Hako GmbH Manual Hako Service Bad Oldesloe



Hako system maintenance:
Hako-Citymaster 1650 (1491.15)
Die Ordnungsgemäße Ausführung der Hako- System- Wartung stellt die Verfügbarkeit der Maschine für den Kunden sicher und dient dernachhaltigen Werterhaltung des Hako- Produktes. Der Nachweis der ordnungsgemäßen Durchführung ist die Vorraussetzung für den Erhalt der Gewährleistungs- und Garantieansprüche gegenüber dem Hersteller.
Proper execution of Hako system maintenance ensures machine availability for the customer and serves to maintain the retention value of the Hako product. Proof that the maintenance has been properly carried out is a prerequisite for the receipt of warranty and guarantee claims made against the manufacturer.
La maintenace correcte de Hako system maintenance garantit la disposition de machine pour l'acheteur et sert une valorisation de longue durée de produit Hako. La preuve de la maintenance correcte est la condition pour les pretentions de garantie et des droit à garantie envers le vendeur.
Version: January 2024

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Це	aka ayatam maintana	nos A4 Inonaction ofter 50 energting hours (ange)
па Quantity		nce A1 – Inspection after 50 operating hours (once) Designation
Quaritity	SP NO.	Designation
1	01500200	Engine oil filter
1	01500310	Fuel filter (until WHW14911531403500)
1	01509030	Fuel filter (from WHW14911531403500)
1	01493180	Hydraulic oil filter
1	01501190	Oil drain screw
1	01501200	Seal of oil drain screw
Litres	Operating media	ocal of oil drain sciew
approx.	Engine oil	Fuchs Titan CARGO 5W-40, specification ACEA E9,
7.2	Lingine on	API CK-4, or similar.
1.2		AFT CN-4, OF SITTILIZE.
	Hako system mainte	enance I – every 500 operating hours or annually
Quantity	SP No.	Designation
guaritity	01 110.	Designation
1	01500200	Engine oil filter
1	01501190	Oil drain screw
1	01501200	Seal of oil drain screw
1	01500530	Oil separator crankcase venting
1	01500420	Fuel pre-filter (until WHW14911531403500)
1	01500310	Fuel filter (until WHW14911531403500)
1	01508990	Fuel pre-filter (from WHW14911531403500)
1	01509030	Fuel filter (from WHW14911531403500)
1	01500640	Air filter insert
2	01472250	Roller (Suction Unit). If required!
1	01470830	Rubber apron (Suction Unit). If required!
1	01470860	Rubber apron (Suction Unit). If required!
1	01470890	Circulation water serrated (Suction Unit). If required!
1	01231950	Hose, cpl. (Circulating water system) If required!
Litres	Operating media	
approx.	Engine oil	Fuchs Titan CARGO 5W-40, specification ACEA E9,
7.2		API CK-4, or similar.
	Helse evetem m	saintananaa II. ayam 4000 anayatina hayna
Doggo n		naintenance II – every 1000 operating hours ing hours, also carry out system maintenance I extend
icase in	ote: arter 5000 operar	ing nours, also carry out system maintenance rextend
Quantity		
	LSP No	11)esignation
zuurnity	SP No.	Designation
1		
	SP No. 01500200 01501190	Engine oil filter
1	01500200	
1 1	01500200 01501190	Engine oil filter Oil drain screw
1 1 1	01500200 01501190 01501200	Engine oil filter Oil drain screw Seal of oil drain screw
1 1 1 1	01500200 01501190 01501200 01500530	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500)
1 1 1 1	01500200 01501190 01501200 01500530 01500420	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500)
1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500)
1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500)
1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500)
1 1 1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030 01500640	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500) Air filter insert
1 1 1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030 01500640 01500750	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500) Air filter insert Safety cartridge Hydraulic oil filter Hydraulic oil tank venting filter
1 1 1 1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030 01500640 01500750 01493180	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500) Air filter insert Safety cartridge Hydraulic oil filter
1 1 1 1 1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030 01500640 01500750 01493180 01497120	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500) Air filter insert Safety cartridge Hydraulic oil filter Hydraulic oil tank venting filter Oil check kit (sample bottle for sending in for oil check)
1 1 1 1 1 1 1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030 01500640 01500750 01493180 01497120 00009720	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500) Air filter insert Safety cartridge Hydraulic oil filter Hydraulic oil tank venting filter Oil check kit (sample bottle for sending in for oil check) Cab air filter for CM 1650
1 1 1 1 1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030 01500640 01500750 01493180 01497120 00009720 01065540	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500) Air filter insert Safety cartridge Hydraulic oil filter Hydraulic oil tank venting filter Oil check kit (sample bottle for sending in for oil check) Cab air filter for CM 1650 Roller (Suction Unit). If required!
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030 01500640 01500750 01493180 01497120 00009720 01065540 01472250	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500) Air filter insert Safety cartridge Hydraulic oil filter Hydraulic oil tank venting filter Oil check kit (sample bottle for sending in for oil check) Cab air filter for CM 1650 Roller (Suction Unit). If required! Rubber apron (Suction Unit). If required!
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	01500200 01501190 01501200 01500530 01500420 01500310 01508990 01509030 01500640 01500750 01493180 01497120 00009720 01065540 01470830	Engine oil filter Oil drain screw Seal of oil drain screw Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) Fuel filter (until WHW14911531403500) Fuel pre-filter (from WHW14911531403500) Fuel filter (from WHW14911531403500) Air filter insert Safety cartridge Hydraulic oil filter Hydraulic oil tank venting filter Oil check kit (sample bottle for sending in for oil check) Cab air filter for CM 1650 Roller (Suction Unit). If required!

Hako system maintenance II - every 1000 operating hours Please note: after 5000 operating hours, also carry out system maintenance I extended Litres Operating media Fuchs Titan CARGO 5W-40, specification ACEA E9, approx. Engine oil 7.2 API CK-4, or similar. 0.5 Brake fluid DOT 4, e.g. FTE Type 9368 Check proportion of water in the brake fluid. If the proportion of water is greater than 3 % the brake fluid must be replaced. Check brake fluid oil level and top up if necessary. Or replace brake fluid every 2 years! Hako system maintenance I - after 1500 operating hours Quantity SP No. Designation 01500200 1 Engine oil filter 01501190 1 Oil drain screw Seal of oil drain screw 1 01501200 1 01500530 Oil separator crankcase venting Fuel pre-filter (until WHW14911531403500) 1 01500420 (until WHW14911531403500) 1 01500310 Fuel filter 01508990 Fuel pre-filter (from WHW14911531403500) 1 1 01509030 Fuel filter (from WHW14911531403500) 1 01500640 Air filter insert 2 Bearing block (2-broom- system) 01493820 4 01060940 Bushing (2-broom- system) 4 01060950 Bushing (2-broom- system) 2 01493640 Comb (2-broom- system) 2 01472250 Roller (Suction Unit). If required! 01470830 Rubber apron (Suction Unit). If required! 1 1 01470860 Rubber apron (Suction Unit). If required! 1 01470890 Circulation water serrated (Suction Unit). If required! Hose, cpl. (Circulating water system) If required! 01231950 Litres Operating media Fuchs Titan CARGO 5W-40, specification ACEA E9, approx. Engine oil API CK-4, or similar. 7.2

	Hako system mainte	nance II extended – after 2000 operating hours
Quantity	SP No.	Designation
1	01500200	Engine oil filter
1	01501190	Oil drain screw
1	01501200	Seal of oil drain screw
1	01500530	Oil separator crankcase venting
1	01500420	Fuel pre-filter (until WHW14911531403500)
1	01500310	Fuel filter (until WHW14911531403500)
1	01508990	Fuel pre-filter (from WHW14911531403500)
1	01509030	Fuel filter (from WHW14911531403500)
1	01500640	Air filter insert
1	01500750	Safety cartridge
1	01493180	Hydraulic oil filter
1	01497120	Hydraulic oil tank venting filter
1	00009720	Oil check kit (sample bottle for sending in for oil check)
1	01065540	Cab air filter for CM 1600
1	01167520	Bowden cable coarse material flap at the suction mouth
1	01220790	V-belt suction fan (CASAPPA Hydraulic-motor)
1	48601960001	V-belt suction fan (DANA Hydraulic-motor)
1	01493620	Hydraulic hose suction fan
1	01493670	Hydraulic hose suction fan
2	01490530	Rubber- Metal- Buffer front axle
2	01472250	Roller (Suction Unit). If required!
1	01470830	Rubber apron (Suction Unit). If required!
1	01470860	Rubber apron (Suction Unit). If required!
1	01470890	Circulation water serrated (Suction Unit). If required!
1	01231950	Hose, cpl. (Circulating water system) If required!
Litres	Operating media	
approx.	Engine oil	Fuchs Titan CARGO 5W-40, specification ACEA E9,
7.2		API CK-4, or similar.
0.5	Brake fluid	DOT 4, e.g. FTE Type 9368
		Check proportion of water in the brake fluid. If the
		proportion of water is greater than 3 % the brake fluid
		must be replaced. Check brake fluid oil level and top up if
		necessary. Or replace brake fluid every
		2 years!
	L	1 2

Hako system maintenance I extended – after 2500 operating hours Please note: after 5000 operating hours carry out additional				
		system maintenance II		
Quantity	SP No.	Designation		
1	01500200	Engine oil filter		
1	01501190	Oil drain screw		
1	01501200	Seal of oil drain screw		
1	01501230	Poly V-belt		
1	01501210	Tensioning element		
1	01503800	Idler pulley		
1	01500530	Oil separator crankcase venting		
1	01500420	Fuel pre-filter (until WHW14911531403500)		
1	01500310	Fuel filter (until WHW14911531403500)		
1	01508990	Fuel pre-filter (from WHW14911531403500)		
1	01509030	Fuel filter (from WHW14911531403500)		
1	01500640	Air filter insert		
2	01472250	Roller (Suction Unit). If required!		
1	01470830	Rubber apron (Suction Unit). If required!		
1	01470860	Rubber apron (Suction Unit). If required!		
1	01470890	Circulation water serrated (Suction Unit). If required!		
1	01231950	Hose, cpl. (Circulating water system) If required!		
Litres	Operating media			
approx.	Engine oil	Fuchs Titan CARGO 5W-40, specification ACEA E9,		
7.2		API CK-4, or similar.		
	Hako system maint	enance II extended – after 3000 operating hours		
Quantity	SP No.	Designation Designation		
1	01500200	Engine oil filter		
1	01501190	Oil drain screw		
1	01501200	Seal of oil drain screw		
1	01500530	Oil separator crankcase venting		
1	01500330	Fuel pre-filter (until WHW14911531403500)		
1	01500420	Fuel filter (until WHW14911531403500)		
1	01508990	Fuel pre-filter (from WHW14911531403500)		
1	01509990	Fuel filter (from WHW14911531403500)		
1	01509630	Air filter insert		
1	01500750	Safety cartridge		
1	01493180	Hydraulic oil filter		
1	01497120	Hydraulic oil tank venting filter		
1	01065540	Cab air filter for CM 1650		
2	01472330	Rear bolt of front lift		
2	01493820	Bearing block (2-broom- system)		
4	01060940	Bushing (2-broom- system)		
4	01060940	Bushing (2-broom- system)		
2	01493640	Comb (2-broom- system)		
		, ,		
2	01472250	Roller (Suction Unit). If required!		
1	01470830	Rubber apron (Suction Unit). If required!		
1	01470860	Rubber apron (Suction Unit). If required!		
1	01470890	Circulation water serrated (Suction Unit). If required!		
1	01231950	Hose, cpl. (Circulating water system) If required!		

	Hako system mainten	ance II extended – after 3000 operating hours
Litres	Operating media	
approx.	Engine oil	Fuchs Titan CARGO 5W-40, specification ACEA E9,
7.2	Ŭ.	API CK-4, or similar.
0.5	Brake fluid	DOT 4, e.g. FTE Type 9368
		Check proportion of water in the brake fluid. If the
		proportion of water is greater than 3 % the brake fluid
		must be replaced. Check brake fluid oil level and top up if
		necessary. Or replace brake fluid every
		2 years!
58	Hydraulic oil	HVLP 46, e.g. Mobiloil DTE 10 Excel
	, i	(DIN 51524 Part 3)
approx.	Refrigerant air	R134a
1000 g	conditioning system	
	Hako system ma	intenance I – after 3500 operating hours
Quantity	SP No.	Designation
1	01500200	Engine oil filter
1	01501190	Oil drain screw
1	01501200	Seal of oil drain screw
1	01500530	Oil separator crankcase venting
1	01500420	Fuel pre-filter (until WHW14911531403500)
1	01500310	Fuel filter (until WHW14911531403500)
1	01508990	Fuel pre-filter (from WHW14911531403500)
1	01509030	Fuel filter (from WHW14911531403500)
1	01500640	Air filter insert
2	01472250	Roller (Suction Unit). If required!
1	01470830	Rubber apron (Suction Unit). If required!
1	01470860	Rubber apron (Suction Unit). If required!
1	01470890	Circulation water serrated (Suction Unit). If required!
1	01231950	Hose, cpl. (Circulating water system) If required!
Litres	Operating media	
approx.	Engine oil	Fuchs Titan CARGO 5W-40, specification ACEA E9,
7.2		API CK-4, or similar.

Hako system maintenance II extended – after 4000 operating hours					
Quantity	SP No.	Designation			
1	01500200	Engine oil filter			
1	01501190	Oil drain screw			
1	01501200	Seal of oil drain screw			
1	01500530	Oil separator crankcase venting			
1	01500420	Fuel pre-filter (until WHW14911531403500)			
1	01500310	Fuel filter (until WHW14911531403500)			
1	01508990	Fuel pre-filter (from WHW14911531403500)			
1	01509030	Fuel filter (from WHW14911531403500)			
1	01500640	Air filter insert			
1	01500750	Safety cartridge			
1	01493180	Hydraulic oil filter			
1	01497120	Hydraulic oil tank venting filter			
1	01065540	Cab air filter for CM 1650			
1	01167520	Bowden cable coarse material flap at the suction mouth			
1	01220790	V-belt suction fan (CASAPPA Hydraulic-motor)			
1	48601960001	V-belt suction fan (DANA Hydraulic-motor)			
1	01493620	Hydraulic hose suction fan			
1	01493670	Hydraulic hose suction fan			
1	01501600	Hydraulic hose to bypass valve			
1	01501740	Hydraulic hose to bypass valve			
2	01490530	Rubber- Metal- Buffer front axle			
2	01472250	Roller (Suction Unit). If required!			
1	01470830	Rubber apron (Suction Unit). If required!			
1	01470860	Rubber apron (Suction Unit). If required!			
1	01470890	Circulation water serrated (Suction Unit). If required!			
1	01231950	Hose, cpl. (Circulating water system) If required!			
Litres	Operating media				
approx.	Engine oil	Fuchs Titan CARGO 5W-40, specification ACEA E9,			
7.2		API CK-4, or similar.			
0.5	Brake fluid	DOT 4, e.g. FTE Type 9368			
		Check proportion of water in the brake fluid. If the			
		proportion of water is greater than 3 % the brake fluid			
		must be replaced. Check brake fluid oil level and top up if			
		necessary. Or replace brake fluid every			
		2 years!			
12	VW- G13 or similar,	Ensure the mixing ratio is at least 40 % coolant additive			
	e.g. Total Glaself Auto	to 60 % water (distilled water).			
	Supra.	Never exceed the mixing ratio 60 % coolant additive to			
		40 % water (distilled water).			
		Never drive without coolant additive, even in warmer			
		climates, as the coolant additive increases the boiling			
		point, prevents corrosion in the engine and lubricates the			
		water pump and thermostat. The coolant also prevents			
		the build-up of limescale and air inclusions in the engine.			
	1				

er to the maintenance and checking work.
er to maintenance tasks carried out in a customer's premises without a workshop,
Hako system maintenance I after 500 operating hours or annually 3.50 hours
Hako system maintenance I after 1500 operating hours 4.75 hours
Hako system maintenance I ext. after 2500 operating hours 4.50 hours
Hako system maintenance I after 3500 operating hours 3.50 hours
Hako system maintenance I after 4500 operating hours 3.50 hours
Hako system maintenance I after 5500 operating hours 3.50 hours

Hako system maintenance II after	Hako system maintenance I after				
6000 operating hours with hydraulic oil	6500 operating hours				
change	3.50 hours				
7.00 hours					
Hako system maintenance II after	Hako system maintenance I ext. after				
7000 operating hours	7500 operating hours				
4.25 hours	4.50 hours				
Hako system maintenance II after	Hako system maintenance I after				
8000 operating hours with engine coolant	8500 operating hours				
change	3.50 hours				
6.50 hours					

Hako-Citymaster 1650 - Hako system maintenance Hako system maintenance before delivery **A** (factory specification). To be carried out by an authorised Hako service centre. Mach. No.: Operating hrs.: Customer: Work to be carried out: **Specifications:** Component: Check engine oil level and top up if Fuchs Titan CARGO, **Engine** necessary. 5W-40 Check coolant level in expansion tank and VW- G13 40 - 60 % coolant top up if necessary. additive (antifreeze) Check service and parking brakes for Brake proper functioning. Check lighting work functions, horn, etc. Electrical system for proper functioning. Fully charge the battery before delivery! С Check the software status of the working Check software status hydraulics, display, engine and drive of control units A01, control unit (hydrostat) and carry out A03, A04 and P01. software updates if necessary! С Re-tighten wheel nuts. 180 Nm Wheels С Check tyre air pressure. Tyres С 215/70 R15 6.0 bar С 225/ 70 R15 C (standard tyres) 5.0 bar 255/ 65 R16 (all-purpose tyres) 3.0 bar С 285/65 R16 C 3.2 bar 320/ 55-15 T559 (lawn surface tyres) С 2.8 bar 325/60 R15 2.5 bar С С Check for transport damage. Vehicle С Equip and refuel. Check scope of delivery, including all attachments. С Operating manual - basic machine С Operating manuals - attachments Functional check for all attachments to be Test drive - functional delivered according to the order, check check completeness of the coding plugs for attachments purchased from other manufacturers.

Work to be carried ou	t:		✓	Specifications:
Hydraulics	С	Visual inspection of the hydraulic system at the hydraulic cylinders, screw connections and hydraulic pipes for leaks and function test. The visual inspection must be carried out after the test drive.		
Hydraulics	С	Check hydraulic oil level after attaching the work equipment and the function test.		HVLP 46
Component:				
Driver briefing		incl. safety instructions and function of the coding plugs.		
Driver training ** at extra charge		Substitute driver, holiday representation, shift work		

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Servicing and maint	tenan	ce work to be carried out by the operat	or	
Servicing and maintenance work to be carried out daily				Specifications:
Component:				
Engine	С	Check engine oil level, top up engine oil if necessary.		Fuchs Titan CARGO, 5W-40
Radiator	С	Check coolant level in expansion tank and radiator antifreeze, top up if necessary. Observe antifreeze for winter operation!		VW- G13 40 - 60 % coolant additive (antifreeze)
Radiator	С	Check combination radiator and radiator grille for contamination, clean with compressed air if necessary.		
Steering	С	Check emergency steering function.		
Brake	С	Check service and parking brakes for proper functioning.		
Electrical system	С	Check lighting work functions, horn, etc. for proper functioning.		
		Vehicle, dirt hopper, circulating water		
Machine cleaning		system, suction mouth, suction tube, suction fan		
	ntena	system, suction mouth, suction tube,	✓	Specifications:
Servicing and mai		system, suction mouth, suction tube, suction fan	✓	Specifications:
Servicing and main Component: Engine	С	system, suction mouth, suction tube, suction fan nce work to be carried out weekly Check engine oil level, top up engine oil if necessary.	✓	7.2 litres. Fuchs Titan CARGO, 5W-40
Servicing and main		system, suction mouth, suction tube, suction fan nce work to be carried out weekly Check engine oil level, top up engine oil if	✓	7.2 litres. Fuchs Titan
Servicing and main Component: Engine Radiator	С	system, suction mouth, suction tube, suction fan nce work to be carried out weekly Check engine oil level, top up engine oil if necessary. Check coolant level in expansion tank and radiator antifreeze, top up if necessary. Observe antifreeze for winter operation! Check combination radiator and radiator grille for contamination, clean with	✓	7.2 litres. Fuchs Titan CARGO, 5W-40 VW- G13 40 - 60 % coolant
Servicing and main Component: Engine Radiator	C	system, suction mouth, suction tube, suction fan nce work to be carried out weekly Check engine oil level, top up engine oil if necessary. Check coolant level in expansion tank and radiator antifreeze, top up if necessary. Observe antifreeze for winter operation! Check combination radiator and radiator	✓	7.2 litres. Fuchs Titan CARGO, 5W-40 VW- G13 40 - 60 % coolant
Servicing and main Component: Engine Radiator Radiator Fuel line	C C	system, suction mouth, suction tube, suction fan nce work to be carried out weekly Check engine oil level, top up engine oil if necessary. Check coolant level in expansion tank and radiator antifreeze, top up if necessary. Observe antifreeze for winter operation! Check combination radiator and radiator grille for contamination, clean with compressed air if necessary.	✓	7.2 litres. Fuchs Titan CARGO, 5W-40 VW- G13 40 - 60 % coolant
Servicing and main Component: Engine Radiator Radiator Fuel line Steering	C C C C	system, suction mouth, suction tube, suction fan nce work to be carried out weekly Check engine oil level, top up engine oil if necessary. Check coolant level in expansion tank and radiator antifreeze, top up if necessary. Observe antifreeze for winter operation! Check combination radiator and radiator grille for contamination, clean with compressed air if necessary. Empty water trap of fuel system. Check emergency steering function. Check service and parking brakes for proper functioning.	✓	7.2 litres. Fuchs Titan CARGO, 5W-40 VW- G13 40 - 60 % coolant
Servicing and main Component: Engine Radiator Radiator Fuel line Steering Brake Electrical system	C C C C	system, suction mouth, suction tube, suction fan nce work to be carried out weekly Check engine oil level, top up engine oil if necessary. Check coolant level in expansion tank and radiator antifreeze, top up if necessary. Observe antifreeze for winter operation! Check combination radiator and radiator grille for contamination, clean with compressed air if necessary. Empty water trap of fuel system. Check emergency steering function. Check service and parking brakes for proper functioning. Check lighting work functions, horn, etc. for proper functioning.	✓	7.2 litres. Fuchs Titan CARGO, 5W-40 VW- G13 40 - 60 % coolant additive (antifreeze)
Servicing and main Component: Engine	C C C C	system, suction mouth, suction tube, suction fan nce work to be carried out weekly Check engine oil level, top up engine oil if necessary. Check coolant level in expansion tank and radiator antifreeze, top up if necessary. Observe antifreeze for winter operation! Check combination radiator and radiator grille for contamination, clean with compressed air if necessary. Empty water trap of fuel system. Check emergency steering function. Check service and parking brakes for proper functioning. Check lighting work functions, horn, etc. for	✓	7.2 litres. Fuchs Titan CARGO, 5W-40 VW- G13 40 - 60 % coolant

Servicing and main	tenar	nce work to be carried out weekly		Specifications:
			✓	
Component:				
Suction mouth	С	Check for wear and damage.		
	С	Check suction mouth setting, gap between sealing strip and ground.		at the side 5 mm, at the rear 10-15 mm
Suction duct	С	Check suction hose for damage and correct seating.		
	С	Check the seal between suction duct and dirt hopper.		
Dirt hopper	С	Check seals		
	С	Check impact plate in the dirt hopper for wear and damage, replace if necessary		
Lubrication service:		Door hinges front lift cylinder front lift sweeping unit dirt hopper/ loading platform		
C = Check: function, seal-tightness, top up, adjust				
R = Replace, (R) = R	Repla	nce if technically necessary		

Hako-Citymaster	165	0 (1491.15) – Hako system ma	ainte	enance
Hako system mainter	nance	e after 50 operating hours (to be carrie	ed o	ut once).
To be carried out by a	an au	ithorised Hako service centre.		
Mach. No.:	WHV	V1491.15		
Operating hrs.:				
Customer:				•
Work to be carried or	ıt: Ha	ako system maintenance after	√	Specifications:
50 operating hours (to		•		opeemedaterie.
Component:				
·		Read the error memory of the engine control unit, delete sporadic errors, repair clear errors if necessary.		
		Check condition of diesel particulate filter and perform service regeneration if necessary.		
				approx. 7.2 litres, Fuchs
Engine	R	Replace engine oil.		Titan CARGO, 5W-40
	R	Replace engine oil filter.		SP No. 01500200
	R	Oil drain screw		SP No. 01501190
	R	Seal of Oil drain screw		SP No. 01501200
	R	Replace fuel filter (until WHW14911531403500)		SP No. 01500310
	R	Replace fuel filter (from WHW14911531403500)		SP No. 01509030
	С	Check coolant hoses and radiator for leaks.		
	С	Check coolant level, top up if necessary. Only top up distilled water or engine coolant!		VW- G13 or similar, e.g. Total Glaself Auto Supra.
Combination radiator	С	Check engine, charge air and hydraulic oil for contamination, clean with compressed air if necessary.		
Engine bearing assembly	С	Check engine bearings for damage, cracks and tight fit.		
V-ribbed belt	С	State and function		
Generator	C	Check generator for contamination, clean.		
Exhaust system	С	Functional and seal tightness check		
Fuel lines	С	Functional and seal tightness check		
Air intake pipe	С	Functional and seal tightness check		

Work to be carried ou 50 operating hours (to	√	Specifications:		
Component:				
Vehicle control system (work hydraulics control unit)	С	Read entries in the work hydraulics control unit, eliminate fault if necessary. Check software status, update software if necessary.		
Vehicle control system (work hydraulics control unit)	С	Read entries in the hydrostatic control unit, eliminate fault if necessary. Check software status, update software if necessary.		
Hydraulics	R	Replace hydraulic oil filter		SP No. 01493180
Trydradiics	C	Check hydraulic oil level and top up if necessary.		HVLP 46, e.g. Mobiloil DTE 10 Excel
	C	Check hydraulic pipes and hydraulic hoses for abrasion points and damage.		
Hydraulic cylinder – sweeping unit	С	Functional and seal tightness check		
Lifting cylinder (front power lift)	С	Functional and seal tightness check		
Lifting cylinder (sweeper set-up)	С	Functional and seal tightness check		
Hydraulic pipes of basic unit	С	Functional and seal tightness check		
Hydraulic pipes of implements and attachments	С	Functional and seal tightness check		
Hand pump	С	Check function of the hand pump (raise the dirt hopper or loading platform with the hand pump).		

		ko system maintenance after	√	Specifications:
50 operating hours (to	be o	carried out once).		
Component:				
Chassis / axles	С	Check chassis springs for damage and ease of movement (visual inspection).		
	С	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle suspension for cracks and damage (visual inspection).		
	С	Check stop buffers for cracks and damage (visual inspection).		
Front axle	С	Re-tighten bolts (M14 x 1.5) of the bearing bushes of the axle guides and the Panhard rod to 140 Nm (8 bolts on the axle guides and 2 bolts on the Panhard rod).		
Rear axle	С	Re-tighten bolts (M14 x 1.5) of the bearing bushes of the axle guides and the Panhard rod to 140 Nm (8 bolts on the axle guides and 2 bolts on the Panhard rod).		
Steering	С	Functional and seal tightness check		
	С	Check steering cylinder for play. Lubricate steering cylinder (4x).		
Electrical system	С	Functional check, lighting, blinkers, work functions, horn, etc.		
Electrical lines (cables)	С	Check cables (electrical lines) for abrasion points and damage.		
	С	Check positive and ground connections to the battery and frame for tight fit and abrasion points, clean if necessary. Protect battery terminals with terminal grease.		
	С	Check battery charge condition.		
Duales		Toot convice broke for proper function:		
Brake	С	Test service brake for proper functioning. Test brakes.		
	С	Test parking brake for proper functioning.		
	С	Check brake hoses and brake lines for damage.		

	Vork to be carried out: Hako system maintenance after 60 operating hours (to be carried out once).					
ov operating nours (to	be (carried out once).				
Component:						
Sweeping unit	С	Check for wear and damage.				
	С	Check sweeping level, adjust if necessary.				
Suction mouth	С	Check coarse material flap and Bowden cable as to function and damage.				
	С	Check the rod ends of the suction mouth lift for wear and damage, replace if necessary.		SP No. 01498260 SP No. 01492810		
	С	Check and if necessary adjust the suction mouth setting.		Distance: at the side 5 mm, at the rear 10 mm		
Suction duct	С	Check suction hose for damage and correct seating.				
	С	Check seal between suction duct and dirt hopper.				
Suction fan	С	Check suction fan for contamination, clean if necessary.				
	С	Check V-belt at the suction fan for correct V-belt tension and damage, re-tension if necessary.				
Hopper flap of the dirt hopper	С	Check seals of the hopper flap for leaks and damage.				

Work to be carried out: Hako system maintenance after	\checkmark	Specifications:
50 operating hours (to be carried out once).		
Component:		
Cab Check and if necessary top up the		
windscreen washing agent level.		
C Functional check of heater		
With air conditioning System System C Functional check of air conditioning system		
With air conditioning C Check condenser of the air conditioning		
system system (radiator) for contamination, clean with compressed air if necessary.		
Wheels / tyres C Re-tighten wheel nuts.		180 Nm
Tyres C Check any damage, air pressure and tread depth.		
C 215/ 70 R15		6.0 bar
C 225/ 70 R15 C (standard tyres)		5.0 bar
C 255/ 65 R16 (all-purpose tyres)		3.0 bar
C 285/ 65 R16 C		3.2 bar
C 320/ 55-15 T559 (lawn surface tyres)		2.8 bar
C 325/ 60 R15		2.5 bar
Lubrication service: Door hinges (4x)		
Front lift cylinder (4x)		
Front lift (2x)		
Upper link (2x)		
Steering cylinder (4x)		
C = Check: function, seal-tightness, top up, adjust		
R = Replace, (R) = Replace if technically necessary		
Remarks; service information for the customer:		
Town / city: Date:		
Signature – Customer:		
Signature – Service technician:		

Hako-Citymaster	165	0 (1491.15) – Hako system ma	aint	enance
Hako system mainten	ance	after 250 operating hours (to be care	ried o	out once).
_		thorised Hako service centre.		•
Mach. No.:	WHW	/1491.15		
Operating hrs.:				
Customer:				
Work to be carried ou 250 operating hours (ko system maintenance after carried out once).	√	Specifications:
Component:				
Engine	С	Read the error memory of the engine control unit, delete sporadic errors, repair clear errors if necessary.		
	С	Check condition of diesel particulate filter and perform service regeneration if necessary.		
	С	Check engine oil level, top up if necessary.		Fuchs Titan CARGO, 5W-40
	С	Check coolant hoses and radiator for leaks.		
	С	Check coolant level, top up if necessary. Only top up distilled water or engine coolant!		VW- G13 or similar, e.g. Total Glaself Auto Supra.
Combination radiator	С	Check engine, charge air and hydraulic oil for contamination, clean with compressed air if necessary.		
Engine bearing assembly	С	Check engine bearings for damage, cracks and tight fit.		
V-ribbed belt	С	State and function		
Generator	С	Check generator for contamination, clean.		
Exhaust system	С	Functional and seal tightness check		
Fuel lines	С	Functional and seal tightness check		
Air intake pipe	С	Functional and seal tightness check		

Work to be carried ou 250 operating hours (√	Specifications:		
Component:				
Hydraulics	С	Check hydraulic oil level and top up if necessary.		HVLP 46, e.g. Mobiloil DTE 10 Excel
		Check hydraulic pipes and hydraulic hoses for abrasion points and damage.		
Hydraulic cylinder – sweeping unit	С	Functional and seal tightness check		
Lifting cylinder (front power lift)	С	Functional and seal tightness check		
Lifting cylinder (sweeper set-up)	С	Functional and seal tightness check		
Hydraulic pipes of basic unit	С	Functional and seal tightness check		
Hydraulic pipes of implements and attachments	С	Functional and seal tightness check		
Hand pump	С	Check function of the hand pump (raise the dirt hopper or loading platform with the hand pump).		

		ko system maintenance after	√	Specifications:
250 operating hours (to be	carried out once).		
Component:				
Chassis / axles	С	Check chassis springs for damage and		
		ease of movement (visual inspection).		
	С	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle		
		suspension for cracks and damage (visual		
		inspection).		
	С	Check stop buffers for cracks and damage (visual inspection).		
Front axle	С	Re-tighten bolts (M14 x 1.5) of the bearing		
		bushes of the axle guides and the Panhard		
		rod to 140 Nm (8 bolts on the axle guides		
		and 2 bolts on the Panhard rod).		
Rear axle	С	Re-tighten bolts (M14 x 1.5) of the bearing		
		bushes of the axle guides and the Panhard		
		rod to 140 Nm (8 bolts on the axle guides		
		and 2 bolts on the Panhard rod).		
Steering	С	Functional and seal tightness check		
	С	Check steering cylinder for play.		
		Lubricate steering cylinder (4x).		
Electrical system	С	Functional check, lighting, blinkers, work		
Electrical system	C	functions, horn, etc.		
Electrical lines	С	Check cables (electrical lines) for abrasion		
(cables)		points and damage.		
	С	Check positive and ground connections to		
		the battery and frame for tight fit and		
		abrasion points, clean if necessary. Protect		
		battery terminals with terminal grease.		
	С	Check battery charge condition.		
Brake	С	Test service brake for proper functioning. Test brakes.		
	С	Test parking brake for proper functioning.		
	С	Check brake hoses for damage.		

Nork to be carried out: Hako system maintenance after					
to be	carried out once).				
С	Check for wear and damage.				
С	Check and if necessary adjust the sweeping level.				
С	Check coarse material flap and Bowden cable as to function and damage.				
С	Check the rod ends of the suction mouth lift for wear and damage, replace if necessary.		SP No. 01498260 SP No. 01492810		
С	Check and if necessary adjust the suction mouth setting.		Distance: at the side 5 mm, at the rear 10 mm		
С	Check suction hose for damage and correct seating.				
С	Check seal between suction duct and dirt hopper.				
С	Check suction fan for contamination, clean if necessary.				
С	Check V-belt at the suction fan for correct V-belt tension and damage, re-tension if necessary.				
С	Check seals of the hopper flap for leaks and damage.				
	C C C C C	C Check for wear and damage. C Check and if necessary adjust the sweeping level. C Check coarse material flap and Bowden cable as to function and damage. C Check the rod ends of the suction mouth lift for wear and damage, replace if necessary. C Check and if necessary adjust the suction mouth setting. C Check suction hose for damage and correct seating. C Check seal between suction duct and dirt hopper. C Check suction fan for contamination, clean if necessary. C Check V-belt at the suction fan for correct V-belt tension and damage, re-tension if necessary. C Check seals of the hopper flap for leaks	C Check for wear and damage. C Check and if necessary adjust the sweeping level. C Check coarse material flap and Bowden cable as to function and damage. C Check the rod ends of the suction mouth lift for wear and damage, replace if necessary. C Check and if necessary adjust the suction mouth setting. C Check suction hose for damage and correct seating. C Check seal between suction duct and dirt hopper. C Check suction fan for contamination, clean if necessary. C Check V-belt at the suction fan for correct V-belt tension and damage, re-tension if necessary. C Check seals of the hopper flap for leaks		

Work to be carried oเ	ıt: Ha	ako system maintenance after	√	Specifications:
250 operating hours ((to be	e carried out once).		
Component:				
Cab	С	Check and if necessary top up the		
		windscreen washing agent level.		
	С	Functional check of heater		
With air conditioning system	С	Functional check of air conditioning system		
System				
With air conditioning	С	Check condenser of the air conditioning		
system		system (radiator) for contamination, clean with compressed air if necessary.		
\\/\b = a a b m = a		Do tighten wheel nute		180 Nm
Wheels / tyres	C	Re-tighten wheel nuts.		TOU INITI
Tyres	С	Check any damage, air pressure and tread depth.		
	С	215/ 70 R15		6.0 bar
	С	225/ 70 R15 C (standard tyres)		5.0 bar
	С	255/ 65 R16 (all-purpose tyres)		3.0 bar
	С	285/ 65 R16 C		3.2 bar
	С	320/ 55-15 T559 (lawn surface tyres)		2.8 bar
	С	325/ 60 R15		2.5 bar
Lubrication commisses		Door hinges (4x)		
Lubrication service:		Door Tilliges (4x)		
		Front lift cylinder (4x)		
		Front lift (2x)		
		Upper link (2x)		
		Steering cylinder (4x)		
C = Check: function,	seal-	-tightness, top up, adjust		
R = Replace, (R) = R	Repla	ace if technically necessary		
Remarks; service info	orma	tion for the customer:		
Town / city:		Date:		
0: 1 0 :				
Signature – Custome	r:			
Signatura Camilas t	oobs	icion:		
Signature – Service to	ecnn	iUlaii.		

Hako-Citymaster	165	0 (1491.15) – Hako system ma	aint	enance
Hako system mainter	nance	e I, 500 operating hours.		
To be carried out by	an au	ithorised Hako service centre.		
Mach. No.:	WHV	V1491.15		
Operating hrs.:				
Customer:				
Work to be carried or	ut: Ha	ako system maintenance I,	\checkmark	Specifications:
500 operating hours	(1500	OH, 3500 OH, 4500 OH,		
5500 OH, 6500 OH, 8	3500	OH, 9500 OH).		
Component:				
Engine	С	Read the error memory of the engine		
J		control unit, delete sporadic errors, repair		
	<u> </u>	clear errors if necessary.		
	С	Check condition of diesel particulate filter and perform service regeneration if		
		necessary.		
	R	Replace engine oil.		approx. 7.2 litres, Fuchs
				Titan CARGO, 5W-40
	R	Replace engine oil filter.		SP No. 01500200
	R	Oil drain screw		SP No. 01501190
	R	Seal of oil drain screw		SP No. 01501200
	R	Fuel filter		SP No. 01500310
		(until WHW14911531403500)		
	R	Fuel pre-filter		SP No. 01500420
		(until WHW14911531403500)		OD N 04500000
	R	Fuel filter (from WHW14911531403500)		SP No. 01509030
	R	Fuel pre-filter		SP No. 01508990
	'`	(from WHW14911531403500)		
	R	Oil separator crankcase venting		SP No. 01500530
	R	Air filter insert		SP No. 01500640
	С	Check coolant hoses and radiator for		
		leaks.		
	С	Check coolant level, top up if necessary.		VW- G13 or similar, e.g.
		Only top up distilled water or engine coolant!		Total Glaself Auto Supra.
Combination radiator	С	Check engine, charge air and hydraulic oil		
Combination radiator		for contamination, clean with compressed		
		air if necessary.		
Engine bearing	С	Check engine bearings for damage,		
assembly		cracks and tight fit.		
V-ribbed belt	С	State and function		
Generator	С	Check generator for contamination, clean.		
Exhaust system	С	Functional and seal tightness check		
Fuel lines	С	Functional and seal tightness check		
Air intake pipe	С	Functional and seal tightness check		
, ,				

Work to be carried ou	ıt: Ha	ko system maintenance I,	√	Specifications:
		OH, 3500 OH, 4500 OH,		- p
5500 OH, 6500 OH, 8	•			
Component:		,		
Vehicle control	С	Read entries in the work hydraulics control		
system (work		unit, eliminate fault if necessary. Check		
hydraulics control		software status, update software if		
unit)		necessary.		
Vehicle control	С	Read entries in the hydrostatic control unit,		
system (work		eliminate fault if necessary. Check		
,		software status, update software if		
hydraulics control		necessary.		
unit)				
Hydraulics	С	Check hydraulic oil level and top up if		HVLP 46, e.g. Mobiloil
		necessary.		DTE 10 Excel
	С	Check hydraulic pipes and hydraulic hoses		
		for abrasion points and damage.		
Hydraulic cylinder –	С	Functional and seal tightness check		
sweeping unit				
Lifting cylinder (front	С	Functional and seal tightness check		
power lift)				
Lifting cylinder	С	Functional and seal tightness check		
(sweeper set-up)				
Hydraulic pipes of	С	Functional and seal tightness check		
basic unit				
Hydraulic pipes of	С	Functional and seal tightness check		
implements and				
attachments				
Hand pump	С	Check function of the hand pump (raise		
		the dirt hopper or loading platform with the		
		hand pump).		
Chassis / Axles	С	Check chassis springs for damage and		
		ease of movement (visual inspection).		
	С	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle suspension for cracks and damage (visual		
		inspection).		
	С	Check stop buffers for cracks and damage		
		(visual inspection).		
Steering	С	Functional and seal tightness check		
	С	Check steering cylinder for play.		
		Lubricate steering cylinder (4x).		

Work to be carried ou	Specifications:			
500 operating hours (
5500 OH, 6500 OH, 8	3500	OH, 9500 OH)		
Component:				
Electrical system	С	Functional check, lighting, blinkers, work functions, horn, etc.		
Electrical lines (cables)	С	Check cables (electrical lines) for abrasion points and damage.		
	С	Check positive and ground connections to the battery and frame for tight fit and abrasion points, clean if necessary. Protect battery terminals with terminal grease.		
	С	Check battery charge condition.		
Brake	C (R)	Check service brake for proper functioning and wear and carry out a brake test, replace required parts if necessary.		
	С	Check rear axle parking brake as to function.		
	С	Check proportion of water in brake fluid. If the proportion of water is greater than 3 % the brake fluid must be replaced. Check brake fluid oil level and top up if necessary. Or replace brake fluid every 2 years!		0.5 litres, DOT 4, e.g. FTE Type 9368
	С	Check brake hoses for damage.		

Mark to be carried as	ıtı Lla	lka ayatam maintananaa l	/	Specifications:
Work to be carried or	•	Specifications:		
	•	OH, 3500 OH, 4500 OH,		
5500 OH, 6500 OH, 8	8500	OH, 9500 OH)		
Component:				
Front tool carrier	С	Check upper link for wear and damage.		
Sweeping unit	С	Check for wear and damage.		
1 9	С	Check and if necessary adjust the		
		sweeping level.		
Suction mouth	С	Check coarse material flap and Bowden		
		cable as to function and damage.		
	C	Check the rod ends of the suction mouth		SP No. 01498260,
	(R)	lift for wear and damage, replace if necessary.		SP No. 01492810
	С	Check rollers, rubber aprons and		SP No. 01472250 (2X)
	(R)	circulation water compartments for wear		SP No. 01470890 `
		and damage. Defective or worn parts must		SP No. 01470830
		be replaced!		SP No 01470860
	С	Check and if necessary adjust the suction		Distance:
		mouth setting.		at the side 5 mm,
				at the rear 10 mm
Suction duct	C	Check suction hose for damage and		
	-	correct seating.		
	С	Check seal between suction duct and dirt hopper.		
Suction fan	С	Check suction fan for contamination, clean		
Oddion fair		if necessary.		
	С	Check V-belt at the suction fan for correct		
		V-belt tension and damage and, if		
		necessary, re-tighten or replace.		
	С	Check suction fan for vibration, check		
	<u> </u>	bearings if necessary.		
	С	Check impeller for wear.		
Hopper flap of the	С	Check seals of the hopper flap for leaks		
dirt hopper		and damage.		
	С	Check impact plate for wear.		
	С	Check cover joints and bearing.		
	С	Check exhaust side of hopper flap for		
		contamination.		
Hopper, circulating	С	Hose, cpl. (Circulating water system) If		SP No. 01231950
water system	(R)	required!		

Work to be carried ou	√	Specifications:		
500 operating hours (1500	OH, 3500 OH, 4500 OH,		
5500 OH, 6500 OH, 8	3500	OH, 9500 OH)		
Component:				
Cab		Clean cab air filter.		
	С	Check and if necessary top up the		
		windscreen washing agent level.		
	С	Functional check of heater		
With air conditioning	С	Functional check of air conditioning		
system		system		
With air conditioning	С	Check condenser of the air conditioning		
system		system (radiator) for contamination, clean		
*		with compressed air if necessary.		
Wheels / Tyres	С	Re-tighten wheel nuts.		180 Nm
Tyres	С	Check any damage, air pressure and tread		
,		depth.		
	С	215/ 70 R15		6.0 bar
	С	225/ 70 R15 C (standard tyres)		5.0 bar
	С	255/ 65 R16 (all-purpose tyres)		3.0 bar
	С	285/ 65 R16 C		3.2 bar
	С	320/ 55-15 T559 (lawn surface tyres)		2.8 bar
	С	325/ 60 R15		2.5 bar
Lubrication service:		Door hinges (4x)		
		Front lift cylinder (4x)		
		Front lift (2x)		
		Upper link (2x)		
		Steering cylinder (4x)		
C = Check: function,	seal-	tightness, top up, adjust		
		ace if technically necessary		
Remarks; service info	rmat	ion for the customer:		
T / :1				
Town / city: Date:				
Signature – Custome	r:			
Signature – Service to	echni	cian:		

Hako-Citymaster 1650 (1491.15) - Hako system maintenance Hako system maintenance II, **1000** operating hours (5000 OH, 7000 OH). To be carried out by an authorised Hako service centre. Please note: After 5000 operating hours, carry out additional system maintenance I extended. Mach. No.: WHW1491.15 Operating hrs.: Customer: Work to be carried out: Hako system maintenance II, Specifications: **1000** operating hours (5000 OH, 7000 OH). Component: Read the error memory of the engine **Engine** control unit, delete sporadic errors, repair clear errors if necessary. Check condition of diesel particulate filter and perform service regeneration if necessary. Replace engine oil. approx. 7.2 litres, Fuchs Titan CARGO, 5W-40 Replace engine oil filter. SP No. 01500200 SP No. 01501190 R Oil drain screw R Seal of oil drain screw SP No. 01501200 SP No. 01500310 R Fuel filter (until WHW14911531403500) Fuel pre-filter SP No. 01500420 (until WHW14911531403500) Fuel filter SP No. 01509030 (from WHW14911531403500) SP No. 01508990 Fuel pre-filter (from WHW14911531403500) Oil separator crankcase venting SP No. 01500530 R SP No. 01500640 Air filter insert SP No. 01500750 Safety cartridge air filter Check coolant hoses and radiator for Check coolant level, top up if necessary. VW- G13 or similar, e.g. Only top up distilled water or engine Total Glaself Auto Supra. coolant! Check engine, charge air and hydraulic oil Combination radiator for contamination, clean with compressed air if necessary. Check engine bearings for damage, cracks **Engine** bearing and tight fit. assembly С State and function V-ribbed belt Generator Check generator for contamination, clean. С Functional and seal tightness check Exhaust system С Functional and seal tightness check Fuel lines Functional and seal tightness check Air intake pipe

Work to be carried out: Hako system maintenance II, ✓ Specifications:					
1000 operating hours					
Component:					
Vehicle control system (work hydraulics control unit)	С	Read entries in the work hydraulics control unit, eliminate fault if necessary. Check software status, update software if necessary.			
Vehicle control system (work hydraulics control unit)	С	Read entries in the hydrostatic control unit, eliminate fault if necessary. Check software status, update software if necessary.			
Hydraulics	R	Hydraulic oil filter		SP No. 01493180	
	R	Venting filter hydraulic tank		SP No. 01497120	
	С	Remove hydraulic oil sample and send it in. If the sample result is negative, the hydraulic oil must be replaced prematurely!		SP No. 00009720	
	С	Check hydraulic oil level, top up if necessary. Please note topping up with organic oil or other oils. Do not mix hydraulic oils! Check hydraulic pipes and hydraulic hoses		HVLP 46, e.g. Mobiloil DTE 10 Excel	
		for abrasion points and damage.			
Hydraulic cylinder – sweeping unit	С	Functional and seal tightness check			
Lifting cylinder (front power lift)	С	Functional and seal tightness check			
Lifting cylinder (sweeper set-up)	С	Functional and seal tightness check			
Hydraulic pipes of basic unit	С	Functional and seal tightness check			
Hydraulic pipes of implements and attachments	С	Functional and seal tightness check			
Hand pump	С	Check function of the hand pump (raise the dirt hopper or loading platform with the hand pump).			

		ko system maintenance II,	✓	Specifications:
1000 operating hour	S (500	10 On, 7000 On)		
Component:				
Chassis / axles	С	Check chassis springs for damage and		
		ease of movement (visual inspection).		
	С	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle		
		suspension for cracks and damage (visual		
		inspection).		
	С	Check stop buffers for cracks and damage		
Oti	_	(visual inspection).		
Steering	C	Functional and seal tightness check. Lubricate steering cylinder (4x).		
	С	Check steering cylinder (4x).		
	C	Remove covers (plastic) of the articulated		
		joints (top + bottom) and check the joints		
		underneath for dirt, if necessary clean dry		
		with a brush.		
	С	Check bearing bushings (top + bottom) of		
		the articulated joints for damage		
Electrical system	С	Functional check, lighting, blinkers, work		
		functions, horn, etc.		
Electrical lines	С	Check cables (electrical lines) for abrasion		
(cables)		points and damage.		
	С	Check positive and ground connections to		
		the battery and frame for tight fit and		
		abrasion points, clean if necessary. Protect		
		battery terminals with terminal grease.		
	С	Check battery charge condition.		
Brake	C	Check service brake for proper functioning		
	(R)	and wear and carry out a brake test,		
		replace required parts if necessary.		
	С	Test parking brake for proper functioning.		
	(R)	Check proportion of water in brake fluid. If		0.5 litres, DOT 4, e.g.
	` ′	the proportion of water is greater than 3 %		FTE Type 9368
		the brake fluid must be replaced. Check		1
		brake fluid oil level and top up if necessary.		
		Or replace brake fluid every		
		2 years!		
	С	Check brake hoses for damage.		
	_	Observation and the later of th		
Front tool carrier	С	Check upper link for wear and damage.		

Work to be carried οι	ut: Ha	ko system maintenance II,	\checkmark	Specifications:
Component:				
Sweeping unit	С	Check for wear and damage.		
<u> </u>	С	Check and if necessary adjust the		
		sweeping level.		
Suction mouth	С	Check coarse material flap and Bowden		
		cable as to function and damage.		
	С	Check the rod ends of the suction mouth		SP No. 01498260,
		lift for wear and damage, replace if		SP No. 01492810
	_	necessary.		00.01
		Check rollers, rubber aprons and		SP No. 01472250 (2X) SP No. 01470890
	(R)	circulation water compartments for wear and damage. Defective or worn parts must		SP No. 01470890 SP No. 01470830
	С	be replaced! Check and if necessary adjust the suction		SP No 01470860 Distance:
		mouth setting.		at the side 5 mm,
		moun seung.		at the rear 10 mm
Suction duct	С	Check suction hose for damage and		at the real forming
		correct seating.		
	С	Check the seal between suction duct and		
		dirt hopper.		
Suction fan	С	Check suction fan for contamination and, if		
		necessary, clean.		
	С	Check V-belt at the suction fan for correct		
		V-belt tension and damage, re-tension or		
		replace if necessary.		
	С	Check suction fan for vibration, check		
	_	bearings if necessary.		
	С	Check impeller for wear.		
Hopper flap of the	С	Check the seals of the hopper lid for		
dirt hopper		tightness and damage.		
	С	Check impact plate for wear.		
	С	Check cover joints and bearing.		
	-		•	•

	С	Check exhaust side of hopper flap for contamination.		
Hopper, circulating water system	C (R)	Hose, cpl. (Circulating water system) If required!		SP No. 01231950
	t: Ha	ko system maintenance II,	✓	Specifications:
Component:				
Cab	R	Cab air filter		SP No. 01065540
	С	Check and if necessary top up the windscreen washing agent level.		
	С	Functional check of heater		
With air conditioning system	С	Functional check of air conditioning system		
With air conditioning system	С	Check condenser of the air conditioning system (radiator) for contamination, clean with compressed air if necessary.		
Wheels / tyres	С	Re-tighten wheel nuts.		180 Nm
Tyres	С	Check any damage, air pressure and tread depth.		100 14111
	С	215/ 70 R15		6.0 bar
	С	225/ 70 R15 C (standard tyres)		5.0 bar
	С	255/ 65 R16 (all-purpose tyres)		3.0 bar
	С	285/ 65 R16 C		3.2 bar
	С	320/ 55-15 T559 (lawn surface tyres)		2.8 bar
	С	325/ 60 R15		2.5 bar
Lubrication service:		Door hinges (4x)		
		Front lift cylinder (4x)		
		Front lift (2x)		
		Upper link (2x)		
		Steering cylinder (4x)		

C = Check: function, seal-tightness, top up, adjust
R = Replace, (R) = Replace if technically necessary

Town / city: Date: Signature – Customer:		
Signature – Customer:	Remarks; service information for the customer:	
Signature – Customer:		
	Town / city:	Date:
Signature – Service technician:	Signature – Customer:	
Signature – Service technician:		
•	Signature – Service technician:	

Hako-Citymaster 1650 (1491.15) - Hako system maintenance Hako system maintenance I, 500 operating hours (1500 OH, 2500 OH, 3500 OH, 4500 OH, 5500 OH, 6500 OH, 7500 OH, 8500 OH, 9500 OH). To be carried out by an authorised Hako service centre. WHW1491.15 Mach. No.: Operating hrs.: Customer: Work to be carried out: Hako system maintenance I. Specifications: 500 operating hours (**1500 OH**, 3500 OH, 4500 OH, 5500 OH, 6500 OH, 7500 OH, 8500 OH, 9500 OH). Assembly Read the error memory of the engine **Engine** control unit, delete sporadic errors, repair clear errors if necessary. Check condition of diesel particulate filter and perform service regeneration if necessary. Replace engine oil. approx. 7.2 litres, Fuchs Titan CARGO, 5W-40 Replace engine oil filter. SP No. 01500200 Oil drain screw SP No. 01501190 R Seal of oil drain screw SP No. 01501200 R Fuel filter SP No. 01500310 (until WHW14911531403500) Fuel pre-filter SP No. 01500420 (until WHW14911531403500) Fuel filter SP No. 01509030 (from WHW14911531403500) SP No. 01508990 Fuel pre-filter (from WHW14911531403500) Oil separator crankcase venting SP No. 01500530 R SP No. 01500640 Air filter insert Check coolant hoses and radiator for leaks. Check coolant level, top up if necessary. VW- G13 or similar, e.g. Only top up distilled water or engine Total Glaself Auto Supra. coolant! Check engine, charge air and hydraulic oil Combination for contamination, clean with compressed radiator air if necessary. Check engine bearings for damage, cracks Engine bearing and tight fit. assembly State and function С V-ribbed belt Check generator for contamination, clean. С Generator Exhaust system С Functional and seal tightness check Functional and seal tightness check Fuel lines С Functional and seal tightness check Air intake pipe С

Work to be carried ou	ıt: Ha	iko system maintenance I,	√	Specifications:
		OH, 3500 OH, 4500 OH,		'
	•	OH, 8500 OH, 9500 OH)		
Assembly				
Vehicle control system (work hydraulics control unit)	С	Read entries in the work hydraulics control unit, eliminate fault if necessary. Check software status, update software if necessary.		
Vehicle control system (work hydraulics control unit)	С	Read entries in the hydrostatic control unit, eliminate fault if necessary. Check software status, update software if necessary.		
Hydraulics	С	Check hydraulic oil level, top up if necessary. Please note topping up with organic oil or other oils. Do not mix hydraulic oils!		HVLP 46, e.g. Mobiloil DTE 10 Excel
	С	Check hydraulic pipes and hydraulic hoses for abrasion points and damage.		
Hydraulic cylinder – sweeping unit	С	Functional and seal tightness check		
Lifting cylinder (front power lift)	С	Functional and seal tightness check		
Lifting cylinder (sweeper set-up)	С	Functional and seal tightness check		
Hydraulic pipes of basic unit	С	Functional and seal tightness check		
Hydraulic pipes of implements and attachments	С	Functional and seal tightness check		
Hand pump	С	Check function of the hand pump (raise the dirt hopper or loading platform with the hand pump).		
Chassis / Axles	С	Check chassis springs for damage and		
		ease of movement (visual inspection).		
	C	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle suspension for cracks and damage (visual inspection).		
	C	Check stop buffers for cracks and damage (visual inspection).		
Steering	С	Functional and seal tightness check		
	С	Check steering cylinder for play. Lubricate steering cylinder (4x).		

Work to be carried ou	ıt: Ha	ıko system maintenance I,	✓	Specifications:		
500 operating hours (1500	OH , 3500 OH, 4500 OH,				
	5500 OH, 6500 OH, 7500 OH, 8500 OH, 9500 OH)					
Assembly		·				
Electrical system	С	Functional check, lighting, blinkers, work functions, horn, etc.				
Electrical lines	С	Check cables (electrical lines) for abrasion				
(cables)		points and damage.				
	С	Check positive and ground connections to the battery and frame for tight fit and abrasion points, clean if necessary. Protect battery terminals with terminal grease.				
	С	Check battery charge condition.				
Brake	С	Check service brake for proper functioning				
	(R)	and wear and carry out a brake test,				
		replace required parts if necessary.				
	С	Test parking brake for proper functioning.				
	(R)	Check proportion of water in brake fluid. If the proportion of water is greater than 3 % the brake fluid must be replaced. Check brake fluid oil level and top up if necessary. Or replace brake fluid every 2 years!		0.5 litres, DOT 4, e.g. FTE Type 9368		
	С	Check brake hoses for damage.				
Front tool carrier	С	Check upper link for wear and damage.				

Work to be carried o	ut: Ha	ako system maintenance I,	√	Specifications:
		O OH, 3500 OH, 4500 OH,		
	•	OH, 8500 OH, 9500 OH)		
Assembly		,		
Sweeping unit	С	Check for wear and damage.		
1 3	С	Check and if necessary adjust the sweeping level.		
	R	Bearing block (2-broom- system) (2X)		SP No. 01493820
	R	Bushing (2-broom- system) (4X)		SP No.01060940
	R	Bushing (2-broom- system) (4X)		SP No.01060950
	R	Comb (2-broom- system) (2X)		SP No.01493640
Suction mouth	С	Check coarse material flap and Bowden cable as to function and damage.		
	С	Check the rod ends of the suction mouth lift for wear and damage, replace if necessary.		SP No. 01498260, SP No. 01492810
	C (R)	Check rollers, rubber aprons and circulation water compartments for wear and damage. Defective or worn parts must		SP No. 01472250 (2X) SP No. 01470890 SP No. 01470830
	С	be replaced! Check and if necessary adjust the suction mouth setting.		SP No 01470860 Distance: at the side 5 mm,
Suction duct	С	Check suction hose for damage and correct seating.		at the olde o min,
	С	Check seal between suction duct and dirt hopper.		
Suction fan	С	Check suction fan for contamination, clean if necessary.		
	С	Check V-belt at the suction fan for correct V-belt tension and damage and, if necessary, re-tighten or replace.		
	С	Check suction fan for vibration, check bearings if necessary.		
	С	Check impeller for wear.		
Hopper flap of the dirt hopper	С	Check seals of the hopper flap for leaks and damage.		
	С	Check impact plate for wear.		
	С	Cover joints and bearing		
	С	Check exhaust side of hopper flap for contamination.		
Hopper, circulating water system	C (R)	Hose, cpl. (Circulating water system) If required!		SP No. 01231950

Work to be carried out: Hako system maintenance I, Specifications:					
500 operating hours					
5500 OH, 6500 OH, 7	7500	OH, 8500 OH, 9500 OH)			
Assembly					
Cab	С	Clean the cab air filter.			
	С	Check and if necessary top up the			
		windscreen washing agent level.			
	С	Functional check of heater			
With air conditioning	С	Functional check of air conditioning system			
system					
With air conditioning	С	Check condenser of the air conditioning			
system		system (radiator) for contamination, clean			
		with compressed air if necessary.			
Wheels / Tyres	С	Re-tighten wheel nuts.		180 Nm	
Tyres	С	Check any damage, air pressure and tread			
-		depth.			
	С	215/ 70 R15		6.0 bar	
	С	225/ 70 R15 C (standard tyres)		5.0 bar	
	С	255/ 65 R16 (all-purpose tyres)		3.0 bar	
	С	285/ 65 R16 C		3.2 bar	
	С	320/ 55-15 T559 (lawn surface tyres)		2.8 bar	
	С	325/ 60 R15		2.5 bar	
Lubrication service:		Door hinges (4x)			
		Front lift cylinder (4x)			
		Front lift (2x)			
		Upper link (2x)			
		Steering cylinder (4x)			
C = Check: function	seal-	tightness, top up, adjust			
		ce if technically necessary			
Tropiace, (rry r	Сріа	de il teorimodily nedecicary			
Remarks; service info	rmai	tion for the customer:			
TCHIAIRS, SCIVICC IIIIC	Jiiia	don for the edstorner.			
Town / city:	Town / city: Date:				
_					
Signature – Custome	r:				
5 2222					
Signature – Service t	echn	ician:			
orginature derivide techniqui.					

Hako-Citymaster	165	0 (1491.15) – Hako system ma	inte	enance
Hako system mainten	ance	e II extended, 2000 operating hours.		
		ithorised Hako service centre.		
Mach. No.:				
Operating hrs.:				
Customer:				
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\				O ::: ::
		ako system maintenance II extended,	✓	Specifications:
2000 operating hours				
Component:				
Engine	С	Read the error memory of the engine		
		control unit, delete sporadic errors, repair		
		clear errors if necessary.		
	С	Check condition of diesel particulate filter		
		and perform service regeneration if		
	R	necessary. Replace engine oil.		approx. 7.2 litres, Fuchs
	K	Replace engine oil.		Titan CARGO, 5W-40
	R	Replace engine oil filter.		SP No. 01500200
	R	Oil drain screw		SP No. 01501190
	R	Seal of oil drain screw		SP No. 01501200
	R	Fuel filter		SP No. 01500310
	R	(until WHW14911531403500) Fuel pre-filter		SP No. 01500420
	11	(until WHW14911531403500)		OI 140. 01300420
	R	Fuel filter		SP No. 01509030
		(from WHW14911531403500)		
	R	Fuel pre-filter		SP No. 01508990
		(from WHW14911531403500)		
	R	Oil separator crankcase venting		SP No. 01500530
	R	Air filter insert		SP No. 01500640
	R	Safety cartridge air filter		SP No. 01500750
	С	Check coolant hoses and radiator for		
		leaks.		
	C	Check coolant level, top up if necessary.		VW- G13 or similar, e.g.
		Only top up distilled water or engine		Total Glaself Auto Supra.
0 1: " " "	_	coolant!		
Combination radiator	С	Check engine, charge air and hydraulic oil for contamination, clean with compressed		
		air if necessary.		
Engine bearing	С	Check engine bearings for damage, cracks		
assembly	Ů	and tight fit.		
, and the same of				
V-ribbed belt	С	State and function		
Generator	С	Check generator for contamination, clean.		
Exhaust system	С	Functional and seal tightness check		
Fuel lines	С	Functional and seal tightness check		
Air intake pipe	С	Functional and seal tightness check		
1-11				

Work to be carried ou 2000 operating hours		ko system maintenance II extended,	√	Specifications:
Component:	<u>.</u> 			
Vehicle control system (work hydraulics control unit)	С	Read entries in the work hydraulics control unit, eliminate fault if necessary. Check software status, update software if necessary.		
Vehicle control system (work hydraulics control unit)	С	Read entries in the hydrostatic control unit, eliminate fault if necessary. Check software status, update software if necessary.		
Hydraulics	R	Hydraulic oil filter		SP No. 01493180
-	R	Venting filter hydraulic tank		SP No. 01497120
	С	Remove hydraulic oil sample and send it in. If the sample result is negative, the hydraulic oil must be replaced prematurely!		SP No. 00009720
	С	Check hydraulic oil level, top up if necessary. Please note topping up with organic oil or other oils. Do not mix hydraulic oils!		HVLP 46, e.g. Mobiloil DTE 10 Excel
	С	Check hydraulic pipes and hydraulic hoses for abrasion points and damage.		
Hydraulic cylinder – sweeping unit	С	Functional and seal tightness check		
Lifting cylinder (front power lift)	С	Functional and seal tightness check		
Lifting cylinder (sweeper set-up)	С	Functional and seal tightness check		
Hydraulic pipes of basic unit	С	Functional and seal tightness check		
Hydraulic pipes of implements and attachments	С	Functional and seal tightness check		
Hand pump	С	Check function of the hand pump (raise the dirt hopper or loading platform with the hand pump).		
				1

		ko system maintenance II extended,	√	Specifications:
2000 operating hour	S.	<u></u>		
Component:				
Chassis / axles	С	Check chassis springs for damage and		
		ease of movement (visual inspection).		
	С	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle		
		suspension for cracks and damage (visual		
	С	inspection).		
		Check stop buffers for cracks and damage (visual inspection).		
	R	Rubber- Metal- Buffer front axle (2X)		SP No. 01490530
Steering	C	Functional and seal tightness check		01 110.0110000
Oteening	С	Check steering cylinder for play.		
		Lubricate steering cylinder (4x).		
	С	Remove covers (plastic) of the articulated		
		joints (top + bottom) and check the joints		
		underneath for dirt, if necessary clean dry		
		with a brush.		
	С	Check bearing bushings (top + bottom) of		
	1	the articulated joints for damage		
Electrical avetem	С	Functional check, lighting, blinkers, work		
Electrical system		functions, horn, etc.		
Electrical lines	С	Check cables (electrical lines) for abrasion		
(cables)		points and damage.		
(645166)	С	Check positive and ground connections to		
		the battery and frame for tight fit and		
		abrasion points, clean if necessary. Protect		
		battery terminals with terminal grease.		
	С	Check battery charge condition		
		Check battery charge condition.		
Brake	С	Check service brake for proper functioning		
Diake		and wear and carry out a brake test,		
	()	replace required parts if necessary.		
	С	Test parking brake for proper functioning.		
	C	Check proportion of water in brake fluid. If		
	(R)	the proportion of water is greater than 3 % the brake fluid must be replaced. Check		
		brake fluid oil level and top up if		
		necessary. Or replace brake fluid every		
		2 years!		
	С	Check brake hoses for damage.		
Front tool carrier	С	Check upper link for wear and damage.		

Work to be carried or	ut: Ha	ko system maintenance II extended,	√	Specifications:
Component:				
Sweeping unit	С	Check for wear and damage.		
	С	Check and if necessary adjust the sweeping level.		
Suction mouth		Bowden cable coarse material flap at the suction mouth.		SP No. 01167520
Suction mouth	С	Check coarse material flap as to function and damage. Replace Bowden cable.		SP no. 01167520
	С	Check the rod ends of the suction mouth lift for wear and damage, replace if necessary.		SP No. 01498260, SP No. 01492810
	C (R)	Check rollers, rubber aprons and circulation water compartments for wear and damage. Defective or worn parts must be replaced!		SP No. 01472250 (2X) SP No. 01470890 SP No. 01470830 SP No 01470860
	С	Check and if necessary adjust the suction mouth setting.		Distance: at the side 5 mm, at the rear 10 mm
Suction duct	С	Check suction hose for damage and correct seating.		
	С	Check the seal between suction duct and dirt hopper.		
Suction fan	R	V-belt suction fan		with Casappa Motor: SP No. 01220790 with Dana Motor: SP No. 48601960001
	С	Check suction fan for contamination, clean if necessary.		
	С	Check V-belt at the suction fan for correct V-belt tension and damage and, if necessary, re-tighten or replace.		
	С	Check suction fan for vibration, check bearings if necessary.		
	С	Check impeller for wear.		
	R	Replace hydraulic hoses from suction fan		SP No. 01493620 SP No. 01493670
Hopper flap of the dirt hopper	С	Check seals of the hopper flap for leaks and damage.		
	С	Check impact plate for wear.		
	С	Cover joints and bearing.		
	С	Check exhaust side of hopper flap for contamination.		
Hopper, circulating water system	C (R)	Hose, cpl. (Circulating water system) If required!		SP No. 01231950

Work to be carried ou	ıt: Ha	ko system maintenance II extended,	✓	Specifications:
Component:				
Cab	R	Cab air filter		SP No. 01065540
	С	Check and if necessary top up the		
		windscreen washing agent level.		
	С	Functional check of heater		
With air conditioning system	С	Functional check of air conditioning system		
With air conditioning system	С	Check condenser of the air conditioning system (radiator) for contamination, clean with compressed air if necessary.		
Wheels / tyres	С	Re-tighten wheel nuts.		180 Nm
Tyres	С	Check any damage, air pressure and tread depth.		
	С	215/ 70 R15		6.0 bar
	С	225/ 70 R15 C (standard tyres)		5.0 bar
	С	255/ 65 R16 (all-purpose tyres)		3.0 bar
	С	285/ 65 R16 C		3.2 bar
	С	320/ 55-15 T559 (lawn surface tyres)		2.8 bar
	С	325/ 60 R15		2.5 bar
Lubrication service:		Door hinges (4x)		
		Front lift cylinder (4x)		
		Front lift (2x)		
		Upper link (2x)		
		Steering cylinder (4x)		
R = Replace, (R) = R	Repla	tightness, top up, adjust ace if technically necessary		
Remarks; service info	rmat	ion for the customer:		
Town / city:		Date:		
Town / city:		Date:		
Signature – Custome	r:			
Signature – Service te	echni	cian:		

Hako-Citymaster 1650 (1491.15) – Hako system maintenance Hako system maintenance I extended. **2500** operating hours (5000 OH, 7500 OH, 10000 To be carried out by an authorised Hako service centre. Please note: after 5000 operating hours, carry out additional system maintenance II Mach. No.: Operating hrs.: Customer: Work to be carried out: Hako system maintenance I extended, Specifications: 2500 operating hours (5000 OH, 7500 OH, 10000 OH) Component: Read the error memory of the engine **Engine** control unit, delete sporadic errors, repair clear errors if necessary. Check condition of diesel particulate filter and perform service regeneration if necessarv. Replace engine oil. approx. 7.2 litres, Fuchs Titan CARGO, 5W-40 Replace engine oil filter. R SP No. 01500200 R Oil drain screw SP No. 01501190 SP No. 01501200 R Seal of oil drain screw R Fuel filter SP No. 01500310 (until WHW14911531403500) R Fuel pre-filter SP No. 01500420 (until WHW14911531403500) R Fuel filter SP No. 01509030 (from WHW14911531403500) R Fuel pre-filter SP No. 01508990 (from WHW14911531403500) R Oil separator crankcase venting SP No. 01500530 SP No. 01500640 R Air filter insert С Check coolant hoses and radiator for С Check coolant level, top up if necessary. VW- G13 or similar, e.g. Only top up distilled water or engine Total Glaself Auto Supra. Combination radiator Check engine, charge air and hydraulic oil for contamination, clean with compressed air if necessary. Engine bearing Check engine bearings for damage, cracks and tight fit. assembly R Poly V-belt SP No. 01501230 V-ribbed belt SP No. 01501210 R Tensioning element R SP No. 01503800 Idler pulley С Check generator for contamination, clean. Generator Exhaust system С Functional and seal tightness check С Functional and seal tightness check Fuel lines С Functional and seal tightness check Air intake pipe

Work to be carried ou 2500 operating hours	√	Specifications:		
Component:				
Vehicle control system (work hydraulics control unit)	С	Read entries in the work hydraulics control unit, eliminate fault if necessary. Check software status, update software if necessary.		
Vehicle control system (work hydraulics control unit)	С	Read entries in the hydrostatic control unit, eliminate fault if necessary. Check software status, update software if necessary.		
Hydraulics	С	Check hydraulic oil level, top up if necessary. Please note topping up with organic oil or other oils. Do not mix hydraulic oils!		HVLP 46, e.g. Mobiloil DTE 10 Excel
	С	Check hydraulic pipes and hydraulic hoses for abrasion points and damage.		
Hydraulic cylinder – sweeping unit	С	Functional and seal tightness check		
Lifting cylinder (front power lift)	С	Functional and seal tightness check		
Lifting cylinder (sweeper set-up)	С	Functional and seal tightness check		
Hydraulic pipes of basic unit	С	Functional and seal tightness check		
Hydraulic pipes of implements and attachments	С	Functional and seal tightness check		
Hand pump	С	Check function of the hand pump (raise the dirt hopper or loading platform with the hand pump).		
Chassis / axles	С	Check chassis springs for damage and		
		ease of movement (visual inspection).		
	С	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle suspension for cracks and damage (visual inspection).		
	С	Check stop buffers for cracks and damage (visual inspection).		

Work to be carried ou 2500 operating hours	√	Specifications:		
Component:				
Steering	С	Functional and seal tightness check		
3	С	Check steering cylinder for play. Lubricate steering cylinder (4x).		
Electrical system	С	Functional check, lighting, blinkers, work functions, horn, etc.		
Electrical lines (cables)	С	Check cables (electrical lines) for abrasion points and damage.		
	С	Check positive and ground connections to the battery and frame for tight fit and abrasion points, clean if necessary. Protect battery terminals with terminal grease.		
	С	Check battery charge condition.		
Brake	C (R)	Check service brake for proper functioning and wear and carry out a brake test, replace required parts if necessary.		
	С	Test parking brake for proper functioning.		
	(R)	Check proportion of water in brake fluid. If the proportion of water is greater than 3 % the brake fluid must be replaced. Check brake fluid oil level and top up if necessary. Or replace brake fluid every 2 years!		0.5 litres, DOT 4, e.g. FTE Type 9368
	С	Check brake hoses for damage.		
Front tool carrier	С	Check upper link for wear and damage.		

Work to be carried o 2500 operating hours	√	Specifications:		
Component:				
Sweeping unit	С	Check for wear and damage.		
1 0	С	Check sweeping level, adjust if necessary.		
Suction mouth	С	Check coarse material flap and Bowden cable as to function and damage.		
	С	Check the rod ends of the suction mouth lift for wear and damage, replace if necessary.		SP No. 01498260, SP No. 01492810
		Check rollers, rubber aprons and circulation water compartments for wear and damage. Defective or worn parts must be replaced!		SP No. 01472250 (2X) SP No. 01470890 SP No. 01470830 SP No 01470860
	С	Check and if necessary adjust the suction mouth setting.		Distance: at the side 5 mm, at the rear 10 mm
Suction duct	С	Check suction hose for damage and correct seating.		
	С	Check seal between suction duct and dirt hopper.		
Suction fan	С	Check suction fan for contamination, clean if necessary.		
	С	Check V-belt at the suction fan for correct V-belt tension and damage and, if necessary, re-tighten or replace.		
	С	Check suction fan for vibration, check bearings if necessary.		
	С	Check impeller for wear.		
Hopper flap of the dirt hopper	С	Check seals of the hopper flap for leaks and damage.		
	С	Check impact plate for wear.		
	С	Cover joints and bearing.		
	С	Check exhaust side of hopper flap for contamination.		
Hopper, circulating water system	C (R)	Hose, cpl. (Circulating water system) If required!		SP No. 01231950

	iko system maintenance I extended,	✓	Specifications:	
2500 operating hours	(500	00 OH, 7500 OH, 10000 OH)		
Component:				
Cab	С	Clean cab air filter		
	С	Check and if necessary top up the		
		windscreen washing agent level.		
	С	Functional check of heater		
With air conditioning	С	Functional check of air conditioning system		
system				
- ,				
With air conditioning	С	Check condenser of the air conditioning		
system		system (radiator) for contamination, clean		
o you on		with compressed air if necessary.		
Wheels / tyres	С	Re-tighten wheel nuts.		180 Nm
Tyres	С	Check any damage, air pressure and tread		
1 9100		depth.		
	С	215/ 70 R15		6.0 bar
	С	225/ 70 R15 C (standard tyres)		5.0 bar
	C	255/ 65 R16 (all-purpose tyres)		3.0 bar
	O	285/ 65 R16 C		3.2 bar
	C	320/ 55-15 T559 (lawn surface tyres)		2.8 bar
	O	325/ 60 R15		2.5 bar
Lubrication service:		Door hinges (4x)		
		Front lift cylinder (4x)		
		Front lift (2x)		
		Upper link (2x)		
		Steering cylinder (4x)		
C = Check: function,	seal-	tightness, top up, adjust		
R = Replace, (R) = R	Repla	ace if technically necessary		
Remarks; service info	rmat	tion for the customer:		
Town / city:		Date:		
Signature – Custome	r:			
Signature – Service to	echn	ician:		
			_	

Hako-Citymaster 1650 (1491.15) - Hako system maintenance Hako system maintenance II extended, 3000 operating hours (6000 OH, 9000 OH). To be carried out by an authorised Hako service centre. Mach. No.: Operating hrs.: Customer: Work to be carried out: Hako system maintenance II extended, Specifications: **3000** operating hours (6000 OH, 9000 OH). Component: **Engine** Read the error memory of the engine control unit, delete sporadic errors, repair clear errors if necessary. Check condition of diesel particulate filter and perform service regeneration if necessary. Replace engine oil. R approx. 7.2 litres, Fuchs Titan CARGO, 5W-40 SP No. 01500200 R Replace engine oil filter. R Oil drain screw SP No. 01501190 SP No. 01501200 R Seal of oil drain screw Fuel filter SP No. 01500310 (until WHW14911531403500) Fuel pre-filter SP No. 01500420 (until WHW14911531403500) Fuel filter SP No. 01509030 (from WHW14911531403500) SP No. 01508990 Fuel pre-filter (from WHW14911531403500) Oil separator crankcase venting SP No. 01500530 R SP No. 01500640 R Air filter insert SP No. 01500750 R Safety cartridge air filter С Check coolant hoses and radiator for leaks. Check coolant level, top up if necessary. VW- G13 or similar, e.g. Only top up distilled water or engine Total Glaself Auto Supra. coolant! Check engine, charge air and hydraulic oil Combination radiator for contamination, clean with compressed air if necessary. Check engine bearings for damage, cracks Engine bearing and tight fit. assembly V-ribbed belt С State and function Check generator for contamination, clean. Generator С Functional and seal tightness check Exhaust system С Functional and seal tightness check Fuel lines Air intake pipe С Functional and seal tightness check

Work to be carried out: Hako system maintenance II extended, ✓ Specifications: 3000 operating hours (6000 OH, 9000 OH).					
Component: Vehicle control	С	Read entries in the work hydraulics control			
system (work hydraulics control unit)		unit, eliminate fault if necessary. Check software status, update software if necessary.			
Vehicle control system (work hydraulics control unit)	С	Read entries in the hydrostatic control unit, eliminate fault if necessary. Check software status, update software if necessary.			
Lludwaydiaa	R	Hydraulic oil filter		SP No. 01493180	
Hydraulics	R	Venting filter hydraulic tank		SP No. 01497120	
	R	Replace hydraulic oil. Check hydraulic oil		approx. 58 litres HVLP	
	IX	level, top up if necessary. Note: Please note topping up with organic oil or other oils. Do not mix hydraulic oils!		46, e.g. Mobiloil DTE 10 Excel	
	С	Check hydraulic pipes and hydraulic hoses for abrasion points and damage.			
Hydraulic cylinder – sweeping unit	С	Functional and seal tightness check			
Lifting cylinder (front power lift)	С	Functional and seal tightness check			
Lifting cylinder (sweeper set-up)	С	Functional and seal tightness check			
Hydraulic pipes of basic unit	С	Functional and seal tightness check			
Hydraulic pipes of implements and attachments	С	Functional and seal tightness check			
Hand pump	С	Check function of the hand pump (raise the dirt hopper or loading platform with the hand pump).			

		ko system maintenance II extended,	√	Specifications:
3000 operating hour	rs (600	0 OH, 9000 OH).		
Component:				
Chassis / axles	С	Check chassis springs for damage and		
		ease of movement (visual inspection).		
	С	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle		
		suspension for cracks and damage (visual inspection).		
	С	Check stop buffers for cracks and damage (visual inspection).		
Steering	С	Functional and seal tightness check		
Oteomig	С	Check steering cylinder for play. Lubricate steering cylinder (4x).		
	С	Remove covers (plastic) of the articulated joints (top + bottom) and check the joints underneath for dirt, if necessary clean dry with a brush.		
	С	Check bearing bushings (top + bottom) of the articulated joints for damage		
Electrical system	С	Functional check, lighting, blinkers, work		
Licotrical system		functions, horn, etc.		
Electrical lines (cables)	С	Check cables (electrical lines) for abrasion points and damage.		
	С	Check positive and ground connections to the battery and frame for tight fit and abrasion points, clean if necessary. Protect battery terminals with terminal grease.		
	С	Check battery charge condition.		
Brake	C (R)	Check service brake for proper functioning and wear and carry out a brake test, replace required parts if necessary.		
	С	Test parking brake for proper functioning.		
	(R)	Check proportion of water in brake fluid. If the proportion of water is greater than 3 % the brake fluid must be replaced. Check brake fluid oil level and top up if necessary. Or replace brake fluid every 2 years!		0.5 litres, DOT 4, e.g. FTE Type 9368
	С	Check brake hoses for damage.		
Front lift	R	Rear bolt of front lift.		SP No. 01472330
Front tool carrier	С	Check upper link for wear and damage.		

	1	Г	1	T
Work to be carried or	ut: Ha	ko system maintenance II extended,	√	Specifications:
Component:				
Sweeping unit	С	Check for wear and damage.		
	С	Check sweeping level, adjust if necessary.		
	R	Bearing block (2-broom- system) (2X)		SP No. 01493820
	R	Bushing (2-broom- system) (4X)		SP No.01060940
	R	Bushing (2-broom- system) (4X)		SP No.01060950
	R	Comb (2-broom- system) (2X)		SP No.01493640
Suction mouth	С	Check coarse material flap and Bowden		
		cable as to function and damage.		
	С	Check the rod ends of the suction mouth		SP No. 01498260,
		lift for wear and damage, replace if		SP No. 01492810
		necessary.		
	С	Check rollers, rubber aprons and		SP No. 01472250 (2X)
	(R)	circulation water compartments for wear		SP No. 01470890
		and damage. Defective or worn parts must		SP No. 01470830
		be replaced!		SP No 01470860
	С	Check and if necessary adjust the suction		Distance:
		mouth setting.		at the side 5 mm, at the rear 10 mm
Suction duct	С	Check suction hose for damage and		at the real TO IIIIII
Suction duct		correct seating.		
	С	Check the seal between suction duct and		
		dirt hopper.		
Suction fan	С	Check suction fan for contamination, clean		
		if necessary.		
	С	Check V-belt at the suction fan for correct		
		V-belt tension and damage and, if		
		necessary, re-tighten or replace.		
	С	Check suction fan for vibration, check		
		bearings if necessary.		<u> </u>
	С	Check impeller for wear.		
Hopper flap of the	С	Check seals of the hopper flap for leaks		
dirt hopper		and damage.		
	С	Check impact plate for wear.		
	С	Cover joints and bearing.		
	С	Check exhaust side of hopper flap for		
		contamination.		
Hopper, circulating	С	Hose, cpl. (Circulating water system) If		SP No. 01231950
	(R)	required!		1. 110. 0 120 1000
water system	١, ,,	- - - - - - - - - -		

Work to be carried ou	<u>ıt: Ha</u>	iko system maintenance II extended,	✓	Specifications:	
Component:					
Cab	R	Cab air filter		SP No. 01065540	
	С	Check and if necessary top up the			
		windscreen washing agent level.			
	С	Functional check of heater			
With air conditioning	С	Functional check of air conditioning system			
system					
With air conditioning	С	Check condenser of the air conditioning			
system		system (radiator) for contamination, clean			
oyotom		with compressed air if necessary.			
Wheels / tyres	С	Re-tighten wheel nuts.		180 Nm	
Tyres	С	Check any damage, air pressure and tread			
. j. 55		depth.			
	С	215/ 70 R15		6.0 bar	
	С	225/ 70 R15 C (standard tyres)		5.0 bar	
	С	255/ 65 R16 (all-purpose tyres)		3.0 bar	
	С	285/ 65 R16 C		3.2 bar	
	С	320/ 55-15 T559 (lawn surface tyres)		2.8 bar	
	С	325/ 60 R15		2.5 bar	
Lubrication service:		Door hinges (4x)			
		Front lift cylinder (4x)			
		Front lift (2x)			
		Upper link (2x)			
		Steering cylinder (4x)			
C = Check: function,	seal-	tightness, top up, adjust			
R = Replace, (R) = R	Repla	nce if technically necessary			
Remarks; service info	ormat	ion for the customer:			
Town / city:		Date:			
ĺ					
Signature – Custome	r:				
Signature – Service to	echn	cian:			

Hako-Citymaster 1650 (1491.15) – Hako system maintenance Hako system maintenance I, 500 operating hours (1500 OH, 3500 OH, 4500 OH, 5500 OH, 6500 OH, 7500 OH, 8500 OH, 9500 OH). To be carried out by an authorised Hako service centre. Mach. No.: Operating hrs.: Customer: Work to be carried out: Hako system maintenance I, Specifications: 500 operating hours (1500 OH, **3500 OH**, 4500 OH, 5500 OH, 6500 OH, 7500 OH, 8500 OH, 9500 OH). Component: Read the error memory of the engine **Engine** control unit, delete sporadic errors, repair clear errors if necessary. Check condition of diesel particulate filter and perform service regeneration if necessary. Replace engine oil. approx. 7.2 litres, Fuchs Titan CARGO, 5W-40 Replace engine oil filter. SP No. 01500200 Oil drain screw SP No. 01501190 R Seal of oil drain screw SP No. 01501200 Fuel filter SP No. 01500310 (until WHW14911531403500) Fuel pre-filter SP No. 01500420 (until WHW14911531403500) SP No. 01509030 Fuel filter (from WHW14911531403500) SP No. 01508990 Fuel pre-filter (from WHW14911531403500) R Oil separator crankcase venting SP No. 01500530 SP No. 01500640 R Air filter insert С Check coolant hoses and radiator for leaks Check coolant level, top up if necessary. VW- G13 or similar, e.g. Only top up distilled water or engine Total Glaself Auto Supra. coolant! Check engine, charge air and hydraulic oil Combination radiator for contamination, clean with compressed air if necessary. Check engine bearings for damage, cracks Engine bearing and tight fit. assembly V-ribbed belt C State and function С Check generator for contamination, clean. Generator С Functional and seal tightness check Exhaust system С Functional and seal tightness check Fuel lines Functional and seal tightness check С Air intake pipe

	Work to be carried out: Hako system maintenance I,						
		OH, 3500 OH , 4500 OH, OH, 8500 OH, 9500 OH).					
	500	Cri, 0300 Cri, 9300 Cri).					
Component: Vehicle control system (work hydraulics control unit)	С	Read entries in the work hydraulics control unit, eliminate fault if necessary. Check software status, update software if necessary.					
Vehicle control system (work hydraulics control unit)	С	Read entries in the hydrostatic control unit, eliminate fault if necessary. Check software status, update software if necessary.					
Hydraulics	С	Check hydraulic oil level, top up if necessary. Check hydraulic oil level, top up if necessary. Note: Please note topping up with organic oil or other oils. Do not mix hydraulic oils!		HVLP 46, e.g. Mobiloil DTE 10 Excel			
	С	Check hydraulic pipes and hydraulic hoses for abrasion points and damage.					
Hydraulic cylinder – sweeping unit	С	Functional and seal tightness check					
Lifting cylinder (front power lift)	С	Functional and seal tightness check					
Lifting cylinder (sweeper set-up)	С	Functional and seal tightness check					
Hydraulic pipes of basic unit	С	Functional and seal tightness check					
Hydraulic pipes of implements and attachments	С	Functional and seal tightness check					
Hand pump	С	Check function of the hand pump (raise the dirt hopper or loading platform with the hand pump)					
Chassis / axles	С	Check chassis springs for damage and					
		ease of movement (visual inspection).					
	С	Check shock absorbers for any leaks.					
	С	Check bearing bushes of the axle suspension for cracks and damage (visual inspection).					
	С	Check stop buffers for cracks and damage (visual inspection).					
Steering	С	Functional and seal tightness check					
	С	Check steering cylinder for play. Lubricate steering cylinder (4x).					

Work to be carried or	ut: Ha	ko system maintenance I,	√	Specifications:
500 operating hours		·		
5500 OH, 6500 OH,				
		,		
Component:				
Electrical system	С	Functional check, lighting, blinkers, work functions, horn, etc.		
Electrical lines	С	Check cables (electrical lines) for abrasion		
(cables)		points and damage.		
	С	Check positive and ground connections to		
		the battery and frame for tight fit and		
		abrasion points, clean if necessary.		
		Protect battery terminals with terminal		
	С	grease. Check battery charge condition.		
	C	Test parking brake for proper functioning.		
		rest parking brake for proper functioning.		
Brake	С	Check service brake for proper functioning		
	(R)	and wear and carry out a brake test,		
		replace required parts if necessary.		
	С	Check proportion of water in brake fluid. If		0.5 litres, DOT 4, e.g.
		the proportion of water is greater than 3 %		FTE Type 9368
		the brake fluid must be replaced. Check		
		brake fluid oil level and top up if		
		necessary. Or replace brake fluid every 2 years!		
	С	Check brake hoses for damage.		
Front tool carrier	С	Check upper link for wear and damage.		

Work to be carried or	ut: Ha	ıko system maintenance I,	√	Specifications:
	OH, 3500 OH , 4500 OH,		'	
	•	OH, 8500 OH, 9500 OH).		
		3. i, 3333 3. i, 3333 3. i/i		
Component:				
Sweeping unit	С	Check for wear and damage.		
owedping dim	С	Check sweeping level, adjust if necessary.		
Suction mouth	С	Check coarse material flap and Bowden		
		cable as to function and damage.		
	С	Check the rod ends of the suction mouth		SP No. 01498260,
		lift for wear and damage, replace if necessary.		SP No. 01492810
	С	Check rollers, rubber aprons and		SP No. 01472250 (2X)
	(R)	circulation water compartments for wear		SP No. 01470890
		and damage. Defective or worn parts must		SP No. 01470830
		be replaced!		SP No 01470860
	С	Check and if necessary adjust the suction		Distance:
		mouth setting.		at the side 5 mm,
				at the rear 10 mm
Suction duct	С	Check suction hose for damage and		
		correct seating.		
	С	Check seal between suction duct and dirt		
	<u> </u>	hopper.		
Suction fan	С	Check suction fan for contamination, clean if necessary.		
	С	Check V-belt at the suction fan for correct		
		V-belt tension and damage and, if		
		necessary, re-tighten or replace.		
	С	Check suction fan for vibration, check		
		bearings if necessary.		
	С	Check impeller for wear.		
Hopper flap of the	С	Check seals of the hopper flap for leaks		
dirt hopper		and damage.		
инт порры	С	Check impact plate for wear.		
	C	Cover joints and bearing.		
	С	Check exhaust side of hopper flap for		
		contamination.		
Hopper, circulating	С	Hose, cpl. (Circulating water system) If		SP No. 01231950
water system	(R)	required!		

Work to be carried ou	ıt: Ha	ıko system maintenance I,	✓	Specifications:	
500 operating hours (1500 OH, 3500 OH , 4500 OH,					
5500 OH, 6500 OH, 7500 OH, 8500 OH, 9500 OH).					
0000 011, 0000 011, 1	000	311, 3333 311, 3333 311).			
Component:					
Cab	С	Clean cab air filter			
Jus	C	Check and if necessary top up the		†	
	_	windscreen washing agent level.			
	С	Functional check of heater			
With air conditioning	С	Functional check of air conditioning system	<u> </u>		
system					
oyotom.					
With air conditioning	С	Check condenser of the air conditioning	 		
system		system (radiator) for contamination, clean			
System		with compressed air if necessary.			
	 			_	
Wheels / tyres	С	Re-tighten wheel nuts.		180 Nm	
Tyres	С	Check any damage, air pressure and tread			
,		depth.	<u> </u>		
	С	215/ 70 R15		6.0 bar	
	С	225/ 70 R15 C (standard tyres)		5.0 bar	
	С	255/ 65 R16 (all-purpose tyres)		3.0 bar	
	С	285/ 65 R16 C		3.2 bar	
	С	320/ 55-15 T559 (lawn surface tyres)		2.8 bar	
	С	325/ 60 R15		2.5 bar	
Lubrication service:		Door hinges (4x)			
		Front lift cylinder (4x)			
		Front lift (2x)			
		Upper link (2x)		1	
		Steering cylinder (4x)			
C = Check: function.	seal-	tightness, top up, adjust	L	.ļ	
		ace if technically necessary			
	101	The tree tree tree tree tree tree tree tr			
Remarks; service info	rmat	ion for the customer:			
,					
Town / city:		Date:			
Signature - Custom	er:				
Signature - Service	Signature – Service technician:				

Hako-Citymaster 168	50 (1	491.15) – Hako system maintenanc	е	
•		e II extended, 4000 operating hours (8	000	OH).
To be carried out by a	ın au	thorised Hako service centre.		
Mach. No.:				
Operating hrs.:				
Customer:				
		ako system maintenance II extended,	\checkmark	Specifications:
4000 operating hours	(800	00 OH).		
Component:				
Engine	С	Read the error memory of the engine		
		control unit, delete sporadic errors, repair		
	С	clear errors if necessary. Check condition of diesel particulate filter		
		and perform a service regeneration.		
	R	Replace engine oil.		approx. 7.2 litres, Fuchs
				Titan CARGO, 5W-40
	R	Replace engine oil filter.		SP No. 01500200
	R	Oil drain screw		SP No. 01501190
	R	Seal of oil drain screw		SP No. 01501200
	R	Fuel filter		SP No. 01500310
	R	(until WHW14911531403500) Fuel pre-filter		SP No. 01500420
	1	(until WHW14911531403500)		SF No. 01300420
	R	Fuel filter		SP No. 01509030
		(from WHW14911531403500)		
	R	Fuel pre-filter		SP No. 01508990
	R	(from WHW14911531403500) Oil separator crankcase venting		SP No. 01500530
	R	Air filter insert		SP No. 01500640
	R			SP No. 01500040
	С	Safety cartridge air filter Check coolant hoses and radiator for		01 110. 01000700
		leaks.		
	С	Clean EGR system (valve and main		
		radiator).		
	R	Replace engine coolant, VW- G13.		VW- G13 or similar, e.g.
		Note: Only use distilled water for mixing. Tap or well water does not meet the		Total Glaself Auto Supra.
		required quality standards that guarantee		
		the coolant is fully functional.		
Combination radiator	С	Check engine, charge air and hydraulic oil		
		for contamination, clean with compressed		
		air if necessary.		
Engine bearing	С	Check engine bearings for damage, cracks and tight fit		
assembly				
V-ribbed belt	С	State and function		
Generator	С	Check generator for contamination, clean.		
Exhaust system	С	Functional and seal tightness check		
Fuel lines	С	Functional and seal tightness check		
Air intake pipe	С	Functional and seal tightness check		
		, in the second		
		i		

Work to be carried ou 4000 operating hours		ko system maintenance II extended,	√	Specifications:
	(800	Ю ОП). Г		
Component: Vehicle control	С	Read entries in the work hydraulics control		
	C	unit, eliminate fault if necessary. Check		
system (work		software status, update software if		
hydraulics control		necessary.		
unit)		·		
Vehicle control	С	Read entries in the hydrostatic control unit,		
system (work		eliminate fault if necessary. Check		
hydraulics control		software status, update software if necessary.		
unit)		niecessary.		
Hydraulics	R	Hydraulic oil filter		SP No. 01493180
	R	Venting filter hydraulic tank		SP No. 01497120
	С	Remove hydraulic oil sample and send it		SP No. 00009720
		in.		
		If the sample result is negative, the		
		hydraulic oil must be replaced		
	R	prematurely! Hydraulic hose to bypass valve		SP No. 01501600
	R	Hydraulic hose to bypass valve		SP No. 01501740
	С	Check hydraulic oil level, top up if		HVLP 46, e.g. Mobiloil
		necessary. Note: Please note topping up		DTE 10 Excel
		with organic oil or other oils. Do not mix		DIE 10 EXOCI
		hydraulic oils!		
	С	Check hydraulic pipes and hydraulic hoses		
		for abrasion points and damage.		
Hydraulic cylinder –	С	Functional and seal tightness check		
sweeping unit				
Lifting cylinder (front power lift)	С	Functional and seal tightness check		
Lifting cylinder	С	Functional and seal tightness check		
(sweeper set-up)		_		
Hydraulic pipes of	С	Functional and seal tightness check		
basic unit				
Hydraulic pipes of	С	Functional and seal tightness check		
implements and				
attachments				
Hand pump	С	Check function of the hand pump (raise		
		the dirt hopper or loading platform with the		
		hand pump).		
Chassis / axles	С	Check chassis springs for damage and		
		ease of movement (visual inspection).		
	С	Check shock absorbers for any leaks.		
	С	Check bearing bushes of the axle		
		suspension for cracks and damage (visual inspection).		
	C	Check stop buffers for cracks and damage (visual inspection).		
	R	Rubber- Metal- Buffer front axle (2X)		SP No. 01490530
	•	•		

Work to be carried of 4000 operating hours		ko system maintenance II extended, 0 OH).	√	Specifications:
Component:	Ì	,		
Steering	С	Functional and seal tightness check. Lubricate steering cylinder (4x).		
	С	Check steering cylinder for play.		
	С	Remove covers (plastic) of the articulated joints (top + bottom) and check the joints underneath for dirt, if necessary clean dry with a brush.		
	С	Check bearing bushings (top + bottom) of the articulated joints for damage		
Electrical system	С	Functional check, lighting, blinkers, work functions, horn, etc.		
Electrical lines (cables)	С	Check cables (electrical lines) for abrasion points and damage.		
	С	Check positive and ground connections to the battery and frame for tight fit and abrasion points, clean if necessary. Protect battery terminals with terminal grease.		
	С	Check battery charge condition.		
Brake	C (R)	Check service brake for proper functioning and wear and carry out a brake test, replace required parts if necessary.		
	С	Test parking brake for proper functioning.		
	С	Check proportion of water in brake fluid. If the proportion of water is greater than 3 % the brake fluid must be replaced. Check brake fluid oil level and top up if necessary. Or replace brake fluid every 2 years!		0.5 litres, DOT 4, e.g. FTE Type 9368
	С	Check brake hoses for damage.		
Front tool carrier	С	Check upper link for wear and damage.		

Work to be carried or	ıt. Ha	l ko system maintenance II extended,	√	Specifications:
Component:	1			opeomedaene.
Sweeping unit	С	Check for wear and damage.		
ewooping arm	С	Check sweeping level, adjust if necessary.		
Suction mouth	С	Check coarse material flap as to function and damage. Replace Bowden cable.		SP no. 01167520
	С	Check the rod ends of the suction mouth lift for wear and damage, replace if necessary.		SP No. 01498260, SP No. 01492810
	C (R)	Check rollers, rubber aprons and circulation water compartments for wear and damage. Defective or worn parts must be replaced!		SP No. 01472250 (2X) SP No. 01470890 SP No. 01470830 SP No 01470860
	С	Check and if necessary adjust the suction mouth setting.		Distance: at the side 5 mm, at the rear 10 mm
Suction duct	С	Check suction hose for damage and correct seating.		
	С	Check seal between suction duct and dirt hopper.		
Suction fan	R	V-belt suction fan		with Casappa motor SP No. 01220790 with Dana motor SP No. 48601960001
	С	Check suction fan for contamination, clean if necessary.		
	С	Check V-belt at the suction fan for correct V-belt tension and damage and, if necessary, re-tighten or replace.		
	С	Check suction fan for vibration, check bearings if necessary.		
	С	Check impeller for wear.		
	R	Replace hydraulic hoses from suction fan		SP No. 01493620 SP No. 01493670
Hopper flap of the dirt hopper	С	Check seals of the hopper flap for leaks and damage.		
	С	Check impact plate for wear.		
	С	Cover joints and bearing.		
	С	Check exhaust side of hopper flap for contamination.		
Hopper, circulating water system	C (R)	Hose, cpl. (Circulating water system) If required!		SP No. 01231950

vvork to be carried of	it: Ha	iko system maintenance ii extended,	•	Specifications:			
Component:							
Cab	R	Cab air filter		SP No. 01065540			
	С	Check and if necessary top up the					
		windscreen washing agent level.					
	С	Functional check of heater					
Mith air conditioning	С	Functional check of air conditioning system					
With air conditioning		If unctional check of all conditioning system					
system							
With air conditioning	С	Check condenser of the air conditioning					
system		system (radiator) for contamination, clean					
		with compressed air if necessary.					
Windscreen washing	С	Check and if necessary top up the					
agent		windscreen washing agent level.					
Wheels / tyres	С	Re-tighten wheel nuts.		180 Nm			
Tyres	С	Check any damage, air pressure and tread		100 11111			
i yies	~	depth.					
	С	215/ 70 R15		6.0 bar			
	С	225/ 70 R15 C (standard tyres)		5.0 bar			
	C	255/ 65 R16 (all-purpose tyres)		3.0 bar			
	С	285/ 65 R16 C		3.2 bar			
	С	320/ 55-15 T559 (lawn surface tyres)		2.8 bar			
	С	325/ 60 R15		2.5 bar			
	C	323/ 60 K13		2.5 Dai			
Lubrication service:		Door hinges (4x)					
		Front lift cylinder (4x)					
		Front lift (2x)					
		Upper link (2x)					
		Steering cylinder (4x)					
C = Check: function.	seal-	tightness, top up, adjust					
		ace if technically necessary					
		,					
Remarks; service info	rmat	ion for the customer:					
Tromaine, corrido imo	71111041						
Town / city: Date:							
,							
Signature – Customer:							
Signature – Service technician							
Signature – Service technician:							