

OPERATOR'S MANUAL

CRAWLER DOZER

1650L

87647839 NA

Issued 01 Oct 07

MidWestTech | Case 1650L Crawler Dozer Operator's Manual | Publication 87647839na

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

TABLE OF CONTENTS

CHAPTER 1
GENERAL INFORMATION
TO THE OWNER 1-1
RIGHT, LEFT, FRONT, AND REAR OF THE MACHINE 1-2
IDENTIFICATION NUMBERS 1-3
MACHINE COMPONENTS 1-4

CHAPTER 2
SAFETY AND SAFETY DECALS
TABLE OF CONTENTS 2-1
SAFETY AND SAFETY DECALS 2-3
SAFETY DECALS 2-11

CHAPTER 3
INSTRUMENTS AND CONTROLS
TABLE OF CONTENTS 3-1
INSTRUMENT PANEL 3-3
BRAKE, DECELERATOR AND FOOTREST 3-14
PARKING BRAKES 3-14
DIRECTION CONTROL LEVER, HYDROSTATIC DRIVE CONTROL, HAND THROTTLE 3-15
DOZER BLADE CONTROL LEVER 3-17
RIPPER CONTROL LEVER 3-19
OPERATORS SEAT 3-20
CAB 3-22
OPERATORS SEAT BELT 3-25

CHAPTER 4
OPERATING INSTRUCTIONS
TABLE OF CONTENTS 4-1
RUN-IN PERIOD OF A NEW MACHINE 4-3
ENGINE OPERATION 4-4
CRAWLER OPERATION 4-6
MOVING A DISABLED CRAWLER 4-13
TRANSPORTING THE MACHINE 4-15
OPERATING IN HOT WEATHER 4-17
OPERATING IN COLD WEATHER 4-17
BOOSTER BATTERY CONNECTION TO MACHINE BATTERY 4-19
TILTING THE CAB 4-20
DOZER OPERATION 4-22
TRACK SYSTEMS 4-23
FACTORS CONTROLLING UNDERCARRIAGE WEAR 4-25

CHAPTER 5
LUBRICATION, FILTERS, AND FLUIDS
TABLE OF CONTENTS 5-1
LUBRICATION, FILTERS, AND FLUIDS 5-3
FLUIDS AND LUBRICANTS 5-5
LUBRICATION AND MAINTENANCE QUICK REFERENCE CHART 5-6
AS REQUIRED MAINTENANCE 5-9
TRACK MAINTENANCE 5-10
EVERY 10 HOURS 5-13
INITIAL 20 HOUR TRACK SHOE BOLT TORQUE 5-16
EVERY 50 HOURS 5-17
EVERY 250 HOURS 5-18
EVERY 500 HOURS 5-21

MidWestTech | Case 1650L Crawler Dozer Operator's Manual | Publication 87647839na Order the manual at mid-west-tech.com >

EVER 1000 HOURS 5-24
EVERY 2000 HOURS 5-27

CHAPTER 6
MAINTENANCE AND ADJUSTMENTS
TABLE OF CONTENTS 6-1
MAINTENANCE AND ADJUSTMENT
ROLL-OVER PROTECTIVE STRUCTURE 6-4
MACHINE CLEANING 6-5
ADJUSTING THE RIPPER SHANKS 6-5
DOZER BLADE PITCH ADJUSTMENT 6-6
FIRE EXTINGUISHER MOUNTING (IF EQUIPPED) 6-6
MACHINE STORAGE 6-7
REAR ATTACHMENT TORQUE VALUES 6-8

CHAPTER 7
ELECTRICAL
TABLE OF CONTENTS 7-1
ELECTRICAL SYSTEM 7-3

CHAPTER 8
SPECIFICATIONS
TABLE OF CONTENTS 8-1
SPECIFICATIONS 8-3
TRANSPORT LENGTH AND WIDTH WITH BLADE FULLY ANGLED 28 DEGREES 8-5
OPERATING DATA AND DIMENSIONS 8-6
OPERATING DATA AND DIMENSIONS - RIPPER 8-8

CHAPTER 9
INDEX

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

MidWestTech | Case 1650L Crawler Dozer Operator's Manual | Publication 87647839na Order the manual at mid-west-tech.com >

Chapter 2

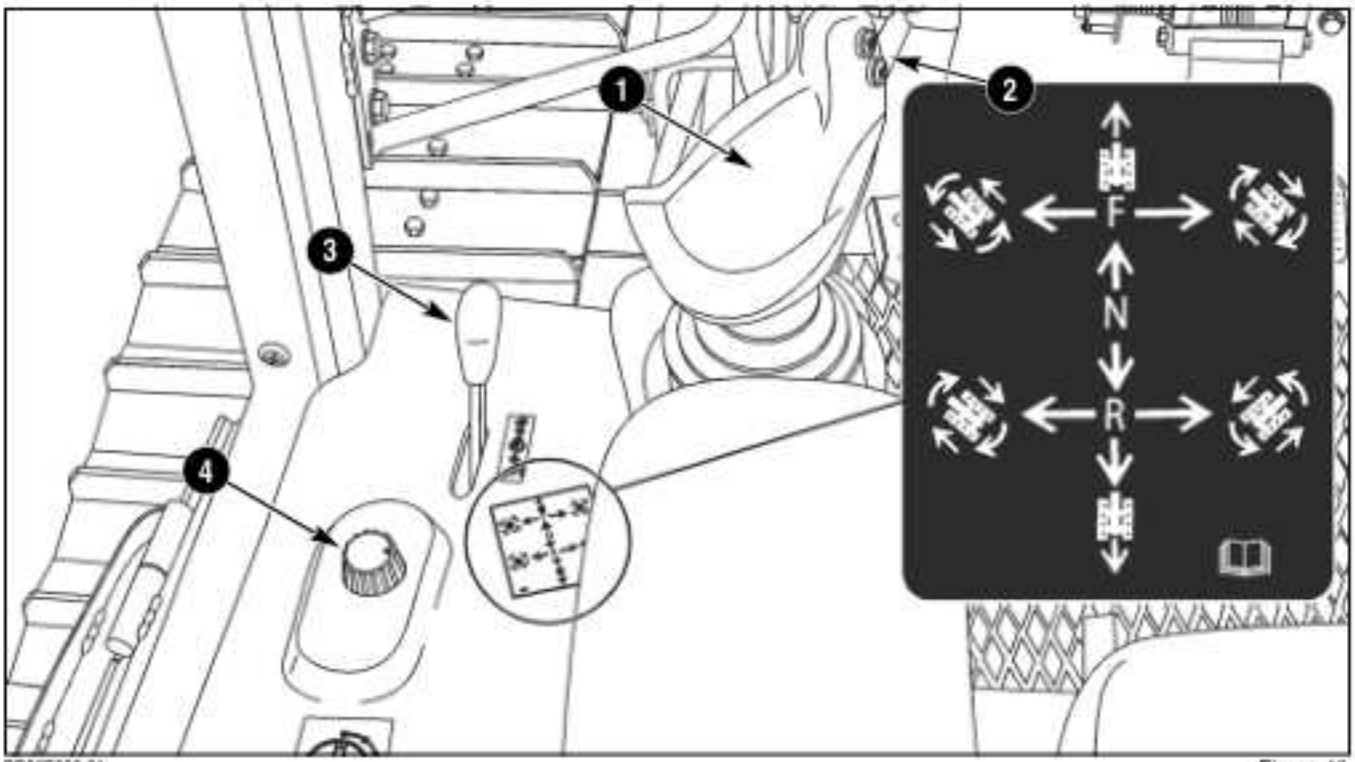
SAFETY AND SAFETY DECALS

TABLE OF CONTENTS

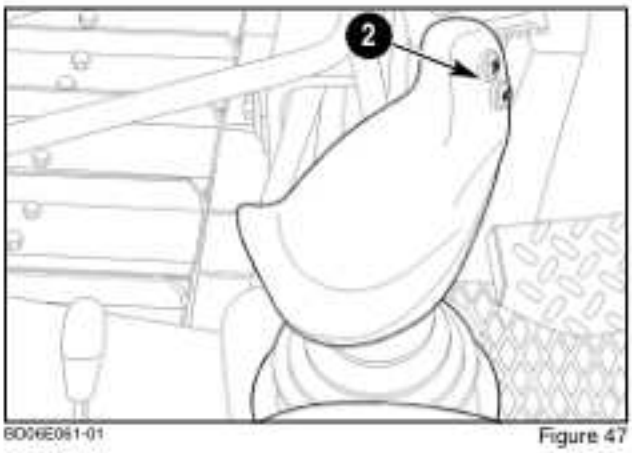
SAFETY AND SAFETY DECALS 2-3
GENERAL AND SPECIFIC SAFETY INFORMATION 2-3
UTILITY SAFETY 2-4
OPERATOR PRECAUTIONS 2-5
Personnel Precautions 2-5
Operator - General 2-5
Proper Entry And Exit 2-5
Starting And Stopping Precautions 2-6
Operating Precautions 2-7
Maintenance Precautions 2-8
Fuel Handling Precautions 2-9
Burn Prevention 2-9
Hazardous Chemical Precautions 2-9
Transporting Precautions 2-9
Roll-over Protective Structure 2-10
Fire Extinguisher 2-10
Seat Belt Precautions 2-10
To Fasten The Seat Belt 2-10
To Unfasten The Seat Belt 2-10
Specific Precautions To This Machine 2-10
SAFETY DECALS 2-11
READ OPERATOR'S MANUAL 2-11
READ REPAIR MANUAL 2-11

MidWestTech | Case 1650L Crawler Dozer Operator's Manual | Publication 87647839na Order the manual at mid-west-tech.com >

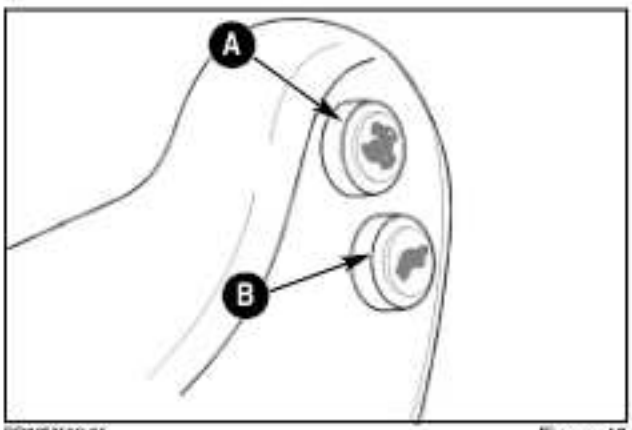
DIRECTION CONTROL LEVER, HYDROSTATIC DRIVE CONTROL, HAND THROTTLE



BD06E060-01 Figure 46



BD06E061-01 Figure 47



BD02M166-01 Figure 48

1. DIRECTION CONTROL LEVER

This lever controls the forward speed, neutral or reverse speed, as well as turning.

To turn, push or pull the lever to the direction you want the crawler to go, in forward or reverse. The crawler will not move unless engine rpms are 1000 or higher.

This lever has detent positions in forward and reverse. The lever will stay in the forward or reverse position until the operator pulls it out. At start up the crawler must be in Neutral for several seconds before it will move.

The Direction Control Lever position will be displayed on the instrument gauge.

2. HYDROSTATIC DRIVE SPEED UP/DOWN BUTTONS

A. UP BUTTON (Drive speed increase)

B. DOWN BUTTON (Drive speed decrease)

These two buttons change the speed of the crawler from low to high. The maximum speed is selectable in a range of 10 increments. To increase track speed push the upper button. To decrease track speed push the lower button. The operator may choose to hold the appropriate button in the DOWN or UP position to allow the speed to increment. The speed range will be indicated by the needle on the Hydrostatic Drive Speed Gauge.

NOTE: *Top speed is limited to 90% from the factory.*

MidWestTech | Case 1650L Crawler Dozer Operator's Manual | Publication 87647839na Order the manual at mid-west-tech.com >

EVERY 250 HOURS

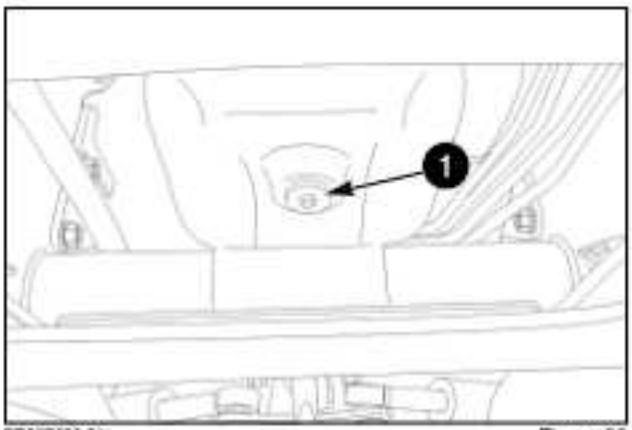
Oil Change and Filter Replacement

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

Park the machine of firm, level ground. The old oil and contaminants will drain better if the engine is slightly warm.

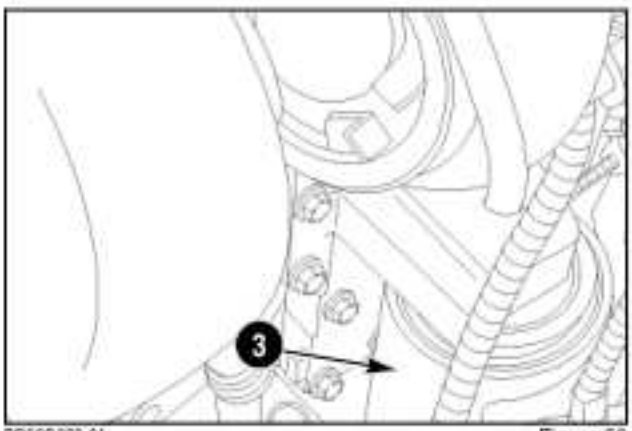
Use a 21 mm wrench and remove the four bolts that secure the engine oil access plate under the engine.

1. Before draining the oil, have a container that will hold the suitable quantity.



BD06E022-01 Figure 58

2. Remove the engine oil drain plug (1).



BD06G228-01 Figure 59

3. Turn the oil filter (3) counter-clockwise to remove. Discard the filter.
4. Use a clean cloth and wipe the sealing surface of the oil filter base to remove all dirt or gasket material.
5. Apply a thin layer of clean grease or oil to the gasket of the new oil filter.
6. 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.

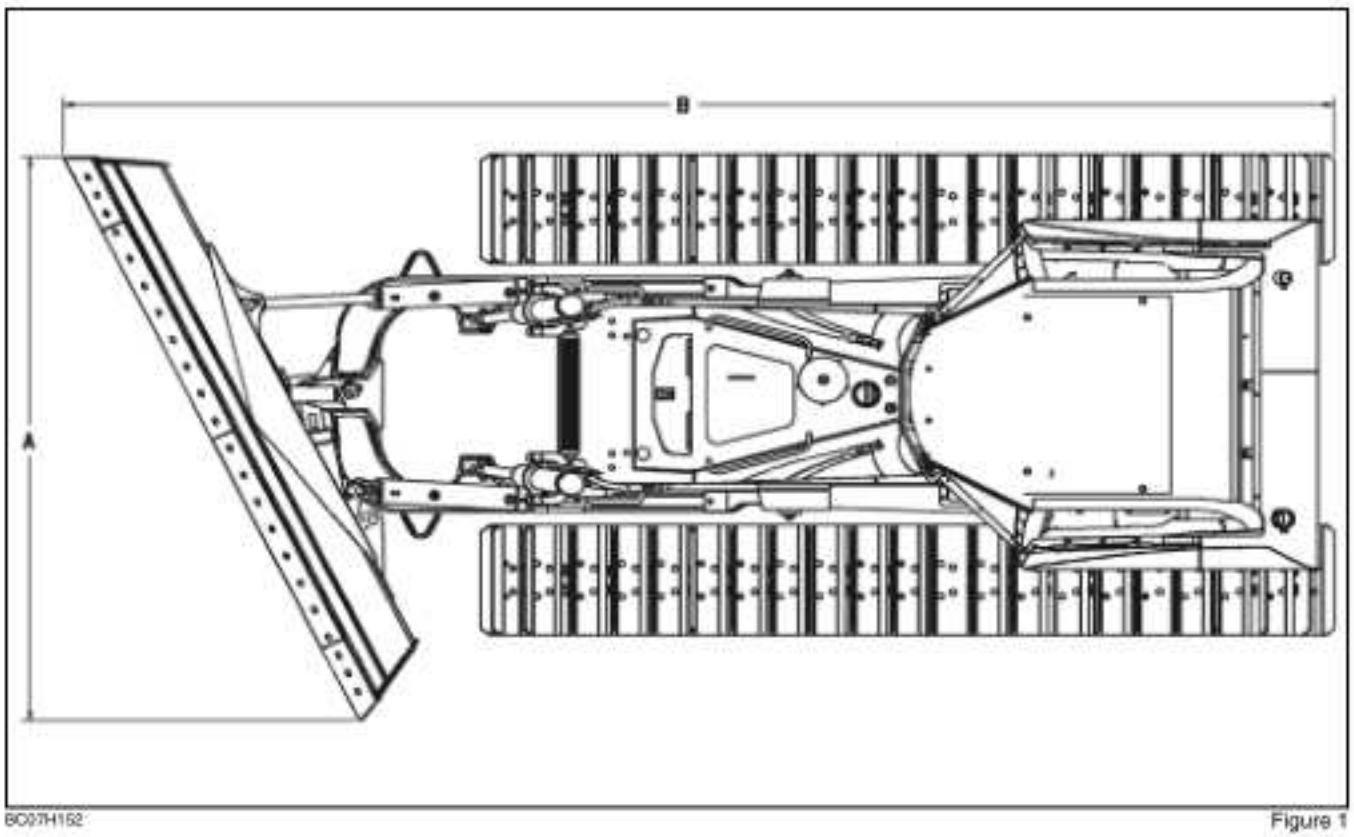
IMPORTANT: *Do not use a filter strap wrench to install the oil filter. An oil filter strap wrench can cause a leak if the filter is dented.*

IMPORTANT: *Clean all dirt and foreign material from the front engine guard a minimum of every thirty days. Dirt will cause rust on the engine oil pan and a loss of engine oil.*

7. Install the drain plug. Tighten the drain plug to a torque of 68 to 82 Nm (50 to 60 lb. ft.). Overtightening can damage the oil pan. Install the guard plate.
8. Put new oil into the engine oil fill tube.
9. Before you start the engine, prime the turbocharger oil lines with oil. See the following topic.
10. Start the engine and run at idle speed. Check the engine oil filter for leaks. After two minutes, stop the engine, wait for 2 or 3 minutes, and check the engine oil level with the dipstick.

MidWestTech | Case 1650L Crawler Dozer Operator's Manual | Publication 87647839na Order the manual at mid-west-tech.com >

TRANSPORT LENGTH AND WIDTH WITH BLADE FULLY ANGLED 28 DEGREES



BC07H152

Figure 1

Blade width	A Transport width		B 1650L w/o Drawbar	
126 in (3200 mm)	110.6 in	2810 mm	239.6 in	6085 mm
157.5 in (4000 mm)	138.8 in	3525 mm	248.3 in	6306 mm

NOTE: *Add 10.3 in (262 mm) for drawbar. Add 48.3 in (1227 mm) for ripper.*

MidWestTech | Case 1650L Crawler Dozer Operator's Manual | Publication 87647839na Order the manual at mid-west-tech.com >