“L” Series Loader Backoe

Service Manual

7-48854

MidWestTech | Case 580 Super L, 580L, 590 Super L, 580SL, 590SL Series 1 Loader Backhoe Service Manual | Publication 7-48694

Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

MASTER CYLINDER 2

Disassembly 2

Inspection 4

Assembly 4

NOTE: The Case Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

MASTER CYLINDER

Disassembly

1. Clean the outside of the master cylinder.
2. Fasten the body (6) of the master cylinder is the vise.
3. Remove the flow valve adapter (1) from the master cylinder.
4. Remove the flow valve (3) fro the master cylinder.
5. Remove the ball (5) from the master cylinder
6. Remove the gasket (2) from the flow valve adapter (1).
7. Remove the flow valve seal (4) fro the flow valve (3).
8. Loosen the lock nut. Remove the clevis and lock nut from the push rod (15).
9. Remove the boot (18) from the body (6).
10. Remove the snap ring (17) from the body (6).
11. Remove the push rod (15) and washer (16) from the body (6).
12. Hit the open end of the master cylinder against a piece of wood to move the piston assembly to the end of the master cylinder.
13. Pull the piston assembly from the master cylinder.
14. There is a small tab in the spring seat (12) that holds the spring seat (12) on the piston (13). Use a screwdriver to left up the tab.
15. Remove the check valve assembly from the piston (13).
16. Remove the seal (14) from the piston (13).
17. Disconnect the check valve seat (10) from the spring seat (12).
18. Remove the spring (11) from the spring seat (12).
19. Remove the check valve seat (10) fro the check valve piston (8).
20. Remove the wave spring (9) from the check valve piston (8).
21. Remove the check valve seal (7) from the check valve piston (8).

MidWestTech | Case 580 Super L, 580L, 590 Super L, 580SL, 590SL Series 1 Loader Backh... Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

PORTABLE FILTER 3

GENERAL INFORMATION 4

TYPES OF CONTAMINATION 4

CLEANING THE HYDRAULIC SYSTEM 5

FLUSHING WATER FROM THE HYDRAULIC SYSTEM 7

NOTE: The Case Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

MidWestTech | Case 580 Super L, 580L, 590 Super L, 580SL, 590SL Series 1 Loader Backh... Order the manual at mid-west-tech.com >

TABLE OF CONTENTS

SAFETY PROCEDURES 3

SPECIAL TOOLS 4

TROUBLESHOOTING 5-7

EXTERNAL COMPRESSOR CHECK 8,9

BLOWER MOTOR AND COMPRESSOR CLUTCH CHECK 10-13

CAB TEMPERATURE CHECK 14,15

VISUAL REFRIGERANT CHECK 16

CAB HEATER CHECK 17

EVAPORATOR AND PLENUM CHECK 18,19

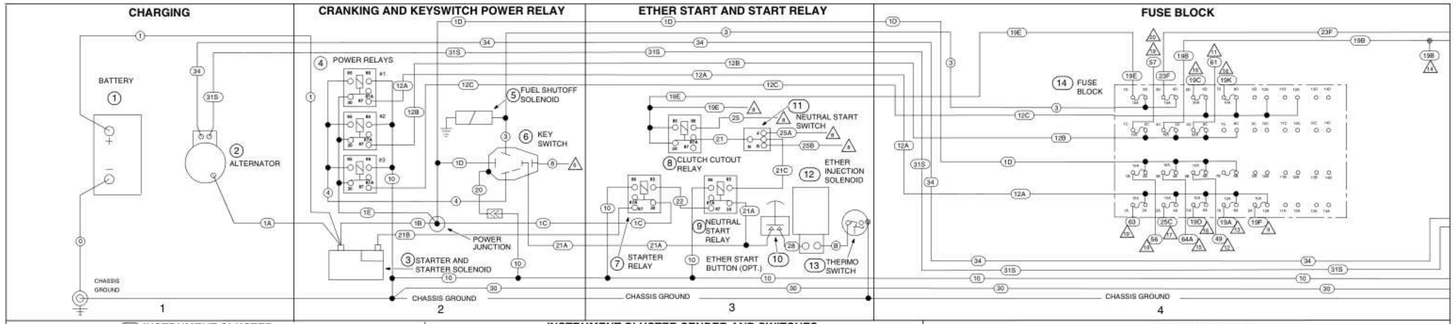
PRESSURE SWITCH CHECK 20

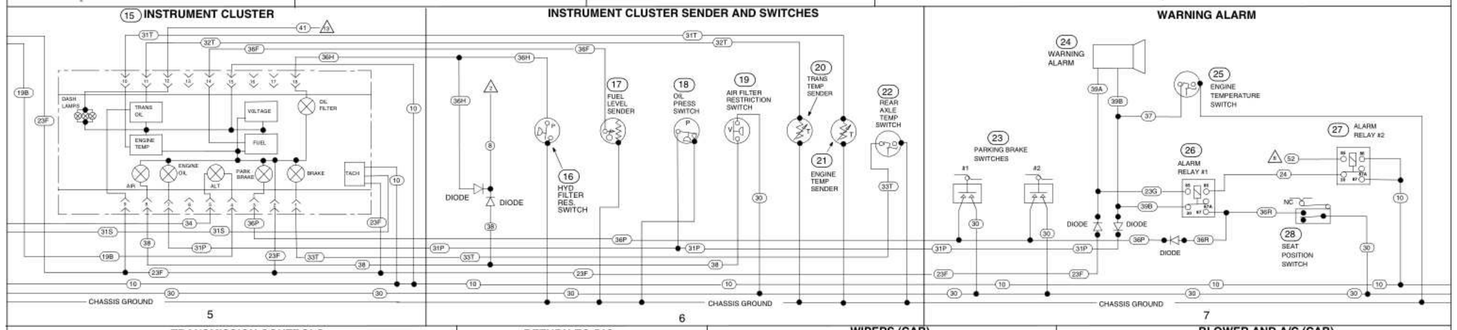
AIR CONDITIONING CONTROL SWITCH CHECK 21
- Current Check 21
- Sensing Line Check 21

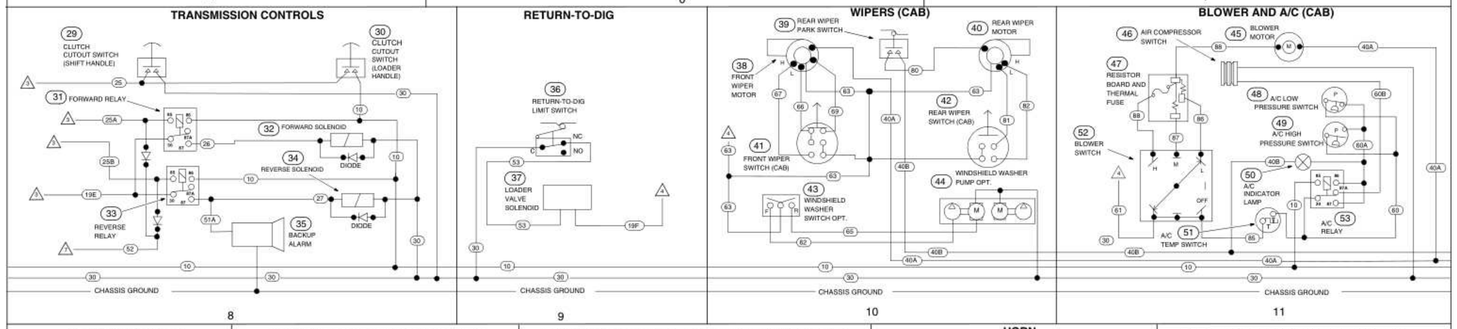
NOTE: The Case Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

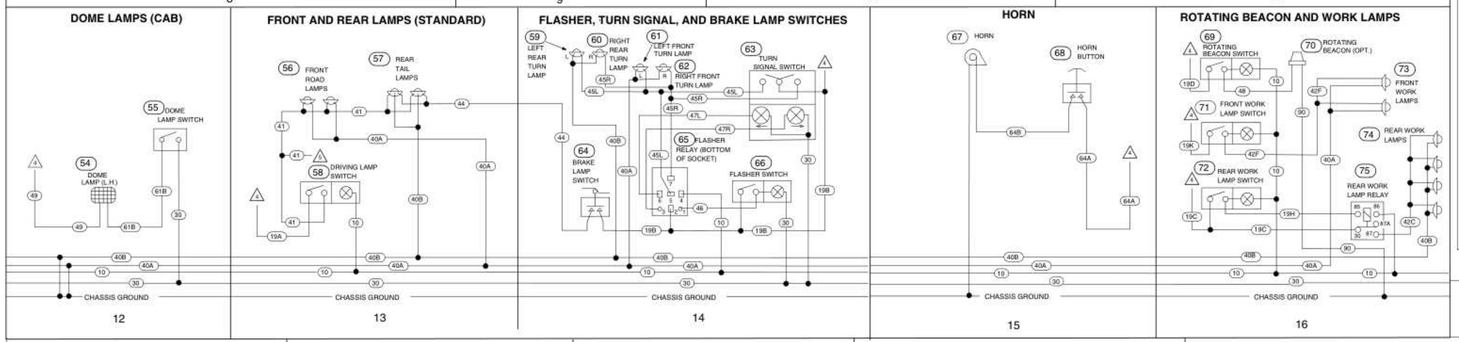
Bur 7-50091 Issued 7-95 Printed in U.S.A.

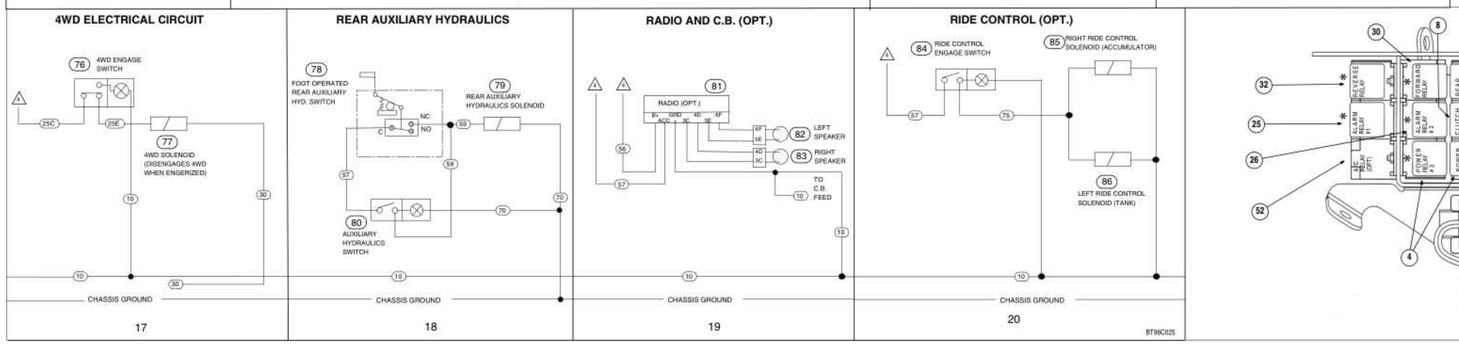
MidWestTech | Case 580 Super L, 580L, 590 Super L, 580SL, 590SL Series 1 Loader Backh... Order the manual at mid-west-tech.com >







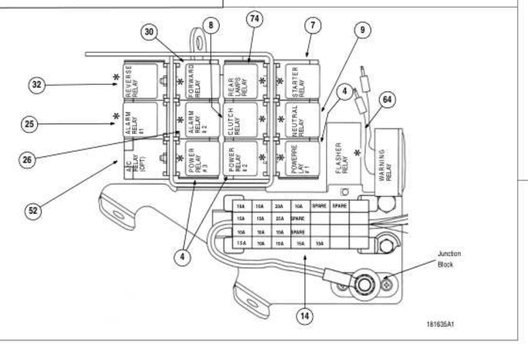




NO.	GA.	COLOR	FROM:	TO:
0	ST	(None)	Battery	Ground
1	0	Red	Battery	Starter Battery Terminal
1A	8	Red	Starter Battery Terminal	Alternator
1B	6	Red	Starter Battery Terminal	Power Junction Post
1C	12	Red	Power Junction Post	Starter Relay T30
1D	12	Red/Lt Blue	Power Junction Post	Ignition Switch (Batt) Fuse Block 2B, 4B, 6B, 8B
1E	12	Red	Power Junction Post	Power Relays 1, 2, 3, T30
3	12	Orange/White	Ignition Switch (Ignition)	Fuel Solenoid (Hold In), Fuse Block 2D, 4D
3C	16	Gray/Black	RH Speaker	Ground at Radio
4	14	Orange/Black	Ignition Switch (ACC.)	Power Relays 1, 2, 3, T85
4D	16	Gray	RH Speaker	Radio (Right Output)
5E	16	Gray/Black	LH Speaker	Ground at Radio
6F	16	Gray	LH Speaker	Radio (Left Output)
8	16	Yellow/White	Ignition Switch Momentary Ground	Diodes
10	16	Black/Orange	Accessories	Ground
12A	12	Red/Black	Power Relay 1, T87	Fuse Block 2A, 4A, 6A, 8A, and 10A
12B	12	Red/Orange	Power Relay 2, T87	Fuse Block 2C, 4C, 6C, and 8C
12C	12	Red	Power Relay 3, T87	Fuse Block 6D, 8D, 10D, and 12D
19A	14	Red	Fuse Block 7A	Driving Light Switch
19B	12	Red/Black	Fuse Block 3C	Alternator Lamp, Turn Signal Switch, Brake Switch, Hazard Switch, Flasher Relay T2
19C	12	Red/White	Fuse Block 5D	Rear Work Lamp Switch and Relay T30
19D	16	Red/Yellow	Fuse Block 5A	Rotating Beacon Switch
19E	16	Red/Blue	Fuse Block 1D	Clutch Relay T85 and T30, Forward and Reverse Relays T30
19F	16	Red/Green	Fuse Block 9A	Loader Valve RTD Solenoid
19H	16	Red/Purple	Rear Work Lamp Switch	Rear Work Lamp and Relay T85
19K	16	Red/Brown	Fuse Block 7D	Front Work Lamp Switch
20	16	Black	Ignition Switch Body	Ground
21	16	White/Green	Clutch Relay T87a	Forward/Neutral/Reverse Lever (+)
21A	16	White/Red	Ignition Switch (Start)	Ether Start Button and Neutral Relay T30
21B	12	White	Starter Relay T87	Starter Solenoid
21C	16	White/Yellow	Forward/Neutral/Reverse Lever (-)	Neutral Relay T85
22	16	White/Purple	Neutral Relay T87	Starter Relay T85
23F	16	White/Orange	Fuse Block 3D	Instrument Cluster T2, T9, Tach, Diode
23G	16	White/Blue	Diode & Wire 39A	Alarm Relay #1 T85
24	16	White/Brown	Alarm Relay #1 T86	Alarm Relay #2 T30
25	16	White/Gray	Clutch Relay T86	Clutch Cutout Switches
25A	16	White/Black	Forward/Neutral/Reverse Lever (FOR)	Forward Relay T85 & Diode
25B	16	White/Orange	Forward/Neutral/Reverse Lever (REV)	Reverse Relay T85 & Diode
25C	16	Orange/Yellow	Fuse Block 3A	4WD Engage Switch
25E	16	Orange/White	4WD Engage Switch	4WD Solenoid
26	16	Orange/Gray	Forward Relay T87	Forward Solenoid & Diode
27	16	Orange/Red	Reverse Relay T87	Reverse Solenoid, Wire #51A, & Diode
28	16	Gray/Orange	Ether Start Button	Ether Injection Solenoid
30	16	Black/Yellow	Accessories	Ground
31P	16	Yellow/Black	Instrument Cluster T7	Oil Pressure Switch & Diode
31S	16	Yellow/Red	Alternator Tach Output	Instrument Cluster Tachometer
31T	16	Yellow	Instrument Cluster T10	Coolant Temperature Sender
32T	16	Yellow/Green	Instrument Cluster T11	Transmission Temperature Sender
33T	16	Yellow/Pink	Instrument Cluster T1	Rear Axle Temperature Switch
34	16	Yellow/Dk Blue	Alternator	Instrument Cluster T5
36F	16	Yellow/Orange	Instrument Cluster T14	Fuel Level Sender
36H	16	Yellow/Purple	Instrument Cluster T18	Hydraulic Filter Restriction Switch & Diode

NO.	GA.	COLOR	FROM:	TO:
36P	16	Yellow/Brown	Instrument Cluster T3	Park Brake Switch & Diode
36R	16	Yellow/Gray	Alarm Relay #1 T87	Seat Position Switch (NC) & Diode
37	16	Yellow/White	Warning Alarm (-), Wire 39B	Coolant Temperature Switch
38	16	Yellow/Blue	Instrument Cluster T8	Air Filter Restriction Switch & Diode
39A	16	Purple/Yellow	Diode & Wire 23G	Warning Alarm (+)
39B	16	Purple/White	Warning Alarm (-)	Alarm Relay #1 T30, Diode & Wire # 37
40A	12	Black	Front Driving, Work, Turn Lamps, Front Wiper, Blower	Ground
40B	12	Black/White	Rear Work, Tail, Turn Lamps, Rear Wiper Stop Switch & AC Indicator Lamp	Ground
41	14	Pink	Front Driving Lamp Switch	Front Driving, Tail, Cluster - T12
42C	12	Dk Blue/Orange	Rear Work Lamp Relay T87	Rear Work Lamps
42F	16	Dark Blue	Front Work Lamp Switch	Front Work Lamps
44	14	Tan	Brake Switch	Brake Lamps
45L	16	Dark Brown/Yellow	Flasher Relay T5	Left Turn Signal Lamps
45R	16	Dark Brown/Green	Flasher Relay T7	Right Turn Signal Lamps
46	16	Dark Brown	Flasher Switch	Flasher Relay T1
47L	16	Lt Brown/Yellow	Turn Signal Switch (Left)	Left Turn Indicator, Flash Relay T6
47R	16	Lt Brown/Green	Turn Signal Switch (Right)	Right Turn Indicator, Flash Relay T3
48	16	Lt Brown/White	Beacon Switch	Beacon
49	16	Gray	Fuse Block 5B	Dome Lamp
51A	16	Red/Yellow	Wire 27 & Diode	Backup Alarm (+)
52	16	Blue/Red	Diodes	Alarm Relay #2 T85
53	16	Purple/Red	Loader Valve RTD Solenoid	RTD Limit Switch (NC)
56	16	Red/Gray	Fuse Block 1B	Optional Radio or C.B.
57	16	Orange/Yellow	Fuse Block 1C	Optional Radio or C.B. and Optional Rear Auxiliary Hydraulic Switch
59	16	Red	Optional Rear Auxiliary Hydraulic Switch	Optional Rear Auxiliary Hydraulic Solenoid
60	16	Orange/Brown	A/C Thermostat	A/C Relay T30, A/C High/Low Pressure Switches
60A	16	Orange/Black	A/C Relay T86 & T87	A/C/ Low/High Pressure Switch, A/C Indicator Lamp
60B	16	Orange/Green	A/C Relay T87a	A/C Compressor Clutch
61	14	Gray/White	Fuse Block 5C	Blower Switch (+)
61B	16	Gray/Black	Dome Lamp	Dome Lamp Switch
62	16	Orange/Gray	Windshield Washer Switch	Front Windshield Washer Pump
63	14	Orange/Purple	Fuse Block 1A	Front/Rear Wiper Switches, Motors, Windshield Washer Switch
64A	16	Orange/Blue	Fuse Block 3B	Horn Switch
64B	16	Green/Red	Horn Switch	Horn
65	16	Orange/Brown	Windshield Washer Switch	Rear Windshield Washer Pump
66	16	Green	Front Wiper Switch - Low	Front Wiper - Low
67	16	Red	Front Wiper Switch - High	Front Wiper - High
69	16	Yellow	Front Wiper Switch - Brake	Front Wiper - Brake
70	16	Black	Optional Rear Auxiliary Hydraulic Solenoid	Ground
71	16	Red/Black	Aux Hyd Foot Switch "N/O"	Aux Hydraulic Solenoid
75	16	Red	Ride Control Engage Switch	Ride Control Solenoids
80	14	Black	Wiper (Ground)	Rear Wiper Motor Stop Switch
81	16	Gray	Rear Wiper Switch - Low	Rear Wiper - Low
82	16	White	Rear Wiper Switch - High	Rear Wiper - High
85	14	Orange/Green	Blower Switch	A/C Thermostat
86	14	Light Blue	Blower Switch - Low	Resistor Board - Low
87	14	Blue	Blower Switch - Medium	Resistor Board - Medium
88	14	Lt Blue/White	Blower Switch - High	Resistor Board - High/Blower
90	16	Black	Rotating Beacon	Ground

8 Indicates circuit continued on block shown.



FUSE AND RELAY LOCATION

* STARTING & TRANSMISSION CONT.	* INSTRUMENTS & ALARM SYS.	* REAR WORK LAMPS	* FRONT WORK LAMPS	SPARE	SPARE	
RADIO & RIDE CONTROL REAR AUXILIARY HYDRAULIC (OPT)	* SIGNAL LAMPS	** BLOWER	SPARE			
RADIO & C.B., (BATT+)	* HORN	** DOME LAMP	SPARE			
* WIPERS	4WD (OPT)	ROTATING BEACON (OPT)	* DRIVING LAMPS	* RETURN TO DIG		

* STANDARD EQUIPMENT
** STANDARD EQUIPMENT W/CAB

"L" SERIES LOADER BACKHOE FAMILY ELECTRICAL SCHEMATIC

(580L, 580 Super L and 590 Super L)

Additional copies of this hydraulic and electrical schematic can be ordered through Technical Publications Distribution System. The part number is 7-48712.

Order the manual at mid-west-tech.com >