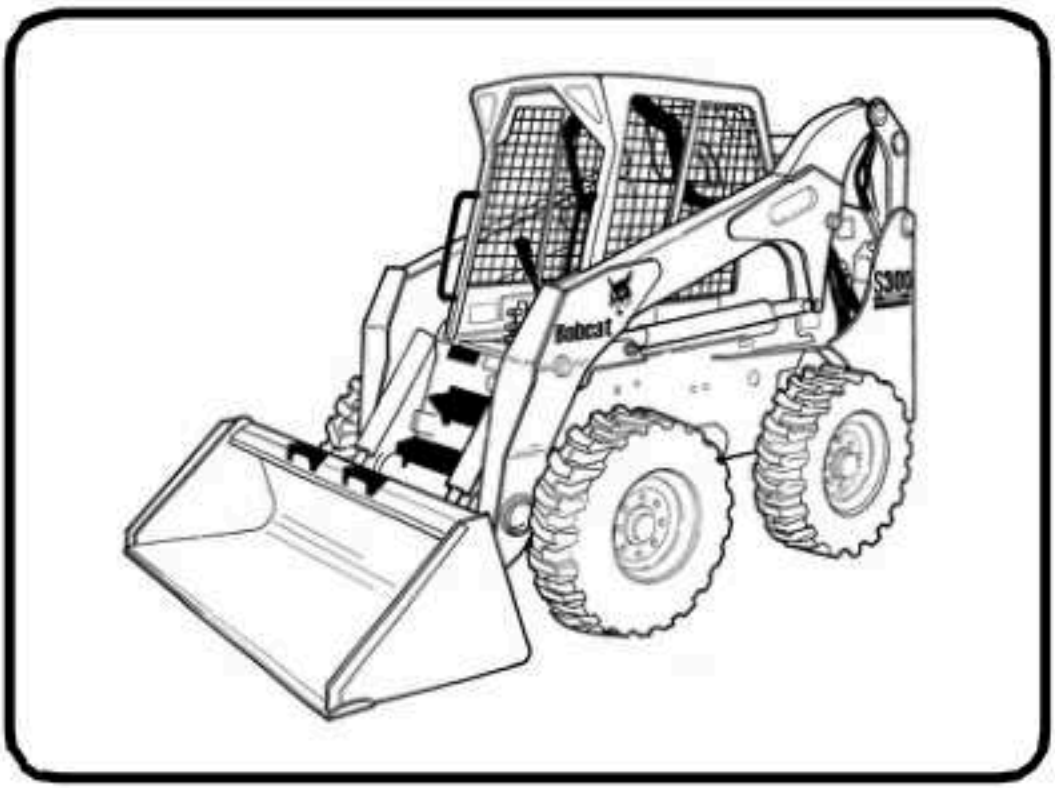
Bobcat®

Service Manual

S250, S300 Skid-Steer Loader

S/N A5GM20001 & Above
S/N A5GN20001 & Above
S/N A5GP20001 & Above
S/N A5GR20001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6987039 (7-08)

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Troubleshooting

The following troubleshooting chart is provided for assistance in locating and correcting common system problems. It is recommended that these procedures 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.

W-2003-0807

PROBLEM	CAUSE
Battery will not take a charge.	1, 2, 3, 4, 5
Alternator will not charge.	1, 2, 5
Starter will not turn the engine.	2, 3, 4, 6, 7, 8, 9

KEY TO CORRECT THE CAUSE
1. Alternator belt is loose or damaged.
2. Battery connections are dirty or loose.
3. Battery is damaged.
4. The cable & wire connections are not making a good contact.
5. The alternator is damaged.
6. The engine is locked.
7. The starter is damaged.
8. The wiring or the solenoid is damaged.
9. Check the fuses.

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Valve Guide - Checking

The tool described below is not provided. The tool is used for inserting and removing the valve guides.Use the dimensions below **[Figure 70-80-27]** and **[Figure 70-80-28]** to make this tool.

Figure 70-80-27

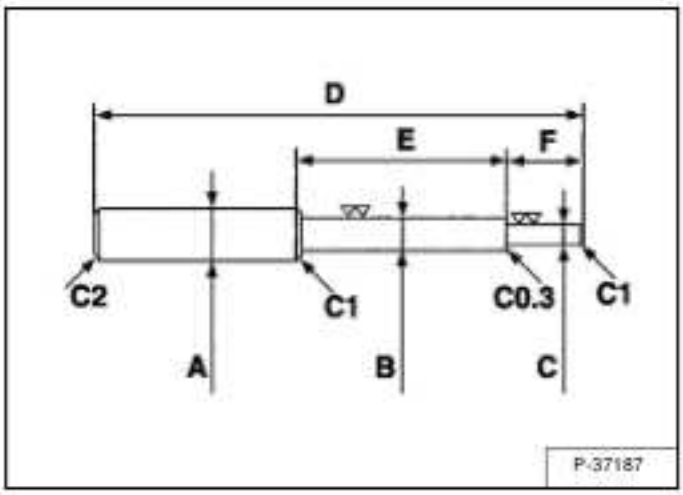
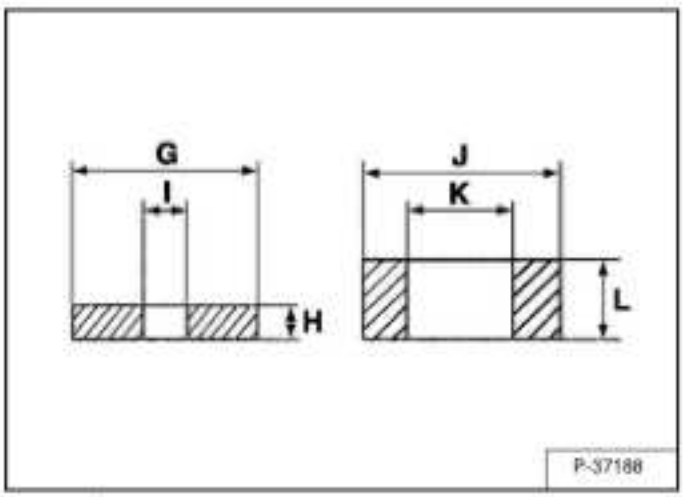
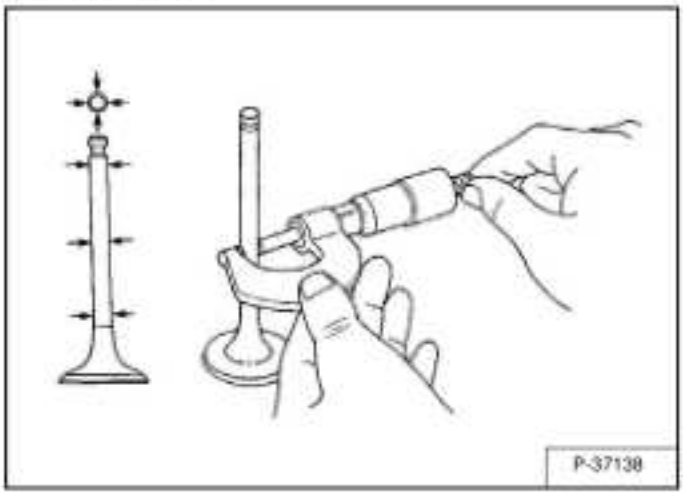


Figure 70-80-28



A	0.79 in. dia. (20 mm dia.)
B	0.460 - 0.468 in. dia. (11,7 - 11,9 mm dia.)
C	0.256 - 0.259 in. dia. (6,5 - 6,6 mm dia.)
D	8.86 in. (225 mm)
E	2.76 in. (70 mm)
F	1.77 in. (45 mm)
G	0.98 in. (25 mm)
H	0.197 in. (5 mm)
I	0.263 - 0.275 in. dia. (6.7 - 7.0 mm dia.)
J	0.787 in. dia. (20 mm dia.)
K	0.492 - 0.504 in. dia. (12.5 - 12.8 mm dia.)
L	0.350 - 0.3578 in. dia. (8.9 - 9.1 mm)
C1	Chamfer 0.039 in. (1.0 mm)
C2	Chamfer 0.079 in. (2.0 mm)
C0.3	Chamfer 0.012 in. (0.3 mm)

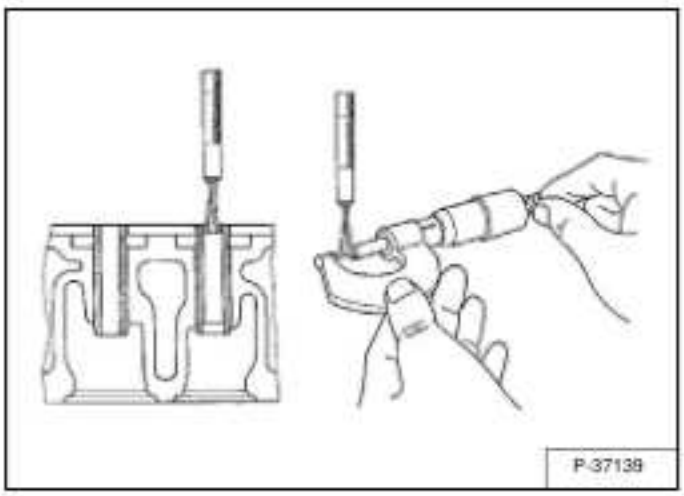
Figure 70-80-29



Remove carbon from the valve guide section.

Measure the valve stem O.D. with an outside micrometer **[Figure 70-80-29]**.

Figure 70-80-30

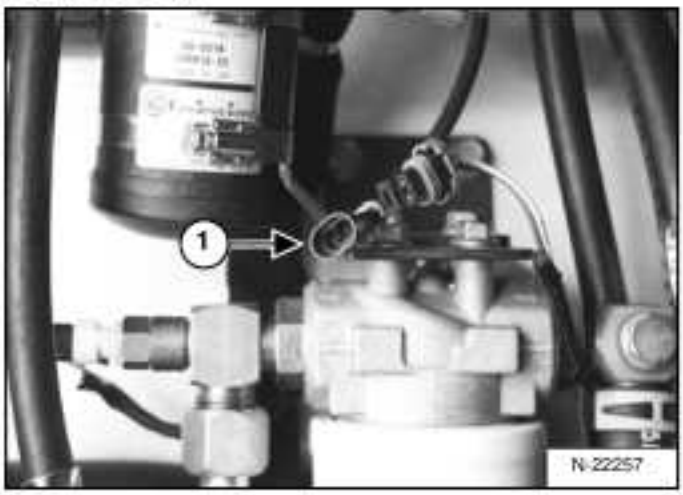


Measure the valve guide I.D. of the cylinder head at the most wear part as shown in **[Figure 70-80-30]** with a small hole gauge and calculate the clearance.

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Electrical System (Cont'd)

Figure 80-30-12



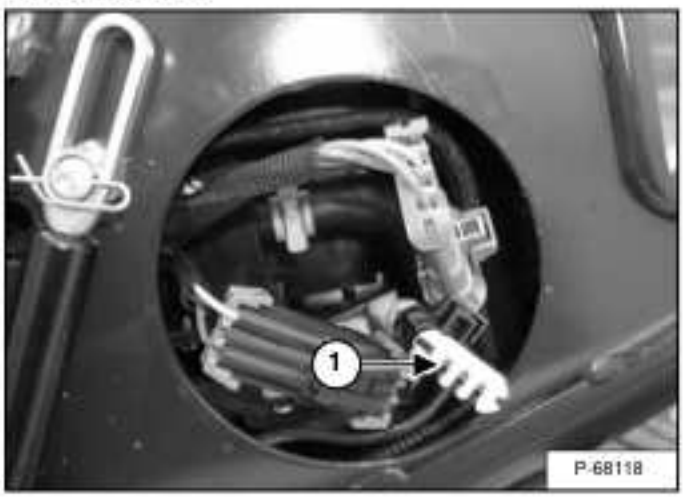
If there is voltage at the harness, check the resistance at the pressure switch (Item 1) **[Figure 80-30-12]**.

If there is no resistance value, check for low refrigerant level. (See Reclamation And Charging With Recovery / Charging Unit on Page 80-40-2.)

If a resistance value is seen, the pressure switch is good.

Reconnect the loader harness to the pressure switch.

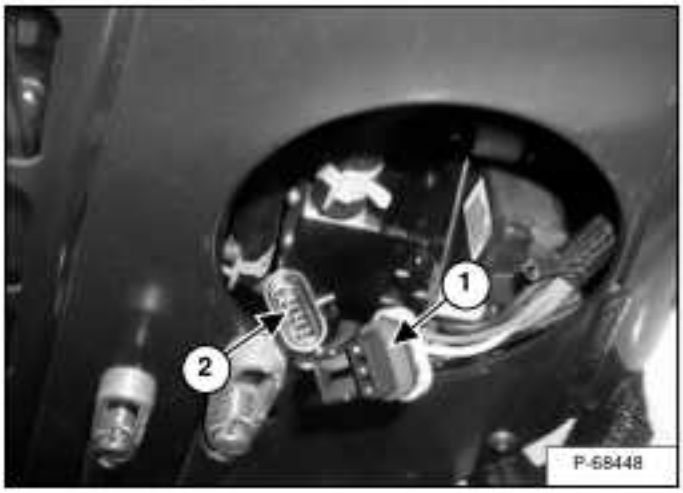
Figure 80-30-13



Remove the operator cab, left side access cover.

Disconnect the thermostat wiring connector (Item 1 **[Figure 80-30-13]** from the loader wiring harness.

Figure 80-30-14



Check the loader harness (Item 1) **[Figure 80-30-14]** for voltage. The voltage should be 12 volts.

If there is no voltage at the wiring harness, check the harness for broken wires.

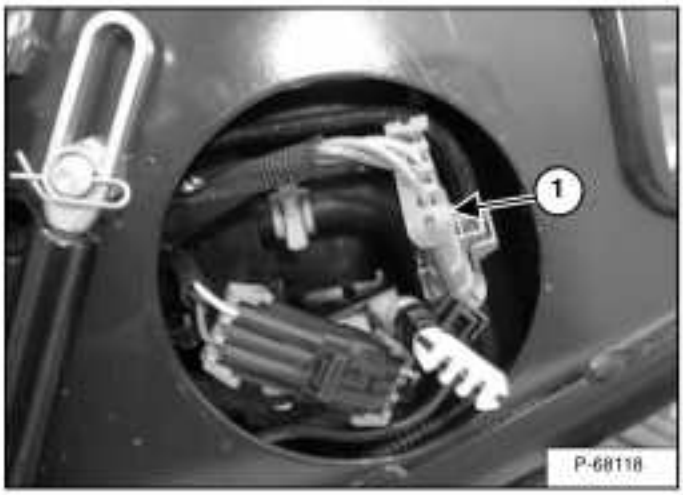
If there is voltage at the wiring harness, check the thermostat (Item 2) **[Figure 80-30-14]** for resistance.

The resistance value of the thermostat should be 10 Ohms at 68° F (20° C).

If there is no resistance value, replace the thermostat. (See Removal And Installation on Page 80-90-1.)

If there is a resistance value, check the blower.

Figure 80-30-15



Disconnect the blower wiring connector (Item 1) **[Figure 80-30-15]** from the loader wiring harness.

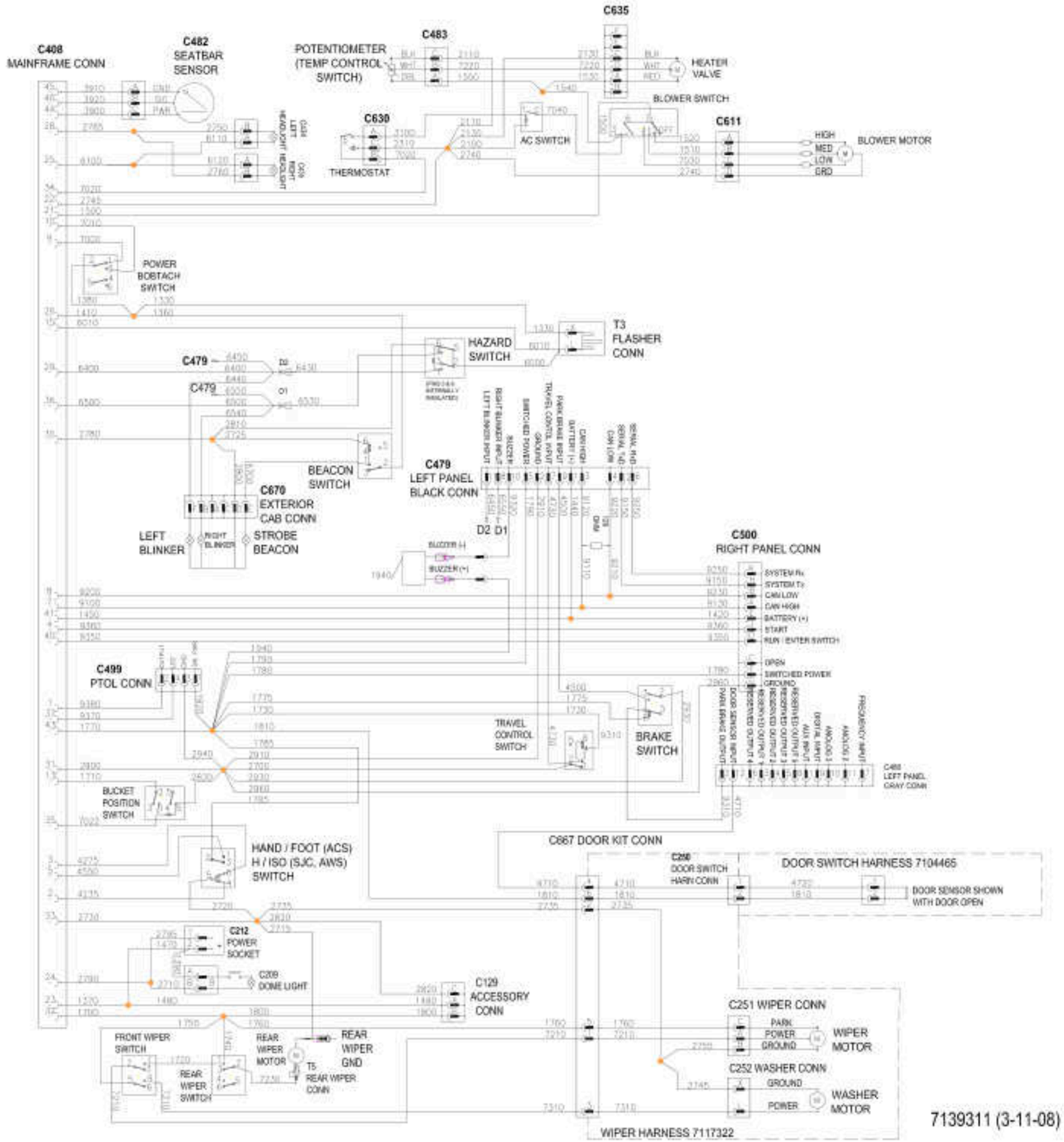
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WIRING SCHEMATIC
(DELUXE CAB)
S250 (S/N A5GM20001 AND ABOVE)
(S/N A5GN20001 AND ABOVE)
S300 (S/N A5GP20001 AND ABOVE)
(S/N A5GR20001 AND ABOVE)

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