HOFMANN®

MotoTechnik
Technika Warsztatowa & Serwis
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monty 3300-26

Automatic Tire Changer
Operator's manual

Dystrybutor:

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FAMILY NAME	MODELS	VERSION / DESCRIPTION
monty 3300-26	*monty 3300-26 Racing smartSpeed GP plus*	Foot pedal operated Bead breaker
	monty 3300-26 Racing smartSpeed+ GP plus	Handle operated bead breaker - Display touch

EC / **UKCA** DECLARATION (Original document contained in Spare Parts Booklet)
DECLARATION **EC** / **UKCA** (Le document original figurant dans le Liste des pièces détachées)
EC / **UKCA** KONFORMITÄTSERKLÄRUNG (Originaldokument in der Ersatzteilliste enthaltenen)
DICHIARAZIONE **EC** / **UKCA** (Originale contenuta nel Libretto Ricambi)
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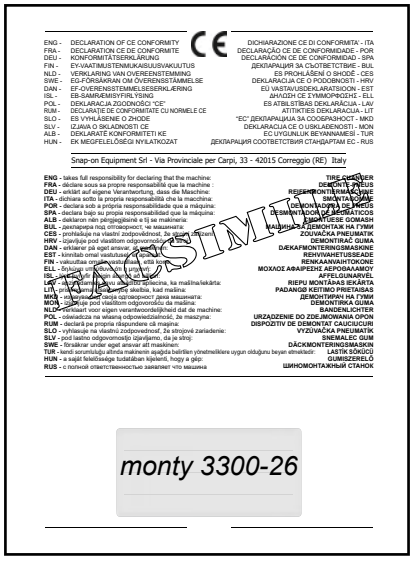
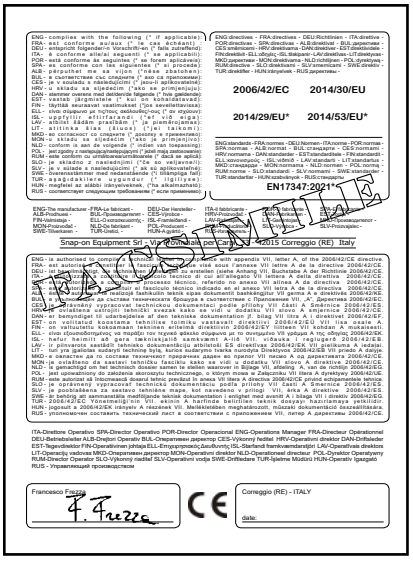
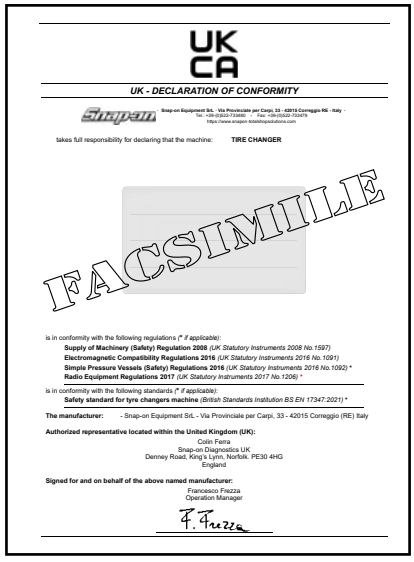
- FACSIMILE - ФАКСИМИЛЕ -







All Information in this manual has been supplied by the producer of the equipment:
Toutes les informations figurant dans le présent manuel ont été fournies par le fabricant de l’équipement :
Alle in diesem Handbuch enthaltenen Informationen wurden durch den Hersteller der Maschinen geliefert:
Tutte le informazioni contenute nel presente manuale sono fornite dal produttore dell’apparecchiatura:
Todas las informaciones contenidas en este manual han sido facilitadas por el productor del equipo:
Todas as informações contidas neste manual foram fornecidas pelo produtor da máquina:
Вся информация, содержащаяся в данном руководстве, предоставлена производителем оборудования
All information i denna manual tillhandahålls av apparatens tillverkare:

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SIGN SIGLE KENN. SIGLA SIGLA SIGLA АББ. TECKEN	DESCRIPTION DESCRIPTION BESCHREIBUNG DESCRIZIONE DESCRIÇÃO DESCRIPCIÓN ОПИСАНИЕ BESKRIVNING	LANGUAGE LANGUE SPRACHE LINGUA IDIOMA IDIOMA ЯЗЫК SPRÅK	REFERENCES RÉFÉRENCE VERWEIS RIFERIMENTO REFERÊNCIA REFERENCIA ССЫЛКАХ REFERENS
OM	Operator’s Manual Manuel de l’Opérateur Betriebsanleitung Manuale Operatore Manual de Operador Manual do Operador Руководство по эксплуатации Operatörsmanual	ENG FRA DEU ITA POR SPA RU SWE	**ZEEWH782A03** **ZEEWH782A05** **ZEEWH782A08**
SP	Spare Parts Booklet Liste des pièces détachées Ersatzteilliste Libretto Ricambi Lista de peças Tabla de repuestos Каталог запасных частей Reservdelsbok	ENG FRA DEU ITA POR SPA RU SWE	**TEEWH782A3**
QS	Safety and Quick Start Sécurité et Démarrage Rapide Sicherheit und schneller Start Sicurezza e Avvio Rapido Segurança e Arranque Rápido Seguridad y Arranque Rápido Безопасность и быстрый запуск Säkerhet och Snabbstart	ENG FRA DEU ITA POR SPA RU SWE	**EAZ0144G64A** **EAZ0144G65A** **EAZ0144G66A**
AP	Accessories Plan Plan Accessoires Zubehörprogramm Piano Accessori Plano Acessórios Plan de accesorios Принадлежности Plan för tillbehör	ENG	*http://service.snapon-equipment.net/*
TSS Info Hub	Application Software Logiciel d’Application Anwendersoftware Software Applicativo Software Aplicativo Software de la aplicación Приложение Tillämpningsprogram	ENG DEU ESP FRA ITA POR RU SWE	ANDROID APP ON Google play Download on the App Store EXPLORE IT ON AppGallery

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UPDATES GUIDE

Release: B _____Date: **February 2024** _____ Object: App reference

DISCLAIMER OF WARRANTIES AND LIMITATIONS OF LIABILITIES

While the authors have taken care in the preparation of this manual, nothing contained herein:

- modifies or alters in any way the standard terms and conditions of the purchase, lease or rental agreement under the terms of which the equipment to which this manual relates was acquired.
- increases in any way the liability to the customer or to third parties.

While every effort has been made to ensure that the information contained in this manual is correct, complete and up-to date, the right to change any part of this document at any time without prior notice is reserved.

Before operating with the machine, understand and follow the indications in this document and in the “*Safety and quick start*” manual supplied.

FORMAT OF THIS MANUAL

This manual contains text styles designed to draw the user’s attention:

Note: Suggestion or explanation.

CAUTION: INDICATES THAT THE FOLLOWING ACTION MAY CAUSE DAMAGE TO THE UNIT OR OBJECTS ATTACHED TO IT.

⚠ INDICATES THAT THE FOLLOWING ACTION MAY CAUSE (EVEN SEVERE) INJURY TO THE OPERATOR OR OTHERS.

- **Bulleted list**:

Indicates that action must be taken by the operator before being able to go to the next step in the sequence.

➚ **Important: Absolute indication** (always follow).

TOPIC (☞ n°) = see the Chapter number.

The topic indicated is explained in full in the chapter specified.

XX Figure is repeated from previous section.

1.0 Introduction

Instructions for the use and management of the machine are covered in this manual.

This document contains warnings relating to the specific topics examined.

All the safety precautions for the unit can be found in the document “**QS**: *Safety and Quick Start*” supplied with the machine.

⚠ ALL THE OPERATORS AND THE REPAIR TECHNICIANS MUST UNDERSTAND AND FOLLOW ALL THE INFORMATION RELATIVE TO SAFETY.

CAUTION: BEFORE USING THE MACHINE THE OPERATORS MUST UNDERSTAND THE INSTRUCTIONS AND WARNINGS CONTAINED IN THIS MANUAL AND IN THE MANUAL ***Safety and Quick Start***.

All the machine documentation is available digitally at the website;

http://service.snapon-equipment.net/

The **TSS Info Hub** application, available from the Store, allows the machine identification system to make the single relevant documents available automatically.

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Be familiar with:

- the possible dangers described in the “*Safety and Quick Start*” manual supplied with the machine.
- the identification of the parts of the unit (☞ 3.0), the panel and the control parts.

Note: A working area, wheels and auxiliary devices which are clean and in good condition ensure the best results.

The routine maintenance of the machine is set out in the “*Safety and Quick Start*“ manual supplied.

1.1 Scope of application

The tire changer is intended to be used as a device for the bead breaking, beading, mounting and demounting of car and motorcycle tires mounted on one-piece rims.

This tire changer can operate in compliance with the technical specifications stated here (☞ 2.0) and found in the data plate.

The machine can integrate only the auxiliary devices indicated by the manufacturer (☞ 3.1.1) and listed in the Accessories Plan.

This device must be used in the application for which it is specifically designed. Any other use shall be considered improper, therefore not reasonable.
The manufacturer shall not be considered liable for possible damage caused by improper, wrong or unreasonable use.

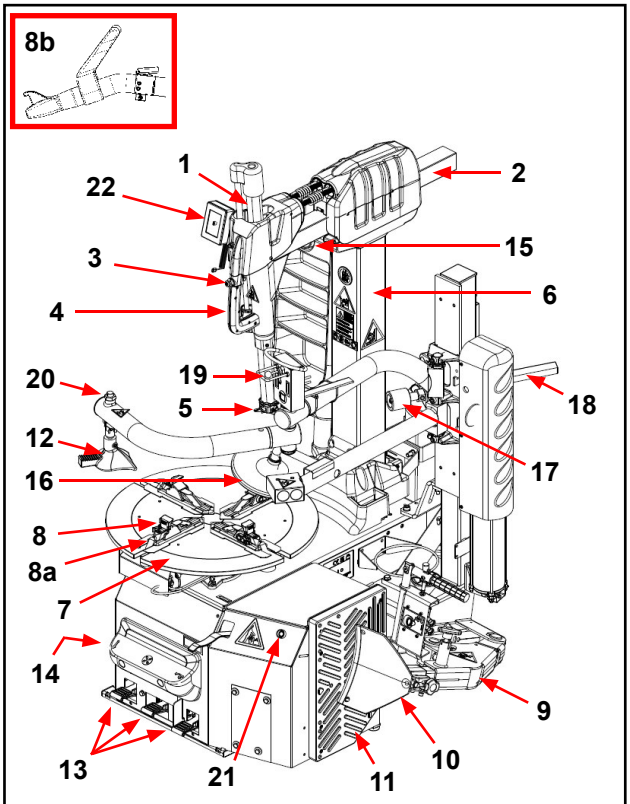
The equipment cannot be used in the presence of flammable liquids or gases.

⚠ READ THIS MANUAL THOROUGHLY BEFORE USING THE MACHINE.

2.0 Technical specifications

FUNDAMENTAL	HOFMANN monty 3300-26 Racing
CONDITIONS	
Vehicles supported	Cars, light trucks, SUVs, motorbikes
Standard power supply (EU)	230 Volts - 1 ph - 50/60 Hz (16 A)
Standard power supply (USA)	230 Volts - 1 ph - 50/60 Hz (16 A)
Standard power supply (JAPAN)	200 Volts - 1 ph - 50/60 Hz (11 A)
Pneumatic supply	8 ÷ 12 bar (110 ÷ 170 psi)
Turntable speed (clockwise (up to) / counterclockwise)	≤ 18 rpm / 7 rpm
Bead breaking force (10 bar)	15 kN (3300 lbs)
Air consumption / wheel	300 l (66 gallon)
DIMENSIONAL	
Rim width range	3” ÷ 14” (76 mm ÷ 355 mm)
Max. wheel diameter	1140 mm (45”)
Max. wheel weight	70 kg (154 lbs)
External clamping capacity	10” ÷ 26”
Internal clamping capacity	12” ÷ 28”
Machine dimensions (Height / Width / Depth)	1920 / 1615 / 1685 mm
Net weight	360Kg (794 lbs)
Package dimensions (Height / Width / Depth)	1050 / 1400 / 1940 mm
Gross weight	390Kg (860 lbs)
FUNCTIONAL	
Shovel telescoping	✓
Claws manual presetting	✓
Vertical bead pusher	✓
Wheel lift	✓
Wheel stop in position	✓
Tool box	✓
Camera	–
Laser Pointer	–
Rim lighting	–
Asa Network	–
Mains power socket	✓
Connection (WiFi)	✓
USB connection port	✓
Injection beading	✓
Diagnostic functions	✓
Job counter	✓
Dynamic functions	✓
Energy optimisation	✓
ENVIRONMENTAL	
Temperature range ° C	0° ÷ 50°
Relative humidity range (without condensation)	0% ÷ 90%
Sound pressure	<70 dB A
Sound pressure at the injection beading	88 dB A

Available	✓
Not available	–



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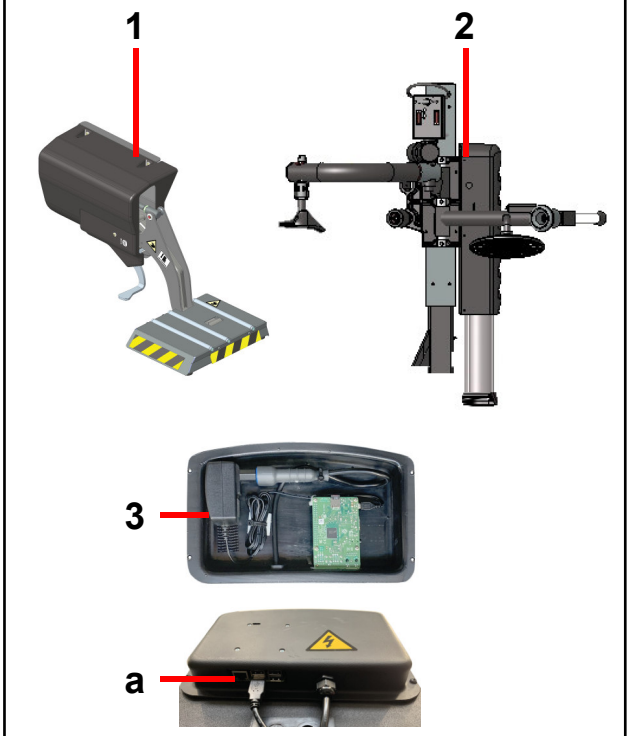

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3.0 Identifying the parts

Before using the machine learn the name of the parts and the functions of the commands.

3.1 Nomenclature

Figure 3-1

1. Vertical slide
2. Horizontal arm
3. Lock button
4. Handle
5. Tool (or Head)
6. Tilt tower
7. Turntable
8. Jaw or clamp

8a. Beading nozzles
8b. Manual beading device

9. Bead breaker arm
10. Bead breaker shovel
11. Bead breaker pads
12. Bead pusher tool
13. Pedal assembly
14. Bead seater/inflator pedal
15. Inflation gauge
16. Lower bead holder disk
17. Roller
18. Horizontal arm
19. Control lever Bead pusher
20. Bead pusher arm
21. Stop button (if present)
22. Display (if present) (☞4.0)

3.1.1 Auxiliary devices

Figure 3-2

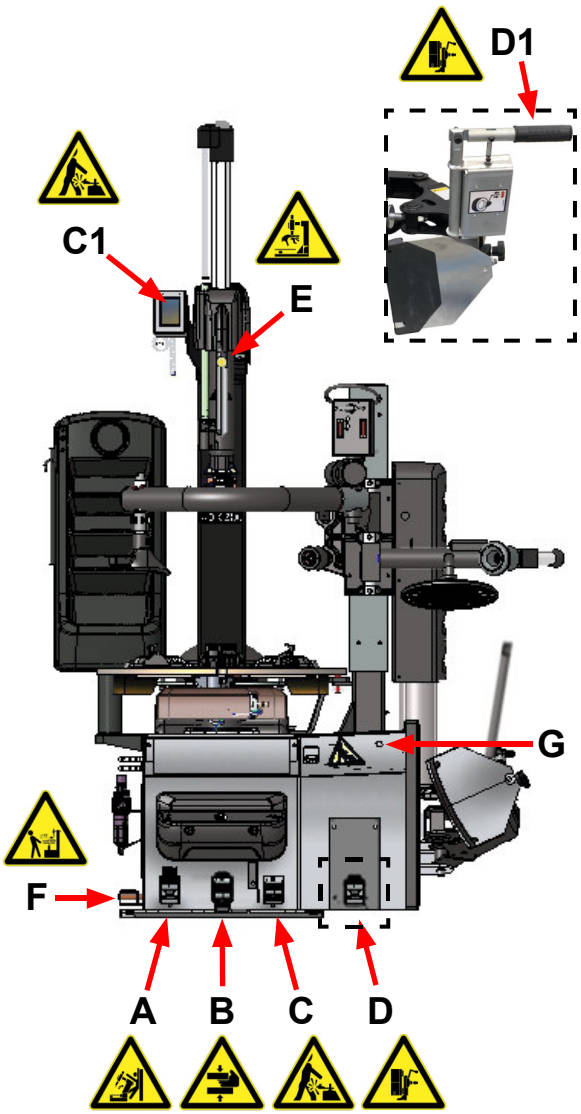
The machine can be fitted exclusively with the accessories listed in the machine Accessories Plan (☞*Printed material and connected elements*).

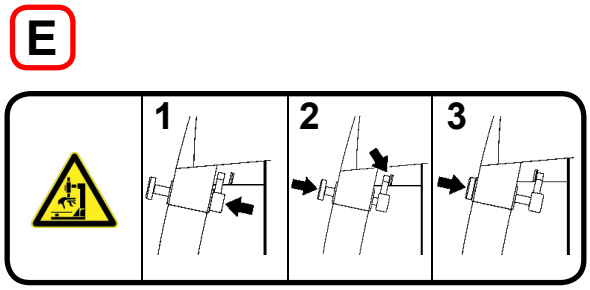
1. Lifter CW1045
2. Bead pusher MH 330 PRO
3. Communication device (if applicable)

3.1.1.1 Connections

In the back of the toolbox there are the connections of the communication device (**a**):

- network port (RJ).
- data exchange (USB)
- power supply.





3-3

3.2 Controls

Before operating the machine ensure that you have well understood the operation and function of all the controls.

Figure 3-3

A.

⚠ DANGER OF BODY CRUSHING

Press down and release, WITH LEFT FOOT, the first pedal from the left: the column tilts backwards. Press again: the column returns to the work position.

B.

Press down and release, WITH LEFT FOOT, the second pedal from the left: the clamps of the turntable will retract. o it again: the clamps will expand. If you press the pedal prior to the end of the stroke and release, the clamps may be stopped in any position.

C.

Press, WITH THE RIGTH FOOT, the third pedal from the left: the turntable turns clockwise and works in *smartSpeed* mode.
Lift the pedal and the turntable turns counter-clockwise.

C1. (complementary control)

The digital controls perform partial semiautomatic rotations. Follow the instructions (☞4.0).

D.

⚠ DANGER OF LEG TRAPPING

Open the bead breaker arm.
Press and keep pressed the right pedal with the LEFT FOOT: the bead breaker moves towards the machine.
Release the pedal: the bead breaker can be opened manually.

D1. (alternative command)

Lift the lever: the bead breaker closes.
Lower the lever: the bead breaker opens.

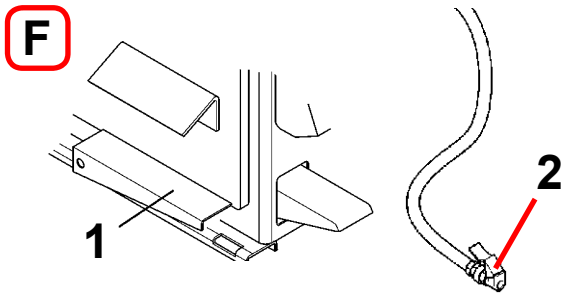
If there is the lever **D1** the pedal **D** is not fitted.

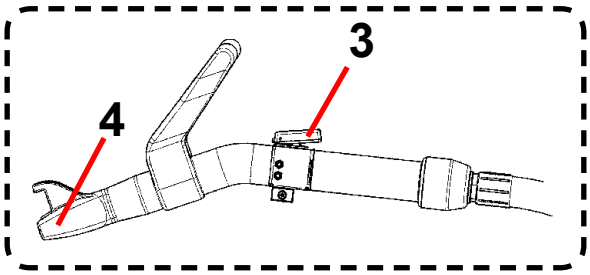
E.

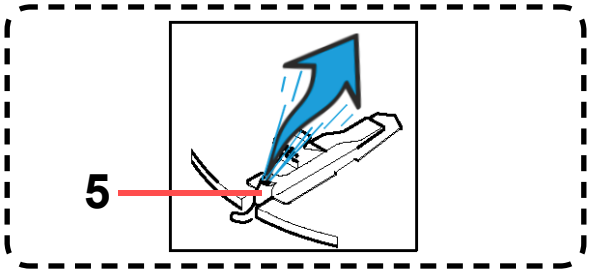
⚠ DANGER OF HAND CRUSHING

The push button on the handle allows to release the arms and drive the mount/demount tool in the correct position.

1. **To release and raise the rod with tool**: press in the direction of the arrow with the forefinger.
2. **To release and lower the rod with the tool**: press partially with the thumb.
3. **To block**: press fully with the thumb.







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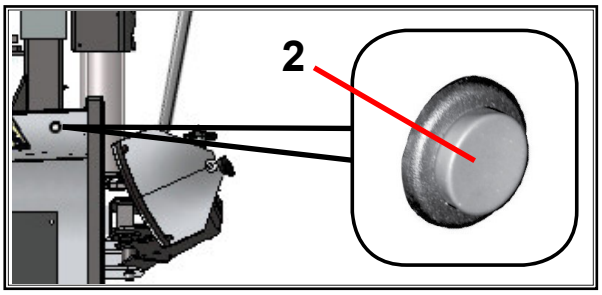

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F.

⚠ WEAR PERSONAL PROTECTION EQUIPMENT FOR EARS AND EYES.

Figure 3-4

Press the pedal half-way (**1**);
the air comes out of the head of the inflation tube (**2**).

⚠ DANGER OF EXPLOSION.

Beading from above (☞ 5.4.1)**:**

⚠ HOLD THE TUBELESS BEADING NOZZLE FIRMLY.

Press the button on the Tubeless beading nozzle (**3**), then press fully and firmly the pedal (**1**);

Beading from below (☞ 5.4.2)**:**

The system from below is an alternative to the previous one and does not have the double command (button/ pedal).

Press the pedal fully and firmly (**1**);

In both cases an abundant high pressure air jet comes out of the nozzles (**4/5**) of the device.

Keep the pedal pressed;
air continues to come out of the inflation head (**2**).

Note: For safety reasons the beading pressure is limited to 4.3 bar (+/-0,2).

⚠ ON THE TIRE CHANGER COMPLY WITH THE PRESSURE LIMIT INDICATED BY THE WHEEL MANUFACTURER:

If necessary remove the wheel and move it in a suitable environment (e.g. safety cage).

G.

Figure 3-5

ON-OFF functionality

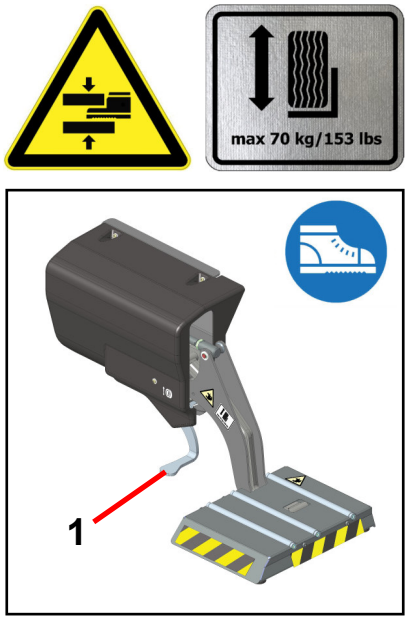
When the unit does not have a power switch on and off (**1**), disconnect and reconnect the power plug.

CAUTION: WE RECOMMEND SWITCHING OFF THE UNIT AT THE END OF THE WORK DAY.

Stop button (if present)

Holding down the Stop button (**2**), the rotation of the wheel stops.

To restart working suspend any operation for a few seconds (≈ 3 s).



3-6

3.3 Wheel lifter

The machine can be fitted with a wheel lifter. The lifter **CW1045** completes the operation of the tire changer and increase its safety.

The operator can decide to facilitate the lifting of the wheel on the turntable of the tire changer with the wheel lifter.

This avoids any potentially harmful exertions.

3.3.1 Use

⚠ THE WHEEL LIFTER IS DESIGNED TO BE USED EXCLUSIVELY WITH VEHICLE WHEELS.

⚠ DO NOT LIFT PEOPLE.

⚠ DO NOT EXCEED THE MAXIMUM LOAD.

Figure 3-6

- Roll the wheel on the lifter platform. It is necessary to place the rim LH drop centre on the machine outer side.

  Note: During the upstroke and downstroke of the platform support the wheel with your hands.
- With the RIGHT FOOT press the pedal (**1**) to the right to raise the wheel.
- Once the desired height is reached, release the pedal.
- Tilt and rest the wheel on the turntable.
- Press the pedal (**1**) to the left to lower the platform.
- Release the pedal as soon as the lifter rests on the floor.

CAUTION: DO NOT USE THE TIRE CHANGER IF THE LIFTER IS STILL IN THE RAISED POSITION.

Note: At the end of the operation perform the steps above in reverse to remove the wheel from the tire changer.

3.3.2 Lifter maintenance

At the end of the shift:

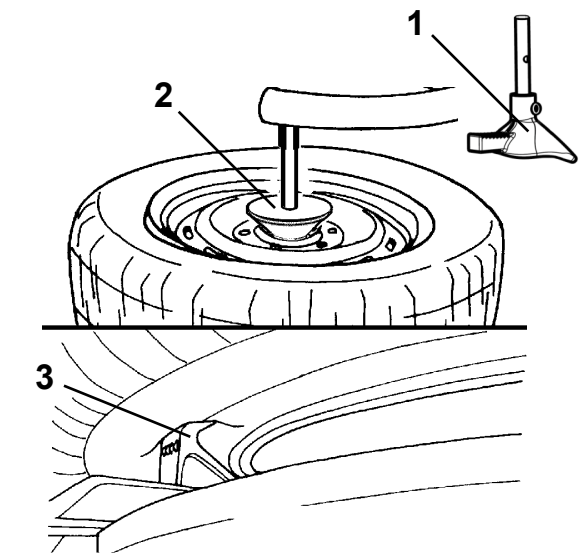
- Regularly clean with a cloth the mobile and fixed parts.

Note: Clean any resistant dirt with spray detergent for mechanical parts.

Once a month:

- Check for any excess play in the joints.
- Lubricate the joints.

  Note: If a fault occurs, stop using the equipment and call the *Snap-on* technical support team.



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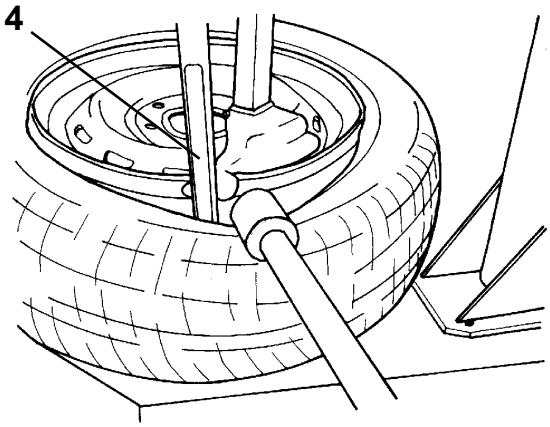

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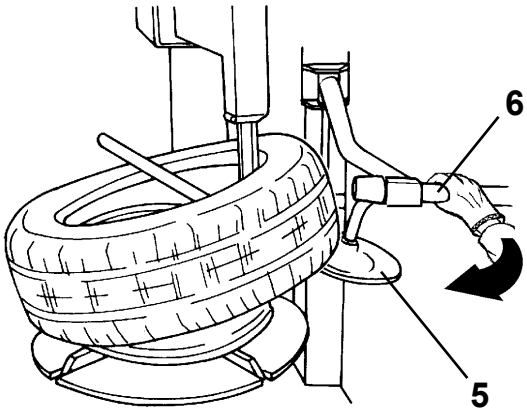

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3.4 Bead pusher

The **MH 330 PRO** bead pusher is an auxiliary support system for the demounting and mounting operations.

The device minimises the exertion required and the direct use of the hands, thus safeguarding the health and safety of the operator.

3.4.1 Use

⚠ DANGER OF HAND CRUSHING.

Keep away from parts in contact with the wheel, in particular during the rotation.

3.4.1.1 Locking assistance

Figure 3-7

To make the locking of wheels with hard or lowered tyres easier, the operator can use the rim pusher, provided with the bead pusher.

- Replace the bead presser (**1**) with the rim presser (**2**).
- Move the claws in the wheel locking position (**3**).

CAUTION: CHECK THE CORRECT OPENING TO AVOID PINCHING THE TIRE.

- Position the rim presser in the centre and lower enough to allow the wedges to grip.

3.4.1.2 Removal assistance

Upper bead

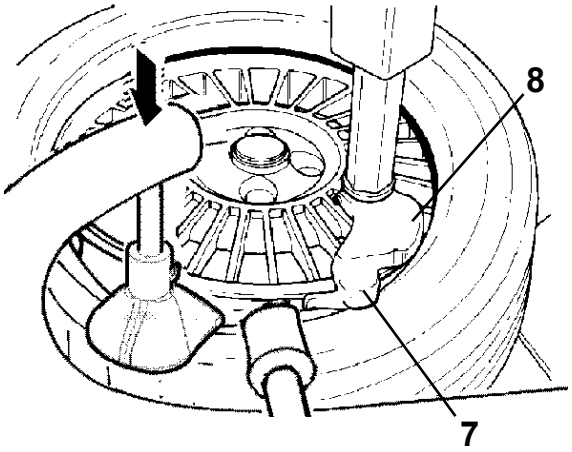
Figure 3-8

- Use the roller of the bead pusher to lower the side of the tire and make it easier to insert the bead-lifter lever (**4**).
- Insert and hold the lever between the rim and the bead.
- Lift and move the bead pusher (**1,Fig. 3-8**) in the position opposite the tool of the tyre changer .
- Press on the tire until the bead is in the drop-center of the rim.
- Lower the lever to load the bead on the mounting head.
- Rotate the turntable clockwise and at the same time push down on the tire sidewall to keep the bead into the drop-center of the rim.

Lower bead

Figure 3-9

- Position the lower disk (**5**) next to the lower rim edge.
- Load the lower bead on the mounting head.
  Grip tightly (**6**), start the device upstroke and at the same time rotate the turntable.



3-10

3.4.1.3 Beading assistance

Figure 3-10

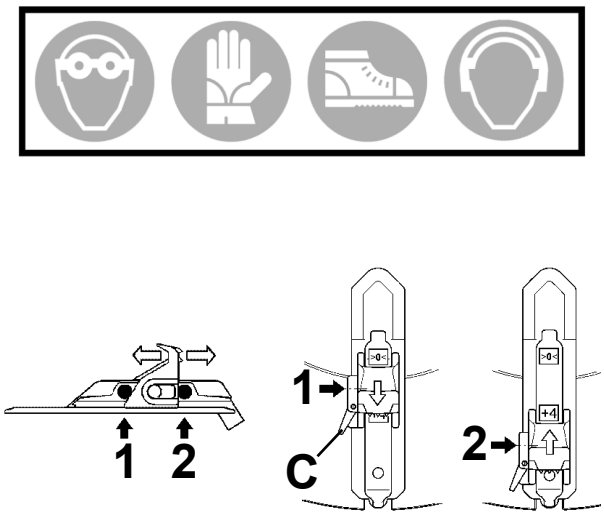
During the insertion the bead pusher keeps the bead in a position that makes it easier for the tool to operate.

- Place the bead pusher and the roller in front of the mounting head (**7**).
- Lower the bead pusher so that the pressure of the disc and the Bead Pusher tool on the tire help keeps the bead in the drop center.

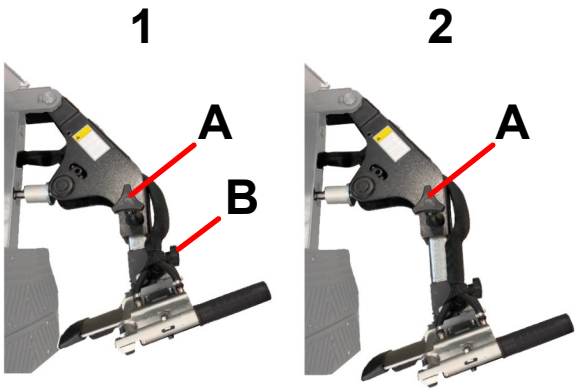
Note: Check the pressure so that the bead is kept above the tail of the tool (**8**).

- Start the clockwise rotation and lighten the action of the bead pusher on the tire as the insertion is completed.

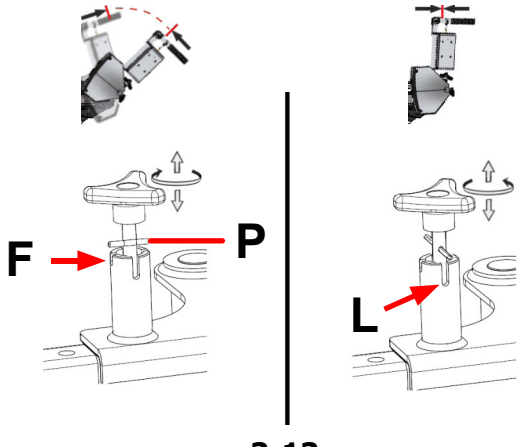
WARNING: TO AVOID COLLISIONS RAISE THE BEAD PUSHER FROM THE TIRE BEFORE THE COMPLETE INSERTION.



3-11



3-12



3-13

3.5 Turntable presetting

Figure 3-11

N.B.: Turntable capacity can be changed before pedal control.

The turntable jaws can be positioned manually in two different ways (0/+4”).
Push the lever (**C**) on the left side of each jaw and shift at the same each one.

VERY IMPORTANT: LOOK FOR PROPER INSERTION OF THE PIN

CAUTION! MAKE SURE ALL FOUR CLAMPING JAWS ARE MOUNTED IN THE SAME POSITION (POS. 1 OR POS. 2). OTHERWISE THE RIM MAY COME LOOSE AND INJURE THE OPERATOR OR DAMAGE PROPERTY!

- Position **1**; retracted position necessary for small diameter rims.
- Position **2**; extended position necessary for large diameter rims.

3.6 Bead breaker presetting

Note: If the tire is over 13” (340 mm) wide, first set the bead breaker in the “Extended” position as follow:

Extension setting

Figure 3-12

1) Pull up and hold the pin (**A**), then pull the bead breaker shovel assembly in the "Extended" position (**2**).

2) Release the pin (**A**) in its hole to lock the bead breaker in the new position.

N.B.: The extension setting pin (**A**) is also used to set the shovel rotation.

Rotation setting

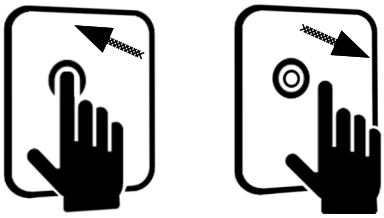
Figure 3-13

1) Place the positioner (**P**) in the short slot (**F**) to block the removal and at the same time allow the rotation of the bead breaker shovel.

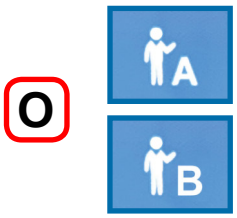
2) Place the positioner (**P**) in the deep slot (**L**) to block the removal and at the same time prevent the rotation of the bead breaker shovel.

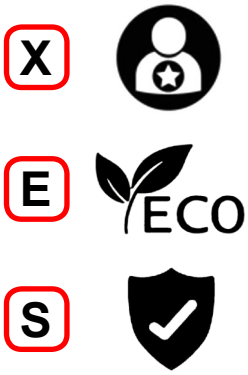
Note: For the adjustments of the shovel joint (**B**) consult the quick guide supplied with the machine.

4-1



4-2





4-3

4.0 Control display

Figure 4-1

As well as providing the operator with the necessary information, the display shows the function controls. The device allows to:

- Set up the valve in the correct position to demount and mount the upper bead.
- Select the operator change.
- Display the stresses to the tyre in real time and allow the operator to control the forces exercised by the tyre changer.
- Produce a report for the customer.

4.1 Functions

When the machine is started the display opens the start screen automatically (**Fig. 4-1**).

4.1.1 Selections:

Touch and release the screen to select a function (**Fig. 4-2**).
An audible signal confirms that the selection has been made.

Note: Keep the display clean to ensure it operates correctly. A calibration can increase the touch precision (☞ 4.4).

4.1.1.1 Operator enable

Two operators can use the machine at the same time, by recalling their profile from the memory.

Information on each operator is saved in a specific memory and can be consulted at any time from the COUNTERS screens (☞ 4.5).

Note: When the machine is switched off the data are saved.

- Touch the operator key (**O, Fig. 4-3**) to activate the alternative operator;

The letter shown indicates the operator active.

4.1.1.2 Operating modes

If necessary select the operating mode before installing the wheel.

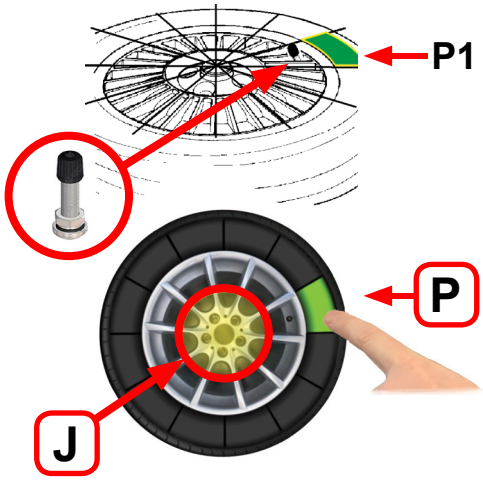
Figure 4-3

(**X**) **SMART SPEED**; The machine works at the maximum speed possible, based on the necessary torque.

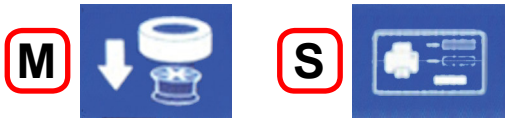
(**E**) **ECO**; Energy saving mode.

(**S**) **TIRE CARE**; Control of the stresses applied to the tyre and stop if the critical level is reached.

4-4



4-5



4-6

4.1.3 Displays

During the demounting and mounting of the upper bead, a series of coloured sectors highlight the stress index on the tyre in real time (**Fig. 4-4**).

The different colours indicate the stress level:
- **Green**; Non-critical stress.
- **Red**; Critical stress.
- **Yellow** and **Orange** are intermediate values with a progressive increase in the criticality.

4.2 Operation

4.2.1 Demounting

Figure 4-5

- Break the bead and clamp the wheel (☞ 5.2).
- Set the operating mode if necessary (☞ 4.1.2).
- Select on the display the sector (**P**) for the current angle position of the valve (**P1**).

  Note: To repeat and/or cancel the selection, touch the centre (**J**).

⚠ MOVE AWAY FROM THE WHEEL BEFORE PRESSING THE START COMMAND.

- Select Start Demounting (**D**).

The turntable automatically moves the valve in the safety position to start the demounting.

- Complete the demounting (☞ 5.2.3).
- Select (**S**) to save (☞ 4.1.5).

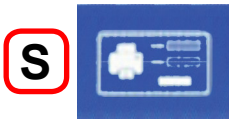
4.2.2 Mounting

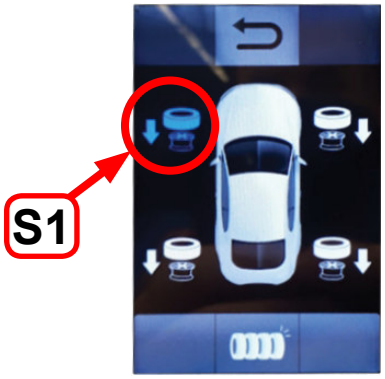
Figure 4-6

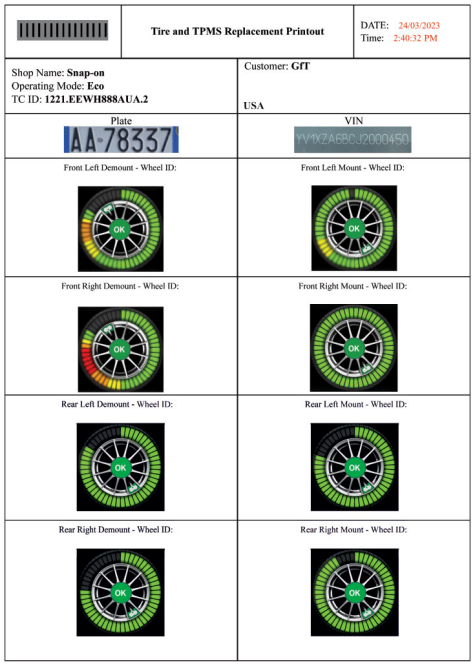
- Set the operating mode if necessary (☞ 4.1.1.2).
- Select on the display the sector (**P**) for the current angle position of the valve (**P1**).

⚠ MOVE AWAY FROM THE WHEEL BEFORE PRESSING THE START COMMAND.

- Select Start Mounting (**M**).
- Place the tire on the rim.
- Set the tool to working position.
- Complete the mounting (☞ 5.3).
- Select (**S**) to save (☞ 4.3).






Tire and TPMS Replacement Printout

DATE: 24/03/2023
Time: 2:40:32 PM

Shop Name: **Snap-on**
Operating Mode: **Eco**
TC ID: **1221.EEWH888AUA.2**

Customer: **GfT**

USA

Plate: AA-78337

VIN: 1V1YZAE8CJ2000450

Front Left Demount - Wheel ID:
Front Left Mount - Wheel ID:
Front Right Demount - Wheel ID:
Front Right Mount - Wheel ID:
Rear Left Demount - Wheel ID:
Rear Left Mount - Wheel ID:
Rear Right Demount - Wheel ID:
Rear Right Mount - Wheel ID:

4-7

4.3 Report

The report certifies that the demounting and mounting operations have been carried out starting from a correct positioning of the valve, maintaining the integrity of the tyres and the electronic TPMS devices supplied on the inflation valves.

Figure 4-7

The report can be produced for one operation and up to a total of eight operations (4 demounting and 4 mounting operations). The report contains the order and can be printed for the customer and archived by the workshop.

The following are saved for every wheel: the stress index, valve position at the operation start, the position of the wheel on the vehicle and the type of operation.

At the end of the demounting and mounting operations assign the destination position of the wheel on the vehicle to save the results for the report.

At the end of every operation:

- Press the key (**S**).
- Assign the destination position of the wheel on the vehicle (**S1**) to avoid losing the data acquired.

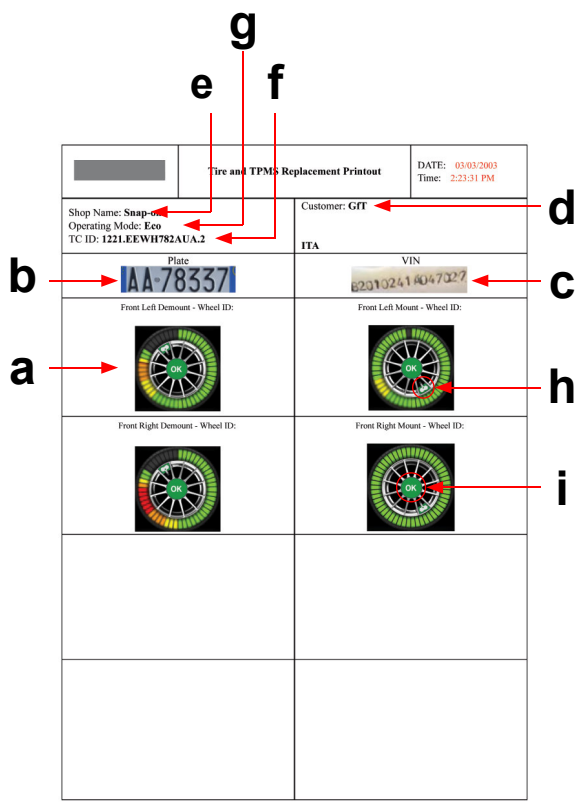
  Note: Selecting a position that is already assigned will overwrite the data.

  Note: The positions already assigned will be in a dark colour (**S1**).

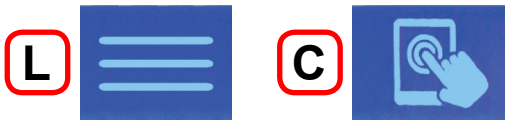
- The start screen will return automatically to proceed with the remaining operations (☞ 4.2).

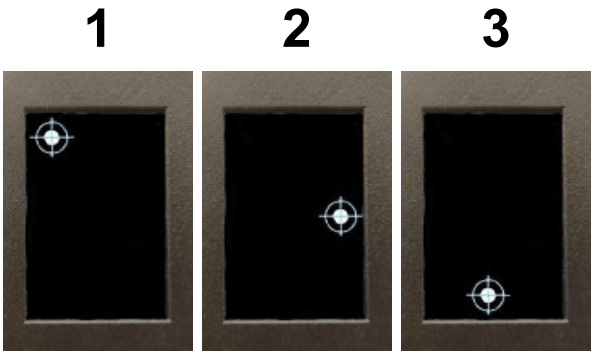
All the operations saved will be included in the order report.

- Proceed with the **Print** (☞ 4.3.1).



4-7





4-8

4.3.1 Print

Figure 4-7

To print the report with the **TSS Info Hub** application, proceed as follows.

- open the **TSS Info Hub** application
- connect the APP to the machine via Bluetooth®
- select the function “*Print Out*”
- fill in the fields for the texts and photos
- select *Print*.

The application lets the operator fill in and generate the report in PDF format with the following data and references;

a demounting and mounting graphs
b vehicle licence plate
c vehicle chassis number(VIN)
d customer
e workshop ID
f equipment ID
g operating mode
h initial valve position
i correct procedure confirmation

.

Note: The PDF report can be saved, printed or shared (e-mail, instant messaging, etc.).

4.4 Display Calibration

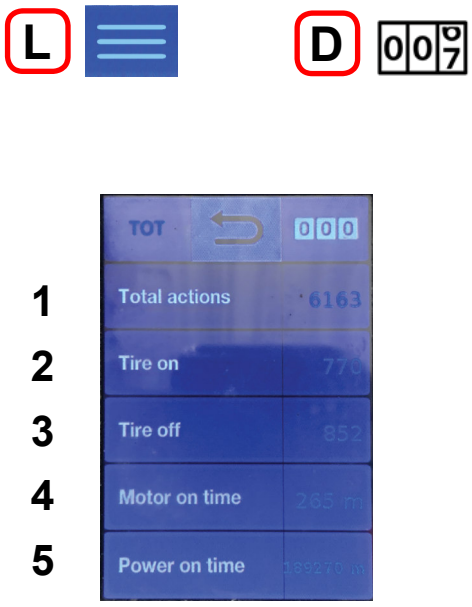
Figure 4-8

The display must be calibrated if the touch screen is not sufficiently precise.
The operator must touch the pointers (**1**, **2**, **3**)three times.

- Press the “Menu” key (**L**).
- Press the “Calibration” key (**C**).
- Touch the centre of the pointers displayed in sequence.

At the end of the calibration process the display restarts automatically.

The Touchscreen is now operational.



4-9

4.5 Counters

Figure 4-9

To access the Counters screen use the keys (**L - D**). The key on the top left identifies the counter that the data displayed in that moment refer to.

4.5.1 TOTAL COUNTERS

The total counters display data from the start of the machine's life.

The following parameters are displayed:

- **1**; total motor drives.
- **2**; total mounting operations.
- **3**; total demounting operations.
- **4**; motor rotating time (minutes).
- **5**; machine on time (minutes).

Note: The TOTAL COUNTERS cannot be reset.

4.5.2 PARTIAL COUNTERS

The partial counters have the same parameters of the total counters and refer to the following functions.

T1	Operator **A**
T2	Operator **B**
T3	**SMART SPEED**
T4	**ECO**
T5	**TIRE CARE**

- Select (**T1, T2, T3, T4, T5**) to recall the partial counters available in sequence.

.

Note: the partial counters can be reset to start a new analysis period, by pressing the key (**W**).

5.0 Demounting and mounting tires

CAUTION: BEFORE MOUNTING THE TIRE ON THE RIM COMPLY WITH THE FOLLOWING PRECAUTIONS.

5.1 General precautions

A- THE RIM MUST BE CLEAN AND IN GOOD CONDITION: IF NECESSARY CLEAN AFTER REMOVING ALL WHEEL-WEIGHTS INCLUDING ‘TAPE WEIGHTS’ INSIDE THE RIM.

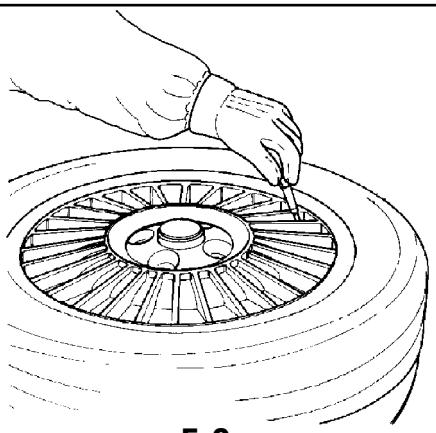
B- THE TIRE MUST BE CLEAN AND DRY, WITH NO DAMAGE TO THE BEAD AND THE CASING.

C- REPLACE THE RUBBER VALVE STEM WITH A NEW ONE OR REPLACE THE ‘O’ RING IF THE VALVE STEM IS MADE OF METAL.

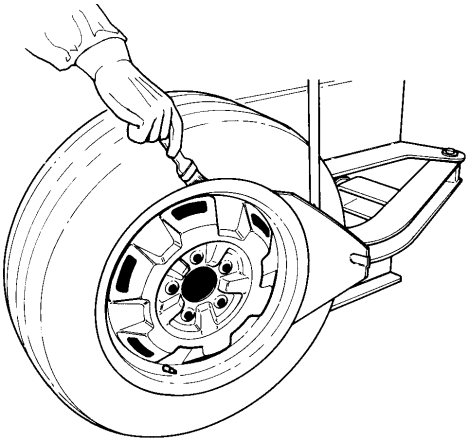
D- IF THE TIRE REQUIRES A TUBE, MAKE SURE THE TUBE IS DRY AND IN GOOD CONDITION.

E- LUBRICATION IS NECESSARY FOR CORRECT MOUNTING OF THE TIRE AND PROPER CENTERING. USE ONLY AN APPROVED LUBRICANT FOR TIRES.

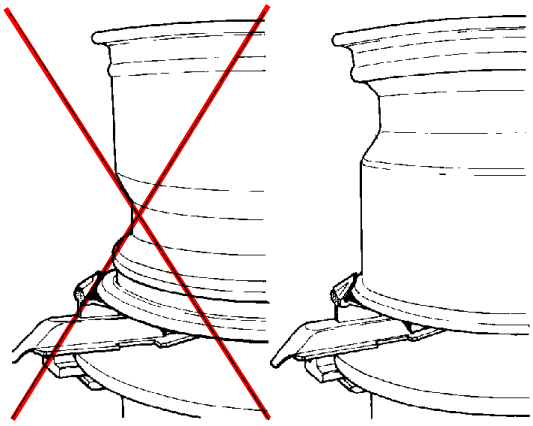
F- MAKE SURE THE TIRE IS THE CORRECT SIZE FOR THE RIM.



5-0



5-1



5-2

5.2 Demounting

- Remove all wheel-weights from the edges of the rim. **5-0**).

  Note: Unless indicated otherwise these instructions refer to tubeless wheels.

5.2.1 Bead breaking

NOTE: If the tire is wider than 13” (340 mm), extend the arm (☞ 3.6).

- Break the external side of the bead by starting from a position opposite to the position of the valve. Lubricate the bead and rim with a tire-specific lubricant only. Break inner bead. Pay attention not to keep the pedal pressed or the lever lifted (based on the model) longer than necessary. This could damage the bead.
- Lubricate the bead and the rim abundantly (**Fig. 5-1**).

  Note: Do not break the bead in the area of the TPMS sensor, if present.

5.2.2 Rim clamping

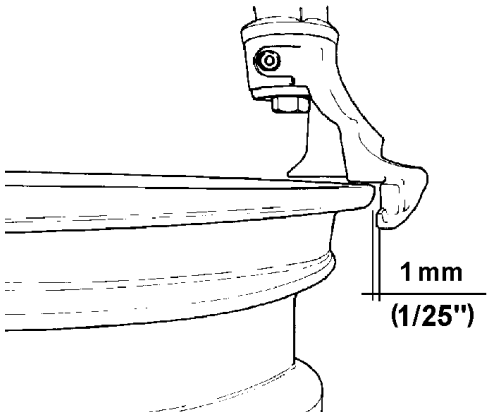
CAUTION: TO MINIMIZE THE RISK OF SCRATCHING ALLOY RIMS, THESE SHOULD BE CLAMPED FROM THE OUTSIDE.

- Tip over the demounting/mounting tool in the out of work position.
- Set the rim clamps to the proper position: retract clamps to clamp the wheel from the inside and expand clamps to clamp from the outside.

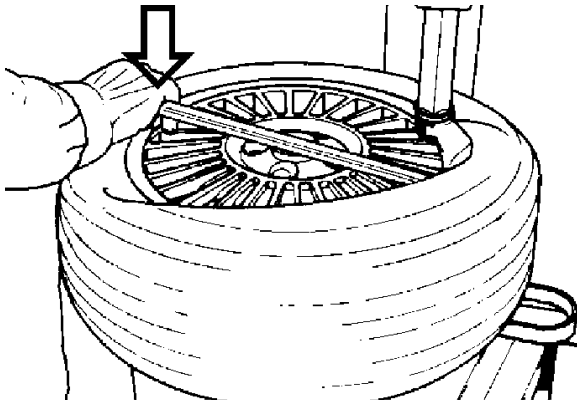
  NOTE: To avoid pinching the tire, before placing the wheel on the turntable, position the claws at a diameter similar to the rim diameter (☞ 3.4.1.1).

- Liberally lubricate bead and rim.
- Position the wheel on the turntable with the DROP CENTER UPWARDS (**Fig. 5-2**) and clamp it.

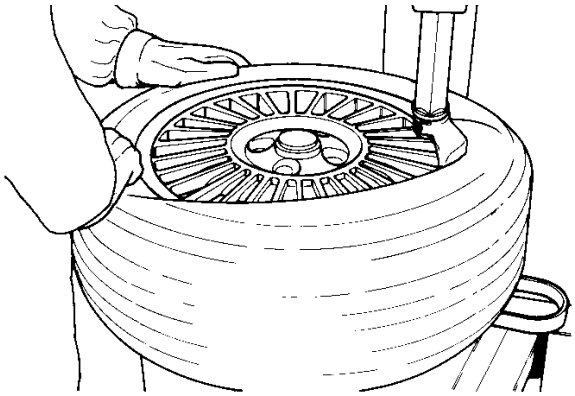
If available, use the **Lifter CW1045** to load the wheel on the turntable (☞ 3.3).



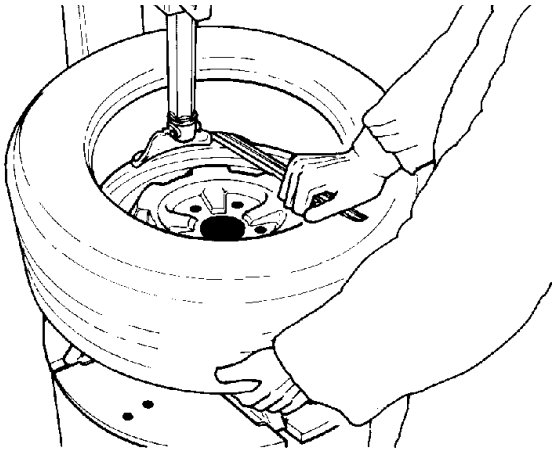
5-3



5-4



5-5



5-6

5.2.2 Bead removal

- Move the tool in contact with the edge of the rim and clamp it: to avoid damaging the rim the tool moves away automatically with a vertical and horizontal movement (**Fig. 5-3**).

  Note: Folding the post allows the tool to be removed from the work area without having to repeat the manual positioning for wheels of same size as the previous ones.

  Note: The plastic insert inside the mounting/demounting head must be replaced regularly. Each machine is supplied with various spare inserts (in the accessories box).

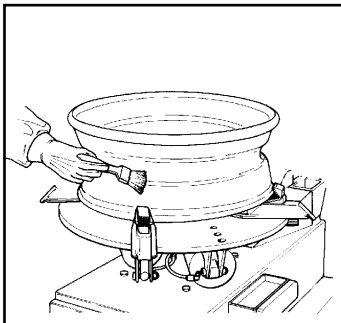
- Move the valve to 11 o'clock (automatic “**Demounting**” function ☞4.2.1).
- Insert the bead lifting tool under the bead and over the support of the mount/demount tool.
- Lift the bead onto the mounting finger. To facilitate this operation, press with left hand on the bead in position diametrically opposite to that of the tool. If desired, the bead lifting tool can be removed after lifting the bead onto the finger (**Fig. 5-4**).
- Rotate the turntable clockwise and at the same time push down on the tire sidewall to keep the bead into the drop-center of the rim (**Fig. 5-5**).
  - Remove the inner tube (if present).
- Repeat the process for removing the lower bead. With left hand, lift the bead in position diametrically opposite the tool to keep it in the drop center (**Fig. 5-6**).
- Operate the folding post command and remove the tire

Note: To remove the beads you can use an auxiliary device **MH 330 PRO** (☞ 3.4.1.2).

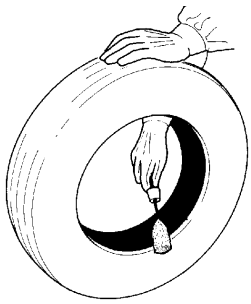
For tires with inner tube:

CAUTION: DO NOT DAMAGE THE INNER TUBE WITH THE LEVER.

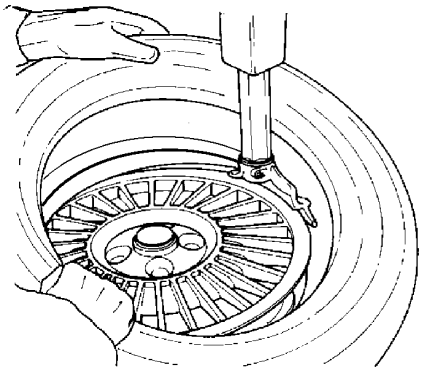
Note: For the angle adjustment of the tool consult the “*Safety and quick start*” (**QS**) manual supplied with the machine.



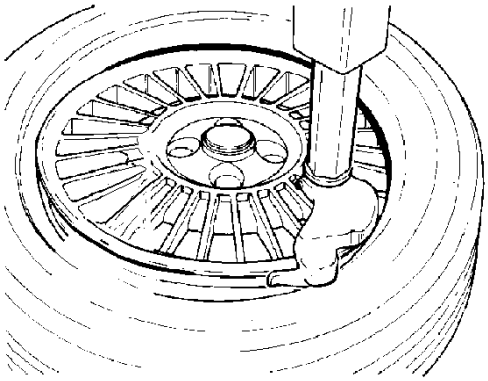
5-7



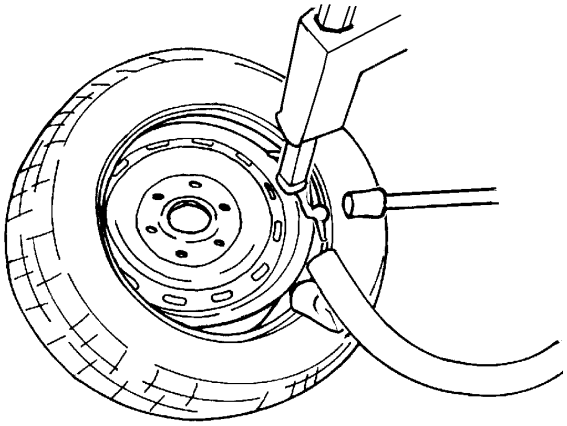
5-8



5-9



5-10



5-11

5.3 Mounting

Note: Use only specific lubricant for mounting tires found on the market.

- Lubricate the inside of the rim and the seatings of the beads (**Fig. 5-7**). Lubricate the inside and outside of the tire beads (**Fig. 5-8**).

OBSERVE THE ROTATION DIRECTION OF THE TIRE, IF REQUIRED. SOME TIRES HAVE A COLOR DOT THAT MUST BE KEPT ON THE OUTSIDE OF THE WHEEL.

LIBERAL LUBRICATION OF THE TIRE AND RIM IS NECESSARY TO MOUNT THE TIRE AND OBTAIN CORRECT ALIGNMENT ON THE RIM. BE SURE YOU ARE USING AND APPROVED TIRE LUBRICANT ONLY.

- Lock the rim on the turntable and rotate it to have the valve in 5 o’clock position (automatic “**Mounting**” function ☞4.2.2). Place the tire to be mounted on the rim. Swing the mounting arm forward so that the mount/demount tool is in the working position.

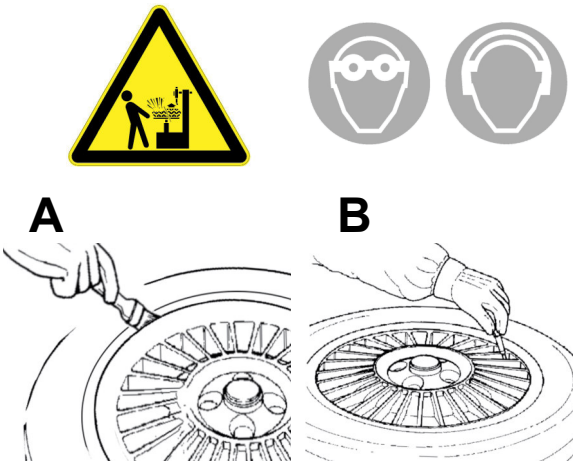
ENSURE THAT THE MOUNT/DEMOUNT TOOL IS NOT PRESET TO A WRONG POSITION SOTHAT IT WILL HIT THE RIM EDGE AND CREATE AN HAZARD, BE-FORE TILTING THE COLUMN FORWARD.

- **Engage the lower bead OVER the mounting wing and UNDER the head of the tool** (**Fig. 5-9**). Turn the turntable clockwise and push the bead down into the drop centre, opposite to the tool.

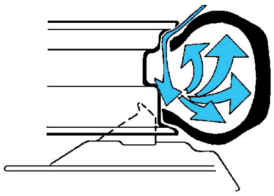
For tires with inner tube:

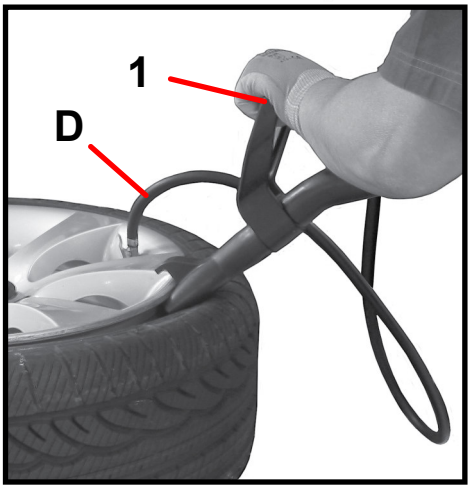
- Insert the deflated inner tube in the tire, fix the valve and position the inner tube well stretched out.
- Mount the upper bead in the same way (**Fig. 5-10**).

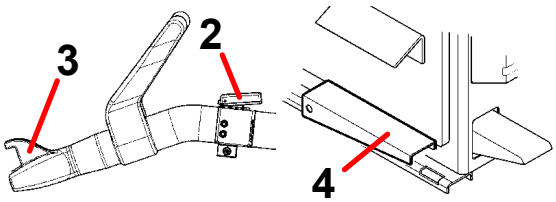
Note: When working with tires with a lowered section, the bead pusher (**MH 330 PRO**, **Fig. 5-11**) is useful to mount the upper bead (☞ 3.4.1.3).



5-12







5-13

5.4 Tubeless beading

⚠ DO NOT USE THE TIRE CHANGER TO INFLATE TIRES.

⚠ WEAR PERSONAL PROTECTION EQUIPMENT FOR EARS AND EYES.

Figure 5-12

- Clamp the wheel from the inside to make it easier to bead the tire.
- Ensure that both the beads and the inside of the rim are thoroughly lubricated (**A**).
- Screw the valve insert (**B**).
- Move the tool close to the rim and lock it (**C**).

⚠ LOCK THE TOOL ON THE RIM TO AVOID SERIOUS ACCIDENTS.

- Connect the compressed air hose to the valve (**D**).
- Continue with the beading instructions from above or below, based on the device on the machine (☞ 5.4.1 / 5.4.2).

5.4.1 Beading from above

Figure 5-13

Beading from above is used for machines with the mobile beading device.

- Hold the device with both hands; one **hand on the handle** (**1**) and the other **hand on the tube**, close to the command button (**2**).
- Insert the nozzle between the tire and the rim until it rests against it (**3**).
- Press the command button (**2**).

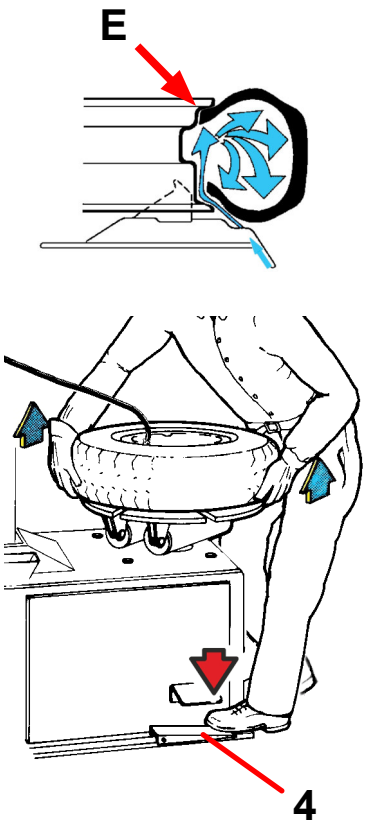
⚠ MOVE AS FAR AWAY AS POSSIBLE FROM THE WHEEL.

- Keep firmly in position and press the pedal fully (**4**).

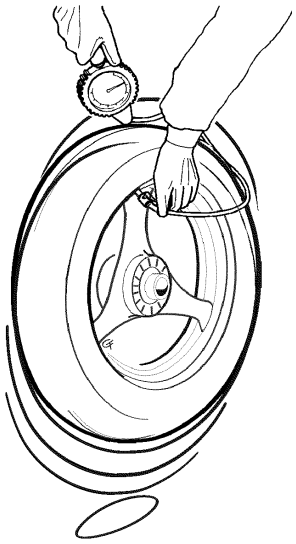
A large volume of air is shot inside the tire to seat the beads on the rim.

⚠ STOP THE COMPRESSED AIR AS SOON AS THE BEADS GRIP THE RIM WELL.

- Place the wheel in a type approved cage to finish inflating and completely settle the beads in their seats on the rim.



5-14



5-15

5.4.2 Beading from below

Figure 5-14

Beading from below is used for machines with the beading nozzles built-in to the turntable.

- **Lift the tire with both hands so that the upper bead (E)** creates a seal with the edge of the rim.

⚠ MOVE AS FAR AWAY AS POSSIBLE FROM THE WHEEL.

- Press the inflation pedal (**4)fully and quickly.**

A large quantity of compressed air is show inside the tire in one shot to expand and hook the beads to the rim.

⚠ STOP THE COMPRESSED AIR AS SOON AS THE BEADS GRIP THE RIM WELL.

- Place the wheel in a type approved cage to finish inflating and completely settle the beads in their seats on the rim.

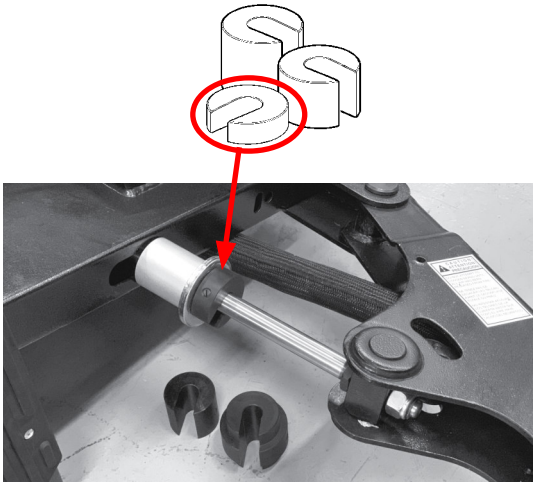
Beading tubeless tires is sometimes difficult because the beads may be very close to each other (e.g. due to incorrect storage) thus not permitting a correct sealing against the rim.

In this event it may be helpful to place the wheel on the floor in a vertical position and ‘bounce’ it while introducing air with the pedal control or with the inflating gun (Figure **5-15**).

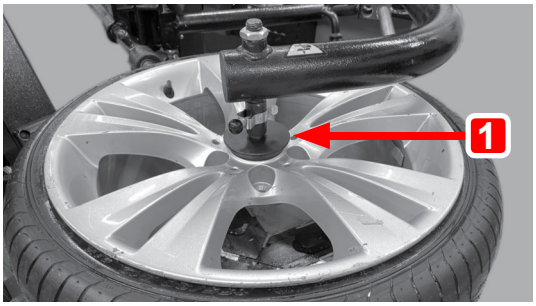
5.5 Beading with inner tube

- Release the rim and start inflating the tire by pushing the valve towards the inside to avoid forming air pockets between the inner tube and the tire.

- Place the wheel in a type approved cage to finish inflating and completely settle the beads in their seats on the rim.



6-1



6-2

6.0 UHP and RUN FLAT wheels

Working with **UHP and Runflat** wheels could be particularly difficult due to the stiffness of the tires or for the additional elements not required for conventional wheels.

To work on this type of tires the manufacturers require the use of specific procedures and equipment.

See below for the general indications to work correctly with UHP and Runflat tires.

NOTE: For the operations you must use the bead breaker MH 330 PRO and specific PLUS accessories.

SHOULD ANY FUNCTIONAL ANOMALIES BE OBSERVED STOP WORKING AND CONTACT AN AUTHORISED DEALER’S TECHNICAL ASSISTANCE SERVICE.

6.1 Demounting tires

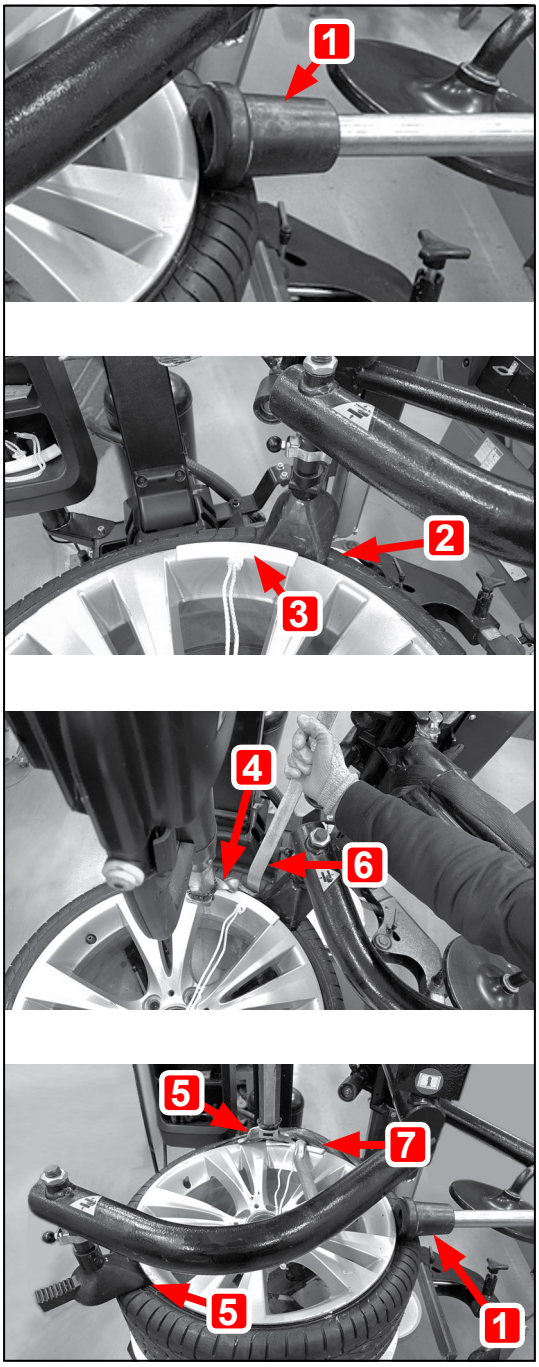
NOTE: The operating procedures described below refer to what has been described for conventional wheels, in this OPERATING MANUAL (☞ 5.2).

- Add spacers to the bead breaker (**Fig. 6-1**):

- no spacers for rims up to 5“ wide.
- 20 mm for rims about 6“/7“ wide
- 50 mm for rims about 8“/9“ wide
- 70 mm for rims about 9“/10“ wide
- 90 mm (70+20mm) for rims about 10"/12" wide
- 120 mm (70+50 mm) for rims about 12“-14“

NOTES: Pay attention to the pressure sensors in the wheel, if they are present.

- Break the bead on bot sides of the wheel. Apply lubricant on the tire bead and in the bead seating.
- Preset the opening of the turntable based on the rim diameter. For alloy rims we recommend using the plastic protections.
- Insert the conical rim pusher tool (**1**,**Fig. 6-2**).
- Press the wheel down until the rim is inserted in the clamping claws.
- Clamp the complete wheel.
- Check that the wheel is clamped correctly.
- Lubricate the bead and its seating.



6-3

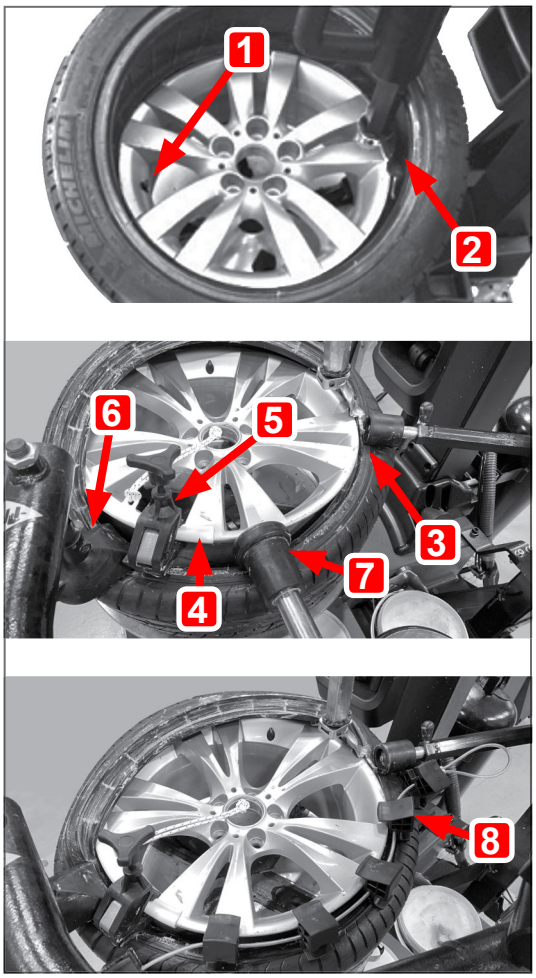
6.1.1 Demounting the upper bead

Figure 6-3

- Lower the upper bead with the conical roller (optional **1**) to lubricate the bead-rim contact surface along the whole circumference.
- Move the valve to 11 o'clock (automatic “**Demounting**” function ☞4.2.1).
- Press on the bead with the bead pusher tool, to create a space between the bead and the rim in the lever insertion area, position (**2**) in the figure.
- Install the rim protection (**3**).
- Move the mounting tool (**4**) in position.
- Lubricate the bead lifting lever.
- Press on the bead with the roller (**1**), and at the same time with the bead pusher tool at the 8 o'clock position (**5**) in the figure; bead in the drop-center of the rim .
- Insert the lever (**6**) between the tire and the rim, close to the mounting tool, then lower it lift the bead on the tool, position (**7**) in the figure.
- Raise the bead pusher and the roller.
- Rotate the turntable clockwise until the upper bead is completely demounted.

6.1.2 Demounting the lower bead

- Check that the rims protection is positioned correctly (**3**).
- Move the mounting tool (**4**) in position.
- Insert the lever to lift the lower bead on the mounting tool.
- Rotate clockwise to remove the tire completely from the rim.



6-4

6.2 Mounting tires

Figure 6-4

6.2.1 Mounting the lower bead

- Place the tire on the rim.
- Position the mounting tool (**2**).
- Mount the lower bead with the mounting tool.

6.2.2 Mounting the upper bead

- Move the valve to about 5 o'clock (automatic “**Mounting**” function ☞4.2.2).
- Move the roller next to the tool, close to the edge of the rim (**3**).
- Insert the rims protection (**4**) at about 4 o'clock.
- With the bead pusher clamp (**5**) positioned close to the bead pusher tool (**6**), block the rims protection (**4**) on the rim.
- Where necessary, fir the conical roller (optional **7**) at 3 o'clock, between the mounting tool and the bead pusher.
- Pay attention not to pinch the bead.
- Start mounting the tire and then stop the rotation when the valve reaches the 7 o'clock position.

Alternatively you can use the sectors spacers (**8**).

- Insert one sector at the time to create the necessary space with the bead pusher tool close.
- Continue mounting gradually adjusting the bead pusher tool, to reduce as much as possible the tension on the bead.

  Note: Gradually raise the bead pusher tool to compensate the pressure built up by the tire during the rotation.

- Remove the sectors of the spacer (**8**).
- Raise and move away the bead pusher and the roller.
- Move the mounting tool in the out of work position.
- Complete the mounting as described for conventional wheels (☞5.3).

7.0 Troubleshooting

If a problem with the tire changer appears, proceed in the following order to solve the problem:

1. Rethink the last steps taken.
- Did you work according to the manual?
- Did the balancer work as described and expected?
2. Check the balancer according to the list in this chapter.
3. Call your local sales agent for technical assistance.

The format of this section is:
Problem
1. Possible main cause.
- Possible solution.
- Additional solution.
2. Possible alternative cause.
- Possible solution.
- Additional solution.

The turntable doesn't start with the rotation command.
1. No power.
- Insert the plug correctly.
- Position the machine switch to “ON”.
- Make sure that there is voltage in the mains power supply.
2. Inverter or motor in short circuit.
- Check that the machine specifications are compatible with the system.
- Call the authorized service center.

The rotation pedal of the turntable does not return to the central position.
1. Pedal spring broken.
- Return the inverter pedal to the central position.
- Disconnect the machine from the power and pneumatic supply lines.
- Contact the authorised technical support centre.

Turntable and bead breaking pedal stiff.
1. Rods of the pneumatic valves poorly lubricated.
- Check the oil level in the lubricator.
- Adjust the oil flow from the lubricator.

Bead presser cylinder has little force while breaking the bead.
1. Insufficient pressure.
- Check the pressure in the air supply line.
2. Worn cylinder gaskets.
3. Command valve fault.
- Contact the authorised technical support centre.

It doesn't clamp the rims.
1. Wedges dirty.
- Clean the wedges.
2. Turntable dirty.
- Clean and oil the sliding guides of the turntable.
3. Insufficient pressure.
- Check the pressure in the air supply line.
4. Wedges worn.
- Check the condition of the wedges.
- Contact the authorised technical support centre.

Damages the alloy rims.
1. Plastic protections of the tool inefficient.
- Replace the damaged or missing plastic protections.
2. Wedges protection worn.
- Replace the wedges protection.

Folding post knocks.
1. Insufficient pressure.
- Check the pressure in the air supply line.
2. Folding post cylinder or valve fault.
- Contact the authorised technical support centre.

7.2 Customer technical assistance

For after-sales technical assistance services the customer has the following options:

- Contact your local dealer:
  List of dealers can be found on the website:

https://www.hofmann-equipment.com/en/distributor

- Contact Snap-on headquarters.
  Contacts available on the website:

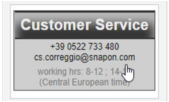
https://www.hofmann-equipment.com/en/contact

- Consult the Technical Documentation available on the website:

https://service.snapon-equipment.net/

Note: In order to improve technical assistance for the customer, the equipment can be geolocated during work by an authorised technician. Consult the Privacy Policy available at:

https://service.snapon-equipment.net/



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