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863

HIGH FLOW

Service Manual

(S/N 514411001–514424999)
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EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6724799 (7-10)

Printed in U.S.A.

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CALIFORNIA
PROPOSITION 65 WARNING

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

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TROUBLESHOOTING

Chart

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

⚠ WARNING

Instructions are necessary before operating or servicing machine. Read Operation & Maintenance Manuals, 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. Failure to follow instructions can cause injury or death.

W-2003-0797

PROBLEM	CAUSE
Battery will not take a charge.	2, 3, 4
Alternator will not charge.	1, 4
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 connection 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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ENGINE

Removal and Installation

NOTE: The engine and hydrostatic pumps will be removed as an assembly.



WARNING

Never work on a machine with the lift arms up unless the lift arms are secured by an approved lift arm support device. Failure to use an approved lift arm support device can allow the lift arms or attachment to fall and cause injury or death.

W-2059-0598

Raise the lift arms and install an approved lift arm support device. (See Page 1–1.)

Raise the operator cab. (See Page 1–1.)

Drain the fluid from the hydraulic reservoir.

Remove the hydraulic reservoir. (See Page 2–1.)

Disconnect the fuel fill hose from the fuel fill neck (Item 1) **[A]**.

Disconnect the air vent hose (Item 2) **[A]** from the fuel fill neck.

Remove fan belt shield (Item 1) **[B]**.

Remove the fan drive belt (Item 2) **[B]**.

Disconnect the engine wiring harness (Item 1) **[C]** from the operator cab wiring harness.

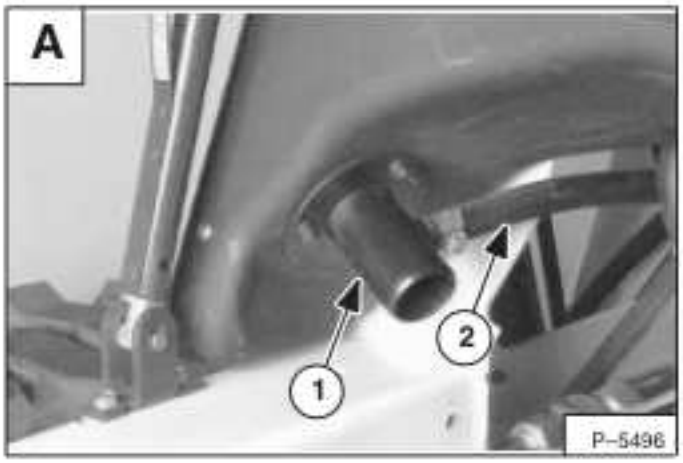
Remove the bolt (Item 2) **[C]** from the harness mounting clamp.

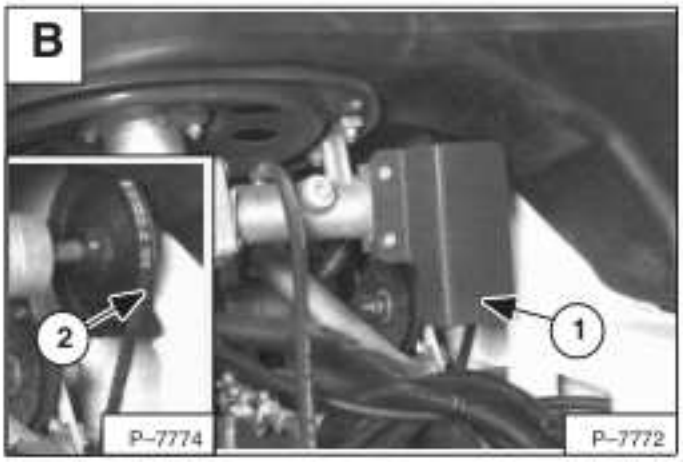
NOTE: The electrical harness will be removed with the engine.

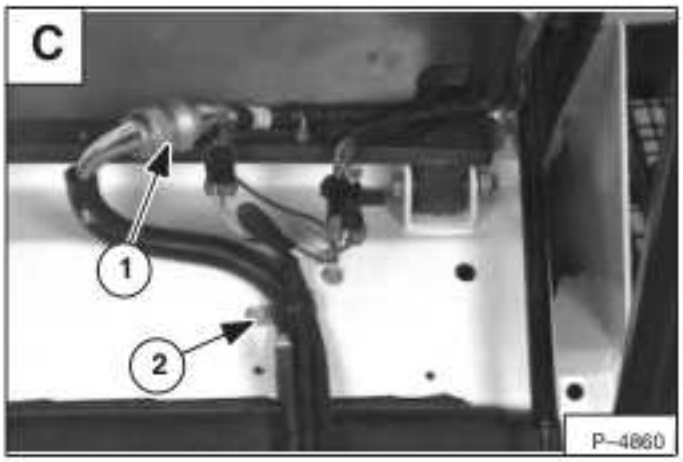
Remove the u–bolt (Item 1) **[D]** from the steering cable (both sides).

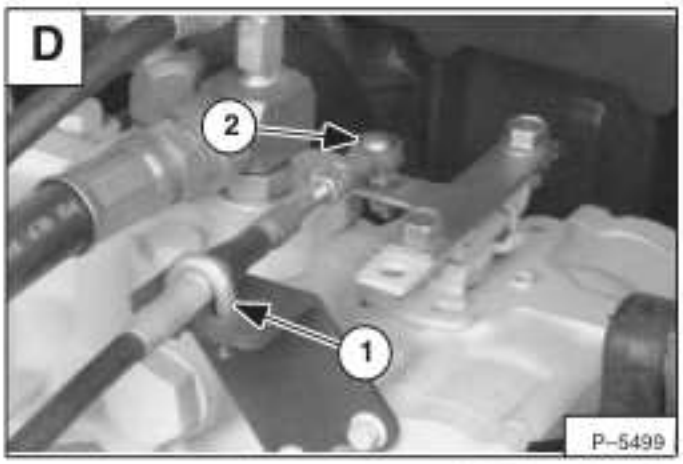
Disconnect the steering cable end (Item 2) **[D]** from the hydrostatic pump lever (both sides).

Installation: See Page 3–1 for transmission neutral adjustment.









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Troubleshooting Guide (Cont'd)

The following troubleshooting guide is provided for assistance in locating and correcting BICS system problems It is recommended that these procedures 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

SEAT SENSOR

PROBLEM	SOLUTION #
Seat indicator light does not come ON with operator in seat.	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
Seat indicator light stays ON when operator is out of seat.	2, 3, 6, 10, 11, 12, 13, 14
Intermittent indicator light during operation.	11, 15, 16, 17, 18

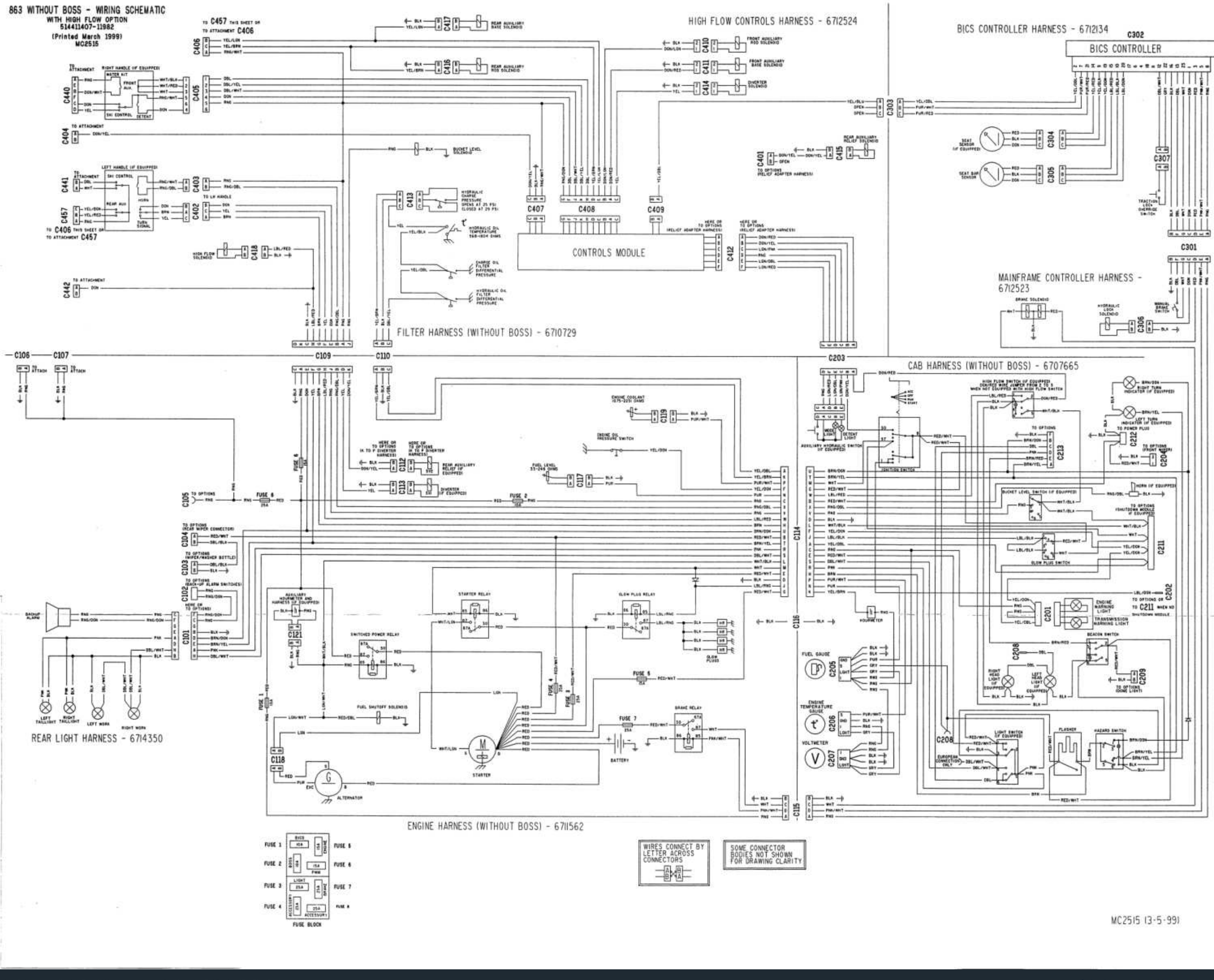
SOLUTION SUGGESTIONS

1. Check to make sure power indicator light is ON.
2. Check for debris under and around seat.
3. Look for any obstruction around seat.
4. Check to make sure seat rail lowers when weight is in seat.
5. Raise cab and check for magnet collar movement when weight is added to seat. (Magnet collar should extend approximately 3/8 inch beyond the sensor assembly with weight in the seat.)
6. Use sensor tester to check operation of sensor and controller. Follow instructions on tester.
7. Check to make sure the magnet guide pin is in place.
8. Check for contamination on magnets such as metal particles or for shipping plate over magnets.
9. Check to make sure both magnets are in collar.
10. Check for binding of magnet collar or bushing with hex head on other side for binding.
11. Check for correct mounting. One spring for standard seat. Two springs for suspension seats. Thick washers should be under front seat mounting rails on both sides.
12. Check for loose hardware mounting magnet collar. Check to make sure the magnet collar bushing is threaded on all the way so it is contacting seat rail.
13. Check to make sure seat rail raises when weight is removed from the seat.
14. Raise cab and check for magnet collar movement when weight is removed from seat. (Magnet collar should extend approximately 1/8 inch beyond the sensor assembly without weight in seat.)
15. With smaller operators that operate with the seat forward some mounting alterations may be required. (See solution suggestions 16, 17 and 18.)
16. Adjust suspension seat to lightest weight setting.
17. Check to make sure the seat rails move up and down freely when weight is added.
18. Add washer between the bushing and the magnet collar assembly which slides on and the seat rail. This will reduce the amount of seat travel required to activate the system. **Must check**, with seat moved all the way back, that indicator light does not stay on with operator out of seat. If light does not go out with operator out of the seat, the washer must be removed.

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WITH HIGH FLOW OPTION
514411407-11982
(Printed March 1999)
MC2515



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