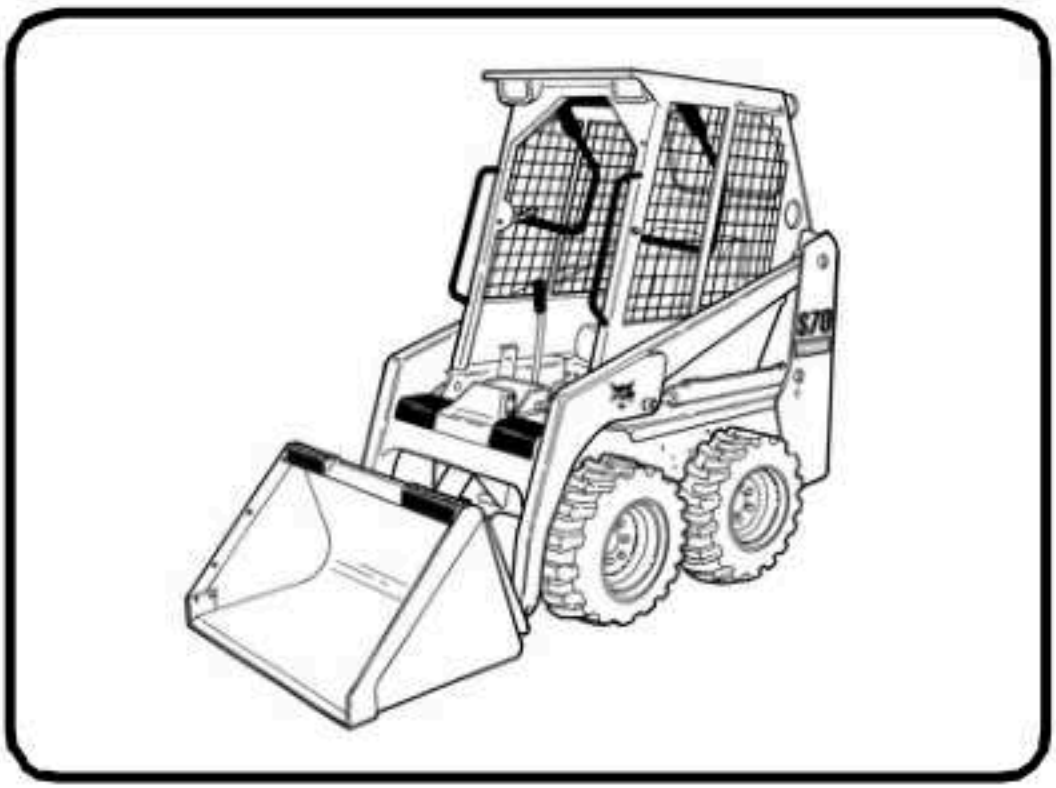
Bobcat®

Service Manual
S70 Skid-Steer Loader

S/N A3W611001 & Above
S/N A3W711001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6986662 (8-08)

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Troubleshooting

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

Check for correct function after adjustments, repairs or service. Failure to make correct repairs or adjustments can cause injury or death.

W-2004-1285

PROBLEM	CAUSE
No drive on one side, in one direction.	1, 2, 3, 4, 5, 19
No drive on one side in both directions.	2, 3, 5, 6, 7, 8
The loader does not move in a straight line.	2, 3, 4, 6, 7, 8, 9, 10, 19
the hydrostatic system is overheating.	4, 11, 12, 13, 14, 15
The oil light comes on.	16, 17, 18

KEY TO CORRECT THE CAUSE
1. The hydrostatic system has a fluid leak.
2. The steering linkage needs adjustment.
3. The high pressure relief valve(s) are defective.
4. The shuttle valve in the hydrostatic motor has a defect.
5. The balance plate in the hydrostatic motor seals are defective.
6. The hydrostatic pumps have a defect.
7. The final drive chain is broken.
8. The hydrostatic motor has a defect.
9. The tires do not have the correct tire pressure.
10. The tires are not the same size.
11. The hydrostatic fluid is not at the correct level.
12. The oil cooler has a restriction (Externally or Internally).
13. The temperature sending switch is not operating correctly.
14. The control valve is not operating correctly.
15. The loader is not being operated at the correct RPM.
16. The sender has a defect.
17. There is low charge pressure.
18. The charge relief has a defect.
19. Steering lever is obstructed.

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Specifications (Cont'd)

All dimensions are given in inches. Respective metric dimensions are given in millimeters enclosed by parentheses.

Crankshaft

Crankshaft Alignment Limit Permitted	0.0008 (0,02)
O.D. of Crankshaft Journal No. 1	1.8872-1.8878 (47,934-47,950)
I.D. of Crankshaft Bearing No. 1	1.8891-1.8917 (47,984-48,048)
Oil Clearance Between No.1 Crankshaft Journal and Bearing	0.0013-0.0045 (0,034-0,114)
Allowable Limit	0.0079 (0,20)
O.D. of Crankshaft Journal No. 2 & No. 3	1.8872-1.8878 (47,934-47,950)
I.D. of Crankshaft Bearing No. 2 & No. 3	1.8891-1.8909 (47,984-48,029)
Oil Clearance Between No. 2 & No. 3 Crankshaft Journals & Bearings	0.0013-0.0037 (0,034-0,095)
Allowable Limit	0.0079 (0,20)
O.D. of Crankshaft Journal No. 4	2.0441-2.0449 (51,921-51,940)
I.D. of Crankshaft Bearing No. 4	2.0462-2.0480 (51,974-52,019)
Oil Clearance Between No. 4 Crankshaft Journal and Bearing	0.0013-0.0039 (0,034-0,098)
Allowable Limit	0.0079 (0,20)
O.D. of Connecting Rod Journals	1.5732-1.5738 (39,959-39,975)
I.D. of Connecting Rod Bearings	1.5750-1.5768 (40,004-40,050)
Oil Clearance Between Connecting Rod Journals and Bearings	0.0011-0.0036 (0,029-0,091)
Allowable Limit	0.0079 (0,2)
Crankshaft End Play	0.0059-0.0122 (0,15-0,31)
Allowable Limit	0.0197 (0,50)

Oil Pump

Oil Pressure @ Rated RPM	28-64 PSI (1,9- 4,4 bar)
Allowable Limit @ Rated RPM	21 PSI (1,4 bar)
Oil Pressure @ Idle Speed	7 PSI (0,5 bar)
Rotor Lobe Clearance Limit Permitted	0.0118 (0.3)
Clearance Between Outer Rotor & Pump Body	0.0039-0.0071 (0,100-0,180)
End Clearance Between Inner Rotor & Cover	0.0010-0.0030 (0,025-0,075)
Clearance Between Inner Rotor & Outer Rotor	0.0024-0.0071 (0,06-0,18)

Thermostat

Opening Temperature	
Starting	157-163°F (70-73°C)
Fully Open	185°F (85°C)

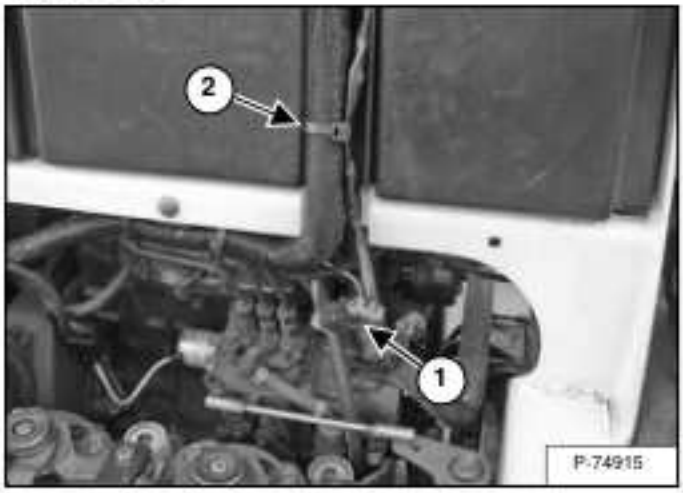
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HEATER UNIT

Removal And Installation

Raise the operator cab. (See Raising on Page 10-30-1.)

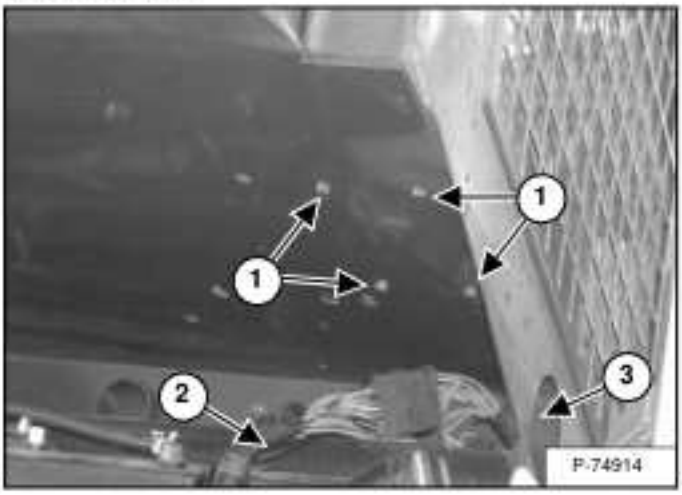
Figure 80-40-1



Disconnect the heater harness connector (Item 1) **[Figure 80-40-1]** from the main harness.

Remove the tie strap (Item 2) **[Figure 80-40-1]**.

Figure 80-40-2

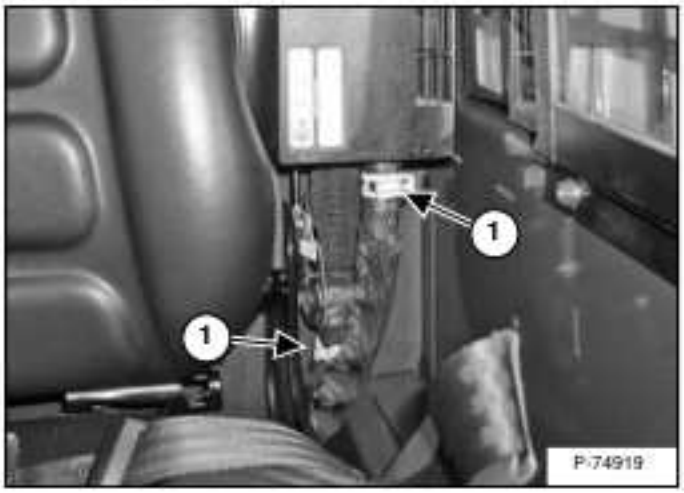


Remove the four bolts (Item 1) **[Figure 80-40-2]** which secure the heater unit to the back of the cab.

Pull the heater harness (Item 2) away from the fuel tank and out the opening (Item 3) **[Figure 80-40-1]**.

Lower the cab. (See Lowering on Page 10-30-2.)

Figure 80-40-3



Loosen the clamps (Item 1) **[Figure 80-40-3]** and remove the hoses. Plug the hoses after removal.

Remove the heater unit from the cab.

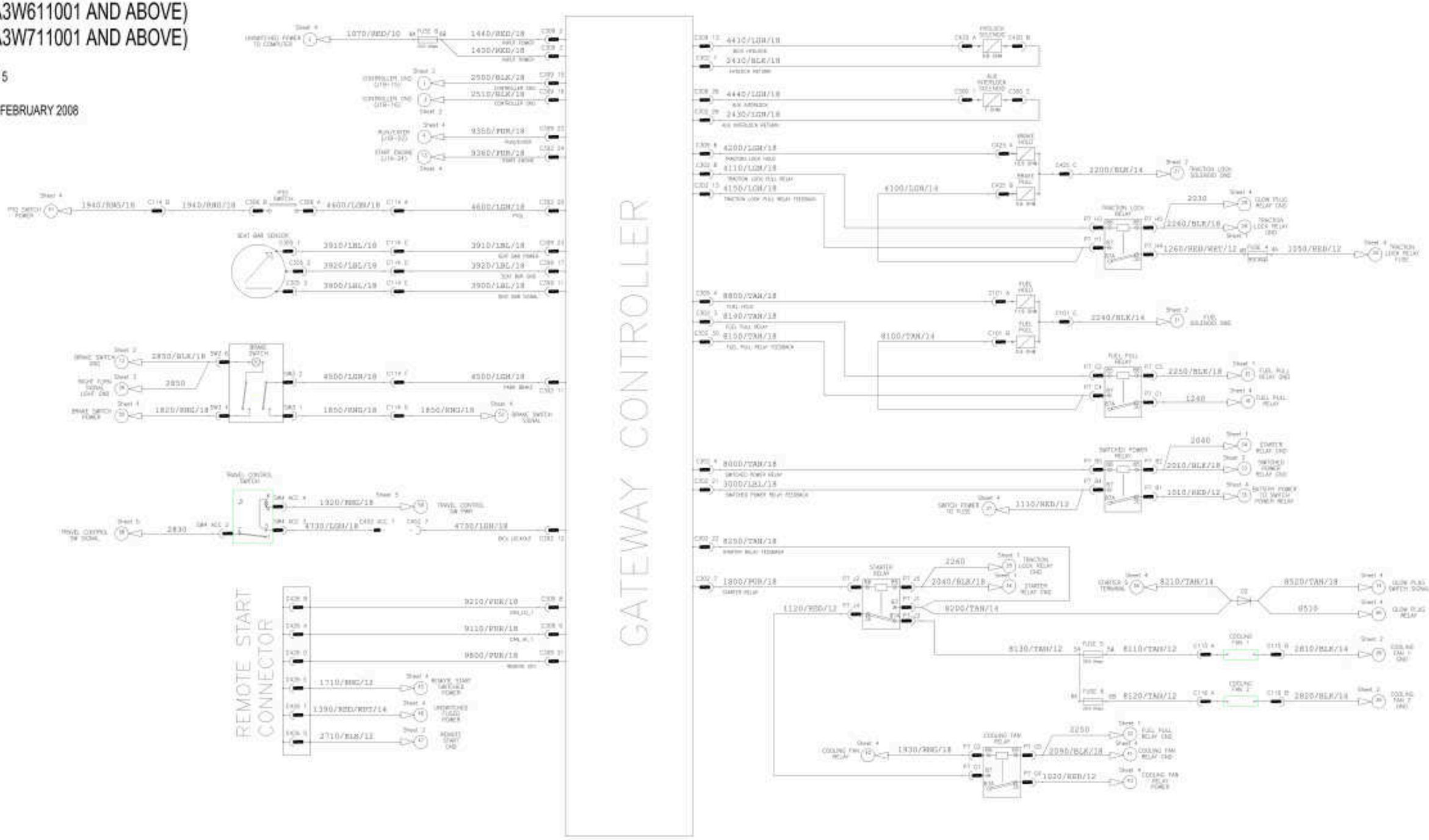
NOTE: Some coolant will be lost during hose removal.

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ELECTRICAL SCHEMATIC
S70 SMALL LOADER
(S/N A3W611001 AND ABOVE)
(S/N A3W711001 AND ABOVE)

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