

GP/GLP/GDP040-060RG/TG/ZG (A875)

SERVICE MANUAL CONTENTS

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Service information for Cummins diesel engines can be ordered through the Hyster Literature Distribution Center.

PART NO. 524158635 (10/13)

General



WARNING

The lift truck must be put on blocks for some types of maintenance and repair. The removal of the following assemblies will cause large changes in the center of gravity: mast, drive axle, engine and transmission, and counterweight. When the lift truck is put on blocks, put additional blocks in the following positions to maintain stability:

- Before removing the mast and drive axle, put blocks under the counterweight so the lift truck cannot fall backward.
- Before removing the counterweight, put blocks under the mast assembly so the lift truck cannot fall forward.

The surface must be solid, even, and level when the lift truck is put on blocks. Make sure that any blocks used to support the lift truck are solid, one-piece units. See the Operating Manual or the Periodic Maintenance manual for your lift truck.

This section has the description of the frame and some connected parts. See Figure 1. Procedures for the removal and installation of the counterweight, hood, overhead guard, and engine (including the transmission) are found in this section. Checks for the operator restraint system and procedures for the repair of fuel and hydraulic tanks and installation of safety labels are also included.

Description

The frame is one weldment and includes the hydraulic tank and the fuel tank for gasoline or diesel fuel. There is a counterweight for each capacity of lift truck. The counterweights are similar, but are different weights. The muffler is fastened to the frame inside of the counterweight.

An operator module is installed on the frame with rubber mounts. See Figure 1. The overhead guard, steering

controls, instrument panel, hood, and seat are installed on the operator module. The hood is connected to the operator module with hinges. The floor plates and side access doors can be removed for access to the engine, transmission, and other components.

Operator Module Repair

REMOVE

1. Remove the hood and side covers. See Figure 2.
2. Remove the steering housing and instrument cluster from the cowl. Remove the capscrews that hold the parking brake lever to the cowl.
3. Remove the nuts and bolts at the mounts for the operator module.
4. Connect a lifting device to the overhead guard. The overhead guard and module weigh approximately 385 kg (850 lb). Lift the operator module from the frame.

INSTALL

NOTE: If the overhead guard was removed from the operator module, tighten the rear leg mount capscrews to 53 N•m (39 lbf ft). On GP2.00-3.00TF/RF (GP040-

060RG/TG/ZG) units, tighten the capscrews that fasten the module cowl side plate to the front legs to 66 N•m (49 lbf ft). See Figure 1.

1. Connect a lifting device to the overhead guard. The overhead guard and module weigh approximately 385 kg (850 lb). Lift the operator module onto the frame.
2. Make sure the rubber mounts are installed in the frame. Install the large washer and nut on the bottom of the mount. Tighten the nuts to 53 N•m (39 lbf ft).
3. Install the hood and side covers.
4. Install the steering controls and the parking brake lever.
5. Install the floor plates.

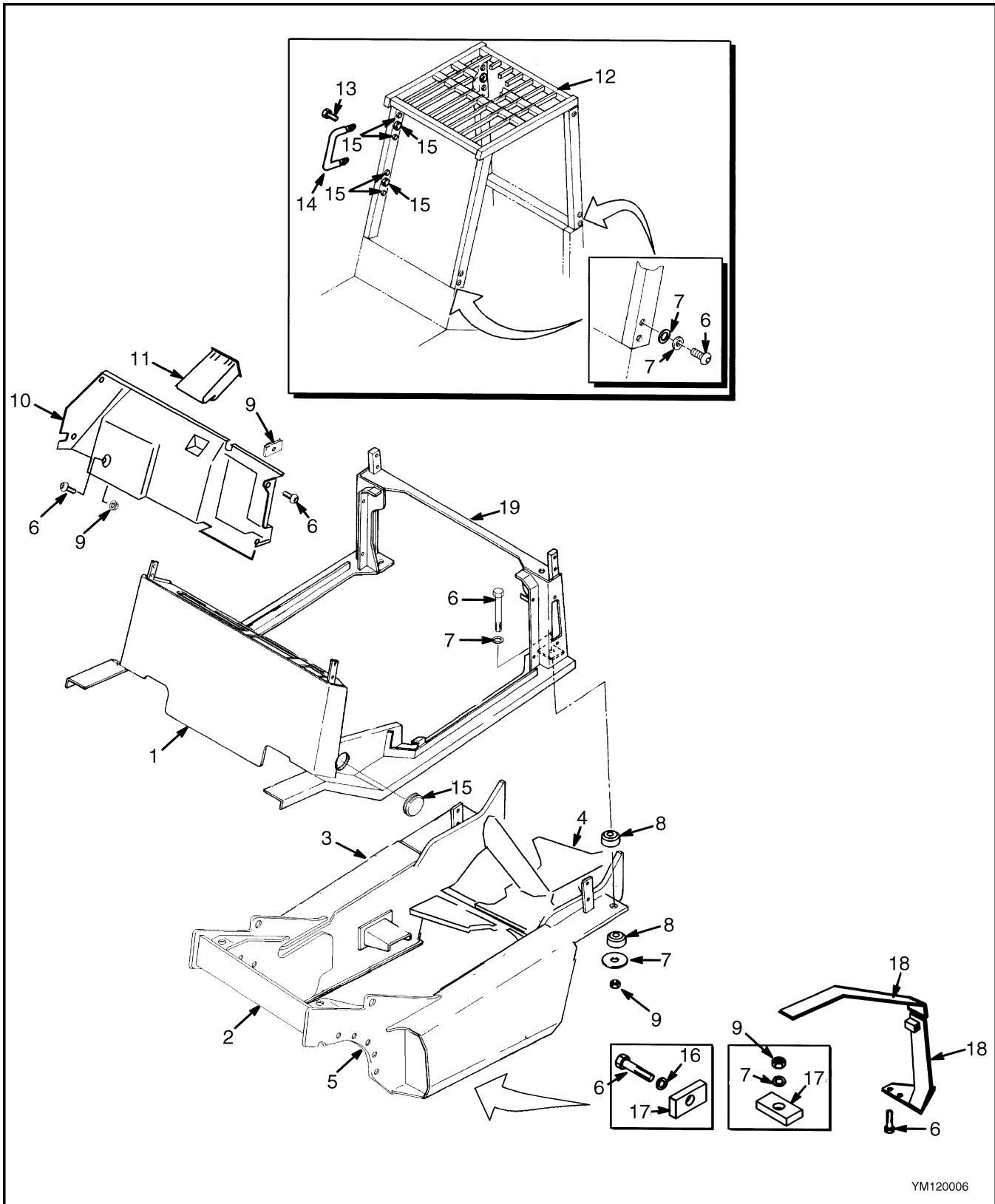


Figure 1. Frame and Operator Module

Legend for Figure 1

- | | |
|------------------------|-----------------------------|
| 1. OPERATOR MODULE | 11. STORAGE COMPARTMENT |
| 2. FRAME | 12. OVERHEAD GUARD (RAISED) |
| 3. HYDRAULIC TANK | 13. SCREW |
| 4. STEERING AXLE MOUNT | 14. HANDLE |
| 5. DRIVE AXLE MOUNT | 15. PLUG |
| 6. CAPSCREW | 16. LOCKWASHER |
| 7. WASHER | 17. BAR |
| 8. RUBBER MOUNT | 18. FENDER |
| 9. NUT | 19. CROSSMEMBER |
| 10. COVER | |

Hood and Side Covers Repair



WARNING

The hood and hood latch must be correctly adjusted for the correct operation of the operator restraint system.

The operator's seat is fastened to the upper hood panel. This upper hood panel opens forward for access to the engine compartment. Two hinges fasten the upper hood panel to the front plate weldment of the engine compartment. A latch mechanism with a push knob holds the upper hood panel in position during operation of the lift truck. See Figure 2.

A torsion spring is fastened between the front plate weldment and the upper hood panel to help personnel when opening and closing the hood. Sound-absorbing materials are fastened inside the hood panels to reduce noise during operation. See Figure 2 and Figure 3.

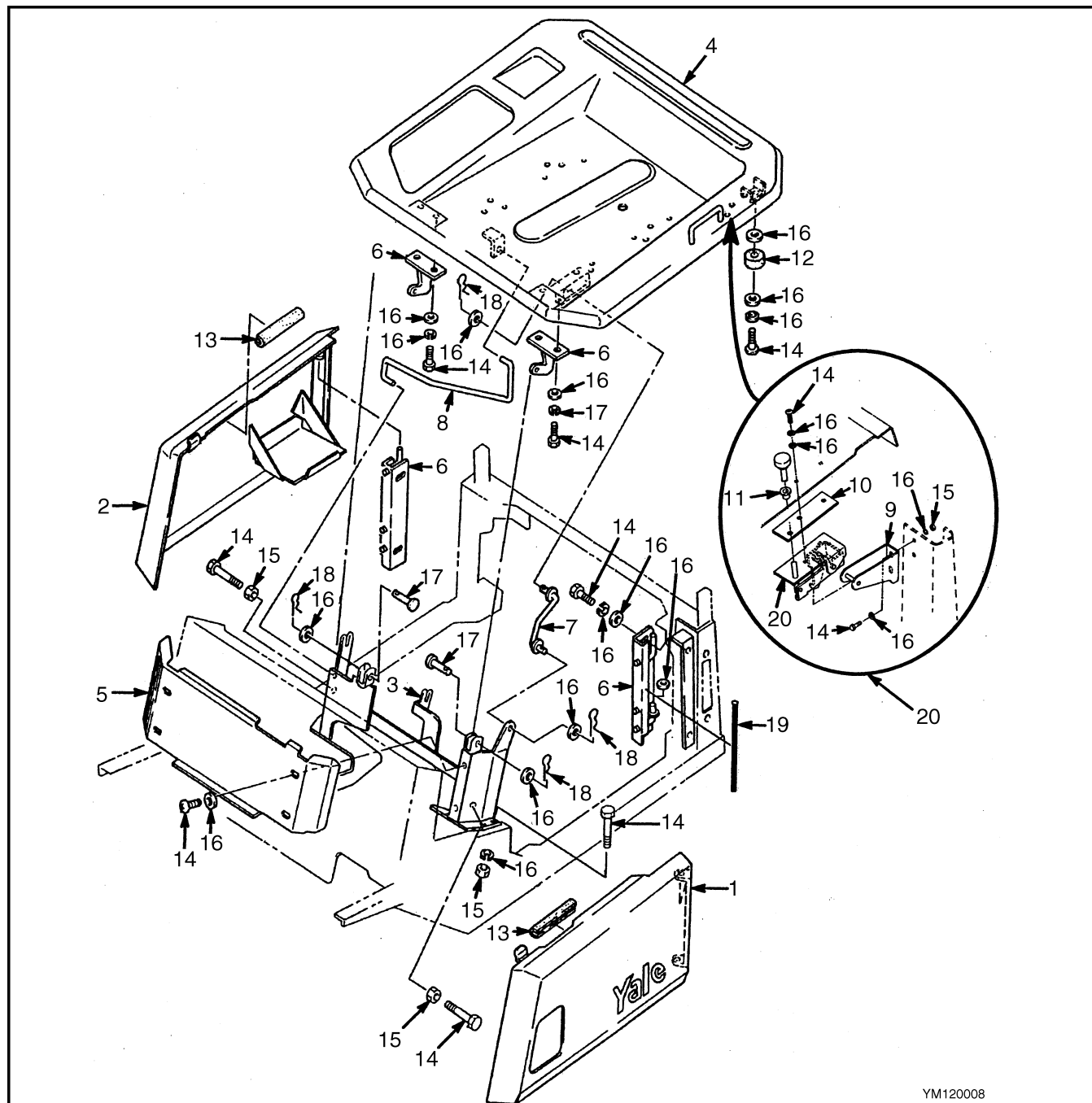
REMOVE

Remove the floor plate and the hood and side covers.

INSTALL AND ADJUST

Install and adjust the hood and side covers as follows:

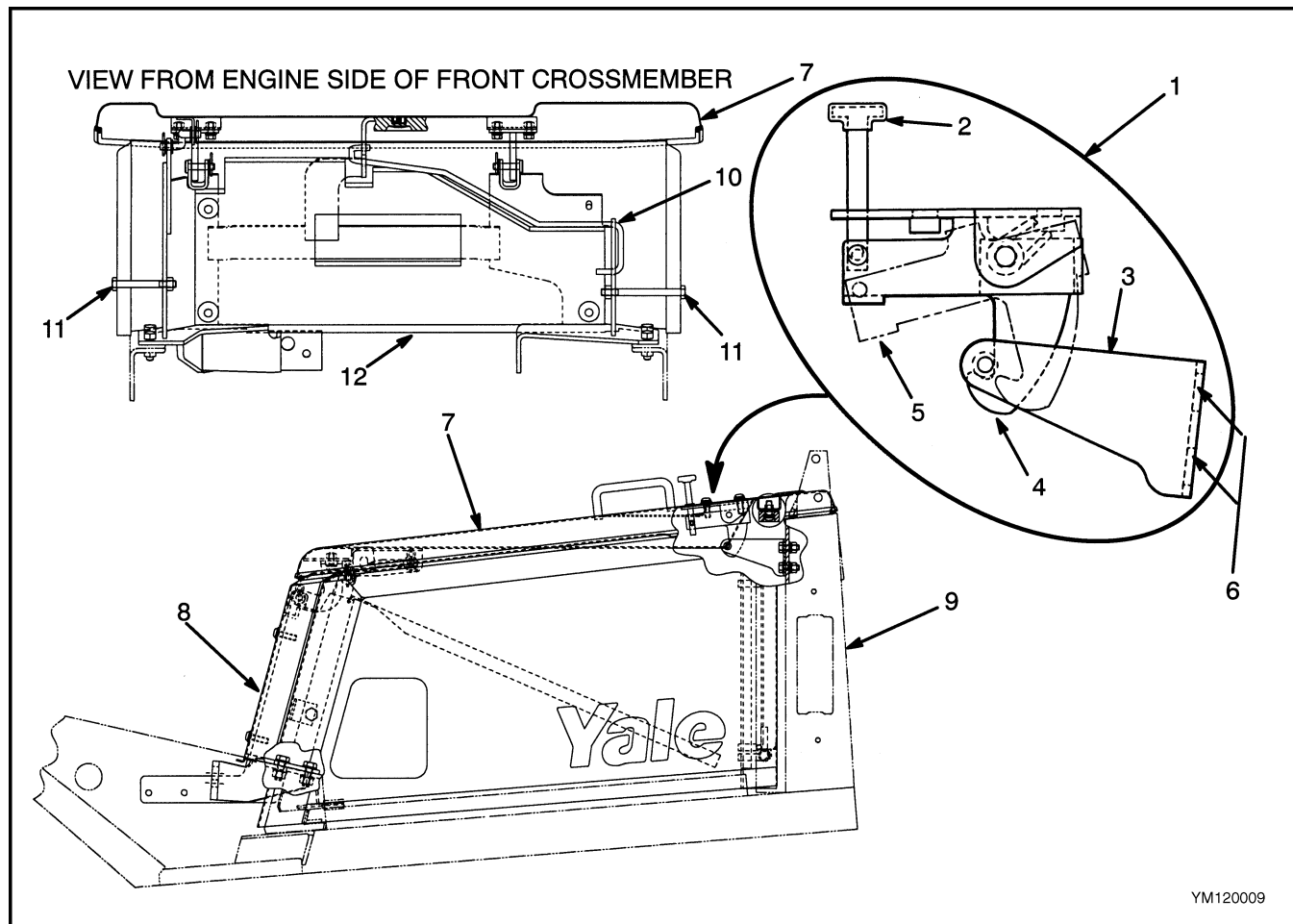
1. Install the crossmember onto the frame. Install the front plate weldment, but do not tighten the four capscrews.
2. Install the hinges on the upper hood panel. Do not tighten the capscrews.
3. Install the latch hook.
4. Install the upper hood panel in position on the front plate weldment. Connect the torsion spring. Install the hinge pins. Install the rod.
5. Close the upper hood panel until the rubber cushions are against the rear crossmember of the engine compartment. Align the edge of the upper hood panel with the rear crossmember of the engine compartment. Tighten the capscrews for the hinges.
6. When the upper hood panel is fully closed, check that the latch fully engages the latch hook. If the latch does not engage correctly, add or remove washers (shims) as necessary to adjust the latch assembly. When the adjustment is correct, tighten the capscrews that hold the latch assembly.
7. Install the hinges onto the engine compartment, but do not tighten the bolts.
8. Install the access doors on the hinges. Close the access doors. Adjust the stop bolts and front plate so that the front plate is even from side to side and the access doors will engage the tabs. Tighten the capscrews on the front plate. Tighten the jam nuts on the stop bolts.
9. Adjust the hinges so that the front edges of the access doors are even with the front plate. Tighten the bolts for the hinges. Install washers (shims) as necessary so that the access doors are against the hood seal when they are closed.



1. ACCESS DOOR (LH)
2. ACCESS DOOR (RH)
3. CROSSMEMBER
4. UPPER HOOD PANEL
5. PLATE
6. HINGE
7. ROD
8. TORSION SPRING
9. LATCH HOOK
10. SPACER

11. BUSHING
12. RUBBER CUSHION
13. TRIM
14. CAPSCREW
15. NUT
16. WASHER
17. PIN
18. COTTER PIN
19. SEAL
20. LATCH ASSEMBLY

Figure 2. Hood and Side Covers Arrangement



- | | |
|-------------------------|---|
| 1. LATCH ASSEMBLY | 8. FRONT PLATE |
| 2. PUSH KNOB | 9. REAR CROSSMEMBER OF ENGINE COMPARTMENT |
| 3. LATCH HOOK | 10. TORSION SPRING |
| 4. LATCH (ENGAGED) | 11. STOP BOLT |
| 5. LATCH (DISENGAGED) | 12. FRONT CROSSMEMBER OF ENGINE COMPARTMENT |
| 6. SHIMS (AS NECESSARY) | |
| 7. UPPER HOOD PANEL | |

Figure 3. Hood Assembly

Overhead Guard Repair

REMOVE AND INSTALL



WARNING

Do not operate the lift truck without the overhead guard correctly fastened to the lift truck.

Changes that are made by welding, or by drilling holes that are too big or in the wrong location, can

reduce the strength of the overhead guard. See the section **Changes to the Overhead Guard** in the **Periodic Maintenance 8000 YRM 707** for instructions on making changes to the overhead guard.

1. Connect a crane or lifting device to remove or install the overhead guard. Disconnect the air intake at the overhead guard leg.

2. Disconnect any wires between the frame and the overhead guard. When the overhead guard is lifted from the frame, make sure that any electrical wires are moved through the holes in the frame so that they are not damaged.
3. There are two capscrews at each corner of the left-hand leg of the overhead guard. Remove and install the capscrews for the overhead guard as follows:
 - a. Access to the bolts at the front of the overhead guard is under the dash panel. Remove the plastic box from the right-hand side of the dash panel.
 - b. Access to the bolts at the rear of the overhead guard is under the rear fender wells.
 - c. Tighten the rear leg mount capscrews to 53 N•m (39 lbf ft). On GP2.00-3.00TF/RF (GP040-060RG/TG/ZG) units, tighten the capscrews that fasten the module cowl side plate to the front legs to 66 N•m (49 lbf ft).

NOTE: The air inlet for the air filter is installed in the left-hand leg of the overhead guard. Make sure the grill is installed with the louvers pointed downward.

LED BACKUP AND BRAKE LIGHTS, REPLACE

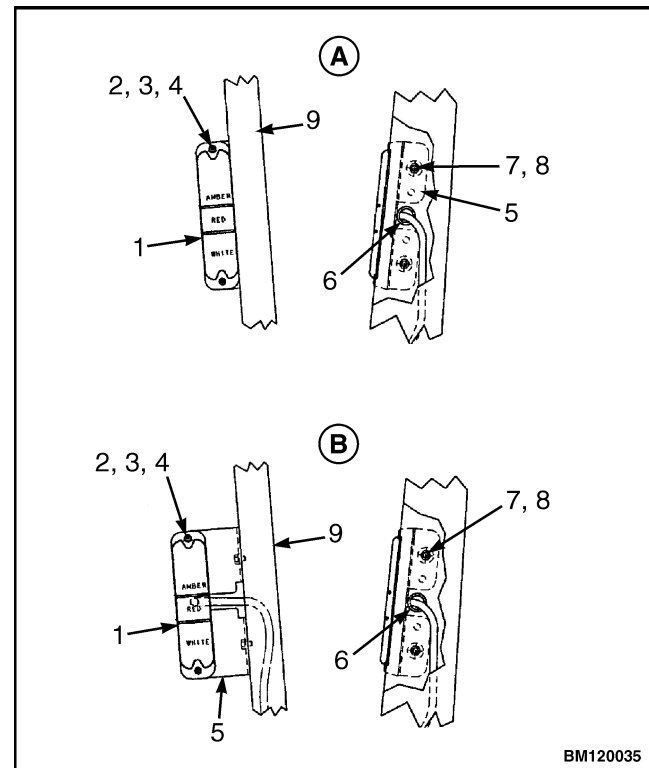
NOTE: Newer models of lift trucks are equipped with LED (Light Emitting Diode) backup and brake tail lights. These light assemblies are non-repairable and must be replaced as a complete unit. See the **Parts Manual** for replacement LED lights.

Remove

1. Disconnect negative terminal of battery and remove the key.
2. Disconnect the LED light from the chassis light harness.
3. Remove LED light assembly and harness from mounting bracket. See Figure 4.
4. If the LED mounting bracket must be removed from the overhead guard leg, remove the plug, screw and bracket from the overhead guard leg.

Install

1. If the mounting bracket was removed, install it onto the overhead guard leg. Insert the plug and screw to attach mounting bracket to overhead guard leg. See Figure 4.
2. Install the LED light assembly and harness on the mounting bracket.
3. Connect the LED light to the chassis light harness.
4. Connect the negative terminal of battery and close the hood.



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- A.** LED ASSEMBLY WITH STANDARD EXHAUST
B. LED ASSEMBLY WITH OVERHEAD EXHAUST

1. LED LIGHT
2. SCREW
3. WASHER
4. LOCKNUT
5. MOUNTING BRACKET
6. GROMMET
7. PLUG
8. SCREW
9. OVERHEAD GUARD LEG

Figure 4. LED Backup and Brake Lights Assembly

Counterweight Repair



WARNING

The lift truck must be put on blocks for some types of maintenance and repair. The removal of the following assemblies will cause large changes in the center of gravity: mast, drive axle, engine and transmission, and counterweight. When the lift truck is put on blocks, put additional blocks in the following positions to maintain stability:

- Before removing the mast and drive axle, put blocks under the counterweight so the lift truck cannot fall backward.
- Before removing the counterweight, put blocks under the mast assembly so the lift truck cannot fall forward.

The surface must be solid, even, and level when the lift truck is put on blocks. Make sure that any blocks used to support the lift truck are solid, one-piece units. See the Operating Manual or Periodic Maintenance 8000 YRM 707 for your lift truck.

The counterweight is held in position on the frame by two hooks that are part of the frame. One M24 × 3 capscrew holds the counterweight to the lower part of the frame.

REMOVE



WARNING

Do not operate the lift truck if the capscrew for the counterweight is not installed. When the capscrew is removed, the counterweight can fall from the lift truck.



WARNING

LPG can cause an explosion. Do not cause sparks or permit flammable material near the LPG system. LPG fuel systems can be disconnected indoors only if the lift truck is at least 8 m (26 ft) from any open flame, motor vehicles, electrical equipment, or ignition source.

Close the shutoff valve on the LPG tank before any part of the engine fuel system is disconnected. Run the engine until the fuel in the system is used and the engine stops.

If the engine will not run, close the shutoff valve on the LPG tank. Loosen the fitting on the supply hose from the LPG tank where it enters the filter unit. Permit the pressure in the fuel system to decrease

slowly. Fuel leaving the fitting removes heat. Use a cloth to protect your hands from the cold fitting.

1. If the lift truck has an LPG fuel system, use the following procedure to remove the LPG tank and bracket so that the counterweight can be removed. See Figure 5.

Additional information on the LPG fuel system can be found in the following sections: **LPG Fuel System, GM 2.2L and 3.0L Engines** 900 YRM 498, **LPG Fuel System, Mazda FE Engine** 900 YRM 523, or **Electronic Controlled LPG/Gasoline Fuel System, GM 3.0L and 4.3L EPA Compliant Engines** 900 YRM 1088.

- a. LPG tanks can be removed and replaced indoors only if the lift truck is at least 8 m (26 ft) from any flame or ignition source.
- b. Move the lift truck to the area where tanks are changed.
- c. Turn the shutoff valve clockwise until the valve is completely closed.
- d. Run the engine until it stops, then turn the key switch to the **OFF** position.
- e. Disconnect the quick-disconnect fitting.
- f. Release the LPG tank latch and remove the tank from the bracket.

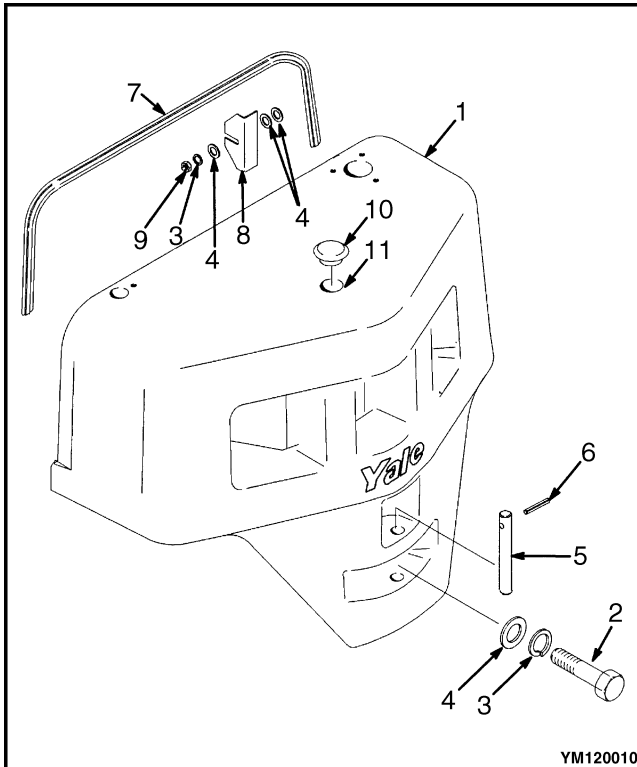
2. If an overhead exhaust is installed, remove it as shown in Figure 12.



WARNING

The counterweight is heavy. Make sure that the eye-bolt and lifting devices have enough capacity to lift the weight. The approximate weights of the counterweight castings are shown in Table 1.

3. Install a lifting eye in the lifting hole of the counterweight. See Figure 5. Connect a crane to the lifting eye and raise the crane until it holds part of the weight of the counterweight. Remove the capscrew that holds the counterweight to the frame. Use the crane to lift the counterweight from the lift truck. Put the counterweight on the floor so that it has stability and will not fall over. Remove the spacers from the mounts.



1. COUNTERWEIGHT
2. CAPSCREW (M24
× 3 × 180)
3. LOCKWASHER
4. WASHER
5. TOW PIN
6. ROLL PIN
7. SEAL
8. SHIM
9. NUT
10. CAP
11. LIFTING HOLE

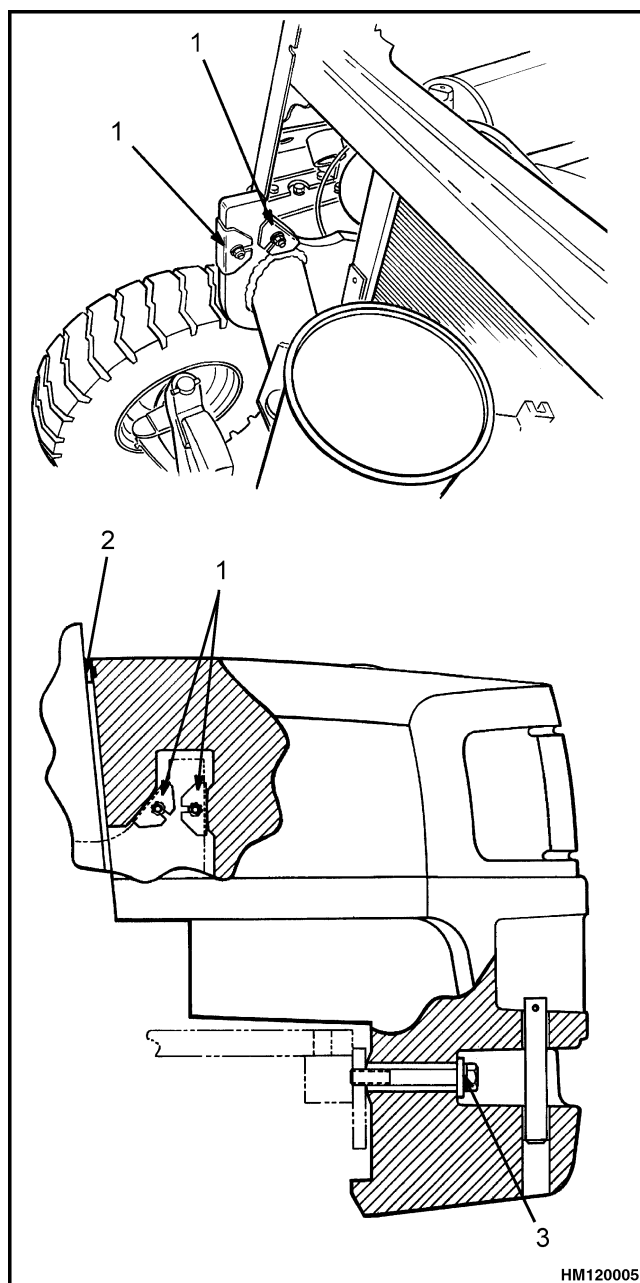
Figure 5. Counterweight

Table 1. Weight of Counterweights

Model	kg	lbs
GP 040	1,080 ±16	2380 ±35
GP 050	1406 ±21	3100 ±46
GP 060	1800 ±27	3970 ±60
GC 040	1070 ±15	2360 ±33
GC 050	1433 ±21	3160 ±46
GC 060	1855 ±28	4090 ±62

INSTALL

- 1.** Install the spacers on the mounts. See Figure 6. Use a crane to install the counterweight on the lift truck. When the counterweight is installed, make sure the hooks on the frame fully engage the counterweight so it is aligned with the parts of the frame. Use the spacers to obtain a gap of 8.5 to 11.5 mm (0.33 to 0.45 in.) between the counterweight and the overhead guard leg. Install and tighten the M24 × 3 capscrew to 555 N•m (409 lbf ft).
- 2.** If the lift truck has an LPG fuel system, use the following procedure to install the bracket and LPG tank after the counterweight has been installed:
 - a.** Before the LPG tank is installed on the lift truck, make sure the tank has fuel in it. Check the operation of the fuel gauge. Look at the fuel gauge and move the tank. If the gauge needle does not move, a new tank must be installed.
 - b.** Put the tank in the tank bracket. Make sure the tank is aligned with the alignment pin.
 - c.** Close the latch.
 - d.** Connect the quick-disconnect fitting to the shut-off valve on the tank. Use your hand to tighten the fitting. Do not open the shutoff valve until the quick-disconnect fitting is completely tightened. Turn the shutoff valve counterclockwise to open the valve.
 - e.** Inspect the fuel system for leaks when the shut-off valve is open. Frost on the surface of the tank, valves, or fittings or a strong odor indicates leakage.
- 3.** If the lift truck has an overhead exhaust, install it as shown in Figure 12.

*Legend for Figure 6*

- | | |
|----------------|-------------|
| 1. SPACER | 3. CAPSCREW |
| 2. RUBBER SEAL | |

Figure 6. Counterweight Installation

Exhaust System Repair

The muffler is installed inside the cavity of the counterweight. A short exhaust pipe sends the exhaust gases from the lift truck through the grille in the counterweight. See Figure 7, Figure 8, Figure 9 or Figure 10.

An optional catalytic converter can be installed in the exhaust system between the engine and the muffler. See Figure 11. The type of catalytic converter installed

depends on the fuel the engine uses. See the **Parts Manual** for your lift truck model.

The GP2.00-3.00RF/TF (GP040-060RG/TG/ZG) series of lift trucks can have an overhead exhaust system. The exhaust pipe is fastened to the top of the counterweight. See Figure 12.

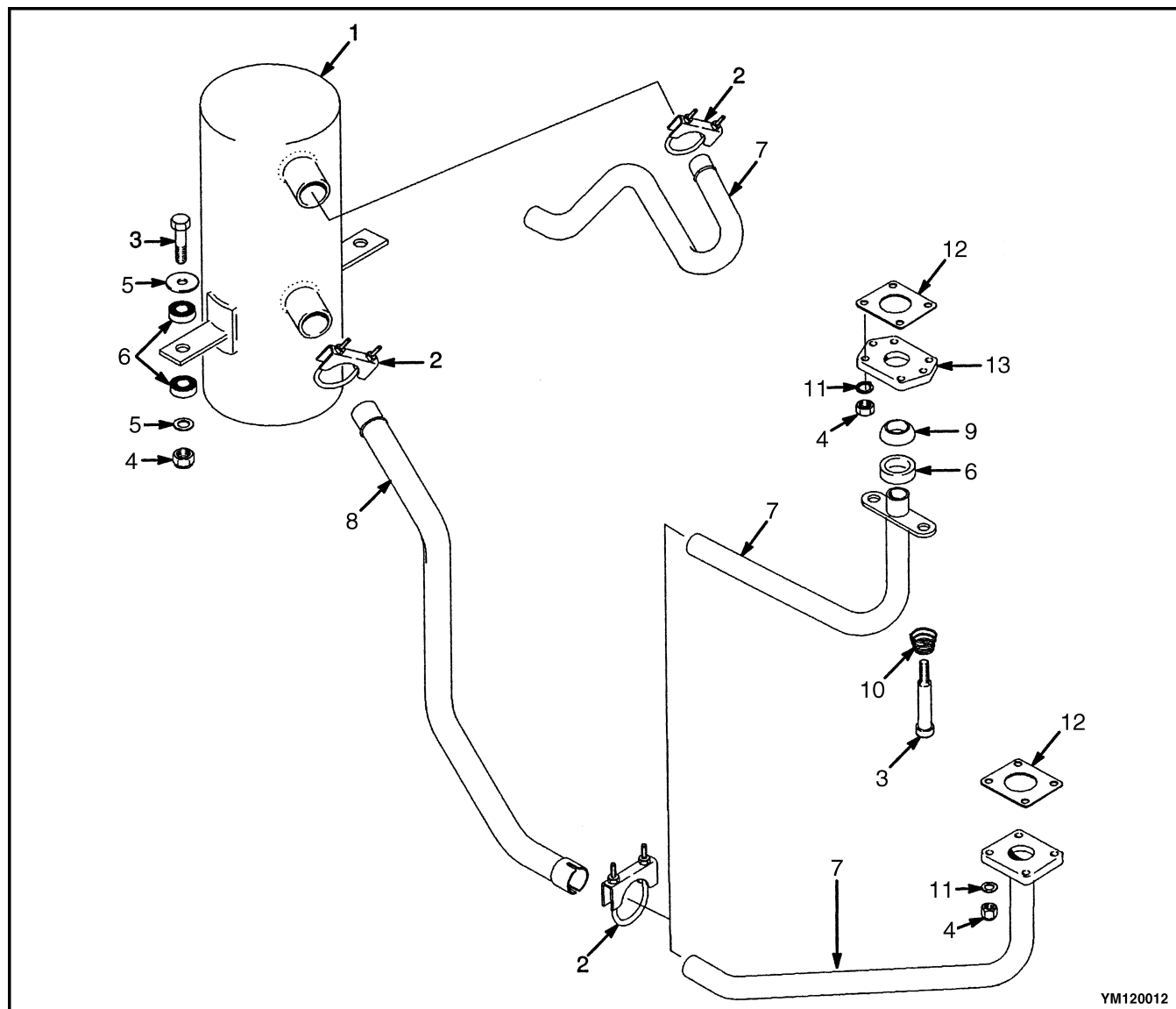
MUFFLER, REPLACE

The counterweight must be removed to repair or install a new muffler or other parts of the exhaust system. See Figure 7. When connecting the exhaust pipe to the engine, do the following:

1. Install the adapter on the exhaust manifold. Tighten the nuts for the adapter to 40 N•m (30 lbf ft). Install

the exhaust seal, spacer, and exhaust pipe. Install the springs and special capscrews. Tighten the special capscrews to 38 N•m (28 lbf ft).

2. On units with an overhead exhaust, tighten the capscrews that hold the overhead exhaust to the counterweight to 38 N•m (28 lbf ft). Install the cover.

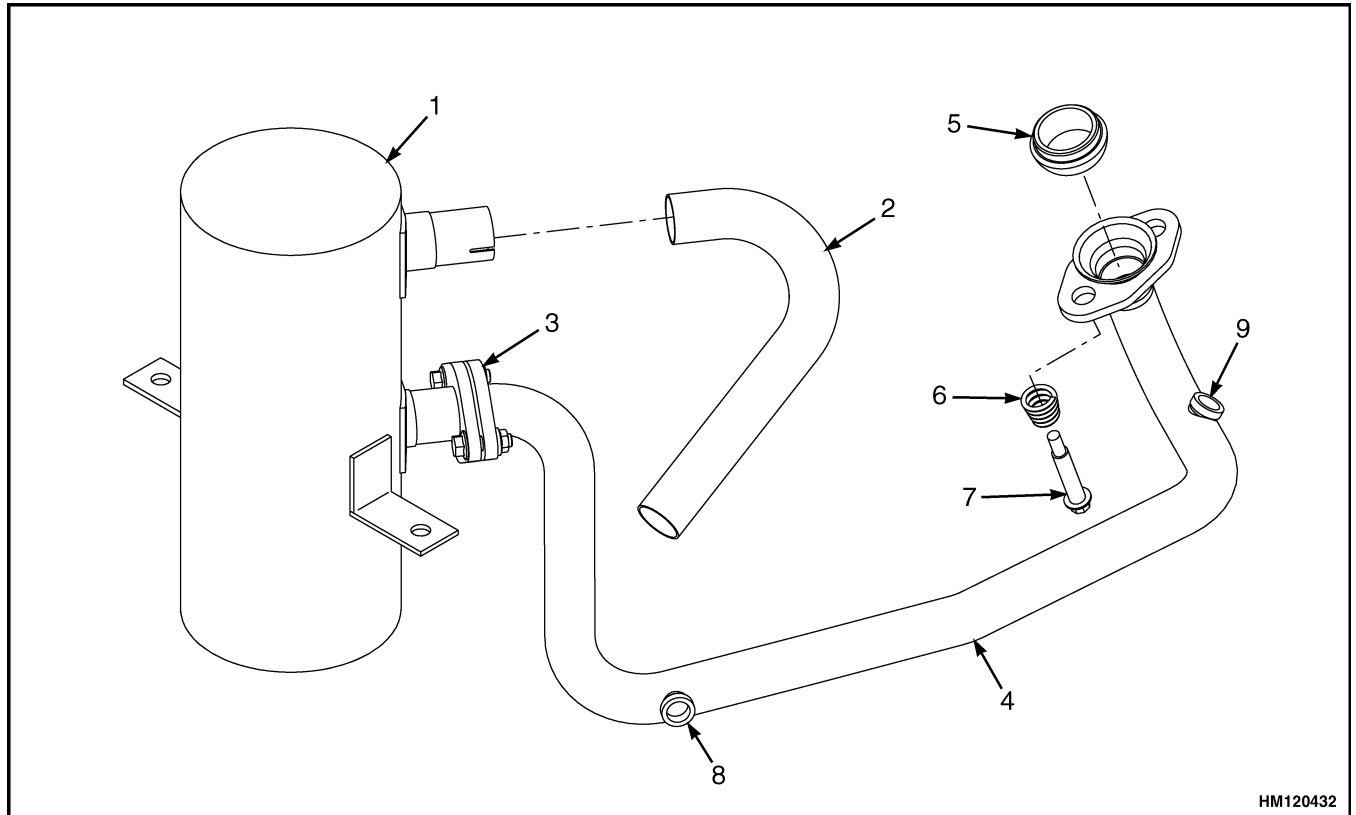


1. MUFFLER
2. CLAMP
3. CAPSCREW
4. NUT
5. WASHER

6. SPACER
7. PIPE
8. TUBE
9. SEAL
10. SPRING

11. LOCKWASHER
12. GASKET
13. ADAPTER

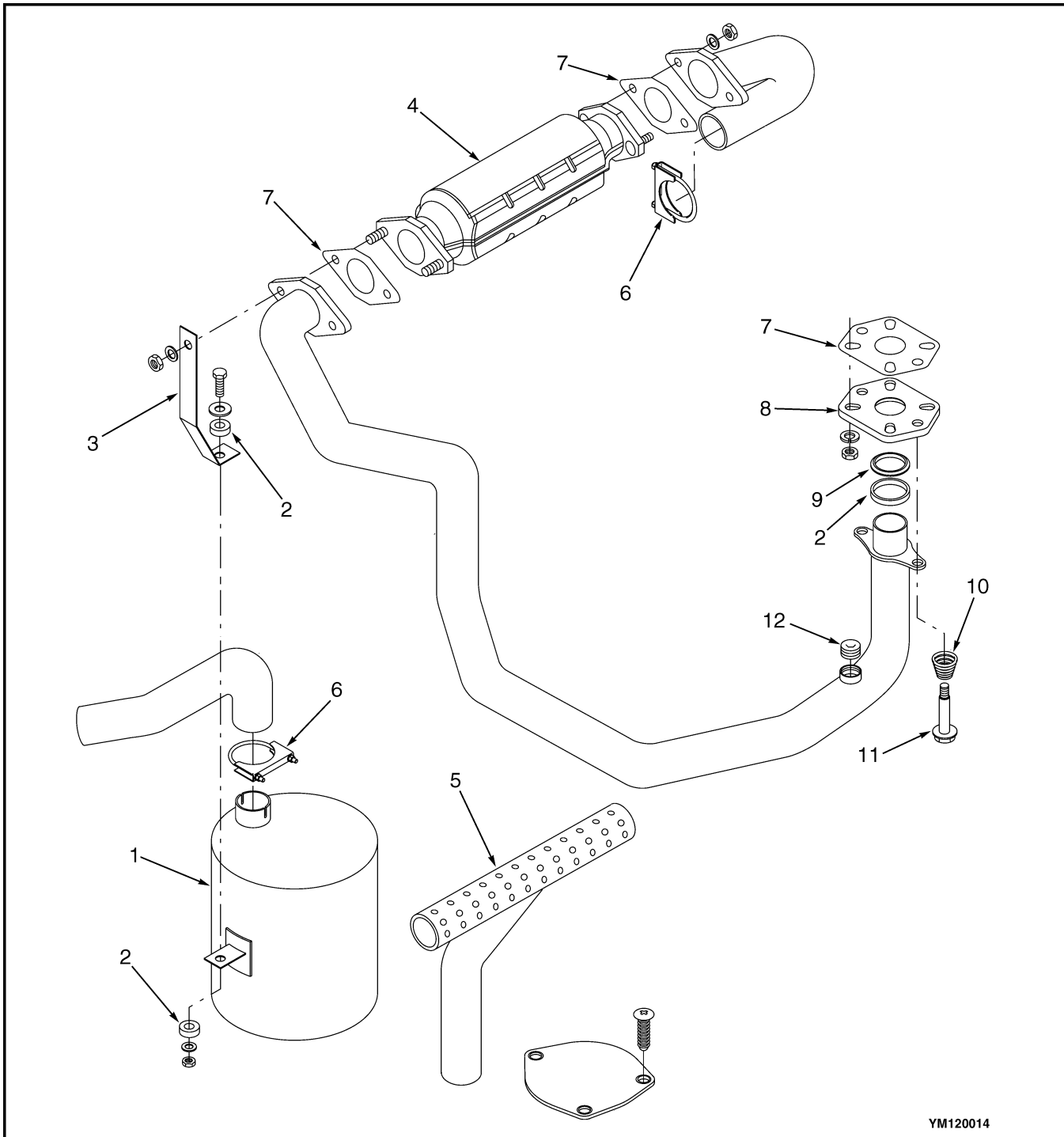
Figure 7. Exhaust System (Gasoline and LPG)



1. MUFFLER
2. COUNTERWEIGHT EXHAUST PIPE
3. GASKET
4. EXHAUST PIPE
5. SEAL

6. SPRING
7. SPECIAL SCREW
8. OXYGEN SENSOR PORT
9. RAW GAS CHECK PORT

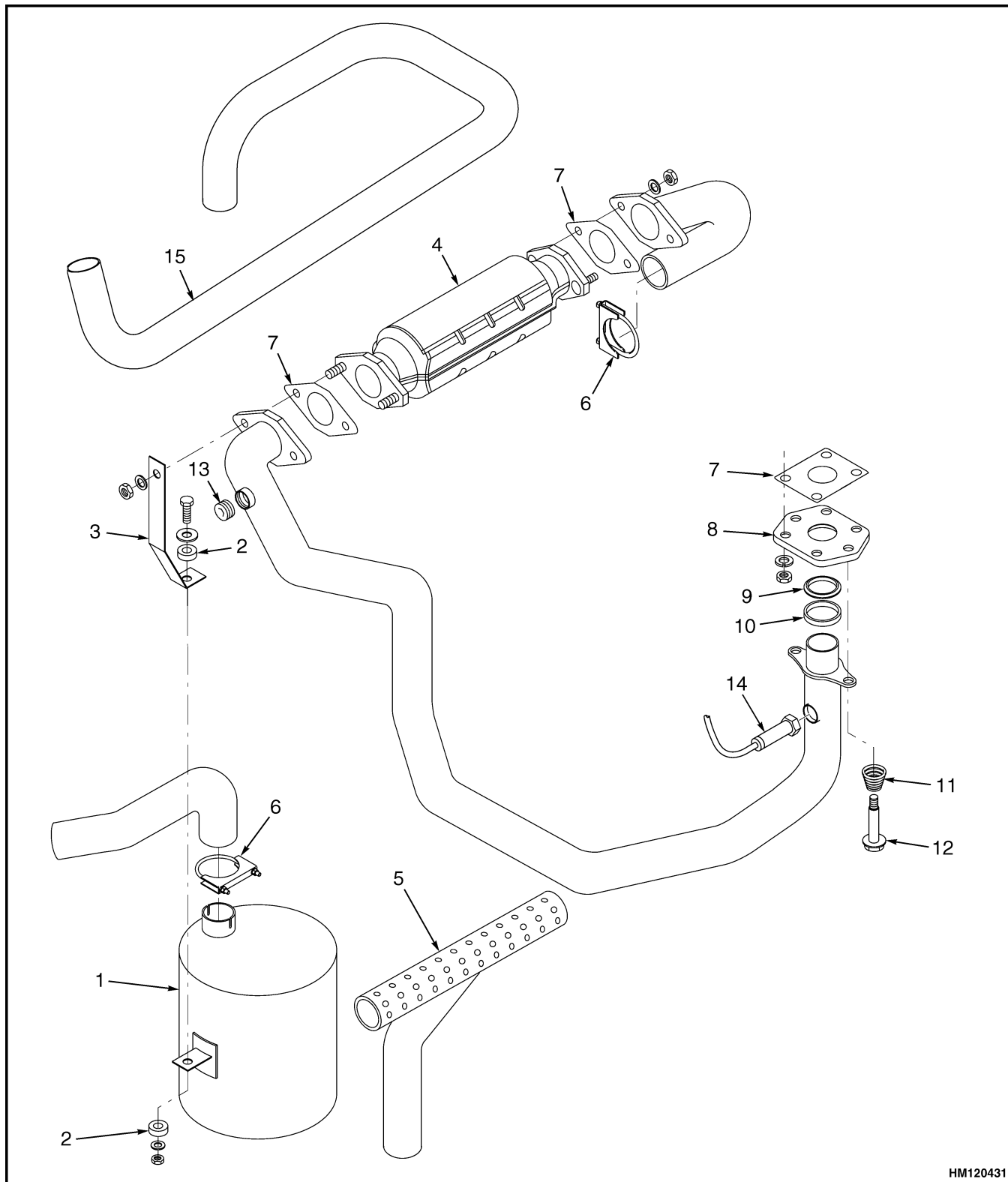
Figure 8. Exhaust System, GM3.0L EPA Compliant



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- | | | |
|------------------------|-------------|----------------------|
| 1. MUFFLER | 5. DIFFUSER | 9. SEAL |
| 2. SPACER | 6. CLAMP | 10. SPRING |
| 3. BRACKET | 7. GASKET | 11. SPECIAL CAPSCREW |
| 4. CATALYTIC CONVERTER | 8. ADAPTER | 12. PLUG |

Figure 9. Exhaust System (Low Emissions)



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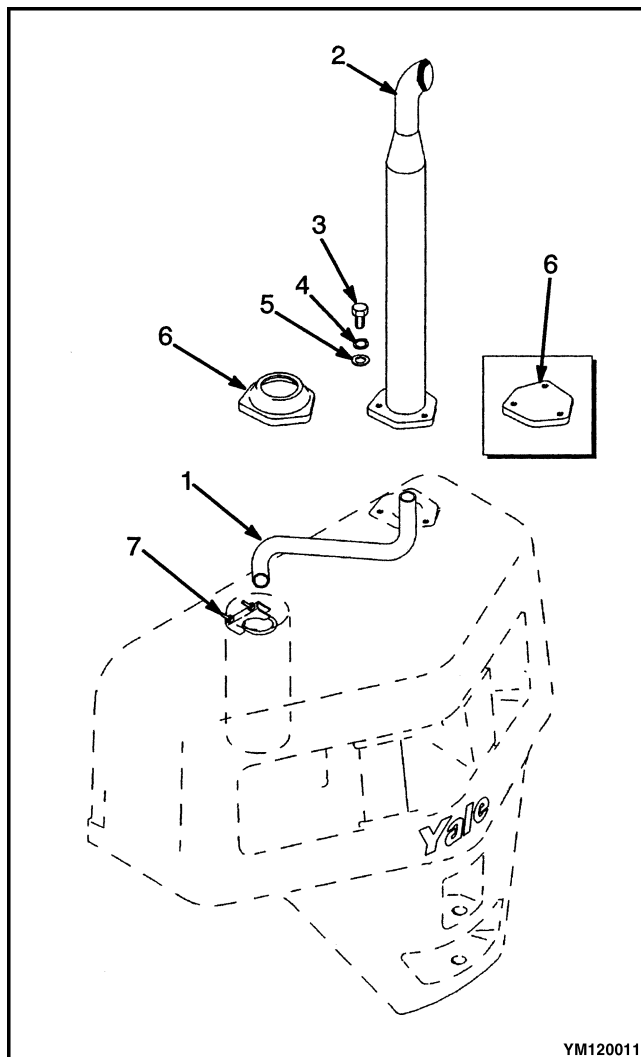
Figure 10. EPA Compliant Exhaust System Mazda 2.0L and 2.2L

1. MUFFLER	7. GASKET	13. PLUG (RAW GAS CHECK
2. SPACER	8. ADAPTER	PORT)
3. BRACKET	9. SEAL	14. OXYGEN SENSOR
4. CATALYTIC CONVERTER	10. SPACER	15. OVERHEAD EXHAUST PIPE
5. DIFFUSER	11. SPRING	
6. CLAMP	12. SPECIAL CAPSCREW	



Legend for Figure 11

- | | |
|-------------|-------------------------|
| 1. MUFFLER | 9. GASKET |
| 2. CLAMP | 10. SPRING |
| 3. CAPSCREW | 11. LOCKWASHER |
| 4. NUT | 12. ADAPTER |
| 5. WASHER | 13. SEAL |
| 6. SPACER | 14. CATALYTIC CONVERTER |
| 7. PIPE | 15. HEAT SHIELD |
| 8. TUBE | 16. FITTING |

**Legend for Figure 12**

- | | |
|---------------|-----------|
| 1. TUBE | 5. WASHER |
| 2. TAILPIPE | 6. COVER |
| 3. CAPSCREW | 7. CLAMP |
| 4. LOCKWASHER | |

Figure 12. Overhead Exhaust

Radiator and Cooling System Repair

REMOVE



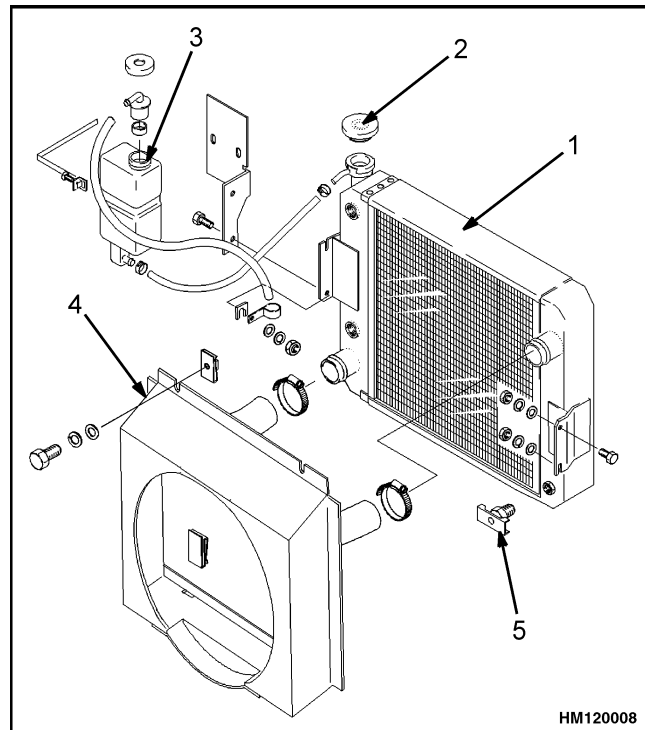
WARNING

DO NOT remove the radiator cap while it is hot. Hot coolant and steam can cause burns. Make sure the label is on the radiator cap. See Figure 17.

1. Use the drain valve and drain the coolant from the radiator. Remove the bottom radiator hose and drain the coolant from the engine. See Figure 13 and Figure 14.
2. Remove the capscrews that fasten the fan to the hub. Remove the capscrews that hold the fan shroud to the radiator. Remove both the fan and the fan shroud.
3. Disconnect the top coolant hose at the radiator. Disconnect the lines to the oil cooler in the side of the radiator. Put caps on the open lines and ports. Remove the capscrews that hold the radiator to the frame. Remove the radiator.

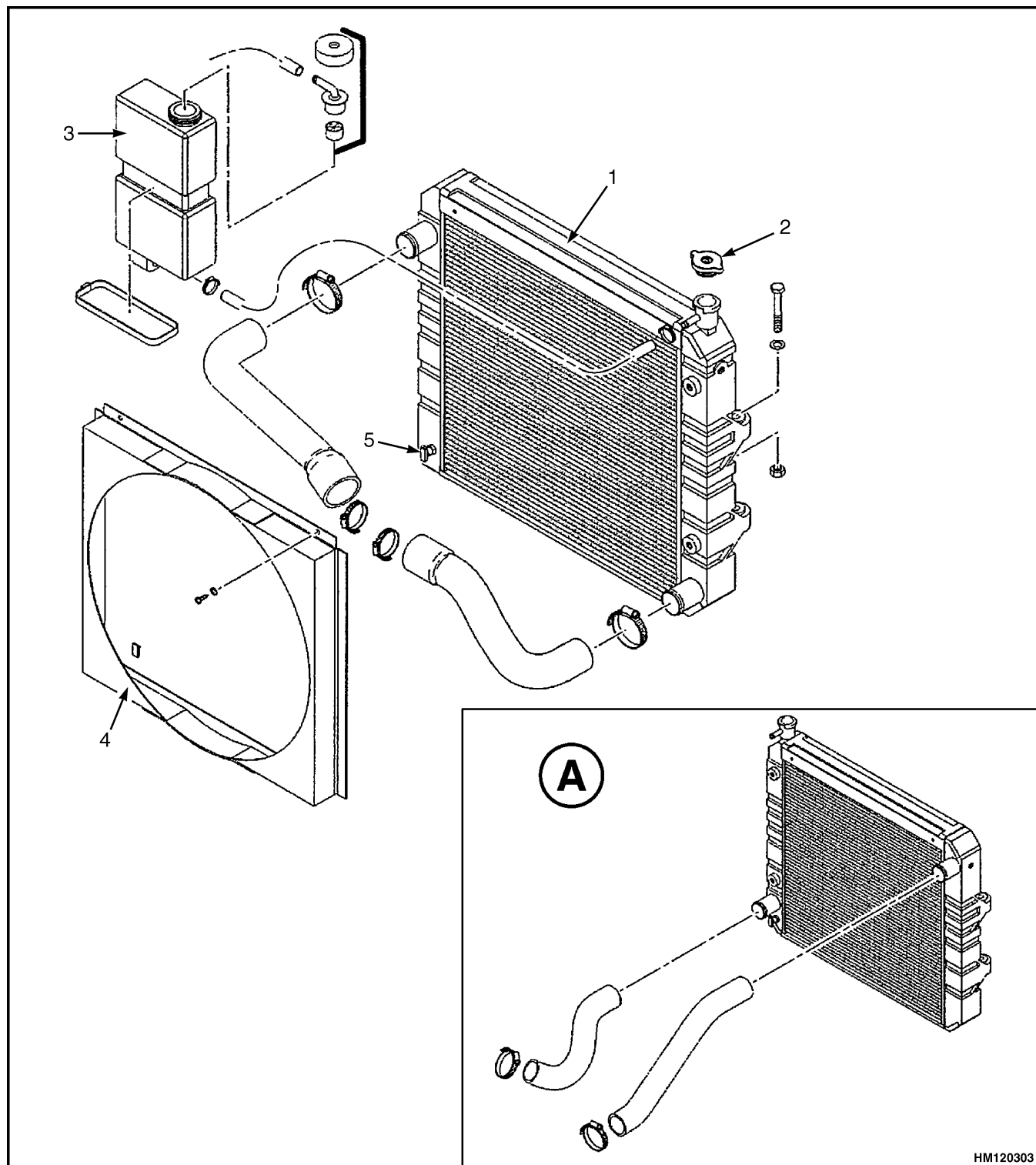
INSTALL

1. Install the radiator. See Figure 13 and Figure 14. Install the fan and fan shroud in position on the radiator. Install the capscrews that hold the fan shroud. Install the capscrews that fasten the fan to the hub. Tighten the capscrews to 26 N•m (19 lbf ft).
2. Connect the upper coolant hoses at the radiator. Connect the lines for transmission oil to the oil cooler in the radiator.



1. RADIATOR
2. RADIATOR CAP
3. AUXILIARY COOLANT RESERVOIR
4. SHROUD
5. DRAIN VALVE

Figure 13. Cooling System (Older)



A. MAZDA FE AND F2 ENGINES

- 1. RADIATOR
- 2. RADIATOR CAP
- 3. AUXILIARY COOLANT RESERVOIR

- 4. SHROUD
- 5. DRAIN VALVE

Figure 14. Cooling System (Newer)

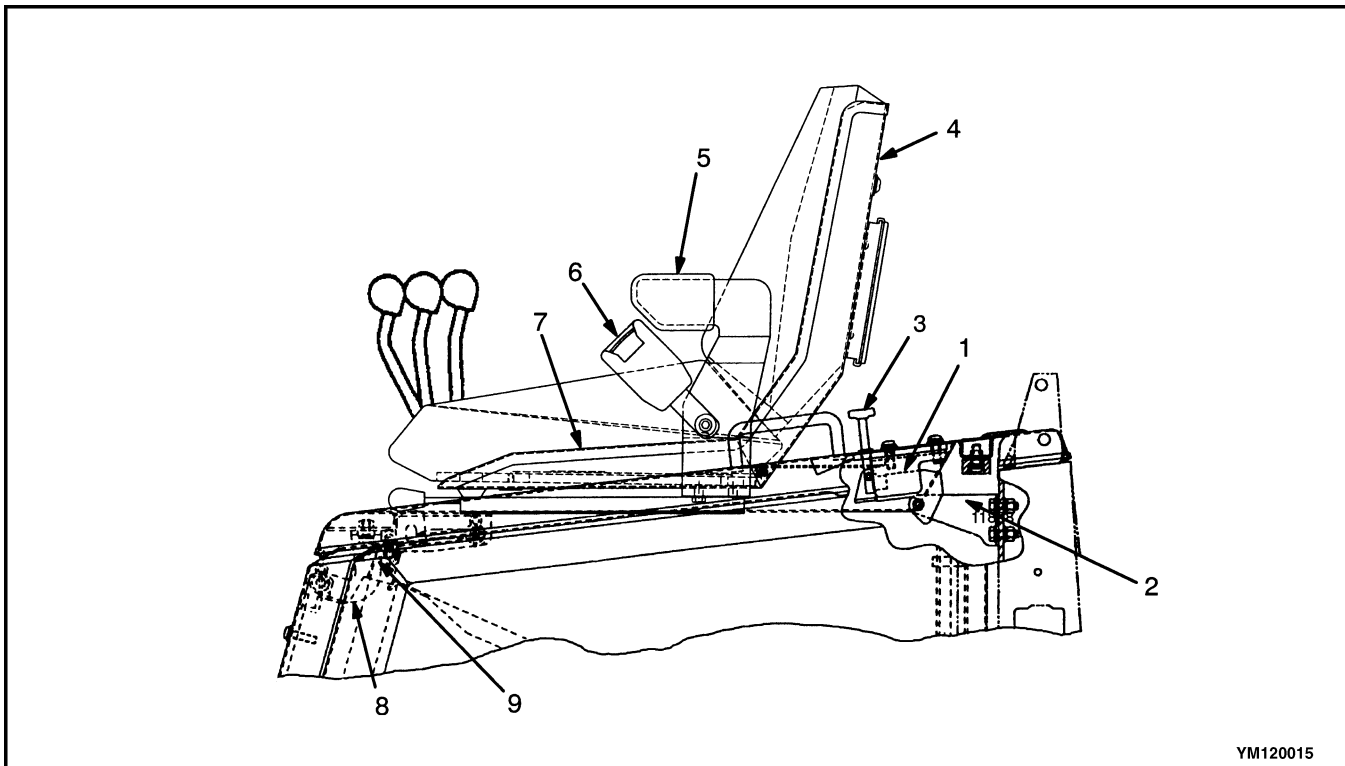
Operator Restraint System Repair

The seat belt, hip restraint, seat and mount, hood, and latch are all part of the operator restraint system. Each item must be checked to make sure it is fastened correctly, functions correctly, and is in good condition. See Figure 15.

The end of the seat belt must fasten correctly in the latch. Make sure the seat belt pulls from the retractor

assembly and retracts smoothly. The seat belt must be in good condition. A seat belt that is damaged or worn will not give protection when it is needed.

Adjust the hood, hood latch, and latch striker when any of the parts of the operator restraint system are installed or replaced. See Hood and Side Covers Repair for the adjustment procedures.



YM120015

1. HOOD LATCH
2. LATCH HOOK
3. PUSH KNOB
4. SEAT
5. HIP RESTRAINT

6. SEAT BELT
7. UPPER HOOD PANEL
8. HINGE
9. TORSION SPRING

Figure 15. Hood and Seat Check

Engine Repair

REMOVE ENGINE ONLY



WARNING

The lift truck must be put on blocks for some types of maintenance and repair. The removal of the following assemblies will cause large changes in the center of gravity: mast, drive axle, engine and transmission, and counterweight. When the lift truck is put on blocks, put additional blocks in the following positions to maintain stability:

- Before removing the mast and drive axle, put blocks under the counterweight so the lift truck cannot fall backward.
- Before removing the counterweight, put blocks under the mast assembly so the lift truck cannot fall forward.

The surface must be solid, even, and level when the lift truck is put on blocks. Make sure that any blocks used to support the lift truck are solid, one-piece units. See the Operating Manual or the Periodic Maintenance section for your lift truck.

The engine can be removed with or without the transmission. Follow this procedure to remove the engine without the transmission.



WARNING

Always disconnect the cables at the battery before you make repairs to the engine. Disconnect the cable at the negative terminal first.

1. Remove the floor plates. Remove the hood and side covers. Remove the crossmember that is the hood mount. Remove the air filter and battery. Remove the radiator.
2. Disconnect the throttle linkage. Disconnect the exhaust system.
3. Disconnect the wires and wiring harnesses at the engine. Disconnect the fuel lines at the engine.
4. Connect a lifting device to the engine. Put a block under the transmission housing as a support.
5. Remove the capscrews that hold the torque converter housing to the flywheel housing. Remove the capscrews that hold the drive plate to the torque converter.



WARNING

The engine is heavy. Make sure that any lifting device has enough capacity to lift the engine. The engine can weigh approximately 340 kg (750 lb).

6. Remove the nuts and bolts from the engine mounts. Use the lifting device to carefully move the engine away from the torque converter. Make sure all hoses, wires, and cables are disconnected from the engine, then lift the engine from the frame.

REMOVE ENGINE AND TRANSMISSION

The engine can be removed with or without the transmission. Follow this procedure to remove the engine with the transmission.

1. Remove the mast. See the section **Mast, Repairs** 4000 YRM 522. Put the lift truck on blocks so you have access under the lift truck. See the section **Periodic Maintenance** 8000 YRM 707.
2. Perform Step 1 through Step 3 from Remove Engine Only.
3. Remove the crossmember for the brake and throttle pedals.
4. Remove the hydraulic hose between the pump and the tank. Put a cap on the tank fitting. Remove the hydraulic filter and hoses. Remove the supply line to the main control valve.
5. Drain the oil from the axle housing. Remove the capscrews that hold the axle shafts to the hubs. Remove the axle shafts. Disconnect the brake lines and parking brake cables. Remove the capscrews that hold the transmission housing to the axle housing.



WARNING

The engine and transmission are heavy. Make sure that any lifting device has enough capacity to lift the weight. The engine and transmission can weigh approximately 680 kg (1500 lb).

6. Connect a lifting device to the engine and transmission. Make sure the engine and transmission assembly can be raised at an angle so they will clear the frame. Remove the nuts and bolts from the engine mounts. Use the lifting device to carefully lift the engine and transmission from the frame.

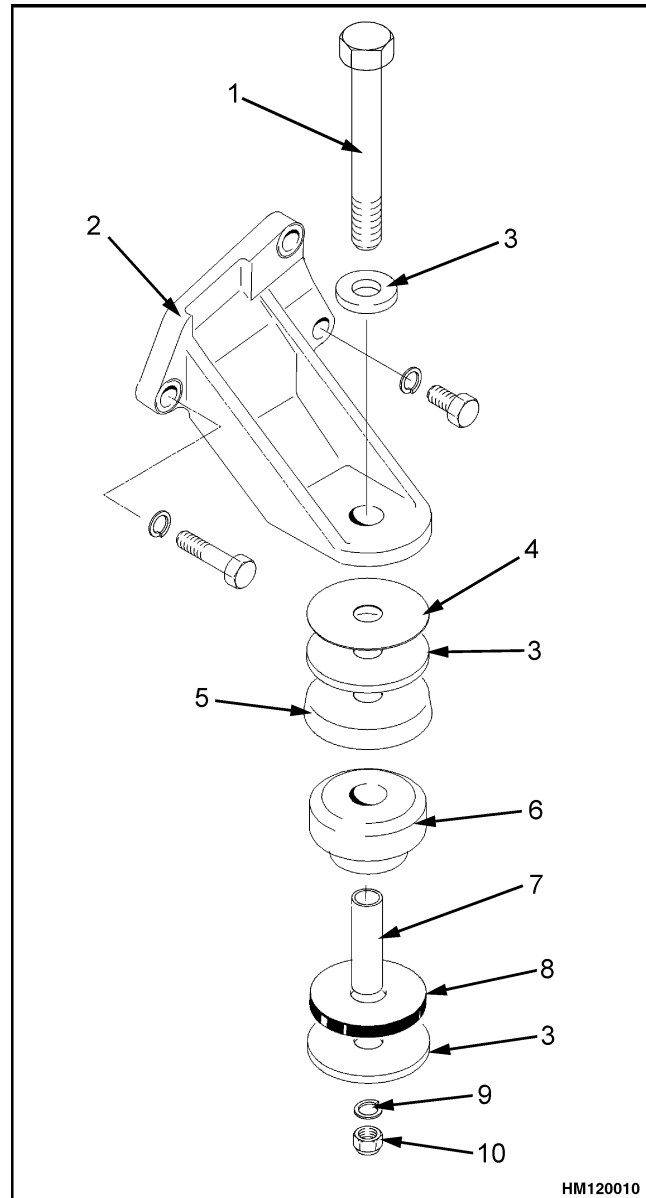
INSTALL ENGINE ONLY

The engine can be installed with or without the transmission. Follow this procedure to install the engine without the transmission.

WARNING

The engine is heavy. Make sure that any lifting device has enough capacity to lift the engine. The engine can weigh approximately 340 kg (750 lb).

1. Make sure the torque converter is installed in the transmission and the drive plate is on the flywheel. Connect a lifting device to the engine. Lift the engine into the frame. Carefully align the drive plate with the transmission. See the section **Single-Speed Powershift Transmission, Troubleshooting and Repair** 1300 YRM 501. Make sure the pilot on the torque converter is in the hole in the flywheel. Install the capscrews that hold the torque converter housing to the flywheel housing. Install the capscrews that hold the drive plate to the torque converter.
2. Install the nuts and bolts for the engine mounts. Install the parts of the mounts as shown in Figure 16. Use a maximum of three spacers to bring the engine mounts within 1.0 mm (0.04 in.) of a vertical position. Tighten the nuts to 66 N•m (49 lbf ft).
3. Install the radiator and connect the coolant hoses and the lines to the transmission.
4. Install the crossmember that is the hood mount. Connect the wires and wiring harnesses at the engine. Connect the fuel lines at the engine.
5. Connect the throttle linkage. Connect the exhaust system. Install the air filter assembly.
6. Install the battery. Install the side covers and the hood.
7. Check all fluid levels as described in **Periodic Maintenance** 8000 YRM 707.



- | | |
|-----------------|-----------------|
| 1. BOLT | 6. RUBBER MOUNT |
| 2. ENGINE MOUNT | 7. TUBE SPACER |
| 3. FLAT WASHER | 8. BUMPER |
| 4. SPACER | 9. LOCKWASHER |
| 5. CUP | 10. NUT |

Figure 16. Engine Mounts

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