



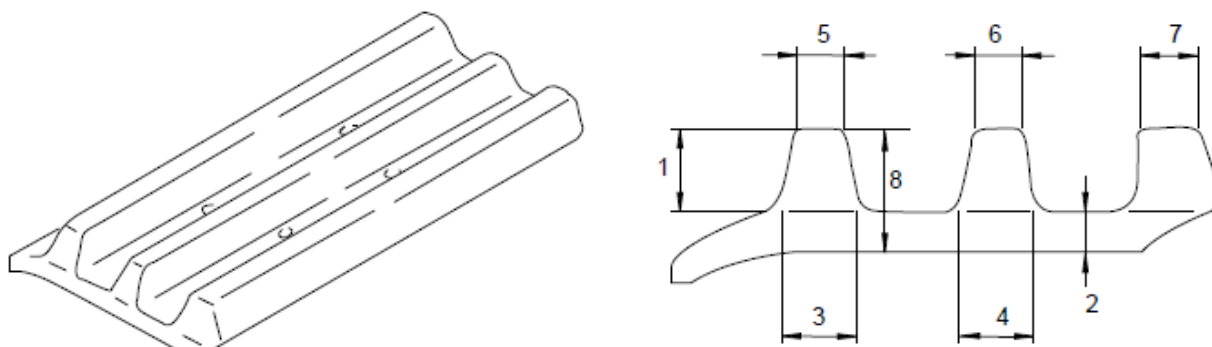
SY305H Hydraulic Excavator Maintenance Manual

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- This manual is prepared for experienced technicians and aims to provide technical information required for maintenance and repair of the machine.
- This manual may involve work equipment and optional devices not available in your region. You may consult local Sany authorized dealers for ordering of these parts. Materials and technical specifications are subject to change without prior notice.

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Three-teeth track shoe



ZX215-1002014

Fig. 4-13

Unit: mm

No.	Inspection Item	Standard		Measures
1	Height	Standard size	Repair limit	Perform overlay welding or replace the part
		36	21.3	
2	Thickness	13		
3	Base length	29		
4		24		
5	Top length	22		
6		16		
7		22		
8	Thickness	Standard size	Repair limit	
		49	34.3	

PPC accumulator

1. Air plug
2. Hosing
3. Seat valve spool
4. Retainer
5. Bag
6. Oil port

Technical Specifications

Gas quantity: 300 cc (for PPC)

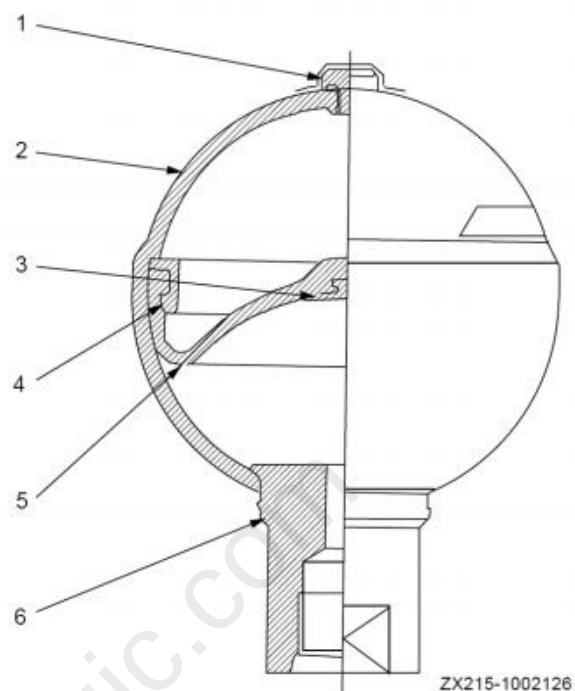


Fig. 4-119

Compression pressure measurement

Inspection of compression pressure of engine

Note: During inspection, pay attention to warming up the engine.

1. Remove the glow plug from the cylinder head assembly.

Note: Remove all glow plugs.

2. Disconnect the fuel injector harness connector from the lower end cover.

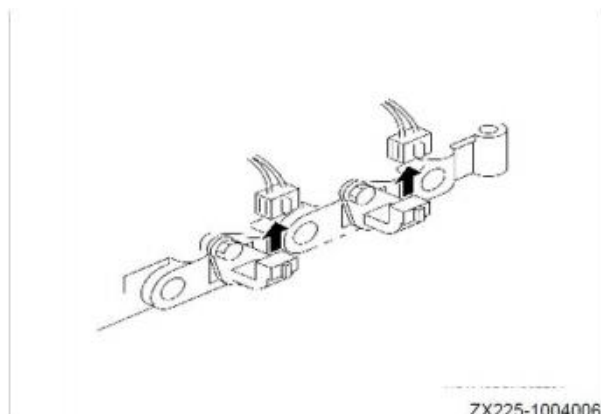
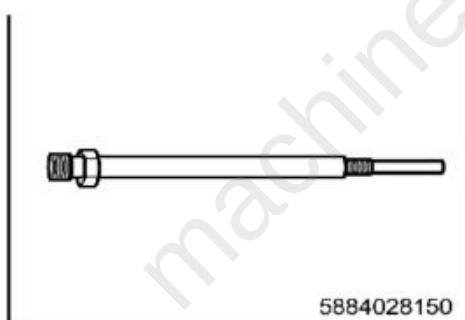


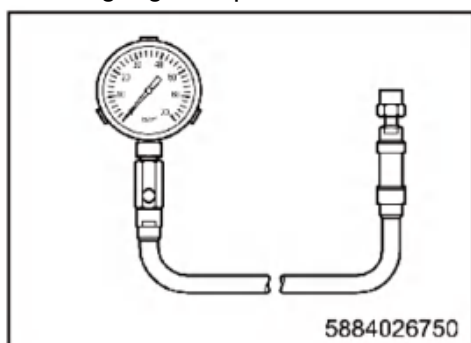
Fig. 6-4

3. Install the special tool to the cylinder head assembly.

Note: Insert the compression gauge adapter into the glow plug hole, and install the compression gauge.



Compression gauge adapter: 5-8840-2815-0



Compression gauge: 5-8840-2675-0
(5-8531-7002-0)

Table 1: Travel speed high/low switching

Under test	Output pressure (Mpa)
Low speed	0
High speed	3.9-4.1

Table 2: Swing priority solenoid valve

Under test	Output pressure (Mpa)
No swing motion	0
With swing motion	3.9-4.1

Table 3: Secondary pressurization

Under test	Output pressure (Mpa)
No boom lifting or arm digging	0
With boom lifting or arm digging	3.0-3.9

1. Pressure gauge
 2. Compression gauge adapter
- Fig. 6-5
4. Measure the compression pressure.

Note:

(1) Rotate the starter, and record the stable compression pressure reading at about 200r/min.

(2) Measure the compression pressures in all cylinders.

Temperature value: 3240.0 kPa { 33.04 kgf/cm² /470 psi }

Limit: 2260.0 kPa { 23.05 kgf/cm² /328 psi }

Difference between cylinders: 294.0 kPa { 3.00 kgf/cm² /43 psi }

Caution:

During rotation, air will come into and out of the glow plug.

Note:

When the ignition switch is turned to ON with the fuel injector harness connector removed, the engine control module will determine the fault and record the trouble code. Therefore, be sure to clear the diagnostic trouble code after inspection.

3. Reassemble the No.2 planetary carrier assembly.

- 1) Reassemble the No.2 planetary carrier assembly as follows.

★ Replace the plate (20) and (16) with new ones.

- (e) Install the bearings (18 and 9) to the gear (17), install the top plate (16) and bottom plate (20), and set the gear assembly on the carrier (22).

- (f) Fix them with the screw (15).

🔧 Screw (15):

$539 \pm 28 \text{ N} \cdot \text{m}$ $\{55 \pm 2.9 \text{ kgf} \cdot \text{m}\}$

★ After reassembling the planetary carrier assembly, check if the gear (17) is able to rotate freely.

4. Thrust washer

Install the thrust washer (13).

5. No. 2 sun gear

Install the No. 2 sun gear (14).

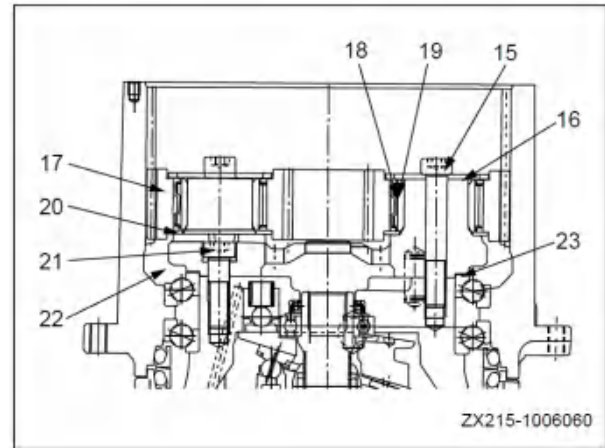


Fig. 8-41

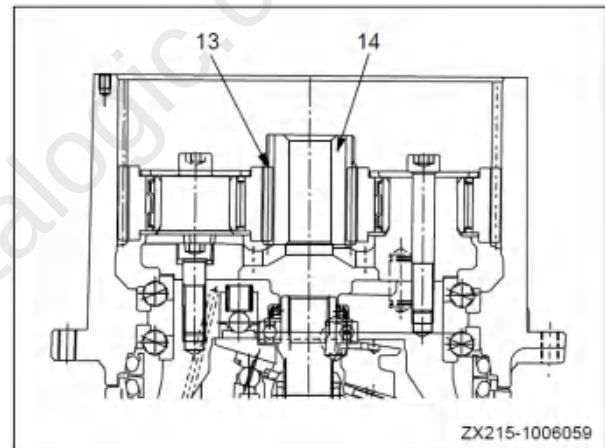


Fig. 8-42

6. No. 1 sun gear shaft

Install the No. 1 sun gear shaft (12).

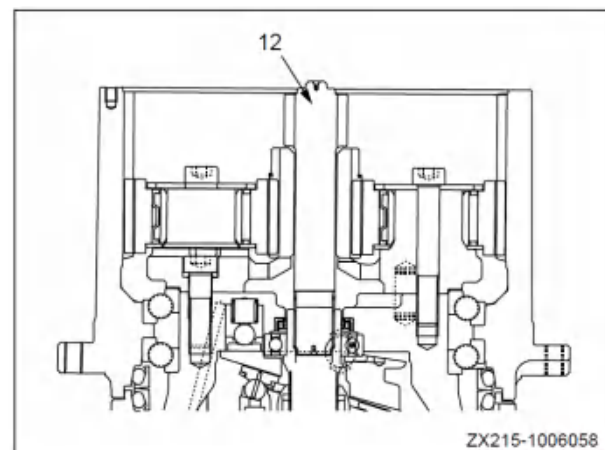


Fig. 8-43

- Install an additional rubber seal (6b) to the lower door glass.

The installation position of the additional rubber seal (6b) :

(j): 110 mm

(k): 90 mm

(m): 200 mm

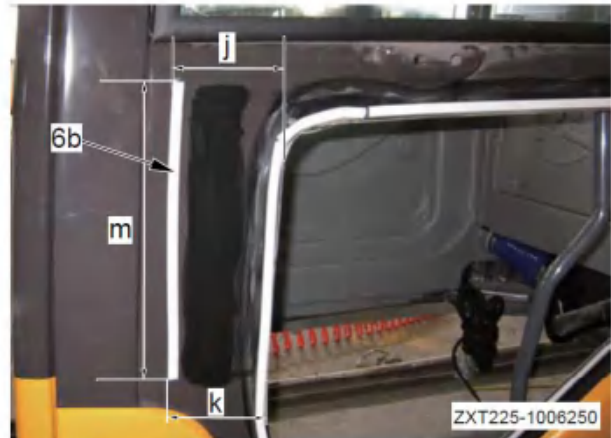


Fig. 8-220

- 4) Install the rubber seal (6) of the front windshield glass to the position indicated in the right figure.

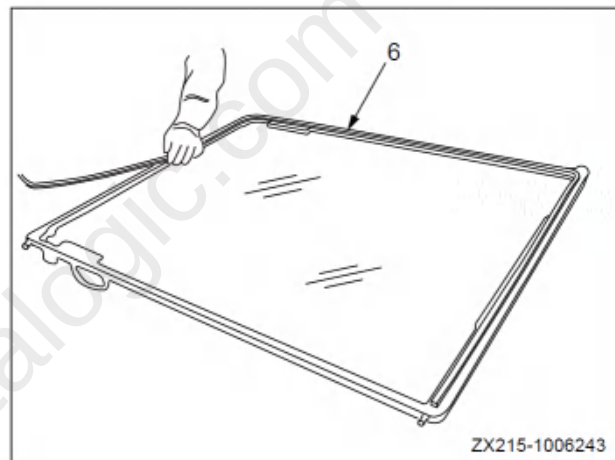


Fig. 8-221

Note: Different from other installation of rubber seals (6), the rubber seal (6c) shall be installed along the external edge of the lower front windshield frame. If it is installed along the inner edge, it will be seen through the transparent glass from outside.

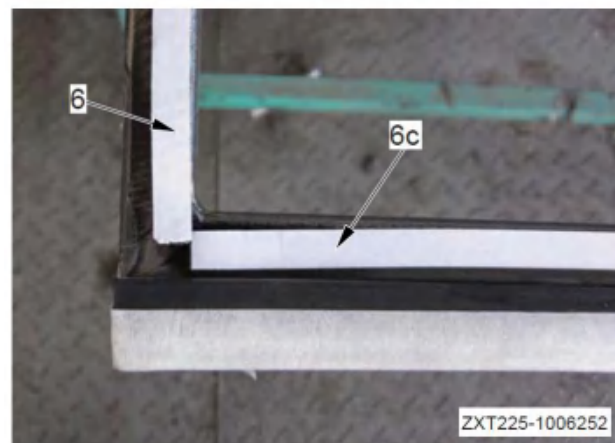


Fig. 8-222

Full Version Available

Sany SY305H Excavator Service Manual

Sany SY305H excavator service manual with repair procedures, adjustments and troubleshooting for the main systems. Searchable PDF, 590 pages.

VIEW THE FULL MANUAL

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