

INSTRUCTION MANUAL CARTRIDGE OPERATED HAND-HELD FIXING TOOL

(translation of the original instructions in English)

BOSS 3500

Technical Assistance:

Bossong S.p.A.
Z.I.2 Via E. Fermi 51
24050 Grassobbio (Bergamo) ITALY
Tel. 0039 035 3846 011
Fax. 0039 035 3846 012
www.bossong.com
info@bossong.com - tek@bossong.com

Dealer :



EC DECLARATION OF CONFORMITY

we declare that the machinery

BOSS 3500

Cartridge operated hand-held fixing tools to fixing metal nails in the concrete and steel
in single shoot version

Serial Number:

Placed on the market by

Bossong S.p.A.
Via Enrico Fermi – 49/51
24050 Grassobbio - Italy

fulfils all relevant provisions of the directive 2006/42/EC.

**According to EN 15895 statement, the vibration total value to which the hand-arm system is
subjected does not exceed 2,5 m/s²**

Airborne noise emissions :

- $L_{pA,1s,0} = 113 \pm 2$ dB (A)
- $L_{pC,peak} = 151 \pm 1$ dB (C)
- $L_{WA,1s} = 118 \pm 3$ dB (A)

Determined according to EN 15895 annex D with .27 caliber RED cartridges and KDH60 nails.

Grassobbio, date 26.09.2012



Mr Andrea Taddei
General Manager
Bossong S.p.a.

ENGLISH

READ CAREFULLY THE INSTRUCTIONS CONTAINED IN THIS GUIDE BEFORE USING THE TOOLS

BOSSONG tools must be used by adult expert personnel only, who knows well how to realize the work, as well as the safety rules, operational and maintenance instructions contained in this user's guide.

Technical assistance service offered by BOSSONG SpA can help the workers as far as the use and maintenance of the tools are concerned.



CHARACTERISTICS AND MAIN TECHNICAL SHEET

- ❖ BOSS 3500 is an indirect-acting powder actuated tool. The power developed by the cartridges drives the piston, that then fixes the nail into the work surface. The highest velocity of the fixing does not exceed 100 m/s (it is classified as Low Velocity tool, class A). The tool, once correctly placed on the work surface, can fire under the pressure of at least 0,17 kN (17 kg).
- ❖ The BOSS 3500 tool can fix nails until 60 mm with single shot.
- ❖ Power regulator allows to use a wide range of available powers only employing the red cartridges. Please, only use cartridges 6.8x11 mm. Each cartridge strip allows to shoot up to 10 nails.
- ❖ Automatic cartridge advance system and semi-automatic reloading of piston.
- ❖ High power, capacity of penetration into steel up to 10 mm, suggested minimum penetration into concrete: 27 mm.
- ❖ BOSS 3500: length: 340 mm weight: 2,35 kg



MAIN OPERATING AND SAFETY INSTRUCTIONS

- ❖ BEFORE USING THE TOOL MAKE SURE THERE ARE NO CARTRIDGES LEFT INSIDE. WHEN YOUR WORK IS FINISHED UNLOAD THE POSSIBLE CARTRIDGES AND NAILS.
- ❖ WORKERS AND ASSISTANCE PERSONNEL WILL ALWAYS HAVE TO WEAR EYE AND HEARING PROTECTION WHEN SHOOTING.
- ❖ NEVER PUT YOUR HAND OVER THE MUZZLE.
- ❖ DO NOT PULL THE TRIGGER UNTIL THE TOOL IS RIGHTLY PLACED WITH THE MUZZLE ON THE WORK SURFACE.
- ❖ DO NOT USE THE TOOL WHERE FLAMMABLE OR EXPLOSIVE VAPOURS, DUST OR SIMILAR SUBSTANCES ARE PRESENT.
- ❖ DURING TRANSPORTATION AND LOADING, THESE TOOLS WILL HAVE TO BE POSITIONED HORIZONTALLY. KEEP TOOLS POINTED IN A SAFE DIRECTION. NEVER POINT POWDER-ACTUATED TOOLS AT ANYONE.
- ❖ WHEN SHOOTING THE SINGLE SHOT, ALWAYS USE THE PROTECTION SHIELD INSTALLED ON THE TOOL.
- ❖ AT THE END OF WORK PLACE THE TOOL CAREFULLY IN THE ORIGINAL BOX. USE ONLY THE ORIGINAL BOX FOR THE TRANSPORTATION.
- ❖ ONLY ORIGINAL BOSSONG CONSUMABLES, COMPONENTS AND SPARE PARTS MUST BE USED IN THE TOOL.



Wear eye protection



Wear ear protection



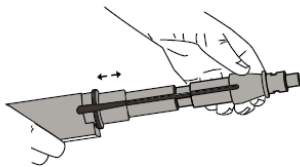
Wear protective gloves



WORKING

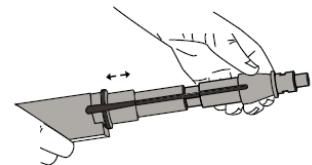
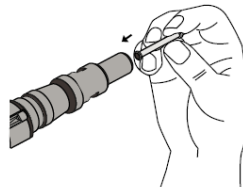
1) PRELIMINARY OPERATIONS

- ❖ Before using the tool make sure there are no cartridges left inside. When the work is finished, unload the tool both from cartridges and nails.
- ❖ Before loading nails and cartridges check that the guide moves easily and that the firing chamber or the areas where piston and nails will move during the shooting are free from any obstruction



2) INSERTION OF NAILS

- ❖ The nails to be used with this tool are only those created for shooting; do not use common nails. The material and the treatment must be adequate to the use.
- ❖ Point the tool down, do not point at you or anyone else, then insert the appropriate powder fastener into the muzzle of the tool, head first, until it is completely inserted.
- ❖ The barrel should be pulled fully forward to reset the piston for the fastening.



3) LOADING OF CARTRIDGES

- ❖ Only use the following types of color-coded cartridges:
caliber 6,8/11 green (min strength)
caliber 6,8/11 yellow (medium strength)
caliber 6,8/11 red (max strength)

4) SHOOTING

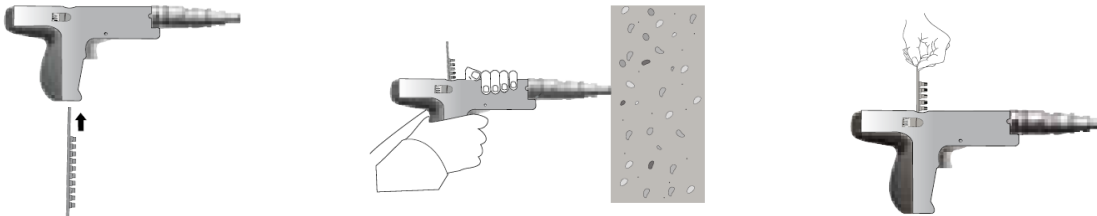
- ❖ Once loaded, the tool is ready to shoot.
- ❖ Place the muzzle of the fastening tool against the work surface at a right angle. Keep it balanced. The worker should position himself behind the tool, in range with the axis of the tool guide. The assistance personnel should be

Cartridges should be protected from heat and humidity during storage.

- ❖ Insert the cartridges into the tool through the slot below the handle and push until they are completely inside.
- ❖ To eject the cartridges or simply move them inside the tool pull them from the slot on the upper part of the tool.
- ❖ Allow only trained, competent and authorized persons to load a tool. It is strictly forbidden to leave cartridges inside the loading box once the work is finished.
- ❖ Cartridges must not be forced during the loading, or inserted using other tools.
- ❖ This kind of cartridges (FOR TECHNICAL USE ONLY) cannot be used for guns.

behind the worker. Push the tool against the surface and pull the trigger. Please shoot only if no one is in a dangerous position around or inside the working area.

- ❖ After the shot release the tool; the worker will be aware of the fact that it will inevitably recoil.
- ❖ FOR A NEW SHOT WITH THE SINGLE-SHOT MODEL, INSERT THE NAIL AS DESCRIBED ABOVE IN THE ITEM 2 AND SHOOT AS DESCRBED IN THE ITEM 4.
- ❖ WHEN ALL CARTRIDGES ARE OVER, REMOVE THE CARTRIDGES PLASTIC CONTAINER FROM THE UPPER HOLE OF THE TOOL, REPEAT ITEMS 1 TO 4 FOR NEW FIXINGS.
- ❖ DO NOT FIX WHEN A PRECEEDING ATTEMPT FAILED.



FASTENING

- ❖ Because of differences in hardness of concrete and thickness of steel, fastenings to these materials requires different strength of power.



- ❖ Using tool you have a possibility of stepless power regulation by turning the handwheel until the resistance of required power is reached.
- ❖ The proper power selection is the matter of experience and needs a number of trial fastenings. The first test should be made with the lowest power, and then power should be increased until desired penetration is reached.

- ❖ MINIMUM CENTRE DISTANCE: nails should be fixed with a distance not less than 80 mm the one from the other in concrete. For fixing on steel the minimum distance should be at least of 20 mm.
- ❖ MINIMUM EDGE DISTANCE : When nails are fixed into concrete keep a distance of at least 80 mm. When nails are shot into steel keep an edge distance of at least 20 mm.
- ❖ MINIMUM THICKNESS OF THE BASE MATERIAL: For fixings into concrete min. 80 mm, for fixings into steel min 4 mm.
- ❖ DO NOT FASTEN INTO STEEL THINNER THAN THE FASTENER SHANK DIAMETER.
- ❖ The fixing will be visible after the shoot.
- ❖ To eliminate spalling and during work with the single shoot version, a Spall Shield should be used.
- ❖ You should not use your tool to do fastenings into roof tiles, hollow bricks, glazing bricks, surface-hardened steel. It is forbidden to use the tool for fixing fragile material, even if is hard, such as cast iron, hardened steel, marble, granite, glass, ceramic material, drilled bricks, etc. NEVER DO FASTENINGS INTO PERFORATED OR BRITTTLED MATERIAL. NEVER DO FASTENINGS INTO WELDED SURFACES.
- ❖ ALWAYS POINT THE TOOL PERPENDICULAR TO THE WORK SURFACE.
- ❖ NEVER FIRE THE TOOL WITHOUT FASTENER - IT MAY DAMAGE THE TOOL.
- ❖ NEVER FIRE INTO A HOLE.

MAINTENANCE

- ❖ To replace parts of the tool, must be used only original spare parts from BOSSONG.
- ❖ Should follow each day's work or each 1000 shots.
- ❖ The tool must be checked, cleaned and oiled at the end of such day and it must be send at least once a year to the manufacturer or to an authorized technician for a general overhaul.
- ❖ **Firing no more than 200 shots per hour in order to guarantees the safety and an optimal durability of piston returner.**

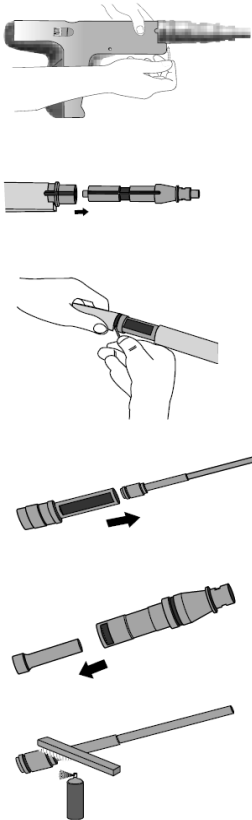
1) DISASSEMBLY

- ❖ With a pin, lift the tip of the annular ball spring (part n°16) and turn toward the top of the tool body
- ❖ Pull back the piston stop out of the tool body (part n°11).
- ❖ Slide the piston guide and base plate assembly out of the tool.
- ❖ Using a flat blade screwdriver, pry the shear clip off the groove in the base plate (part n°3).
- ❖ Remove the base plate from the piston guide, then pull the piston out of the guide.
- ❖ Clean the barrel and the other elements with a brush. Take care in cleaning the lower part of the barrel hole and the piston head.
- ❖ Check the piston and if it is damaged, change it.

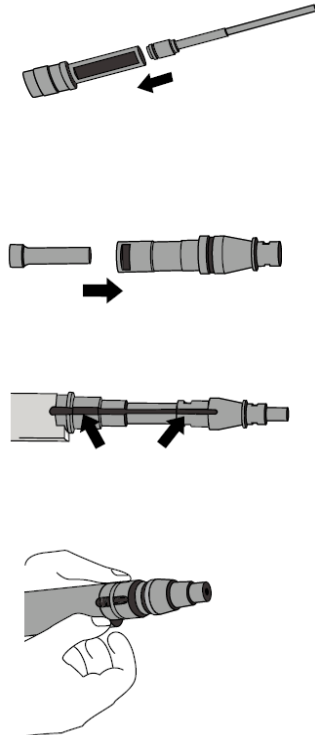
2) ASSEMBLY

- ❖ Press the piston into the end of the piston guide.
- ❖ Insert the fastener guide into the base plate.
- ❖ The groove in both the piston guide and base plate should be aligned. Slide the base plate (with fastener guide) onto the piston guide.
- ❖ Apply the force until shear clip is in place.
- ❖ Insert the piston guide and base plate assembly into the liner in the tool body.
- ❖ Insert the piston stop in the proper place.
- ❖ Turn the annular spring into place.
- ❖ When the assembly is finished, check the correct functioning of the tool. Depress a tool against a flat, hard surface an pull the trigger. The barrel assembly should slide with ease inside the tool housing assembly. The firing pin must release after the trigger has been pulled. This test should be performed without nails and loads.

DISASSEMBLY



ASSEMBLY



STORAGE

- ❖ After the daily cleaning, the tool must be stored in the original box, in place protected from dirt, moisture and weather.
- ❖ Storage the tool in a safety place in order to avoid the use by un-authorized people.
- ❖ The loads must be stored in the original box. Read carefully the instructions in the safety data sheet of the product.



TROUBLES DURING SHOOTING

- ❖ If a cartridge misfires, hold the tool against the work surface and pull the trigger again. At the case of failure to do so, keep the tool in the above position for about 30 seconds. Take the tool away from the work surface and depress it again to advance the next cartridge. Please make sure that the misfired cartridge cannot be used again.
- ❖ If you hear a very low noise shooting, it means that the cartridge power has not completely burned. In this case you must disassemble the tool and clean carefully the barrel, the head of the piston and the bottom of the barrel hole (before this operation remove the nail and loads).
- ❖ If you have any problem with the cartridge, please stop and call our technical service.
- ❖ If the tool does not appear to be working properly and if it cannot be unloaded, leave it in safe place and inform the «BOSSONG After Sales Service».



WARRANTY

- ❖ Warranty: 1 year from the date of purchase of the Customer.
- ❖ The warranty cover only defects in material and workmanship; the warranty is valid only if the tool is operated and handled correctly, cleaned and serviced properly and in accordance with the operating instructions manual.
- ❖ Only original Bossong consumables, components and spare parts must be used in the tool.
- ❖ This warranty provides the replacement of defective parts only. Parts requiring repair or replacement as a result of normal wear and tear are not covered by this warranty. For example: pistons, guides, rubber returner, advance cartridge system, etc. are not covered by warranty.
- ❖ Warranty do not cover neither costs to repair the tool neither transport freight.
- ❖ Bossong is not obliged for damages, losses or expenses in connection with the use or inability to use the tool.
- ❖ For repair or replacement, send tool and/or parts immediately upon discovery of the defect to the address of the Bossong Distributor.

Tools and nails

Description	KDH	KD	KDHC	KDHR	KDC	KISL	GD8-8	GD6-8
BOSS 3500	X	X	X	X	X	X	X	X
CONCRETE	X	X	X	X	X	X	X	X
STEEL	KDH 20	KD 20					GD8-8- 1514	GD6-8- 820

Tools

code	description
055000	BOSS 3500

code	description
055005	Piston
055004	Guide 8 mm

Accessories

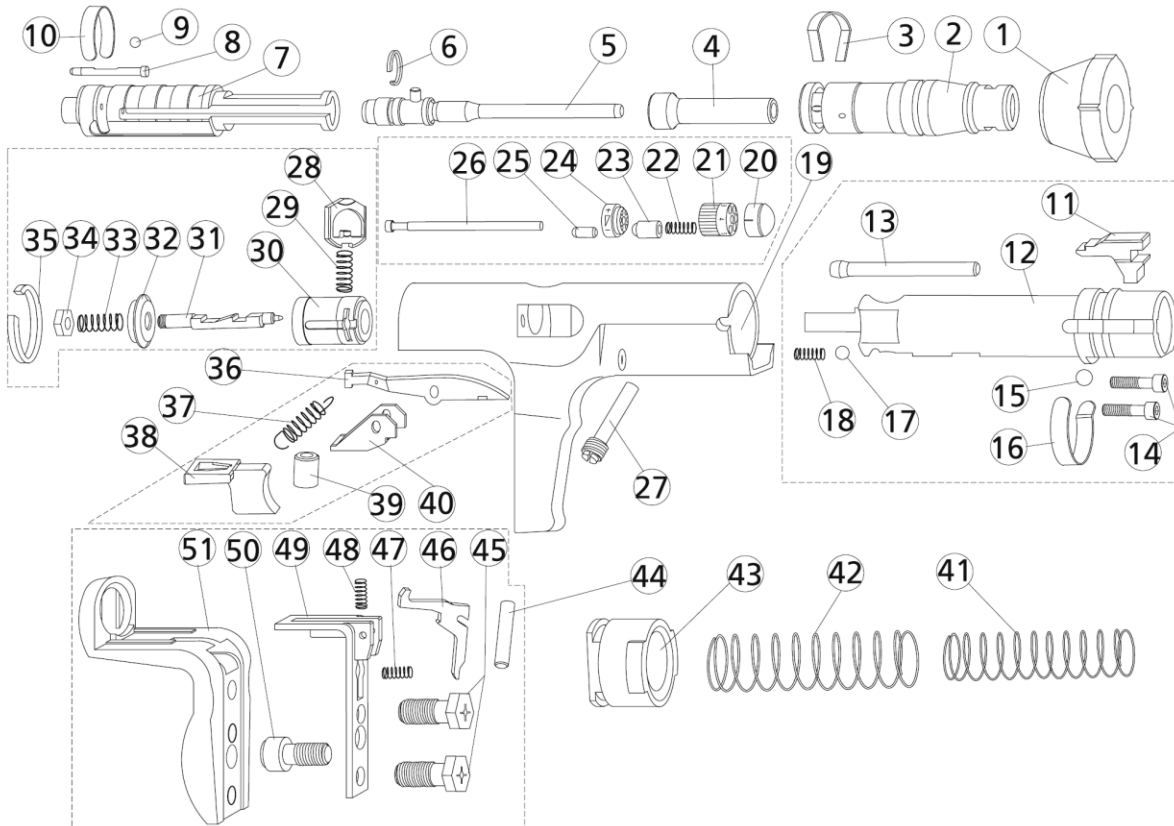
code	description
000012	Oil spray
000011	Safety glasses
000025	Barrel Brush
000030	Cloth

BOSS 3500

SPARE PARTS

To replace parts of the tool, must be used only original spare parts from Bossong.

Nr	DESCRIPTION	codice	Nr	DESCRIPTION	codice
1	STABILIZER	055001	35	RETENTION RING	055035
2	BASEPLATE	055002	36	ADVANCE LEVER	055036
3	SHEAR CLIP	055003	37	ADVANCE LEVER SPRING	055037
4	FASTENER GUIDE 8 mm	055004	38	TRIGGER	055038
5	PISTON COMPLETE	055005	39	ADVANCE LEVER BUSHING	055039
6	PISTON RING	055006	40	ADVANCE LEVER GUIDE	055040
7	PISTON GUIDE	055007	41-42	FIRING-PIN SPRINGS	055041
8	REGULATION PIN	055008	43	END CAP	055043
9	1/8" STEEL BALL	055009	44	RELEASE LEVER PIN	055044
10	C CLIP FOR PISTON GUIDE	055010	45	FRONT CAPSCREW	055045
11	PISTON STOP	055011	46	RELEASE LEVER	055046
12	STEEL LINER	055012	47	TRIGGER RETURN SPRING	055047
13	PRESSURE PIN	055013	48	COMPRESSION SPRING	055048
14	SCREW M6x25	055014	49	SUPPORT STRIP ASSEMBLY	055049
15	STEEL BALL	055015	50	HANDLE ALLEN SCREW	055050
16	ANNULAR BALL SPRING	055016	51	RUBBER GRIP	055051
17-18	STRIP PRESSURE BALL AND SPRING	055017			
19	COVER / HOUSING	055019			
20-26	REGULATOR POWER ASSEMBLY	055020			
27	THREADED PIN	055027			
28	SEAR	055028			
29	SEAR SPRING	055029			
30	SPRING GUIDE	055030			
31-34	FIRING-PIN ASSEMBLY	055031			



ONE YEAR GARANZIA - WARRANTY- GARANTIE



Modello - Model - Model
Model - Typ :

Numero di serie - Serial number - Serienummer
Numero de serie :

Data di Acquisto - Date of Purchase - Verkaufsdatum
Date d'achat - Aankoopdatum - Købsdato :

Cliente - Customer - Kunde - Client - Klient : Indirizzo - Address - Adresse - Adresse - Adres :

Timbro Distributore - Stamp of Distributor
Stempel des Vetreibers - Timbre Distributeur
Stempel van Dealer - Forhandlers stempel:

Spedire subito a Bossong. Envoyer immédiatement à Bossong. To be mailed immediately to Bossong. Sofort zum Bossong schicken. Bij aankoop toestel direct terugsturen naar uw Bossong.