SECTION 1 GENERAL

Group 1 Safety hints ····· 1-1
Group 2 Specifications ····· 1-9
Group 3 Maintenance ····· 1-15

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

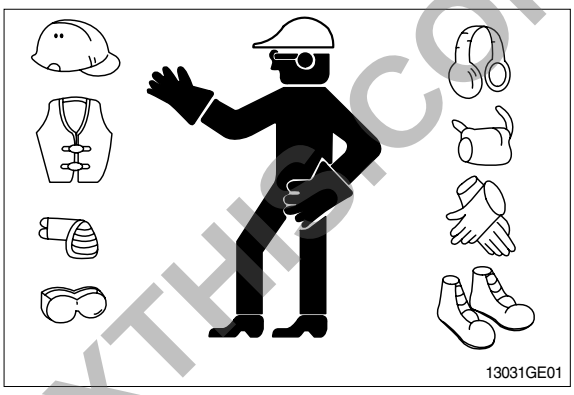
GROUP 1 SAFETY HINTS

FOLLOW SAFE PROCEDURE

Unsafe work practices are dangerous. Understand service procedure before doing work; do not attempt shortcuts.

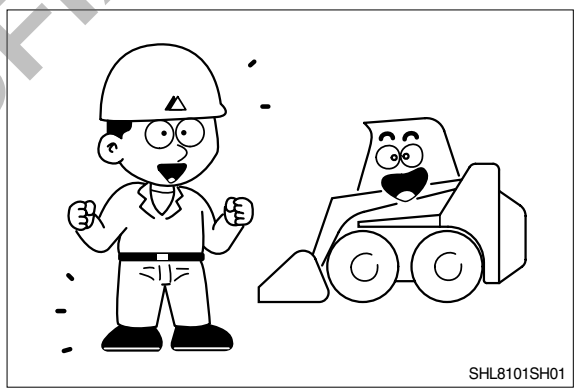
WEAR PROTECTIVE CLOTHING

Wear close fitting clothing and safety equipment appropriate to the job.



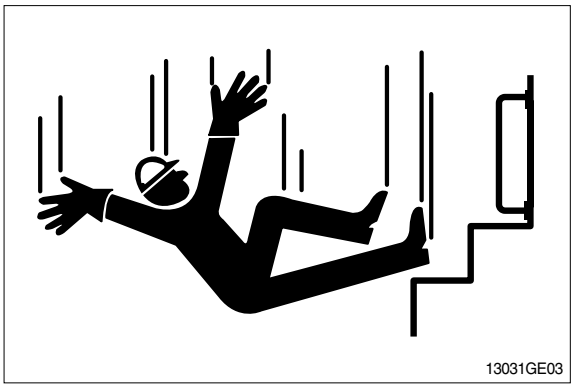
WARN OTHERS OF SERVICE WORK

Unexpected machine movement can cause serious injury.
Before performing any work on the machine, attach a 「**Do Not Operate**」 tag on the right side steering control lever.



USE HANDHOLDS AND STEPS

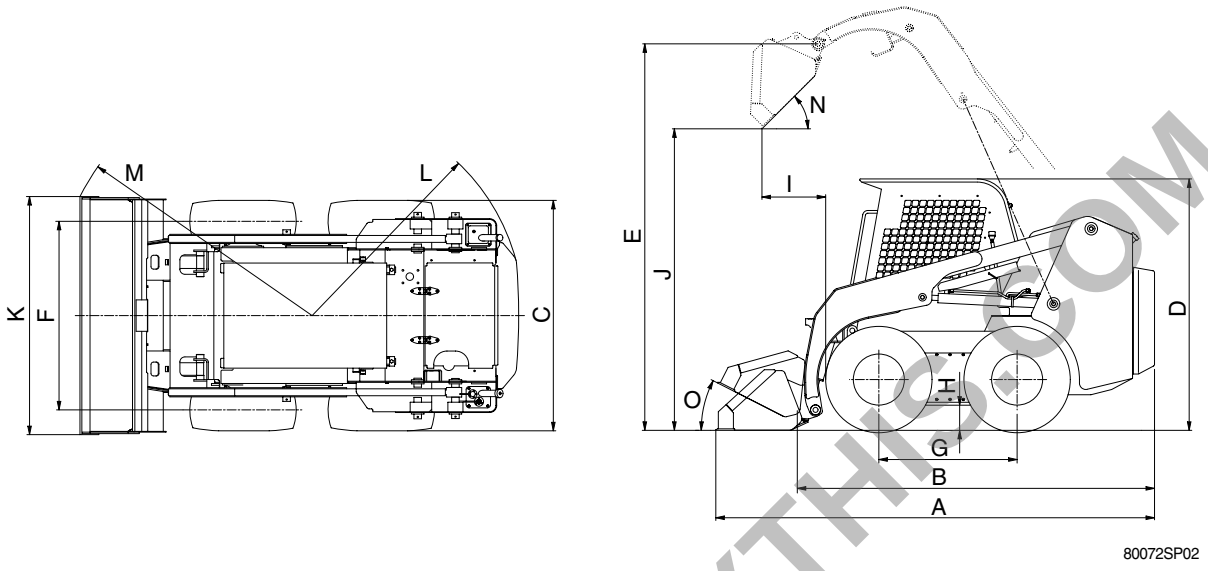
Falling is one of the major causes of personal injury.
When you get on and off the machine, always maintain a three point contact with the steps and handrails and face the machine. Do not use any controls as handholds.
Never jump on or off the machine. Never mount or dismount a moving machine.
Be careful of slippery conditions on platforms, steps, and handrails when leaving the machine.



PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

2. SPECIFICATIONS

· WITH STANDARD BUCKET AND CANOPY



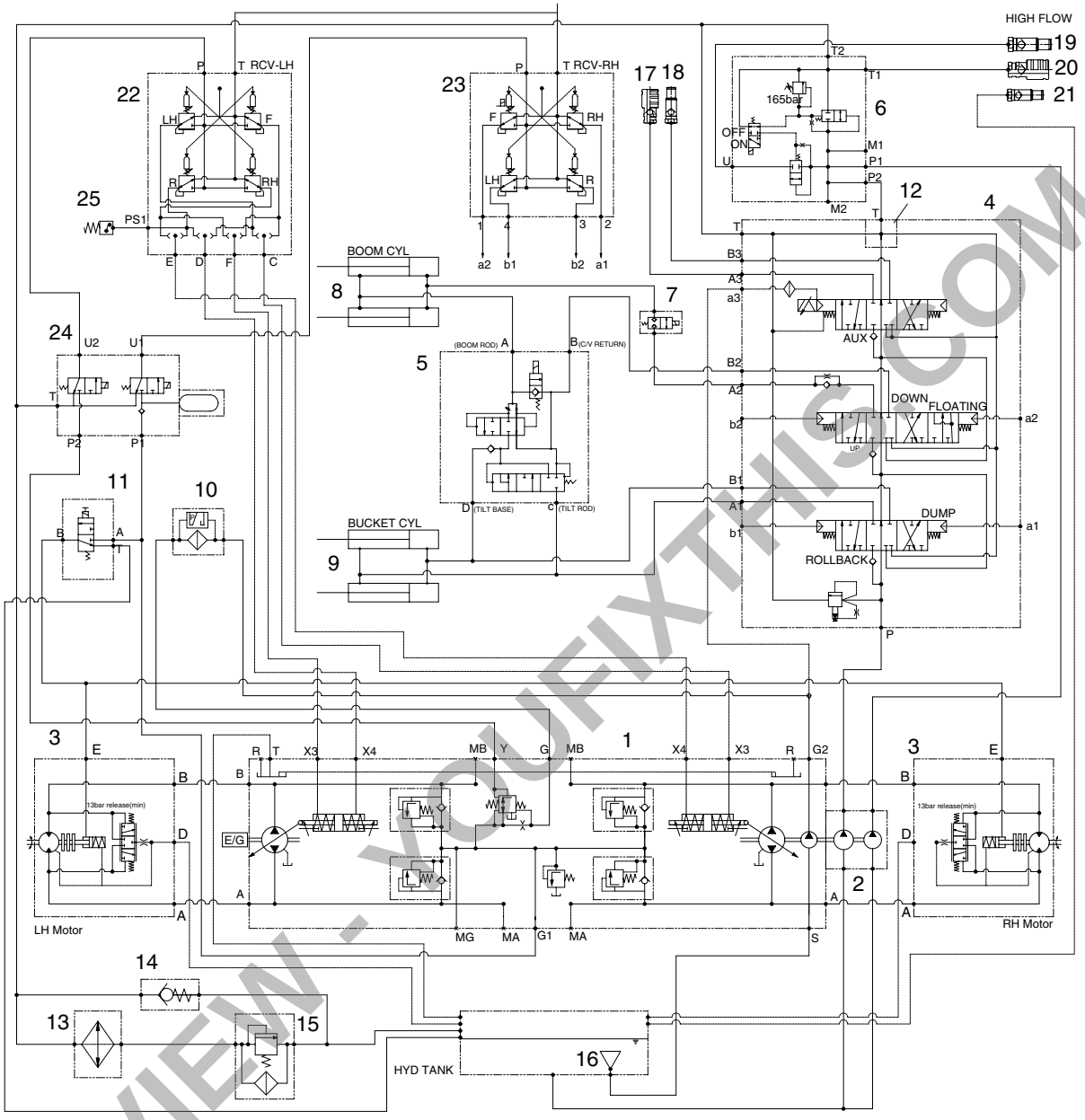
80072SP02

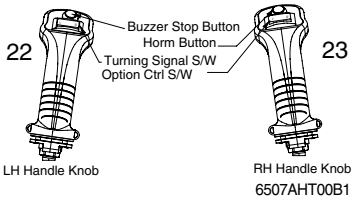
Description			Unit	Specification
Operating weight			kg(lb)	3290(7250)
Bucket capacity		Struck	$m^3(yd^3)$	0.29(0.38)
		Heaped		0.37(0.48)
Overall length		A	mm(ft-in)	3470(11' 5")
Overall length(Without bucket)		B		2840(9 ' 4")
Overall width(Except bucket)		C		1830(6' 0")
Overall height		D		2000(6' 7")
Overall height(To hinge pin)		E		3075(10' 1")
Tread		F		1500(4' 11")
Wheelbase		G		1100(3' 7")
Ground clearance		H		205(0' 8 ")
Dump reach		I		510(1' 10")
Dump height		J		2410(7' 11")
Bucket width		K		1894(6' 3")
Clearance circle(Rear)		L		1660(5' 5")
Clearance circle(Front / bucket)		M		2050(6' 8")
Dump angle		N	Degree(°)	45
Roll back angle(Carry position)		O		27
Cycle time	Boom	Up	sec	4.31
		Down		2.57
	Bucket	Dump		2.9
		Roll back		2.1
Maximum travel speed			km/hr(mph)	11.4(7.1)
Minimum turning radius(Without bucket)			mm(ft-in)	1300(4' 3")
Gradeability			Degree(°)	20

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

2. PILOT TYPE





6507AHT00B1

1	HST pump	10	Filter assy	19	Quick coupler (female, option)
2	Auxiliary pump	11	Parking solenoid valve	20	Quick coupler (male, option)
3	Travel motor	12	Power beyond sleeve	21	Quick coupler (male, option)
4	Main control valve	13	Oil cooler	22	Remote control valve-LH
5	Self level valve (option)	14	Check valve	23	Remote control valve-RH
6	High flow valve (option)	15	Return filter	24	Pilot lock valve
7	Safety solenoid valve	16	Suction strainer	25	Pressure switch
8	Boom cylinder	17	Quick coupler (female)		
9	Bucket cylinder	18	Quick coupler (male)		

PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

1. AUXILIARY PUMP(STD)

1) REMOVAL AND INSTALL



(1) Removal

⚠ If engine is running or full up pressure into hydraulic system, absolutely does not repair or tighten hose, fitting.
As hydraulic line explode, dangerous accident may occur.

① Lowered the bucket on the ground.

② Shut off engine and raise the seat bar.

③ Raise canopy and remove the front cover (1, 2).

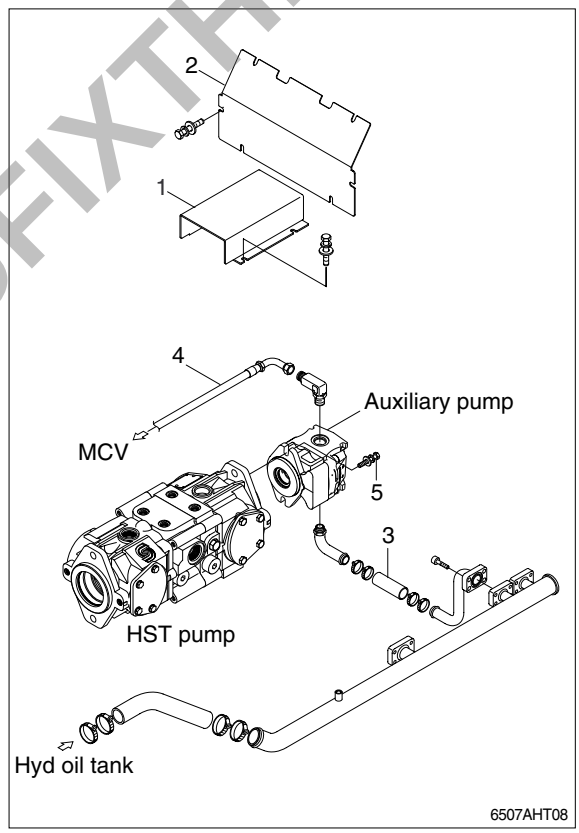
※ **For raising and lowering of the canopy, refer to page 4-14 of the operator's manual.**

④ Disassemble inlet hose(3) of auxiliary pump and oil tank.

⑤ Disassemble outlet hose(4) of auxiliary pump.

⑥ Loose two bolts(5) joined HST pump and auxiliary pump.

⑦ Disassemble auxiliary pump from HST pump.



(2) Install

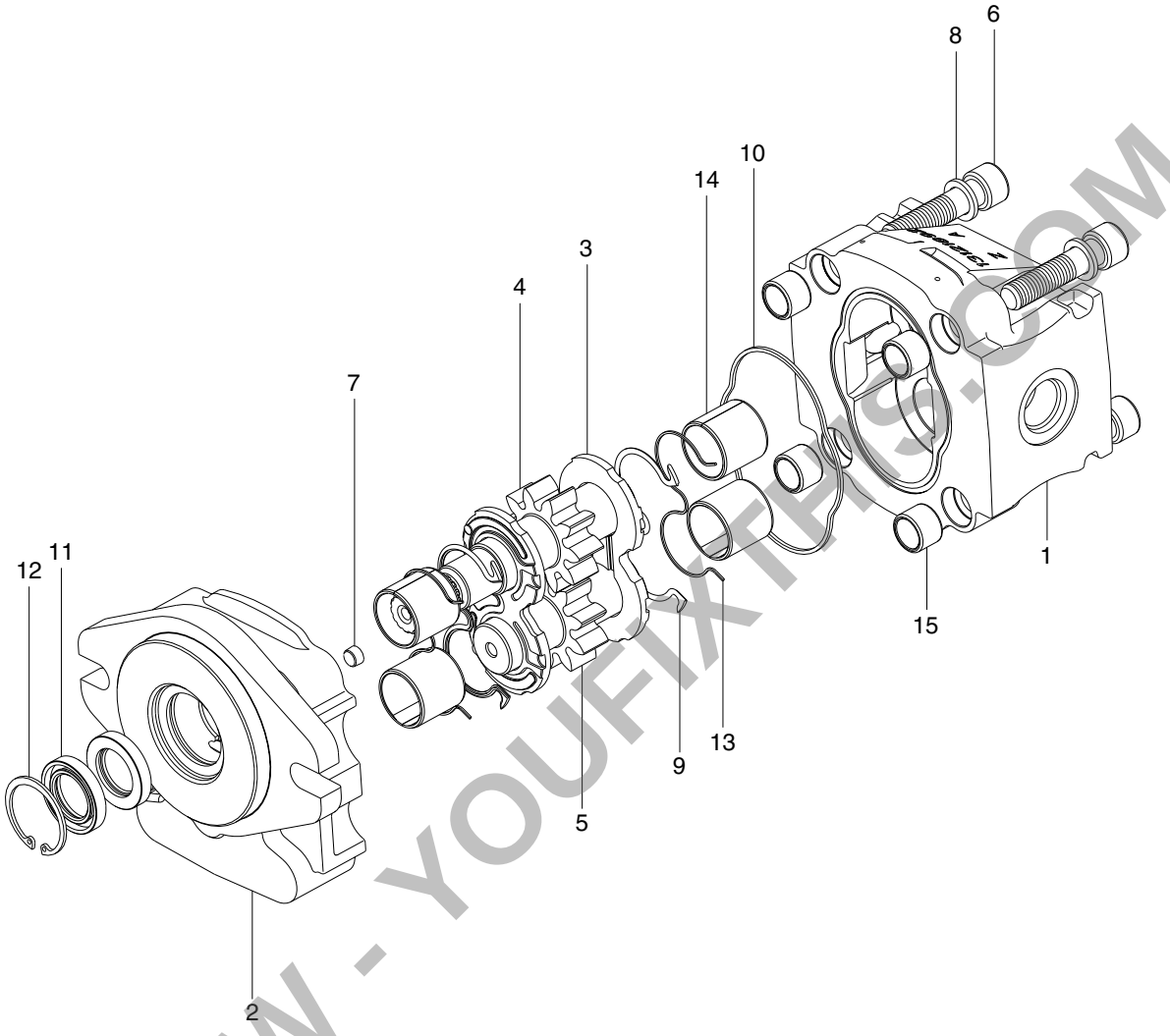
① Join auxiliary pump to HST pump, tighten with bolts(5).
· Tightening torque : 3.7~4.2 kgf · m
(26.8~30.4 lbf · ft)

② Assemble hose inlet hose(3) and outlet hose(4).

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

2) STRUCTURE



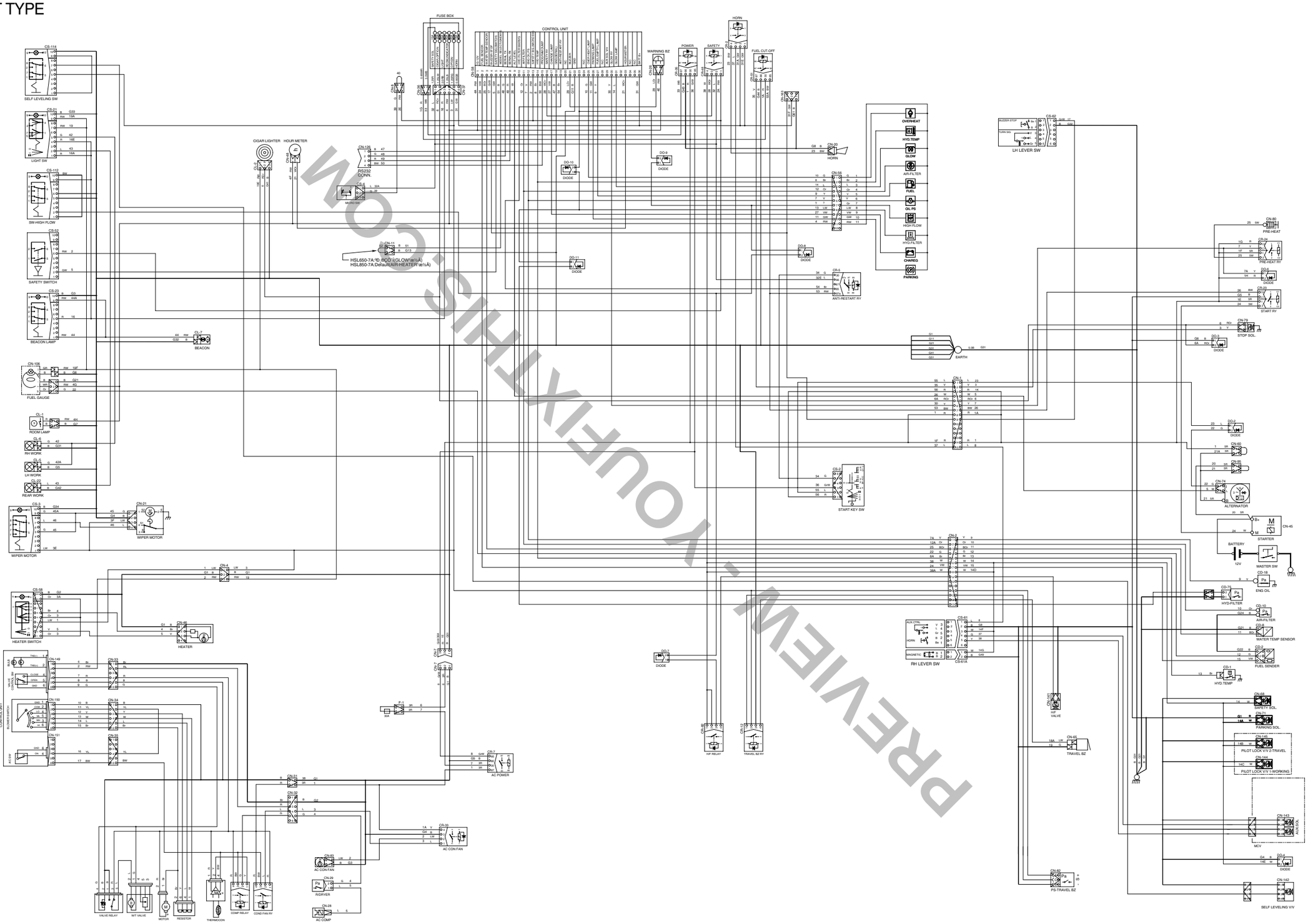
6507AHT38

1	Body	6	Bolt	11	Shaft seal
2	Front cover	7	Screw	12	Snap ring
3	Thrust plate	8	Washer	13	Backup ring
4	Drive shaft	9	O-ring	14	Sleeve bearing
5	Driven gear	10	Square O-ring	15	Guide tube

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PILOT TYPE



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

8507A7EL01

GROUP 1 TRAVEL HYDRAULICS

1. TRAVEL HYDRAULICS

Trouble	Probable cause	Remedy
Loss of drive power on one side - both directions	· Reservoir low on oil	· Check for leaks. Fill reservoir
	· Disconnected steering control linkage	· Reconnect and adjust steering control linkage
	· Bolts sheared on pump neutral bracket	· Replace. Check neutral bracket for loose bolt or excessive play.
	· High pressure line failure	· Replace line. Check travel motor and control pump mounting bolts.
	· Travel motor shaft failure	· Inspect and repair defective parts. Check motor mounting bolts.
	· HST pump failure. Drive may initially appear to be lost on one side only, but after a few moments, drive will be lost on both sides	· Inspect and repair defective parts.
	· Excessive internal leakage or damage in control pumps and/or travel motor	· Inspect and repair defective unit. Flush all lines and reservoir. Replace filter, check on type of fluid used and engine rpm.
Loss of drive power on one side-one direction only	· Defective valve block relief valves	· Replace relief valves.
	· Damaged or seized travel motor shuttle valve	· Inspect and replace defective parts.
Loss of drive power-both side(No hydraulic power)	· Reservoir low on oil	· Check for leaks. Fill reservoir.
	· Universal joint between engine and pump failure	· Inspect and replace damaged parts. Check for misalignment.
	· HST pump not functioning	· Inspect and replace damaged parts.
Loss of drive power-both sides(No hydraulic power)	· Implement pump shaft failure	· Inspect and replace damaged parts.
	· Spline coupling between front and rear control pump failure	· Inspect and replace damaged parts.

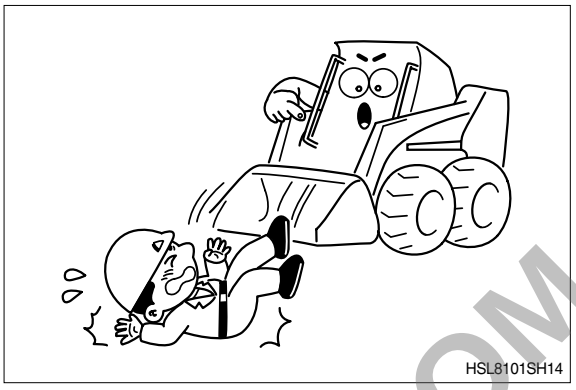
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

KEEP RIDERS OFF MACHINE

Only allow the operator on the machine. Keep riders off.

Riders on machine are subject to injury such as being struck by foreign objects and being thrown off the machine. Riders also obstruct the operator's view resulting in the machine being operated in an unsafe manner.

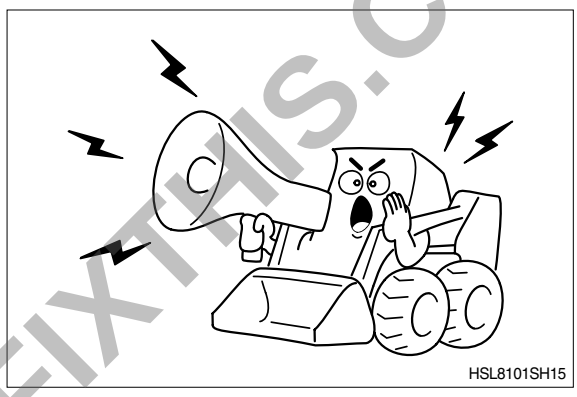

HSL8101SH14

MOVE AND OPERATE MACHINE SAFELY

Bystanders can be run over. Know the location of bystanders before moving, steering, or operating the machine.

Always keep the travel alarm in working condition. It warns people when the machine starts to move.

Use a signal person when moving, turning, or operating the machine in congested areas. Coordinate hand signals before starting the machine.


HSL8101SH15

OPERATE ONLY ON OPERATOR'S SEAT

Avoid possible injury and machine damage. Do not start engine by shorting across starter terminals.

NEVER start engine while standing on ground. Start engine only on operator's seat.

PARK MACHINE SAFELY

Before working on the machine:

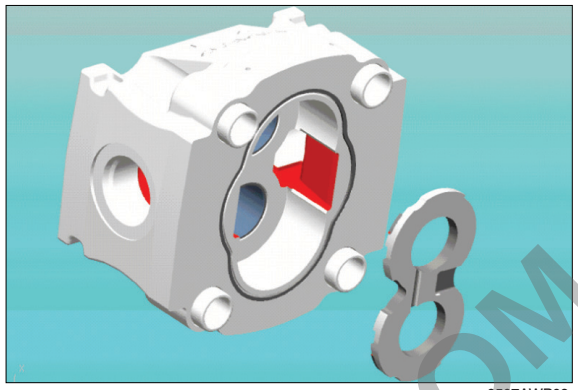
- Park machine on a level surface.
- Lower bucket to the ground.
- Run engine at 1/2 speed without load for 2 minutes.
- Turn key switch to OFF to stop engine. Remove key from switch.
- Allow engine to cool.
- Raise seat bar and chock the wheels.
- Put jackstands under the rear frame.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

(2) Assembling

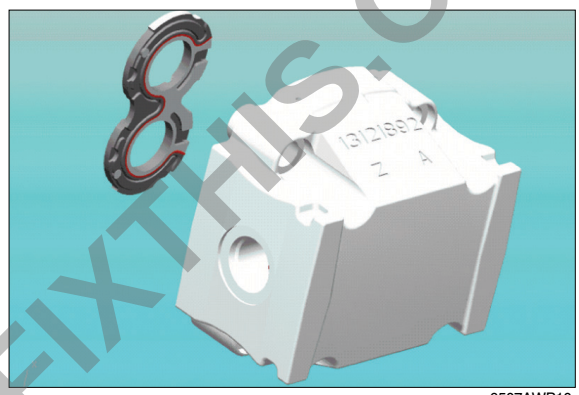
① Prepare cleaned 2nd body prearranged guard pins and square O- ring.



6507AWP09

② Insert a thrust plate prearranged O-ring & backup ring inside of body.

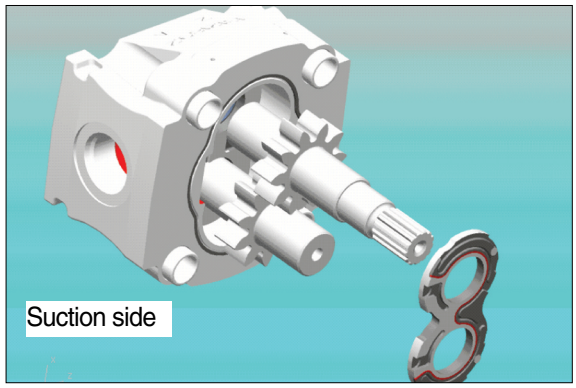
※ Opened area of O-ring should face to suction side. And O-ring side should face to the body.



6507AWP10

③ Locate driving gear and driven gear keeping as straight as possible during assembling.

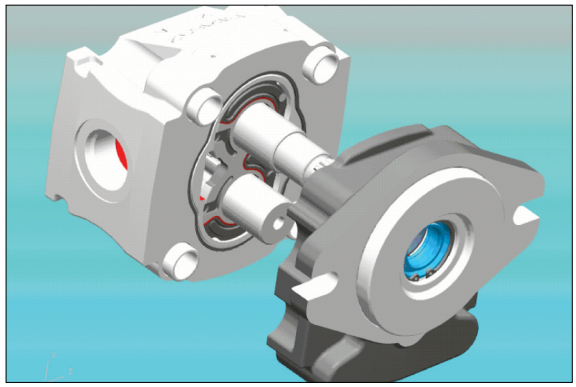
④ Locate one of thrust plates preassembled.



6507AWP11

⑤ Assemble front cover to the body, taking care not to give any damage on the shaft seals by sharp edge of shaft.

※ Smear clean grease on the lips of shaft seals before assembling.



6507AWP12

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

3. ADJUSTMENT INSTRUCTIONS

1) LOW PRESSURE VALVE (Boost pressure)

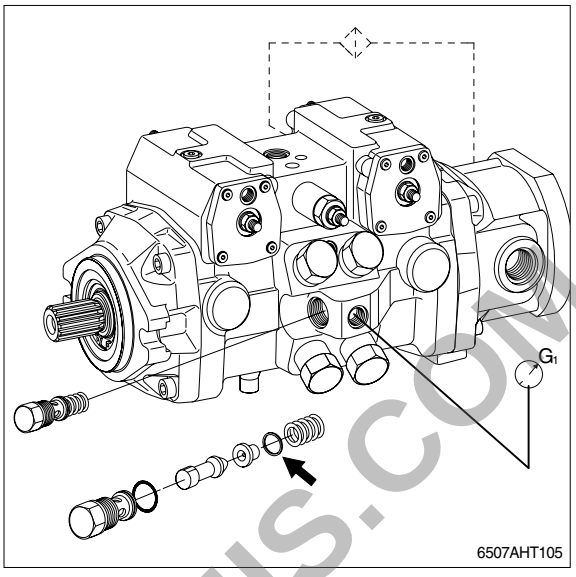
⚠ Observe safety regulations.

(1) Readjust only at operating temperature.

(2) Connect pressure gauge (60 bar) to "G_1" port.

※ **Boost pressure setting is adjusted with shims.**

(3) Setting data is in accordance to the specification.

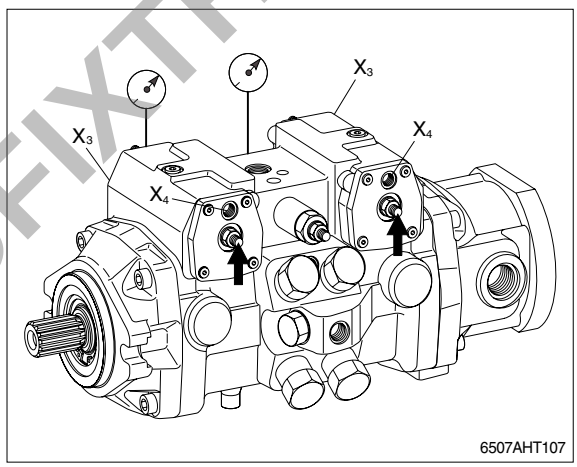


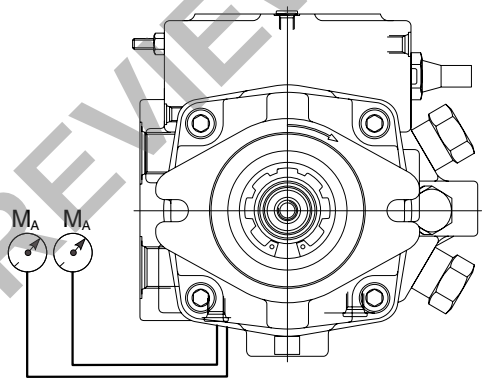
2) MECHANICAL "ZERO POSITION"

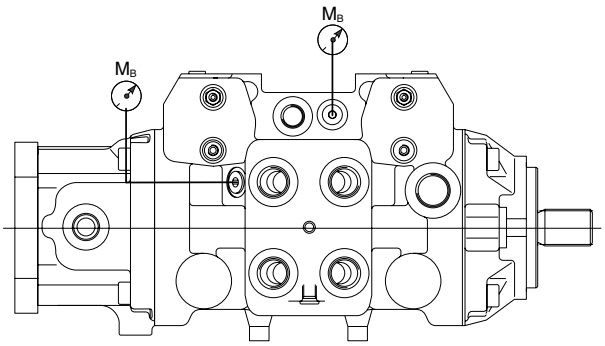
(1) Ports X_3 / X_4 control pressure to the tank open.

(2) Connect pressure gauges (600 bar) to MA and MB. Adjust the zero position so that with at blocked drive both pressure gauges indicate the same pressure valve.

※ **Ascertain the zero position dead band.**



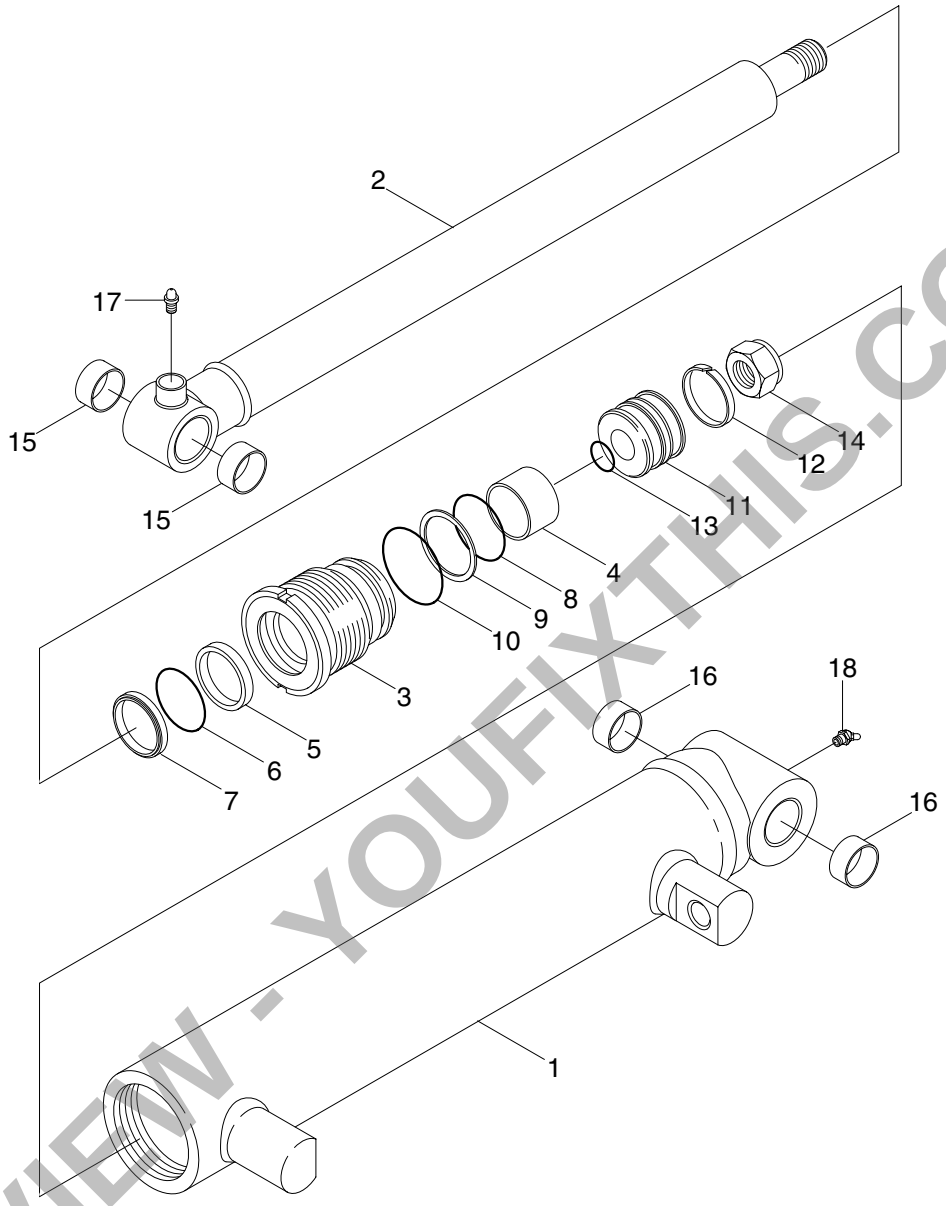




PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

(2) Bucket cylinder



8007HT36

1	Tube assy	7	Dust wiper	13	O-ring
2	Rod assy	8	O-ring	14	Nylon nut
3	Gland	9	Back up ring	15	Du bushing
4	Du-bushing	10	O-ring	16	Du bushing
5	Rod seal	11	Piston	17	Grease nipple
6	Back up ring	12	Piston seal	18	Grease nipple

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 180 pages

The full manual includes:

- All 180 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Hyundai HSL850-7A Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual