

# Vahva Jussi 320

## 4WD user manual & spare parts list



MANUFACTURER: Kreisi Metall

2011 Kreisi Metall

## Foreword!

Please follow the enclosed instructions closely, and your assembly should be effortless and quick. For your convenience we have pre-assembled and packaged as many components as possible. The instruction manual has to be enclosed with the trailer at all times, also after reselling to new owners. This instruction manual will help you to use 4 WD attachment rightly and for a long working period.

The manufacturer reserves the right to modify and correct the product without pre notification.

The manufacturer does not take the responsibility for intensional missusage or wrong working methods.

Pay attention to regular maintenance. If any question arise you can't solve by yourself, take contact the producer or the authorized dealer

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## **Safety and working instructions**

For your own and other safety please read carefully the following information.

- DO NOT use the 4WD before you are convinced that nobody is near working area of the trailer and crane.
- When reversing the trailer, driver has to be convinced that nobody is behind the trailer.
- The operator of the 4WD drive has to have a clear overview from the working area.
- It is prohibited to go beneath the trailer when operating the 4WD.
- Check that 4WD rollers are regulated to the right height (10mm gap between roller and tire) and tire pressure is max 1kPa. If the gap is too big or too small follow the instructions on page nr. 7.
- Before driving check that no tools or equipment are located on or under the trailer.
- The more logs you load on the trailer the more effectively the 4WD will work.
- 4WD main purpose is to assist movement of ATV,UTV or other vehicle on difficult terrain or steep climbs.
- 4WD can be also used as a break when moving down hill. If you push the switch in reverse during movement.
- The 4WD has the pushing force of 650 kg and maximum working speed up to 3 km/h.
- If the speed exceeds 3 km/h the 4WD roller moves automatically up.
- Never use 4WD with a bigger load on the trailer than is allowed by the manufacturer, otherwise the warranty of the trailer will expire.

## 4WD switch and electrics installment

1) The 4WD switch is usually fastened to the left hand of ATV handle bar(see picture), then you can operate the throttle and 4WD simultaneously.



2) The switch wires are connected to the ATV battery pack. **YELLOW** wire is connected to the battery **MINUS -** side and **RED** wire to the battery **PLUS +** side.

3) The wires are guided under the seat to the back end and connected to the 4WD electric section of manipulator.

4) The oil back flow whose must be connected between the hydraulic unit and distributor. Otherwise the hydraulic engines of 4WD will be damaged. If you are using tractor hydraulics you have to have a back flow to the oil tank.



### Maintenance table.

OBJECT	ACTION		
	Maintenance interval, working hours		
	8 h or after working shift	40 h or after working week	250 h
4 WD system	Check cylinders and leakages, grease slide bearings and adjust the height of the 4WD rollers if necessary	Check that bolts and whoses are tight and are not damaged.	Check the condition of primary structures

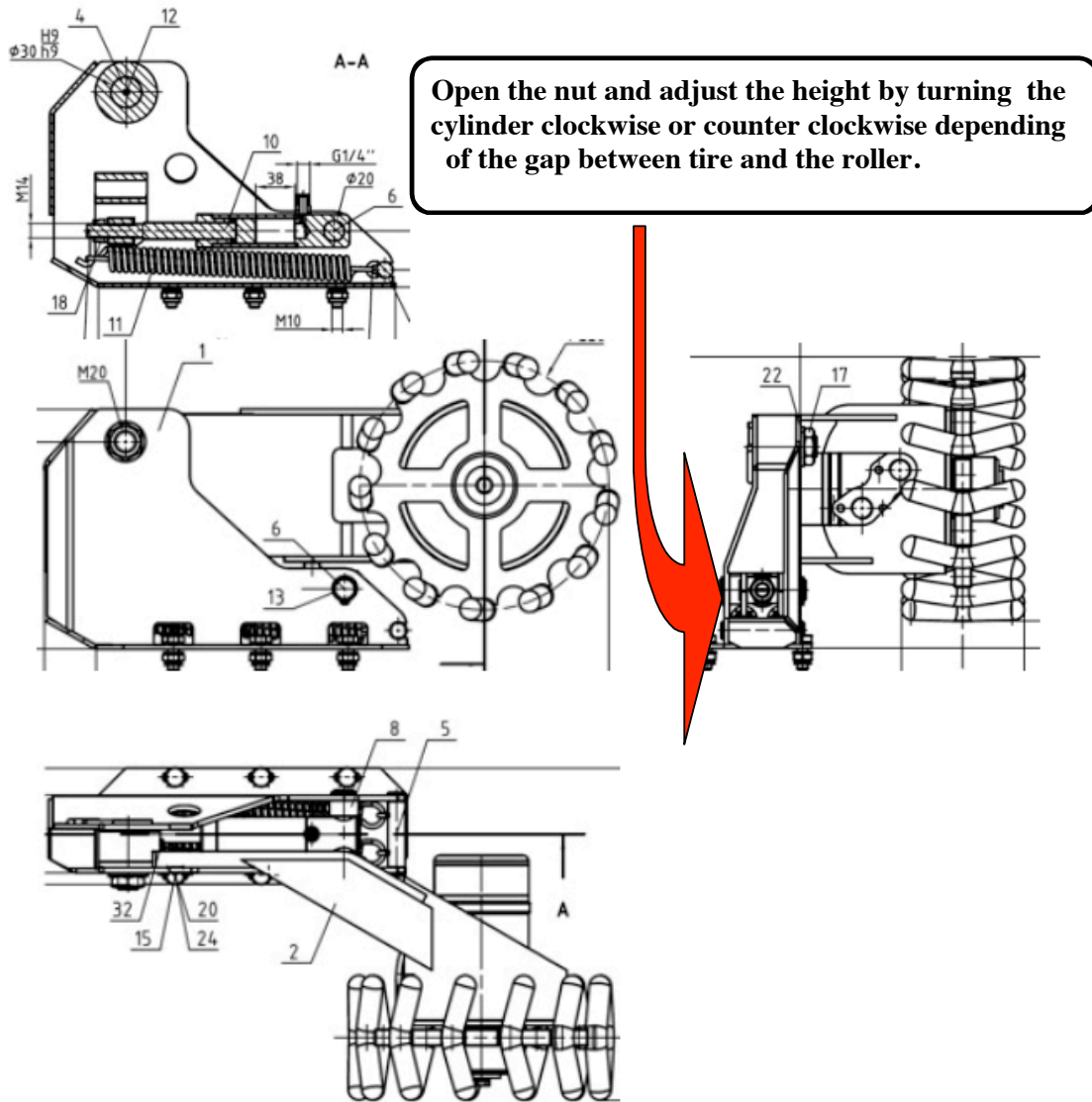
### Lubrication points for 4WD (SEE DRAWING NO.1)

DEVICE	Lubricating points(GP)	Action	Interval, h
1. 4WD slide bearings	12	Greasing	8
2. 4WD moving arm	24	Greasing	8

### 4WD PARTS AND SPECIFICATIONS

24	12	Seib	ZN/C	A 10.5	DIN 433	0.03
23	2	Seib	ZN/C	A 13	DIN 125	0.01
22	1	Seib	ZN/C	A 21	DIN 125	0.02
21	1	Vedrusseib	ZN/C	A B	DIN 127	0.00
20	6	Mutter	8 ZN/C	M10	DIN 985	0.08
19	2	Mutter	8 ZN/C	M12	DIN 985	0.04
18	1	Mutter	8 ZN/C	M14	DIN 985	0.03
17	1	Mutter	8 ZN/C	M20 X 1,5	DIN 936	0.04
16	1	Polt	8.8 ZN/C	M8 X 25	DIN 933	0.02
15	6	Polt	8.8 ZN/C	M10 X 25	DIN 933	0.16
14	2	Koonuspea sise.kk polt	8.8 ZN/C	M12 X 4.5	DIN 7991	0.10
13	2	Stopperrõngas	SS 1774-04	Ø20 X 1.2	DIN 471	0.00
12	2	Määrdenippel	ZN/C	AM 6	DIN 71412	0.01
11	2	Tõmbevedru	SS 1774-04	Ø4 X 25 X 170		0.49
10	1	Hüdrosilinder		HC-25-16-38		0.85
9	1	Hüdro mootor		OMP 160	Sauer-Danfoss	6.20
8	2	Toru Ø26.9x3.2	S235JRH	14		0.05
7	1	SEIB Ø9/35-4	S235JRG2	1240.00.00.02		0.03
6	1	TELG Ø25-81	Imatra 550	1240.00.00.01		0.20
5	1	TELG		1240.05.00.00		0.12
4	1	TELG		1240.04.00.00		0.34
3	1	RULL		1240.03.00.00		6.74
2	1	HM PESA		1240.02.00.00		7.48
1	1	KORPUS		1240.01.00.00		4.33

**DRAWING NO.1**



## Troubleshooting

<b>TROUBLE</b>	<b>POSSIBLE CAUSE</b>	<b>REMEDY</b>
4WD WORKING MOVEMENT SLOW	PUMP RUNNING TOO SLOWLY	CHECK PUMP ROTATING SPEED
	NOT ENOUGH OIL	ADD OIL (AIR-BLEEDING)
	FAULTY PUMP	CHANGE OR GET THE PUMP
	LEAKS OR OBSTRUCTIONS IN OIL LINES	INSPECT AND CLEAN OIL LINES
	OIL TOO THICK	CHANGE TO A THINNER (PROPER) OIL GRADE
4WD WORKING MOVEMENTS POWERLESS	NOT ENOUGH OIL	ADD OIL (AIR BLEEDING)
	FAULTY PUMP	CHANGE OR GET THE PUMP
	FAULTY OF RELIEF OR SHOCK VALVES OR WRONG ADJUSTMENT	CHANGE THE RELIEF OR SHOCK VALVES OR ADJUST IN
	FAULTY CONTROL VALVE	CHANGE OR GET THE VALVE
	FAULTY CYLINDERS OR SEALS	CHECK THE CYLINDERS AND CHANGE THE SEALS
4WD MOVEMENTS ARE JERKY	AIR IN HYDRAULIC SYSTEM	CHECK OIL LEVEL, BLEED AIR FROM SYSTEM
		CHECK FOR OBSTRUCTIONS OR LEAKS ON THE INLET SIDE
	FAULTY PUMP	INSPECT THE PUMP AND GET IT FIXED



## CE-Konformity declaration of the producer

Hereby the producer

**KREISI METALL OÜ (reg.nr: 11236295)**

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declares that **4WD** application used on **Vahva Jussi 320** trailer  
produced and launched on to the market corresponds to the standards  
and demands of item 89/392 EEC.

Lääne-Virumaa, Estonia  
(place)

01.01.2011  
(date)