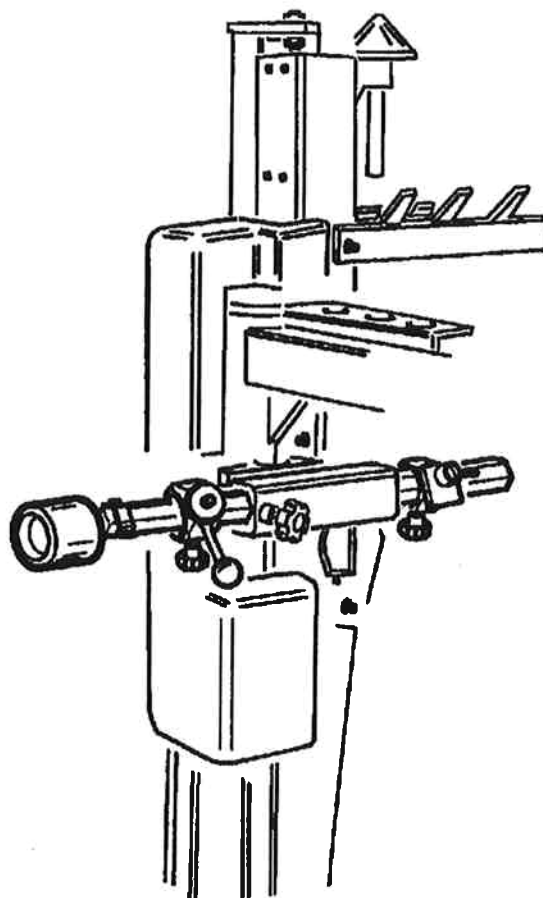


Italiano
English
Français
Deutsch
Español

Manuale d'uso
Operator's manual
Manuel d'utilisation
Betriebsanleitung
Manual de uso



cod. 4-103304 - 1.0 del 02/05

RM RPX

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Español

Elaborazione grafica e impaginazione

Ufficio **P**ubblicazioni **T**ecniche

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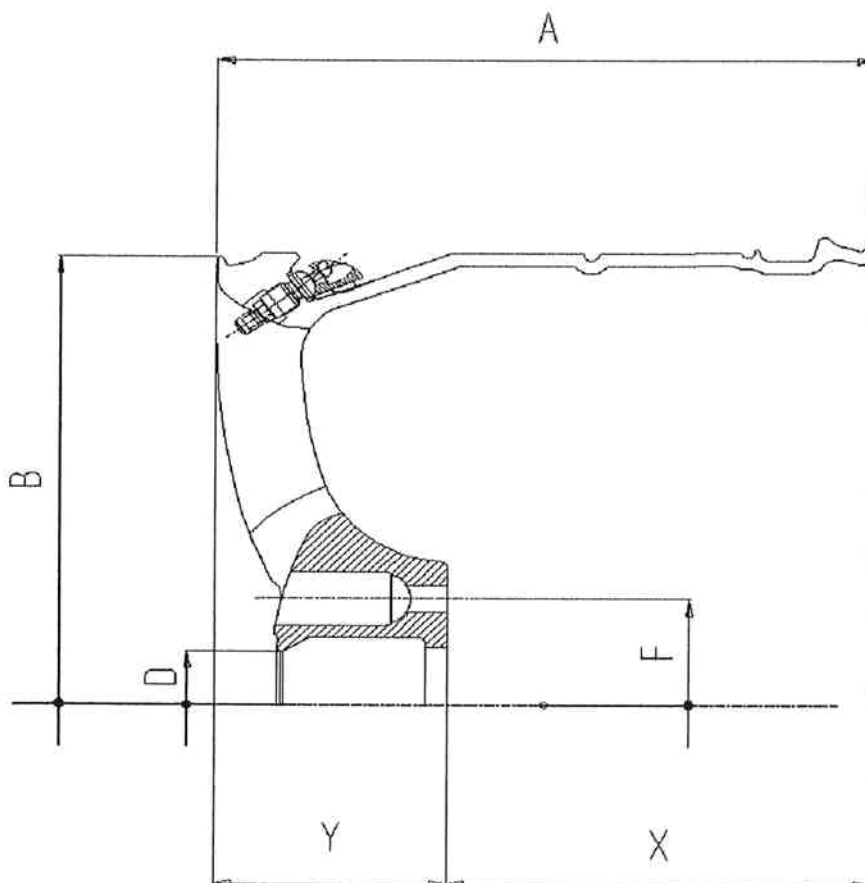
TECHNICAL DATA

- Maximum dimensions of PAX tyres - as per table below
- Tyre diameter 1040 mm
- Minimum rim hole diameter 40 mm
- Operating pressure (minimum) 7 bar
- Operating pressure (maximum) 10 bar
- Pneumatic cylinder force (at 7 bar) 5000 N
- Weight 60 kg

RM RPX Technical Data on: AS933-AS943-AS944 and AS963

The RM RPX with PAX system is able to process wheels (see drawing below)

	NON-CLIPPE' ROLLER (U fig.7)	CLIPPE' TOOL (J - Q fig.7)
Diameter (B)	from 360 to 520	
Max width (A)	434 mm	340 mm
Internal offset (X)	fig.10 and 10a - TAB.1 and 2	fig.10 and 10a - TAB.1 and 2
External offset (Y)	fig.10 and 10a - TAB.1 and 2	fig.10 and 10a - TAB.1 and 2
Hole diameter (D)	from 40 to 105	
Circumference diameter		
Fixing hole (F)	from 98 to 170	
Max tyre diameter	1040	



INSTALLATION AREA

Place the tyre changer in the chosen work position, complying with the minimum clearances shown in the tyre changer manual (fig.1).

INSTALLATION

N.B.:

The RM RPX may only be installed on the tyre changer by qualified personnel authorised by MONDOLFO FERRO SpA. Installation by UNQUALIFIED personnel leads to loss of the warranties concerning performance of the device.

The RM RPX accessory may only be installed on MONDOLFO FERRO AS 933, AS 943, AS 944 and AS 963 tyre changers already equipped with SUPER RM+RM2 / SUPER RM+RM4.

- Disconnect the electricity and compressed air connection (fig.1a).
- Check whether the machine already has the holes required for installation of the RM RPX accessory.
- Fix the upright to the machine body (fig.2).
- Fix the tool shelf (fig.2).

DESCRIPTION OF THE RM RPX

Fig.7

- | | |
|--|---|
| A. Upright | L. Bead demounting lever |
| A1. Tool shelf | M. Rim guard (Réglette) |
| B. Horizontal arm with cylindrical roller | N. Small cone |
| C. PAX wheel support | O. Large cone |
| D. Anti-rotation pin | P. Tool securing pin |
| E. Selector switch | Q. Angled disc (for clippé wheels) |
| F. Horizontal arm clamping handle | R. PAX tyre fig.30 |
| H. Locking ring nut | S. Support fig.30 |
| I. Ring nut wrench | T. PAX special profile rim fig.30 |
| J. Double roller and claw tool
(for clippé wheels) | U. Cylindrical roller |
| K. Bead inserter | Y. Cam |
| | X. Positioning pin |

GB



WARNING

Before starting demounting, it is essential to check the code to identify the type of PAX System (full width or clippé support).



WARNING

Whenever working on the pressure valve or transducer, refer to the transducer manufacturer's manual and follow the instructions given therein.

DEMOUNTING A TYRE

Procedure for standard PAX tyres

Fig.8

- Deflate the tyre.
- Clamp the PAX wheel support (C) on the turntable.
- Place the wheel with PAX tyre on the support (C).
- Fit the anti-rotation pin (D) into one of the rim's fixing holes.
- Choose the appropriate cone (N) or (O) to suit the centring hole dimensions.
- Fit the quick-lock ring nut (H).
- Clamp the wheel by tightening the ring nut (H) with the wrench (I).

Selector switch functions

Fig.9

The selector switch has four settings:

- position 1: saves and corresponds to the external diameter (small diameter) during demounting;
- position 2: saves and corresponds to the internal diameter (large diameter) during demounting;
- position 3: saves and corresponds to the clippé support extraction stage;
- position 4: saves and corresponds to the bead demounting stage for external and internal diameter.

Lower bead breaking

(Common procedure for full width and clippé support Pax System wheels)

IMPORTANT

Before demounting the tyre it is essential to set the selector switch, allowing you to save the tool positions for demounting tyres of the same size.

Setting the Selector Switch

N.B.:

The selector switch allows you to save the tool positions when working on sets of wheels of the same size.

- Use the pneumatic system switch (G) to lower the arm with cylindrical roller (B) fig.11.
- Position the cylindrical roller on the edge of the rim fig.11.
- Turn the selector switch (E) to 1 and lock it in place with the handle (F) fig.12.
- Move the arm with cylindrical roller to the underside of the wheel fig.13.
- Move the switch (E) to 2 fig.14.
- Move the roller to touch the lower bead fig.11.
- Press the rotation pedal and operate the pneumatic system switch (G) to gradually start breaking the bead. At the same time, lubricate the bead with spray lubricant of the type recommended by the tyre manufacturer, or if no liquid lubricant is available, with the special spray device fig.16.
- Completely remove the bead from the rim fig.17.

Setting the wheel support plate

Fig.10a

The wheel support plate can be set in four positions P1, P2, P3 and P4.

Set the wheel support plate to suit the width of the wheel to be processed (see TAB.1-2, fig.10).

Upper bead extraction

(Common procedure for full width and clippé support Pax System wheels)

- Move the arm with cylindrical roller B to the upper side of the wheel fig.18.
- Move the switch to 1 fig.19.
- Move the roller into position on the bead fig.20.
- Use the pneumatic system switch (G) to press the roller onto the bead of the tyre (B) fig.11. To assure the correct roller position, it is best to secure the arm (B) with the handle (F).
- During bead breaking, spray on liquid lubricant fig.20.
- With the roller pressing the bead, it is best to rotate the wheel through at least a couple of revolutions to de-stress the bead.
- The réglette is inserted into the space this produces between the bead and the edge of the rim fig.21.
- Insert the réglette as shown in fig.22.



N.B.:

the réglette must be inserted between the edge of the rim and the bead. The réglette has a recess to take the end of the bead breaking lever.



WARNING

A single réglette may be used for numerous demounting jobs. However, its condition must be checked before using it. If the réglette's tang is worn, we recommend replacing it.

Réglette insertion

The réglette must be inserted one way round only. The end with the recess for the bead breaking lever must be towards the outside of the wheel. When the wheel is being rotated to insert the réglette, the tang of the réglette must pass beneath the cylindrical roller.

- Raise the roller by operating the pneumatic system switch (G) and move it backwards.
- Fit the lever into the recess in the réglette, fig.22.
- Lift the bead by levering it towards the centre of the wheel, fig 22.



WARNING

Before lifting the bead make sure the lever has penetrated right underneath the bead.

- When the bead has been completely broken, remove the réglette from the tyre immediately fig.23.



WARNING

Take care not to drop the réglette inside the tyre. It must not be left inside the wheel during the subsequent mounting operation.



WARNING

Take great care to avoid contact between the tyre bead and the pressure transducer, or between the latter and the demounting/mounting tools.

Contacts with above-normal stresses can result in breakage of the sensors or compromise the seal between the valve and the rim.

Demounting the support

(Procedure for Pax System wheels with full width support)

- Move the arm with cylindrical roller to the underside of the wheel (fig.24).
- Move the selector switch (E) to 2.
- Move the roller axially until it is in position flush with the rim.
- Place the roller on the bead fig.24.
- Press the rotation pedal.
- During rotation, operate the pneumatic system switch (G). The tyre will gradually come off the rim, dragging the support with it fig.24.
- Remove the tyre and support from the rim by hand.



WARNING

Take great care to avoid contact between the tyre bead and the pressure transducer, or between the latter and the demounting/mounting tools.

Contacts with above-normal stresses can result in breakage of the sensors or compromise the seal between the valve and the rim.

Demounting the Support **(Procedure for Pax System wheels with clippé support)**

- Replace the cylindrical roller with the angled disc fig.25.
- Move the arm with disc to the underside of the wheel.
- Move the selector switch to 3, fig.26.
- Move the arm until the disc is in position at a tangent to the rim.
- Place the disc on the bead fig.27.
- During rotation, operate the pneumatic system switch (G). The tyre will gradually come off the rim, dragging the support with it.

The particularly stiff supports, it may be necessary to use the cam (Y) fig.27a - 27b. When the disc is touching the support, tighten the knob C as shown in fig.27a, turn the selector switch to 1 and operate the lever F as shown in fig.27b.

Then continue to extract the support and tyre.

Now that the disc is closer to the rim, it will be easier to extract the support.

NOTE: when extraction is complete, undo the knob C and return the lever F to the low position.

- Remove the tyre and support from the rim by hand.
- Remove the support from the tyre, fig.28 and fig.29.



WARNING

Take great care to avoid contact between the tyre bead and the pressure transducer, or between the latter and the demounting/mounting tools.

Contacts with above-normal stresses can result in breakage of the sensors or compromise the seal between the valve and the rim.

GB

MOUNTING THE TYRE

The PAX System comprises (fig.30):

1. Rim with special PAX System (T) profile (for full width or clippé support).
2. Support S (full width or clippé).
3. PAX System tyre (R).
4. Pressure control sensor.

Fitting the support in the tyre

- Coat the inside of the tyre with the special PAX System Gel for the mechanical support fig.31.
- Lubricate the beads of the PAX tyre (R) and the surface of the support (S) which is going to be in contact with the rim with standard lubricant for mounting car wheels fig.32.

IMPORTANT

When lubricating the inside of the tyre with the special PAX System gel for the mechanical support, take care not to dirty the beads, on which a standard tyre lubricant will be used.

- Insert the Support (S) into the tyre (R) fig.33.
- Use the levers provided fig.34.



WARNING

The support (S) must be placed in the tyre the correct way round, as shown in Fig.35 for standard and fig.35a for clippé wheels.

- Lubricate the bead seats on the rim (zones marked T in fig.36).
- Fit the tyre-support assembly on the rim fig.36.

Fitting the support on the rim

(Procedure for Pax System wheels with full width support)

- Move the selector switch (E) to 1 fig.37.
- Fit the cylindrical roller on the arm, if not already fitted fig.37.
- Move the arm axially until the cylindrical roller is in position flush with the rim fig.37.
- Press the roller on the tyre bead and at the same time turn the turntable until the support (S) is completely inserted in the tyre (T) fig.37.
- When the operation is complete lift the roller off the tyre.

Fitting the support on the rim

(Procedure for Pax System wheels with clippé support)

- Fit the double roller tool (J) in fig.38.
- Move the arm axially until the larger-diameter roller is in position flush with the rim fig.39.
- Move the tyre bead away and lower the roller onto the surface of the support, keeping the bead behind the special claw on the double roller tool fig.39.
- Turn the turntable until the rest (S) is completely inserted in the rim (T). When the operation is complete lift the roller off the tyre.

N.B.:

the support is fully inserted when the small roller is resting on the top edge of the rim.



WARNING

When inserting the support take care that the upper bead does not enter the seat in the rim which houses the inflation pressure sensor, as this may damage the sensor.

Mounting the lower bead

(Common procedure for Pax System wheels with full width and clippé support)

- Using a standard lever (preferably protected by a plastic sheath), remove the lower bead from the lower edge of the rim fig.40.
- Move the selector switch (E) to 4.
- Move the cylindrical roller to the underside of the tyre.
- Press the roller on the edge of the rim.
- Fit the bead insertion tool (K) onto the wheel fig.41.
- Insert the bead into its seat, turn the wheel at the minimum speed and, moving forward gradually, stop before the belt interferes with the roller fig.41a.

Mounting the upper bead

(Common procedure for Pax System wheels with full width and clippé support)

- Replace the double roller tool with the cylindrical roller (fig.38a).
- Move the cylindrical roller to the upper side of the tyre.
- Use the pneumatic system switch (G) to press the roller onto the edge of the rim fig.42.
- Insert the bead into its seat, turn the wheel at the minimum speed and, moving forward gradually, stop before the belt interferes with the roller.
- When the bead is completely mounted, release the bead insertion tool from the wheel.
- Move the roller away by pushing it in an axial direction.
- Inflate the tyre fig.43 using the air gun connected to the tyre changer.
- Make sure that the tyres are correctly inserted in their seats.

GB



WARNING

DO NOT FOR ANY REASON exceed the tyre manufacturer's recommended inflation pressure - TYRE DAMAGE HAZARD.



WARNING

After fitting the support, always clean the following items with a dry cloth:

- the tyre beads;
- the wheel support grooves;
- the support positioning roller.



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Illustrazioni e schemi
Illustrations and diagrams
Illustrations et schémas
Bilder und Zeichnungen
Ilustraciones y esquemas

cod.4-103304 rev.1.1 del 06/05

RM RPX

Fig. 1

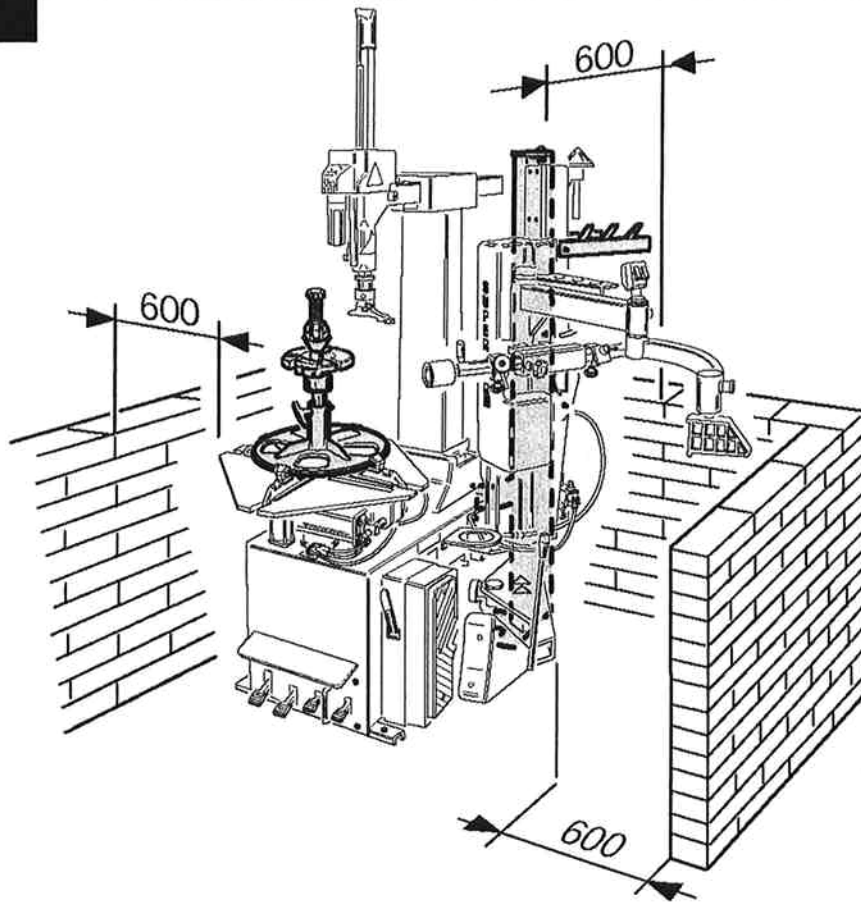


Fig. 1a

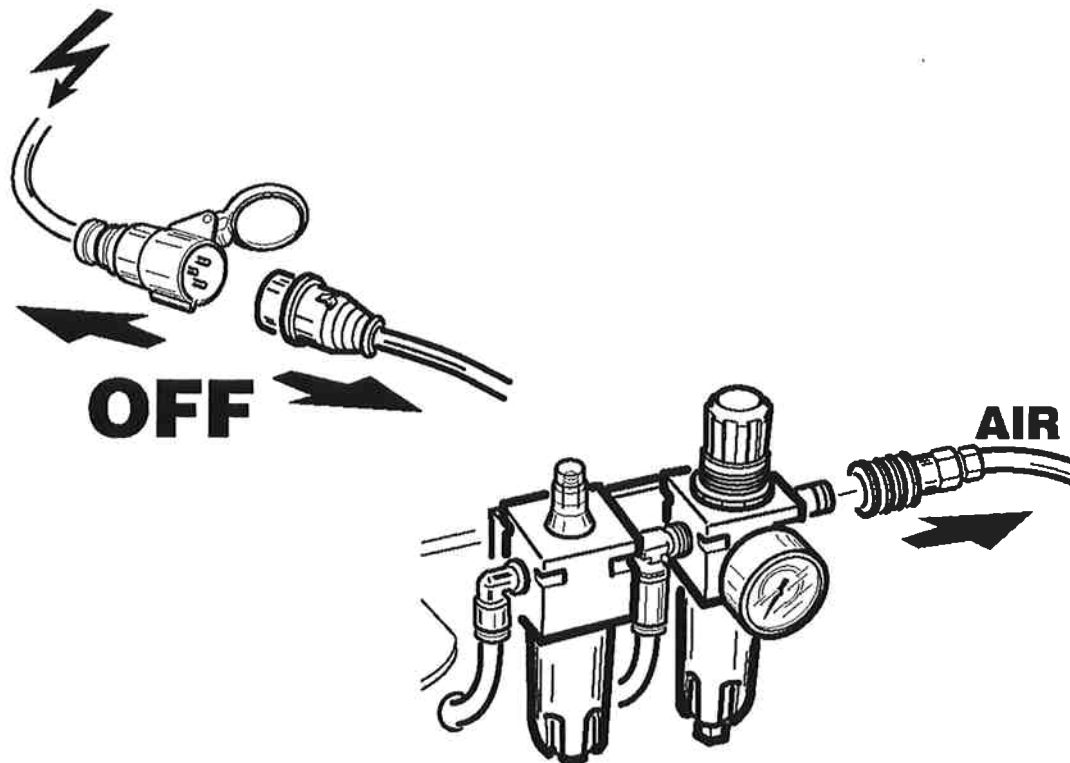


Fig. 2

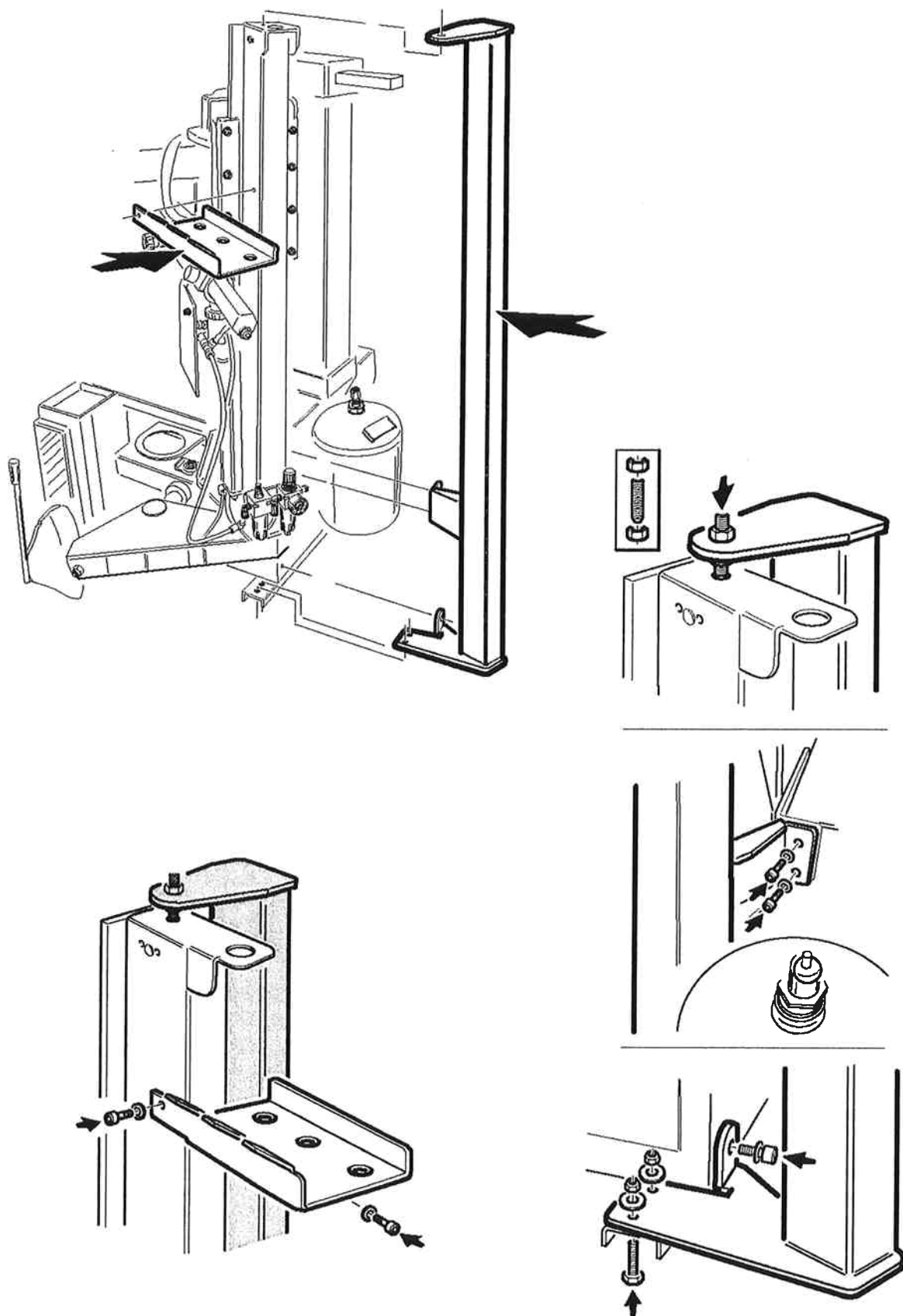


Fig. 7

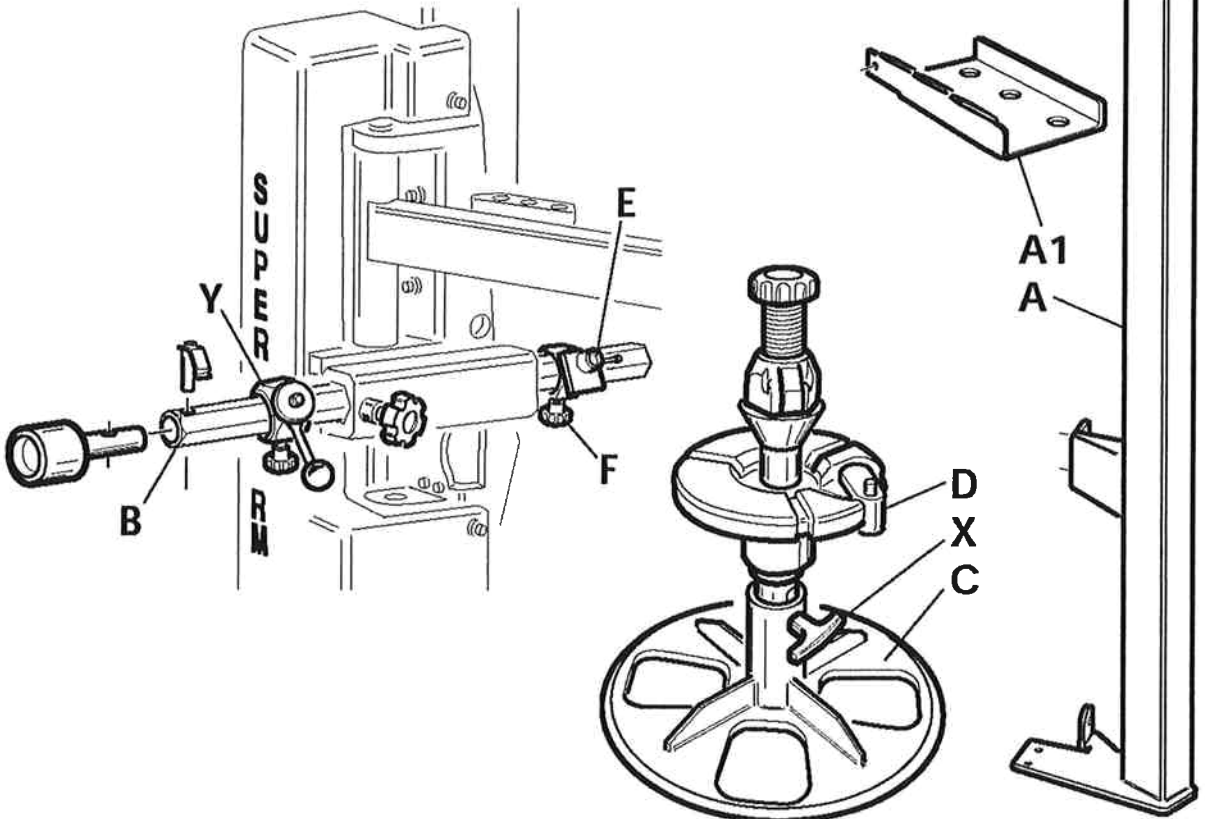
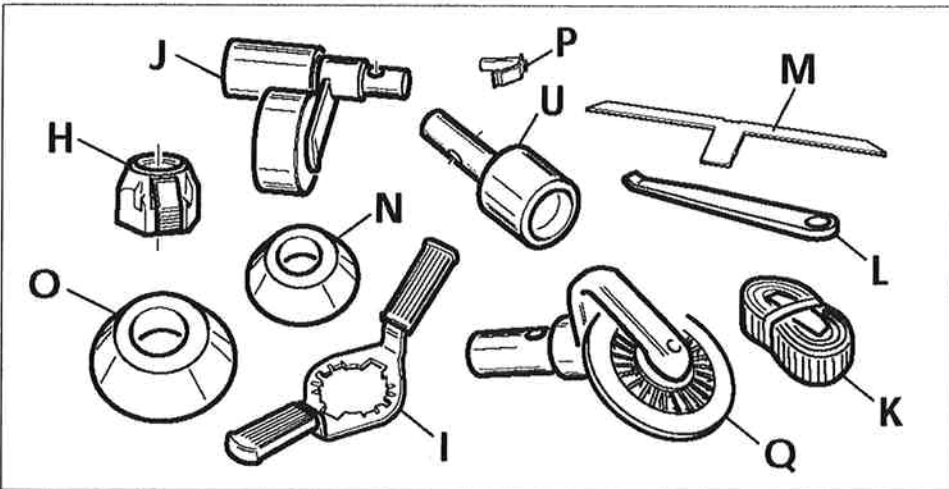
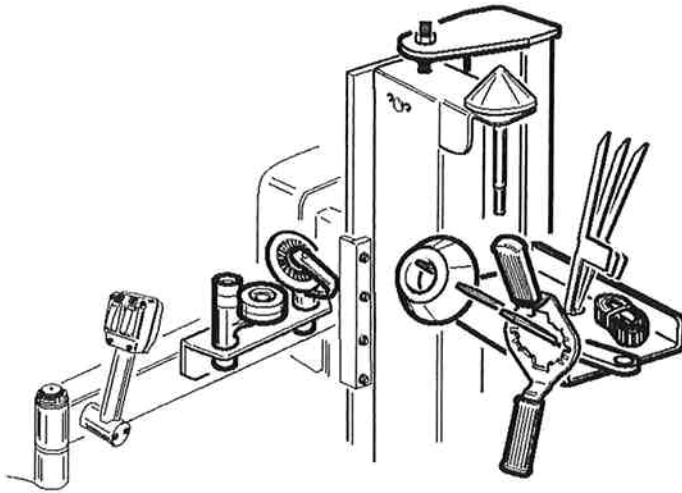


Fig. 8

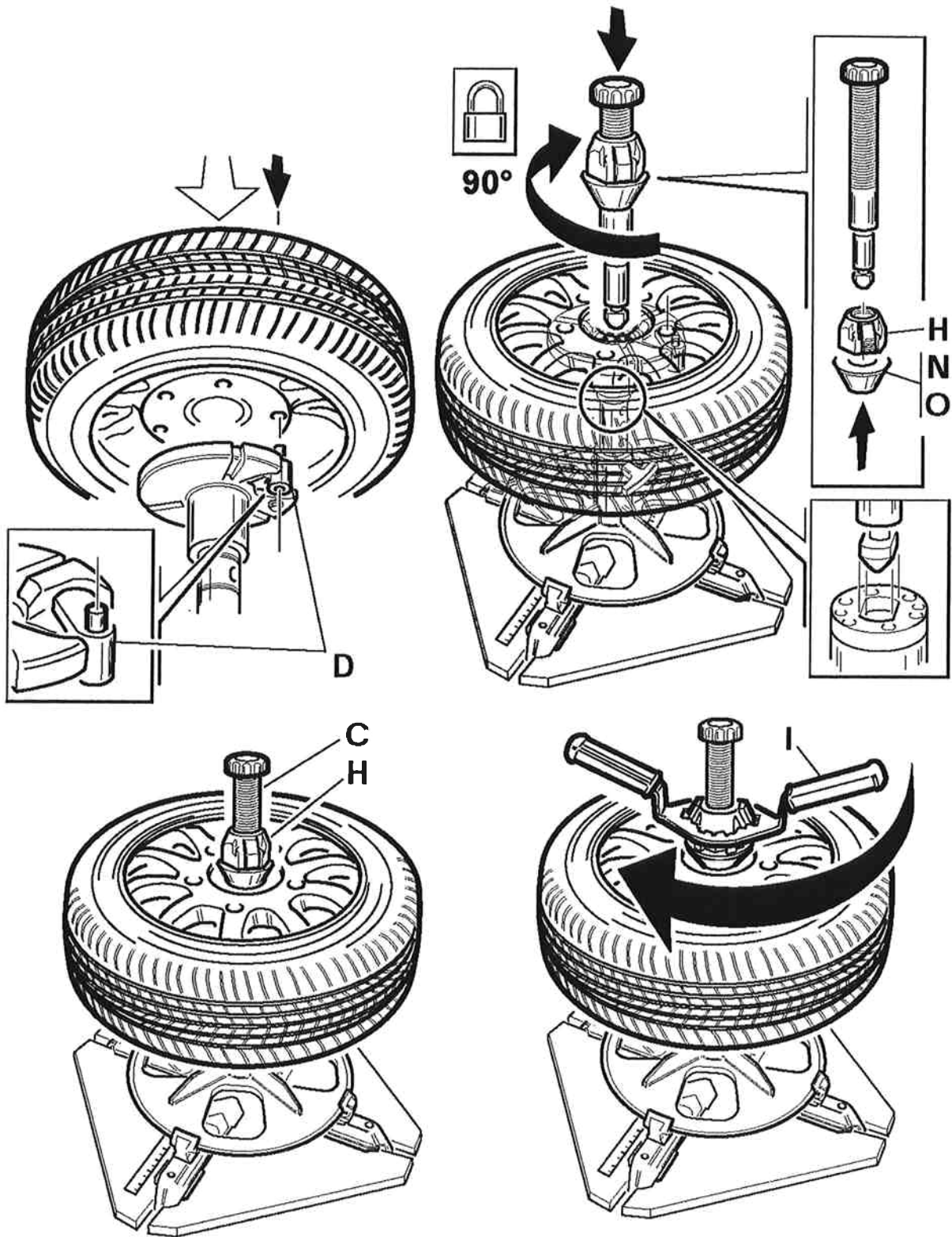
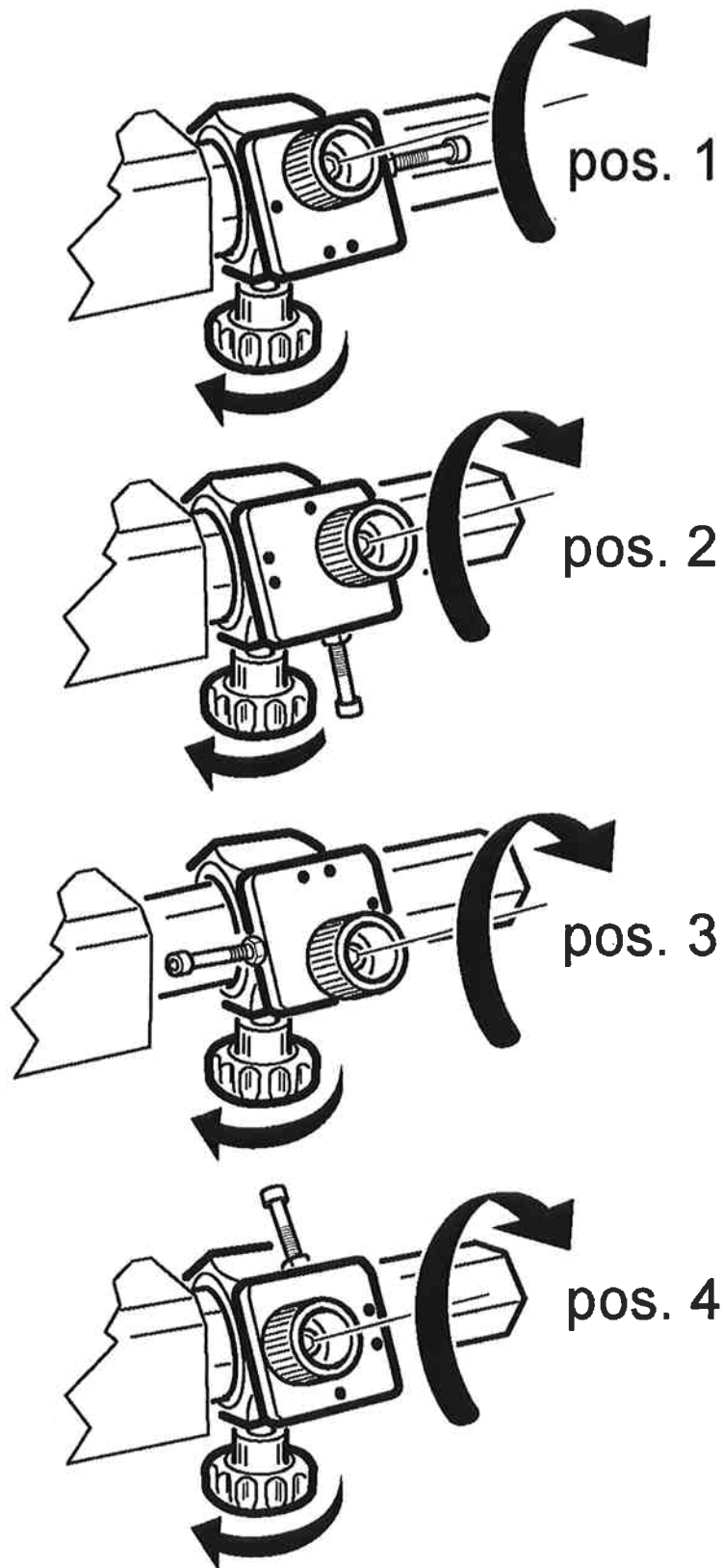


Fig. 9



TAB. 01

AS 933 - AS 943 - AS 944			
	Ymax	Y clipe max	Xmax
P1	214	120	220
P2	184	90	250
P3	154	60	280
P4	124	30	310

TAB. 02

AS 963			
	Ymax	Y clipe max	Xmax
P1	180	86	254
P2	150	56	284
P3	120	26	314
P4	90	-	344

Fig.10a

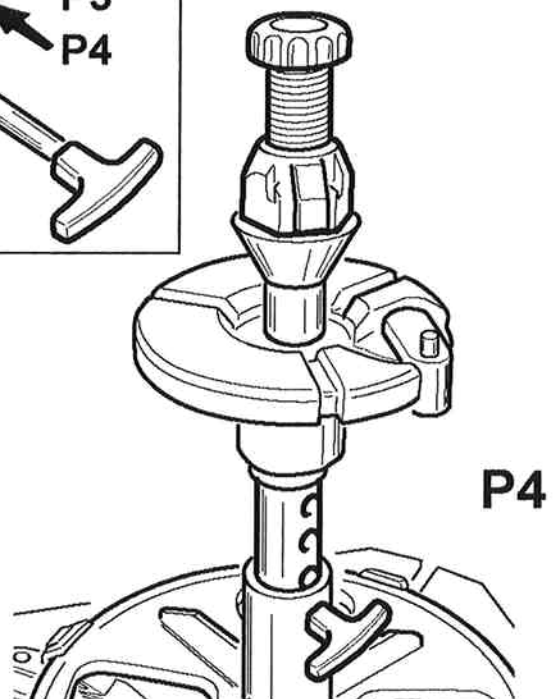
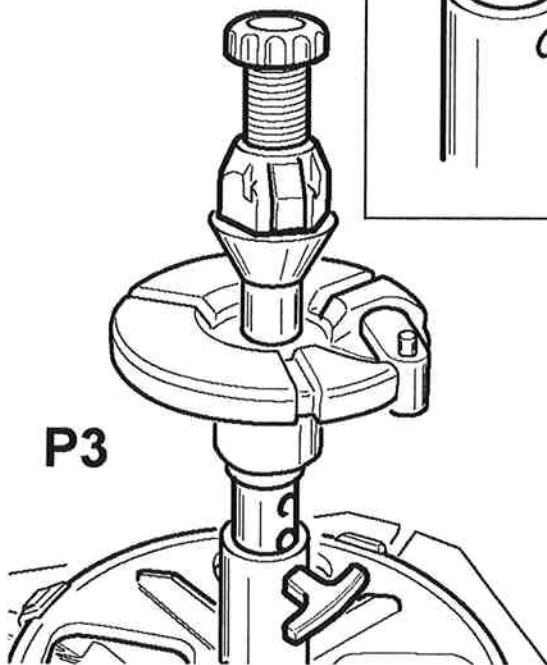
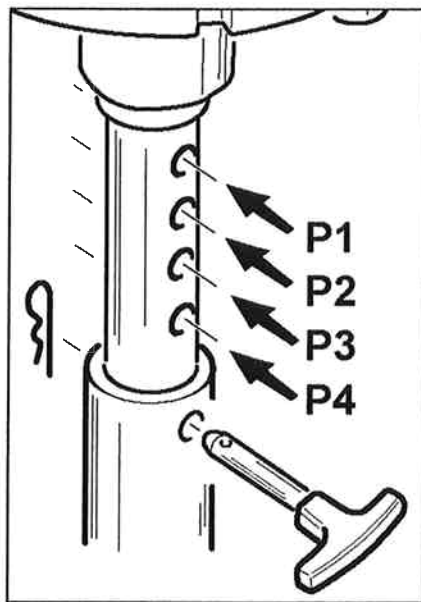
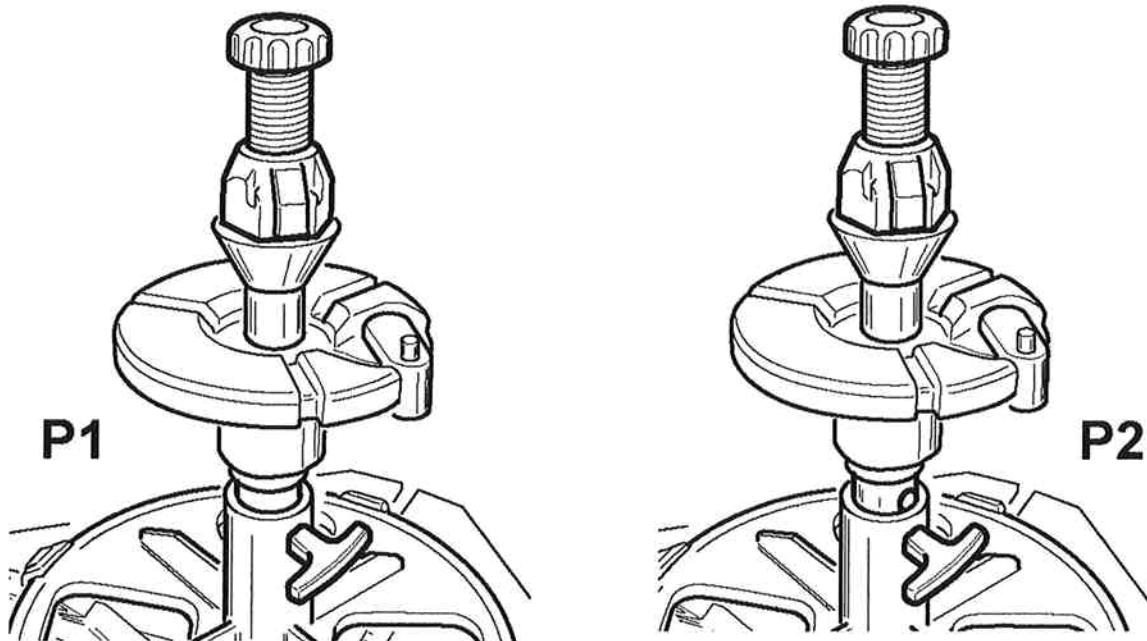


Fig.11

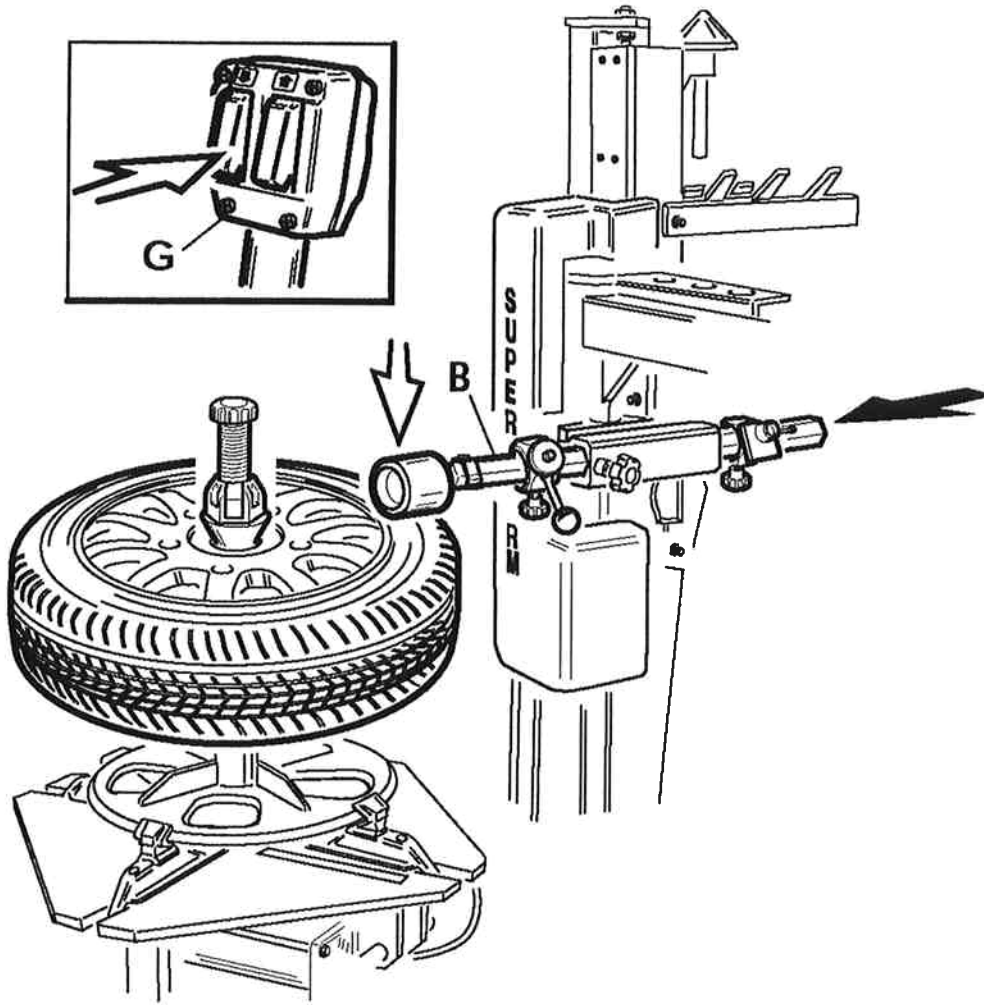


Fig. 12

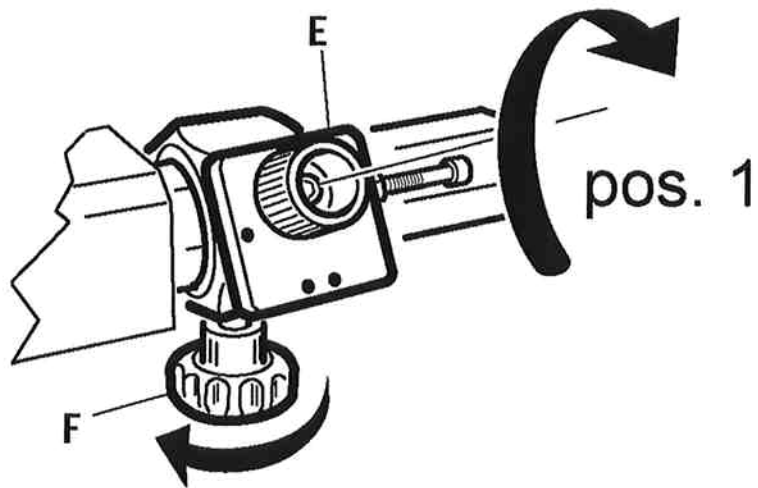


Fig. 13

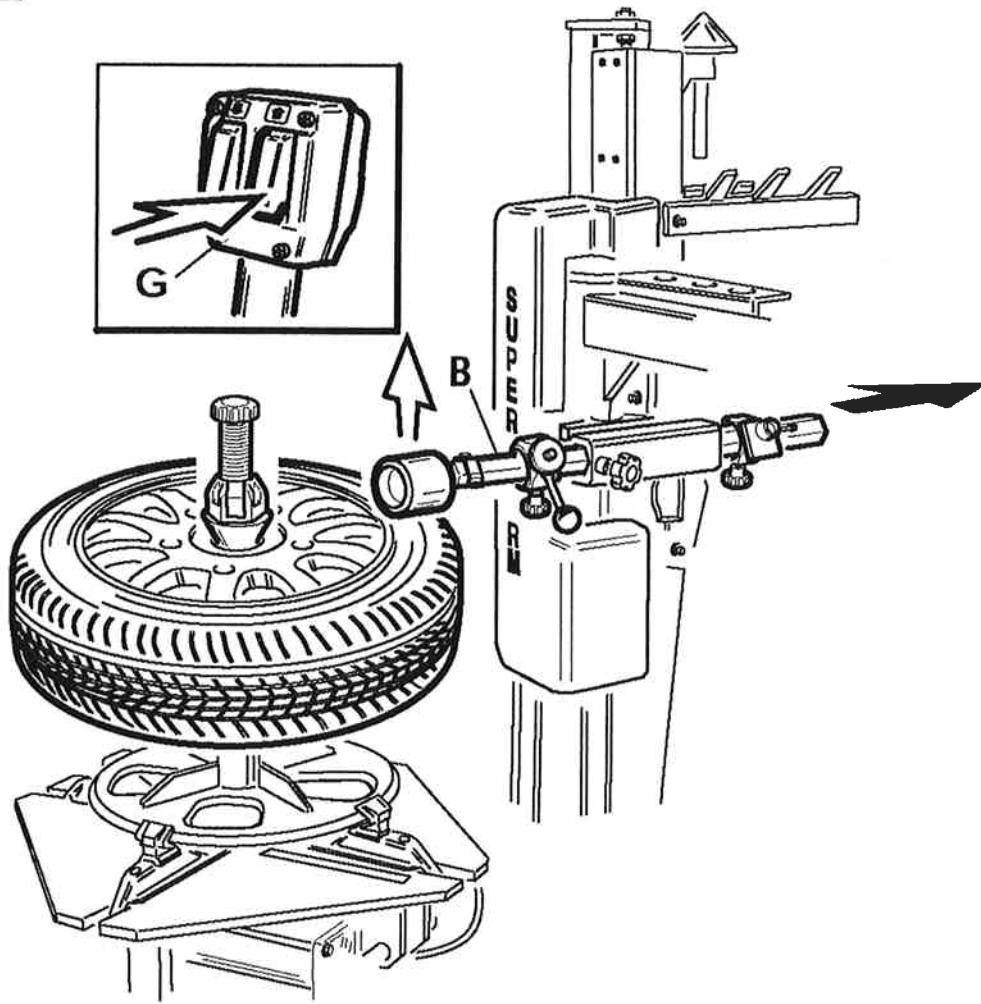


Fig. 14

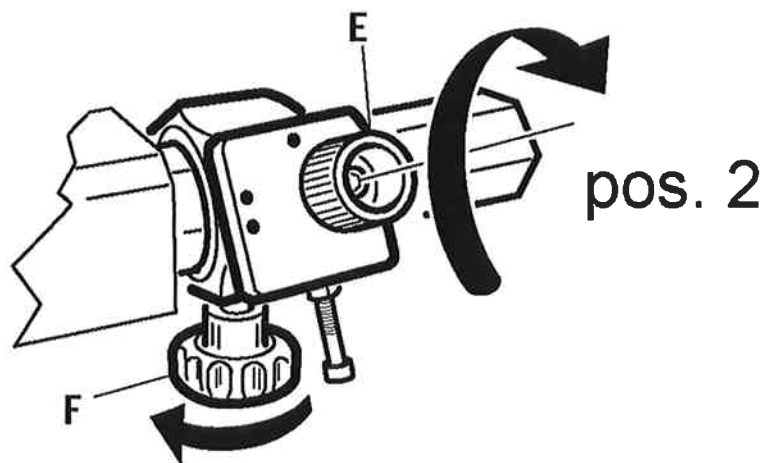


Fig.15

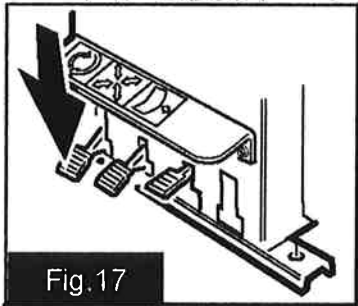
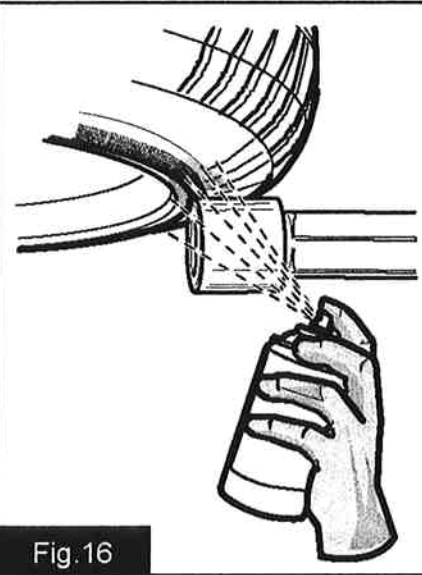
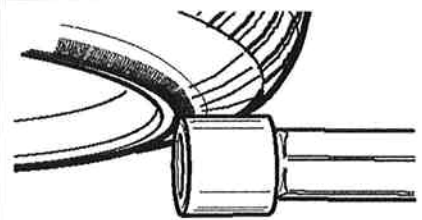
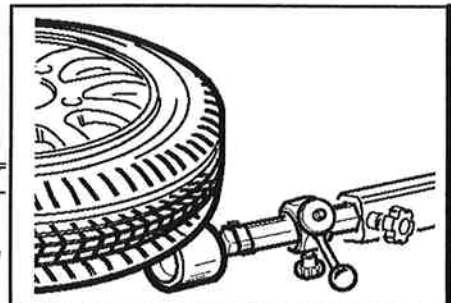
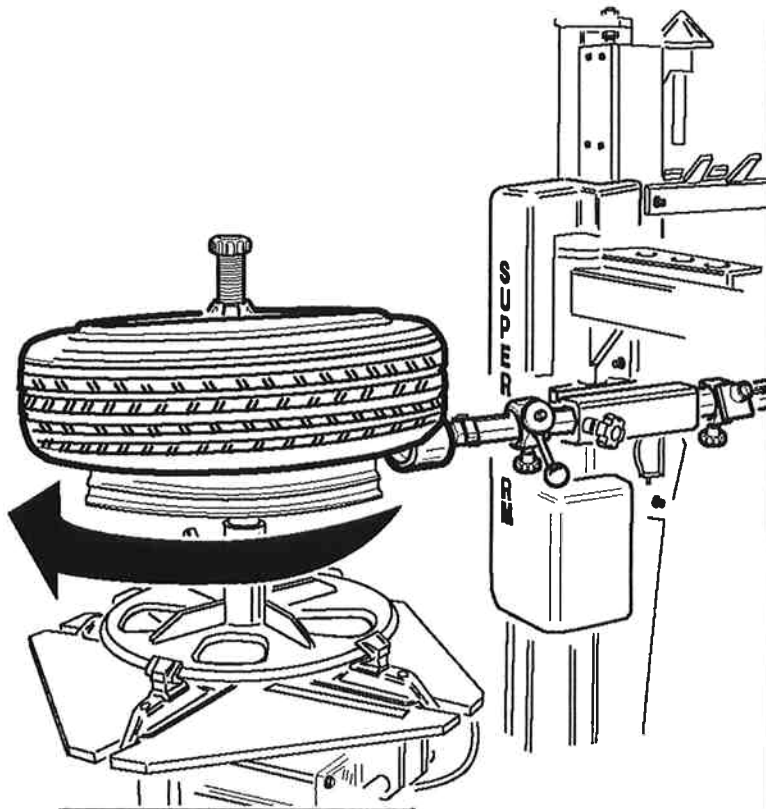


Fig.17

Fig.16

Fig. 18

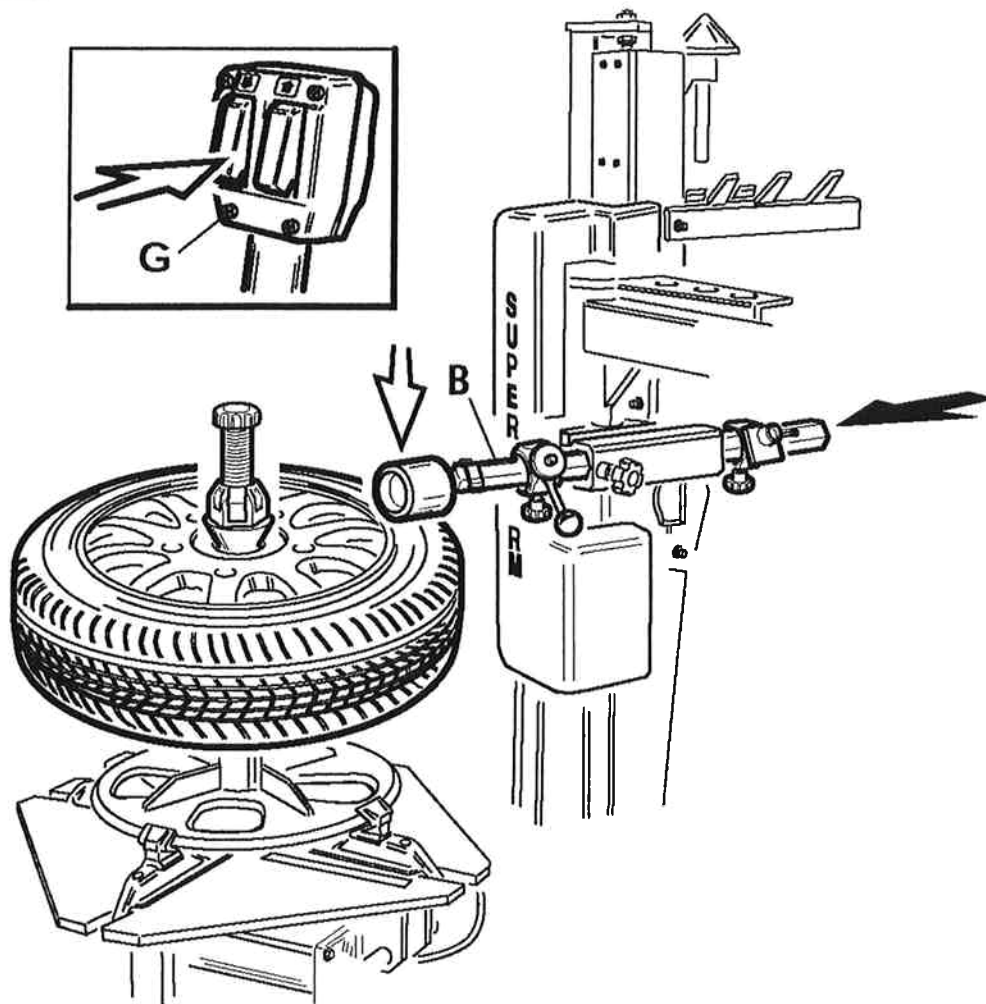


Fig. 19

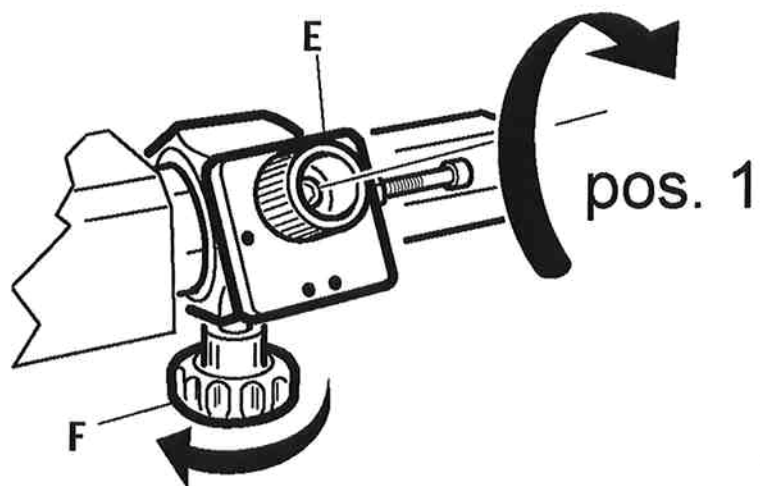


Fig.20

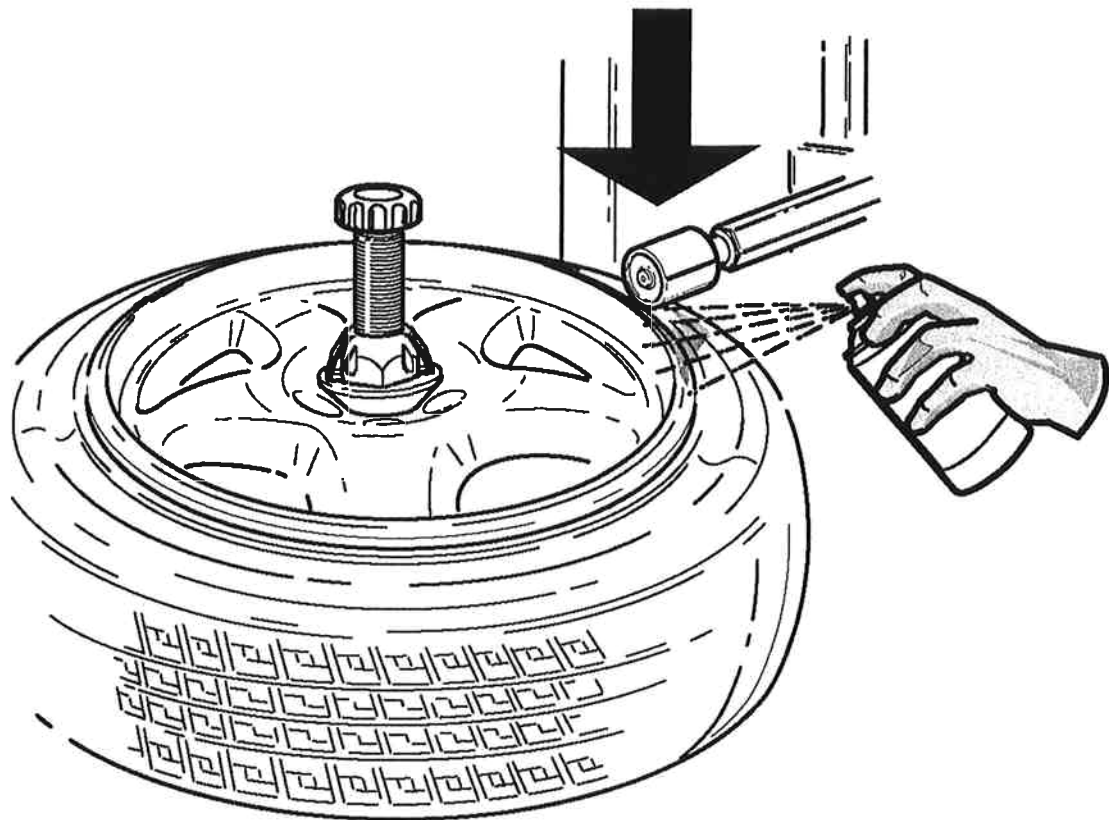


Fig. 21

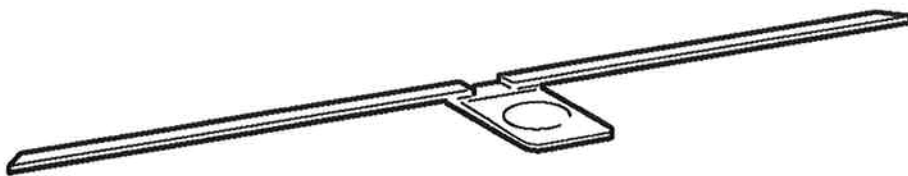


Fig. 22

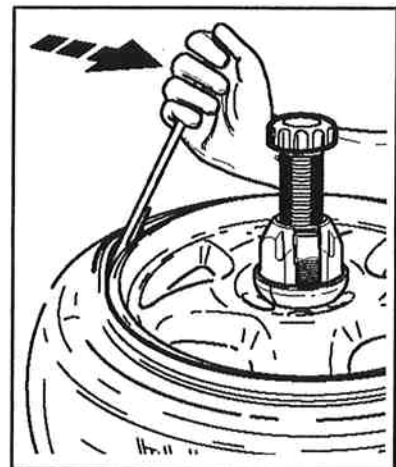
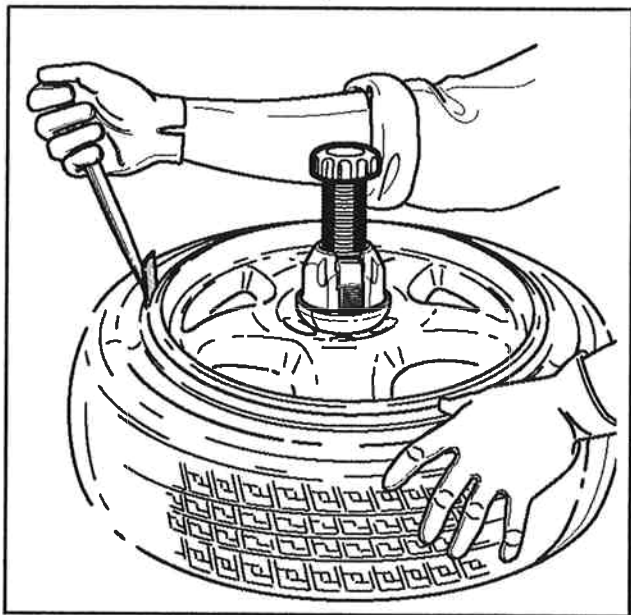
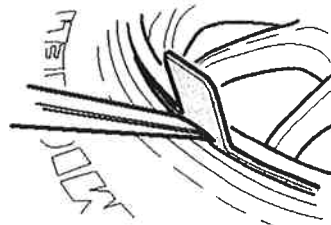
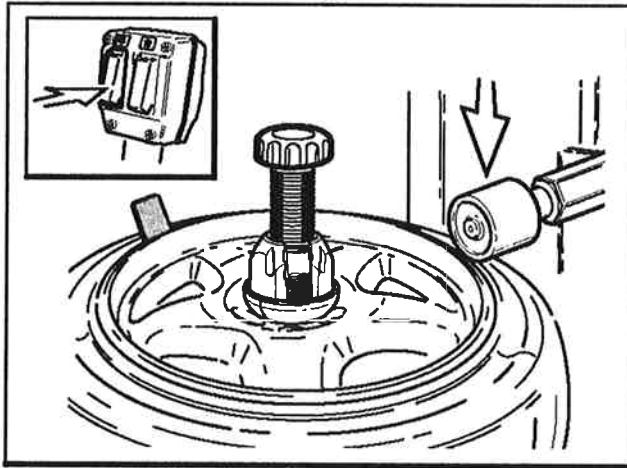
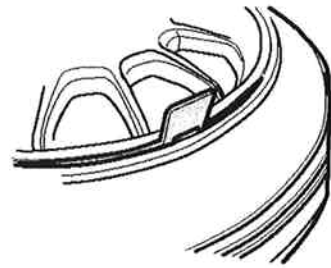
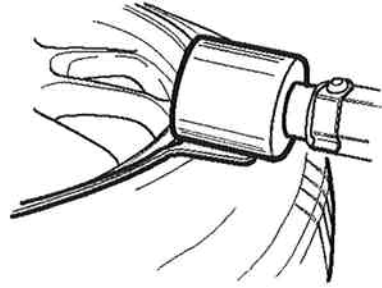
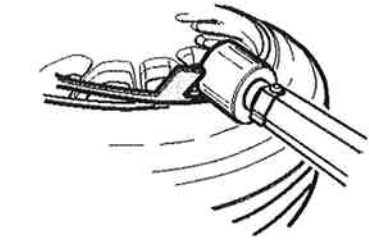
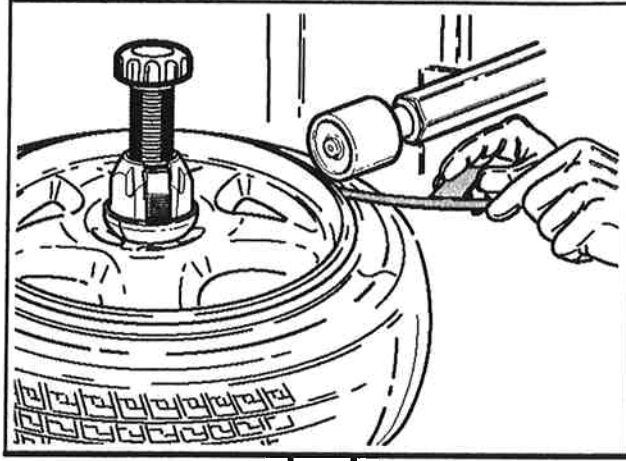


Fig.23

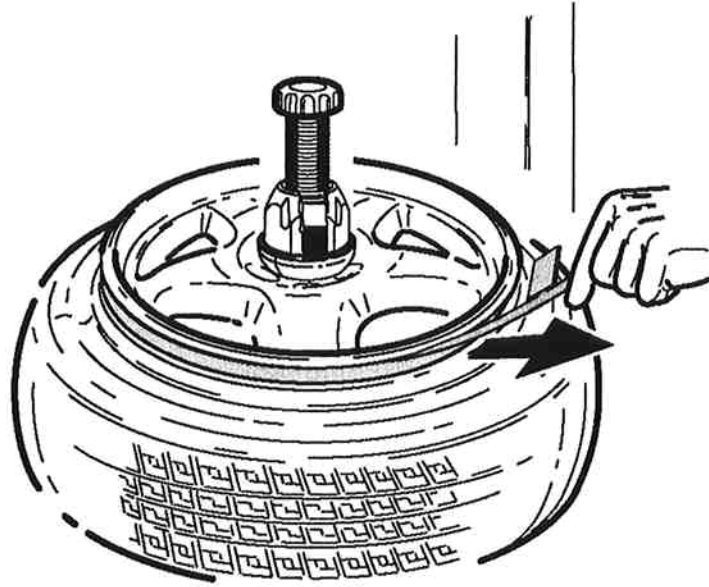


Fig.24

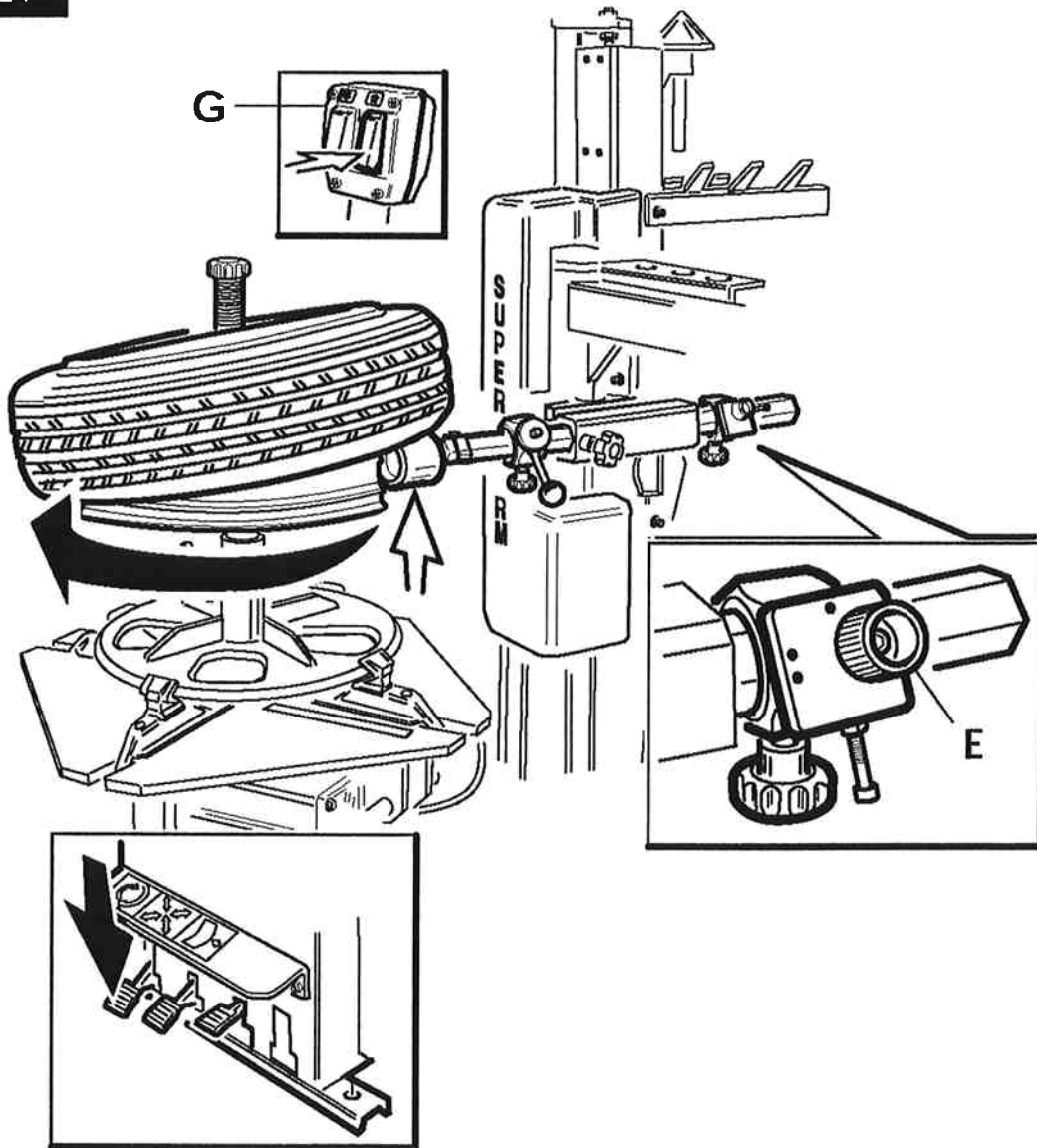


Fig.25

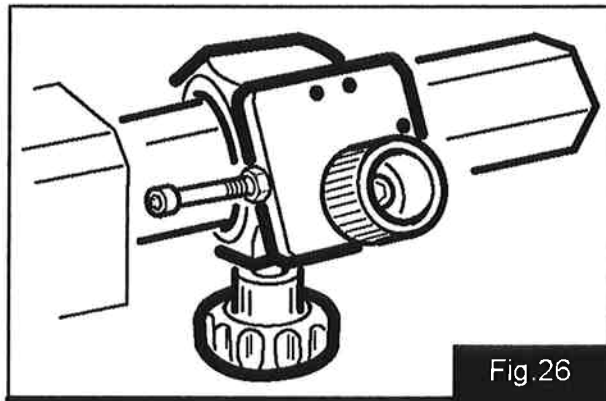
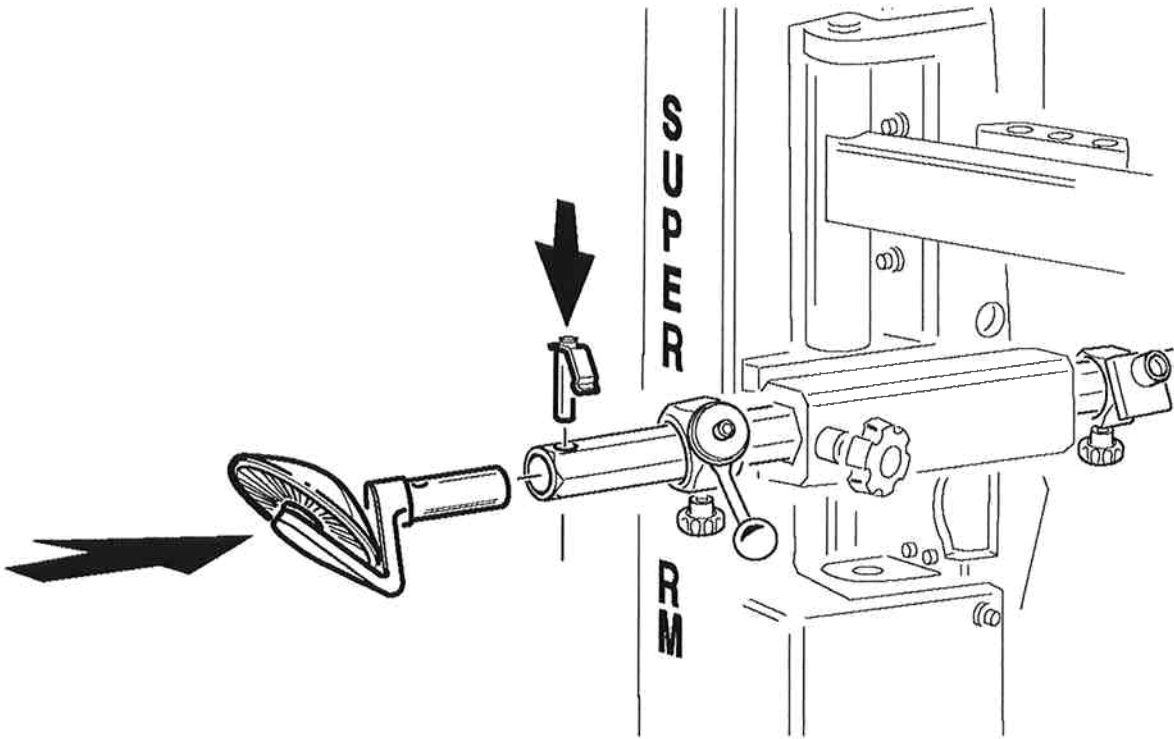


Fig.26

Fig.27

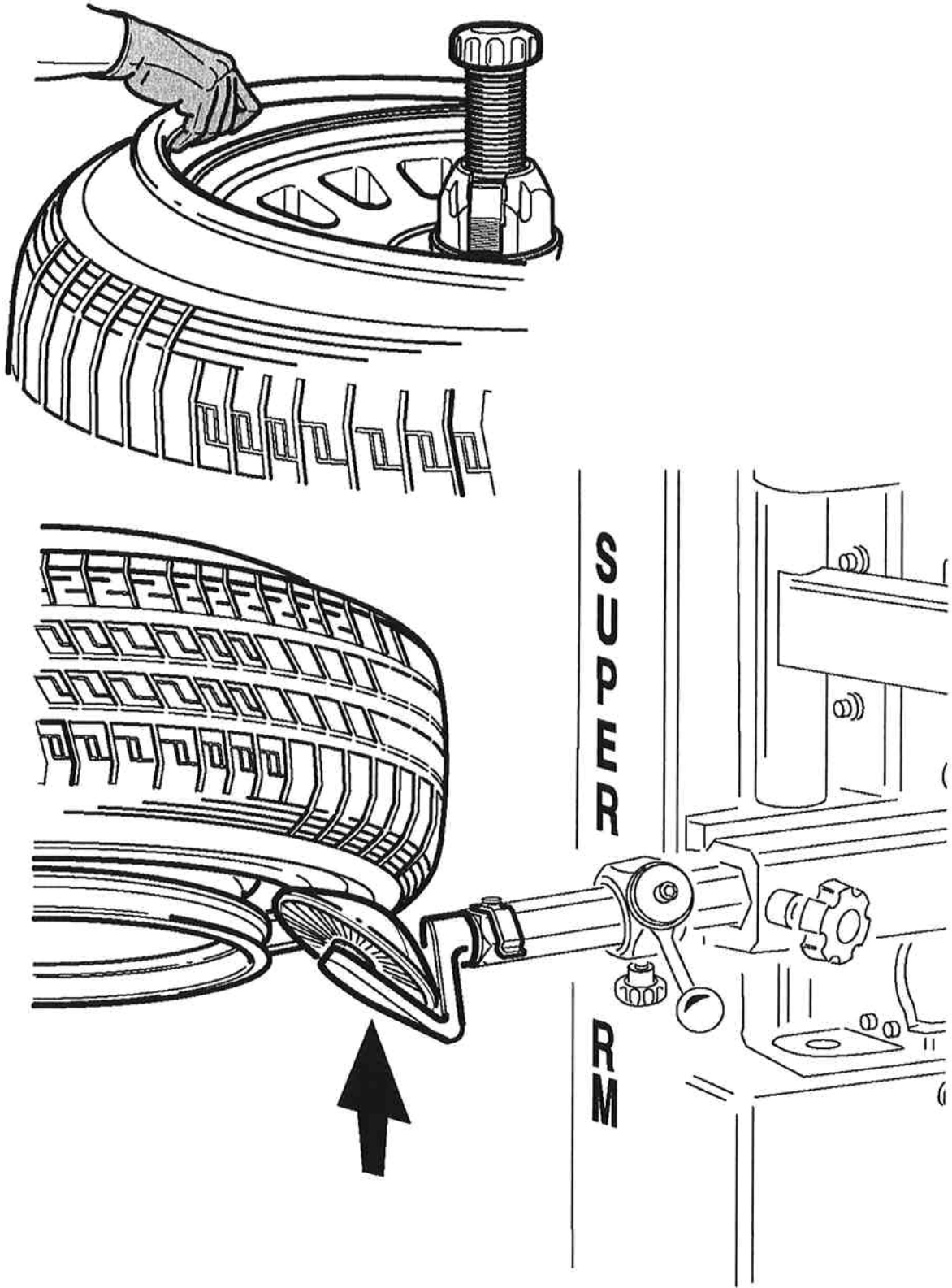


Fig.27a

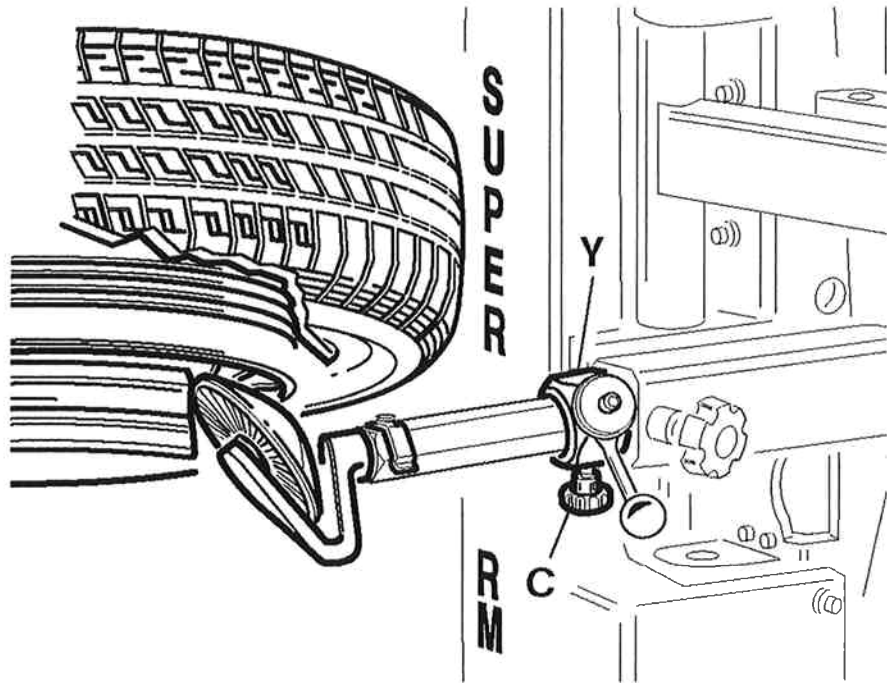


Fig.27b

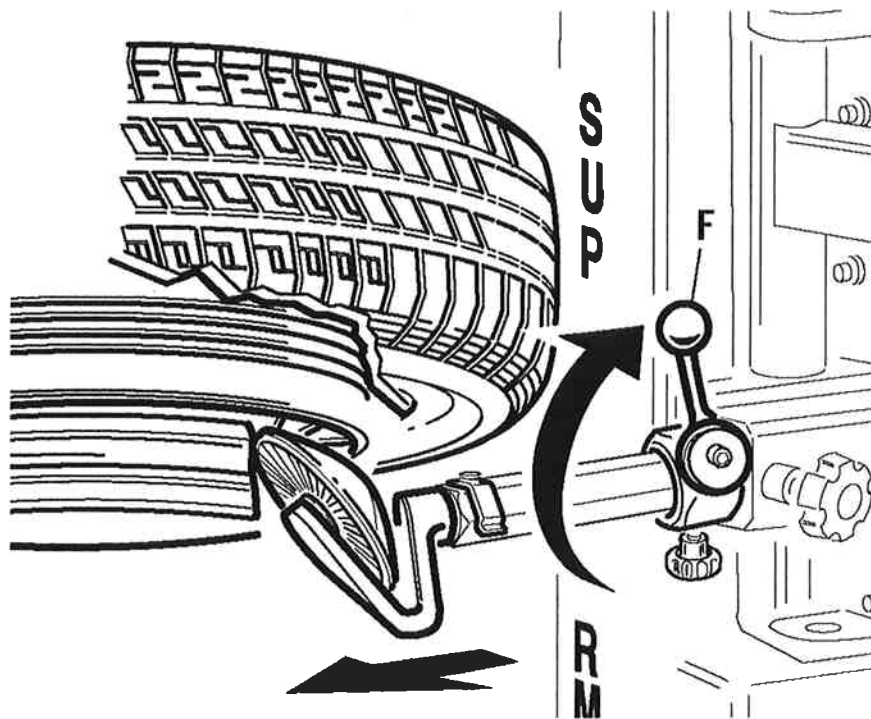


Fig.28

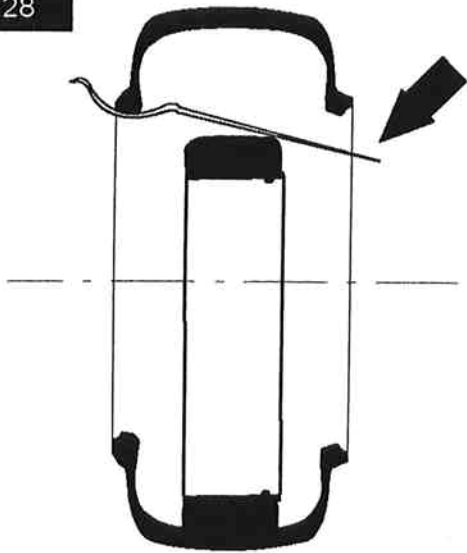


Fig.29

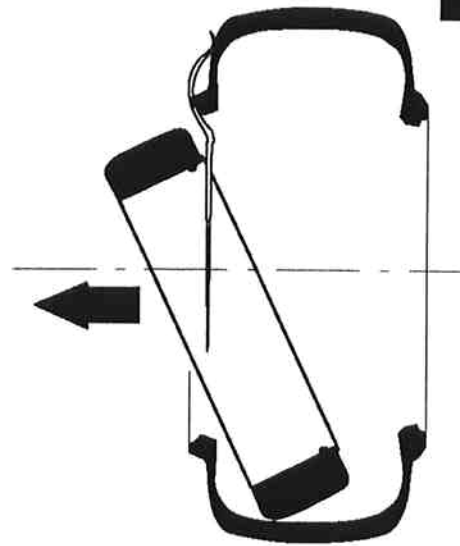


Fig.30

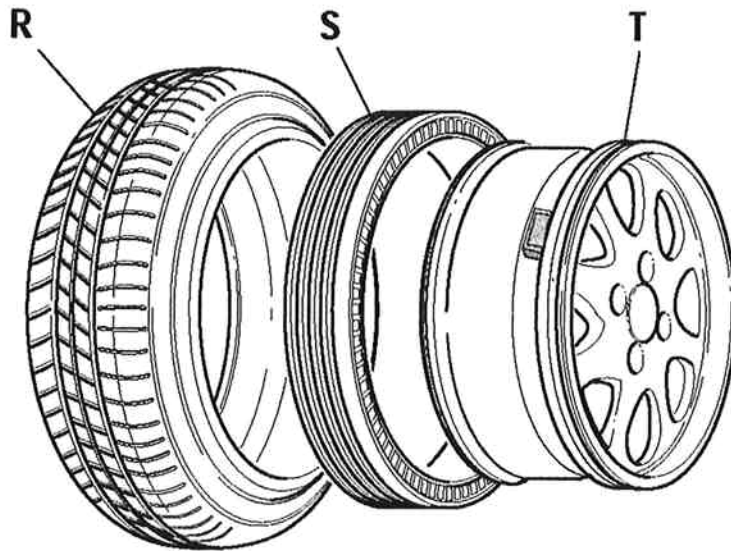


Fig. 31

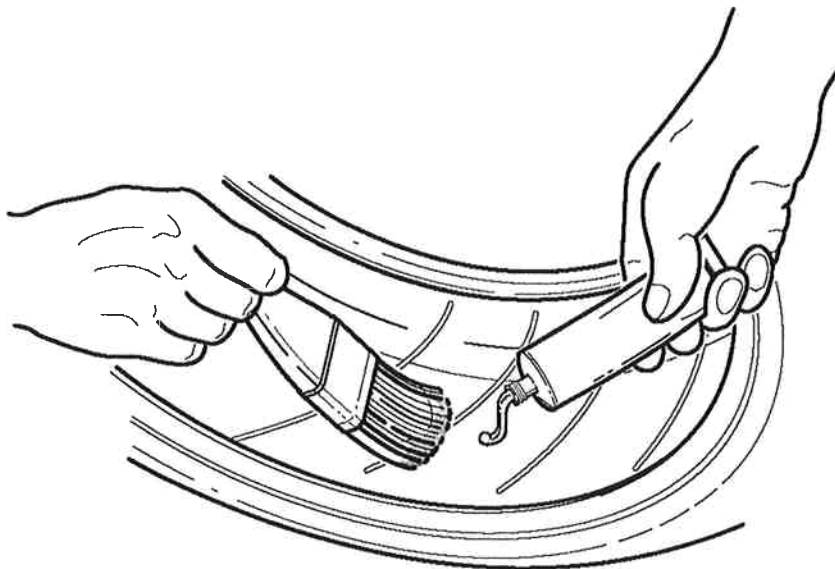


Fig.32

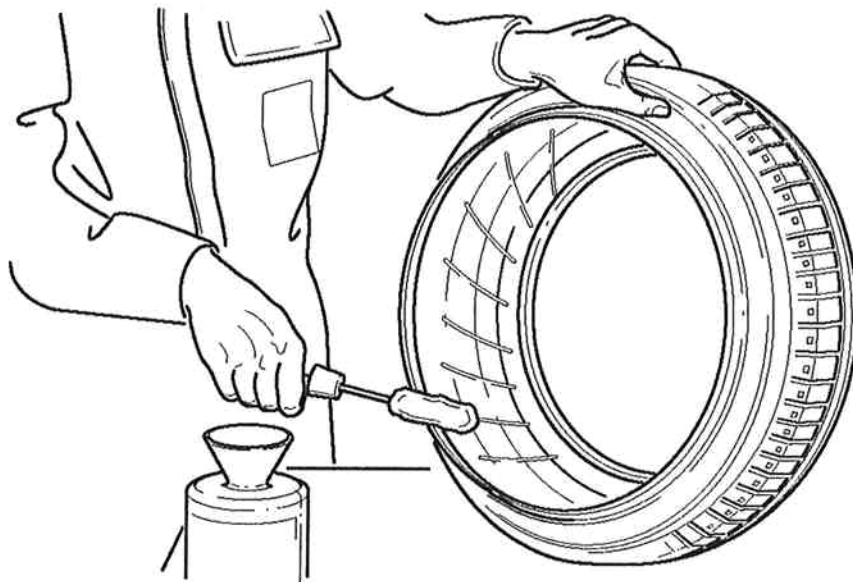


Fig.33

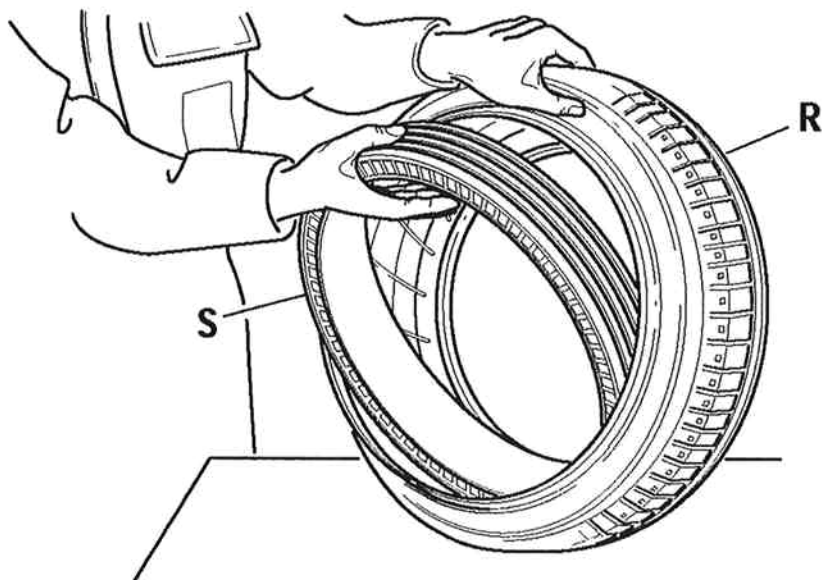


Fig.34

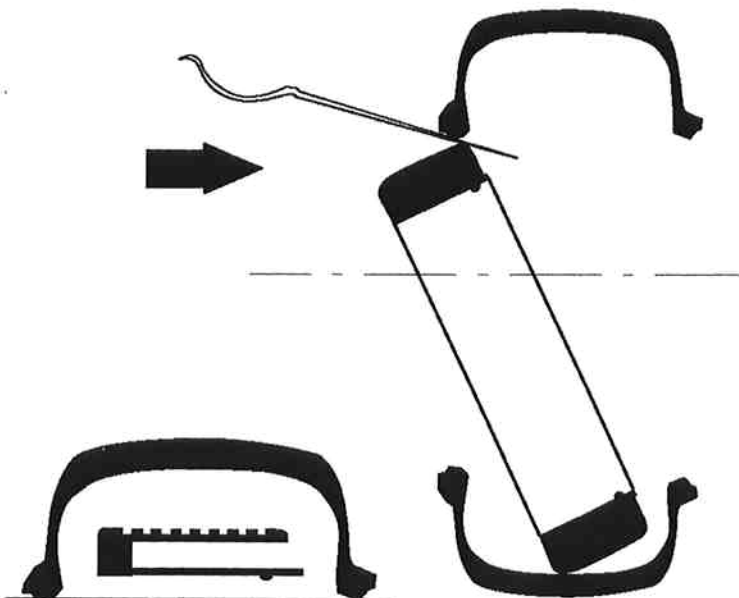


Fig 35

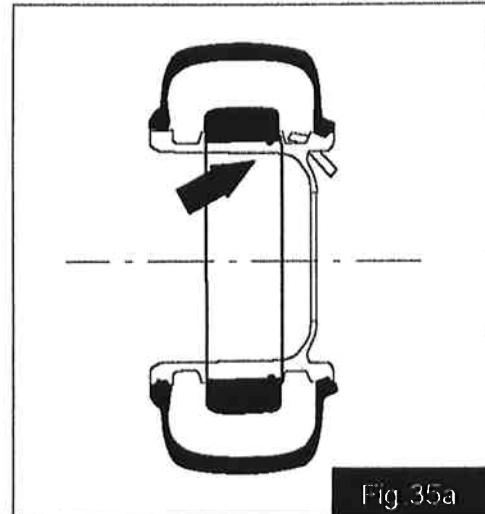
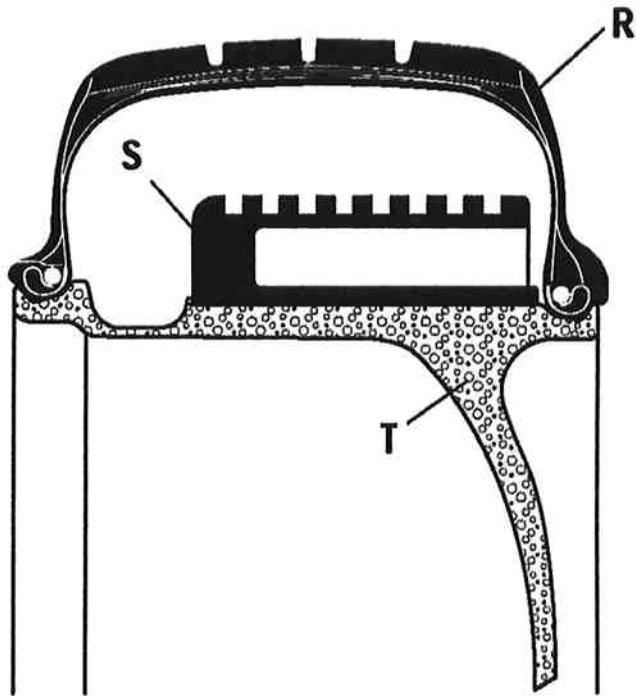


Fig 35a

Fig 36

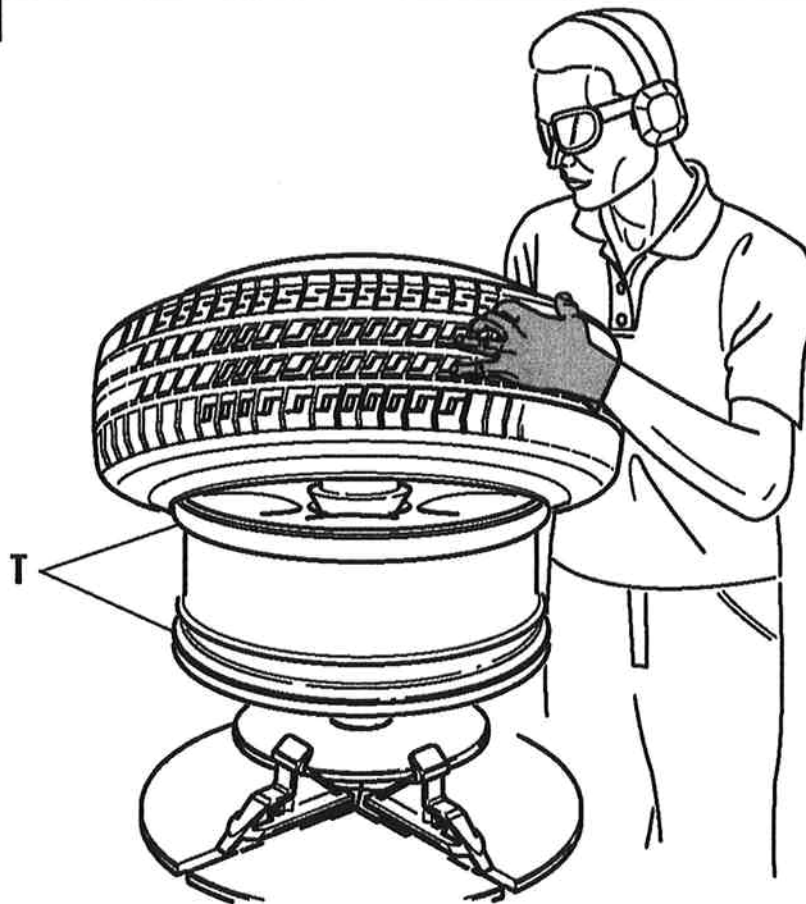


Fig.37

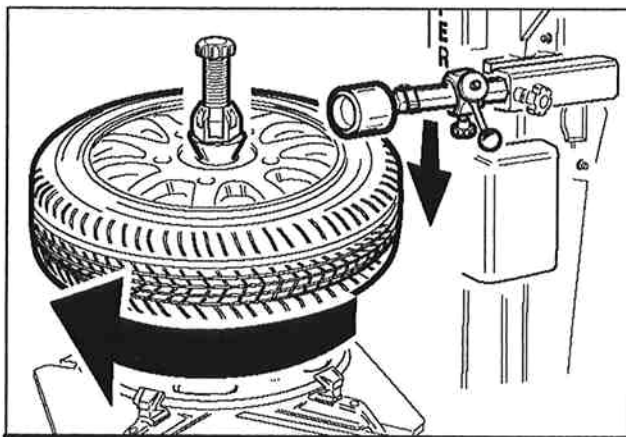
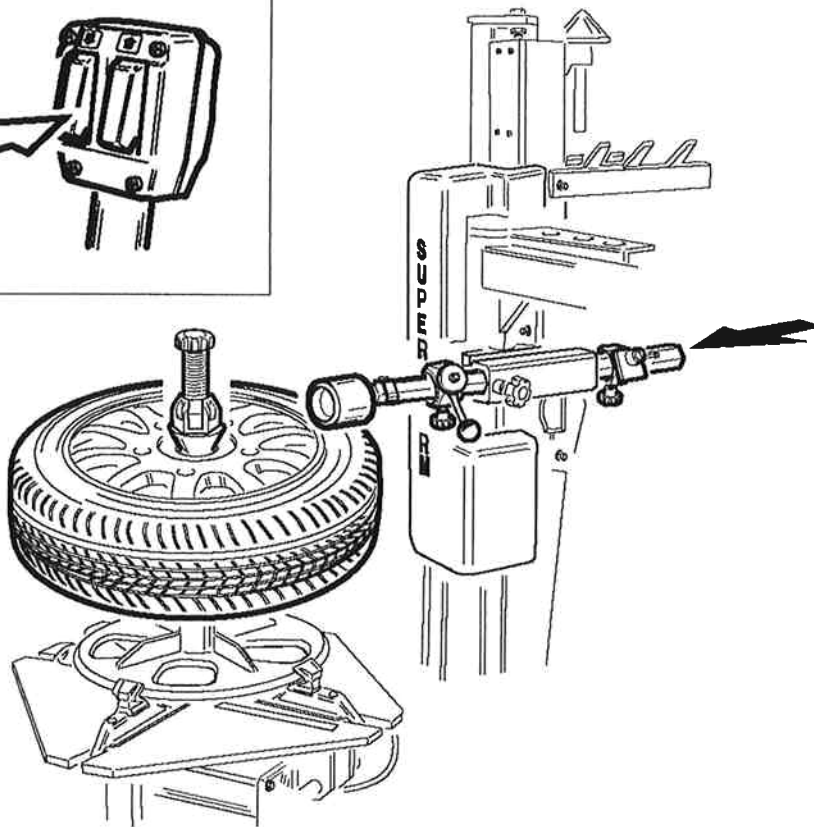
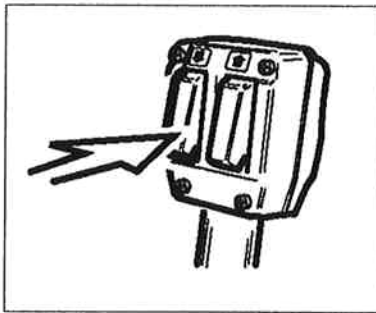
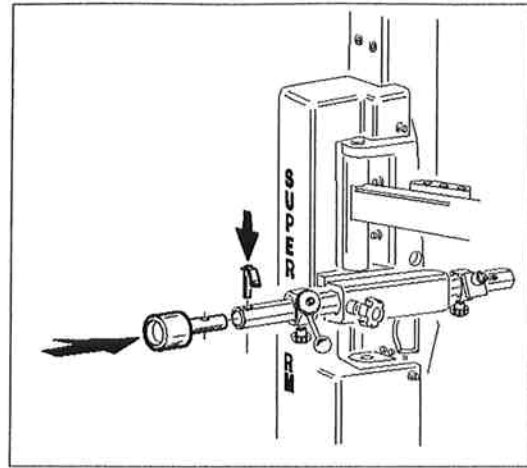
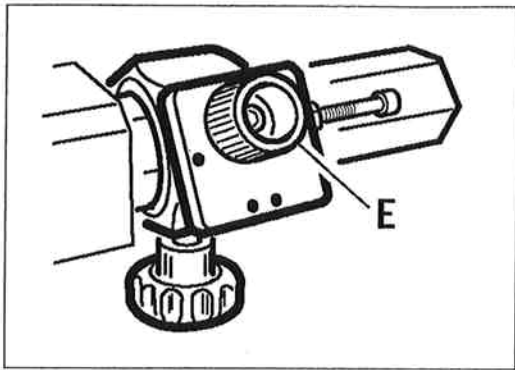


Fig.38

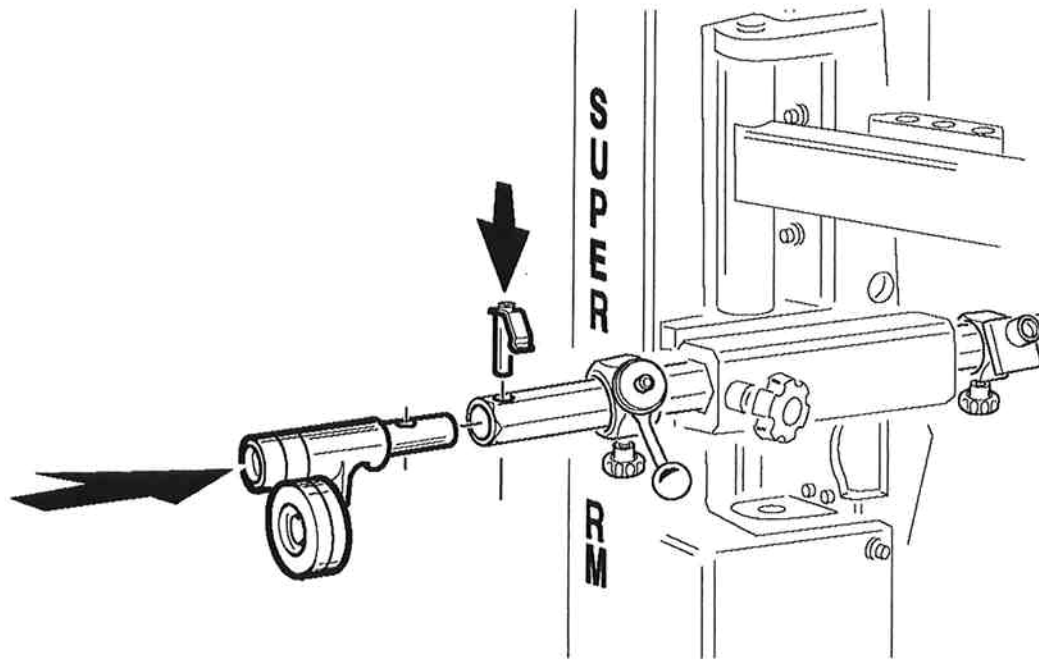


Fig.38a

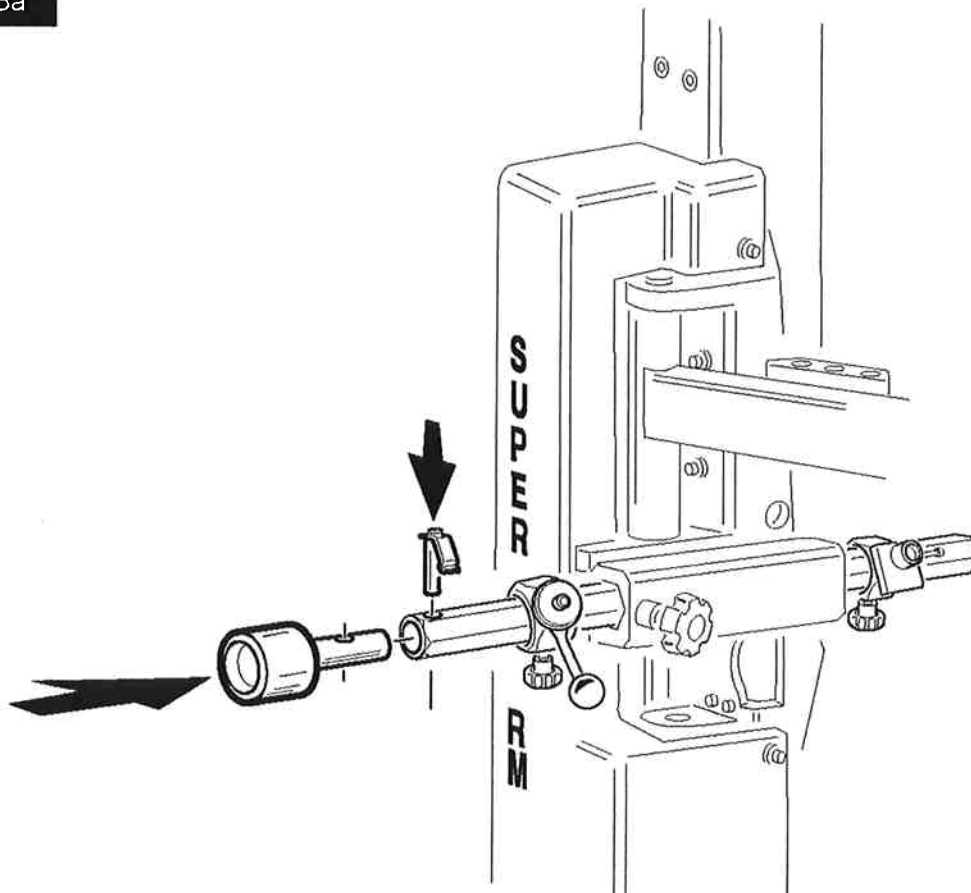


Fig.39

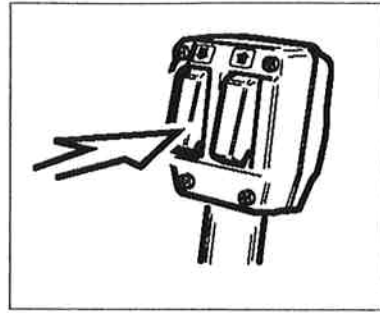
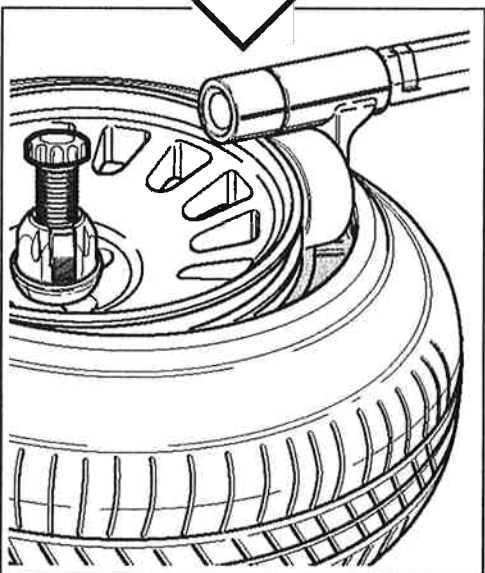
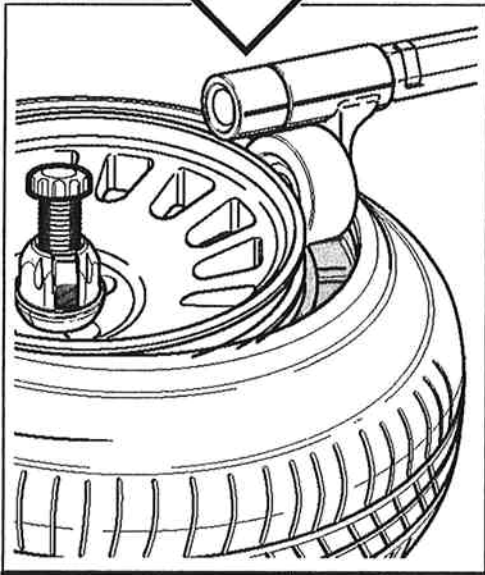
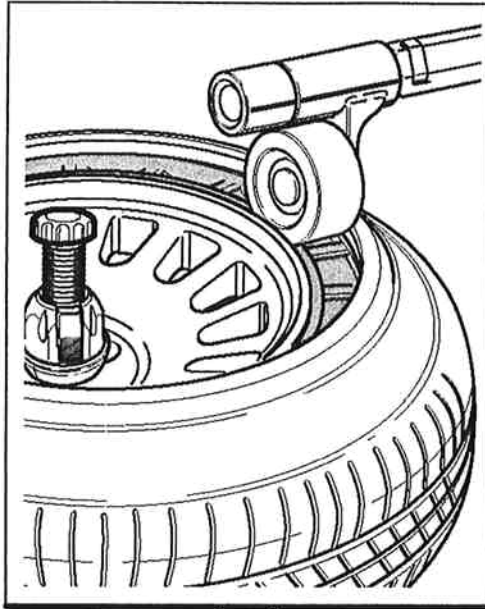


Fig.40

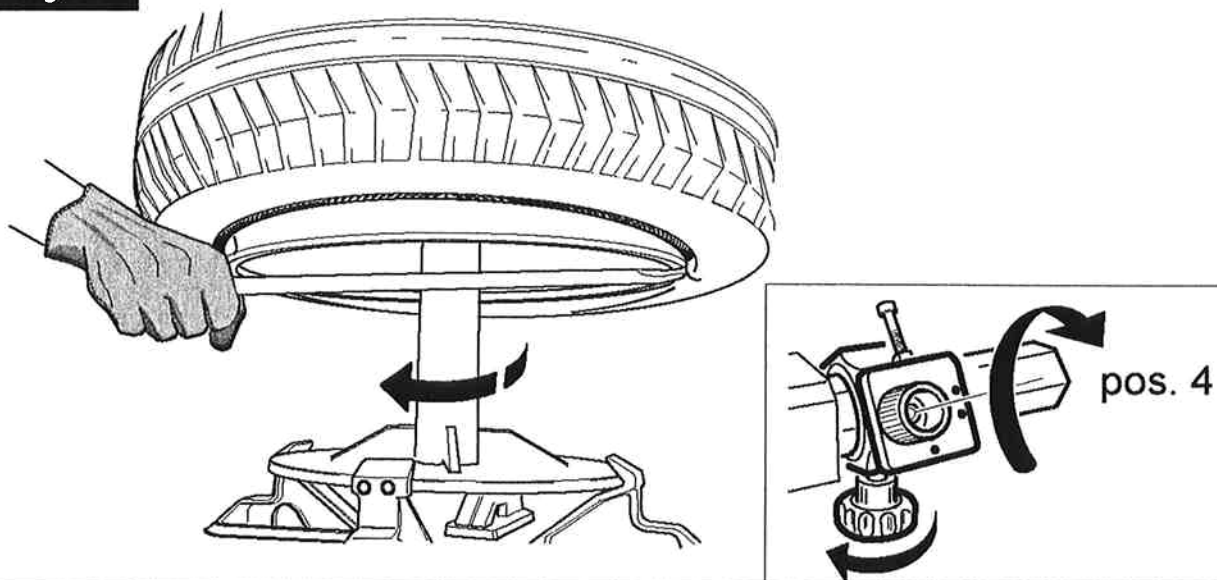


Fig.41

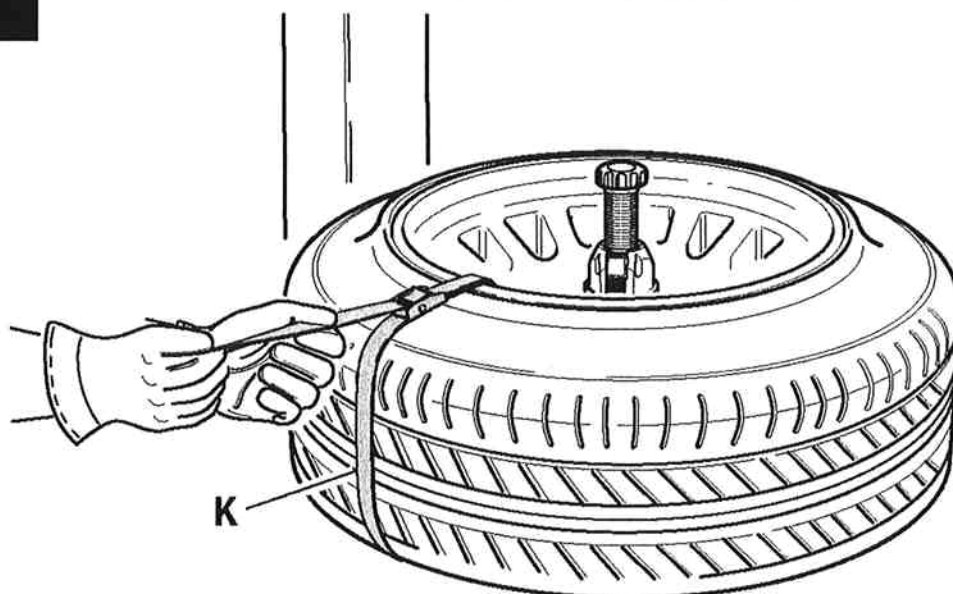


Fig.41a

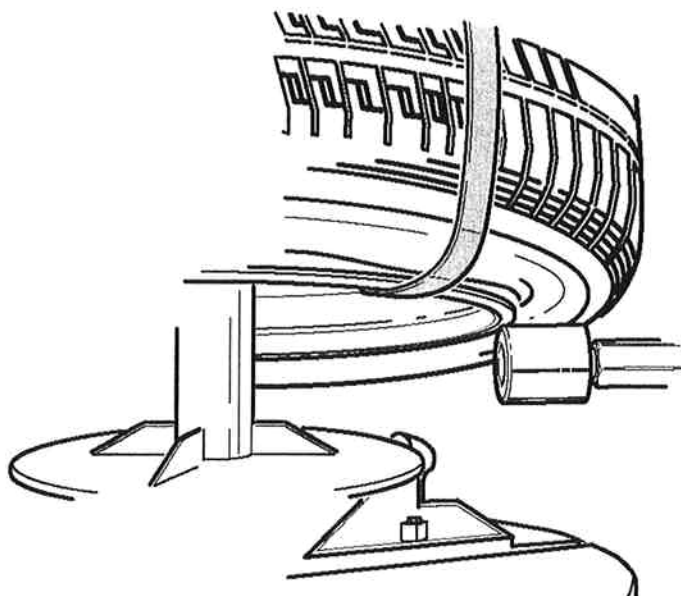


Fig.42

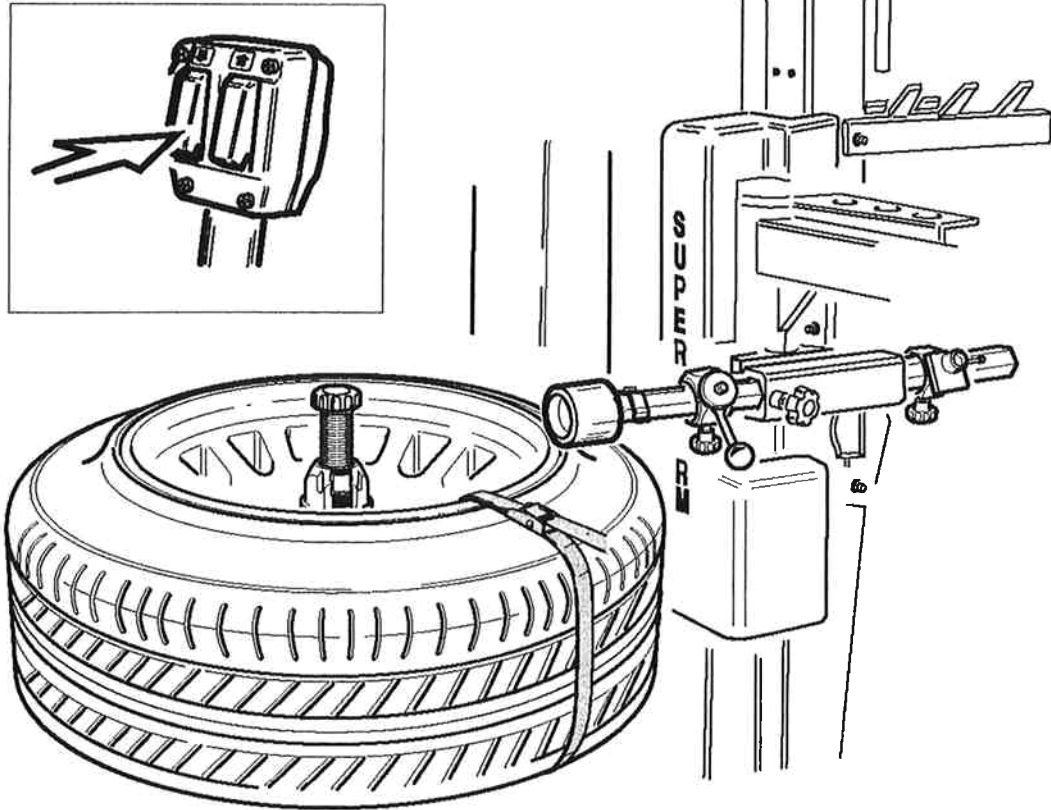
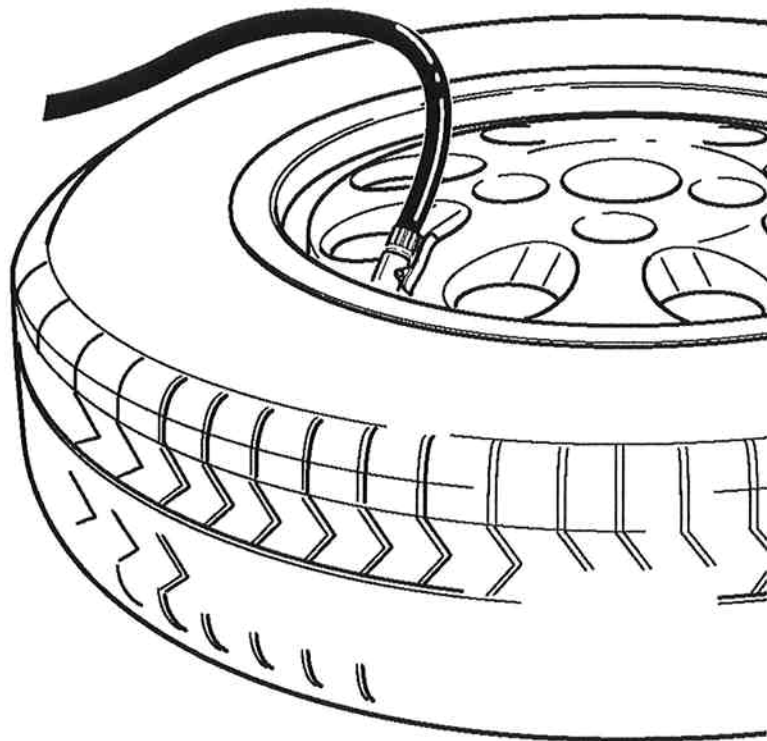
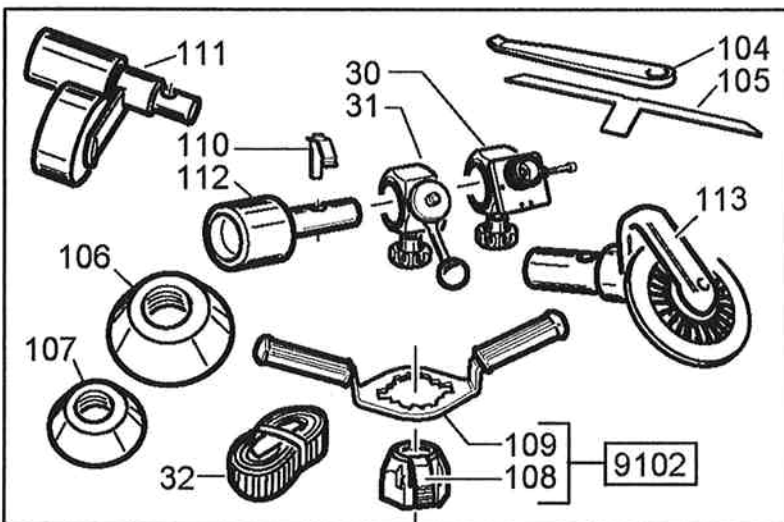
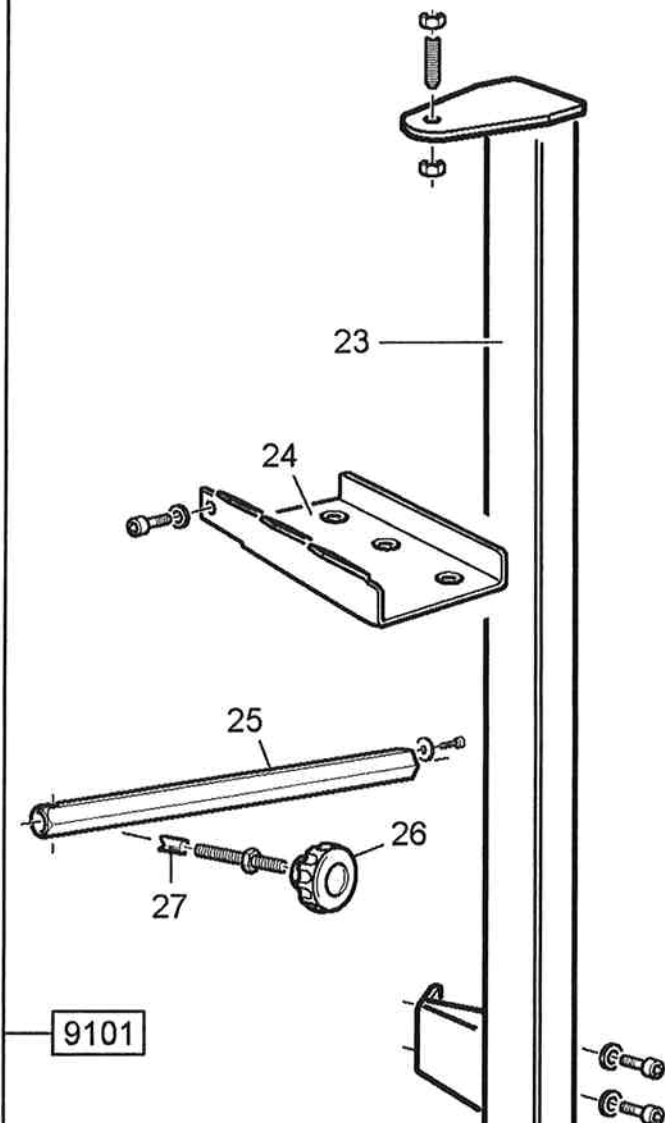
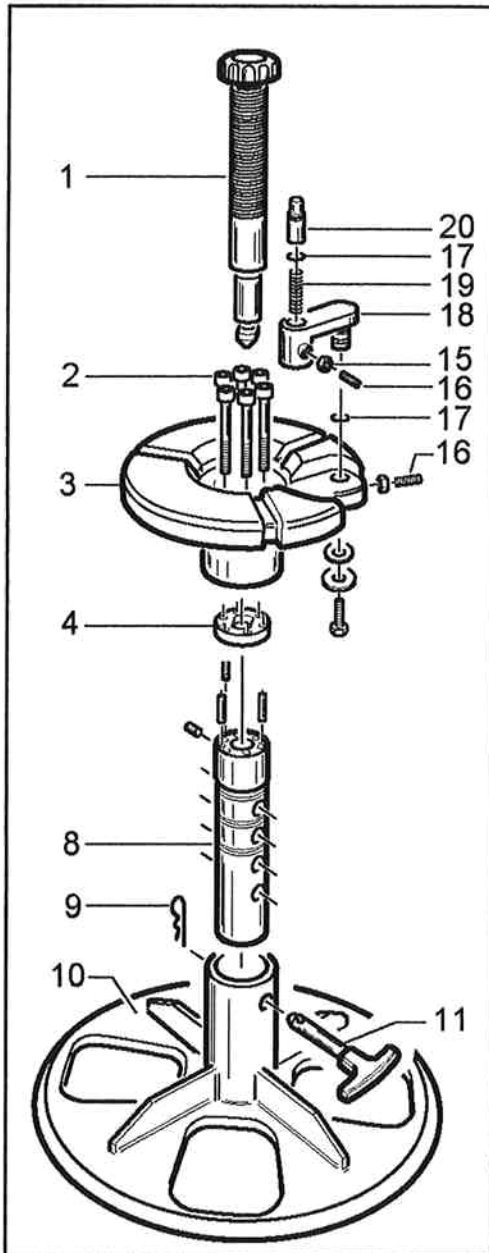


Fig.43





POS.	COD.	DESCRIZIONE	DESCRIPTION
9101	900260373	SUPPORTO	SUPPORT
0001	5-100967	BLOCCAGGIO RUOTE	WHEEL BLOCK
0002	2-02064	VITE	SCREW
0003	4-103152	CENTRAGGIO RUOTE	WHEEL SPIGOT
0004	4-103142	RONDELLA	WASHER
0005	2-00850	VITE	SCREW
0006	2-02124	SPINA CILINDRICA	STRAIGHT PIN
0007	2-71364	VITE	SCREW
0008	4-103141	ALBERO	SHAFT
0009	2-02221	COPIGLIA	SPLIT PIN
0010	4-103140	BASE PLATORELLO	WHEEL SUPPORT PLATE BASE
0011	263202	PERNO	PIN
0012	2-00355	VITE	SCREW
0013	434168	RONDELLA	WASHER
0014	412246	ANELLO ELASTICO	O-RING
0015	2-00676	DADO	NUT
0016	2-02560	VITE	SCREW
0017	424630	GUARNIZIONE	SEAL
0018	4-103143	LEVA	LEVER
0019	4-102331/A	MOLLA PERNO	PIN SPRING
0020	4-102326/B	PERNO	PIN
0023	4-102798	MONTANTE	PILLAR
0024	4-102578	LAMIERA PORTAOGGETTI	SHELF
0025	360379	ASTA	SHAFT
0026	459897	MANIGLIA	HANDLE
0027	360153	PASTIGLIA	PIN
0030	259895	SELETORE	SELECTOR
0031	261150	REG. ANT. BRACCIO ESAG.	HEXAG. ARM FRONT ADJ.
0032	461826	CINGHIA INTALLONATORE	BEAD INSERTION BELT
0104	900460154	LEVA	LEVER
0105	900460234	SUPPORTO	SUPPORT
0106	900357442	CONO	CONE
0107	900354116	CONO	CONE
9102	900255132	GHIERA	RING NUT
0108	900317511	CRICCHETTO	CRICK
0109	900260209	CHIAVE	KEY
0110	900260115	PERNO	PIN
0111	900260219	UTENSILE	UTENSIL
0112	900260120	RULLO	ROLLER
0113	900260228	DISCO	DISK



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