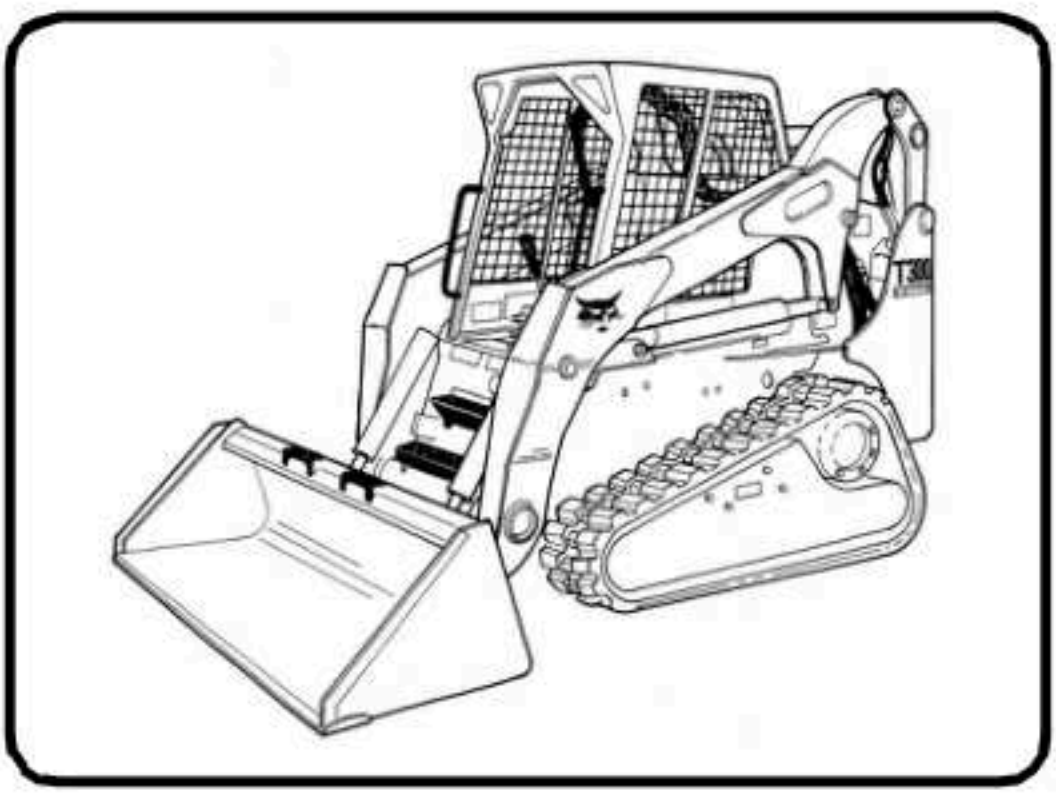
Bobcat®

Service Manual
T300 Compact Track Loader

S/N A5GU20001 & Above
S/N A5GV20001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6987045 (7-08)

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ACS- ADVANCED CONTROL SYSTEM
AHC- ADVANCED HAND CONTROL SYSTEM
BICS™-BOBCAT INTERLOCK CONTROL SYSTEM

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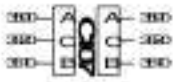
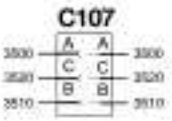
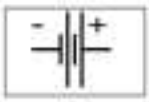
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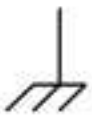
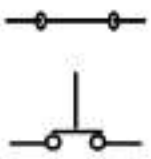
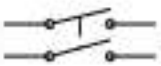
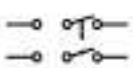
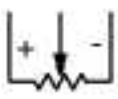
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Glossary Of Electrical Symbols

SYMBOL	DESCRIPTION
	CONNECTIONS
	CONNECTOR - Harness - Used for connecting 2 harnesses together or a harness to a component. The connector can vary from a single pin to any number of pins (Example: 3 pin connectors shown). The connector pins can be numbered alphabetical (shown) or numerical (1, 2, 3 etc.). The harness wires numbers are called out next to the connector (Example: 3500).
	The connector number is called out next to the connector (Example: C107). These connector numbers are used for schematic identification only and do not appear on the harness or connector.
	COMPONENTS
	BATTERY - Used for supplying and storing electrical power for the machine.
+	POSITIVE ELECTRICAL CIRCUIT - Indicates positive battery circuit.
-	NEGATIVE ELECTRICAL CIRCUIT - Indicates battery ground circuit.
	ALTERNATOR - Used to create the electrical current to supply voltage to the battery and components.
	STARTER - Uses battery current to start the machine engine.
	GROUND - Used to represent an external ground connection.

SYMBOL	DESCRIPTION
	COMPONENTS
	GROUND - Frame - Used to represent an component that is internally grounded.
	LIGHT -
	SWITCH - Single Pole - Single Throw (ON-OFF) Normally Open
	SWITCH - Single Pole - Single Throw (ON-OFF) Normally Closed.
	SWITCH - Single Pole - Double Throw (ON-OFF-ON) - This switch can be in any of three positions. (Some switches are spring activated to return them to a certain position when released.)
	SWITCH - Double Pole - Single Throw (ON-OFF) Open and Closed positions will be specified depending on switch application.)
	SWITCH - Double Pole - Double Throw (ON-OFF) Open and Closed positions will be specified depending on switch application.
	POTENTIOMETER - Variable resistance - Provides variable resistance.

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Troubleshooting (Standard And ACS)

The following troubleshooting chart is provided for assistance in locating and correcting problems which are most common. Many of the recommended procedures must be done by authorized Bobcat Service Personnel only.

⚠ WARNING

AVOID INJURY OR DEATH

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

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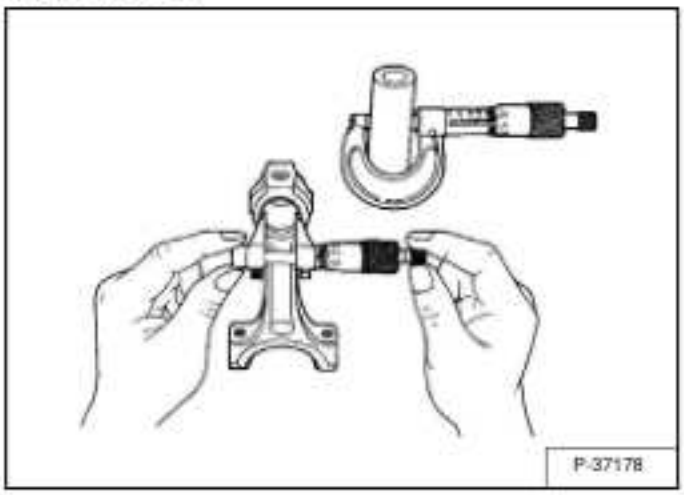
PROBLEM	CAUSE
Back-up alarm will not sound when the operator moves both steering levers in the reverse position.	1, 2, 3, 4, 5, 6, 7
Back-up alarm sounds when steering levers in neutral / forward position.	2, 6, 7

KEY TO CORRECT THE CAUSE
1. The ground connection is not making a good contact.
2. The back-up alarm switches are damaged.
3. The alarm is damaged.
4. The alarm or back-up switch wires are disconnected.
5. Check the fuses.
6. The wiring is damaged.
7. The back-up alarm switches need adjusting.

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Piston And Connecting Rod - Servicing (Cont'd)

Figure 70-90-12



Measure the O.D. of the piston pin where it contacts the bushing with an outside micrometer **[Figure 70-90-12]**.

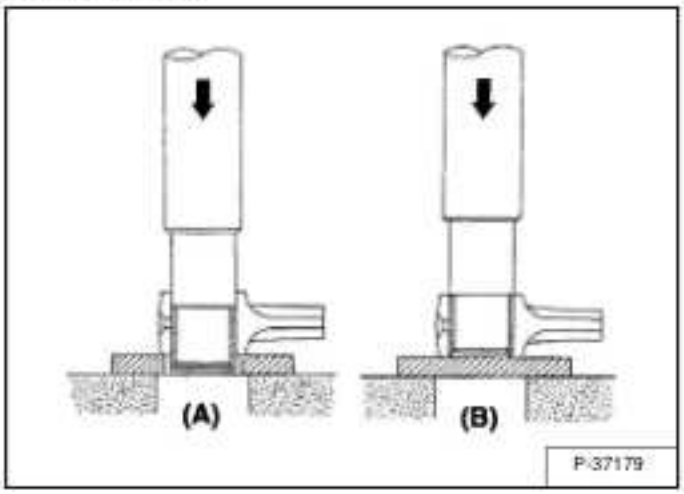
Measure the I.D. of the piston pin bushing at the connecting rod small end with a cylinder gauge **[Figure 70-90-12]**.

If the clearance exceeds the allowable limit, replace the bushing. If it still exceeds the allowable limit, replace the piston pin.

Oil clearance between piston pin and small end bushing	Factory spec.	0.00079 - 0.0015 in. (0,020 - 0,040 mm)
	Allowable limit	0.0059 in. (0,15 mm)

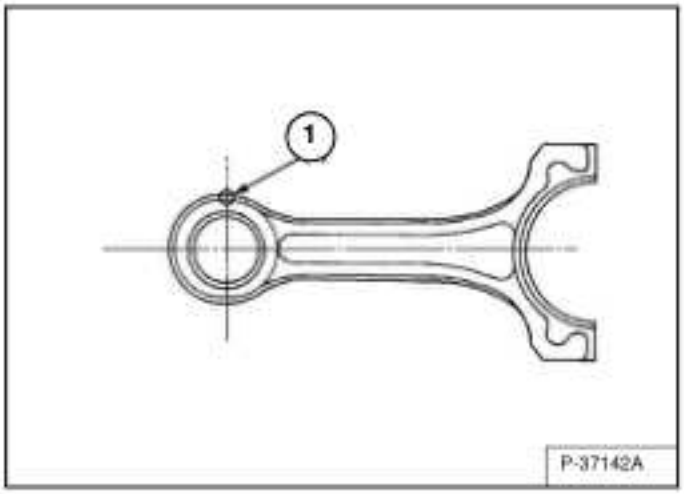
Piston pin O.D.	Factory spec.	1.1814 - 1.1815 in. (30,006 - 30,011 mm)
Small end bushing I.D.	Factory spec.	1.1824 - 1.1829 in. (30,031 - 30,046 mm)

Figure 70-90-13



Press out the used bushing using a small end bushing replacing tool **[Figure 70-90-13]**.

Figure 70-90-14



Clean a new small end bushing and bore, and apply engine oil to them.

Insert a new bushing onto the tool and press-fit it with a press so that the seam (Item 1) **[Figure 70-90-14]** of the bushing is flush with the connecting rod.

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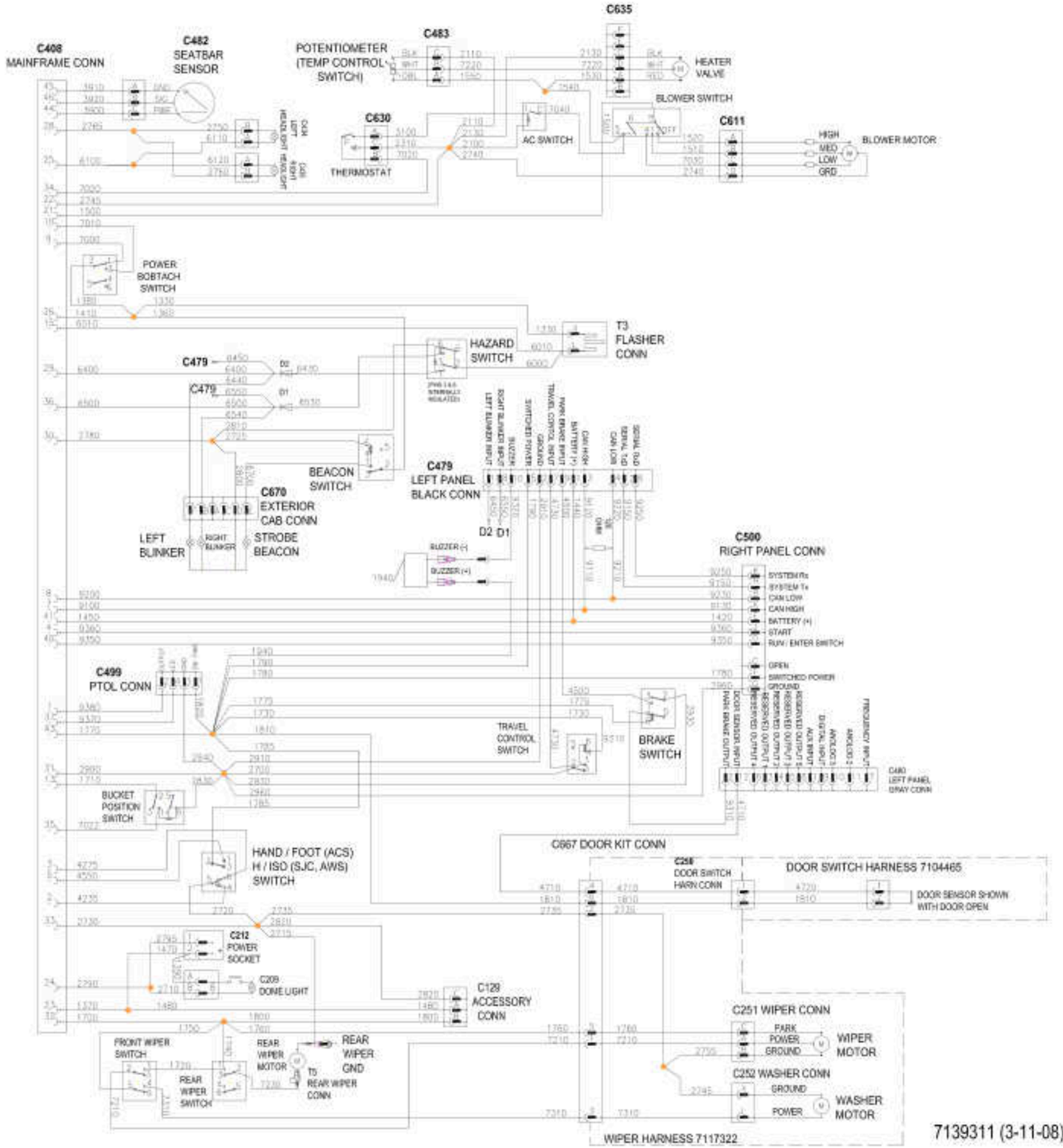
WIRING SCHEMATIC
(DELUXE CAB)
T300 (S/N A5GU20001 AND ABOVE)
(S/N A5GV20001 AND ABOVE)

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