

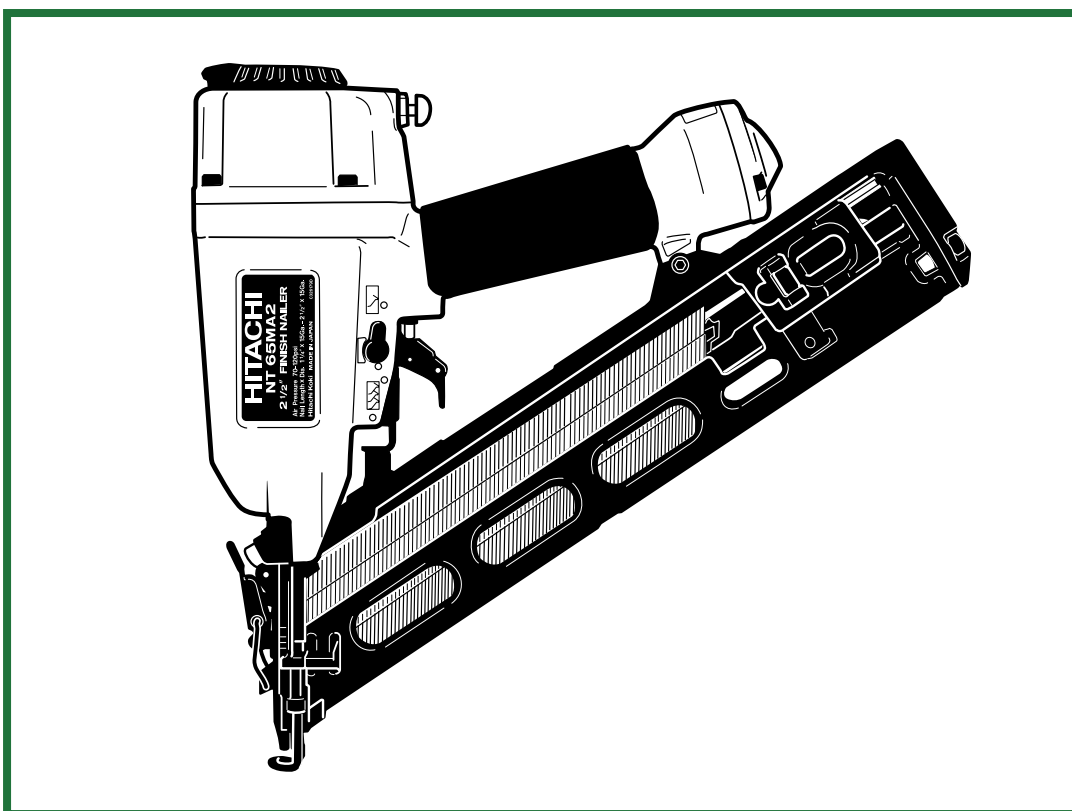
MODEL

**NT 65MA2**

# Hitachi Power Tools

**FINISH NAILER  
NT 65MA2**

**TECHNICAL DATA  
AND  
SERVICE MANUAL**



**N**

LIST No. E011

Aug. 2003

SPECIFICATIONS AND PARTS ARE SUBJECT TO CHANGE FOR IMPROVEMENT

REMARK:

Throughout this TECHNICAL DATA AND SERVICE MANUAL, a symbol(s) is(are) used in the place of company name(s) and model name(s) of our competitor(s). The symbol(s) utilized here is(are) as follows:

Symbols Utilized	Competitors	
	Company Name	Model Name
P	PORTER CABLE	DA250B
Q	BOSTITCH	N62FN
R	SENCO	SFN40
S	DEWALT	D51275



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## 1. PRODUCT NAME

Hitachi 2-1/2" Finish Nailer, Model NT 65MA2

## 2. MARKETING OBJECTIVE

The new Model NT 65MA2 finish nailer is a minor-changed version of the current Model NT 65MA. Owing to the modification of the ANSI standard, the valve construction was changed. In addition, the head valve construction was simplified and the O-ring was adopted for sliding the piston to respond to market prices of finish nailers in the U.S.A.

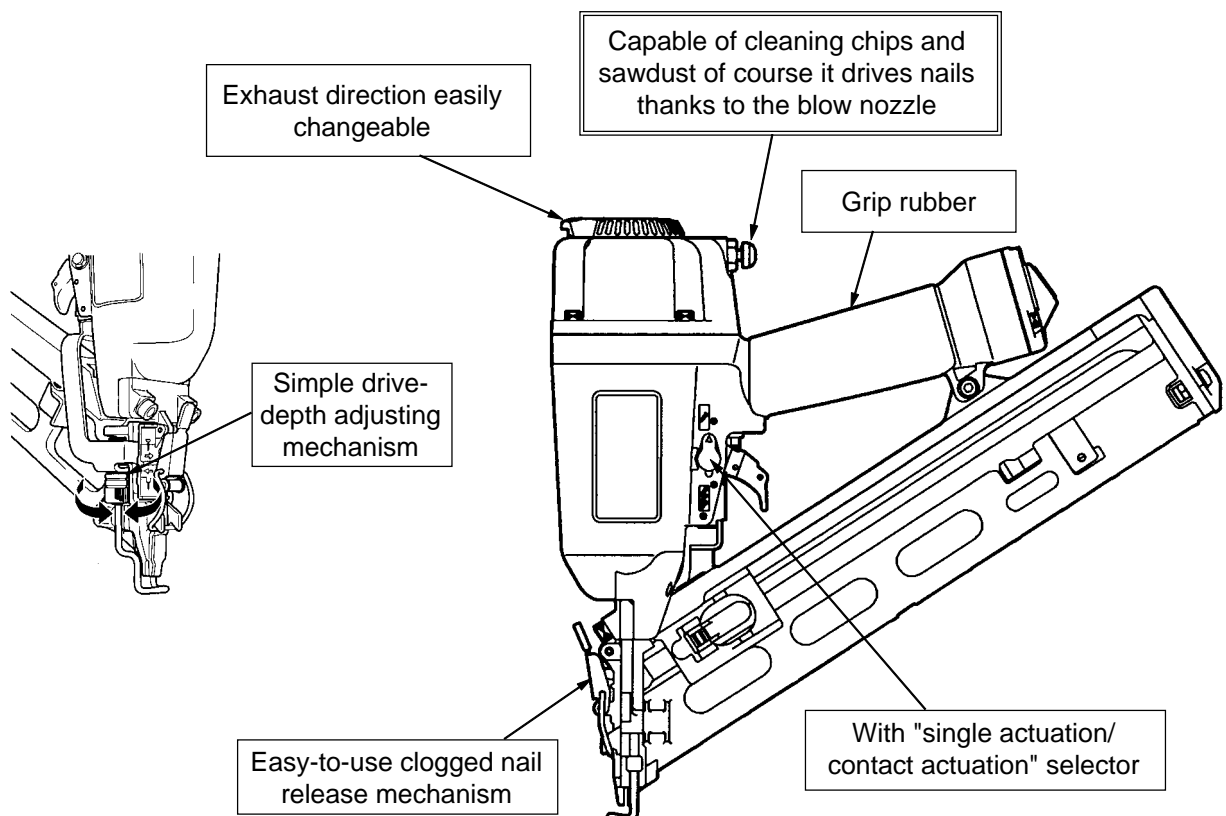
Primary differences from the Model NT 65MA are described below.

- (1) Equipped with the switching device at the valve. The nailer operation is selectable between "single actuation (single sequential actuation) mechanism" and "contact actuation mechanism" (the current Model NT 65MA is provided with the contact actuation mechanism only).
- (2) Equipped with the same head valve of solid rubber as the Model NR 65AK (the current Model NT 65MA is equipped with the head valve made of plastic and rubber).
- (3) Equipped with the O-ring for sliding the piston (the current Model NT 65MA is equipped with the piston ring).

## 3. APPLICATIONS

- For manufactured housing, on-site and mobile home construction:
  - Mounting of light and heavy trim
  - Installation of molding, paneling and stairways
  - Assembling of window and door casings
- For cabinet-making, furniture-making and woodworking

## 4. SELLING POINTS



## 5. SPECIFICATIONS

### 5-1. Specifications

Model	NT 65MA2
Driving system	Reciprocating piston type
Operating pressure	4.9 – 8.3 bar (5 – 8.5 kgf/cm <sup>2</sup> , 70 – 120 psi) (Gauge pressure)
Driving speed	3 pcs./sec
Weight	2.0 kg (4.4 lbs.)
Dimensions (Length x Height x Width)	344 mm x 304 mm x 82 mm (13-17/32" x 11-31/32" x 3-7/32")
Nail feed system	Ribbon spring
Nail capacity	100 nails
Air consumption	1.20 ltr/cycle at 6.9 bar (1.20 ltr/cycle at 7 kgf/cm <sup>2</sup> ) (.042 ft <sup>3</sup> /cycle at 100 psi)
Air inlet	3/8 NPT thread
Packaging	Corrugated cardboard box (Sleeve type)
Packaging dimensions (Length x Height x Width)	430 mm x 380 mm x 113 mm (16-15/16" x 14-15/32" x 4-7/16")
Standard accessories	Safety glasses (Code No. 875769) ..... 1 Hex. bar wrench for M5 screw (Code No. 944458) ..... 1 Hex. bar wrench for M6 screw (Code No. 944459) ..... 1 Case (Code No. 881775) ..... 1 Nose cap (A) (Code No. 881751) ..... 1
Optional accessories	Full sequential actuation mechanism kit (Code No. 884320) (Sequential trip mechanism kit) Pneumatic tool lubricant (30 cc (1 oz) oil feeder) (Code No. 877153) Pneumatic tool lubricant (120 cc (4 oz) oil feeder) (Code No. 874042) Pneumatic tool lubricant (1 ltr (1 quart) can) (Code No. 876212) Grease (ATTOLUB No. 2) (500 g (1.1 lbs)) (Code No. 317918)

## 5-2. Explanation of the Nailing Operation

To meet the requirements of "ANSI SNT-101-2002", the Model NT 65MA2 is equipped with a nailing operation switching device at the valve section as shown in the figures below. Use SINGLE ACTUATION MECHANISM (SINGLE SEQUENTIAL ACTUATION MECHANISM) or CONTACT ACTUATION MECHANISM in accordance with the work to be performed. A FULL SEQUENTIAL ACTUATION MECHANISM KIT (SEQUENTIAL TRIP MECHANISM KIT) is also available as an option. Each nailing operation is as follows.

- SINGLE ACTUATION MECHANISM (SINGLE SEQUENTIAL ACTUATION MECHANISM):

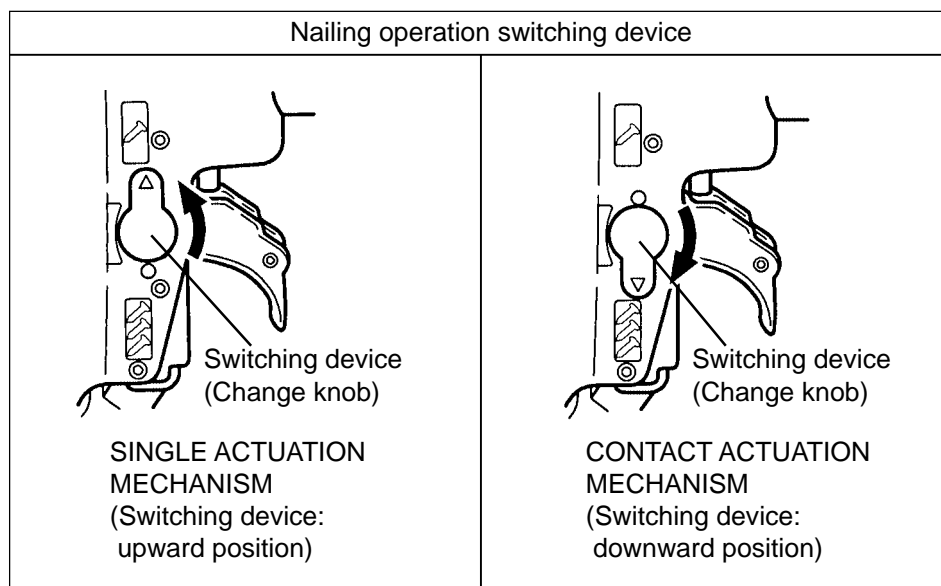
First, press the push lever against the wood; next, pull the trigger to drive the nail. First, pull the trigger; next, press the push lever against the wood to drive the nail. After nailing once, nailing will not be possible again until the trigger is released and pressed again.

- CONTACT ACTUATION MECHANISM:

First, press the push lever against the wood; next, pull the trigger to drive the nail. First, pull the trigger; next, press the push lever against the wood to drive the nail. If the trigger is held back, a nail will be driven each time the push lever is pressed against the wood.

- FULL SEQUENTIAL ACTUATION MECHANISM:

First, press the push lever against the wood; next, pull the trigger to drive the nail. Follow the same sequence to continue driving nails.



5-3. Nail Selection

The Model NT 65MA2 utilizes small-head, T-shaped nails (finish nails) collated by tapes. Applicable nails are shown below.

**CAUTION:** Ensure that nails are as specified in Fig. 1. Other nails will cause clogging of nails and subsequent damage to the nailer.

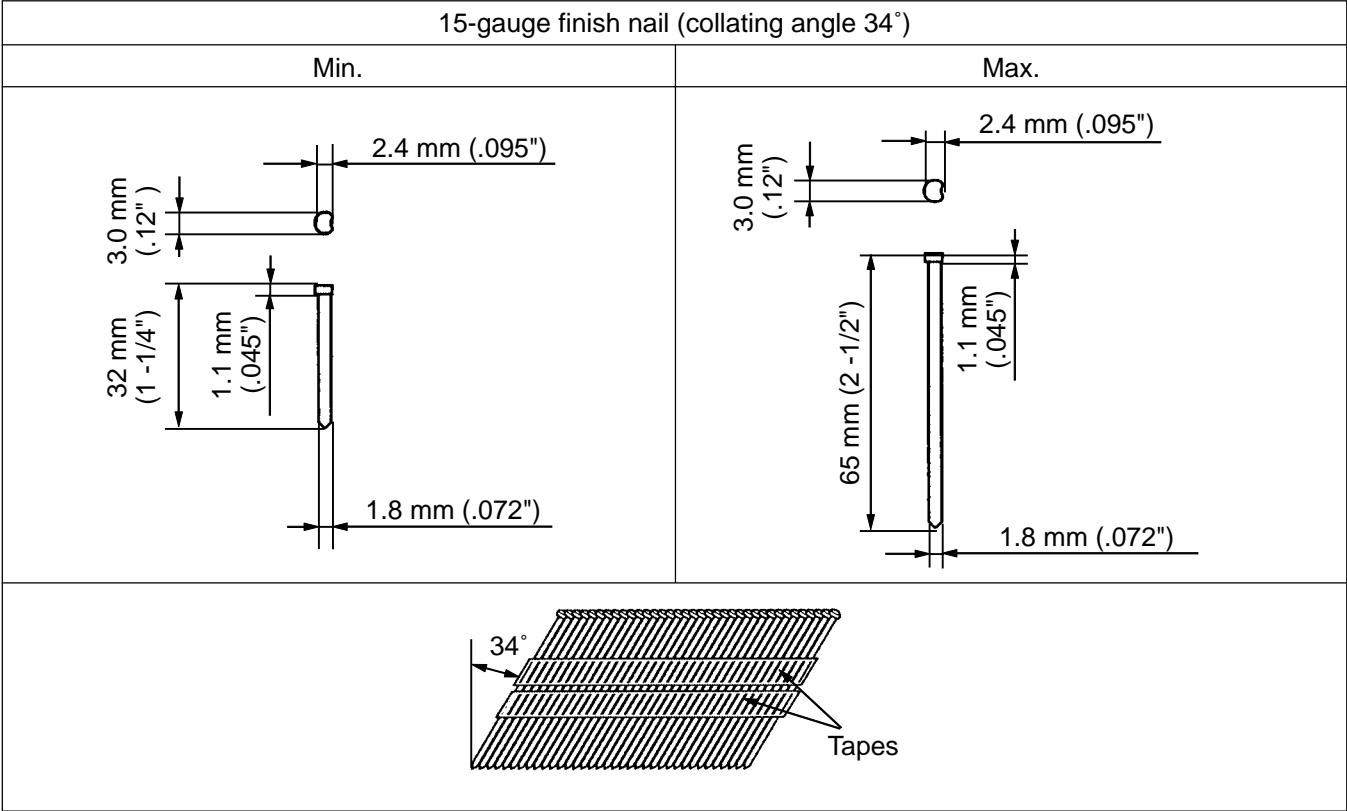
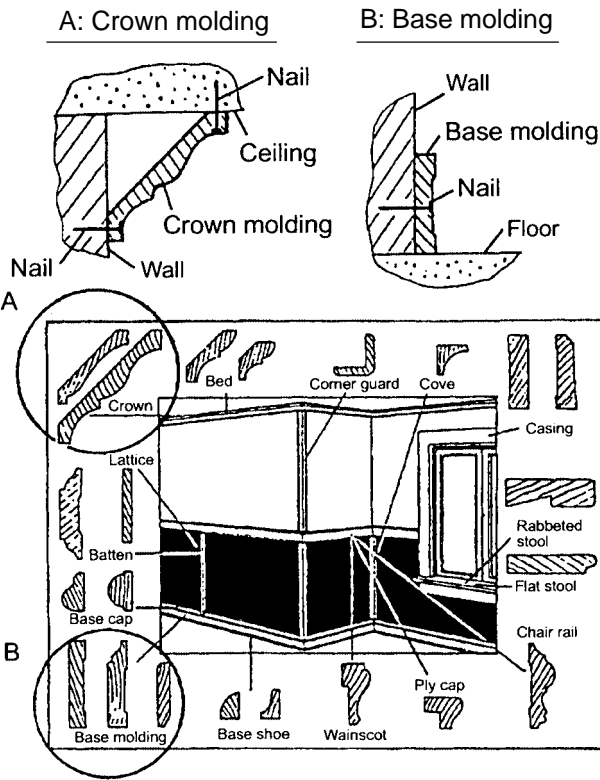


Fig. 1 Dimensions of nails

5-4. Examples of Nail Use



Examples of uses for the nails shown in 5-2 for installing finish materials, or molding as shown in Fig. 2. Typical mounting methods are shown in circles A and B.

Fig. 2 Examples of molding

## 5-5. Nail Driving Force

Figure 3 shows by type of wood and nail the nailer output energy provided by the supply pressure and the nailing energy required for driving the nail flush. Air pressure which exceeds the intersecting point between the nailer output energy and the required nailing energy for driving the nail allows the nail to be fully driven. For example, when driving a nail of 1.8 mm dia. x 65 mm length (.072" x 2-1/2") into six sheets of 12 mm (.472") plywood (72 mm (2-27/32") thick) with the Model NT 65MA2, a pressure of about 6.3 bar (6.4 kgf/cm<sup>2</sup>, 91 psi) allows the nailer to drive the nail flush with the wood surface. A pressure beyond this value causes the nail head to be driven below the wood surface. Figure 3 should be used as a reference only because those values vary depending on the type of wood, moisture content, and grain of wood.

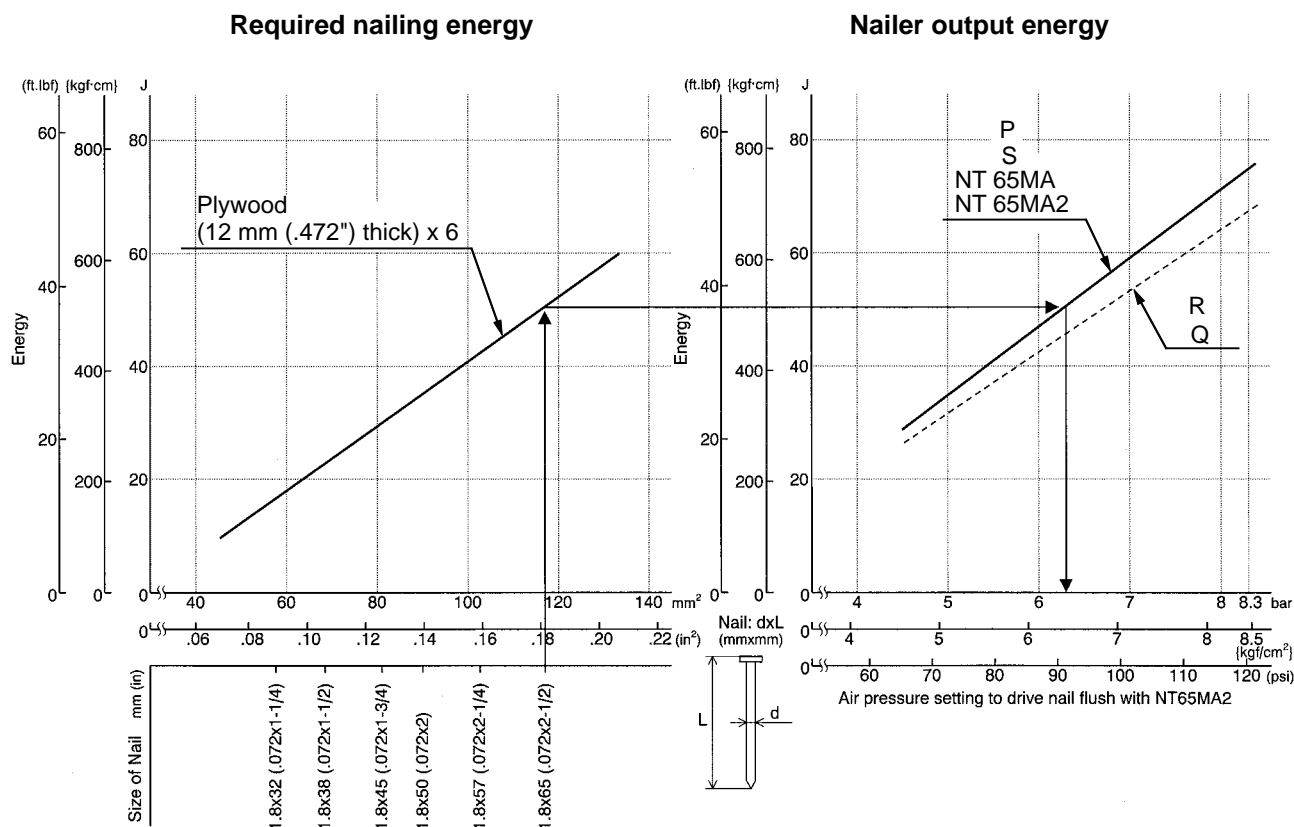


Fig. 3 Required nailing energy and nailer output energy

## 5-6. Optional Accessories

Full sequential actuation mechanism kit (sequential trip mechanism kit) (Code No. 884320)

A full sequential actuation mechanism kit (sequential trip mechanism kit) is provided as an optional accessory for the Model NT 65MA2. By using this optional accessory, a nail is driven by pressing the pushing lever first against a workpiece and then pulling the trigger (single-shot operation), and no nail is driven when pulling the trigger first and then pressing the pushing lever against a workpiece. Please recommend the full sequential actuation mechanism kit (sequential trip mechanism kit) to the customers who want to use it. Salespersons must instruct the customers to read the Handling Instructions attached to the full sequential actuation mechanism kit (sequential trip mechanism kit) and also the Handling Instructions of the Model NT 65MA2 thoroughly for correct use.



## 6. COMPARISONS WITH SIMILAR PRODUCTS

Maker	HITACHI		P	Q	R	S
	NT 65MA2	NT 65MA				
Model name						
Operating pressure	4.9 to 8.3 bar (5 to 8.5 kgf/cm <sup>2</sup> ) (70 to 120 psi)		4.9 to 8.3 bar (5 to 8.5 kgf/cm <sup>2</sup> ) (70 to 120 psi)	4.9 to 8.3 bar (5 to 8.5 kgf/cm <sup>2</sup> ) (70 to 120 psi)	5.4 to 7.6 bar (5.5 to 7.7 kgf/cm <sup>2</sup> ) (80 to 110 psi)	4.9 to 8.3 bar (5 to 8.5 kgf/cm <sup>2</sup> ) (70 to 120 psi)
Weight	2.0 kg (4.4 lbs.)		2.0 kg (4.4 lbs.)	1.7 kg (3.7 lbs.)	2.2 kg (4.8 lbs.)	1.9 kg (4.1 lbs.)
Dimensions (L x H x W)	344 mm x 304 mm x 82 mm (13-17/32" x 11-31/32" x 3-7/32")	344 mm x 305 mm x 82 mm (13-17/32" x 12" x 3-7/32")	349 mm x 301 mm x 85 mm (13-3/4" x 11-27/32" x 3-11/32")	378 mm x 298 mm x 83 mm (14-7/8" x 11-3/4" x 3-9/32")	334 mm x 287 mm x 90 mm (13-5/32" x 11-5/16" x 3-17/32")	323 mm x 298 mm x 94 mm (12-23/32" x 11-3/4" x 3-11/16")
Air consumption at 6.9 bar (7 kgf/cm <sup>2</sup> , 100 psi)	1.2 ltr/cycle (.042 ft <sup>3</sup> /cycle)		1.3 ltr/cycle (.046 ft <sup>3</sup> /cycle)	1.1 ltr/cycle (.039 ft <sup>3</sup> /cycle)	1.2 ltr/cycle (.042 ft <sup>3</sup> /cycle)	1.0 ltr/cycle (.035 ft <sup>3</sup> /cycle)
Nail capacity	100 nails		100 nails	129 nails	100 nails	110 nails
Magazine type	Rear loading type Angle: 34°		Rear loading type Angle: 34°	Rear loading type Angle: 34°	Rear loading type Angle: 26°	Rear loading type Angle: 34°
Blow nozzle	Provided		None	None	None	None
Nailing operation switching device	Provided	None	None	None	None	None
Direction change of exhaust air	Easily changeable 360° by turning by hand		Easily changeable 360° by turning by hand	Easily changeable 360° by turning by hand	Only 4 directions by 90° each by replacing the piece	Easily changeable 360° by turning by hand
Jam-release	Single-touch operation by hand		Single-touch operation by hand	Single-touch operation by hand	Single-touch operation by hand	Single-touch operation by hand
Driving depth adjustment mechanism	Horizontal dial		Horizontal dial	Horizontal dial	Horizontal dial	Vertical slide
Handle grip	Rubber	Racket grip	Rubber	Rubber	Hook and loop tape type	Rubber
	34°		34°	34°	26°	34°
	Collating angle					
Applicable nails	2.4 mm to 3.0 mm (.095" to .12")		2.4 mm to 3.0 mm (.095" to .12")	2.4 mm to 3.0 mm (.095" to .12")	2.4 mm to 3.0 mm (.095" to .12")	2.4 mm to 3.0 mm (.095" to .12")
	Length		32 mm to 65 mm (1-1/4" to 2-1/2")	32 mm to 65 mm (1-1/4" to 2-1/2")	32 mm to 65 mm (1-1/4" to 2-1/2")	25 mm to 65 mm (1" to 2-1/2")

## 7. PRECAUTIONS IN SALES PROMOTION

In the interest of promoting the safest and most efficient use of the Model NT 65MA2 Nailer by all of our customers, it is very important that at the time of sale the salesperson carefully ensures that the buyer seriously recognizes the importance of the contents of the Instruction Manual, and fully understands the meaning of the precautions listed on the Warning Label attached to each tool.

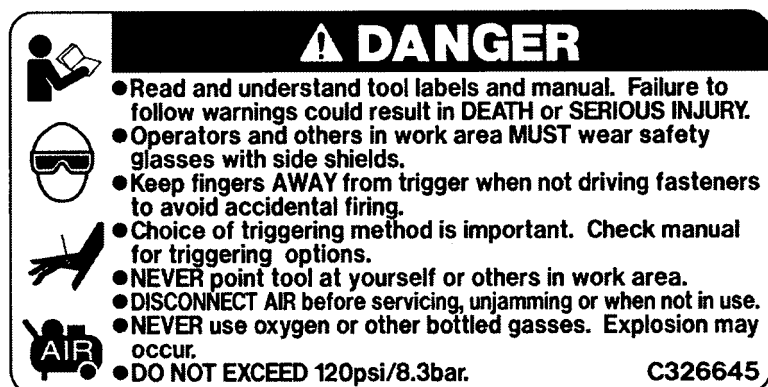
The Model NT 65MA2 Nailer is selectable between single actuation mechanism (single sequential actuation mechanism) and contact actuation mechanism (however, some of the Model NT 65MA2 are designed for single-shot operation only for some destinations). At time of sale, the salesperson must inform the customer that the full sequential actuation mechanism kit (sequential trip mechanism kit) which can change the Model NT 65MA2 to a single-shot nailer is optionally available, and recommend it to the customers who want to use it. Refer to the leaflet attached together with the Instruction Manual for details.

### 7-1. Instruction Manual

Although every effort is made in each step of the design, manufacture, and inspection to provide protection against safety hazards, the dangers inherent in the use of any pneumatic tool cannot be completely eliminated. Accordingly, general precautions and suggestions for use of pneumatic tools, and specific precautions and suggestions for the use of the pneumatic nailer are listed in the Instruction Manual to enhance the safe, efficient use of the tool by the customer. Salespersons must be thoroughly familiar with the contents of the Instruction Manual to be able to offer appropriate guidance to the customers during sales promotion.

### 7-2. Warning Label

Each Model NT 65MA2 unit is provided with a Warning Label (illustrated below) which lists basic safety precautions in its use. Carefully ensure that customers fully understand and follow these precautions before using the tool.



### 7-3. Related Laws and Regulations

As nailers and staplers are designed to instantaneously drive nails and staples, there is an ever-present danger of misfiring and subsequent possible serious injury. Accordingly, close attention in handling is absolutely necessary at all times. Carefully ensure that the customer is fully aware of the precautions listed in the Instruction Manual provided with each unit.

While there are no specific safety regulations, there are related items in various general safety regulations with which the salespersons should be familiar in order to properly advise the customer. Please check your national and/or local regulations for applicable items.

Some applicable items are outlined below.

The U.S.A.:

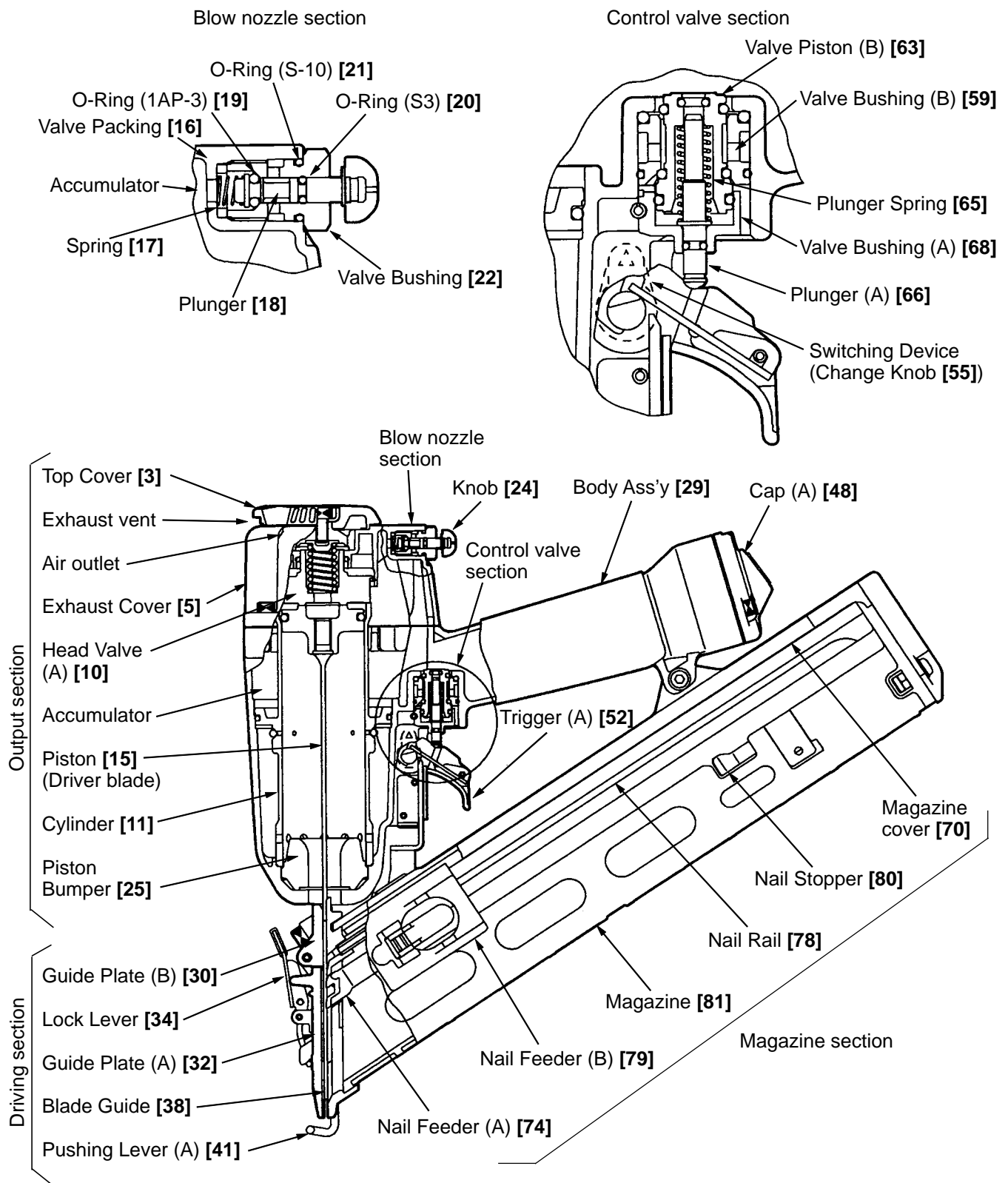
OSHA	1926.102 Eye and face protection 1926.302 Power-operated hand tools
ANSI SNT-101-2002	Portable, Compressed-Air-Actuated, Fastener Driving Tools-Safety Requirements for

## 8. MECHANISM AND OPERATION PRINCIPLE

### 8-1. Mechanism

As illustrated in Fig. 4, the Model NT 65MA2 can be generally divided into four sections: output section, control valve section, driving section, and magazine section. The basic construction of the Model NT 65MA2 is the same as that of the Model NT 65MA and the interchangeable components are used as much as possible. Primary differences from the Model NT 65MA are described below.

- Output section ..... The head valve construction was simplified and the O-ring was adopted for sliding the piston. The grip tape wound around the grip of the body was changed to the ring-type grip rubber. Conventional grip tape is supplied as a repair part because the grip rubber cannot be mounted to the grip of the body by hand.
  - Body: Newly designed
  - Exhaust cover: Newly designed
  - Head valve (A): Common to the Model NR 65AK etc.
  - Piston: Newly designed
  - Cylinder: Newly designed
- Control valve section.... Following parts were changed or added owing to the change of the construction (selectable either the single actuation mechanism or the contact actuation mechanism).
  - Plunger (A): Common to the Model NR 90AC3
  - Valve piston (B): Common to the Model NR 90AC3
  - Valve bushing (B): Common to the Model NR 65AK etc.
  - Trigger (A): Common to the Model NR 90AC3
  - Change knob: Newly designed
- Driving section and magazine section ..... Common to the Model NT 65MA.

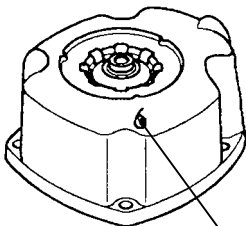
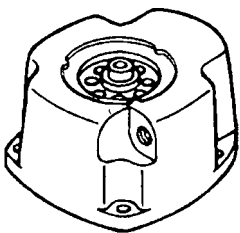

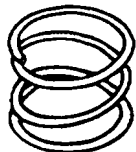
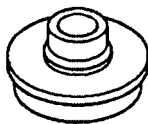
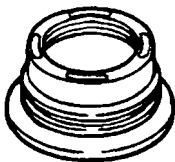
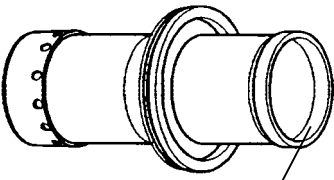
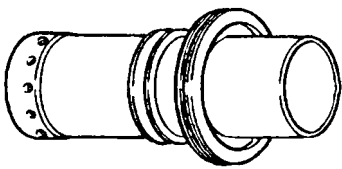
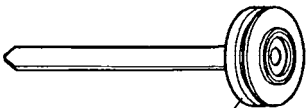



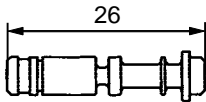
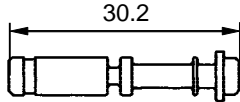
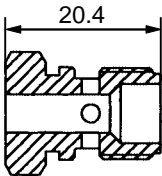
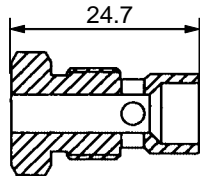
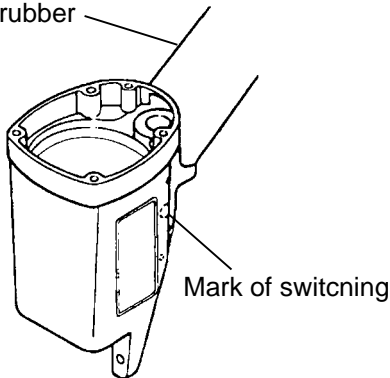
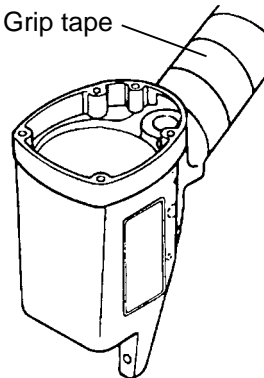
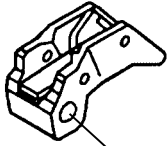
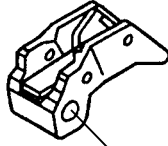
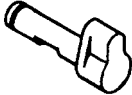
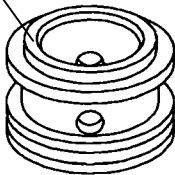
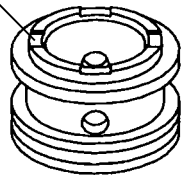
**Fig. 4 Construction**

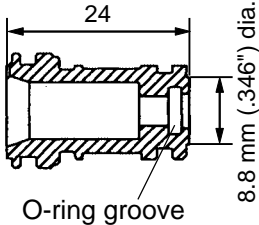
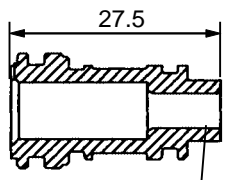
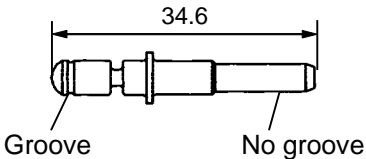
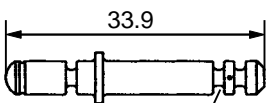
## 8-2. Interchangeability

Interchangeability of the parts between the Model NT 65MA2 and the Model NT 65MA is described below. Both the parts that are not interchangeable and the parts that are interchangeable though their code numbers are different are described in detail.

(1) Parts that are not interchangeable with those of the Model NT 65MA

Parts	NT 65MA2	NT 65MA
Exhaust Cover [5]	Newly designed  2.1 mm (.083") dia. hole	
Head Bumper [7]	Common to the Model NR 65AK etc.	—
Head Valve Spring [8]	Common to the Model NR 65AK etc. 	
O-ring (P-22) [9]	Common to the Model NR 65AK etc.	—
Head Valve (A) [10]	Common to the Model NR 65AK etc. 	
Cylinder [11]	Newly designed  Bore diameter is concave.	
O-ring (I.D 34.7) [14]	Newly designed	—
Piston [15]	Newly designed  O-ring type	 Piston ring type

Parts	NT 65MA2	NT 65MA
Plunger [18]	Newly designed 	
Valve Bushing [22]	Newly designed 	
Body Ass'y [29]	Newly designed 	
Trigger (A) [52]	Common to the Model NR 90AC3  7.6 mm (.299") dia. hole	 7 mm (.276") dia. hole
Steel Ball D3.97 [53]	Common to the Model NR 90AC3	—
Spring (C) [54]	Common to the Model NR 90AC3	—
Change Knob [55]	Newly designed 	—
Valve Bushing (B) [59]	Common to the Model NR 65AK etc. No notches  Color: Aluminum (silver)	Notches are added (4 pcs.)  Color: Black
O-ring (S-4) [62]	Common to the Model NR 65AK etc.	—


Parts	NT 65MA2	NT 65MA
Valve Piston (B) <b>[63]</b>	<p>Common to the Model NR 90AC3</p> <p>Be careful not to make mistakes in mounting Valve Piston (B) <b>[63]</b> because it is similar to that of the Models NR 90AC3 and NR 65AK.</p>  <p>O-ring groove</p> <p>Color: Black</p>	 <p>No groove</p> <p>Color: Aluminum (silver)</p>
Plunger (A) <b>[66]</b>	<p>Common to the Model NR 90AC3</p> <p>Be careful not to make mistakes in mounting Plunger (A) <b>[66]</b> because it is similar to that of the Models NR 90AC3 and NR 65AK.</p>  <p>Groove</p> <p>No groove</p>	 <p>O-ring groove (2 pcs.)</p>

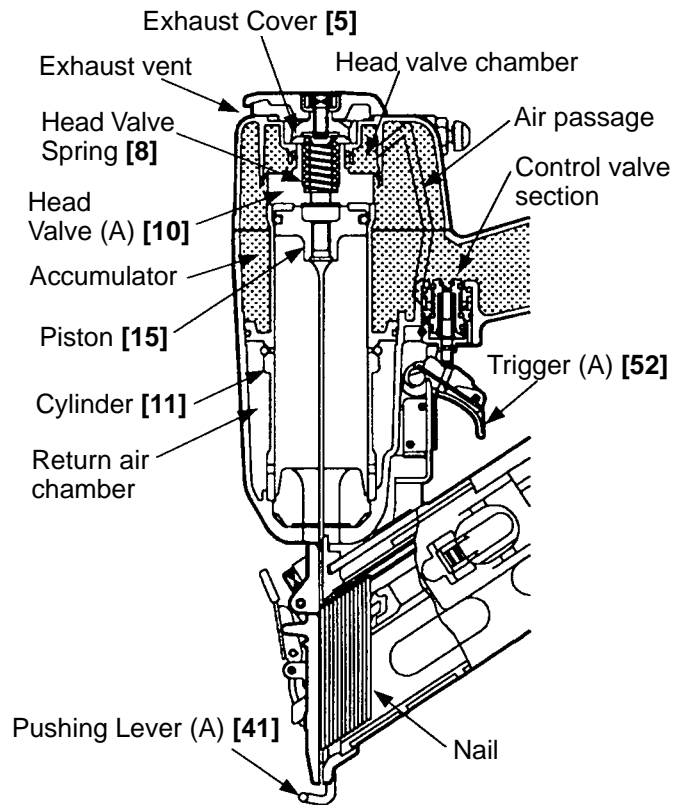
(2) Parts that are interchangeable with those of the Model NT 65MA though their code numbers are different

Parts	Code No. on the Parts List	
	NT 65MA2	NT 65MA
Top Cover <b>[3]</b>	884332	880514
Knob <b>[24]</b>	884334	881713
Lock Lever <b>[34]</b>	884323	881747
Pushing Lever (B) <b>[37]</b>	884326	881749
Adjuster <b>[39]</b>	884325	881748
Pushing Lever (A) <b>[41]</b>	884324	881750
Pushing Lever Guide <b>[56]</b>	884336	880361
Nail Rail <b>[78]</b>	884327	881753

### 8-3. Operation Principle


#### (1) Before nailing: (Fig. 5 and Fig. 6)

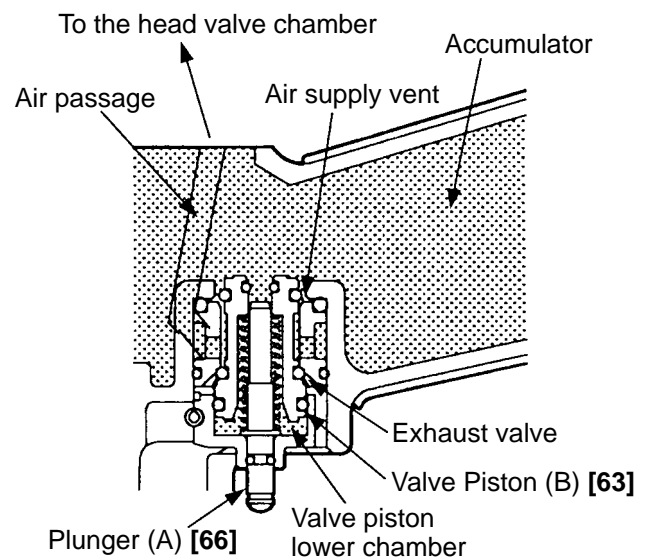
- 1) When compressed air is fed to the main body, it fills the Accumulator (  ).
- 2) At the same time, the compressed air flows into the valve piston lower chamber of the control valve section and forces Valve Piston (B) [63] upward. Also, the compressed air is fed through the air supply vent and air passage to the head valve chamber. As a result, the Head Valve Spring [8] is pushed down together to seal Head Valve (A) [10] and Cylinder [11].



**Fig. 5**

#### (2) When nailing: (Fig. 5 and Fig. 6)

- 1) When Pushing Lever (A) [41] and Trigger (A) [52] are operated together and Plunger (A) [66] is pushed upward, the compressed air in the valve piston lower chamber is discharged from the bottom of Plunger (A) [66]. As a result, the compressed air in the accumulator (  ) pushes down Valve Piston (B) [63], blocking the air supply vent and opening the exhaust valve.
- 2) When the exhaust valve opens, the compressed air in the head valve chamber is discharged into the atmosphere through the air passage.
- 3) When the air pressure applied on the bottom surface of Head Valve (A) [10] overcomes the strength of the Head Valve Spring [8], Head Valve (A) [10] is pushed upward. At this time, Head Valve (A) [10] seals with Exhaust Cover [5], blocking the passage to the exhaust vent.
- 4) When Head Valve (A) [10] goes up, the compressed air in the accumulator flows rapidly into the Cylinder [11], forcing the Piston [15] downward to strike the nail. When the Piston [15] passes the cylinder hole, the compressed air flows into the return air chamber and is accumulated there.

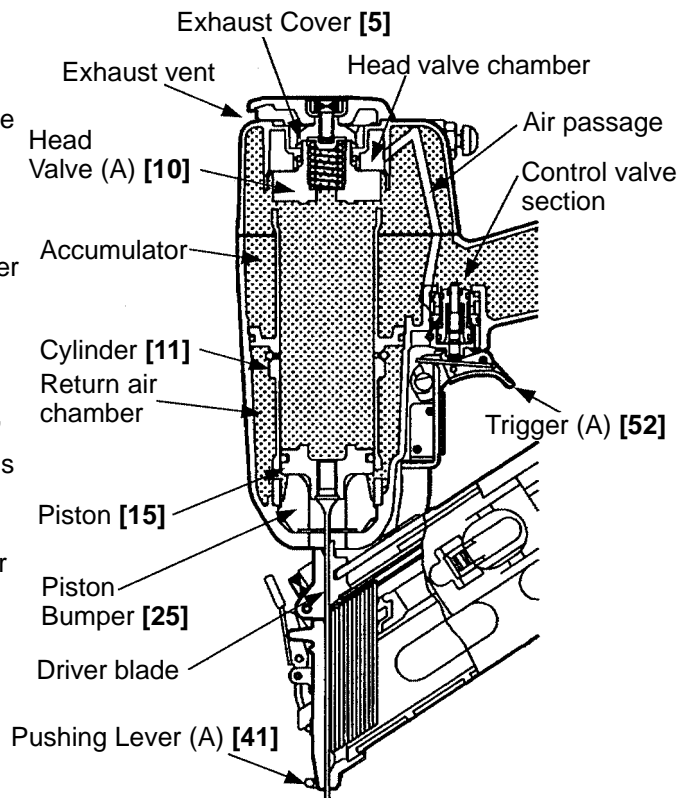


**Fig. 6 Control valve section**

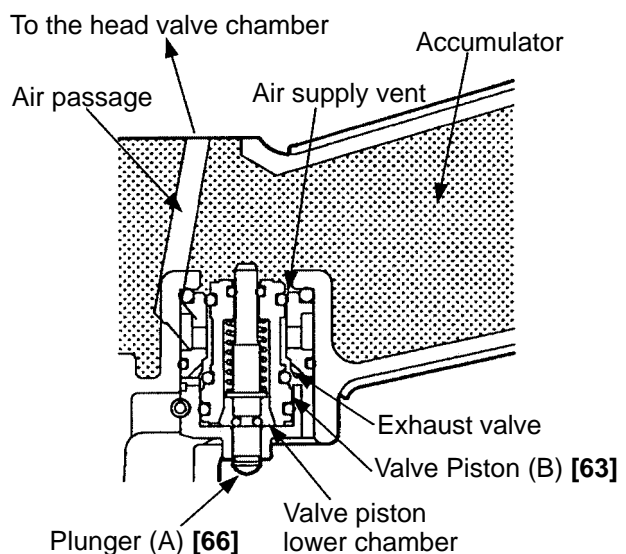


(3) During return: (Fig. 7 and Fig. 8)

- 1) When either Pushing Lever (A) [41] or Trigger (A) [52] is released, Plunger (A) [66] goes down and the compressed air in the accumulator flows into the valve piston lower chamber.
- 2) As the air pressure in the valve piston lower chamber increases to overcome the air pressure applied on the upper portion of Valve Piston (B) [63], Valve Piston (B) [63] is forced upward. When this occurs, the exhaust valve is closed and the air supply vent is opened.
- 3) When the air supply vent opens, the compressed air in the accumulator ( ) passes through the air passage and flows into the head valve chamber to push down Head Valve (A) [10]. As a result, Head Valve (A) [10] and Cylinder [11] are sealed and, at the same time, Head Valve (A) [10] and Exhaust Cover [5] are released to open the exhaust vent.
- 4) The compressed air at the upper portion of the Piston [15] is discharged into the atmosphere through the exhaust vent. In this way, the air pressure at the upper portion of the Piston [15] is reduced, and the greater pressure of the air accumulated in the return air chamber pushes the Piston [15] upward.
- 5) If the air pressure at the lower portion of the Piston [15] is higher than that of the atmosphere after the Piston [15] has fully returned, the excess air pressure is discharged into the atmosphere through the clearance between the Piston Bumper [25] and the driver blade.



**Fig. 7**



**Fig. 8 Control valve section**

(4) Single actuation mechanism/contact actuation mechanism: (Fig. 9 and Fig. 10)

Single/contact actuation mechanism changeover is accomplished by turning the switching device (Change Knob [55]).

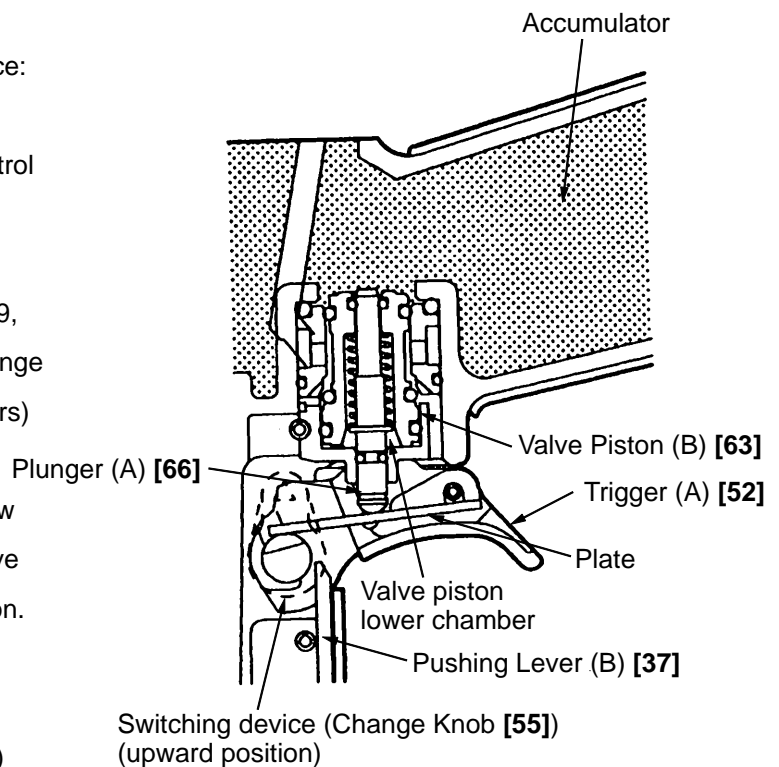
- Single actuation mechanism (Switching device: upward position):

- 1) Immediately after driving the first nail, the control valve should be as shown in Fig. 8.
- 2) When only Pushing Lever (B) [37] is released and Trigger (A) [52] is held as shown in Fig. 9, the plate of Trigger (A) [52] contacts the Change Knob [55] and Plunger (A) [66] returns (lowers) only halfway. Because of this, compressed air does not flow into the valve piston lower chamber, and Valve Piston (B) [63] remains in the lowered position. Accordingly, the Piston [15] remains in the lowered position as shown in Fig. 7.

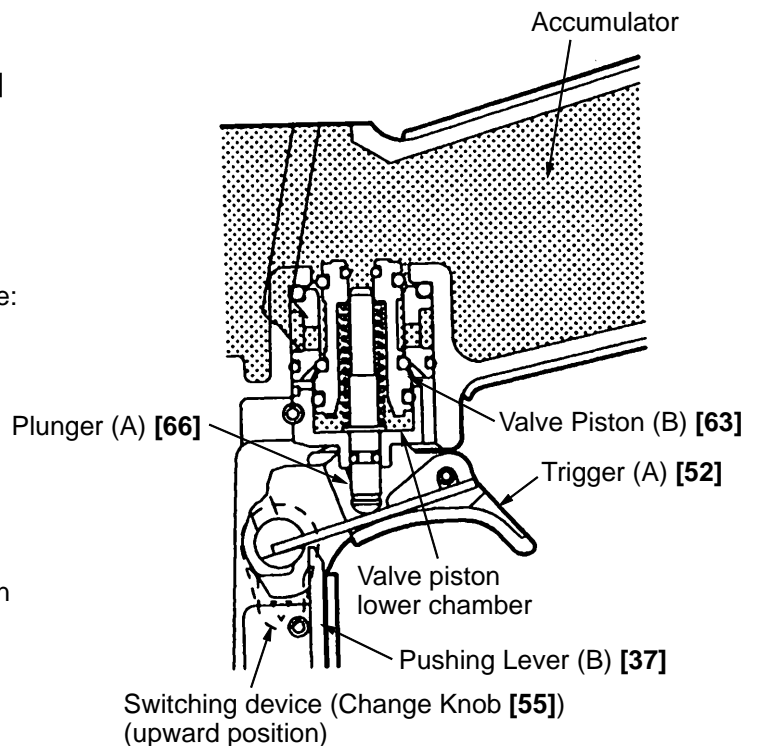
- 3) When Trigger (A) [52] is released, Plunger (A) [66] returns (lowers) completely as shown in Fig. 6. Compressed air then flows into the valve piston lower chamber, and Valve Piston (B) [63] is forced upward. The Piston [15] then returns fully upward. Therefore, unless Trigger (A) [52] is released after each nailing operation, the structural mechanism prevents the next nailing operation.

- Contact actuation mechanism (Switching device: downward position):

- 1) Immediately after the first nail is driven, the control valve should be as shown in Fig. 8.
- 2) Even when only Pushing Lever (B) [37] is released and Trigger (A) [52] is held, Plunger (A) [66] returns (lowers) completely as shown in Fig. 10. Thus the Piston [15] returns (raises) fully. Accordingly, continuous nailing can be accomplished by pushing only Pushing Lever (B) [37] up and down while holding Trigger (A) [52] depressed.



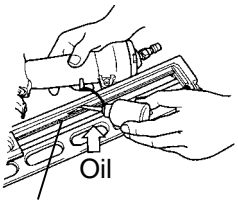
**Fig. 9 Single actuation mechanism**



**Fig. 10 Contact actuation mechanism**

## 9. TROUBLESHOOTING GUIDE

### 9-1. Troubleshooting and Correction

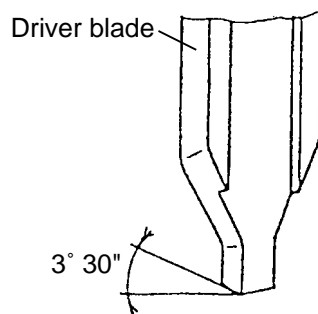
Problem	Possible cause (* : most-common cause)	Inspection method	Remedy
1) Nails cannot be driven.	<Nails>	<ul style="list-style-type: none"> <li>Check that the magazine is correctly loaded with specified nails.</li> </ul>	<ul style="list-style-type: none"> <li>Use specified nails.</li> </ul>
	<ul style="list-style-type: none"> <li>Magazine is not loaded with specified genuine nails.</li> <li>Magazine is loaded with abnormal nails (bent nails, abnormal collation, others).</li> </ul>		<ul style="list-style-type: none"> <li>Remove the abnormal nails and load the nailer with proper nails.</li> </ul>
	<Magazine>	<ul style="list-style-type: none"> <li>Check the nail feeding section for abnormal conditions (burrs, fatigued, deformed, damaged).</li> </ul>	<ul style="list-style-type: none"> <li>Correct the burred or deformed portion.</li> <li>Replace the part.</li> </ul>
	<ul style="list-style-type: none"> <li>Nail feeder is abnormal (burrs, deformed or damaged).</li> <li>Ribbon spring is abnormal (fatigued or damaged).</li> </ul>		<ul style="list-style-type: none"> <li>Replace the part.</li> </ul>
	<ul style="list-style-type: none"> <li>Magazine groove too wide or too narrow.</li> <li>Nail rail groove width too wide or too narrow.</li> <li>Nail groove in the blade guide is abnormal (burrs, deformed or damaged).</li> <li>Magazine cover is abnormal (deformed or damaged).</li> </ul>	<ul style="list-style-type: none"> <li>Check if they move smoothly after loading nails and check if the nail feeder operates smoothly.</li> </ul>	<ul style="list-style-type: none"> <li>Replace the part.</li> <li>Replace the part.</li> <li>Correct the burred or deformed portion.</li> <li>Replace the part.</li> <li>Replace the part.</li> </ul>
	*• Adhesive fragments and wood chips are on the magazine, nail feeder or nail rail.		<ul style="list-style-type: none"> <li>After removing the adhesive fragments and wood chips, lubricate the nail rail.</li> </ul>
			 <p>Nail rail</p>
	<Output section: piston, driver blade, etc.>	<ul style="list-style-type: none"> <li>Keep the nail feeder in the back position after pulling it backward and release the lock lever for idle driving. Then, check if the driver blade and guide plate (A) have returned.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the air pressure to 4.9 to 8.3 bar (5 to 8.5 kgf/cm<sup>2</sup>, 70 to 120 psi)</li> </ul>
	<ul style="list-style-type: none"> <li>Air pressure is too low.</li> <li>O-ring in the piston is abnormal (worn or damaged).</li> <li>Piston bumper is abnormal.</li> </ul>		<ul style="list-style-type: none"> <li>Replace the o-ring.</li> <li>Replace the piston bumper.</li> </ul>
	<ul style="list-style-type: none"> <li>O-ring in the cylinder is abnormal (removed, deformed or damaged).</li> <li>Driver blade is abnormal (burrs, deformed or damaged).</li> <li>Bumper sheet is abnormal (square hole worn, or damaged).</li> </ul>		<ul style="list-style-type: none"> <li>Reassemble or replace the parts.</li> <li>Correct or replace the parts.</li> </ul>
	<ul style="list-style-type: none"> <li>Cylinder inside surface is abnormal (packed with dust, or worn).</li> </ul>	<ul style="list-style-type: none"> <li>Check the nails can be driven at 4.9 bar (5 kgf/cm<sup>2</sup>, 70 psi).</li> </ul>	<ul style="list-style-type: none"> <li>Remove dust and then lubricate.</li> <li>Replace the part.</li> </ul>

Problem	Possible cause (* : most-common cause)	Inspection method	Remedy
1) Nails cannot be driven. (continued)	• Head valve (A) sliding surface is abnormal (seized or damaged, or lubrication is needed.)	• Perform idle driving to check the driving operation.	• Replace the part. • Apply grease.
	• Head valve spring is abnormal (fatigued or damaged).	• Perform idle driving to check that the driver blade is not held in the down position.	• Replace the part.
	<Control valve section > • Plunger (A), valve piston (B), valve bushing (A) or valve bushing (B) is abnormal (seized or damaged).		• Replace the abnormal part.
	• O-ring or sliding surface is worn or needs lubrication.	• Disassemble the control valve section and check the O-rings.	• Replace the abnormal part. • Apply grease.
2) Nails are driven but bent.	*• Adjuster is raised too high for short nails.	• Check that the adjuster is not raised too high.	• Turn the adjuster lower (lower the pressure).
	• Nails are not completely fed into the injection port.	• See item 1).	• See item 1).
	*• Unspecified nails are used.		
	*• Driver blade is worn.	• Check that the driver blade tip is not abnormally worn.	• Replace the part. • Regrind (see 9-2, "Regrinding the Driver Blade").
	• Workpiece is too hard.	• Check if a nail is bent even when driven into soft wood.	• Nailer cannot be used because the material is beyond its applicable range.
3) Nails cannot be driven into the workpiece completely: the heads cannot be made flush.	• Adjuster is incorrectly set.	• Turn the adjuster to the deepest driving position and then drive nails.	• Set the adjuster to the optimum position.
	• Air pressure is too low.		• Adjust the air pressure to 4.9 to 8.3 bar (5 to 8.5 kgf/cm <sup>2</sup> , 70 to 120 psi)
	• Workpiece is too hard.	• Check if a nail is bent even when driven into soft wood.	• Nailer cannot be used because the material is beyond its applicable range.
	*• Driver blade is worn.	• Perform idle driving to check the driver blade is projected from the nose tip.	• Replace the part. • Regrind (see 9-2, "Regrinding the Driver Blade").
	*• O-ring in the piston is abnormal (worn or damaged).	• Disassemble the output section and check the o-ring and the inside of the cylinder for abnormality.	• Replace the O-ring.
	• Cylinder inside surface is abnormal (worn and rough).		• Replace the part.
	• Head valve (A) sliding surface is abnormal (seized or damaged, or lubrication is needed).	• Check the sliding surface for abnormality and lubrication.	• Replace the part. • Apply grease.
4) Nails jam.	*• Unspecified nails are used.	• Check if the specified nails are used.	• Use specified nails.
	< Improper nail feed > • See item "1) Magazine section".	• Check if they move smoothly after loading nails, and check if the nail feeder operates smoothly.	• See item "1) Magazine section".
	• Driver blade is worn.	• Check that the driver blade tip is not abnormally worn.	• Replace the part. • Regrind (see 9-2, "Regrinding the Driver Blade").

Problem	Possible cause (* : most-common cause)	Inspection method	Remedy
4) Nails jam. (continued)	< Driver blade is not returned completely > • See item "1) Output section: piston, driver blade, etc."	• Perform idle or actual driving to check if the driver blade is returned completely.	• See item "1) Output section: piston, driver blade, etc."
5) Single actuation mechanism is not possible.	*• O-ring in plunger (A) is worn.	• Disassemble the control valve section, and check the O-ring of plunger (A) and valve piston (B).	• Replace the part.
	*• O-ring in valve piston (B) is worn.		• Replace the part.
	• Plunger (A) sliding surface abnormal of valve piston (B) (seized or deformed).	• Check each part for abnormalities (worn, damaged, deformed, etc.)	• Replace the part.
	• Abnormal plunger (A), trigger arm (A), pushing lever (B), and/or body (worn or damaged).		• Replace the abnormal part.
	• The position of a switching device is mistaken.	• The position of a switching device is checked.	• A switching device is set to the correct position.
6) Air keeps blowing from the nose of the blow nozzle.	• Spring is abnormal (fatigued or damaged).	• Press the button of the blow nozzle to check if it operates smoothly.	• Replace the spring.
	*• O-ring in the plunger is abnormal (removed, deformed or damaged).		• Reassemble or replace the parts.

## 9-2. Regrinding the Driver Blade

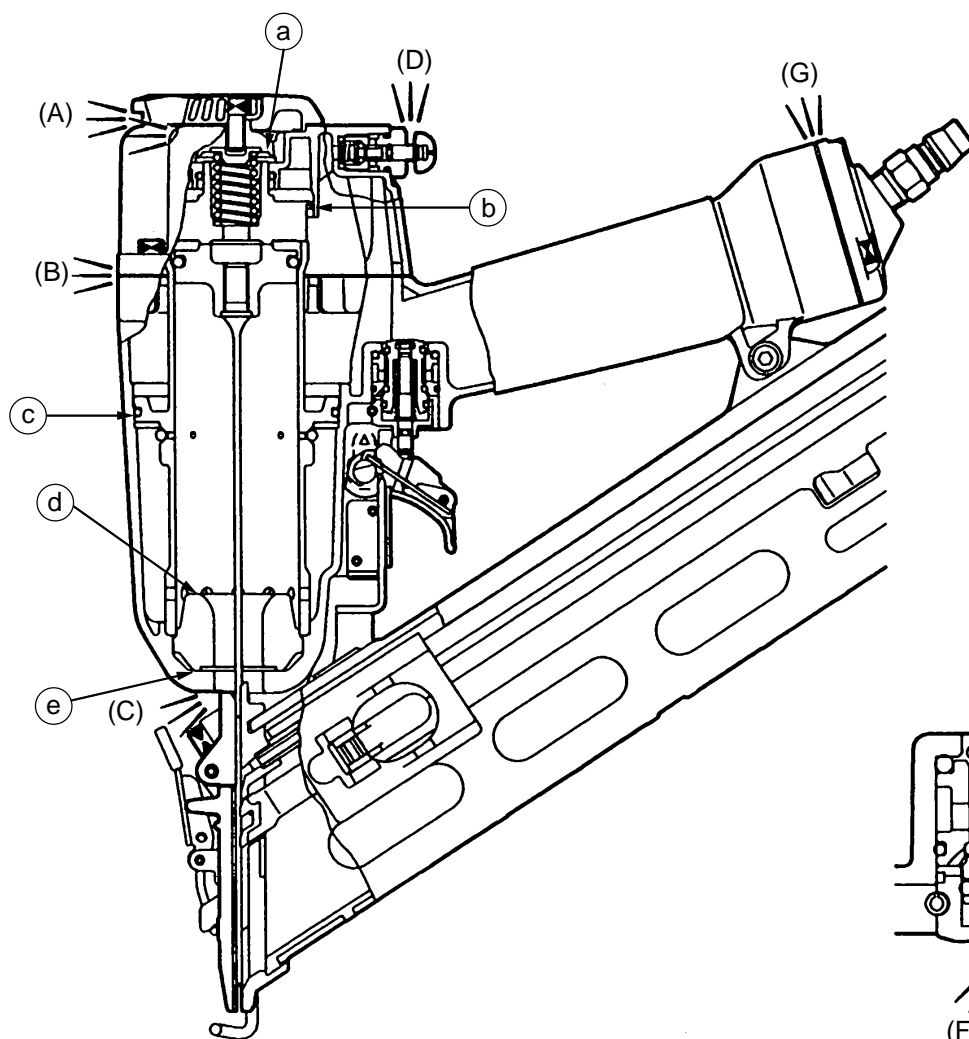
The tip of the driver blade should be ground as shown in Fig. 11. To grind with a grinder, gradually grind the tip while cooling the ground area with water to prevent it from being excessively heated. Excessive grinding will rapidly reduce the service life of the driver blade. In such a case, replace the driver blade.



**Fig. 11**

### 9-3. Possible Causes and Correction of Air Leakage

Air leakage repair location



#### • Repair procedure

- (1) Check the points of the following parts marked by an asterisk for abnormal condition.
- (2) Next, check the seal parts (marked with a double circle) for wear, flaws and damage.
- (3) And then, check other places.

Air leakage point	Possible cause	
	With control valve OFF	With control valve ON
(A) Exhaust port	<ul style="list-style-type: none"> <li>○ Head Valve (A) [10] and Cylinder [11] are abnormal (seal surface of the ⑥ portion is worn or deformed).</li> <li>○ The O-ring (P-22) [9] is abnormal (worn, deformed or damaged).</li> <li>• Head Valve (A) [10] is abnormal (worn, deformed or damaged).</li> </ul>	<ul style="list-style-type: none"> <li>○ Head Valve (A) [10] is abnormal ( ⑥ portion is worn, deformed or broken).</li> <li>* The Exhaust Cover [5] is abnormal ( ⑥ portion is deformed or clogged with dust).</li> </ul>
(B) Exhaust cover	<ul style="list-style-type: none"> <li>• The Hex. Socket Hd. bolt M5 x 20 [4] is loose.</li> <li>○ Gasket [6] is damaged.</li> <li>• The seal surface of the Body Ass'y [29] or the Exhaust Cover [5] is abnormal.</li> </ul>	

Air leakage point	Possible cause	
	With control valve OFF	With control valve ON
(C) Blade guide	<ul style="list-style-type: none"> <li>○ The Cylinder O-Ring (I.D 63.1) <b>[12]</b> is abnormal (broken or damaged).</li> <li>• The seal surface of the Body Ass'y <b>[29]</b> is abnormal ( Ⓒ portion)</li> </ul>	<ul style="list-style-type: none"> <li>○ The Piston Bumper <b>[25]</b> is abnormal ( Ⓓ or Ⓔ portion is damaged, deformed or cracked).</li> <li>• The Piston <b>[15]</b> is abnormal (driver blade or sealed face is deformed).</li> <li>• The Ⓔ surface of the Body Ass'y <b>[29]</b> is deformed.</li> </ul>
(D) Air outlet, valve bushing	<ul style="list-style-type: none"> <li>○ The Valve Packing <b>[16]</b> is damaged.</li> <li>○ The O-Ring (1AP-3) <b>[19]</b> of the Plunger <b>[18]</b> is abnormal (worn, broken or damaged).</li> <li>○ The O-Ring (S3) <b>[20]</b> of the Plunger <b>[18]</b> is abnormal (worn, broken or damaged).</li> <li>• The screw of the Valve Bushing <b>[22]</b> is loose.</li> </ul>	
(E) Control valve (1)	<ul style="list-style-type: none"> <li>○ The O-Ring (I.D 11) <b>[64]</b> on Valve Piston (B) <b>[63]</b> is abnormal (worn, broken or damaged).</li> <li>○ The lower O-ring (I.D 8.8) <b>[61]</b> on Valve Piston (B) <b>[63]</b> is abnormal (worn, broken or damaged).</li> <li>○ The O-Ring (S-18) <b>[60]</b> on Valve Bushing (B) <b>[59]</b> is abnormal (broken or damaged).</li> <li>* The inside surface of the valve chamber of the Body Ass'y <b>[29]</b> is abnormal.</li> </ul>	<ul style="list-style-type: none"> <li>○ The upper O-Ring (I.D 8.8) <b>[61]</b> on Valve Piston (B) <b>[63]</b> is abnormal (worn, broken or damaged).</li> <li>○ The Head Valve O-Ring (I.D 16.8) <b>[58]</b> on Valve Bushing (B) <b>[59]</b> is abnormal (broken or damaged).</li> <li>* The Top surface of the valve chamber of the Body Ass'y <b>[29]</b> is abnormal ( Ⓕ portion).</li> </ul>
(F) Control valve (2)	<ul style="list-style-type: none"> <li>○ The O-ring (I.D 1.8) <b>[67]</b> on Plunger (A) <b>[66]</b> is abnormal (worn, broken or damaged).</li> <li>• Valve Bushing (A) <b>[68]</b> is abnormal (sliding surface of Plunger (A) <b>[66]</b> is deformed or scratched).</li> </ul>	<ul style="list-style-type: none"> <li>○ The inside of the O-ring (S-4) <b>[62]</b> on Valve Piston (B) <b>[63]</b> is abnormal (worn, broken or damaged).</li> <li>• Plunger (A) <b>[66]</b> is abnormal (sliding surface is deformed or scratched).</li> </ul>
(G) Cap (A)	<ul style="list-style-type: none"> <li>○ Gasket (B) <b>[47]</b> is damaged.</li> <li>• The Hex. Socket Hd. Bolt M5 x 16 <b>[49]</b> is loose.</li> <li>• The seal surface of the Body Ass'y <b>[29]</b> or Cap (A) <b>[48]</b> is abnormal (broken, deformed or scratched).</li> </ul>	

## 10. DISASSEMBLY AND REASSEMBLY

The items particularly necessary for disassembly and reassembly are described below. The **[Bold]** numbers in the descriptions below correspond to the item numbers in the Parts List and exploded assembly diagram.

### [CAUTION]

- Before disassembly or reassembly, be sure to disconnect the air hose from the nailer (with your finger released from the trigger) to exhaust all the compressed air and remove all nails.

#### 10-1. General Precautions in Disassembly and Reassembly

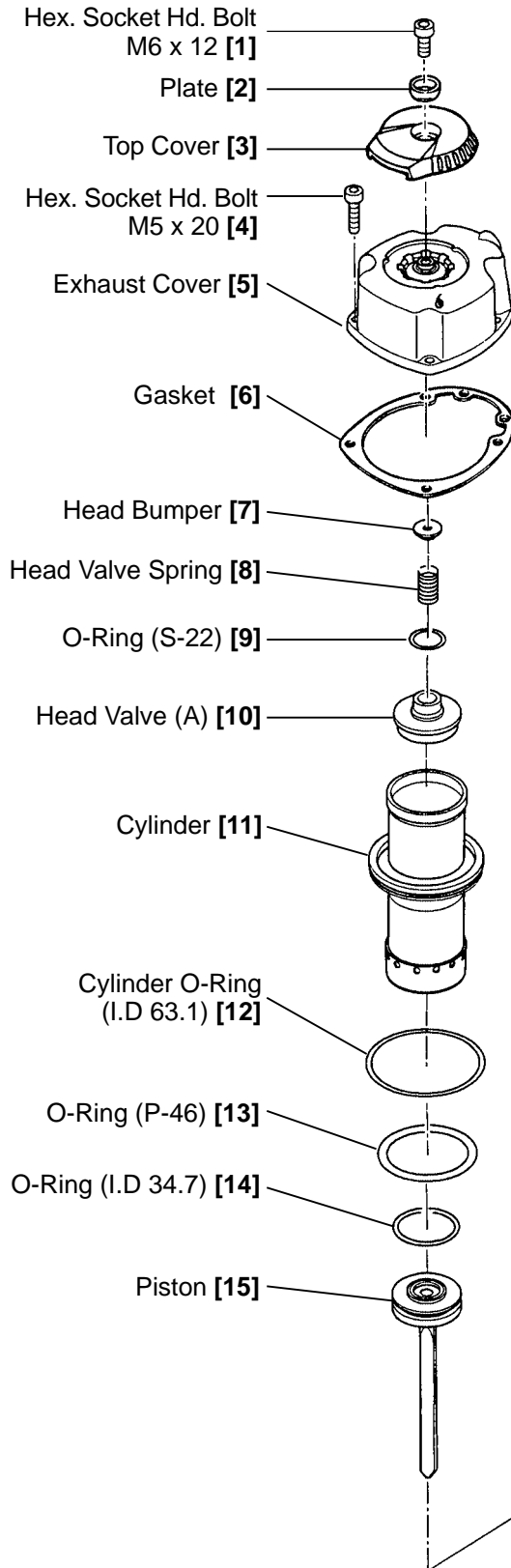
- Apply grease (ATTOLUB No. 2) (Code No. 317918) to the O-rings and O-rings' sliding portions.  
When installing the O-rings, be careful not to damage the O-rings and prevent dirt entry.
- Oil required: Hitachi pneumatic tool lubricant
  - 30 cc (1 oz) Oil feeder (Code No. 877153)
  - 120 cc (4 oz) Oil feeder (Code No. 874042)
  - 1 ltr (1 quart ) Can (Code No. 876212)
- If the Gasket **[6]** is damaged, replace it and check that no air is leaking.
- Be especially careful to prevent the entry of foreign particles into the control valve section.
- Use the conventional grip tape for repair of the Grip Rubber **[45]** because the Grip Rubber **[45]** cannot be mounted without the specifically designed jig.
- Tightening torque for each part

Bolt and screw	Tightening torque N·m (kgf·cm, ft-lb)
Hex. Socket Hd. Bolt M6 ..... <b>[1], [31]</b>	12.7 ± 0.8 (130 ± 8, 9.4 ± 0.6)
Hex. Socket Hd. Bolt M5 ..... <b>[4], [49]</b>	8.3 ± 0.5 ( 85 ± 5, 6.1 ± 0.4)
Hex. Socket Hd. Bolt (W/Flange) M5 ..... <b>[76]</b>	8.3 ± 0.5 ( 85 ± 5, 6.1 ± 0.4)
Machine Screw (W/Washer) M5 ..... <b>[77]</b>	2.0 ± 0.5 ( 20 ± 5, 1.5 ± 0.4)
Valve Bushing ..... <b>[22]</b>	9.8 ± 0.8 (100 ± 8, 7.2 ± 0.6)



## 10-2. Disassembly and Reassembly of the Output Section

(1) Disassembly and reassembly of the Exhaust Cover [5], Head Valve (A) [10], Cylinder [11], Piston [15], Piston Bumper [25], etc. (See Fig. 12.)

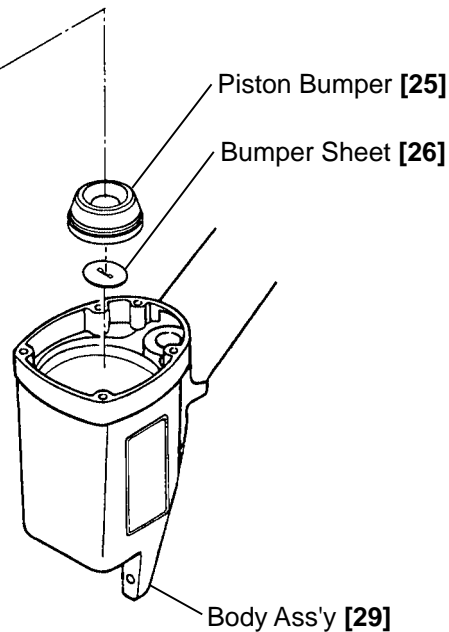


### [Tool required]

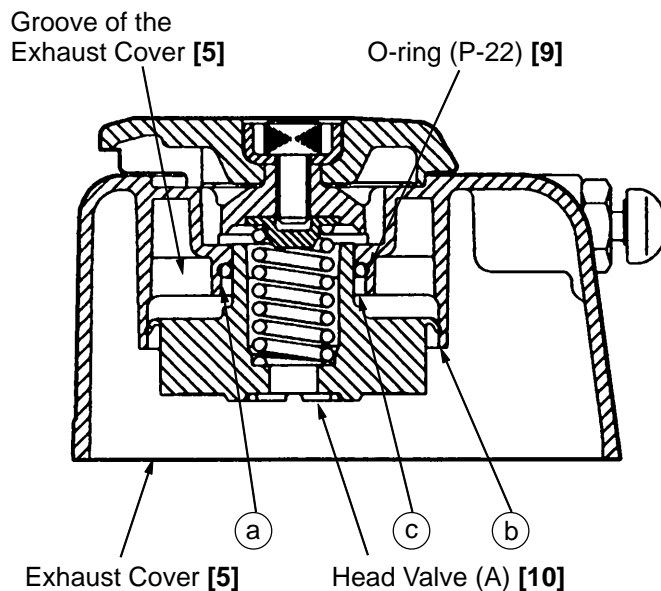
- Hex. bar wrenches (5 mm and 4 mm)

#### (a) Disassembly

- Remove the four Hex. Socket Hd. Bolts M5 x 20 [4] with a hex. bar wrench (4 mm) and remove the Exhaust Cover [5]. Then the components of the output section such as the Cylinder [11], Piston [15], Piston Bumper [25] (with the Bumper Sheet [26] assembled), etc. can be removed.
- Remove the Hex. Socket Hd. Bolt M6 x 12 [1] with a hex. bar wrench (5 mm). The Plate [2] and Top Cover [3] can now be removed.



**Fig. 12 Disassembly and reassembly of the exhaust cover, head valve (A), cylinder, piston, piston bumper, etc.**



**Fig.13**

**(b) Reassembly**

Disassembly procedures should be followed in the reverse order. Note the following points:

- Apply grease to the inside of the Cylinder [11], O-ring (I.D 34.7) [14] and the Cylinder O-ring (I.D 63.1) [12] before reassembly.
- Apply grease to the sliding surface (a) of the Exhaust Cover [5] and Head Valve (A) [10] and charge about 0.5 g (.018 oz) of grease in the groove of the Exhaust Cover [5] (Fig. 13).
- Apply grease to the lip portions (b) and (c) of Head Valve (A) [10] (Fig. 13).
- Apply grease to the O-ring (P-22) [9].

Mount the O-ring (P-22) [9] to Head Valve (A) [10], then mount it to the Exhaust Cover [5].

**(2) Disassembly and reassembly of the Valve Bushing [22], Plunger [18], etc. (See Fig. 14.)**

**[Tools required]**

- Socket wrench (14 mm)
- Flat-blade head screwdriver

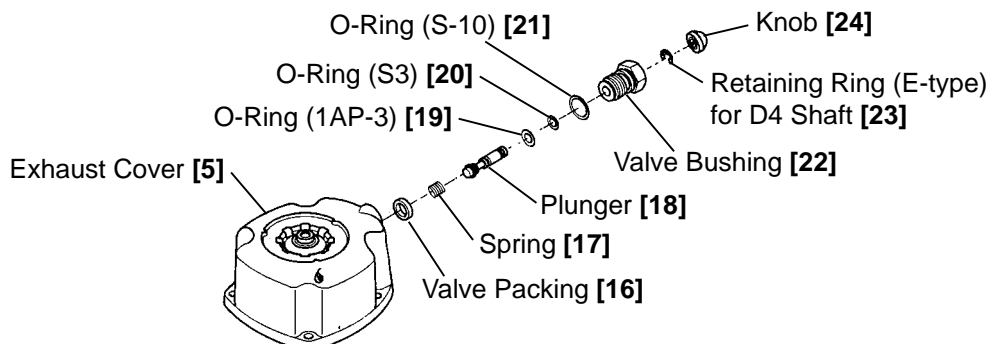
**(a) Disassembly**

- Remove the Valve Bushing [22] with a socket wrench (14 mm ). The Valve Packing [16] and the Spring [17] can now be removed.
- Remove the Knob [24] and the Retaining Ring (E-type) for D4 Shaft [23] then the Plunger [18] can be removed from the Valve Bushing [22].

**(a) Reassembly**

Disassembly procedures should be followed in the reverse order. Note the following points:

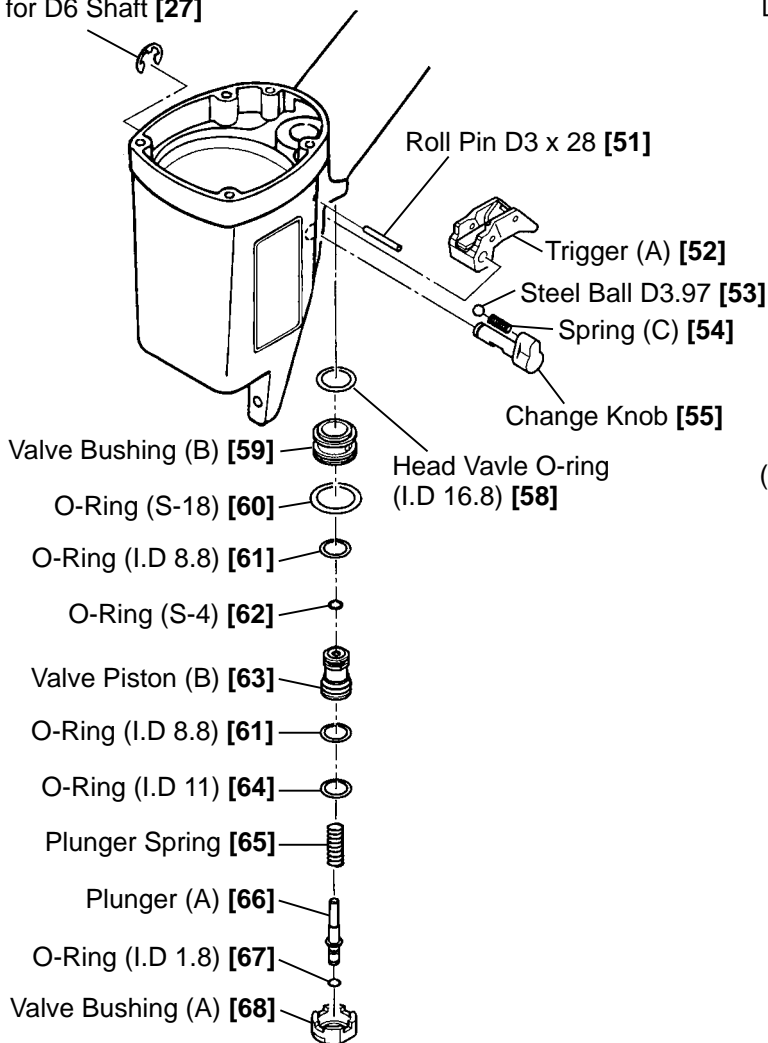
- Apply grease to the O-ring (1AP-3) [19], O-ring (S3) [20] and the O-ring (S-10) [21].
- Mount the Retaining Ring (E-type) for D4 Shaft [23] to the Plunger [18] then press the Knob [24] against the Retaining Ring (E-type) for D4 Shaft [23] to mount it.



**Fig. 14 Disassembly and reassembly of the valve bushing, plunger, etc.**

### 10-3. Disassembly and Reassembly of the Control Valve Section (See Fig. 15.)

Retaining Ring (E-type)  
for D6 Shaft [27]



[Tools required]

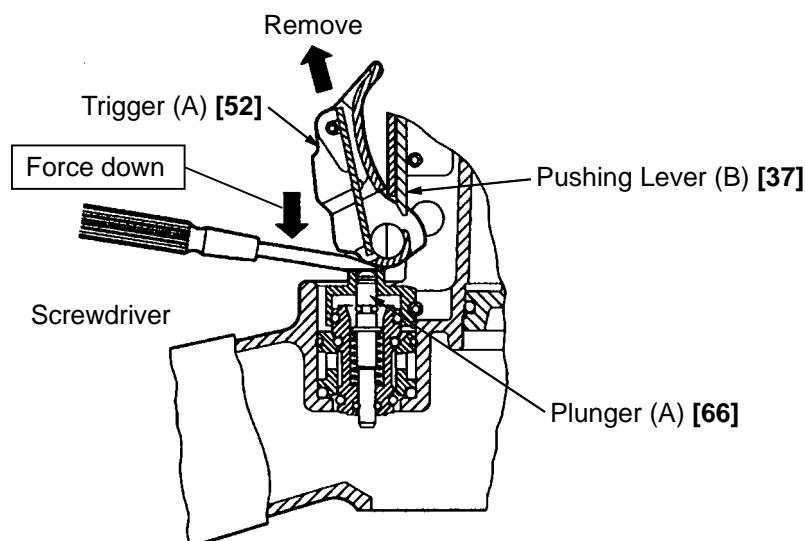
- Flat-blade screwdriver
- Roll pin puller (3 mm (.118") dia.)
- Hex. bar wrench (4 mm)

Carefully disassemble so as  
not to lose these parts.

#### (a) Disassembly

- Remove the Retaining Ring (E-type) for D6 Shaft [27] with the blade of a screwdriver and pull out the Change Knob [55] being careful not to lose the Steel Ball D3.97 [53] and Spring (C) [54]. Then Trigger (A) [52] can be removed.
- To remove Trigger (A) [52] together with the driving section (Pushing Lever (B) [37], Blade Guide [38], etc.), remove Trigger (A) [52] while forcing down Plunger (A) [66] with the blade of a screwdriver, as shown in Fig. 16.

**Fig. 15 Disassembly and reassembly of the control valve section**



**Fig. 16**

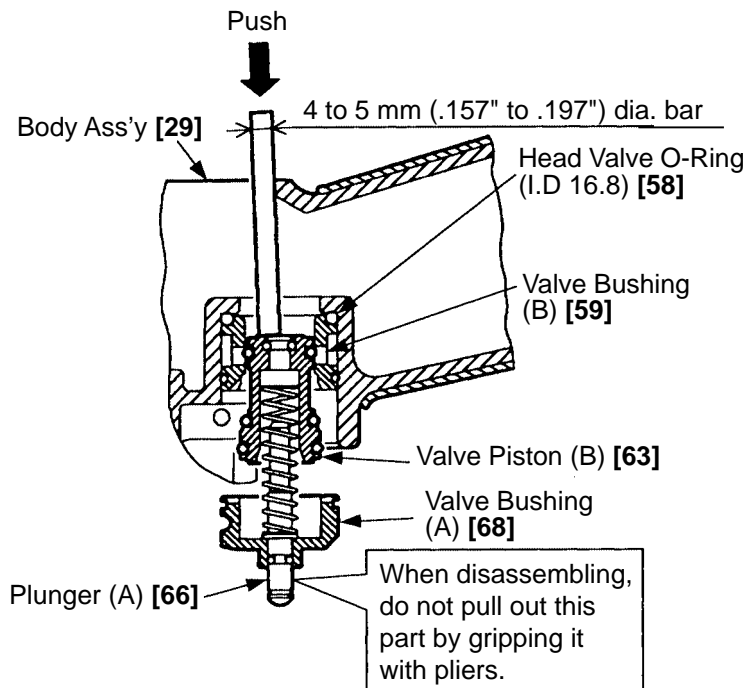


Fig. 17

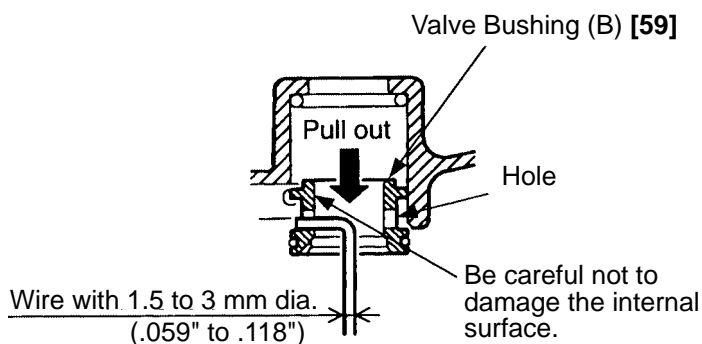


Fig. 18

- Pull out the Roll Pin D3 x 28 [51] with the roll pin puller (3 mm (.118") dia.), and take out the control valve in the following manner.

- 1) Remove the Exhaust Cover [5] by following the procedure in (1), section 10-2.
- 2) As shown in Fig. 17, put a 4 to 5 mm (.157" to .197") dia. bar in from the upper side of the Body Ass'y [29] and push the top of Valve Piston (B) [63]. Now, the parts forming the control valve can be taken out except Valve Bushing (A) [68] and the Head Valve O-Ring (I.D 16.8) [58].

#### [CAUTIONS]

- Be careful not to damage Valve Piston (B) [63], Valve Bushings (A) [68] and (B) [59], etc.
- Do not pull out the end of Plunger (A) [66] with pliers.

- 3) To take out Valve Bushing (B) [59], put a 1.5 to 3 mm (.059" to .118") dia. wire with its end hooked into the hole in the bushing and pull it out while being careful not to damage the internal surface of Valve Bushing (B) [59], as shown in Fig. 18.

(b) Reassembly

Disassembly procedures should be followed in the reverse order. Note the following points:

- Be extremely careful to prevent the entry of foreign particles into the control valve section.
- Thoroughly apply grease to the O-Ring (I.D 1.8) [67] on Plunger (A) [66], O-Rings (S-4) [62], (I.D 8.8) [61] and (I.D 11) [64] on Valve Piston (B) [63], and the shaft of Plunger (A) [66] as shown in Fig. 19.
- As shown in Fig. 19, install Valve Bushing (A) [68] so that the roll pin groove in Valve Bushing (A) [68] will be aligned with the roll pin hole in the Body Ass'y [29]. First, insert a roll pin puller (3 mm (.118" dia.) into the roll pin hole. Then, upon confirming that the puller passes through the hole, drive in the Roll Pin D3 x 28 [51].

If an attempt is made to drive the roll pin with force when the roll pin groove in Valve Bushing (A) [68] is not aligned with the roll pin hole in the Body Ass'y [29], it will damage the periphery of Valve Bushing (A) [68] and prevent disassembly or reassembly.

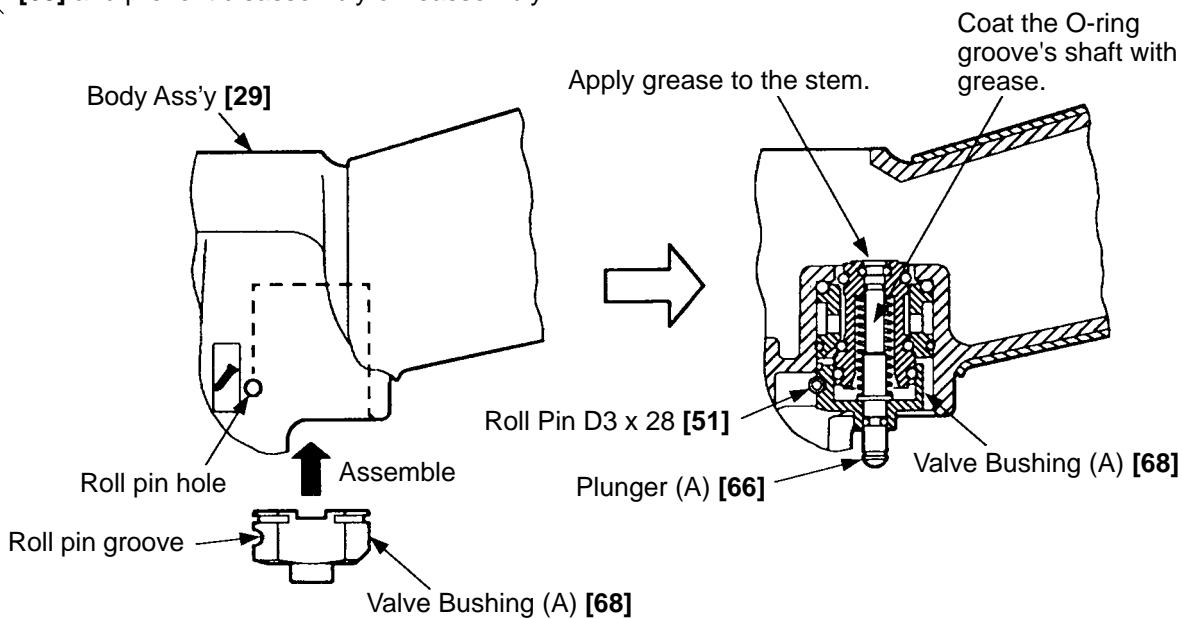
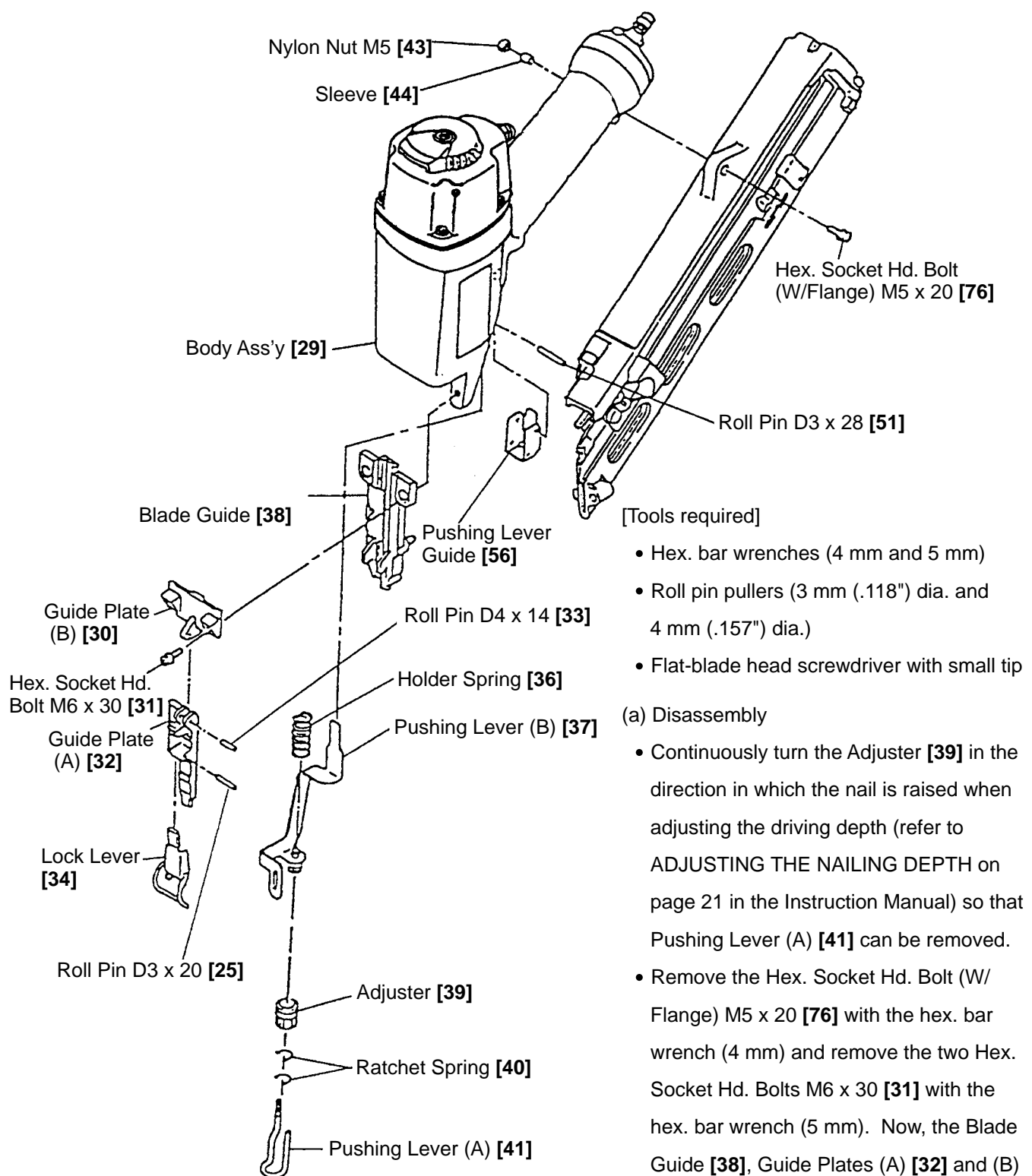


Fig. 19

- After assembling, check that Plunger (A) [66] moves smoothly.

#### 10-4. Disassembly and Reassembly of the Driving Section (See Fig. 20.)



**Fig. 20 Disassembly and reassembly of the driving section**

- Pull out the Roll Pin D4 x 14 [33] with the roll pin puller (4 mm (.157" dia.) so that Guide Plate (A) [32] and Guide Plate (B) [30] can be disassembled.
- Pull out the Roll Pin D3 x 20 [35] and the two Roll Pins D3 x 28 [51] with the roll pin puller (3 mm (.118" dia.) so that the Lock Lever [34] and Pushing Lever Guide [56] can be removed.

(b) Reassembly

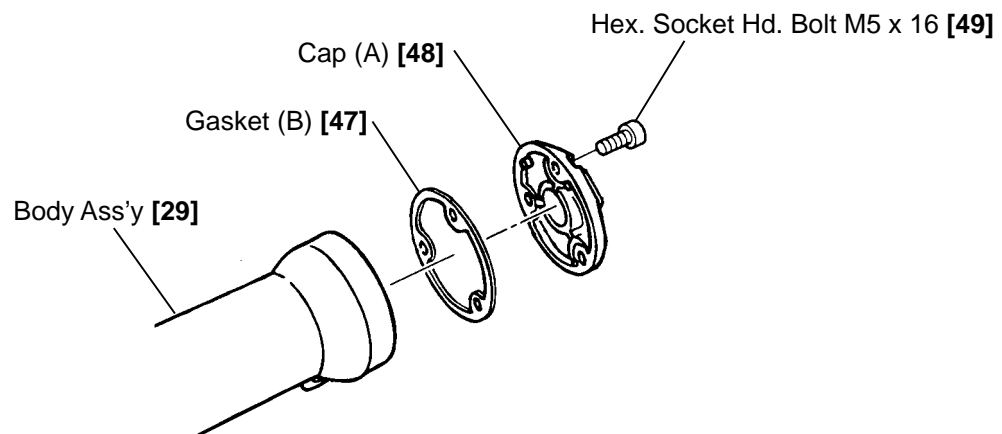
- Disassembly procedures should be followed in the reverse order and tighten the two Hex. Socket Hd. Bolts M6 x 30 [31] after making the Blade Guide [38], Guide Plates (A) [32] and (B) [30] flush with the Body Ass'y [29]. After assembly, check that Pushing Levers (A) [41], (B) [37] and the Adjuster [39] move smoothly.

## 10-5. Disassembly and Reassembly of the Cap and the Magazine Section

(1) Disassembly and reassembly of the cap (See Fig. 21.)

[Tool required]

- Hex. bar wrench (4 mm)



**Fig. 21 Disassembly and reassembly of the cap**

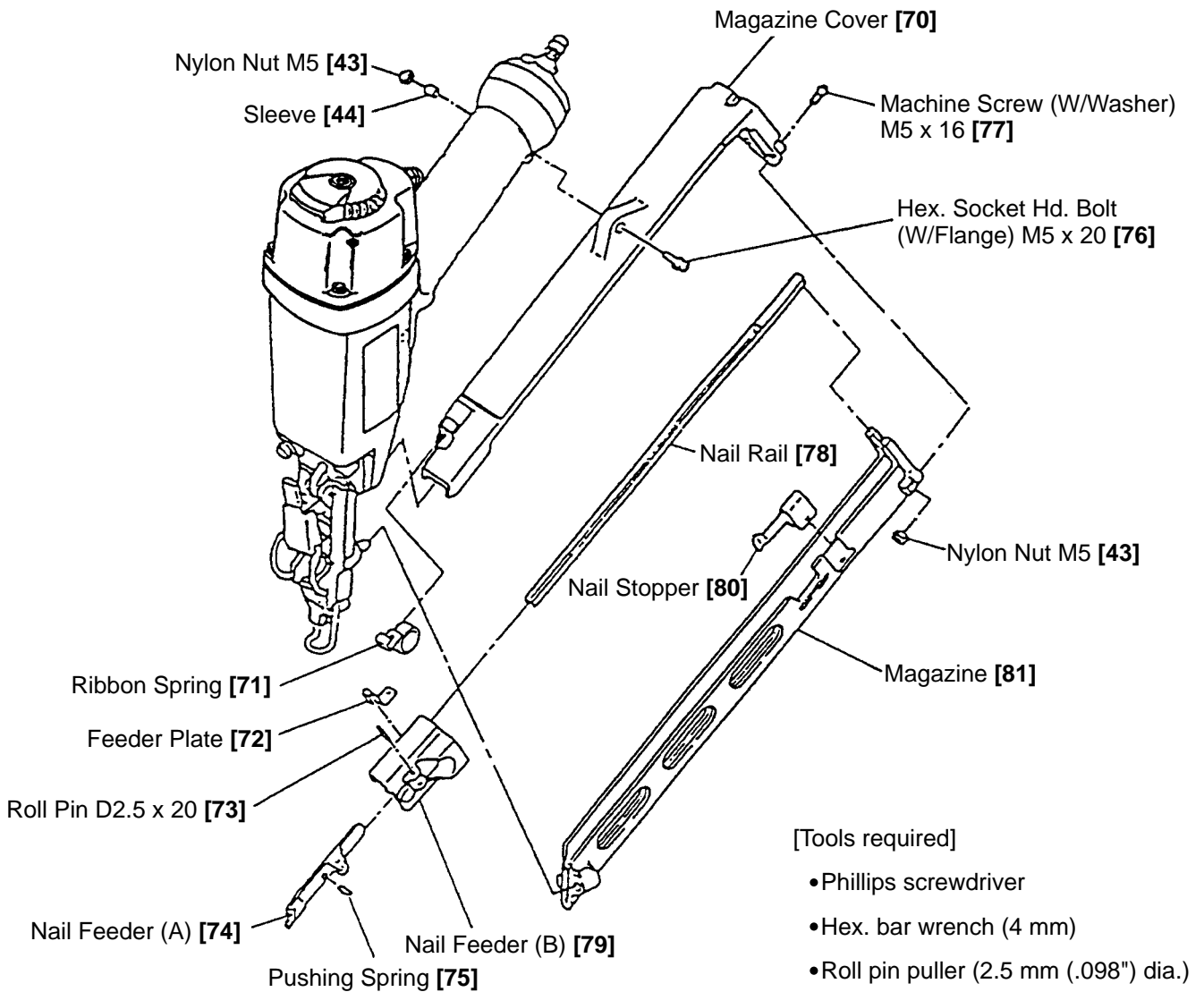
(a) Disassembly

- Remove the three Hex. Socket Hd. Bolts M5 x 16 [49] with the hex. bar wrench (4 mm) so that Cap (A) [48] and Gasket (B) [47] can be removed.

(b) Reassembly

- Disassembly procedures should be followed in the reverse order.

(2) Disassembly and reassembly of the magazine section (See Fig. 22.)



**Fig. 22 Disassembly and reassembly of the magazine section**

**(a) Disassembly**

- Remove the Hex. Socket Hd. Bolt (W/Flange) M5 x 20 [76] with the hex. bar wrench (4 mm) and so that the entire magazine section can be removed and the Ribbon Spring [71], Nail Feeders (A) [74], (B) [79] and Nail Rail [78] can be taken out.
- Remove the two Machine Screws (W/Washer) M5 x 16 (Black) [77] with the Phillips screwdriver so that the Magazine [81] and the Magazine Cover [70] can be removed.
- Pull out the Roll Pin D2.5 x 20 [73] with the roll pin puller (2.5 mm (.098") dia.) so that Nail Feeder (A) [74], Nail Feeder (B) [79] and the Pushing Spring [75] can be removed.

**(b) Reassembly**

Disassembly procedures should be followed in the reverse order. Note the following points:

- The Hex. Socket Hd. Bolt (W/Flange) M5 x 20 [76] should be tightened while pressing the Magazine [81] and the Magazine Cover [70] so that there will be no space between the Magazine [81] and the Blade Guide [38].
- Lubricate the Nail Rail [78] and the Ribbon Spring [71] with Hitachi pneumatic tool lubricant to smooth the movement of Nail Feeders (A) [74] and (B) [79].



## 11. INSPECTION AND CONFIRMATION AFTER REASSEMBLY

Be sure to check the following items after reassembly. Pay special attention to the items (2) and (4) about the single actuation (single sequential actuation) mechanism that is not provided to the Model NT 65MA but the Model NT 65MA2. Before checking the following items except (5), check that no nail is loaded in the Magazine **[81]** and the Blade Guide **[38]**.

- (1) Check that Pushing Levers (A) **[41]** and (B) **[37]**, Trigger (A) **[52]**, Plunger (A) **[66]**, Change Knob **[55]** and Adjuster **[39]** operate smoothly without connecting to an air compressor. Then check that Nail Feeders (A) **[74]** and (B) **[79]** move smoothly in the Magazine **[81]**.
- (2) Connect the Model NT 65MA2 to an air compressor and set the Change Knob **[55]** to "single actuation (single sequential actuation)" (see 5-2). Check the following when the pressure is 4.5 kgf/cm<sup>2</sup> (63 psi) and 8.5 kgf/cm<sup>2</sup> (120 psi).
  - Check that there is no air leakage and the Model NT 65MA2 does not operate (i.e., check that the Piston **[15]** does not come out of the Blade Guide **[38]** tip (outlet of nails) when it is left for five seconds or more).
- (3) Set the Change Knob **[55]** to "contact actuation" (see 5-2). Check the following when the pressure is 8.5 kgf/cm<sup>2</sup> (120 psi).
  - 1) Check that the Model NT 65MA2 does not operate just by pulling Trigger (A) **[52]**.
  - 2) Check that the Model NT 65MA2 does not operate just by pressing Pushing Lever (A) **[41]** against a test piece (wood etc.)
  - 3) Check that the Model NT 65MA2 operates by pulling Trigger (A) **[52]** first then pressing Pushing Lever (A) **[41]** against a test piece.
- (4) Set the Change Knob **[55]** to "single actuation (single sequential actuation)" (see 5-2). Check the following when the pressure is 8.5 kgf/cm<sup>2</sup> (120 psi).
  - 1) Check that the Model NT 65MA2 does not operate just by pulling Trigger (A) **[52]** (i.e., check that the Piston **[15]** does not come out of the Blade Guide **[38]** tip (outlet of nails) when keeping Trigger (A) **[52]** pulled for five seconds or more).
  - 2) Check that the Model NT 65MA2 does not operate just by pressing Pushing Lever (A) **[41]** against a test piece.
  - 3) Check that the Model NT 65MA2 operates by pressing Pushing Lever (A) **[41]** against a test piece first then pulling Trigger (A) **[52]**. Check that the Piston **[15]** is still showing from the Blade Guide **[38]** tip (outlet of nails) after Pushing Lever (A) **[41]** is released from the test piece with Trigger (A) **[52]** pulled.
- (5) Set the Change Knob **[55]** to "contact actuation". Set the pressure to 4.5 kgf/cm<sup>2</sup> (63 psi) and load nails in the Magazine **[81]**. Perform nailing operation and check that nails are properly driven (no idling and bent nails).
- (6) Recheck the tightening torque of each screw without connecting to an air compressor.

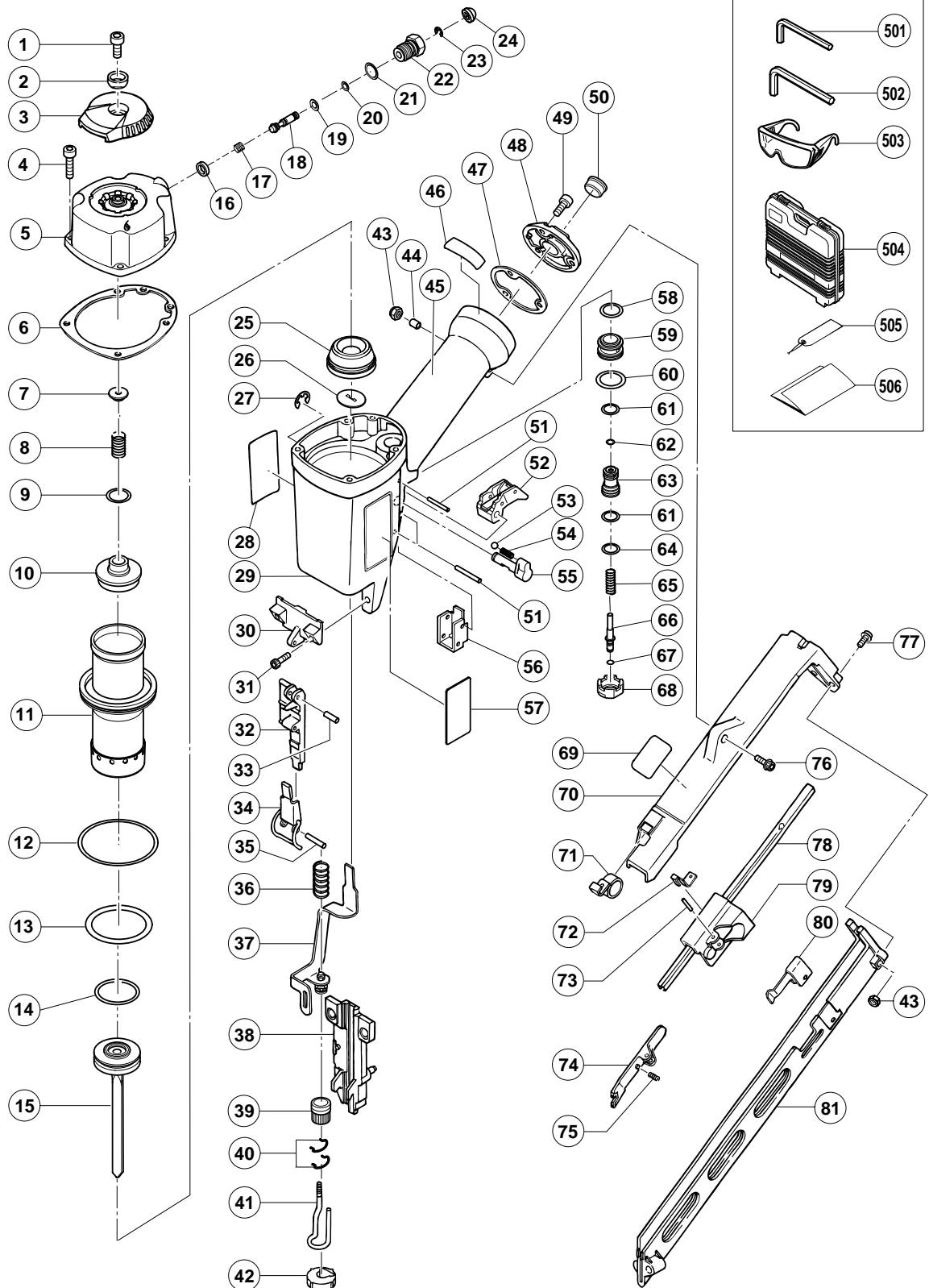
## 12. STANDARD REPAIR TIME (UNIT) SCHEDULES

MODEL	Fixed	Variable	10	20	30	40	50	60 min.
NT 65MA2		Work Flow						
				Top Cover Exhaust Cover Gasket Head Valve Spring	Guide Plate (B) Guide Plate (A) Plate Guide Magazine Magazine Cover Nail Feeder (A) Nail Rail Nail Feeder (B)			
		Knob Plunger O-ring x 3 Valve Bushing		O-ring Head Valve Spring				
		General Assembly						
				Pushing Lever (B) Holder Spring Adjuster Pushing Lever (A) Piston O-ring Trigger (A) Pushing Lever Guide Valve Bushing (B) Valve Piston (B) Plunger Spring Plunger (A) Valve Bushing (A) Head Valve O-ring O-ring x 6	Cylinder Cylinder O-ring O-ring Piston Bumper Bumper Sheet			Body
				Adjustment (Cylinder, Body, Valve)				

## PNEUMATIC TOOL PARTS LIST

### FINISH NAILER Model NT 65MA2

2003 • 8 • 5  
(E1)



# PARTS

NT 65MA2

ITEM NO.	CODE NO.	DESCRIPTION	NO. USED	REMARKS	
1	949-657	HEX. SOCKET HD. BOLT M6X12 (10 PCS.)	1		
2	880-515	PLATE	1		
3	884-332	TOP COVER	1		
4	949-757	HEX. SOCKET HD. BOLT M5X20 (10 PCS.)	4		
5	884-331	EXHAUST COVER	1		
6	880-358	GASKET	1		
7	882-914	HEAD BUMPER	1		
8	882-913	HEAD VALVE SPRING	1		
9	876-796	O-RING (P-22)	1		
10	882-912	HEAD VALVE (A)	1		
11	884-329	CYLINDER	1		
12	877-312	CYLINDER O-RING (I.D 63.1)	1		
13	878-716	O-RING (P-46)	1		
14	882-685	O-RING (I.D 34.7)	1		
15	884-330	PISTON	1		
16	881-711	VALVE PACKING	1		
17	881-900	SPRING	1		
18	884-333	PLUNGER	1		
19	873-093	O-RING (1AP-3)	1		
20	881-715	O-RING (S3)	1		
21	987-105	O-RING (S-10)	1		
22	882-701	VALVE BUSHING	1		
23	968-643	RETAINING RING (E-TYPE) FOR D4 SHAFT	1		
24	884-334	KNOB	1		
25	881-741	PISTON BUMPER	1		
26	881-756	BUMPER SHEET	1		
27	955-479	RETAINING RING (E-TYPE) FOR D6 SHAFT	1		
28	884-070	WARNING LABEL	1		
29	884-328	BODY ASS'Y	1	INCLUD. 45	
30	881-764	GUIDE PLATE (B)	1		
31	949-661	HEX. SOCKET HD. BOLT M6X30 (10 PCS.)	2		
32	881-743	GUIDE PLATE (A)	1		
33	949-770	ROLL PIN D4X14 (10 PCS.)	1		
34	884-323	LOCK LEVER	1		
35	949-685	ROLL PIN D3X20 (10 PCS.)	1		
36	877-894	HOLDER SPRING	1		
37	884-326	PUSHING LEVER (B)	1		
38	881-742	BLADE GUIDE	1		
39	884-325	ADJUSTER	1		
40	881-765	RATCHET SPRING	2		
41	884-324	PUSHING LEVER (A)	1		
42	881-751	NOSE CAP (A)	1		
43	877-371	NYLON NUT M5	3		
44	881-774	SLEEVE	1		
45		GRIP RUBBER	1	(SUPPLIED WITH ITEM NO. 607, 608)	
46		CAUTION PLATE	1		
47	881-769	GASKET (B)	1		
48	881-758	CAP (A)	1		
49	949-821	HEX. SOCKET HD. BOLT M5X16 (10 PCS.)	3		
50	872-035	DUST CAP	1		
51	949-865	ROLL PIN D3X28 (10 PCS.)	3		

## PARTS

NT 65MA2

[illegible]

## STANDARD ACCESSORIES

NT 65MA2

[illegible]

## OPTIONAL ACCESSORIES

[illegible]

