580N
580SN
580SN WT
590SN
Tier 3
Tractor Loader Backhoe

OPERATOR'S MANUAL

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CASE CONSTRUCTION

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Backhoe controls - Pilot

⚠WARNING

Unexpected machine movement!
Pilot controls have two different backhoe controls patterns; before operating the machine, check which control function is active.
Failure to comply could result in death or serious injury.

W0185A

Left-hand backhoe control lever

- Control pattern 1 - Controls the boom and swing functions.
- Control pattern 2 - Controls the dipper and swing functions.

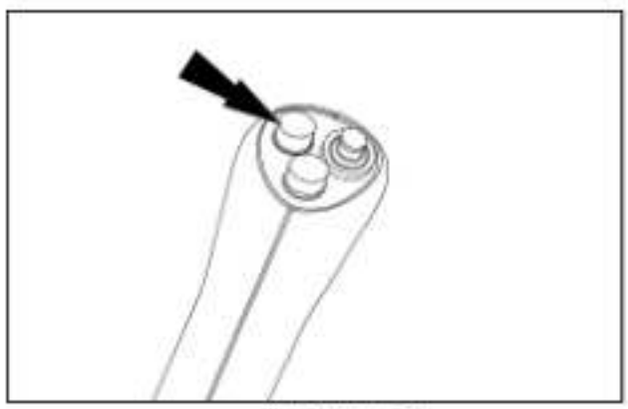
NOTE: *The control pattern switch illuminates when pattern 2 is enabled. The control pattern switch is located on the right control tower.*



RGPH10TLB135AAF 1

Uni-directional auxiliary hydraulics

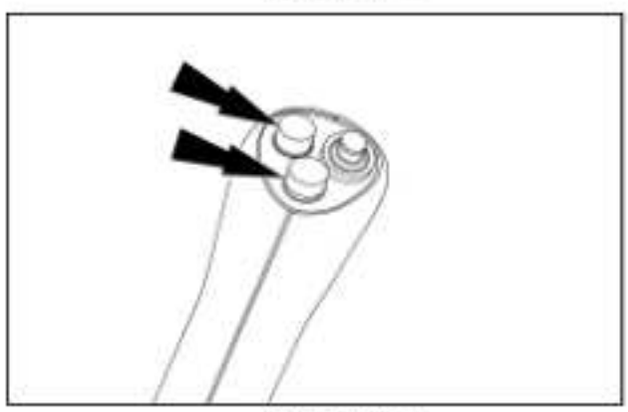
ON/OFF button.



RAIL14TLB07E8AA 2

Bi-directional auxiliary hydraulics

Proportional control buttons.



RAIL14TLB07E8AA 3

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Maintenance planning

Maintenance chart

Maintenance action	Replace	Check	Tighten	Grease	Tire inflating	Cleaning	Charging	Bleed	Change fluid	Adjust	Lubricate	Page no.
At warning message display												
Engine air filters	x											7-35
Hydraulic filter	x											7-37
Fuel system water separator		x										7-39
Initial 10 hours												
Air-conditioning compressor drive belt			x									7-41
Wheel nut and bolt torque		x										7-43
Every 10 hours or daily												
Engine oil level		x										7-44
Loader, backhoe, Extendahoe grease fittings				x								7-46
Tire pressure and condition					x							7-55
Initial 20 hours												
Transmission fluid level		x										7-56
Front axle fluid level - Four-Wheel Drive (4WD)		x										7-58
Rear axle fluid level		x										7-59
Every 50 hours												
Fuel system water separator		x										7-60
Coolant reservoir (deaeration reservoir) fluid level		x										7-63
Hydraulic reservoir fluid level		x										7-64
Front axle grease fittings				x								7-65
Loader hydraulic coupler lock pins				x								7-66
4-in-1 bucket pivots and grease fittings				x								7-66
Initial 100 hours												
Hydraulic filter(s)	x											7-68
Transmission filter	x											7-70
Fuel filters	x											7-72
Service brakes		x										7-76
Parking brake		x										7-77
Every 100 hours												
Backhoe swing control				x								7-78
Extendahoe control				x								7-78
Spark arresting muffler					x							7-79
Every 250 hours												
Battery					x							7-80
Air-conditioning compressor drive belt			x									7-81
Front axle fluid level - Four-Wheel Drive (4WD)		x										7-83
Front axle breather valve - Four-Wheel Drive (4WD)		x										7-84
Front axle drive shaft - Four-Wheel Drive (4WD)				x								7-84
Rear axle fluid level		x										7-85
Rear axle breather		x										7-85
Rear axle drive shaft				x								7-85
Fuel tank		x										7-86
Transmission fluid level		x										7-87
Air-conditioning compressor seals						x						7-88
Operator's seat				x								7-89

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9 - SPECIFICATIONS

Capacities – 580N

NOTE: *Machines with the optional Severe Cold Weather Package (SCWP) use the SCWP recommended fluids. Your machine will have a decal that indicates that the machine is equipped with the SCWP option. The decal is on the left-hand side of the engine near the maintenance decal.*

Engine crank case

Standard specification:	**CASE AKCELA UNITEK NO. 1™ SBL CJ-4 SAE 10W-40**
SCWP specification:	**CASE AKCELA UNITEK NO. 1™ SSL CJ-4 SAE 0W-40**
Capacity:	
With filter change	**13.6 L (14.4 US qt)**

Fuel tank

Standard specification:	**ASTM D975 GRADE NO. 2-D S15** (No. 2 diesel)
SCWP specification:	Winter diesel fuel blend with a diesel fuel additive
Capacity:	**159 L (42 US gal)**

NOTE: *Contact your CASE CONSTRUCTION dealer for assistance and availability of winter diesel fuel blends in your area. Follow the directions on the manufactures label of the cold weather diesel fuel additive for recommended use.*

Cooling system

Standard and SCWP specification:	**CASE AKCELA ACTIFULL™ OT EXTENDED LIFE COOLANT** (**50 %** concentrate and **50 %** distilled water)
Without heater	**16.1 L (17.0 US qt)**
With heater	**16.8 L (17.8 US qt)**

Hydraulic system

Standard specification:	**CASE AKCELA NEXPLORE™ FLUID**
SCWP specification:	**CASE AKCELA HY-TRAN® ULTRACTION SSL**
Capacity:	
Total system	**100.0 L (105.7 US qt)**
Total system with Extendahoe	**105.7 L (111.7 US qt)**
Reservoir with filter change	**55.0 L (58.1 US qt)**
Reservoir without filter change	**53.0 L (56.0 US qt)**

Transmission

Standard specification:	**CASE AKCELA NEXPLORE™ FLUID**
SCWP specification:	**CASE AKCELA HY-TRAN® ULTRACTION SSL**

Manual (powershuttle)

	Two wheel drive	Four wheel drive
Total system	**17.0 l (18 US qt)**	**19.4 l (21 US qt)**
Refill (with or without filter change)	**10.5 l (11 US qt)**	**13.0 l (14 US qt)**

Powershift S-type

	Two wheel drive	Four wheel drive
Total system	**21.7 l (22.9 US qt)**	**20.7 l (21.9 US qt)**
Refill (with or without filter change)	**15.3 l (16.2 US qt)**	**14.3 l (15.1 US qt)**

NOTE: *The master brake cylinder receives fluid from the transmission.*

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Safety Instruction

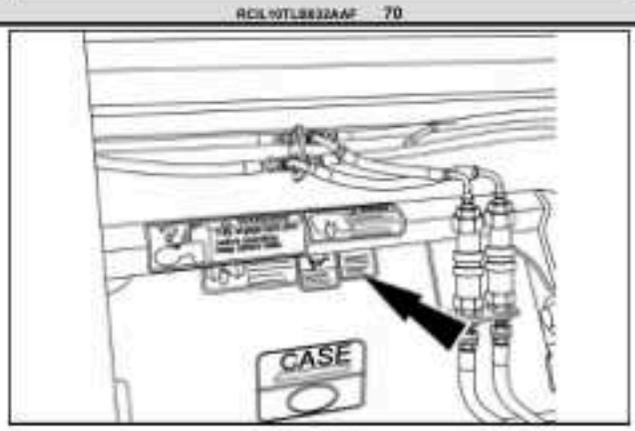
SAFETY
Make sure everyone is clear before operating the machine. Lower attachment, shut off motor and set parking brake before leaving the machine. Relieve pressure and disconnect hydraulic lines before servicing.

Quantity: 1
English RDL–3139



RCIL10TLB032AAF 70

(34) Located on4 in 1 bucket, rear center, equipped with hydraulic coupler.



RCPH10TLB118AAF 71

Parking brake

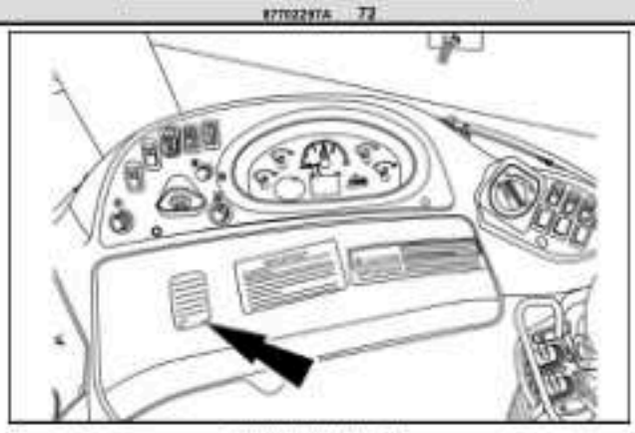
IMPORTANT
Always set parking brake before leaving seat. After startup, cycle park brake switch ON/OFF to release parking brake.

Quantity: 1
English 87702297
Spanish 87708227
Portuguese 84138361



87702297A 72

(35) Located on right-hand console.



RCPH10TLB151AAF 73

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