580M
580 SUPER M
580 SUPER M+
590 SUPER M
590 SUPER M+
Series 3
Loader Backhoes

Operator's Manual

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CASE CONSTRUCTION

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TABLE OF CONTENTS

CHAPTER 1
TO THE OWNER
M SERIES 3 LOADER BACKHOES 1-1
IDENTIFICATION NUMBERS 1-4
MACHINE COMPONENTS 1-6

CHAPTER 2
SAFETY, AND SAFETY DECALS
TABLE OF CONTENTS 2-1

CHAPTER 3
INSTRUMENTS AND CONTROLS
TABLE OF CONTENTS 3-1

CHAPTER 4
OPERATING INSTRUCTIONS
TABLE OF CONTENTS 4-1

CHAPTER 5
LUBRICATION, FILTERS, AND FLUIDS
TABLE OF CONTENTS 5-1

CHAPTER 6
MAINTENANCE AND ADJUSTMENTS
TABLE OF CONTENTS 6-1

CHAPTER 7
ELECTRICAL
TABLE OF CONTENTS 7-1

CHAPTER 8
SPECIFICATIONS
TABLE OF CONTENTS 8-1

CHAPTER 9
INDEX 9-1

CHAPTER 10
AFTER DELIVERY CHECK - DEALER COPY 10-1
AFTER DELIVERY CHECK - OWNERS COPY 10-3

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Chapter 2

SAFETY, AND SAFETY DECALS

TABLE OF CONTENTS

SAFETY RULES 2-3
UTILITY SAFETY 2-4
OPERATOR PRECAUTIONS 2-5
Personnel 2-5
General 2-5
Mounting And Dismounting Precautions 2-5
Starting And Stopping Precautions 2-5
Operating Precautions 2-6
Maintenance Precautions 2-7
Fuel Handling Precautions 2-8
Burn Prevention 2-8
Hazardous Chemical Precautions 2-8
Transporting Precautions 2-9
Wheel And Tire Safety 2-9
Roll-Over Protective Structure 2-9
Seat Belt Precautions 2-9
Specific Precautions To This Machine 2-10
Cast Ductile Iron 2-10
SAFETY DECALS 2-11
HAND SIGNALS 2-24

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Chapter 3
INSTRUMENTS AND CONTROLS

TABLE OF CONTENTS

FRONT CONSOLE AND STEERING COLUMN MOUNTED CONTROLS 3-3
STANDARD TRANSMISSION CONTROLS 3-6
POWERSHIFT TRANSMISSION CONTROLS 3-7
TRANSMISSION KICKDOWN CONTROLS 3-8
FOOT PEDALS 3-9
LOADER CONTROL LEVER 3-10
RIGHT SIDE CONSOLE CONTROLS 3-13
580 M INSTRUMENT CLUSTER 3-17
ADVANCED INSTRUMENT CLUSTER 3-20
LEFT REAR CONSOLE CONTROLS 3-27
BACKHOE CONTROLS 3-29
BACKHOE CONTROLS WITH FOOT SWING 3-30
EXTENDAHOE CONTROLS WITH FOOT SWING 3-31
BACKHOE CONTROLS WITH HAND SWING 3-32
BACKHOE CONTROLS WITH HAND SWING AND EXTENDABLE DIPPER 3-34
BACKHOE WITH PILOT CONTROLS 3-35
LEFT TOWER CONTROLS AND SWITCHES 3-36
RIGHT TOWER CONTROLS AND SWITCHES 3-38
BACKHOE CONTROL PATTERN 1 3-41
BACKHOE CONTROL PATTERN 2 3-42
AUXILIARY HYDRAULIC ATTACHMENT CONTROL FOR BACKHOES 3-43
SEAT BELTS 3-44
SEATS 3-45
CAB CONTROLS 3-49

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RIGHT TOWER CONTROLS AND SWITCHES



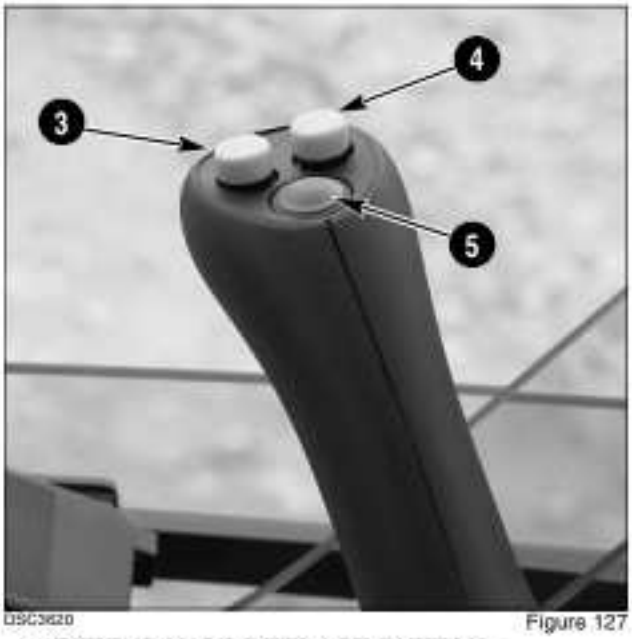
BD07J092 Figure 126

1. RIGHT TOWER:

2. RIGHT CONTROL LEVER:

This lever controls the Dipper and Bucket functions when in Backhoe Control Pattern 1.

When in Backhoe Control Pattern 2 this lever controls the Boom and Bucket. *The Backhoe Control Pattern Switch will illuminate when in pattern 2.*



D9C3620 Figure 127

3. EXTENDAHOE RETRACT BUTTON:

If equipped, this button activates the Extendahoe retract function. Push and hold the button to retract. Release the button to stop. This switch is proportional. Push harder and retract will function faster.

4. EXTENDAHOE EXTEND BUTTON:

If equipped, this button activates the Extendahoe extend function. Push and hold the button to extend. Release the button to stop. This switch is proportional. Push harder and extend will function faster.

5. ONE TOUCH IDLE BUTTON:

Press this button to reduce the engine speed to idle. Press the switch again to restore the engine speed.

WARNING: *Pilot control machines are equipped with two backhoe control function patterns. Check control functions before operating this machine. Failure to check control pattern before operating can cause unexpected machine movement, death or serious injury.*

M956 Figure 128

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EVERY 500 HOURS

ENGINE OIL AND FILTER

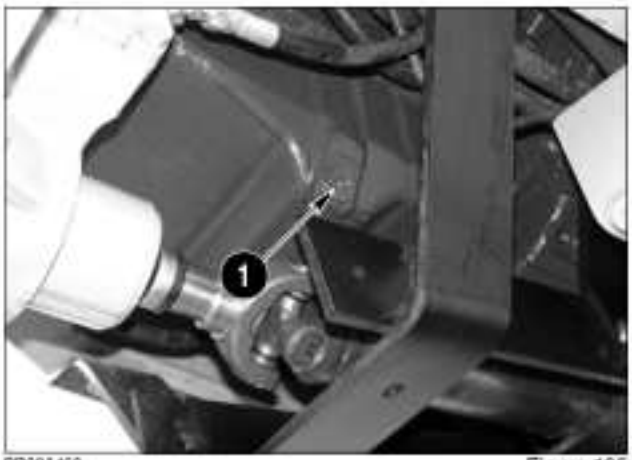
Change the engine oil and replace the filter after every 500 hours of operation or once a year, whichever occurs first.

Specification . . Case Akcela No. 1 15W-40 API CI-4

NOTE: *For more complete removal of foreign material, change the engine oil while the engine is still warm from operation.*

IMPORTANT: *You must charge the turbocharger oil lines before attempting to start the machine, after this procedure.*

1. Park the machine on a firm, level surface.
2. Place the backhoe in the transport position with the swing lock pin installed for transport.
3. Place the loader bucket on the ground, with the bottom of the loader bucket parallel to the surface.
4. Place all drive controls into Neutral.
5. Raise the loader arms up and install the support strut. See page 5-5 at the beginning of this chapter for the procedure.
6. Stop the engine.



80308A460 Figure 105

1. ENGINE OIL DRAIN PLUG (LEFT SIDE OF PAN)

7. Clean around the engine oil dipstick, oil pan drain plug, engine fill cap and engine oil filter and head.
8. Slowly open the engine oil drain plug and drain into a suitable container.
9. Open the hood.



80308A461 Figure 106

2. ENGINE OIL FILTER

10. Turn the oil filter counterclockwise to remove. Use a filter removal tool, if necessary.
11. Discard the old filter in accordance with local and regional environmental codes.
12. Use a clean cloth and wipe the sealing surface of the oil filter base to remove all dirt.
13. Apply a thin layer of clean grease or oil to the gasket of the new oil filter.
14. Turn the new oil filter onto the base until the gasket makes contact with the base. Continue to tighten the filter for 3/4 turn with your hand.

IMPORTANT: *Do not use a filter wrench to install the oil filter. An oil filter wrench can cause a leak if the filter is dented.*

15. Install the drain plug.
16. Put new oil into the engine.
17. Close the hood.

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LIFT CAPACITIES 590 SUPER M CONTINUED -

Extendahoe Extended		
Boom Lift	Distance from swing pivot	Backhoe lift capacity
+ 18 ft (5.48 m)		1 940 lbs (880 kg)
+ 16 ft (4.87 m)	13 ft 6 in (4.11 m)	2 200lbs (998 kg)
+ 14 ft (4.27 m)	15 ft 5 in (4.70 m)	2 300 lbs (1043 kg)
+ 12 ft (3.66 m)	16 ft 10 in (5.13 m)	2 420 lbs (1098 kg)
+ 10 ft (3.05 m)	17 ft 11 in (5.46 m)	2 370 lbs (1075 kg)
+ 8 ft (2.44 m)	18 ft 9 in (5.72 m)	2 420 lbs (1098 kg)
+ 6 ft (1.83 m)	19 ft 3 in (5.87 m)	2 420 lbs (1098 kg)
+ 4 ft (1.22 m)	19 ft 7 in (5.97 m)	2 310 lbs (1048 kg)
+ 2 ft (0.61 m)	19 ft 8 in (5.99 m)	2 290 lbs (1039 kg)
Ground Level	19 ft 6 in (5.94 m)	2 260 lbs (1025 kg)
–2 ft (0.61 m)	19 ft 2 in (5.84 m)	2 230 lbs (1012 kg)
–4 ft (1.22 m)	18 ft 6 in (5.64 m)	2 220 lbs (1007 kg)
–6 ft (1.83 m)	17 ft 8 in (5.38 m)	2 140 lbs (971 kg)
- 8 ft (2.44 m)	16 ft 6 in (5.03 m)	2 110 lbs (957 kg)
- 10 ft (3.05 m)	14 ft 10 in (4.52 m)	2 090 lbs (948 kg)
- 12 ft (3.66 m)	12 ft 9 in (3.89 m)	2 180 lbs (989 kg)
- 14 ft (4.27 m)	9 ft 9 in (2.97 m)	2 240 lbs (1016 kg)
- 15 ft (4.57 m)	6 ft 0 in (1.83 m)	2 490 lbs (1129 kg)
Dipper Lift	Distance from swing pivot	Backhoe lift capacity
+ 16 ft (4.87 m)	12 ft 10 in (3.91 m)	2 810 lbs (1275 kg)
+ 14 (4.27 m)	14 ft 0 in (4.27 m)	2 940 lbs (1334 kg)
+ 12 ft (3.66 m)	14 ft 7 in (4.45 m)	3 080 lbs (1397 kg)
+ 10 ft (3.05 m)	14 ft 9 in (4.50 m)	3 100 lbs (1406 kg)
+ 8 ft (2.44 m)	14 ft 8 in (4.47 m)	3 150 lbs (1429L kg)
+ 6 ft (1.83 m)	14 ft 0 in (4.27 m)	3 190 lbs (1447 kg)
+ 4 ft (1.22 m)	12 ft 9 in (3.89 m)	3 290 lbs (1492 kg)

NOTE: *Lift capacities apply straight to the rear of prime mover. Equipped with 24 in (610 mm) universal H.D. trenching bucket and Case coupler except as noted.*

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