

BALL-JOINT UNCOUPLING TOOL : USE



Note, one or more warnings are present in this procedure



WARNING



To avoid all risk of damage to the systems, apply the safety and cleanliness instructions and operation recommendations before carrying out any repair:



(see **Front axle components: Precautions for the repair**) ,



(see **Vehicle: Precautions for the repair**) (01D, Mechanical introduction).

Note:



If the lower ball joint is stuck in the stub axle carrier and it will not come out, this document explains how to extract the lower ball joint.

USE



Repair-00x02x12x01-01x79-1-1-1.xml



XSL version : 3.02 du 22/07/11

BELT TENSION CHECKING TOOL: USE



Note, one or more warnings are present in this procedure



Special tooling required	
Belt tension setting tool (frequency meter)	Mot. 1505
Belt tension checking tool (frequency indicator).	Mot. 1715



WARNING

Before carrying out any operation on a vehicle fitted with the Stop & Start system, always follow the safety instructions [Vehicle: Precautions for the repair](#)

1.INTRODUCTION

Frequency meters Belt tension setting tool (frequency meter)([Mot. 1505](#)) or Belt tension checking tool (frequency indicator). ([Mot. 1715](#)) allow the tension of the timing and accessories belts to be checked during a fault finding procedure or when a belt is refitted.

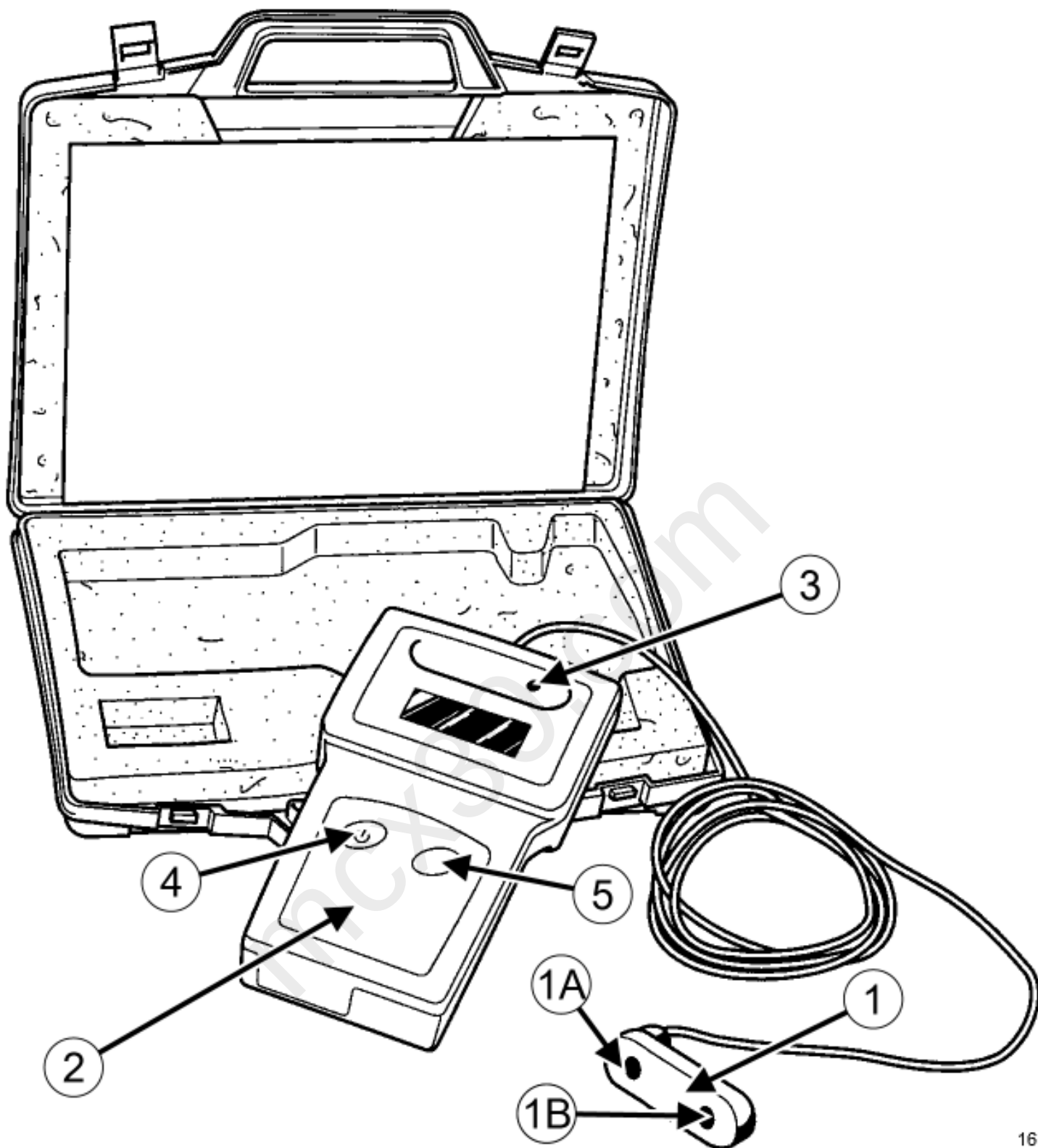
This note describes the use of these tools as an addition to the replacement and checking procedures for belts given in the vehicle repair methods.

The procedures and tension values recommended by the manufacturer must always be adhered to as they affect the service life of the drive systems.

An incorrect belt tension may cause noise, loss of power, engine cut-outs or even irreparable damage to the engine.

2. TOOL MOT.1505

1-DESCRIPTION



16163

The tool is comprised of:

- a reading head(1) including two sensors(1A) and (1B) ,
- a display unit(2) ,

■ a calibrated frequency generator(3) (512 ± 1 Hz) integrated into the display unit(2) ,

■ a power switch(4) ,

a tester switch(5) for checking the calibration of the equipment.

2- CALIBRATING



Note:

The tool must be calibrated every month

The calibrated frequency generator(3) integrated into the display unit(2) allows the calibration of the tool to be checked.



Switch the tool on by pressing switch(4) .



Position the sensor(1A) on the calibrated frequency generator(3) .



Press on the tester switch(5) .



Read the value shown on the display.



Reapply the procedure to check sensor(1B) .

If the value read on the display is not 512 ± 1 Hz, for both sensors, return the tool to the address below:

ONE TOO

1 ZAC de Saint Esteve

06640 Saint-Jeannet les Plans

Tel: +33 (0)4 92 12 04 80

Fax: +33 (0)4 92 12 04 66.

3- OPERATION

1)PRINCIPLE



This device measures the frequency of the belt to be checked in Hertz (Hz).

Frequency is a physical unit which here reflects the belt tension level very accurately.

The measurement must not be made with just one sensor, the other is used as a reference, and should be outside the measurement field.

Both of these sensors can be used either as a measuring sensor or as a reference sensor.

Measuring range: 30 to 520 Hz.

Uncertainty: $\pm 1 \text{ Hz} < 100 \text{ Hz}$ and $1\% > 100 \text{ Hz}$.

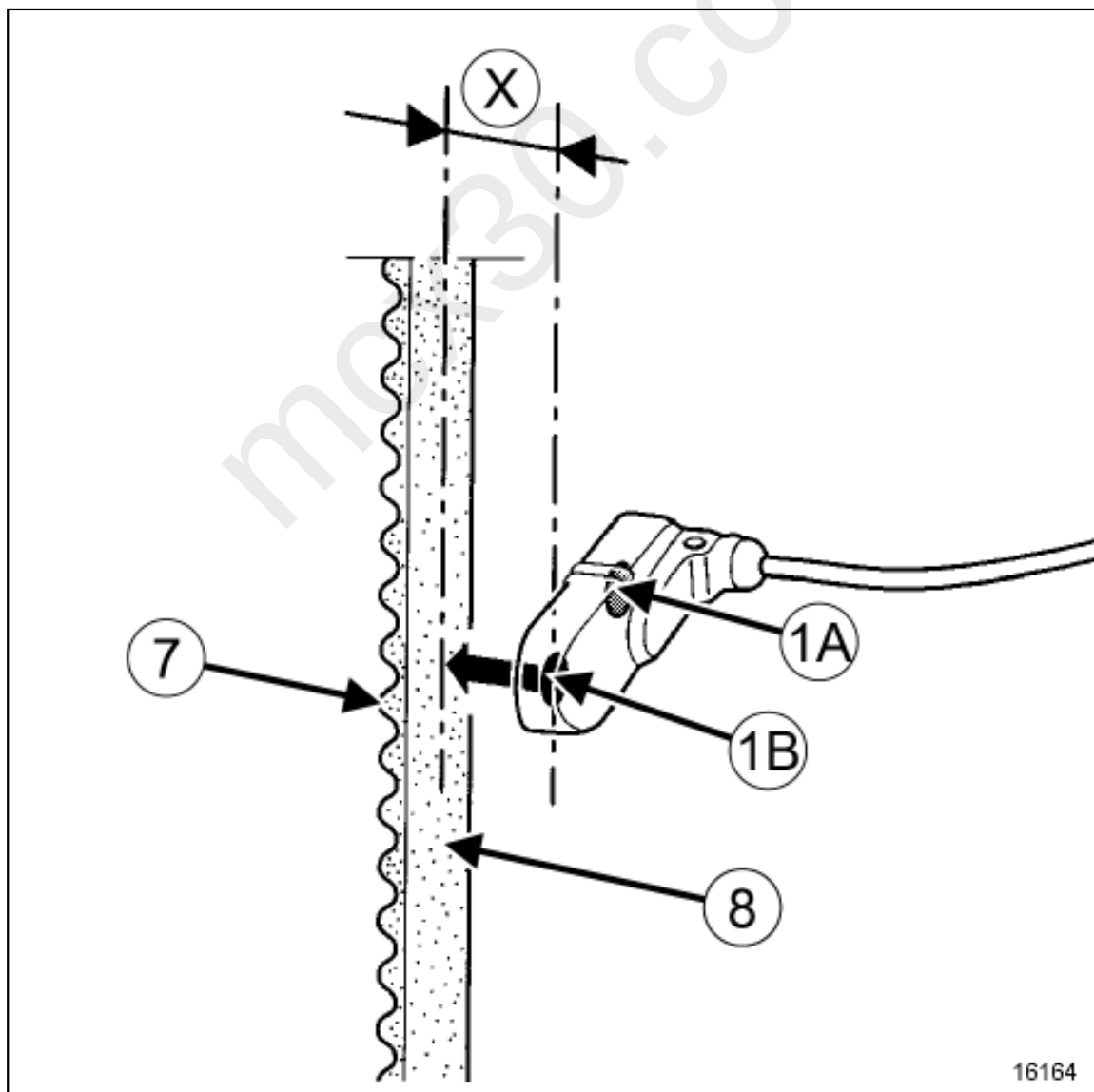
2)USE

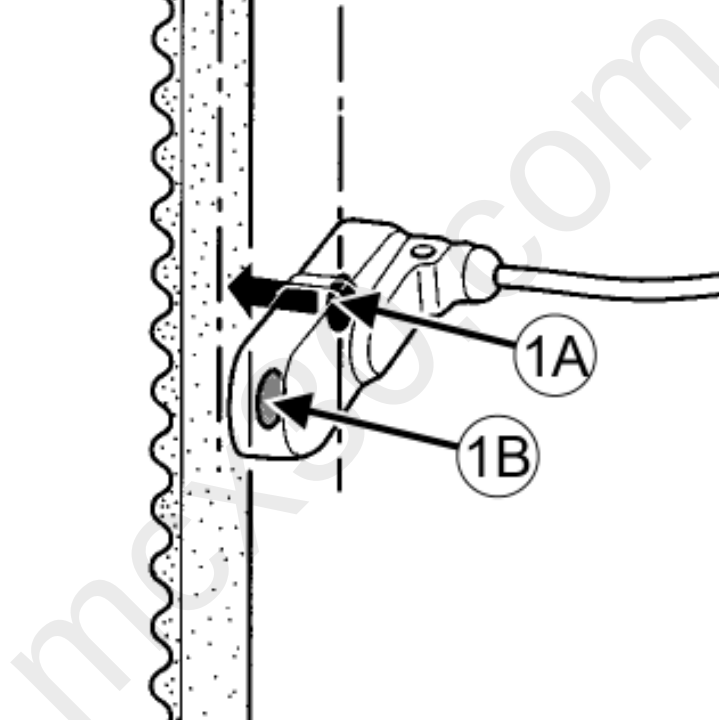


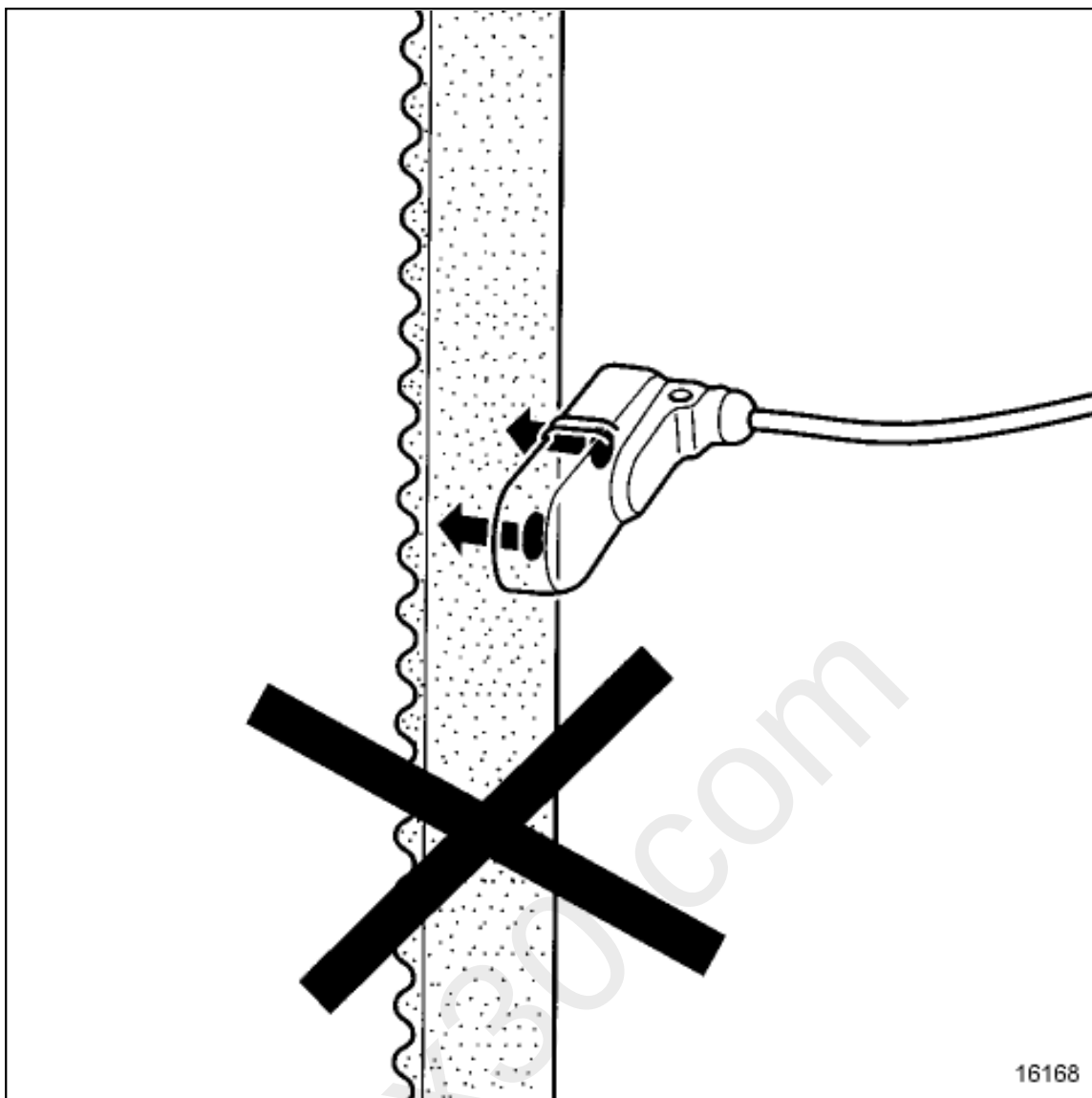
Switch the tool on using switch(4) .



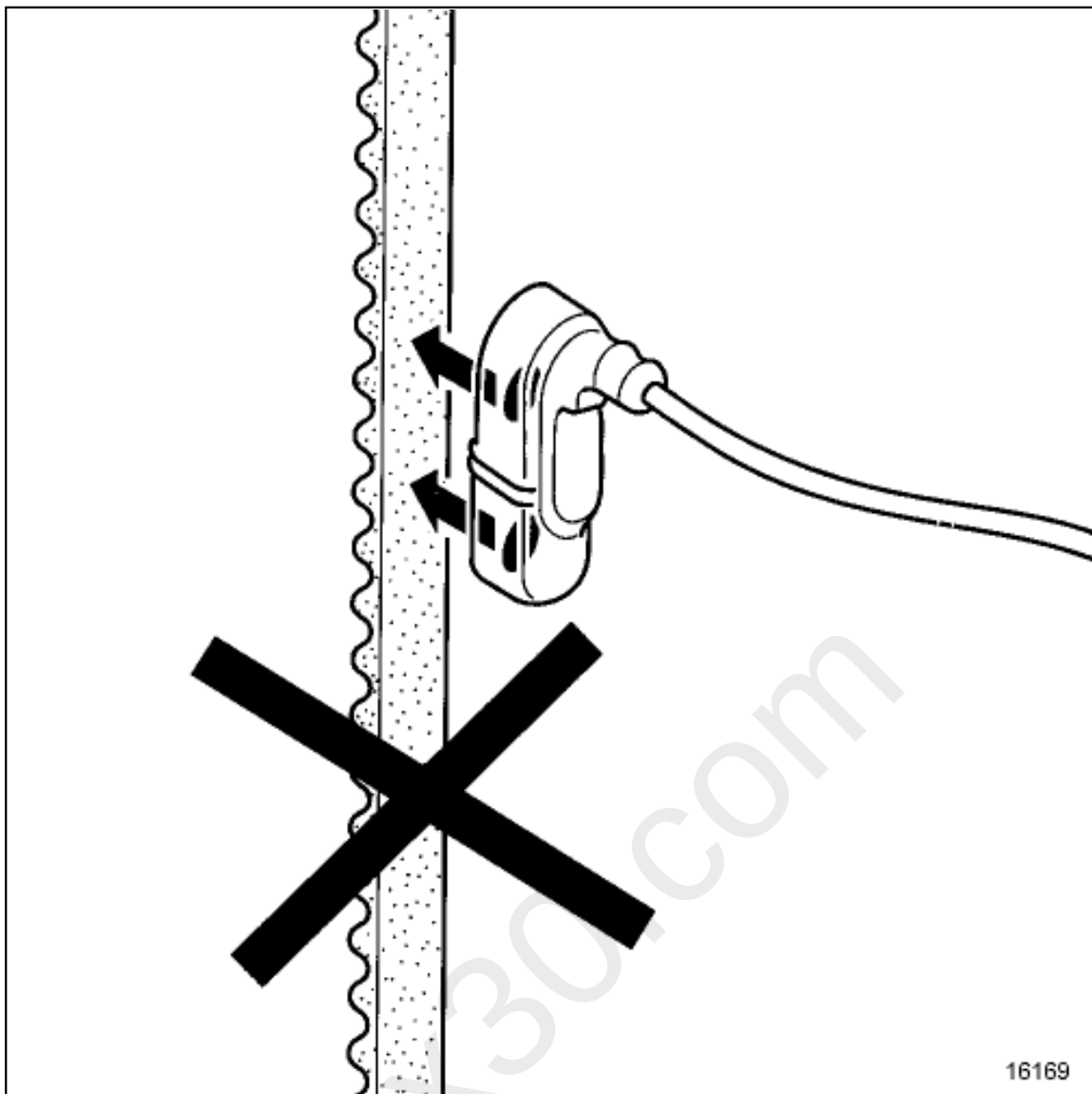
Bring the reading head(1) up to the belt section to be measured.



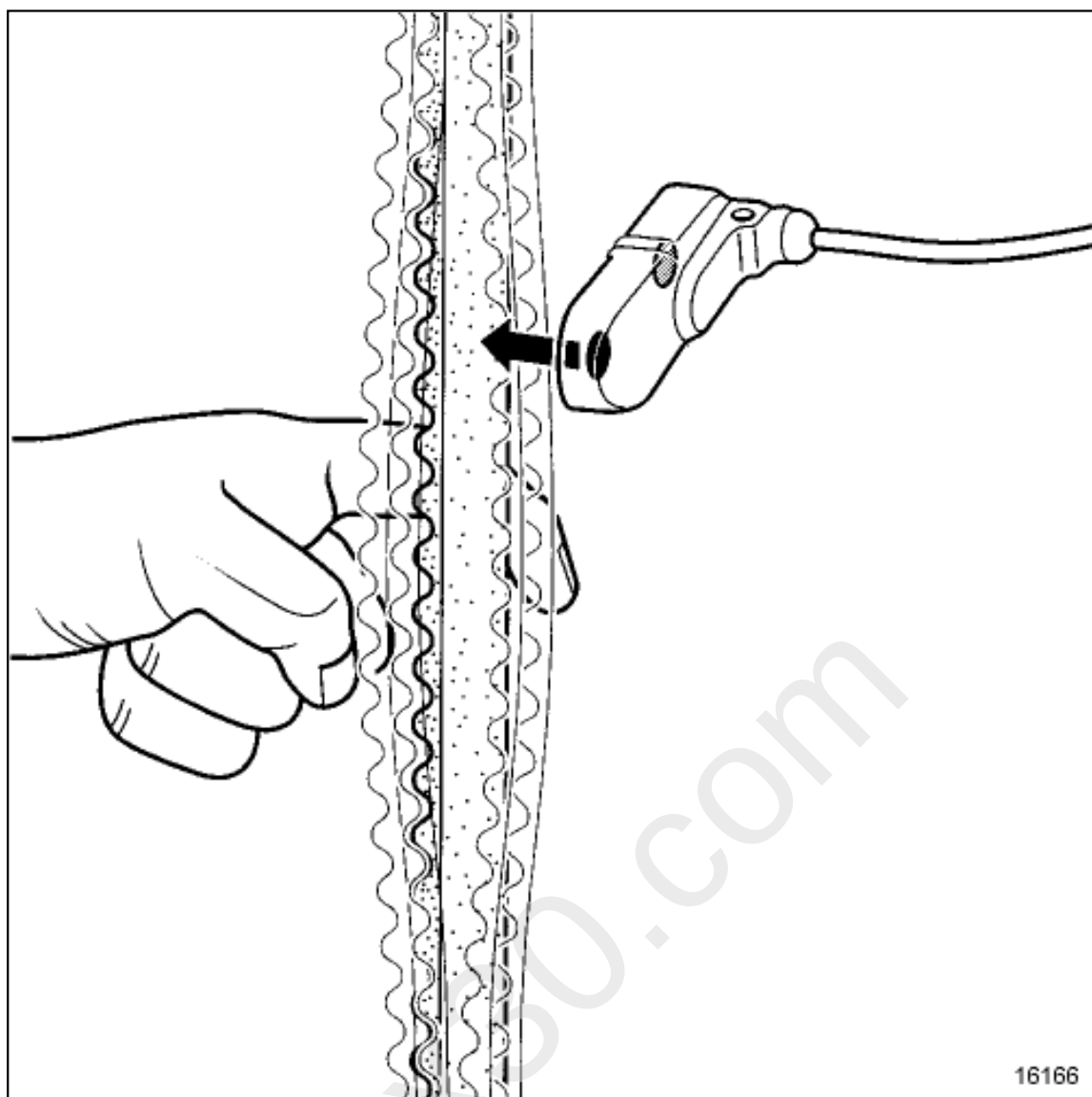




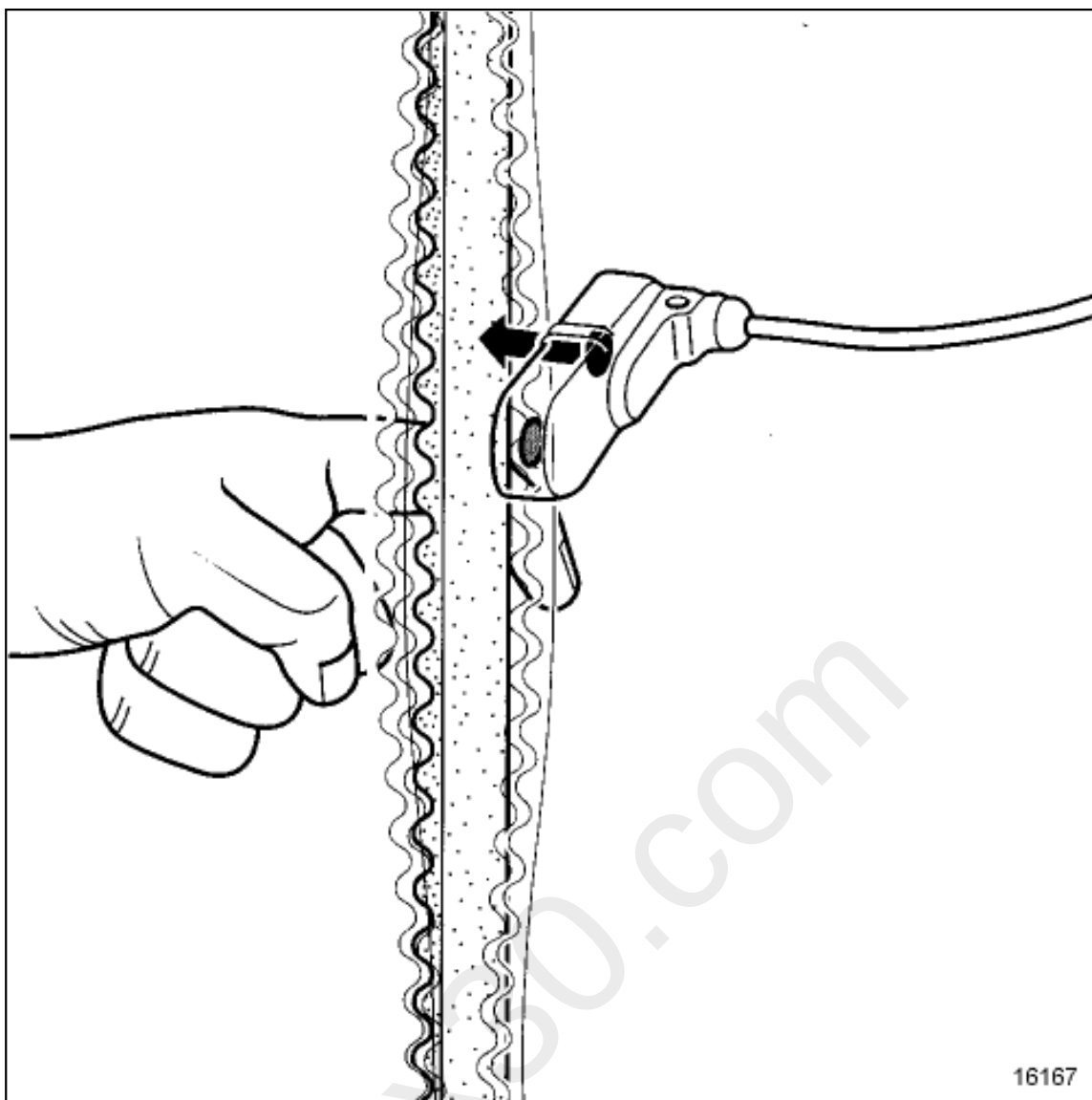
16168



Under no circumstances should the two sensors be facing the belt simultaneously during measurement.



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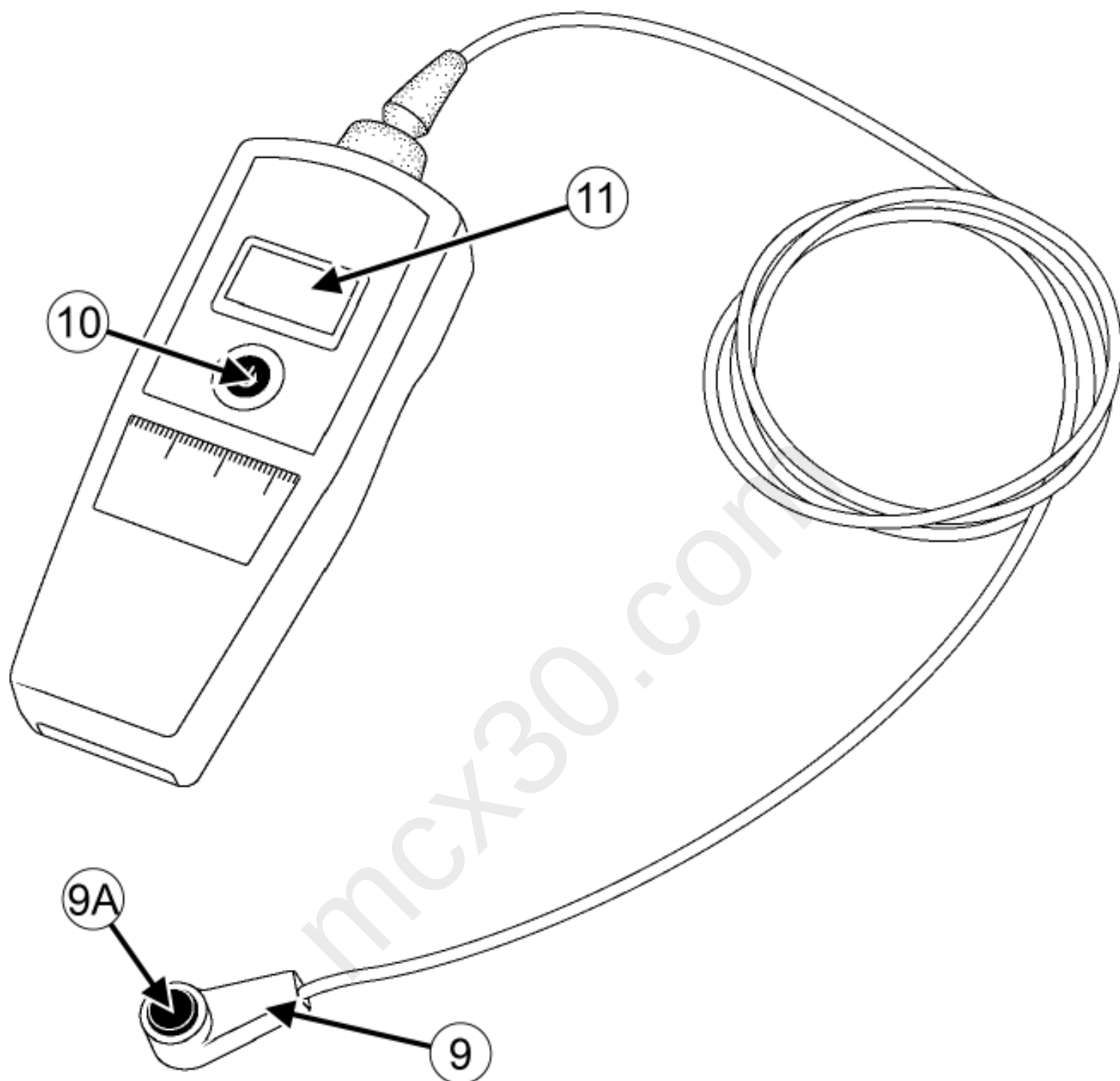


Make the measurement after setting the belt vibrating with a finger.

The measurement is validated by a bleep.

3. TOOL MOT.1715

1- DESCRIPTION



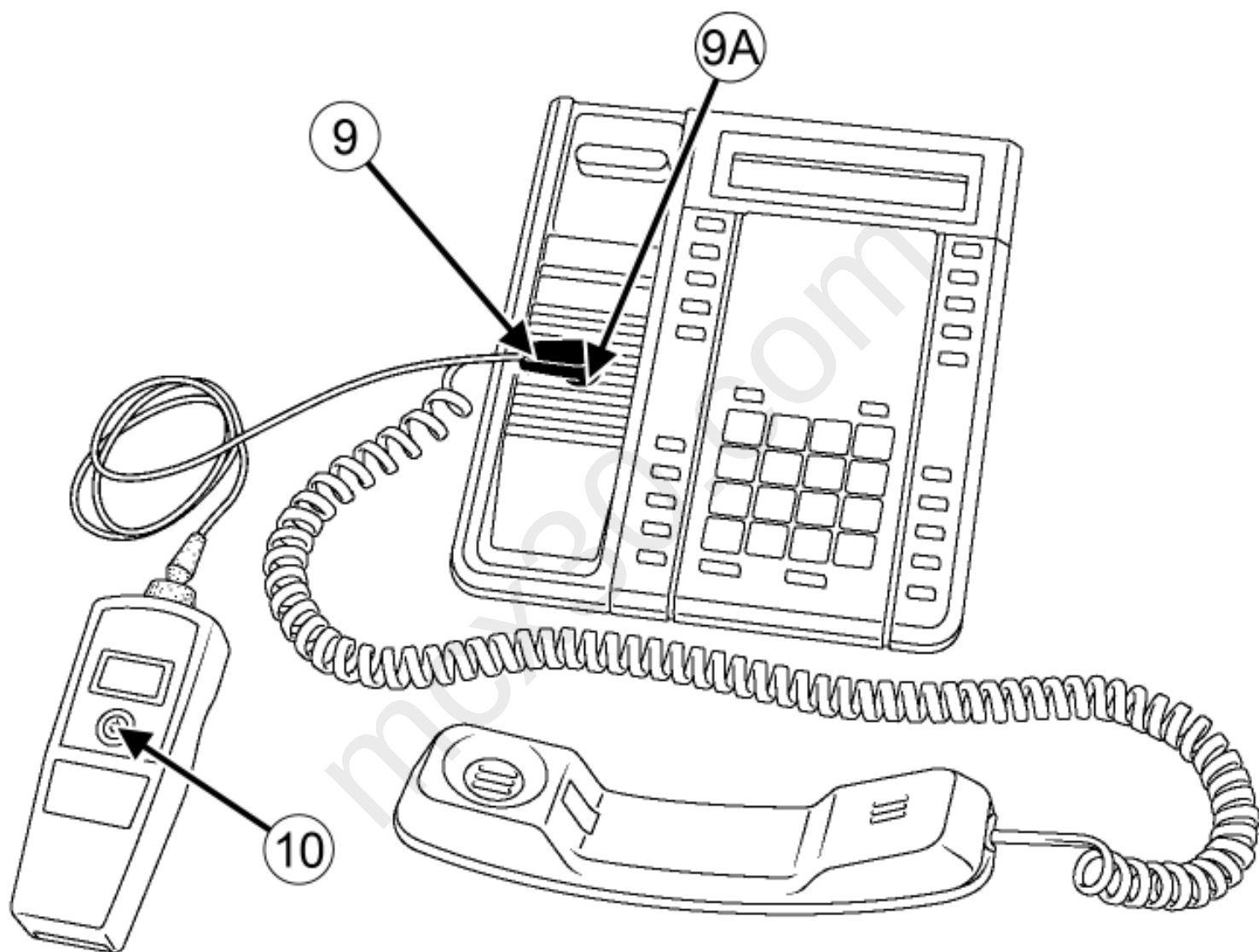
106186

The tool is comprised of:

- a reading head(9) including one sensor(9A) ,
- a power switch(10) ,

a display(11) .

2- CALIBRATION



106185



Note:

The tool must be calibrated every month.

This operation allows the calibration of the tool to be checked using a telephone.



Switch the tool on by pressing on switch(10) .



Take the telephone receiver off the hook.



Dial +33 (0)4 92 12 06 54(this number is free to call).

Do not hang up the call.



Turn up the volume to maximum.



Position the sensor(9A) on the speaker.



Read the value shown on the display.

If the value read on the display is not 440 ± 2 Hz, return the tool to the address below:

ONE TOO

1 ZAC de Saint Esteve

06640 Saint-Jeannet les Plans

Tel: +33 (0)4 92 12 04 80

Fax: +33 (0)4 92 12 04 66.

3- OPERATION

1)PRINCIPLE



This tool measures the frequency of the belt to be checked in Hertz (Hz).

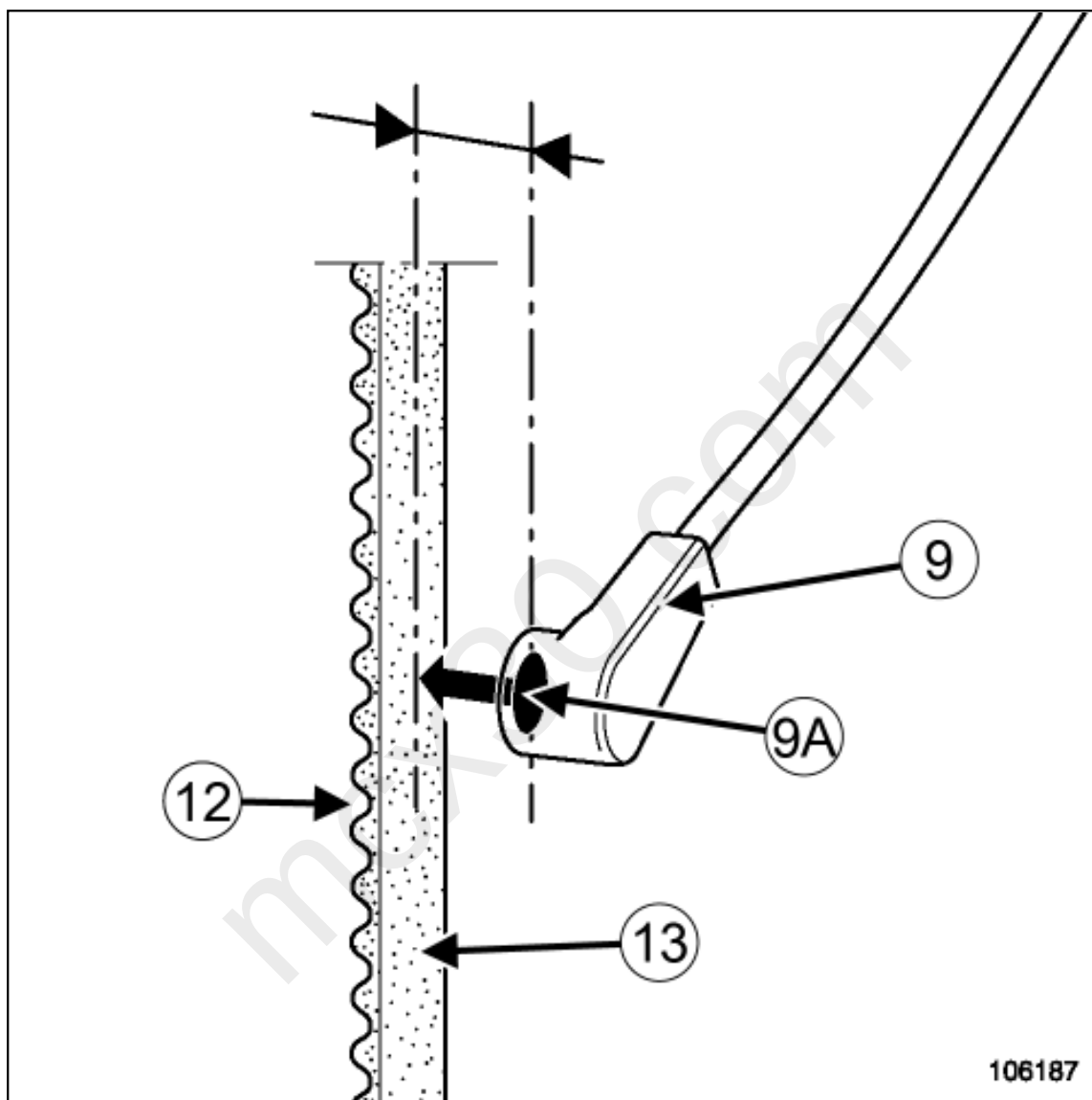
Frequency is a physical unit which here reflects the belt tension level very accurately.

Measuring range: 30 to 520 Hz.

Uncertainty: ± 1 Hz < 100 Hz and 1% > 100 Hz.

Switch the tool on by pressing on switch(10) .

Bring the reading head(9) up to the belt section to be measured.



Position the reading head(9) at a distance (x) between approximately 5 and 10 mm inclusive from the belt.

The measurement can be made on either face(12) or (13) of the belt, according to the dimensions.