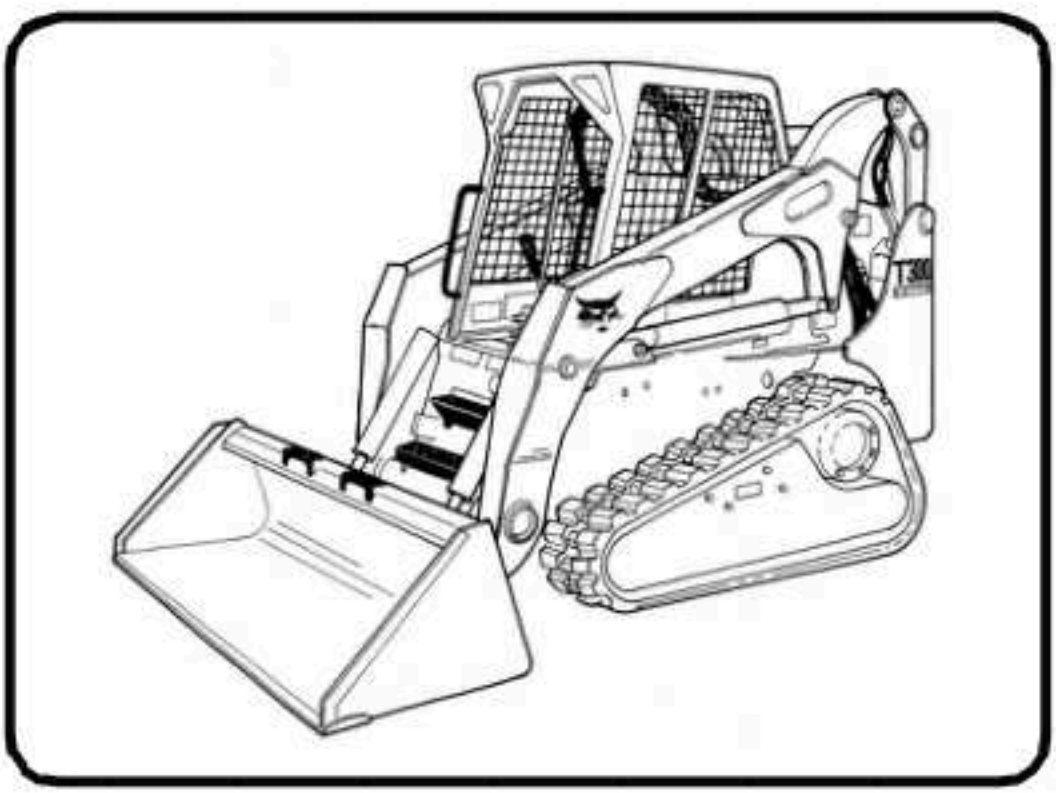
Bobcat®

Service Manual
T300 Compact Track Loader

S/N A5GU20001 & Above
S/N A5GV20001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6987045 (6-10)

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

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REMOTE START TOOL (SERVICE TOOL) KIT - 6689779

Description

The Remote Start Tool (Service Tool) Kit is a replacement tool for MEL 1563 Remote Start Tool and MEL 1400B - BOSS® Diagnostic Tool.

The Remote Start Tool (Service Tool) Kit, P/N 6689779, can be used to service older loaders with the BOSS® system using the supplied BOSS® Service Tool Harness P/N 6689745.

The Remote Start Tool (Service Tool) Kit, P/N 6689779, can be used to service newer loaders using the supplied harness P/N 6689747.

A computer can be connected to the Remote Start Tool (Service Tool) for diagnostics and software updates using the computer harness P/N 6689746 in conjunction with the loader harness.

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Specifications (Cont'd)

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

Timing Gear

Timing Gear Backlash	
Crank Gear - Idler Gear	0.00193 - 0.00759 in. (0,049 - 0,193 mm)
Allowable Limit	0.0087 in. (0,22 mm)
Idler Gear - Cam Gear	0.00193 - 0.00744 in. (0,049 - 0,189 mm)
Allowable Limit	0.0087 in. (0,22 mm)
Idle Gear - Injection Pump Gear	0.00119 - 0.00649 in. (0,0300 - 0,165 mm)
Allowable Limit	0.0087 in. (0,22 mm)
Clearance Between Idle Gear Shaft And Idle Gear Bushing	0.0020 - 0.0035 in. (0.050 - 0.091 mm)
Allowable Limit	0.0039 in. (0,10 mm)
Idle Gear Bushing I.D.	1.7727 - 1.7736 in. (45,025 - 45,050 mm)
Idle Gear Shaft O.D.	1.7701 - 1.7706 in. (44,959 - 44,975 mm)
Idle Gear Side Clearance	0.0059 - 0.011 in. (0,15 - 0,30 mm)
Allowable Limit	0.04 in. (0,9 mm)

Cylinder Head

Cylinder Head Surface Flatness - Allowable Limit	0.002 in. (0,05 mm)
Compression Pressure	504 PSI / 250 RPM (34,749 bar / 250 RPM)
Compression Pressure - Allowable Limit	371 PSI / 250 RPM (25,579 bar / 250 RPM)
Compression Ratio	19.0
Variance Among Cylinder - Allowable Limit	10% or less
Firing Order	1-3-4-2

Piston And Piston Ring

Piston Pin Bore I.D.	1.1811 - 1.1816 in. (30,000 - 30,013 mm)
Allowable Limit	1.183 in. (30,05 mm)
Clearance Between Compression Ring 1 and Ring Groove	0.002 - 0.003 in. (0,05 - 0,09 mm)
Allowable Limit	0.0059 in. (0,15 mm)
Clearance Between Compression Ring 2 and Ring Groove	0.00367 - 0.00472 in. (0,0930 - 0,120 mm)
Allowable Limit	0.0079 in. (0,20 mm)
Clearance Between Oil Ring And Ring Groove	0.0008 - 0.0023 in. (0,020 - 0,060 mm)
Allowable Limit	0.0059 in. (0,15 mm)
Ring Gap	
Compression Ring 1	0.012 - 0.017 in. (0,30 - 0,45 mm)
Allowable Limit	0.0492 in. (1,25 mm)
Compression Ring 2	0.012 - 0.017 in. (0,30 - 0,45 mm)
Allowable Limit	0.0492 in. (1,25 mm)
Oil Ring	0.0099 - 0.017 in. (0,25 - 0,45 mm)
Allowable Limit	0.0492 in. (1,25 mm)

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Gauge Pressure Related Troubleshooting (Cont'd)

Possible Cause	Inspection	Solution
High pressure side Too low.		
1. Low refrigerant charge.	The high side pressure will be low and bubbles may be present in sight glass on receive drier.	Repair any leaks and recharge the refrigerant to the correct level.
System pressures Equal		
1. Clutch not operating.	See magnetic clutch related topics above.	
2. Compressor not pumping.	Equal high and low pressures.	Replace compressor.

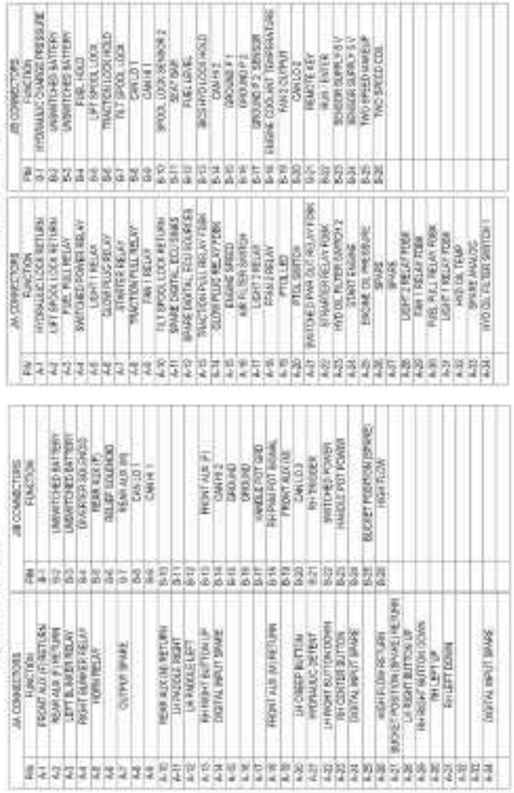
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WIRING SCHEMATIC
(MAINFRAME)
T300 (S/N A5GU20001 AND ABOVE)
(S/N A5GV20001 AND ABOVE)

(PRINTED OCTOBER 2006)

7159444 or 7169388

LARGE FRAME
MAINFRAME
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