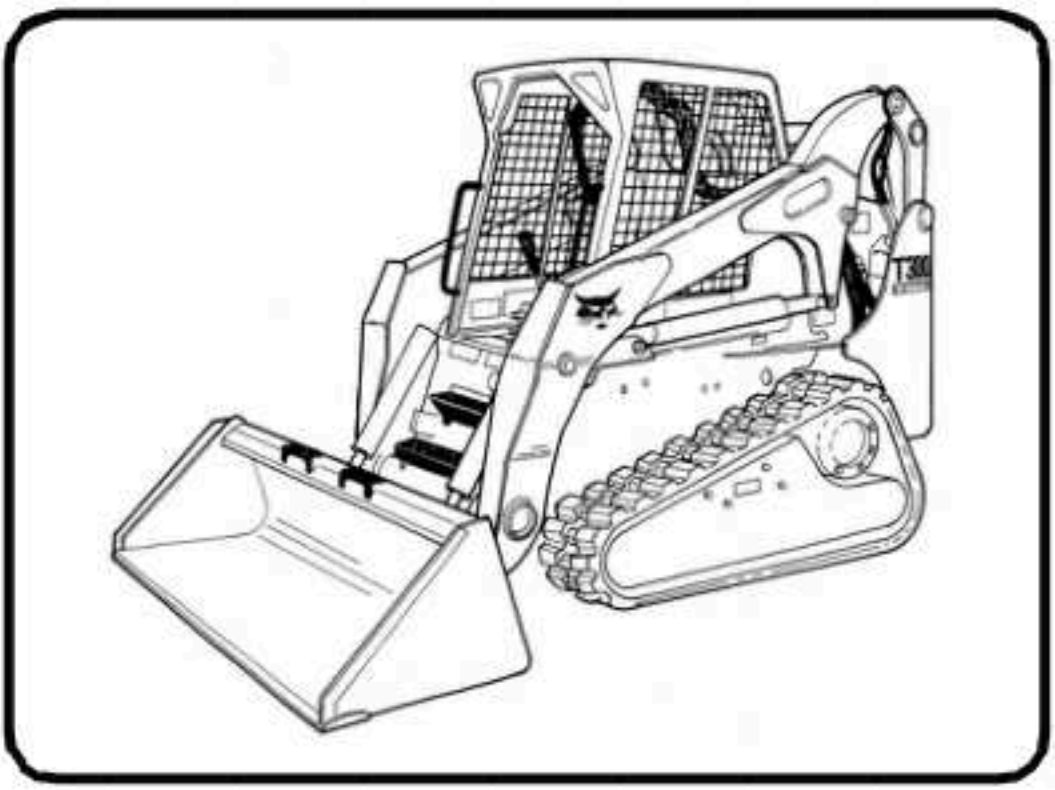
Bobcat®

Service Manual
T300 Compact Track Loader

S/N A5GU11001 - A5GU19999
S/N A5GV11001 - A5GV19999



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6986683 (3-09)

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ACS- ADVANCED CONTROL SYSTEM
AHC- ADVANCED HAND CONTROL SYSTEM
BICS™-BOBCAT INTERLOCK CONTROL SYSTEM

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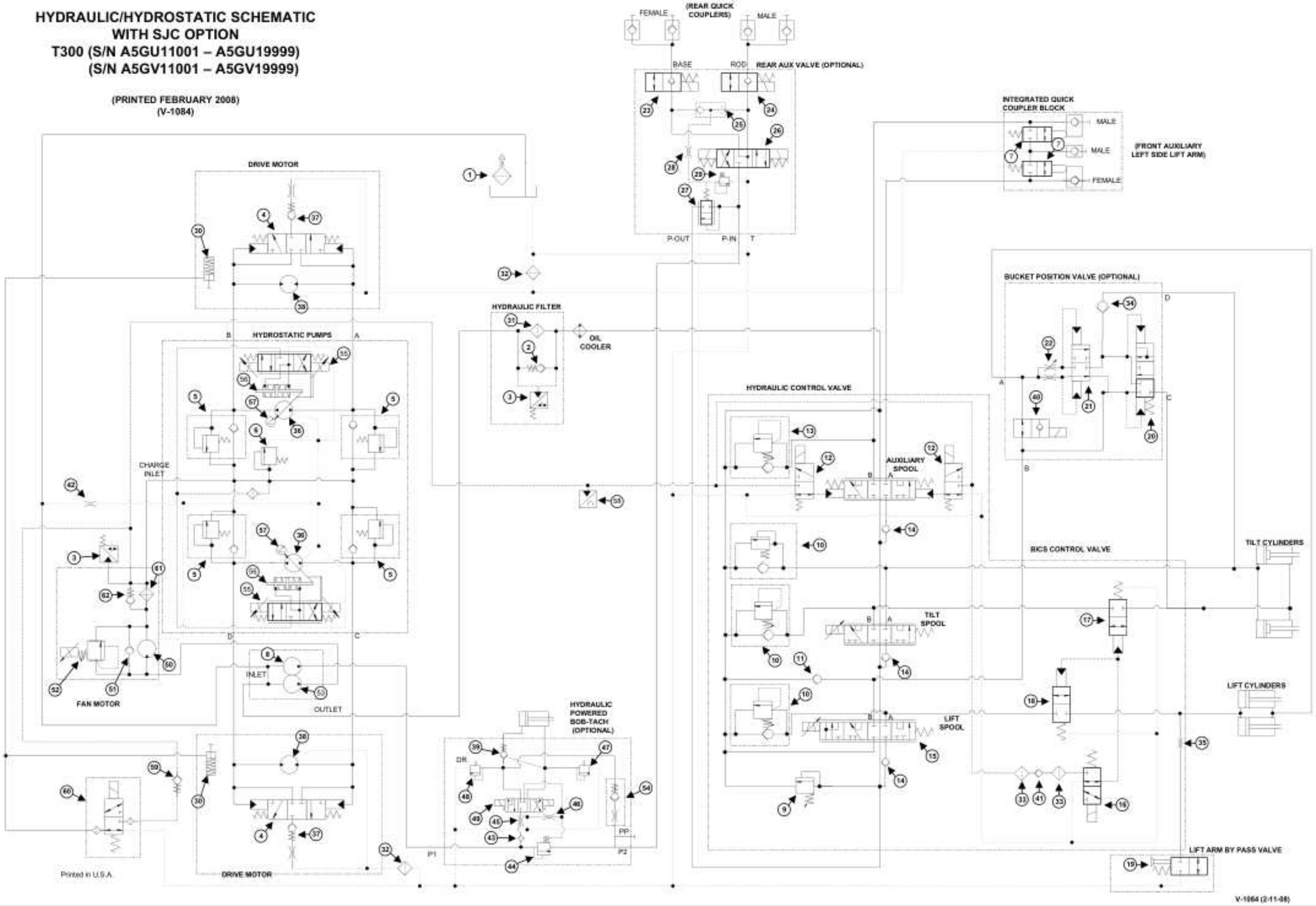
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HYDRAULIC/HYDROSTATIC SCHEMATIC
WITH SJC OPTION
T300 (S/N A5GU11001 – A5GU19999)
(S/N A5GV11001 – A5GV19999)

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(V-1084)



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Troubleshooting

The following troubleshooting chart 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

PROBLEM	CAUSE
Indicator light does not come ON when seat bar is lowered.	1, 2, 3, 4, 5

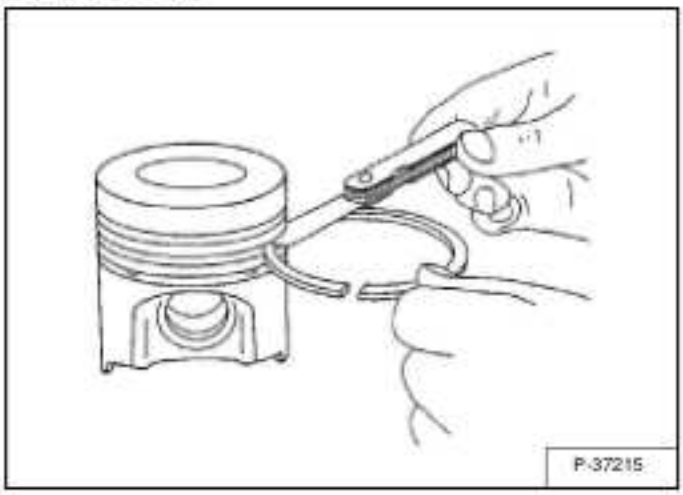
KEY TO CORRECT THE CAUSE
1. Check sensor wire connection.
2. Use the BICS sensor tester MEL1428 with seat bar adapter MEL1567 to check sensor and controller.
3. Check for loose hardware.
4. Check keyed bushing to make sure magnet collar rotates with seat bar.
5. Check magnet collar magnets for contamination such as metal particles.

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Piston And Connecting Rod - Servicing (Cont'd)

Piston Ring Groove

Figure 70-90-15



Remove carbon from the ring grooves.

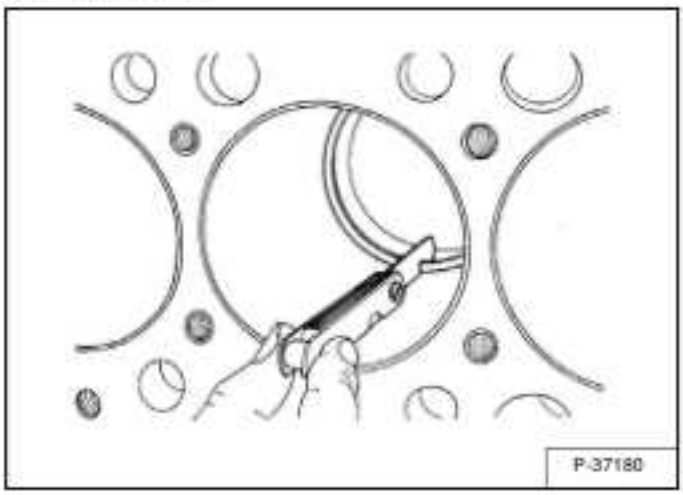
Measure the clearance between the ring and the groove with a feeler gauge **[Figure 70-90-15]**.

If the clearance exceeds allowable limit, check the new rings on an old piston and if it is out of spec, replace the piston.

Factory spec.	Compression ring 1	0.002 - 0.003 in. (0,05 - 0,09 mm)
	Compression ring 2	0.00367 - 0.00472 in. (0,0930 - 0,1200 mm)
	Oil Ring	0.00079 - 0.0023 in. (0,020 - 0,060 mm)
Allowable limit	Compression ring 1	0.0059 in. (0,15 mm)
	Compression ring 2	0.0079 in. (0,20 mm)
	Oil ring	0.0059 in. (0,15 mm)

Piston Ring Gap

Figure 70-90-16



Insert the piston ring into the lower part of the liner (the least worn out part) with the piston.

Measure the ring gap with a feeler gauge **[Figure 70-90-16]**.

If the gap exceeds the allowable limit, replace the piston ring.

Compression ring 1, 2	Factory spec.	0.012 - 0.017 in. (0,30 - 0,45 mm)
	Allowable limit	0.0492 in. (1,25 mm)

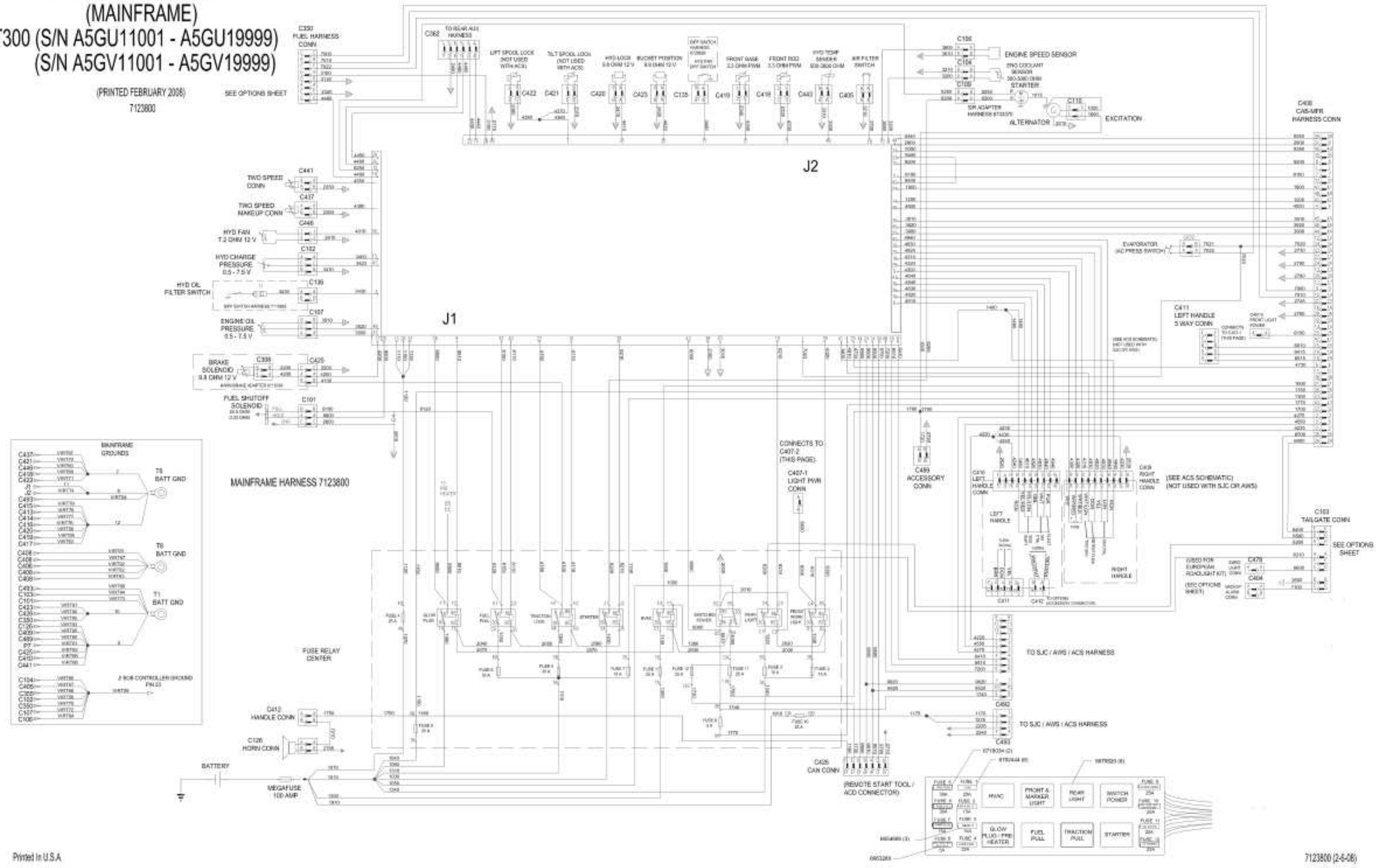
Oil Ring	Factory spec.	0.0099 - 0.017 in. (0,25 - 0,45 mm)
	Allowable limit	0.0492 in. (1,25 mm)

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WIRING SCHEMATIC
(MAINFRAME)
T300 (S/N A5GU11001 - A5GU19999)
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