

D180



	LT/XLT	LGP
NET POWER	145 kW/194 hp	157 kW/211 hp

MAX OPERATING WEIGHT:	LT	XLT	LGP
- STEERING CLUTCH VERSION	Kg 20 200	21 300	-
- POWER STEERING VERSION	Kg 20 530	21 750	22 730

D180 QUALITY FOR COMFORT

THE CAB

A ample glass area for all - round visibility to the blade cutting edge and rear to the ripper.

Integral ROPS (ISO3471 / EN13510) and FOPS (EN ISO 3449) to grant maximum operator safety in a roomy and comfortable interior.



TRANSMISSION CONTROLS

All controls are fingertip type. Steering control with electro proportional levers, speed control with push buttons and forward/reverse selection with a rotating switch. Two standard automatic controls for gear selection: Auto Shift for forward/reverse selection and Auto Kick down for automatic downshifting when engine rpm drops below a set threshold.

BLADE CONTROL

Implement controls are electro-hydraulic piloted to minimise operating effort and ensure outstanding controllability. Blade control is with a single lever. Automatic blade control systems (Laser & GPS) can be easily adapted by the electro-hydraulic control.

THE INSTRUMENT PANEL

The easy-to-read instrument panel features immediate vital machine function monitoring. It includes diagnostic functions.



HEATING/CONDITIONING SYSTEM

The air conditioning system is supplied on request directly from the plant. Powerful multi-outlet adjustable vents ensure excellent cab ventilation and conditioning.



ADJUSTABLE ARMRESTS

For operator comfort, the left transmission/steering armrest has three-way adjustment: vertical, longitudinal and angular, whilst the right armrest has two: vertical and angular.



OPERATOR SEAT

The cloth covered seat is adjustable to operator weight. Length and backrest position can also be adjusted. Air suspended seat available as optional.

ACCESSIBILITY TO THE OPERATOR COMPARTMENT

Easy access to operator compartment from both sides, with wide access doors.

The cab is attached to the machine frame with four rugged dampers.

D180

QUALITY FOR



RESPECT FOR THE ENVIRONMENT

The D180 respects the European "reduced noise level" as per directive 2000/14/EC.



THE CHOICE BETWEEN TWO STEERING SYSTEMS

STEERING/BRAKE CLUTCHES

The steering brakes and clutches are oil bath disc type, virtually maintenance-free. Steering brakes and clutches are modular, for independent and easier serviceability.

HYDROSTATIC DIFFERENTIAL "POWER STEERING"

In the Power Steering version a hydraulic powered motor is actuating epicycloidal reduction gears that replace the steering clutches. The reduction gears on both sides generate different speeds in the output gear of each track, to enable machine turning. At any time during a turn 100% of the engine power is transmitted to the tracks enabling smooth and powerful turns. Possible counter-rotation minimises the turning radius. Excellent manoeuvrability and Shock-free steering minimises operator fatigue and reduces machine down time.

PRODUCTIVITY

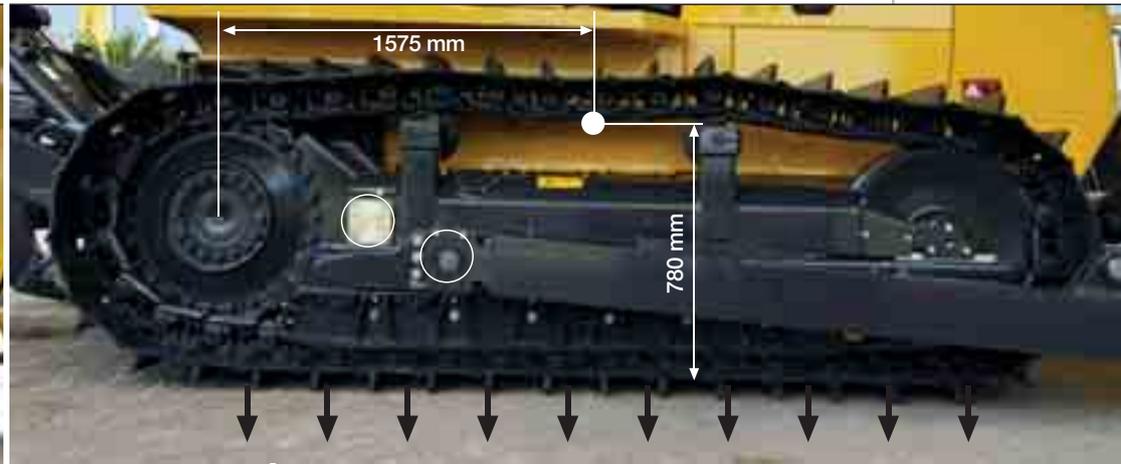
GROUND CLEARANCE

Undercarriage hinging is independent from the final gear shaft, thereby eliminating the need for diagonal booms below the final drive and increasing ground clearance.

STABILITY

Some design decisions made during product development have boosted the D180 pushability and levelling performance.

- The centre of gravity at only 78 cm height from the ground and 157 cm from the sprocket axis ensures outstanding stability
- Push beam to undercarriage and undercarriage to frame hinging are differentiated to guarantee optimum balance between machine weight and beam push. This prevents the undercarriage front from sinking into the ground, as would occur with coincident fulcrums, and the tendency to lift, which would happen if they were too far apart.



AUTOMATIC TRANSMISSION

Speed selection and forward/reverse control are actuated by the operator without moving his hands and wrists. Two electro proportional levers control brakes and steering clutches or Power Steering.

A rotating switch selects forward and reverse direction.

Two push buttons control up and down shifting

Two automatic control modes are available:

- Auto Kick Down, for automatic downshifting when engine rpm decreases below a set value.

- Auto shift, to 1st gear when selecting forward and to 2nd gear when selecting reverse.

Easy and intuitive controls mean the operator's attention can concentrate on the implement increasing efficiency and productivity.

IMPLEMENT CONTROL

Implement control is electro - hydraulic piloted for precise movements with low actuating effort and short strokes. Operating ergonomics and comfort translate into better performance.

VISIBILITY

Excellent night visibility is granted by two front and two rear flood lights. Four front lights are available as optional.

D180

POWER STEERING

A hydraulic motor increases the speed of one track and decreases the speed of the opposite one to generate power steering.

- The same productivity when digging on a curve or straight ahead.
 - Better direction control on slopes.
- Straight-ahead travel when corner digging and on rough terrain.
 - Less stress to the transmission, reduction gears and chains.
 - Progressive steering without jerks or power loss to the tracks.
 - Improved operating comfort.



BLADE VISIBILITY

New holland machine is designed to assure the best visibility of the cutting edge thanks to the shape of the cab, with its wide glass areas to the front right and left hand sides and to the tapered engine hood.



IMPLEMENTS

LT and XLT versions feature three types of blades: Semi-U, Angle and Straight offering to the customer the best possible choice for his job. The LGP version features a straight blade. In addition, all New Holland models offer two sizes of PAT blades, which feature increased levelling accuracy.

EQUISTATIC

New Holland HSU blades have the exclusive Equistatic device: it features a better distribution of linear and torsional stresses to both push beams for a better balance and components reliability.

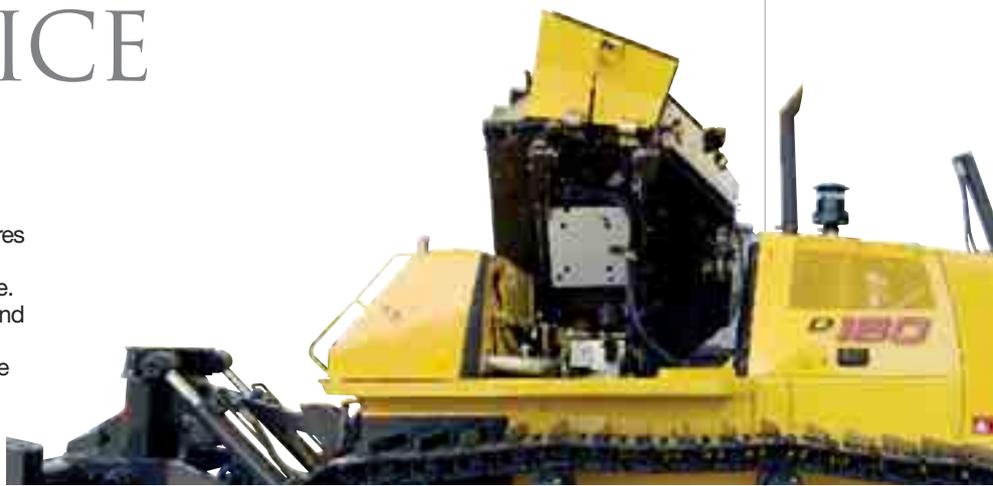
FLOTATION

The outstanding length of track on ground for all models ensures excellent flotation. The large diameter idler prevents vibrations caused by wide link pitch and ensures precise levelling jobs. It also relieves carrier rollers from traction stress.

EASY MAINTENANCE AND SERVICE

ACCESSIBILITY

The cab is tilted with a hydraulic cylinder and features exceptional accessibility to the hydraulic pumps and transmission components, for easy field maintenance. The hinged side panels of the engine compartment and those on the side of the cab ensure quick checks of many vital components for long, trouble-free machine life.



HINGED ENGINE SUMP GUARD

The engine sump guard is a rugged hinged plate that is easily opened without having to handle heavy weights in uncomfortable positions.

BELT TENSIONING

Alternator control belt tensioning is automatic.

FUSES BOX

Fuses are provided with system identification decals and are contained in an easily accessible box inside the cab.

D180 SPECIFICATIONS



ENGINE TIER 3A

Net power at 2000 rpm
 - LT/XLT version (ISO 14396/ECE R120).....145 kW/194 hp
 - LGP version (ISO 14396/ECE R120).....157 kW/211 hp
 Make and modelCNH 667TA
 TypeDiesel, Common rail, 4 valves, turbo, aftercooled, electronic injection

Number of cylinders6
 Bore x stroke104 x 132 mm
 Displacement6.7 l
 Maximum torque at 1400 rpm86 daNm (LGP = 95 daNm)
 Lubricationfull pressure by gear pump
 The machine may be operated up to 3000 m altitude without derating the engine.

The engine conforms to European requirements for "low exhaust emission" in accordance with directive 97/68/EC TIER 3A



ELECTRICAL SYSTEM

Voltage24 V
 Battery2
 Rating (total)160 Ah
 Typemaintenance free
 Starter.....7.8 kW
 Alternator.....65 A
 Master switch for electrical system.



TORQUE CONVERTER

Typesingle stage, rotating housing
 Torque multiplication2.28 : 1



TRANSMISSION

Type:full PowerShift, countershaft, constant mesh
 Control modulation5 modulation valves
 (2 for direction +3 for shifting)
 ControlTouch-shift buttons for upshift and downshift
 rotational direction control for forward, neutral and reverse.
 Automatic shifting.....Auto Shift allows the operator
 to pre-select the 1st speed forward
 and 2nd speed reverse at directional change.
 Auto kickdown automatically downshifts the transmission
 when the engine slows down to a predetermined RPM level.
 Both automatic features can be selected through specific buttons.
 Clutchesmultiple disc, hydraulic
 Lubricationfull pressure

Speeds and drawbar pull*

	LT/XLT		LGP	
	km/h	KN	km/h	KN
Fwd				
1 st	4.3	290	4.3	305
2 nd	6.7	165	6.7	174
3 rd	10.9	93	10.9	99
Rev				
1 st	5.2	228	5.2	240
2 nd	8.4	129	8.4	136
3 rd	13.0	72	13.0	76

*Drawbar tractive effort depends on adhesion coefficient, rolling resistance and machine operating weight.

Safety device: either of the two levers in the lock position inhibits transmission and automatically engages parking brakes.



STEERING (STEERING CLUTCH VERSION)

Hydraulically applied, spring released multi-disc oil bath steering clutches. Spring applied, hydraulically released multi-disc oil bath brakes. Modular assembly.

Control: All controls are fingertip type and are integrated in the left armrest. Steering control with electro-proportional levers. Forward and Reverse selection with a rotating switch.

**Standard for LT and XLT version.
 Not available for LGP version**



STEERING (POWER STEERING VERSION)

Hydraulic motor and epicycloidal unit control hydrostatic steering system. Epicycloidal reduction gears on both sides replace steering clutches. A hydraulic motor makes the epicycloidal reduction gear solars rotate in the opposite direction to generate different speeds in the output gear carriers and therefore steering. Counter-rotation is obtained if the hydraulic motor is actuated with the machine motionless.

Control: All controls are actuated and positioned as in the **steering clutch version**.

Standard for LGP version; optional for LT and XLT version



BRAKES

SERVICE BRAKES

Spring applied hydraulically released multi-disc oil bath brakes. Foot pedal piloted control.

The steering brakes also act as service and parking brakes.

PARKING BRAKES

Service brakes are locked automatically when the transmission safety lever is actuated or when the engine is cut off.



FINAL DRIVES

Typedouble reduction, modular assembly
 Ratio1 to 12.286
 Lubricationsplash



TRACK

Box section track frames. Oscillating type.

Hydraulic track adjusters. Sprockets with bolt-on segments, anti-packing teeth profile.

Track bushings with greater diameter at the rolling area.

Outer sprocket guards, front and rear track guards, full track roller guards
 Disc idlers, track rollers, carrier rollers are permanently lubricated and sealed
 Sealed and lubricated track with split master link.

	LT	XLT	LGP
Track rollers (per track).....	7	8	8
Carrier rollers (per track).....	2	2	2
Number of shoes.....	40	45	45
Length of track on groundmm	2700	3205	3205
Gaugemm	1900	1900	2085
Track shoes width.....mm	560	560	915
Shoe grouser heightmm	71.5	71.5	71.5
Carriage oscillationmm	255	317	317
Track shoes	Ground contact area	Ground pressure*	
560 mm LT	30240 cm ²	0.679 kg/cm ²	
610 mm LT	32940 cm ²	0.623 kg/cm ²	
560 mm XLT	35896 cm ²	0.603 kg/cm ²	
610 mm XLT	39100 cm ²	0.553 kg/cm ²	
760 mm LGP	48716 cm ²	0.467 kg/cm ²	
915 mm LGP	58652 cm ²	0.388 kg/cm ²	

*Ground pressure may vary according to machine configuration



HYDRAULIC SYSTEM

Closed-centre load sensing system designed for precise and responsive control, and for efficient simultaneous operations. It utilises a feedback loop from the implement valve to the pump to monitor the hydraulic power. The pump flow is regulated to only what is needed, thus reducing the engine power requirement for the hydraulics and fuel consumption and increasing the machine production.

Control systemelectro proportional
 Pump..... variable displacement piston pump
 Capacity at rated speed250 l/min
 Relief valve pressure 190 bar
 Standard control valvefour spools with safetylock device
 Optional (for Pat blade)five spools with safety lock device
 Actuation (HA, HS, HSU blade).....single lever
 Actuation (for Pat blade).....single lever with twist function
 Dozer circuitraise, hold, lower, float
 Tilt circuitleft, hold, right
 PAT circuit.....left angle, right angle
 Auxiliary circuit.....for ripper or other attachments
 Double acting cylinder control
 - Blade, with quick drop and travel limit valves2
 Rod x Bore x stroke60 x 95 x 1250 mm
 - Tilt (HSU) 1
 Rod x Bore x stroke70 x 140 x 126 mm
 - Tilt (HA).....1
 Rod x Bore x stroke63 x 110 x 124 mm
 Hydraulic oil level sight gauge reservoir.

Transmission, oil
 Torque converter and transmission.....38
 Steering and braking70
 Final drive (each)33
 Hydraulic system
 - Steering clutch version110
 - Power Steering Version.....130



CAPACITIES

Liters

Lube oil.....19
 Coolant.....25
 Fuel tank..... 400



RIPPER

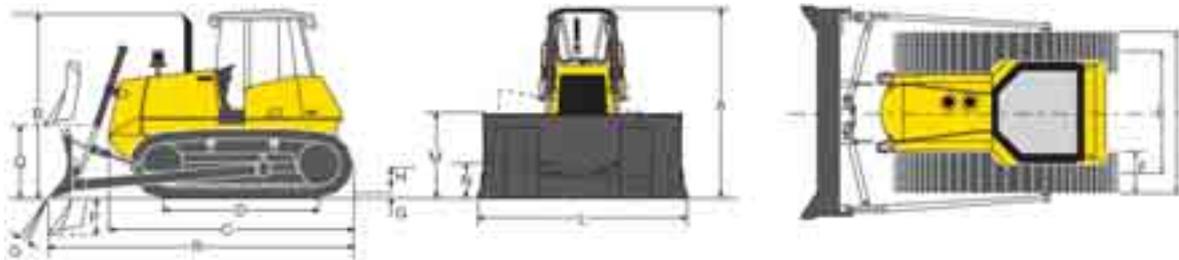
	LT/XLT	LGP
MODEL.....	PD180	RP14F
Type.....	Parallelogramm	Parallelogramm
Ripping depth (mm).....	540	430
Ripping width (mm).....	1900	1800
Shanks.....	3	3
Shank holders.....	3	3
Clearance, under tooth with ripper raised (mm).....	500	490
Clearance, under tool beam with ripper lowered (mm).....	390	235
Hydraulic cylinders.....	2	2
Rod x bore x stroke (mm).....	100x56x480	140x70x380
Overall width (mm).....	2130	2030
Weight (with three shanks) (kg).....	2010	1430



BLADES

MACHINE MODEL	LT	XLT	LGP
BLADE TYPE			
Semi U (HSU)	X	X	-
Angle (HA)	X	X	-
Straight (HS)	X	X	X
PAT 3.6 meter wide	X	X	-
PAT 4.0 meter wide	X	X	X

MACHINE DIMENSIONS



MACHINE MODEL		LT	XLT	LGP
A Height over cab	mm	3235	3235	3235
B Height over muffler	mm	3170	3170	3170
C Tractor length	mm	4210	4210	4210
D Length of track on ground	mm	2700	3205	3205
E Gauge	mm	1900	1900	2085
F Track shoes width	mm	560-610	560-610	760-915
G Shoe grouser height	mm	71.5	71.5	71.5
H Ground clearance	mm	390	390	390
I Overall width with shoes 560	mm	2460	2460	-
Overall width with shoes 610	mm	2510 (required for PAT)	2510 (required for PAT)	-
Overall width with shoes 760	mm	-	-	2845 (required for PAT)
Overall width with shoes 915	mm	-	-	2995
Shipping weight w/o blade*	kg	17290	18390	19400

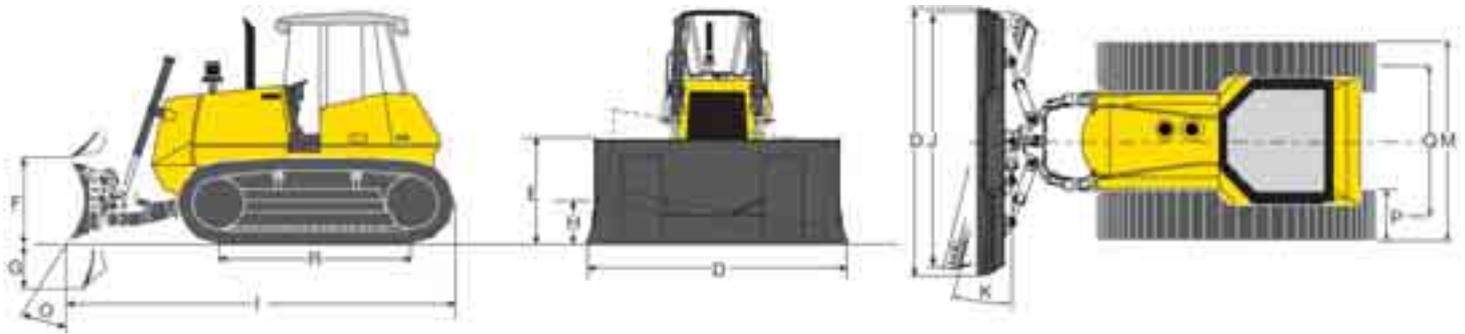
* Includes ROPS Cab (with ROPS canopy deduct 300 kg) 610 mm shoes, 10% fuel, blade lift cylinders, lubricants, coolant (for steering clutch version deduct 330 kg).

D180

BLADES DIMENSIONS		LT				XLT				LGP
		Semi-U (HSU)	Semi-U 3 m	Angle (HA)	Straight (HS)	Semi-U (HSU)	Semi-U 3 m	Angle (HA)	Straight (HS)	Straight (HS)
Blade capacity SAE J1265	m ³	5.6	5.0	3.2	4.0	5.6	5.0	3.2	4.0	3.7
L Width of blade	mm	3460	2990	4000	3385	3460	2990	4000	3385	3900
Width of angled blade	mm	-	-	3650	-	-	-	3650	-	-
M Height of blade	mm	1425	1425	1030	1215	1425	1425	1030	1215	1110
N Max. tilt	mm	850	600	550	760	850	600	550	760	835
O Blade pitch	°	+/- 5	+/- 5	+/- 5	+/- 5	+/- 5	+/- 5	+/- 5	+/- 5	+/- 5
Blade angle	°	-	-	+/- 25	-	-	-	+/- 25	-	-
P Digging depth	mm	480	550	450	470	550	550	500	535	535
Q Max. lift above ground	mm	1100	1190	1148	1160	1190	1190	1315	1160	1160
R Overall length with blade	mm	5485	5485	5315	5440	5880	5880	5827	5675	5675
Operating weight with blade*	kg	20530	20430	20140	20300	21630	21530	21240	21400	22730

* Includes ROPS Cab (with ROPS canopy deduct 300 kg), 610 mm shoes, (915 mm for LGP), fuel, oil and operator (for steering clutch version deduct 330 kg).

D180 WITH POWER STEERING AND PAT BLADE



PAT BLADES DIMENSIONS		LT		XLT		LGP
Blade capacity	m ³	4.8	5.4	4.8	5.4	5.4
D Blade width	mm	3610	4067	3610	4067	4067
E Blade height	mm	1324	1324	1324	1324	1324
F Max. lift above ground	mm	1133	1133	1260	1260	1260
G Blade digging depth	mm	765	765	800	800	800
H Blade max tilt	mm	480	570	480	570	570
K Blade angle	°	+/- 25	+/- 25	+/- 25	+/- 25	+/- 25
J Width of angled blade	mm	3325	3740	3325	3740	3740
O Pitch	°	33.5	33.5	33.5	33.5	33.5
I Overall length with blade	mm	5615	5615	5930	5930	5930
Q Gauge	mm	1900	1900	1900	1900	2080
P Max. width of shoes	mm	610	610	610	610	760
M Width over track	mm	2510	2510	2510	2510	2845
R Length of track on ground	mm	2700	2700	3205	3205	3205
Operating weight with Pat blade*	kg	20380	20520	21620	21750	22490

* Includes ROPS Cab (with ROPS canopy deduct 300 kg), 610 mm shoes, (760 mm for LGP) fuel oil and operator .

EQUIPMENT

D180 POWER STEERING AND STEERING CLUTCH VERSION

LT

Track frame 7 rollers
Sealed and lubricated chains, 560 mm shoes or sealed and lubricated chains, 610 mm shoes

XLT

Track frame 8 rollers
Sealed and lubricated chains, 560 mm shoes or sealed and lubricated chains, 610 mm shoes

LGP

Track frame 8 rollers LGP
Sealed and lubricated chains, 915 mm shoes

BASIC MACHINE

- Alternator, 65 A
- Horn
- Back-up alarm
- Maintenance-free batteries
- Tool kit
- Blade lift cylinders
- Single lever hydraulic system control
- Foot pedal decelerator
- Diagnostics
- Hinged engine side panels
- Air filter + pre-filter
- Front pull hook
- Electrical system, 24 V
- Protections: engine sump and drive wheel gearbox, sprocket, front and rear on track carriages
- Steering Clutch or Power Steering system for LT and XLT version
- Power Steering system for LGP
- Track tension hydraulic adjustment

- Exhaust pipe muffler
- Integral 3+3 Power Shift Transmission (with automatic control)

MANDATORY VARIANTS

- ROPS cab with heating system or ROPS cab with air conditioning; or ROPS canopy
- 4 spools control valve for HSU blade
- 5 spools control valve for PAT blade

OPTIONAL EQUIPMENT

- Air conditioning
- Air suspended seat
- Cold weather starting aid
- Fire extinguisher
- (HSU) Semi-U blade with Equistatic device, push beams and tilt cylinder (LT and XLT)
- 3 m (HSU) Semi-U blade with Equistatic device, push beams and tilt cylinder (LT and XLT)
- (HS) Straight blade with push beams and tilt cylinder (LT, XLT and LGP)
- (HA) Angle blade with C frame and 1 tilt cylinder (LT and XLT)
- PAT blade with internal push beams (LT, XLT in power steering version and LGP) *
- Parallelogram 3-teeth PD180 Ripper (LT and XLT)
- Parallelogram 3-teeth RP14F Ripper (LGP)
- Radio
- Rear implement control and piping
- Rear draw bar
- Roller protection (long) for XLT and LGP
- Roller protection (short) for LT
- Service lights: 2 additional front lights

* PAT blade is available from the parts organization only

NEW HOLLAND. THE POWER OF A GLOBAL BRAND

New Holland is a global brand with a key position in the Construction Equipment business. It supplies a complete range of 12 product lines and 80 basic models split into Compact line and Heavy line.

It operates in all the main markets, such as Europe, North and Latin America, Africa, Asia and Middle East with the same technology and under the same logo and brand.

It manufactures durable, safe and productive machines aimed at supporting customers in developing their own business.

Dealers are company partners. They play an important role to support the brand in their territories through intense professional relationships with Customers.

New Holland is reinforced by its global alliance with Kobelco: world leader in hydraulic excavator technology.

 **NEW HOLLAND**



PARTS & SERVICE

The New Holland dealer network is, in itself, the best guarantee of continued productivity for the machines it delivers to its customers. New Holland service technicians are fully equipped to resolve all maintenance and repair issues, with each and every service point providing the high standards they are obliged to observe under New Holland's stringent quality guidelines.

The New Holland global parts network ensures fast, reliable, replacement parts for less downtime, increased productivity and, of course, profitable operation for its customers.

AT YOUR OWN DEALERSHIP

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