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MANUAL PREVIEW

Bobcat

Operator's Manual

500, 600 & 610

Belt Drive

Skid Steer

Operator's Manual

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BC-O-500,600



bobcat

**500
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**OPERATION & MAINTENANCE
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CONTENTS

GENERAL OPERATION INSTRUCTIONS

MAJOR PARTS IDENTIFICATION

SERVICE AND MAINTENANCE

SPECIFICATIONS

TROUBLESHOOTING

OPERATION

SERVICE

TROUBLESHOOTING

SPECIFICATIONS

MAJOR PARTS
IDENTIFICATION

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TO LOCATE DESIRED SECTION, PLACE THUMB ON
RESPECTIVE TAB AND FLIP PAGES UNTIL CORRE-
SPONDING SECTION TAB IS REACHED.

M-500, M-600 & M-610 Loader
Owner's Manual

GENERAL OPERATION INSTRUCTIONS

OPERATION

BOB-TACH SYSTEM	6
CONTROLS, ENGINE	2
CONTROLS, DRIVE	2
CONTROLS, LOADER	2
COUNTERWEIGHTING	6
INSTRUMENTATION	1
OPERATING PROCEDURE	5
OPERATION, UNDERGROUND	9
SERVICE SCHEDULE, PREVENTATIVE MAINTENANCE	12
TRANSPORTING	11

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M-500, M-600 & M-610 Loader
Owner's Manual

SERVICE AND MAINTENANCE

ADJUSTMENTS, CONTROL PEDALS	23
ADJUSTMENTS, DIRECTIONAL CONTROLS	16
ADJUSTMENTS, DRIVE CHAINS	19
ADJUSTMENTS, VARIABLE SPEED	17
AIR CLEANER, ENGINE	24
CABLE REEL, ELECTRIC MOTOR	34
CABLE REPLACEMENT, ELECTRIC MOTOR	32
COOLING SYSTEM, ENGINE	30
ELECTRIC MOTOR SERVICE	32
ELECTRICAL SYSTEM	31
EXHAUST MUFFLER	27
FUEL SYSTEM, GASOLINE AND LP GAS	25
FUEL SYSTEM, DIESEL	26
HYDRAULIC SYSTEM	21
LUBRICATION SYSTEM, ENGINE	28
LUBRICATION SYSTEM, LOADER	15
TIRES	15

SERVICE

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Use a fine carborundum stone and carefully dress down any shaft nicks and scratches (Figure 58).

2. Look for pinholes at the cylinder ports. These are usually evidenced by external leakage. Pinholes can sometimes be "peened" shut with a hammer or safely welded by gas or arc welding if the cylinder piston is moved (hydraulically) in the case to an area away from the point of weld. The arc must be grounded to the cylinder case, not the shaft, to prevent arcing between the case and shaft. Serious problems should be referred to your dealer.
3. Look for dents in the cylinder case. Dents will cause the piston to be worn flat and internal leaking will result. Repair of dented cylinder cases is generally not economical. The damaged cylinder should be replaced with a new one.
4. Fluid leaking out of the shaft end of the cylinder is an indication that the head seal is damaged or worn. Replacement of cylinder head seals requires disassembly of the cylinder and should be accomplished by your dealer.

LIFT CIRCUIT CHECKS (Internal Leaks):

1. Lift Control Valve Section: If the lift arms will not stay up when raised and there is no visible external loss of fluid anywhere in the hydraulic system, there is a leak in the lift control valve. The spool may not be centering in the valve body when the pedal is released, or the valve may be worn or cracked. Control valve repair should be accomplished by your dealer.
2. Lift Cylinders: Raise the front of the machine off the ground by tilting the bucket down (Figure 59). If the lift arms will not support the machine (bucket remains tilted, but machine settles due to movement of the shaft in the cylinders), a piston seal in one or both of the cylinders is leaking or the cylinder bore is scored and should be repaired or replaced.

TIPT CIRCUIT CHECKS (Internal Leaks):

1. Tilt Control Valve Section: Raise the front of the machine by tilting the bucket down. If the bucket will not support the machine (boom cylinder shaft remains stationary, but the machine settles due to movement of the tilt cylinder shaft), the tilt control valve is leaking. The valve spool may not be centering in the valve body when the pedal is released, or the valve may be worn or cracked. Control valve repair should be accomplished by your dealer.
2. Tilt Cylinders: Load the bucket and roll it back as far as it will go. If the bucket will not remain tilted back, the piston seal in one or both of the cylinders is leaking or the cylinder bore is scored and should be repaired or replaced (Figure 60).

QUICK COUPLERS

Lack of proper care of quick couplers often causes hydraulic problems. Coupling together dirty connectors puts foreign material directly into the hydraulic system.

Protective caps or plugs should always be used when the couplers are separated (Figure 61).

Before connecting an attachment, always flush and wash both mating points with solvent or hydraulic fluid.

CONTROL PEDAL LINKAGE ADJUSTMENT

The three foot pedals may be adjusted for operator comfort and convenience. Shortening or lengthening the control linkage, located under the floorboard, changes the tilt of the pedal (Figure 62). Disconnect the pedal, loosen the locking nut and turn the yoke on the rod for desired adjustment.

NOTE: It may be necessary to adjust the auxiliary hydraulic control pedal (center pedal) linkage or the lift control pedal (left pedal) linkage so that the pedals will remain in the overcenter position.

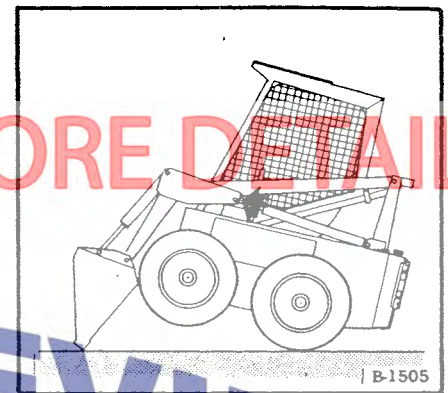


Fig. 59 Checking for Leaks (Lift Circuit)

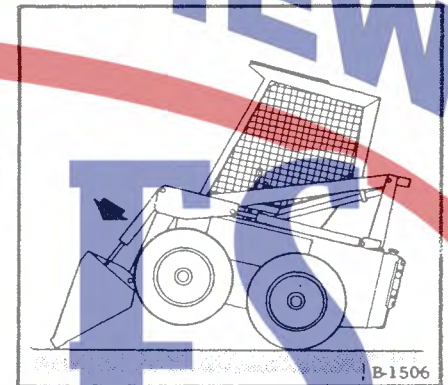


Fig. 60 Checking for Leaks (Tilt Circuit)

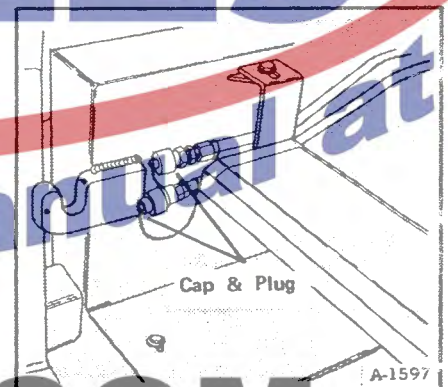


Fig. 61 Quick Coupler Cap & Plug

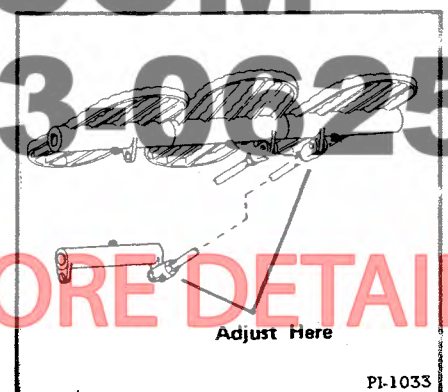


Fig. 62 Control Pedal Adjustment

TROUBLESHOOTING

ENGINE

35

DRIVE

38

HYDRAULIC

40

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MANUAL PREVIEW

TR

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SPECIFICATIONS

DIMENSIONAL	43
M-500	44
M-600 BUREAU OF MINES APPROVED	46
M-600 DEUTZ	45
M-600 ELECTRIC	46
M-600 PETTER	45
M-610 WISCONSIN	44

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SPECIFICATIONS

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M-500, M-600 & M-610 Loader
Owner's Manual

MAJOR PARTS IDENTIFICATION

ELECTRICAL CIRCUITRY	54
ELECTRIC MOTOR REEL AND MAST	53
DEUTZ ENGINE AND ATTACHING PARTS	51
DRIVE SYSTEM	48
KOHLER ENGINE AND ATTACHING PARTS	49
LOADER HYDRAULICS	56
MAIN FRAME	47
MAIN FRAME HYDRAULIC CIRCUITRY	55
PETTER ENGINE AND ATTACHING PARTS	52
WISCONSIN ENGINE AND ATTACHING PARTS	50

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