CASE

PROFESSIONAL PARTNER

REPAIR MANUAL

MOTOR GRADER

845 DHP
865 VHP
885
TIER 3

75314589 NA

Issued 11-2006

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845 DHP - 865 VHP - 885 GRADERS
Repair Manual

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NOTE: CNH Latin America 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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Required Service Tools for Selected CASE Equipment
Option 1 — 38040085

380040085 Pressure Test Adapter Kit

380000510	380000511	380000513	380000514
			
380000515	**380000516**	**CAS1884-2**	**CAS2336**
			

Kit 380040085 is required to properly pressure test the hydraulic circuits of selected CASE. Equipment. The kit contains SAE and metric adapter fittings.

380040085 Kit Contents:

380000510 — Internal M16 x 2 adapter with 90° elbow and external PD style quick coupler.

380000511 — Internal M16 x 2 adapter with external PD style quick coupler.

- Used for pilot pressure, blade up pressure, blade down pressure, turn table right, turn table left and articulation tests on motor grader model 845DHP

380000513 — Internal 7/16-20 JIC adapter with external PD style quick coupler.

- Used for lube pressure tests on crawler models 1650K and 1850K on 1st speed clutch, 2nd speed clutch, 3rd speed clutch, forward clutch, and reverse clutch.

380000514 — Internal 9/16-18 JIC adapter with external PD style quick coupler.

380000515 — Tee Fitting, Internal 7/16-20 JIC with external PD style quick coupler.

380000516 — Internal 1/8 NPTF adapter with external PD style quick coupler.

CAS1884-2 — External M14 x 1.5 O-ring boss adapter with 90° elbow and external PD style quick coupler.

CAS2336 — Tee Fitting, Internal 1/4 BSPP x external 1/4 BSPP adapter with external PD style quick coupler.

380000512 Pressure Test Adapter Hoses

380000512



The pressure hose is 6-1/2 feet in length, equipped with internal PD style quick couplers at both ends, and is rated at 6000 PSI. Two hoses are included.

Application: • Motor Grader Model 845DHP.

Ordering Info: 38040085 Pressure Test Fitting Kit and Hose Assembly

Dealer Standard: Code A (required at all servicing locations)

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TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	TEST	SOLUTION
Wheel lean fails to function	Wheel lean safety bolt installed	Observation	Remove bolt
	Control valve malfunction	Conduct pressure test	Repair valve if pressure incorrect
	Wheel lean link frozen or seized	Observation	Free link joint
	Damaged hydraulic cylinder	Conduct pressure test	Replace
	Damaged hydraulic hose	Observation	Replace
Front wheels will not remain in desired position	Leaking control valve	Conduct pressure test	Repair valve if pressure incorrect
	Leaking hydraulic cylinder	Observation	Repair hydraulic cylinder
	Hydraulic lines or joints leaking		Repair or replace
Front wheels wobble	Improper toe-in	Observation	Correct toe – in
	Rims improperly installed on wheel	Observation	Straighten rim or wheel
	Wheel bearing loose	Observation	Adjust wheel bearings
	Steering arm loose	Observation	Tighten nut
	Spindle bearing loose	Observation	Adjust bearing
	Drag link damage	Observation	Repair
Hard to steer in either direction	Low air pressure in front tires	Observation	Inflate to proper pressure
	Steering links		Repair
	Improper toe-in		Adjust toe-in
	Malfunction in power assist hydraulic system	Conduct pressure test	Insure pressure is correct
	Damaged wheel lean link		Repair or replace
	Axle pivot pin and bushing worn		Replace
Excessive free play in steering wheel	Worn drag link socket or swivel joints		Repair or replace
	Loose wheel or spindle bearing		Adjusting bearings
	Damaged or worn power steering		Repair or replace
	Loose steering arm		Adjusting bearings
Improper caster in front wheels	Worn or loose spindle bearing		Replace bearing and / or adjust shims
	Wheel bearings loose		Adjust bearings
	Bent wheel lean link		Straighten link or replace
	Knuckle bushing or pin worn		Replace
Uneven or abnormal tire wear	Tires over or under inflated		Inflate to specified pressure
	Misalignment of tires		Correct alignment

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OTHER MATERIAL

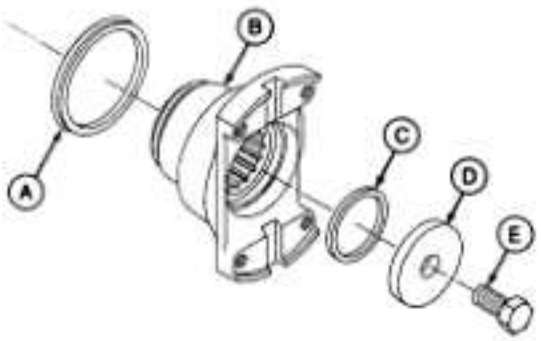
Number	Name	Use
	Transmission fluid	All moving parts and o-rings.
	LOCTITE® #242	Oil Seal

SPECIFICATIONS

Item	Measurement	Specification
Front housing-to-rear housing cap screws.	Torque	87 N·m (64 lb-ft)
Front housing.	Weight	120 Kg (265 lbs.)
1 5/8 Plug	Torque	190 N·m (140 lb-ft)

OUTPUT YOKE

A—V-ring seal
B—Yoke
C—O-ring
D—Yoke washer
E—Cap screw



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MOLDBOARD LIFT CYLINDERS



WHEEL LEAN CYLINDER



CIRCLE SHIFT CYLINDER



ARTICULATION CYLINDER



SADDLE PIN LOCK CYLINDER



SCARIFIER OR DOZER BLADE CYLINDER

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PUMP REMOVAL

Disassembly of the hydraulic pump.



Open the hood.



845DHP hydraulic pump.

Type: Gear pump, fixed displacement, unloader valve load sensing, variable discharge.

Displacement:..... 91 Cu.cm/rev. (5.51 Cu.in/rev.)



865 VHP and 885 hydraulic pump.

Type: Piston pump, variable displacement, pressure and flow compensated, load sensing.

Displacement:..... 100 Cu.cm/rev. (6.10 Cu.in/rev.)

To start disassembly of the pump, drain the hydraulic tank, disconnect the hoses and tube from the hydraulic pump.

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