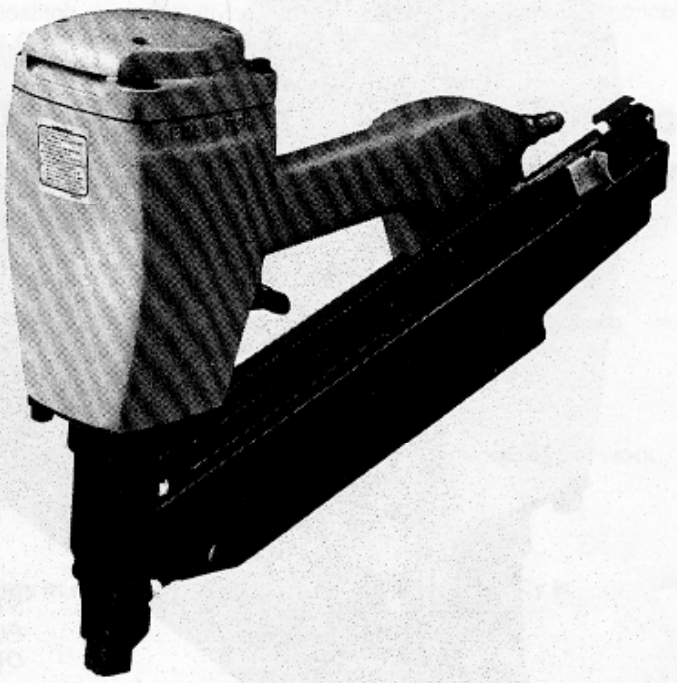
MODEL

N16
SERIES

PNEUMATIC NAILERS



BOSTITCH®

OPERATION and MAINTENANCE MANUAL

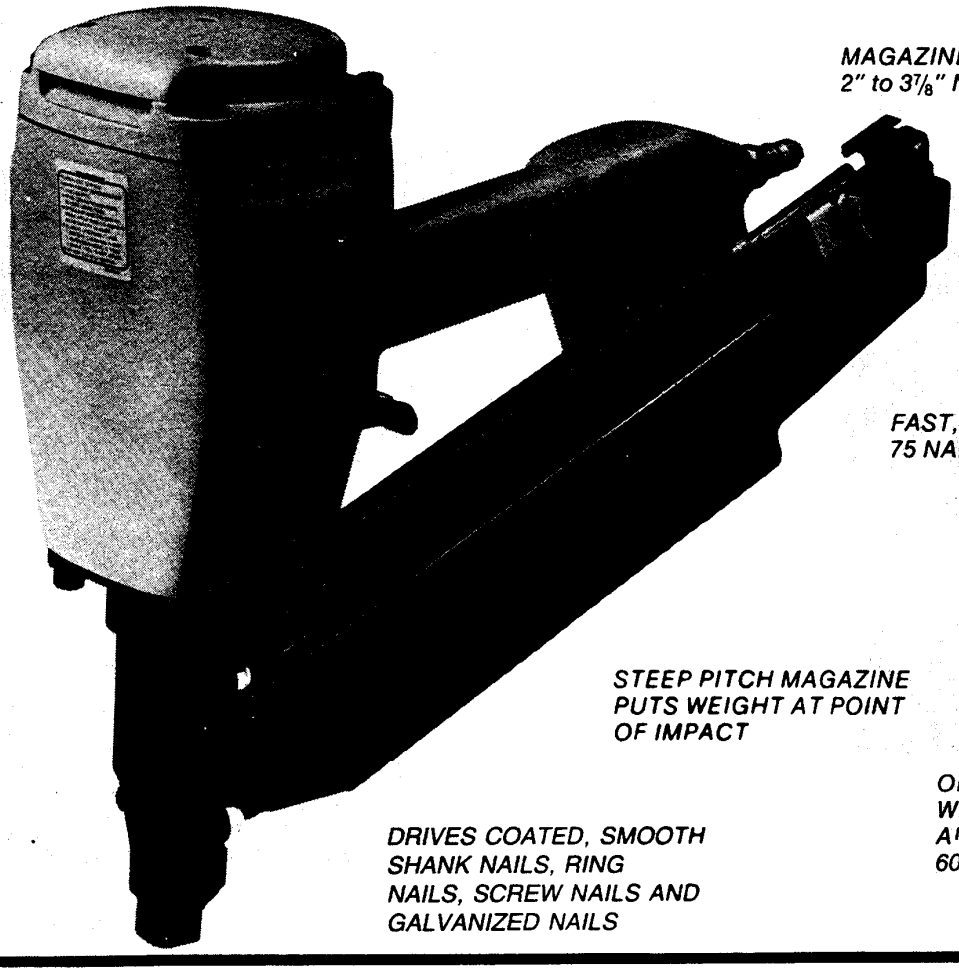
⚠WARNING:

BEFORE OPERATING THIS TOOL, STUDY THIS MANUAL AND UNDERSTAND THE SAFETY WARNINGS AND INSTRUCTIONS. IF YOU HAVE ANY QUESTIONS, CONTACT YOUR BOSTITCH REPRESENTATIVE OR DISTRIBUTOR. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

BSA1082S Rev "A" 8/87

STANLEY® BOSTITCH
A Subsidiary of The Stanley Works

LIGHT-ALLOY FRAME FOR EASE OF HANDLING AND GOOD BALANCE



MAGAZINE ACCOMMODATES 2" to 3⅞" NAILS

FAST, EASY RELOADING 75 NAILS PER LOAD

STEEP PITCH MAGAZINE PUTS WEIGHT AT POINT OF IMPACT

OPERATES OVER WIDE RANGE OF AIR PRESSURES 60-100 PSI

DRIVES COATED, SMOOTH SHANK NAILS, RING NAILS, SCREW NAILS AND GALVANIZED NAILS

N16 Specifications

Length	Height	Width	Weight
16 13/16" (470mm)	13½" (340mm)	4½" (115mm)	10 lbs. 4 oz. (4.6 kg)

Bostitch offers two types of trip for this series nailer.

Contact Trip

The common operating procedure on "Contact Trip" tools is for the operator to contact the work to actuate the trip mechanism thus driving a nail each time the work is contacted, while keeping the trigger pulled during this nailing cycle. This will give fast nailing operation on many jobs, such as sheathing, decking and pallet assembly.

All pneumatic tools are subject to recoil when driving fasteners. The nailer may bounce, releasing the trip, and if unintentionally allowed to recontact the work surface with the trigger still actuated (finger still holding trigger pulled) an unwanted second fastener will be driven.

Sequential Trip

The Sequential trip requires the operator to hold the nailer against the work before pulling the trigger. This makes accurate nail placement easier, for instance on framing, toe nailing and crating applications.

The Sequential Trip allows exact fastener location without the possibility of driving a second fastener on recoil, as described under "contact trip"

The sequential trip nailer has a positive safety advantage because it will not accidentally drive a nail if the tool is contacted against the work — or anything else — while the operator is holding the trigger pulled.

INTRODUCTION

The Bostitch N16 series nailers are precision-built tools, designed for high speed, high volume nailing. These nailers will deliver efficient, dependable service when used correctly and with care. As with any fine power tool, for best erformance the manufacturer's instructions must be followed. Please study this manual before operating the nailer and understand the safety warnings and cautions. The instructions on installation, operation and maintenance should be read carefully, and the manual kept for reference. NOTE: Additional safety measures may be required because of your particular application of the nailer. Contact your Bostitch representative or distributor with any questions concerning the nailer and its use. Stanley-Bostitch, Inc., East Greenwich, Rhode Island 02818.

BEFORE USING ANY PNEUMATIC NAILER BE AWARE OF THE FOLLOWING WARNINGS:

Approved EYE PROTECTION should always be worn by the operator and others in the work area.

Always DISCONNECT THE AIR SUPPLY before making adjustments, servicing the tool or clearing jams, and when tool is not in use.

CHECK the operation of the trip mechanism frequently, and do not use nailer if the trip does not work correctly.

NEVER place a hand or any other part of body in nail discharge area of tool while air supply is connected.

DO NOT USE oxygen or combustible gases as a power source for this tool.

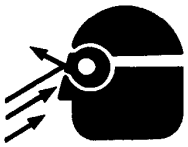
DO NOT HOLD OR CARRY the tool with finger on the trigger.

EAR PROTECTION may be required in some environments.

INDEX

OPERATING THE N16 SERIES NAILER

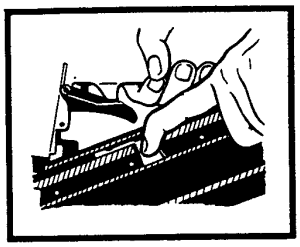
WARNING: **Approved EYE PROTECTION should ALWAYS be worn by the operator and others in the work area when loading, operating, unloading or servicing this tool. Eye protection is required for protection from flying fasteners and debris, which could cause severe eye injury. The employer and/or user should ensure that the proper eye protection is worn. Safety eye protection equipment must conform to the requirements of ANSI Z87.1-1979, American National Standard Practice for Occupational and Educational Eye and Face Protection, classified in the referenced standard under Fig. 8 Selection Chart, as Type 1 Goggles; Types 5 & 6 Spectacles with side shields.**



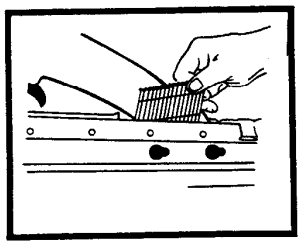
CAUTION: **EAR PROTECTION may be required in some environments. As the working condition may include exposure to high noise levels which can lead to hearing damage, the employer and user should ensure that any necessary hearing protection is provided and used by the operator and others in the work area.**

LOADING NAILER

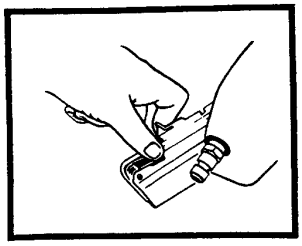
1) Open the Magazine.
Pull pusher back until locked by latch.



2) Load Nails.
Hold the nailer with the magazine tilted downward. Insert sticks of nails.



3) Close the magazine.
Push down latch to release the pusher and guide it into place.



CAUTION: When the magazine is empty or partially loaded, do not release pusher allowing it to strike the forward stop or nails with impact.

WARNING: **To prevent accidental injuries:**

- **Never place a hand or any other part of body in nail discharge area of tool while the air supply is connected.**
- **Never point tool toward anyone else.**
- **Never engage in horseplay.**
- **Always handle the tool with care.**
- **Never pull trigger unless nose is directed toward the work.**
- **Do not pull the trigger or depress the trip mechanism while loading the tool.**

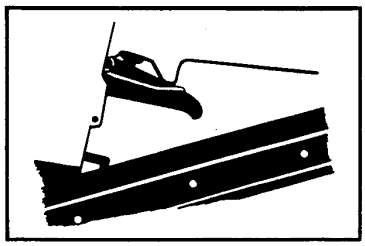
WARNING: **Disconnect the air supply before making adjustments.**

NOTE: **Use only nails recommended by Bostitch for use in Bostitch N16 Series nailers, or nails which meet the Bostitch Specifications.**

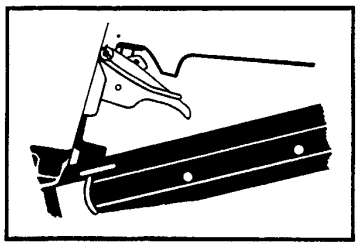
TRIP MECHANISM

There are two models of N16 Nailer:

CONTACT TRIP



SEQUENTIAL TRIP



WARNING: Check operation of the trip mechanism frequently. Do not use the nailer if the trip is not working correctly, as accidental driving of nail may result. Do not interfere with the proper operation of the trip mechanism.

CHECKING OPERATION OF TRIP MECHANISM

1.) To determine which model the tool is, see pictures above.
2.) Disconnect air supply, remove nails, check that trigger and trip mechanism parts operate freely with no binding or sticking.
3.) Reconnect air supply.

WARNING: Always double-check that there are no nails — don't "assume" that the tool is empty.

CAUTION: Operate the nailer without nails as seldom as possible, as this causes accelerated wear.

To check CONTACT TRIP model:

a.) Press the "contact arm" against the work without touching the trigger. The nailer must not cycle.
b.) Hold the nailer clear of the work, and pull the trigger. The nailer must not cycle.
c.) While holding the trigger pulled, press the "contact arm" against the work, where a nail is to be driven. The nailer must cycle.
d.) Without touching the trigger, press the "contact arm" against the work, then pull the trigger. The tool must cycle.
With the trigger held pulled, the CONTACT TRIP model will drive a fastener each time the "contact arm" is pressed against the work. This is normal operating procedure for contact trip models.

WARNING: The operator must not hold the trigger actuated on contact trip tools except during rapid nailing operation. Do not carry or hold contact trip model nailers with trigger pulled, as serious injury could result if the "contact arm" is accidentally bumped against someone or something, causing the tool to cycle. Disconnect air supply when moving tool to a new location.

CAUTION: A contact trip tool may bounce from the recoil of driving the fastener, and if unintentionally allowed to recontact the work while the trigger is held actuated an unwanted second fastener will be driven.

NOTE: Holding the tool against the work with extra force is not necessary, and in fact is not desirable - let the tool do the driving. The operator should let the tool recoil far enough to release the trip, avoiding an unwanted second cycle by not recontacting the work.

To check SEQUENTIAL TRIP model:

a.) Press the "contact arm" against the work without touching the trigger. The nailer must not cycle.
b.) Hold the nailer clear of the work, and pull the trigger. The nailer must not cycle.
c.) While holding the trigger pulled, press the "contact arm" against the work. The nailer must not cycle. Release the trigger before releasing the "contact arm"; then, when the "contact arm" is released, the trigger should snap to its fully-released position.
d.) Press the "contact arm" against the work where a nail is to be driven. Pull the trigger. The nailer must cycle.
The SEQUENTIAL TRIP model will drive a fastener each time the operator repeats the sequence of: contact work; pull trigger. This is the normal operating procedure for sequential trip models.
NOTE: If the "contact arm" remains completely depressed against the work, the tool will cycle each time the trigger is pulled. If recoil from driving a nail causes the tool to lift from the work surface, the trigger must first be released and the "contact arm" again depressed against the work before another nail can be driven.

AIR SUPPLY AND CONNECTIONS

OPERATING PRESSURE

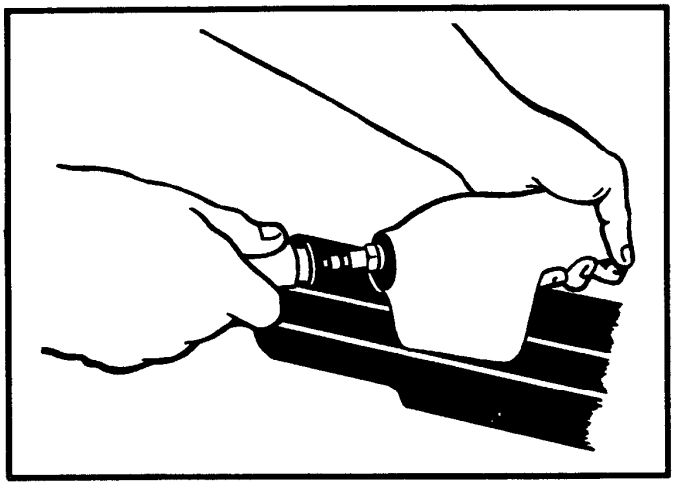
The operating pressure of the N16 series nailer is 60 to 100 p.s.i. (4.2 to 7.1 kg/cm ^{2}).
Do not exceed 100 p.s.i. (7.1 kg/cm^2). Tool wear will be greatly increased if excessive pressure is used.

SETTING THE CORRECT PRESSURE.

The air requirements will vary, depending on the material to be nailed and the nail size. Do not use more air pressure than is required to drive the nail in the specific job. To determine best setting, start at low pressure and increase pressure until drive is satisfactory.
Using excess pressure increases tool wear on the nailer and wastes compressed air.

QUICK DISCONNECT FITTINGS

Install a free-flow connector plug on the nailer. Thread is $\frac{3}{8}$" N.P.T.
Install a connector socket on the air hose. For best performance, fitting should have minimum inside dia. of .290".



REGULATORS

Most air supply equipment will produce pressures that exceed the N16's maximum operating pressure, 100 p.s.i. (7.1 kg/cm^2). A pressure regulator is required to control the operating pressure.
The flow capacity must be sufficient for the air usage at the installation.

HOSES

Air supply hoses should have a 150 P.S.I. (10.6 kg/cm^2) working pressure rating (or 150 percent of the maximum pressure that could be produced in the air system.

WARNING: To prevent accidental discharge, disconnect air supply:
- **before making adjustments**
- **when servicing the tool**
- **when clearing jams**
- **when tool is not in use**
- **when moving to a different work area.**

WARNING: Do not use oxygen or combustible gases as a power source for this tool or air supply sources which can potentially exceed 200 P.S.I. (14.2 kg/cm^2) as tool may explode.

NOTE: The air supply system must be capable of maintaining the required air pressure at the tool when it is operated at its highest cycle speed. Inadequate air supply will result in a loss of power and inconsistent driving after the first cycle when the tool is operated in high speed bursts.

WARNING: Always attach a free-flow connector plug to the nailer. If a wrong fitting is used, the tool can remain charged with air after disconnecting, and thus will be able to drive a nail even after the air line is unplugged.

NOTE: Air compressors used to supply compressed air to this nailer should comply with the requirements of the American National Standards Institute Standard B19.3-1981, Safety Standard for Compressor for Process Industries.

NOTE: Make sure air lines and fittings are clean before connecting.

AIR CONSUMPTION

The N16 requires 9.6 cubic feet per minute of free air to operate at the rate of 100 nails per minute, at 80 p.s.i. Take the actual rate at which the nailer will run to determine the amount of air required. For instance, if your nailer usage averages 50 nails per minute, you need 50% of the 9.6 c.f.m. which is required for running at 100 nails per minute.

FILTERS

Dirt and water in the air supply is a major cause of wear in air tools. A filter will help to get best performance from this nailer. The filter must have adequate flow capacity for the specific installation.

The filter has to be kept clean to be effective in cleaning the air. Consult the filter manufacturer's instructions on proper maintenance. Clean and empty the filter as needed.

A dirty and clogged filter will also cause a pressure drop, which can reduce the nailers performance.

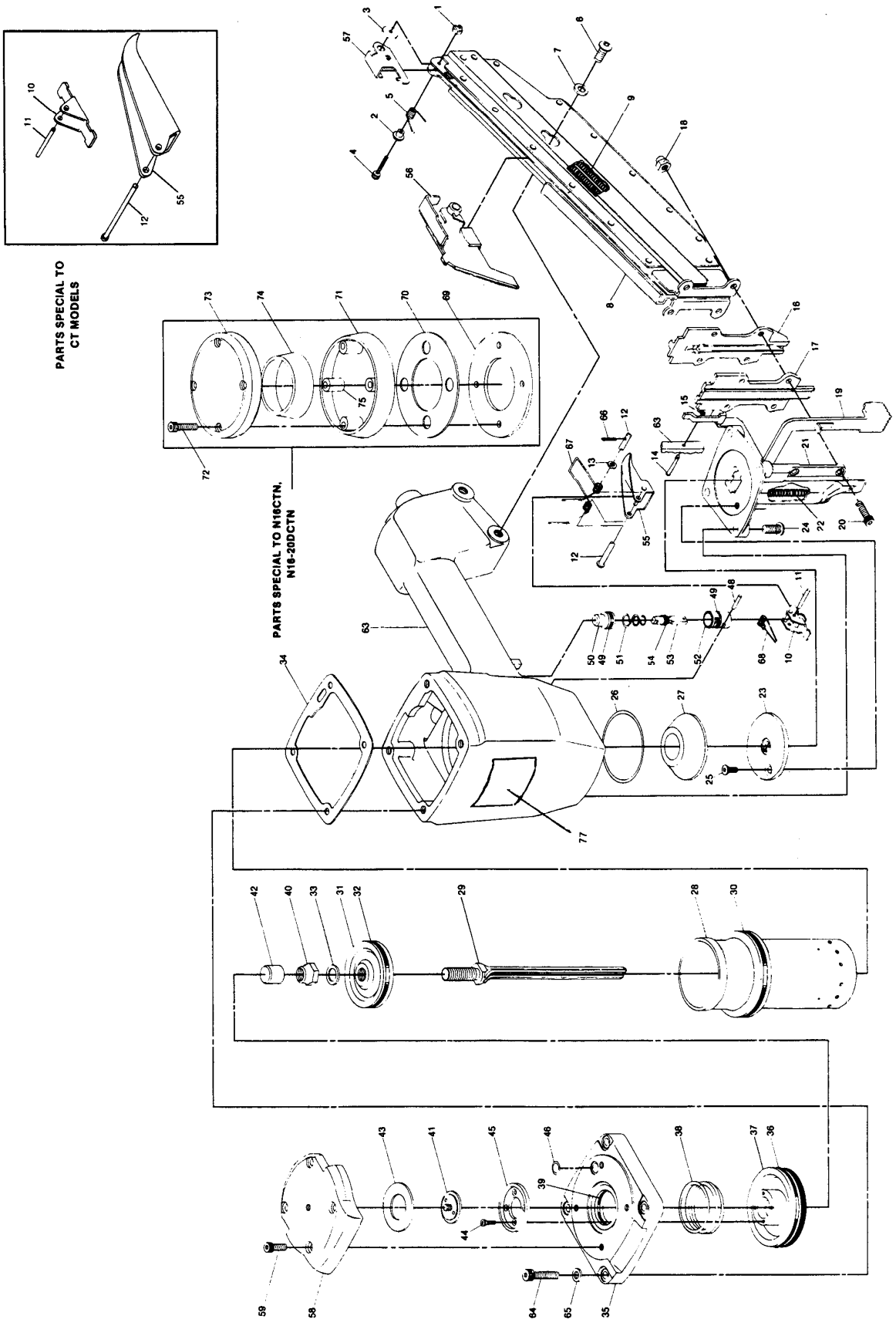
LUBRICATION

Frequent but not excessive lubrication is required for best performance. Oil added through the air line connection will lubricate the internal parts. Use Bostitch Air Tool Lubricant BC602 (pint) or BC604 (quart), Mobil Velocite #10 oil or an equivalent. Do not use detergent oil or oil additives because the seals and bumpers in the tool may be attacked by the oil.

If an air line lubricator is used it should be as close to the tool as practical, with a hose to the tool no longer than 50 feet (15 meters).

If no lubricator is used, add oil during use by squirting oil into the air fitting on the tool once or twice a day. Only a few drops at a time are required. Too much oil will collect inside the tool and will be noticeable in the exhaust.

For cold weather operation, near and below freezing, the oil and water present in the air line may freeze and prevent operation. We recommend the use of Bostitch "Winter Formula" Air Tool Lubricant BC603 in place of BC602/BC604 or permanent antifreeze (ethylene glycol) as a cold weather lubricant. Note that some commercial air line drying liquids attack o-rings and seals — do not use these low temperature air dryers without checking compatibility.


PARTS SPECIAL TO CT MODELS
PARTS SPECIAL TO N16CTN, N16-20DCTN

PARTS COMMON TO ALL

ITEM NO.	ASSEM. OR PART NO.	DESCRIPTION
1	HN540.2	LOCK NUT 5-40
2	N16048	STUD, LATCH
3	N16047	SPACER, LATCH
4	UA1814.1	HEX. SOC. HD. SCR. 5-40 x 7/8
5	N16046	SPRING, LATCH
6	UA5808.7	HEX. SOC. BUT. HD. SCR. 5/16-18 x 1/2
7	N16052	WASHER
9	N16035	SPRING, PUSHER
11	N16049	PIN, ROCKER
12	N16067	PIN, TRIGGER
13	N16068	WASHER
14	N16058	PIN, CONTACT TRIP
15	850000	E-RING
17	N16143	DRIVER GUIDE
18	HN1420.9	LOCK NUT 1/4-20
19	N16076A	TRIP
20	UA4816.1	HEX. SOC. HD. SCR. 1/4-20 x 1"
21	N16169	NOSE
22	N16170	SPRING, CONTACT TRIP

ITEM NO.	ASSEM. OR PART NO.	DESCRIPTION
23	N16168	LOCATOR PLATE
24	UA5814.3	HEX. SOC. HD. SCR. 5/16-18 X 7/8
25	UA3808.9	HEX. SOC. FL. HD. SCR. 10-32 x 1/2"
26	89673	O-RING
27	N16021	BUMPER
28	N16010	CYLINDER SLEEVE
29	N16139	DRIVER
30	89672	O-RING
31	N16011	PISTON
32	89675	O-RING
33	N16042	WASHER
34	N16015	GASKET
35	N16016A	CAP
36	89674	O-RING
37	N16086	VALVE HEAD
38	N16146	SPRING, VALVE
39	89694	O-RING
40	HN1220.3	LOCK NUT 1/2-20
41	N16063	SEAL RETAINER
42	N16147	TOP BUMPER

ITEM NO.	ASSEM. OR PART NO.	DESCRIPTION
43	N16019	EXHAUST SEAL
44	UA2808.5	HEX. SOC. FL. HD. SCR. 8-32 x 1/2
45	N16085	EXHAUST SEAT
46	85010	O-RING
48	UB3811.1	ROLL PIN 3/32 Dia. x 11/16
49	86458	O-RING
50	N16071	VALVE SEAT
51	N16091	SPRING, TRIGGER VALVE
52	N16006	VALVE SLEEVE
** 54	N16005	SEAL (REQUIRES SPECIAL TOOLS TO ASSEMBLE)
56	N16036A	PUSHER ASSEM.
57	N16045	LATCH, PUSHER
58	N16094A	DEFLECTOR
59	UA4812.1	HEX. SOC. HD. SCR. 1/4-20 x 3/4
63	N16001A	BODY
64	UA4824.2	HEX. SOC. HD. SCR. 1/4-20 x 1 1/2
65	PW12.5	1/2 PLAIN WASHER
66	UB1904.2	COTTER PIN
77	850916	WARNING LABEL

ITEM NO.	DESCRIPTION	N16	N16CT	N16CTN	N16-20D	N16-20DCTN
8	MAGAZINE SUB-ASS'Y	N16050A*	N16050A*	N16050A*		
8	MAGAZINE ASSEMBLY				N16119A	N16119A
10	ROCKER	N16079A	N16007	N16007	N16079A	N16007
16	WEARPLATE	N16141	N16141	N16141	N16144	N16124
**53	VALVE STEM	N16080A	N16080A	N16080A	N16080A	N16080A
55	TRIGGER	N16078A	N16008	N16008	N16078A	N16008
67	SPRING, TRIGGER	N16088	N16066	N16066	N16088	N16066
68	SPRING, ROCKER	N16082			N16082	
69	DIFFUSER PLATE			N16131		N16131
70	DIFFUSER GASKET			N16132		N16132
71	OUTER DIFFUSER			N16134		N16134
72	HEX. SOC. HD. CAP SCREW			UA4828.1		UA4828.1
73	DEFLECTOR-DIFFUSER			N16130A		N16130A
74	INNER DIFFUSER			N16135		N16135
75	STAND OFF			N16133		N16133

* Magazine replacement can be ordered as: N16171A Magazine/Pusher assembly which includes the following parts: ITEM NO.'s: 1, 2, 3, 4, 5, 8, 9, 56, 57

** Item 53 includes Item 54, however, Item 54 may be ordered separately.

ACCESSORIES

N16075	**Kit to equip Model N16 Series Nailers with Remote Fire**
N16K3	**Kit to equip Model N16 Series Nailers with Plain Trip without serrations**
N16090	**Kit to equip Model N16CT Series Nailers with Sequential Trip**
N16095	**Kit to equip Model N16 Series Nailers with Bail**
N16K7	**Spare Parts for Model N16 Series Nailers**
N16K1	**Muffler Kit for Model N16 Series Nailers**
BA101	**Belt**
BC744A	**Portable Filter and Lube Ass'y**
86518	**Carrier**

NOTES AND RECORDS

MAINTAINING THE N16 SERIES NAILER

WARNING: When working on air tools, note the warnings in this manual, and use extra care when evaluating problem tools.

REPLACEMENT PARTS

Bostitch replacement parts are recommended. Do not use modified parts or parts which will not give equivalent performance to the original equipment.

When ordering replacement parts specify by part number.

ASSEMBLY PROCEDURES FOR SEALS

When repairing a nailer make sure the internal parts are clean and freshly lubricated. User Parker O-lube or equivalent on all "O"-rings. Coat each "O"-ring with O-lube before assembling. Use a small amount of oil on all moving surfaces and pivots. After reassembly, add a few drops of Velocite #10 oil or equivalent through the air line fitting before testing.

WARNING: Eye protection should be worn by the person operating or testing the nailer, and by others in the work area.

WARNING: Disconnect the air supply before making adjustments, servicing the tool, clearing jams, or when tool is not in use.

TROUBLE SHOOTING

PROBLEMS AND CURES:

"Skipping" nails - the tool fails to feed a fastener and cycles without driving one -

1. Worn bumper - check that the bumper is not cracked or damaged.
2. Tar or dirt in the drive channel, causing drag on the driver so that it does not go back up.
3. Too-small air line fitting or a restriction in the air line. Restriction of air flow or low air pressure will result in the piston not returning.
4. Dirt or damage preventing the fasteners or pusher form sliding freely in the magazine; damaged pusher springs.
5. Worn o-ring on the piston; or lack of lubrication.
6. Cut o-ring on trigger valve sleeve, or leaking cap gasket.

Failure to cycle - the driver stays up or stays down, and operating the trigger causes only air to leak.

1. Lack of lubrication.
2. Worn or cut o-rings on head valve or trigger valve, or excessive wear on the diameters on which the head valves runs.

Lack of power - not driving the staples or nails fully.

1. Restriction in the air line causing an air pressure drop at the tool.
2. Tool dry from lack of lubrication.
3. Driver dragging due to tar or dirt buildup.
4. End of driver worn or chipped off.
5. Cylinder sleeve not down against nose.

Leaking air-

1. O-rings worn or damaged; gasket under cap damaged.
2. If leaking excessively when trigger mechanism is held actuated; leakage from top of tool - check head valve bumper; if leakage is from bottom of tool, check bumper and o-rings on sleeve.

Jamming - nails wedged in nose.

1. Wear on core tip or in driver channel.
2. Wrong nails - length too short for the model of nailer.
3. Check pusher springs and free movement of pusher and nails in magazine.

LIMITED WARRANTY

Stanley-Bostitch, Inc., warrants to the original retail purchaser that this product is free from defects in material and workmanship, and agrees to repair or replace, at Bostitch's option, any defective product within 90 days from the date of purchase. This warranty is not transferable. It only covers damage resulting from defects in material or workmanship, and it does not cover conditions or malfunctions resulting from normal wear, neglect, abuse or accident.

THIS WARRANTY IS IN LIEU OF ALL OTHER EXPRESS WARRANTIES. ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THIS WARRANTY. BOSTITCH SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

To obtain warranty service, you must return the product at your expense together with proof of purchase to your nearest Bostitch office, check your telephone directory or write to your nearest Bostitch Regional office; the four Bostitch Regional Offices in the United States are:

EASTERN: Stanley-Bostitch, Inc., Briggs Drive, Door 1, East Greenwich, R.I. 02818

MIDWEST: Stanley-Bostitch, Inc., 420 South Kitley Avenue, P.O. Box 19329, Indianapolis, IN 46219

SOUTHERN: Stanley-Bostitch, Inc., 3623 Clearview Parkway, Atlanta, GA 30340

WESTERN: Stanley-Bostitch, Inc., 6941 West Goshen Avenue, P.O. Box 111, Visalia, CA 93277

BOSTITCH SALES OFFICES & WAREHOUSES

ARIZONA	
Phoenix	602-257-8130
CALIFORNIA	
Fullerton	714-773-5591
San Francisco	408-727-7582
Visalia	209-651-4011
COLORADO	
Denver	303-373-4873
FLORIDA	
Ft. Lauderdale	305-979-5710
Tampa	813-621-4791
GEORGIA	
Atlanta	404-458-2324
HAWAII	
Honolulu	808-836-4568
ILLINOIS	
Skokie	312-470-8400
INDIANA	
Indianapolis	317-353-2171
KANSAS	
Kansas City	913-894-9555
KENTUCKY	
Somerset	606-679-6842
LOUISIANA	
New Orleans	504-733-2451
MARYLAND	
Baltimore	301-242-8058
	301-242-8059
MASSACHUSETTS	
Woburn	617-933-1128
MICHIGAN	
Detroit	313-477-1200
Grand Rapids	616-452-1435
MINNESOTA	
Minneapolis	612-835-2440
MISSOURI	
St. Louis	314-567-6120
NEW JERSEY	
East Rutherford	201-773-5113
NEW YORK	
Syracuse	315-437-1021
NORTH CAROLINA	
Charlotte	704-376-4402
OHIO	
Cleveland	216-433-1060
Cincinnati	513-825-7771
OREGON	
Portland	503-220-0518
PENNSYLVANIA	
Philadelphia	215-643-6200
Pittsburgh	412-787-1243
	412-787-1244
PUERTO RICO	809-781-6216
RHODE ISLAND	
East Greenwich	401-885-0700
TENNESSEE	
Memphis	901-365-7200
TEXAS	
Dallas	214-620-8770
Houston	713-240-3697
UTAH	
Salt Lake City	801-973-2233
VIRGINIA	
Richmond	804-222-3105
WASHINGTON	
Seattle	206-575-0655

Litho in U.S.A.