



MASH TL3 BLADE TMA

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MAINTENANCE INFORMATION FOR VERDEGRO BLADE-TMA



VERDEGRO®

READ BEFORE USE!

ONLY AUTHORISED PERSONS ARE ALLOWED TO OPERATE THE MACHINE!

IMPROPER USE CAN CAUSE SERIOUS INJURIES!

All maintenance and repair should be done by the manufacturer or under their supervision by an official distributor.



12 Inspection

12.1 Inspection table TMA installed to air suspension trucks

General inspection points (If they are in bad condition, use of the BLADE-TMA is forbidden)	Every application	Weekly	Monthly
Level hydraulic oil		X	
Condition hydraulic cylinders	X		
Leakage hydraulic	X		
Condition of the hydraulic hoses	X		
Inspection of BLADE-TMAs inside the cut and bend mechanism (opened and closed)		X	
Inspection visually and manually of the sensors are stuck! <i>See p.69 for max. torque</i>			X
Visual inspection of there is any moisture is in the electric cabinet (<i>every 12 month replace the moisture bag</i>)			X
Visual inspection of both racks, no damage or were out is shown		X	
Inspection visually for cracks on mid center warning plate /sign		X	
Operate the BLADE-TMA fully down & extend, fully retract and up, check all functions and check all led's on cabin controller are working well			X
Visual inspection of shafts, bolts and structural bearings		X	
Operation-end position defectors	X		
Always check if green LED is shown at cabin controller in operation position fully down and extended !	X		
Visual inspection loose machine parts	X		
Cracks			X
Damage on the cushion	X		
Horizontal position, cushion down		X	

Table 2


12.2 Inspection table TMA installed to spring suspension trucks

<i>General inspection points (If they are in bad condition, use of the BLADE-TMA is forbidden)</i>	<i>Every application</i>	<i>Weekly</i>	<i>Monthly</i>
<i>Level hydraulic oil</i>		X	
<i>Condition hydraulic cylinders</i>	X		
<i>Leakage hydraulic</i>	X		
<i>Condition of the hydraulic hoses</i>	X		
<i>Inspection of BLADE-TMAs inside the cut and bend mechanism (opened and closed)</i>		X	
<i>Visual inspection of both racks, no damage or were out is shown</i>	X		
<i>Operate the BLADE-TMA fully down & extend, fully retract and up, check all functions and check all led's on cabin controller are working well</i>	X		
<i>Visual inspection of shafts, bolts and structural bearings</i>		X	
<i>Operation-end position defectors</i>	X		
<i>Always check if green LED is shown at cabin controller in operation position fully down and extended !</i>	X		
<i>Visual inspection loose machine parts</i>	X		
<i>Cracks</i>	X		
<i>Damage on the cushion</i>	X		
<i>Horizontal position, cushion down</i>		X	

Table 3

12.3 Control position Crash Cushion

Verify proper operation / adjustment of the cushion on a straight road surface without any height differences. After unfolding the cushion, the BLADE-TMA cushion tubes and beams should be horizontal.

	<p>If the machine is not leveled horizontal, directly contact the installer or manufacturer; use prohibited!</p>
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12.4 Use of the machine in cold

- Take into account delays in cold (-5° or colder)
- Ensure that there is no snow, ice or dirt on the safety switches.
- Ensure that there is no snow, ice or dirt on the frame and cushion.
- Protect the machine from the snow and ice when not in use.

12.5 High voltage

Do not use or touch this machine within:

- 50 Meters of power lines on steel towers
- 25 Meters of low voltage lines on wooden poles
- 5 Meters in contact Lines of railway or tramway etc.

13 Maintenance

Scheduled maintenance keeps the BLADE-TMA in safe and reliable condition. The maintenance schedule and checklist for the annual inspection shows what measurements are required. Read for the maintenance of the BLADE-TMA the entire manual carefully!. If in doubt about the maintenance work, it is better that it is carried out by the manufacturer. If not, than it must be done under supervision of the manufacturer, for example by an official distributor. Distributors can be found on the website www.verdegro.com / www.BLADE-TMA.com

13.1 Checking hydraulic oil

The BLADE-TMA has an oil level in the tank.

- Open the hydraulic compartment
- Make sure the machine is reasonably flat
- Before opening the cap or around the filling is clean, clean it if necessary.
- Add the oil with a special pump with filter. The use of the oil directly from the can to pour.

13.2 Service schedule

Term	Actions
Daily or before any start up	<i>Check level hydraulic oil</i>
	<i>Check bearings parts</i>
	<i>Check hydraulic hoses and cylinders, pipes and fitting</i>
	<i>Check operation of emergency and safety devices</i>
	<i>Piston rods outrigger daily check for debris, leaks or damage. If severely polluted or clean brine is presents.</i>
	<i>Try all in normal position</i>
Each 8 weeks or at latest each 6 months	<i>Lubricate all bearings and sliding surfaces</i>
	<i>Turntable bolts tightened</i>
	<i>Level device bolts tightened</i>
	<i>Check condition of cylinders and outrigger</i>
Every 6 months	<i>Check of total BLADE-TMA</i>
Every 12 months	<i>Annual inspection. + Full service preventive replacement valves and seals.</i>
	<i>Replace the moisturizer that is placed near the electric board Available by Verdegro Group/BLADE B.V.</i>
Cushion	<i>Check daily for damages</i>

Table 4

13.3 Maintenance details

HYDRAULIC

Oil volume : 0.8 Gallon (3 liter)

Oil quantity : (applications of -10° to +50°) UNIVIS 32

GUIDED BEARINGS

Multi duty grease EP2 (example Shell alvania EP2/ Esso beacom EP2)

SLIDEWAYS Racks

Only clean

Slideways Tubes inside

Only clean the surface

TURNTABLE

Multi duty grease EP2 (example Shell alvania EP2/ Esso beacom EP2)

13.4 Torque index Tension

Dimensions thread	Of torque for bolt with thread in hermetically ISO Nm		
	Hex bolt Class 8.8	Hex bolt Class 10.9	Hex bolt Class 12.9
M4	2,8	4,0	4,9
M5	5,7	7,9	9,5
M6	9,7	13,7	16,2
M8	23,5	33,3	39,2
M10	47,1	65,7	79,4
M12	81,4	114,7	137
M14	130	181	216
M16	196	280	333
M18	270	382	461
M20	382	539	647
M22	519	730	873
M24	662	932	1118
M30	1324	1863	2236

Table 5

13.5 Max torque index for sensors!

M12	Max. 12Nm
M18	Max. 30Nm



FOR TECHNICAL SUPPORT PLEASE CONTACT OUR ELECTRONICS TEAM

SERVICE PLANNER

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Quality
ISO 9001



Health &
Safety
ISO 45001



Environment
ISO 14001

