

4. MAINTENANCE CHECK LIST

1) DAILY SERVICE BEFORE STARTING

Check items	Service	Page
Visual check		
Fuel tank	Check, Refill	6-29
Hydraulic oil level	Check, Add	6-33
Engine oil level	Check, Add	6-18
Coolant level	Check, Add	6-21
Control panel & pilot lamp	Check, Clean	6-43
Water separator	Check, Drain	6-30
Fan belt tension	Check, Adjust	6-27

2) EVERY 50 HOURS SERVICE

Check items	Service	Page
Fuel tank	Drain	6-29
Track tension	Check, Adjust	6-38
Swing bearing	Lubricate	6-36
Swing reduction gear oil	Check, Add	6-36
Lubricate pin and bushing	Lubricate	6-42
<ul style="list-style-type: none"> • Boom cylinder tube end • Boom foot • Boom cylinder rod end • Arm cylinder tube end • Arm cylinder rod end • Boom + Arm connecting • Bucket cylinder tube end • Bucket cylinder rod end • Arm + Bucket connecting • Arm + Link, Bucket control • Bucket control rod 		

3) INITIAL 50 HOURS SERVICE

Check items	Service	Page
Engine oil	Change	6-18, 19
Engine oil filter	Replace	6-18, 19
Pilot line filter	Replace	6-35
Hydraulic return filter	Replace	6-34
Drain filter cartridge	Replace	6-35
Fuel filter	Replace	6-30
Bolts & Nuts	Check, Tight	6-8
· Sprocket mounting bolts		
· Travel motor mounting bolts		
· Swing motor mounting bolts		
· Swing bearing mounting bolts		
· Engine mounting bolts		
· Counterweight mounting bolts		
· Turning joint locating bolts		
· Track shoe mounting bolts and nuts		
· Hydraulic pump mounting bolts		

Service the above items only for the new machine, and thereafter keep the normal service interval.

4) EVERY 100 HOURS SERVICE

Check items	Service	Page
Return filter	Replace	6-34
Pilot line filter	Replace	6-35
Element in hydraulic tank breather	Replace	6-35
Drain filter cartridge	Replace	6-35

Replace 4 filters for continuous hydraulic breaker operation only.

5) EVERY 250 HOURS SERVICE

Check items	Service	Page
Battery electrolyte	Check, Add	6-43
Hydraulic oil return filter	Replace	6-34
Drain filter cartridge	Replace	6-35
★ Swing reduction gear oil	Change	6-36
★ Swing reduction grease	Check, Add	6-36
Pilot line filter	Replace	6-35
Charge air cooler	Check, Replace	6-25
Element in hydraulic tank breather	Replace	6-35
Bolts & Nuts	Check, Tight	6-8
· Sprocket mounting bolts		
· Travel motor mounting bolts		
· Swing motor mounting bolts		
· Swing bearing mounting bolts		
· Engine mounting bolts		
· Counterweight mounting bolts		
· Turning joint locating bolts		
· Track shoe mounting bolts and nuts		
· Hydraulic pump mounting bolts		

★ Change oil and add grease after initial 250 hours of operation.

6) EVERY 500 HOURS SERVICE

Check items	Service	Page
★Engine oil	Change	6-18, 19
★Engine oil filter	Replace	6-18, 19
Radiator and cooler fin	Inspect, Clean	6-25
☆Air cleaner element	Check, Clean	6-29
Fuel filter	Replace	6-30
Corrosion resistor	Replace	6-20
Travel reduction gear oil	Check, Add	6-37
◆Travel reduction gear oil	Change	6-37

★ If you use high sulfur containing fuel above than 0.5% or use low grade of engine oil reduce change interval.

☆ Clean the primary element only after 500 hours operation or when the air cleaner warning lamp blinks. Replace primary element and safety element after 4 times cleanings of primary element.

◆ Change oil after initial 500 hours of operation.

Service interval	No.	Description	Service action	Oil symbol	Capacity l (U.S.gal)	Service points No.
10 Hours or daily	1	Fuel tank	Check, Refill	DF	520(137)	1
	2	Hydraulic oil level	Check, Add	HO	230(61)	1
	4	Engine oil level	Check, Add	EO	26.5(7.0)	1
	5	Radiator coolant	Check, Add	C	45(12)	1
	6	Control panel & pilot lamp	Check, Clean	-	-	1
	7	Water separator	Check, Drain	-	-	1
50 Hours or weekly	3	Attachment pins	Check, Add	PGL	-	17
	9	Fuel tank strainer and drain	Check, Clean	-	-	1
	10	Track tension	Check, Adjust	PGL	-	2
	12	Swing bearing grease	Check, Add	PGL	-	3
	17	Swing drive gear case	Check, Add	GO	6(1.6)	1
250 Hours	8	Battery(Electrolyte)	Check, Add	-	-	2
	13	Hydraulic oil return filter	Replace	-	-	1
	21	Line filter element	Replace	-	-	1
	22	Drain filter cartridge	Replace	-	-	2
	23	Air breather element	Replace	-	-	1
	26	Charge air cooler	Check, Replace	-	-	1
500 Hours	4	Engine oil level	Change	EO	26.5(7.0)	1
	11	Engine oil filter	Replace	-	-	1
	14	Air cleaner element	Clean	-	-	2
	15	Radiator and cooler fin	Check, Clean	-	-	1
	16	Fuel filter element	Replace	-	-	2
	18	Final drive gear case	Check, Add	GO	7(1.8)	2
	27	Corrosion resistor	Replace	-	-	1
1000 Hours	17	Swing drive gear case	Change	GO	6(1.6)	1
	18	Final drive gear case	Change	GO	7(1.8)	2
	20	Fan belt tensioner, auto adjustable	Check, Replace	-	-	1
	24	Swing gear and pinion	Change	PGL	12.8(3.4)	1
2000 Hours	2	Hydraulic oil level	Change	HO	230(61)	1
	5	Radiator coolant	Change	C	45(12)	1
	19	Hydraulic oil suction strainer	Check, Clean	-	-	1
As required	25	Air conditioner filters	Check, Clean	-	-	2

※ **Oil symbol**

Please refer to the recommended lubricants for specification.

DF : Diesel fuel

GO : Gear oil

HO : Hydraulic oil

C : Coolant

PGL : Grease

EO : Engine oil

7) EVERY 1000 HOURS SERVICE

Check items	Service	Page
Forn belt tensioner	Check, Replace	6-27
Travel motor reduction gear oil	Change	6-37
Swing reduction gear oil	Change	6-36
Swing reduction grease	Refill	6-36
Grease in swing gear and pinion	Change	6-37

8) EVERY 2000 HOURS SERVICE

Check items	Service	Page
Hydraulic tank		
· Oil	Change	6-23
· Suction strainer	Check, Clean	6-34
Coolant	Change	6-22, 23, 24, 25

Change oil every 600 hours of continuous hydraulic breaker operation.

9) WHEN REQUIRED

Whenever you have trouble in the machine, you must perform the service of related items, system by system.

Check items	Service	Page
Fuel system		
· Fuel tank	Drain or Clean	6-29
· Water separator	Drain or Replace	6-30
· Fuel filter	Replace	6-30
Engine lubrication system		
· Engine oil	Change	6-18, 19
· Engine oil filter	Replace	6-18, 19
Engine cooling system		
· Coolant	Add or Change	6-22, 23, 24, 25
· Radiator	Clean or Flush	6-22, 23, 24, 25
Engine air system		
· Air cleaner element	Replace	6-29
Hydraulic system		
· Hydraulic oil	Add or Change	6-33
· Return filter	Replace	6-34
· Drain line filter	Replace	6-35
· Pilot line filter	Replace	6-35
· Element of breather	Replace	6-35
· Suction strainer	Clean	6-34
Undercarriage		
· Track tension	Check, Adjust	6-38
Bucket		
· Tooth	Replace	6-40
· Side cutter	Replace	6-40
· Linkage	Adjust	6-41
· Bucket assy	Replace	6-39
Air conditioner and heater		
· Fresh filter	Clean, Replace	6-46
· Recirculation filter	Clean	6-47