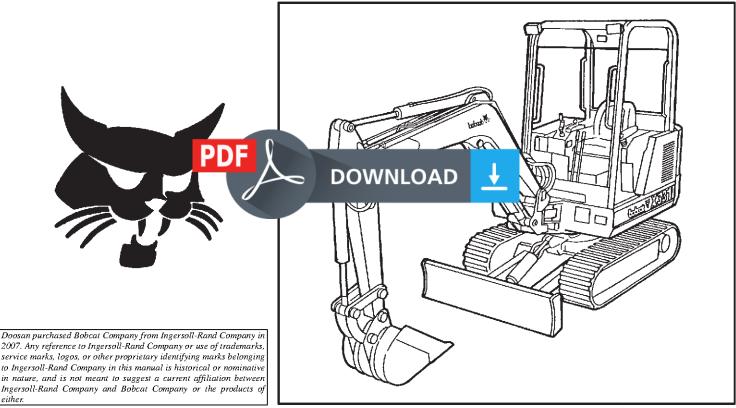
X331

Excavator

Service Manual

(S/N 511920001 & Above)



MELROE INGERSOLL-RAND

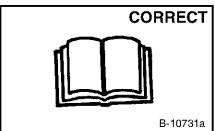


MAINTENANCE SAFETY



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

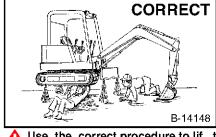
Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



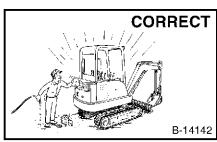
Bobcat

without

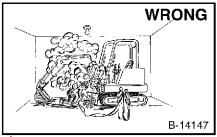
Never service the Hydraulic Excavator instructions.



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



Cleaning and maintenance are required daily.



Have good ventilation when welding or grinding painted

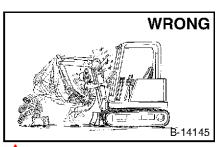
Wear dust mask when grinding painted parts. Toxic dust and gas can be produced.



Vent exhaust to o utside when engine must be run for service.



Exhaust system must be tightly sealed. Ex haust Fumes can kill without warning.



Always lower the bucket and blade to the ground before doing anv maintenance.

Never modify equipment or add attachments not approved by **Bobcat Company.**

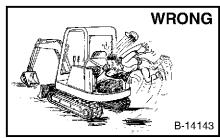


Stop, cool and clean engine of before flammable materials checking fluids.

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 leaking under pressure. It can penetrate the skin or eyes.

Never fill fuel tank with engine running, while smoking or when near open flame.



Keep body, jewelry and clothing away moving from parts, electrical contact, hot parts and exhaust.

Wear eye protection to gu ard 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.



Lead-acid batteries produce flammable and explosive gases. Keep arcs, sparks, flames and

liahted tobacco away 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.



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PREVENTIVE MAINTENANCE

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Thank you very much for your reading.

Please click here to get more information.