Mobile Crane Branch Company of Zoomlion Heavy Industry Science and Technology Co., Ltd.

## Mobile Crane Quality Warranty Manual

(2020 Overseas version)

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## **Tips**

- 1. Zoomlion appreciates your selection of ZOOMLION crane for your application.
- 2. Please check completeness of attached technical documents, tools and spare parts according to the packing list of the crane and preserve them. In case of any missing item, please contact the responsible crane handover person or local partner from Zoomlion for disposal, otherwise Zoomlion shall not be held accountable for any responsibility or consequence resulted from such case.
- 3. Please read the Operator's Manual carefully before using the crane and carry out operation, adjustment and maintenance of the crane in strict accordance with the instructions in the manual, conduct troubleshooting of common malfunctions of the crane, and preserve all attached tools, spare parts, manuals and documents delivered together with the crane. For better use of the crane, it is recommended to have the crane maintained and serviced at an institute authorized by Zoomlion and preserve the maintenance records, as this relates to the quality warranty of the crane.
- 4. As this quality warranty manual is a constituent part of the crane, please preserve it together with the crane. You can apply for after-sales service from the authorized service station in the region by this manual.
- 5. After finishing each service at your site, Zoomlion's service engineer or authorized representative will fill out a Service Report in written form and send it back to Zoomlion, in which your suggestions on the crane and Zoomlion's service can be attached and they will be much appreciated by Zoomlion. so as for us to know about the usage and service condition of the crane in time for future timely improvements of our product and service.
- 6. This warranty manual is only applicable to cranes manufactured by Zoomlion and sold to countries and areas beyond China Mainland.
- 7. This warranty manual is effective from January 1<sup>st</sup>, 2020. The after-sales service terms of mobile cranes which are purchased at oversea market as of this date shall be implemented according to ones established in this warranty manual. As this warranty manual is a standard document, the main contract shall prevail in case if its special terms have any discrepancy with this warranty manual.

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### **Chapter I Service Concept**

- 1. Service concept: customer focused
- 2. Service objective: efficient service exceeds expectation
- 3. Service goal: to forge the No. 1 service brand
- 4. Service email: Zoomlion or authorized institute
- 5. Service principles: timeliness, efficiency, standardization, initiative, professionalism and honesty.
- 6. Service standards: standardized dressing, standardized wording, standardized configuration, standardized operation and standardized process.

## **Chapter II Contents of After-sale Services**

- Crane delivery: when the crane is delivered to the customer, a full-scale check and adjustment will be conducted on the crane;
- 2. First training: During or after the crane delivery, a training on crane operation, maintenance and common troubleshooting of the crane will be carried out;
- Maintenance service: after crane delivery, a periodic maintenance service will be provided according to the maintenance schedule or relevant agreements;
- 4. Routine checks: periodic full-scale checks on the crane after delivery;
- 5. Last check: a full-scale check will be carried out when the warranty period is one week due or from being due;
- 6. Routine check beyond warranty: a periodic full-scale check after the warranty is expired;
- 7. Customer training: will be held periodically for customers and operators.
- 8. Technical consultation: problem solving and emergency solutions is provided by Zoomlion to customers.
- 9. Technical upgrade: product upgrade service is provided by Zoomlion.

#### **Chapter III Warranty Policies**

#### 1. Definition

Warranty refers to Zoomlion's commitment of replacing or repairing defective components with functional failure or serious performance deterioration of the crane caused by material or processing at free charge within a certain period of time. However, intentional or accidental damages, or force majeure is not covered by the warranty.

#### 2. Warranty period

Refer to the period of time in which products and their parts and components sold by Zoomlion will be warranted, and beyond which they will not be warranted by Zoomlion.

Complete vehicle warranty period: refers to the period of time of **12months or 2000 working hours** (whichever is due first) starting from the date of crane delivery. The delivery date is the date recorded in



the Delivery Report. The warranty period of a specific part or component is implemented as per Chapter V of this manual. Special agreements reached in the main contract shall prevail if there is any.

- 3. Within the warranty period, Zoomlion and its authorized institutes will provide warranty for products and equipment except for cases that they fail to work due to improper use at the customer side. Zoomlion shall be at free choice of ways of repairing, i.e. repair or replacement of the faulty component;
- 4. Based on the crane procurement agreement signed between the customer and Zoomlion, if the liability of providing warranty service is exempted from Zoomlion's side as a one-off amount of money has been already deducted from the total contracted amount, the crane will not be covered by the warranty stated herein, and the crane will be warranted at charge from Zoomlion.
- 5. Zoomlion is only responsible for fees directly covering the warranted spare parts, excluding indirect expenses or losses occurred from the faulty product, which may include but not limited to rental expense of auxiliary equipment needed during product repair, site rental fee and downtime economic losses, etc.
- 6. Zoomlion is only responsible for delivering warranted spare parts to a port (including inland ones) specified by the customer and undertaking the expense and insurance fees during such delivery. The expenses occurred thereafter shall be undertaken by the customer solely, which may include but not limited to tax fees, import clearance charges and transportation fees, etc.
- 7. Any of the following cases is not covered by the warranty:
- Product malfunctions cased by the user's violation of operational instructions and safety procedures, incorrect operation, failure to conduct routine maintenance, or unauthorized modification of the crane:
- ♦ The user or operator of the crane has not received professional training on crane operations.
- ♦ Malfunctions of the crane during transportation, transfer or delivery caused by the customer;
- Malfunctions or serious damages of other critical components caused by failure to use correct fuel, hydraulic oil, grease oil or anti-freezing liquid specified in the Operator's Manual, or failure to use original spare parts ordered from Zoomlion.
- Within the warranty period, in case of a faulty product, the user repairs the faulty product in an unauthorized repairing institute without Zoomlion's prior written consent and authorization.
- Within the warranty period, in case of a faulty product, the customer continues to use the faulty crane without Zoomlion's prior written consent, which results in a further damage. Zoomlion shall be held accountable only for warranty of the original malfunction (which shall be proved to be an actual product quality issue).
- Within the warranty period, in case of a major accident, the customer fails to notify Zoomlion or its authorized institution instantly so as for effective evaluation of the root cause and consequence of the accident at Zoomlion's side, or the user has the crane repaired by an unauthorized institute



which leads to a crane malfunction.

- A malfunction or accident is caused by the customer's modification or adjustment of the crane or its equipments without written consent and authorization from Zoomlion;
- ♦ General abrasion or aging phenomenon caused by years of crane usage;
- All accidents caused by a way of constructing the crane on a floating site, e.g. a boat or floating bridge, etc.
- ♦ Damages or accident caused by a way of construction in which the crane chassis frame or its outriggers are fixed which results in zero degree of freedom of X and Y axis of the crane.
- Damages caused by a force majeure, intentional operation or accident.
- 8. Customer's general responsibilities and obligations
- To read carefully the Operator's Manual and strictly comply with it. Conduct proper delivery, operation, driving, maintenance and service of the purchased crane, and preserve all attached tools, spare parts and technical documents delivered together with the crane.
- In case of any malfunction of the crane, please timely contact Zoomlion or its authorized institute by the service hotline number .During communication with a Zoomlion service engineer, please provide an accurate description of the malfunction phenomenon, faulty component, crane location and operating mode etc. of the crane at the time when the malfunction occurs, so as for timely and efficient troubleshooting.
- When the use location of the crane is changed (e.g. to another country or region), the customer shall inform Zoomlion in written form so as for transfer of the warranty service by Zoomlion.
- During a site visit of a service engineer representing Zoomlion, please provide active cooperation for him/her and arrange with him/her reasonable time, site and facilities for repair. He/she shall not be scolded or even bitten because of the quality issue, or Zoomlion shall have the right to terminate the quality warranty service and pursue the liability in accordance with the law.
- In case of a serious malfunction or accident, please preserve the site and damaged spare part. Notify a Zoomlion service engineer or authorized institute for a site investigation and provide assistance in root cause analysis. Zoomlion shall not be held accountable for any responsibility related to failure of analysis and traceability of the root cause of the malfunction or accident due to arbitrary removal of the crane from the site by the customer or the customer's intentional sabotage of the site, and will not provide warranty for such case;
- Please cooperate with the service engineer from Zoomlion to collect the originally faulty spare part after being replaced. It shall not be taken or discarded by the customer at any excuse; otherwise Zoomlion shall have the right to terminate the warranty service;
- The customer's refusal of maintenance service provided by Zoomlion or its authorized institute in the region will be rendered as the customer's giving up of its crane's warranty service.
- 9. Other agreements



- Zoomlion shall only be held accountable with limited responsibility for losses or fees arising from design, manufacturing and sales of the crane, no matter whether a basis for the customer's claim for compensation on Zoomlion or its authorized institute can be found in this warranty manual, whether it is agreed in the contract, or whether a civil infringement is caused due to neglect or breach of duty from Zoomlion's side. Under each circumstance, the cost undertaken by Zoomlion or its authorized institute for liability of the damage of the crane shall not exceed the value of the component itself which causes such liability.
- Within the warranty period, in case of a major accident such as crane collision, tipping over, burning or boom rupture caused by the customer, Zoomlion shall have the right to terminate the warranty of the crane if the customer has the crane repaired at an unauthorized institute trying to recover the crane without consent from Zoomlion;
- Within the warranty period, in case of the customer's violation of the contracted terms (including but not limited to delayed payment and refusal of crane maintenance service, etc.), Zoomlion shall have the right to terminate the quality warranty of the crane and purse legal liability from the customer in accordance with law after approval of a related department of Zoomlion.
- Disputes arising on responsibility and compensation for damage of a malfunction shall be settled according to the terms agreed in the contract.
- ♦ Matters not mentioned herein shall be settled subject to negotiation of the two parties.

## Chapter VI Service Items

#### Maintenance Interval Table of Components of Medium and Small Tonnage Truck Crane

					Replace	ment interval	(whichever o	occurs first)		
No.	Components	Replacement items	First 200 H/ 3 months	500H/ 6 months	750H/ 9 months	1000H/12 months	1250H/ 15 months	1500H/ 18 months	1750H/ 21 months	2000H/ 24 months
		Replace the oil.	√	√	√	√	√	√	√	√
	Engine,	Replace the oil filter element.	√	√	√	√	√	√	√	√
1	small tonnage truck crane	Replace the fuel filter element.	√	√	√	√	<b>√</b>	√	√	√
		Replace the air filter element.		√		√		√		√
		Replace the antifreeze.				√				√
2	Transmission (FAST)	Replace the gear oil of transfer case.	√			√				√
	3 Hydraulic system	Replace the pilot filter element.	√	√		√		√		√
3		Replace the filter element of return oil.	√	√		√		√		√
		Replace the hydraulic oil.						√		
4	Slewing reducer	Replace the gear oil.		√		√		√		√
5	Reducer of main winch	Replace the hydraulic oil.		√		√		√		√
6	Reducer of auxiliary winch	Replace the hydraulic oil.		√		√		√		√
7	Steering system	Replace the steering filter element.	√		√		√		√	
8	Steering system	Replace the steering oil.				√				√
9	Air circuit system	Replace the filter element of dryer.		√		√		√		√
			Replacement interval (whichever occurs first)							
No.	Components	Replacement items	3000 KW 3 months			10000KM / 12 months				20000KM / 24 months
10	Intermediate reducer of drive axle	Replace the gear oil.	√			<b>V</b>				√
11	Hub reducer of drive axle	Replace the gear oil.	√			√				√



#### Maintenance Interval Table of Components of Large Tonnage Truck Crane

No.	Components	Replacement items			Replace	ement interva	(whichever o	occurs first)		
NO.	Components	Replacement lems	First 200 H/ 3 months	500H/ 6 months	750H/ 9 months	1000H/12 months	1250H/ 15 months	1500H/ 18 months	1750H/ 21 months	2000H/ 24 months
	Superstructure/Chassis	Replace the oil.	√	<b>V</b>	<b>√</b>	<b>~</b>	<b>~</b>	<b>√</b>	<b>√</b>	√
	engine (Homemade)	Replace the oil filter element.	√	√	<b>√</b>	√	<b>√</b>	√	<b>V</b>	√
		Replace the fuel filter element.	√	√	<b>√</b>	√	<b>√</b>	√	√	√
1	Superstructure/Chassis	Replace the oil.	√		<b>√</b>		√		√	
·	engine (Imported)	Replace the oil filter element.	√		<b>√</b>		<b>V</b>		√	
		Replace the fuel filter element.	√		<b>√</b>		<b>~</b>		<b>√</b>	
	Superstructure/Chassis	Replace the air filter element.		<b>V</b>		<b>~</b>		<b>√</b>		√
	engine	Replace the antifreeze.				√				√
2	Superstructure/Chassis hydraulic system	Replace the filter element of hydraulic oil.	√	<b>V</b>		<b>V</b>		√		√
_	nydradne system	Replace the hydraulic oil.						√		
3	slewing closed pump	Replace the slewing filter element.	√	√		√		√		√
4	Slewing reducer	Replace the gear oil.		√		√		√		√
5	Reducer of main winch	Replace the hydraulic oil.		√		√		√		√
6	Reducer of auxiliary winch	Replace the hydraulic oil.		√		√		√		√
7	Air circuit system	Replace the filter element of dryer.		√		√		√		√
					Replace	ement interva	(whichever o	occurs first)		
No.	Components	Replacement items	3000 KM/ 3 months			10000KM / 12 months				20000KM / 24 months
8	Transmission (FAST)	Replace the gear oil.	√			√				√
9	Transfer case	Replace the gear oil.	√			√				√
10	Intermediate reducer of drive axle	Replace the gear oil.	√			√				√
11	Hub reducer of drive axle	Replace the gear oil.	√			√				√

Note: As for other brand transmissions and transfer cases (such as ZF or Eton), maintain them according to their maintenance manuals.

Maintenance Interval Table of Components of Rough Terrain Crane

		Maintenance interval rabie					(whichever o	occurs first)		
No.	Components	Replacement items	First 200 H/ 3 months	500H/ 6 months	750H/ 9 months	1000H/12 months	1250H/ 15 months	1500H/ 18 months	1750H/ 21 months	2000H/ 24 months
		Replace the oil.	√	√	√	√	√	√	√	√
		Replace the oil filter element.	√	√	√	√	√	√	√	√
		Replace the fuel coarse filter element.	√	√	√	√	√	√	√	√
1	Engine	Replace the fuel fine filter element.	√	√	√	√	√	√	√	√
		Replace the air filter element.		√		√		√		√
		Replace the filter element of water separator.	√	√	√	√	√	√	√	√
		Replace the antifreeze.				√				√
2	2 Transmission	Replace the filter element of transmission.	√	√	√	√	√	√	√	√
	Hansinission	Replace the filter element of gear oil.		√		√		√		√
	Hydraulic system	Replace the filter element of hydraulic oil.	<b>√</b>	√	√	√	<b>√</b>	√	√	√
3		Replace the filter element of high pressure oil.	<b>√</b>	√	√	√	<b>√</b>	√	√	√
٦		Replace the filter element of return oil.	√	√	√	√	√	√	√	√
		Replace the hydraulic oil.						√		
4	Slewing reducer	Replace the gear oil.		√		√		√		√
5	Reducer of main winch	Replace the gear oil.		√		√		√		√
6	Reducer of auxiliary winch	Replace the gear oil.		√		√		√		√
			Replacement interval (whichever occurs first)							
No.	Components	Replacement items	3000 KM/ 3 months			10000KM / 12 months				20000KM / 24 months
7	axle	Replace the gear oil.	<b>V</b>			√				√
8	Hub reducer of drive axle	Replace the gear oil.	√			√				√



## **Chapter V Detailed List of Warranted Parts**

Within the warranty period, the customer shall use, check and maintain the crane in strict accordance with the Operator's Manual. Except when the crane fails to work normally due to improper use of the customer, Zoomlion shall be at free choice of ways of repairing the crane, i.e. repair or replacement of the faulty component. Refer to the table below for the warranty period of a specific spare part.

No.		Descriptio	n	Malfunction	Warranty	Warranty
		<u> </u>		phenomenon	methods	period
1		Main boom, Y-	shape boom, jib	They crack or deform	Repair	12 months
		,		etc. due to poor quality.		
				The slewing table cracks		
2		Slewing table		or deforms etc. due to	Repair	12 months
				poor quality.		
				The chassis frame		
3		Chassis frame		cracks or deforms etc.	Repair	12 months
				due to poor quality.		
				The counterweight		
4		Counterweight		cracks or ruptures etc.	Repair	12 months
	0, , ,			due to poor quality.		
	Structural member			The outrigger box cracks		
5	member	Outrigger		or deforms etc. due to	Repair	12 months
				poor quality.		
6		Hoist mechanism	Reducers of main and auxiliary winches, winch holder	The crack or deform etc. due to poor quality, excluding the wear of the friction disk	Repair	12 months
7		Slewing gear	Slewing ring, slewing reducer	The crack or deform etc. due to poor quality, excluding the wear of the friction disk	Repair	12 months
8	Power system	Engine	Engine body	The stipulations in the warranty certificate supplied by the manufacturer shall prevail.	Repair / Replace	12 months
9			Cylinder block, flywheel housing, flywheel, oil pan	They crack etc. due to poor quality.	Replace	12 months

10		Crankshaft, rocker arm, connecting rod	They crack or deform etc. due to poor quality.	Repair / Replace	12 months
11		Oil pump, water pump, AdBlue pump	They leak inside due to poor quality.	Repair / Replace	12 months
12		Air compressor, supercharger, oil radiator	They leak the oil, or the inner piston or bearing is damaged due to poor quality.	Repair / Replace	12 months
13		Thermostat, oil transfer pump	They leak the oil or fail due to poor quality.	Repair / Replace	12 months
14		Starter, sensors of generator	They burn out or fail due to poor quality.	Repair / Replace	12 months
15		Fuel spray	The fuel-injection quantity reduces etc. due to poor quality.	Repair / Replace	1 month
16	Clutch	Pressure plate, Release bearing, master cylinder, sub pump	Under normal use, the release bearing burn out, or the pressure plate of clutch cracks, or the master or sub pumps of clutch leak or is seized etc., excluding the wear of the friction disk	Replace	12 months
17	Transmission	Transmission	The transmission cracks or leaks, or the inner gear damages due to poor quality.	Repair / Replace	12 months
18	Transfer case	Transfer case	The transfer case cracks or leaks, or the gear damages due to poor quality.	Repair / Replace	12 months
19	Propeller shaft	Propeller shafts	The propeller shaft cracks or ruptures due to poor quality, excluding the sintering and damaged cross bearing.	Replace	12 months
20	Axle	Axle	The axle leaks, or the half shaft, the inner gear	Repair / Replace	12 months

				andha ha siisis s		
				or the bearing are		
				damaged etc. due to		
				poor quality. (The		
				warranty period of the		
				half shaft is 12 months.)		
			Brake hub, steel			12 months
			ring, steel spring	They deform or are		or 10,000
21			plate, Shock	damaged etc. under	Replace	km,
			absorber, bush	normal use.		whichever
			absorber, busin			is due first
				The tire fractures,		
22		Tire	Tire assy.	stratifies or bulges etc.	Replace	3 months
				under normal use.		
00		Structural fram	ing, door of	They crack or leak etc.	Repair /	40 4
23		operator's cab		due to poor quality.	Replace	12 months
		Mechanical co	ntrol device,			
24		electrical contr	ol box, element of	They crack or fail etc.	Repair /	12 months
		instrument con	sole, seat assy.	due to poor quality.	Replace	
	Driver's	Door locks, air	·			
	cab /		acting the pedal,			
25	Operator's	-	ng door, guide rail	They rupture or fail etc.	Repair /	6 months
	cab	of sliding door,		due to poor quality.	Replace	
		molding, fluid o	_			
			ld, roof windshield,			
			ass, rear window			0 个月
26		_		Quick-wear parts		
			erior decorations,			null
		wiper blade		The oil outlands are star		
				The oil cylinder cracks		
				etc. due to poor quality,	Repair /	
27		Oil cylinder	Oil cylinders	excluding the scuffing	Replace	12 months
				and deformation of		
				cylinder bore		
	Hydraulic			One of the following		
	system			situations occurs due to		
				poor quality:	Repair /	
28		Valves	Main valves	The spool of main valve	Replace	12 months
				ruptures; the valve stem	ποριασσ	
				or the valve body is		
				damaged etc.		

29			Hydraulic valve and valve blocks	One of the following situations occurs due to poor quality: The valve spool ruptures; the valve stem or the valve body is damaged; the coil of solenoid valve is short circuit/open circuit etc.	Repair / Replace	12 months
30		Pump and motor	Main pump and motor	They leak inside or leak the oil etc. due to poor quality.	Repair / Replace	12 months
31			Hose drum	The hose drum cannot return to its initial position due to poor quality, or the hose is damaged etc.	Repair / Replace	12 months
32			Centre revolving joint	The centre revolving joint is blocked or leaks etc. due to poor quality.	Repair / Replace	12 months
34		Other	Accumulator	The accumulator cannot work normally etc. due to poor quality.	Repair / Replace	12 months
35		hydraulic elements	Radiator, oil cooler, hydraulic oil tank/fuel tank	They leak water or oil, or crack due to poor quality instead of external force or improper use.	Repair / Replace	12 months
36			Steering pump/steering cylinder/steering gear	They leak inside or leak the oil etc. due to poor quality.	Repair / Replace	12months or 20,000 km, whichever is due first
37			Fittings of steel pipes, pipeline	The steel pipe leaks the oil or the cutting sleeve cracks etc. due to poor quality.	Repair / Replace	12 months
38	Electrical system	Controller	PLC/closed loop controller etc.	PLC cannot output the signal, or the electrical control steering axle cannot return to its initial position etc. due to poor	Repair / Replace	12 months

			quality.		
39		Mentor/display	The weight displayed is incorrect, or the pressure sensor cannot output the signal due to poor quality, or the load moment limiter cannot display the corresponding information.	Repair / Replace	12 months
40	Load moment limiter	Length/angle sensor	The length and angle are incorrect, or the information of length and angle cannot be displayed due to poor quality.  (The warranty is not applicable here if this situation is caused by the broken cable.)	Repair / Replace	12 months
41		Pressure sensor	The weight signal fails etc. due to poor quality. (The warranty is not applicable here if this situation is caused by the broken cable.)	Repair / Replace	12 months
42	Cable harnesses	Cable harness of engine, cable harness of operator's cab, cable harness of slewing table, cable harness of load moment limiter, cable harness of boom, cable harness of monitoring system	The cable harness has short/open circuit etc. due to poor quality.	Repair / Replace	6 months

43	Sensors	Displacement sensor, tilt angle sensor, wind speed gauge, sensor of odometer, water temperature sensor, water level sensor, fuel sensor, air pressure sensor etc.	Under normal use, the corresponding sensors have no indication, or the indication is not correct after installation.	Repair / Replace	6 months
44	Switches	Hoisting limit switch, lowering limit switch, proximity switch, rocker switch, selective switch, hand throttle switch	The switches cannot return its initial position, or their function is invalid etc. due to poor quality.	Repair / Replace	3 months
45	Other electrical elements	ABS system, remote control device, Central lubricating device, cable drum, conducting ring of centre revolving joint, outrigger control box, wiper motor, reversing monitoring system	Their function is invalid etc. due to poor quality.	Repair / Replace	12 months
46	Battery	7,000	The battery is disconnected inside or cannot store the electric power, or the outer shell of the battery swells due to poor quality.	Repair / Replace	3 months

47	Air line system	Air valves of chassis	They leak or fail etc. due to poor quality.  The hook cannot rotate,	Replace	12 months or 10,000 km, whichever is due first
48	Hook	Main hook/auxiliary hook	or the hook cracks etc. due to poor quality.	Replace	12 months
49	Wire rope	Main hoist rope/auxiliary hoist rope	Under normal use, the number of broke wire rope or strands of wire rope exceed the range stipulated by the nation.	Replace	3 months
50	Pulleys	Pulley of boom, pulley of tip boom, rope support of boom, nylon cushion block, guide pulley, rope holder wheel	Under normal use, they crack or rupture (excluding their normal wear) etc.	Repair / Replace	6 months
51	A/C system and cab heater	A/C motor, compressor, A/C pipeline, expansion valve, fluid reservoir, condenser, cab heater motor, water pipe of cab heater, control box of cab heater, ignition plug	Under normal use, one of these situations occurs: the coolant is insufficient; A/C motor leaks inside or leaks the oil; The compressor of A/C and the electromagnetic clutch cannot work; The expansion valve or the fluid reservoir leak etc.	Repair / Replace	12 months
52		Coolant (Freon)	The part of A/C system leaks the Freon, or the coolant is insufficient etc. due to poor quality of the parts of A/C system.	Repair / Replace	6 months
53	Covers	Cover plates of slewing table, platform, ladder/handrail, engine boarding, closed plate, slewing table hood, protecting cover (closed plate) of traveling motor	They crack or deform etc. due to poor quality.	Repair / Replace	12 months
54	Others	Lifting rope, auxiliary sling	They rupture etc. due to poor quality.	Repair / Replace	3 months



55		Pressure gauge, level gauge	They fail etc. due to poor quality.	Repair / Replace	3 months
		The paint of the crane is subject to			
56	Paint	complete vehicle during delivery. T	Repair	6 months	
		peels off or there are some rust etc	<b>).</b>		

#### Note:

- 1. The frequently-used wearable parts and quick-wear parts are not within the warranty coverage, which include the fuel/engine oil/hydraulic oil filter elements, hydraulic and lubricating oils, brake linings, lamp bulbs, fuses, relays, pull wires and electric wires, bolts, buffer blocks of suspension, adjustment blocks of outriggers, wiper blades and attached tools, etc.
- 2. The warranty period of the unmentioned parts and components of the crane is 12 months or 2000 hours, whichever is due first. Warranty on parts replaced within warranty policyshall refer to the corresponding categories specified in the articles above. In any conditions, the warranty would end with the Machine in which they are installed. Parts ordered from Zoomlion while not covered by warranty would be guaranteed for three (3) months from the date of delivery to end user while not exceeding six (6) months from the ex-factory date, which occurs first.
- 3. The above-mentioned clauses apply to each series of mobile cranes manufactured by Zoomlion. The maintenance/warranty period of their components is subject to the crane configuration during delivery.

The service staff should upload the right part of the cutting line of this page with the service report.

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Product model:	Product model:	Work unit of the customer:
VIN:	VIN:	Work telephone:
Delivery date:	Delivery date:	Work unit contacts:
Superstructure engine model:	Superstructure engine model	Customer name:
Superstructure	Superstructure	Client phone:
engine code:	engine code:	Job location:
Chassis engine model:	Chassis engine model:	Dear Sir/Madam,
Chassis engine code:	Chassis engine	Zoomlion requires the service staff to read and explain this quality warranty manual during crane delivery in order to offer high-quality service to you. If they
Axle model:	Axle model:	read and explain this manual clearly, please confirm that you understand and accept the terms and conditions of the quality warranty manual. Thank you!
Service agency :	Service agency:	Best wishes.  Customer (signature):
Contact number:	Contact number:	Date:
		Legal entity (seal, authorized signature)  Date: