



PU 1500

Cod.459655A - 3.0 del 10/02

Italiano

Manuale d'uso

English

Operator's manual

Français

Manuel d'utilisation

Deutsch

Betriebsanleitung

Español

Manual de uso

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Italiano

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English

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Deutsch

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Español

Elaborazione grafica e impaginazione

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

TECHNICAL DATA

- Maximum size of conventional tyres – see tyre changer manual
- Maximum size of PAX tyres – as in following table
- Tyre diameter 810 mm
- Minimum rim hole diameter 40 mm
- Operating pressure (minimum) 7 bar
- Operating pressure (maximum) 10 bar
- Pneumatic cylinder force (at 7 bar) 6500 N
- Total weight 90 kg
- Central unit weight 43 kg
- PAX kit weight 24 kg
- Beadpressing arm kit weight 10 kg
- Maximum PU1500 size:
- Height 1600 mm
- Width 1300 mm
- Depth 600 mm

TECHNICAL DATA PU 1500 on JOLLY, A9212, CORNO620

The PU 1500 with the PAX system can operate on wheels (see drawing):

	NON CLIPPÉ ROLLER(fig.1)	CLIPPÉ TOOLS(J - Q fig. 8)
Diameter (B)	from 360 to 560	
Width max (A)	405 mm	311mm
Internal Offset (X)	fig.10a TAB.1	fig.10a TAB.1
External Offset (Y)	fig.10a TAB.1	fig.10a TAB.1
Hole diameter (D)	from 40 to 105	
Fixing holes		
circumference diameter (F)	from 98 to 170	
Tyre diameter max	960	

TECHNICAL DATA PU 1500 on A2010 - A2019 - A2001- CORNO820 - CORNO920

The PU 1500 with the PAX system can operate on wheels (see drawing):

	NON-CLIPPÉ ROLLER (U fig. 8)	CLIPPÉ TOOLS (J - Q fig. 8)
Diameter (B)	from 360 to 560	
Width max (A)	405 mm	311mm
Internal Offset (X)	fig.10a TAB.2	fig.10a TAB.2
External Offset (Y)	fig.10a TAB.2	fig.10a TAB.2
Hole diameter (D)	from 40 to 105	
Fixing holes		
circumference diameter (F)	from 98 to 170	
Tyre diameter max	960	

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TECHNICAL DATA PU 1500 on A2000 - R2100 - A9212

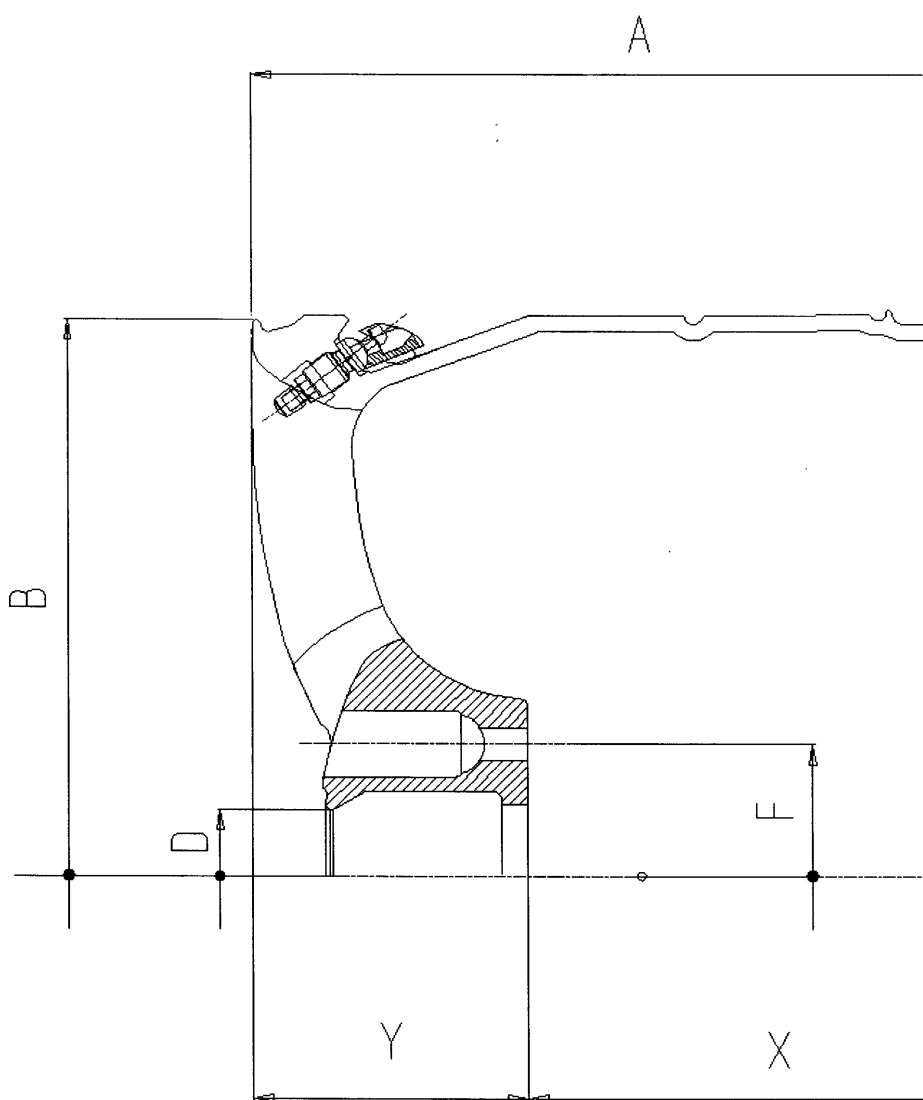
The PU 1500 with the PAX system can operate on wheels (see drawing):

	NON-CLIPPÉ ROLLER (U fig. 8)	CLIPPÉ TOOLS (J - Q fig. 8)
Diameter (B)	from 360 to 520	
Width max (A)	405 mm	311.5 mm
Internal Offset (X)	fig.10a TAB.3	fig.10a TAB.3
External Offset (Y)	fig.10a TAB.3	fig.10a TAB.3
Hole diameter (D)	from 40 to 105	
Fixing holes		
circumference diameter (F)	from 98 to 170	
Tyre diameter max	900	

TECHNICAL DATA PU 1500 on JUNIOR PRO

The PU 1500 with the PAX system can operate on wheels (see drawing):

	NON-CLIPPÉ ROLLER (U fig. 8)	CLIPPÉ TOOLS (J - Q fig. 8)
Diameter (B)	from 360 to 520	
Width max (A)	405 mm	311 mm
Internal Offset (X)	fig.10a TAB.4	fig.10a TAB.4
External Offset (Y)	fig.10a TAB.4	fig.10a TAB.4
Hole diameter (D)	from 40 to 105	
Fixing holes		
circumference diameter (F)	from 98 to 170	
Tyre diameter max	900	



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INSTALLATION CLEARANCES

Bring the tyre changer to the required working position, meeting the minimum measurements indicated in the tyre changer manual. Fig.1

INSTALLATION

Note:

Installation of the PU1500 on the tyre changer may be carried out by CORGHI SpA qualified and authorised personnel only. Installation by NON-qualified personnel implies the loss of the warranty on the performance of the device.

The PU1500 accessory may only be installed on CORGHI tyre changers of the A2000, A2001, A2010, A2019, JOLLY, JUNIOR PRO, CORNO 620/820/920, R2100, A9212/9820 type. fig. 5 for A2001, A2010, A2019, CORNO 820/920, JUNIOR PRO, R2100, A9212/9820; fig. 5a for JOLLY, A9212; fig. 5b for A2000

- Disconnect the electrical and pneumatic connections.
- Demount the side casing of the tyre changer.
- Check whether the machine has the holes needed to mount the PU1500 accessory.
- If the holes are lacking, apply them following the scheme supplied with the machine or in fig. 49. If the scheme is missing, stop installing and call the supplier.
- Fix the strut mount to the body.
- Mount the control arm to the strut mount fig.2.
- Fix the PU1500 to the strut mount, fig.5, 5a, 5b.
- Find the pneumatic supply 8 mm diameter pipe from the lubrication filter inside the machine.
- Cut the pipe at about half its length fig.3.
- Connect the T-union supplied with the 8 mm diameter pipe of the machine fig.4.
- Connect the PU1500 supply pipe to the T-union fig.4.
- Mount the side casing.
- Connect the 6 mm diameter pipes of the PU1500 to the control valve pipes G in fig. 5, 5a, 5b.

CALIBRATION OF THE BEADPRESSING ARM VERSION OF THE PU1500

fig.6

- Secure one wheel to the turntable, bring the Beadpressing Arm to the working position.

fig.7

- If the centring cone of the arm is not in the centre of the wheel, act on the screws securing the PU 1500.

CALIBRATION OF THE PAX VERSION OF THE PU1500

fig.6

- Secure the wheel support (C in fig. 8) to the turntable, secure one PAX wheel to the wheel support, approach the roller of the horizontal arm (B in fig.8) to the edge of the rim.

fig.7

- If the roller is not tangent to the edge of the rim and/or slight misalignments are observed, act on the screws securing the PU 1500.

DESCRIPTION OF THE PU 1500

fig. 8

- | | |
|--|---|
| A. Base module | J. Double roller and claw tool (for clippé wheels) |
| A1. Roller arm | K. Bead inserter |
| B. Horizontal arm with cylindrical roller | L. Bead demounting lever |
| B1. Bead presser roller | M. Rim guard (Réglette) |
| C. PAX wheel support | N. Small cone |
| C1. Roller locking knob | O. Large cone |
| D. Anti-rotation plug | P. Tool securing pin |
| D1. Rotation locking pin | Q. Inclined disk (for clippé wheels) |
| E. Selector | R. PAX tyre fig. 30 |
| E1. Bead lifter disk | S. Support fig. 30 |
| F. Horizontal arm clamping handle | T. Special Pax profile rim fig. 30 |
| F1. Jack | U. Cylindrical roller |
| G. Pneumatic switch | V. Rim clamp arm |
| G1. Extension for wheel centring cone | Z. Centring cone |
| H. Locking ring-nut | Y. Eccentric |
| I. Locking ring-nut wrench | X. Positioning pin |



WARNING

Before starting demounting it is important to check the code on the wheel which indicates the type of Pax tyre - standard or Clippé -.



WARNING

For any work on the valve or on the pressure transducer, consult and follow the operator's manual supplied by the transducer manufacturer.

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TYRE DEMOUNTING

Procedure for PAX standard tyres

fig. 9

- Deflate the tyre
- Lock the PAX wheel support (C) on the turntable
- Place the wheel with PAX tyre on the support(C)
- Insert the anti-rotation plug (D) in one of the fixing holes of the rim
- Select the appropriate cone N or O according to the size of the centring hole
- Install the quick ring-nut H
- Clamp the wheel by locking the nut H with the wrench (I)

SELECTOR FUNCTIONS

fig.10

The Selector has four positions:

- position 1 – memorises and corresponds to the external diameter (small diameter) in the demounting phase
- position 2 - memorises and corresponds to the internal diameter (large diameter) in the demounting phase
- position 3 – memorises and corresponds to the bead mounting phase by external and internal diameter
- position 4 – memorises and corresponds to the Clippé Support extraction phase

Bead breaking of the lower bead

(Common procedure for Pax System with full width or clippé rest)

IMPORTANT

Before demounting the tyre, the selector must be calibrated in order to memorise the tool position when demounting tyres of the same size.

Selector calibration

Note:

When working on a set of wheels of the same size, the tool positions can be memorised by means of the Selector.

- Using the pneumatic lever switch (G), lower the arm of the cylindrical roller (B). fig.11
- Place the cylindrical roller on the edge of the rim. fig.11
- Place the selector (E) on position 1 and secure it using the handle. F. fig. 12
- Move the cylindrical roller arm to the lower part of the wheel. fig. 13
- Place the selector on 2. fig. 14
- Bring the roller into contact with the lower bead. fig. 15
- Press the rotation pedal and, by activating the pneumatic switch (G), gradually start bead breaking; at the same time lubricate the bead with spray lubricant of the type recommended by the tyre manufacturer or if not available with liquid lubricant, using a special sprayer. fig. 16
- Completely bead break the bead from the rim. fig. 17

Calibrating the wheel support plate

fig.10a

The wheel support plate can be set at four different heights P1, P2, P3 and P4. Set the wheel support plate as appropriate to the width of the wheel to be processed (see TAB. 1-2-3-4).

Extraction of the upper bead

(Common procedure for Pax System with full width or clippé rest)

- Move the arm with the cylindrical roller B to the upper part of the wheel fig. 18
- Place the selector on I. fig. 19
- Move the roller in position on the bead. fig. 20
- Using the lever pneumatic switch (G), press the roller onto the bead of the tyre. To guarantee correct positioning of the roller, it is recommended to secure the arm (B) with the handle (F).
- During bead breaking, apply liquid lubricant by spraying. fig. 20
- It is recommended to rotate the wheel a few turns with the roller pressing on the bead in order to ease the tension on the bead.
- The réglette will be inserted in the space obtained between the bead and the edge of the rim. fig.21
- Insert the réglette as shown in fig. 22, fig. 22a.

Note:

The réglette is inserted between the edge of the rim and the bead. A notch on the réglette allows to insert the tip of the bead breaking lever.



WARNING

The same réglette can be used for more than one demounting. First check its condition. If the tang of the réglette shows signs of deterioration, replace with a new one.

INSERTION OF THE RÉGLETTE

There is a special way to insert the réglette. The part with the lever housing is to be held towards the exterior of the wheel. During rotational movement in order to insert the réglette, the tang must pass under the cylindrical roller.

- Lift the roller by acting on the pneumatic lever switch (G) and move it backwards.
- Insert the lever into the réglette housing, fig.22a.
- Lift the bead by pressing on the centre of the wheel, fig 22a.



WARNING

Make sure that the lever is well inserted under the bead before lifting the bead.

- After bead breaking, immediately remove the réglette from the tyre fig. 23



WARNING

Be careful not to drop the réglette inside the tyre. You might leave it inside the tyre during the next mounting.

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WARNING

Be very careful to avoid contact between the bead of the tyre and the pressure transducer, and between the pressure transducer and the demounting/mounting tools. Contacts with unusual stress may damage the sensors or create sealing defects between the valve and the rim.

Demounting of the support (Procedure for Pax System with full width rest)

- Move the arm with the cylindrical roller to the lower part of the wheel
- Position the selector on 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, act on the pneumatic lever switch (G). The tyre will gradually unthread from the rim dragging the support with it fig. 24
- Remove the tyre and support from the rim manually



WARNING

Be very careful to avoid contact between the bead of the tyre and the pressure transducer, and between the pressure transducer and the demounting/mounting tools. Contacts with unusual stress may damage the sensors or create sealing defects between the valve and the rim.

Support Demounting (Procedure for Pax System with clippé rest)

- Replace the cylindrical roller with the inclined disk fig. 25
- Bring the arm with the disk to the lower part of the wheel
- Position the selector on 4 fig. 26
- Move the arm axially until the disk is in position, flush with the rim
- Place the disk on the bead fig. 27
- During rotation, act on the pneumatic lever switch (G). The tyre will gradually unthread from the rim dragging the support with it.

With particularly rigid supports, it may be necessary to use the eccentric fig.27A - 27B. With the disk touching the support, lock the knob C as shown in fig. 27A, turn the selector to 1 and operate the lever F as shown in fig.27B.

Then continue extraction of the support and tyre.

Moving the disk closer to the rim in this way facilitates extraction of the support.

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

- Remove the tyre and support from the rim manually
- Extract the support from the tyre, fig.28 and fig.29.



WARNING

Be very careful to avoid contact between the bead of the tyre and the pressure transducer, and between the pressure transducer and the demounting/mounting

tools. Contacts with unusual stress may damage the sensors or create sealing defects between the valve and the rim.

TYRE MOUNTING

The PAX System is made up of the following parts (fig. 30):

1. Special PAX System profile rim (T) (for full width contact or clippé rest)
2. Rest (S) (for full width or clippé rest)
3. PAX tyre(R)
4. Pressure control sensor

Tyre support mounting

- Spread the inner part of the tyre with the special PAX System Gel of the mechanical support fig. 31
- Lubricate the beads of the PAX tyre (R) and the surface of the support (S) that will come into contact with the rim with standard lubricant for vehicle wheel mounting fig. 32

IMPORTANT

When lubricating the tyre interior with the special PAX System Gel of the mechanical support, be careful not to touch the beads with that gel, since the beads are to be lubricated with standard tyre lubricant

- Insert the Support (S) inside the tyre (R) fig. 33
- Use the special levers fig. 34



WARNING

Make sure the orientation of the rest (S) is correct when introducing it into the tyre, as described in Fig. 35 for standard, and in fig.35a for Clippé.

- Lubricate the bead housings on the rim (areas indicated with the letter T in fig. 36)
- Introduce the tyre-rest assembly on the rim fig. 36

Mounting of the support on the rim (Procedure for Pax System with full-width rest)

- Place the selector (E) on position 1 fig. 37
- If not present, mount the cylindrical roller on the arm fig.37a
- Move the arm axially until the cylindrical roller is brought into position, flush with the rim fig. 37
- Press the roller onto the bead of the tyre, and at the same time rotate the turntable until the rest (S) is fully inserted in the rim (T) fig. 37
- At completion lift the roller off the tyre.

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Mounting the rest on the rim

(Procedure for Pax System with clippé rest)

- Mount the double roller tool (J) in fig. 38
- Move the arm axially until the roller with the greater diameter is brought in position, flush with the rim
- Remove the tyre bead, bring the roller down to the surface of the rest while keeping the bead behind the special claw on the double roller tool fig.39
- Rotate the turntable until the rest (S) is fully inserted in the rim (T). At completion lift the roller off the tyre.

Note:

The rest is fully inserted when the small roller touches the upper edge of the rim.



WARNING

While inserting the rest, the upper bead must not enter the rim housing on which the inflation pressure sensor is mounted; doing so might damage it.

Mounting the lower bead

(Common procedure for Pax System with full width or clippé rest)

- Remove the lower bead from the lower edge of the rim using a standard lever (better if protected by a plastic sheath) fig. 40
- Place the selector (E) on position 3
- Move the cylindrical roller to the lower part of the tyre
- Press the roller onto the edge of the rim
- Couple the bead inserter (K in fig. 8) with the wheel fig. 41.
- Fit the bead in its housing, rotate the wheel at minimum speed and, proceeding gradually, stop before the belt reaches the roller fig. 41A.

Mounting the upper bead

(Common procedure for Pax System with full width or clippé rest)

- Replace the double roller tool with the cylindrical roller
- Move the cylindrical roller to the upper part of the tyre
- While acting on the pneumatic lever switch (G), press the roller onto the edge of the rim fig. 42
- Fit the bead in its housing, rotate the wheel at minimum speed and, proceeding gradually, stop before the belt reaches the roller.
- At completion release the bead inserter from the wheel
- Remove the roller by pushing it axially.
- Inflate the tyre fig. 43 using the special air gun connected to the tyre changer.
- Make sure the beads are properly inserted in their housing.



WARNING

The maximum inflation pressure recommended by the manufacturer must never be exceeded for any reason whatsoever – DANGER OF DAMAGE TO THE TYRE.



WARNING

After fitting the support ring, always wipe the following parts clean with a dry cloth:

- the tyre beads
- the grooves in the wheel which house the tyre
- the support ring positioning roller

DEMOUNTING MOUNTING THE TYRE

(Procedure with the use of the bead lifting and bead pressing arms)

The bead lifting and bead pressing arms of the PU 1500 are intended to help the operator in the tyre demounting and mounting phases.

Centring function

When clamping the wheel with outside rim hold, proceed as follows:

- Prepare the clamps of the turntable at a slightly higher measurement than that of the wheel, place the wheel on the turntable, position the rim clamp arm (V) in the working position Fig.44, activate valve (G) so as to press the wheel on the turntable, then clamp the wheel with the special pedal.

When working on rims with reverse drop centre, use the cone extension (G1) to reach the rim hole.

N.B. This facilitates the insertion of the sliding clamp between the tyre and the rim Fig.44.

Bead lifter function

- When demounting the second bead, the bead usually sticks to the lower edge of the rim. In this event, if the bead lifter disk (E1) is placed between the rim and the tyre, and the valve (G) is activated, the bead will be released (Fig. 45).

Bead presser function

This accessory has several applications:

In the demounting phase of the first bead, the roller (B1) is used to create a space between the tyre and the demounting tool thus facilitating bead loading (Fig. 46).

In this same phase, it is used in the zone opposite the demounting tool to facilitate insertion of the tyre bead into the drop centre (Fig. 47).

In the mounting phase of the second bead, it helps keep the bead inside the drop centre (Fig. 48).

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PU 1500

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Italiano

Illustrazioni e schemi

English

Illustrations and diagrams

Français

Illustrations et schémas

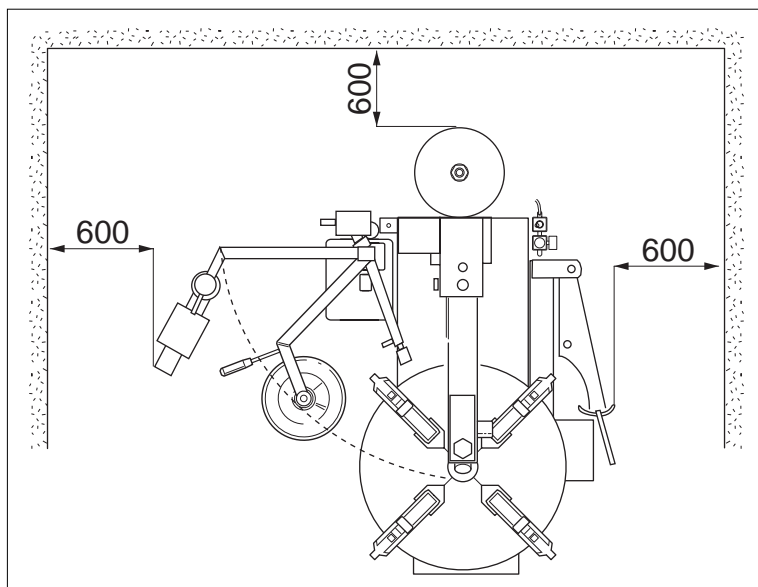
Deutsch

Bilder und Zeichnungen

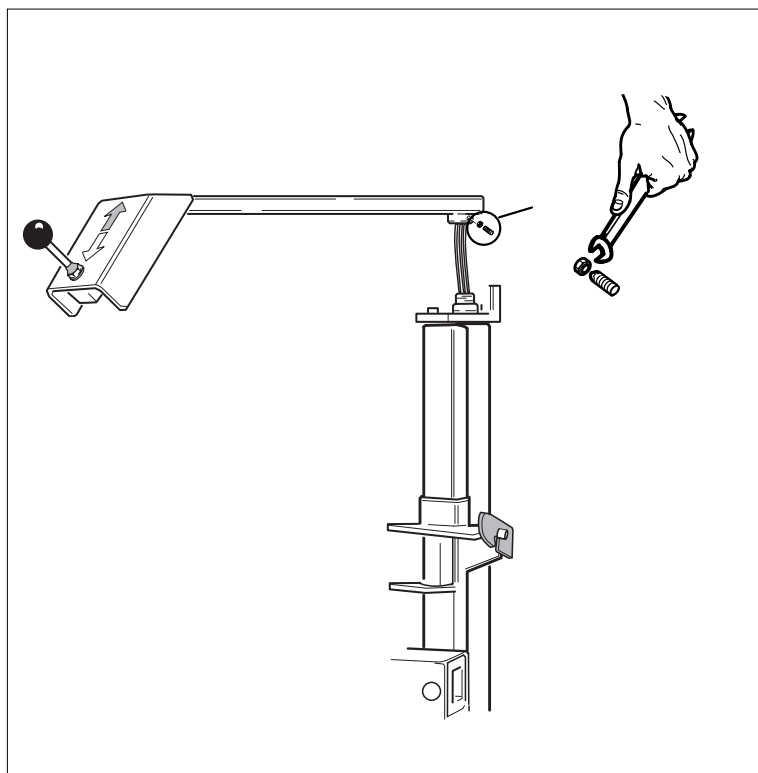
Español

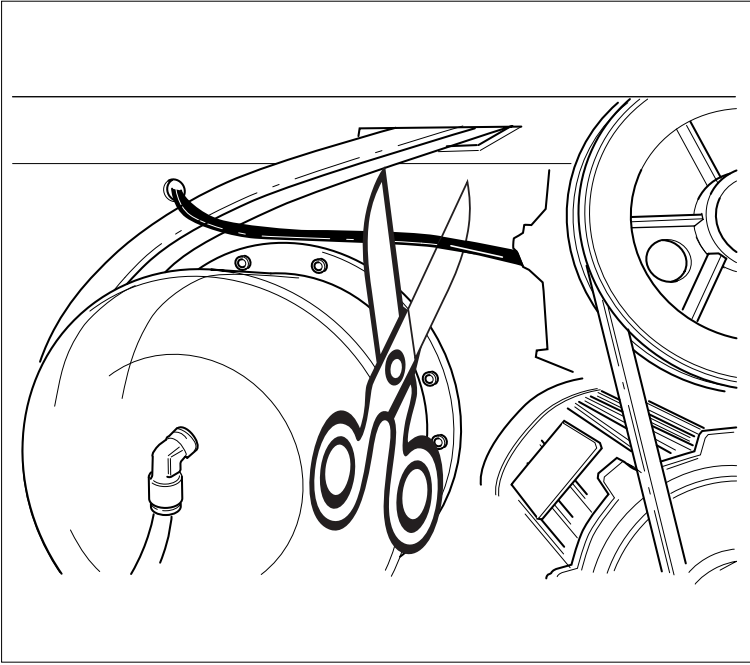
Ilustraciones y esquemas

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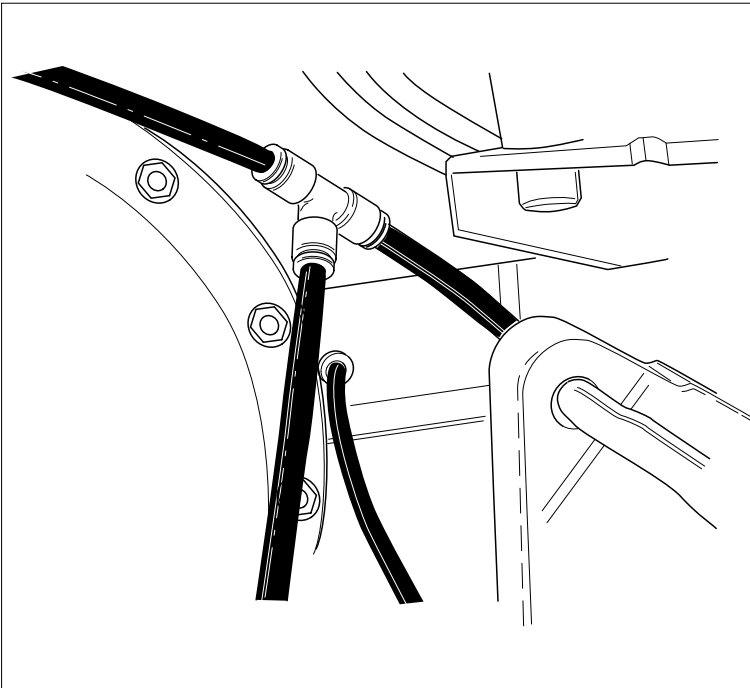


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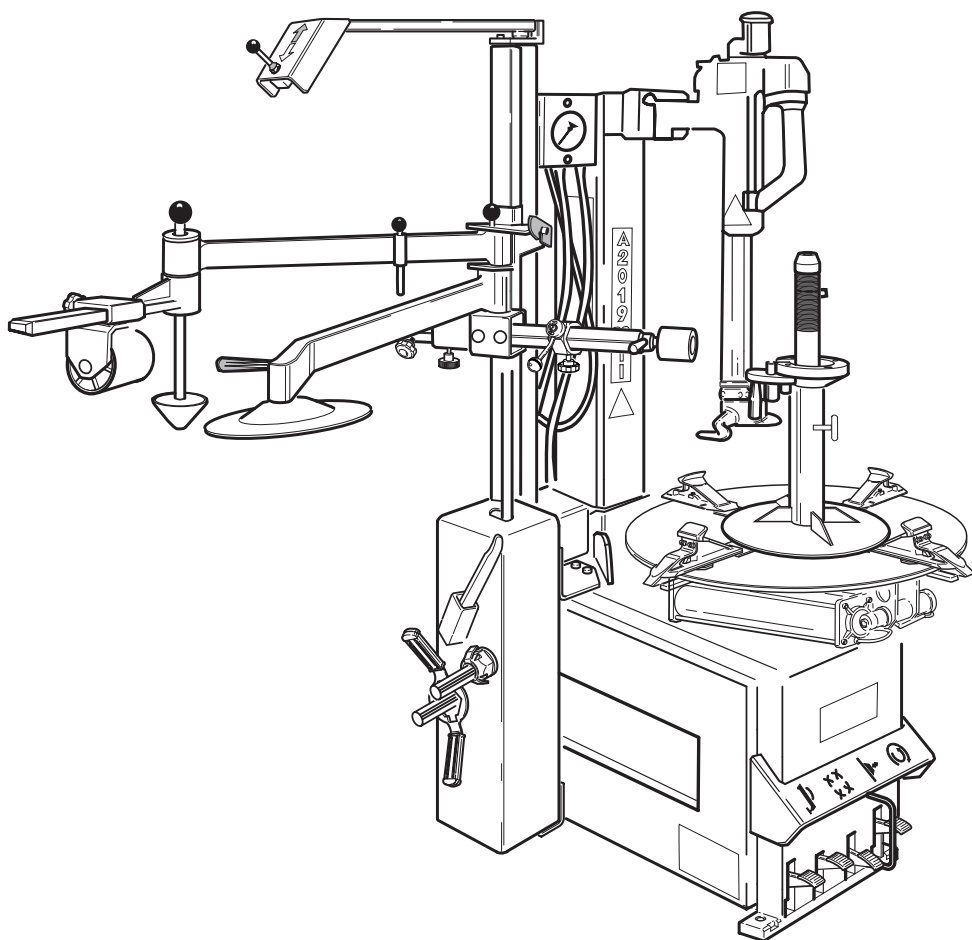


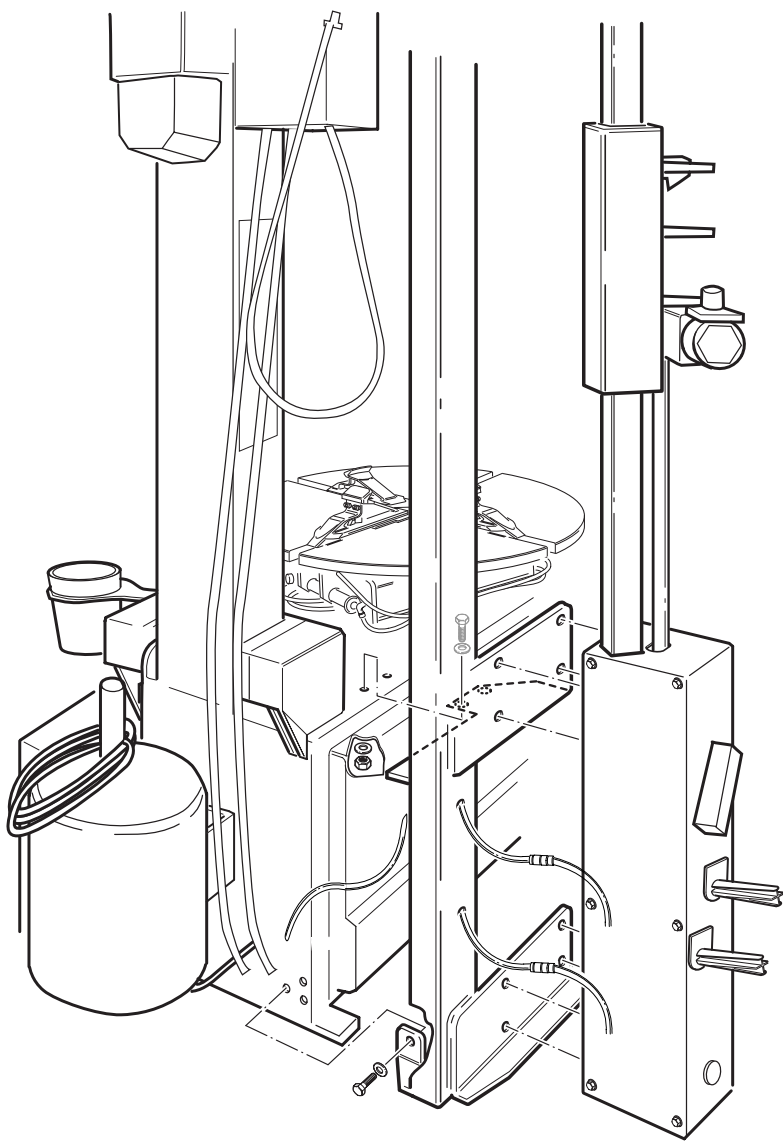


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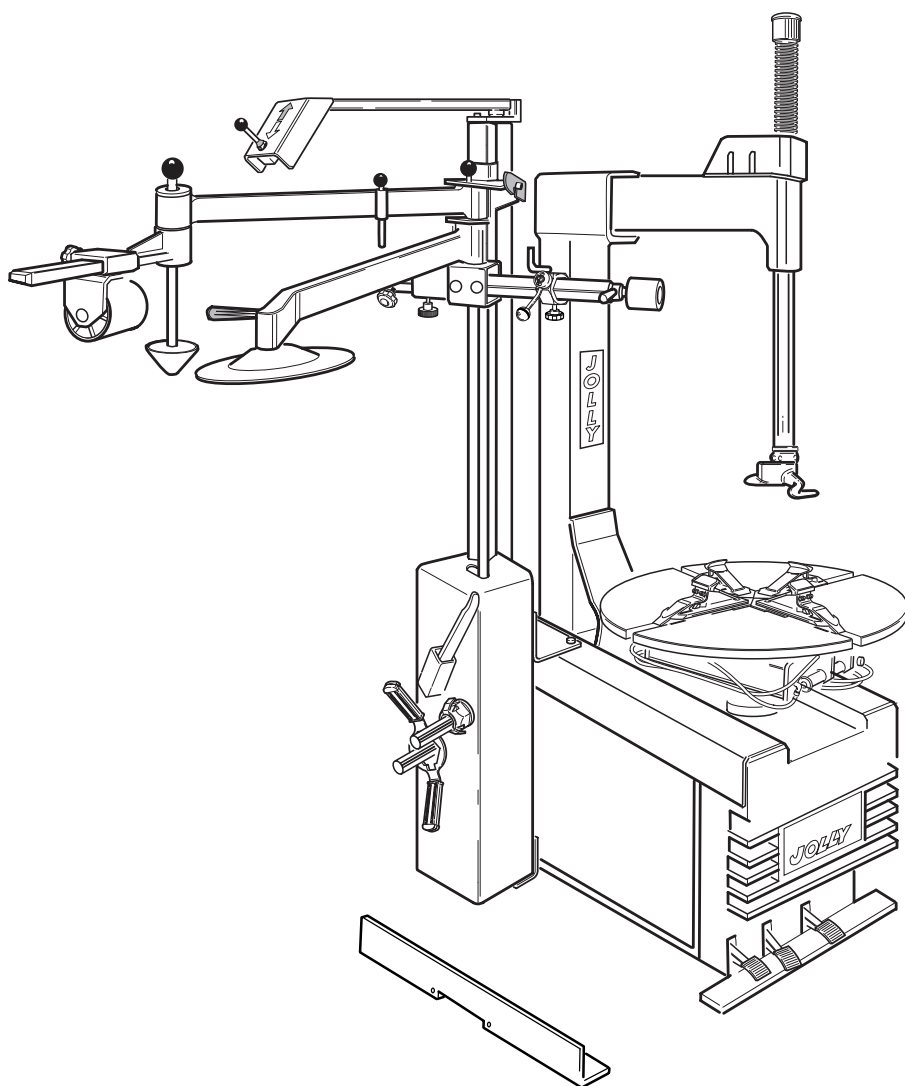


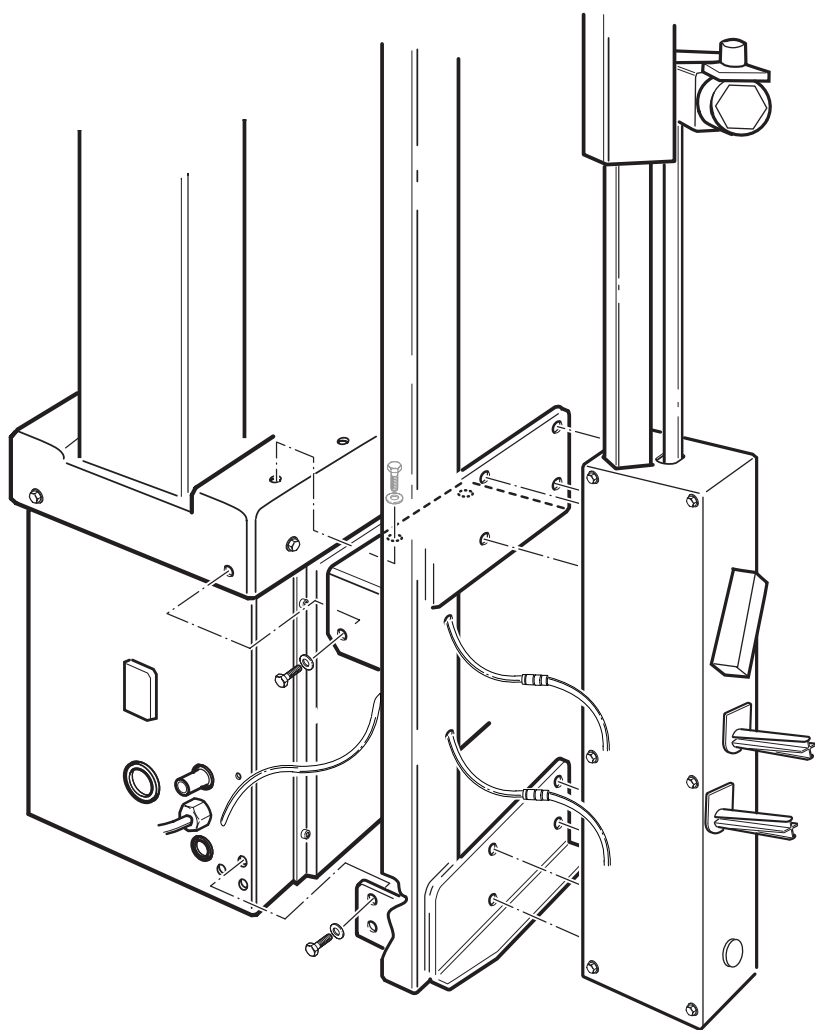
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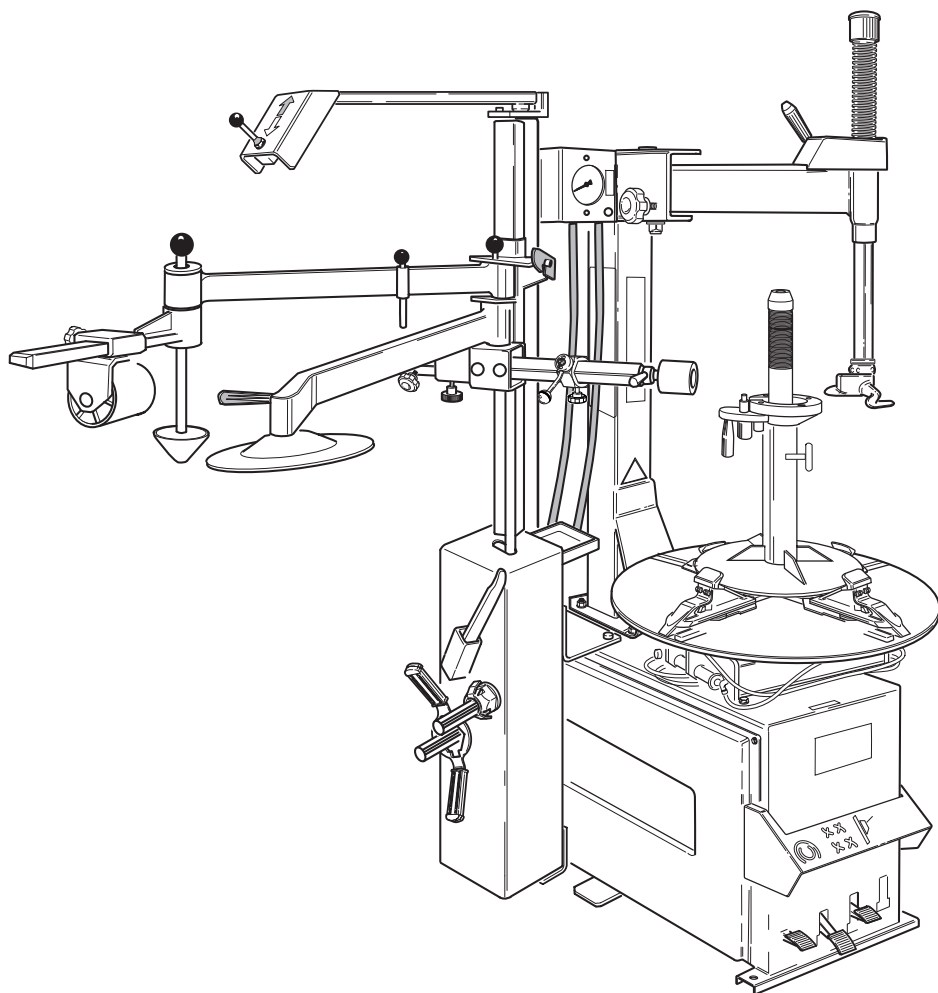


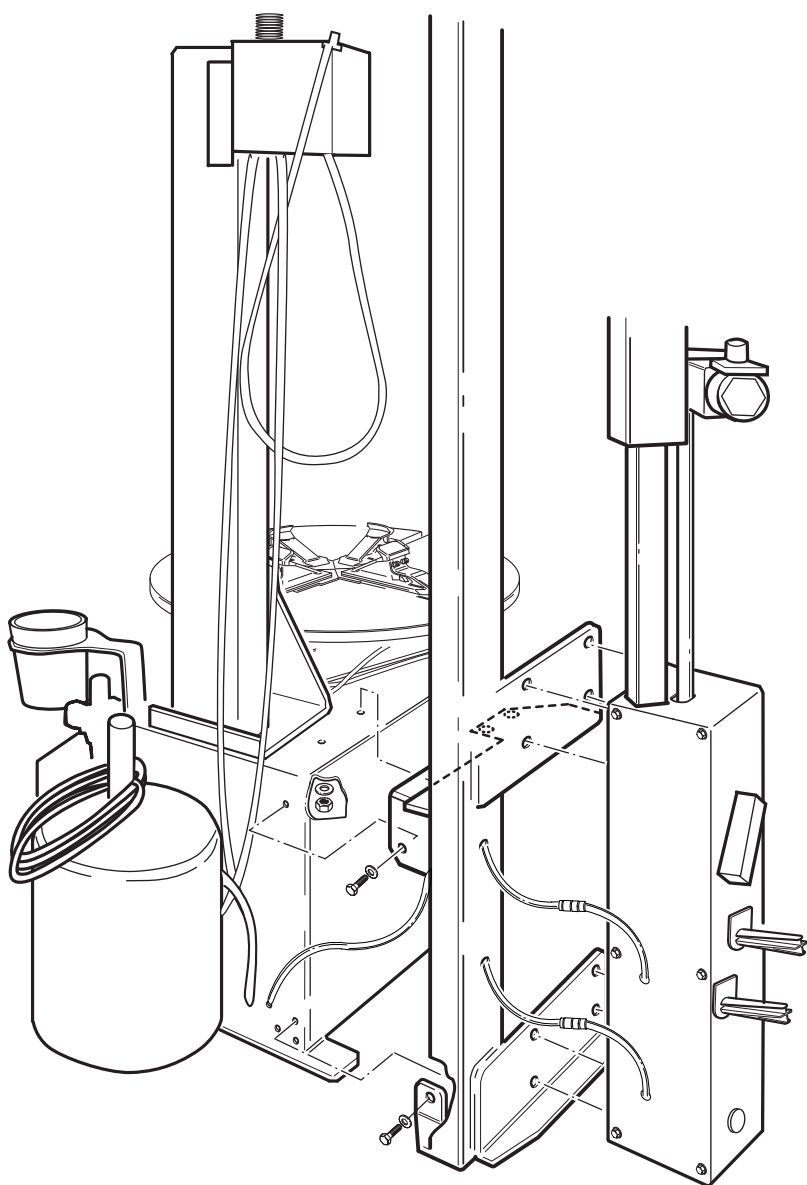
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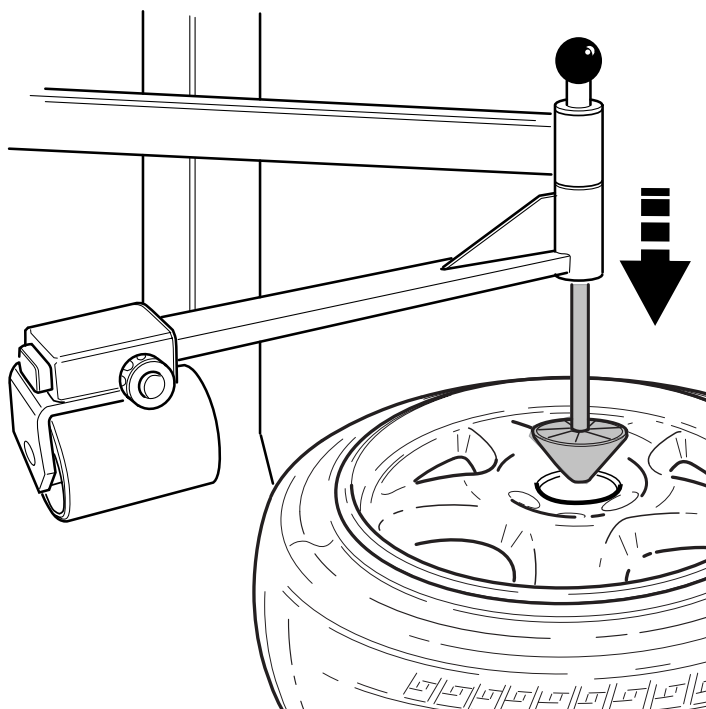


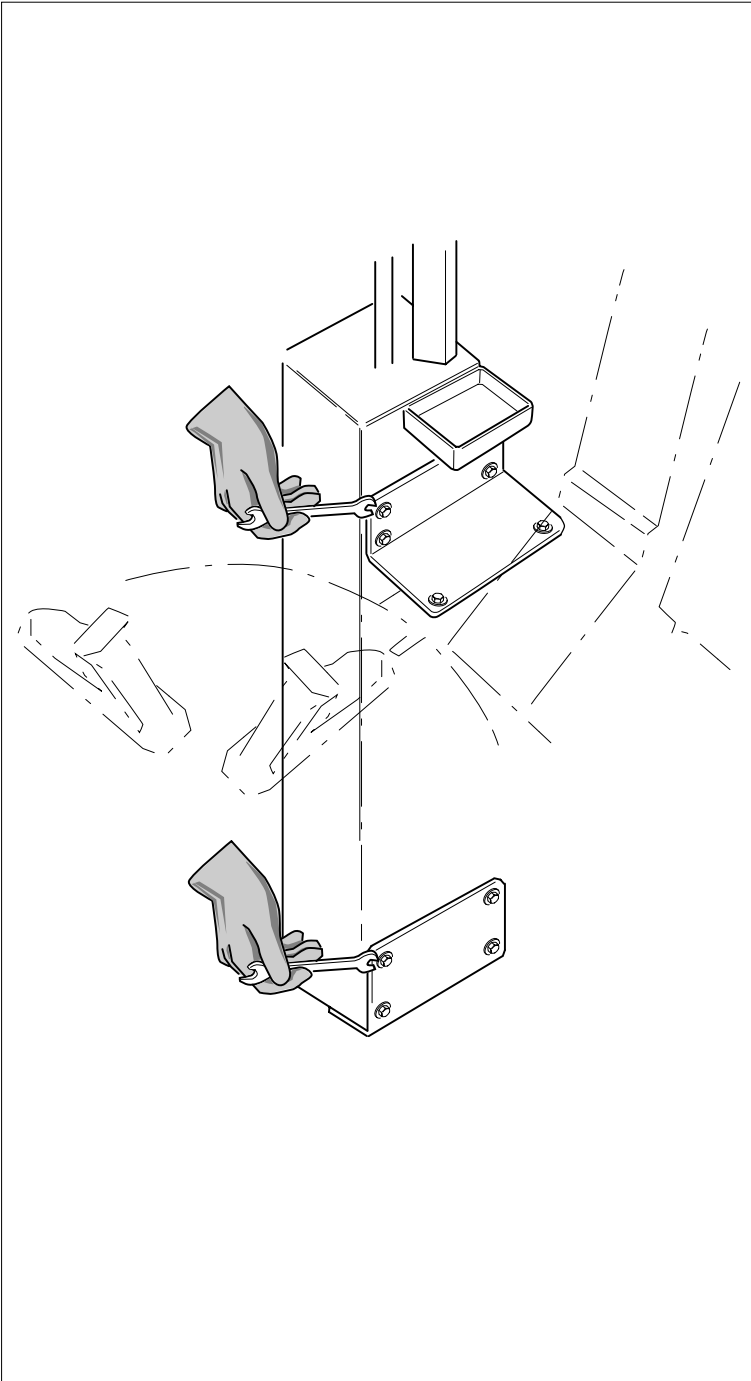
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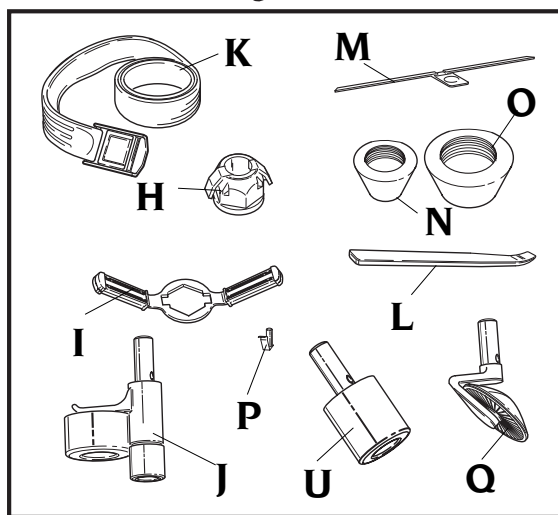
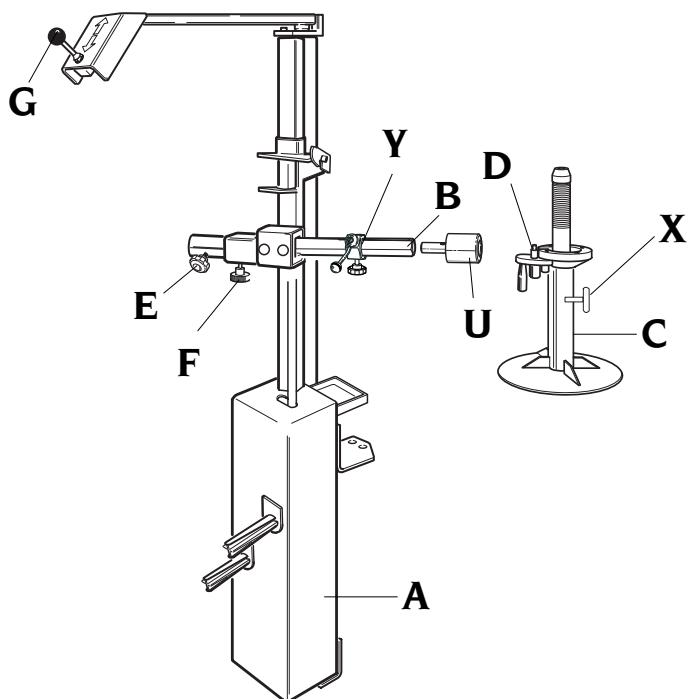


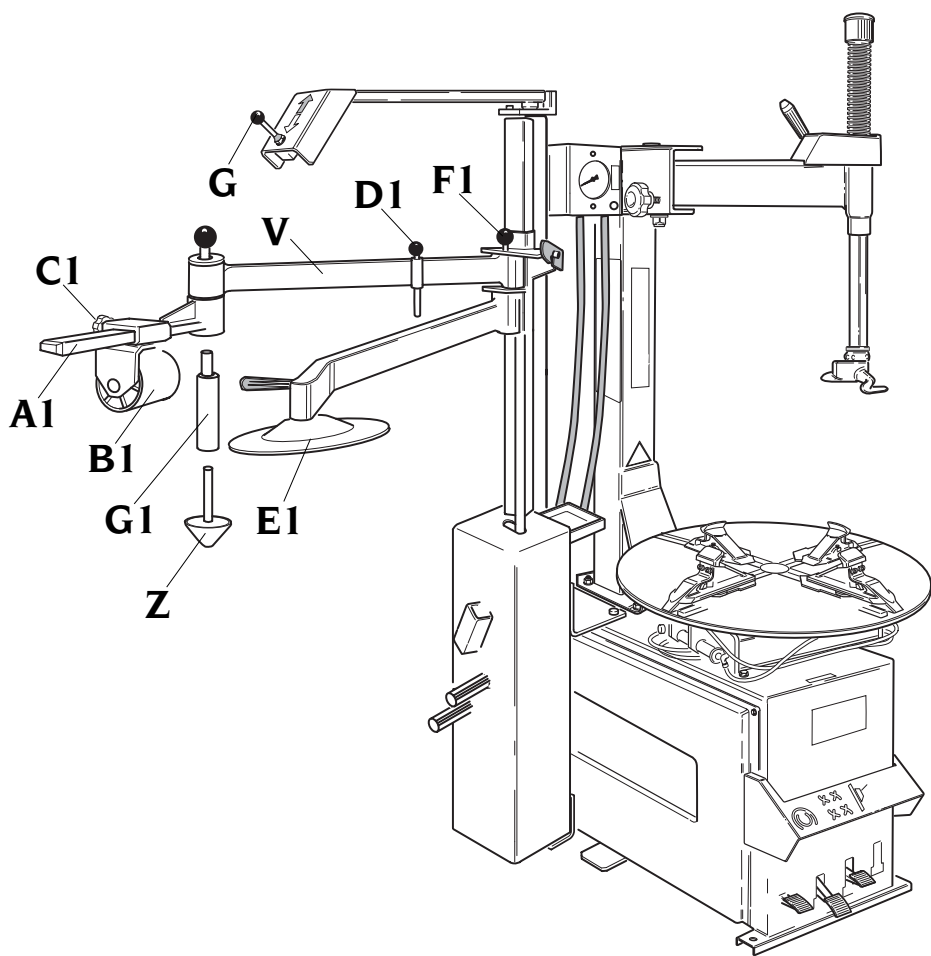
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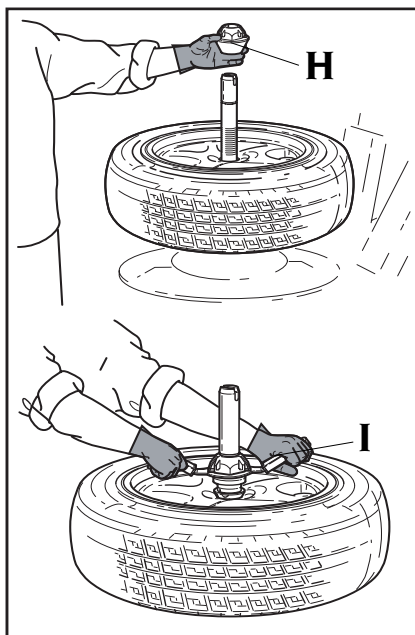
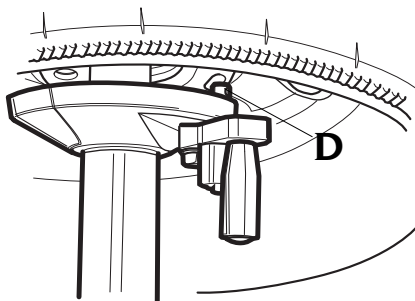
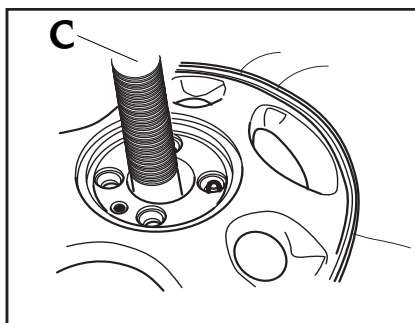


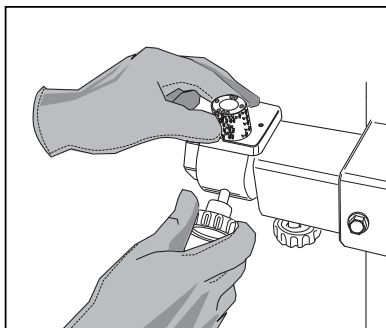
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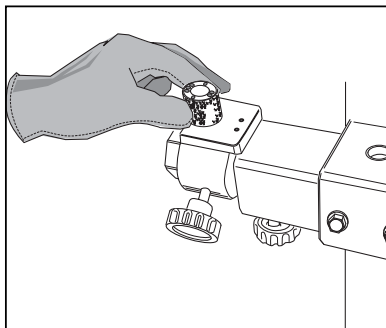


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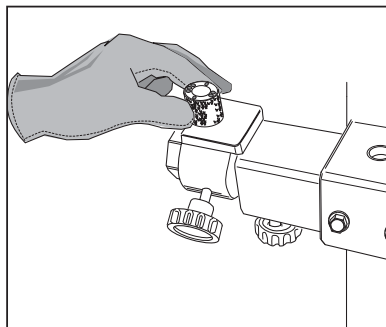




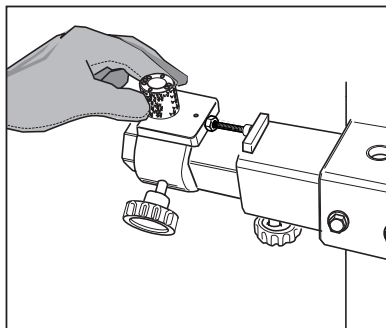
Pos. 1



Pos. 2



Pos. 3



Pos. 4

10

10a

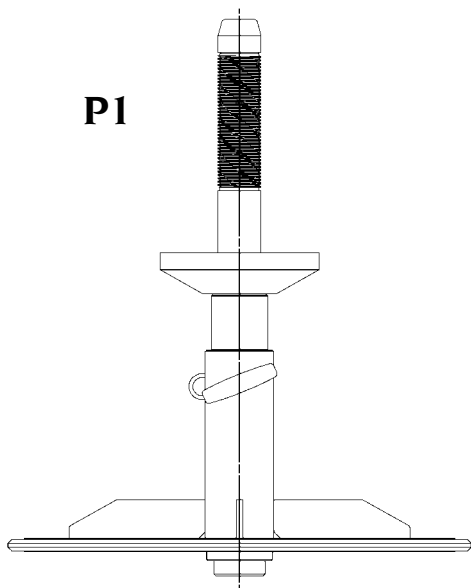
TAB.1			
JOLLY - A9212 - CORNO 620			
	Y max	Y clipe max	X max
P1	214.5	120.5	191
P2	184.5	90.5	221
P3	154.5	60.5	251
P4	124.5	30.5	281

TAB.2			
A2010 - A2019 - A2001 - CORNO 820 - CORNO 920			
	Y max	Y clipe max	X max
P1	269	175	136.5
P2	239	145	166.5
P3	219	115	196.5
P4	179	85	226.5

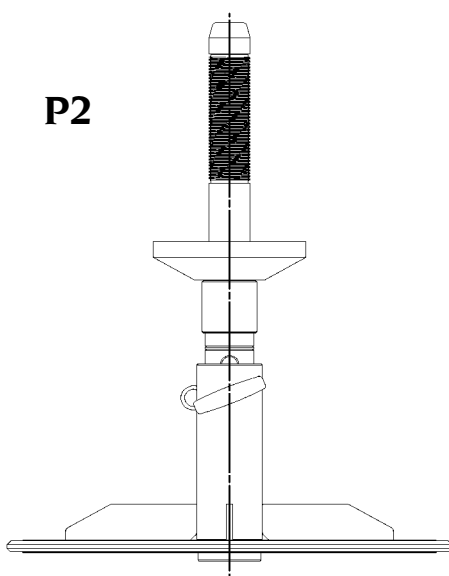
TAB.3			
A2000 - R2100 - R9212 - A9820			
	Y max	Y clipe max	X max
P1	233.5	139.5	172
P2	203.5	109.5	202
P3	173.5	79.5	232
P4	143.5	49.5	262

TAB.4			
JUNIOR PRO			
	Y max	Y clipe max	X max
P1	284	190	121.5
P2	254	160	151.5
P3	224	130	181.5
P4	194	100	211.5

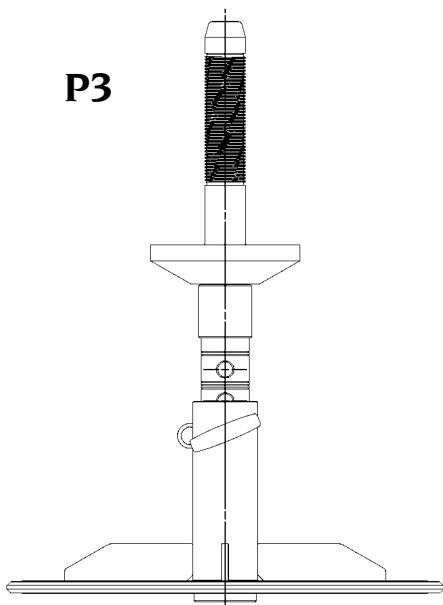
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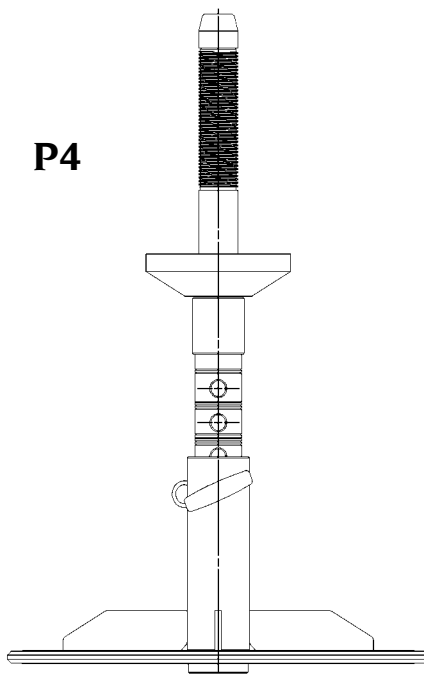
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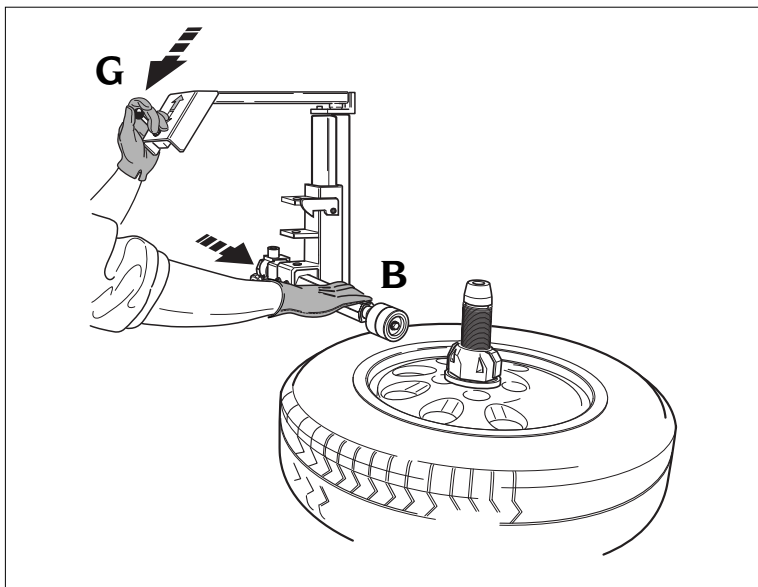
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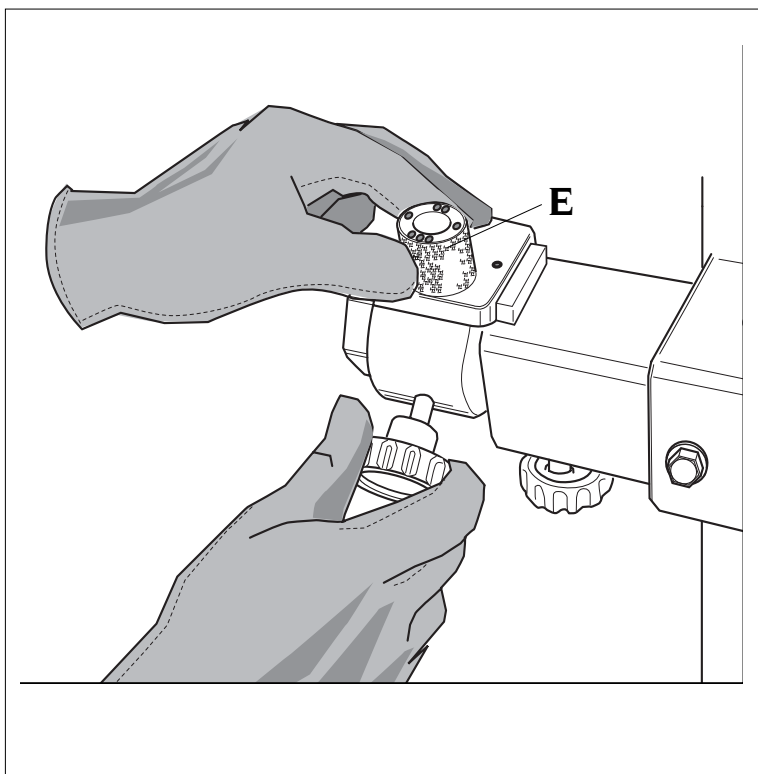
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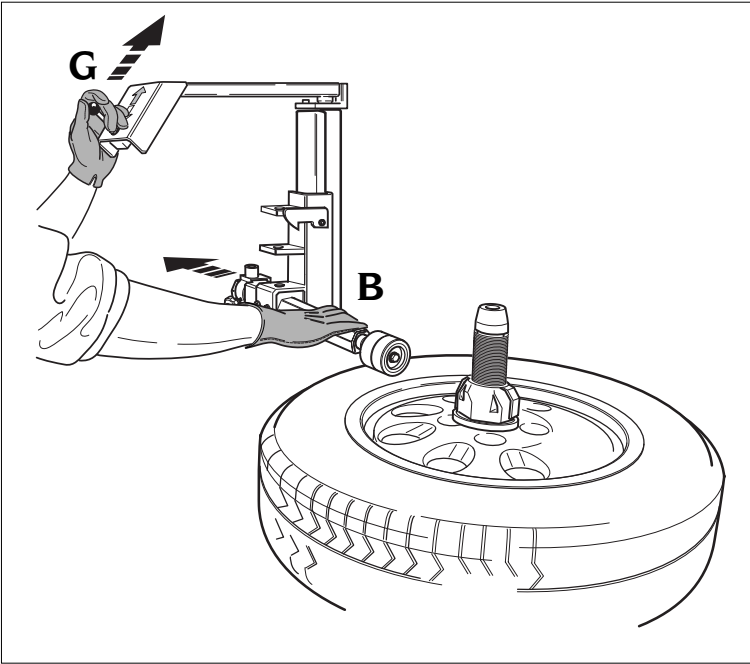


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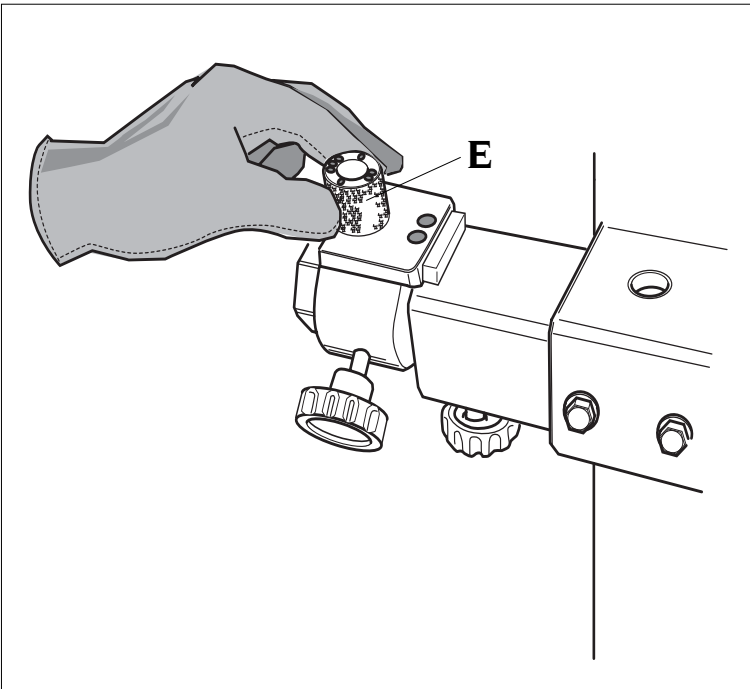


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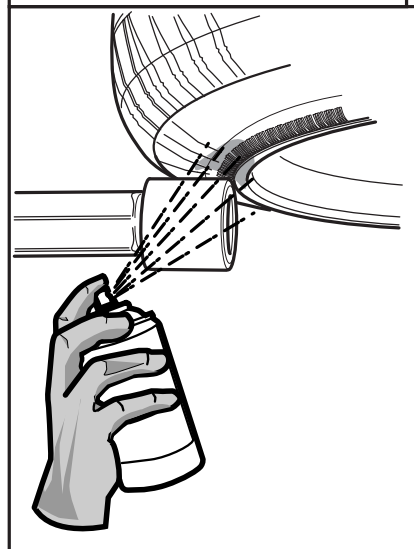
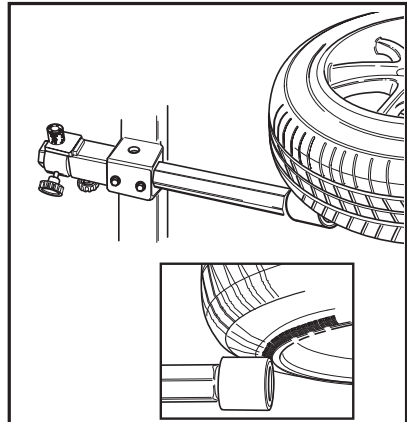


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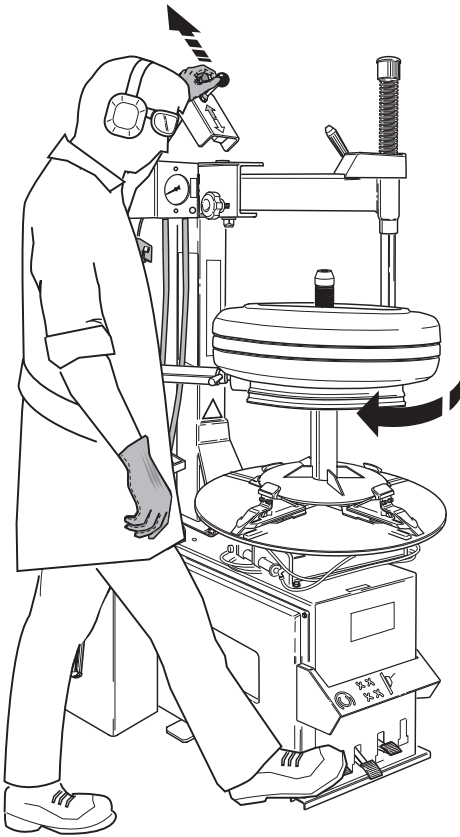


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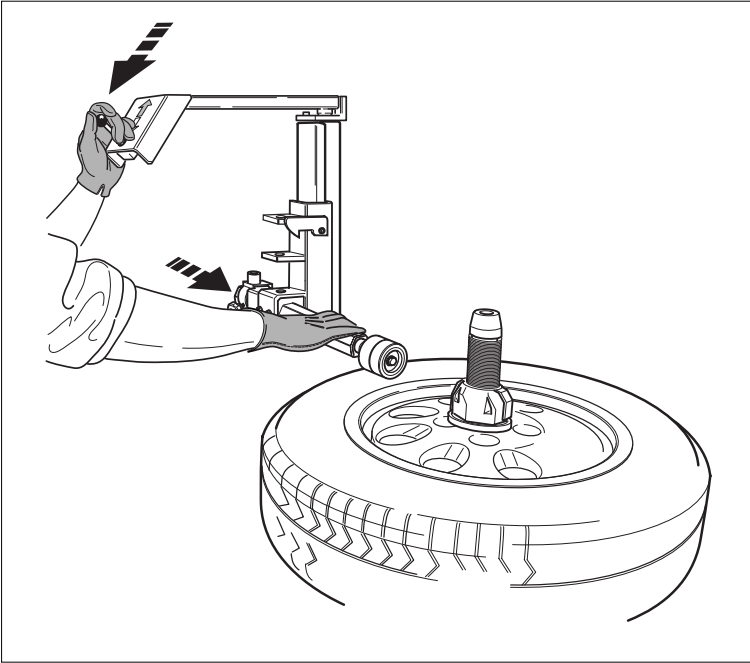
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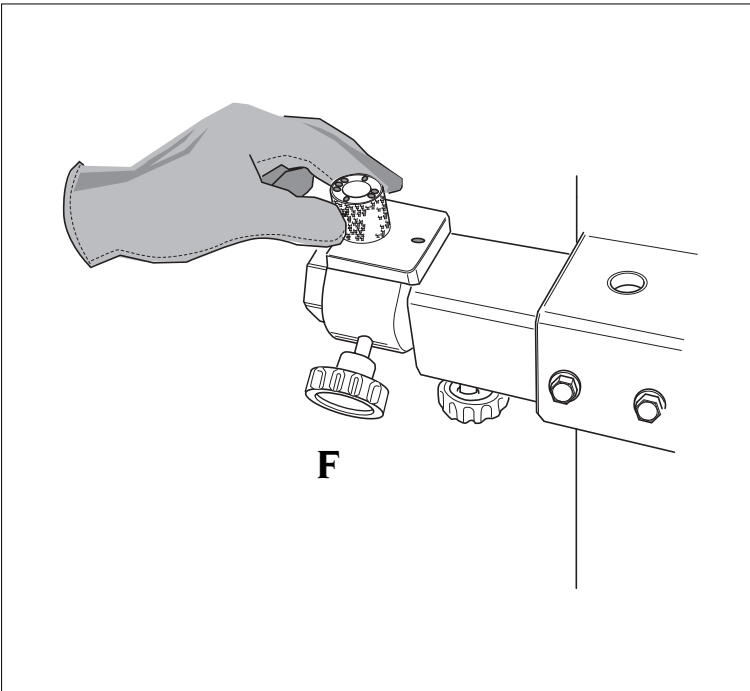
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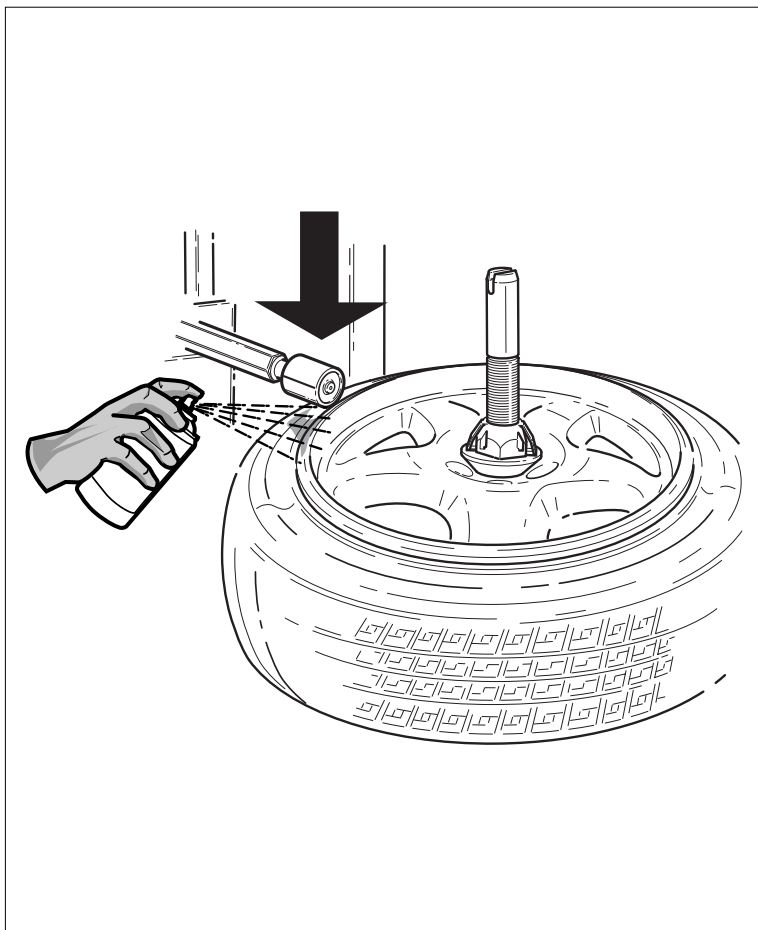


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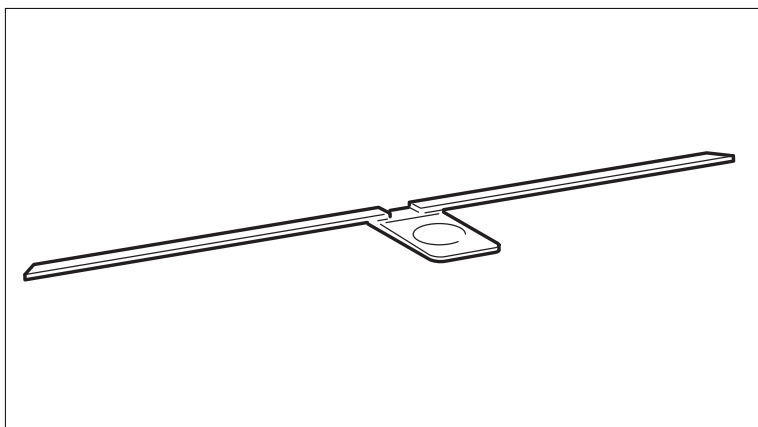


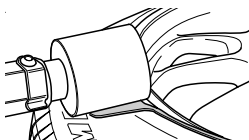
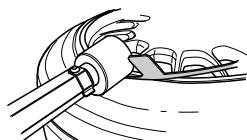
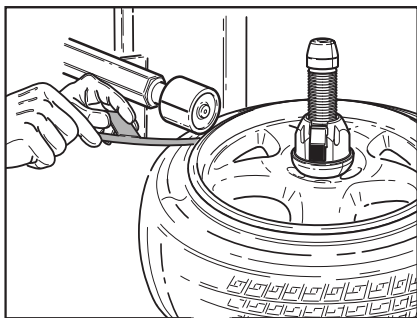
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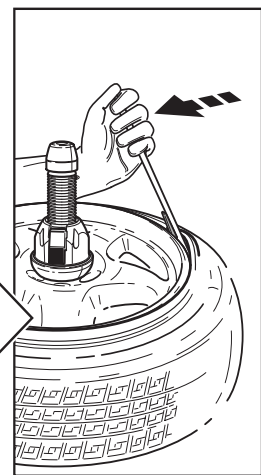
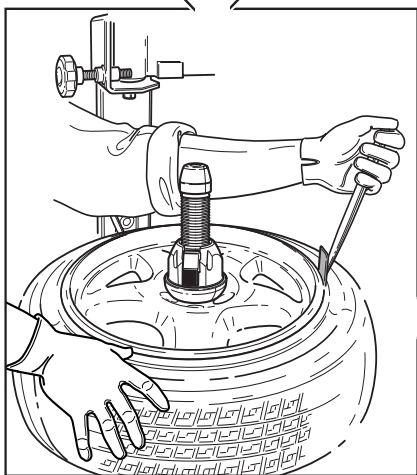
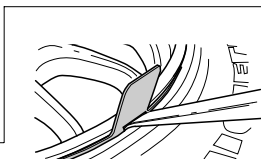
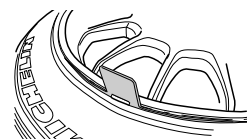
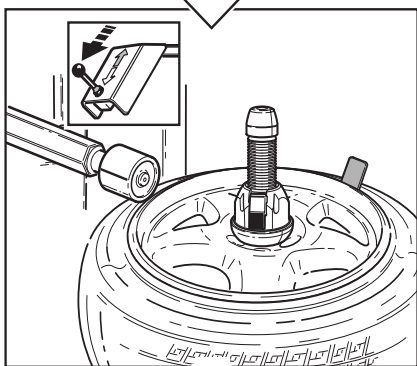


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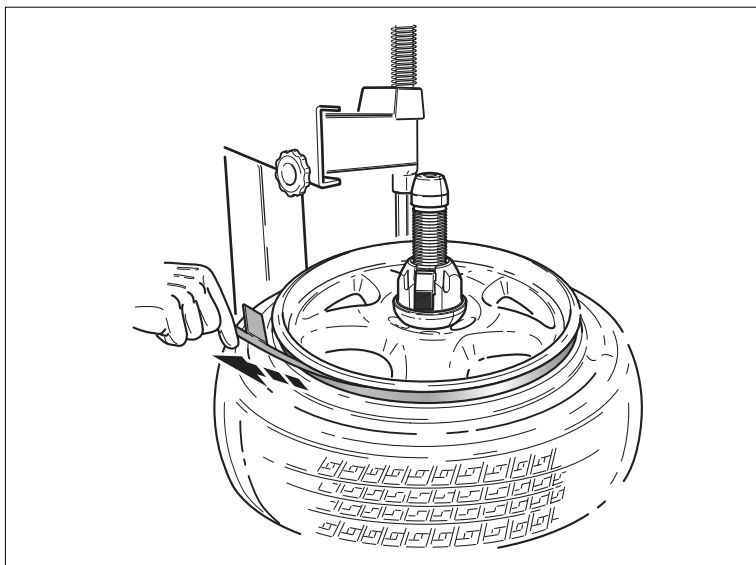


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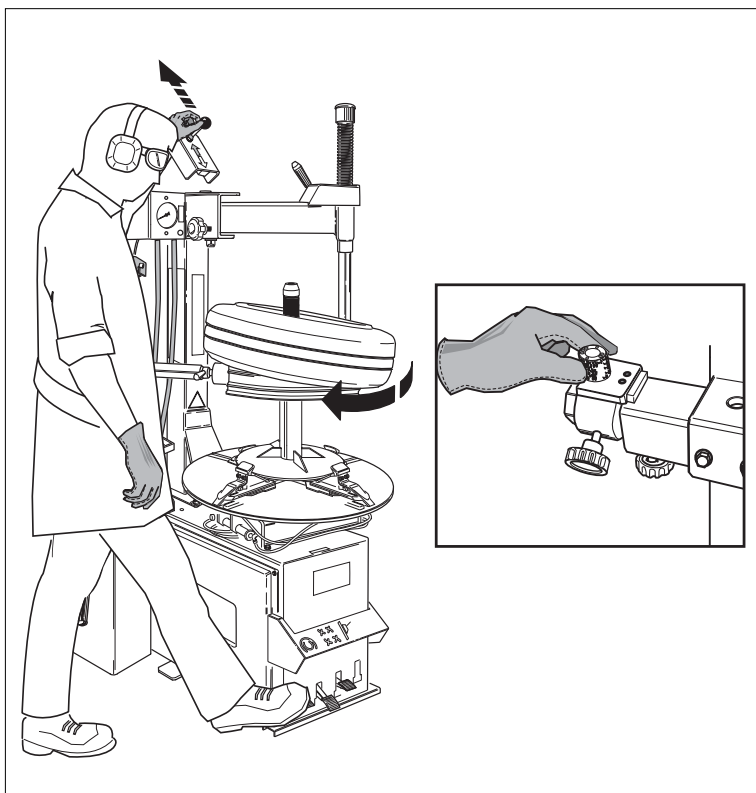


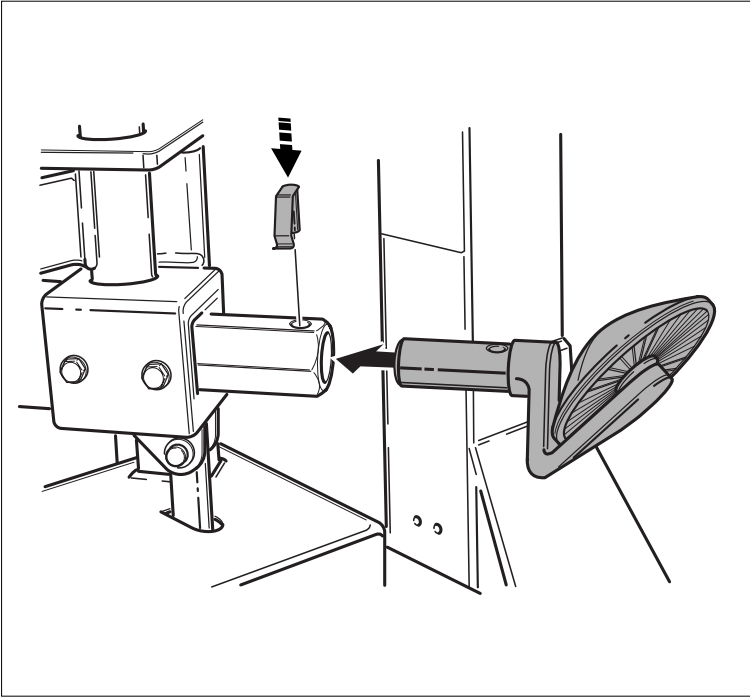
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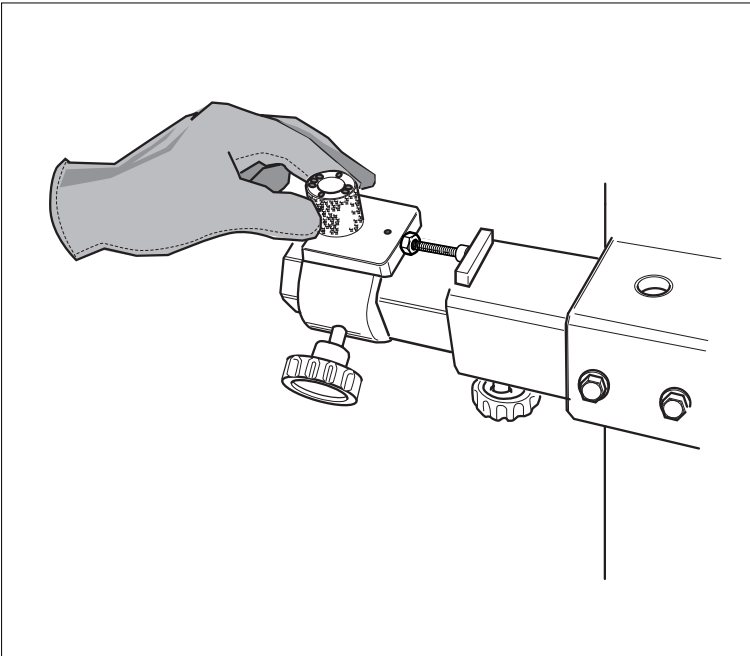


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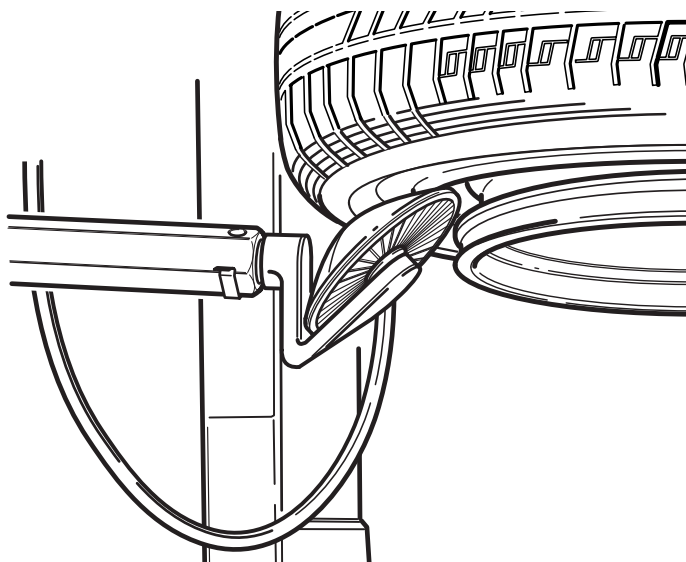
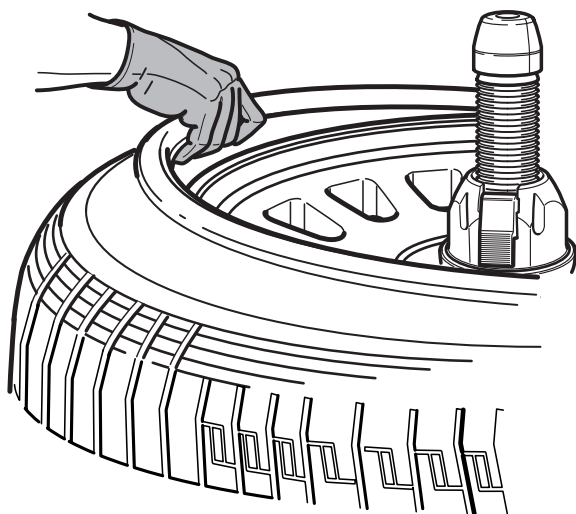


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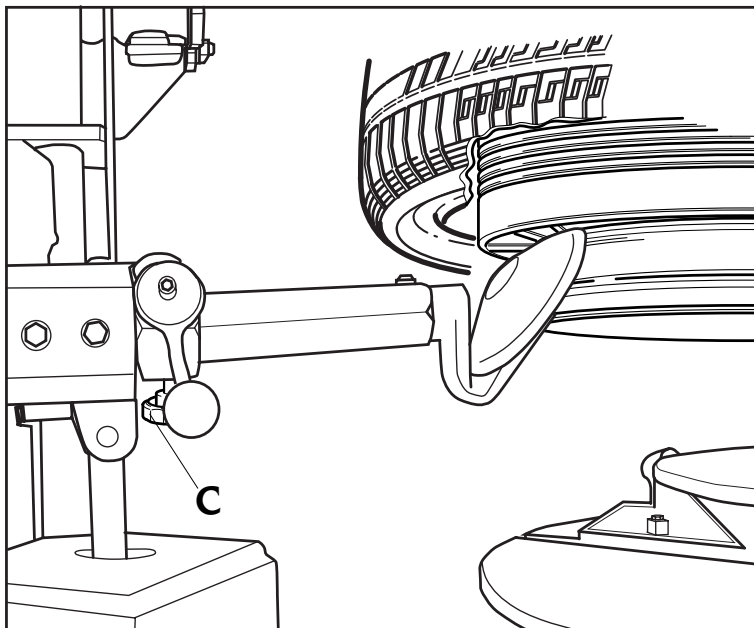


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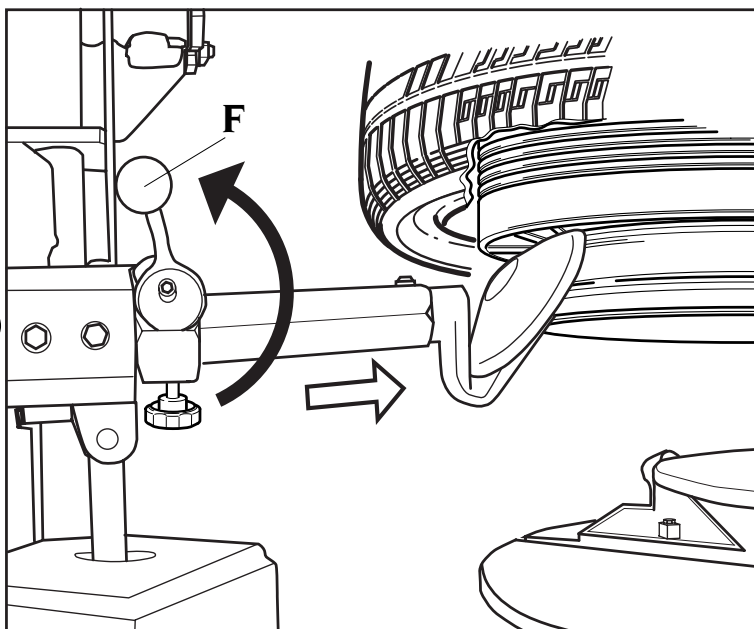
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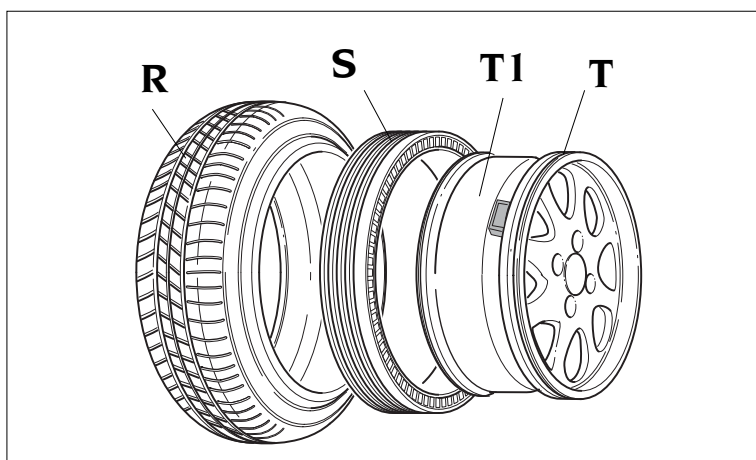
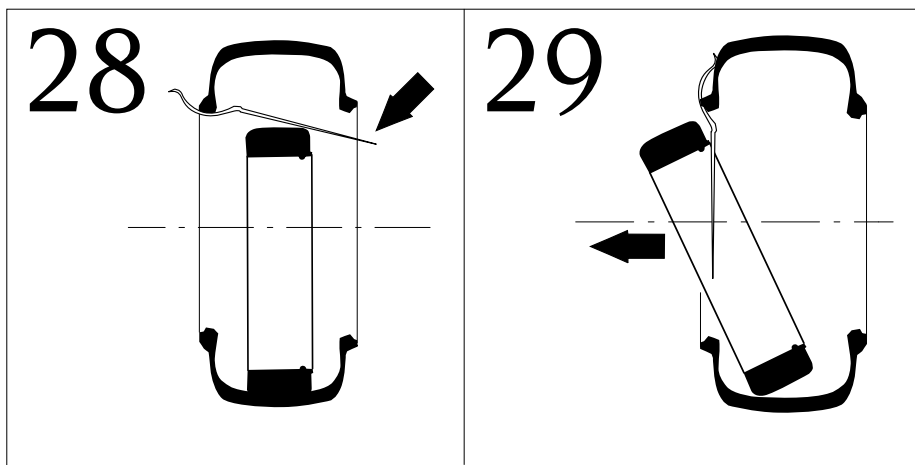


27_a

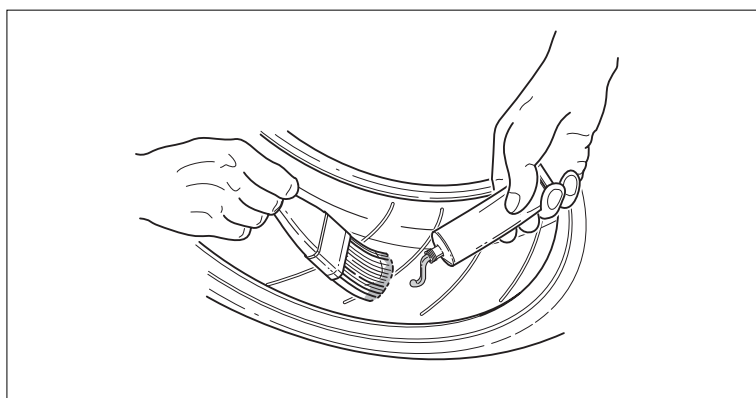


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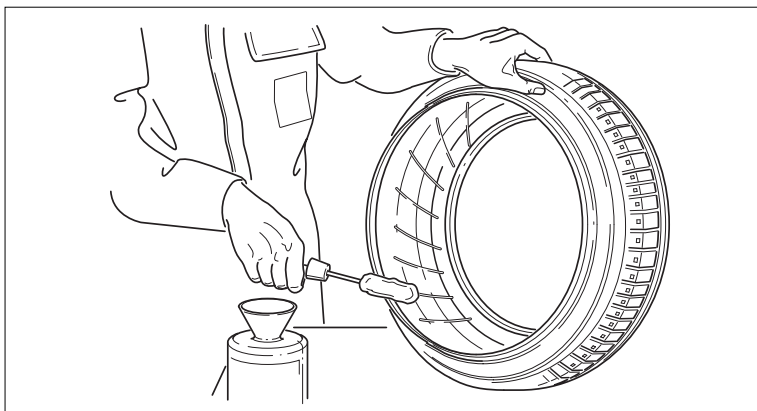


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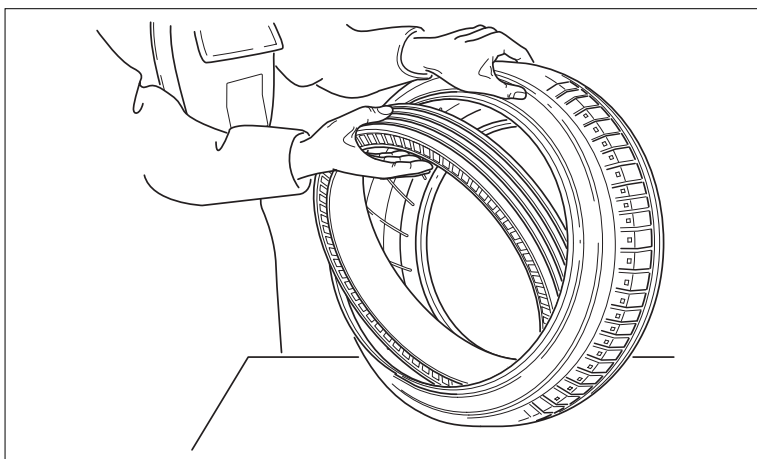


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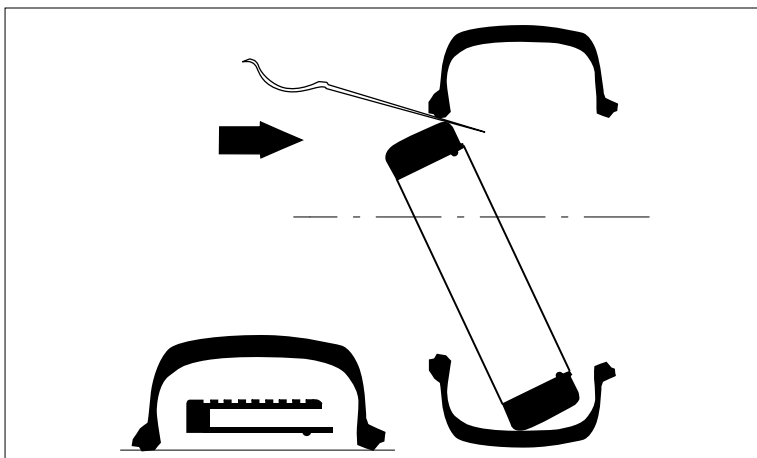
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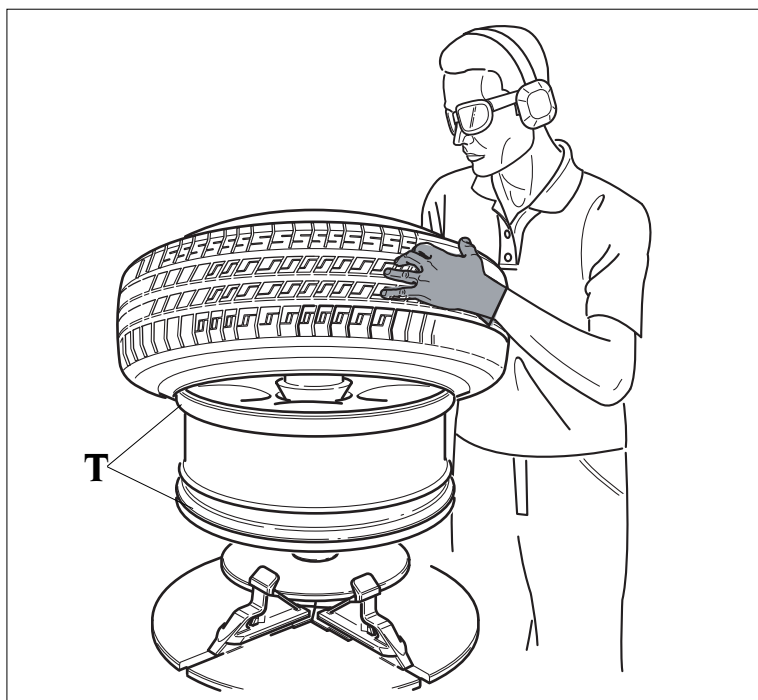
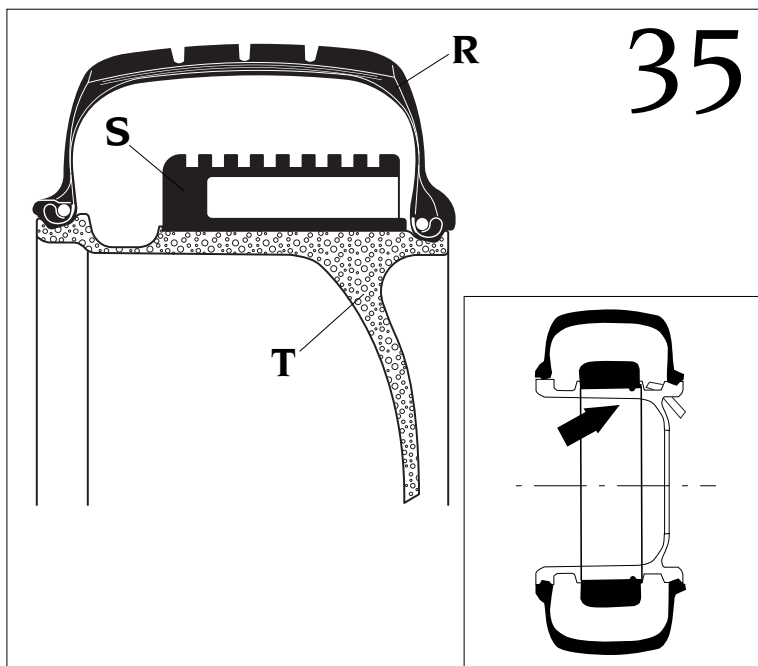


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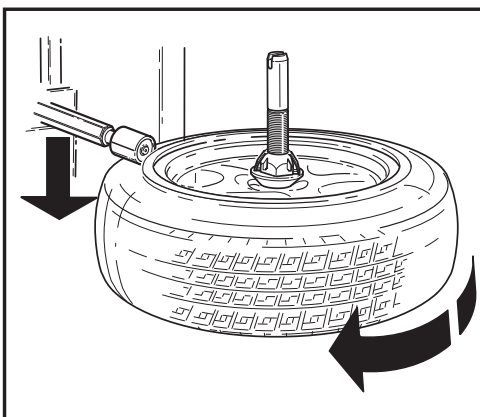
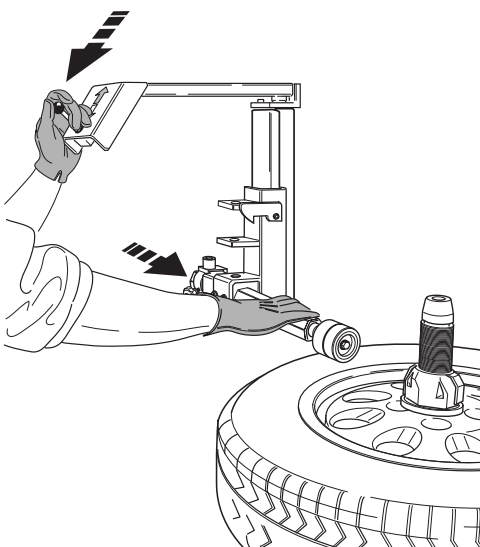
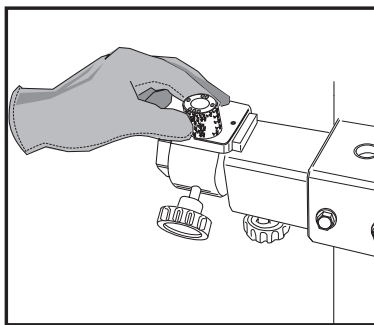


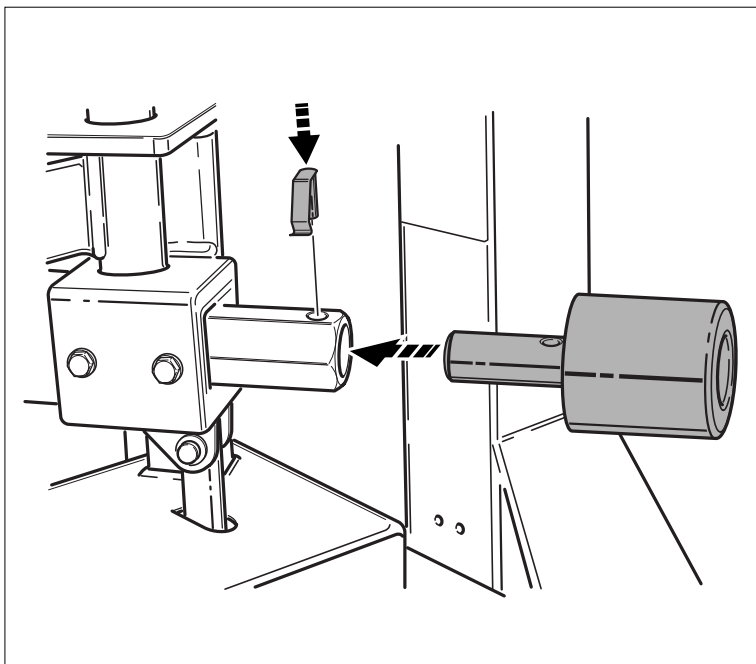
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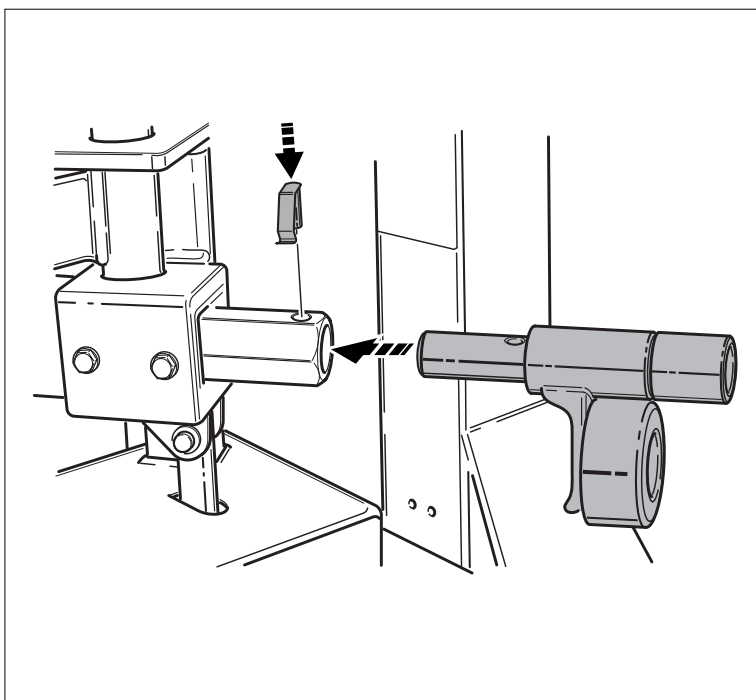


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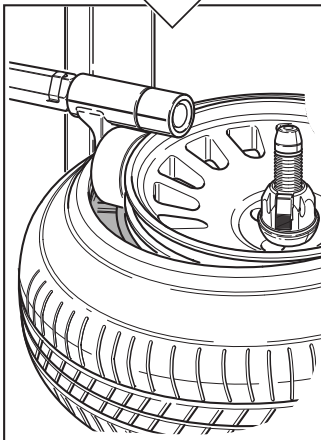
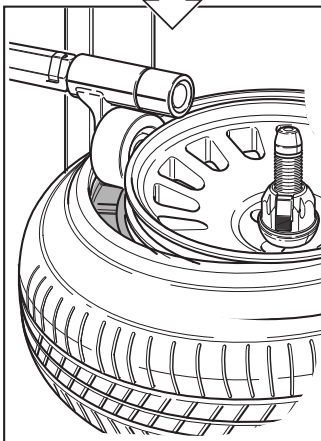
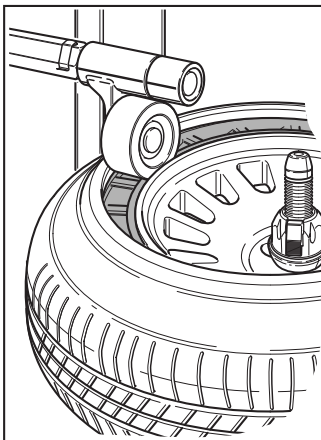


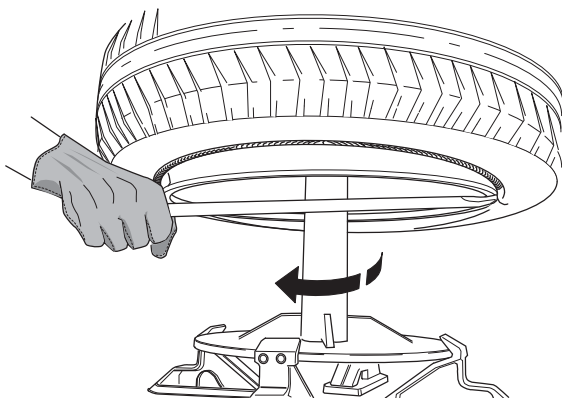
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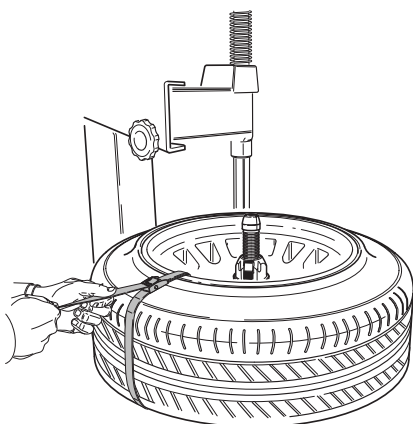
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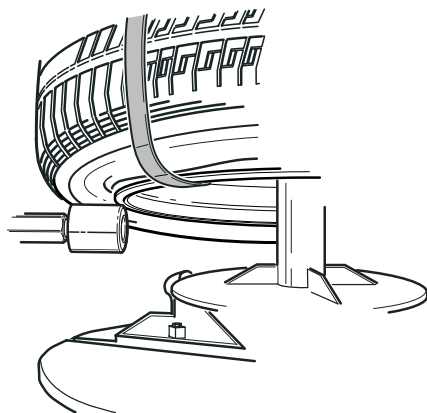




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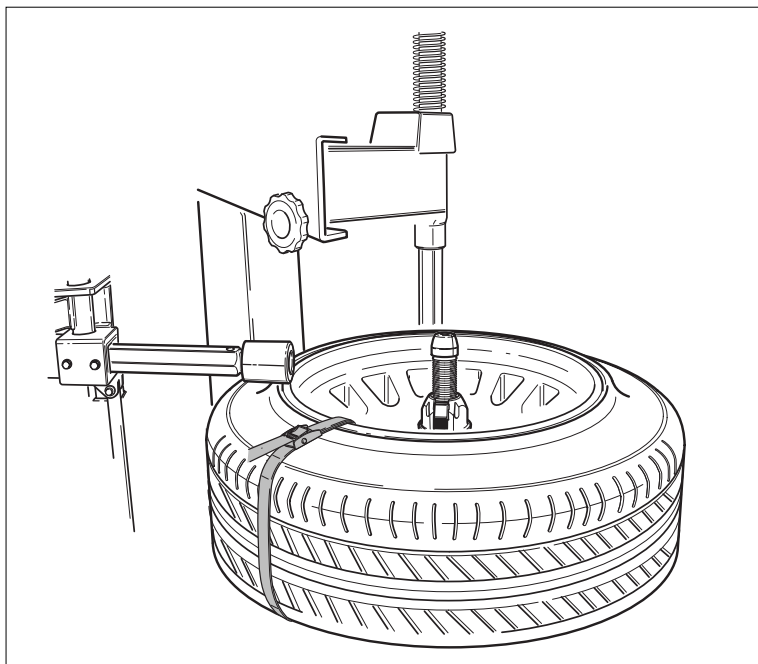


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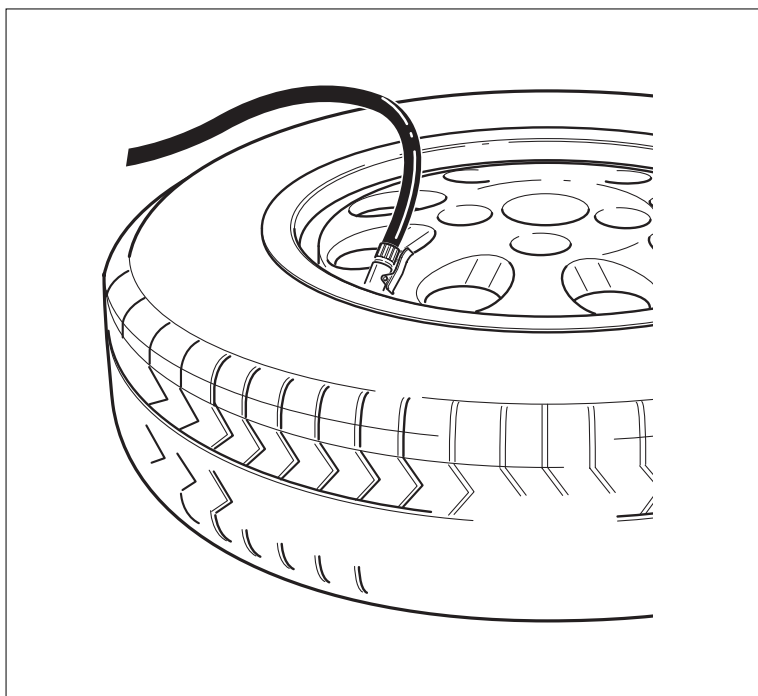


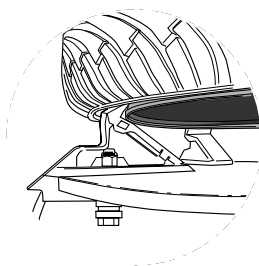
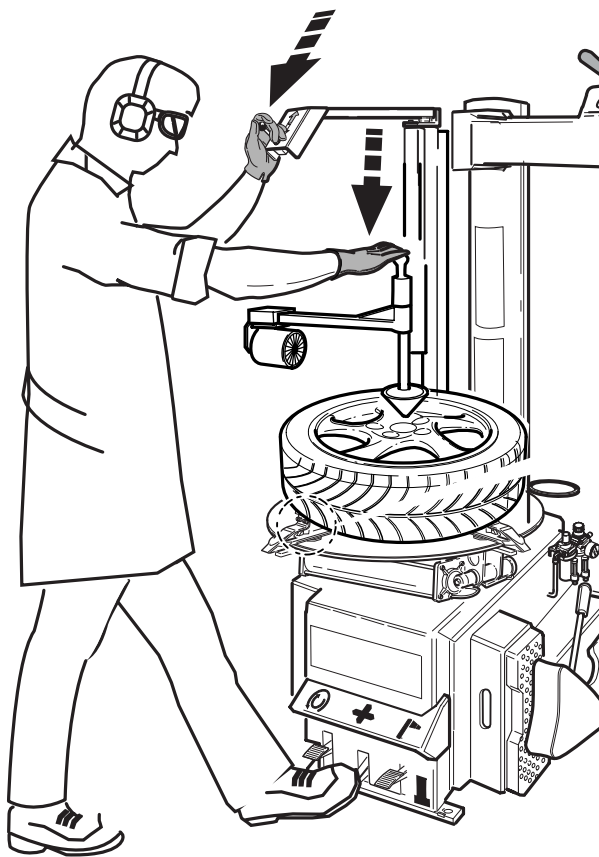
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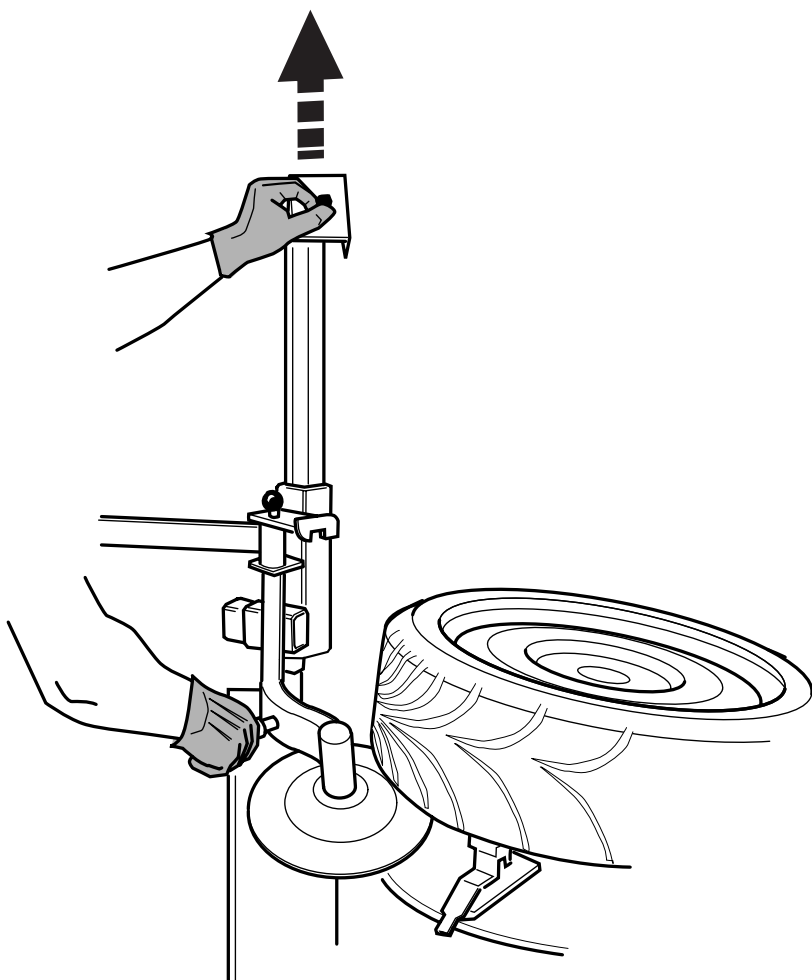
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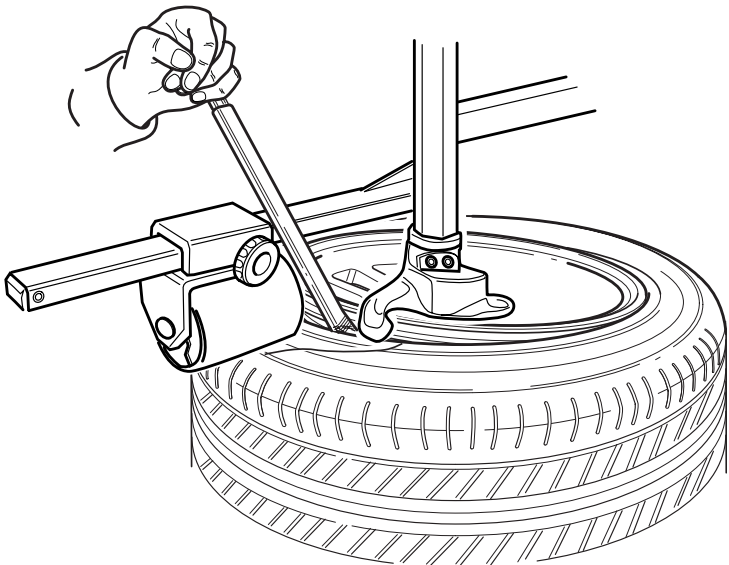
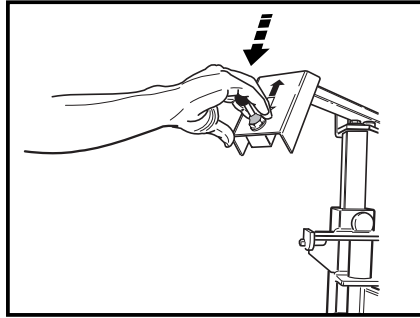
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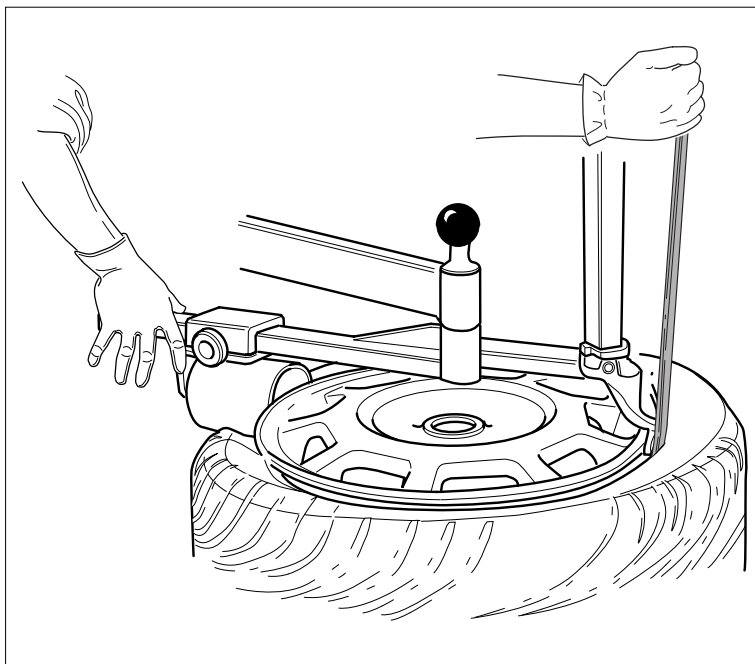




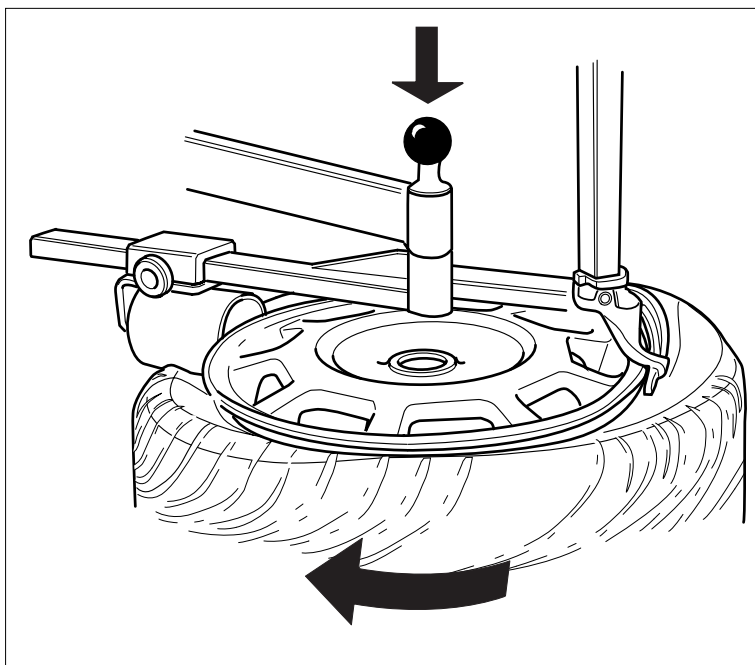


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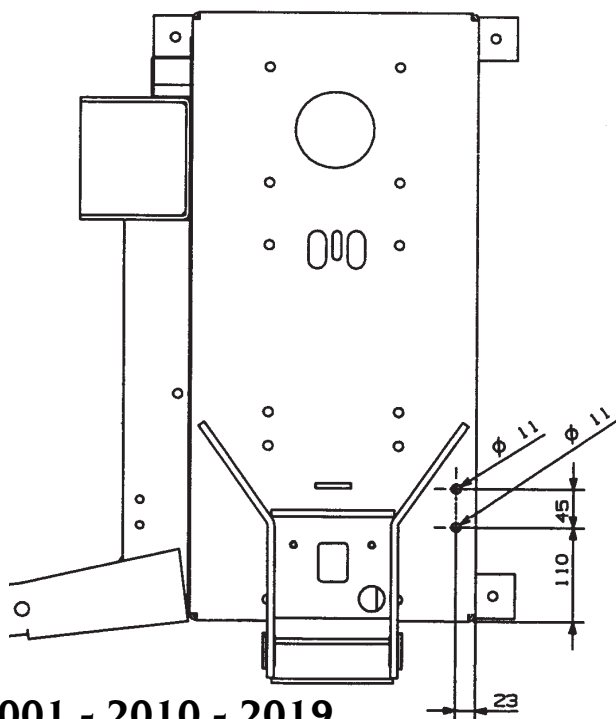
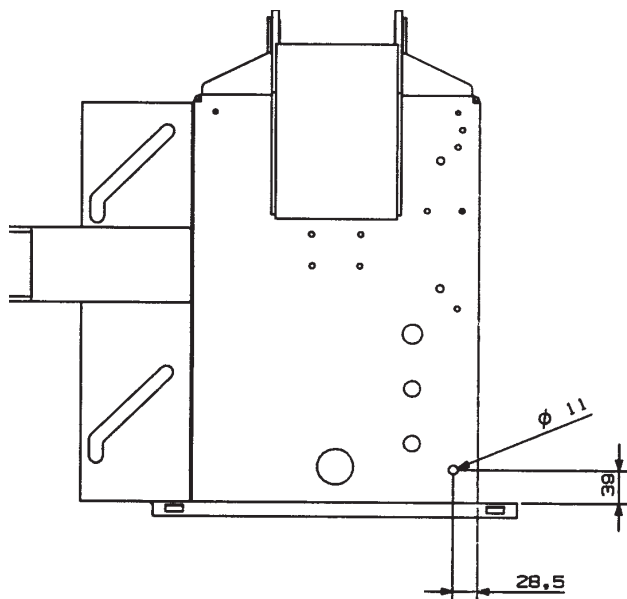


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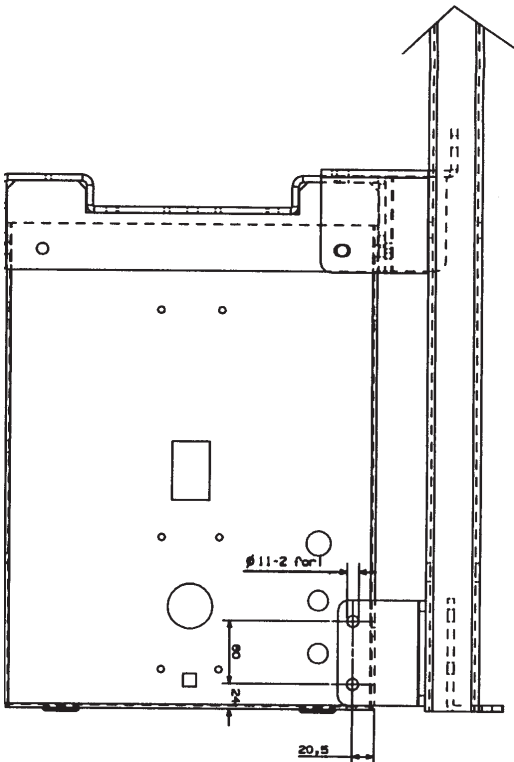
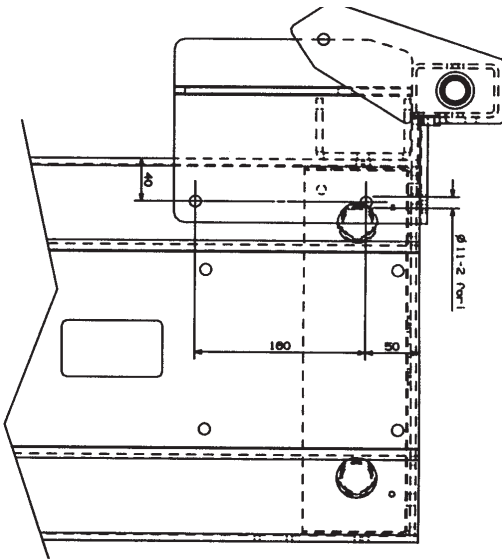


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49

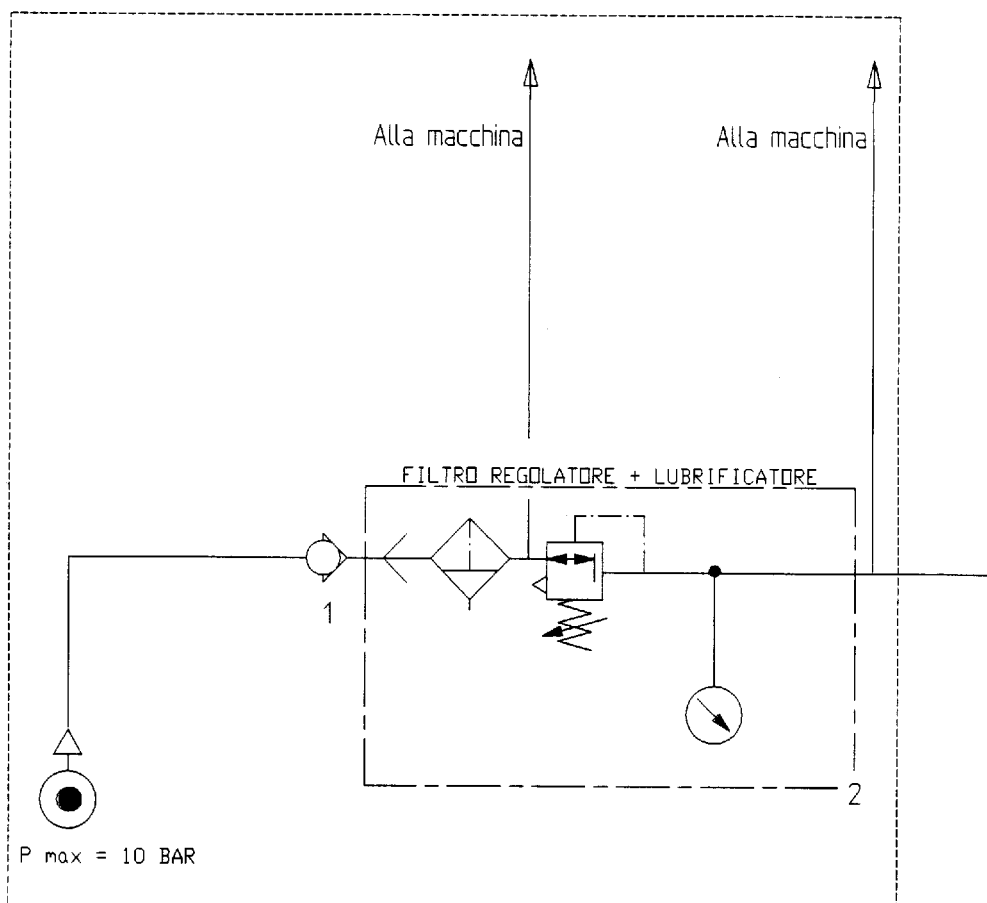


A 2000 - 2001 - 2010 - 2019



JOLLY

Componenti già appartenenti alla macchina







CORGHI S.p.A. - Strada Statale 468 n.9
42015 CORREGGIO - R.E. - ITALY
Tel. ++39 0522 639.111 - Fax ++39 0522 639.150
www.corgi.com - info@corgi.com