9040B Excavator

Service Manual

7-62222

CASE CONSTRUCTION

MidWestTech | Case 9040B Excavator Service Manual | Publication 7-62222

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SAFETY

This symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED. The message that follows the symbol contains important information about safety. Carefully read the message. Make sure you fully understand the causes of possible injury or death. SB001

To prevent injury always follow the Warning, Caution and Danger notes in this section and throughout the manual.

Put the warning tag shown below on the key for the keyswitch when servicing or repairing the machine. One warning tag is supplied with each machine. Additional tags Part Number 331-4614 are available from your service parts supplier.



1001-01

WARNING: *Read the operator's manual to familiarize yourself with the correct control functions.* 46-27

WARNING: *Operate the machine and equipment controls from the seat position only. Any other method could result in serious injury.* 48-55

WARNING: *This is a one man machine, no riders allowed.* 35-8

WARNING: *Before starting engine, study Operator's Manual safety messages. Read all safety signs on machine. Clear the area of other persons. Learn and practice safe use of controls before operating.*
It is your responsibility to understand and follow manufacturers instructions on machine operation, service and to observe pertinent laws and regulations. Operator's and Service Manuals may be obtained from your Case dealer. SA055

WARNING: *If you wear clothing that is too loose or do not use the correct safety equipment for your job, you can be injured. Always wear clothing that will not catch on objects. Extra safety equipment that can be required includes hard hat, safety shoes, ear protection, eye or face protection, heavy gloves and reflector clothing.* 45-3A

WARNING: *When working in the area of the fan belt with the engine running, avoid loose clothing if possible, and use extreme caution.* 35-4

WARNING: *When doing checks and tests on the equipment hydraulics, follow the procedures as they are written. DO NOT change the procedure.* 47-44

WARNING: *When putting the hydraulic cylinders on this machine through the necessary cycles to check operation or to remove air from a circuit, make sure all people are out of the way.* 47-45

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WARNING: *Use insulated gloves or mittens when working with hot parts.* 47-41A

CAUTION: *Lower all attachments to the ground or use stands to safely support the attachments before you do any maintenance or service.* 49-11

CAUTION: *Pin sized and smaller streams of hydraulic oil under pressure can penetrate the skin and result in serious infection. If hydraulic oil under pressure does penetrate the skin, seek medical treatment immediately. Maintain all hoses and tubes in good condition. Make sure all connections are tight. Make a replacement of any tube or hose that is damaged or thought to be damaged. DO NOT use your hand to check for leaks, use a piece of cardboard or wood.* 40-6A

CAUTION: *When removing hardened pins such as a pivot pin, or a hardened shaft, use a soft head (brass or bronze) hammer or use a driver made from brass or bronze and a steel head hammer.* 46-17

CAUTION: *When using a hammer to remove and install pivot pins or separate parts using compressed air or using a grinder, wear eye protection that completely encloses the eyes (approved goggles or other approved eye protectors).* 46-13

CAUTION: *Use suitable floor (service) jacks or chain hoist to raise wheels or tracks off the floor. Always block machine in place with suitable safety stands.* 40-7A

CAUTION: *When servicing or repairing the machine, keep the shop floor and operator's compartment and steps free of oil, water, grease, tools, etc. Use an oil absorbing material and/or shop cloths as required. Use safe practices at all times.* 40-8

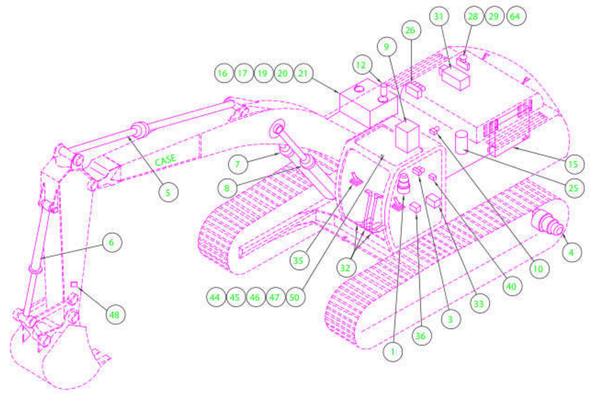
CAUTION: *Some components of this machine are very heavy. Use suitable lifting equipment or additional help as instructed in this Service Manual.* 40-10

DANGER: *Engine exhaust fumes can cause death. If it is necessary to start the engine in a closed place, remove the exhaust fumes from the area with an exhaust pipe extension. Open the doors and get outside air into the area.* 48-56

WARNING: *When the battery electrolyte is frozen, the battery can explode if (1), you try to charge the battery, or (2), you try to jump start and run the engine. To prevent the battery electrolyte from freezing, try to keep the battery at full charge. If you do not follow these instructions, you or others in the area can be injured.* SA033

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9030B, 9040B, 9045B EXCAVATOR HYDRAULIC/ELECTRICAL SCHEMATIC



ITEM	DESCRIPTION
1.	SWING MOTOR
2.	SWIVEL
3.	SWING BRAKE RELEASE
4.	MOTOR, TRAVEL
5.	CYLINDER, ARM
6.	CYLINDER, BUCKET
7.	CYLINDER, BOOM
8.	CYLINDER, BOOM
9.	VALVE, CONTROL
10.	FREE SWING SOLENOID
11.	FREE SWING ORIFICE
12.	DRAIN FILTER, CASE
13.	VALVE, RETURN PRESSURE
14.	COOLER BYPASS
15.	HYDRAULIC OIL COOLER
16.	BREATHER, AIR
17.	RESERVOIR
18.	FILTER
19.	STRAINER
20.	VALVE, RELIEF, FILTER BYPASS
21.	FILTER, RETURN
22.	FILTER, SHUT OFF
23.	FILTER, AIR/PROH
24.	PRESSURE SWITCH, UPPER
25.	PRESSURE SWITCH, TRAVEL
26.	8 SOLENOID VALVE BANK
27.	SHUTTLE VALVE, PUMP DESTROKE
28.	NITROGEN ACCUMULATOR
29.	PILOT MANIFOLD
30.	PILOT FILTER
31.	PUMP, HYDRAULIC
32.	TRAVEL CONTROLS
33.	PILOT CONTROL MANIFOLD
34.	SWING PRESSURE SWITCH
35.	VALVE, HAND CONTROLS
36.	VALVE, BOOM ARM CUSHION
37.	NEUTRAL PUMP DESTROKE
38.	SINGLE TRAVEL MANIFOLD 304MB ONLY)
39.	OPTIONAL SHUTTLE VALVE
40.	AUXILIARY DUAL FLOW
41.	SHUTTLE VALVE ARM 2/BUCKET 2
42.	BRAKE
43.	PRESSURE SWITCH, BOOM LOWERING
44.	BREAKER RETURN FILTER
45.	BREAKER RELIEF VALVE
46.	RELIEF SHUT OFF
47.	AUXILIARY OPTION SELECTOR
48.	AUXILIARY SHUT OFF VALVE
49.	BREAKER PILOT PRESSURE
50.	AUXILIARY DUAL PUMP SHUT OFF
51.	VALVE, BOOM HOLDING
52.	VALVE, ARM HOLDING
53.	BOOM 2 BLOCK OUT SPOOL
54.	ARM ANTI-DRIFT VALVE
55.	BOOM ANTI-DRIFT VALVE

LEGEND

- PUMP 1
- PUMP 2
- PILOT PUMP
- RETURN TO TANK
- DRAIN LINE
- WORKING LINE
- PILOT LINE
- TRAVEL PRESSURE
- UPPER PRESSURE
- STRAIGHT TRAVEL
- ENCLOSURE LINE
- FLEX HOSE IN LINE
- INDICATES COLOR BAND ON ELECTRICAL SOLENOID WIRES
- CONNECTED
- NOT CONNECTED
- 60 — INDICATES ITEM NUMBER
- 60 / K2 — UPPER VALVE INDICATES ITEM NUMBER; LOWER VALVE INDICATES VALVE PORT NUMBER

9030B, 9040B, 9045B EXCAVATOR
HYDRAULIC SCHEMATIC
Part number 7-15360

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