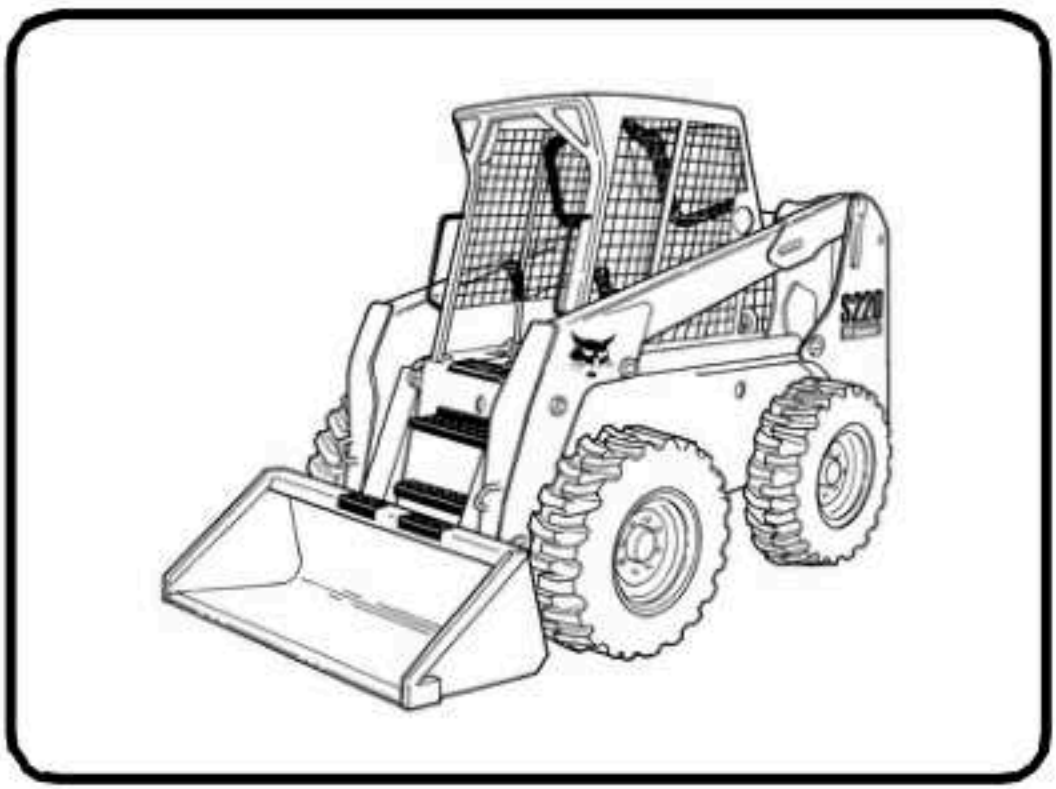
Bobcat

Service Manual
S220 Skid-Steer Loader

S/N A5GK11001 - A5GK19999
S/N A5GL11001 - A5GL19999



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS)

6986679 (5-08)

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ALPHABETICAL INDEX

ACCESS PANEL (INSIDE) 50-01
ACCESS PANEL (INSIDE) (SJC) 50-01
AIR CLEANER 70-01
AIR CLEANER SERVICE 10-01
AIR CONDITIONING SYSTEM FLOW 80-01
ALTERNATOR 60-01

BACK UP ALARM SYSTEM 60-01
BATTERY 60-01
BLOWER FAN 80-01
BOBCAT CONTROLLER (ACS) 60-01
BOBCAT CONTROLLER (MAIN) 60-01
BOBCAT CONTROLLER (SJC) (DRIVE) 60-01
BOBCAT INTERLOCK CONTROL SYSTEM (BICS) 60-01
BOB-TACH (HAND LEVER) 10-01, 50-01
BOB-TACH (POWER) BLOCK 20-01
BOB-TACH (POWER- OPTION) 10-01, 50-01
BRAKE 40-01
BRAKE (TWO-SPEED) 40-01
BUCKET POSITION VALVE 20-01

CAB DOOR 50-01
CALIBRATION 60-01
CAMSHAFT AND TIMING GEARS 70-01
CASE DRAIN FILTER 30-01
CHAINCASE 40-01
CHARGE PRESSURE 30-01
COMPRESSOR 80-01
CONDENSER 80-01
CONTROL HANDLE / LEVER 50-01
CONTROL HANDLE / LEVER (ACS) 50-01
CONTROL PANEL 50-01
CONTROL PANEL SETUP 60-01
CONTROL PANEL (SJC) 50-01
CONTROL PEDALS (ACS) 50-01
CONTROL PEDALS AND LINKAGES 50-01
CONTROL SYSTEM (ACS) 60-01
CONVERSIONS SPEC-01
CRANKSHAFT AND PISTONS 70-01
CYLINDER HEAD 70-01
CYLINDER (LIFT) 20-01
CYLINDER (BOB-TACH) 20-01
CYLINDER (TILT) 20-01

DIAGNOSTICS SERVICE CODES 60-01
DRIVE BELT 30-01
DRIVE COMPONENTS 40-01

ELECTRICAL / HYDRAULIC CONTROLS 60-01
ELECTRICAL/HYDRAULIC CONTROLS (SJC) 60-01
ELECTRICAL SYSTEM INFORMATION 60-01
ENGINE COOLING SYSTEM 10-01, 70-01
ENGINE INFORMATION 70-01
ENGINE LUBRICATION SYSTEM 10-01
ENGINE SPEED CONTROL 70-01
ENGINE SPEED CONTROL (SJC) 70-01
EVAPORATOR 80-01
EVAPORATOR / HEATER UNIT 80-01

EXHAUST GAS RECIRCULATION (EGR) SYSTEM 80-01
EXPANSION VALVE 80-01

FINAL DRIVE TRANSMISSION (CHAINCASE) 10-01
FLYWHEEL AND HOUSING 70-01
FLYWHEEL RPM SENSOR 60-01
FRONT AUXILIARY HYD. COUPLER BLOCK 20-01
FUEL SYSTEM 10-01, 70-01
FUEL TANK 50-01

HEATER COIL 80-01
HEATER VALVE 80-01
HYDRAULIC CONNECTION SPECS SPEC-01
HYDRAULIC CONTROL VALVE (ACS) OR (SJC) 20-01
HYDRAULIC CONTROL VALVE (STANDARD) 20-01
HYDRAULIC FLUID RESERVOIR 20-01
HYDRAULIC FLUID SPECIFICATIONS SPEC-01
HYDRAULIC / HYDROSTATIC FILTERS 20-01
HYDRAULIC / HYDROSTATIC SYSTEM 10-01
HYDRAULIC PUMP (STANDARD) (HIGH FLOW) 20-01
HYDRAULIC PUMP (STANDARD) 20-01
HYDRAULIC PUMP (SJC) (HIGH FLOW) 20-01
HYDRAULIC PUMP (SJC) 20-01
HYDRAULIC SYSTEM INFORMATION 20-01
HYDROSTATIC MOTOR 30-01
HYDROSTATIC MOTOR (TWO-SPEED) 30-01
HYDROSTATIC MOTOR CARRIER 30-01
HYDROSTATIC MOTOR CARRIER (SJC) 30-01
HYDROSTATIC PUMP 30-01
HYDROSTATIC PUMP (SJC) 30-01
HYDROSTATIC SYSTEM INFORMATION 30-01

INSTRUMENT PANELS 60-01

JOYSTICK CONTROL 50-01

LIFT ARMS 50-01
LIFT ARM BYPASS CONTROL VALVE 20-01
LIFT ARM SUPPORT DEVICE 10-01
LIFTING AND BLOCKING THE LOADER 10-01
LIGHTS 60-01
(S220) LOADER SPECIFICATIONS SPEC-01
LOADER STORAGE AND RETURN TO SERVICE 10-01
LUBRICATION SYSTEM 70-01
LUBRICATING THE LOADER 10-01

MAIN RELIEF VALVE 20-01
MAINTENANCE CLOCK 60-01
MUFFLER 70-01

OIL COOLER 20-01
OPERATOR CAB 10-01, 50-01
OPERATOR SEAT 50-01
OPERATOR SEAT (SUSPENSION) 50-01

MidWestTech | Bobcat S220 Skid Steer Loader Service Manual | Publication 6986679_5_08 Order the manual at mid-west-tech.com >

PASSWORD SETUP (IF EQUIPPED WITH KEYLESS START) 60-01
PIVOT PINS 10-01

REAR AUXILIARY DIVERTER VALVE 20-01
REAR DOOR 50-01
REAR GRILL 50-01
RECEIVER / DRIER 80-01
REGULAR MAINTENANCE 80-01
REMOTE START TOOL KIT-MEL1563 10-01
REMOTE START TOOL (SERVICE TOOL) KIT - 6689779 10-01

SEAT BAR 50-01
SEAT BAR SENSOR 60-01
SERVICE PC (LAPTOP COMPUTER) 60-01
SERVICE SCHEDULE 10-01
SPEED SENSOR (SJC) 60-01
SPARK ARRESTOR MUFFLER 10-01
STARTER 60-01
STEERING DRIFT COMPENSATION 60-01
STOPPING THE ENGINE AND LEAVING THE LOADER 10-01
SYSTEM CHARGING AND RECLAMATION 80-01

THERMOSTAT 80-01
TIRE MAINTENANCE 10-01
TORQUE SPECIFICATIONS FOR BOLTS SPEC-01
TOWING THE LOADER 10-01
TRACTION LOCK 60-01
TRANSPORTING LOADER ON A TRAILER 10-01
TROUBLESHOOTING 80-01
TURBOCHARGER 70-01

WINDOW (FRONT DOOR) 50-01
WINDOW (REAR) 50-01
WINDOW (SIDE) 50-01
WINDOW (TOP) 50-01

MidWestTech | Bobcat S220 Skid Steer Loader Service Manual | Publication 6986679_5_08 Order the manual at mid-west-tech.com >

CONTENTS

DELIVERY REPORT IX

FOREWORD II

LOADER IDENTIFICATION X

SAFETY INSTRUCTIONS V

SERIAL NUMBER LOCATIONS IX

SAFETY AND MAINTENANCE 10-01

HYDRAULIC SYSTEM 20-01

HYDROSTATIC SYSTEM 30-01

DRIVE SYSTEM 40-01

MAIN FRAME 50-01

ELECTRICAL SYSTEM & ANALYSIS 60-01

ENGINE SERVICE 70-01

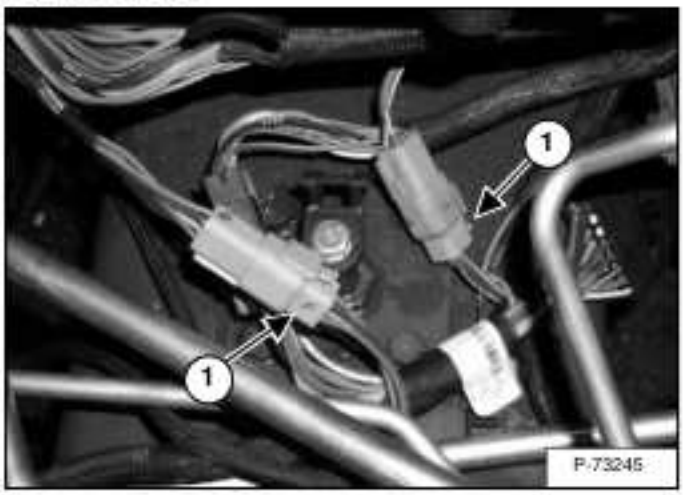
HEATING, VENTILATION, AIR CONDITIONING 80-01

SPECIFICATIONS SPEC-01

MidWestTech | Bobcat S220 Skid Steer Loader Service Manual | Publication 6986679_5_08 Order the manual at mid-west-tech.com >

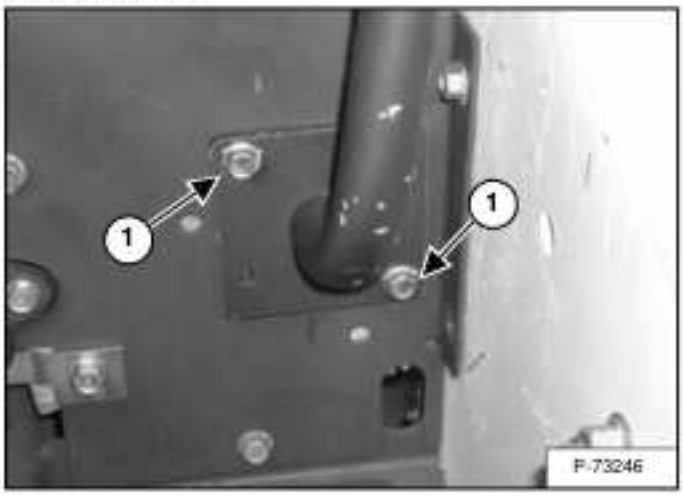
Joystick Mount Removal And Installation

Figure 50-112-8



Disconnect both of the electrical harness connectors from the loader harness (Item 1) **[Figure 50-112-8]**.

Figure 50-112-9

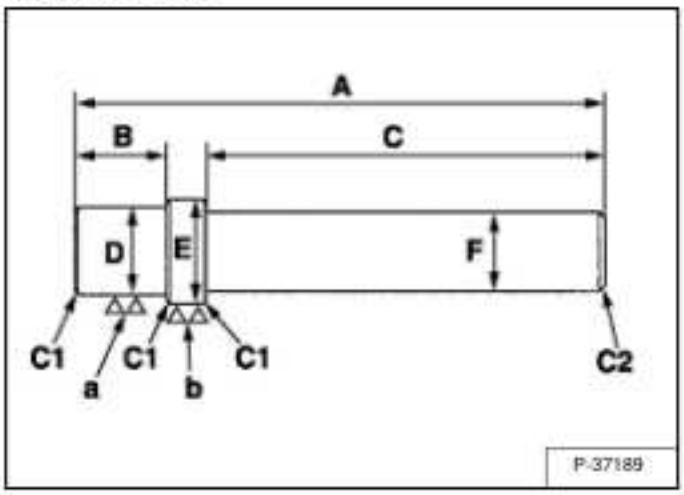


Remove the bolts (Item 1) **[Figure 50-112-9]** to remove the control lever from the loader.

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Idler Gear And Shaft - Servicing

Figure 70-100-13

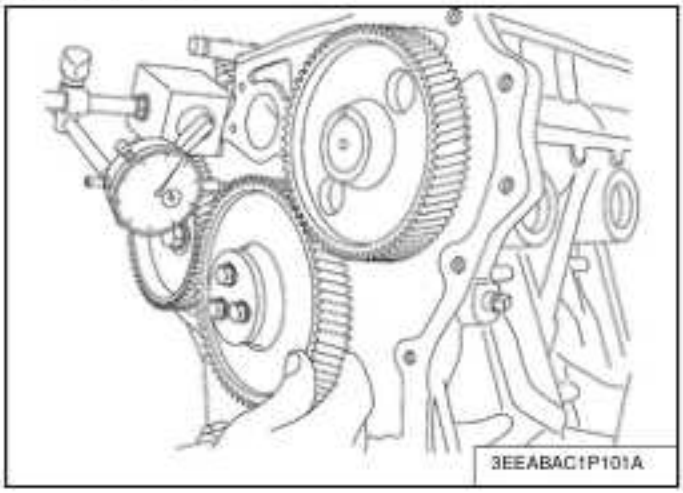


Bushing Replacing Tool
Application: Use to press out and press fit the bushing.
1. For idle gear bushing.

A	7.7165 in. (196 mm)
B	1.476 in. (37,5 mm)
C	5.9055 in. (150 mm)
D	1.8238 - 1.8307 in. dia. (46,325 - 46,500 mm dia.)
E	1.8937 - 1.8927 in. dia. (48,100 - 48,075 mm dia.)
F	0.7874 in. (20 mm)
a	0.00025 in. (0,0000063 mm)
b	0.00025 in. (0,0000063 mm)
C1	Chamfer 0.039 in. (1,0 mm)
C2	Chamfer 0.079 in. (2,0 mm)

Side Clearance

Figure 70-100-14



Set a dial indicator with its tip on the idle gear **[Figure 70-100-14]**.

Measure the side clearance by moving the idle gear to the front and rear.

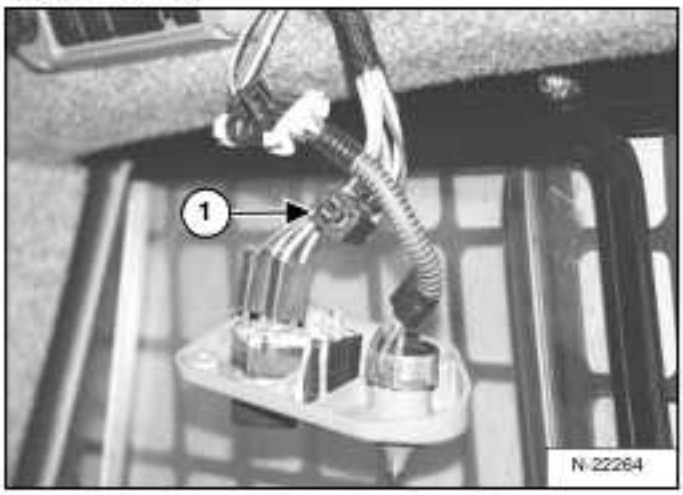
If the measurement exceeds the allowable limit, replace the idle gear collar.

Side clearance	Factory spec.	0.0059 - 0.0118 in. (0,15 - 0,30 mm)
	Allowable limit	0.0354 in. (0,9 mm)

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Electrical System (Cont'd)

Figure 80-30-21

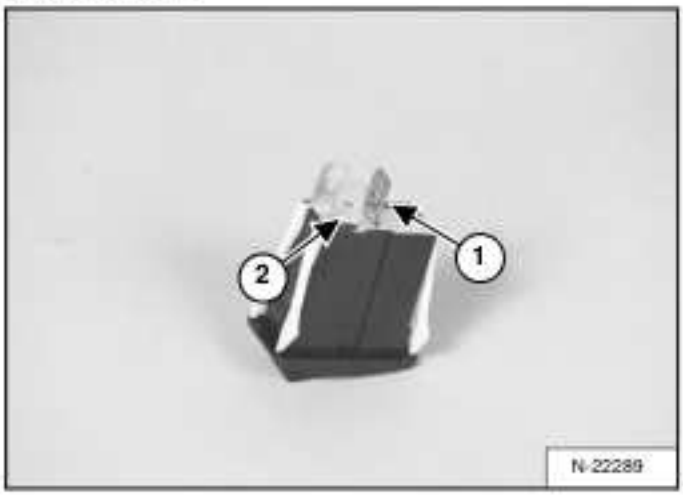


At the loader cab, disconnect the loader harness (Item 1) **[Figure 80-30-21]** from the A/C switch.

Check the harness for voltage. The voltage should be 12 volts.

If there is no voltage at the wiring harness, check the harness for broken wires.

Figure 80-30-22



If there is voltage at the wiring harness, check the A/C switch **[Figure 80-30-22]** for resistance.

With the switch in the OFF position there should be no resistance between any of the three terminals on the A/C switch.

With the switch in the ON position there should be resistance between terminal (Item 1) and terminal (Item 2) **[Figure 80-30-22]**.

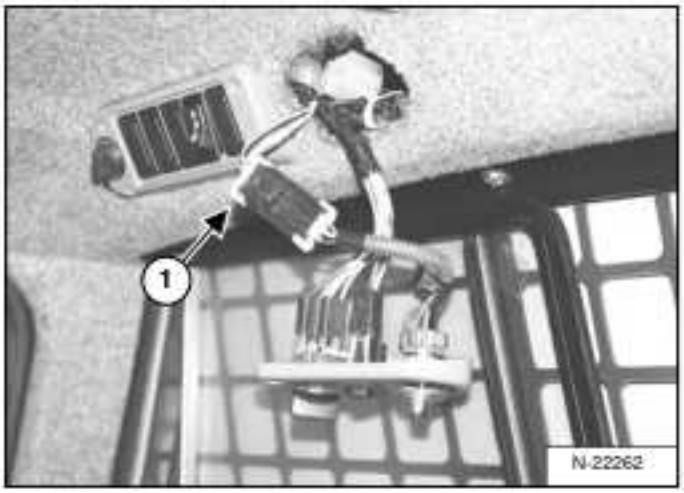
If no resistance value is found, replace the A/C switch.

If a resistance value is found, check the potentiometer.

The potentiometer will effect the A/C system and also effect the operation of the heater.

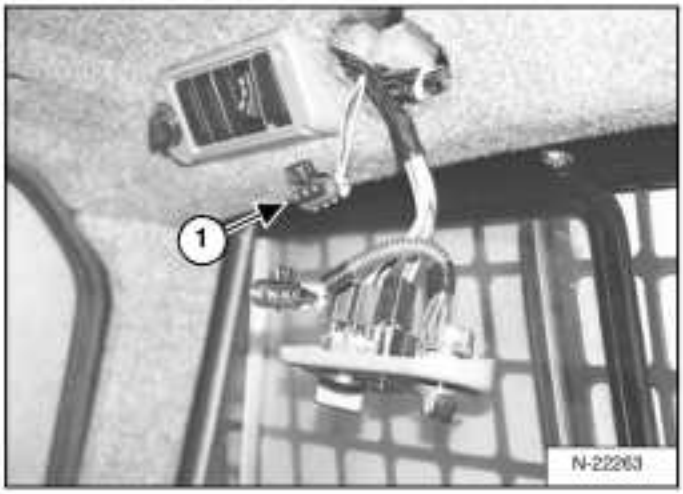
If heater valve does not open, or close, or the A/C does not work, check the potentiometer.

Figure 80-30-23



At the loader cab, disconnect the loader harness (Item 1) **[Figure 80-30-23]** from the potentiometer.

Figure 80-30-24



Check the loader harness (Item 1) **[Figure 80-30-24]** for voltage. The voltage should be 12 volts.

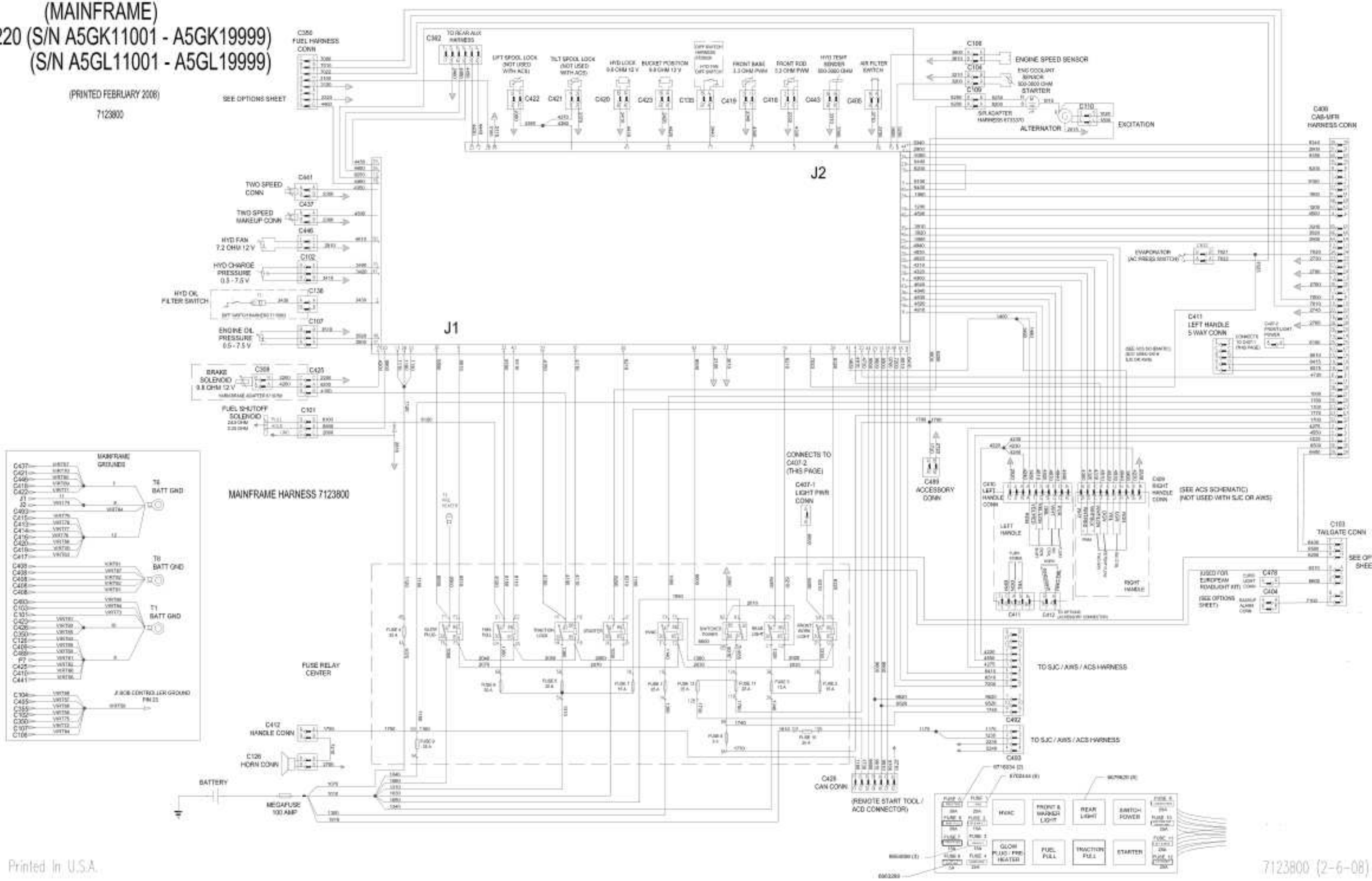
If there is no voltage at the wiring harness, check the harness for broken wires.

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WIRING SCHEMATIC
(MAINFRAME)
S220 (S/N A5GK11001 - A5GK19999)
(S/N A5GL11001 - A5GL19999)

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