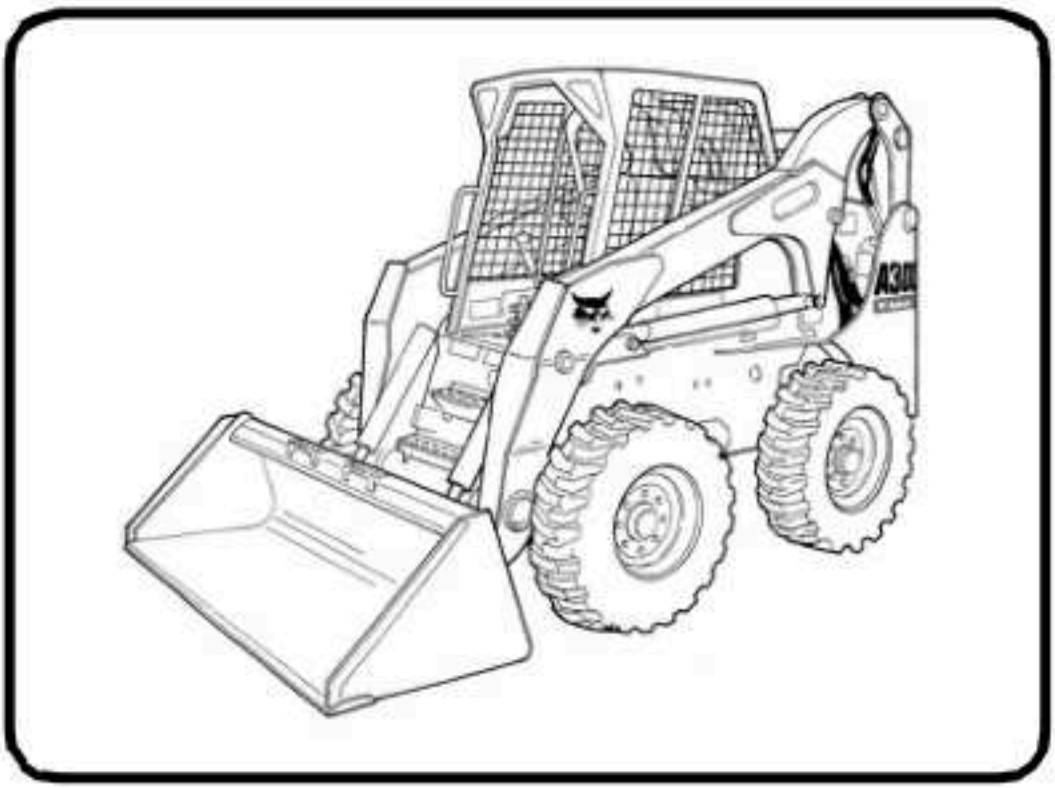
Bobcat®

Service Manual
A300 All-Wheel Steer

S/N 539911001 & Above
S/N 540011001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS)

6904172 (1-08)

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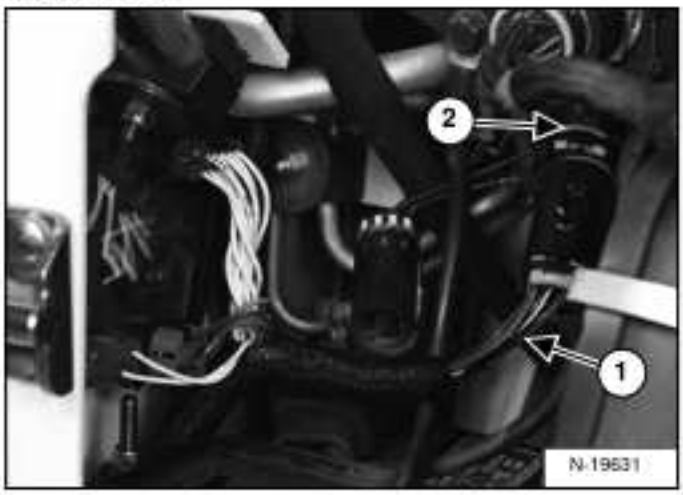
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Service Tool Harness Control - MEL1565 (Cont'd)

Figure 10-60-7



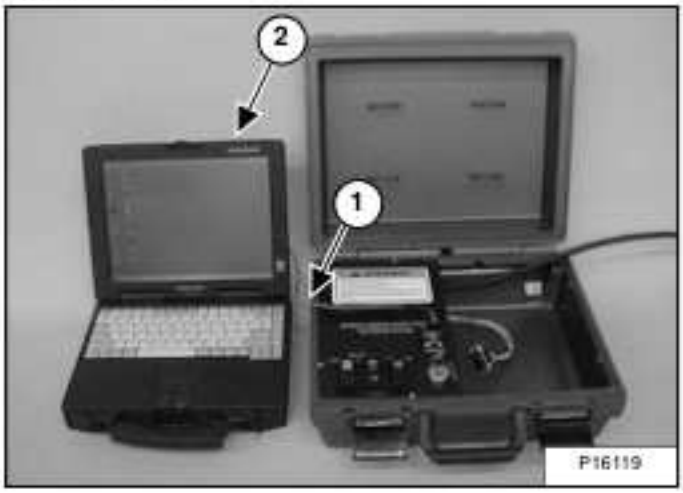
Loaders equipped with an attachment harness (Item 1) **[Figure 10-60-7]** must disconnect the attachment harness from the loader harness (Item 2) **[Figure 10-60-7]**.

Connect the service tool harness to the ACD connector and the loader harness connector.

NOTE: To monitor, diagnose or load new software the Service PC must be connected to the Remote Start Tool Switch.

Service Tool Harness Communicator - MEL1566

Figure 10-60-8



The service tool harness communicator (Item 1) **[Figure 10-60-8]** is required to connect remote start tool to the Service PC (Item 2) **[Figure 10-60-8]**.

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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.

PROBLEM	CAUSE
Slow cranking speed.	1, 2, 3
Engine will not start.	2, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 19, 27, 28, 29
Difficult to start.	1, 2, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 25, 27, 28, 29, 54
No power for engine.	8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 20, 21, 22, 23, 27, 28, 29
Engine is mis-firing.	8, 9, 11, 12, 13, 15, 16, 17, 21, 22, 24, 25, 26, 28
Too much fuel consumption.	10, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 27, 28, 29
Black exhaust.	10, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 27, 28, 29
Blue/white exhaust.	4, 10, 15, 16, 17, 21, 23, 27, 29, 30, 50
Low oil pressure.	4, 31, 32, 33, 34, 35, 37, 38, 39, 52
Engine knocking.	13, 15, 16, 19, 22, 24, 25, 27, 29, 31, 40, 41, 53
Engine running rough.	7, 8, 9, 10, 11, 12, 13, 17, 18, 22, 24, 25, 26, 29, 40, 53
Vibration.	12, 13, 17, 21, 22, 25, 26, 29, 40, 42, 43
High oil pressure warning.	4, 33, 36
Overheating.	10, 12, 13, 15, 16, 20, 21, 40, 44, 45, 46, 47, 48, 51
Too much crankcase pressure.	22, 27, 29, 30, 40, 49
Poor compression.	10, 16, 21, 24, 25, 27, 28, 29, 30, 41, 53
Start and stop.	9, 10, 11

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(A300) LOADER SPECIFICATIONS (CONT'D)

Hydraulic System

Pump Type	Engine driven gear type
Pump Capacity - Standard	20.7 GPM (78,4 L/min.) @ 2967 pump RPM @ 91% efficiency
Pump Capacity - High-Flow Option	36.7 GPM (138,9 L/min.) @ 2967 pump RPM @ 91% efficiency
System Relief at Quick Couplers	3250 - 3350 PSI (224 - 231 bar)
Filters	Full flow replaceable, 3-micron synthetic media element
Steering Filter	In Line replaceable filter.
Hydraulic Cylinders	Double-acting; tilt cylinders have cushioning feature on dump and rollback
Bore Diameter: Lift Cylinder (2) Tilt Cylinder (2) Steering Cylinder (4) Rod Diameter: Lift Cylinder (2) Tilt Cylinder (2) Steering Cylinder (4) Stroke: Lift Cylinder (2) Tilt Cylinder (2) Steering Cylinder (4)	3.00 (76,2) 3.00 (76,2) 2.00 (50,8) 1.62 (41,1) 1.50 (38,1) 1.00 (25,4) 25.46 (647,0) 15.10 (384) 4.86 (123)
Control Valve	3-Spool, open center type with float detent on lift and electrically controlled auxiliary spool
Fluid Lines	SAE Standard tubelines, hoses and fittings
Fluid Type	BOBCAT FLUID, Hydraulic/Hydrostatic 6903117 - (2.5 Gal.) 6903118 - (5 Gal.) 6903119 - (55 Gal.)
Hydraulic Function Time: Raise Lift Arms Lower Lift Arms Bucket Dump Bucket Rollback Wheel Cycle (Left to Right)	 4.5 Seconds 3.5 Seconds 2.6 Seconds 2.1 Seconds 1.4 Seconds

Electrical

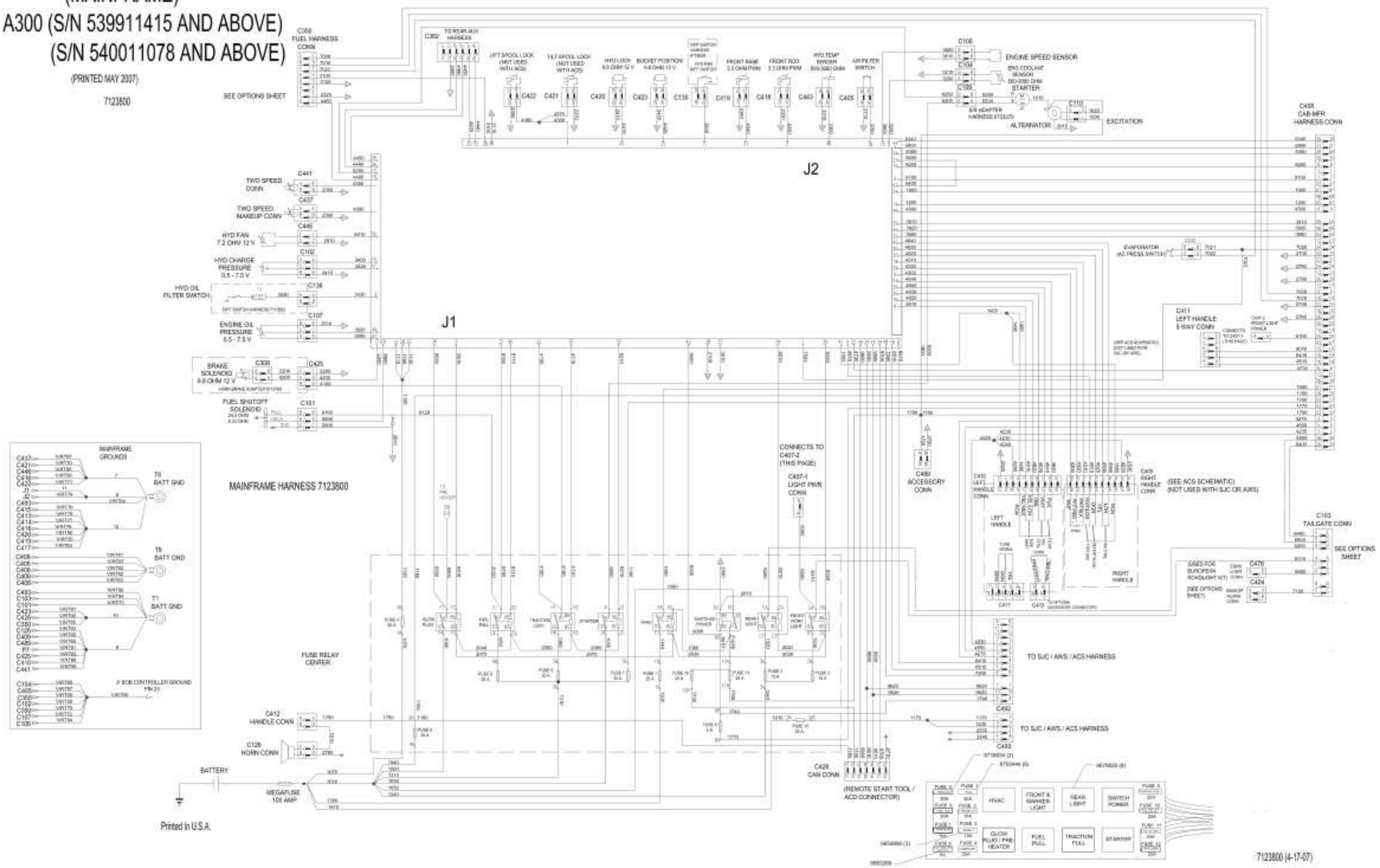
Alternator	Belt driven, 90 amps, open frame
Battery	12 volts, 950 cold cranking amps @ 0° F (-18° C), 180 Minute reserve capacity at 25 amps
Starter	12 volts, gear type, 4.02 HP (3,0 kW)
Instrumentation	**Gauges:** Hourmeter, Fuel, Engine Coolant Temperature. **Warning lights:** Fuel Level, Engine Preheat, System Voltage, Seat Belt, Engine Coolant Temperature, Engine Oil Pressure, Hydrostatic Charge Pressure, Hydraulic Oil Temperature, Engine Air Filter and Hydraulic Filter. **Other:** Audible Alarm, BICS Function, Lights, Opt./Accessory Switches. **Optional Deluxe Instrumentation:** Same gauges and warning lights as standard instrumentation. Additional bar-type gauges for: Engine Oil Pressure, System Voltage, Hydrostatic Charge Pressure and Hydraulic Oil Temperature. Additional Features Included: Keyless Start, Clock, Job Clock, Help Screens, and Diagnostic Capability.

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WIRING SCHEMATIC
(MAINFRAME)
A300 (S/N 539911415 AND ABOVE)
(S/N 540011078 AND ABOVE)

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