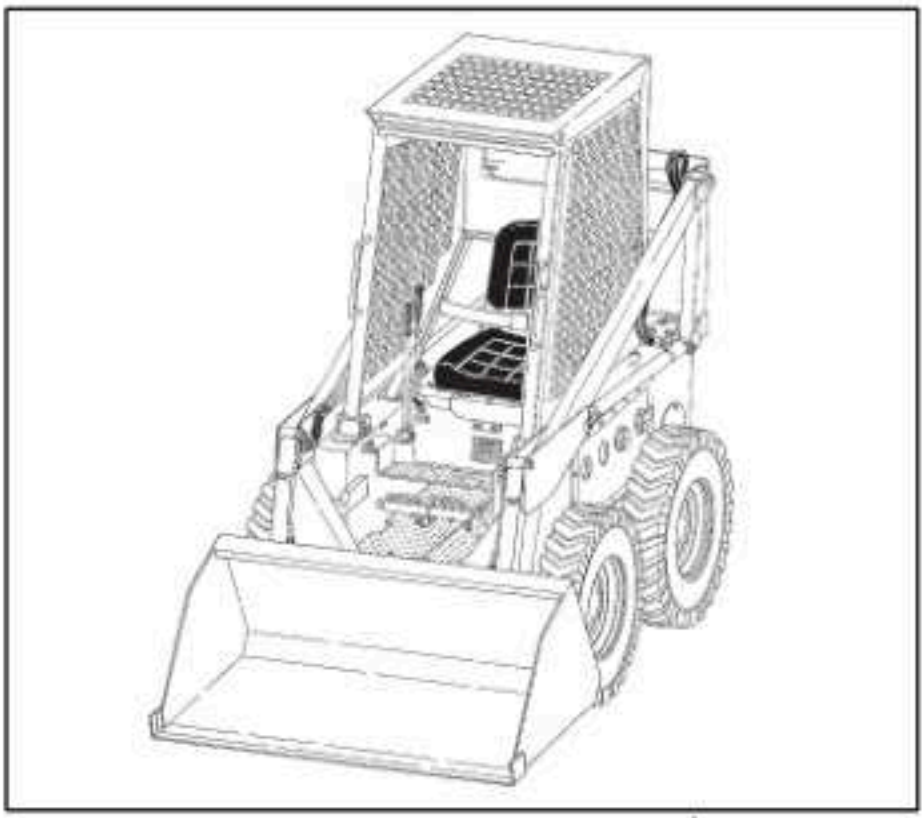
600

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610

611

Service Manual



MELROE
INGERSOLL-RAND

6556276 (6–87)

Printed in U.S.A.

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FOREWORD

This manual provides instruction for proper routine servicing and adjustment of the Bobcat, and detailed overhaul instructions of the power train, loader hydraulic/hydrostatic system and general mainframe components.

Refer to the Owner's Manual for general operating instructions (Starting Procedure, Daily Check, Bucket Operation, Minor Maintenance, etc.).

A general inspection of the following items should be made whenever the machine has undergone service or repair:

1. Check hydraulic fluid level, engine oil level and fuel supply.
2. Inspect for any sign of fuel, oil or hydraulic fluid leaks.
3. Lubricate the machine.
4. Check battery condition, electrolyte level and cables.
5. Inspect air cleaner system for damage or leaks. Check element and make replacement, if necessary.
6. Check alternator drive belt for condition and tension.
7. Check for loose drive chains by lifting the rear of the machine and turning the rear wheels by hand.
8. Check tires for wear and pressure.
9. Check the Bob–Tach attachment for condition. Inspect the wedges for damage or wear.
10. Inspect safety items for condition (ROPS Guard, Seat Belt, Safety Treads, Lights, etc.).
11. Make a visual inspection for loose or broken parts or connections.
12. Operate the loader, checking all functions.

Advise the owner if any of the above items are in need of repair.

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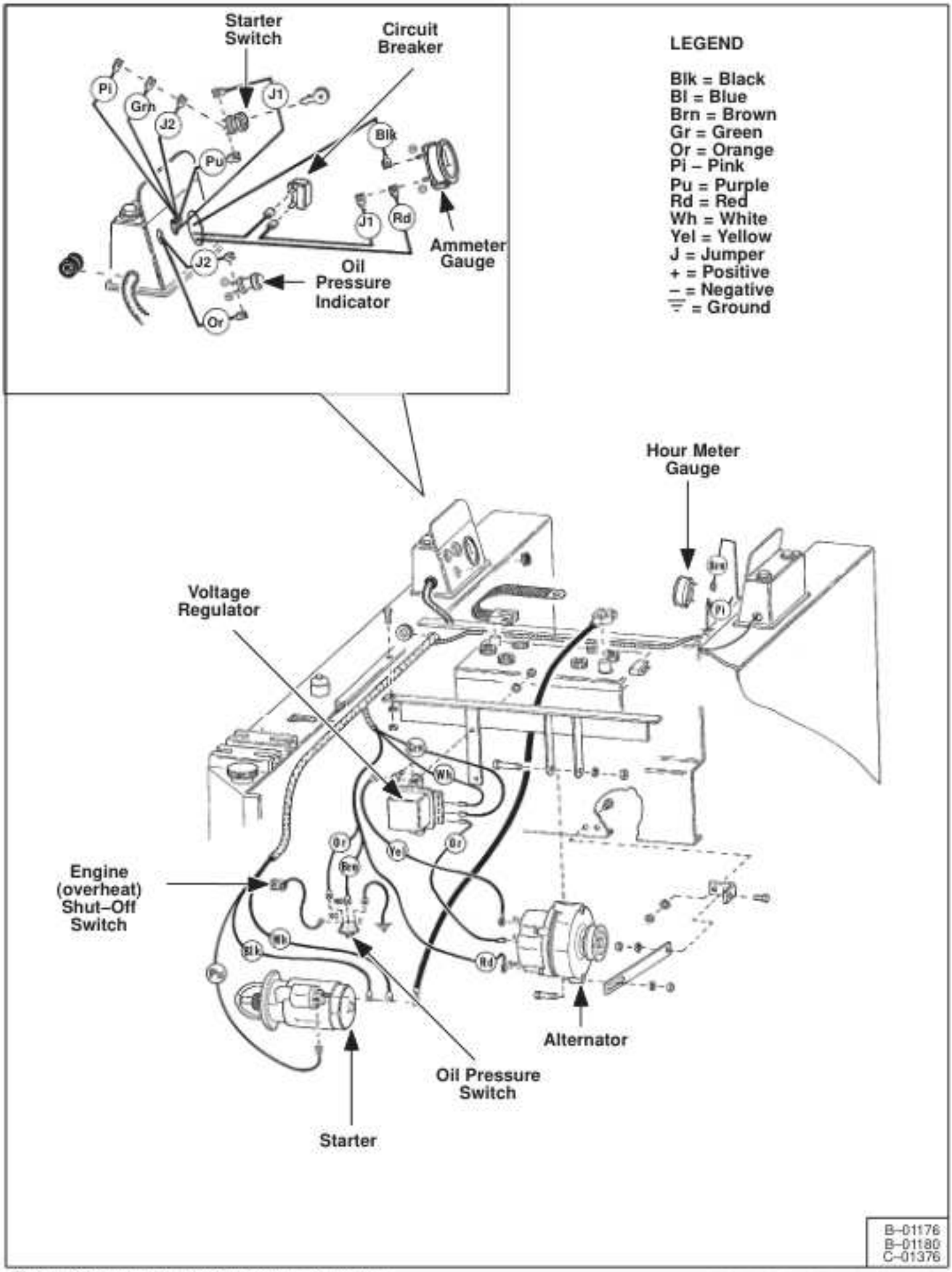


Fig. 1–55 Electrical Circuitry (Petter W/Delco Alternators)
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PROBLEM	CAUSE	CORRECTION	Ref.
Lift arms drift with bucket empty.	Dirty check valve at the left control valve section.	Clean, check valve.	
	Lift control linkage is out of adjustment.	Make adjustments of control linkage so spool centers correctly in the valve in neutral position.	
Rough control valve movement.	The control pedals are rough because of no lubrication.	Lubricate and clean away old grease.	
	The spool centering spring inside the valve is broken.	Install new spring.	
	The control valve housing is out of line because of wrong fastening.	Fasten valve group with only the three outside bolts, putting shims under the valve on the bolts to fasten it away from plate.	
Loose of hydraulic fluid in hydraulic system, (external).	Oil may be leaking beyond any of these seals or gaskets: 1. Clutch shaft caps. 2. Gearcase side panels. 3. Axle. 4. Upper jackshaft. 5. Lower jackshaft fastenings. 6. Control lever pivots. 7. Clutch shafts fasteners.	Check all bolts and nuts for looseness. Make repairs when there is leakage beyond seals or gaskets. Fill oil in reservoir to make up for lost oil. Check all seals and replace any allowing oil loss.	SEE SECTION 4
	Oil has been used to fill the hydraulic system of a new attachment.	Add new hydraulic oil.	
	Oil leak through hole on welded tank joint.	Check for leaks in the frame tanks and weld.	
	Oil is leaking beyond the lift or tilt cylinder shaft seals.	Install shaft seals and inspect the cylinder shafts for damage. Add new oil.	
	Loose hydraulic connections in the hydraulic systems.	Tighten the connections or install them when they don't seal. Add new oil.	
	Oil is leaking through holes at the cylinder openings.	Remove the cylinder and weld holes. Add new oil.	
	Oil is leaking beyond the variable speed drive swivel seals.	Install seals. Add new oil.	
Hydraulic cylinder leaks (internal).	Case is damaged, causing piston to wear flat and seal to leak oil.	Install new cylinder.	
	Case is rough beyond the piston at that point.	Install new cylinder case and piston seals.	

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