Mobile Crane Branch Company of Zoomlion Heavy

Industry Science & Technology Co., Ltd.

Crawler Crane Quality Warranty Manual

(2020 Overseas version)

©Zoomlion Heavy Industry Science and Technology Co., Ltd

All information contained in this manual and all software installed in Zoomlion vehicle systems are protected by Zoomlion Heavy Industry Science and Technology Co., Ltd's intellectual property rights and other ones authorized by Zoomlion's licensors.

Under the copyright laws, this manual may not be copied, photocopied, reproduced, translated, or reduced in whole or part, without the prior written consent of Zoomlion Heavy Industry Science and Technology Co., Ltd.

Listed below are Zoomlion's trademarks or registered trademarks in People's Republic of China and other countries







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 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 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. You can also contact us by an email to <u>crane-service@zoomlion.com</u>, 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 1st, 2020. The after-sales service terms of crawler 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.

Contents

Chapter I Service Concept	04
Chapter II Contents of After-sale Services	04
Chapter III Quality Warranty Policies	04
Chapter IV Service Items	06
Chapter V Detailed List of Warranted Parts	70

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: crane-service@zoomlion.com
- 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

- 1. Crane delivery: when the crane is delivered to the customer, a full-scale check and adjustment will be conducted on the crane;
- First training: During or after the crane delivery, a training on crane operation, maintenance and common troubleshooting of the crane will be carried out;
- 3. 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.
- 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 **12 months 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 or send an email to <u>crane-service@zoomlion.com</u>. 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

- 6 -

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.

		Maintenance Interva	I Table of C	Compone	ents of Cr	awler Cra	ne			
			Replacement interval (whichever 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.	\checkmark	√	√	\checkmark	√	\checkmark	√	\checkmark
		Replace the oil filter element.	√	√	√	√	√	√	√	V
		Replace the diesel oil coarse filter element.	√	√	√	√	√	\checkmark	√	V
1	Engine	Replace the diesel oil fine filter element.	√	√	√	√	√	√	√	\checkmark
		Replace the air filter element.		√		√		√		V
		Replace the filter element of water separator.		√		√		√		V
		Replace the antifreeze.				√				\checkmark
2	Transfer case	Replace the gear oil.	√			√				√
		Replace the pilot filter element.	√	√		√		√		√
3	Hydraulic system	Replace the filter element of return oil.	√	√		√		√		\checkmark
3	Hyuraulic system	Replace the air filter element.	√	√		√		√		\checkmark
		Replace the hydraulic oil.						\checkmark		
4	Slewing reducer	Replace the gear oil.				√				\checkmark
5	Reducer of main winch	Replace the hydraulic oil.				~				\checkmark
6	Reducer of auxiliary winch	Replace the hydraulic oil.				V				\checkmark
7	Reducer of derricking winch	Replace the hydraulic oil.				V				\checkmark
8	Travelling reducer	Replace the hydraulic oil.	√			√				V

Chapter VI Service Items

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.		Descript	ion	Fault	Guarantee time
		Main boom (the h	neavy duty boom and the	They crack and deform	0.1
1		light duty boom, i	ncluding the boom head)	etc. due to poor quality.	24 months
		Fixed jib, tunnel b	ooring boom, wind plant	They crack and deform	0.4 m on the
2		jib, tip boom		etc. due to poor quality.	24 months
				The jib cracks and	
3		Luffing jib		deforms etc. due to poor	24 months
				quality.	
				The derrick boom cracks	
4	Boom and	Derrick boom		and deforms etc. due to	12 months
	anchoring			poor quality.	
	rod	Tilting-back mech	nanism of boom		
5	iou	(tilting-back mech	nanism of main boom,	They crack and deform	12 months
5		fixed jib, luffing jit	o, stay etc., excluding the	etc. due to poor quality.	
		oil cylinder)			
				The anchoring rod crack	
6		Anchoring rod		and deform etc. due to	12 months
				poor quality.	
				The pin spindle scuffs and	
7		Pin spindles of ar	nchoring rod	deforms etc. due to poor	12 months
				quality.	
				The crawler carrier cracks	
8		Crawler carrier (to	ension beam)	and deforms etc. due to	24 months
				poor quality.	
				The additional support	
9		Additional suppor	rt, support plate	cracks and deforms etc.	24 months
	Structural			due to poor quality.	
	members			The undercarriage central	
10		Undercarriage ce	ntral section	section cracks and	24 months
		endered nage ee		deforms etc. due to poor	
			[quality.	
			Counterweight,	The counterweight and the	
11		Counterweight	counterweight base	central counterweight	24 months
			plate, central	crack and deform etc. due	

zo	OMLIC	N		Quality Warranty N	lanual
			counterweight, central counterweight support	to poor quality.	
12			Fixing chain of the counterweight, fixing bolts of the counterweight	They crack and deform etc. due to poor quality.	24 months
13		Slewing mechanism	Slewing ring, slewing reducer assy.	The slewing mechanism cracks and deforms etc. due to poor quality.	12 months
14			Winch bracket	The winch bracket cracks and deforms etc. due to poor quality.	12 months
15		Hoisting winch	Reducer assemblies of hoisting winch 1, hoisting winch 2 derricking winch, superlift derricking winch, luffing jib derricking winch, hoisting winch 3	The inner gear of the reducer is seized etc. due to poor quality.	12 months
16			Reducer of reeving winch	The inner gear of the reducer is seized etc. due to poor quality.	12 months
17			Sealing elements of reducer	The reducer leaks the oil etc. due to poor quality.	12 months
18			Friction lining of reducer	The quick-wear parts crack.	3 months
19		Slewing table		The slewing table cracks and deforms etc. due to poor quality.	12 months
20		Main mast		The main mast cracks and deforms etc. due to poor quality.	12 months
21		Pin spindle		The pin spindle ruptures, scuffs, deforms etc. due to poor quality.	12 months
22	Track roller, drive sprocket,	Track roller, drive sprocket, track c	e sprocket, driven arrier roller	They crack, rupture, leak etc. due to poor quality, but the normal wear of them is not within the	12 months

	driven sprocket,			warranty coverage.	
23	track carrier roller and track pad	Track pad		The track pad cracks, ruptures etc. due to poor quality, but the normal wear of them is not within the warranty coverage.	12 months
24		Pin spindles of tra	ack pad	The pin spindles of track pad ruptures and deforms etc. due to poor quality.	12 months
25	Power system	Engine (The stipulations in the warranty certificate supplied by the manufacturer shall prevail.)	Air cylinder body, connecting rod, flywheel housing, crankshaft, camshaft, cylinder cover, crankcase, timing gear chamber, cover of valve chamber, flywheel, piston pin, air inlet pipe, exhaust pipe, discharging tube, rocker-arm support, rocker-arm support, rocker-arm, oil pan, valve lifter, valve tappet, gears, covers of gear chamber, valve spring, flange of oil pump, fan bracket, shock absorber, original body of air filter, original body of fuel filter, seat of oil filter, belt pulley, engine bracket	The following situations occur due to poor quality. The blowhole occurs. They crack and deform. They are damaged etc.	12 months

26		Bearing, oil stick, cylinder gasket, connecting rod bolt, gear ring, rear oil seal of crankshaft, piston, oil pump, metal oil pipes, piston ring, thrust plate, water pump, silencer, oil radiator, metal pipe fitting, bearing shell of connecting rod with, air compressor, jump ring of piston pin, main bearing shell, electromagnetic fan, oil gas separator, bearing shell of camshaft, flange, ECU, cylinder liner, WEVB system, common rail pipe, air valve, high pressure oil pump, high pressure oil pipe, valve spring, main body of fuel injector, suction filter, valve spring seat, multifunctional fuel filter ekcluding the filter element, elements of dipstick tube, air valve port, limiting valve, cooling jet, valve guide,	The following situations occur due to poor quality. They crack and deform. They are damaged etc.	12 months
		common rail line, Gasket of air inlet		
27		(exhaust) pipe, gasket of valve cover, seal rings, front oil seal of crankshaft, rubber hoses, gasket of oil pan, oil seals, fuel	The following situations occur due to poor quality. They crack and deform. They are damaged etc.	6 months

zo	OMLIC	N		Quality Warranty N	lanual
			injector of oil return pipe, idle lifting device, gasket of supercharger, oil delivery pump, bowl plug, thermostat, fuel injector, bush, steering pump, bolts, screws, tension roller, supercharger		
28			Starter, sensors, start preheater, generator, electron pedal, compressor of A/C, instruments, cable harness of engine, econ-switch, monitor controller assy., solenoid valve	The following situations occur due to poor quality. They cannot work normally. Poor contact occurs. They are damaged etc.	6 months
29			Belt, other type shims, plunger and barrel assembly of high pressure oil pump, shroud, clamp, hoses, oil nozzle assembly, other nonmetal pipelines	The following situations occur due to poor quality. They crack and deform. They are damaged etc.	1 month
30		Accessories of	Radiator, fuel tank, water tank, intercooler, silencer	The following situations occur due to poor quality. They leak the water and the oil. They crack etc.	12 months
31		engine	Exhaust pipe, cooling pipe, fuel pipe, shock pad etc.	They crack, deform, leak etc. due to poor quality.	3 months
32		Tra	ansfer case	The following situations occur due to poor quality. The transfer case leaks the oil. The case body cracks and the gear is damaged etc.	12 months
33	Operator's	Structural framing	g, door of operator's cab	They crack and leak the	12 months

	cab			water etc. due to poor quality.	
34		control box, suba console, seat ass		They crack and cannot work normally etc. due to poor quality.	12 months
35		of sliding door, gu	oring of pedal, guide roller uide rail of sliding door, ng, fluid containers	They rupture and are invalid etc. due to poor quality.	6 months
36			roof windshield, side ar window glass, floor, ns, wiper blade	Quick-wear parts	null
37		Oil cylinders	A-frame erection cylinder, rear counterweight lifting cylinder, suspended ballast lifting cylinder, main boom tilting-back support cylinder, derrick boom tilting-back support cylinder, luffing jib tilting-back support cylinder	Excluding the scuffing and deformation of cylinder bore, the oil cylinder leaks and cracks etc. due to poor quality.	12 months
38	Hydraulic system		Vertical cylinder, bolting cylinder, cylinder for retracting the pin, other oil cylinders	Excluding the scuffing and deformation of cylinder bore, the oil cylinder leaks and cracks etc. due to poor quality.	12 months
39			Main valve, undercarriage control valve	The valve spools rupture due to poor quality. The valve leaks and fails due to the damaged valve stem and valve body.	12 months
40		Valves	Balance valve, directional control valve, slewing cushion valve, shutoff gate valve of oil tank, other control valves, auxiliary valve blocks, control valve blocks	The valve spools rupture due to poor quality. The valve leaks and fails due to the damaged valve stem and valve body.	12 months

41		Oil pumps and	Main oil pump, slewing pump	They leak the oil and cannot work normally due to poor quality.	12 months
42		motors	Gear pump, hydraulic motor, auxiliary pump, oil supplementary pump	They leak the oil and cannot work normally due to poor quality.	12 months
43			Hydraulic oil tank, hydraulic joystick	They leak the oil and cannot work normally due to poor quality.	12 months
44		Hydraulic elements	Oil cooler, centre revolving joint, accumulator, quick-release coupling, small pump station	The following situations occur due to poor quality. They are seized. They leak the oil and cannot work normally.	12 months
45			Fitting of steel pipes (or pipelines), hydraulic hoses	They cannot work normally etc. due to poor quality.	6 months
46		Controller	PLC controller, onboard computer	The controllers have no output and cannot work normally etc. due to poor quality.	12 months
47		Load moment	Mentor, display	The mentor and the display cannot perform its function normally etc. due to poor quality.	12 months
48	Electrical	limiter	Angle sensor, pressure sensor, pulling force sensor	The sensor cannot output the signal and work normally due to poor quality.	12 months
49	system	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 is short circuit and broken circuit etc. due to poor quality.	6 months
50		Sensors	Fuel level sensor, pressure sensor, wind	In normal condition, the corresponding sensors	6 months

zo	OMLIC	N		Quality Warranty M	1anual
			speed gauge, tilt angle sensor	have no indication and the indication is not correct due to poor quality. Also, they fail etc.	
51		Switches	Hoisting limit switch, lowering limit switch, proximity switch, rocker switch, selective switch, hand throttle switch	The switches cannot return its initial position and their function is invalid etc. due to poor quality.	3 months
52			Control lever, electron pedal, remote controller, cable drum, winch coder, slewing coder, travelling foot pedal	The following situations occur due to poor quality. No corresponding information can be displayed and be outputted. The functions of them are invalid etc.	12 months
53		Electrical elements	Guide ring of centre revolving joint, central lubricating system, safety monitoring system, auxiliary control box, wiper motor	The electric motor cannot work normally and its function is invalid etc. due to poor quality.	6 months
54			Solenoid valve, lamps, horn, instruments, buzzer, radio, electric fan etc.	Their function is invalid etc. due to poor quality.	3 months
55		Battery		The battery is disconnected inside and cannot store the electric power due to poor quality. Also, the outer shell of the battery swells.	3 months
56	Hook	Main hook/auxilia	iry hook	The hook cannot rotate and the hook cracks etc. due to poor quality.	12 months
57	Wire rope	rope of derricking hoisting winch 3,	auxiliary hoist rope, wire g winch, wire rope of wire rope of luffing jib wire rope of superlift	In normal condition, the number of broke wire rope and the number of broken strands of wire rope exceed the range	3 months

			stipulated by the nation.	
58		Wire rope of reeving winch, wire rope for installing the luffing jib strut, Intermediate tensioner, wind rope	In normal condition, the number of broke wire rope and the number of broken strands of wire rope exceed the range stipulated by the nation.	3 months
59		Pulley of boom, pulley of tip boom, pulley of head section etc.	In normal condition, they crack and rupture (excluding the normal wear of them) etc.	6 months
60	Pulleys	Rope support of boom, nylon cushion block, guide pulley, rope holder	In normal condition, they crack and rupture (excluding the normal wear of them) etc.	6 months
61	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 and deform etc. due to poor quality.	12 months
62	A/C system	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	In normal condition, these situations occur. The coolant is insufficient. A/C motor leaks inside and leaks the oil. The compressor of A/C and the electromagnetic clutch cannot work. The expansion valve and the fluid reservoir leak etc.	12 months
63		Coolant (Freon)	The part of A/C system leaks the Freon and the coolant is insufficient etc. due to poor quality of the parts of A/C system.	6 months
64		Lifting rope, auxiliary sling	They rupture etc. due to poor quality.	3 months
65	Others	Level gauge	There is no bubble and the level gauge fails due to poor quality.	3 months

Quality Warranty Manual

66 A	Appearance of complete vehicle and the paint	The paint of the product is subject to the appearance of complete vehicle during delivery. The paint of large area peels off and there are some rust etc.	6 months
------	--	--	----------

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 6 months or 1000 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.

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