OPERATOR'S MANUAL

RG170.B
MOTOR GRADER

NEW HOLLAND
CONSTRUCTION

75314349NA

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ADDITIONAL PRELIMINARY INSTRUCTIONS

CHANGING GEARS, FORWARD TO REVERSE, REVERSE TO FOWARD

The operator may do these gear changes as required by working conditions.
The transmission will automatically select the most appropriate gear in the opposite direction, this is done with mechanical shock protection.

PARKING BRAKE

The transmission will not engage any gear with the parking brake engaged.

"Inching" control pedal ..... (See page 29)
Transmission control lever ..... (See page 31)
Switch key ..... (See page 33)

RUN-IN PERIODS

1- Operate the unit at a moderate load during the first 50 hours. Efficient operation is with engine coolant temperature in the GREEN zone of the gauge. Engine operation at a coolant temperature lower than this limit will cause incomplete combustion, higher fuel consumption, loss of power and dirt buildup inside the engine.

WARNING

Never lubricate, repair or adjust the machine with the engine running.

2 - Inspect the entire machine after the first 10 operating hours. Tighten all loose bolts and other controls. Also check the hydraulic and electrical systems. After the first 50 hours of operation with a new machine, or after major repairs, carry out the following procedures:

a- Replace transmission oil filter element.

WARNING

Pressurized fluid. Turn cap slowly to relieve pressure, prior to removing the cap.

b- Replace hydraulic oil filter elemento.
c- Check ROPS attachment bolts.

WARNING

Protection provided by the ROPS type frame may suffer if modified or damaged.

d- Check tandem wheel nuts.
e- Check wheel attaching nuts.

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LUBRICATION AND SERVICE GUIDE RG 170.B STD CLARK AXLE					
INTERVAL	SERVICE	*	N° OF POINTS	LUBRICANT	APPROXIMATE CAPACITY
10 Hours or daily	Engine air cleaner (dry type)			See manual	
	Fuel sediment bowl(wash filter screen)				
	Engine crankcase (include filters)	V	1	EO	3,75 gal
	Radiator (coolant level)	V	1	-	10,6 gal
	Transmission (see Service Manual)	V	1	TO	6,6 gal
50 Hours or weekly	Hydraulic oil reservoir	V	1	HO	25,1 gal
	Fuel filters	V	2	-	-
100 Hours or every two weeks	Blade lift cylinders balls	L	2	PGL	06 to 10 shots
	Side shift cylinder balls	L	2	PGL	06 to 14 shots
	Draw bar ball	L	1	PGL	04 to 06 shots
	Articulation bearings	L	2	PGL	06 to 14 shots
	Articulation cylinder ends	L	4	PGL	06 to 10 shots
250 Hours or monthly	Engine crankcase (include filters)	T	1	EO	3,75 gal
	Rear axle center housing	T	1	EPGL	7,7 gal
	Blade articulation pin	L	2	PGL	01 to 02 shots
	Circle swing reduction gear casing	V	1	EPGL	0,75 gal
	Tires	V	6	-	-
	Alternator/fan belts (check)	V	2	-	-
	Blade articulation cylinder	L	2	PGL	4 to 6 shots
	Front axle articulation pin	L	4	PGL	4 to 6 shots
	Steering bar	L	2	PGL	4 to 6 shots
	Front axle rod pin	L	4	PGL	4 to 6 shots
	Front wheel angle cylinder	L	2	PGL	4 to 6 shots
	Front axle oscillation pin	L	2	PGL	4 to 6 shots
	Pivot pin lift cylinder fork	L	-	PGL	4 to 6 shots
500 Hours or every three months	Fuel filters	T	2	-	-
	Rear axle center housing	V	2	EPGL	7,7 gal
	Tandem boxes	V	1 each side	TO	7,7 gal
	Tandem wheels axle bearings	L	4 each side	PGL	14 to 20 shots
	Transmission oil filter	T	1	-	-
	Hydraulic reservoir oil filter	T	1	-	-
	Coolant system filter	T	1	-	-
	Fuel tank drain plug	Lp	1	-	-
	Wheel reduction	V	1	-	1,3 gal
1000 Hours or every 6 months	Transmission	T	1	TO	6,6 gal
	Transmission screen	Lp		-	-
	Injector nozzles	A	6	-	-
	Engine valves	A	12	-	-
2000 Hours or annually	Hydraulic oil reservoir	T	1	HO	25,1 gal
	Front wheel bearings	T	2	WBG	0,9 kg / side
	Rear axle housing	T	2	EPGL	6,6 gal
	Tandem boxes	T	1 each side	RGL	7,7 gal / side
	Wheel reduction	T	4	TO	1,3

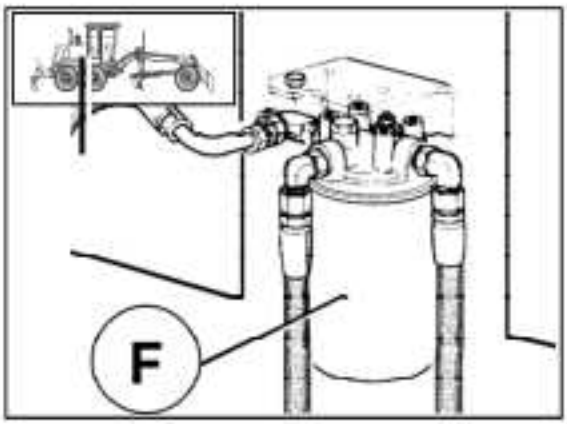
* DESCRIPTION OF SERVICE: V = check T = change (replace L = lubricate A = adjust Lp = clean

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MAINTENANCE

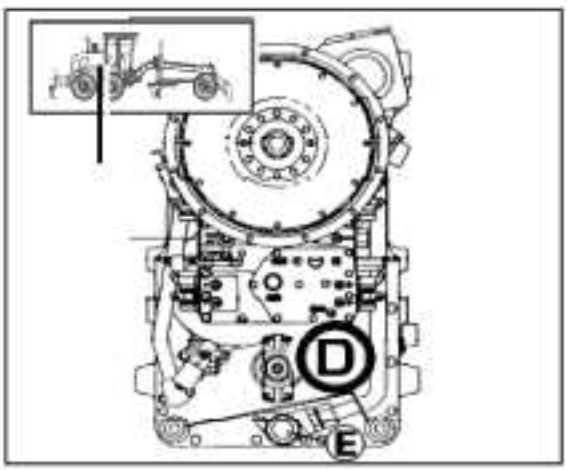
EVERY 1000 OPERATING HOURS

25- TRANSMISSION OIL FILTER
Replace



This filter (F) is a remote type filter. To replace, clean the area around the filter. Then replace filter element and gaskets. Clean the inside of the filter and mating surface. Reinstall the filter.

26- TRANSMISSION
Change oil / clean screen



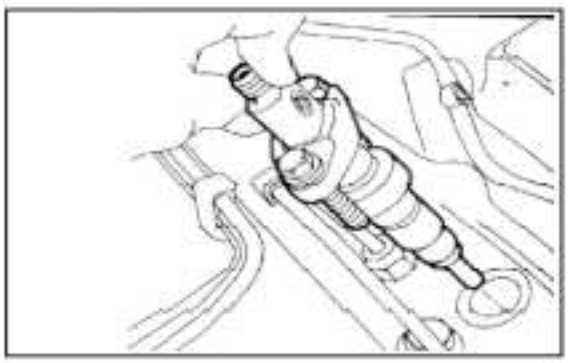
Drain plug (D) and screen filter (E)

Keep engine running until the transmission oil reaches normal operating temperature.
Park machine on a level, flat surface, engage parking brake, lower the blade to the ground and switch off the engine.
Remove the transmission screen filter and allow the oil to drain.
Clean suction screen thoroughly. Reinstall screen and drain plug (at this time change transmission oil filter).
Fill the system with specified oil until flush with the bottom of the plug.

WARNING

Never use gasoline, solvents or other fluids to clean the parts. Use only commercial, non-flammable, non-toxic solvents.

27- FUEL INJECTORS
Check



Injector nozzles

CAUTION

Keep your hands away from injector end. Atomized fuel is ejected with sufficient force to cause blood poisoning. Use safety goggles.

Remove fuel injector pipes from the injectors and cover them to prevent contamination. Remove injector attaching bolts on the cylinder head and remove the injectors.
Cover all openings in the cylinder head to prevent contamination.
The injectors must be checked by qualified personnel and specialized service shops, that have proper equipment.
Nozzle opening pressure settings are 205 BAR.
Ensure all gaskets and seals are in good condition.

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INSTRUÇÕES DE OPERAÇÃO / QUICK OPERATION INSTRUCTIONS



Chave de Ignição (Key switch) Chave geral (Master switch)

Dar partida no motor:
a)Alavanca de marcha em neutro e acelerador em marcha lenta.
b)Ligar a chave geral.
c)Dar partida na chave de ignição.

Engine starting
a)Gear selector lever in neutral position and throttle lever at low position.
b)Turn on master switch.
c)Turn on key switch.



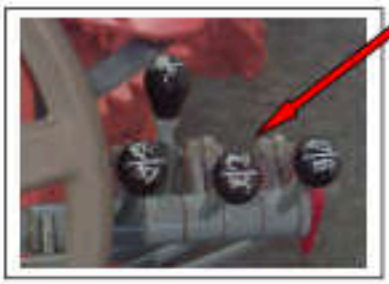
Alavanca de marchas (Gear selector lever):

Movimentar a máquina:
a)Acionar o pedal da embreagem.
b)Soltar o freio de mão.
c)Levantar a trava da alavanca de marchas e movimentar a alavanca para frente ou para trás.
d)Soltar o pedal da embreagem lentamente.

To move the machine:
a)Press inching pedal.
b)Release parking brake lever.
c)Lift gear selector lever lock and move the lever to forward or reverse.
d)Release inching pedal slowly.



Pedal da Embreagem (Inching Control Pedal)



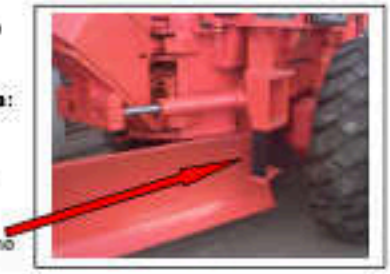
Alav. de inclinação das rodas e articulação do chassis:
(Wheel lean control lever and frame articulation lever)
Atenção: Não acionar a alavanca de inclinação das rodas com o parafuso trava montado na barra de inclinação e também a alavanca de articulação chassis com o pino de travamento montado nos chassis.
Warning: Do not move the wheel lean lever with lock bolt locked and do not move the articulation frame lever with the lock pin locked on frames.



Parafuso Trava – Eixo Dianteiro
(Lock Bolt – Front Axle)

Alavanca de Controle da Lâmina:
(Blade Control Lever)
Atenção: Cuidado ao deslocar a lâmina para não danificar a escada / pneus.

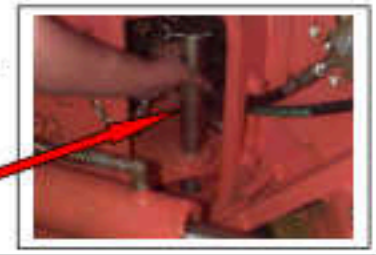
Warning: Be careful when moving the moldboard to avoid step / tires damage.





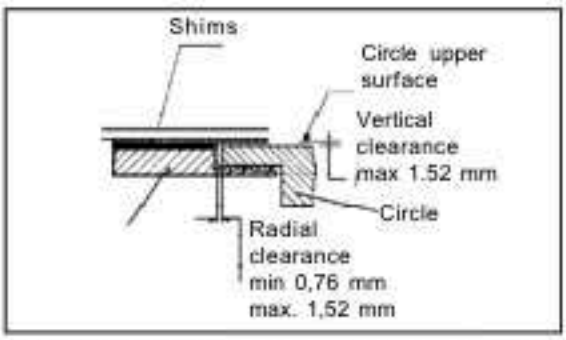
Alavancas de controle da lâmina
(Blade control levers)

Pino travamento chassis
(Frames lock pin)



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Locate the swing motor pinion such as to achieve an engaging position.

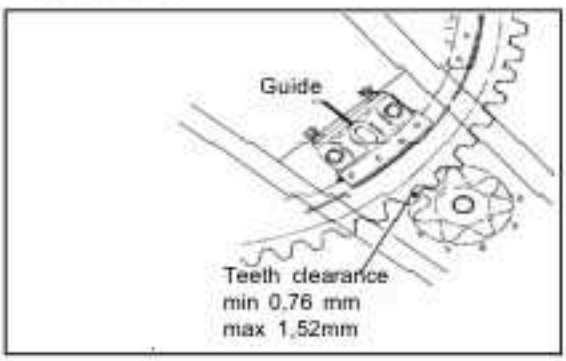
Note that, at the center of the swing motor pinion, the vortex of the engaging tooth and the front guide attaching centrer nut are in alignment.

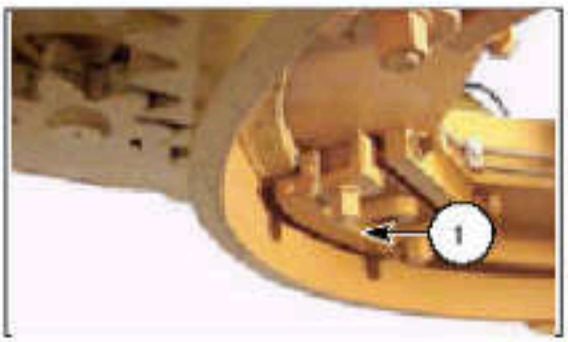
Supporting one of the sides of the referenced pinion tooth against the side of one circle tooth, act on the front guide radial clearance adjusting bolt to provide a 0.76 mm clearance between the non-supported side of the pinion engaged tooth and the circle tooth. Note that during adjustment of the teeth clearance, the front guide wear plate should rest on the innner race of the circle.

After adjustment of the radial clearance of the front guide is completed and all nuts tightened, adjust the two rear guides to provide a maximum clearance of 0.76 mm between the inner circle race and the guide wear plates (curved), at the adjusting bolts of the wear plates.

Lock adjusting bolts with their lock nuts. Tighten the guide nuts and operate the circle to check for 360° free rotation.

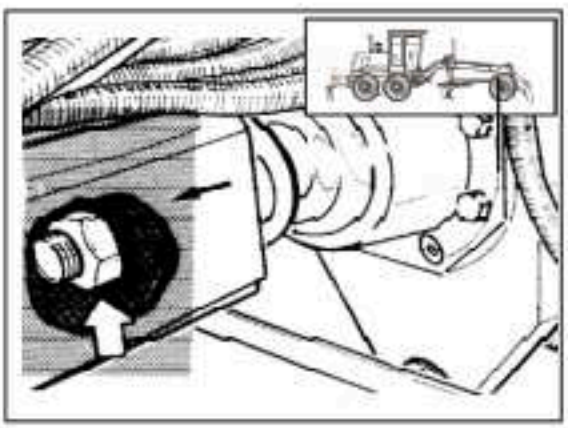
If the circle does not rotate freely, redo the adjusment, by gradually increasing clearance between the sides of the teeth until the specified limit is achieved.







41- CIRCLE CARRIER BAR BALL NUTS
Check



Draw bar ball nuts

Check coupling ball nuts.
Torque to 75 to 91 kgm (540 to 660 lbs.ft).

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