

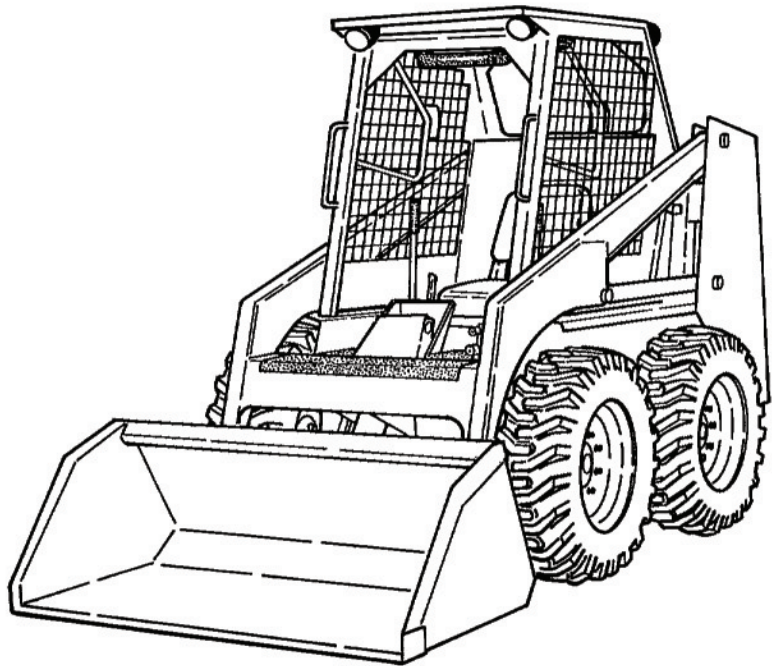
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Operation & Maintenance Manual



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6566708 (10-98) Revised 6-12)

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OPERATING INSTRUCTIONS

OPERATING
INSTRUCTIONS

ATTACHMENTS & BUCKETS FOR MODEL 640 SERIES LOADER	11
BEFORE YOU START THE ENGINE	8
CONTROLS	2
DASH PANEL	5
HYDRAULIC CONTROLS	7
LIFTING THE BOBCAT LOADER	17
OPERATING INSTRUCTIONS	1
OPERATING PROCEDURE	13
PARKING BRAKE	5
PARKING THE BOBCAT LOADER	16
SAFETY SIGNS (DECALS)	3 & 4
STARTING THE ENGINE	9
STEERING LEVERS	6
TRANSPORTING THE BOBCAT LOADER	16
THROTTLE CONTROL	5
TO STOP THE ENGINE	5

SERVICE SCHEDULE

EVERY 10 HOURS

1. Engine Oil — check level—do not overfill (See Operator's Manual for recommended fluid).
2. Engine Air Filter (empty) dust cap—change element if needed).
3. Engine Cooling System — clean debris from cooling fins, shrouds and grills—check coolant level cold, add 50% ethylene glycol—water as needed.
4. Check fan and pump drive belts for condition and tension.
5. Loader Lift Arm and Cylinder Pivot Points — lubricate with multi-purpose lithium base grease.
6. Tires — check inflation pressure, FLOTATION - 35 PSI (241 kPa), STANDARD AND 8 PLY RATING - 50 PSI (340 kPa), 5.70 x 12 - 40 PSI (275 kPa), inspect tires for cuts.
7. Engine Air System — check for leaks and damaged components.
8. General — check for loose or broken parts, damaged seat belt or operator cab, instrument operations, loose wheel nuts, oil leaks, etc.
9. Fuel Filter — remove trapped water (diesel only).

EVERY 50 HOURS

1. Engine Oil — drain hot and change filter (oil replacement only, every 25 hours on 440 loader). See Operator's Manual for recommended fluid.
2. Hydraulic Fluid — check the fluid level. See your Operator's Manual for recommended fluid.
3. Chaincase — check the fluid level. See your Operator's Manual for recommended fluid.
4. Battery — check condition.
5. Controls and Brakes — check operation, adjust if needed.

EVERY 100 HOURS

1. Ignition System — check plugs, points and timing—replace faulty parts (gasoline only).
2. Spark Arrestor Muffler — empty spark chamber.
3. Hydraulic System — change filter 440's - 540's.

EVERY 250 HOURS

1. Hydraulic System — change filter on 843.
2. Final Fuel Filter — replace filter element.
3. Drive Line — grease U-joint with approved grease recommended in Service Manual.
4. Grease seat bar pivot as needed.

EVERY 500 HOURS

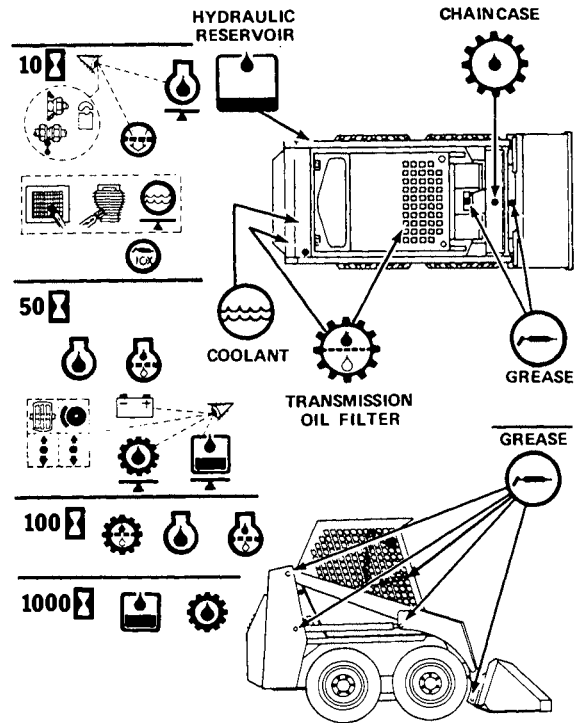
1. Hydraulic System — change bronze filter if so equipped.
2. Primary Fuel Filter — clean sediment bowl.
3. Replace Hydraulic Reservoir Breather Cap.

EVERY 1000 HOURS

1. Hydraulic Reservoir — drain fluid and replace. See your Operator's Manual for recommended fluid.
2. Chaincase — drain fluid and replace. See your Operator's Manual for recommended fluid.

HYDROSTATIC FILTER (For — 640's, 740's & 843)

1. When hydrostatic warning light comes on change filter.
- 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 manual de l'opérateur pour plus enseignements.



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Fig. 20 Service Schedule Decal

IMPORTANT

Always let the engine warm completely before you begin operation each day.

I-1002

STARTING THE ENGINE

WARNING

When operating loader, always fasten seat belt snugly, lower seat bar and keep feet on pedals.

W-1005

WARNING

When an internal combustion engine is running in an enclosed space, fresh air must be added to avoid excess exhaust fumes. If engine is stationary, vent exhaust to outside. Exhaust fumes contain odorless, invisible gases which kill without warning.

W-1010

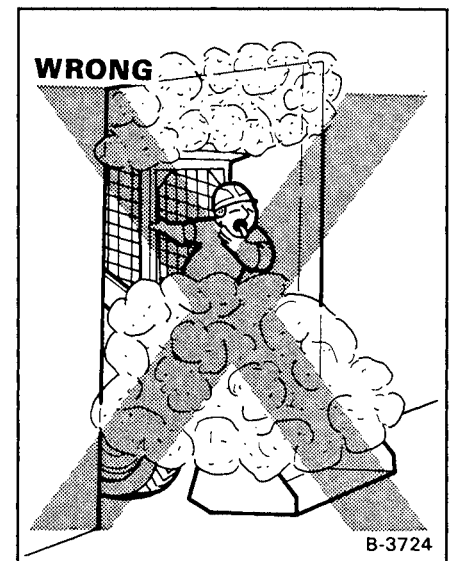


Fig. 21 Exhaust Conditions

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PREVENTIVE MAINTENANCE

AIR CLEANER SERVICE	22
AUXILIARY LOCK BOLT	38
BELT ADJUSTMENT	27
BOB-TACH	37
BRAKE PEDAL ADJUSTMENT	38
COOLANT LEVEL	26
ELECTRICAL SYSTEM	27
ENGINE LUBRICATION SYSTEM	25
ENGINE SERVICE	22
FINAL DRIVE TRANSMISSION (CHAINCASE)	35
FUEL FILTER	24
FUEL SYSTEM	23
FUEL SYSTEM SERVICE	23
HYDRAULIC/HYDROSTATIC FLUID RESERVOIR	34
HYDRAULIC/HYDROSTATIC SYSTEM	34
INSTALLING A NEW BATTERY	31
LIFT ARM STOP	20
LIFTING THE OPERATOR CAB	20
LOWERING THE OPERATOR CAB	21
LUBRICATION OF THE BOBCAT LOADER	36
PIVOT PINS	37
REMOVING AIR FROM THE FUEL SYSTEM	24
REMOVING COOLANT FROM THE COOLING SYSTEM	26
REPLACEMENT OF ENGINE OIL & FILTER	25
REPLACEMENT OF HYDRAULIC FILTER ELEMENT	34
ROLLOVER & FALLING OBJECT PROTECTION	
STRUCTURE (ROPS & FOPS)	21
SERVICE SCHEDULE	19
SPARK ARRESTOR MUFFLER	32
TIRE MAINTENANCE	35
USING AN EXTRA BATTERY (JUMP STARTING)	30

PREVENTIVE
MAINTENANCE

WARNING

Instructions are necessary before doing maintenance and specified service on this loader. See all instructions and warnings in the manual. Check warnings at the beginning of the preventive maintenance section. After doing service always check for correct function of loader.

Safety glasses or goggles are always needed for eye protection from electric arcs from shorts or welding, battery acid, compressed springs, fluids under pressure, and flying debris or loose material when engines are running or tools are used. Use eye protection approved for type of welding. Failure to obey warnings can cause injury or death.

W-1006

ENGINE LUBRICATION SYSTEM

Check the oil level each day.

To check the oil level, stop the engine and remove the dipstick at the right side of the engine (Fig. 58, Item 2).

Keep the oil level between the marks on the dipstick (Fig. 59). DO NOT fill above the top mark on the dipstick. Use a good quality motor oil that meets API Service Classification (See the Oil Chart).

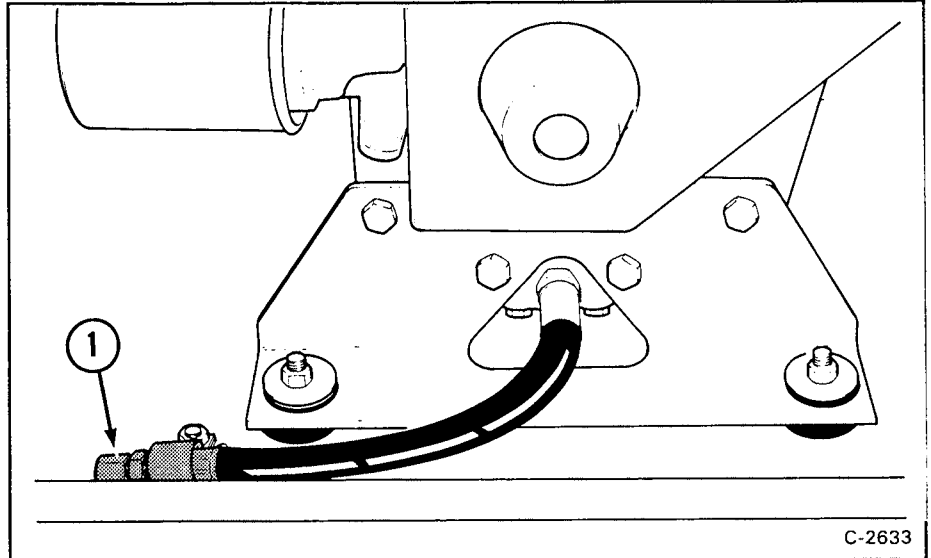
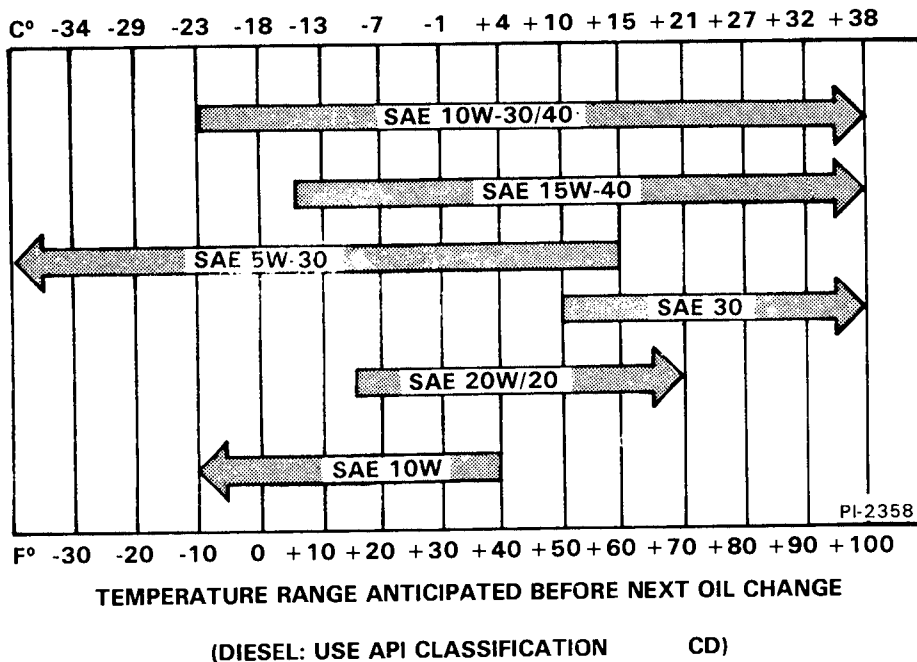


Fig. 60 Engine Oil Plug

REPLACEMENT OF ENGINE OIL AND FILTER

Replace the engine oil and filter after every 50 hours of loader operation.

RECOMMENDED SAE VISCOSITY NUMBER (LUBRICATION OILS FOR ENGINE CRANKCASE)



To replace the engine oil and filter, use the following procedure:

1. Operate the engine until it is at operating temperature. Stop the engine.
2. Open the rear door. Remove the oil plug (Fig. 60, Item 1). Remove all the oil from the engine.
3. Remove the oil filter (Fig. 61, Item 1).

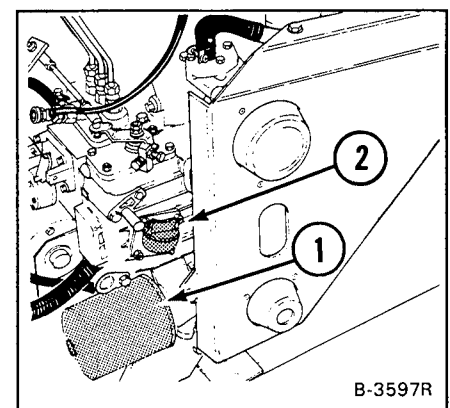


Fig. 61 Engine Oil Filter

2. Remove the dipstick at the side of the reservoir (Fig. 77, Item 1). The fluid level is good if the fluid level is between the top and bottom mark on the dipstick.
3. If the fluid level is below the bottom mark, remove the filler cap (Fig. 78) from the reservoir. Add fluid to the reservoir until the fluid level is at the top mark on the dipstick. Replace the filler cap.

Removing the Hydraulic Fluid

Remove the fluid from the hydraulic/hydrostatic reservoir and replace it with new fluid every 1000 hours of loader operation. Also replace the fluid after it has become dirty or after any major repairs.

1. Remove the filler cap from the reservoir (Fig. 78).
2. Remove the snap ring and screen from the fill pipe (Fig. 79).
3. Remove the fluid from the reservoir with a hydraulic transfer pump (Fig. 80) or a hand operated suction pump.
4. Wash the screen in clean solvent. Install the screen and snap ring in the fill pipe (Fig. 79).
5. Remove the filter element (Fig. 76) and install a new filter element.
6. Add hydraulic/hydrostatic fluid to the reservoir (See Specifications, Page 62 for the correct fluid). DO NOT fill above the top mark on the dipstick. Add approximately 3.5 gallons (13 L) of fluid, check the fluid level on the dipstick.
7. Operate the loader through all the functions. Stop the engine and check the fluid level, add fluid as needed to the reservoir.

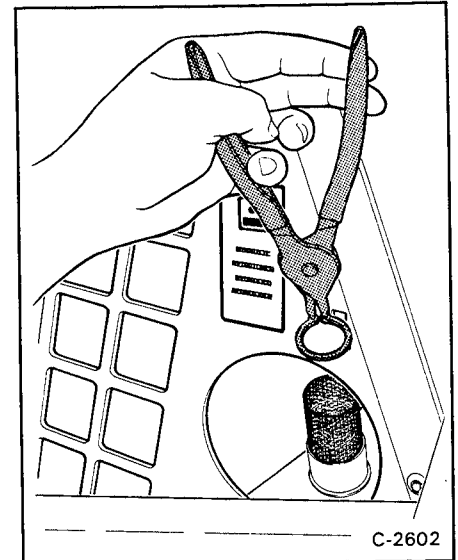


Fig. 79 Screen Snap Ring

FINAL DRIVE TRANSMISSION (CHAINCASE)

The chaincase contains the final drive sprockets and the chains. The chaincase is filled with the same type of fluid as the hydraulic/hydrostatic system and is used for chain lubrication (See Specifications, Page 62 for the correct fluid).

To check the chaincase, use the following procedure:

1. Put the Bobcat loader on a level surface.
2. Lower the lift arms and stop the engine.
3. Remove the plug at the front of the transmission (Fig. 81).
4. Add fluid through the check plug until the fluid flows from the check plug hole. Install and tighten the plug.

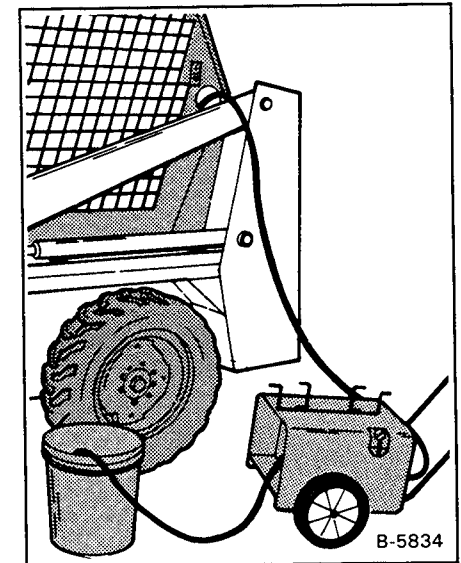


Fig. 80 Hydraulic Transfer Pump

TIRE MAINTENANCE

Check the tires regularly for wear, damage and correct tire pressure (See Specifications, Page 62).

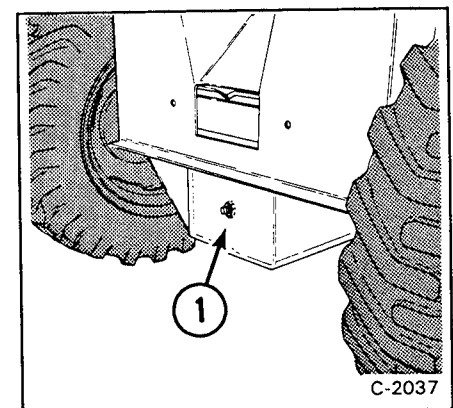
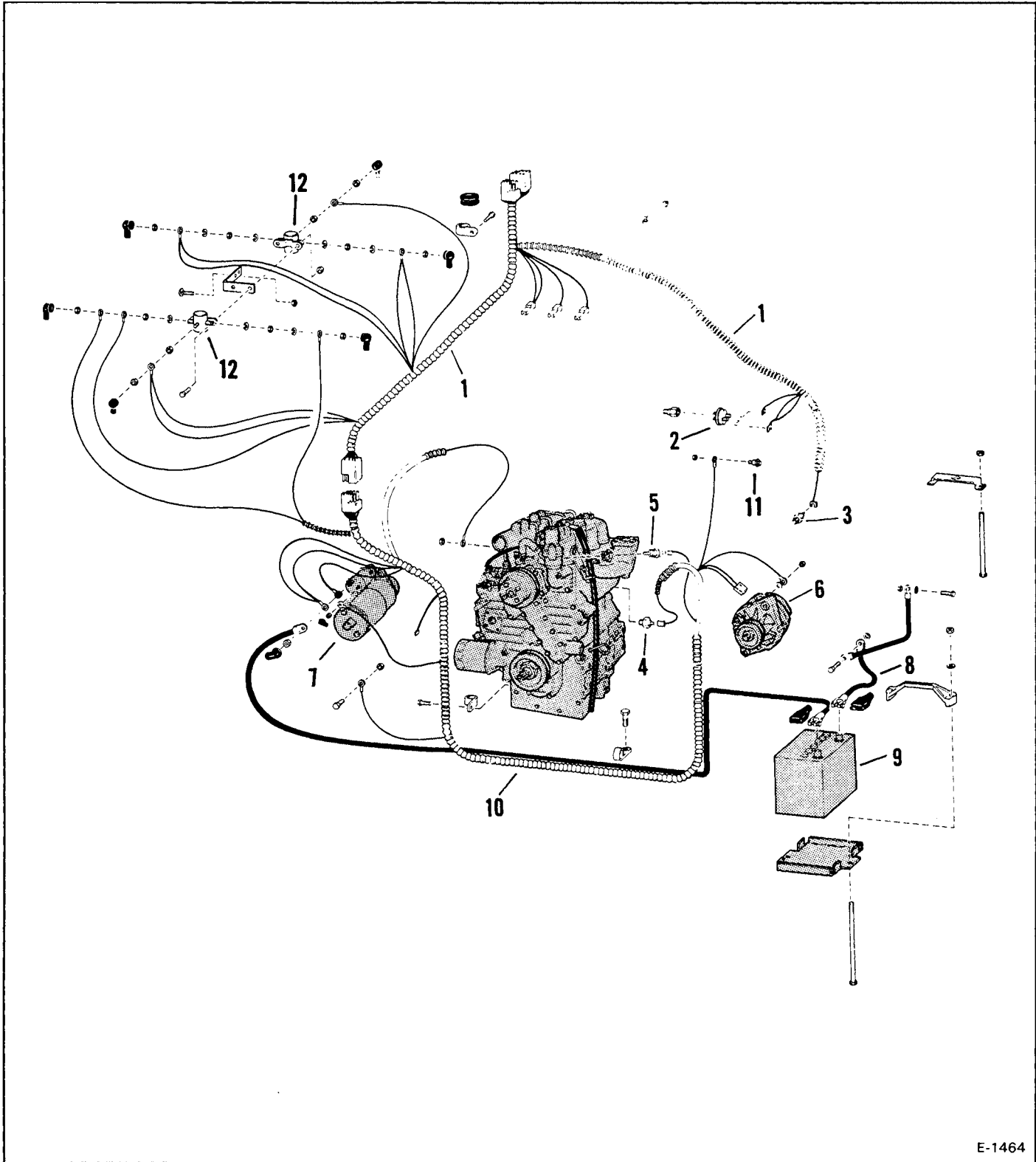


Fig. 81 Chaincase Plug

MAJOR PARTS

BRAKES	46
CONTROL PEDALS	47
DRIVE SYSTEM	45
ENGINE & ATTACHING PARTS	53 & 54
ENGINE ELECTRICAL SYSTEM	52
HAND CONTROLS	50
HYDRAULIC SYSTEM	48
MAIN FRAME	43
OPERATOR CAB ELECTRICAL SYSTEM	51
SEAT, PANELS & FUEL SYSTEM	44

MAJOR
PARTS



E-1464

ENGINE ELECTRICAL SYSTEM

Ref.	Description	Ref.	Description
1.	Harness, wiring	7.	Starter
2.	Switch, hydrostatic pressure	8.	Cable, positive
3.	Switch, hydrostatic temperature	9.	Battery
4.	Switch, eng. oil pressure	10.	Harness
5.	Sender, engine temperature	11.	Switch, filter condition
6.	Alternator	12.	Solenoid



WARNING AMONESTACIÓN WARNUNG AVERTISSEMENT

DO NOT OPERATE BOBCAT WITHOUT INSTRUCTION.

DO NOT OPERATE BOBCAT WITHOUT USING SEAT BAR, FASTENING SEAT BELT AND KEEPING FEET ON PEDALS.

DO NOT TRAVEL OR TURN WITH THE LIFT ARMS UP.

DO NOT LEAVE BOBCAT WITH ENGINE RUNNING, LIFT ARMS UP OR BRAKE OFF.

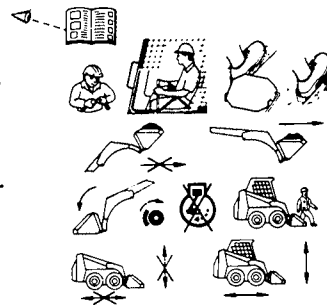
DO NOT OPERATE BOBCAT WITHOUT OPERATOR GUARD.

Failure to obey warnings may cause injury or death.

Missachtung dieser Regeln kann Verletzung verursachen und kann Tödlich sein.

El no obedecer estos avisos puede causar heridas o ser fatal.

Le non-respect de les préceptes peut entraîner des blessures ou la mort.



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'opérateur pour plus enseignements.

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WARNUNG (GERMAN)

Bobcat-Lader nicht ohne Betriebsanleitung bedienen.

Bobcat-Lader nur bedienen, wenn der Schutzbügel vorgelegt und der Sitzgurt umgelegt ist und beide Füße auf den Pedalen sind.

Nicht mit angehobenen Hubarmen fahren oder drehen.

Lader nicht verlassen, wenn der Motor läuft, die Hubarme angehoben sind, oder die Feststellbremse nicht eingelegt ist.

Lader nicht ohne Fahrerschutzkabine (ROPS) bedienen.

AVERTENCIAS (SPANISH)

No haga funcionar el cargador Bobcat sin instrucciones.

No haga funcionar el cargador sin utilizar la barra del asiento, sujetar el cinturón del asiento y mantener los pies en los pedales.

No mueva la máquina o gire con los brazos de elevación levantados.

No abandone el cargador con el motor funcionando, los brazos de elevación levantados o el freno de estacionamiento desconectado.

No haga funcionar el cargador sin la guard protectora del operador (ROPS).

AVERTISEMENT (FRENCH)

Ne pas utiliser le Bobcat sans formation préalable.

Ne pas utiliser la chargeuse sans mettre l'arceau de siège, sans boucler la ceinture de sécurité, et sans garder les pieds sur les pédales.

Ne pas rouler ou tourner avec les bras de levage relevés.

Ne pas laisser la chargeuse avec le moteur en marche, les bras de levage relevés, ou le frein de stationnement desserré.

Ne pas utiliser la chargeuse sans la structure de protection (ROPS).

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