ECHNICAL INFORMATION

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Models No. ► AF550H

Description > Pneumatic Brad Nailer

CONCEPT AND MAIN APPLICATIONS

Model AF550H is a pneumatic finish nailer powered by high pressure air. Drives 18Ga Finish nails and Super finish nails of the following length: Finish nails and $5 \times 2.24(6^{\circ})$

Finish nails: 15 to 55mm (5/8 to 2-3/16") Super finish nails: 15 to 50mm (5/8 to 2")

Its main benefits are:

- Ultra-fine finish with almost invisible driver tip marking
- Compact and lightweight design for high maneuverability
- Slim contact arm and nose adapter for easy access to tight places
- Contact arm with an extra-short stroke and non-marring rubber nose adapter for protection of workpiece surface from damages/scratches

L W2 W1

Dimensions: mm (")		
Length (L)	228 (9)	
Width 1 (W1)	61 (2-3/8)	
Width 2 (W2)	45 (1-3/4)	
Height (H)	235 (9-1/4)	

Width 1: with Hook Width 2: without Hook

Specification

	Gauge (Shank diameter)		18Ga	
Nail	Type/ Head size: mm	Length: mm (")	Finish nail/ 1.3 x 1.9	15, 20, 25, 30, 35, 40, 45, 50, 55 (5/8, 3/4, 1, 1-3/16, 1-3/8, 1-9/16, 1-3/4, 2, 2-3/16)
			Super finish nail/ 1.3 x 1.4	15, 20, 25, 30, 35, 40, 45, 50 (5/8, 3/4, 1, 1-3/16, 1-3/8, 1-9/16, 1-3/4, 2)
	Nail collation angle		Straight	
	Nails per strip		100	
Magazine capacity: nails		104		
Operating air pressure: MPa		0.98 - 2.26		
[kgf/cm2]		[10 - 23]		
(PSI)		(140 - 320)		
Net weight: kg (lbs)		1.2 (2.6)		

► Standard equipment

1
1
2
1
. 1
. 1

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

► Optional accessories

Finish nails, Super finish nails Air hoses Repair kit for trigger (containing O rings)

CAUTION: Disconnect the air hose from the machine and then remove remaining nails for safety before repair/ maintenance in accordance with the instruction manual!

[1] NECESSARY REPAIRING TOOLS

Code No.	Description	Use for	
1R003	Retaining ring pliers ST-2N	Pulling off Pipe	
1R237	Round bar for Arbor 8-100	Removing Front seal and Front cushion	
1R266	Spring pin extractor 2	Removing/ mounting Spring pins 2-8	
1R268	Spring pin extractor 3	Removing/ mounting Spring pins 3-28 and 3-26	
1R274	Insert jig for Type 72 Field	Supporting Knob when removing Pin 2-8	

[2] LUBRICATIONS

Apply Isoflex NB52 to the following portions designated with the black arrows to protect parts and product from unusual abrasion.

Item No.	Description	Portion to lubricate	Amount
3	O ring 31		
5	O ring 14		
7	O ring 29	Whole portion	
8	D ring 21.5		
9	Cylinder	Inside where Driver complete moves	
21)24	O ring 9.5		a little
22	O ring 11	whole portion	
33	Idler guide	The portion where Idler contacts	
37)	Pin 3		
39	Pin 2	whole portion	
49	Stopper	The portion where Trigger base contacts	
Fig. 1 Top cap			

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Repair [2] LUBRICATIONS (Cont.)

Apply Isoflex NB52 to the following portions designated with the black arrows to protect parts and product from unusual abrasion.

Item No.	Description	Portion to be lubricated	
(96)	O ring 20		
(97)	O ring 22		
(99)	O ring 11.2	Whole portion	
100	O ring 12.5		
(101)	O ring 18		
(103)	Compression Spring 7	Whole oprtion for smooth action in Main valve	
(104)	O ring 12		
(105)	O ring 18		
(107)	O ring 6	Whole portion	
108	O ring 6		
(110)	O ring 12		
(111)	Compression Spring 3	Whole portion for smooth action in Pilot valve	
(112)	O ring 3	Whole portion	
114 (115)	O-ring 3	Note : O ring 3 is different from O-ring 3. Distinguish them by the parts numbers.	
116	O ring 22	Whole portion	
(16) O ring 22 Who Fig. 2 Image: Constraint of the second se		Image: Figure Valve Section Main valve Image: Figure Valve guide B Image: Figure Valve guide B <	

[3] Adhesive for One touch joint H22PM and Bolts

Apply Loctite 242 or ThreeBond 1342 to the threads of One touch joint H22PM and bolts listed below.



[4] DISASSEMBLY/ASSEMBLY[4]-1. Driver complete

DISASSEMBLING

Disassemble Driver complete and O rings in the order of Figs. 4 to 8.



ASSEMBLING

Take the disassembling step in reverse.

Note: 1) Apply Lubricant to O rings and fit them into each groove on Driver complete and Top cap. (Fig. 8)

 Insert the round shape of Driver complete on the bottom of Cylinder, and face the vertical groove of Driver complete in the opposite direction to Magazine, then set the assembled part in place as illustrated in Fig. 9.

3) Rear cushion is directional. Therefore, set it in place as illustrated in Fig. 6. Do not pinch O ring 31 between threads of Top cap and Housing set.



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► Repair

[4] DISASSEMBLY/ASSEMBLY

[4]-2. Front cushion

DISASSEMBLING

(1) Remove Driver complete in the order of **Figs. 4 to 7**.

(2) Separate Magazine and Trigger section from Housing set. Front cushion and Front seal can be removed as illustrated in Figs. 10 and 11.

Fig. 10



Fig. 11



ASSEMBLING

(1) Assemble Cylinder section to Housing set.

As the fitting of Front cushion is very tight, take the step illustrated in Fig. 12.



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

DISASSEMBLING

(1) Separate Magazine and Trigger section from Housing set as illustrated in Fig. 10.

(2) Remove Trigger valve case as illustrated in Fig. 13. Trigger valve section are disassembled as illustrated in Fig.14.

Fig. 13



Fig. 14



ASSEMBLING

Take the disassembling step in reverse. Refer to Figs. 14 and 13.

When assembling Trigger valve case, use 1R268 to guide Spring pin to the far side hole of Housing set. (**Fig. 15**) **Fig. 15**



[4] DISASSEMBLY/ASSEMBLY[4]-4 Inlet cap, One touch joint H22PM

DISASSEMBLING

Inlet cap and One touch joint H22PM are removed in the order of Figs. 16 to 21.

Fig. 16





Fig. 18





ASSEMBLING

- Applying Loctite 242 or "ThreeBond 1321/1342 to the thread of One Touch Joint H22PM, assemble One Touch Joint H22PM to Inlet cap by turning counterclockwise. Refer to Figs. 21 and 20.
- (2) Take the disassembling step in reverse. Refer to Fig. 19, 18, 17 and 16.

Repair [4] DISASSEMBLY/ASSEMBLY [4]-5. Magazine section

DISASSEMBLING

Magazine section is disassembled by removing Slide door complete.

- (1) Remove M4x12 and M5x14 Hex socket head bolts and remove Slide door complete from Magazine as illustrated in **Fig. 22**.
- (2) The following parts can be removed from Slide door complete as illustrated in Figs. 23 and 24.
 - * Guide pipe in which Compression spring 6 are assembled
 - * Pusher to which Stopper and Compression spring 3 are assembled
 - * Cover plate
 - * Nail guide plate A (8 pcs.) and Nail guide plate B (2 pcs.)





Fig. 23





Repair [4] DISASSEMBLY/ASSEMBLY [4]-5. Magazine section (cont.)

ASSEMBLING

(1) Assemble Slide door complete in the order of Figs. 25 to 27.

Fig. 25











(2) Assemble Magazine to Joint by tightening it with M4x12 Hex socket head bolt. (2pcs.) And assemble Housing set to Joint by tightening it with M5x14 Hex socket head bolt. Refer to Fig. 27.

Repair [4] DISASSEMBLY/ASSEMBLY [4]-6 Trigger base section

DISASSEMBLING

Disassemble Magazine section together with Trigger section as illustrated in Fig. 10.
Separate Trigger base section from Magazine section as illustrated in Figs. 25 to 27.

Fig. 25



Fig. 26





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Repair [4] DISASSEMBLY/ASSEMBLY [4]-6 Trigger base section (cont.)

ASSEMBLING

(1) Assemble Trigger base section in the order of Figs. 28 to 31.

Fig. 28



Fig. 30



Trigger Idler Idler guide Loop of Tension spring 4	Arm	O C O C O C O C O C O C O C O C O C O C
Interlock Idler with Idler guide while moving Trigger as illustrated above. And bring the loop portion of Tension spring 4 to Idler side.	Arm interferes with Trigger in moving to the direction designated with arrow. However, Trigger can be pushed to the place as it is without trouble.	Hook the loop of Tension spring 4 to Idler as illustrated above.

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Repair [4] DISASSEMBLY/ASSEMBLY [4]-6 Trigger base section (cont.)

ASSEMBLING

(2) Mount the assembled Trigger base section to Magazine section in the order of Figs. 32 and 33.



Repair [4] DISASSEMBLY/ASSEMBLY [4]-7 Contact arm section

DISASSEMBLING

(1) Disassemble Magazine section together with Trigger section as illustrated in Fig. 10.

(2) Separate Trigger base section from Magazine section as illustrated in Fig. 25.

(3) Contact arm complete can be disassembled in the order of Figs. 34 and 35.

Fig. 34



Fig. 35



ASSEMBLING

Take the disassembling step in reverse.

Note: Use new Push nut 3. Because it is deformed when disassembling.