

Operating Instructions and Parts Manual 72-inch Box and Pan Brakes

Models BP-1272 and BP-1672



JET 427 New Sanford Road LaVergne, Tennessee 37086 Ph.: 800-274-6848 www.jettools.com



1.0 IMPORTANT SAFETY INSTRUCTIONS

READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE.

WARNING – To reduce the 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 the warning labels if they become obscured or removed.
- 4. This box and pan brake 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 brake, do not use until proper training and knowledge have been obtained.
- Do not use this brake for 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 brake. (Everyday eyeglasses only have impact resistant lenses; they are *not* safety glasses.)
- Before operating this machine, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Do not wear loose clothing. Confine long hair. Non-slip footwear or anti-skid floor strips are recommended.
- 8. Wear ear protectors (plugs or muffs) if noise reaches unsafe levels.
- Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
- Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
- 11. Keep safety 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 after 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.
- 13. Provide for adequate space surrounding work area and non-glare, overhead lighting.
- 14. Keep the floor around the machine clean and free of scrap material, oil and grease.
- 15. Keep visitors a safe distance from the work area. Keep children away.
- 16. Make your workshop child proof with padlocks, master switches or by removing starter keys.
- Give your work undivided attention. Looking around, carrying on a conversation and "horseplay" are careless acts that can result in serious injury.
- 18. Maintain a balanced stance at all times so that you do not fall into the blade or other moving parts. Do not overreach or use excessive force to perform any machine operation.
- 19. Use recommended accessories; improper accessories may be hazardous.
- Maintain tools with care. Keep blades sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
- 21. Do not stand on the machine. Serious injury could occur if the machine tips over.
- 22. Remove loose items and unnecessary work pieces from the area before operating the machine.
- 23. Do not use in dangerous environment. Do not use machine in damp or wet location, or expose to rain. Keep work area well lighted.
- 24. Sheet metal stock has sharp edges; use caution when handling to prevent cuts.
- 25. Keep hands clear of bending area while operating.
- 26. Do not exceed rated capacity of brake.
- 27. The brake should be secured to floor with appropriate fasteners.

▲ WARNING: This product can expose you to chemicals including lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to http://www.p65warnings.ca.gov.

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.

▲ WARNING: Some dust, fumes and gases created by power sanding, sawing, grinding, drilling, welding and other construction activities contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead based paint
- crystalline silica from bricks, cement and other masonry products
- arsenic and chromium from chemically treated lumber

Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as dust masks that are specifically designed to filter out microscopic particles. For more information go to http://www.p65warnings.ca.gov/ and http://www.p65warnings.ca.gov/wood.

SAVE THESE INSTRUCTIONS

2.0 About this manual

This manual is provided by JET, covering the safe operation and maintenance procedures for a JET Model BP-1272 and BP-1672 Box and Pan Brake. 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 as 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/

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4.0 Specifications

Model number	BP-1272	BP-1672
Stock number	754125	754130
Capacity (mild steel)	12 gauge (2.5 mm)	16 gauge (1.5 mm)
Bending length capacity	72 in. (1830 mm)	72 in. (1830 mm)
Bending angle	0-135 deg.	0-135 deg.
Maximum box depth	4 in. (100 mm)	4 in. (100 mm)
Maximum lift of beam	2.2 in. (55.88 mm)	2.2 in. (55.88 mm)
Beam adjustment, front to rear	7/8 in. (22 mm)	1 in. (25.4 mm)
Recommended min. flange in capacity	material1 in. (25.4 mm)	1 in. (25.4 mm)
Number of fingers	17	17
Width of fingers6@3	3 in., 3@4 in., 6@5 in., 2@6 in	6@3 in., 3@4 in., 6@5 in., 2@6 in
		45 deg.
Finger nose radius	1/32 in. (0.79 mm)	1/32 in. (0.79 mm)
Overall dimensions:		
Assembled (LxWxH)100x3	30x41 in. (254x76.2x104.2 cm)	100x31x41 in. (2540x788x1042 mm)
Shipping (LxWxH) 92-1/2x3	30x39-1/2 in. (235x76x100 cm)	92-1/2x30x39-1/2 in. (235x76x100 cm)
Weights:		
Net	2182 lb. (990 kg)	1960 lb. (889 kg)
Shipping	2535 lb. (1150 kg)	2290 lb. (1039 kg)

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.

5.0 Setup and assembly

AWARNING Read and understand all assembly instructions before attempting assembly. Failure to comply may cause serious injury.

5.1 Shipping contents

Refer to Figures 1 and 2.

- 1 Box and pan brake (not shown)
- 2 Leg stands A
- 1 Handle B
- 1 Stop rod C
- 2 Counterweight assemblies D
- 1 Stop rod pin E
- 1 Stop collar with handle F
- 8 Hex cap bolts, M12x45 HP1
- 1 Flat washer, M16 HP3
- 8 Flat washers, M12 HP4
- 8 Lock washers, M12 HP5
- 5 Hex nuts, M12 HP6
- 1 Hex nut, M16 HP7
- 1 Cotter pin HP8
- 1 Instructions and parts manual (not shown)
- 1 Warranty card (not shown)

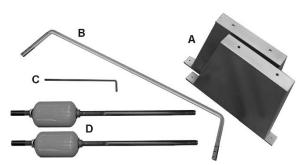


Figure 1

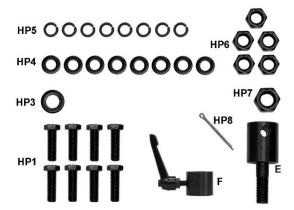


Figure 2

5.2 Tools required for assembly

Hex wrench 6mm Wrench 18mm Pliers

5.3 Unpacking and cleanup

- Remove all contents from shipping crate and compare to the contents list in this manual. If shipping damage or any part shortages are identified, contact your distributor. (Check brake first in case parts were shipped preassembled.) Do not discard packing material until brake is assembled and operating satisfactorily.
- Carefully clean all rust protected surfaces with a mild solvent or kerosene and a soft rag. Do not use lacquer thinner, paint thinner, or gasoline – these will damage painted surfaces.
- Coat all machined surfaces with a light coat of oil to inhibit rust.

5.4 Assembly

Refer to exploded view if additional clarification is needed for assembly.

- 1. Remove bolts holding leg stands and brake to pallet.
- Locate brake in a dry, well-lighted area with a sturdy, level floor. Machine location must allow room for loading and offloading stock, and access on all sides for maintenance.
- Use hoist or forklift to carefully lift brake onto leg stands. Secure with M12 bolts, washers and nuts (HP1/HP4/HP5/HP6).

beneath the brake while moving it into position and until it is secured on leg stands.

- Verify that brake is level; use shims if necessary. Secure leg stands to floor with appropriate fasteners, such as lag bolts (not provided).
- 5. The clamp handles are shipped in lowered position due to size constraints (thus, the fingers will contact platform before handles reach proper forward position). The handles must be repositioned before operating, as follows:
- Remove screw, spring cover and spring (J, Figure 3). Slide handle outward just enough to clear stop pin, and rotate handle to a higher position, as shown. Reinstall spring, spring cover and screw, and tighten screw until there is no "play" in the handle.

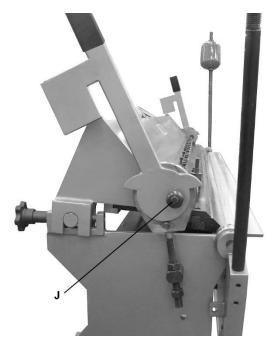


Figure 3

- Install counterweight assemblies to left and right hinges and tighten set screws. See Figure 3
- 8. Install handle (B) to front of apron (HP1, HP4,HP5).
- Install stop rod assembly on left side of brake, through weldment on apron, as shown in Figure
 Secure stop rod pin (F) with flat washer and hex nut (HP7,HP3). Install cotter pin (HP8) at end of stop rod, and bend with pliers to secure.

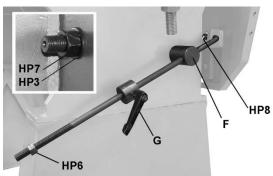


Figure 4

6.0 Adjustments

6.1 Counterweight position

Proper counterweight position determines amount of leverage for the bend, and most efficient movement of apron for the operator.

To adjust, back off top nut (K, Figure 5) and rotate counterweight (lower nut will turn with it) to desired

position. Bring top nut back into contact with counterweight.

When lifting the apron for a bend, grasp handle (L) to push counterweights.

ACAUTION Do not grasp the threads as they may cause cuts to hand.



Figure 5

6.2 Apron adjustment

The apron assembly has been adjusted by the manufacturer for use with material having the capacity listed in the Specifications section. If any misalignment occurs, correct as follows.

The forward edge of hold-down fingers should be adjusted parallel to pivot edge of press bar. Release clamping pressure on hold-down assembly by pushing clamp handles slightly to the rear. Turn knobs (M, Figure 6) to adjust hold-down assembly for parallel.

The truss nuts (N, Figure 6) can be used to help achieve alignment in apron and hold-down assemblies, by eliminating any bowing at the center of these assembles.

Finger alignment can be achieved by loosening the socket head screws on the fingers and raising apron to 90-degree position. Push fingers forward against apron bar for proper alignment. Retighten all screws.

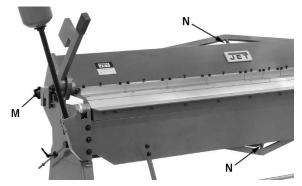


Figure 6

6.3 Adjusting for metal thickness

The hold-down assembly must be adjusted to allow for clearance when making bends according to material thickness. Clearance for material within four gauges of the capacity should be twice the thickness of the material. For lighter gauges use 1-1/2 times the thickness.

Turn both knobs (M, Figure 6) the same amount to maintain parallelism of fingers with apron.

6.4 Adjusting clamping pressure

Clamping pressure should be adjusted according to material thickness. Clamping pressure should be great enough to hold material securely in place but not so much that it is difficult to lock the clamping handles. Clamping pressure can be adjusted by turning the nuts on the threaded rod portion of yoke assembly (P, Figure 7).

When clamping handles are properly set, you will be able to feel them drop into locking position.

6.5 Repeat bends

Adjust stop collar on stop rod (Figure 4) to limit apron swing.

7.0 User-maintenance

7.1 Lubrication

The machine must be lubricated every day of service with a few drops of oil at the pivot points. Oil fittings are located at both yoke assemblies (A, Figure 7) and the apron assembly near the hinge pin (B).

Lightly oil all machined (unpainted) parts when not in use, to inhibit rust.

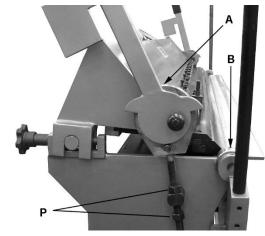


Figure 7

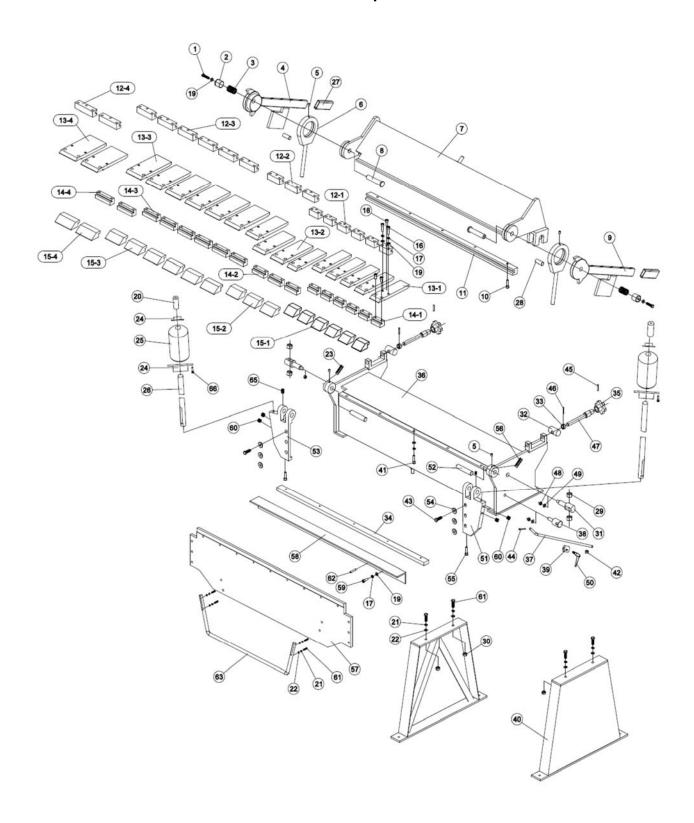
8.0 Replacement Parts

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.

8.1.1 BP-1272/1672 Box and Pan Brakes – Exploded View



8.1.2 **BP-1272/1672 Box and Pan Brakes – Parts List**

Index No Part No	Description	Size	Qty
1F008836	Hex Cap Screw	M10x25	2
2BPF16100-02	Spring Cover		2
3BPF16100-03	Spring		2
	Clamp Handle (LH)		
5BPF1248-05	Zerk Fitting		4
BP1272-06A	Yoke Assembly (includes #5,6,28)		2
6	. Yoke		2
	Hold Down Assembly		
	Hold Down Assembly		
	Shaft		
	Clamp Handle (RH)		
	Socket Head Cap Screw		
	Long Press A		
12-1BP12/2-12-1	Joint Open	3°	6
BP 1072-12-1	Joint Open	3	٥
	Joint Open		
	Joint Open		
RD1672-12-3	Joint Open	5	6
12-4 RD1272-12-4	Joint Open	5	
RP1672-12-4	Joint Open	6"	2
	Holder, Finger		
13-3 BP1272-13-3	Holder, Finger	5"	6
BP1672-13-3	Holder, Finger	5"	6
	Holder, Finger		
	Holder, Finger		
14-1BP1272-14-1	Washer, Finger	3"	6
BP1672-14-1	Washer, Finger	3"	6
14-2BP1272-14-2	Washer, Finger	4"	3
	Washer, Finger		
	Washer, Finger		
BP1672-14-3	Washer, Finger	5"	6
14-4BP1272-14-4	Washer, Finger	6"	2
BP1672-14-4	Washer, Finger	6"	2
	Finger		
15-3BP12/2-15-3	Finger	5"	6
BP1072-15-3	Finger	5°	٥
	FingerFinger		
	Socket Head Cap Screw		
	Lock Washer		
	Socket Head Cap Screw		
	Flat Washer		
	Sleeve		
	Lock Washer		
	Flat Washer		
	Scale (LH)		
	Nut		
	Counter Weight Assembly		
26BP1272-26	Rod		2
	Rubber grip		
28BP1272-28	Stop Pin		2
	Hex Nut		
30F003084	Hex Nut	M12	4

Index No	Part No	Description	Size	Qty
31	BPF16100-31	. Swivel Pin Assembly		2
32	BPF1248-32	. Adjusting Nut		2
33	BPF1248-33	. Stop Nut		2
34	BP1272-34	. Long Press B		1
35	BPF1248-35	. Knob		2
		. Base Assembly		
	BP1672-36	. Base Assembly		1
		. Stop Rod		
		Stop Rod Pin		
		Stop Collar		
		. Stand		
		Socket Head Cap Screw		
		. Hex Nut		
		. Hex Cap Screw		
		. Cotter Pin		
		. Round Pin		
		Round Pin		
		Lead Screw		
		. Hex Nut		
		. Flat Washer		
		. Handle		
		. Hinge Assembly (RH) (includes #51,64,65)		
		. Hinge (RH)		
		. Hinge Pin		
		. Hinge Assembly (LH) (includes #53,64,65)		
		. Hinge (LH)		
		. Special Washer		
		Socket Head Cap Screw		
		. Scale (RH)		
		. Apron Assembly		
		. Apron Assembly		
		Insert Bar		
		Socket Head Cap Screw		
		Socket Set Screw		
		. Hex Cap Screw		
		Round Pin		
		Bend Handle		
		Scale Pointer (not shown)		
		Socket Set Screw		
		Socket Head Cap Screw		
		. ID/Warning Label, BP-1272 (not shown)		
	LIVIOUUZ 10	. ID/Warning Label, BP1672 (not shown)		1
		. JET Logo (not shown)		
		. JET LOGO (HOL SHOWH)		1

9.0 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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