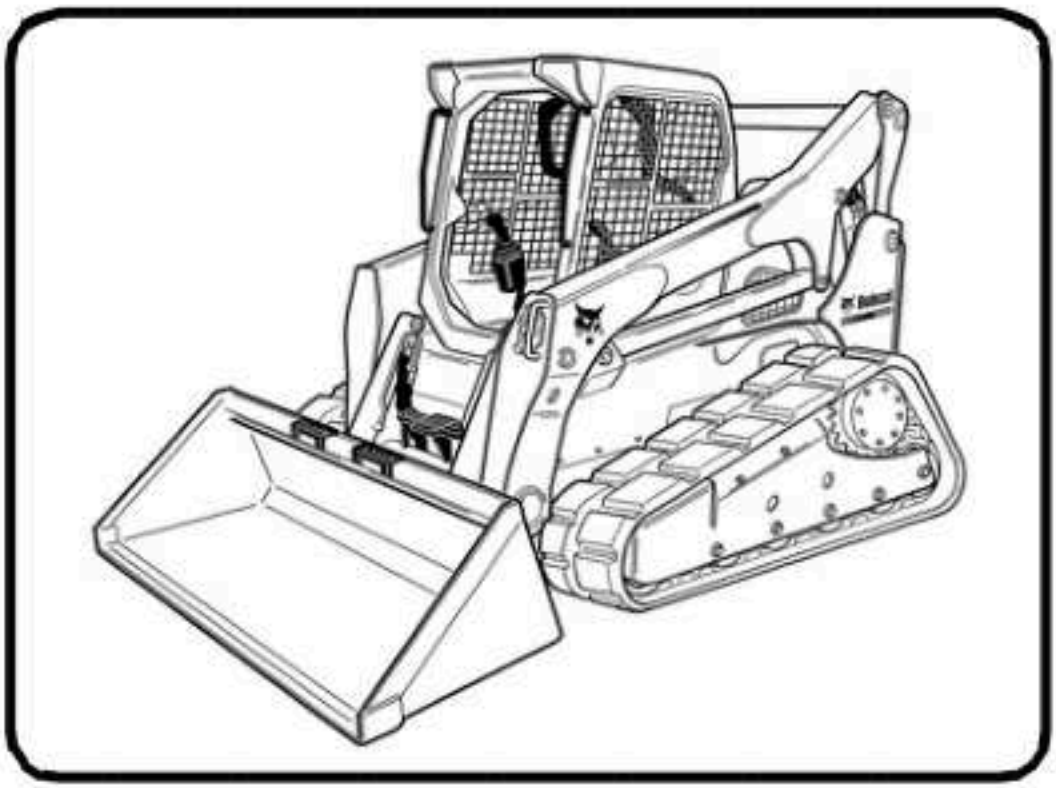
Bobcat®

Service Manual
T870 Compact Track Loader

S/N A3PG11001 & Above
S/N A3PH11001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6987487 (9-10)

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CONTENTS

SAFETY & MAINTENANCE 10-01

HYDRAULIC SYSTEM 20-01

HYDROSTATIC SYSTEM 30-01

DRIVE SYSTEM 40-01

MAINFRAME 50-01

ELECTRICAL SYSTEM & ANALYSIS 60-01

ENGINE SERVICE 70-01

HEATING, VENTILATION AND AIR CONDITIONING (HVAC) 80-01

SPECIFICATIONS SPEC-01

ALPHABETICAL INDEX INDEX-01

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FOREWORD 1-7

SAFETY INSTRUCTIONS 1-10

FIRE PREVENTION 1-12
- Maintenance 1-12
- Operation 1-12
- Electrical 1-12
- Hydraulic System 1-12
- Fueling 1-12
- Starting 1-12
- Spark Arrestor Exhaust System 1-12
- Welding And Grinding 1-13
- Fire Extinguishers 1-13

SERIAL NUMBER LOCATIONS 1-14
- Loader Serial Number 1-14
- Engine Serial Number 1-14

DELIVERY REPORT 1-15

LOADER IDENTIFICATION 1-16

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J1 CONNECTOR ASSIGNMENTS(GATEWAY CONTROLLER)			
PIN	FUNCTION	PIN	FUNCTION
A-1	HYDRAULIC LOCK RETURN	B-1	HYD CHARGE PRESS
A-2		B-2	UNSW BATT
A-3	FUEL PULL RELAY	B-3	UNSW BATT
A-4	SWITCHED POWER OUT RELAY	B-4	FUEL HOLD
A-5	LIGHT 1 RELAY	B-5	
A-6	GLOW PLUG RELAY	B-6	TRACTION LOCK HOLD
A-7	STARTER RELAY	B-7	
A-8	TRACTION PULL RELAY	B-8	CAN LO 1
A-9		B-9	CAN HI 1
A-10		B-10	
A-11	AC SENSE	B-11	SEAT BAR
A-12	SPARE DIGITAL, ECU SOURCES	B-12	FUEL LEVEL
A-13	TRACTION PULL RELAY FDBK	B-13	BICS HYD LOCK HOLD
A-14	GLOW PLUG RELAY FDBK	B-14	CAN HI 2
A-15	ENGINE SPEED	B-15	GROUND P1
A-16	AIR FILTER SWITCH	B-16	GROUND P2
A-17	REAR LIGHT 2 RELAY	B-17	GROUND P3, SENSOR
A-18	FAN 2 RETURN	B-18	ENGINE COOLANT TEMP
A-19	PTOL LED	B-19	FAN 2 OUTPUT
A-20	PTOL SWITCH	B-20	CAN LO 2
A-21	SWITCHED POWER OUT RELAY FDBK	B-21	REMOTE KEY
A-22	STATER RELAY FDBK	B-22	RUN/ENTER
A-23		B-23	SENSOR SUPPLY 8V
A-24	START ENGINE	B-24	SENSOR SUPPLY 5V
A-25	ENGINE OIL PRESS	B-25	TWO SPEED MAKEUP
A-26	TWO SPEED RETURN	B-26	TWO SPEED COIL
A-27	TWO SPEED MAKE-UP RETURN		
A-28	REAR LIGHT 2 RELAY FDBK		
A-29			
A-30	FUEL PULL RELAY FDBK		
A-31	FRONT WORK LIGHT 1 RELAY FDBK		
A-32	HYD OIL TEMP		
A-33			
A-34	HYD OIL FILTER SW1		

J2 CONNECTOR ASSIGNMENTS(AUXILLIARY CONTROLLER)			
PIN	FUNCTION	PIN	FUNCTION
A-1	FRONT AUX (F) RETURN	B-1	
A-2	REAR AUX (F) RETURN	B-2	UNSW BATT
A-3	LEFT BLINKER RELAY	B-3	UNSW BATT
A-4	RIGHT BLINKER RELAY	B-4	DIVERTED SOLENOID
A-5	HORN RELAY	B-5	REAR AUX (F)
A-6		B-6	RELIEF SOLENOID
A-7		B-7	REAR AUX (M)
A-8		B-8	CAN LO 1
A-9		B-9	CAN HI 1
A-10	REAR AUX (M) RETURN	B-10	
A-11		B-11	
A-12		B-12	
A-13		B-13	FRONT AUX (F)
A-14		B-14	
A-15		B-15	GROUND
A-16		B-16	GROUND
A-17		B-17	
A-18	FRONT AUX (M) RETURN	B-18	
A-19		B-19	FRONT AUX (M)
A-20		B-20	
A-21		B-21	
A-22		B-22	SWITCHED POWER
A-23		B-23	
A-24		B-24	
A-25		B-25	HYDRAULIC BOOST
A-26	HIGH FLOW RETURN	B-26	HIGH FLOW
A-27	HYDRAULIC BOOST RETURN		
A-28			
A-29			
A-30			
A-31			
A-32			
A-33			
A-34			

J5 DRIVE CONTROLLER	
PIN	FUNCTION
1	
2	
3	
4	H PAT SWITCH
5	
6	ISO LITE
7	L SWASH PLATE ANGLE
8	R SWASH PLATE ANGLE
9	
10	
11	L FWD RETURN
12	CAN HIGH
13	
14	
15	
16	H PAT LITE
17	
18	
19	
20	
21	L FWD DRIVE
22	CAN LOW
23	R QUAD A DRIVE
24	R QUAD B DRIVE
25	
26	BRAKE LIGHT OUTPUT
27	GROUND
28	GROUND
29	SENSOR GROUND
30	
31	L REV DRIVE
32	
33	L QUAD A DRIVE
34	L QUAD B DRIVE
35	
36	BACKUP ALARM
37	
38	
39	
40	SENSOR SUPPLY 1 +5V
41	L REV RETURN
42	R FWD RETURN
43	R FWD DRIVE
44	R REV DRIVE
45	R REV RETURN
46	
47	UNSWITCHED BATTERY
48	UNSWITCHED BATTERY
49	
50	SWITCHED BATTERY

ACS CONTROLLER					
CONNECTOR J3A		CONNECTOR J3B		CONNECTOR J3C	
PIN	FUNCTION	PIN	FUNCTION	PIN	FUNCTION
A	+5V TO SENSORS	A		A	TILT MOTOR 1
B	SWITCHED POWER	B		B	UNSWITCHED POWER
C		C		C	UNSWITCHED POWER
D	CAN HIGH	D		D	LIFT MOTOR 2
E	CAN LOW	E	TILT ACTUATOR FEEDBACK	E	
F		F		F	LIFT MOTOR 1
G	GROUND	G		G	PEDAL ENABLE
H	GROUND	H	LIFT ACTUATOR FEEDBACK	H	GROUND
		J	LIFT PEDAL	J	GROUND
		K	TILT PEDAL	K	TILT MOTOR 2

HARNESS PART NUMBER	
MFR SJC	7176759
DLX CAB	7176096
DLX FUEL	7184255
STD FUEL	7149219
DOOR	7155024
S/R	6733370
TAILGATE DOM	7175271
TAILGATE EUR	7175287
2 SPD ADP	7159366
A22 PUMP	7169309
SUSP JSTK	7163706
BRAKE ADAPTER	7165061
SPD SNSR ADP	7168115



WIRING SCHEMATIC
(SJC MACHINE)
T870 (S/N A3PG11001 AND ABOVE)
(S/N A3PH11001 AND ABOVE)
Sheet 2 of 13

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