

INSTRUCTION MANUAL

1 GENERAL INFORMATION

The DAAL has been designed as a tire changer accessory to help the operator to mount the tire on the rim or to demount it.

The use of this device is limited to that specified in this manual. Any other use is improper and therefore not authorized. Before beginning any kind of work on or with this machine, carefully read and understand the contents of these operating instructions.

We shall not be liable for any injury to persons or damage to things caused by improper use of this machine.

KEEP THIS MANUAL NEAR THE MACHINE AND CONSULT IT AS NEEDED DURING OPERATIONS.

2 TECHNICAL DATA

Operating pressure	8 – 10 bar
Weight	60 kg
Acoustic pressure level (at work)	Lp A < 70 dB (A)

3 GENERAL SAFETY REGULATION

The operator must be a well –trained professional personnel.

This device could only function when work together with our tire changer.

We won't responsible for any unauthorized modifications.

4 INSTALLATION

ATTENTION !

This device, when ordered together with the tire changer, is already mounted on the machine. For this reason the following operations are not needed.

DANGER !

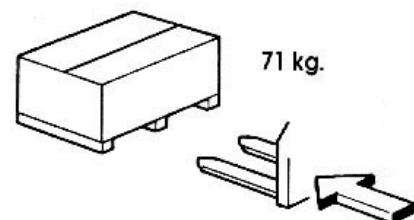
The DAAL device must be installed only by professionally qualified technical personnel.

Before any installation work , check to make sure that the tire changer is disconnected from any power source .



4.1 TRANSPORT

If the DAAL is supplied separately from the tire changer, it will be packed in a cardboard box. Move the machine with a fork-lift truck inserting the forks under the pallet as illustrated in right picture.



4.2 UNPACKING

Once the packing material has been removed, check the device visually for any signs of damage.

Keep the packing materials out of the reach of children as they can be a source of danger.

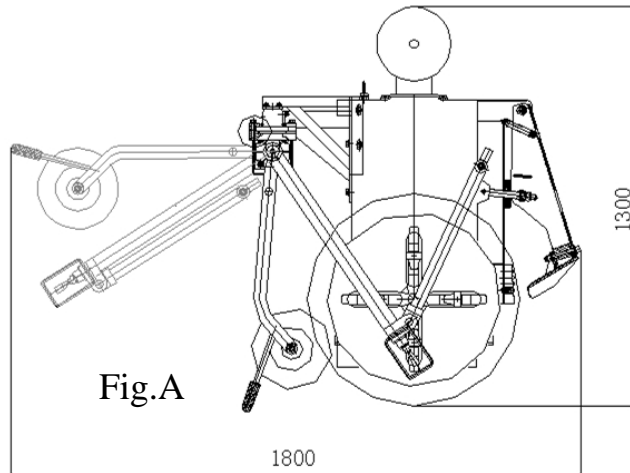
N.B: Keep the packing for possible future transport .

4.3 OVERALL DIMENSIONS

Fig. A gives the overall dimensions of the DAAL installed on the tire changer.

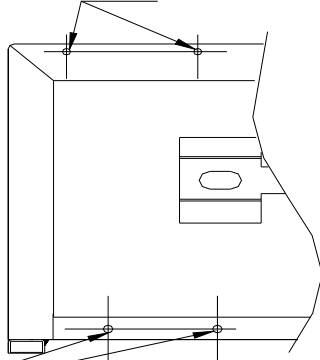
Add the dimensions of the DAAL to the overall dimensions of the tire changer (listed in its Operator Manual) and you will have the minimum footprint of the combination machine.

Don't forget that you will need a minimum of 500 mm from any wall.

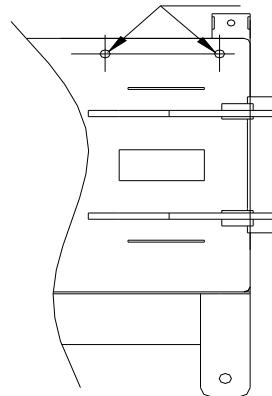


4.4 MOUNTING

FOR LEFT ARM UPPER BRACKET



FOR LEFT ARM UPPER BRACKET



FOR LEFT ARM LOWER BRACKET Fig. B

The following steps show how to install the DAAL device.

1) Disconnect the tire changer from the electric power source and the compressed air circuit.

2) Mount the side bracket and rear bracket to the corresponding position. Then assemble the DAAL device on the tire changer body. (Fig. B)

3) Connect the air hose (Ø8mm) that introduced through the rear hole of the box with the corresponding joint of T-union.

4) For IP version, connect the hose (Ø8mm) through the back of the body to the fittings of the five-way valve according to corresponding marks.

5 LAYOUT OF FUNCTIONAL PARTS

Fig. C illustrates the functional components of the DAAL.

- 1- Mounting block holding forearm
- 2- Centering block
- 3- Control valve lever
- 4- Pressing block
- 5- Left bead-breaking disc

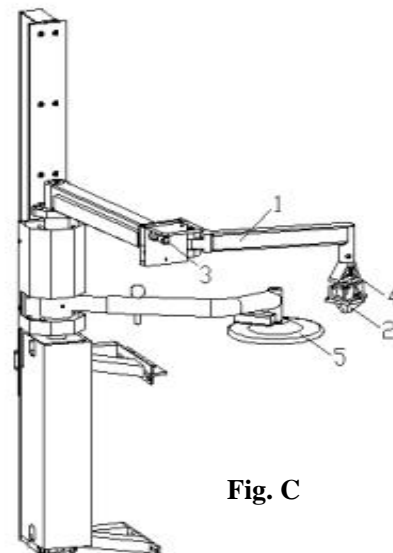


Fig. C

6 IDENTIFYING CONTROLS

The operating controls of the DAAL device are :

- **The control valve lever (3, Fig. C)** use to lower and raise the tool holding arm **(1, Fig. C)**.

7 CORRECT OPERATION CHECKS

DAAL is pneumatically supplied from the tire changer to which it is connected.

In order to use this device, the tire changer must be connected to the compressed air mains following the instructions and precautions given in the tire changer Operating Manual.

- Move the control valve lever (3, Fig. C) up: the mounting block holding forearm (1, Fig. C) should rise. Move the control valve lever (3, Fig. C) down: the mounting block holding forearm (1, Fig. C) should lower.

8 IDENTIFYING WARNING SIGNAL

**WARNING : Unreadable and missing warning labels must be replaced immediately .
Do not use the tire changer if one or more labels are missing.
Do not add any object that could prevent the operator from seeing the labels.
Use the code in this table to order labels you need.**



WARNING : hand-crushing hazard .

9 OPERATION

The DAAL has been designed to facilitate the operations of wheel locking and mounting/demounting the tire on or from the rim. These operations, especially with low-profile or very wide sports car tires or with very hard beads, can be very difficult.

In any case, the DAAL will make these jobs easier and less tiring on any type of wheel.

9.1 CLAMPING THE WHEEL

Break the beads of the tire following the instructions and the warnings given in the tire changer manual.

- If you plan to clamp the wheel from the inside (on the grippers) follow the normal procedure (refer to the Operator Manual).
- If you plan to clamp the wheel from the outside (also using the plastic slide and grip covers) the DAAL can help with these operations.

Follow these steps:

- 1- Release the turntable bringing the tire changer operating arm and the DAAL device to non-working position.
- 2- Select the turntable opening so that the jaws touch the tire near the rim, when putting the wheel on the turntable (see Fig. D).
- 3- Insert the centering block (2, Fig. E) on the arm (1, Fig. E) and push it upwards making sure it slips into place.

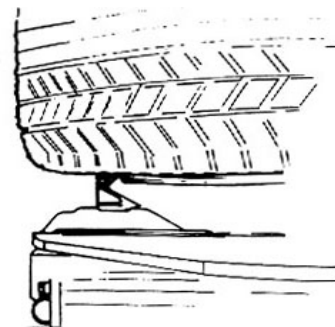


Fig. D

4- Set the arm (1, Fig. E) in work position: it will automatically lock in line with the turntable.

5- Lower lever (3, Fig. E) until the centering block, as it presses against the tire, forces it down a couple of centimeters.

6- Close the grippers with the usual pedal and raise the arm (1, Fig. E) by moving the lever (3, Fig. E) up.

Remove the centering block and bring the arm (1, Fig. E) back to its non-working position.

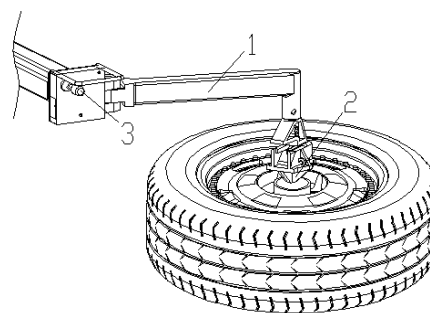


Fig. E

9.2 DEMOUNTING

BREAKING THE 1 st BEAD (if necessary)

If the top bead has re-seated, the bead breaking procedure can be repeated with the pressing block (4, Fig. F) rather than the normal blade.

Follow these steps:

a- Bring the mounting block holding arm to its work position and regulate the pressing block on the edge of the rim .

b- Move the control valve lever down so that the pressing block is against the tire until it is against the edge of the rim . At this point, rotate the turntable clockwise.

The mounting block holding arm will turn with the tire until it comes against the end travel stop. At this point the pressing block will begin to break the top bead on the tire.

NB: when the top bead has been pushed into the drop center, the operator can lubricate the bead and the rim thoroughly to facilitate the subsequent demounting stages.

When the operation has been completed, lift up the mounting blocking holding arm, move it away from the turntable and begin the demounting operations.

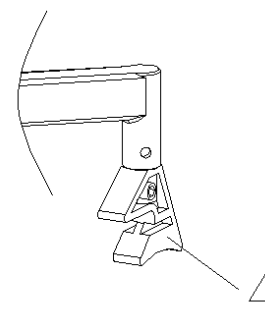


Fig. F

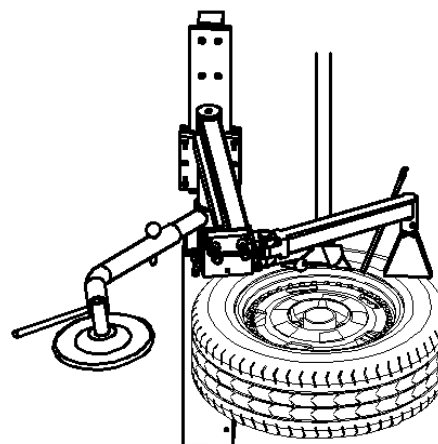


Fig. G

DEMOUNTING THE 1 st BEAD

1) Position the mounting head.

WARNING !

The positioning and the removal of the operating arm of the tire changer from the edge of the rim can be carried on only after having brought DAAL outwards in non-working position .



If the tire very stiff walls that prevent correct position of the mounting head on the rim edge, follow these steps:

a- move the mounting block holding arm (Fig. G) to its working position.

b- move the pressing block (Fig. G) to the tire and close to the mounting head.

Use the lever (Fig. G) to press down on the tire to create enough space to position the mounting

head correctly and to insert the bead lifter tool.

WARNING!

Bringing the bead-pressing tool against the tire creates a hazard: the operator's hands could be crushed between the tool and the rim.

Be careful and keep your hands away from the rim.

c- Clamp the mounting head, insert the bead lifter tool and raise the mounting block holding arm .

2) Use lever to raise the arm and turn it to bring the pressing block by the drop center of the rim (**Fig. H**).

3) Use the lever to lower the arm and apply pressure against the tire so that the bead is moved into the center well of the rim (**Fig. H**).

This will ensure that the bead is not excessively stretched and can easily move onto the mounting head (**Fig. H**).

4) Use the lever to move the bead over the lip of the mounting head.

5) Raise the mounting block holding arm and rotate it outwards to free the work top and then rotate the turntable to remove the first bead.

BREAKING THE 2nd BEAD (if necessary)

If the second bead has re-seated, use the disc (**5, Fig. C**) to loosen the bead.

Follow these steps:

a- bring the arm (**1, Fig. C**) to non-working position .

b- position the disc (**5, Fig. C**) under the tire , making sure that it is near the edge of the rim .

c- Hold the handle (**2, Fig. I**) to keep the disk pressed against the tire .

c- Rotate the turntable clockwise simultaneously raising the disc up ,with the control (**3, Fig. C**) , until the bead-breaking procedure is completed .

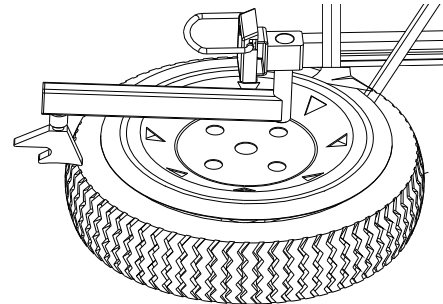


Fig. H

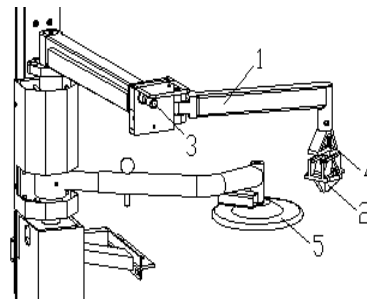


Fig. C

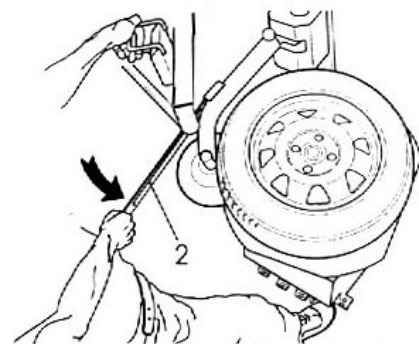


Fig. I

DEMOUNTING THE 2nd BEAD

NB: with some tires the disc alone can be used to demount the tire. To do this, continue the bead breaking procedure until the bead comes completely off the rim.

The disc (**5, Fig. C**) will always facilitate second bead demounting (especially with sports wheels with wide treads) by lifting the second bead up and holding it in line with the drop center.

1) Position the disc as shown in **Fig. J** and lift the second bead until it is in the drop center.

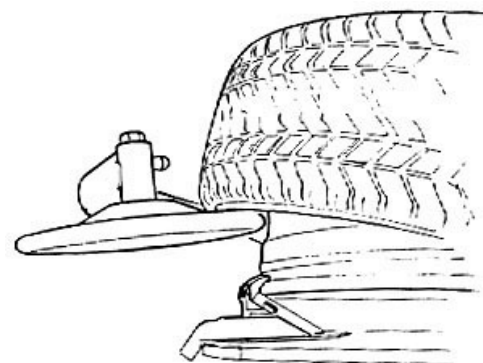


Fig. J

- 2) Use the bead lifting lever to bring the second bead onto the hooked section of the mounting head.
- 3) Move the disc away from the work area and rotate the turntable until the second bead comes off the rim.

9.3 MOUNTING

- 1) Clamp the rim on the table and mount the first bead as described in the Instruction manual of the tire changer.

WARNING !

The positioning and the removal of the operating arm of the tire changer from the edge of the rim can be carried on only after having brought DAAL outwards to its non-working position.

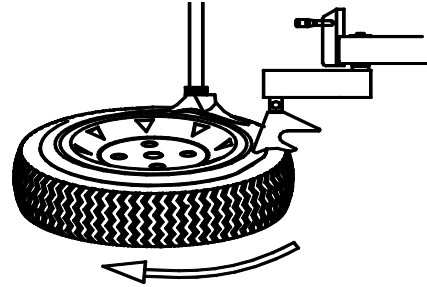


Fig. K

- 2) Position the pressing block near the mounting head (about 3-4 cm as shown in Fig. K). Lower it until the second bead is level with the center well.

WARNING !

Bringing the bead-pressing tool against the tire is hazardous: the operator's hands could be crushed between the tool and the rim.

Be careful and keep your hands away from the rim.

- 3) Please pay special attention during this procedure. Pressing the rim with the pressing block is not permitted. It will lead to danger. Keep away hands from the mounting block.
- 4) As the turntable turns the pressing block will keep the bead in the well. The second bead will thus be mounted on the rim without any effort or danger to the operator and without damaging the tire.

10 ROUBLE SHOOTING

Phenomena	When the control valve lever (3, Fig. C) is used, the arm (1, Fig. C) does not move.
Analysis	1) No compressed air supply to the system.
	2) Compressed air hose is crimped or crushed.
	3) The pneumatic valve, which controls the air supply, does not work properly.
Solution	1) Check and correct the compressed air supply source.
	2) Check and correct any hose defects. Replace hose if damaged.
	3) Please contact with the department of after sale

