CX490D
CX500D
Crawler Excavator

OPERATOR'S MANUAL

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CASE CONSTRUCTION

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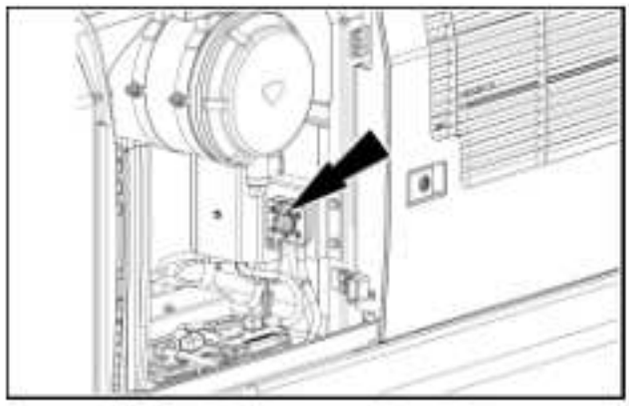
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Battery disconnect switch

The battery disconnect switch is located near the batteries. It can thus be reached by opening the front left-hand door.

The battery disconnect switch allows to cut off any power supply in the electrical system of the machine.

NOTE: *When the switch is turned to OFF position, all electrical circuits are cut off and the stations stored on the radio presets and the time set for the clock will be cleared.*



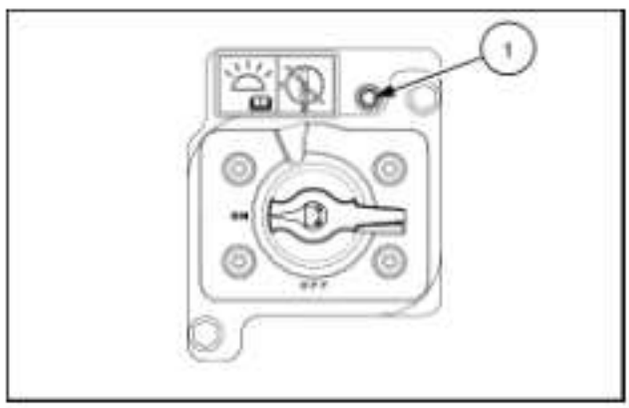
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The battery disconnect switch shall be in ON position for normal operation.

The battery disconnect switch shall be turned to OFF position only when taking the actions below for inspection, repair and welding:

1. Batteries removal.
2. Electrical system connectors removal.
3. Service on the electrical system.
4. Long-term storage.

NOTICE: *Never turn the battery disconnect switch to OFF position with the engine running. This could damage the electrical system.*

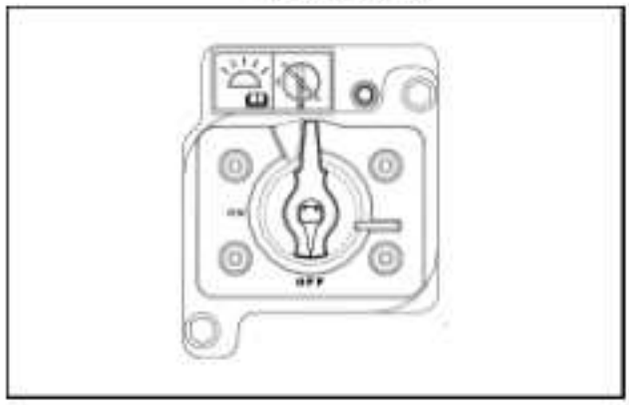


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The battery disconnect switch shall never be turned to OFF position within **3 min** after the engine is stopped.

NOTICE: *The urea SCR system continues to operate for approximately **3 min** after the starter key is turned off in order to suck back the circulating **DEF/ADBLUE®** in the line to the tank. Otherwise the **DEF/ADBLUE®** may remain in the line and damage the urea SCR system when frozen.*

NOTICE: *Never turn the battery disconnect switch to OFF position within **3 min** after the starter key is turned off. The machine control system and the engine control system will be damaged.*



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The LED indicator **(1)** above the battery disconnect switch is lit up in yellow as the main control systems are still operating after the engine stop. Never turn the battery disconnect switch to OFF position when the LED indicator **(1)** is lit up in yellow.

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Maintenance planning

Maintenance chart

Maintenance action	Grease	Check	Replace	Change fluid	Adjust	Cleaning	Drain fluid	Page no.
Break-in period								
Grease points (Backhoe bucket)	x							6-17
Cab protection (ROPS and FOPS)		x						6-17
Tightening torques		x						6-17
Track shoe bolt torque		x						6-17
Hydraulic oil return filter			x					6-17
Pilot line filter			x					6-17
Swing reduction unit oil				x				6-17
Travel reduction units oil				x				6-17
Every 10 hours								
Engine oil level		x						6-18
Engine coolant level		x						6-19
Hydraulic oil level		x						6-20
Fuel tank drain					x			6-21
Fuel pre-filter					x			6-22
Fuel filters					x			6-22
Fan and alternator drive belt		x						6-22
Every 50 hours								
Air conditioner filters						x		6-23
Grease points (Bucket)	x							6-25
Every 250 hours								
Swing reduction gear		x						6-26
Travel reduction gears		x						6-26
Engine primary air filter						x		6-27
Battery electrolyte level		x						6-30
Fan and alternator drive belt							x	6-33
Hydraulic oil tank					x			6-34
Tightening torques		x						6-35
Track shoe bolt torque		x						6-36
Track rollers and idler wheels		x						6-37
Cab protection (ROPS and FOPS)		x						6-37
Every 500 hours								
Turntable bearing	x							6-38
Swing ring gear	x							6-38
Engine oil and filters				x				6-39
Fuel pre-filter			x					6-41
Fuel filters			x					6-43
Radiator and coolers						x		6-44
Every 1000 hours								
Grease points (Boom and arm)	x							6-46
Hydraulic tank breather			x					6-49
Engine air filters			x					6-50
Hydraulic fluid analysis		x						6-52
Engine valve rocker clearance adjustment		x						6-52
Swing reduction gear				x				6-53
Alternator		x						6-54
Starter motor		x						6-54

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Direct fit buckets application as function of the arm CX490D RTC

Heavy Duty buckets			Arm			
Capacity ISO 7451 (Heaped)	Width	Mass	2.53 m (99.61 in)	3.38 m (133.07 in)	4.00 m (157.48 in)	4.85 m (190.94 in)
1.10 m³ (1.44 yd³)	915 mm (36 in)	1284 kg (2830 lb)	○	○	○	○
1.32 m³ (1.73 yd³)	1065 mm (42 in)	1420 kg (3130 lb)	○	○	○	○
1.55 m³ (2.03 yd³)	1220 mm (48 in)	1556 kg (3430 lb)	○	○	○	○
1.78 m³ (2.33 yd³)	1370 mm (54 in)	1656 kg (3650 lb)	○	○	○	○
(*) 2.01 m³ (2.63 yd³)	1525 mm (60 in)	1803 kg (3975 lb)	○	○	○	●
(*) 2.24 m³ (2.93 yd³)	1675 mm (66 in)	1941 kg (4280 lb)	○	○	●	■
(*) 2.47 m³ (3.23 yd³)	1830 mm (72 in)	2041 kg (4500 lb)	○	●	●	■

Heavy Duty, High Capacity buckets			Arm			
Capacity ISO 7451 (Heaped)	Width	Mass	2.53 m (99.61 in)	3.38 m (133.07 in)	4.00 m (157.48 in)	4.85 m (190.94 in)
1.42 m³ (1.86 yd³)	915 mm (36 in)	1510 kg (3329 lb)	○	○	○	○
1.70 m³ (2.23 yd³)	1065 mm (42 in)	1678 kg (3700 lb)	○	○	○	○
2.00 m³ (2.61 yd³)	1220 mm (48 in)	1842 kg (4060 lb)	○	○	○	●
2.29 m³ (2.99 yd³)	1370 mm (54 in)	1973 kg (4350 lb)	○	●	●	■
(*) 2.58 m³ (3.37 yd³)	1525 mm (60 in)	2100 kg (4630 lb)	○	●	■	■
2.87 m³ (3.75 yd³)	1675 mm (66 in)	2304 kg (5080 lb)	●	■	■	x
3.16 m³ (4.13 yd³)	1830 mm (72 in)	2443 kg (5385 lb)	■	■	x	x

Severe Duty buckets			Arm			
Capacity ISO 7451 (Heaped)	Width	Mass	2.53 m (99.61 in)	3.38 m (133.07 in)	4.00 m (157.48 in)	4.85 m (190.94 in)
1.10 m³ (1.44 yd³)	915 mm (36 in)	1678 kg (3699 lb)	○	○	○	○
1.32 m³ (1.73 yd³)	1065 mm (42 in)	1860 kg (4101 lb)	○	○	○	○
1.55 m³ (2.03 yd³)	1220 mm (48 in)	1984 kg (4374 lb)	○	○	○	○
1.78 m³ (2.33 yd³)	1370 mm (54 in)	2177 kg (4799 lb)	○	○	○	●
(*) 2.01 m³ (2.63 yd³)	1525 mm (60 in)	2370 kg (5225 lb)	○	○	●	■
(*) 2.24 m³ (2.93 yd³)	1675 mm (66 in)	2563 kg (5650 lb)	○	●	■	■

(*) to be removed for road transport with **4.85 m (190.94 in)** arm

○ Density of material up to 2 t/m^3
● Density of material up to 1.6 t/m^3
■ Density of material up to 1.2 t/m^3
x Not applicable

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