

Operating Instructions and Parts Manual 16-Gauge Foot-Operated Corner Notcher Model FN-16



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1.0 IMPORTANT SAFETY INSTRUCTIONS

WARNING - To reduce risk of injury:

- Read and understand the entire owner's manual before attempting assembly or operation.
- Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
- Replace warning labels if they become obscured or removed.
- 4. This sheet metal notcher is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a sheet metal notcher, do not use it until proper training and knowledge have been obtained.
- Do not use this notcher for purposes other than its intended use. If used for other purposes, JET disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
- Always wear ANSI Z87.1 approved safety glasses or face shield while using this machine. (Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.)
- 7. Wear ear protectors (plugs or muffs) if noise exceeds safe levels.
- 8. Wear appropriate footwear, such as steel-toed shoes, when working with metal materials.
- Before operating the machine, remove tie, rings, watches, other jewelry, and roll sleeves up past the elbows. Do not wear loose clothing. Confine long hair.
- 10. Keep the floor around the machine clean and free of scrap material, oil and grease.
- 11. Keep machine guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately upon completion of maintenance.
- 12. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may

- affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
- Use the right tool. Do not force a tool or attachment to do a job for which it was not designed.
- Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before operating.
- Give your work undivided attention. Looking around, carrying on a conversation and "horseplay" are careless acts that can result in serious injury.
- 16. Keep visitors a safe distance from the work area. Keep children away.
- Make your workshop child proof with padlocks, master switches or by removing starter keys.
- 18. Do not overreach. Failure to maintain proper working position can cause you to fall into the machine or allow clothing to get caught, pulling you into the machine.
- 19. Keep the floor around the machine clean and free of scrap material, oil and grease.
- Use recommended accessories; improper accessories may be hazardous.
- 21. CALIFORNIA PROPOSITION 65 WARNING: This product contains chemicals known to the State of California to cause cancer, or birth defects or other reproductive harm.
- 22. This product, when used for welding, cutting, or working with metal, produces fumes, gases, or dusts which contain chemicals known to the State of California to cause birth defects and, in some cases, cancer. (California Health and Safety Code Section 25249.5 et seq.)
- 23. Do not operate this machine while under the influence of drugs, alcohol or any medication.
- 24. Keep blades sharp and clean for safe and best performance.
- 25. Deburr any sharp metal edges of the workpiece before placing it into the machine. Use leather gloves when handling workpieces.
- 26. Keep hands away from blade area during operation.
- 27. Provide for adequate space surrounding work area and non-glare, overhead lighting.
- 28. Anchor machine to the floor to prevent tipping.
- Do not stand on the machine. Serious injury could occur if the machine tips over.
- 30. Do not attempt to cut material thicker than the listed capacity of the notcher.

- 31. Do not cut round or bar stock on this machine, as it may damage the knives.
- 32. Use only JET factory authorized replacement parts and accessories; otherwise, the warranty and guarantee are null and void.

Familiarize yourself with the following safety notices used in this manual:

This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

This means that if precautions are not heeded, it may result in serious, or possibly even fatal, injury.

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3.0 About this manual

This manual is provided by JET, covering the safe operation and maintenance procedures for a JET Model FN-16 Corner Notcher. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. Your machine has been designed and constructed to provide consistent, long-term operation if used in accordance with the instructions set forth in this document.

If there are questions or comments, please contact your local supplier or JET. JET can also be reached at our web site: www.jettools.com.

Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

AWARNING Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!

Register your product online - http://www.jettools.com/us/en/service-and-support/warranty/registration/

4.0 Specifications

Model number	FN-16		
Stock number	755017		
Capacities			
Maximum cutting thickness, mild steel	16 gauge – 1.5 mm (1/16 in.)		
Notching angle	90-degree fixed		
Maximum notching capacity	80 x 80 mm (3.15 x 3.15 in.)		
Stroke length	25 mm (1 in.)		
Blade length	80 mm (3 in.)		
Main materials			
Cutting head	Steel		
Blades	Hardened steel, HRC 50-55		
Table	Steel, ground surface		
Stand and foot pedal	Steel		
Dimensions			
Table size LxW	260 x 260 mm (10-1/4 x 10-1/4 in.)		
Table height from floor	940 mm (37 in.)		
T-slot size WxD	3/8 x 5/8 in. (9.5 x 16 mm)		
Overall dimensions LxWxH	425 x 300 x 1170 mm (16-3/4 x 11-3/4 x 46 in.)		
Shipping dimensions LxWxH	1270 x 400 x 560 mm (50 x 15-3/4 x 33 in.)		
Weights			
Net weight	81 kg (178 lbs)		
Shipping weight	105 kg (231 lbs)		

Table 1

L = length, W = width, H = height, D = depth

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, JET reserves the right to change specifications at any time and without prior notice, without incurring obligations.

4.1 Base hole spacings

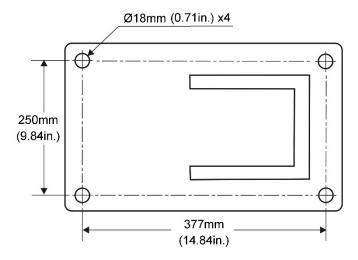


Figure 4-1

AWARNING Read and understand the entire contents of this manual before attempting setup or operation. Failure to comply may cause serious injury.

5.0 **Setup**

The FN-16 Notcher is shipped fully assembled. The user will be required only to secure it to floor and ensure it is properly adjusted and lubricated before operating.

5.1 Shipping contents

- 1 Notcher
- 3 Hex wrenches, 6,8,10 mm
- 1 Open-end wrench, 13/16 mm
- 1 Operating instructions and parts manual
- 1 Product registration card

5.2 Unpacking and locating

- Inspect contents for shipping damage. Report any damage immediately to your distributor and shipping agent. Do not discard any shipping material until machine is assembled and operating properly.
- Position notcher in a well-lighted area, with enough room on all sides for general maintenance and handling of materials. Anchor machine to a stable floor, preferably concrete, using lag screws or other appropriate fasteners through holes in base. Before tightening to floor, level the machine; use shims if needed.
- Exposed metal surfaces have been given a
 protective coating. Remove this with a soft cloth
 and a cleaner-degreaser or kerosene. Do not
 use gasoline, paint thinner, or acetone, as these
 may damage painted surfaces. Do not use an
 abrasive pad, as it may scratch polished
 surfaces.
- 4. Insert oil into hole atop cutting head (see Figure 6-1).
- Apply a light coat of SAE30 oil to table surface to inhibit rust.

6.0 Adjustments

6.1 Table position

See Figures 6-1 and 6-2 (shown with table mounted on right side of cutting head).

The table, with lower blades attached, can be positioned on left or right side of cutting head for user convenience. The upper blade assembly must also be rotated.

1. Remove blade guard (A, Figure 6-1).

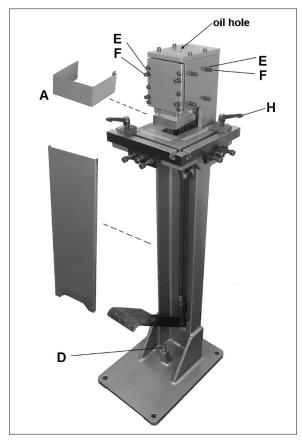


Figure 6-1 (shown with guards removed; all guards must be installed before operating)

- 2. Remove three (3) hex cap bolts with washers (B, Figure 6-2) from beneath table; two at front and one at back.
- 3. Remove two (2) socket head screws (C, Figure 6-2). Remove table.
- Rotate table and install at opposite side of cutting head.
- 5. Insert bolts/washers (B, Figure 6-2) and screws/washers (C, Figure 6-2). Hand tighten only at this time.
- 6. Verify appropriate blade gap (see *sect. 6.4.*) and make adjustments if needed.
- 7. After setting blade gap, tighten bolts and screws (B/C) securely.

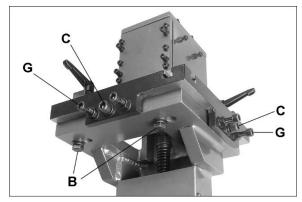


Figure 6-2

- 8. Remove four screws securing upper blade to ram (#24, sect. 10.1.1). Rotate upper blade to match new table position. Insert screws and tighten upper blade securely in new position.
- 9. Reinstall blade guard (A, Figure 6-1).

6.2 Stroke depth

Stroke depth has been set by the manufacturer so that foot pedal at its lowest point will cause upper blade edge to descend below lower blade edge.

Should future adjustment be needed, loosen hex nut and turn stop bolt (D, Figure 6-1) as needed. Retighten hex nut against block to secure setting.

6.3 Ram tightness

Normal wear on the ram may cause need for future adjustment. Loosen any of the eight nuts (E) and turn screws (F, Figure 6-1) at front and side as needed to modify drag on ram block. The ram should slide smoothly up and down with just enough drag to prevent shifting or free falling.

6.4 Setting blade gap

The notcher blades are designed for "splay" cutting, in which the cut begins at outside edge of material. The blades are pre-set by the manufacturer for notching 16-gauge material, with 0.004 in. (0.10mm) blade gap.

If misalignment has occurred, or table has been moved to other side of head, the gap should be inspected and readjusted as needed.

- 1. Remove blade guard (A, Figure 6-1).
- Verify that lower blades are secured to table and they are flush at front corner, forming a 90degree angle.
- 3. Press foot pedal to engage blades, and keep pedal in lowered position.
- 4. As a general rule, blade gap should be approximately 6% of stock thickness. For precise measurement, slide a feeler gauge (not provided) between upper and lower blades. Blade gap should be approx. 0.002 to 0.004inches (0.05 to 0.10mm). See Figure 6-3.

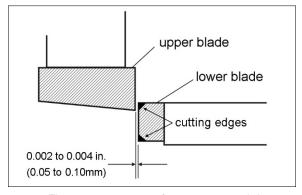


Figure 6-3: gap set for 16ga. material

- 5. Slightly loosen screws (C, Figure 6-2).
- Loosen nuts on four adjustment screws (G, Figure 6-2) and turn adjustment screws as needed to adjust gap between lower and upper blades on both sides of table. Feeler gauge should be snug but still able to be smoothly removed.
- NOTE: If a feeler gauge is not available, make incremental adjustments according to step #6, then tighten the screws (C), and make test cuts. Continue to adjust as needed until notcher is cutting properly.
- 8. Tighten nuts on the adjustment screws (G, Figure 6-2) to secure setting.
- 9. Tighten center screws (C, Figure 6-2).
- 10. Reinstall blade guard (A, Figure 6-2).

6.5 Handle adjustment

To adjust T-stop handles (H, Figure 6-1) to more convenient position: pull up on handle and rotate, then release, making sure handle settles back onto pin.

7.0 **Operation**

- Position T-blocks for desired notch size, using attached scales for general reference. Tighten handles.
- Position workpiece against T-blocks and step on foot pedal to make cut. The cut-off piece will fall through to the floor.

ACAUTION Protective footwear should be worn during operation.

3. Release foot pedal.

8.0 User-maintenance

8.1 Lubrication

AWARNING Use caution when working around blade area to prevent injury to fingers.

Keep blade area free of deposits or shavings, which can impede cut quality and hasten blade wear.

Keep table and T-slots clean. Periodically apply light coat of SAE 30 oil or equivalent to exposed metal surfaces, such as table, blades and T-slots, to inhibit rust.

Periodically insert oil through hole in top cover to lubricate ram mechanism.

Periodically apply oil to foot pedal pivot points.

Maintain sharp blades. If they become dull, resharpen or replace. NOTE: The two lower blades are double-edged; if one edge becomes dull, remove blade from table and flip it end-for-end for a fresh edge. See Figure 6-3 for identification of the cutting edges.

8.2 Additional servicing

Any additional servicing should be performed by authorized service personnel.

9.0 Troubleshooting FN-16 Corner Notcher

Symptom	Possible Cause	Correction	
Machine cuts with	Machine capacity exceeded.	Use materials within rated capacity.	
difficulty	Improper lubrication.	Follow lubricating guidelines.	
	Dull blade(s)	Sharpen or replace.	
Edges of cut are rough or rolled.	Blade gap incorrect.	Adjust blade gap.	
	Insufficient workpiece material on each side of blade.	Make sure there is sufficient length of material before and behind blade.	
Poor cut quality.	Machine capacity exceeded.	Use materials within rated capacity.	
, ,	Blades dry; improper lubrication.	Follow lubricating guidelines.	
	Blades dull or damaged.	Resharpen or replace blades.	
	Blades are loose.	Check all blades for tightness.	

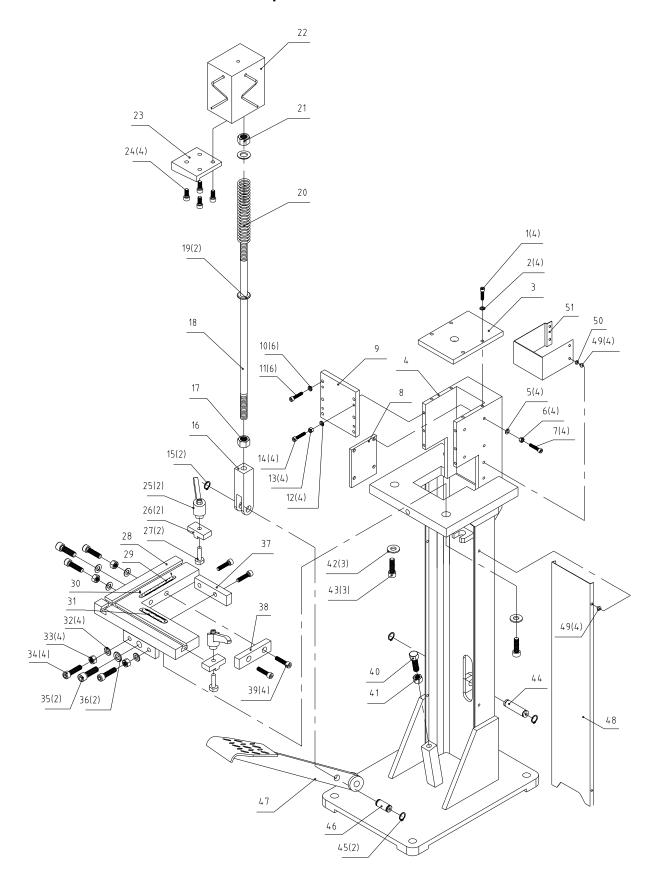
10.0 Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from JET.

Some parts are shown for reference only, and may not be available individually.

10.1.1 FN-16 Corner Notcher – Exploded View



10.1.2 FN-16 Corner Notcher – Parts List

Index No	Part No	Description	Size	Qty
		. Socket HD Cap Screw		
		. Flat Washer		
		Top Plate		
		. Stand		
		. Flat Washer		
		. Hex Nut, Full		
		. Socket HD Cap Screw		
		. Side Plate		
		. Front Plate		
		. Flat Washer		
11	TS-1503061	. Socket HD Cap Screw	M6-1.0x25	6
12	TS-1540041	. Flat Washer	M6	4
		. Hex Nut, Full		
		Socket HD Cap Screw		
15	F006044	C-Retaining Ring, Ext	16mm	2
16	FN16-16	. Yoke		1
		. Hex Nut, Full		
18	FN16-18	. Pull Rod		1
		. Flat Washer		
		Spring		
		Hex Nut, Full		
		. Ram		
		. Upper Blade		
24	TS-1504041	. Socket HD Cap Screw	M8-1 25x20	4
		. Adjustable Handle		
		. T-Block		
		. T-Bolt		
		. Work Table		
		Scale LH		
		Rivet		
		Scale RH		
		Flat Washer		
		. Hex Nut, Full		
		Socket HD Cap Screw		
		. Socket HD Cap Screw		
		. Flat Washer		
		. Lower Blade-2		
		. Lower Blade-1		
		Socket HD Cap Screw		
		·		
		. Hex Cap Screw		
		. Hex Nut, Full		
		. Flat Washer . Socket HD Cap Screw		
44	FIN 10-44	Long Pin		T
45	FUU0U44	. C-Retaining Ring, Ext		2
		. Short Pin		
		. Pedal		
		. Front Cover		
		. Mach Screw, Pan Hd, Phillips		
		Flat Washer		
		Blade Guard		
		Hex Wrench (not shown)		
		Hex Wrench (not shown)		
		. Hex Wrench (not shown)		
		. Open-End Wrench (not shown)		
		. JET Logo (not shown)		
		. ID Label, FN-16 (not shown)		
58	LM000295	. Warning Label, FN-16 (not shown)		1

11.0 Warranty and service

JET warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official JET branded website.

- JET products carry a limited warranty which varies in duration based upon the product. (See chart below)
- · Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. JET woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. Please note that you will be asked to provide proof of initial purchase when calling. If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. JET has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the JET website.

More Information

JET is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the JET website.

How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

Limitations on This Warranty

JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. JET SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

JET sells through distributors only. The specifications listed in JET printed materials and on official JET website are given as general information and are not binding. JET reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever. JET® branded products are not sold in Canada by JPW Industries, Inc.

Product Listing with Warranty Period

90 Days - Parts; Consumable items

1 Year - Motors; Machine Accessories

2 Year – Metalworking Machinery; Electric Hoists, Electric Hoist Accessories; Woodworking Machinery used for industrial or commercial purposes

5 Year - Woodworking Machinery

Limited Lifetime – JET Parallel clamps; VOLT Series Electric Hoists; Manual Hoists; Manual Hoist Accessories; Shop Tools; Warehouse & Dock products; Hand Tools; Air Tools

NOTE: JET is a division of JPW Industries, Inc. References in this document to JET also apply to JPW Industries, Inc., or any of its successors in interest to the JET brand.

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