4. MAINTENANCE CHECK LIST

1) DAILY SERVICE BEFORE STARTING

Check items	Service	Page
Visual check		
Fuel tank	Check, Refill	6-25
Hydraulic oil level	Check, Add	6-29
Engine oil level	Check, Add	6-17
Coolant level	Check, Add	6-19
Control panel & pilot lamp	Check, Clean	6-45
Water separator	Check, Drain	6-26
Fan belt tension	Check, Adjust	6-23, 24
★ Air cleaner element	Check, Clean	6-25

[★] Severely dusty area operation only.

2) EVERY 50 HOURS SERVICE

Check items	Service	Page
Fuel tank(Water sediment)	Drain	6-25
Swing bearing	Lubricate	6-33
★ Air cleaner element	Check, Clean	6-25
Swing reduction gear oil	Check, Add	6-32
Lubricate pin and bushing	Lubricate	6-43
· 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		
· Bucket link connecting		
· Dozer blade cylinder rod end	Lubricate	6-35
· Dozer blade pivot pin	Lubricate	6-35
· Dozer blade cylinder tube end	Lubricate	6-35
· Drive shaft(Front and rear)	Lubricate	6-34
· Axle pivot	Lubricate	6-34
· Hub pivot	Lubricate	6-34
· Steering links	Lubricate	6-34

[★] Shorten cleaning interval for severely dusty area operation such as quarry, cement factory and etc.

[★] Replace the inner & outer element after 6 times cleanings.

3) INITIAL 50 HOURS SERVICE

Check items	Service	Page
Engine oil	Change	6-17, 18
Engine oil filter	Replace	6-17, 18
Pilot line filter	Replace	6-32
Hydraulic return filter	Replace	6-31
Drain filter cartridge	Replace	6-32
Fuel filter	Replace	6-26
Bolts & Nuts	Check, Tight	6-8
Power train mounting bolts		
Swing motor mounting bolts		
Swing bearing mounting bolts		
Engine mounting bolts		
Counterweight mounting bolts		
Turning joint locating bolts		
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	6-31
★ Pilot line filter	Replace	6-32
★ Element in hydraulic tank breather	Replace	6-31
★ Drain filter cartridge	Replace	6-32
☆ Transmission oil	Change	6-39

[★] Replace 4 filters for continuous hydraulic breaker operation only.

[☆] Change oil after initial 100 hours operation.

5) EVERY 250 HOURS SERVICE

Check items	Service	Page
★ Engine oil	Change	6-17, 18
Battery electrolyte	Check, Add	6-45
★ Engine oil filter	Replace	6-17, 18
Air cleaner element(Inner and outer)	Replace	6-25
Hydraulic oil return filter	Replace	6-31
Pilot line filter	Replace	6-32
Drain filter cartridge	Replace	6-32
Element in hydraulic tank breather	Replace	6-31
☆ Swing reduction gear oil	Change	6-32
☆ Swing reduction grease	Check, Add	6-32
Axle & drive shaft	Lubricate	6-34
Axle oil level	Check, Add	6-37,38
Transmission oil	Check, Add	6-39
Bolts & Nuts	Check, Tight	6-8
Power train mounting bolts	,g.n.	
Swing motor mounting bolts		
· Swing bearing mounting bolts	·	
· Engine mounting bolts		
· Counterweight mounting bolts		
Turning joint locating bolts		
Hydraulic pump mounting bolts		

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

6) EVERY 500 HOURS SERVICE

Check items	Service	Page
Radiator and cooler fin	Inspect, Clean	6-23
Fuel filter	Replace	6-26
★ Axle oil	Change	6-38

 $[\]bigstar$ Change oil after initial 500 hours operation.

7) EVERY 1000 HOURS SERVICE

Check items	Service	Page
Swing reduction gear oil	Change	6-32
Swing reduction grease	Refill	6-32
Grease in swing gear and pinion	Change	6-33
Axle oil	Change	6-37, 38
Transmission oil	Change	6-39

 $[\]mbox{$\frac{1}{2}$}$ Change oil after initial 250 hours operation.

8) EVERY 2000 HOURS SERVICE

Check items	Service	Page
Hydraulic tank		
★ · Oil	Change	6-30
· Suction strainer	Check, Clean	6-30
Coolant	Change	6-19, 20, 21, 22, 23

[★]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, Clean	6-25
- Water separator	Drain, Replace	6-26
· Fuel filter	Replace	6-26
Engine lubrication system		
· Engine oil	Change	6-17, 18
Engine oil filter	Replace	6-17, 18
Engine cooling system		
· Coolant	Add, Change	6-19, 20, 21, 22
· Radiator	Clean, Flush	6-19, 20, 21, 22, 23
Engine air system		
· Air cleaner	Replace	6-25
Hydraulic system	·	
· Hydraulic oil	Add, Change	6-29, 30
· Return filter	Replace	6-31
Drain cartridge filter	Replace	6-32
~ PMot line filter	Replace	6-32
· Element of breather	Replace	6-31
Suction strainer	Clean	6-30
Tire pressure	Check, Inflate	6-35
Bucket		
- Tooth	Replace	6-40
· Side cutter	Replace	6-40
· Linkage	Adjust	6-41
Bucket assy	Replace	6-41
Air conditioner and heater		
· Outer filter	Check, Clean, Replace	6-48
· Inner filter	Check, Clean, Replace	6-48, 49