SERVICE MANUAL

RG140.B
RG170.B
RG200.B
MOTOR GRADERS



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NOTE: NEW HOLLAND reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

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Symptom	Problem	Solution
	Low transmission pump flow due to worn pump	Do transmission pump flow test.
	Stuck solenoid valve	Check wiring to solenoid valve.
		Remove and inspect solenoid valve.
Transmission overheating.	Oil level too high.	Establish proper oil level. Check front seal on auxiliary driven hydraulic pump if equipped.
	Engine overheating.	Check engine coolant.
	Water lines defective on heat exchanger.	Replace lines.
	Heat exchanger dirty.	Clean heat exchanger.
	Clutch slipping.	Check clutch pressure.

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SPECIFICATIONS

Item	Measurement	Specification
Lift hanger and cover-to-rear housing cap screw.	Torque	87 N·m (64 lb-ft)
Bearing retainer-to-rear housing cap screws.	Torque	25 N·m (18 lb-ft)
Dipstick tube assembly-to-front housing cap screws.	Torque	25 N·m (18 lb-ft)
Yoke-to-output shaft cap screw.	Torque	215 N·m (159 lb-ft)
Output shaft.	End play	0± .051 mm (0± .002 inch)

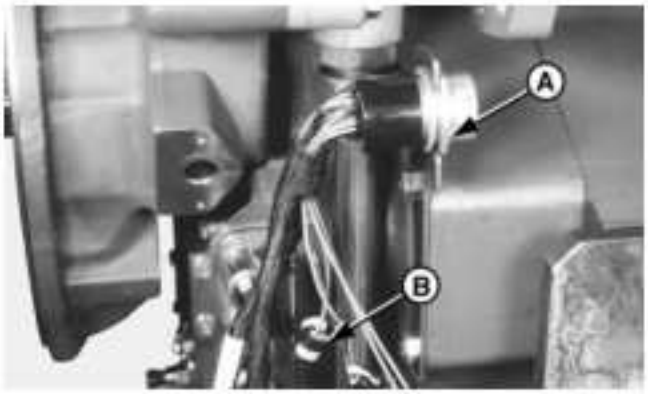
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REMOVE WIRING HARNESS

1. Loosen nut (A).

NOTE: Tag all wiring connectors before disconnecting wiring harness.

2. Unfasten all weather pack connectors (B).



INSTALL WIRING HARNESS

1. Fasten all weather pack connectors.

2. Place main wiring harness connector (A) in bracket.

3. Tighten nut to 18—27 N·m (13—20 lb-ft).



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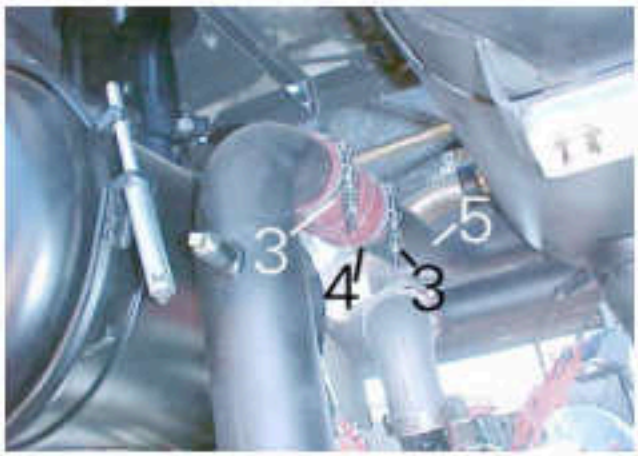
Charge Air Cooler

Air inlet to cooler pipe removal

1 - Remove clamps (1)
2 - Remove hose (2)



3 - Remove clamps (3)
4 - Remove hose (4)
5 - Remove tube (5)



6 - Remove bolts (6)
7 - Remove tube (7)
8 - Remove gasket (8)



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SETTING OF MIN. AND MAX. ACCUMULATOR RECHARGE PRESSURE

Connect two pressure gauges **M1** and **M2** (200 bar 2900 PSI capacity) to the quick release pressure pick-up points (**7** and **8,** fig.), located left side of the machine.
Start the engine and operate the hydraulic levers to warm-up the oil to 40° ÷ 50° C (105° ÷ 120° F)
Parking brake ON.

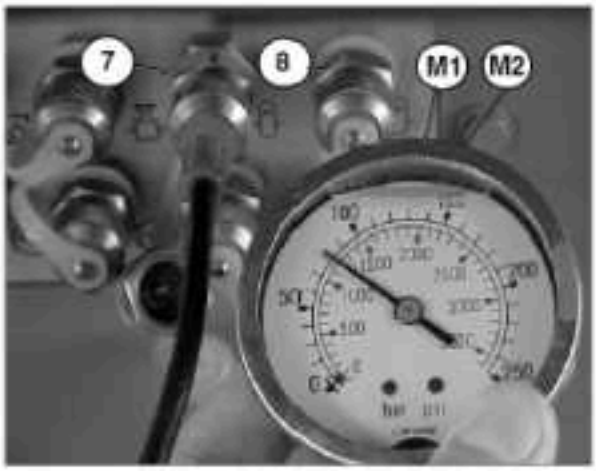
Minimum recharge value

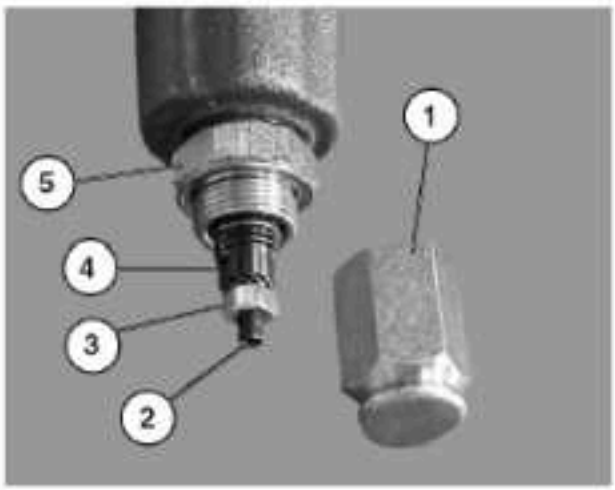
With engine idling and machine standing still, apply brake 8 to 10 times slowly. Read on gauges **M1** and **M2** the values of minimum on pressure, prior to the start of the recharge cycle
The pressure gauges must read momentary 81÷87bar (1175 ÷ 1262 PSI).

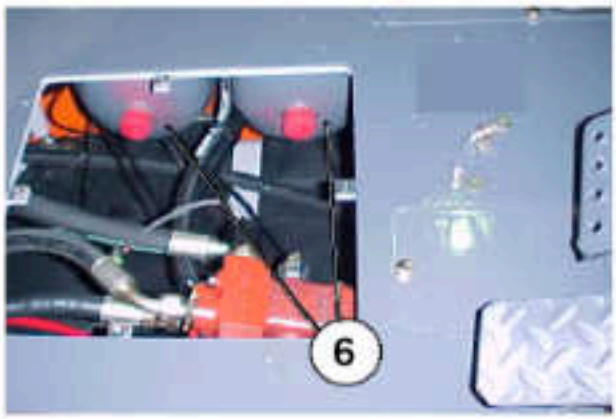
If the minimum recharge pressure is different from the nominal value, remove cap (1), loosen nut (5) and adjust screw (4) slowly, until the correct value is obtained.
Check the pressure again before tightening locknut (3).

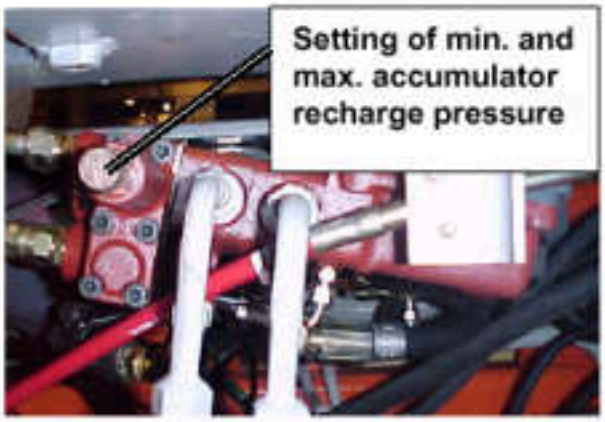
Recharge maximum value

With engine at low idle read the maximum charging pressure on pressure gauges **M1** and **M2**.
This pressure must be 120 ÷ 126bar (1740 ÷ 1827 PSI).
If the maximum recharge pressure is different from the nominal value, remove plug (1), loosen locknut (3) and adjust screw (2), until this value is obtained.









M1 and M2 Pressure gauges – **1.** Cap – **2.** Max. Pressure setting screw – **3.** Locknut – **4.** Min. pressure setting screw – **5.** Nut – **6.** Accumulators – **7.** And **8.** Pressure pick-up points thd M16 x 2.

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