



RIV 790

14.4V LITHIUM BATTERY OPERATED TOOL

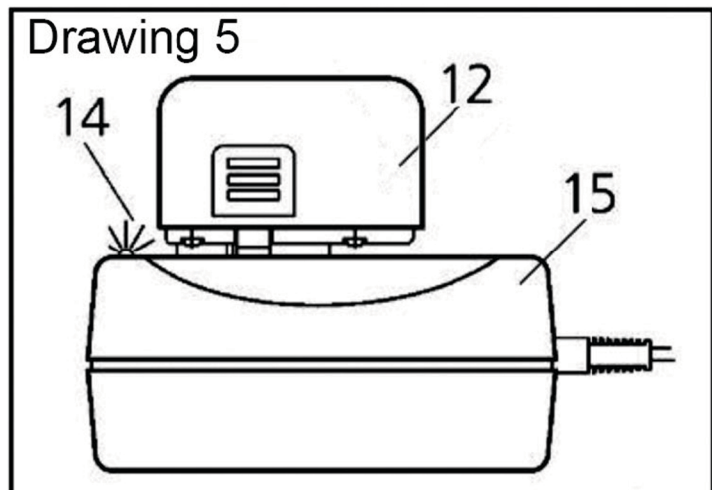
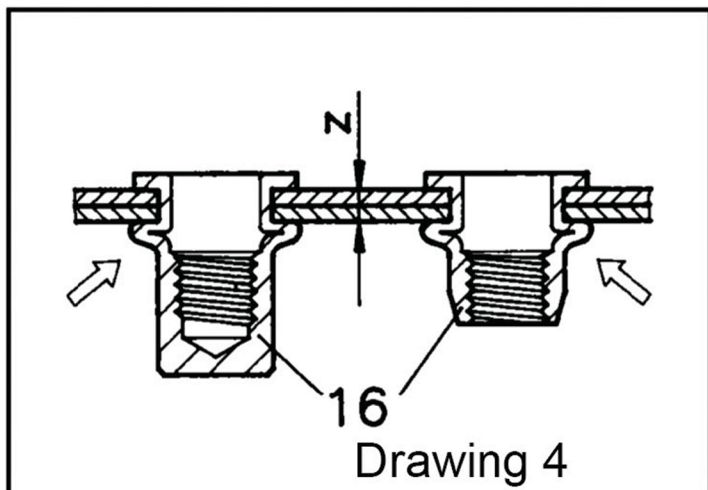
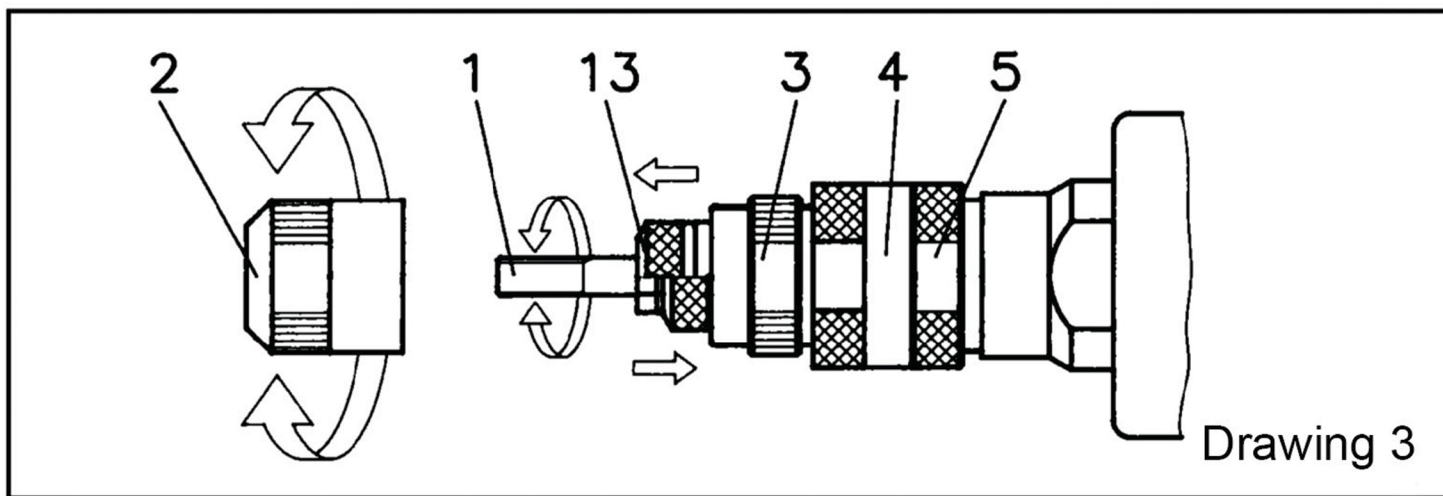
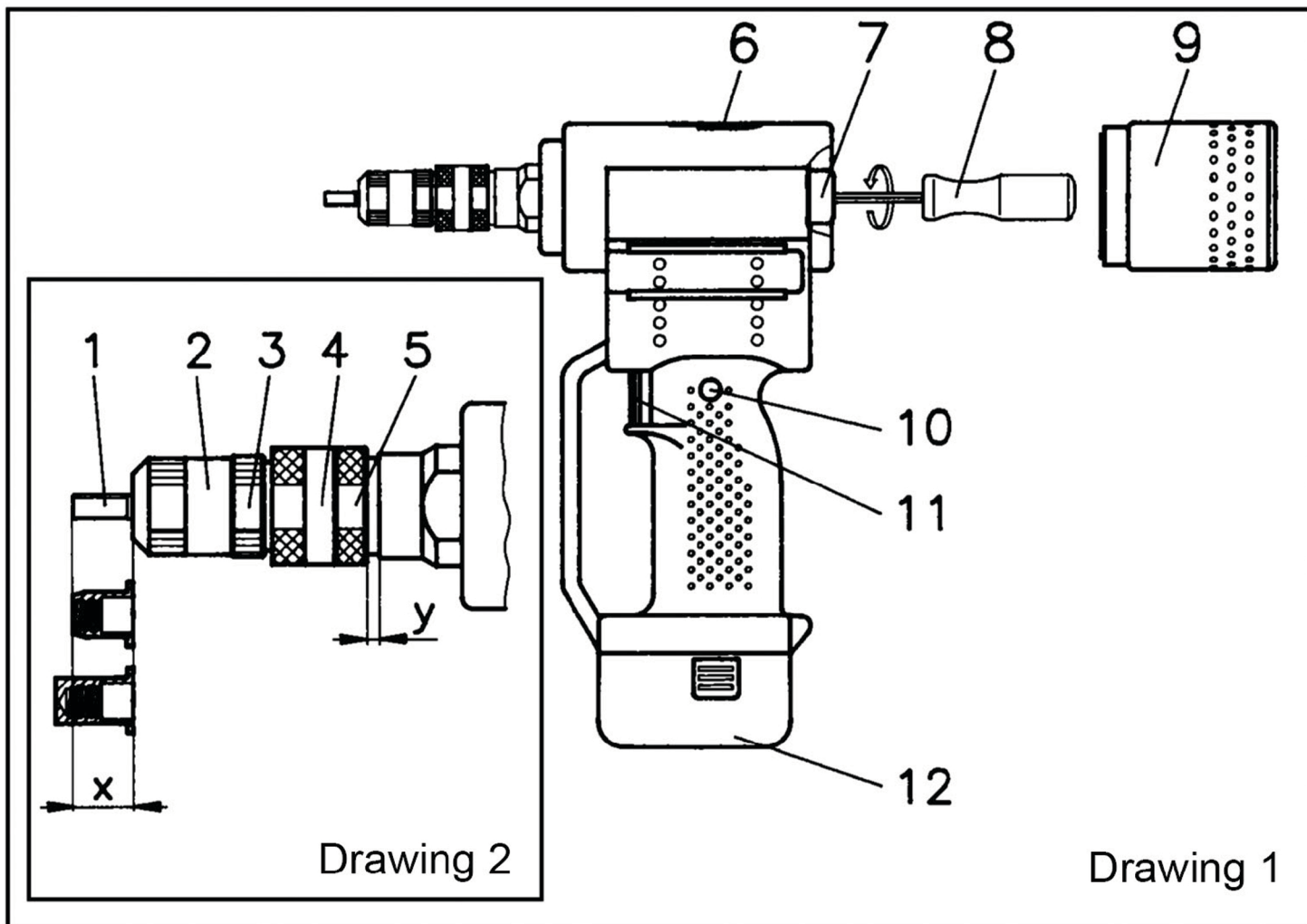


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1. Overview (see drawing 1-5; Page 1)

Pos.	Description	Drawing
1	Threaded Mandrel	2
2	Nosepiece	2
3	Lock Nut	2
4	Adjusting Nut	2
5	Lock Nut	2
6	Suspension Loop	1
7	Cap	1
8	Screw Driver	1
9	Accessories Container	1
10	Control Light	1
11	Trigger	1
12	Battery	1; 5
13	Slide Lock	3
14	Charging Control Light	5
15	Battery Charger	5
16	Set Blind Rivet Nut	4
x	Length of Threaded Mandrel	2
y	Setting Stroke	2
z	Grip Range	4

2. Blind rivet nut setting tool

2.1. Working capacity

Blind rivet nuts from M3 to M8 in alu and steel as well as M10 in alu.

2.2. Equipment/Accessories

Threaded mandrel	M6 in working position,
and nosepieces:	M4 and M5 in holder
	M3, M8, M10
	available as special accessory on request
Wrench:	1 hexagon wrench SW 4
Suspension loop:	concealed in housing
Quick charger:	230 V AC, 50 Hz
Battery:	12 V DC

2.3. Technical Data

Weight:	2,3 kg (with battery, without accessories container)
Max. stroke:	5,5 mm
Operating voltage:	12 V DC
Traction power:	13.000 N
Noise emission:	LPA 76,5 dB
Vibrations:	< 2,5 m/s ²

2.4. Threaded Mandrels and Nosepieces Rivet Nuts per Charge

Blind rivet nut inner thread	Material	Rivet nuts per charge	Part number	
			Threaded Mandrel	Nosepiece
M3	Alu Steel	600 550	1551700	1552300
M4	Alu Steel	520 480	1551800	1552400
M5	Alu Steel	480 400	1551900	1552500
M6	Alu Steel	400 300	1552000	1552600
M8	Alu Steel	340 180	1552100	1552700
M10	Alu	300	1552200	1552800

2.5. Safety instructions

Blind rivet nut setting tool RIV 790

Caution :

Following safety rules must be followed for adequate protection against electrical shock, injuries or fire hazards:



- The tool should be used exclusively to set blind rivet nuts.
- Do not overload the tool; Work within the prescribed work capacity.
- Do not expose the tool to humidity or rain, do not operate the tool close to inflammable substances or gases. **Risk of explosion!**
- Ensure that the battery is properly secured in the tool handgrip.
- Remove the battery when the tool is not in use and for repair/servicing operations.
- Do not use the tool as a hammer.
- When not in use, keep the tool in a dry closed room, out of reach of children.

- When working with the tool, always carry protection goggles. Personal protection like clothes, gloves, safety helmet, non slipping shoes, ear protectors and protection against fall are highly recommended.
- The air inlets for the engine should not be obstructed. Do not introduce anything into them.
- When depositing the tool, make sure that it cannot fall down.
- Use only genuine spare parts for repair.
- Repair work must be carried out by skilled personal. In case of doubt, always send back the tool to the manufacturer.

2.6. Starting Procedure

Before starting read and follow operating manual carefully!

2.6.1. Adjustment of threaded mandrel length **x** (drawing 2)



- By turning the nosepiece 2 adjust the threaded mandrel length **x** to the blind rivet nut length.
- In case of closed end rivet nuts (drawing 2; 4) use full length of thread.
- Lock nosepiece 2 with lock nut 3 against shifting.

2.6.2. Adjustment of stroke **y** (drawing 2)

- The stroke **y** depends on the blind rivet unit size (M3 – M10) and the grip range **z** (drawing 4).

Recommended value for stroke **y**:

Thread size	Stroke y (in mm)	
	min	max
M3	1	2
M4	1	2
M5	1,5	2,5
M6	2,5	3,5
M8	2,5	3,5
M10	3	4

- The stroke **y** is adjusted by screwing in or out the adjustment nut 4.

Important:

- To start with, the stroke **y** is to be set to “min” and then a blind rivet nut is to be set.
- If the blind rivet nut does not – as shown in drawing 4 – form a distinctive head (↗), the stroke must be enlarged step by step.
- Lock adjustment nut 4 with lock nut 5 against shifting.



2.7. Operating Procedure

2.7.1. Threading on a Blind Rivet Nut

- Place blind rivet nut – without tilting it – on the end of the threaded mandrel.
- Keep trigger 11 pressed until tool comes to a stop; afterwards release.
- Hold blind rivet nut tight during the entire threading on procedure.
- If the blind rivet nut is not tight against the nosepiece 2 after having been threaded on, the threading procedure must be repeated. For this purpose hold the blind rivet nut tight and a short quick touch of the trigger 11 will induce threading out procedure. Now repeat threading on.



2.7.2. Setting a Blind Rivet Nut

- Insert drilled-on blind rivet nut into the rivet hole completely to end position.
- Press trigger 11 and hold it until setting and automatic threading out are finished.

2.7.3. Change of Threaded mandrel 1 (drawing 3)

- Unscrew nosepiece 2.
- Push head slide 13 to the rear end.
- Unscrew and exchange threaded mandrel 1.
- Bring hexagon area of screwed in threaded mandrel 1 to match hexagon area of locking socket.
- Lock the threaded mandrel 1 by pulling the head slide 13 back to the end position.
- Screw on proper nosepiece 2, adjust threaded mandrel length **x** (see 2.6.1.) and secure nose - piece 2 with lock nut 3 against torsion.

3. Charger and battery

3.1. Technical characteristics

3.1.1. Battery charger

Type:	12355/12356
Input voltage:	220-240VAC/50-60Hz
Output voltage:	14,4VDC
Output current:	1,5A max.
Weight:	0,6kg

3.1.2. Battery

Nominal voltage:	14,4VDC
Number of cells:	4/8
Cell:	Li-Ion
Capacity:	1,3Ah/2,6Ah
Weight:	0,35/0,5kg

3.2. . Safety Instructions

3.2.1. Battery charger

Caution:

Following safety rules must be followed for adequate protection against electrical shock, injuries or fire hazards:



- The charger must be exclusively used to charge RIVIT batteries.
- Check regularly cord, plug and device and have it fixed by skilled personal when damaged.
- Use exclusively genuine plugs and cords and genuine spare parts for repair.
- Never use the charger in humid or wet environment, or close to inflammable substances or gases: **Explosion hazard!**
- Take the charger out of its package before use. Insert the battery in the right way (pole+ to pole+) into the charger bay. Insertion should take place without noticeable effort.
- Never try to charge non rechargeable batteries.
- Store the charger in a dry closed room, out of reach of children.
- Never insert metallic parts into the charging bay: Short circuit hazard.
- When the charger is wall-mounted, make sure that the inserted battery cannot fall down.
- Do not operate this battery charger at altitudes exceeding 2.000 meter above sea level.

- This battery charger should not be operated neither by physically disabled or mentally affected people, nor by untrained or unskilled people.

3.2.2. Battery

Caution:

Following safety rules must be followed for adequate protection against electrical shock, injuries or fire hazards:

- Never try to charge a damaged battery.
- Do not insert a dirty or wet battery into the charger.
- Never throw batteries into the waste, into fire or into water.
- Do not charge a battery when the environment temperature is below 0°C.

3.3. Charging procedure

- Charge only RIVIT batteries when the environment temperature is between 0°C and 40°C.
- Take the charger out of its package and connect to mains. Check the input voltage on the type label before connecting.
- Insert the battery in the right way (pole+ to pole+) into the charger bay. Insertion should take place without noticeable effort.
- The charging operation starts automatically when the battery is inserted into the charging bay.

Function lights:

Steady green: Battery is charged,
preserv.charge in process

Blinking green: Charging

Steady red: Charging temperature out of range
(battery too hot or too cold)

Blinking red: Battery is defective

Typical charging cycles:

Type	Part Number	Charging cycle*
1,3 Ah	4207600	approx. 50 min
2,6 Ah	4207700	approx. 100 min

*charging cycles may vary according to the rest capacity and the battery temperature.



3.4. Battery handling

- Use only cold batteries to obtain optimum charging.
- The RIVIT batteries can be charged approx. 1.000 times and reaches its maximum capacity only after several charging cycles.
- Do not insert the battery into the charger after each use, but wait until the battery is fully discharged (tool cannot set the rivet).
- Recharge the battery after a long period of inactivity.
- Battery autonomy becoming shorter despite of proper recharging means that the battery must be replaced.
- Keep the battery in dry and warm rooms. The optimum operating temperature range is 10°C to 50°C.

3.5. Environmental protection

If batteries have to be replaced, the following instructions should be followed:

- Bring back discarded batteries to your RIVIT agent or to RIVIT for recycling.
- Never throw away discarded batteries into waste, fire or water.



4. Trouble shooting

4.1. Blind Rivet Nut is not threading on

Causes

- Nut thread faulty
- Threaded mandrel 1 faulty
- Blind rivet nut not touching nosepiece

- Blind rivet nut threads off again

- Battery empty

Remedy

- take a new blind rivet nut
- Replace threaded mandrel 1
- wrong length of threaded mandrel **x** adjust to length of blind rivet nut (see 2.6.1.)
- hold blind rivet nut when threading on until tool comes to a stop
- keep trigger 11 pressed until tool comes to a stop
- charge, if necessary replace. (see 3.3./3.4.)

4.2. Set Blind Rivet Nut is loose

Causes

- Stroke **y** too short
- Trigger 11 released too early

Remedy

- adjust to larger stroke **y** (see 2.6.2.)
- keep trigger 11 pressed until automatic change-over switching and threading out (see 2.7.)

4.3. Threaded mandrel is not unthreading

Causes

- Wrong stroke adjustment

- Battery empty

Remedy

- Reduce stroke **y** (see 2.6.2.); if necessary unscrew threaded mandrel with hexagon screw driver 8 (see drawing 1).
- recharge; if necessary replace

5. Warranty

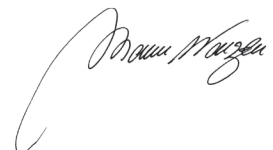
This riveting tool has a 12 months warranty from the day of delivery (to be proved by invoice or delivery note). Damage caused by common wearing, overloading or improper handling are excluded from the warranty.

Damages caused by material or manufacturing faults will be covered by this warranty and will be repaired or replaced at no cost. Claims can only be accepted if the **complete** riveting tool (not stripped) is returned to the distributor or **RIVIT**.

6. CE Conformity declaration

We hereby declare under our sole responsibility that these products meet following standards and directives:

- EN 50260
- EN 60335
- 2006/42/EG
- 2006/95/EG
- 2004/108/EG



Manuele Avanzolini
(Head of Legal)

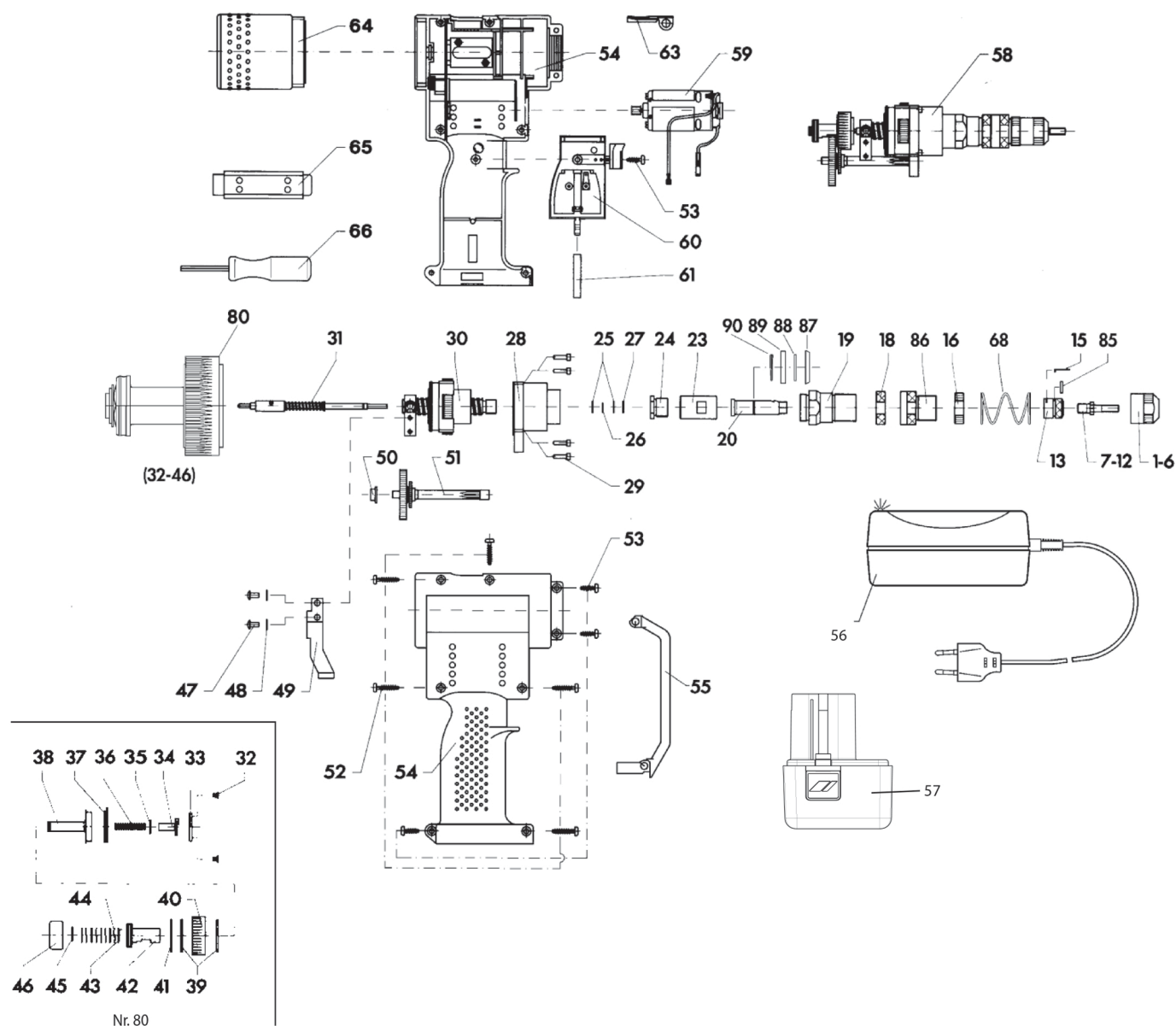
Technical documentation at:

RIVIT S.r.l.

Via Marconi, 20 - loc. Ponte Rizzoli

40064 Ozzano Emilia (Bologna) - Italy

7. Spare Parts



8.

1	7262086	(M 3)
2	7262094	(M 4)
3	7262108	(M 5)
4	7262116	(M 6)
5	7262124	(M 8)
6	7262132	(M 10)
7	7262019	(M 3)
8	7262027	(M 4)
9	7262035	(M 5)
10	7262043	(M 6)
11	7262051	(M 8)
12	7262078	(M 10)
13	7262159	
15	7262167	
16	7262175	
18	7262191	
19	7262205	
20	7262213	

23	7262256	
24	7262264	
25	7262272	
26	7262280	
27	7262299	
28	7259185	
29	7251982	
30	7262302	
31	7262310	
32	7262329	
33	7262337	
34	7262345	
35	7262353	
36	7262361	
37	7262388	
38	7262396	
39	7262418	

40	7262426	
41	7262434	
42	7262442	
43	7262450	
44	7262469	
45	7262477	
46	7262485	
47	7251990	
48	7252008	
49	7259266	
50	7251893	
51	7262493	
52	7262024	
53	7252032	
54	7262507	
55	7251540	
56	7251134	

57	7251045	
58	7262515	
59	7259223	
60	7262523	
61	7255066	
63	7262531	
64	7262140	
65	7262558	
66	7262566	
68	7263077	
80	7262973	
85	7263093	
86	7263085	
87	7263069	
88	7263050	
89	7263042	
90	7279914	