# **Operator's Manual**

# **CRAFTSMAN**®

15 Gauge 1¼" - 2½" Length IN-LINE ANGLE FINISH NAILER Model No. 351.184420

**CAUTION:** Read and follow all Safety Rules and Operating Instructions before First Use of this Product.

- Safety
- Operation
- Maintenance
- Parts List

Sears, Roebuck and Co., Hoffman Estates, IL 60179 U.S.A.

## **TABLE OF CONTENTS**

Warranty	. 2
Safety Rules	. 2
Operation	2-4
Maintenance	. 4
Troubleshooting	. 5
Parts Illustration and List 6	3-7

#### **WARRANTY**

# FULL ONE YEAR WARRANTY ON CRAFTSMAN FINISH NAILER

If this Craftsman air-drive tool fails due to a defect in material or workmanship within one full year from the date of purchase, return it to the nearest Sears Service Center 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. 817WA, Hoffman Estates, IL 60179

### **SAFETY RULES**

- Air tool operators and all others in work area should always wear safety goggles complying with United States ANSI Z87.1 to prevent eye injury from fasteners and flying debris when loading, operating or unloading this tool.
- Never exceed operating pressure of 110 PSI.
- 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 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 with nose of 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 gas 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.
- Do not use a hose swivel with this tool.
- Use Sears recommended fasteners only.

### **OPERATION**

Refer to Figures 1, 2, 3, 4 and 5.

#### **DESCRIPTION**

The Craftsman 15 Gauge In-line Angle Finish Nailer drives nails from 1¼" to 2½" long. Die cast aluminum, textured finish body with cushion grip minimizes operator fatigue. Large capacity, rear loading magazine makes loading easy. Safety feature disables tool unless contact trip is pressed against workpiece. Tapered nosepiece provides operator with greater visibility for precise fastener placement. Quick release nose cover allows easy access to jammed fasteners. Adjustment knob controls depth of fastener. Air deflector can be adjusted to any direction. The 15 Gauge Finish Nailer is excellent for interior and exterior trim work, door and window manufacturing, furniture making and cabinetry.

#### **SPECIFICATIONS**

Capacity	100 finish nails
Nail size	15 gauge (.072" x .068")
Nail lengths	1½ to 2½″
Operating pressure	70-110 PSI
Air inlet	¼″ N.P.T.F.
Length	13½″
Height	12½″
Width	31/4"
Weight	4.6 lbs.

#### FINISH NAILS

18348	15 gauge finish nails, 11/2" long
18349	15 gauge finish nails, 2" long
18355	15 gauge finish nails, 21/2" long

#### **AIR SUPPLY LINE**

Refer to Figure 1 (page 3).

- The air tool operates on compressed air at pressures from 70 to 110 PSI.
- Never exceed maximum pressure.

**Air Delivery Required:** 1.41 SCFM @ 90 PSI (30 shots per minute).

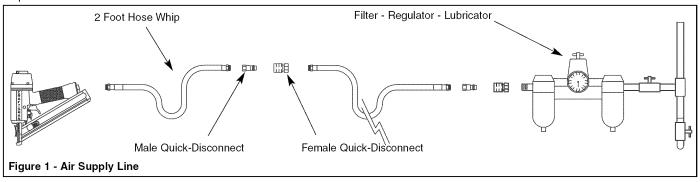
**WARNING:** Keep hands and body away from discharge area of tool when connecting air supply. Always disconnect tool from air supply when servicing or adjusting tool and when tool is not in use.

- 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, page 3).
   A distance of less than 15 feet is recommended.
- Keep air filter clean. A dirty filter will reduce the air pressure to the tool causing a reduction in power and efficiency.
- The air supply system must be able to provide air pressure of 70 to 110 pounds per square inch at tool.

- The lubricator should be filled with a non-detergent air tool
- All hoses and pipes in the air supply system must be clean and free of moisture and foreign particles.
- Do not mount swivel connector in air supply line.
- The air pressure should be properly regulated.
- Different workpiece materials and different fastener lengths will require different operating pressure.
- Be sure all connections in air supply system are sealed to prevent air loss.

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.

**WARNING:** 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 tool which could discharge if the tool trigger is actuated.



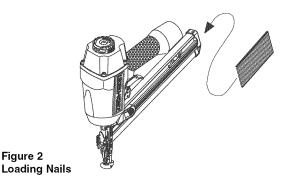
#### LOADING

Refer to Figures 2 & 5 (pages 3 and 6).

WARNING: Disconnect tool from air supply. Always load with nose of tool pointing away from you and others. Always wear safety goggles that comply with United States ANSI Z87.1.

NOTE: For best results use Sears fasteners only.

- Insert fasteners into magazine (see Figure 2).
- Slide pusher housing (Fig. 5, No. 65) towards rear of tool until it locks into position behind the fasteners.



To remove fasteners, press tab on pusher (Fig. 5, No. 61) and slide pusher assembly forward above the fasteners.

#### **NAILING OPERATION**

Figure 2

Refer to Figures 3 & 5 (pages 3 and 6)

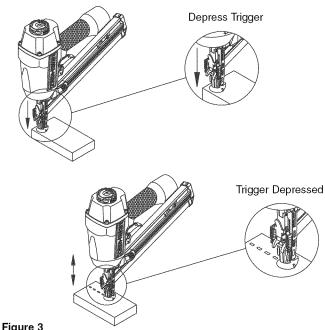
**WARNING:** Never operate tool unless contact trip is in contact with workpiece. Do not operate tool without fasteners or damage to tool may result. Never fire fasteners into the air because fasteners may injure operator or others and damage to tool may result.

- The air tool is equipped with a contact trip safety mechanism (see Figure 3, page 3) that disables tool unless contact trip is pushed against work. Hold body firmly and press contact trip on workpiece where fastener is to be applied. Pull trigger to drive fastener into workpiece.
- The tool can also be operated by holding trigger depressed and pushing contact trip against workpiece. This operating procedure provides rapid-fire fastener driving.

Never operate tool unless contact trip is in contact with workpiece.

- The driven depth of the fastener can be changed by turning the knob (Fig. 5, No. 46) in either direction.
- The air tool is equipped with a rotating switch (Fig. 5, No. 40) that can be used to lock the trigger (L), set to rapid-fire mode (C), or single-fire mode (S). When the switch is set to "S", the tool will not drive a second fastener until the trigger is fully released and pulled again.

WARNING: All air power fastening tools recoil when operated. This recoil is caused by rapid driving of the fastener. Tool may bounce from recoil causing a second, unwanted fastener to be driven. Reduce tool bounce by holding tool firmly in hand and pressing tool gently against workpiece. This will allow recoil of tool to bounce away from workpiece preventing the driving of second fastener.



#### **CONTACT TRIP PAD**

Refer to Figure 5 (page 6).

The tool is equipped with a contact trip pad (Fig. 5, No. 48) that prevents marring of finished surfaces by the contact trip during normal operation. The pad can be removed and stored when it is not required.

CAUTION: Disconnect tool from air supply before removing or reinstalling contact trip pad.

#### **QUICK RELEASE NOSE**

Refer to Figure 5 (page 6).

The tool is equipped with a quick release nose for clearing iammed fasteners.

 If a fastener jams in the tool, disconnect the air supply from the tool. Open the magazine and remove any fasteners. Pull the nose cover latch (Fig. 5, No. 53) down and release the nose cover. Remove the jammed fastener and secure the latch. Reload the fasteners and reconnect the air supply.

#### **OPERATING PRESSURE**

- Use only enough air pressure to perform the operation. Air pressure in excess of that which is required will make the operation inefficient and may cause premature wear or damage to the tool.
- Determine minimum air pressure required by driving some test fasteners into the workpiece. Set air pressure so that test fasteners are driven down flush with the work surface.
   Fasteners driven too deep may damage workpiece.

#### **EXHAUST DEFLECTOR**

Refer to Figures 4 & 5 (pages 4 and 6).

Exhaust deflector can be positioned to point in any direction (full 360° movement). Reposition deflector (Fig. 5, No. 2) by grasping firmly and rotating to the desired position.

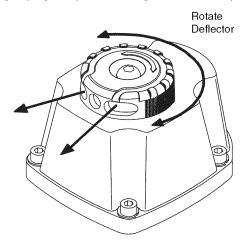


Figure 4 - Exhaust Deflector Adjustment

### **MAINTENANCE**

Refer to Figure 5 (page 6).

#### LUBRICATION

Lubricate tool daily with quality air tool oil. If no air line lubricator is used, place five or six drops of oil into body (Fig. 5, No. 36) through male quick disconnect of tool everyday.

#### **MAGAZINE AND PISTON/RAM**

 Keep magazine and contact trip area clean and free of any dirt, lint or abrasive particles.

The tip of the ram (Fig. 5, No. 18) can become dented or rounded over time.

 Square off the tip of the ram with a clean, fine hand file to extend the life of the ram and tool. Fastener firing will be more consistent if the ram tip is kept clean and square.

#### **SAFETY MECHANISM**

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

With the switch (Fig. 5, No. 40) in the rapid-fire mode, perform the following procedures to test safety mechanism:

- Leave trigger untouched while pushing contact trip into workpiece. Tool must not fire.
- Pull trigger while contact trip is clear of work and pointed away from operator and others. Tool must not fire.
- Depress and hold trigger. Push contact trip against work where fastener is needed. The tool should drive only one fastener each time the contact trip is pushed against workpiece.

If contact trip mechanism does not operate properly, repair tool immediately through Sears Service Center.

Replace any damaged or missing parts. Use the parts list to order parts.

## **REBUILD KITS**

Rebuild kits are available as spare parts, (see page 7). Tools should be rebuilt if tool fails to operate properly after extended use. See troubleshooting to determine required replacement parts.

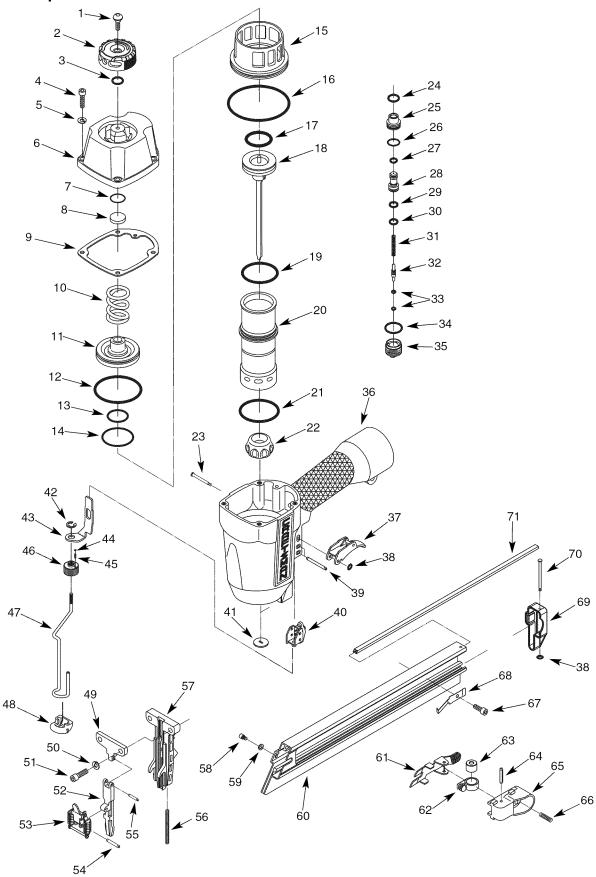
Disconnect tool from air supply before attempting repair or adjustment.

**NOTE:** When replacing O-rings or cylinder, lubricate with air tool oil before assembly.

# TROUBLESHOOTING

SYMPTOM	POSSIBLE CAUSE(S)	CORRECTIVE ACTION
Trigger cap leaks air	O-ring damaged     O-rings damaged	<ol> <li>Check and replace damaged O-ring (Fig. 5, No. 34)</li> <li>Check and replace damaged O-rings (Fig. 5, Nos. 24, 26, 27, 29, 30, 34 and two 33)</li> </ol>
Cap leaks air	Cap bolts loose     Damaged cap gasket     Damaged O-ring	<ol> <li>Tighten bolts (Fig. 5, No. 4)</li> <li>Check and replace damaged gasket (Fig. 5, No. 9)</li> <li>Check and replace damaged O-ring (Fig. 5, No. 7)</li> </ol>
Nose leaks air	Damaged bumper     Ram guide damaged	<ol> <li>Check and replace damaged bumper (Fig. 5, No. 22)</li> <li>Check and replace ram guide (Fig. 5, No. 41)</li> </ol>
Tool will not operate	<ol> <li>Insufficient air supply</li> <li>Damaged or worn head valve O-rings or seal</li> <li>Damaged head valve spring</li> <li>Head valve binding in cap</li> <li>Insufficient lubrication</li> </ol>	<ol> <li>Check air supply</li> <li>Replace damaged or worn O-rings or seal (Fig. 5, Nos. 7, 8, 12, 13 and 14)</li> <li>Replace damaged spring (Fig. 5, No. 10)</li> <li>Clean and lubricate cap and head valve (Fig. 5, Nos. 6 and 11)</li> <li>Place five or six drops of air tool oil into body (Fig. 5, No. 36) through male quick disconnect</li> </ol>
Tool operates slowly or loses power	Damaged head valve spring     Damaged or worn O-rings     Damaged trigger assembly     Build-up on ram     Cylinder not sealed on bumper properly     Insufficient air supply     Insufficient lubrication  Head valve poorly lubricated	<ol> <li>Check and replace spring (Fig. 5, No. 10)</li> <li>Replace damaged or worn O-rings</li> <li>Check and replace trigger assembly</li> <li>Clean and lubricate piston/ram assembly (Fig. 5, No. 18)</li> <li>Disassemble cylinder and assemble properly</li> <li>Check air supply</li> <li>Place five or six drops of air tool oil into body (Fig. 5, No. 36) through male quick disconnect</li> <li>Disassemble head valve (Fig. 5, No. 11).</li> <li>Clean, lubricate and assemble properly</li> </ol>
Tool skips fasteners or inconsistent operation	1. Worn or damaged bumper 2. Build-up on ram or nose  3. Insufficient air supply 4. Damaged or worn piston O-ring 5. Damaged magazine spring 6. Magazine-nose bolts loose  7. Fasteners too short 8. Damaged fasteners 9. Incorrect fastener size 10. Head valve O-rings leak  11. Damaged trigger valve O-rings  12. Bent or damaged ram  13. Dirty magazine 14. Damaged or worn magazine 15. Insufficient lubrication	<ol> <li>Check and replace bumper (Fig. 5, No. 22)</li> <li>Clean and lubricate piston/ram assembly (Fig. 5, No. 18) and inside of nose and nose cover (Fig. 5, Nos. 52 and 57)</li> <li>Check air supply</li> <li>Check and replace O-ring (Fig. 5, No. 17)</li> <li>Check and replace spring (Fig. 5, No. 62)</li> <li>Align nose with magazine and tighten bolts (Fig. 5, Nos. 51 and 58)</li> <li>Use Sears recommended fasteners only</li> <li>Discard damaged fasteners</li> <li>Use Sears recommended fasteners only</li> <li>Check and replace damaged O-rings (Fig. 5, Nos. 12, 13 and 14)</li> <li>Check and replace damaged O-rings (Fig. 5, Nos. 24, 26, 27, 29, 30, 34 and two 33)</li> <li>Check and replace damaged piston/ram assembly (Fig. 5, No. 18)</li> <li>Clean magazine and lubricate with air tool oil</li> <li>Check and replace magazine (Fig. 5, No. 60)</li> <li>Place five or six drops of air tool oil into body (Fig. 5, No. 36) through male quick disconnect</li> </ol>

Figure 5 - Replacement Parts Illustration



# REPLACEMENT PARTS LIST FOR NAILER

KEY NO.	PART NO.	DESCRIPTION	QTY.
1	06412.00	5-0.8 x 6mm Shoulder Screw	1
2	16020.00	Deflector	1
3	06414.00	Spacer	1
4	05284.00	5-0.8 x 25mm Socket Head Bolt	4
5	STD852005	5mm Lockwasher*	4
6	06901.00	Сар	1
7	06416.00	17.8 x 2.4mm O-Ring	1
8	06903.00	Seal	1
9	06902.00	Cap Gasket	1
10	06419.00	Spring	1
11	06904.00	Head Valve Piston	1
12	06421.00	49.1 x 2.5mm O-Ring	1
13	06106.00	24.7 x 3.5mm O-Ring	1
14	09512.00	37.7 x 3.5mm O-Ring	1
15	06905.00	Collar	1
16	06906.00	66.3 x 2.62mm O-Ring	1
17	06907.00	36.1 x 3.53mm O-Ring	1
18	16021.00	Piston Ram Assembly	1
19	06909.00	44.17 x 1.78mm O-Ring	2
20	06910.00	Cylinder	1
21	07426.00	45.7 x 2.62mm O-Ring	1
22	16022.00	Bumper	1
23	06914.00	Clevis Pin	1
24	07333.00	11.8 x 2.4mm O-Ring	1
25	06442.00	Trigger Head Valve	1
26	06443.00	11.5 x 1.5mm O-Ring	1
27	06064.00	3.8 x 1.9mm O-Ring	1
28	06444.00	Valve Plunger	1
29	06445.00	5.8 x 1.9mm O-Ring	1
30	06446.00	7.8 x 1.9mm O-Ring	1
31	06447.00	Spring	1
32	06448.00	Valve Stem	1
33	06449.00	2.5 x 1.4mm O-Ring	2
34	06451.00	14.8 x 2.4mm O-Ring	1
35	06450.00	Trigger Cap	1
36	16023.00	Body	1
37	06441.00	Trigger Assembly	1

KEY	PART		
NO.	NO.	DESCRIPTION	QTY.
38	06437.00	2.05 x 2.62mm O-Ring	2
39	08082.00	3 x 24mm Spring Pin	2
40	06452.00	Switch Assembly	1
41	06913.00	Ram Guide	1
42	08323.00	3CMI-8 E-Ring	1
43	16024.00	Contact Trip Bracket	1
44	06460.00	2mm Steel Ball	1
45	06459.00	Spring	1
46	16025.00	Depth Control Knob	1
47	16026.00	Contact Trip	1
48	16027.00	Contact Trip Pad	1
49	16028.00	Nose Bracket	1
50	STD852006	6mm Lockwasher*	2
51	06182.00	6-1.0 x 30mm Socket Head Bolt	2
52	16029.00	Nose Cover	1
53	16030.00	Latch	1
54	03378.00	2.5 x 14mm Spring Pin	1
55	06396.00	3 x 12mm Spring Pin	1
56	16031.00	Spring	1
57	16032.00	Nose	1
58	06086.00	4-0.7 x 8mm Socket Head Bolt	1
59	STD852004	4mm Lockwasher*	1
60	16033.00	Magazine	1
61	16034.00	Pusher	1
62	16035.00	Magazine Spring	1
63	16036.00	Roller	1
64	01873.00	3 x 22mm Spring Pin	1
65	16037.00	Pusher Housing	1
66	16038.00	Spring	1
67	00814.00	5-0.8 x 16mm Socket Head Bolt	1
68	16039.00	Nail Stop Bracket	1
69	15137.00	End Cover	1
70	15138.00	Clevis Pin	1
71	15139.00	Wear Plate	1
Δ	16272.00	Plastic Case	1
Δ	16301.01	Operator's Manual	1

Δ Not Shown\* Standard hardware item available locally

Recommended Accessories			
Δ	15 Gauge Finish Nails, 1½" Long	9-18348	
Δ	15 Gauge Finish Nails, 2″ Long	9-18349	
Δ	15 Gauge Finish Nails, 2½" Long	9-18355	

Rebuild Kits			
Δ	06487.00	Trigger Rebuild Kit Key Nos. 24, 26, 27, 29, 30, 31, 32, two 34 and two 33	1
Δ	06491.00	Head Valve Rebuild Kit Key Nos. 7, 8, 12, 13 and 14	1
Δ	15148.00	Piston-Ram Assembly Rebuild Kit Key Nos. 17, 18, 22 and 41	1
Δ	15149.00	Cylinder Rebuild Kit Key Nos. 9, 16, 19, 21 and 22	1

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## For the repair or replacement parts you need:

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www.sears.com/partsdirect

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For the location of a Sears Service Center in your area:

Call 24 hours a day, 7 days a week

1-800-488-1222

To purchase or inquire about a Sears Maintenance Agreement:

Call 7 a.m. – 5 p.m. CST, Monday – Saturday

1-800-827-6655

