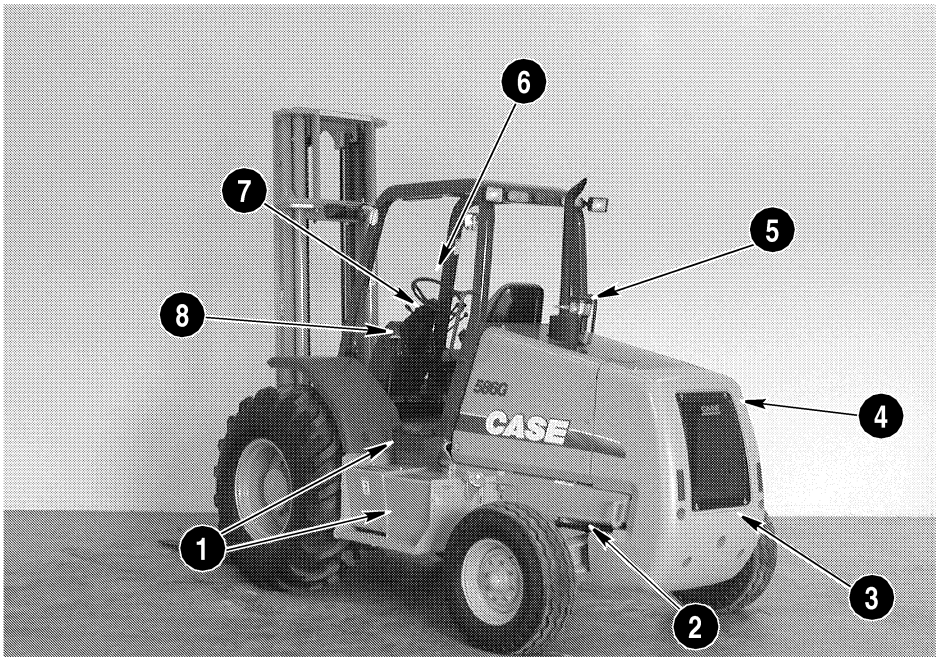
585G, 586G and 588G Forklift

Operators Manual

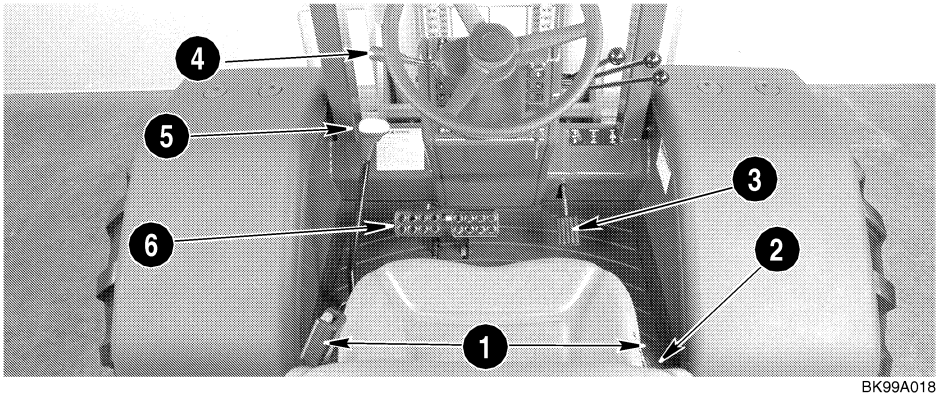
Bur 6-6443NA

CASE



BD99D007

1. OPERATOR'S STEPS
2. STEERING AXLE
3. REAR COUNTERWEIGHT
4. GRILLE / RADIATOR
5. EXHAUST
6. STEERING WHEEL
7. CONTROLS
8. INSTRUMENTS



BK99A018

1. SEAT BELTS
2. PARKING BRAKE
3. FOOT THROTTLE
4. FORWARD / REVERSE LEVER
5. FOUR SPEED SHIFT LEVER
6. BRAKE PEDALS

- When inflating tires, use a self-attaching inflation chuck with remote shutoff and stand clear of the tire. Position yourself beside the tire and not beside the rim.
- When absolutely necessary to tow the machine, do not exceed the recommended towing speed. Be sure the towing machine has sufficient braking capacity to stop the towed load. If the towed machine cannot be braked, a towbar must be used or two towing machines must be used. - one in front pulling and one in the rear to act as a brake. Avoid towing over long distances.
- Observe proper maintenance procedures.
- Whenever servicing or replacing hardened pins, etc, use a brass drift or other suitable material between the hammer and pin. Alt: Use a brass hammer, drift or suitable material on the pin, etc.
- Keep the brakes and steering systems in good operating condition.
- Replace all missing, illegible or damaged safety signs. Keep all safety signs clean.

Fuel Handling Precautions

- Do not smoke or permit open flames while fueling or near fueling operations.
- Never remove the fuel cap or refuel gasoline engine powered machines with the engine running or hot. Never allow fuel to spill on hot machine components. Never allow fuel to spill on the environment.
- To avoid spilling fuel maintain control of the fuel filler nozzle when filling the tank.
- Do not fill the fuel tank completely to the top. Allow room for expansion.
- Clean up spilled fuel immediately and dispose of contaminated material in an environmentally correct manner.
- Tighten the fuel tank cap securely. Should the fuel cap be lost, replace it only with the original manufacturers approved cap. Use of a non-approved cap without proper venting may result in pressurization of the tank.
- Never use fuel for cleaning purposes.
- Use the correct fuel grade for the operating season.

10

⚠ WARNING

- Before starting engine study operators manual.
- Walk around and check your machine before starting.
- Check that all controls are in neutral before starting.
- Learn and practice safe use of controls before operating.
- Fasten seat belt before starting.
- Operate from seat position only.
- Stop engine before dismounting.
- Clear the area of all persons. Know their locations.
- Do not permit riders on any part of machine.
- Lock brake pedals together for road travel.
- Be aware of surrounding, persons, obstructions and overhead wires.
- Keep forks or attachments as low as possible. On hills or uneven terrain use lower gears and drive slowly.
- Lower forks to ground or support them before leaving machine.
- Park on level ground, apply parking brake, stop engine, remove key.
- Face the machine, use grab handles, supports and steps entering and exiting.
- Make sure the operators area is clean and free of loose items.
- Check instrument warning lights and buzzers before and after starting.
- Incorrect operation of this machine can cause injury or death.

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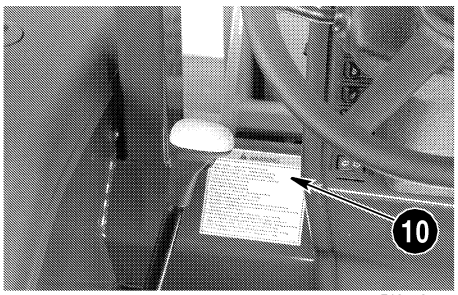

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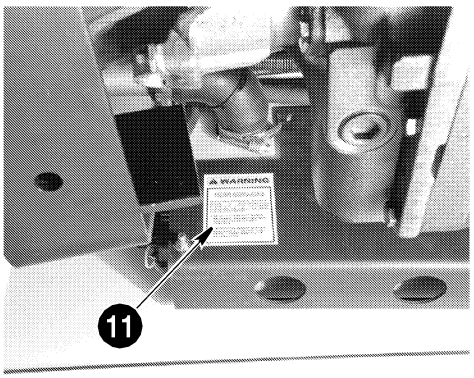

11

⚠ WARNING

PRESSURE ACCUMULATOR IN LOADER HYDRAULIC SYSTEM

DISCHARGE HYDRAULIC PRESSURE PRIOR TO DISCONNECTING HYDRAULIC LINES. ESCAPING HYDRAULIC OIL UNDER PRESSURE COULD CAUSE INJURY.

- REFER TO THE SERVICE MANUAL. PRECHARGE ONLY WITH DRY INERT GAS SUCH AS HIGH PURITY NITROGEN.
- REFER TO THE SERVICE MANUAL. DISCHARGE ALL GAS PRESSURE PRIOR TO DISASSEMBLING THE ACCUMULATOR.

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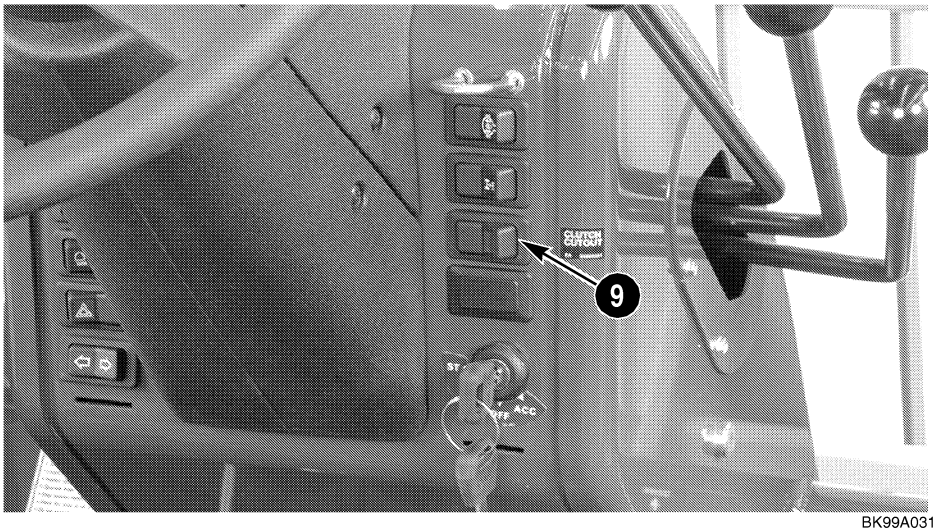
BK99A027 / 256318A1

RIGHT-HAND CONSOLE CONTROLS



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9. **CLUTCH CUTOUT SWITCH:**

RIGHT SIDE OF ROCKER SWITCH DEPRESSED: When you push the brake pedals, the transmission remains engaged. Use this position when moving a load slowly into a tight place.

LEFT SIDE OF ROCKER SWITCH DEPRESSED: When the switch is in this position and you push the brake pedals, the transmission is disconnected from the engine. Use this position for maximum hydraulic power.

NOTE: *If there is pressure being applied to the brakes and the left side of the Clutch Cutout Switch is depressed, the engine will not start.*

⚠ *The clutch cutout control can affect braking of this machine as follows:*

Left side of clutch cutout switch depressed: When you depress the brake pedal, the transmission is disconnected from the engine. Thus "engine braking" is not available to assist in stopping the machine.

Right side of clutch cutout switch depressed: The engine and transmission remain connected even if you depress the brake pedals. At high engine speeds, the brakes may not be able to stop the machine.

WARNING: *Do not work this machine or drive on roads until you are completely familiar with the operation of the clutch cutout control.*

M714A

OPERATING INSTRUCTIONS

ENGINE

WARNING: *Before starting engine, study the operator's manual safety messages. Read all safety signs on the machine. Clear the area of other persons. Learn and practice safe use of controls before operation. It is your responsibility to understand and follow manufacturers instructions on machine operation, service, and to observe pertinent laws and regulation. Operator's and service manuals can be obtained from your dealer.*

SB055

CAUTION

- Machine capacity is less when operating on uneven, unstable or soft ground conditions. Reduce the load to maintain stability.
- Lift capacities are based on solid, level, smooth ground conditions.

Walk-Around Inspection

Do the following items each day before you start the engine.

1. Check for leaks under the machine.
2. Check the tires for damage.
3. Check the forks and mast for wear, damage or missing parts.
4. Check the machine for broken, missing, or loose parts.
5. Clean any debris from the machine. Make sure the radiator area is clean.
6. Clean or replace any safety or instructional decals that cannot be read.
7. Clean the steps, hand rails, and operators compartment.
8. See the Maintenance Chart in this manual for regular intervals and do the items under every 10 hours of operation or each day whichever occurs first.

NOTE: *If this is a new machine, or a machine with a rebuilt engine, See Run-In Period in this manual for additional information.*

Operating the Machine

WARNING: Tipover Hazard - *The forklift will tipover if the counterweight is removed from the machine before the lift mast is removed. To avoid tipover remove the lift mast first.*

M723

WARNING: : *Know the rules, laws and safety equipment necessary for transporting or operating this machine on a road or highway. Rotating beacon, backup alarm, slow moving vehicle emblem and other safety equipment items are available from your dealer.*

84-13

WARNING: *Prevent accidents when you move the machine around the job site. Know the rules for movement of people and machines on the job site. Follow the instructions of the flagman, signals and signs.*

84-11

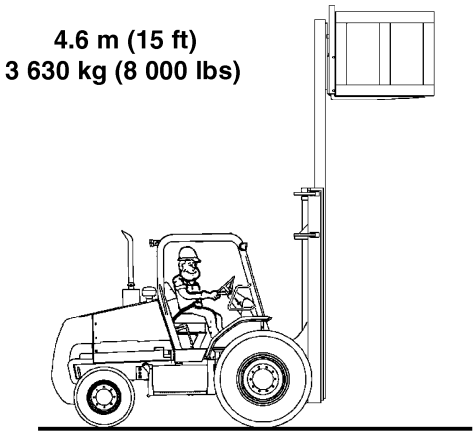
When driving for any distance around the job site or when driving on the highway, raise the forks approximately 152 mm (6 inches) from the ground and tilt the mast back. Your travel speed must be slow enough to maintain complete control of your machine at all times.

If the load has to be raised above the height of the main mast, make sure load is secured by tying, banding, etc. If load is loose, do not have load higher than the fork backing plate.

NOTE: *Avoid prolonged converter (engine in gear, under load, increased rpm, drive train not turning), hydraulic (running valve over relief as in holding control lever in raised or lowered position after the load or mast stops moving at increased rpm), or combined stalls. Repeated stalls will decrease fuel economy and will cause overheating and damage to the engine or engine and hydraulic system. Do Not stall the converter and hydraulics for more than 10 seconds at a time.*

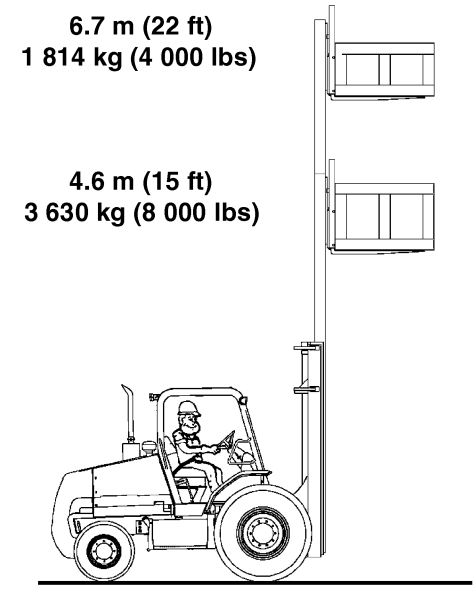
588G Forklift - Load Limits with 610 mm (24 Inch) Load Center Only (Mast Vertical)

NOTE: *For Limits with load centers other than 610 mm (24 inches), refer to Load Limit Chart in this Section of the manual.*



BS98N059

4.6 M (15 FT) MAST



BS98N060

6.7 M (22 FT) MAST

Wheel Nut and Bolt Torques

When the machine is new or when a wheel is removed for service, check the wheel nut or bolt torques every 10 hours of operation until the wheel nuts or bolts remain tight.

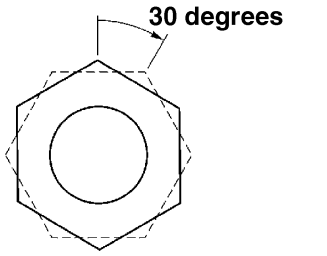
IMPORTANT: *The wheel mounting nuts on this machine are metric. Use only the mounting nuts shown in the parts catalog for this machine.*

Procedure:

1. Check torque with a dial or click torque wrench. If the nut does not move on the following torque's, it is tight and does not need re-torqued.
   Front Wheel Mounting Nut..... 325 Nm (240 pound-feet)
   Rear Wheel Mounting Nut - 4wd ..... 271 Nm (200 pound-feet)
   Rear Wheel Mounting Nut - 2wd ..... 156 Nm (115 pound-feet)
2. If any of the nuts are loose, re-torque using the following methods.

Front Wheel Mounting Nut ..... Torque Turn Method (see below)

Back off the torque, re-torque to 271 nm (200 pound-feet), then turn and additional 30 degrees (one half the distance on one side of the nut.



BS99D052

Rear Wheel Mounting Nut

Four Wheel Drive..... 270 to 352 Nm (200 to 260 pound-feet)
Two Wheel Drive ..... 156 to 203 Nm (115 to 150 pound-feet)

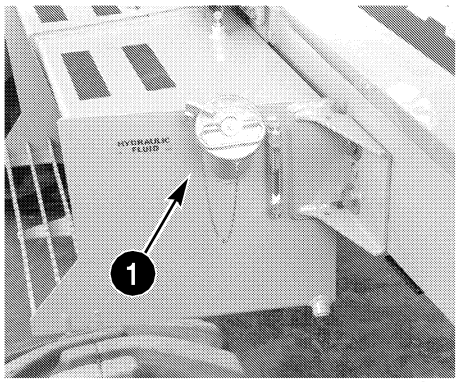
SERVICE POINTS	PAGE NUMBER	NOTES	NUMBER OF POINTS	FREQUENCY IN HOURS					
				CLEAN	CHANGE	CHECK	GREASE	DRAIN	REPLACE
Steer Axle Breather - 4WD	101			250					
Drive Axle Oil Level	102	6	3			250			
Drive Axle Breather	102			250					
Radiator Fluid Level	103					250			
Fuel Tank (Drain Water and Sediment)	104							250	
Transmission Oil Level	104					250			
Tire Condition and Air Pressure	105					250			
Side Shift Cylinder Bearings	105	3	2				250		
Tilt Cylinders	105	3	4				250		
Forklift Mast Chain	106					250	250		
ROPS Canopy	107					500			
Fuel Filter	111								500
Steer Axle Bearings/(Replace) Seals - 2WD	113	8					500		500
Mast Chains for Wear or Stretch	113	8				500			
Carriage Thrust Rollers for Wear or Damage	113	8				500			
Hydraulic Filter	114								1000
Hydraulic Fluid	115	4			1000				
Battery (ies) Fluid Level	118					1000			
Drive Axle Oil	116	6	3		1000				
Transmission Oil and Filter	117	6			1000				1000
Steer Axle Oil -4WD	118	6	3		1000				
Engine Valve Adjustment	119	8				1000			
Air Filter Elements	119								1000
Engine Cooling System	127				2000			2000	
Chain Rollers on Mast for Wear	124	8				2000			
Load Rollers on Mast for Wear	124	8				2000			

NOTE 1: Service the air filter elements if the air filter warning lamp illuminates.
NOTE 2: *Replace the hydraulic filter if the hydraulic filter warning lamp illuminates.*
NOTE 3: Use Case Molydisulfide Grease.
NOTE 4: Use Case Hy-Tran Ultra® (MS 1209)
NOTE 5: Case No. 1 15W-40 API CG-4 or CF-4
NOTE 6: Use Case Hy-Trans Plus® (MS-1207).
NOTE 7: For 588G Forklift with 6.7 m (22 FOOT) Mast only.
NOTE 8: See Service Manual or your Case dealer.

50 HOUR MAINTENANCE

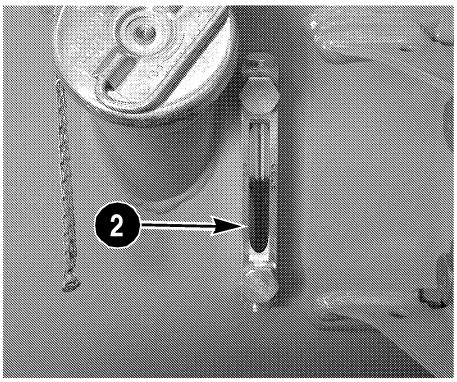
Hydraulic Reservoir Fluid Level

Check the fluid level of the hydraulic reservoir every 50 hours of operation



BD01G080

1. HYDRAULIC RESERVOIR



BD01G081

2. HYDRAULIC RESERVOIR SIGHT GAUGE

1. Park the machine on a level surface.
2. Lower the forks to the ground. Stop the engine.
3. Make sure the hydraulic fluid is cold when you check the fluid level (fluid temperature the same as the outside air temperature).
4. The hydraulic reservoir is full when hydraulic fluid covers half of the sight gauge window.

IMPORTANT: *When the hydraulic fluid level is low, a small amount of hydraulic fluid will remain on the lower part of the sight gauge window. This condition* ***does not*** *show a correct fluid level.*

500 HOUR MAINTENANCE

Roll-Over Protective Structure

BD01G053

1. ROPS LABEL

Your machine has a roll-over protective structure (ROPS). A ROPS label is fastened to the structure. The ROPS label has important information about ROPS.

The ROPS label shows the serial number of the ROPS, gross weight approval and regulation numbers and Model Number of the machine.

IMPORTANT: *Read the following important information. Do not remove the ROPS label.*

ROPS Label

Made In U.S.A. By: **CASE CORPORATION** RACINE, WI 53404 U.S.A.		FOR APPLICATION ON	585G,586G & 588G SERIES FORKLIFT
ROPS SERIAL No.		FOR MAX. GROSS MACHINE WEIGHT	16 400 lb (7450kg)
CONFORMS TO OSHA REGULATION	1910.178 (a2) 1926.602 (c) (v)	APPROVAL NUMBER	
PERFORMANCE STANDARDS MEASURED IN ACCORDANCE WITH:	ASME B56.6 1992, SAE J231, SAE J1040 & SAE J1043		

TYPE - CERTIFICATION FOR ROLLOVER PROTECTIVE STRUCTURES

PROTECTION AFFORDED BY THIS ROPS WILL BE REDUCED IF THE ROPS IS ALTERED, HAS STRUCTURAL DAMAGE, OR HAS BEEN SUBJECT TO UPSET. SEE OPERATOR'S MANUAL FOR COMPLETE INSTRUCTIONS AND INSPECTION REQUIREMENTS.

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347809A1

Maintenance and Inspection of the ROPS

After the first 20 hours of operation with a new machine and after every 500 hours of operation, do the following:

1. Check the torque of the ROPS mounting bolts. See page110 for correct torque specifications. If necessary, tighten the bolts to the correct torque.
2. Check the operators seat and the mounting parts for the seat belt. Tighten the bolts to the correct torque. See page 130 for correct torque specifications. Replace parts that have wear or damage.

1000 HOUR MAINTENANCE

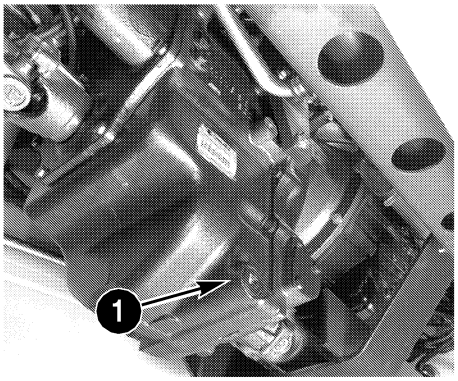
Transmission Fluid, Transmission Filter Change, and Breather Cleaning

Change the transmission filter after the first 20 hours of operation.

Change the transmission fluid, replace the transmission filter, and clean the breather every 1000 hours of operation.

Transmission Fluid Change

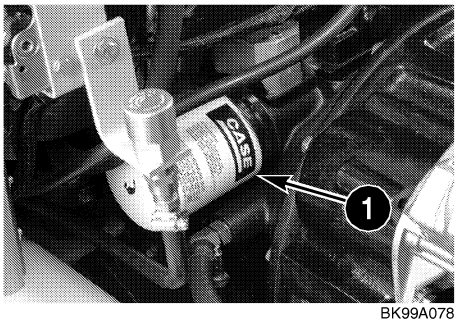
1. Put a container under the drain plug that will hold 20.8 litres (5.5 U.S. gallons).



1. DRAIN PLUG

2. Remove the dipstick and drain plug.

Transmission Filter Replacement



BK99A078

1. STANDARD TRANSMISSION FILTER

1. Clean the area above the mounting surface for debris and dirt.
2. Remove the old filter and discard. Clean the filter mounting surface with a clean cloth.
3. Lubricate the gasket of the new filter with clean oil.
4. Install the new filter and turn clockwise until the gasket contacts the head of the filter assembly. Continue to tighten the filter for 1/3 turn.

IMPORTANT: *Do not use a filter strap wrench to install the filter. A fluid leak can occur if the filter is dented by the filter strap wrench.*

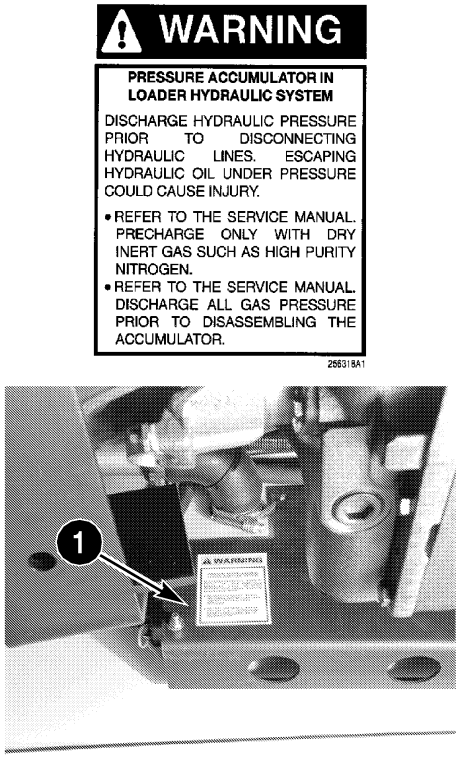
5. Install the drain plug and fill with new fluid.
6. Start the engine and check for leaks around the filter.
7. Operate the machine in first and second gear for a few minutes. Park the machine on a level surface. Apply the park brake. With the engine running at idle speed, check the fluid level. Add fluid as required.

LOAD CONTROL ACCUMULATOR

If the load control accumulator must be replaced for any reason, always follow the instruction on the decal located on the accumulator mounting plate.

Never disconnect the hydraulic line between the accumulator and the solenoid valves without first discharging all hydraulic pressure from the hydraulic system. Always refer to the accumulator decal located at the right, in the safety section of this manual or the decal located on the accumulator mounting plate.

Refer to the service manual for complete instructions on testing the accumulator and solenoid.



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1. ACCUMULATOR WARNING DECAL

WARNING: *The accumulator on this machine contains highly pressurized nitrogen gas. If the accumulator system does not function correctly, replace the accumulator. DO NOT attempt to repair the accumulator, only install a new one. Injury or death can result if you do not follow these instructions.*

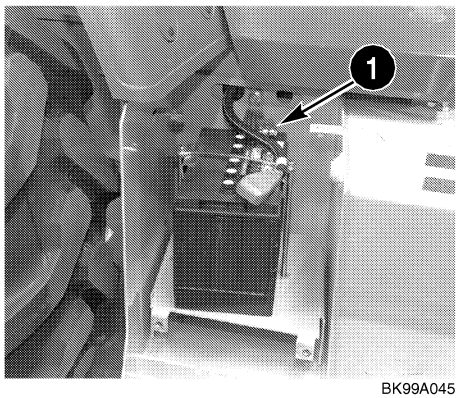
SA142

Battery Service

NOTE: *The electrical system in this machine is 12 volts.*
Before you service components of the electrical system, wear face protection and always disconnect the negative (-) battery cable.

DO NOT run the engine with the battery cables disconnected or with the alternator wires disconnected.
Before using an electric welder, disconnect the alternator wires, instrument cluster, and battery(ies).
Do not use a steam cleaner or cleaning solvent to clean the alternator.

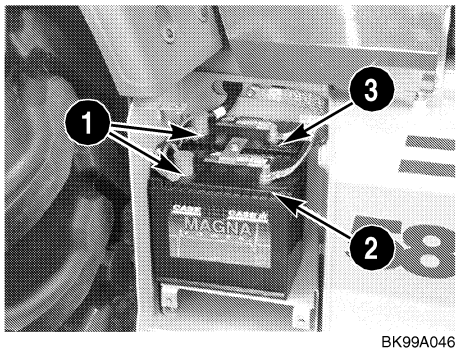
One Battery System



BK99A045

1. NEGATIVE (-) TERMINAL

Two Battery System - Optional Cold Start



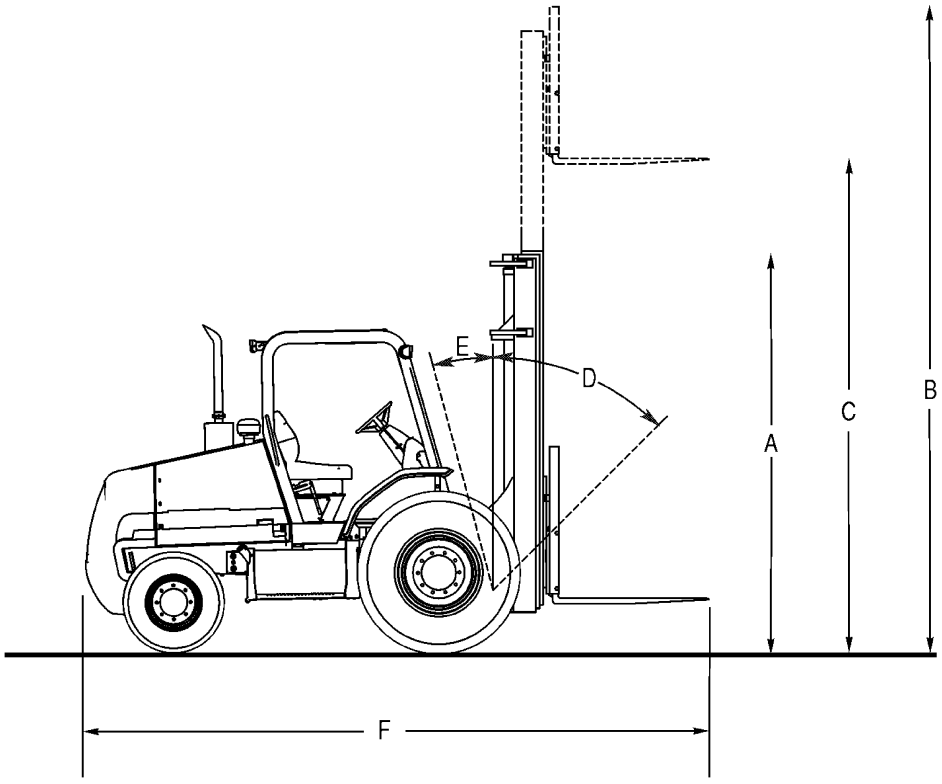
BK99A046

1. POSITIVE (+) TERMINAL
2. NEGATIVE (-) TERMINAL
3. NEGATIVE (-) TERMINAL AND GROUND

Battery Fluid Level

Check the fluid level of the battery every 1000 hours of operation. If the fluid level is low, add distilled or drinking water to each cell until the fluid level is at the split ring at the bottom of each cell opening. DO NOT add electrolyte to the battery.

IMPORTANT: *If the temperature is 0 °C (32 °F) or below and you have added water to the battery, do the following: Connect a battery charger to the battery or run the engine for approximately two hours. This procedure is necessary to mix the water with the electrolyte.*



BS98N045

585G Forklift with 6.71 m (22 ft) Mast

Overall Width ..... 2 109 mm (83 in)

A. Overall Height, forks 152.4 mm (6 in) off ground, unloaded:
with 2WD and 17.5L x 24 tires..... 3 225.8 mm (127 in)
with 2WD and 19.5L x 24 tires..... 3 276.6 mm (129 in)

B. Overall Height, mast raised, unloaded:
with 2WD and 17.5L x 24 tires..... 7 620 mm (300 in)
with 2WD and 19.5L x 24 tires..... 7 670.8 mm (302 in)

C. Maximum fork height ..... 6 705.6 mm (264 in)

D. Degrees tilt, forward..... 45 degrees

E. Degrees tilt, rearward ..... 15 degrees
Overall length with 1 219 mm (48 in) forks ..... 4 902 mm (193 in)
with 2WD and 19.5L x 24 tires..... 3 276.6 mm (129 in)

F. Overall length with 1 219 mm (48 in) forks ..... 4 902 mm (193 in)

Lift capacity to full height at 610 mm (24 in) load center.....1 361 kg (3 000 lbs)