Item 2).
- 4. Align the mounting holes of the battery box mounting brackets (Item 2) with the mounting holes in the battery box (Item 1). Install the six hex flanged bolts (Item 6), three each side. Tighten to 142 to 174 lbf-ft (193 to 237 N•m).

#### Install Batteries, Battery Cable Block and Battery Cables and Connectors

Refer to Figure 11 for items in parentheses.

- 1. Install the batteries in the battery box (Item 1).
- 2. Position the battery cable block on the battery box front side plate (Item 9) and install pan head screw to secure it.
- 3. Connect battery cables by installing the positive cable, then install negative cable. Connect the connectors on top of the batteries.

#### Install Battery Box Hold Down Hook Bolts, Battery Hold Down Clamp and Mounting Hardware

Refer to Figure 8 (See Figure 8, page 16) for items in parentheses.

- 1. Install the battery hold down hook bolts (Item 6) into battery box (Item 8). Install battery hold down clamp (Item 7).
- 2. Install hex lock nuts (Item 4) and flat washers (Item 5) on the battery hold down hook bolts (Item 6). Tighten to 50 to 60 lbf-in (5.6 to 6.8 N•m).

#### **Install Battery Box Front Plate**

Refer to Figure 11 for items in parentheses.

1. Install the battery box front plate (Item 7) by sliding the grove on the bottom into the front lip of the battery box bottom plate (Item 8). Align the holes at each end of the battery box front plate with the holes in the battery box front side plate (Item 9) and battery box rear side plate (Item 10). Install two hex bolts (Item 11) and flat washers (Item 12). Tighten to 14 to 17 lbf-ft (19 to 24 N•m).

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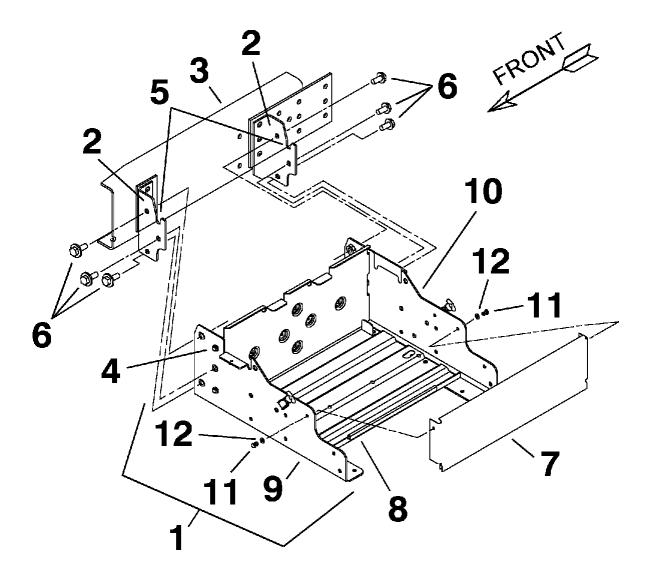


Figure 11 Installing New Battery Box, Batteries and Battery Box Front Plate

- 1. BATTERY BOX
- 2. BATTERY BOX MOUNTING BRACKET
- 3. FRAME RAIL
- 4. HEX BOLT ASSEMBLY
- 5. SLOT IN BATTERY BOX MOUNTING BRACKET
- 6. HEX FLANGED BOLT
- 7. BATTERY BOX FRONT PLATE
- 8. BATTERY BOX BOTTOM PLATE
- 9. BATTERY BOX FRONT SIDE PLATE
- 10. BATTERY BOX REAR SIDE PLATE
- 11. HEX BOLT
- 12. FLAT WASHER

#### **Install Battery Box Cover**

Refer to Figure 8 (See Figure 8, page 16) for items in parentheses.

1. Install battery box cover (Item 3) on the battery box (Item 8). Latch two rubber hold down latches (Item 1) on the two latch catches (Item 2) on the battery box cover.

#### Install Two Step Mounting Brackets, U-nuts and Upper and Lower Steps

Refer to Figure 12 for items in parentheses.

- 1. Use new mounting hardware to install the new two step mounting brackets.
- 2. Position the left side two step mounting bracket (Item 1) on battery box front side plate (Item 2). Install two hex flanged bolts (Item 3) and hex lock nuts (Item 4). Tighten to 27 to 34 lbf-ft (37 to 46 N•m).
- 3. Position the right side two step mounting bracket (Item 5) on battery box rear side plate (Item 6). Install two hex flanged bolts (Item 7) and hex lock nuts (Item 8). Tighten to 27 to 34 lbf-ft (37 to 46 N•m).
- 4. Install the four old U-nuts (Item 9) onto the lower step portion of the two step mounting brackets (Items 1 and 5).
- 5. Install the four new U-nuts (Item 10) onto the upper step portion of the two step mounting brackets (Items 1 and 5).

NOTE – Before installing the old step (Item 11), position the step on the lower step mounting portion of the new two step mounting brackets (Items 1 and 5). Using the marked locations for the mounting bolts (Item 12) that were made on the step during removal. Position the marked mounting holes over the U-nuts (Item 9) on the lower step mounting portion of the two step mounting brackets and install mounting hardware per step 6 below.

6. Position the old step (Item 11) onto the lower step portion of the two step mounting brackets (Items 1 and 5). Install four new hex bolt assemblies (Item 12). Tighten to 14 to 17 lbf-ft (19 to 24 N•m).

NOTE – Before installing the new step (Item 13), position the step on the upper step mounting portion of the new two step mounting brackets (Items 1 and 5). Use the same holes on the new step that were marked on the old step to install new step properly. Position the marked mounting holes over the U-nuts (Item 10) on the upper step mounting portion of the two step mounting brackets and install mounting hardware per step 7 below.

7. Position the new step (Item 13) onto the upper step portion of the two step mounting brackets (Items 1 and 5). Install four new hex bolt assemblies (Item 14). Tighten to 14 to 17 lbf-ft (19 to 24 N•m).

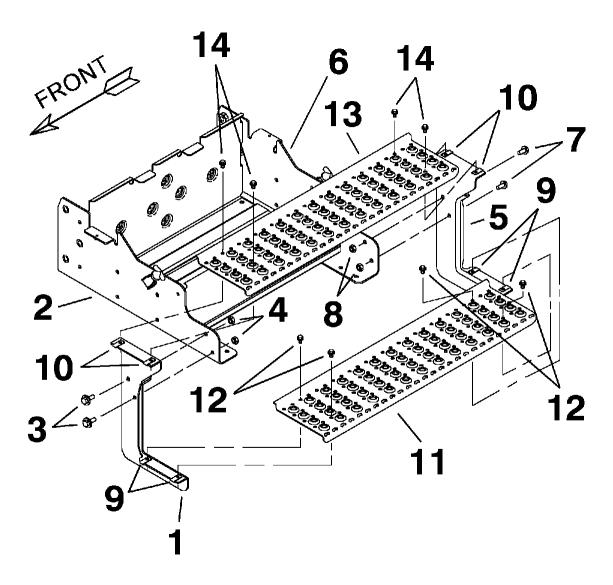


Figure 12 Installing Two Step Mounting Brackets, U-nuts and Upper and Lower Steps

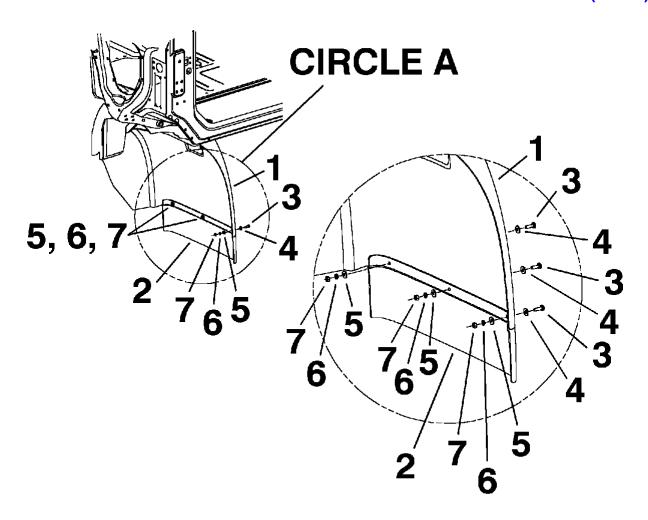
- 1. LEFT SIDE TWO STEP MOUNTING BRACKET
- 2. BATTERY BOX FRONT SIDE PLATE
- 3. HEX FLANGED BOLT
- 4. HEX LOCK NUT
- 5. RIGHT SIDE TWO STEP MOUNTING BRACKET
- 6. BATTERY BOX REAR SIDE PLATE
- 7. HEX FLANGED BOLT
- 8. HEX LOCK NUT
- 9. U-NUT
- 10. U-NUT
- 11. OLD STEP
- 12. HEX BOLT ASSEMBLY
- 13. NEW STEP
- 14. HEX BOLT ASSEMBLY

# INSTALLING MUD FLAPS ON FENDER EXTENSIONS SERVICE PROCEDURE

#### Install Mud Flaps on Driver and Passenger Side Fender Extensions

Refer to Figure 13 for items in parentheses.

- 1. Using three dimples located in line 1/2 inch from the bottom on the inside of the fender extension (Item 1), drill a pilot hole from the inside through the center of the three dimples. Place a piece of masking tape over the pilot holes and drill three 3/8 inch diameter holes in the fender extension from the outside through the masking tape, drivers side shown.
- 2. Position mud flap (Item 2) on the inside of the fender extension (Item 1). From the outside, install three torx head bolts (Item 3) with flat washers (Item 4) though the fender extension and mud flap. Install three flat washers (Item 5), lock washers (Item 6) and hex nuts (Item 7), drivers side shown. Tighten to 15 to 19 lbf-ft (21 to 26 N•m).
- 3. Repeat procedure to install passenger side mud flap.



# **VIEW IN CIRCLE A**

Figure 13 Installing Mud Flaps on Driver and Passenger Side Fender Extensions

- 1. FENDER EXTENSION
- 2. MUD FLAP
- 3. TORX HEAD BOLT
- 4. FLAT WASHER
- 5. FLAT WASHER
- 6. LOCK WASHER
- 7. HEX NUT

#### **INSTALLING FENDER EXTENSIONS SERVICE PROCEDURE**

#### **Install Passenger Side Fender Extension**

Refer to Figure 1 (See Figure 1, page 3) for items in parentheses.

- 1. Position passenger side fender extension (Item 2) over the threaded stud (Item 5) and install hex flanged nut (Item 4). Do not tighten.
- 2. Install hex bolt with flat washer (Item 1) through passenger side fender extension (Item 2) into bracket under cab. Do not tighten.
- 3. Install hex bolt with flat washer (Item 3) through passenger side fender extension (Item 2) into bottom of cab. Tighten two hex bolts (Items 1 and 3) and hex flanged nut (Item 4) to 15 to 19 lbf-ft (21 to 26 N•m).

#### **Install Driver Side Fender Extension**

Refer to Figure 7 (See Figure 7, page 14) for items in parentheses.

- 1. Position driver side fender extension (Item 2) over the threaded stud (Item 5) and install hex flanged nut (Item 4). Do not tighten.
- 2. Install hex bolt with flat washer (Item 1) through driver side fender extension (Item 2) into bracket under cab. Do not tighten.
- 3. Install hex bolt with flat washer (Item 3) through driver side fender extension (Item 2) into bottom of cab. Tighten two hex bolts (Items 1 and 3) and hex flanged nut (Item 4) to 15 to 19 lbf-ft (21 to 26 N•m).

Operation number must appear on all claims.

Table 2 Labor Information

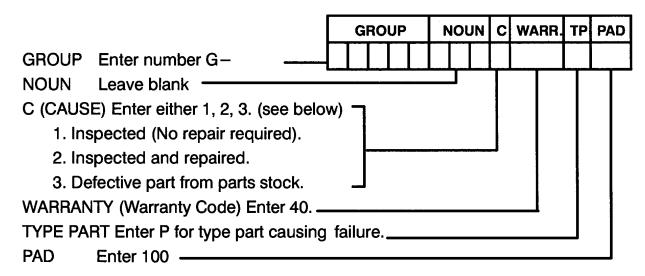
Operation No.	Description	Time
A40-01908-1	Remove and Replace Fuel Tank, add new Fuel Tank mounting Bracket, Battery Box Steps and add Mud Flaps	2.1 Hr.

#### **ADMINISTRATIVE PROCEDURE**

Expense is to be charged to Warranty. Claims are to be submitted in the normal manner, making reference to Authorized Field Change Number G-01908.

It is important that the coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7–1. Special attention should be given to Items 39 through 44.

To assure this important improvement is made in a timely manner, all claims for G-01908 activity must be submitted by September 30, 2004 or within the normal warranty period for the vehicle, if after September 30, 2004.



Distribution: All except J-81 Reproduction: Not required.