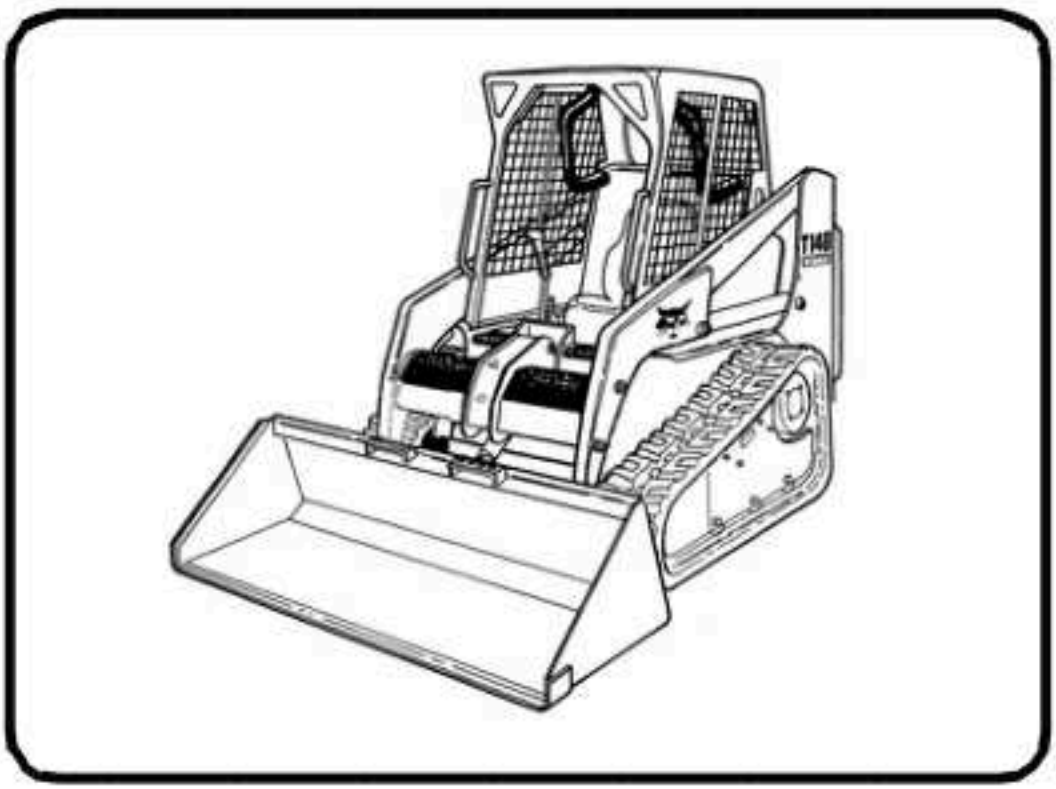
Bobcat®

Service Manual
T140 Compact Track Loader

S/N A3L720001 & Above
S/N A3L820001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6987041 (1-11)

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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.

W-2004-1285

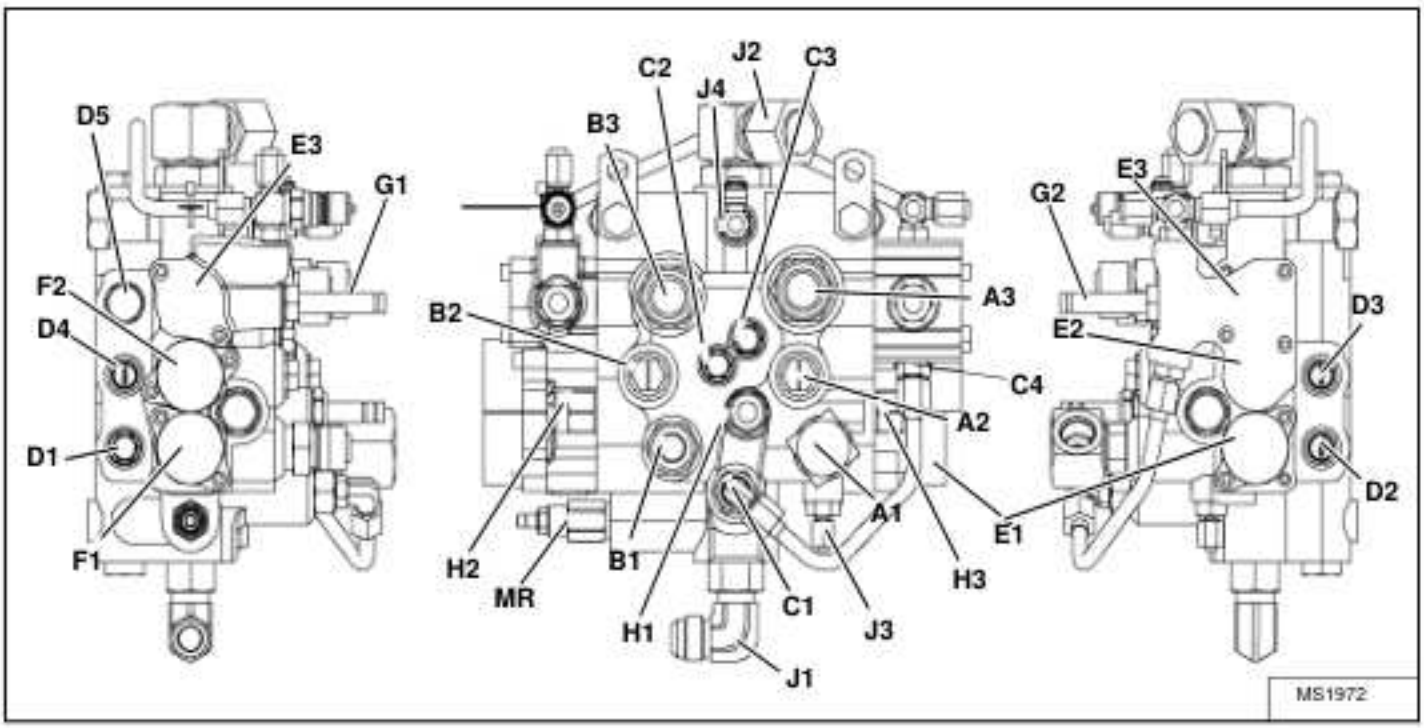
PROBLEM	CAUSE
The hydraulic system will not operate.	1, 2, 3, 5, 8
Slow hydraulic system action.	1, 3, 4, 6, 8
Hydraulic action is not smooth.	1, 4, 5, 6, 7
Lift arms go up slowly at full engine rpm.	1, 3, 4, 5, 6, 7, 8, 9
The lift arms or Bob-Tach will move when the pedal is in neutral position.	4, 9, 10, 11
Lift arm bypass control valve stuck.	12
Lift arm bypass control valve stem 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 Section 80-01)
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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Identification Chart

Figure 20-41-26



ITEM	T140 LOADER
A1	Lift Cylinder Base End
A2	Tilt Cylinder Base End
A3	Auxiliary Hydraulic Rod End
B1	Lift Cylinder Rod End
B2	Tilt Cylinder Rod End
B3	Auxiliary Hydraulics Base End
C1	Lift Load Check
C2	Load Check Valve Tilt Function
C3	Load Check Valve Auxiliary Function
C4	Check Valve
D1	Anti-Cavitation Valve Lift (Rod End)
D2	Port Relief / Anti-Cavitation Valve – 24,1 MPa (241,3 bar) (3500 psi) Lift (Base End)
D3	Port Relief / Anti-Cavitation Valve – 24,1 MPa (241,3 bar) (3500 psi) Tilt (Base End)
D4	Port Relief / Anti-Cavitation Valve – 24,1 MPa (241,3 bar) (3500 psi) Tilt (Rod End)
D5	Port Relief / Anti-Cavitation Valve (Auxiliary) 24,1 MPa (241,3 bar) (3500 psi) (Optional)

ITEM	T140 LOADER
E1	Lift Spool Centering Spring
E2	Tilt Spool Centering Spring
E3	Auxiliary Spool / Centering Springs
F1	Lift Spool
F2	Tilt Spool
G1	Auxiliary Solenoid Stem
G2	Auxiliary Solenoid Stem
H1	BICS™ Valve Solenoid
H2	BICS™ Lock Valve (Tilt)
H3	BICS™ Lock Valve (Lift)
J1	Inlet Fluid Flow (From Pump)
J2	Outlet Fluid Flow (Return to Tank)
J3	Lift Arm Bypass Orifice
J4	Drain (Case)
MR	Main Relief Valve – 18,6 MPa (186,2 bar) (2700 psi)

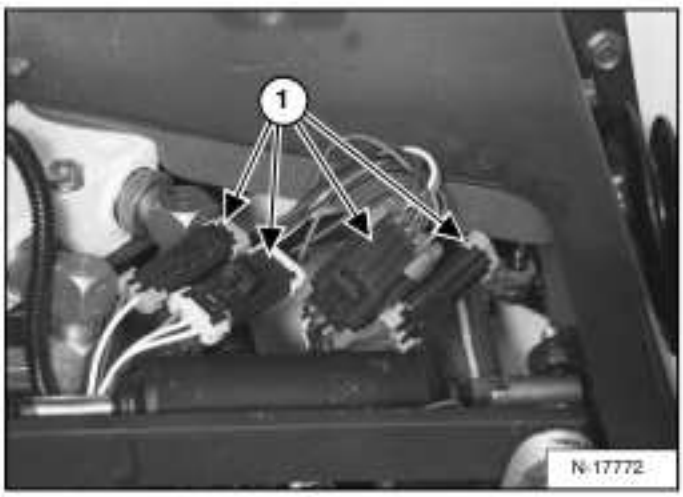
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Switch Handle Installation (Cont'd)

Figure 60-130-17

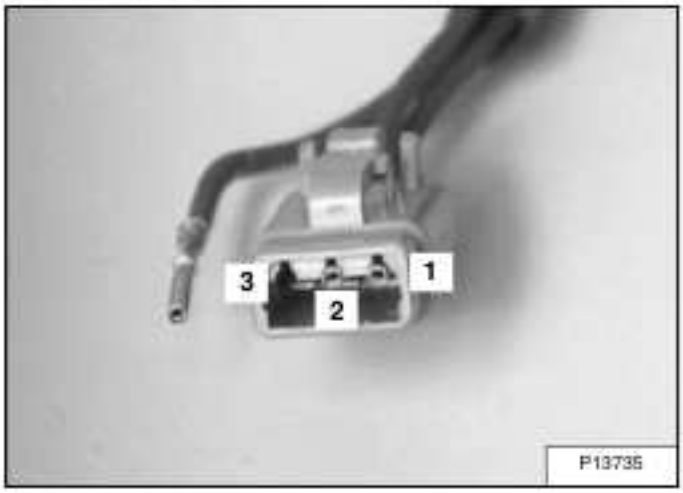


Figure 60-130-18



Connect the handle harness connectors (Item 1) **[Figure 60-130-17]** and **[Figure 60-130-18]** to the loader harness connectors.

Figure 60-130-19

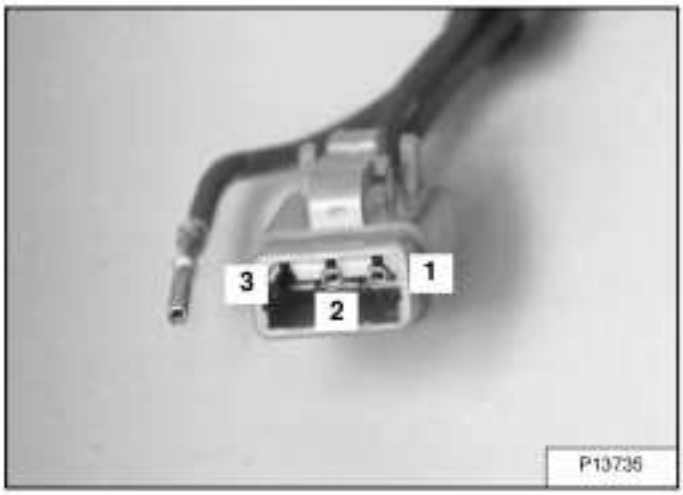


Install the wires into the connectors as listed below:

Left And Right Control Lever Switch Handle **[Figure 60-130-19]**

1-Terminal - Red/White
2-Terminal - Black/White
3-Terminal - Purple/White

Figure 60-130-20



Left And Right Control Lever Switch Handle **[Figure 60-130-20]**

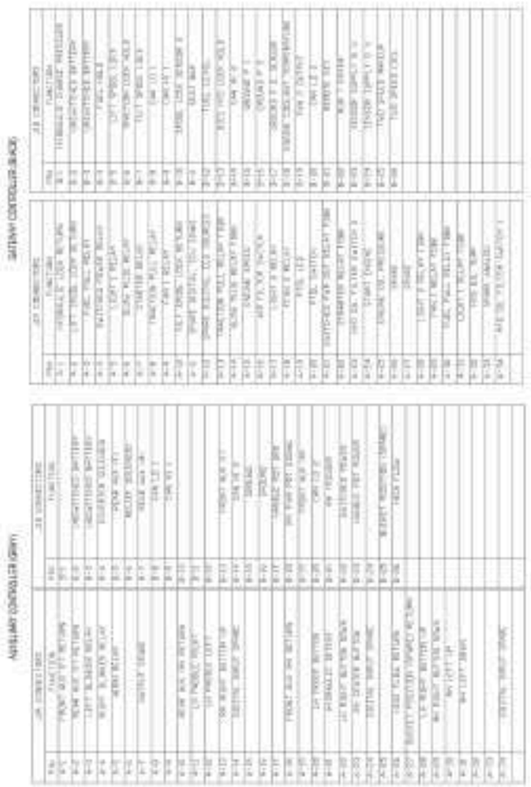
1-Terminal - Yellow/Red
2-Terminal - Open
3-Terminal - Orange/Black

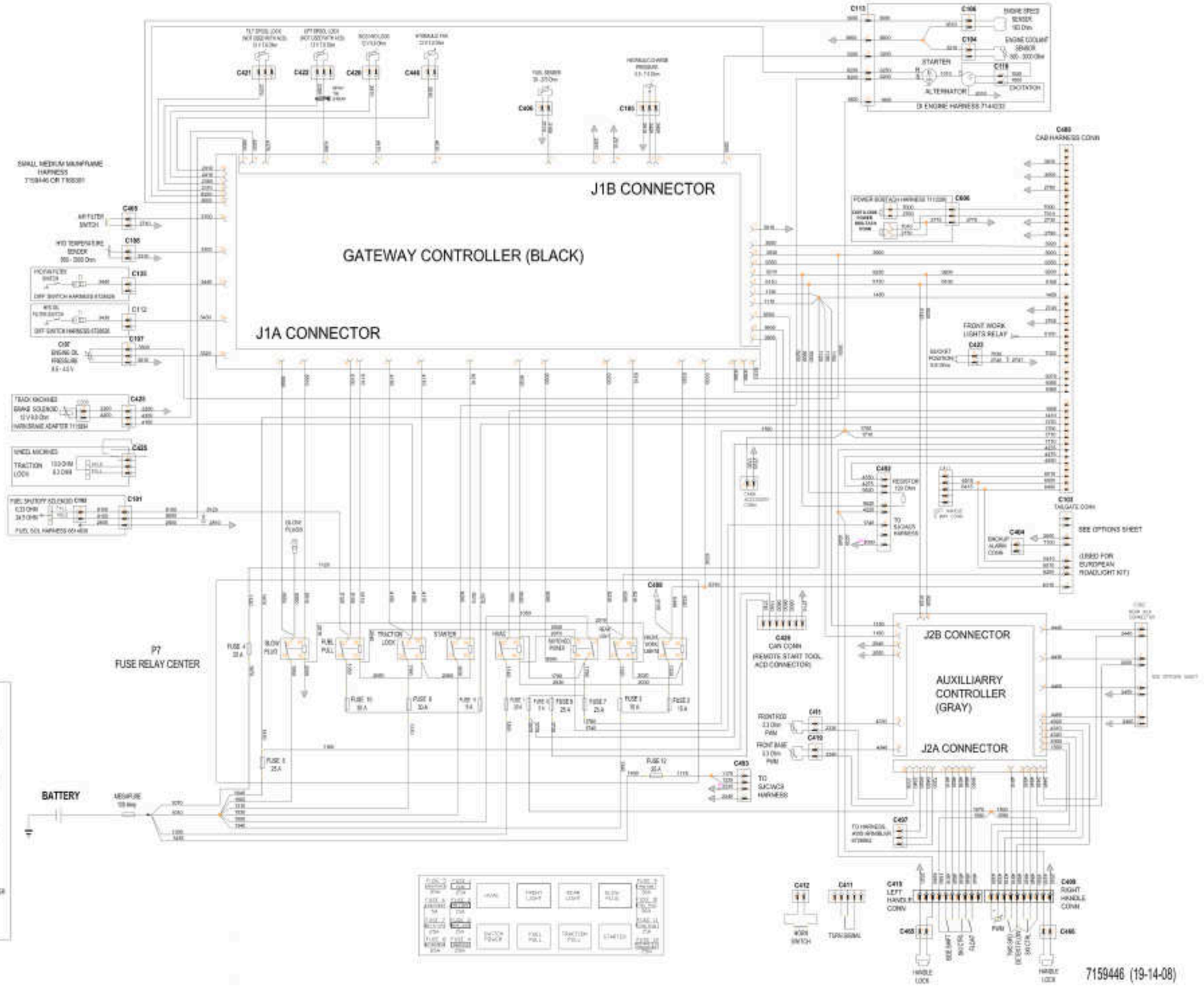
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WIRING SCHEMATIC
MAINFRAME
T140 (S/N A3L720001 AND ABOVE)
(S/N A3L820001 AND ABOVE)

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