

X 331
X 331E
X 334

Excavator

Service Manual

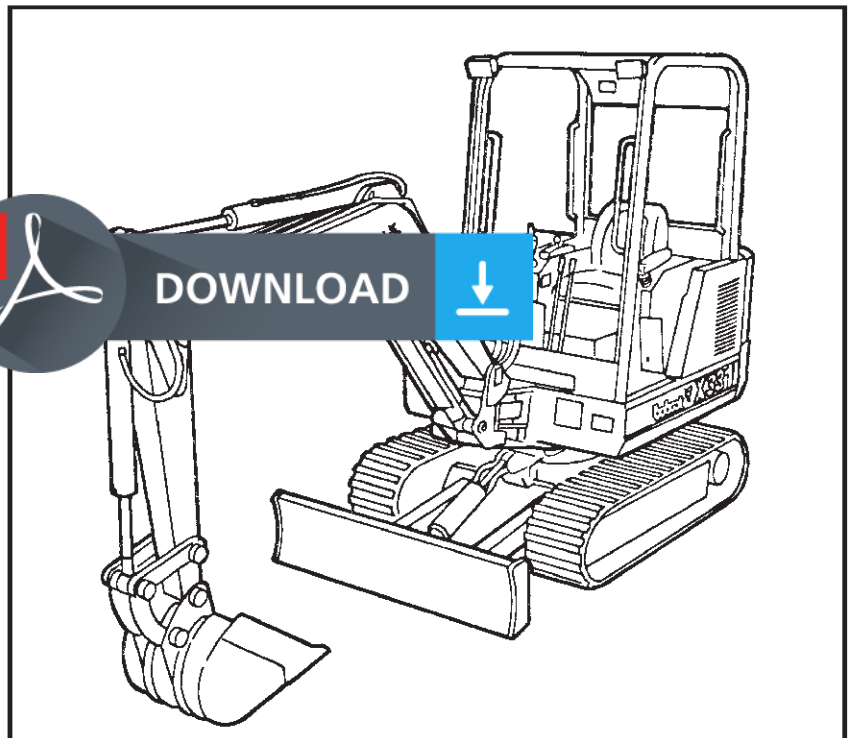
331 (S/N 512913001 & Above)
331E (S/N 517711001 & Above)
334 (S/N 516711001 & Above)



PDF



DOWNLOAD



MELROE
INGERSOLL-RAND

6900464(2-98)
1 of 525



© Melroe Company 1998
Printed in U.S.A.

MAINTENANCE SAFETY



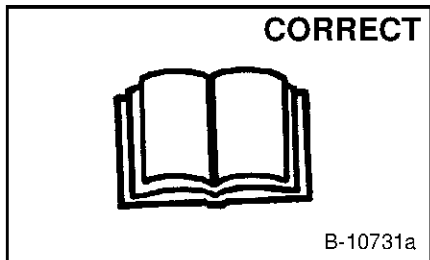
WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0903

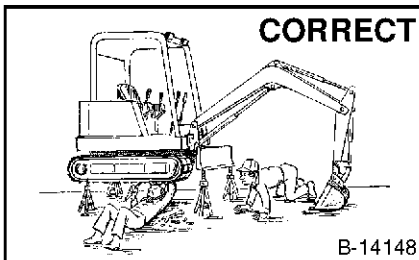


Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



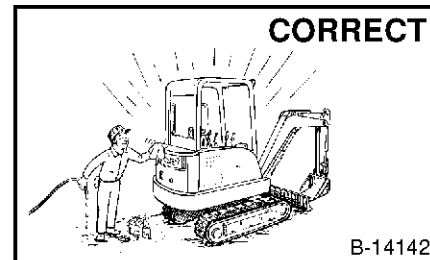
B-10731a

- ⚠ Never service the Hydraulic Excavator without instructions.



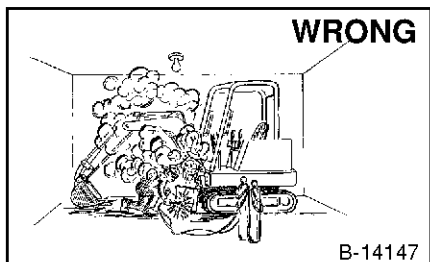
B-14148

- ⚠ Use the correct procedure to lift and support the excavator.
- ⚠ Always lift the blade fully before installing jackstands.



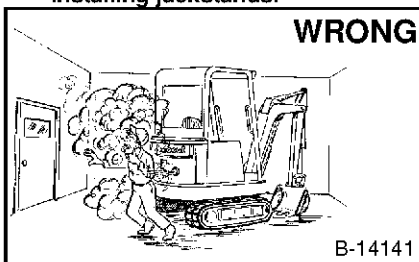
B-14142

- ⚠ Cleaning and maintenance are required daily.



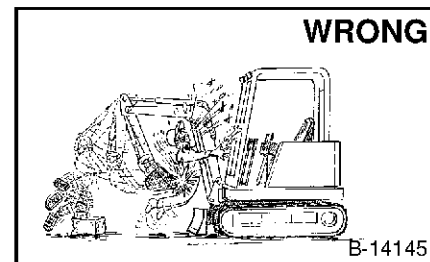
B-14147

- ⚠ Have good ventilation when welding or grinding painted parts.
- ⚠ Wear dust mask when grinding painted parts. Toxic dust and gas can be produced.



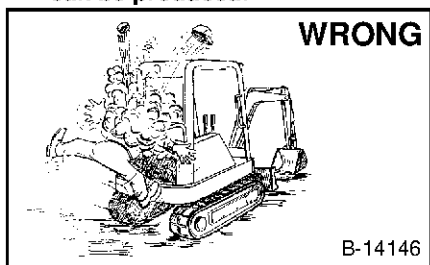
B-14141

- ⚠ Vent exhaust to outside when engine must be run for service.
- ⚠ Exhaust system must be tightly sealed. Exhaust Fumes can kill without warning.



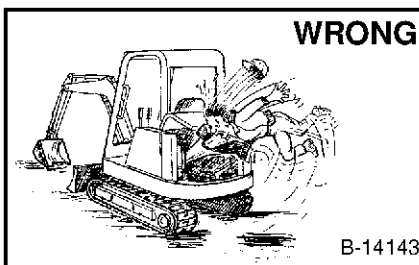
B-14145

- ⚠ Always lower the bucket and blade to the ground before doing any maintenance.
- ⚠ Never modify equipment or add attachments not approved by Bobcat Company.



B-14146

- ⚠ Stop, cool and clean engine of flammable materials before checking fluids.
- ⚠ Never service or adjust machine with the engine running unless instructed to do so in the manual.
- ⚠ Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate the skin or eyes.
- ⚠ Never fill fuel tank with engine running, while smoking or when near open flame.



B-14143

- ⚠ Keep body, jewelry and clothing away from moving parts, electrical contact, hot parts and exhaust.
- ⚠ Wear eye protection to guard from battery acid, compressed springs, fluids under pressure and flying debris when engines are running or tools are used. Use eye protection approved for type of welding.
- ⚠ Keep rear door closed except for service. Close and latch door before operating the excavator.



B-6589

- ⚠ Lead-acid batteries produce flammable and explosive gases.
- ⚠ Keep arcs, sparks, flames and lighted tobacco away from batteries.
- ⚠ Batteries contain acid which burns eyes or skin on contact. Wear protective clothing. If acid contacts body, flush well with water. For eye contact flush well and get immediate medical attention.

Maintenance procedures which are given in the Operation & Maintenance Manual can be performed by the owner/operator without any specific technical training. Maintenance procedures which are **not** in the Operation & Maintenance Manual must be performed **ONLY BY QUALIFIED BOBCAT SERVICE PERSONNEL**. Always use genuine Bobcat replacement parts. The Service Safety Training Course is available from your Bobcat dealer.

MSW20-0805

Dealer Copy -- Not for Resale



Bobcat®

ALPHABETICAL INDEX

ACCUMULATOR	2-1	GAUGES	6-1
AIR CLEANER	1-1, 7-1	GLOW PLUGS	7-1
ALTERNATOR	6-1		
ALTERNATOR BELT	1-1	HORN	6-1
ANTI-FREEZE SOLUTION	8-1	HYDRAULIC CONTROL VALVE (5-Spool)	2-1
ARM	4-1	HYDRAULIC CYLINDER	2-1
ARM BUSHINGS	4-1	HYDRAULIC EXCAVATOR SPECIFICATIONS	8-1
ARM CYLINDER	2-1	HYDRAULIC FILTER ASSEMBLY	2-1
AUXILIARY SELECTOR VALVE	2-1	HYDRAULIC PUMP	2-1
		HYDRAULIC RESERVOIR AND FUEL RESERVOIR	2-1
BATTERY	6-1	HYDRAULIC SERVICE INFORMATION	2-1
BLADE	5-1	HYDRAULIC SYSTEM	1-1
BLADE CYLINDER	2-1	HYDRAULIC SYSTEM TROUBLESHOOTING	2-1
BOOM	4-1		
BOOM BUSHING	4-1	IDLER GEAR AND CAMSHAFT	7-1
BOOM CYLINDER	2-1	INSTRUMENT PANEL	
BOOM PIVOT BUSHING	4-1	(331 S/N 512913001-512915199)	6-1
BOOM SWING BRACKET	4-1		
BOOM SWING CYLINDER	2-1	JOYSTICK	3-1
BUCKET (PIN ON)	4-1	JOYSTICK CONTROL CHANGE	2-1
BUCKET CYLINDER	2-1		
BUCKET TEETH	4-1	LEFT CONSOLE (331 S/N 512913001-512915199)	3-1
BUILD UP VALVE	2-1	LEFT CONSOLE (331 S/N 512915200 & Above)	
BUZZER	6-1	(331E 517711001 & Above)	3-1
		(334 S/N 516711001 & Above)	3-1
CAB	4-1	LEFT CONSOLE COVER (331 S/N 512915200 & Above) (331E 517711001 & Above)	
CAB/CANOPY REAR COVER	4-1	(334 S/N 516711001 & Above)	3-1
CAB ELECTRICAL	6-1	LEFT HAND CORNER POST	4-1
CENTER SWIVEL JOINT	4-1	LEFT HAND SIDE COVER	4-1
COUNTERWEIGHTS	4-1	LIFTING AND BLOCKING THE EXCAVATOR	1-1
COOLING SYSTEM	1-1	LUBRICATION OF THE EXCAVATOR	1-1
CRANKSHAFT AND BEARINGS	7-1		
CRANKSHAFT GEAR	7-1	MAIN RELIEF VALVES (Adjustable)	2-1
CROSS PORT RELIEF VALVE	2-1	MUFFLER	7-1
CYLINDER BORE	7-1		
CYLINDER HEAD	7-1	OIL COOLER	2-1
		OIL PUMP	7-1
DIODES (331 S/N 512915200 & Above)			
(331E 517711001 & Above)		PISTON AND CONNECTING ROD	7-1
(334 S/N 516711001 & Above)	6-1	PORT BLOCK	2-1
DECIMAL & MILLIMETER EQUIVALENTS	8-1	PORT RELIEF VALVES AND MAIN RELIEF VALVES	2-1
ELECTRICAL SYSTEM	1-1, 6-1	RADIATOR	7-1
ENGINE	7-1	REAR FLOOR PLATE	4-1
ENGINE COMPRESSION	7-1	RIGHT CONSOLE (331 S/N 512913001-512915199)	3-1
ENGINE COVER	1-1, 4-1	RIGHT CONSOLE (331 S/N 512915200 & Above)	
ENGINE FLYWHEEL	7-1	(331E 517711001 & Above)	3-1
ENGINE LUBRICATION SYSTEM	1-1	(334 S/N 516711001 & Above)	3-1
ENGINE OIL SPECIFICATIONS	8-1	RIGHT CONSOLE COVER	
ENGINE SPECIFICATIONS	8-1	(331 S/N 512913001-512915199)	3-1
EXTENDIBLE ARM	4-1	RIGHT CONSOLE COVER (331 S/N 512915200 & Above) (331E 517711001 & Above)	
EXTENDIBLE ARM CYLINDER	2-1	(334 S/N 516711001 & Above)	3-1
		RIGHT HAND CORNER POST	4-1
FAN GUARD	7-1	RIGHT HAND SIDE COVER	4-1
FUEL CAMSHAFT	7-1	ROCKER ARM AND SHAFT	7-1
FUEL, COOLANT AND LUBRICANTS	8-1	ROPS CANOPY	4-1
FUEL INJECTOR NOZZLES	7-1		
FUEL INJECTION PUMP	7-1		
FUEL LEVEL SENDER	6-1		
FUEL SHUT-OFF SOLENOID	7-1		
FUEL SYSTEM	1-1		
FLOORMAT AND FLOOR PLATE	4-1		
FRONT ENGINE COVER	4-1		

Dealer Copy -- Not for Resale



Thank you very much
for your reading.
Please click here
to get more information.