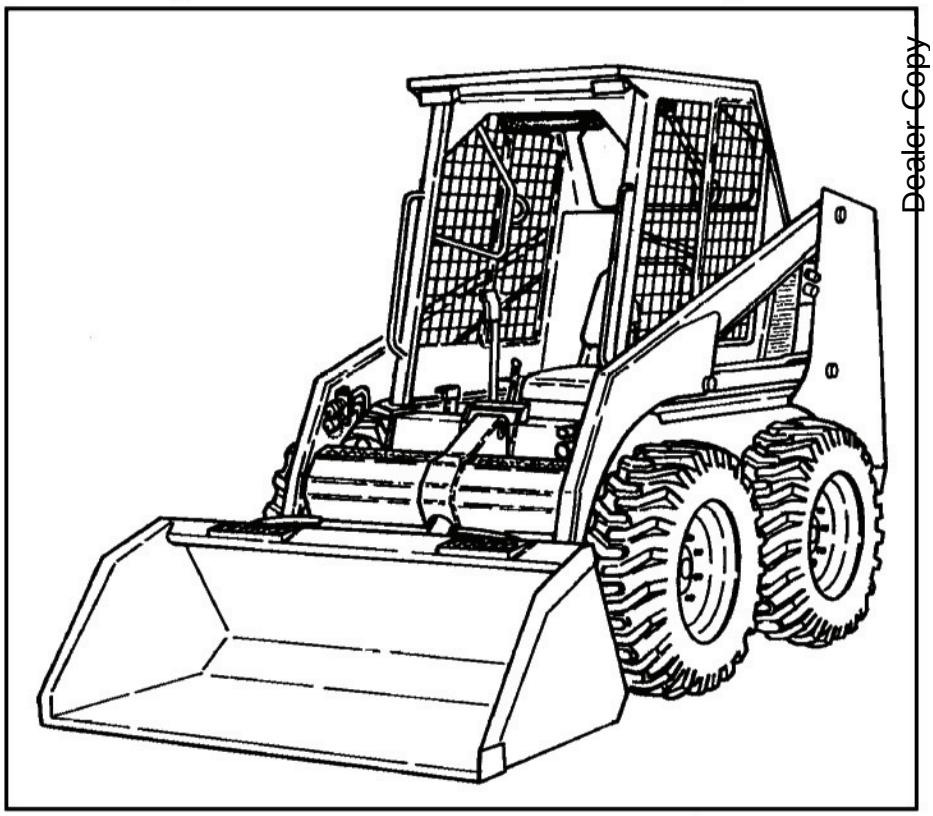
843

Operation & Maintenance Manual

(S/N 502620001 & Above)



MELROE
INGERSOLL-RAND

6566894 (4-97) Revised (6-12)

Printed in U.S.A.

bobcat®

SAFETY

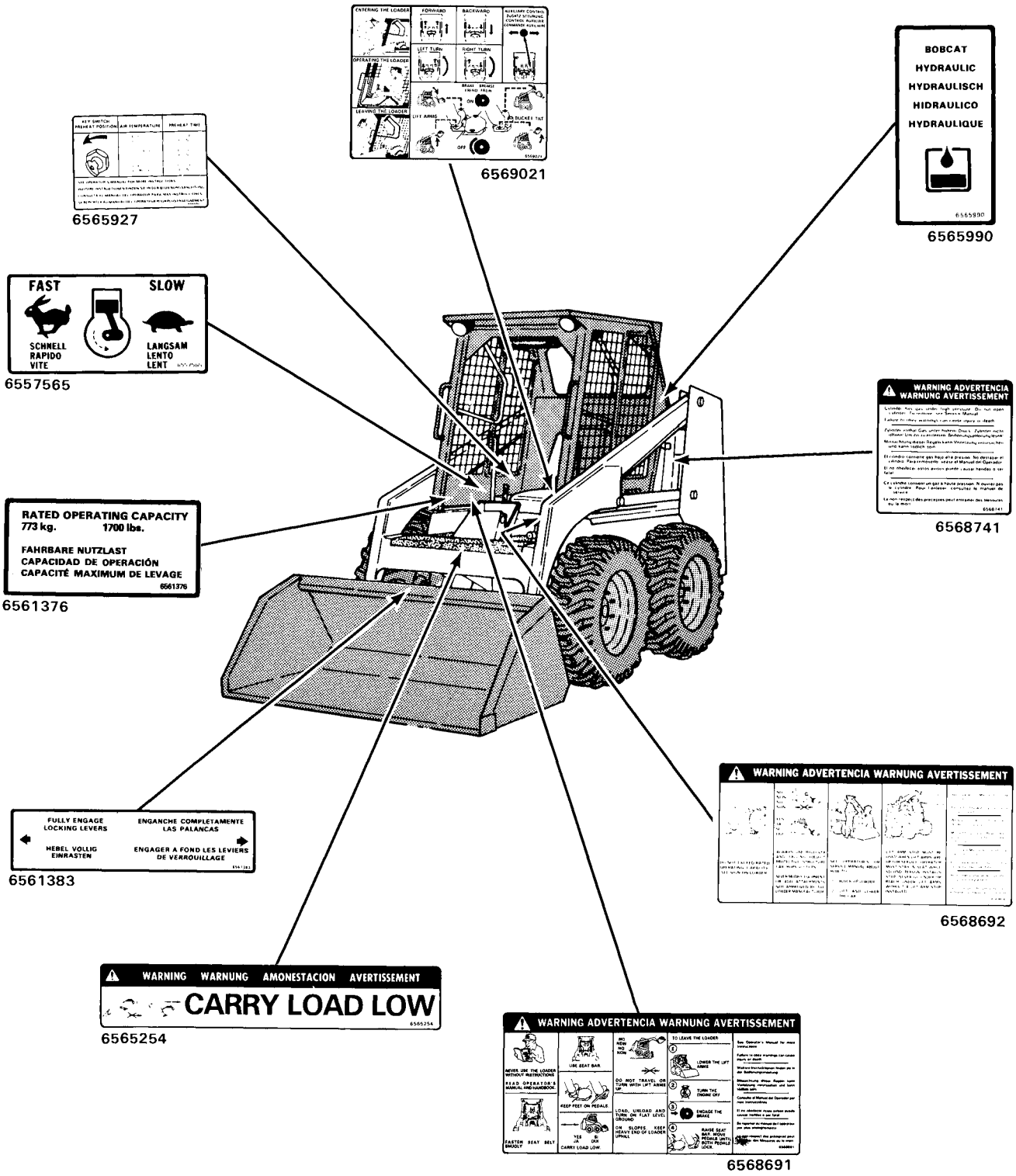


Fig. 8 Safety Signs (Decals)

Bucket or Fork Installation

The loader is equipped with the Bob-Tach system. The Bob-Tach is used for fast changing of buckets and attachments. See the attachment Operator's Manual to install other attachments.

1. Pull the Bob-Tach levers all the way up.

⚠ WARNING

Bob-Tach lever has spring tension. Hold lever tightly and release lever slowly. Failure to obey warnings can cause injury or death.

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2. Tilt the Bob-Tach forward. Drive forward to the bucket until the top edge of the Bob-Tach is completely under the flange of the bucket (Fig. 29). DO NOT hit the Bob-Tach levers on the bucket.

3. Tilt the Bob-Tach backward until the bucket is off the ground (Fig. 30) and stop the engine.

4. Push down on the Bob-Tach levers (Fig. 31) until they are in the locked position.

5. The wedges (Fig. 32, Item 1) must extend at least 1/2'' (12,7 mm) through the holes (Item 2) in the attachment.

⚠ WARNING

Bob-Tach wedges must extend through holes in attachment to keep attachment from falling off. Never use loader without both wedges in holes. Failure to obey warnings can cause injury or death.

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Bucket or Fork Removal

1. Lower the lift arms all the way and tilt the Bob-Tach forward until the front of the bucket is just above the ground. Stop the engine.

2. Pull the Bob-Tach levers all the way up.

3. Start the engine and tilt the Bob-Tach forward. Drive backward, away from the attachment.

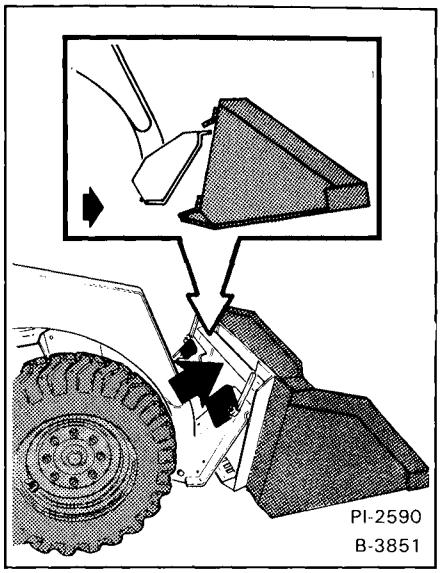

Fig. 29 Installing the Bucket

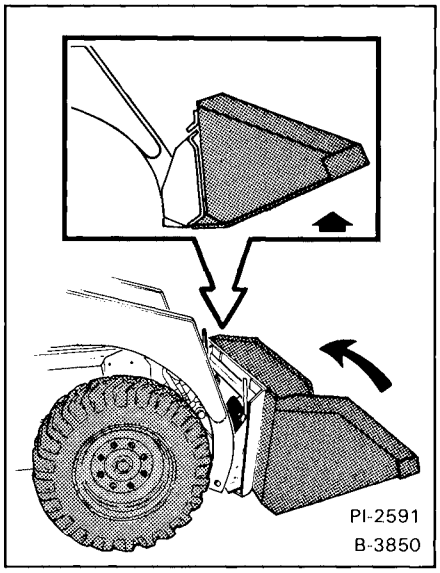

Fig. 30 Lifting the Bucket

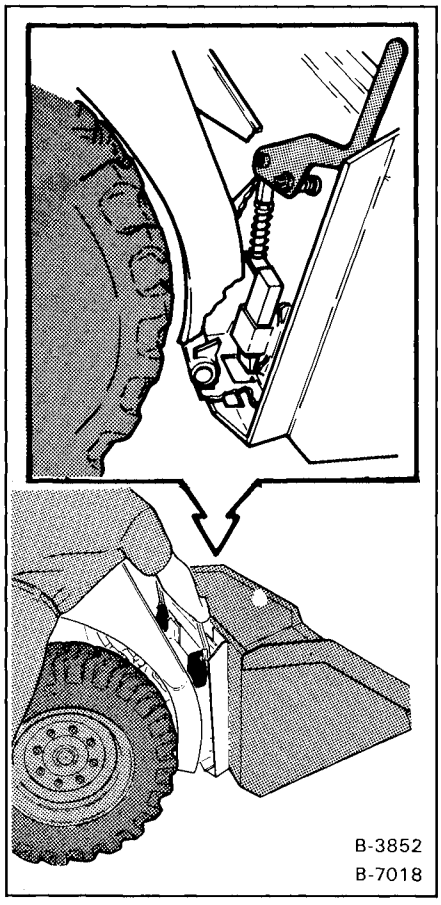

Fig. 31 Locking Bob-Tach Levers

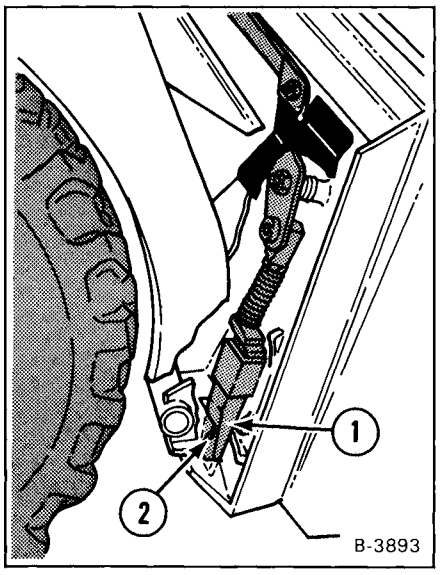

Fig. 32 Wedges in Locked Position

SERVICE SCHEDULE

The service schedule is a guide for correct maintenance of the Bobcat loader that must be done regularly. Always use these service intervals unless very hot, cold, dusty or corrosive operating conditions make it necessary to increase the frequency of service. Failure to do so will cause damage to the loader or the engine.

⚠WARNING

Instructions are necessary before doing service on loader. See warnings and instructions both at beginning and throughout this manual. After doing service or making repair or adjustment, always check function of loader. Failure to obey warnings can cause injury or death.

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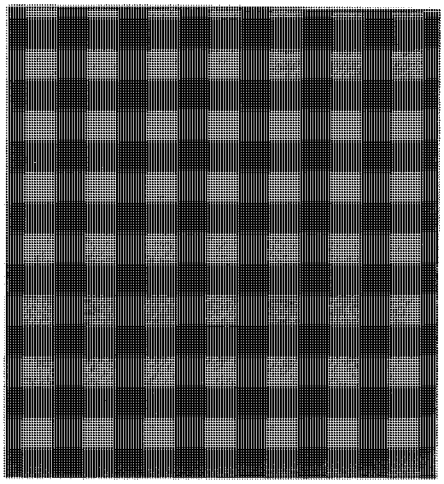

SERVICE SCHEDULE		HOURS					
ITEM	**SERVICE REQUIRED**	8-10	50	100	250	500	1000
Engine Oil	Check the oil level and add oil as needed.	■					
Engine Air Cleaner	Empty the dust cup. Replace the outer filter element only when the red ring shows in the indicator window. Check for leaks and damaged components.	■					
Engine Cooling System	Clean debris from shrouds and grills. Check coolant level in the recovery tank and add as needed.	■					
Tires	Check for damaged tires and correct air pressure.	■					
Seat Belt and Seat Bar	Check the condition of seat belt. Check the seat bar for correct operation.	■					
Safety Signs (Decals)	Check for damaged signs (Decals). Replace damaged signs (Decals) and signs (Decals) that are not in the correct location.	■					
Lift Arm and Bob-Tach Pivot Areas	Add grease to the fittings until extra grease shows.	■					
Engine Fuel Filter	Remove water from filter.	■					
Operator Cab	Check the fastening bolts, washers and nuts. Check the condition of the cab.	■					
Wheel Nuts	★Check for loose wheel nuts. Tighten to correct torque if loose.		■				
Engine Oil and Filter	Replace the oil and the engine oil filter.		■				
Battery	Check the water level. Check battery cables for corrosion. Check that the battery cables are tight. Check covers.		■				
Hydraulic Fluid, Tubelines and Hoses	Check the fluid level and add as needed. Check for damage and leaks and replace as needed.		■				
Alternator Drive Belt	Check the tension and adjust as needed.		■				
Chaincase	Check the fluid level and add as needed.		■				
Controls and Brakes	Check operation and adjust as needed.		■				
Spark Arrestor Muffler	Remove the plug and clean the spark chamber.			■			
Seat Bar	Grease pivot as needed.				■		
Steering Shaft Pivots	Grease two (2) fittings. Add oil to steering shaft.				■		
Hydraulic and Hydrostatic Filters	▲Replace filter elements.				■		
U-Joint	Grease three (3) fittings with correct grease.				■		
Engine Fuel Filter	Replace the filter element.				■		
Hydraulic/Hydrostatic Reservoir Breather Cap	Replace breather cap.					■	
Chaincase	Replace the fluid.						■
Hydraulic Fluid Reservoir	Replace the hydraulic fluid.						■

★ Check wheel nut torque every 8 hours for the first 24 hours of operation.

▲ Also replace hydrostatic filter element when the transmission warning light stays on for five (5) minutes after the hydrostatic fluid is at operating temperature.

⚠WARNING

Safety glasses or goggles are always needed for eye protection from fluids under pressure, flying debris or loose material when engine is running or tools are used. Failure to obey warnings can cause injury or death.

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2. Remove the panels above the engine under the oil cooler. Clean the oil cooler area of all debris.

3. Install the panels under the oil cooler.

4. Lift the rear grill (Fig. 70).

5. Clean the top of the radiator (Fig. 71).

To clean the debris between the radiator and oil cooler, use the following procedure:

1. Have a second person in the operator cab with the seat belt fastened, seat bar lowered and the parking brake in the locked position.

2. Start the engine. Run at full RPM.

3. Use air pressure to blow debris down from the top side of the radiator (Fig. 71a). Debris will be blown out of the opening between the radiator and frame crossmember.

   Blow air pressure from side to side starting at the rear of the core radiator and proceeding forward.

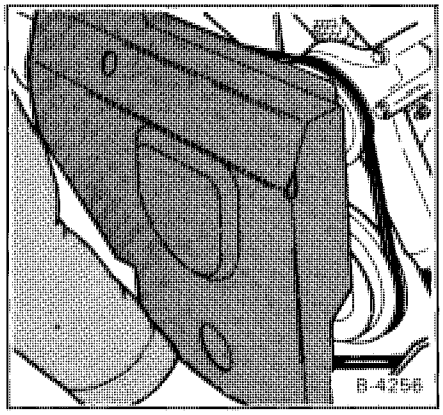


Fig. 72 Coolant Drain

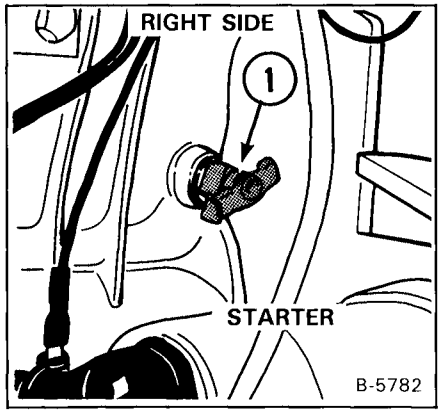


Fig. 73 Radiator Cap

ALTERNATOR BELT ADJUSTMENT

1. Stop the engine. Open the rear door and remove the belt shield (Fig. 73).

2. Loosen the adjustment bolt (Fig. 74, Item 1) and move the alternator to set the belt tension at 5/16" (7,94 mm) movement between pulleys with 15 pounds of force (Fig. 74). Tighten the adjustment bolt.

3. Install the belt shield.

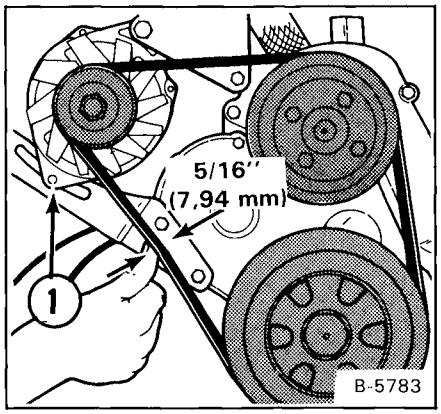


Fig. 74 Belt Adjustment

2. Remove the plug at the front of the transmission housing (Fig. 89, Item 1). If oil can be reached with the tip of your finger through the hole the level is correct.

3. If the level is low, add oil through the check plug hole until the oil level is at the hole. Install the plug.

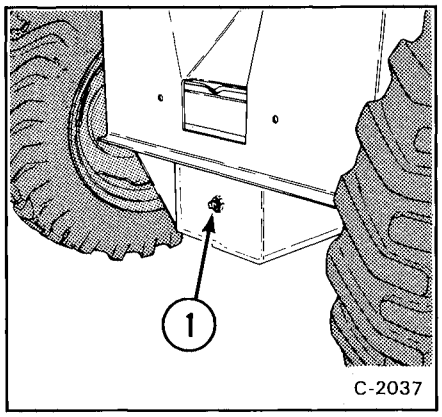


Fig. 89 Chaincase Plug

TIRE MAINTENANCE

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

Tire Rotation

Rear tires usually wear faster than front tires. To keep tire wear even, move the front tires to the rear and the rear tires to the front (Fig. 90).

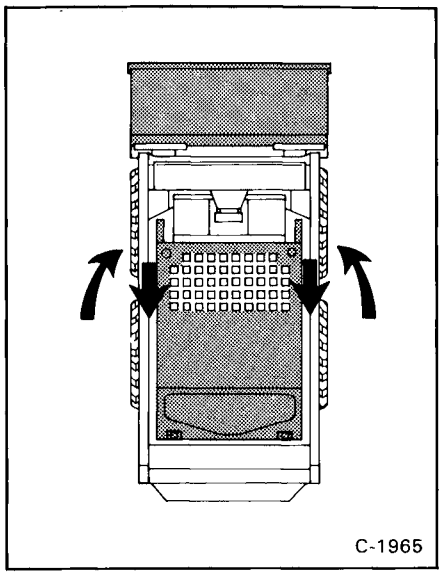
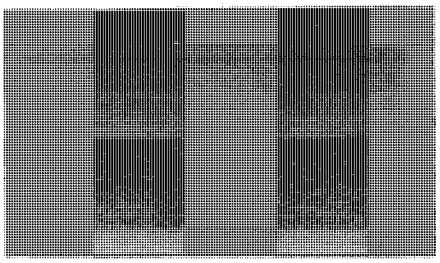


Fig. 90 Tire Rotation

Tires must be the same size and pressure for best handling of the loader. If the tires are worn different amounts, loader durability is improved by matching pairs of tires on each side of the loader.



Recommended tire pressure must be maintained to avoid excessive tire wear and loss of stability and handling. Tire pressure must be checked daily. The tires may be inflated above or below operating pressure for shipping. Check for correct pressure before operating the loader (See the Specifications Section).

When installing a tire on a rim, avoid excess pressure which can rupture the tire and cause serious personal injury. During inflation of the tire, check the tire pressure frequently to avoid over-inflation.

⚠ WARNING

Tires must not be inflated above specified pressure to avoid explosion of tire which can cause injury or death.

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The rim flange must be clean and free of rust. The tire bead and rim flange must be lubricated with a rubber lubricant before mounting the tire to avoid damage to the tire and rim.

Wheel Nuts

See the Service Schedule (Page 19) for the service interval to check the wheel nuts.

Correct torque is 115 ft.-lbs. (155 Nm).

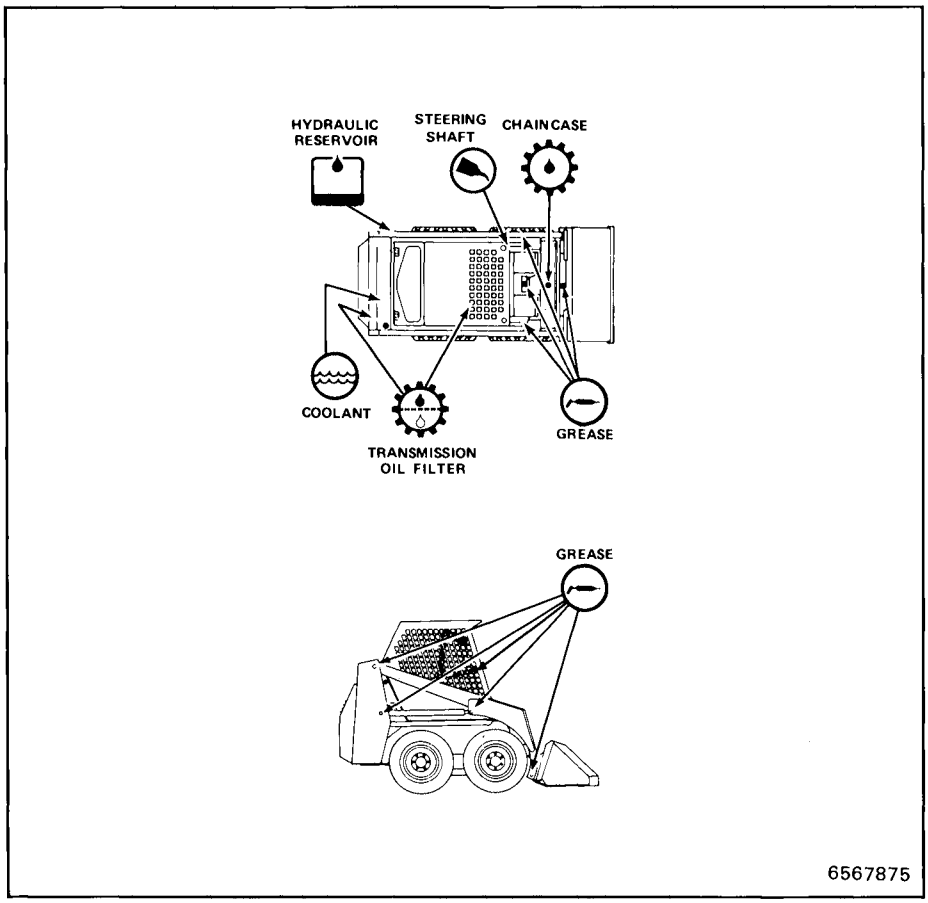
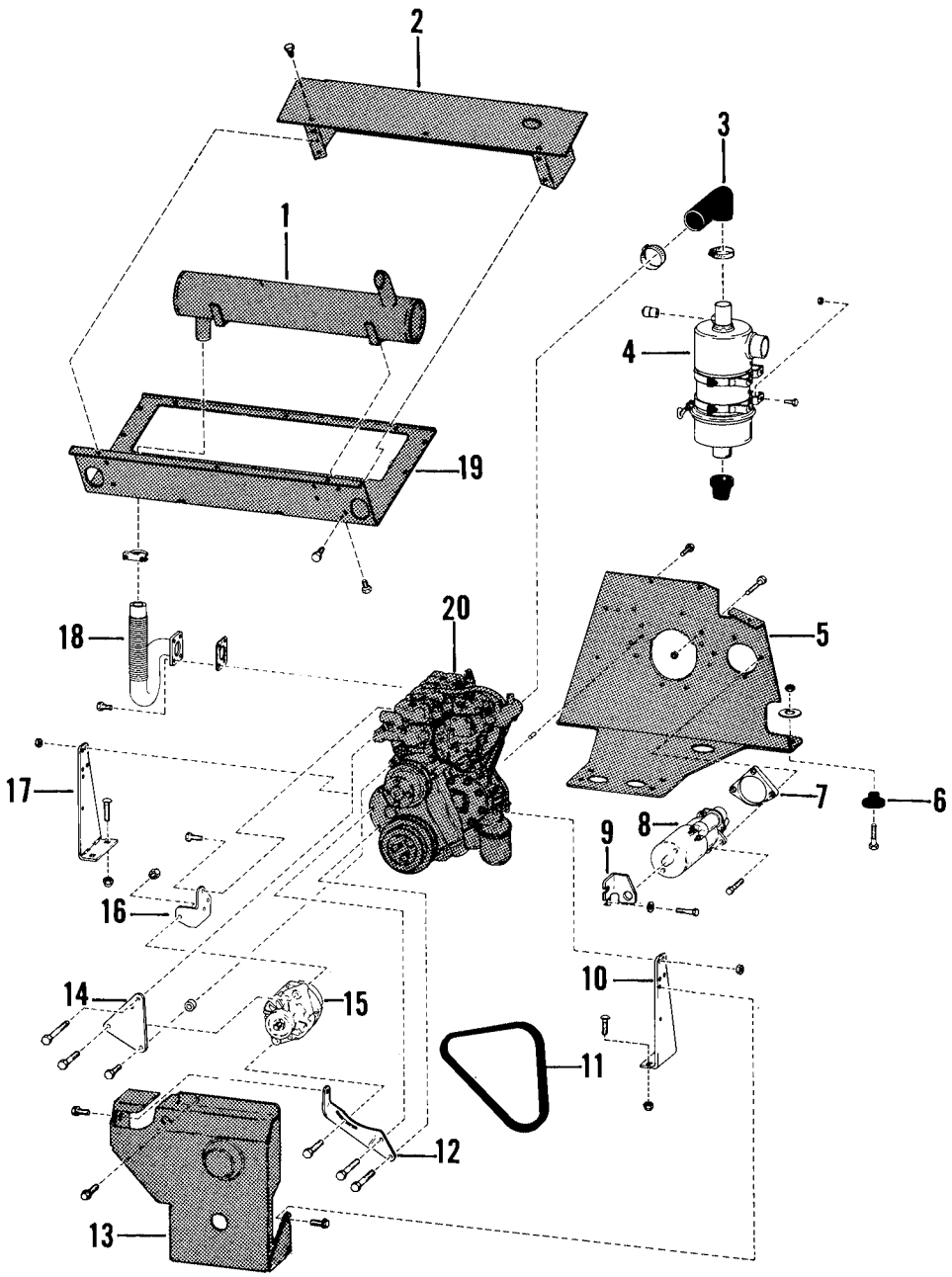


Fig. 91 Lubrication Points

MAJOR PARTS



ENGINE & ATTACHING PARTS

Ref.	Description	Ref.	Description	Ref.	Description
1.	Muffler	8.	Starter	15.	Alternator
2.	Shield	9.	Bracket	16.	Bracket
3.	Hose	10.	Mount, engine	17.	Mount, engine
4.	Air Cleaner	11.	Belt	18.	Tube, exhaust
5.	Mount, engine	12.	Bracket	19.	Shield
6.	Mount, rubber	13.	Guard	20.	Engine
7.	Spacer	14.	Bracket		