

TADANO

Publication no. ATF-650 XL- (U) -1D

Operation and Maintenance Manual

Crane Carrier

Model

ATF-650 XL

Applicable Serial No. 50~

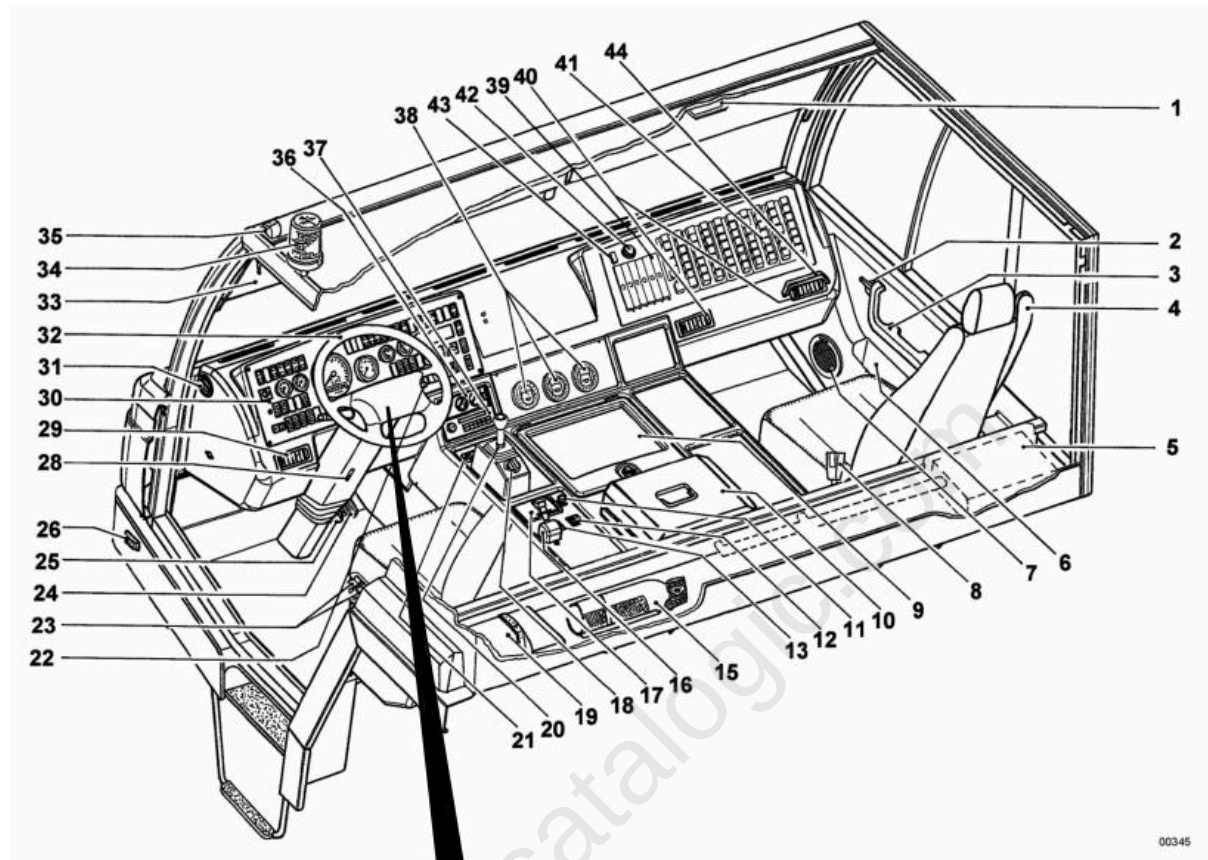
[!] DANGER

**Read this manual before operating. Keep this manual
in the crane carrier cab for further reference.**

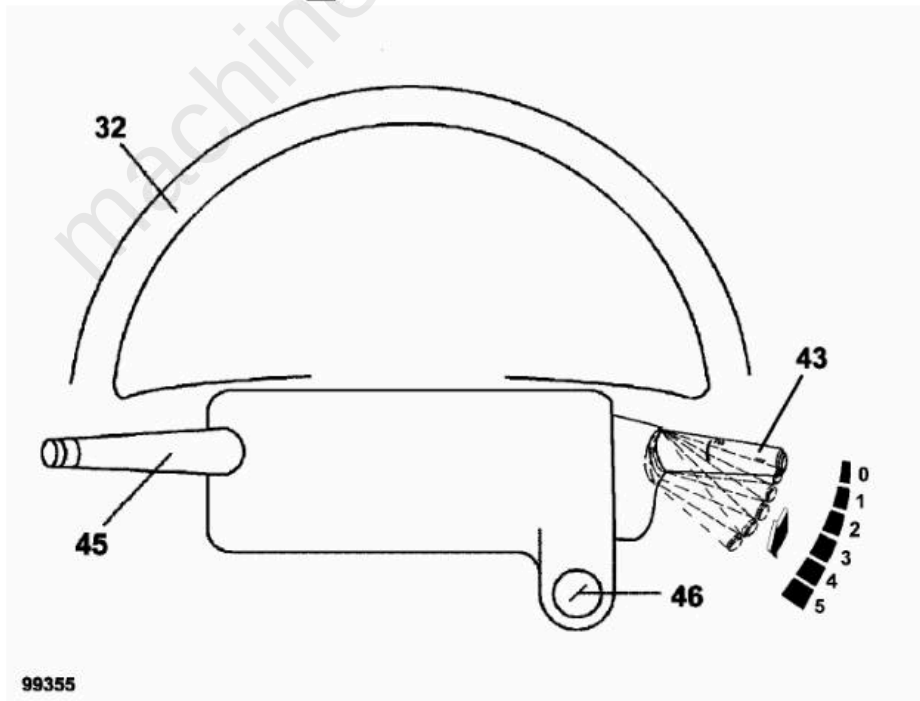
Tadano Ltd.

Layout of Controls

Lower Structure Controls



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Grease joints and pins and all movable components with lubricating oil. Make sure that these parts move freely and are easy to operate.

These components are, e.g.:

- Joints of the folding access steps on the left and right;
- Hinges of the cover lid below the driver's cab,
- Hinges of the engine servicing lid.

The mechanical components of the door locks also require regular care. The closing cylinders should be treated with a graphited agent, preferably before the cold season begins. It is better to treat door seals and other rubber components with acid-free grease or French talc before the cold season begins.

Warm water heating

Heat exchanger

After having removed the rear panel, lifted off the cover with air distributor and released the hose connections, the heat exchanger can be pulled upwards and out. It is advisable to rinse it thoroughly on the water end at all main servicing intervals (approx. 3 - 5 years) to ensure that chalk and iron deposits are removed.

The air fins should be blown out at regular intervals of 500 service hours using compressed air in the direction opposite to the air supply. This can be performed while the heat exchanger remains mounted. However, the air cleaner and the blower fan must be removed to this effect.

Blower fan

The blower fan slide-in module can be pulled out to the back after the rear panel has been removed. To reach an optimum service life, the electric motor and the fan wheel must be blown out gently with compressed air at regular intervals of 500 service hours. (Contamination reduces the electric motor's service life and, due to imbalances on the fan wheel, may result to vibrations and consequently to development of noise).

[!] ATTENTION

[!] Make sure that the position of any balancing clips on the impeller is not changed!

Air cleaner

The air cleaner can be replaced through the fresh air port when the flap is set to "fresh air". It must be checked for contamination at regular intervals. A servicing interval of approx. 3 months or 9300 miles (15,000 km travelled) is recommended for filter replacement.

The servicing intervals depend on the local operating conditions and may be subject to fluctuations.

A severely contaminated air cleaner may result in insufficient demisting of the windows.

Steering

◆ Regular maintenance work and inspections have been marked "X" in the columns "Service hours". Work and inspections to be effected at different intervals have been specified in the column "Remarks".

Assemblies / Maintenance work	Service hours						Remarks
	10	125	250	500	1000	2000	
Grease the bearing points of the guide levers.					X		

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Terms used in the diagram, in alphabetic order

Achse - Axle	FBA - Air accumulator parking brake
Anschluss Konstantdrossel Motor - Connection for const. throttle, engine	Getriebe - Gearbox
BBA – Service brake system	Motorbremse – Engine brake
Drehdurchführung - Rotary coupling	Oberwagen - Superstructure
Edelstahlrohr - Special steel pipe	Spk-Br. - Spreading wedge brake

TECHNICAL DATA OF BRAKE SYSTEM:

Switch-off pressure: 10 ± 0.2 bar, circuits 1 and 2
 Switch-on pressure: 8.5 to 9.5 bar, circuits 1 and 2
 Design pressure : 8.5 bar, 1st and 2nd axles

The brake pressure of axles 3 and 4 is limited to 5.5 ± 0.2 bar

Pressure limitation, circuits 3 and 4 : $8.5_{-0.4}$ bar

Brake circuit 1: 3rd and 4th axles

Brake circuit 2: 1st and 2nd axles

The brake system is equipped with polyamide pipe according to DIN standard 74324.

(KG) = Connection for clutch and gearbox

(NV) = Connection for auxiliary equipment

Y011 = Actuation of parking brake from superstructure

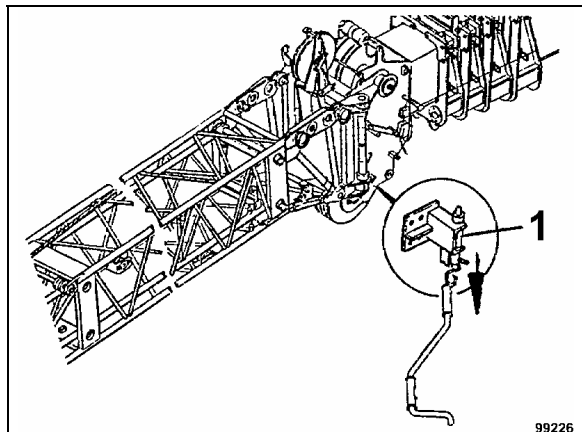
The listed parts are specified in conjunction with the individual assemblies!

Item	Designation	Qty.	Item	Designation	Qty.
1	Air compressor	1	16.1	Overload protection relay valve	2
2	Pressure control unit/air drier	1	19	Air pressure gauge	2
3	4-circuit protection valve	1	20	Pressure switch	5
4	Two-circuit brake valve	1	21	Pressure switch	1
5	Handbrake valve	1	24	Silencer	4
7	Air tank, 5 l	1	24.1	Silencer	1
8	Air tank, 20 l	1	28	Test connector	9
8.1	Air tank, 40 l	1	28.1	Test connector	4
8.2	Air tank, 60 l	2	30	Filler socket	1
9	Drain valve	5	31	3/2-way solenoid valve	2
10	Brake cylinder, 20"	6	32	Two-way valve	3
11	Air-accumulator brake cylinder 20/24"	2	33	Check valve	2
11.1	Air-accumulator brake cylinder 18/24"	2	34	Air tank, 10 l	1
11.2	Air-accumulator brake cylinder 18/16"	2	36	Electric control system	1
15	Pressure limiting valve	1	37	Rod-type sensor	2
15.1	Pressure limiting valve	1	38	Solenoid valve	4
16	Relay valve	2	39	Rod-type sensor	2

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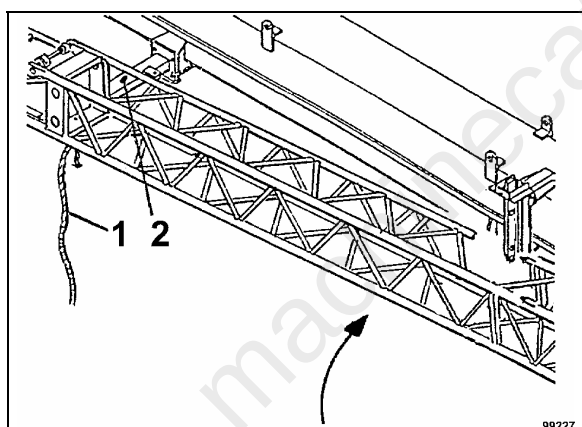
13. Release the lock pin (1) (stopper) by means of the hook on the crank handle (pull down).



14. Use the guide or the guy rope (1) to swing the jib round carefully, along the longitudinal side of the telescopic boom.

[NOTICE]

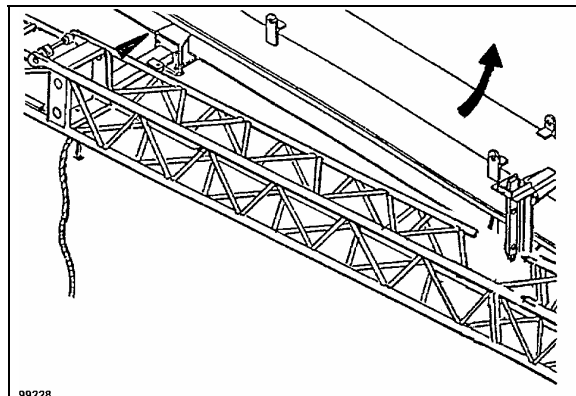
◆ Use the guide and/or the guy rope to fix the jib so that the jib position in front of the transporting support (2) on the superstructure is reached.



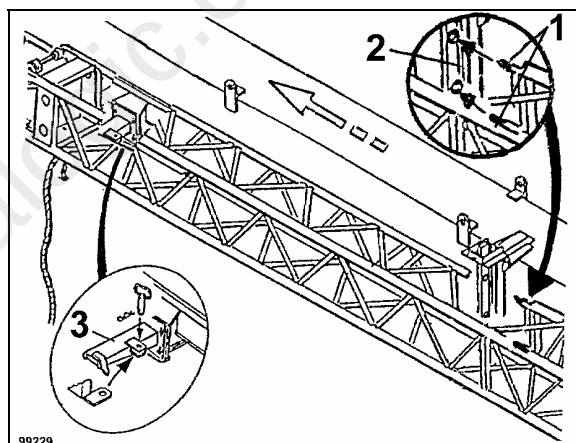
15. Elevate the telescopic boom slowly and carefully so that the jib slides onto the transporting support and comes to rest on the side of the telescopic boom in this position.

[NOTICE]

◆ Check whether the jib is completely folded onto and/or rests on the transporting support.



16. Retract telescopic boom carefully so that the two retention pins (1) can be inserted into the bore-holes of the transporting support (2) and that the jib can be slid onto the transporting support (3), secured with pins and locked.



17. Actuate the elevating mechanism to lower the telescopic boom in its lowest position.

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FOR TECHNICAL DATA OF BRAKE SYSTEM, REFER TO BRAKE SYSTEM OF CHASSIS

The brake system is equipped with nylon pipe according to DIN 74324.

Connector, rotary passage

Table of functionalities (not for materials planning)

Item	Description	Qty.
1	Single-circuit brake valve	1
2	Pressure switch	1
3	Pressure gauge	1

Full Version Available

Tadano ATF 650XL All Terrain Crane Operator Manual

Tadano ATF 650XL all terrain crane operator manual covering controls, safe operation, travel and daily checks and care. Instant PDF download.

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Book No: ATF-650 XL- (U) -1D · File Pages: 855 · File Count: 1 · File Language: English