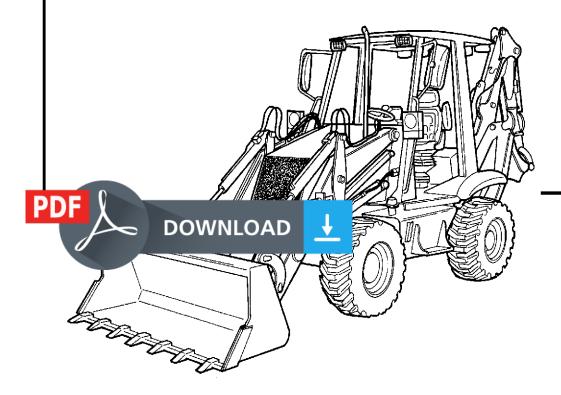
BL-470 BL-475



## Service Manual

BL 470 (S/N 570511001 & Above) BL 475 (S/N 571911001 & Above)



Doosan purchased Bobcat Company from Ingersoll-Rand Company in 2007. Any reference to Ingersoll-Rand Company or use of trademarks, service marks, logos, or other proprietary identifying marks belonging to Ingersoll-Rand Company in this manual is historical or nominative in nature, and is not meant to suggest a current affiliation between Ingersoll-Rand Company and Bobcat Company or the products of either.





## MAINTENANCE SAFETY



Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, 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.

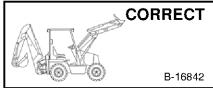
Safety Alert Symbol: This symbol with a warning statement, means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.



## CORRECT

B-10731a

Never service the Ingersoll-Rand Loader **Backhoe** without instructions.



Always use an approved lift arm support device when servicing the loader backhoe with the lift arm raised. Replace the lift arm support device if damaged or missing.

Disconnecting or loosening any

hydraulic tubeline, hoe, fitting component, or part failure can cause lift arms or backhoe boom to drop.



Cleaning and maintenance required daily.

NEVER modify equipment or add attachments not approved by Ingersoll-Rand.



Have good ventilation when welding or grinding painted parts.

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

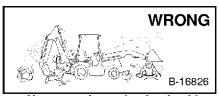


Vent exhaust to outside when engine must be run for service.

without warning.



Exhaust system must be tightly sealed. Exhaust Fumes can kill



Never work on loader backhoe with lift arms raised unless supported by an approved lift arm support device.

Always lower the backhoe bucket to the ground before doing any maintenance.



Stop, cool and clean engine of 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 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 from moving 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 engine cover closed except for service. Close and latch engine cover before operating the loader backhoe



produce batteries Lead-acid 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 immediate medical and get 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 & Mai ntenance Manual must be performed **ONLY BY QUALIFIED INGERSOLL-RAND** SERVICE PERSONNEL. Always use genuine Ingersoll-Rand replacement parts.

M\$W18-0602



## **ALPHABETICAL INDEX**

AIR CLEANER	70-01	HYDRAULIC/HYDROSTATIC FLUID	
AIR CLEANER SERVICE	10-01	SPECIFICATIONS	SPEC-01
ALTERNATOR	60-01	HYDRAULIC/HYDROSTATIC SYSTEM	10-01
ALTERNATOR BELT	10-01	HYDROSTATIC DRIVE MOTOR	30-01
ARM CYLINDER	20-01	HYDROSTATIC PUMP	30-01
ARM		HYDROSTATIC SYSTEM INFORMATION	30-01
AXLE TOE-IN	10-01	HYDROSTATIC TESTING	30-01
BACKHOE BOOM LOCK		INSTRUMENT PANEL	60-01
BACKHOE CONTROL VALVE	20-01		
BATTERY	60-01	LOADER BACKHOE SPECIFICATIONS	SPEC-01
BOB-TACH	50-01	LOADER BACKHOE TORQUE	SPEC-01
BOB-TACH HAND LEVER	10-01	LOADER CONTROL VALVE	20-01
BOOM	50-01	LIFT ARMS	50-01
BOOM CYLINDER	20-01	LIFT ARM STABILIZER	50-01
BRAKE CALIPER		LIFT ARM SUPPORT DEVICE	10-01
BUCKET		LIFT CYLINDER	
BUCKET CYLINDER		LIFTING AND BLOCKING THE LOADER BACKHOE	
CAB LIGHTS	60-01	LUBRICATING THE LOADER BACKHOE	10-01
CENTER FLOOR PANEL		EODITIONING THE EONDER BROKINGE	
CONVERSIONS		MAIN RELIEF VALVE	20-01
CONVENCIONO		MUFFLER	
DRIVE COUPLER	70-01	WOIT ELIT	70-0
DRIVE GOOF EET		OIL COOLER	30-01
DROP BOX		OPERATOR CAB	
DHOF BOX	40-01	OPERATOR SEAT	
ELECTRICAL SYSTEM INFORMATION	60.01	OPENATOR SEAT	50-01
ENCLOSED CAB		PARKING BRAKE	40.01
ENGINE		PORT RELIEF VALVE	40-0
ENGINE COMPONENTS AND TESTI		(BACKHOE CONTROL VALVE)	00.01
		(BACKHOE CONTROL VALVE)	20-0
ENGINE COVER		RADIATOR	70.01
ENGINE COVER ENGINE LUBRICATION SYSTEM		REAR AXLE	
			,
ENGINE SIDE COVERS		RECONDITIONING THE ENGINE	70-0
ENGINE SPECIFICATIONS		OFDWOE COUEDINE	10.04
ENGINE SPEED CONTROL	70-01	SERVICE SCHEDULE	
		STABILIZER	
FENDER		STABILIZER CYLINDER	
FLOOR PANELS		STEERING CYLINDER	
FLYWHEEL		STEERING PUMP	
FLYWHEEL HOUSING		STEERING VALVE	
FRONT AXLE		STARTER	
FRONT AXLE PIVOT FRAME		SWING CYLINDER	
FRONT LIGHTS		SWING FRAME	50-01
FUEL LEVEL SENDER			
FUEL SYSTEM		TILT CYLINDER	
FUEL TANK	50-01	TIRE MAINTENANCE	10-01
		TORQUE SPECIFICATIONS	
GEAR PUMP		FOR BOLTS	
GRILL		TOWING THE LOADER BACKHOE	
GRILL FRAME	50-01	TRANSPORTING THE LOADER BACKHOR	
		TRAVEL PEDAL	
HYDRAULIC FILTER HOUSING	20-01	TROUBLESHOOTING	,
HYDRAULIC FLUID RESERVOIR		TURBOCHARGER	
HYDRAULIC SYSTEM INFORMATION	20-01	TURN INDICATOR LIGHTS (FRONT)	60-01
		. ,	



Thank you very much for your reading.

Please click here to get more information.