

SAVE THIS MANUAL  
FOR  
FUTURE REFERENCE

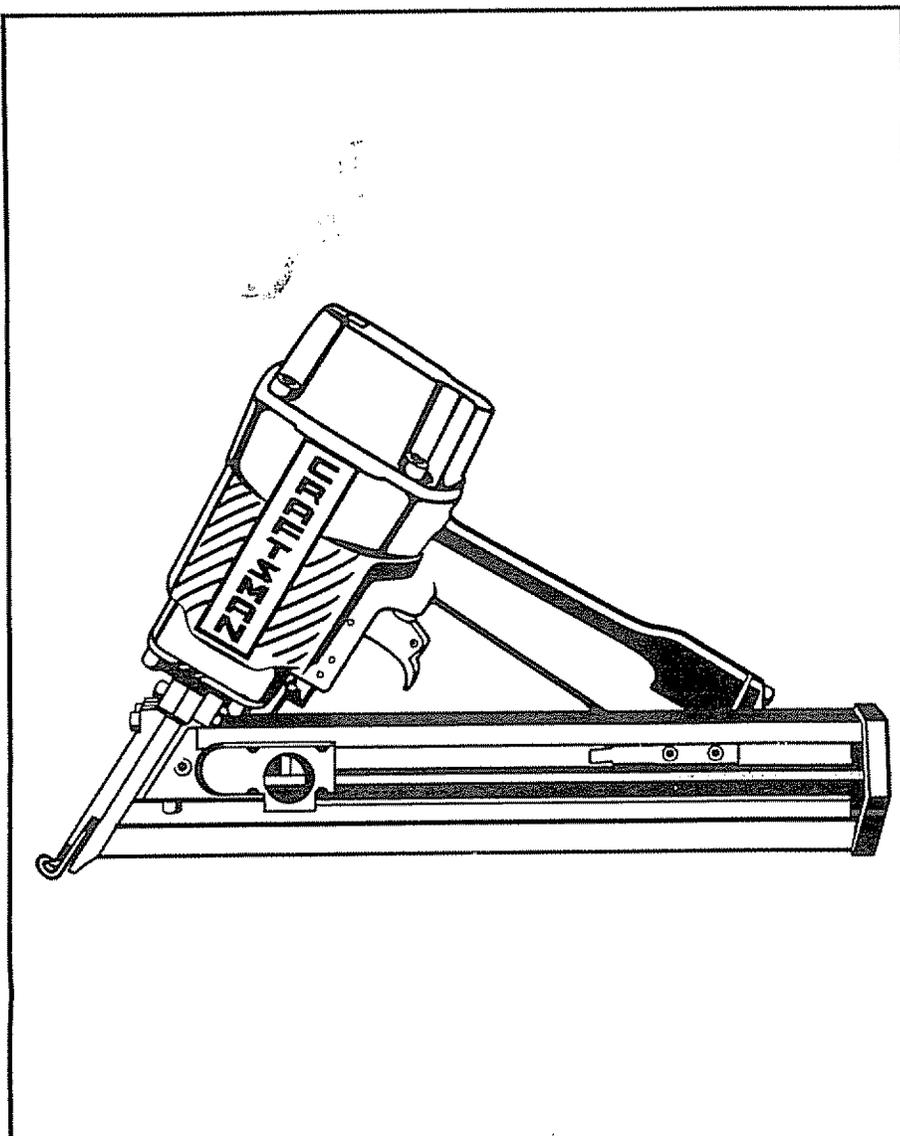
# SEARS

OWNER'S  
MANUAL

MODEL NO.  
351.183220

**CAUTION:**

READ ALL  
INSTRUCTIONS  
CAREFULLY!



## SEARS/CRAFTSMAN®

### Angle Finishing Nailer

- safety instructions
- operating instructions
- replacement parts

Sold by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A. ©

Part No. 7553.01

SEPTEMBER 1993

## DESCRIPTION

The Sears Angle Finishing Nailer drives 15 gauge nails from 1 1/2 to 2 1/4" long and 14 gauge nails 2 1/2" long. Magazine is angled for nailing in tight spots. Tapered nose makes precise nail placement easy. Die cast aluminum body is light weight and balanced to reduce operator fatigue. Contact safety disables nailer until nosepiece is in contact with workpiece. Convenient rear load magazine makes loading nails easy. The Sears Angle Finishing Nailer is ideal for interior and exterior molding, furniture making and cabinetry.

## SPECIFICATIONS

Capacity	100 nails, 15 gauge
	90 nails, 14 gauge
Finish nail lengths	1 1/2 to 2 1/2"
Operating pressure	60-100 PSIG
Air inlet	1/4" N.P.T.F.
Length	13"
Height	11 1/2"
Width	3 3/4"
Weight	5 3/4 lbs.

## FINISH NAILS

Q18348	15 gauge finish nails, 1 1/2" long
Q18349	15 gauge finish nails, 2" long
Q18350	14 gauge finish nails, 2 1/2" long

## SAFETY INSTRUCTIONS

Air tool operators and all others in work area should always wear safety goggles (must comply with ANSI Z87.1) to prevent eye injury from fasteners and flying debris when loading, operating or unloading this tool.

Never exceed operating pressure of 100 PSIG (7.1 kg/cm<sup>3</sup>).

Always keep hands and body away from the fastener discharge area when air supply is connected to tool.

Always disconnect tool from air supply when servicing or adjusting tool and when tool is not in use.

Do not operate tool when contact trip is not in contact with work.

Never load the tool until you are ready to use it.

Never depress tool trigger when loading.

Always load tool with tool pointing away from you and others.

Never point tool at yourself or others.

Never carry tool with trigger depressed.

Do not use oxygen, combustible gases or high pressure compressed gas as the air supply for the tool.

Always use tool at safe distance from other people in work area.

Do not attempt to discharge fastener into hard or brittle materials such as concrete, steel or tile.

Do not connect female quick-disconnect coupling to tool side of air line.

Connect male free-flow nipple to tool side of air line so that tool is depressurized when disconnected from hose.

Use Sears recommended fasteners only.

## OPERATING INSTRUCTIONS

### AIR SUPPLY LINE

Refer to Figure 1.

The Sears air nailer operates on compressed air at pressures from 60 to 100 PSIG.

Never exceed maximum pressure.

Minimum air requirements for nailer: Average working SCFM 4.0 at 90 PSI with a 3/8" air hose and 15 gallon tank.

**WARNING: KEEP HANDS AND BODY AWAY FROM DISCHARGE AREA OF NAILER WHEN CONNECTING AIR SUPPLY. ALWAYS DISCONNECT TOOL FROM AIR SUPPLY WHEN SERVICING OR ADJUSTING TOOL AND WHEN TOOL IS NOT IN USE.**

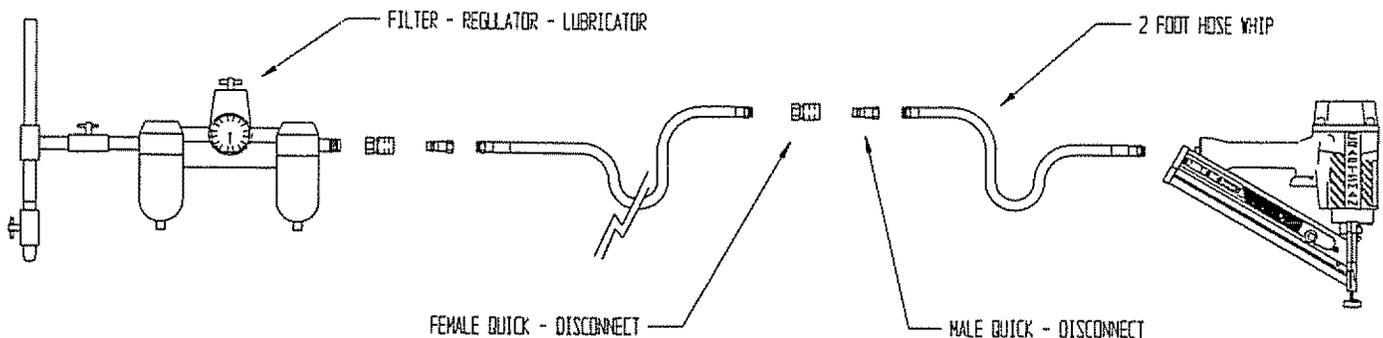


Figure 1- Air Supply Line

## OPERATING INSTRUCTIONS (Continued)

### AIR SUPPLY LINE (Continued)

Clean dry air is essential to the operation of the Sears nailer. Air operated tools require clean, dry, lubricated compressed air to ensure top performance, low maintenance and long life.

Dirt and abrasive materials present in all air lines will damage tool O-rings, valves and cylinders.

Moisture will reduce tool performance and life if not removed from compressed air.

A filter-regulator-lubricator system is required and should be located as close to tool as possible (see Figure 1), a distance of less than 15 feet is recommended.

Keep air filter clean. A dirty filter will reduce the air pressure to the nailer causing a reduction in power and efficiency.

The air supply system must be able to provide air pressure of 60 to 100 pounds per square inch at tool.

The lubricator should be filled with a non-detergent air tool oil.

All hoses and pipes in the air supply system must be clean and free of all moisture and foreign particles.

**Never connect a female quick-disconnect coupling to the tool side of air system.** A male, free-flow coupling should be connected to the tool side of air system. The female coupling provides a seal preventing loss of compressed air from compressor tank when disconnected from male coupling. If connected to tool side of air supply, the female coupling could seal a compressed air charge in the nailer which could discharge if the tool trigger is actuated.

The air pressure should be properly regulated. Do not mount swivel connector in air supply line.

Different workpiece materials and different nail lengths will require different operating pressure.

Be sure all connections in air supply system are sealed to prevent air loss.

### LOADING

Refer to Figures 2 and 5.

**WARNING: DISCONNECT TOOL FROM AIR SUPPLY. ALWAYS LOAD NAILER WITH NOSE OF TOOL POINTING AWAY FROM YOU AND OTHERS. ALWAYS WEAR SAFETY GOGGLES THAT COMPLY WITH ANSI Z87.1.**

1. Insert nails into rear of magazine with heads of nails in top of slot (see Figure 2a below).

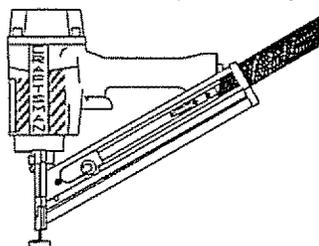


Figure 2a - Loading

2. Slide nails to front of magazine past nail stop bracket (Key No. 40, Figure 5). See Figure 2b below.

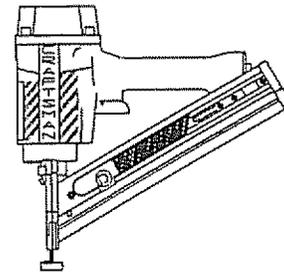


Figure 2b - Loading

3. Slide pusher (Key No. 31, Figure 5) over nails and nail stop bracket to rear of magazine. Slide pusher forward against nails. See Figure 2c below.

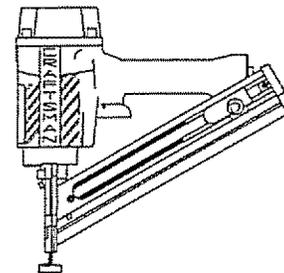


Figure 2c - Loading

### UNLOADING

Refer to Figures 3 and 5.

Place finger inside round hole in pusher cover and press pusher (Key No. 31, Figure 5) to release nails. Slide pusher to front of magazine. Slide nails out of rear of magazine.

Press pusher here  
to release nails

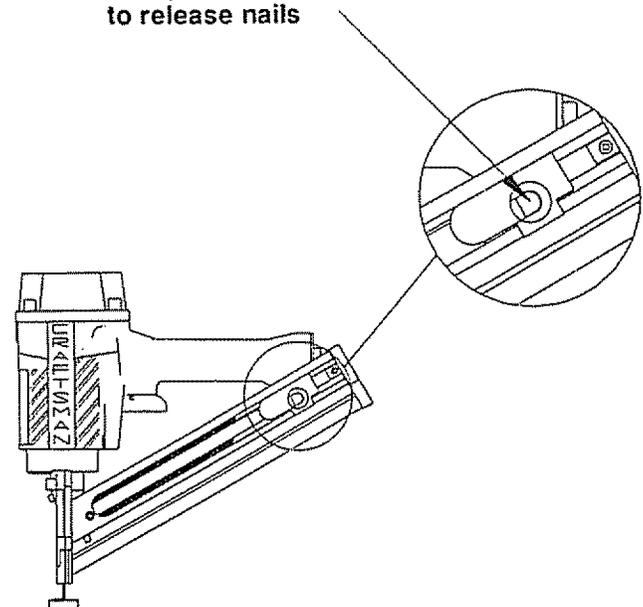


Figure 3 - Unloading

## OPERATING INSTRUCTIONS (Continued)

### NAILING OPERATION

Refer to Figure 4.

**WARNING: NEVER OPERATE TOOL UNLESS CONTACT TRIP IS IN CONTACT WITH WORKPIECE. DO NOT OPERATE TOOL WITHOUT NAILS OR DAMAGE TO TOOL MAY RESULT. NEVER FIRE NAILS INTO THE AIR BECAUSE NAILS MAY INJURE OPERATOR OR OTHERS AND DAMAGE TO TOOL MAY RESULT.**

The Sears 15 Gauge Finishing Nailer is equipped with a contact trip safety mechanism that disables nailer unless contact trip is pushed against work. Hold tool handle firmly and press nose of tool on workpiece where nail is to be applied. Pull trigger to drive nail into workpiece.

The nailer can also be operated by holding trigger depressed and pushing contact trip against workpiece. This operating procedure is preferred for rapid-fire nail driving. Never operate tool unless contact trip is in contact with workpiece.

### OPERATING PRESSURE

Use only enough air pressure to perform the operation. Air pressure in excess of that which is required will make the nailing operation inefficient and may cause premature wear or damage to the tool.

Different workpiece materials and different nail lengths will require different operating pressure. Determine minimum air pressure required by driving some test nails into the workpiece. Set air pressure so that test nail heads are driven down flush with the work surface. Nails driven too deep may damage workpiece.

Air pressure can be adjusted for nail countersinking.

### MAINTENANCE

Lubricate tool daily with quality air tool oil. If no air line lubricator is used, place five to six drops of oil into inlet of nailer everyday.

Keep magazine and nose clean and free of any dirt, lint or abrasive particles.

The tip of the ram (Key No. 11) can become dented or rounded over time. Square off tip of the ram with a clean, fine hand file to extend the life of the ram and nailer. Nail firing will be more consistent if the ram tip is kept clean and square.

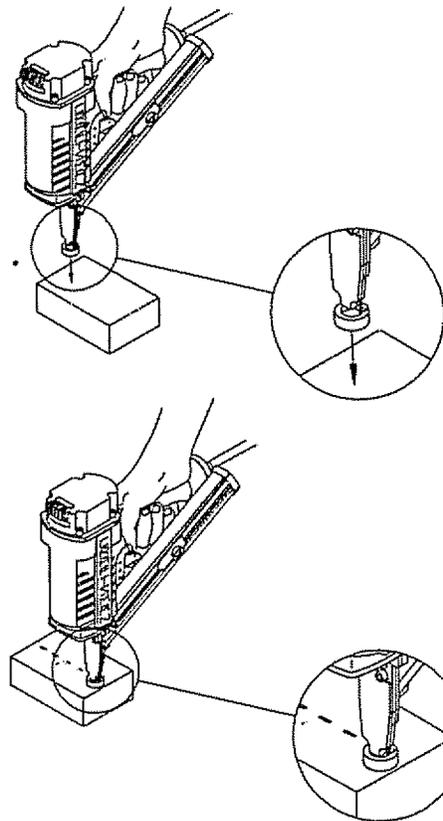


Figure 4 - Contact Trip Operation

Inspect contact trip safety mechanism daily for proper operation. Do not operate nailer if mechanism is not operating properly.

Perform the following procedures to test safety mechanism:

1. Leave trigger untouched while pushing contact trip into workpiece. **Nailer must not fire.**
2. Pull nailer trigger while contact trip is clear of work and pointed away from operator and others. **Nailer must not fire.**
3. Depress and hold trigger. Push contact trip against workpiece where nail is needed. The nailer should drive only one nail each time the contact trip is pushed against workpiece.

**REPAIR NAILER IMMEDIATELY IF CONTACT TRIP MECHANISM DOES NOT OPERATE PROPERLY.**

Repair or replace any missing or damaged parts. Use the parts list to order parts.

#### **FULL ONE YEAR WARRANTY ON CRAFTSMAN AIR-DRIVE TOOLS**

***If this Craftsman air-drive tool fails to give complete satisfaction within one year from the date of purchase, RETURN IT TO THE NEAREST SEARS SERVICE CENTER/ DEPARTMENT IN THE UNITED STATES, and Sears will repair it, free of charge.***

***If this Air-Drive Tool is used for commercial purposes, this warranty applies for only 90 days from the date of purchase.***

***This warranty gives you specific legal rights and you may also have other rights which vary from state to state.***

***Sears, Roebuck and Co., Dept. D/817 WA, Hoffman Estates, IL 60195***

## TROUBLESHOOTING

**WARNING: DISCONNECT TOOL FROM AIR SUPPLY BEFORE ATTEMPTING REPAIR OR ADJUSTMENT.**

Refer to Figure 5.

Note: Be sure tool is oiled properly. Clean and oil all O-rings during reassembly.

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Trigger cap leaks air	1. O-ring damaged	1. Check and replace damaged O-ring (Key No. 54)
Trigger leaks air	1. O-ring damaged	1. Check and replace damaged O-rings (Key Nos. 55, 58, 60, 61, 62, & 64)
Cap leaks air	1. Cap bolts loose	1. Tighten bolts (Key No. 1)
	2. Damaged cap gasket	2. Check and replace damaged gasket (Key No. 18)
Nose leaks air	1. Nose bolts loose	1. Tighten bolts (Key No. 68)
	2. Damaged nose gasket	2. Check and replace damaged gasket (Key No. 65)
	3. Damaged bumper	3. Check and replace damaged bumper (Key No. 15)
Tool will not operate	1. Insufficient air supply	1. Check air supply
	2. Insufficient lubrication	2. Place five or six drops of air tool oil into inlet cap (Key No. 23)
	3. Damaged or worn cylinder valve O-rings	3. Replace damaged or worn O-rings (Key Nos. 6 & 7)
	4. Broken cylinder valve spring	4. Replace broken spring (Key No. 5)
	5. Cylinder valve binding in cap	5. Clean and lubricate valve and cap (Key Nos. 8 & 3)
Tool operates slowly or loses power	1. Insufficient lubrication	1. Place five or six drops of air tool oil into inlet cap (Key No. 23)
	2. Broken cylinder valve spring	2. Check and replace broken spring (Key No. 5)
	3. Damaged or worn O-rings	3. Check and replace damaged or worn O-rings
	4. Damaged trigger assembly	4. Check and replace trigger assembly
	5. Build-up on ram	5. Clean and lubricate ram/piston assembly (Key No. 11)
	6. Cylinder not sealed on bumper properly	6. Disassemble cylinder and assemble properly
	7. Cylinder valve poorly lubricated	7. Disassemble cylinder valve (Key No. 8), clean and lubricate, assemble properly
	8. Insufficient air supply	8. Check air supply
Tool skips staple/ Inconsistent operation	1. Worn or damaged bumper	1. Check and replace bumper (Key No. 15)
	2. Build-up on ram or nose	2. Clean and lubricate ram/piston assembly (Key No 11) and inside of nose and nose cover (Key Nos. 74 & 76)
	3. Insufficient air supply	3. Check air supply
	4. Damaged or worn piston O-ring	4. Check and replace O-ring (Key No. 10)
	5. Insufficient lubrication	5. Place five or six drops of air tool oil into inlet cap (Key No. 23)
	6. Damaged magazine spring	6. Check and replace spring (Key No. 35)
	7. Magazine-nose bolt loose	7. Tighten bolt (Key No. 43)
	8. Nails too short	8. Use Sears recommended nails only
	9. Damaged nails	9. Discard damaged nails. Use Sears recommended nails only
	10. Incorrect nail size	10. Use Sears recommended nails only
	11. Cap gasket leaks	11. Tighten cap bolts (Key No. 1). Check and replace damaged cap gasket (Key No. 18)
	12. Damaged trigger valve O-ring	12. Check and replace damaged O-rings (Key Nos. 55, 58, 60, 61, 62 & 64)
	13. Bent or damaged ram	13. Check and replace damaged ram/piston assembly (Key No. 11)
	14. Dirty magazine	14. Clean magazine and lubricate with air tool oil
	15. Damaged or worn magazine	15. Check and replace magazine (Key No. 30)

MODEL 351.183220

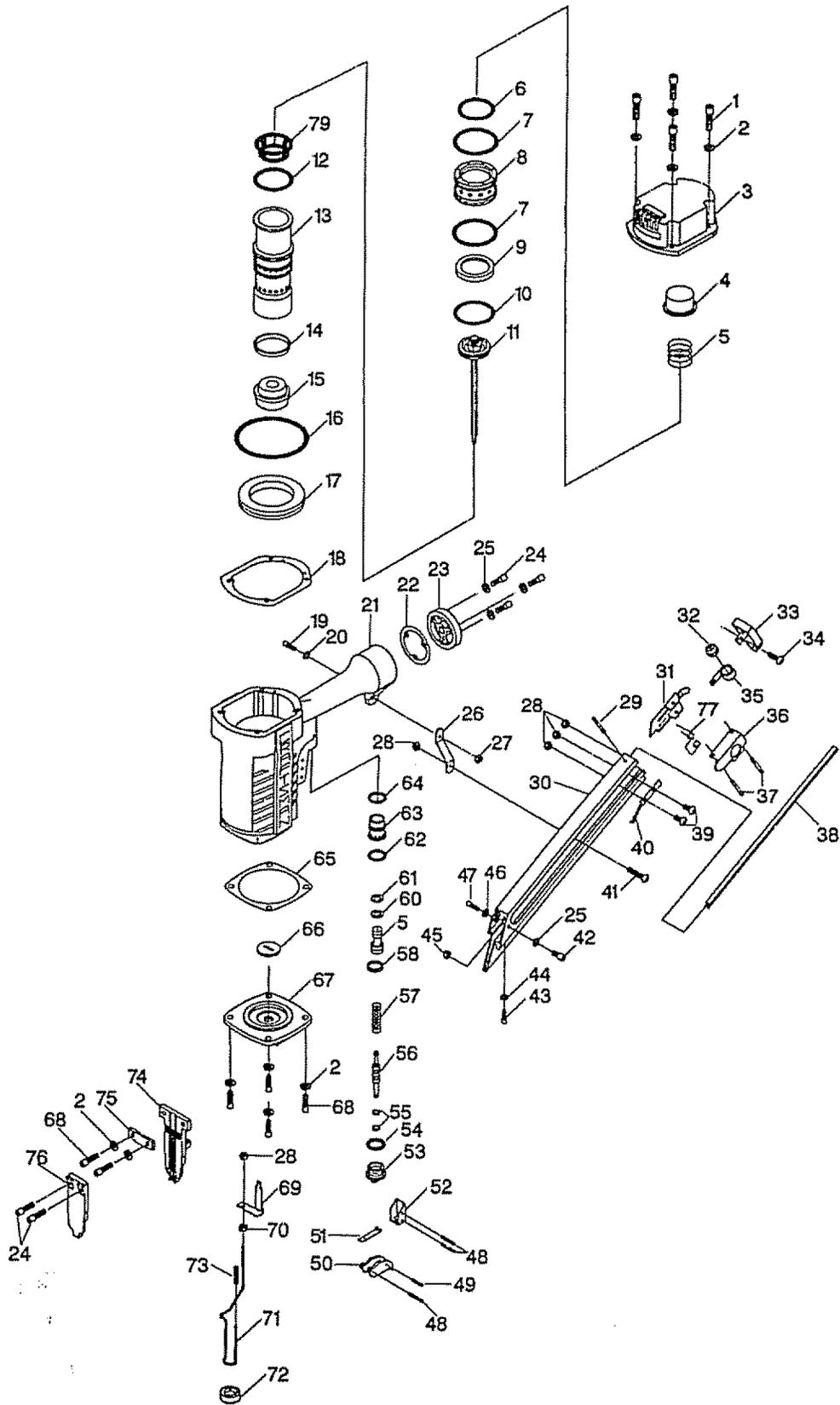


Figure 5 - Replacement Parts Illustration

## REPLACEMENT PARTS LIST FOR NAILER

KEY NO.	PART NO.	DESCRIPTION	QTY.	KEY NO.	PART NO.	DESCRIPTION	QTY.
1	1775 00	6-1 0 x 25mm Bolt, socket head	4	43	6078 00	4-0.7 x 12mm Bolt, socket head	1
2	58-100020	6mm Washer, lock	10	44	46-58470-3	4mm Washer, lock*	1
3	8362 00	Cap	1	45	6349 00	5-0 8 Nut, fiber hex	1
4	7467 00	Cap seal	1	46	46-58436-3	4mm Washer, flat*	1
5	7468.00	Cylinder valve spring	1	47	6086.00	4-0.7 x 8mm Bolt, socket head	1
6	7469 00	O-ring, cylinder valve, inside	1	48	46-22561-3	3 x 25mm Pin, spring*	3
7	7470.00	O-ring, cylinder valve, outside	2	49	6163.00	3 x 16mm Pin, spring	1
8	7471 00	Cylinder valve	1	50	6161.00	Trigger	1
9	7472.00	Valve seal	1	51	6162 00	Lever	1
10	6111.00	O-ring, piston	1	52	6160.00	Safety bracket	1
11	7530 00	Ram/Piston assembly	1	53	6159 00	Trigger cap	1
12	6112 00	O-ring, cylinder	1	54	6158 00	O-ring, trigger cap	1
13	7473.01	Cylinder	1	55	6157.00	O-ring, plunger	2
14	7474.00	Baffle	1	56	6156 00	Plunger	1
15	7531.00	Bumper	1	57	6155 00	Plunger spring	1
16	7476 00	O-ring, cylinder spacer	1	58	6136 00	O-ring, trigger valve, bottom	1
17	7477 00	Cylinder spacer	1	59	6153.00	Trigger valve	1
18	7478.00	Cap gasket	1	60	6151 00	O-ring, trigger valve, middle	1
19	7482.00	5-0 8 x 18mm Bolt, socket head	1	61	6151.00	O-ring, trigger valve, top	1
20	58-100014	5mm Washer, flat*	1	62	6150.00	O-ring, breather valve, bottom	1
21	7479 00	Nailer body	1	63	6149 00	Breather valve	1
22	6121 00	Inlet cap gasket	1	64	6050.00	O-ring, breather valve, top	1
23	7480 00	Inlet cap	1	65	7498.00	Nose gasket	1
24	0814 00	5-0 8 x 16mm Bolt, socket head	5	66	7544.00	Ram guide	1
25	46-58494-3	5mm Washer, lock*	4	67	7545.00	Nose plate	1
26	7532 00	Magazine bracket	1	68	0179 00	6-1 0 x 20mm Bolt, socket head	6
27	6349.00	5-0 8 Nut, fiber hex	1	69	7546 00	Contact trip arm	1
28	6080 00	4-0 7 Nut, fiber hex	5	70	46-5690-3	4-0.7 Nut, hex*	1
29	7533 00	3 x 34mm Pin, spring	1	71	7547 00	Contact trip	1
30	7534.00	Magazine	1	72	7548.00	Rubber cushion	1
31	7535 00	Pusher	1	73	7549 00	Contact trip spring	1
32	7487 00	Roller	1	74	7550 00	Nose	1
33	7536 00	Magazine cap	1	75	7551 00	Nose bracket	1
34	7537 00	4-0 7 x 10mm Screw, sckt. pan hd	1	76	7552 00	Nose cover	1
35	7488 00	Magazine spring	1	77	8051.00	Pusher spring	1
36	7538.00	Pusher cover	1	78	6045.00	5-0.8 x 20mm Bolt, socket head	3
37	7539 00	3 5 x 28mm Pin, dowel	2	79	8361.00	Cylinder bracket	1
38	7540 00	Wear plate	1	●	7553.01	Owner's Manual	1
39	7541.00	4-0.7 x 8mm Screw, socket pan hd.	2	<b>RECOMMENDED ACCESSORIES</b>			
40	7542 00	Nail stop bracket	1	●	9 18348	15 Gauge Finish Nails, 1 1/2" long	1
41	7537 00	4-0.7 x 10mm Screw, sock. pan hd.	1	●	9 18349	15 Gauge Finish Nails, 2" long	1
42	6270.00	5-0.8 x 8mm Bolt, socket head	1	●	9 18350	14 Gauge Finish Nails, 2 1/2" long	1

● Not shown

\* Standard hardware item available locally.

# SEARS

**OWNER'S  
MANUAL**

**SERVICE**

**MODEL NO.  
351.183220**

**HOW TO ORDER  
REPLACEMENT  
PARTS**

## **Angle Finishing Nailer**

Thank you for purchasing your Angle Finishing Nailer from Sears. This unit will provide you with many years of reliable service. Should the need exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit. The model number of your Angle Finishing Nailer is on the front of the nailer.

All parts listed may be ordered from any Sears Service Center and most Sears stores. If the parts you need are not stocked locally, your order will be electronically transmitted to the Sears Repair Parts Distribution Center for handling.

When ordering replacement parts, always give the following information:

NAME OF ITEM: Angle Finishing Nailer

MODEL NUMBER: 351.183220

PART NUMBER:

PART DESCRIPTION:

Sold by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A. ©

Part No. 7553.01

SEPTEMBER 1993