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## **Guiding instructions**

Instruction	The legislator prescribes that the user must be well trained for using com- pressor-driven riveting tools. If desired, the training programme can be conducted at TITGEMEYER in Osnabrück or directly at the client's place.
Technological level	This riveting tool is as per the latest technological standards. For the device to function properly, it is necessary to operate it in an expertly manner, with adherence to safety requirements.
Reading the guiding instructions	Before using the riveting tool for the first time, read the guiding instruc- tions carefully.
Procedures	All the procedures necessary for the operation have been described in these guiding instructions. You may carry out only those procedures, which have been described here.
Obstructions	In case of obstructions, you may repair only those obstructions, which have been marked with an ${f O}$ (Operator).
Illustrations and position-codes	All the illustrations and position-codes in the individual diagrams take reference from the list of parts in the last pages.
Table for torque values	For sizes of screws and threads, you will find a table containing the torque values in the chapter "Maintaining the riveting tool".

## Cautions, instructions and procedural sections in the operating manual

Please follow the instructions and safety informations.

In this operating manual, some sections have been further illustrated through diagrams.

Please acquaint yourself well with these diagrams and their meanings:



**Caution** Hazard of injury! This marking indicates a potential hazard.



Attention Material damage! This marking points at a procedure, which may cause damage to the riveting tool or the work-piece.



e This marking indicates useful information

• This point (•) marks every paragraph, which requires you to act by yourself.

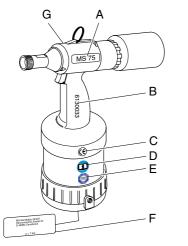


Attention Environmental hazard! This marking indicates a potential environmental hazard.

#### Markings on the riveting tool



This pictogram indicates that you must read the operating manual before using the riveting tool.



- A Marking of the type
- ${\bf B} \ \ {\rm Serial} \ \ {\rm number}$
- C CE-marking
- **D** Instruction for reading the operating manual
- **E** TÜV-Mark (safety checked)
- **F** Name of the manufacturer and the value of the maximum operating pressure
- G Supplier

	Safety instructions	
Application as per the purpose	The riveting tool is solely designed for setting locking ring bolts and blind rivets. The riveting tool MS 75 is designed for the processing of locking ring bolts with a nominal shaft diameter of 5.0 to 6.5 mm made of alumini- um, steel and stainless steel and for blind rivets with a rivet shaft diameter of 5.0 to 6.5 mm made of aluminium, steel and stainless steel. This riveting tool must be used only as a hand-held device! The client is fully responsible for any modifications to the riveting tool!	
Improper use	Never throw away or drop the riveting tool!	
Clean and dry compressed air	<b>r</b> Please take care that only clean and dry compressed air is let into the riveting tool. Moisture and dirt can damage the riveting tool. Use only such compressed air, which falls into class 2 of air quality as per ISO 8573-1.	
<b>^</b>	<b>Caution</b> Hazard of injury because of explosion! Never use the riveting	



Caution Hazard of injury because of explosion! Never use the riveting tool in an atmosphere prone to explosions. Ensure that the workplace is well lit and clean. Hazard of injury due to the openly moving compressed air hose. Connect and lay the compressed air hose properly. Hazard of injury due to tripping over! Lay the compressed air hose in such a way that nobody should trip over it.



Attention Material damage! The maximum operating pressure is 7 bar. For increasing the durability of the riveting tool, it is recommended to fit a compressed air-maintenance unit in the compressed air hose.

#### Basic requirements while dealing with the riveting tool



**Caution** Do not operate the riveting tool when it is directly pointing at any person.

Follow the prevalent guidelines for the prevention of accidents in the respective country.

Use only those fittings and hoses, which have been approved for the operating pressure.

Disconnect the compressed air supply from the riveting tool at the time of installation or maintenance.

Wear personal safety gear (safety glasses and safety helmet).



Attention Pay attention to the details on the packaging of the blind rivets or locking ring bolts.

Use the riveting tool only at operating temperatures above 5°C and 45°C.

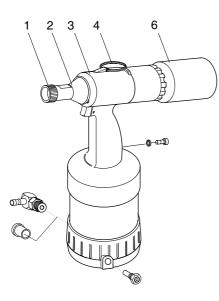
Always use the fitting tension head for every type of blind rivet, locking ring respectively.

Do not throw away the riveting tool.

**Maintenance and servicing** The operator may only carry out the maintenance and repair work described in these operating instructions.

Service instructions Maintenance and service work not described in these operating instructions may only be carried out by trained specialists following instruction by TITGEMEYER on the basis of the service instructions which also exist. See the address on page 34 for more information on service instructions and training.

<b>→</b>	<b>Note</b> The manufacturer accepts no liability for damage resulting from incorrect repairs or the use of spare parts from other sources		
	At the tin pressure	ne of leaving the workplace, do not leave the riveting tool with on.	
Guarantee	A guarantee is void, if any repair work carried out on the riveting tool has lead to any damage of the riveting tool.		
Declaration of conformity	The riveting tool MS 75 has been checked and manufactured according to European guidelines. The declaration of conformity can be found on the second last page.		
GS-checked	In addition to this, the riveting tool has been checked by the TÜV Product Service GmbH, Hannover, and certified with a GS-mark.		
	Noise a	nd vibration levels of the MS 75	
Noise level		nd-emission level for workplaces is L <sub>PAI</sub> <70dB(A) as per 43 and DIN EN 3744.	
Vibration level		tive value measured on acceleration with the handle, as per $8.8662-11$ , is $a_{hw} < 2.5 m/s^2$ .	

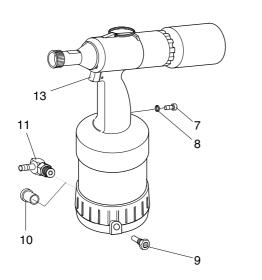


## Description of the riveting tool

The riveting tool MS 75 works according to a pneumatic-hydraulic prinziple.

It consists of the following operation-related components:

1	Knurled nut	fixes the tension head
2	Nose cap	covers jaw case body
3	Hydraulic housing	the pneumatic and the hydraulic units are located in the hydraulic housing
4	Hang-up eyelet	for hanging up on a hook whenever stationary
6	Collector	collects the torn off mandrel, tension part respectively

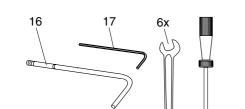


**Note** The socket head screw (7) and the O-ring (8) are screwed tightly into the grip. The socket head screw (7) must not be loosened, else the hydraulic oil will leak.

7	Socket head screw	locking for the hydraulic oil system
8	O-Ring	sealing of the hydraulic oil system
9	Safety valve	(Brass) In case of very high pressures (approx. 8 bar or more), it opens, and lets the air out
10	Plug	serves the purpose of protection of the thread and also against dirt
11	Swivel- joint	serves as the connection for compressed air hoses (operating pressure 6 bar)
13	Trigger	when activated, the riveting procedure starts

### **Necessary tools**

You will require the following tools for all installation, servicing and maintenance work.



#### Tools

- Crank (16)
- Internal hex key (17)
- Wrench<sup>1</sup>

SW4 SW13, SW14, SW15, SW17, SW18, SW20

- Slotted screw driver<sup>1</sup>
- <sup>1</sup> No delivery possibility

## Storing the riveting tool/ tension heads

#### Until first use

If you do not intend to use the riveting tool immediately, store the riveting tool and the tension heads in their original packaging - in a dry and dust-free condition.

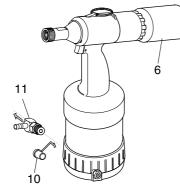
#### Long-term storage after usage

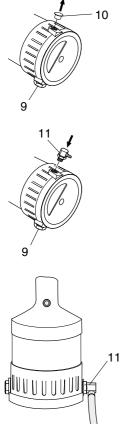
Turn collectors (6) off, screw out swivel joint (11) and close the opening with the plug (10). Dismantle tension head and lubricate with acid-free grease. If possible, store all pieces in the original packing.

#### After long-term storage

After long-term storage (about 3 years), change the hydraulic oil before re-use.

A hydraulic oil change may only be carried out by trained specialist with the help of the service instructions. For further information regarding service instructions and training, please see the address on page 34.





## Preparing the riveting tool

Package insert

The components ordered by you are marked as per the checklist found inside the packing.

Note

Please check the contents of the packing, for completeness of the checklist

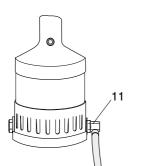
In every case, please carry out a visual check of the riveting tool before starting any work:

- for external damages,
- for oil leakage from the riveting tool.

• Remove the plug (10) from the connection port, and store in the original packing.

- **Note** The swivel joint (11) and the safety valve (9) can be alternatively fitted on both the sides of the hydraulic housing. The diagram below shows the arrangement for a right-hander.
- **Note** In case of all screw-fittings, observe the table for torque values in the chapter "Maintaining the riveting tool"
- Screw on the swivel joint (11) and tighten using the wrench SW17 (see page 26 "Table for torque values").

- Note
- Depending on the type of compressed air supply, it may be necessary to connect a fitting different from the one provided, to the riveting tool. For this, you need to have a fitting having a 1/4" Withworth pipe thread as per ISO 228.



Attention Material damage by compressed air!

As per norm ISO 8573-1, class 2, compressed air must be dry and clean. We recommend that you fit a compressed air-maintenance unit to the riveting tool.

- Compressed air hose should be connected to the swivel joint (11), as prescribed.
- Note
- The operating pressure must be between a minimum of 5 and a maximum of 7 bar!

#### Select tension head

You can modify the riveting tool to process locking ring bolts and blind rivets of varying sizes and materials by changing the tension head. If a different tension head has already been mounted, dismantle it in compliance with the assembly description in reversed sequence.

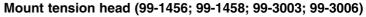
Always check the tension head before every assembly for outer damages. The tension heads have to be ordered separately.

You can see which tension head is to be used from the following table.

	Туре	Ø*	Material	Tension head	Assembly
Lock. ring bolt	C106/ C6L	5.0	Alu./ steel/ stainless steel	99-3003	Page 17
		6.0/ 6.5	Alu./ steel/ stainless steel	99-3006	
	MAGNA-GRIP	5.0	Alu./ steel	99-1456	Page 17
		6.5	Alu	99-1458	
	Tainer	6.5	Steel	99-3465	Page 20
Blind rivet	MAGNA-LOK and	5.0	Alu./ steel/ stainless steel	99-3303	Page 18
	MAGNA-BULB	6.5	Alu./ steel/ stainless steel	99-3305/ 06	
	BOM	5.0	Steel	99-994	Page 19

\* Blind rivet: Rivet shaft diameter; locking ring bolt: Nominal shaft diameter

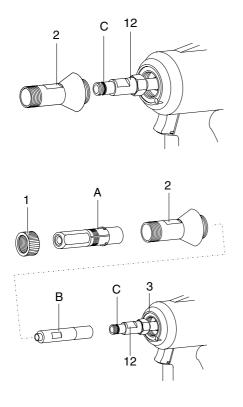
The tension head 99-3465 (Tainer) can only be mounted to the MS 75 by means of a special nose cap that has to be ordered separately (see "list of parts" on page 33).

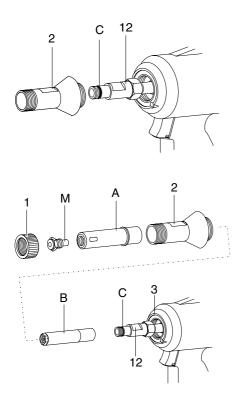


Before mounting the tension head, make sure that you have chosen the right tension head (see table on page 16).

The assembly is identical for the tension heads listed. The tension head 99-3006 is displayed in the illustrations.

- · Loosen compressed air connection.
- Screw (2) nose cap off.
- Insert O-Ring (C) with slotted screw driver in the groove on the jaw case body (12) (O-Ring (C) is included with the tension head).
- Grease O-Ring (C) and thread on the jaw case body (12) lightly with acid-free grease (Vaseline).
- Screw jaw case (B) onto the jaw case body (12) and tighten at a torque of 12 Nm.
- Slip nose cap (2) without knurled nut (1) over the jaw case (B), screw into the hydraulic housing (3) and tighten at a torque of 20 Nm.
- Slip tension head case (A) over the jaw case (B) and push into the nose cap (2) up to the limit.
- Slip knurled nut (1) over the tension head case (A), screw onto the nose cap (2) and screw hand tight.



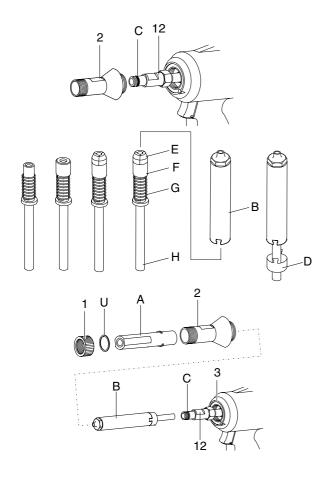


#### Mount tension head (99-3303; 99-3305; 99-3306)

Before mounting the tension head, make sure that you have chosen the right tension head (see table on page 16).

The assembly is identical for the tension heads listed. The tension head 99-3303 is displayed in the illustrations.

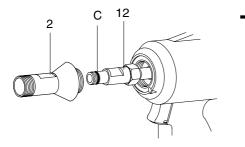
- Loosen compressed air connection.
- Screw (2) nose cap off.
- Insert O-Ring (C) with slotted screw driver in the groove on the jaw case body (12) (O-Ring (C) is included with the tension head).
- Grease O-Ring (C) and thread on the jaw case body (12) lightly with acid-free grease (Vaseline).
- $\cdot$  Screw nose piece (M) tension head case (A) and tighten at a torque value of 5 Nm.
- Screw jaw case (B) onto the jaw case body (12) and tighten at a torque of 12 Nm.
- Slip nose cap (2) without knurled nut (1) over the jaw case (B), screw into the hydraulic housing (3) and tighten at a torque of 20 Nm.
- Slip tension head case (Å) over the jaw case (B) and push into the nose cap (2) up to the limit.
- Slip knurled nut (1) over the tension head case (A), screw onto the nose cap (2) and screw hand tight.

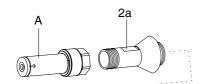


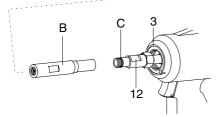
#### Mount tension head (99-994)

Before mounting the tension head, make sure that you have chosen the right tension head (see table on page 16).

- Loosen compressed air connection.
- Screw (2) nose cap off.
- Insert O-Ring (C) with slotted screw driver in the groove on the jaw case body (12) (O-Ring (C) is included with the tension head).
- Grease O-Ring (C) and thread on the jaw case body (12) lightly with acid-free grease (Vaseline).
- Hold guide case (H) upright, slip on pressure spring (G) and jaw bearing (F).
- Place jaws (E) on the jaw bearing (F).
- Carefully slip jaw case (B) over guide case (H) up to the limit stop.
- Slip safety case (D) and jaw case (B) into each other.
- Slip jaw case (B) into the jaw case body (12) up to the limit.
- Screw jaw case (B) onto the jaw case body (12) and tighten at a torque of 12 Nm.
- Slip nose cap (2) without knurled nut (1) over the jaw case (B), screw into the hydraulic housing (3) and tighten at a torque of 20 Nm.
- Slip tension head case (Å) over the jaw case (B) and slip under the nose cap (2) up to the limit.
- Insert washer (U) into the knurled nut (1).
- Slip knurled nut (1) over the tension head case (A), screw onto the nose cap (2) and screw hand tight.







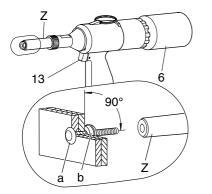
#### Mount tension head (Tainer 99-3465)

Before mounting the tension head, make sure that you have chosen the right tension head (see table on page 16).

Note

You need a special nose cap (2a) for the assembly of the tension head and which you have to order separately (see page 33 "list of parts"):

- Loosen compressed air connection.
- Screw (2) nose cap off.
- Insert O-Ring (C) with slotted screw driver in the groove on the jaw case body (12) (O-Ring (C) is included with the tension head).
- Grease O-Ring (C) and thread on the jaw case body (12) lightly with acid-free grease (Vaseline).
- Screw jaw case (B) onto the jaw case body (12) and tighten at a torque of 12 Nm.
- Slip nose cap (2a) over the jaw case (B), screw into the hydraulic housing (3) and tighten at a torque of Nm 20.
- Slip tension head case (A) over the jaw case (B).
- Screw tension head case onto the nose cap (2a) and tighten at a torque of 8 Nm.



#### 

## Operating the riveting tool

#### Set locking ring bolt

The tension head and locking ring bolts you implement may look a little different than shown in the following illustrations



Attention Material damage! Always set the riveting tool at the correct angle (90°) with the surface of the work-piece to be riveted. A slanted setting will lead to defective riveting.

Note

Note

For the size of the hole (d1) and of the clamping grip (K), refer to the information given by the rivet manufacturer. The illustration on the left shows the position of the locking rings for locking ring bolts C106/ C6L (a1)/(b1) and MAGNA-GRIP (a2)/(b2).

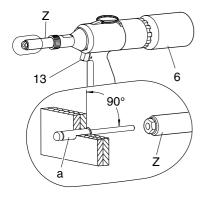
- Connect compressed air (6 bar).
- Place the locking ring bolt (a) into the prepared bore.
- Slip locking ring (b) in the correct position over the tension part of the locking ring bolt (a).
- Hold up the locking ring bolt (a) at the head. Slip the riveting tool with the tension head (Z) over the tension part of the locking ring bolt (a) and against the locking ring (b) and press tightly.
- Press trigger (13) through up to the limit and hold.

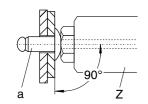
The tension head drives over the locking ring bolt in the process it is shaped in such a manner that the material always presses into the grooves of the shaft.

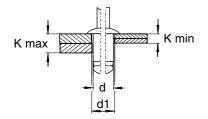
• Release trigger (13).

The torn off tension part is transported to the collector (6) in the next riveting cycle.

#### Operating the riveting tool







#### Setting the blind rivet



The tension head and blind rivet you implement may look a little different than shown in the following illustrations

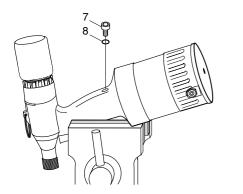


Attention Material damage! Always set the riveting tool at the correct angle (90°) with the surface of the work-piece to be riveted. A slanted setting will lead to defective riveting.

Note

- For the size of the hole (d1) and of the clamping grip (K), refer to the information given by the rivet manufacturer
- Connect compressed air (6 bar).
- Insert blind rivet (a) in tension head (Z).
- Insert blind rivet (a) into the prepared bore and press tightly.
- Straighten the trigger (13) upto the stop point, and hold it there. The rivet shaft is clenched and the blind rivet set by.
- Releasing trigger (13).

The torn off mandrel is transported latest after the next riveting process into the collector (6).





## Maintaining the riveting tool

**Caution** Hazard of injury if handled in an improper manner! Servicing, maintenance and repairs of the riveting tools must be carried out professionally. On completing this work, there should not be any more hazard to the operator, if used as per the regulations. The operator may only carry out the operations mentioned here.

#### Bleeding the hydraulic section

It is necessary to bleed the hydraulic system or to refill the hydraulic oil when:

- oil is leaking from defective O-rings,
- after an oil-change at the time of an overhaul (either after a maximum of 3 years, or after 2000 working hours).
- Detach the compressed air connection.

Note

e If you clamp the riveting tool into a vice, then insert a soft material in-between (Alu/ wood).

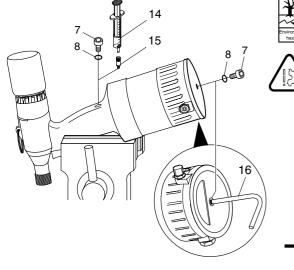
Screw off tension head case to avoid pressure on the hydraulic rod as otherwise you cannot fill in enough oil (also see pages 17 - 20 "Mount Tension head").

• Bend the riveting tool carefully towards the front at an angle and fix e.g. inside a vice (like illustrated in the diagram).

This position makes it possible for enclosed air to escape.

• Unscrew the socket head screw (7) in the hydraulic housing carefully using the internal hex key SW4.

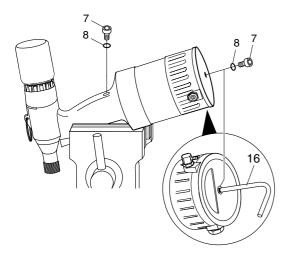
#### Maintaining the riveting tool



#### Refilling hydraulic oil



- Attention Environmental hazard! Always use a large bowl for collecting oil. Please observe all the environmental regulations prevalent in the respective area.
- Attention Material damage! Do not let the O-ring (8) be damaged. If the O-ring gets damaged, then replace immediately.
- Unscrew the socket head screw (7) in the hydraulic housing carefully, using the internal hex key SW4.
- Screw the oil refill adapter screw (15) into the free opening.
- Set the filled oil gun (14).
- Screw socket head screw (7) out of the device floor with the internal hex key SW4.
- Insert the crank (16) into the free opening and screw up to the limit.
- Pull crank (16) out until the marking is flush with the floor plate.
- Note
- By this piston movement hydraulic oil (e.g. ELFOLNA 46 or equivalent) is drained into the hydraulic area from the plugged in oil gun
  - Press oil gun (14) remove and screw out oil refill adapter screw (15).

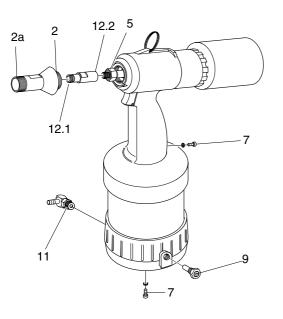


- Screw socket head screw (7) with O-Ring (8) into hydraulic housing and tighten with internal hex key SW4 (see page 26 "Table for torque values").
- Screw crank (16) out.
- Screw socket head screw (7) with O-Ring (8) into the device floor and tighten with internal hex key SW4 (see page 26 "Table for torque values").
- Rub the riveting tool dry.
- · Loosen the fixed riveting tool.
- Mount tension head (see pages 17 20 "Mount Tension head").
- · Reconnect the compressed air supply.
- Carry out a work cycle without blind rivet/ locking ring bolt.



In the following table, you will find torque values, which you are required to adhere to while tightening the screws/ nuts.

Pos.	Name	Threading	Torque value MA in Nm
2 2a	Nose cap Nose cap (Tainer)	Metrical M26x1,5 Special thread	20 8
12.1	Jaw case body	Metrical M13	12
12.2	Jaw case body	Metrical M11x1	12
5	Lock nut	Metrical M11x1	12
7	Socket head screw	Metrical M6	4
9	Safety valve	Withworth-pipe- thread 1/4"	20
11	Swivel joint	Withworth-pipe- thread 1/4"	20



# Riveting tools/ Tension heads service and cleaning



**Caution** Hazard of injury if handled in an improper manner! On completing this work, there should not be any more hazard to the operator, if used as per the regulations. The operator may only carry out the operations mentioned here. Maintenance and service work not described in this operating manual may only be carried out by trained specialists following instruction by TITGEMEYER on the basis of the service instructions which also exist. See the address on page 34 for more information on service instructions and training.

Hazard of injury if the riveting tool falls down! The hydaulic housing must always be kept dry, clean and oil- and fat-free.



Attention Material damage due to corrosion! Do not use any highly active cleaning agents or combustible liquids for cleaning purpose!

The following routine is recommended:

Clean riveting tool and tension heads after completion of cycle with this type and check for mechanical defects.

After the riveting tool and the tension head have been cleaned and if they are to be stored over a longer period of time, apply a little acid-free oil (e.g. ELFOLNA 46) to all metal, outer components.

## **Maintenance Intervals**

Intervall	Activity	How?	Who?	Remark
Daily before use	Check for cracks	Visual check	Operator	If cracks or tears occur send the device to maintenance
Daily before use	Check tension head for wear	Visual check	Operator	If necessary replace tension head
Daily before use	Check the jaws in the tension heads	Functional check	Operator	If required, clean and change jaws (see pages 17 -20 "Mount Tension head")
Daily before use	Check for oil leaks from the riveting tool	Visual check, possibly fill up with recommended oil, bleed hydraulic system	Operator	see page 23 ("Maintaining the riveting tool")
Daily after use	Clean riveting tool	With a rag	Operator	
	Oil moving parts	With acid-free oil e.g. ELFOLNA 46		
Either throughout the 3 years or after a period of 2000 working hours	Change hydraulic oil	With acid-free oil e.g. ELFOLNA 46	Professional	A complete oil change, to be carried out only by a professional

## **Trouble shooting**

Operations, which may be carried out by the operator, are marked with the letter  $\boldsymbol{O}.$ 

Operations, which may be carried out only by an expert person, are marked with the letter  ${\bf P}.$ 



**Caution** Hazard of accident! In any case, keep the compressed air supply detached till the source of the problem is eliminated.



Attention Material damage! Operations, which have been marked with the letter **P**, must be carried out only by well- trained experts. Deliver riveting tool from overhaul

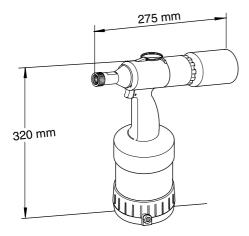
Any replacement of original spare parts may be carried out only by well-trained experts.



After every instance of problem- removal, a thorough functional check must be carried out (check whether a stroke is being carried out)

#### **Trouble shooting**

Problems	Cause	Solution
Blind rivet/ locking ring bolt is not riveted	Supply of compressed air is too rare	<ul> <li>(O) Check compressed air supply</li> <li>(O) Set the compressed air setting on the maintenance unit at a maximum of 7 bar</li> </ul>
	Jaws are dirty	(O) Clean tension head
	Jaws are worn out	(O) Replace jaws, tension head respectively (see page 17 - 20 "Mount tension head")
	Jaw case body loose	(O) Tighten the screws/ nuts (see page 17 - 20 "Mount tension head")
	Oil lacking/ too little stroke	(O) Check oil volume and refill (see page 23 "Maintaining the riveting tool")
Blind rivet/ locking ring bolt cannot be inserted	Wrong tension head	( <b>O</b> ) Replace tension head (see page 17 - 20 "Mount tension head")
	Tension head loose	<ul><li>(O) Tighten the screws/ nuts</li><li>(see page 17 - 20 "Mount tension head")</li></ul>
	Travel-path of the mandrel is blocked	(O) Empty collector
Stroke is too short	Oil level is too low Not bled correctly	<ul> <li>(O) Check oil volume and refill (see page 23 "Maintaining the riveting tool")</li> <li>(O) Bleed the hydraulic system (see page 23 "Maintaining the riveting tool")</li> </ul>
Loss of hydraulic oil due to leakage	Leaking and worn out O-rings inside the riveting tool	(P) Deliver riveting tool from overhaul
Safety valve gets blown off	Compressed air pressure is too high Valve is defective	<ul><li>(O) Check and adjust compressed air setting</li><li>(O) Replace safety valve</li></ul>



## Disposing of the riveting tool

Ensure that the hydraulic oil is inside the riveting tool. Dispose it off in an environmentally friendly manner.

Send the riveting tool back to the manufacturer in it's original packing, if still available.

## **Technical data**

Type of riveting tool:	MS 75
Height:	320 mm (without tension head)
Width:	275 mm (without tension head)
Weight:	1.9 kg
Operating pressure:	5-7 bar
Compressed air supply	
nominal diameter:DN 6	
Power output (at 6 bar):	approx. 24 kN
Operating stroke:	approx. 15 mm
Operating range	
Locking ring bolt:	
C106/ C6L	5.0 - 6.5 mm
MAGNA-GRIP	5.0 and 6.5 mm
Blind rivet:	
MAGNA-LOK/ BULB	5.0 and 6.5 mm
BOM	5.0 mm
Sound emission level	
in the workplace:	L <sub>PAI</sub> <70dB(A) a <sub>hw</sub> <2,5m/s <sup>2</sup>
Vibration level:	a <sub>hw</sub> <2,5m/s <sup>-</sup>

Further technical data on the tension heads are enclosed with the tension heads.

## Guarantee

Other than the official guarantee (6 months), the company TITGEMEYER also offers a guarantee of an additional 6 months from the date of purchase (The bill being the proof thereof).

The following working parts are excluded from the guarantee agreement:

- Collector (6)
- Socket head screw (7) with O-ring (8)
- Tension heads

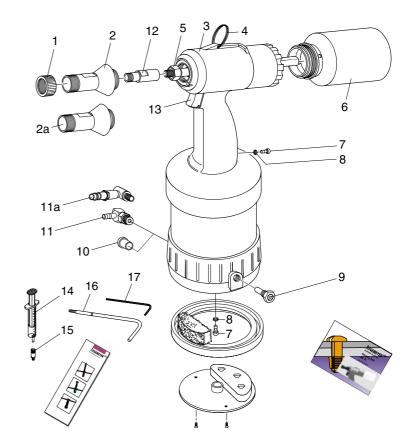
## List of parts

Note

Please mention the name and the GFB code at the time of ordering

Pos.	Qty.	Name	GFB-Code				
		Complete riveting tool	385 060				
1	1	Knurled nut	385 029				
2	1	Nose cap	385 001				
2a	1	dto. for Tainer	385 081				
3	1	Hydraulic housing, complete					
4	1	Hang-up eyelet	348 237				
5	1	Lock nut	431 315				
6	1	Collector	431 356				
7	2	Socket head screw M6x6					
		DIN 7984	348 248				
8	2	O-Ring 5x2	348 249				
9	1	Safety valve, complete	348 281				
10	1	Plug	934 126				
11	1	Swivel joint	431 536				
11a	1	same with rapid coupling <sup>1</sup>	348 280				
12	1	Jaw case body	385 003				
13	1	Trigger, complete					
14	1	Oil gun	348 349				
15	1	Oil refill adapter screw	348 346				
16	1	Crank	348 347				
17	1	Internal hex key SW4	348 296				

<sup>1</sup> If desired, swivel joint with rapid action coupling can be supplied as a special attachment.

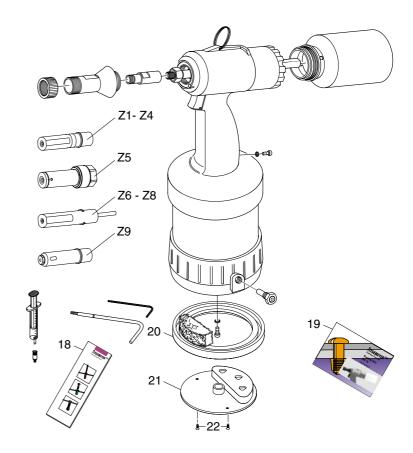


#### List of parts

Pos.	Qty.	Name	GFB-Code				
18	1	Info. Brochure Tb 1293	934 110				
19	1	Operating manual MS 75 Tb 1309	937 204				
20	1	Protection rubber sheet					
		with absorber	385 030				
21	1	Cover plate	348 414				
22	2	Countersunk head screws	431 589				
Tension heads Locking ring bolts							
Z1	1	Tension head 99-3003	371 680				
Z2	1	Tension head 99-3006	371 705				
Z3	1	Tension head 99-1456	372 985				
Z4	1	Tension head 99-1458	371 975				
Z5	1	Tension head 99-3465 (Tainer)	371 730				
Tension heads Blind rivet							
Z6	1	Tension head 99-3303	371 805				
77	4	Tanaian haad 00 2205	071 015				

Z7	1	Tension head 99-3305	371 815
Z8	1	Tension head 99-3306	371 745
Z9	1	Tension head 99-994	372 780

If you have any problems, if you want to order spare parts or if you require information on service instructions and training: Gebr. TITGEMEYER GmbH & Co. KG Hannoversche Straße 97 D-49084 Osnabrück/ Germany Telefon: +49 5 41 5822-0 Telefax: +49 5 41 5822-491 E-Mail: vertrieb-gfb@titgemeyer.com



<b>MS</b> Gerätebau GmbH	EC-Conformity Declaration in accordance with Machine Guidelines 98/37/EG	Pneumatic-hydraulic riveting tool	MS 75	Has been developed, designed and manufactured in accordance with the guidelines mentioned herein, with sole responsibility, by:	MS Gerätebau GmbH Hannoversche Str. 97 49048 Osnabrück - Germany	pr EN 792-14 (0895)	98/37/EG	The products mentioned above comply with the requirements of the said guidelines and norms.	In addition to this, the manufacturing process is also subject to a certified quality-management system as per DIN EN ISO 901.

Make of the machine

Type of tool

Model No.

The following harmonized norms have been adherred to

EC-Guideline

We, as manufacturers, declare

Osnabrück, 12.01.2000

Hame

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G. Chr. Titgemeyer Proprietor



Fastening Technology

Gesellschaft für Befestigungstechnik GEBR. TITGEMEYER GmbH & Co. KG Hannoversche Straße 97 · 49084 Osnabrück Postfach 43 09 · 49033 Osnabrück Tel. +49 (0)5 41/58 22-0 · Fax +49 (0)5 41/58 22-491 E-Mail: vertrieb-gfb@titgemeyer.com · Web: www.titgemeyer.com

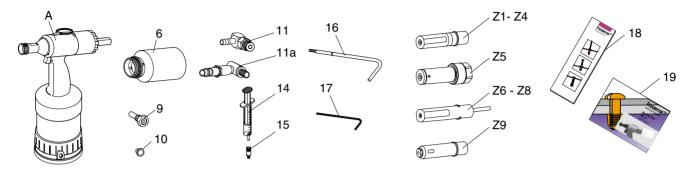




## **Checklist of the MS 75**

The diagram shows the possible contents

Please check if all the contents mentioned below are there in the package. All the parts indicated with an arrow must be present in the quantity mentioned.



Note	THC C	lagram shows the possib		110					
GFB-No.	Pos.	Name	Qty.	available	GFB-No.	Pos.	Name	Qty.	available
385 060	А	Compl. Riveting Tool			371 680	Z1	Tension head 99-3003		
431 356	6	Collector			371 705	Z2	Tension head 99-3006		
348 281	9	Compl. safety valve			372 985	Z3	Tension head 99-1456		
934 126	10	Plug			371 975	Z4	Tension head 99-1458		
431 536	11	Swivel joint			371 730	Z5	Tension head 99-3465		<b>—</b>
348 280	11a	same with rapid couplin	g				(Tainer)		
348 349	14	Oil gun			371 805	Z6	Tension head 99-3303		
348 346	15	Oil refill adapter screw			371 815	Z7	Tension head 99-3305		
348 347	16	Crank			371 745	Z8	Tension head 99-3306		
348 296	17	Internal hex key SW4			372 780	Z9	Tension head 99-994		
010200	.,			—	934 110	18	Info. brochure Tb 1293		

Note

Special parts such as:

937 204 000

19

- Nose cap for tension head Tainer 99-3465 can be supplied upon request.

german

Oper. Manual MS 75 Tb 1309

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