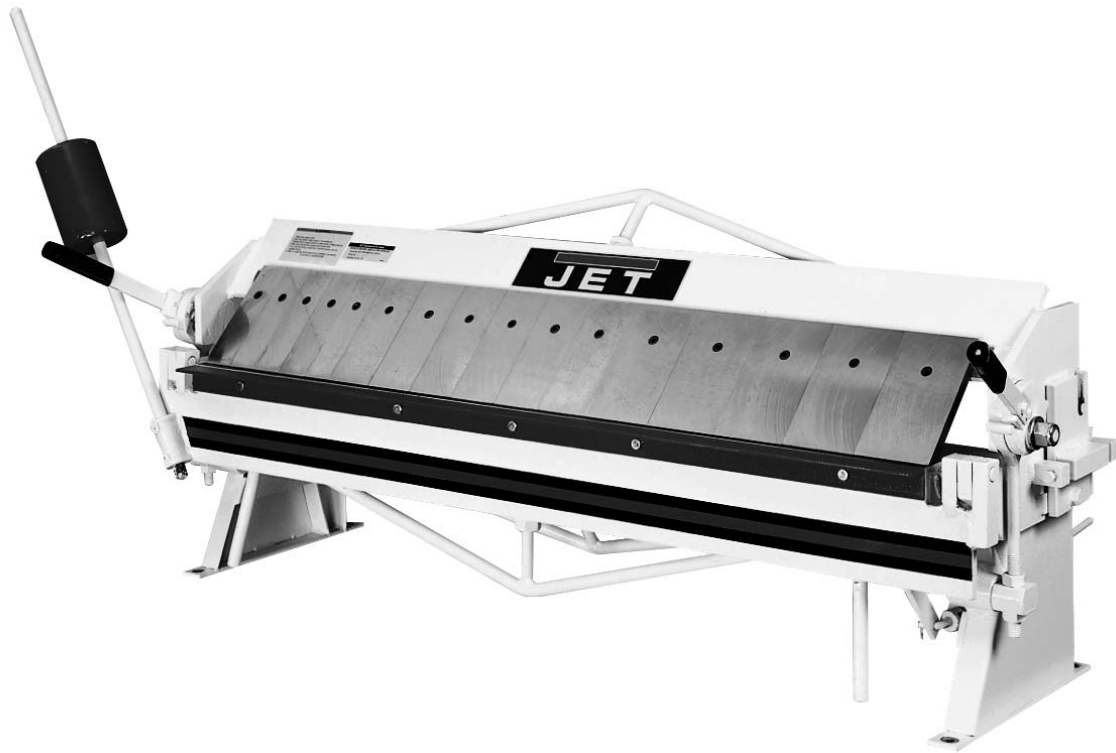




# Operating Instructions and Parts Manual Box and Pan Brake

Models: BP-1648H, BP-2248H



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**Part No. M-752116**  
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# 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 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; Light-Duty Air Tools
1 Year – Motors; Machine Accessories; Heavy-Duty Air Tools; Pro-Duty Air Tools
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

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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The specifications in this manual are given as general information and are not binding. JET reserves the right to effect, at any time and without prior notice, changes or alterations to parts, fittings, and accessory equipment deemed necessary for any reason whatsoever.

## Specifications

Model Number.....	<b>BP-1648H</b> .....	<b>BP-2248H</b>
Stock Number .....	752116 .....	752122
Capacity (mild steel).....	16 gauge .....	22 gauge
Bending Length Capacity .....	48" .....	48"
Maximum Box Depth.....	4" .....	3"
Maximum Lift of Beam .....	1-1/4" .....	7/8"
Beam Adjustment.....	5/8" .....	1/8"
Number of Fingers and Width .....	5@2", 6@3", 5@4" .....	5@2", 6@3", 5@4"
Finger Nose Angle .....	45 .....	45
Finger Nose Radius .....	1/32" .....	1/32"
Overall Dimensions (LxWxH) .....	61" x 21" x 30" .....	61" x 21" x 28"
Net Weight (lb.) .....	430 .....	258
Shipping Weight (lb.).....	507 .....	325



# Warnings

1. Keep guards in place and in working order.
  2. Keep all body parts away from moving parts. Avoid placing any part of your body near belts, cutters, gears, etc.
  3. Do not exceed rated capacity on this brake.
  4. Keep the work area clean. Cluttered areas and workbenches invite accidents.
  5. Keep children away. All visitors should be kept a safe distance from the work area.
  6. Make your workshop child proof with padlocks, master switches or by removing starter keys.
  7. Don't force the machine. It will do the job better and safer at the rate for which it was designed.
  8. Use the right machine. Don't force a machine or attachment to do a job for which it was not designed.
  9. Wear proper apparel. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry, which may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
  10. Always use safety glasses. Also use face or dust masks if the cutting operation is dusty. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
  11. Don't overreach. Keep proper footing and balance at all times.
  12. Maintain tools with care. Keep tools sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
  13. Never stand on a machine. Serious injury could occur if the machine tipped.
  14. 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.
  15. Sheet metal stock has sharp edges. To prevent cuts, use caution when handling.
  16. Keep hands and fingers clear of the area in front and rear of the brake.
  17. Do not use the machine for any purpose other than for which it was designed
  18. Failure to comply with all of these warnings may cause serious injury.
  19. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
    - Lead from lead based paint
    - Crystalline silica from bricks and cement and other masonry products, and
    - Arsenic and chromium from chemically treated lumber.
- Your risk from these exposures 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 those dust masks that are specifically designed to filter out microscopic particles.
20. Do not operate tool while under the influence of drugs, alcohol or any medication.

## Uncrating and Clean-Up

1. Remove the crate from around the machine.
2. 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.
3. Coat all machined surfaces with a light coat of oil to inhibit rust.
4. Remove bolts holding the machine to the skid.
5. Carefully move the machine to a well-lighted area on a solid, level workbench, and secure to the bench with lag screws or bolts.

NOTE: An optional stand (p/n 754200) designed for your brake is available from JET. Call your dealer or JET to order.

6. Machine location must allow access to all sides.

## Brake Setup

The brake will not bend properly if it is not level. Use a machinist's level and shims if necessary.

## Apron Adjustments

*The (#) in the text refers to the breakdown.*

The apron assembly has been adjusted at the factory for proper use of capacity material. During shipment of this unit the machine may have come out of alignment.

The forward edge of the holddown fingers (58, 59 & 60) should be adjusted parallel to the pivot edge of the clamp block. Release clamping pressure on the holddown assembly by pushing clamp handles slightly to the rear. Turn the hex cap screws (64) to adjust for parallel.

The center of the apron can be adjusted by tightening the truss nut on the apron assembly.

Finger alignment can be achieved by loosening all socket head cap screws (57) and rotating the apron (903) to the 90-degree position. This will align fingers. Tighten screws (57).

## Operating the Brake

### Adjusting for Metal Thickness

The holddown assembly must be adjusted to allow for clearance when making bends according to the thickness of the material. 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. The forward edge of the holddown fingers should be adjusted parallel to the pivot edge of the clamp block. Release clamping pressure on the holddown assembly by pushing clamp handles (42 & 43) slightly to the rear. Turn the hex cap screws (64) to adjust for parallel and proper clearance. The center of the holddown can be adjusted by tightening the truss nut on the holddown assembly.

### Adjusting the Clamping Pressure

The clamping pressure should be adjusted according to the thickness of the material. The clamping pressure should be great enough to hold the 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 lower nuts (54) on the threaded rod portion of the yoke assembly (47 & 48).

### Flange Capacity

The recommended minimum flange in capacity material is one inch.

### Repeat Bends

Adjust the stop (81) on the stop rod (69) to limit the swing of the apron assembly.

### Counter Weight

The counter weight (68) can be moved up or down to provide more or less leverage.

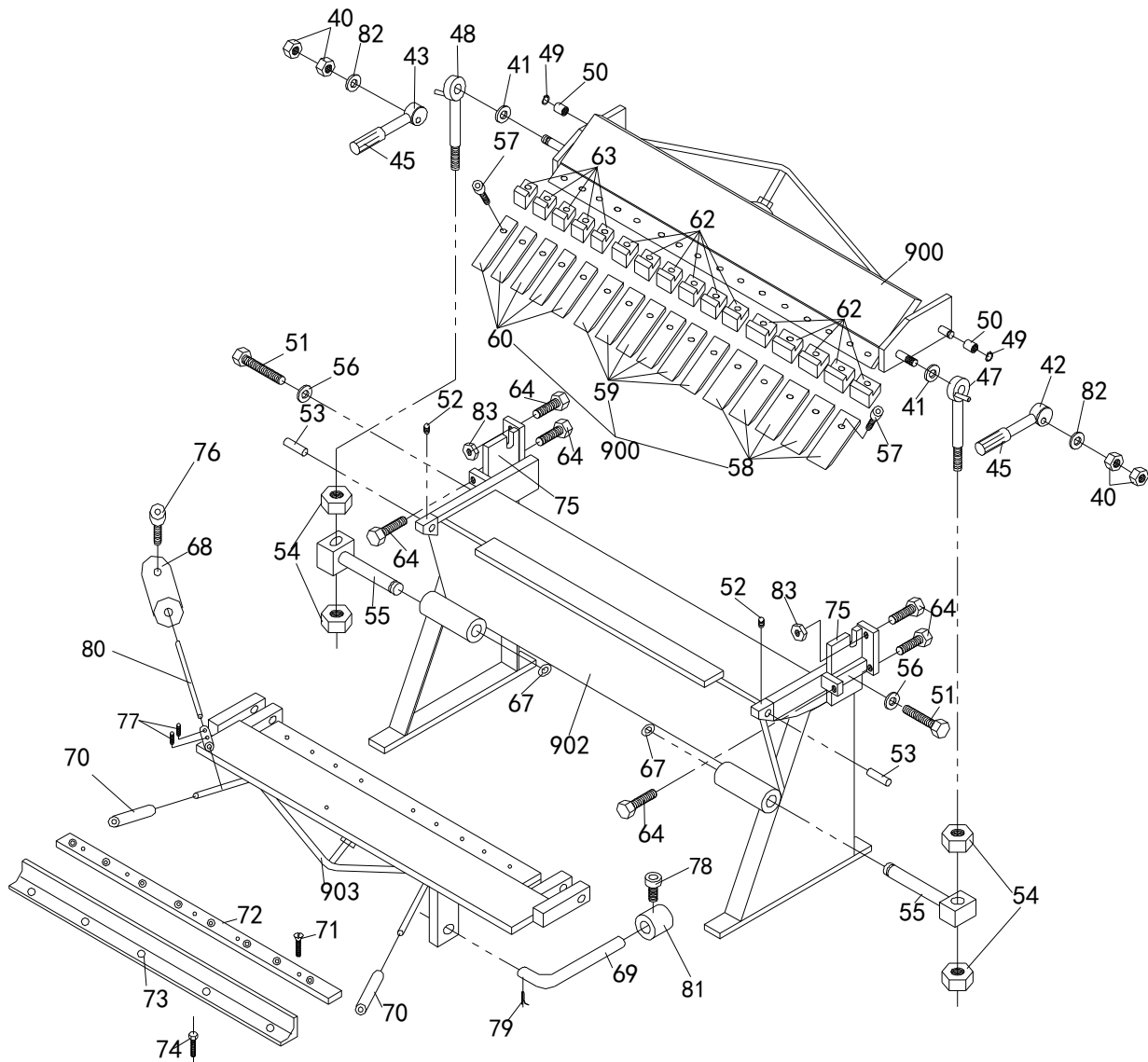
### Lubrication

The machine must be lubricated every day of service with a few drops of oil. Oil pinholes are located at both yoke assemblies (47 & 48), and the apron assembly near the hinge pin (53). Lightly oil the machined parts when not in use to prevent rust.

## Ordering Replacement Parts

To order parts or reach our service department, call 1-800-274-6848 Monday through Friday (see our website for business hours, [www.jettools.com](http://www.jettools.com)). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

## Breakdown for BP-1648H & BP-2248H Box & Pan Brake



## Parts List for the BP-1648H & BP-2248H Box & Pan Brake

Index No.	Part No.	Description	Size	Qty
40	BP1648N-40	Hex Nut	M16	4
41	TS-155011	Flat Washer	M20	2
42	BP1648N-42	Clamp Handle R.H.		1
43	BP1648N-43	Clamp Handle L.H.		1
45	BP1648N-45	Handgrip		2
47	BP1648N-47	Yoke Assembly R.H.		1
48	BP1648N-48	Yoke Assembly L.H.		1
49	BP1648N-49	Retainer Ring	12 mm	2
50	BP1648N-50	Bushing		2
51	BP1648N-51	Hex Cap Screw	M12x30	2
52	TS-2276081	Set Screw	M6x8	2
53	BP1648N-53	Hinge Pin		2
54	BP1648N-54	Hex Nut	M16	4
55	BP1648N-55	Swivel Pin		2
56	BP1648N-56	Washer	M12	2
57	BP1648N-57	Hex Socket Cap Screw	M8x30	16
58	BP1648N-58	Finger	4"	5
	BP2248N-58	Finger	4"	5
59	BP1648N-59	Finger	3"	6
	BP2248N-59	Finger	3"	6
60	BP1648N-60	Finger	2"	5
	BP2248N-60	Finger	2"	5
62	BP1648N-62	Clamp	3"	11
63	BP1648N-63	Clamp	2"	5
64	BP1648N-64	Hex Cap Screw	M8x50	4
67	BP1648N-67	C-Clip	22	2
68	BP1648N-68	Counter Weight		1
69	BP1648N-69	Stop Rod		1
70	BP1648N-70	Pipe		2
71	BP1648N-71	Flat Head Screw	M8x16	8
72	BP1648N-72	Blade		1
73	BP1648N-73	Angle Support		1
74	TS-1504041	Socket Head Cap Screw	M8x20	5
75	BP1648N-75	Step Bracket L & R		2
76	TS-1505031	Socket Head Cap Screw	M10x25	1
77	TS-1490011	Hex Head Cap Screw	M8x10	2
78	TS-1490011	Socket Set Screw	M6x12	1
79	5519949	Cotter Pin	125 x 0.75	1
80	BP1648N-80	Rod		1
81	BP1648N-81	Stop		1
82	TS-155010	Flat Washer	M16	2
	BP1648N-ID	ID Label (not shown)		1
	BP-2248N-ID	ID Label (not shown)		1
	BP-1648N-W	Warning Label (not shown)		1
	BP-1648N-J	JET Label (not shown)		1
83	TS-0571082	Hex Jam Nut	M8	2
900	BP1648N-900	Hold Down Assembly		1
	BP2248N-900	Hold Down Assembly		1
902	BP1648N-902	Base Assembly		1
	BP2248N-902	Base Assembly		1
903	BP1648N-903	Apron Assembly		1
	BP2248N-903	Apron Assembly		1
	STRIPE-1-3/4	JET Stripe	1-3/4"W	per ft.

**Optional Accessory: #754200 Stand for BP-2248H, 1648H**



**JET**

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