

8

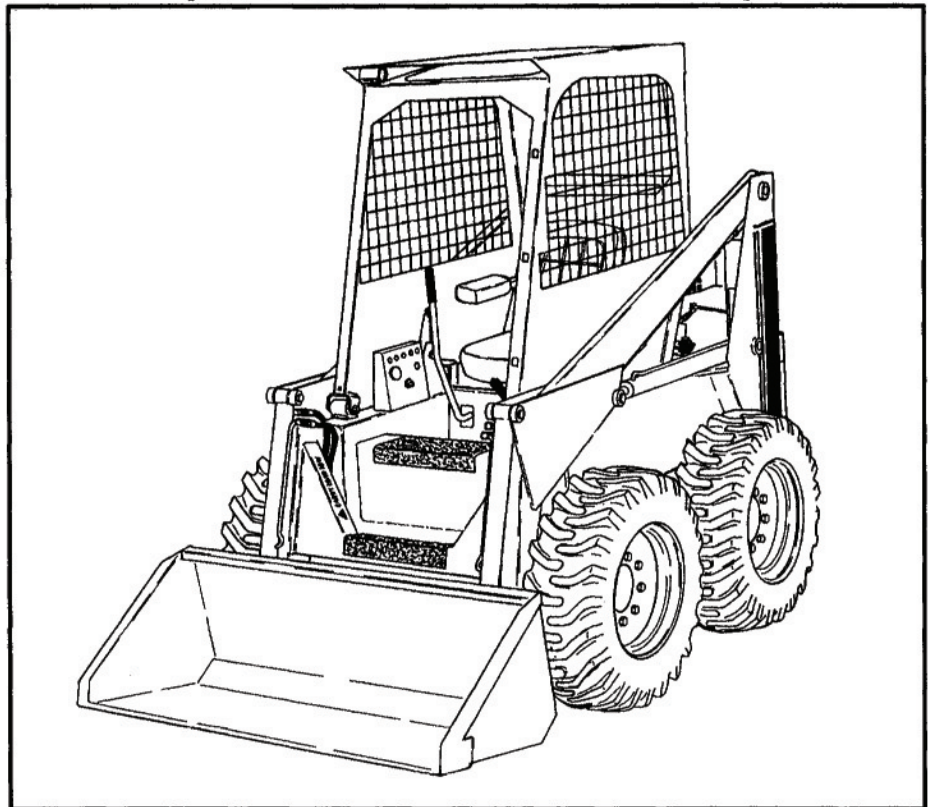
2

5



Operation & Maintenance Manual

(S/N 495814001 & Above)



Doosan purchased Bobcat Company from Ingersoll-Rand Company in 2007. Any reference to Ingersoll-Rand Company or use of trademarks, service marks, logos, or other proprietary identifying marks belonging to Ingersoll-Rand Company in this manual is historical or nominative in nature, and is not meant to suggest a current affiliation between Ingersoll-Rand Company and Bobcat Company or the products of either.

MELROE
INGERSOLL-RAND

6549635 (11-98) Revised (6-12)

Printed in U.S.A.



© Melroe Company 1998

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

OPERATING INSTRUCTIONS

DO NOT operate the Bobcat loader until you have read this operator's manual completely.

Instructions for operating the Bobcat loader with safety and efficiency are given on the following pages.

Carefully follow these instructions to take advantage of the Bobcat loader's design.

You must remember operator safety at all times while you operate the loader.

Read the safety instructions inside the front cover of the Operator's Manual.

It is important that you use the following procedures when you operate the loader.

1. Use the safety tread and grab handles (Fig. 1) when you get on or off the loader.

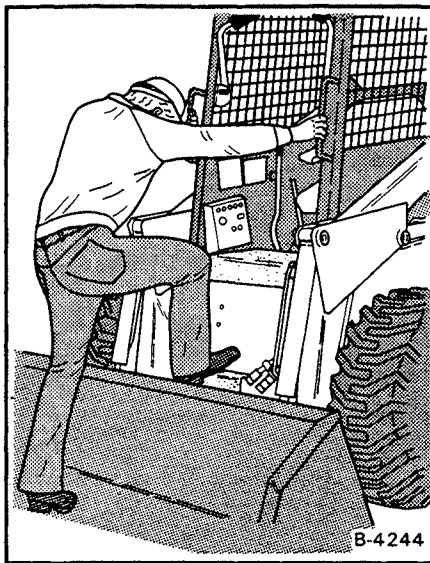


Fig. 1 Using Safety Tread

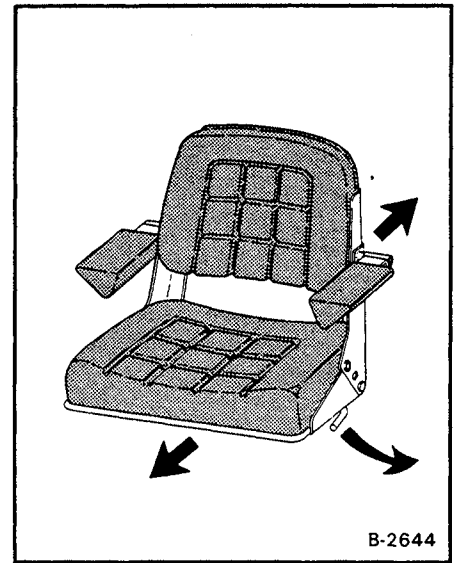


Fig. 2 Adjusting the Seat

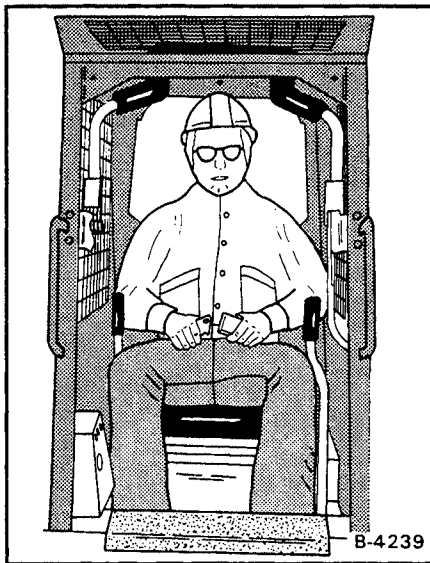


Fig. 3 Fastening Seat Belt

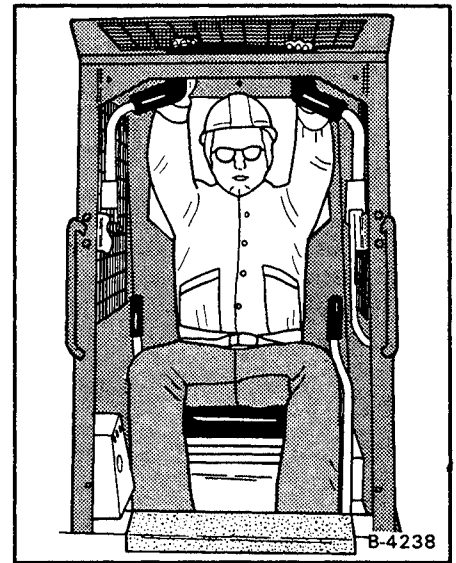


Fig. 4 Lowering Seat Bar

⚠ WARNING

Remember to stop the engine, put the parking brake in the locked position and lower the lift arms before you get off the loader.

2. Adjust the seat position (Fig. 2) for easy operation of the loader. Adjust and fasten the seat belt (Fig. 3). Lower the seat bar into the operating position (Figs. 4, 5 and 6). Check that the parking brake is engaged before you start the engine.

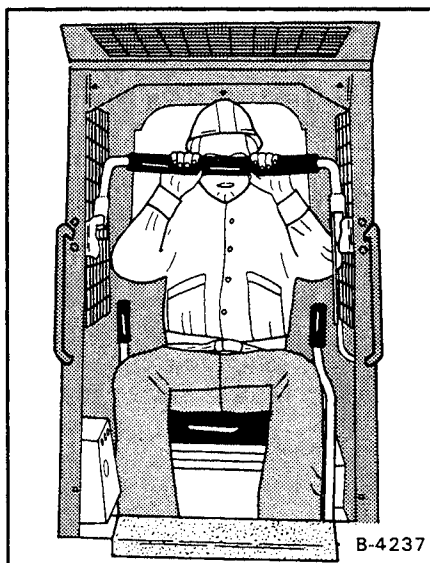


Fig. 5 Lowering Seat Bar

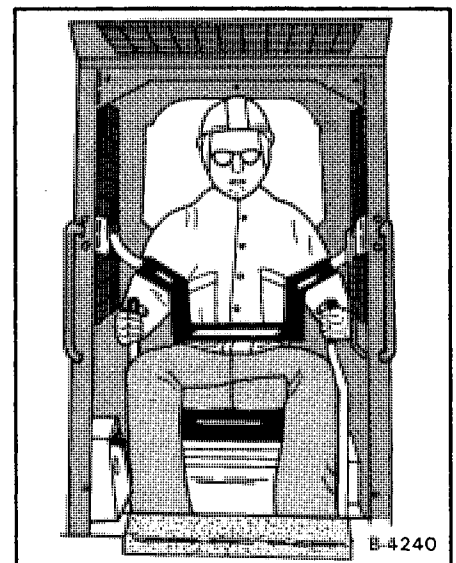


Fig. 6 Seat Bar in Position

Cold Weather Starting Procedure

WARNING

DO NOT use starting fluid (ether) with the Thermostat system.

In cold weather starting use the Pre-Heat system which warms the air going into the engine for easier starting.

To operate the Pre-Heat system, use the following procedure:

1. Follow steps 1 thru 4 for "Normal Starting Condition".
2. Push the pre-heat button (Fig. 25, Item 1) for 15 to 20 seconds.
3. While the pre-heat button is engaged, turn the key switch to "START" and turn the engine.
4. If the engine does not start in 30 seconds, release the key switch from the "START" position, but continue to hold the pre-heat button for 40 to 60 seconds longer. Then try to start the engine again.

NOTE: DO NOT run the starter more than 30 seconds. Let the starter cool for one minute before engaging the starter again.

5. When the engine is running, move the throttle lever forward to increase the engine RPM. It may also be necessary to hold the pre-heat button for a short time (about 5 to 10 seconds), until the engine runs smoothly.
6. Let the engine run for a minimum of five minutes to warm up. This is very important for the hydrostatic transmission. During very cold temperature conditions (0°F. [-23°C.] and below) increase the warm up time. If the transmission warning light becomes illuminated when trying to operate the Bobcat loader, more warm up time is needed. To warm the oil faster, tilt the Bob-Tach backward and continue holding the bottom of the tilt pedal down to let the oil go over relief pressure.

BOBCAT LOADER OPERATION

WARNING

DO NOT exceed rated operating capacity of the Bobcat loader (Fig. 26).

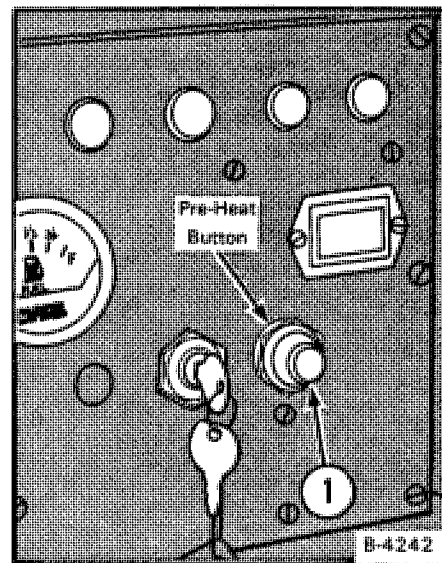


Fig. 25 Pre-Heat Button

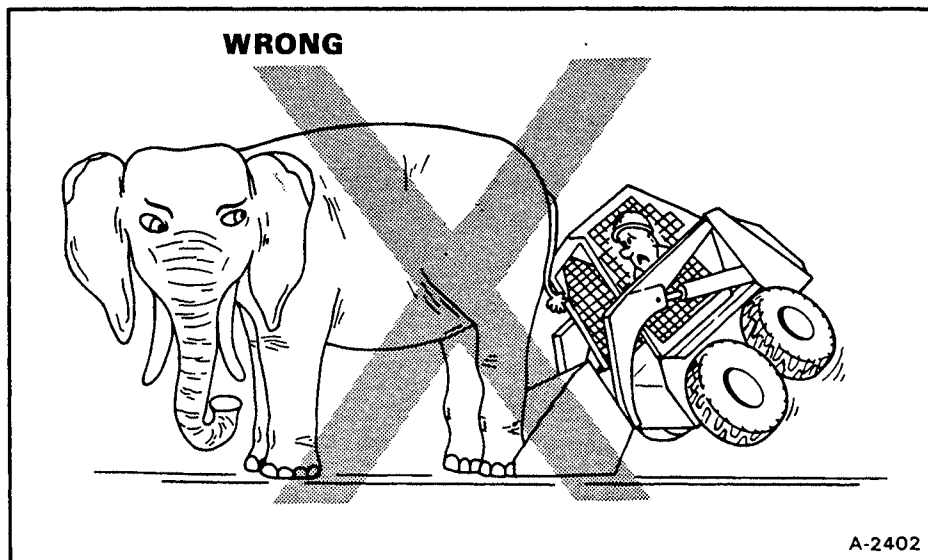



Fig. 26 Excessive Load Capacity

SERVICE SCHEDULE

Maintenance work must be done at regular intervals. Failure to do so will result in damage to the Bobcat loader or the engine. The service schedule is a guide for correct maintenance of the Bobcat loader. DO NOT change this service schedule unless you increase the frequency of service when the Bobcat loader is operated in very hot, cold, dusty or corrosive conditions.

 WARNING	<p>DO NOT work on the loader with the lift arms in a raised position without support. Use lift arm stops or other methods.</p>
--	---

SERVICE SCHEDULE		HOURS					
ITEM	SERVICE REQUIRED	8-10	50	100	200	500	1000
Engine Oil	Check the oil and add oil as needed.						
Engine Air Cleaner	Check the condition indicator. Make inspection of the air cleaner system. Replace the element when the red ring shows in the indicator window.						
Engine Cooling System	Make inspection and clean the radiator as necessary. Check the coolant level and add coolant if level is low.						
Tires	Check tires for damage and for correct air pressure.						
Seat Belt, Operator Guard & Seat Bar	Check the condition of the seat belt. Check the operator guard fastening bolts to make sure they are tight. Check the seat bar for correct operation.						
Safety Signs (Decals)	Check for damaged decals. Replace any decals that are not in the correct location.						
All Pivot Pins	Add grease to all the fittings.						
Hydraulic Fluid	Check fluid level and add recommended fluid as needed.						
Water Filter	Remove the trapped water.						
Wheel Nuts	Tighten wheel nuts to 105-115 ft.-lbs. (142-156 Nm) torque (Check every 8 hours for the first 20 hours).						
Engine Oil and Filter	Change oil and filter.						
Transmission Fluid	Check fluid level and add fluid as needed.						
Battery	Check the battery cables and the water level.						
Control Pedals and Steering Linkage	Check both for correct operation. Make repairs and adjustments as needed.						
Bob-Tach	Check the locking levers and wedges for their condition and correct operation.						
Brake	Check the brake for correct operation. Make adjustment as needed.						
Drive Belt (Alternator & Water Pump)	Check condition and tension of the belt.						
Drive Chains	Raise the loader and check the tension in the chains.						
Hydraulic Tubes & Hoses	Inspect for damage and leaks and replace as needed.						
Spark Arrestor Muffler	Empty spark chamber.						
Fluid Filter (25 Micron)	Replace the filter element.						
Fluid Filter (10 Micron [External])	Replace the filter element.						
Final Fuel Filter	Replace the filter element. Remove air from the system.						
Transmission Fluid Reservoir	Remove condensation, check level and add as needed.						
U-joint (Hydrostatic & Engine)	Add grease to the fittings (3).						
Seat Bar	Lubricate the detent mechanism.						
Transmission Fluid Reservoir	Drain the reservoir and fill with the correct fluid.						
Transmission Fluid Filter (10 Micron [Internal])	Replace the filter element.						

NOTE: Check the torque of the cylinder head bolts after the first 8 - 12 hours of operation. Adjust valve tappets after making torque adjustment.

3. Clean the terminal posts (Fig. 64) of the new battery. Install the battery in the battery compartment. Install the hold down clamp.

NOTE: DO NOT touch any metal with the battery terminals.

4. Install and tighten the battery cables. Connect the ground (negative) cable last to prevent sparks.

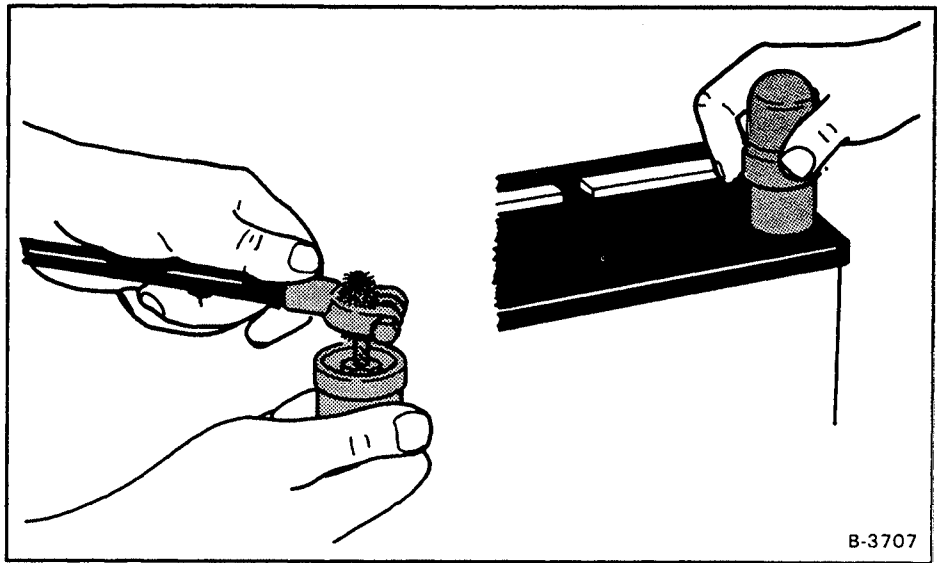


Fig. 64 Cleaning Battery Terminals

HYDRAULIC/HYDROSTATIC SYSTEM (Fig. 65)

The hydraulic and hydrostatic systems use the same hydraulic fluid reservoir.

The system has an engine driven gear pump that supplies hydraulic fluid to the control valve and to the lift and tilt cylinders.

Fluid also goes from the control valve to the hydrostatic transmission pumps to provide charge pressure and cooling flow of fluid.

There are three (3) hydraulic filters in the system which are used to clean the fluid and protect the hydrostatic system.

A large (primary) 25 micron filter is located at the right side of the Bobcat loader under the Operator Guard. One (secondary) 10 micron is located on the right side of the Bobcat loader under the Operator Guard. Another (final) 10 micron filter is located under the cover for the hydraulic/hydrostatic reservoir.

The location of the oil cooler is behind the rear door and mounted on the radiator. The oil cooler is used for cooling the hydraulic fluid before it returns to the gear pump.

HYDRAULIC/HYDROSTATIC FLUID RESERVOIR

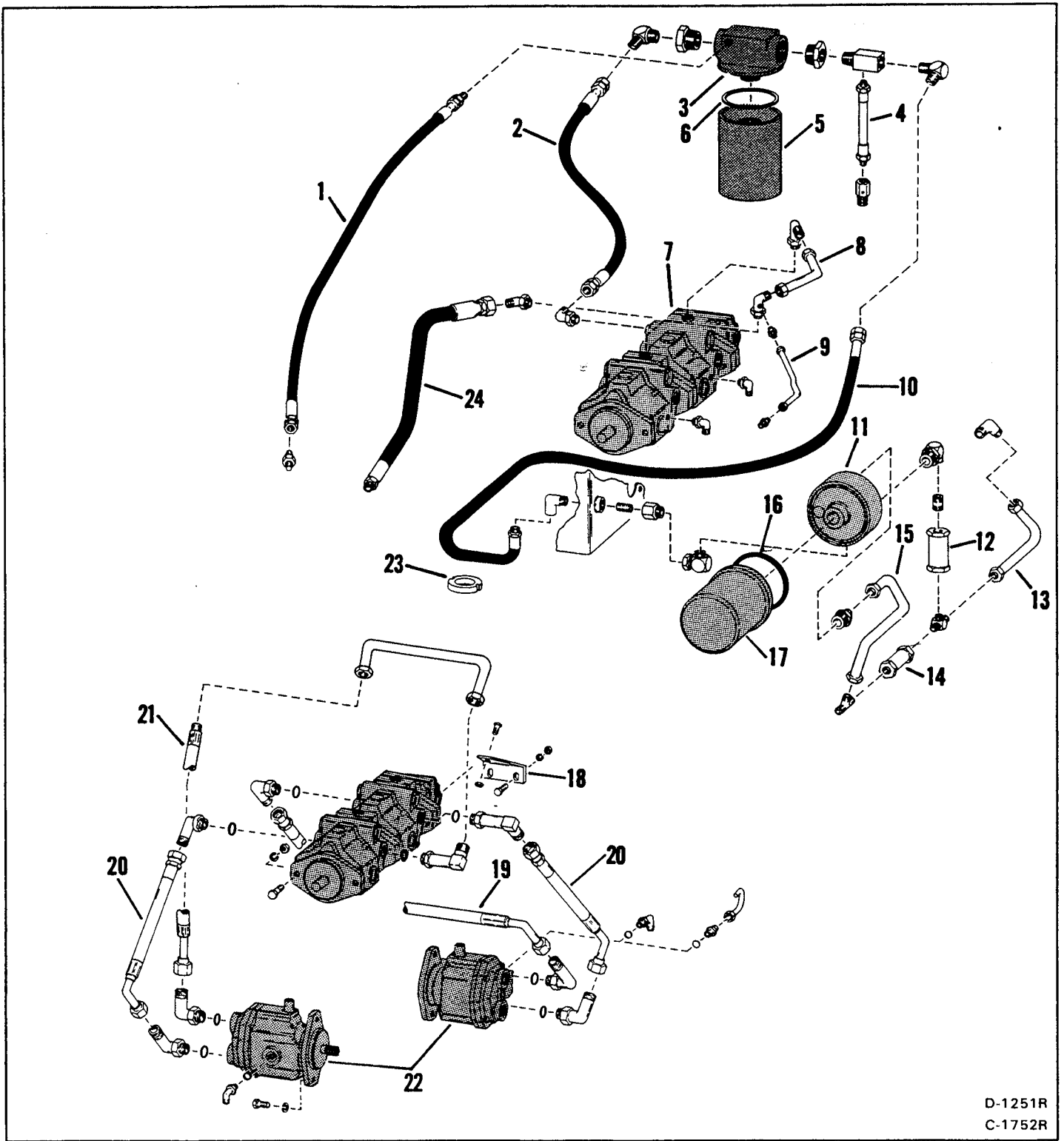
Use only the recommended fluid in the hydraulic/hydrostatic system (See "Specifications" on page 56 for the correct fluid).

TROUBLESHOOTING

The troubleshooting section is used in finding and correcting loader problems which can most often occur. Service personnel from an authorized Bobcat dealer must do most of the service procedures. They must not be done by the owner/operator. The service procedures marked D/S are to be done only by your authorized Bobcat dealer.

The pages which are referenced are used to find the correct service procedures in this manual.

TROUBLESHOOTING THE ENGINE			
PROBLEM	CAUSE	CORRECTION	PAGE
Engine will not turn over with the starter.	An open circuit breaker in wiring harness.	Find cause and repair as needed.	25
	Battery is dead.	Recharge battery or replace, find cause of dead battery.	—
	Battery cable ends are corroded.	Clean as needed.	—
	Defective starter, solenoid or wiring.	Check the starting circuit. Make repairs as needed.	D/S
Engine turns with starter but is difficult to start.	No fuel in tank.	Add fuel as needed.	21
	Restriction in fuel line.	Clean fuel line.	—
	Restriction in fuel filter.	Install new filter.	22
	Dirt or water in fuel system.	Make repairs as needed.	D/S
	Restriction in air cleaner filter.	Install new filter element.	20
	Air in fuel system.	Remove air from the fuel system.	22
	Fuel injectors have a defect.	Check and repair as needed.	D/S
	Wrong starting procedure.	Refer to correct starting procedure.	10
	Vent in fuel filler cap is plugged.	Clean as needed.	—
	Wrong grade or type of fuel.	Drain fuel and replace with correct type.	23
	Restriction in the exhaust pipe.	Clean exhaust pipe of any foreign material.	—
Engine starts but immediately stops.	No fuel in tank.	Fill the tank. (Remove air from system before starting).	21
	Restriction in fuel filter.	Replace fuel filter element.	21
	Restriction in the air cleaner.	Install a new filter element.	20
	Air in fuel system.	Remove air from the fuel system.	22
	Return line from the injectors has a restriction.	Clean and repair as needed.	D/S
	Restriction in fuel line.	Clean fuel line and fuel tank.	—
"Oil Pressure" indicator light comes on when engine is running (Low oil pressure).	Wrong grade lube oil.	Replace with correct grade for ambient temperature.	23
	Low oil level.	Fill to correct level.	23
	Pressure switch not working.	Replace switch.	D/S



D-1251R
C-1752R

HYDROSTATIC CIRCUITRY

Ref.	Description	Ref.	Description	Ref.	Description
1.	Hose	9.	Tube	17.	Filter
2.	Hose	10.	Hose	18.	Bracket
3.	Head	11.	Head	19.	Hose
4.	Hose	12.	Valve, check	20.	Hose
5.	Filter	13.	Tube	21.	Hose
6.	Seal	14.	Valve, check	22.	Motor
7.	Pumps	15.	Tube	23.	Magnet
8.	Tube	16.	Seal	24.	Hose

WICHTIG (GERMAN)

DIESER LADER IST FABRIKMÄSSIG MIT EINEM FUNKENFÄNGER-AUSPUFF AUSGERÜSTET, DER DEN U.S.D.A. -FORSTEINSATZBESTIMMUNGEN ENTSPRICHT.

DIESER FUNKENFÄNGER-AUSPUFF MUSS GEWARTET WERDEN, UM SEINE FUNKTIONSFÄHIGKEIT ZU BEHALTEN. ZUR WARTUNG DES FUNKENFÄNGER-AUSPUFFS MUSS DER FUNKENFÄNGERTOPF ALLE 100 BETRIEBSTUNDEN AUSGELEERT WERDEN.

WENN DIESE MASCHINE AUF LEICHTENTZÜNDLICHEM FORST-, GESTRÜPP- ODER GRASLAND EINGESETZT WIRD, MUSS SIE MIT EINER FUNKENFANG-ANLAGE AM AUSPUFF AUSGERÜSTET SEIN UND DIESE ANLAGE MUSS REGELMÄSSIG GEWARTET WERDEN. ZUWIDERHANDLUNG VERSTÖSST GEGEN DAS STAATSGESETZ VON KALIFORNIEN, ABSATZ 4442, PAR. C.

ÖRTLICHE GESETZE UND BESTIMMUNGEN ÜBER FUNKENFÄNGER-AUSRÜSTUNG GENAU BEACHTEN.

IMPORTANTE (SPANISH)

ESTE CARGADOR VIENE EQUIPADO DE FÁBRICA CON UN SILENCIADOR REPRESOR DE CHISPAS APROBADO POR EL SERVICIO FORESTAL DEL DEPARTAMENTO DE AGRICULTURA DE LOS E.U.

ES NECESARIO DAR SERVICIO AL REPRESOR DE CHISPAS PARA QUE ESTÉ EN CONDICIONES DE BUEN FUNCIONAMIENTO. PARA DAR SERVICIO AL REPRESOR DE CHISPAS HAY QUE VACIAR LA CÁMARA DE CHISPAS CADA 100 HORAS DE OPERACIÓN.

SI ESTÁ MÁQUINA TRABAJA EN UN BOSQUE INFLAMABLE O EN UN LLANO CON MALEZA O HIERBA SECA, DEBE ESTAR EQUIPADA CON UN REPRESOR DE CHISPAS COLOCADO EN EL SISTEMA DE ESCAPE Y SE DEBE MANTENER EL IMPLEMENTO EN BUENAS CONDICIONES DE TRABAJO. SI NO SE CUMPLE CON ESTA INDICACIÓN, SE ESTARÁ EN CONTRAVENCIÓN DE LA LEY DEL ESTADO DE CALIFORNIA, SECCIÓN 4442, PRC.

CONSULTE LAS LEYES Y REGLAMENTACIONES LOCALES PARA CONOCER LOS REQUIERIMIENTOS SOBRE REPRESOR DE CHISPAS.

IMPORTANT

THIS LOADER IS FACTORY EQUIPPED WITH A U.S.D.A. FORESTRY SERVICE APPROVED SPARK ARRESTOR MUFFLER.

IT IS NECESSARY TO DO MAINTENANCE ON THIS SPARK ARRESTOR MUFFLER TO KEEP IT IN WORKING CONDITION. THE SPARK ARRESTOR MUFFLER MUST BE SERVICED BY DUMPING THE SPARK CHAMBER EVERY 100 HOURS OF OPERATION.

IF THIS MACHINE IS OPERATED ON FLAMMABLE FOREST, BRUSH OR GRASS COVERED LAND, IT MUST BE EQUIPPED WITH A SPARK ARRESTOR ATTACHED TO THE EXHAUST SYSTEM AND MAINTAINED IN WORKING ORDER. FAILURE TO DO SO WILL BE IN VIOLATION OF CALIFORNIA STATE LAW, SECTION 4442, PRC.

MAKE REFERENCE TO LOCAL LAWS AND REGULATIONS FOR SPARK ARRESTOR REQUIREMENTS.

SEE OPERATOR'S MANUAL FOR MORE INSTRUCTIONS.

WEITERE INSTRUKTIONEN FINDEN SIE IN DER BEDIENUNGSANLEITUNG.

CONSULTA EL MANUAL DEL OPERADOR PARA MAS INSTRUCCIONES.

SE REPORTER AU MANUEL DE L'OPERATEUR POUR PLUS ENSEIGNEMENTS.
6560573

IMPORTANT (FRENCH)

CETTE CHARGEUSE EST EQUIPEE SORTIE USINE D'UN POT D'ECHAPPEMENT A PARE-ETINCELLES APPROUVE PAR LE SERVICE DES EAUX ET FORETS DES ETATS-UNIS (U.S.D.A. FORESTRY SERVICE).

IL EST INDISPENSABLE D'EFFECTUER UN ENTRETIEN REGULIER DE CE POT D'ECHAPPEMENT AFIN DE LE GARDER EN BON ETAT DE MARCHÉ. L'ENTRETIEN CONSISTE A VIDER LA CHAMBRE A ETINCELLES TOUTES LES 100 HEURES DE MARCHÉ.

SI CET ENGIN EST UTILISE SUR TERRAIN COUVERT D'ARBRES, DE BROUSSAILLES, OU D'HERBAGES INFLAMMABLES, IL DOIT ABSOLUMENT ETRE EQUIPE D'UN PARE-ETINCELLES MONTE SUR LE SYSTEME D'ECHAPPEMENT ET GARDE EN BON ETAT DE MARCHÉ. TOUT MANQUE A CE REGLEMENT CONSTITUERA UNE INFRACTION A LA LOI DE L'ETAT DE CALIFORNIE, SECTION 4442, PRC.

CONSULTER LES LOIS ET REGLEMENTS LOCAUX QUI SE RAPPORTENT AUX PARE-ETINCELLES.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL

- Thank you very much for reading the preview of the manual.
- You can download the complete manual from: www.heydownloads.com by clicking the link below



- Please note: If there is no response to CLICKING the link, please download this PDF first and then click on it.

CLICK HERE TO **DOWNLOAD** THE COMPLETE MANUAL