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# INTEGRAL FORK POSITIONER WITH INTEGRATED SIDE SHIFT Type 678

## INSTRUCTIONS MANUAL FOR USE in compliance with the EEC COUNCIL DIRECTIVE 2006/42/CE dated 17/05/2006

**WARNING** Read this manual very carefully before starting-up the machine.

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#### **1. USE AND UPKEEP OF THIS MANUAL**

This "Instructions Manual for Use" (hereinafter called Manual) is issued together with the A.T.I.B. equipment – INTEGRAL FORK POSITIONER WIH INTEGRATED SIDE SHIFT Type 678, in compliance with the EEC COUNCIL DIRECTIVE 2006/42/CE dated 17/05/2006 and further addenda.

The indications given below are essential for a correct use of the equipment and the personnel who will carry out installation, use, maintenance and repair operations must be informed thereof.

This Manual must be considered as an integral part of the equipment and must be kept until the said equipment is dismantled in an accessible, protected and dry area and it must be available for a rapid consulting.

Should this manual go astray or get damaged, the user may ask the machine builder for a copy.

The machine builder reserves the right to modify this manual without warning and without being under the obligation of updating the previously distributed copies.

The machine builder considers himself relieved from all responsibility in case of:

- improper use of the equipment;
- use of the equipment carried out by untrained staff;
- use not accepted by national and international norms;
- lack of the expected maintenance operations;
- unauthorized operations or modifications;
- use of spare parts that are not original and/or not specified for this model;
- failure to adhere, either totally or partially, to these instructions;
- unusual events.

## 2. IDENTIFICATION OF THE ATTACHMENT

2	ΤΙΡΟ-ΤΥΡΕ-ΤΥΡΕ ΤΥΡ-ΠΡΟ	PORTATA NOMINALE CAPACITE NOMINALE	COPPIA MAX - MAX TORQUE
3	CODICE REFERENCE CODE	NOMINAL CAPACITY Kg - mm TRACKRAFT CAPACIDAD NOMINAL	
	MATRICOLA N - MATRICULE NR	PRESSIONE MAX DI ESERCIZIO PRESSION MAX DE SERVICE MAX OPERATING PRESSURE	da N. m.
4	SERIAL N - MATRIKEL N - MATRICULA N ANNO DI COSTRUZIONE ANNEE DE FABRICATION YEAR OF MANUFACTORE - BALIJAHR	MAX BETRIEBSDRUCK bar PRECION MAX DE TRABAJO	<u>eltram</u>
	AND DE FABRICACION PESO - POIDS - WEIGHT Kg	nota: CSSERVARE I LIMITI DI PORTATA DELL'INSIEME CARRELLO CON ATTREZZATURA	DELLO (BS) ITALIA
5	SPESSORE - EPAISSEUR - THICKINESS	note: RESPECTER LES LIMITES DE CAPACITE DE L'ENSEMBLE CHARJOT + ACCESSOIRE warning: RESPECT THE RATED CAPACITY OF TRUCK AND A TTACHMENT COMBINED	Tel. +39 (030) 9771711 Fax. +39 (030) 9719432
6	CENTRO DI GRAVITA'- CENTRE DE GRAVITE' CENTRO DI GRAVITA'- CENTRE DE GRAVITE' CENTRO DE GRAVEDAD	benerkung: EINHALTEN DIE GEWICHTSGRENZEN DES STAPLER SOWIE DES GERAETES nota: OBSERVAR LOS LIMITES DE CAPACIDAD DEL CONJUNTO CARRETILLA-EQUPO	

#### 1. Type

7

It identifies the model of the equipment as shown in the catalogue.

#### 2. Code

It identifies the equipment order code.

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#### 3. Series N°

It progressively identifies the individual equipment.

The series number has been stamped should the tag go missing or be damaged. Always refer to the series number for any kind of information.

#### 4. Year of construction

It indicates the year of construction.

#### 5. Weight

It indicates the Q weight of the equipment in kg.

#### 6. Thickness

It indicates the thickness of the equipment in mm.

#### 7. Centre of gravity

It indicates the distance in mm of the equipment CG center of gravity from the fork holding plate table.

#### 8. Nominal capacity

It indicates the maximum P load applicable to the hoisting equipment and the maximum CC barycentric distance of the load itself.

#### 9. Hydraulic working pressure

Not applicable to this equipment.

#### 10.Max. couple

Not applicable to this equipment.

## 3. DESCRIPTION OF THE ATTACHMENT

A.T.I.B. – INTEGRAL FORK POSITIONER WITH INTEGRATED SIDE SHIFT Type 678 has been designed and manufactured to the regulation of the interaxis of the forks fork centres through two hydraulic cylinders an lateral shifting movement through another hydraulic cylinder.

This equipment must be applied directly on the mast of the fork lift and connected to the distributor by means of a hydraulic circuit; then you can mount other attachments on it. The positioning movement is carried out through two hydraulic cylinders which act directly on the two plates to which the forks are applied.

The side shifting movement is carried out through one hydraulic cylinder integrated in the attachment

The coupling components of the fork holding plate are manufactured in compliance with the ISO 2328 norm.

To connect attachment and mast there are 2 possible construction alternatives:

- brackets welded to the attachment (drawings and structural dimensions chargeable to the customer)

- without brackets (drawings, structural dimensions, creation and welding chargeable to the customer).

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## 4. INSTALLATION

#### a) Attachment with welded brackets

Couple mast rolls to the pivots realized in the brackets.

Check status of the chains and eventually replace word or damaged parts.

Install the attachment in the mast putting the rolls through specific sliding guides and fixt chains in the holes of the brackets as required by the producer of the mast.

Before installing forks or other attachments, unscrew central screw and then screw it when the operation is over, as to not allow the loss of the forks.

Connect pipes to the cylinder and to the distributor as the movement of the lever will follow this chart:

Function	Lever movement
Right movement	Pull
Left movement	Push

Check that the working pressure of the pipes is higher than or equal to the one indicated on the identification tag.

Lubricate the contact surfaces.

#### b) Attachment without brackets

Take off the brackets from original fork carriage and possible chain anchors.

Weld profiles (contact ATIB for eventual technical informations).

Welding must be made considering to resist stress due to the use of the attachmente and considering the material of the profiles of the attachment (usually Fe 510 C as for UNI EN 10025 02.92, unless different indication).

Mount wear pads in specific spaces.

Mount mobile body from the upper part.

Screw lower hooks with specific screws.

Further operations are equal to case a) already described.

Hook the forks on fork's plates blocking them with stopper to be tighten following their torque.

#### 5. USE

Before using the equipment, verify the seal of the pipes and that the assembly and connection operations were carried out correctly, by means of approximately ten preliminary maneuvers.

When using the equipment it is a good rule to follow the indications listed below:

- do not try to lift loads by clamping them between the two forks;
- comply with the capacity limits of the trolley equipment group;
- do not exceed the maximum pressure value indicated on the identification tag.

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Should the equipment be subject to slight errors in the movement synchronism between the two forks, these movement differences, which will add up in time, will have to be annulled by an operator.

It will be sufficient for the operator to keep one of the two forks at the opening or closing end stroke, for the necessary time it will take for the other fork to recuperate the difference in movement accumulated.

Every ATIB equipment is projected and constructed according to a load positioned (as regards its center of gravity) at a certain distance from vertical part of the fork. This data is written in the identification plate in the "nominal capacity" box (see img. 1, point 8).

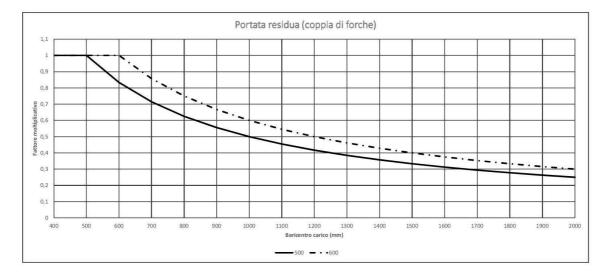
If you need to increase the distance of the center of gravity as regards vertical part of the fork you have to reduce the weight of the load.

In this occasion, we suggest to control the chart here below where, according to the increase of the center of gravity (x-axis) there is a load reduction multiplying factor (y-axis). The multiplying factor, obtained based on desired load center position, will be multiplied with nominal capacity of the equipment.

The result of this multiplication will be actual capacity of the attachment.

Continuous line is for equipment with load center at 500 mm

Dotted line is for equipment with load center at 600 mm



#### NOTES:

- Chart is useful just to calculate residual capacity of the attachment.. To check the residual capacity of the combination fork lift attachment please contact fork lift producer.
- This calculation is valid only for "stable" load, in case of movement of liquid material please contact the producer.



The condition of the soil, the quickness of the movement of the load and the lifting height can effect the hold of the load and must be taken into consideration as regards specific occasions.



The affordable stroke can compromise the stability of the forklift. We suggest to consult the forklift manufacturer to check residual capacity of the combination forklift-equipment.

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Side shifting movement is forbidden in movement.

Side shifting movement in condition of lifted mast is permitted only to bring back the load at the center of the mast.

Nominal capacity of the combination fork lift – attachment is established by the producer of the fork lift and can be lower than the one indicated on the identification label of the attachment.

Check label of the fork lift (Directive 2006/42/CE)

## 6. MAINTENANCE

Failure to adhere to the norms and established times for maintenance operations, will be detrimental to the good functioning of the equipment and will annul the guarantee conditions.

## Every 200 working hours:

- check the hydraulic connections and replace the worn parts;
- check the bolts clamping torque of the equipment seal lower hooks;
- clean and lubricate the sliding parts, intensifying operations should the equipment be used in particularly difficult conditions.

#### Every 2000 working hours:

disassemble the cylinders, replace the gaskets in case of oil leaks and the stems if they are scored.

All maintenance operations must be carried out with the trolley motionless and the hydraulic circuit not activated.

#### 7. BREAKDOWNS AND SOLUTIONS

Causes and solutions following difficulties or equipment not functioning

BREAKDOWN	SOLUTION
Oil leakage in the hydraulic circuit	Replace the pipes or tighten the pipe fittings more
High friction among the sliding devices	Clean and lubricate the sliding devices
Worn cylinder stems	Disassemble the cylinder and replace the stems
Deformed structure due to overloading or bumps	Mechanical repairs

Should there be other problems, please contact A.T.I.B. srl

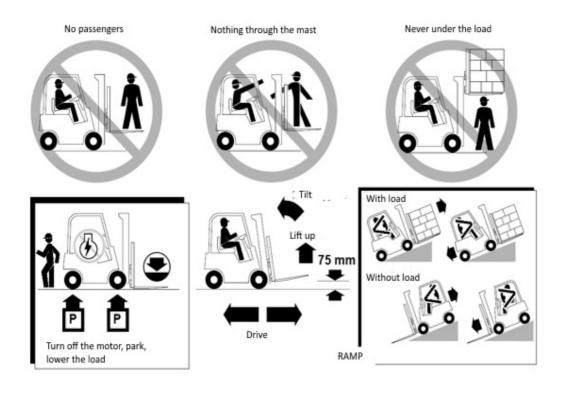
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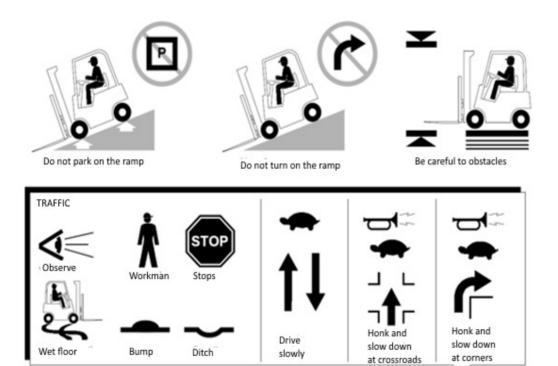
#### 8. WARNINGS AND INFORMATION CONCERNING SAFETY

- The equipment must be activated by one single operator from the operating position of the trolley.
- Do not action the equipment when people or animals are in action range of the trolley.
- Any operation concerning installation, use and maintenance must be carried out by specialized personnel equipped with suitable equipment for the type of operation to be carried out.
- Carry out maintenance operations and/or repairs with the trolley motionless and the hydraulic circuit not active. Use appropriate protection means (gloves, accident-preventing shoes etc.).
- Do not try to lift loads by clamping them between the two forks.

The considered acoustic pressure level is lower than 70 dB (A).

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