

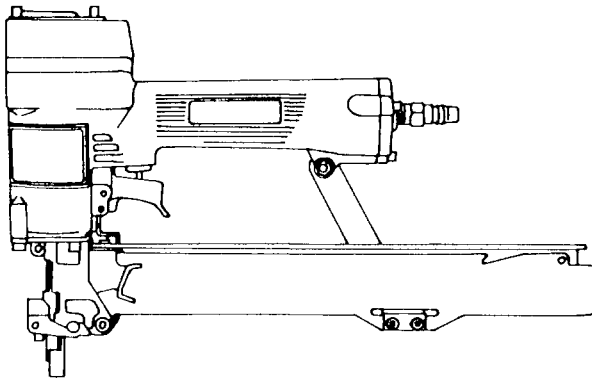


HITACHI

PNEUMATIC STAPLER

MODEL N3804A

INSTRUCTION MANUAL



Note

Before using this Pneumatic Power Tool, carefully read through this INSTRUCTION MANUAL to ensure efficient, safe operation. It is recommended that this MANUAL be kept readily available as an important reference when using this pneumatic power tool.

We sincerely thank you for selecting a HITACHI PNEUMATIC POWER TOOL. To operate this pneumatic power tool safely and efficiently, please read this INSTRUCTION MANUAL carefully to get a good understanding of the precautions in operation, the capacity of the pneumatic power tool, uses and the like.

GENERAL OPERATIONAL PRECAUTIONS

1. OPERATE THE POWER TOOL SAFELY FOR CORRECT USE.

Do not use the power tool for uses other than those specified in this INSTRUCTION MANUAL.

2. FOR SAFE OPERATION HANDLE THE POWER TOOL CORRECTLY.

Please follow the instructions given in this instruction manual and correctly handle this tool so as to ensure safe operation. Never let the tool be used by children or people who do not know enough to be able to handle it correctly, or let it be used by people who cannot operate it correctly.

3. ORDER IS THE FIRST STEP TO SAFETY.

The workshop should always be kept in order and be lighted properly. Order is the first step to safety. Always keep the workshop and workbench in order.

4. CONFIRM THE SAFETY OF THE WORKSHOP.

Keep unauthorized people away from the workshop. Especially children should be kept away.

5. THE RIGHT PARTS IN THE RIGHT PLACES.

Do not remove any of the covers or screws. Keep them in place as they have their functions.

Moreover, because it would be dangerous, never make modifications to the tool or use it after making modifications.

6. CHECK THE TOOL BEFORE USING IT.

Before using the tool, always check that no parts of it are broken, that all screws are completely tight, and that no parts are missing or rusty.

7. PROPER CLOTHES SHOULD BE WORN.

Work in proper clothes. Neckties, gloves and open cuffs could be caught by the power tool.

8. PROTECT YOUR EYES WITH SAFETY EYE PROTECTION.

When operating the power tool always wear safety eye protection.

9. A CORRECT STANCE IS A PREREQUISITE FOR SAFE HANDLING.

It is dangerous to work the machine unless you are firmly in control.

10. EXCESSIVE WORK COULD CAUSE ACCIDENTS.

Do not make tools and accessories work beyond their abilities. Excessive work not only damages the power tool but also is dangerous in itself.

11. STOP OPERATION IMMEDIATELY IF ABNORMALITIES ARE NOTICED.

Stop operation if you notice abnormalities, or if the power tool does not work properly, have the power tool inspected and serviced.

12. NEVER EXPOSE COMPRESSOR, AIR SET AND STAPLER TO DIRECT SUNSHINE FOR EXTENDED PERIODS.

13. LOOK AFTER THE POWER TOOL CAREFULLY.

If you drop or knock the power tool against things, the outer frame may be deformed and cracks or other kinds of damage may occur, so please handle it with sufficient care. Also, do not scratch or engrave signs on the power tool. Owing to high pressure air inside the tool, cracks in the surface are dangerous.

Never use the power tool if a crack develops or if air is escaping from a crack.

14. TAKE GOOD CARE FOR A LONG LIFE.

Always take good care of the power tool and keep it clean.

15. INSPECTION AT REGULAR INTERVALS IS ESSENTIAL FOR SAFETY.

Inspect the power tool at regular intervals so that the power tool can be operated safely and efficiently at all times.

16. ASK THE AUTHORIZED SERVICE AGENT FOR REPAIRING AND CHANGING PARTS.

When servicing use only identical replacement parts.

17. KEEP THE POWER TOOL IN A PROPER PLACE.

When not in use, the power tool should be kept in a dry place out of the reach of children. Put into the body about 2cc oil through the hose joint to protect the tool from rust.

PRECAUTIONS ON USING STAPLER

General precautions for using the power tool have already been mentioned. For the HITACHI stapler, specific precautions are given below. Expect these precautions to be carefully followed when using this efficient tool for stapling.

1. SAFE OPERATION THROUGH CORRECT USAGE. (SEE PASE 8)

This tool was designed for driving staples into wood and similar materials.

Use it for its intended purpose only.

2. MAKE SURE AIR PRESSURE IS WITHIN THE RATED RANGE OF AIR PRESSURE.

Please make sure that the air pressure is within a range of 5kg/cm²-8.5kg/cm²(70~120psi.), and that the air which is used is clean and dry. If the air pressure is greater than 8.5kg/cm²(120psi.), the life of the power tool will be shortened and dangerous conditions could develop.

Toos shall not be connected to pressure which potentially exceeds 14kg/cm²(200psig).

3. NEVER OPERATE THE EQUIPMENT WITH HIGH-PRESSURE GASES OTHER THAN COMPRESSED AIR.

Never use carbon dioxide, oxygen or another gas from pressurized containers under any circumstances.

4. BE CAREFUL OF IGNITION AND EXPLOSIONS.

Since sparks may fly during stapling, it is dangerous to use this tool near lacquer, paint, benzine, thinner, gasoline, gas, adhesives and similar inflammable substances as they may ignite or explode. Under no circumstances should this tool therefore be used in the vicinity of such inflammable material.

5. PROTECT YOUR EYES WITH SAFETY EYE PROTECTION.

When operating the power tool, always wear safety eye protection and ensure that surrounding people wear safety eye protection too.

The possibility of fragments of the staples that were not properly hit entering the eye is a threat to sight.

Safety ey protection can be bought at any hardware store.

Always wear eye safety protection while operating this tool. Use either safety glasses or a wide vision safety mask over prescription glasses.

Eye protection equipment must conform with the requirements of the latest revision of American National Standards Institute(ANSI) Standard Z87.1, Practice for Occupational and Educational Eye and Face Protection, and must afford protection against flying particles both from the front and side. Eye protection which meets these requirements also conforms to OSHA regulations.

Employers should always enforce the use of eye protection equipment.

6. PROTECT YOUR EARS AND HEAD.

When engaged in stapling work please wear ear mufflers and head protection. Also, depending on conditions, ensure that surrounding people also wear ear mufflers and head protection.

7. PAY ATTENTION TO THOSE WORKING CLOSE TO YOU.

It would be very dangerous if staples that wear not properly driven in should hit other people. Therefore, always pay attention to the safety of the people around you when using this tool. Always make sure that nobody's body, hands or feet are close to the staple outlet.

8. NEVER POINT THE STAPLE OUTLET TOWARDS PEOPLE.

Always assume the tool contains fasteners.

If the staple outlet is pointed towards people, serious accidents may be caused if you mistakenly discharge the tool. When connecting and disconnecting the hose, during staple loading or similar operations, be sure the staple outlet is not pointed towards anyone(including yourself). Even when no staples are loaded at all, it is dangerous to

discharge the tool while pointing it at someone, so never attempt to do so. No horseplay. Respect the tool as a working implement.

9. MAKE SURE YOU CONNECT AND HANDLE THE HOSE PROPERLY.

Make sure that the hose is securely fastened into the hose air socket with the hose band and that the air plug is securely seated. Old hoses tend to fly out of the air socket, so please replace the hose before it ages.

It is dangerous to move the power tool by pulling on the hose so avoid doing this. Also take care that the hose does not get cut by sharp edges.

10. BEFORE USING THE POWER TOOL, CHECK THE PUSH LEVER.

Before using the power tool make sure to check that the push lever and valve operate properly. Without staples loaded into the power tool, connect the hose and check the following. If the sound of operation occurs this indicates a fault, so in such a case do not use the power tool until it has been inspected and repaired.

- If merely pulling the trigger causes operating sound of drive bit movement to occur, the power tool is faulty.
- If merely pushing the push lever against the material to be stapled causes the sound of drive bit movement to occur the power tool is faulty.

Furthermore, with regard to the push lever, please note that it must never be modified or removed.

11. USE ONLY THE SPECIFIED STAPLES.(SEE PAGE 7)

Never use any staples other than the ones specified as this may cause abnormal stapling or malfunctions.

12. BE CAREFUL WHEN CONNECTING THE HOSE.

When connecting the hose and loading staples in order not to fire the tool by mistake, make sure of the following:

- Do not touch the trigger.
- Do not allow the firing head(see page 7) to contact with any surface.
- Keep the firing head down.

Strictly observe the above instructions, and always make sure that no part of the body, hands or legs is ever in front of the staple outlet.

13. DO NOT CARELESSLY PLACE YOUR FINGER ON THE TRIGGER.

Do not place your finger on the trigger except when actually stapling. If you carry this tool or hand it to someone while having your finger on the trigger, you may inadvertently discharge a staple and thus cause an accident.

14. PRESS THE STAPLE OUTLET FIRMLY AGAINST THE MATERIAL TO BE STAPLED.

When driving in staples, press the staple outlet firmly against the material to be stapled. If the outlet is not applied properly, the staples may rebound.

15. KEEP HANDS AND FEET AWAY FROM THE FIRING HEAD WHEN USING.

It is very dangerous for a staple to hit the hands or feet by mistake.

16. BEWARE OF THE TOOL'S KICKBACK.

Do not approach the top of the tool with your head etc. during operation. This is dangerous because the tool may recoil violently if the staple currently being driven in comes into contact with a previous staple or a knot in the wood.

17. TAKE CARE WHEN STAPLING THIN BOARDS OR THE CORNERS OF WOOD.

When stapling thin boards, the staples may pass right through, as may also be the case when stapling the corners of wood due to deviation of the staples. In such cases, always make sure that there is no one (and nobody's hands or feet, etc.) behind the thin board or next to the wood you are going to staple.

18. SIMULTANEOUS STAPLING ON BOTH SIDES OF THE SAME WALL IS DANGEROUS.

Under no circumstances should stapling be performed on both sides of a wall at the same time. This would be very dangerous since the staples might pass through the wall and thus cause injuries.

19. WHEN USING THIS TOOL IN ELEVATED PLACES...

Take the following points into consideration when operating this tool in elevated places:

- Secure the hose at a point close to the area you are going to staple. This will prevent accidents caused due to the hose being pulled inadvertently or getting caught.
- When stapling roofs or similar slanted surfaces, start stapling at the lower part and gradually work your way up. Stapling while moving backwards is dangerous as you may lose your footing.
- On the other hand, stapling vertical surfaces such as walls should be performed from the top to the bottom as this helps you avoid fatigue and enables more efficient work.
- When stapling horizontal surfaces, drive in the staples while moving forward. This is the safest method and will help you avoid fatigue while enabling more efficient work.

20. BE CAREFUL OF WIRES AND PIPES HIDDEN BEHIND WALLS AND CEILINGS, ETC.

When using this tool on walls, ceilings, floors, or anywhere electrical wires and gas or other pipes may be hidden, check for the possible presence thereof before beginning work. Failing to do so exposes the user to the potentially serious danger of serious electrical shock and/or explosion.

21. DO NOT DISCONNECT THE HOSE WITH YOUR FINGER ON THE TRIGGER.

If you disconnect the hose with your finger on the trigger, the next time the hose is connected, there is a danger that the power tool will fire a staple spontaneously, or operate incorrectly.

22. DISCONNECT THE HOSE AND TAKE OUT ANY STAPLES LEFT IN THE MAGAZINE AFTER USE.

Disconnect tool from air before doing tool maintenance, cleaning a jammed fastener, leaving work area, moving tool to another location, or after use. It is very dangerous for a staple to be fired by mistake.

23. WHEN REMOVING A STAPLE WHICH HAS BECOME STUCK, MAKE SURE TO FIRST OF ALL DISCONNECT THE HOSE AND RELEASE COMPRESSED AIR.

When removing a staple which has become stuck in the staple outlet, first of all make sure to disconnect the hose and release compressed air inside the power tool. Accidental firing of the staple could be very dangerous.

24. A FEMALE PLUG(AIR SOCKET) SHOULD NOT BE USED IN THE BODY.

If a female plug is installed in the body, the compressed air sometimes can not be drawn when the hose is disconnected so avoid this. The tool and air supply hose must have a hose coupling such that all pressure is removed from the tool when the coupling joint is disconnected.

NAME OF PARTS

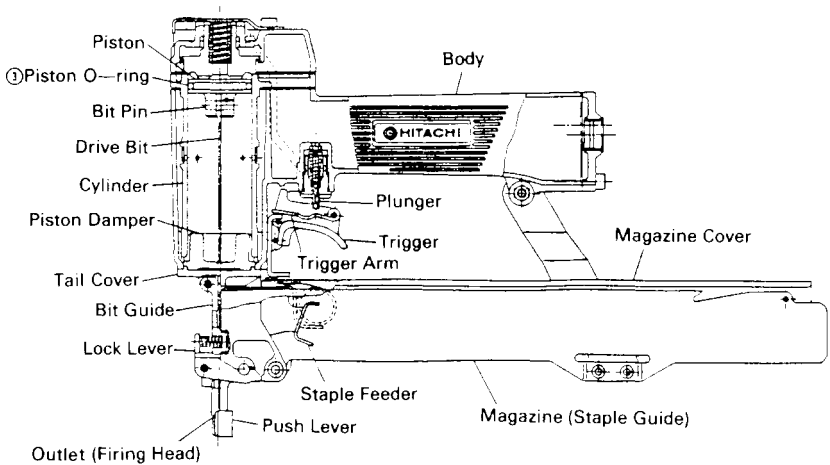


Fig. 1

Note: Numbers in the diagram show spare parts as numbered in Fig. 3.

SPECIFICATIONS

Type of power	Piston reciprocating
Air pressure (Gauge)	5 ~ 8.5kg/cm ² (G) (70 ~ 120psi)
Applicable staples	ref. Fig. 2
Amount of loadable staples	200 staples
Size (L × H × W)	347mm × 214mm × 62mm (13-21/32" × 8-7/16" × 2-7/16")
Weight	1.7kg (3.7lbs)
Hose (inside diam.)	6mm (1/4")

STAPLE SELECTION

Choose a suitable staple from Fig. 2. Staples which are not shown in Fig. 2 can not be driven with this tool. You can buy these staples where you bought the stapler.

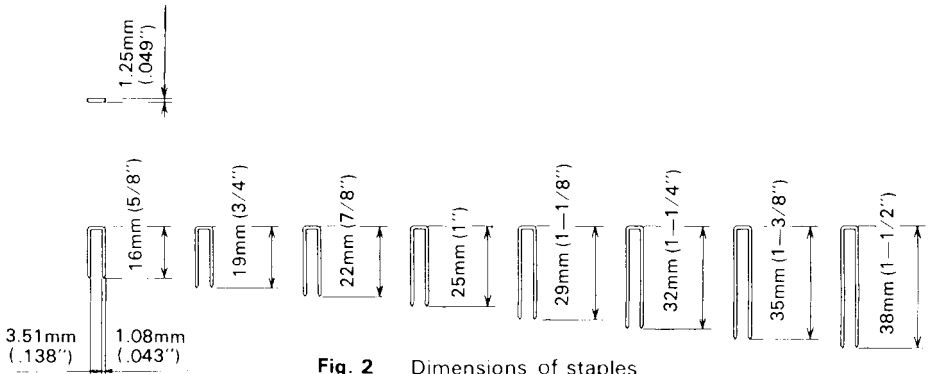


Fig. 2 Dimensions of staples

STANDARD ACCESSORIES

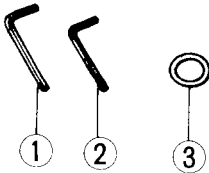


Fig. 3

- 1) Hexagon bar wrench for M5 screw1
- 2) Hexagon bar wrench for M4 screw1
- 3) Piston O-ring (spare parts).....1

(Positions of spare parts are illustrated in Fig. 1)

APPLICATIONS

- Making cases for furniture.
- Creating walls and other areas in mobile homes.
- Making doors and windows for home construction.

PREPARATION PRIOR TO OPERATION

Prior to operating the device, be sure to check the following items:

1. Prepare the hose

Be sure to use the hose provided with minimum 6mm(1/4") inside diameter. Securely connect the hose to an air compressor with a hose band.

Notes:

- The air supply hoses must have a minimum working pressure rating of 180psig or 150 percent of the minimum pressure produced in the air supply system, whichever is higher.
- Before attaching the hose, force air through the hose to clean it out.

2. Discharge drain water from the air compressor

Since moisture or oil deposited in the air compressor may accelerate corrosion, prior to operating the device, open the drain cock at the bottom of the air tank to discharge moisture and oil. Use the clean and dry compressed air. (For further details, refer to the air compressor instruction manual.)

3. Prepare the staples

4. Check on safety

Cautions:

- **Unauthorized persons(including children) must be kept away from the equipment.**
- **Wear safety eye protection.**
- **Check the retaining screws which fix the exhaust cover, etc. for tightness. Check the stapler for air leaks and defective or rusty parts.**
- **Check whether or not the push lever works correctly. Also check whether or not any tar or dirt has adhered to the moving parts of the push lever.**
- **Recheck on operational safety.**

BEFORE USE

1. Check the air pressure

Caution:

- **The air pressure must be constantly maintained at 5~8.5kg cm²(70~120pcs.).**

Adjust the air pressure between 5 to 8.5kg cm²(70~120psi.) according to the diameters and length of staples and hardness of the wood being stapled. Pay special attention to the output pressure, capacity, and piping on the air compressor, so that air pressure does not exceed the specified limit. Note that excessive pressure may affect overall performance, service life, and safety.

2. Never place thinner, gasoline, or other inflammable materials in the work site vicinity.

3. Lubrication

- (1) Prior to operating this stapler, be sure to provide an air set(see Page 13) between the air compressor and this device. Lubrication through the air set offers smooth operation, extended service life, and anticorrosion.
Adjust the oiler so that a single drop of oil is supplied at intervals of 5 to 10 stapling cycles.
- (2) When no oiler is provided, be sure to supply approximately 2cc of oil to the hose nozzle(air plug) at least twice a day-once prior to and once following operation.
Prior lubrication will act as lubricant and final lubrication as anticorrosion oil.

Notes:

- Since the oil supplied prior to operation will disperse in atomized form through the air exhaust outlet, drive two or three staples in a nearby unimportant spot before using in the intended location.
- When lubricating after operation, drive a single staple to uniformly lubricate oil.
- (3) It is recommended using the recommended oil(SHELL TONNA T32). Other applicable oils are listed on page 14. Never mix two or more types of different oils.

4. Connect the hose assembly

As illustrated in Fig. 4, securely connect the hose to this device.

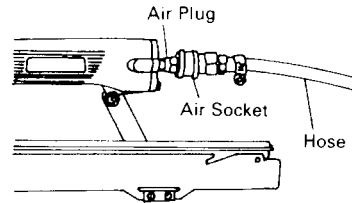


Fig. 4

5. Load staples

- (1) Shift the staple feeder to the rear and engage it with the groove of the staple guide.
- (2) Insert series of staples from the top and feed manually to the front. Load separated staples so that they are packed within the magazine cover. (Fig. 5)
- (3) After loading staples, shift the staple feeder to the rear to disengage it from the groove and move the staple feeder so that it secures the staples. Do not allow the staple feeder to slam into the staple strips.

Caution:

- **To prevent unintentional operation, never touch the trigger or place the top end of the push lever on a work bench or floor. Also, never face the staple outlet toward any part of a person.**

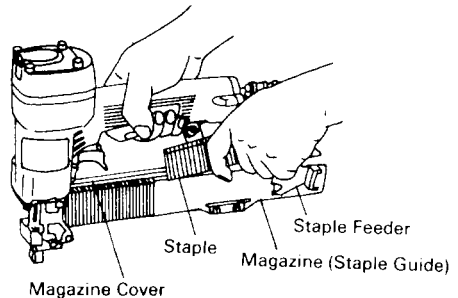


Fig. 5

HOW TO USE THE STAPLER

Caution:

- **When driving staples, always wear safety eye protection. The mis-driven staples sometimes pop out and this can be very dangerous.**
- **Never use the head or body of this device as a hammer.**
- **Take precautions to ensure the safety of persons in the vicinity during operation.**
- **When driving in staples press the staple outlet firmly against the material to be stapled.**
If the outlet is not applied properly, the staples may rebound.
- **Keep hands and feet away from the firing head when using. It is very dangerous for a staple to hit the hands or feet by mistake.**

- **Never fire one staple directly over another! Not only could the second staple be bent, but it could also fly in as undeterminable direction with great force, as well as cause the staple-feed mechanism to malfunction.**

1. Stapling procedures

(1) Intermittent stapling

Depress the staple outlet onto the desired point; then pull the trigger to drive a staple in a single shot. (See Fig. 6)

Caution:

- **This tool will sometimes fire twice in rapid succession when strongly pressed flush against a surface or when using on hard materials. In such cases, fire the nails by squeezing and quickly releasing the trigger.**

(2) Push lever

When depressing the staple outlet, be sure to fully lift the push lever (See Figs. 1 and 6) to release the safety lock. Thus, staples cannot be driven without releasing the safety lock even though the trigger is pulled.

Caution:

- **Never touch or direct the staple outlet toward a person. And then direct the staple outlet downward while supplying compressed air.**

(3) Continuous stapling

First, pull the trigger. Then depress the device onto the desired position to automatically drive staples (See Fig. 7).

Caution:

- **Exercise care when stapling corners of lumber. When continuous stapling corners of lumber, a staple may go astray or break through the corner.**
- **As a good method for continuous stapling, start stapling from close to your body and then gradually proceed in the direction away from you.**

Note:

- Precautions on no-load operation

Sometimes stapling will continue after driving in all staples previously contained in the magazine.

This is termed "no-load". Such operation may deteriorate the damper, magazine, and staple feeder.

To avoid no-load operation, occasionally confirm the amount of remaining staples. On the other hand, all staples should be removed after using this stapler.

Caution:

- **After completing operation, always disconnect the hose and remove all staples.**
- **After completing operation, put into the body about 2cc oil through the hose joint to protect the tool from rust.**

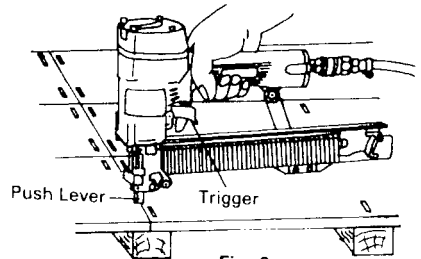


Fig. 6

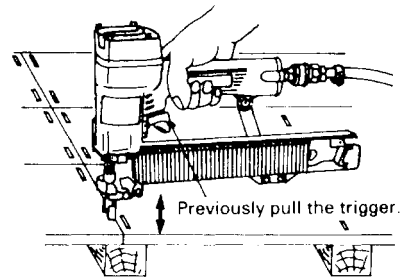


Fig. 7

Notes:

- Under low temperature conditions, the machine sometimes does not operate correctly. Always operate the machine at the appropriate ambient temperature.
- Upon completion of stapling, discharge air from the air compressor to reduce the air pressure to zero. When the drain cock is opened, drain water is discharged from the tank and simultaneously the air pressure can be reduced to zero.

2. Handling procedures for staple

Notes:

- Carefully handle staples regardless of whether they are packed or in of single stripform. Should they be dropped, the bond between adjacent staples may be broken, resulting in staple feed failure.
- Do not expose staples to the open air or direct sunlight over a long period; otherwise rust may occur or the bond between adjacent staples may be damaged. Keep staples in the original package when not using them.

INSPECTION AND MAINTENANCE

Caution:

- **Be sure to disconnect the hose during cleaning jams, inspection, maintenance and cleaning.**

1. Countermeasure for staple jamming

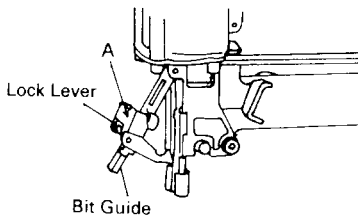


Fig. 8

When removing jammed staples, proceed in the following sequence in order not to discharge the staples by mistake.

- (1) Disconnect the hose and drain the compressed air.
- (2) Remove all staples from the magazine.
- (3) Press the A position of the lock lever, remove the latch, and then turn the bit guide as shown in the illustration to open.
- (4) Remove all jammed staples.
- (5) Return the bit guide to the original position, then shut it with the lock lever.
- (6) Load the staples correctly,

2. Inspection and maintenance

Periodically inspect the device.

- (1) Remove the four hexagon socket hd. bolts securing the exhaust cover and remove the exhaust cover.
Then cylinder, piston, and other parts can be removed in respective assembly groups. Wipe the drive bit, the piston sliding part and the body interior with a cloth to remove deposited dirt.
- (2) Confirm that the piston damper offers normal operation. A damaged piston damper may cause damage to other component parts.
- (3) Carefully check the O-ring for wear while disassembling. A worn or damaged O-ring may deteriorate overall performance. Replace a worn or damaged O-ring with new one.
- (4) Prior to reassembling the device, apply grease(HITACHI Electric Grease No. 1 or HITACHI Motor Grease) to the O-ring. Also, lubricate the device with the recommended oil.

3. Check on mounting screws for each part

At regular intervals check every part for loose mounting screws and whether or not there are any air leaks. Retighten any loose screws. Operating the equipment with loose screws untightened will incur a hazard.

4. Protection against dirt

- (1) Remove dirt from the inlet port and interior or the hose.
- (2) Use only clean oil to protect the air intake port and sliding part against clogging or damage.

5. Inspecting the drive bit

If the top end of the drive bit is slightly rounded to an extent that staple heads slightly float above the work surface, or the staples are often bent, remove the drive bit and finish off the top end with a file or grinder.

(1) Removing procedures

- Remove four hexagon socket head bolts to disassemble the exhaust cover, whereby the piston is exposed. (See Fig. 9)
- Insert an appropriate rod into the staple outlet to withdraw the piston from the opposite side. (See Fig. 10)

(2) Grinding procedures

- Grind the top end of the drive bit. When grinding the top end by using a grinder, to avoid wear, gradually grind it while cooling the grinding part with water. Excessive grinding may shorten the stapler service life.
- If staple heads still float above the work surface even though the top end is ground, replace the drive bit with a new bit. (Replace the drive bit when projection beyond the bit guide reaches approximately 1.5 mm (.06"))
Drive bits are available from the dealer where you ordered the stapler.

(3) Reassembling procedures

Effect reassembling procedures in reverse order to those of disassembling. Confirm that the drive bit is fully inserted into the staple outlet. Then reassemble the exhaust cover. Apply a thin coat of grease (HITACHI Electric Tool Grease No. 1 or HITACHI Motor Grease) to the O-ring and interior surface of the cylinder. (See Fig. 11)

Caution:

- A cracked drive bit may cause damage. Prior to reassembling the drive bit, be sure to check for such cracks.

6. Inspecting the piston

A depletion of cylinder oil or a worn O-ring may restrict smooth operation. In such instances, remove the piston as illustrated in Fig. 9, 10 and 11 and clean the cylinder interior. Then apply 2cc of the recommended oil over the cylinder interior surface. If the piston still refuses to offer smooth operation, replace the worn O-ring. Also, apply a thin coat of grease (HITACHI Electric Tool Grease No. 1 or HITACHI Motor Grease) to the cylinder interior and O-ring.

Caution:

- Never clean the O-ring with gasoline, thinner or similar substance.

7. Inspecting the magazine

Occasionally clean the magazine. Remove any remaining fragments of bond and wooden particles, then apply a thin coat of the recommended oil to the overall surface.

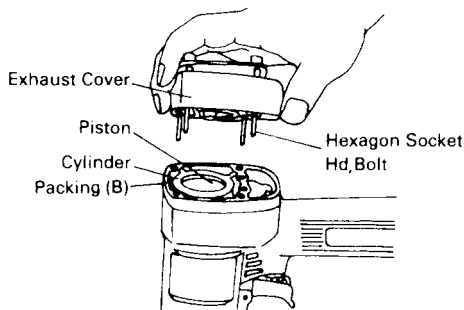


Fig. 9

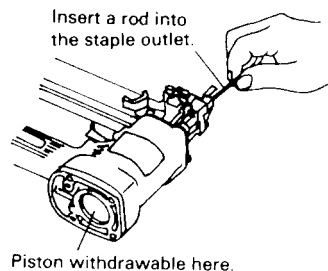


Fig. 10

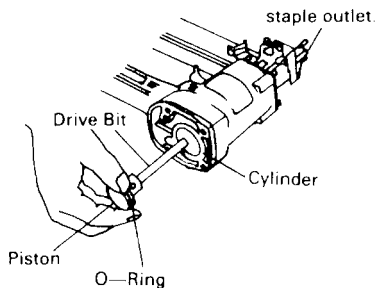


Fig. 11

Caution:

- **Check for smooth movement of staple feeder before use. If movement is uneven, staples could be fired at an irregular angle, presenting a hazard to the operator and others nearby.**

8. Storing

- (1) When the stapler will not be used for an extended period, apply a thin coat of the recommended oil to the steel parts as an anticorrosion measure.
- (2) Preferably store this stapler in a relatively warm temperature to avoid shrinkage of the rubber components, Which would ultimately cause air leakage.
- (3) When not in use, the pneumatic power tool should be placed out of the reach of children.

SELECTING A COMPRESSOR

Select a compressor with an adequate output in accordance with the following table, based on the relation between the rate of operation (number of driven staples/min.) and the operating air pressure.

Rate of operation (total No. of staples driven per min.)

Operating Pressure \ Compressor Output	5~6kg/cm ² (70~85psi)	6~7kg/cm ² (85~100psi)	7~8.5kg/cm ² (100~120psi)
0.4kW (1/2HP)	100~75pcs.	75~60pcs.	—
0.75kW (1HP)	165~130pcs.	130~105pcs.	105~70pcs.
1.5kW (2HP)	350~280pcs.	280~225pcs.	225~155pcs.
2.2kW (3HP)	530~425pcs.	425~335pcs.	335~230pcs.

Example

Assuming that staples are driven at the rate of operation of 60 pcs. per min. on 6kg/cm² (85psi) of air pressure by using 2 units of the stapler, the total number of staples to be driven is: 2 × 60 = 120pcs. From the table, it is evident that a 0.75KW(1HP) compressor is required.

Caution:

- **When the maximum operating pressure of the air compressor exceeds 8.5 kg/cm² (120 psi.), be sure to provide a reducing valve between the air compressor and stapler. Then, adjust the air pressure within the operating range of 5 ~ 8.5 kg/cm² (70 ~ 120 psi.).** If the air set is installed, lubrication is also possible, thus providing additional convenience.

Note:

- Air compressors used to supply compressed air to this tool must comply with the requirements of the latest version of American National Standards Institute (ANSI) Standard B19.3 Safety Standard for Compressors for Process Industries.

OILER-FILTER-REDUCING VALVE (Air Set)

So that the equipment can be operated under an optimum condition to ensure extended service life, it is advisable to use an oiler filter reducing valve.

Please limit the length of the hose between the unit and the air set to within 10m when using

- Oiler..... Automatically supplies the proper amount of clean lubricant.
It is recommended to use SHELL Tonna Oil T32 (for sliding surface).
Shown below are other types of useable oils.
Adjust the oiler so that a drop of oil is supplied per 5 to 10 nails.
- Filter..... Used to remove moisture and dust mixed in compressed air.
- Reducing valve..... Used to adjust the pressure of compressed air to a fixed pressure, as necessary.

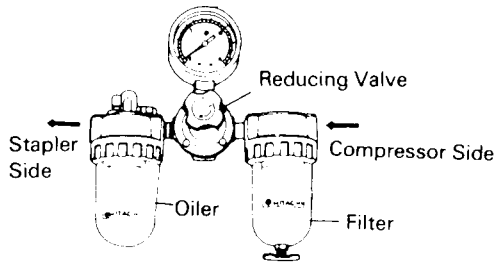
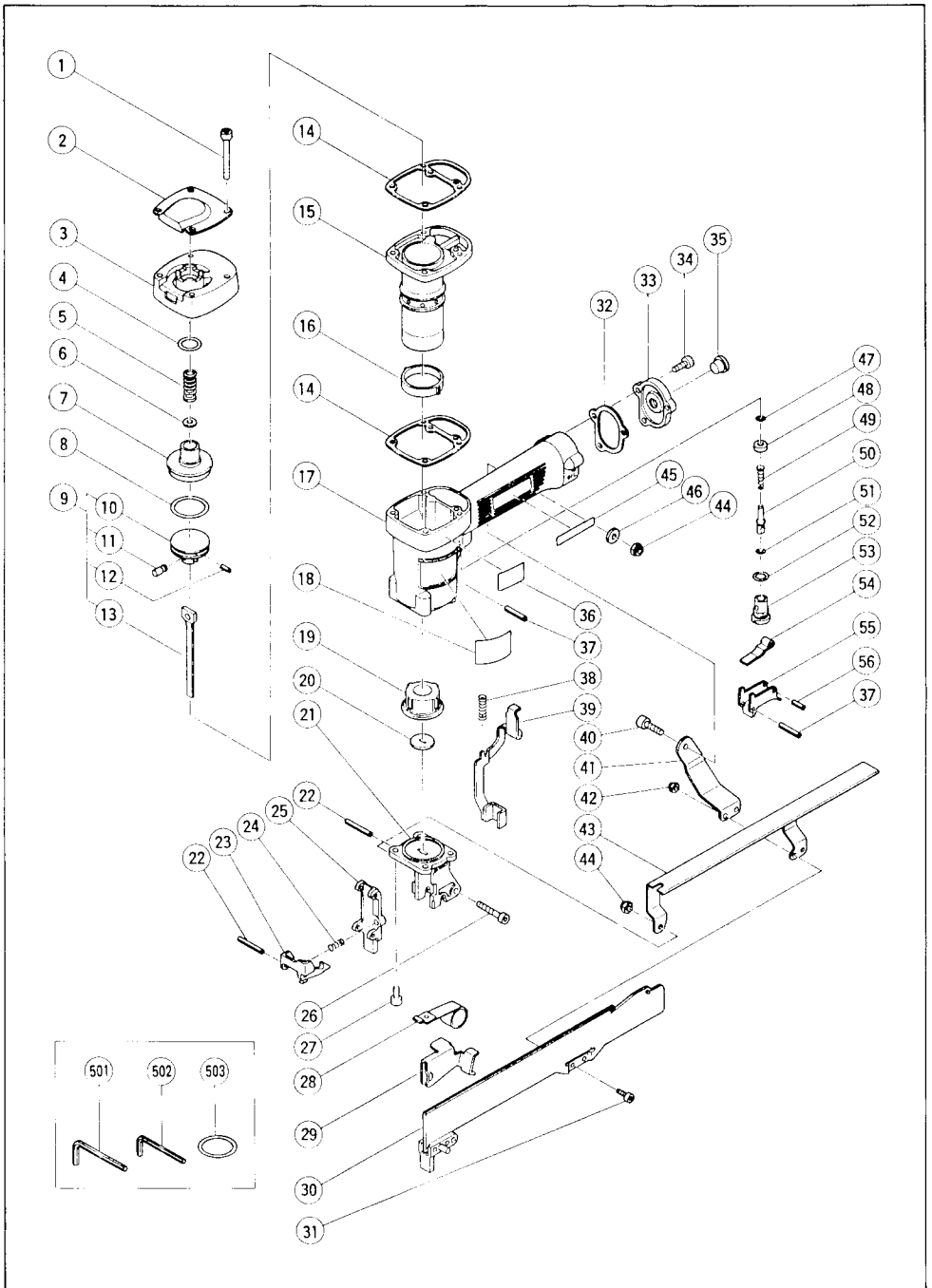


Fig. 12

APPLICABLE LUBRICANTS

Type of lubricant	Name of lubricant
Recommended oil	SHELL TONNA T32
Motor oil	SAE10W, SAE20W
Turbine oil	ISO VG32~68 (#90~#180)



Item No.	Code No.	Part Name	Q'ty
1	949824	Hexagon Socket Hd. Bolt M5 × 45	4
2	877696	Top Cover	1
3	877691	Exhaust Cover	1
4	877699	Head Valve O-Ring	1
5	877698	Head Valve Spring	1
6	962614	Adjusting Washer (B) T0.5	1
7	877697	Head Valve	1
8	971028	O-Ring (P-28)	1
9	878480	Piston Ass'y	1
10	878481	Piston	1
11	878483	Bit Pin	1
12	949860	Roll Pin D2 × 10	1
13	878482	Drive Bit	1
14	877701	Packing (B)	2
15	878494	Cylinder	1
16	877695	Cylinder Ring	1
17	878493	Body	1
18	—	Name Plate	1
19	878484	Piston Damper	1
20	878485	Damper Sheet	1
21	878486	Tail Cover	1
22	949682	Roll Pin D4 × 32	2
23	877866	Lock Lever	1
24	877867	Lever Spring	1
25	878489	Bit Guide	1
26	949664	Hexagon Socket Hd. Bolt M5 × 30	1
27	949765	Hexagon Socket Hd. Bolt M5 × 12	4
28	878488	Ribbon Spring	1
29	878487	Staple Feeder	1
30	878490	Staple Guide	1
31	949813	Hexagon Socket Hd. Bolt M4 × 12	2
32	877131	Packing (D)	1
33	876714P	Cap	1
34	949820	Hexagon Socket Hd. Bolt M5 × 15	3
35	872035	Dust Cap	1

Item No.	Code No.	Part Name	Q'ty
36	878499	Caution Plate	1
37	949539	Roll Pin D3 × 25	2
38	877873	Spring (B)	1
39	878498	Push Lever	1
40	949757	Hexagon Socket Hd. Bolt M5 × 20	1
41	878492	Handle Arm	1
42	876465	Nylon Nut M4	2
43	878491	Magazine Cover	1
44	877371	Nylon Nut M5	2
45	950565	HITACHI Label	1
46	876205	Washer	1
47	873093	O-Ring (1AP-3)	1
48	877703	Valve Bushing (B)	1
49	877704	Plunger Spring	1
50	877706	Plunger	1
51	877705	Plunger O-Ring	1
52	875638	O-Ring (S12)	1
53	877702	Valve Bushing (A)	1
54	878496	Trigger Arm	1
55	878495	Trigger	1
56	878497	Roll Pin D2.5 × 14	1
501	944458	Hexagon Bar Wrench 4mm	1
502	943277	Hexagon Bar Wrench 3mm	1
503	971028	O-Ring (P-28)	1

Parts are subject to possible modification without notice due to improvements.

Hitachi Koki Co.,Ltd.

Nippon Bldg.,
2-6-2, Ohtemachi,
Chiyoda-ku, Tokyo 100, Japan

906

Code No. C99011063 N

Printed in Japan