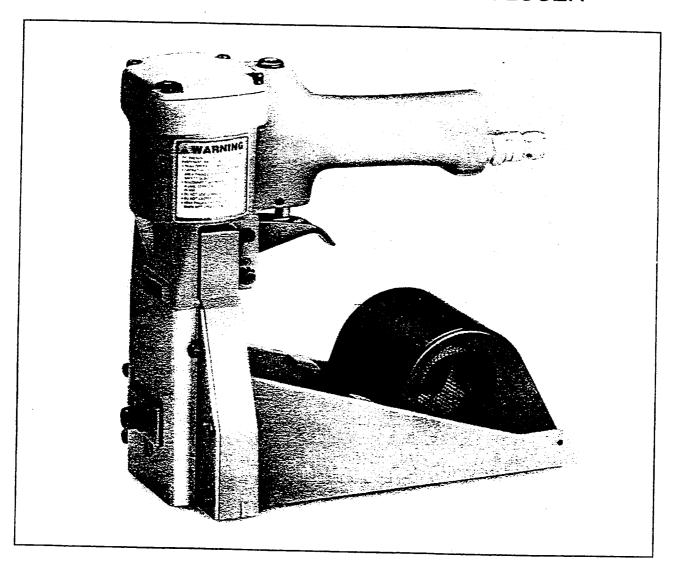
# BOSTITCH

# Model D60ADC COIL-FED PNEUMATIC CARTON CLOSER



# OPERATION and MAINTENANCE MANUAL

# **AWARNING:**

BEFORE OPERATING THIS TOOL, ALL OPERATORS SHOULD STUDY THIS MANUAL, TO UNDERSTAND AND FOLLOW THE SAFETY WARNINGS AND INSTRUCTIONS. KEEP THESE INSTRUCTIONS WITH THE TOOL FOR FUTURE REFERENCE. IF YOU HAVE ANY QUESTIONS, CONTACT YOUR BOSTITCH REPRESENTATIVE OR DISTRIBUTOR.

BSA1469S REVG 7/00 SS/LT

BOSTITCH

Stanley Fastening Systems

WARNING

OPERATES OVER WIDE RANGE OF AIR PRESSURES 70-100 PSI (4.9 - 7.0 kg/cm²)

> FAST, EASY RELOADING 1000 STAPLES IN EACH COIL

ADJUSTABLE DEPTH OF PENETRATION

ADJUSTABLE TIGHTNESS OF CLINCH MAGAZINE ACCOMODATES 1/2"(13MM), 5/8"(16MM), 3/4"(19MM) SWC STAPLES WITH AN EASY ADJUSTMENT

QUICK JAM RELEASE FEATURE

**D60ADC Specifications** 

Length 9" (230mm)

Height 85/8"
(219mm)

Width 4½" (115mm)

Weight 5 lbs. 9 oz. (2.5 kg)

# INTRODUCTION

The Bostitch D60ADC Carton Closer is a precision-built tool, designed for high speed, high volume carton closing. This coil-fed closer will deliver efficient, dependable service when used correctly and with care. As with any fine power tool, for best performance the manufacturer's instructions must be followed. Please study this manual before operating the closer 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 carton closer. Contact your Bostitch representative or distributor with any questions concerning the carton closer and its use. Bostitch, Inc., East Greenwich, Rhode Island 02818.

# BEFORE USING ANY PNEUMATIC TOOL 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.

NEVER place hands or any other part of body in staple clincher area or adjustment window.

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

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,		Back Cove



NOTE: Bostitch tools have been engineered to provide excellent customer satisfaction and are designed to achieve maximum performance when used with precision Bostitch fasteners engineered to the same exacting standards. Bostitch cannot assume responsibility for product performance if our tools are used with fasteners or accessories not meeting the specific requirements established for genuine Bostitch nails, staples and accessories.

# OPERATING THE D60ADC CARTON CLOSER

AWARNING:



<u>EYE PROTECTION</u> which conforms to ANSI specifications and provides protection against flying particles both from the FRONT and SIDE should ALWAYS be worn by the operator and others in the work area when loading, operating or servicing this tool. Eye protection is required to guard against flying fasteners and debris, which could cause severe eye injury.

The employer and/or user must ensure that proper eye protection is worn. Eye protection equipment must conform to the requirements of the American National Standards Institute, ANSI 287.1-1989 and provide both frontal and side protection. NOTE: Non-side shielded spectacles and face shields alone do not provide adequate protection.



COVER

<u>CAUTION: ADDITIONAL SAFETY PROTECTION</u> will be required in some environments. For example, the working area may include exposure to noise level which can lead to hearing damage. The employer and user must ensure that any necessary hearing protection is provided and used by the operator and others in the work area. Some environments will require the use of head protection equipment. When required, the employer and user must ensure that head protection conforming to ANSI Z89.1 1986 is used.

# **LOADING CARTON CLOSER**

1) Open the Magazine.

Press cover slightly to unlatch from magazine and swing cover open.

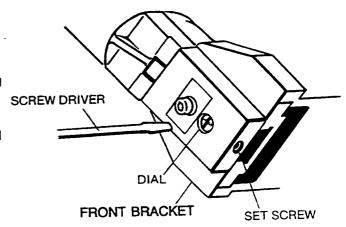
MAGAZINE

- Check Staple Leg Length:
   Adjustment is provided in machine for different staple leg lengths. Clinchers must be changed to use 1/2" (13mm) staples.
  - A) To adjust machine for leg length, loosen set screw and turn dial 180° with a screw driver to the desired adjustment as noted. Tighten set screw.
  - B) To change to shallow clinchers (see parts charts for part numbers) remove screws and front bracket to provide access to clinchers. Change one at a time to prevent reversing parts.

WARNING: To prevent accidental injuries:

- Never place a hand or any other part of body in staple clinching area or adjustment window.
- Never point tool toward anyone else.
- · Never engage in horseplay.
- Always handle the tool with care.
- Never pull trigger unless tool is in place on carton.
- Do not pull the trigger while loading the tool.

WARNING: Disconnect the air supply before making adjustments.

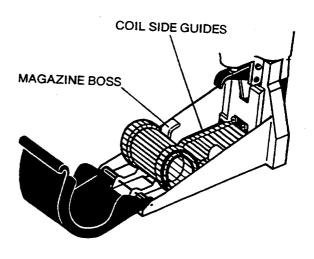


CLINCHERS	STANDAF 1127		SHALLOW/OFFSET D60065 (R.H.), D60066 (L.H.)							
STAPLES SWC7437	5/8 (16mm)	3/4 (19mm)	1/2 (13mm)	5/8 (16mm)						
DIAL POSITION	S		S 1	LS						

- 2) C) To adjust coil guides, loosen four screws:
  - For 1/2" (13mm) staples: push guides forward and inward as far as they go, tighten screws.
  - For 5/8" (16mm) staples: push guides to rear with screws in center of slots, tighten screws.
  - For 3/4" (19mm) staples: push guides forward and outward as far as they go, tighten screws.

# 3) Load the Coil of Staples:

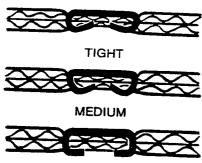
Place coil of staples in magazine. Feed front end of coil into side & top guides. Push forward until stopping on blade guide, swing cover closed and slightly squeeze to engage magazine bosses. Check positive engagement.



NOTE: Use only staples recommended for use in Bostitch D60ADC Top Carton Closer

# 4) Clinch Adjustment:

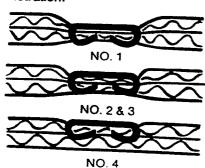
Turn special nut through window clockwise to tighten clinch and counter-clockwise to loosen clinch. Use a tool to fit in 1/8" (3mm) hole.

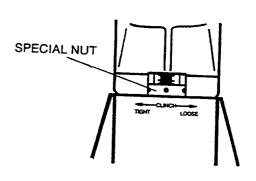


LOOSE

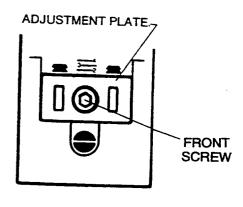
# 5) Depth Adjustment:

Loosen front screw and adjust to desired depth. When top edge of adjustment plate is et at highest setting (No. 4), the clinchers are at their shallowest penetration. If set at lowest setting (No. 1) the clinchers are at their deepest penetration.





NOTE: Remove adjusting tool after adjustment is made.



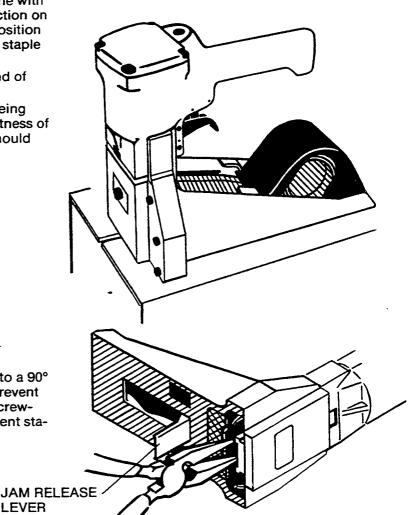
NOTE: Tighten screw before firing tool.

#### 6) Operate Machine:

Grasp handle with one hand. Position on box in line with the desired staple location. There is a small projection on either side of the frame as an aid in locating the position of the staple. Press trigger. Move machine to next staple location with or without releasing trigger.

Strongest closure requires end staples close to end of box. Check packing requirements.

Check staple clinching in samples of box board being used. Adjustments for depth of penetration & tightness of clinch are easy & instantaneous, full advantage should be taken of them.



# 7) Jammed Staple Removal:

Jams can be cleared by pulling jam release lever to a 90° position. At this position, hold coil of staples to prevent movement and use either a long nose plier or a screwdriver to clear jam. Carefully release lever to prevent staples being trapped between anvil & blade guide.



WARNING: Disconnect air supply

before clearing jams.

NOTE: Keep fingers away from lever window in case of accidental release of lever.

# AIR SUPPLY AND CONNECTIONS

**LEVER** 

#### **OPERATING PRESSURE**

The operating pressure of the D60ADC Carton Closer is 70 to 100 p.s.i. (4.9 to 7.0 kg/cm<sup>2</sup>).

Do not exceed 100 p.s.i. (7.0 kg/cm<sup>2</sup>). Tool wear will be greatly increased if excessive pressure is used.

# SETTING THE CORRECT PRESSURE.

The air requirements will vary, depending on the carton to be stapled and staple size. Do not use more air pressure than is required to clinch the staple in the specific job. To determine best setting. start at low pressure and increase pressure until clinching is satisfactory.

Using excess pressure increases tool wear and wastes 6 compressed air.

WARNING: To prevent accidental fir-

ing, disconnect air supply:

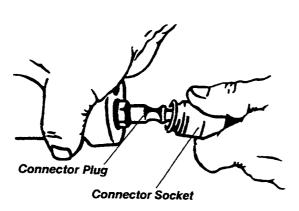
- before making adjustments
- · when servicing the tool
- · when clearing jams
- · when tool is not in use
- when moving to a different work area.

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. (14.14 kg/cm<sup>2</sup>) as tool may explode

# QUICK DISCONNECT FITTINGS

Install a free-flow connector plug on the carton closer. Thread is 1/4" N.P.T.

Install a connector socket on the air hose. For best performance, fitting should have minimum inside dia. of .190".



#### **REGULATORS**

Most air supply equipment will produce pressures that exceed the D60ADC maximum operating pressure, 100 p.s.i. (7.0 kg/cm<sup>2</sup>). 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. (10.5 kg/cm²) working pressure rating (or 150 percent of the maximum pressure that could be produced in the air system).

#### AIR CONSUMPTION

The D60ADC requires 4.0 C.F.M. (0.113) cubic meter/min) of free air to operate at the rate of 100 staples per minute, at 80 p.s.i. (5.66 kg/cm<sup>2</sup>). Take the actual rate at which the carton closer will run to determine the amount of air required. For instance, if your staple usage averages 50 staples per minute, you need 50% of the 4.0 c.f.m. (0.1133 M <sup>3</sup>/min.) which is required for running at 100 staples 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 tool. 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 tool 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, or equivalent. Do not use detergent oil or additives because the seals and bumpers in the tool may be attacked by the oil. If an airline 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.

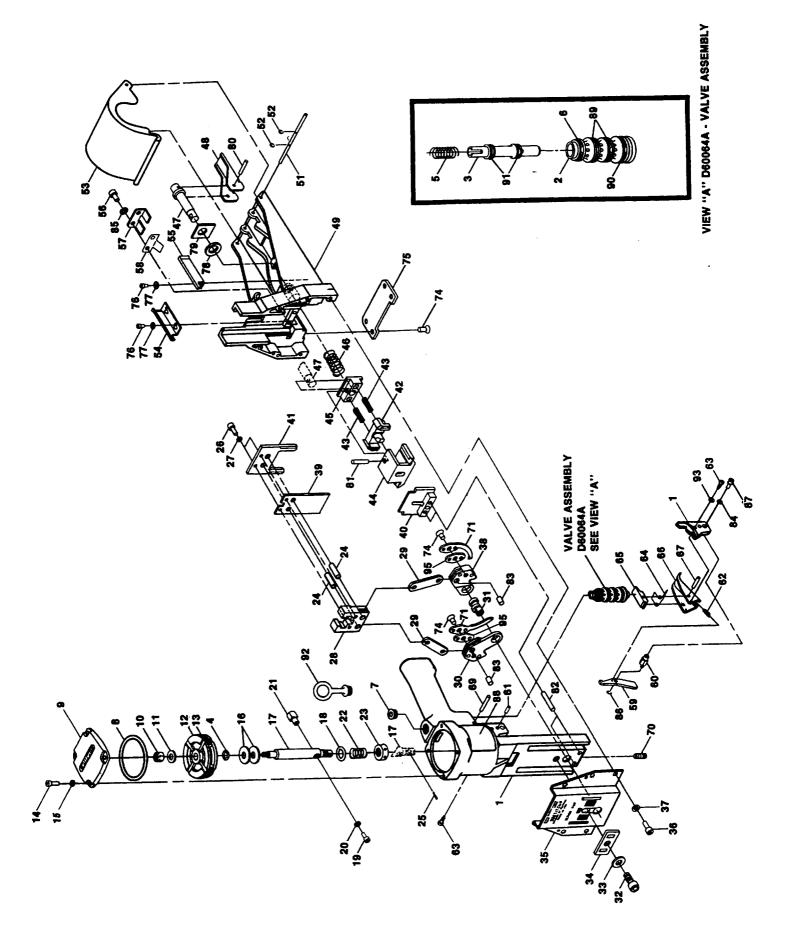
For cold weather operation, near and below freezing, the oil and water present in the air line may freeze and prevent tool operation. We recommend the use of BOSTITCH WINTER FORMULA air tool lubricant BC603 in place of BC602/BC604 or permanent antifreeze (ethylene glycol) as a cold weather lubricant.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

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 carton closer. If a wrong fitting is used, the tool can remain charged with air after disconnecting, and thus will be able to cycle even after the air line is unplugged.

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

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



	No.	Tait NO.	D60050	D60019	D80016	67 UB2812.2 Roll Pin, 1/8" x 3/4"	850243	70 UA4810.2 Screw-1/4"-20 x 5/8"		71** 119780 Elat Climbar	0	D80032	UA1804 1		T.M.I.O	DANNAR	BO TO174 DAIL DIA 1/0" C 7/0"	11B3100.9		Denosa	SW8E		T2118	UA2808.1	850916		86459	851201	D16106A	LW8		0.5 0.501.50
	Description	Scrow Elfe to vola" Con Lid One	2010m, 3/10-10 x 3/4 500. Tu. CRD	LOCKWasher	Flate, ADJ.	Bracket, Front	Screw, #10-32x1/2" Soc. Hd. Cap	Lockwasher #10	Clincher Lever L.H.	Driver	Guide, Driver	Former	Pusher	Spring, Pusher	Anvil	Anvil Cap	Spring, Jam Release	Pin, Jam Release	Lever, Jam Release	Magazine	Pin, Cover Hinge	Retaining Ring 1/8"	Cover	Guide, Coll, R.H.	Gulde, Coll, L.H.	SC(8W, #10-32 x 3/8 Soc, Hd. Cap	Guide, lop	Lear Spring	, Lever, Cycle	Pin, ADJ.	Holl Pin, 1/8" x 3/8"	Spring, Lever
	m o. Part No.	2 LIA5812.3	11/16/10	i	:	;	1	-		-	D80023		2 D60045		-	5 D80046	_							T	D60039	Ť			Ī	-	j	D80035
	Description No.	Cylinder	Valve Body		11 10 × 020 W			O:Hing 1/16 x 1/2 I.D.		(2-1/8" I.D.		Lock Insert	Plain Washer, 1/4"			Screw, #8-32 x 1/2" Soc. Hd. Cap 45	Lockwasher #8				Screw, #8-32 x 3/8" Soc. Hd. Cap 51	191, #8	Calm, Pin		1/4" v F/R"	116"	Hd Can				Clincher Lever 12 Li	
meti	No. Part No.	1 D60002A	2 D60008	3 D80009	4 850880		+	1			$\dashv$	10 HN1428.8		1	i		1	+	-	-	19 UA2806.1	+	22 Denors		24 UB4110.1	<u> </u>		T	+	+	T	-

Complete valve assembly available as P/N D60064A which includes the following: Item No.'s: 2, 3, 5, 6, 89, 90, 91.

\*Special to order.
\*\* SHALLOW CLINCHERS
D60065 R.H. CLINCHER YELLOW
D60066 L.H. CLINCHER YELLOW

# MAINTAINING THE D60ADC CARTON CLOSER

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 D60ADC 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 D60ADC, 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.

NOTE: A number of o-rings are almost identical in size. Care must be taken to insure only the proper o-rings are used in each location. Match new o-ring with part removed.

#### TROUBLE SHOOTING

#### Air Leakage from Exhaust Port:

Check trigger valve body and stem o-rings, piston and piston o-ring for cuts, cracks or excessive wear. Reinstall parts using new o-rings. Refer to assembly procedures for seals.

NOTE: To change damaged piston, remove cylinder head and magazine assembly. Loosen set screw to unlock pivot pin. Slide linkage mechanism and pivot pin simultaneously from adjustment nut and cylinder bar hole. Remove spirol pin, adjustment nut and spring. Remove piston assembly and change piston. Lubricate parts and change o-rings before reassembly. Reverse above procedure to assemble. Refer to exploded view.

#### Air Leakage from Cylinder:

Check trigger valve, body, and piston rod port o-rings for damage or wear. Reinstall new o-rings. Check cylinder head screws for tightness. If loose, remove cap and inspect o-ring. Look for possible damage to cylinder and cylinder head.

#### Slow and Short Travel Cycling:

Check for loosened screw and wear of parts. Position eccentric pin as shown and tighten screw. Re-check, for maximum efficiency, slight adjustment of pin at the position shown must be made. Upward direction if short travel occurs and downward direction if slow cycling occurs.

Lubrication is required as noted in Lubrication section.

#### **Excessive Jams:**

Check for broken leaf spring or incorrect spring load, Maintain load of approx. one to two lbs.

NOTE: Too little load will allow belt of staple to slide backwards or sideways; too high load will prevent correct

feed of belt due to excessive drag.

Check for slow and short travel cycling.

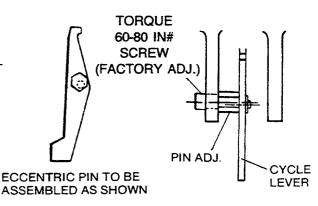
Check coil guides for proper adjustment. Check for broken leaf spring.

Check clinchers screws for looseness. Tighten screws.

Check for leg length adjustment & clincher size.

Correct adjustment, if required.

Check for insufficient lubrication.



#### Uneven Clinch:

Check for leg length adjustment & clincher size.

Check for coil guide adjustment. Correct adjustments.

#### Unclinched Staple:

Check for broken or loose clinchers. Replace or tighten clinchers.

Check for slow and short travel cycling.

#### **Driver or Former Replacements:**

Remove six (6) screws holding cylinder assembly from magazine assembly. Remove two (2) screws.

Replace broken driver or former.

#### Clincher Replacement:

Loosen six (6) screws and remove front bracket. Change clinchers (see parts chart for part nos.) one at a time to prevent reversing clinchers.

# LIMITED WARRANTY

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 1 year 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, accident or repairs attempted or made by other than our regional repair center or authorized warranty service center. Driver blades, bumpers and o-rings are considered normally wearing parts.

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.

This warranty is limited to sales in the United States and Canada. 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, return the product at your expense together with proof of purchase to a Bostitch Regional or authorized warranty repair center. You may call us at 1-800-556-6696 for the location of authorized warranty service centers in your area.