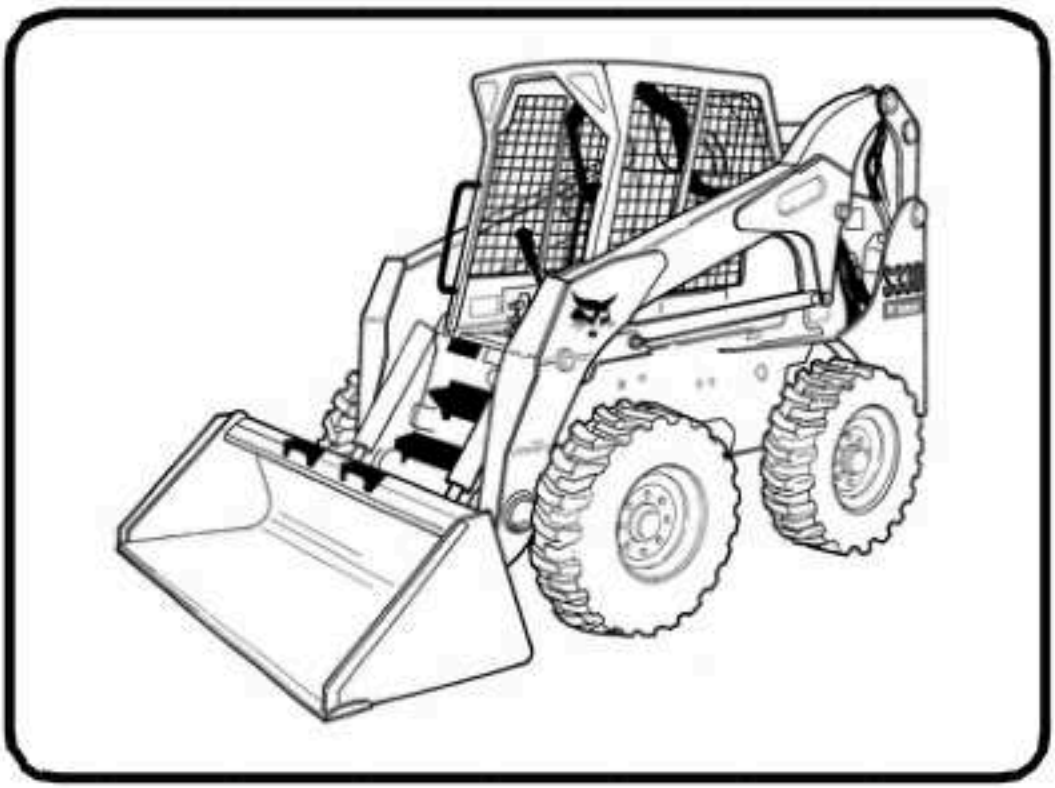
Bobcat®

Service Manual
S330 Skid-Steer Loader

S/N A5HA11001 & Above
S/N AAKM11001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6987040 (5-11)

Printed in U.S.A.

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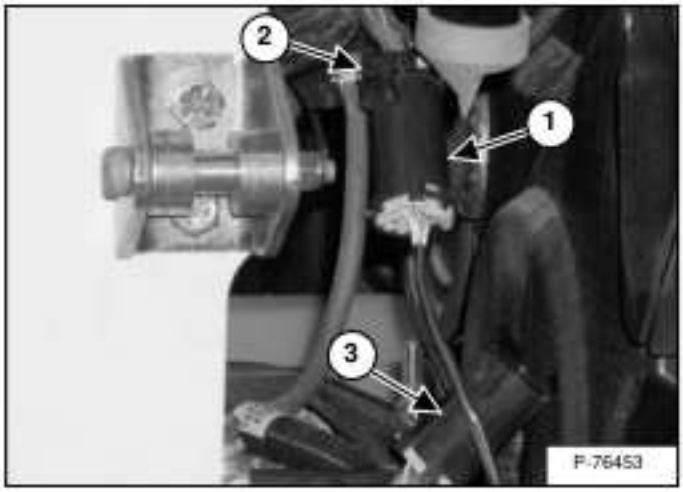
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REMOTE START TOOL (SERVICE TOOL) KIT - 7003031 (CONT'D)

Loader Service Tool Harness - 6689747 (Cont'd)

Figure 10-61-6



NOTE: The Remote Start Tool (Service Tool) connection harness has two connectors (Item 1) and (Item 3). The main connector (Item 1) [Figure 10-61-6] is always used for connection to the loader harness.

The second connector (Item 3) [Figure 10-61-6] is used for attachment ACD upgrades or attachment operational diagnostics only. This connector has a cap attached to it to prevent damage or corrosion when not in use.

Connect the Remote Start Tool (Service Tool) connector (Item 1) to the loader harness connector (Item 2) and the other Remote Start Tool (Service Tool) connector to the ACD harness connector (Item 3) **[Figure 10-61-6]**.

NOTE: The right instrument panel (Standard Key Panel or Deluxe Instrumentation Panel) must be in the off position or the Remote Start Tool (Service Tool) will not operate.

⚠ WARNING

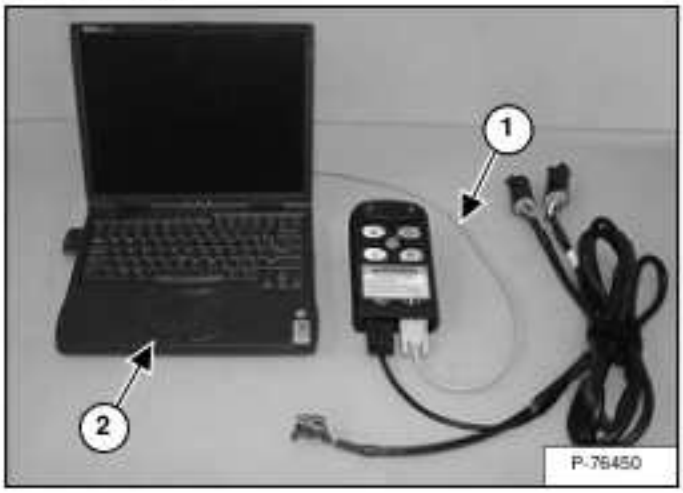
AVOID INJURY OR DEATH

- **Lift and block the machine.**
- **Check that wheels or tracks are clear.**
- **Cab ignition must be in the "STOP" position to start the engine with the Service Tool (if applicable).**
- **See machine Service Manual for more instructions.**

W-2792-0409

Computer Service Tool Harness - 6689746

Figure 10-61-7



The computer service tool harness (Item 1) **[Figure 10-61-7]** is required to connect remote start tool (service tool) to the Service PC (Item 2) **[Figure 10-61-7]**.

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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.

If a service code appears in the left instrument panel. (See DIAGNOSTIC SERVICE CODES on Page 60-90-1.)

⚠ WARNING

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

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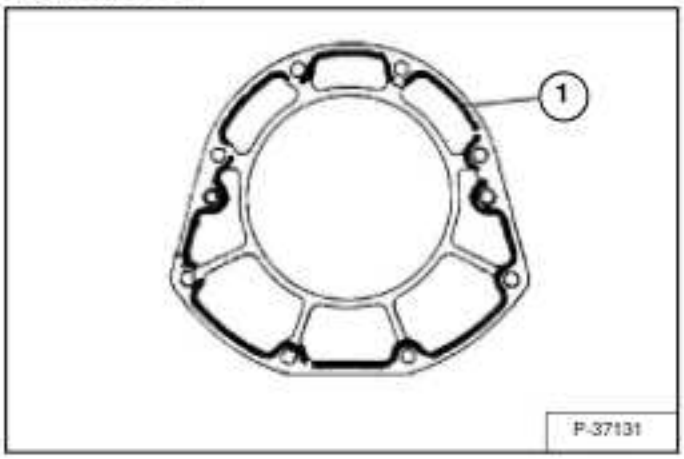
PROBLEM	CAUSE
The hydraulic system will not operate.	1, 2, 3, 5, 8
Slow hydraulic system action.	1, 3, 4, 6, 8
Hydraulic action is not smooth.	1, 4, 5, 6, 7
Lift arms go up slowly at full engine RPM.	1, 3, 4, 6, 7, 8, 9
The lift arms or Bob-Tach will move when the pedal is in neutral position.	4
The lift arms come down with the pedal in the neutral position.	4, 9, 10, 11
Lift arm bypass control valve stuck.	12
Lift arm bypass control valve bent or broken.	13

KEY TO CORRECT THE CAUSE
1. The fluid level is not correct.
2. The pedal linkage is disconnected.
3. The hydraulic pump has damage.
4. The pedal linkage is not adjusted correctly.
5. Relief valve is not at the correct pressure.
6. Suction leak on the inlet side of the hydraulic pump.
7. Fluid is cold. Wrong viscosity fluid.(See HYDRAULIC / HYDROSTATIC FLUID SPECIFICATIONS on Page SPEC-40-1.)
8. Exceeding the loaders rated operating capacity.
9. Internal leak in the lift cylinder(s).
10. External leak from the lift cylinder(s).
11. Damaged lift spool.
12. Rotate shaft.
13. Replace lift arm bypass control valve assembly.

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Crankshaft And Bearings Installation (Cont'd)

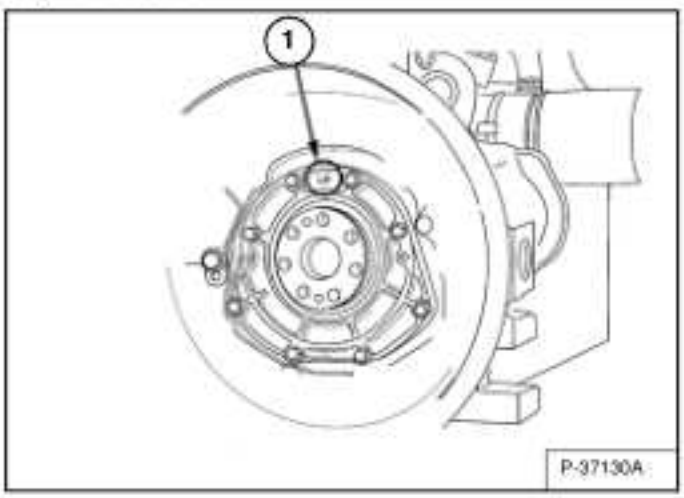
Figure 70-90-35



NOTE: In case of replacing the oil seal, use caution when installing the seal in the bearing case cover as not to install it tilted. The seal should be flush with the cover.

Apply liquid gasket (Item 1) **[Figure 70-90-35]** to the bearing case cover evenly.

Figure 70-90-36



NOTE: Install the bearing case cover / oil seal assembly with the casting mark labeled "UP" (Item 1) [Figure 70-90-36] at the top.

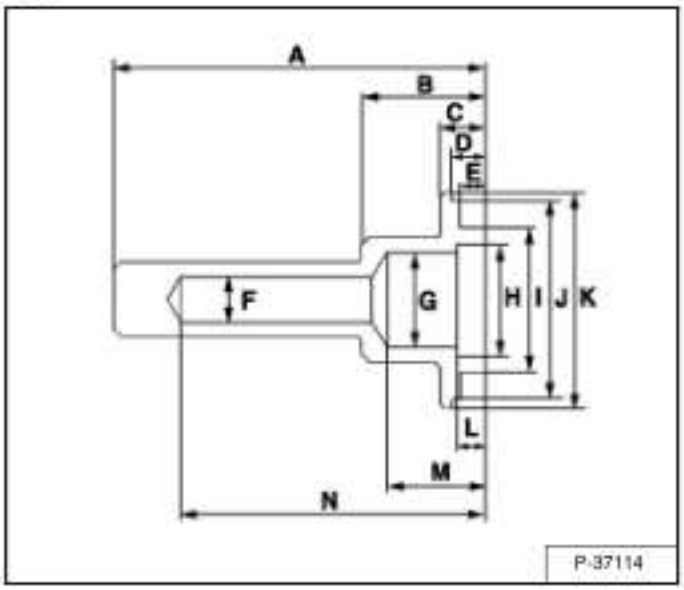
Tighten the bearing case cover mounting screws with even force on the diagonal line.

Tightening torque	Bearing Case Cover mounting screw	18 - 20 ft.-lb. (24 - 27 N•m)

Crankshaft And Bearings - Servicing

The following special tools are not provided, **[Figure 70-90-37]**, **[Figure 70-90-38]** and **[Figure 70-90-22]**.

Figure 70-90-37



Gearcase Oil Seal Replacing Tool

Application: Use to press fit the oil seal.

A	5.8582 in. (148,8 mm)
B	1.9685 in. (50 mm)
C	0.7401 in. (18,8 mm)
D	0.5394 - 0.5472 in. (13,7 - 13,9 mm)
E	0.433 in. (11 mm)
F	0.7087 in. dia. (18 mm dia.)
G	1.4961 in. dia. (38 mm dia.)
H	1.7716 in. dia. (45 mm dia.)
I	2.2795 - 2.2874 in. (57,9 - 58,1 mm)
J	3.1299 in. dia. (79,5 mm dia.)
K	3.452 in. (87 mm)
L	0.4724 in. (12 mm)
M	1.5748 in. (40 mm)
N	4.7244 in. (120 mm)

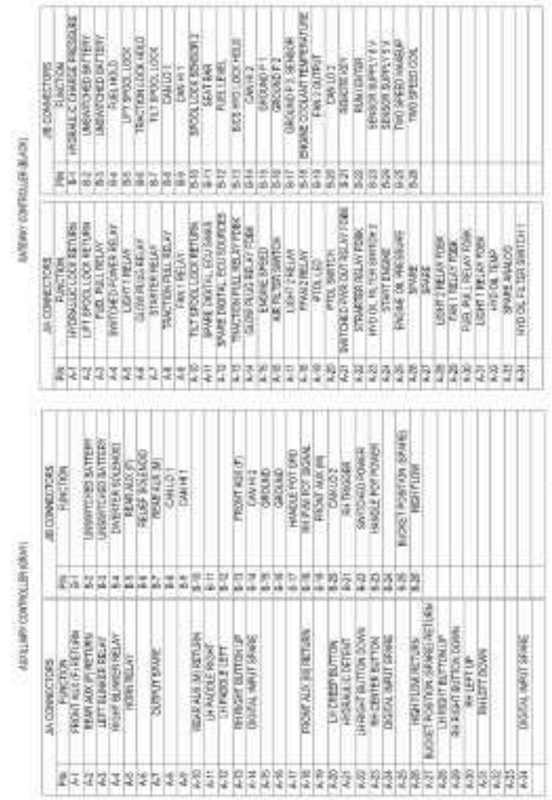
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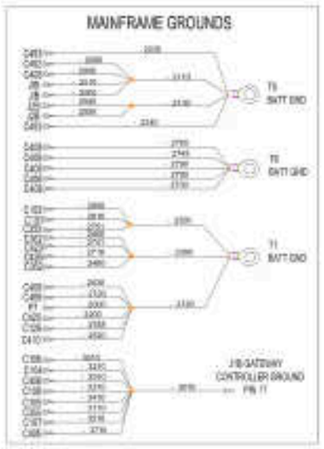
WIRING SCHEMATIC
MAINFRAME
S330 (S/N A5HA11001 AND ABOVE)
(S/N AAKM11001 AND ABOVE)

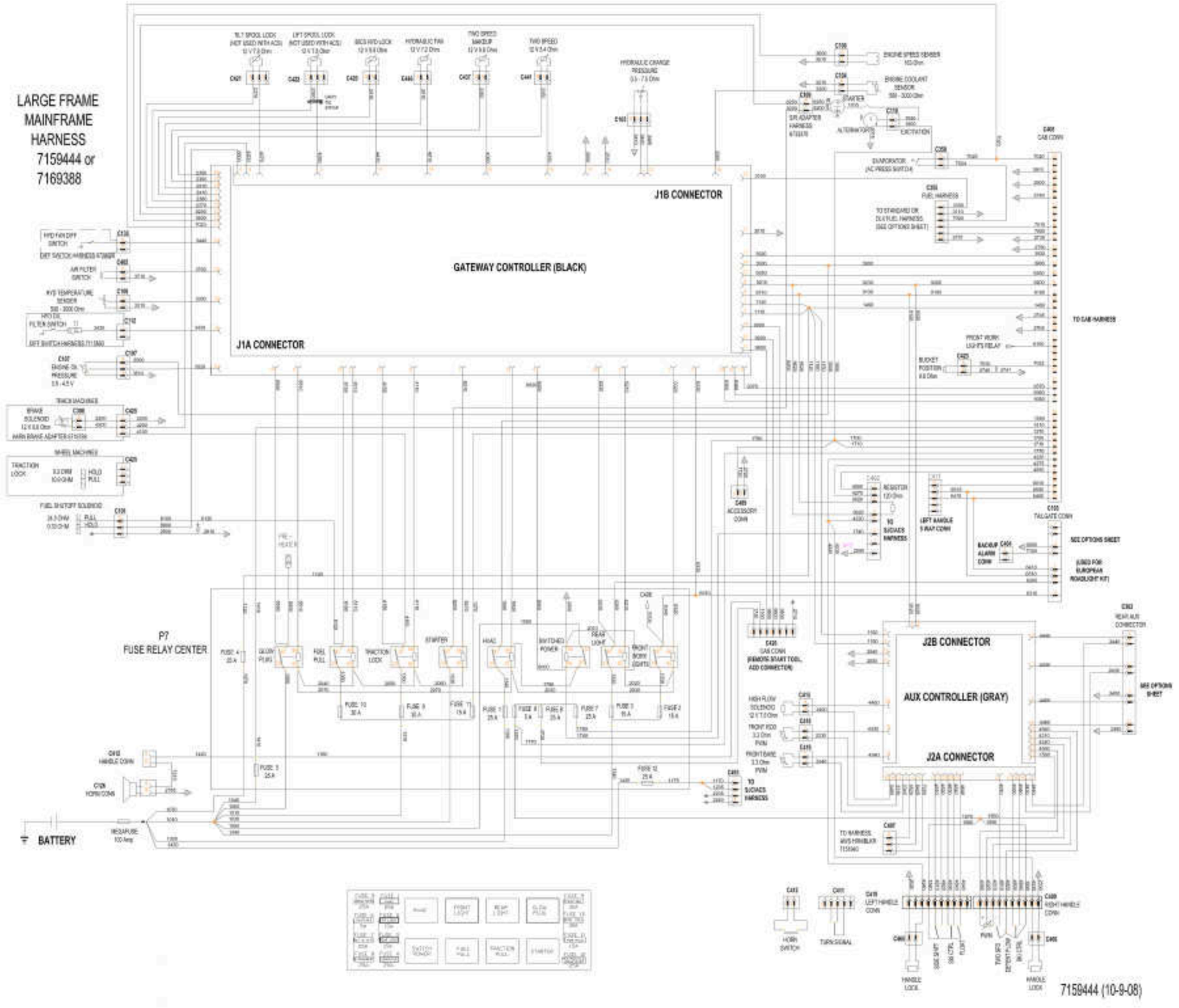
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LARGE FRAME
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