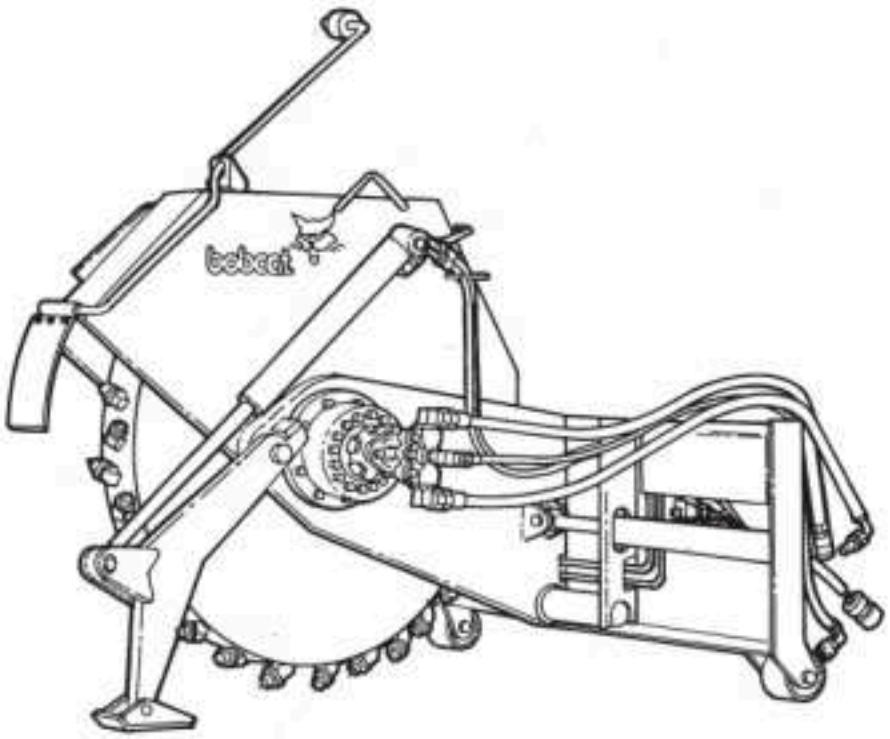
WHEEL SAW

WS 12 (S/N 561500101 & Above)
WS 18 (S/N 561600101 & Above)

Service Manual



MELROE
INGERSOLL-RAND

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CALIFORNIA
PROPOSITION 65 WARNING
Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

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⚠ WARNING

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.

W–2003–0199

If the Wheel Saw is not working correctly, check the hydraulic system of the machine thoroughly before making any repairs on the Wheel Saw. Wheel Saw problems can be affected by a hydraulic system that is not operating to specifications. Connect a flow meter to the loader to check the hydraulic pump output, relief valve setting and tubelines to check flow and pressure. (See the loader Service Manual for the correct procedure to connect the flow meter.)

Use the following troubleshooting chart to locate and correct problems which most often occur with the Wheel Saw.

PROBLEM	CAUSE	CORRECTION
Wheel Saw loses power.	Wheel Saw control valve solenoid failure.	Remove/clean or replace solenoid cartridge or replace O–rings.
	Auxiliary system relief pressure too low.	Check and replace any relief valve. Check settings.
	Loader/auxiliary pump failure.	Replace auxiliary pump.
Auxiliary power fails to disengage.	Auxiliary mode switch failure. Wheel Saw control valve solenoid failure.	Check/replace switch and control valve solenoid.
Wheel continues to rotate with power disengaged.	Residual system pressure sufficient for drive motor creep.	Add supplemental load check to pressure line of drive motor in the direction of flow.
Wheel Saw drive motor leaks at shaft seal.	Excess motor case drain pressure.	Replace motor shaft seal and check coupler connection on loader.

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PLANETARY DRIVE (Cont'd)

Hub Shaft Assembly (Cont'd)

NOTE: The LOCTITE used in the Step is an anaerobic adhesive, which begins to set once it is out of contact with the air. Read the next steps before preceding and then do them as quickly as possible.

Apply LOCTITE 227 to the threads of the lock nut. DO NOT put LOCTITE on the hub/shaft threads.

Thread the lock nut onto the shaft with the chamfered side of the lock nut toward the lock washer.

Tighten the lock nut finger tight.

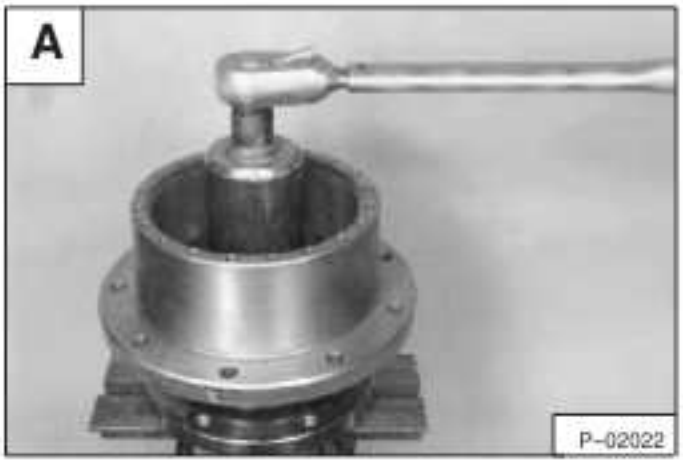
Using the lock nut tool and torque wrench, tighten the lock nut to 175 ft.–lbs. (237 Nm) torque **[A]**.

NOTE: One tab of the lock washer should be aligned with one of the slots in the lock nut. If a tab does not line up when the correct torque is reached, continue to tighten the lock nut until one tab is aligned. DO NOT loosen the lock nut to align the tab.

Check the final rolling torque (procedure on Page 10–30–20). The final rolling torque should be 5–10 in–lbs. (0,57–1,13 Nm) greater than the rolling torque recorded in the initial procedure. (Example: Initial rolling torque is 35 in.–lbs. (4 Nm); final torque must be 40–45 in.–lbs. [4,5–5,1 Nm]).

NOTE: If the final rolling torque is 5 to 10 in.–lbs. (0,57–1,13 Nm) or greater, remove the lock nut and lock washer and clean the LocTite from all parts. Repeat the previous procedure until the rolling torque is correct.

After obtaining the correct rolling torque, remove the bolt from the bolt circle of the hub housing.



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WHEEL SAW CONVERSION MATRIX
Loaders To/From 6 & 14 Pin Connectors

Loader Model	14 pin connector on the loader to 6 pin connector on the Wheel Saw	6 pin connector on the loader to 14 pin connector on the Wheel Saw
540		
550		
640		
740 753		
763 773		
753H 763H	Install adapter P/N 6707303 or install attachement harness adapter kit P/N 6708919.	Not applicable
7753		
843		
843H		
853		
863 864 873		
853H 863H	Install adapter P/N 6707303 or install attachement harness adapter kit P/N 6708919.	Update loader with 14 pin connector wire harness.
864H 963	Install adapter P/N 6707303 or install attachement harness adapter kit P/N 6708919.	Not applicable
Wheel Saw operates only on loaders equipped with 14 pin wiring harness. Operate in low flow only.		

Wheel Saw not approved for use on these loaders

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