# ECHNICAL INFORMATION

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Models No. )► AN250HC

Description 

Pneumatic Concrete Nailer

# **C**ONCEPT AND MAIN APPLICATIONS

Model AN250HC is a pneumatic concrete nailer powered by high pressure air.

Drives 19 to 25mm (3/4 to 1") long plastic sheet collated concrete pins to fasten metal studs to concrete easily.



Dimensions: mm (")				
Length (L)	295 (11-5/8)			
Width 1 (W1)	128 (5)			
Width 2 (W2)	88 (3-1/2)			
Height (H)	291 (11-1/2)			

Width 1: with Hook Width 2: without Hook

## ► Specification

Nail	Nail type		Plastic sheet collated concrete pins		
	Nail collation angle		0 degree		
	Shank diameter:	Length: mm (")	2.5 (0.099)	19, 22, 25 (3/4, 7/8, 1)	
	mm (")		3.0 (0.120)	19 (3/4)	
Magazine capacity			100 pins		
Operating air pressure: MPa			1.18 - 2.26		
(kgf/cm2)			(12 - 23)		
Weight according to EPTA-Procedure 01/2003: kg (lbs)		2.1 (4.7)			

## ► Standard equipment

Hook	1
Safety goggles1	1
Oil supply (containing 30ml of turbine oil) 1	1
Nose adapter A	2
Nose adapter B	2
Plastic carrying case	1

Note: The standard equipment for the tool shown above may vary by country.

### ► Optional accessories

Plastic sheet collated concrete pins Air hoses, etc. Air leak repair set

CAUTION: Repair the machine in accordance with "Instruction manual" or "Safety instructions".

### [1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for
1R229	1/4" Hex shank bit for M5	Removing / screwing M5 Hex socket head bolt
1R230	1/4" Hex shank bit for M6	Removing / screwing M6 Hex socket head bolt from / to Top cap
1R231	1/4" Hex shank bit for M8	Removing / screwing M8 Hex socket head bolt from / to Driver guide
1R266	Spring pin extractor 2	Removing / driving Spring pin 2 from / to Trigger and Adjuster section
1R268	Spring pin extractor 3	Removing / driving Spring pin 3 from / to Trigger base section
1R291	Retaining ring S and R pliers	Removing / installing Retaining ring R-24

### [2] LUBRICATIONS

Apply Isoflex NB52 to the following portions to protect parts and product from unusual abrasion.



#### [3] FASTENING TORQUE

Tighten the bolts and screws to the following fastening torque.

Note: Apply Loctite 242 or ThreeBond 1321 / 1342 to the bolts designated with hexagonal marks.

Item No.	Description	Q'ty	Use for	Torque (N.m)
1	M6x30 Hex socket head bolt	4	Fastening Top cap to Housing set	9.0 - 13.0
32	M8x30 Hex socket head bolt	4	Fastening Driver guide to Housing set	20.0 - 30.0
35	Inlet cap	1	Fastening to Housing set	20.0 - 30.0
37	One touch joint H22PM	1	Fastening to (35) Inlet cap	20.0 - 30.0
42	M5x30 Hex socket head bolt	1	Fastening Magazine, Housing set and Hook base with	2.0 - 3.0
			Sleeve 5 to M5 Hex nut	
44	M5x20 Hex socket head bolt	1	Fastening Contact arm cover to Driver guide	2.0 - 3.0
<u>(63)</u>	M5x22 Pan head screw	1	Fastening Hook to Hook base	2.0 - 3.0
92	M4x10 Hex socket head bolt	1	Fastening Lock lever and Lock pin to Door	3.0 - 5.0
93	M5x12 Hex socket head bolt	1	Fastening Holder to Driver guide	5.0 - 6.5
Fig. 2 Top cap complete (42) Sleeve 5 Magazine Housing set Driver guide Door 92 (33) (33) (33) (37) (33) (37) (33) (37) (33) (37				37 } 63 Hook

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### ► Repair

### [4] ASSEMBLING/ DISASSEMBLING [4]-1. Head valve section

#### DISASSEMBLING

(1) Disassemble Top cap from Housing set as illustrated in Fig. 3.

#### Fig. 3



(2) Disassemble Rear cushion from Top cap as illustrated in Fig. 4.



#### ASSEMBLING

- 1) Assemble Rear cushion to Top cap.
- 2) Put nine Compression springs 4 into holes of Top cap complete.
- 3) Fit Head valve into Top cap complete carefully so as not to lean any Compression springs 4. (**Fig. 5**)



# Repair [4] DISASSEMBLY/ASSEMBLY [4]-2. Driver, Cylinder section (Cylinder stay, Valve seat)

#### DISASSEMBLING

(1) Driver and Cylinder section can be removed as illustrated in Fig. 6.

#### Fig. 6



(2) Remove Cylinder stay and Valve seat from Cylinder as illustrated in Fig. 7.

#### Fig.7



(3) O rings of Cylinder section can be replaced as illustrated in Fig. 8.



#### ASSEMBLING

Take the disassembling step in reverse. Refer to Figs. 8, 7 and 6.

# Repair [4] DISASSEMBLY/ASSEMBLY [4]-3. Trigger value section

#### DISASSEMBLING

**Note**: Trigger valve section can be replaced without removing Magazine section and Driver guide from Housing set. (1) Remove Contact arm and Holder as illustrated in **Fig. 9**.

#### Fig. 9



(2) Trigger valve section can be disassembled as illustrated in Figs. 10 and 11.







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# Repair [4] DISASSEMBLY/ASSEMBLY [4]-3. Trigger valve section (cont.)

#### ASSEMBLING

Refer to the previous page and take the disassembling step in reverse.

**Note:** • Trigger valve case and Trigger guide have to be firmly inserted into places until the click sounds can be heard.

- Set Change rod in place so that the center protrusion faces outside, and then insert Trigger base section into the groove of Housing set. (Fig. 12)
- Do not fail two different length pins to set in place as illustrated in Fig. 13.
- After setting 1R268 instead of Spring pins 3-20/ 3-32 temporarily, push out 1R268 to set Spring pins 3-20/ 3-32 in places. (Fig. 14)





#### [4]-4. Trigger assembly

#### DISASSEMBLING

- (1) Remove Contact arm and Holder. (Fig. 9)
- (2) Remove two Spring pins 3-32 for securing Trigger assembly. (Fig. 10)
  Trigger assembly can be disassembled from Housing set together with Adjuster assy.
  Separate Adjuster assy from Trigger assembly. (Fig. 15)
- (3) Trigger assembly is disassembled as illustrated in Fig. 16.







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### ► Repair

#### [4] DISASSEMBLY/ASSEMBLY [4]-4. Trigger assembly (cont.)

#### ASSEMBLING

 Set the following parts in place as illustrated in Fig. 17. Torsion spring 5 Stopper plate Torsion spring 6

ng 6 Lever





(2) Mount the above part to Trigger base. (Fig. 18)



(3) Assemble the Trigger base section to Housing set. (Figs. 15, 14 and 12)

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# Repair [4] DISASSEMBLY/ASSEMBLY [4]-5. Adjuster assy

#### DISASSEMBLING

Disconnect Contact arm from Slide plate of Adjuster assy, and then remove Holder that secures Adjuster assy to Driver guide.

Remove Contact arm and Holder as illustrated in Fig. 9.

Adjuster assy can be disassembled without removing Spring pins 3-20 and 3-32. (Figs. 19 and 20)

#### Fig. 19



#### Fig. 20



#### ASSEMBLING

Take the disassembling step in reverse as follows;

- (1) Assemble Adjuster piece to Upper yoke.
- (2) Turn Adjuster piece 90° right in Upper yoke so that Adjuster shaft can be in Adjuster piece.
- (3) Assemble Compression spring 2 and Steel ball 2.3 to Upper yoke. Install Adjuster shaft into Adjuster piece carefully so as not to lose Steel ball 2.3 and Compression spring 2.
- (4) Assemble Spring pin 2-14. Mount Adjuster assy to Housing set.
- (5) Secure Adjuster assy to Driver guide with Holder and M5x12 Hex socket head bolt.

# [4] DISASSEMBLY/ASSEMBLY[4]-6. Front cushion

#### DISASSEMBLING

 Remove Contact arm cover by unscrewing M5x20 Hex socket head bolt, and remove Urethane ring 3 from Contact arm. See the **center** and **left** illustration in **Fig. 9**. Contact arm can be removed.

(2) Disassemble Driver guide as illustrated in Fig. 21.

#### Fig. 21



#### ASSEMBLING

Take the disassembling step in reverse.

#### [4]-7. Driver guide section, Feeding mechanism

#### DISASSEMBLING

- Remove Contact arm cover by unscrewing M5x20 Hex socket head bolt, then remove Urethane ring 3 from Contact arm. See the **center** and **left** illustration in **Fig. 9**. Contact arm can be removed.
- (2) Disassemble Driver guide as illustrated in Fig. 21.
- (3) Disassemble Door from Driver guide as illustrated in Fig. 22.



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# Repair [4] DISASSEMBLY/ASSEMBLY [4]-7. Driver guide section, Feeding mechanism (cont.)

#### DISASSEMBLING

(4) Disassemble Feeding mechanism as illustrated in Figs. 23 and 24.



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# Repair [4] DISASSEMBLY/ASSEMBLY [4]-7. Driver guide section, Feeding mechanism (cont.)

#### ASSEMBLING

- (1) Assemble O ring 14 to Piston (for Nail feeding), and mount O ring 9 to the cylinder portion of Driver guide. Refer to **Fig. 24**.
- (2) Assemble Feeding claw and Piston as illustrated in Figs. 25 and 26.

#### Fig. 25





# [4] DISASSEMBLY/ASSEMBLY[4]-8. Magazine, Magazine cap

#### DISASSEMBLING

Disassemble Magazine section as illustrated in Fig. 27.

#### Fig. 27



#### ASSEMBLING

Take the disassembling step in reverse.

#### [4]-9. Door

#### DISASSEMBLING

(1) Remove Pin 5 and Urethane ring 3. Separate Door from Driver guide as illustrated in Fig. 22.

(2) Disassemble Door section as illustrated in Fig. 28.

#### Fig. 28



#### ASSEMBLING

Take the disassembling step in reverse.

# Repair [4] DISASSEMBLY/ASSEMBLY

#### [4]-10. Inlet cap, One touch Joint H22PM

#### DISASSEMBLING

Inlet cap and One touch joint can be disassembled as illustrated in Fig. 29.

If it is difficult to remove One touch joint H22PM as illustrated in **Fig. 29**, One touch joint can be disassembled as illustrated in **Fig. 29A**.

Note: One touch joint H22PM and Inlet cap as Makita high pressure air tool have left handed threads.

#### Fig. 29



#### Fig. 29A

