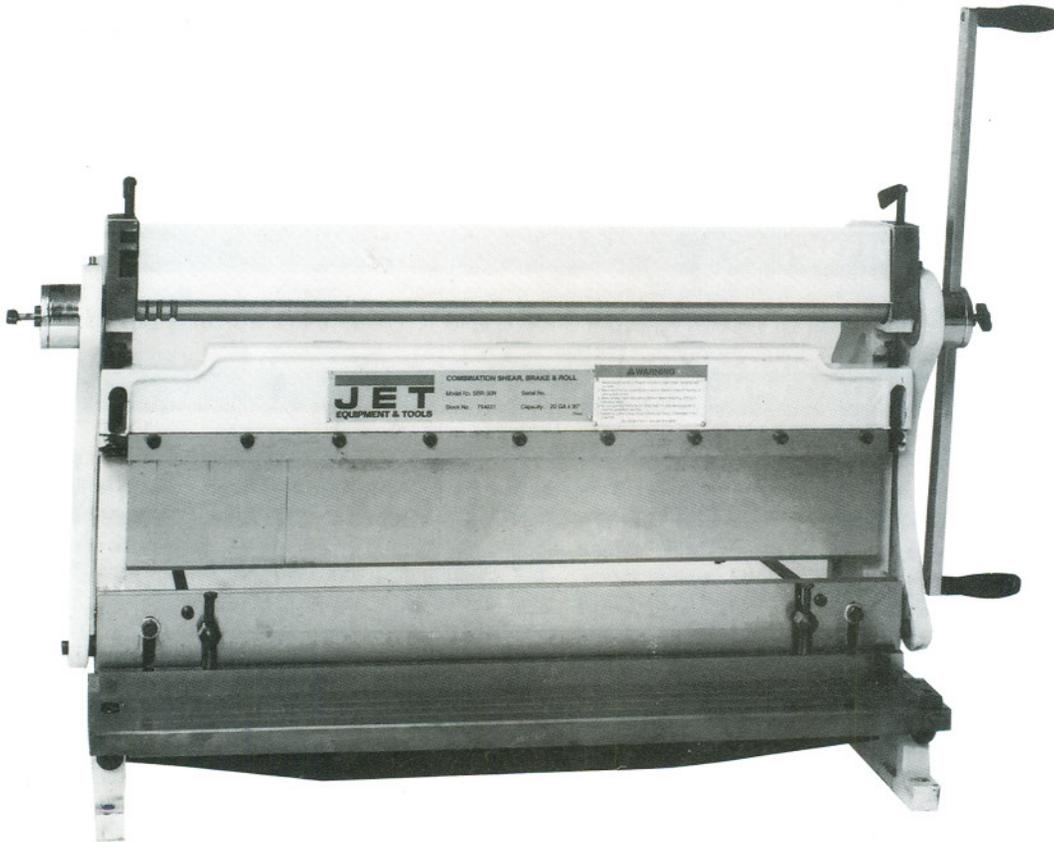


# **J E T**

**EQUIPMENT & TOOLS**

## **OWNER'S MANUAL**

### **SBR-30N /-40N Shear, Brake, and Roll**



(SBR-30N shown)

**JET EQUIPMENT & TOOLS, INC.**  
A WMH - Walter Meier Holding Company

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Auburn, WA 98071-1349

253-351-6000  
Fax 253-939-8001

No. M-754031 06/01

# Important Information

**1-YEAR  
LIMITED WARRANTY**

**JET offers a one-year limited  
warranty on this product**

## REPLACEMENT PARTS

Replacement parts for this tool are available directly from JET Equipment & Tools. To place an order, call 1-800-274-6848. Please have the following information ready:

1. Visa, MasterCard, or Discover Card number
2. Expiration date
3. Part number listed within this manual
4. Shipping address other than a Post Office box.

## REPLACEMENT PART WARRANTY

JET Equipment & Tools makes every effort to assure that parts meet high quality and durability standards and warrants to the original retail consumer/purchaser of our parts that each such part(s) to be free from defects in materials and workmanship for a period of thirty (30) days from the date of purchase.

## PROOF OF PURCHASE

Please retain your dated sales receipt as proof of purchase to validate the warranty period.

## LIMITED TOOL AND EQUIPMENT WARRANTY

JET makes every effort to assure that its products meet high quality and durability standards and warrants to the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship as follows: 1 YEAR LIMITED WARRANTY ON THIS JET PRODUCT. Warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities or to a lack of maintenance. JET LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD SPECIFIED ABOVE FROM THE DATE THE PRODUCT WAS PURCHASED AT RETAIL. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE 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. To take advantage of this warranty, the product or part must be returned for examination, postage prepaid, to an authorized service station designated by our Auburn office. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, JET will either repair or replace the product or refund the purchase price, if we cannot readily and quickly provide a repair or replacement, if you are willing to accept such refund. JET will return repaired product or replacement at JET's expense, but if it is determined there is no defect, or that the defect resulted from causes not within the scope of JET's warranty, then the user must bear the cost of storing and returning the product. This warranty gives you specific legal rights, and you have other rights, which vary, from state to state.

## **WARNING**

- **Read and understand the entire instruction manual before attempting assembly or operation.**
- **This shear, brake, and roll 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 shear, brake, and roll, do not use until proper training and knowledge have been obtained.**
- This shear, brake, and roll is intended to be used by one person only.
- The shear, brake and roll must be bolted securely to a stand and the stand bolted securely to the floor. If the machine is to be bench mounted, the bench must be able to support the weight of the machine and must be bolted to the floor.
- Keep the floor around the shear, brake, and roll clear of scraps, debris, oil, and grease. The flooring around the machine should be a non-skid type.
- Sheet metal stock has sharp edges. To prevent cuts, use caution when handling.
- Keep hands and fingers clear of the area in front and rear of the shearing blades.
- Keep guards in place when not using the slip roll.
- Keep other people away from the shear, brake, and roll.
- Keep hands and fingers clear of the slip roll "nip" points. Keep hand and fingers away from the area in front and rear of the shear blades.
- Keep hands and fingers away from the press brake dies when forming metal.
- Do not exceed the maximum capacity of the machine.
- Do not use the machine for any purpose other than for which it is designed.
- Failure to comply with all of these warnings may cause serious injury.

**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 THOSE 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

**Specifications:****SBR-30N**

Stock Number.....	754031
Capacity (Mild Steel):	
Shearing .....	20 Ga.x30"
Bending .....	20 Ga.x30"
Rolling .....	20 Ga.x30"
Size of Slip Roll .....	1-1/2"Wx30"L
Width of Upper Dies .....	1", 2", 3", 6", 8", & 10"
Upper Die Height.....	4-3/8"
Minimum Forming Radius .....	3/4"
Overall Dimensions .....	42-1/2"Lx21-1/2"Wx28"H
Shipping Weight (approx.).....	330 lbs.

**Specifications:****SBR-40N**

Stock Number.....	754041
Capacity (Mild Steel):	
Shearing .....	20 Ga.x40"
Bending .....	20 Ga.x40"
Rolling .....	20 Ga.x40"
Size of Slip Roll .....	1-1/2"Wx40"L
Width of Upper Dies .....	1", 1-1/2", 2", 2-1/2", 4", 7", 10", & 15"
Upper Die Height.....	4-3/8"
Minimum Forming Radius .....	3/4"
Overall Dimensions .....	57"L x 19"W x 34"H
Shipping Weight (approx.).....	616 lbs.

The specifications in this manual are given as general information and are not binding. JET Equipment and Tools 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.

## Assembly

1. Finish removing the crate from around the machine.
2. Remove the bolts holding the machine to the skid.
3. 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.
4. Coat all machined surfaces with a very light film of oil to inhibit rust.
5. Carefully move the shear, brake, and roll to a work bench or stand. Machine location must allow free access on all sides.
6. Bolt the machine to a stand or a workbench. If using a stand, the stand must be bolted to the floor. If using a work bench, the bench must be bolted to the floor.
7. Remove one handle (A, Fig. 1) from the handle assembly.
8. Loosen wing lock (B, Fig. 1).
9. Slide bar (C, Fig. 1) into hub and tighten wing lock (Fig. 1) to hold in place.
10. Replace handle (B, Fig. 1).
11. Back gauge assembly is installed in either the shear position (angle iron faces up - Fig. 2) or the brake position (angle iron faces down - Fig. 3).

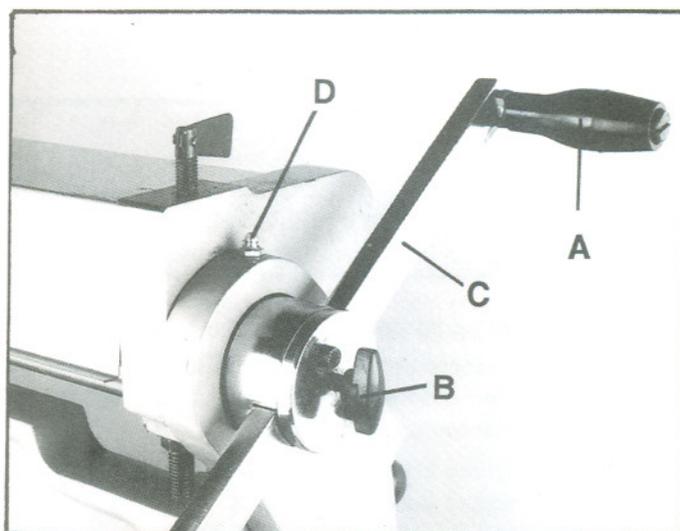


Fig. 1

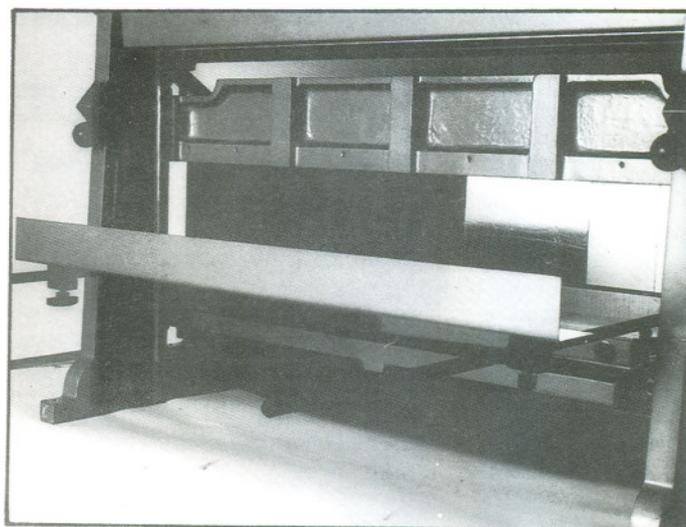


Fig. 2

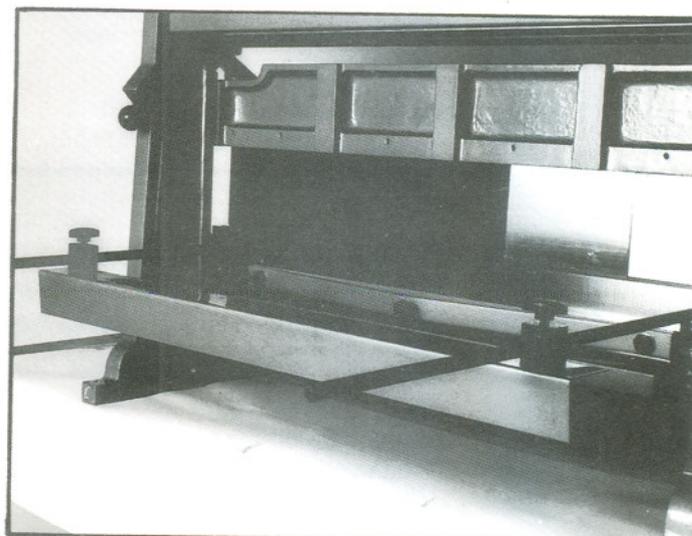


Fig. 3

## Lubrication

1. Grease nipples on top of left and right frame sides with #2 lithium tube grease once a month (D, Fig. 1).

## Setting Up the Press Brake

 **WARNING**

**Do not bend any material larger than 30" (40") 20 gauge mild steel! Failure to comply may cause serious injury and/or damage to the machine!**

To set up for bending:

1. Place a piece of wood 30" long on the bottom die. This will support the upper die(s) during the following adjustment.
2. Close the brake until the wood contacts the upper dies.
3. Loosen hex cap socket retaining screws (A, Fig. 4).
4. Select die(s) (B, Fig. 4) for the desired job and remove others.
5. Lower handle until the wood forces the dies to seat uniformly in the upper beam.
6. Lock all clamp screws (A, Fig. 4) securely.

To adjust the brake beam to make 90° bends at the bottom of the stroke:

1. Loosen locking screws slightly (A, Fig. 5).
2. Turn brake beam adjusting nuts (B, Fig. 5) located on either end of the beam until test bends reflect a 90° bend at both ends of the brake.
3. Tighten locking screws (A, Fig. 5).

For special repetitive bends, the brake beam may be adjusted to over-bend the desired angle since the metal will have some degree of "spring back".

## Setting Up the Shear

 **WARNING**

**Do not shear any material larger than 30" (40") 20 gauge mild steel! Failure to comply may cause serious injury and/or damage to the machine!**

1. Move the angle iron on the back gauge assembly to the "up" position if not already set that way. (See Fig. 6)

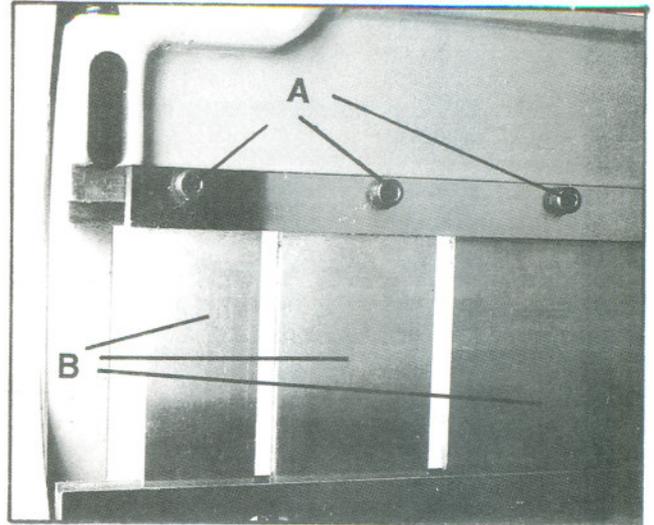


Fig. 4

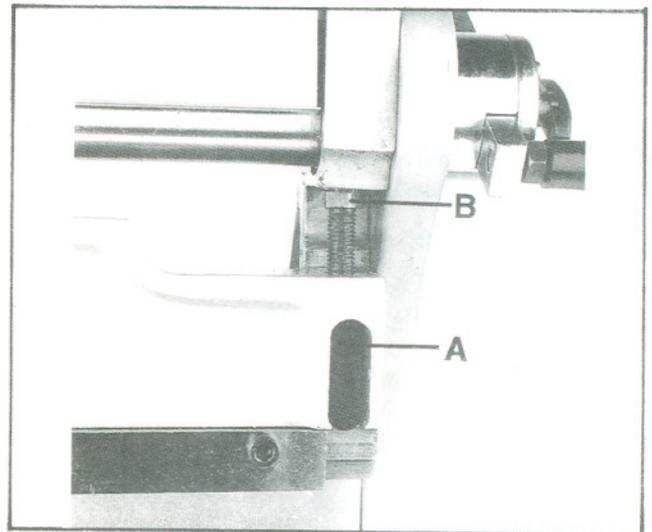


Fig. 5

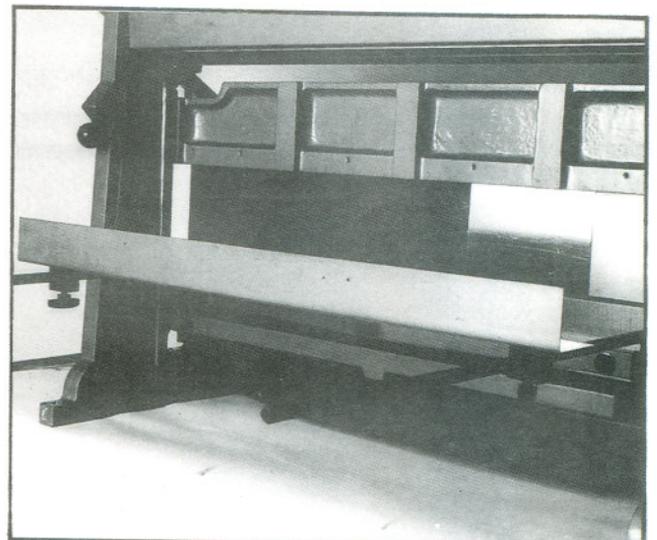


Fig. 6

2. Work to be sheared must be squared against the squaring guide.
3. Adjust the hold down to within 1/4" above the table when the shear blade is in the up position by turning two hex cap bolts (A, Fig. 7). When the blade starts it's downward travel, the hold down should immediately hold the work piece in place.

To prevent distortion, "snap" the handle to facilitate piercing when notching.

To adjust lower shear:

1. Loosen two hex cap screws (B, Fig. 7) on each end of the table.
2. Use adjusting screws (A, Fig. 8) to narrow the gap between the shear and the table to facilitate cutting of thin material.

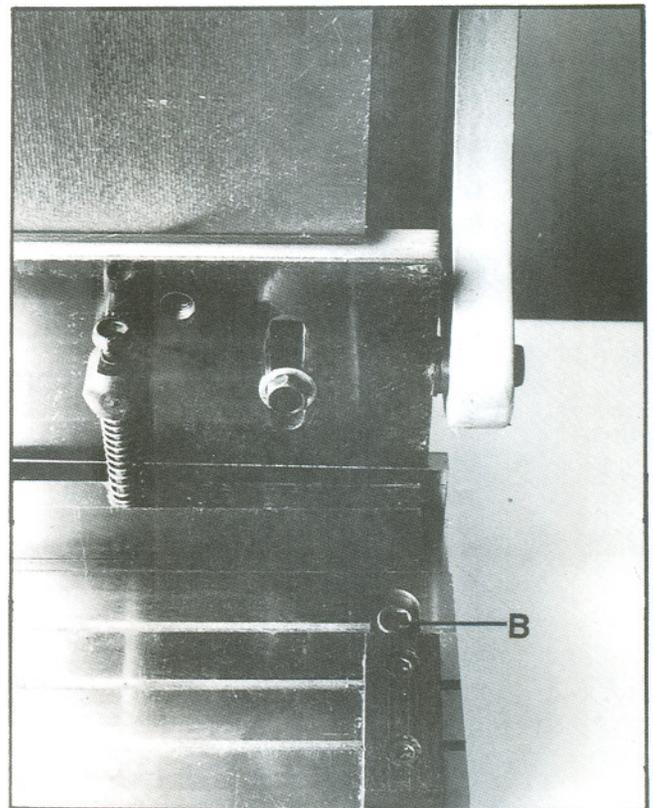


Fig. 7

### Setting Up the Slip Roll

**⚠ WARNING**

**Do not roll any material larger than 30" (40") 20 gauge mild steel!**

**The slip roll guard must cover the slip rolls except when material is being fed into the rolls! Failure to comply may cause serious injury and/or damage to the machine!**

**⚠ WARNING**

**Beware of the "nip" point - the intersection of the upper and lower rolls! Failure to comply may cause serious injury to fingers and/or hands!**

**Note:** If it doesn't interfere with the proposed final shape or design, a slight bend made with the press brake on the leading edge will simplify the initial rolling process.

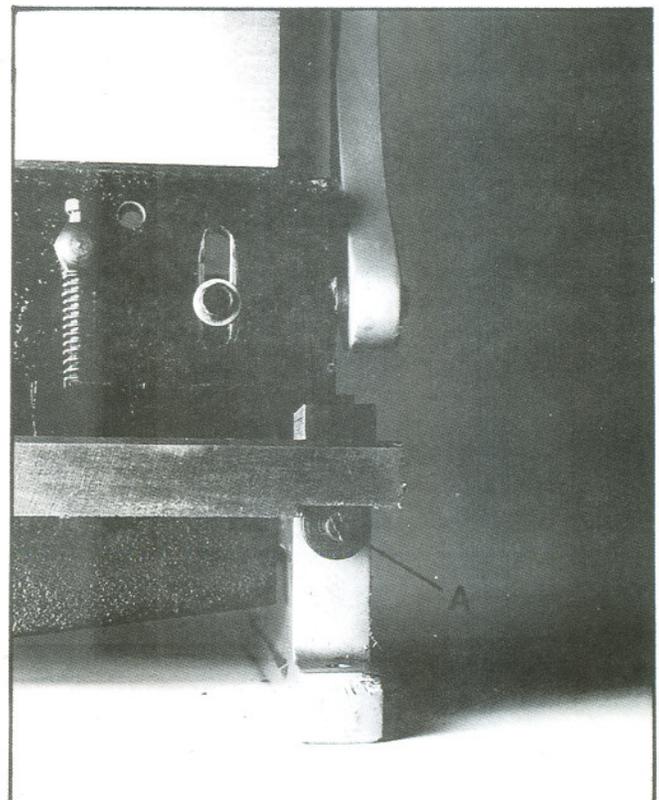


Fig. 8

Upper roll must have sufficient pressure on the work piece to feed properly.

To remove cylindrical shaped workpieces:

1. Loosen wing screws (A, Fig. 9) on either of the top roll.
2. Loosen hex socket cap screw (B, Fig. 9) and rotate toward the rear of the machine to release roll catch.
3. Carefully grasp roll and pull toward you to remove.
4. Once removed, cylindrical shaped work pieces may be slipped off the end of the roll.

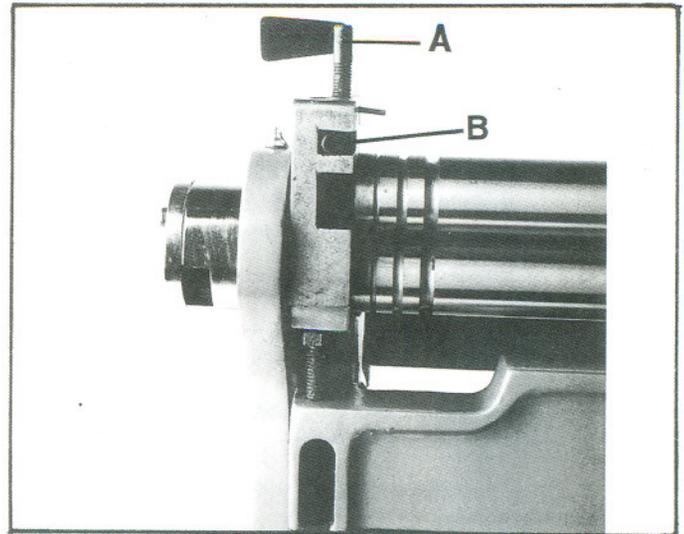
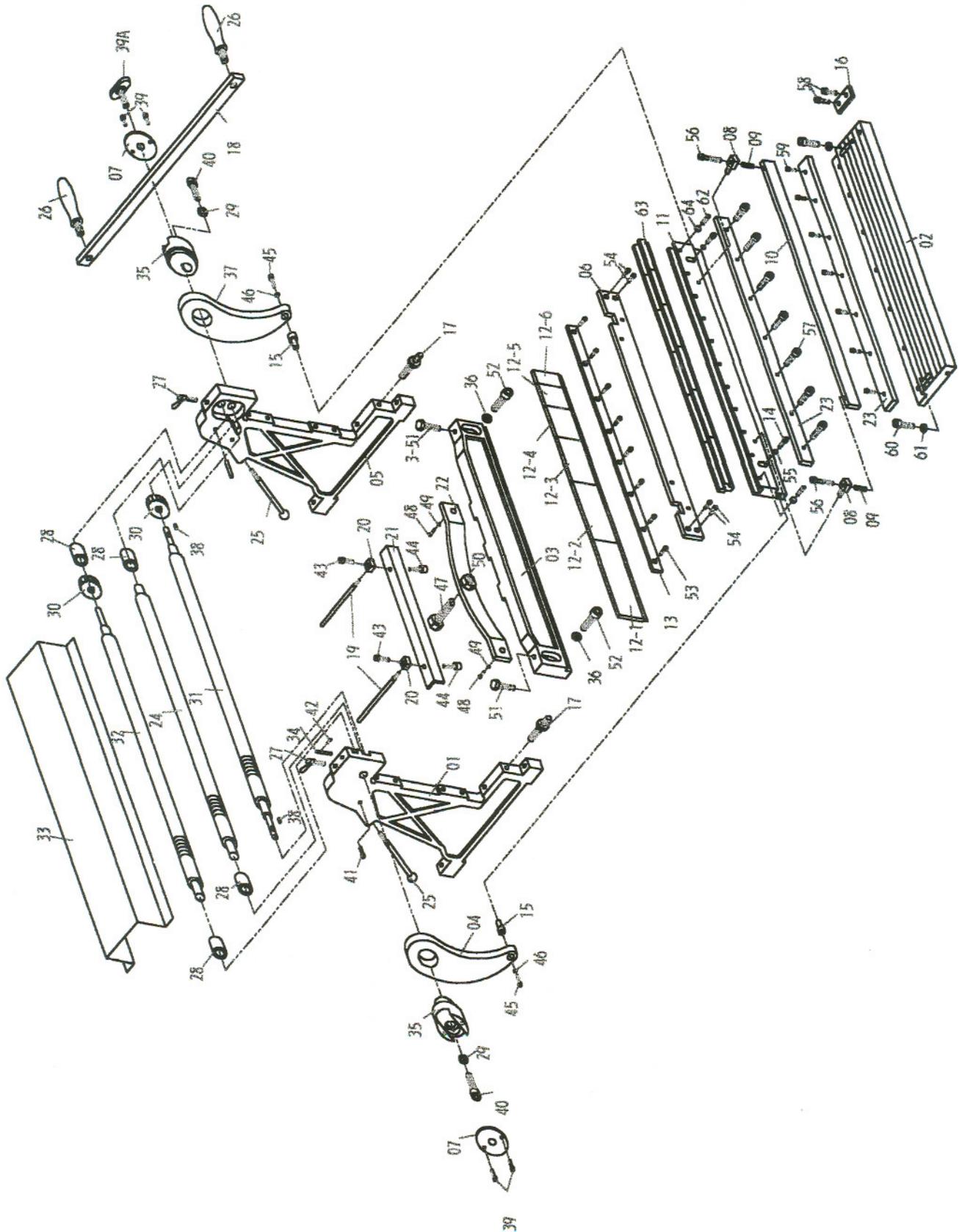


Fig. 9

Breakdown for the SBR-30N Shear, Brake, and Roll

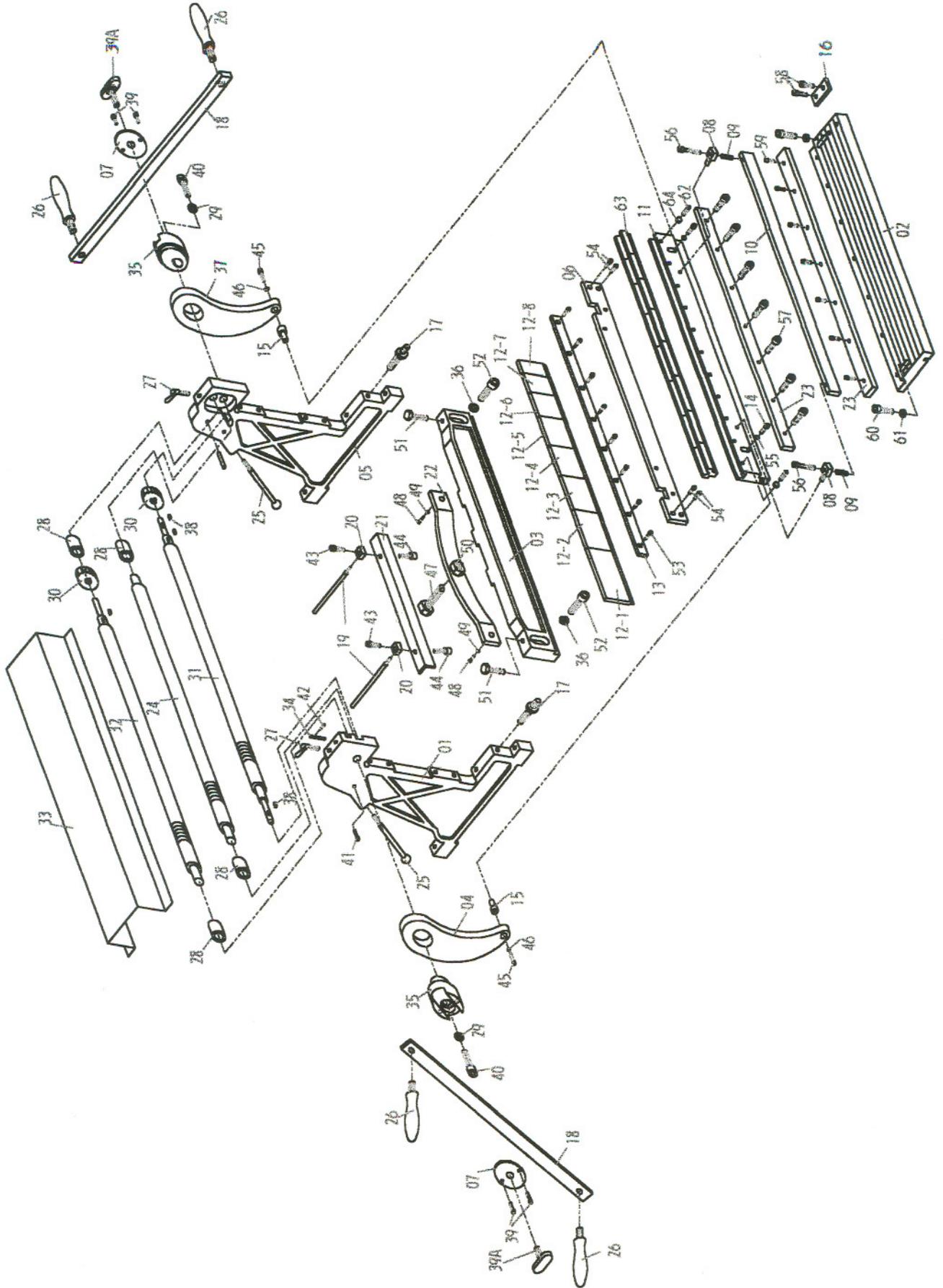


## Parts List For The SBR-30N Shear, Brake, and Roll

Index No.	Part No.	Description	Size	Qty.
1	SBR30N-1	Frame (left)		1
2	SBR30N-2	Table		1
3	SBR30N-3	Cross Beam		1
4	SBR30N-4	Arm (left)		1
5	SBR30N-5	Frame (right)		1
6	SBR30N-6	Spacer Bar		1
7	SBR30N-7	Cover		2
8	SBR30N-8	Plug		2
9	SBR30N-9	Spring		2
10	SBR30N-10	Press Plate		1
11	SBR30N-11	Cutter Plate		1
12-1	SBR30N-12-1	Brake Forming Die	10"	1
12-2	SBR30N-12-2	Brake Forming Die	8"	1
12-3	SBR30N-12-3	Brake Forming Die	6"	1
12-4	SBR30N-12-4	Brake Forming Die	3"	1
12-5	SBR30N-12-5	Brake Forming Die	2"	1
12-6	SBR30N-12-6	Brake Forming Die	1"	1
13	SBR30N-13	Press Plate		1
14	TS-1491081	Hex Cap Bolt	M10x50	2
15	SBR30N-15	Pivot		2
16	SBR30N-16	Block		1
17	SBR30N-17	Adjustable Bolt		2
18	SBR30N-18	Handle Bar		1
19	SBR30N-19	Guide Rod		2
20	SBR30N-20	Guide Block		2
21	SBR30N-21	Guide Plate		1
22	SBR30N-22	Guide Bar		1
23	SBR30N-23	Cutter		2
24	SBR30N-24	Roll		1
25	SBR30N-25	Screw		2
26	SBR30N-26	Handle		2
27	SBR30N-27	Adjustable Bolt		2
28	SBR30N-28	Bushing		4
29	SBR30N-29	Cover		2
30	SBR30N-30	Gear		2
31	SBR30N-31	Lower Pressing Roll		1
32	SBR30N-32	Upper Pressing Roll		1
33	SBR30N-33	Cover		1
34	SBR30N-34	Shaft		1
35	SBR30N-35	Eccentric Shaft		2
36	SBR30N-36	Washer	10.5	2
37	SBR30N-37	Arm (right)		1
38	SBR30N-38	Key		2
39	TS-1482031	Hex Cap Bolt	M6x12	4
39A	SBR30N-39	Lock Bolt		1
40	SBR30N-40	Hex Socket Cap Screw	M6x10	2
41	TS-150506	Hex Cap Bolt	M6x40	2
42	TS-150303	Hex Socket Cap Screw	M6x12	1

43	SBR30N-43	Thumb Screw		2
44	TS-1482031	Hex Cap Bolt	M6x10	2
45	TS-150506	Hex Socket Cap Screw	M10x40	2
46	SBR30N-46	Washer	10.5	2
47	TS-1492051	Hex Cap Bolt	M12x50	1
48	TS-1492051	Hex Cap Bolt	M10x20	2
49	SBR30N-46	Washer	10.5	2
50	SBR30N-50	Adjustable Nut	M12	1
51	TS-1492041	Hex Cap Bolt	M12x40	2
52	TS-1491051	Hex Cap Bolt	M10x35	2
53	TS-1483031	Hex Cap Bolt	M8x25	9
54	TS-1491031	Hex Cap Bolt	M10x25	4
55	SBR30N-46	Washer	10.5	2
56	SBR30N-56	Hex Cap Bolt	M8x90	2
57	TS-1482021	Hex Cap Bolt	M6x10	7
58	TS-1482021	Hex Cap Bolt	M6x12	2
59	TS-1482021	Hex Cap Bolt	M6x12	7
60	TS-1491031	Hex Cap Bolt	M10x25	2
61	SBR30N-61	Washer	10.5	2
62	SBR30N-62	Hex Socket Set Screw	M5x10	20
63	SBR30N-63	V-Block		5
64	SBR30N-64	Hex Nut	M5	20

Breakdown for the SBR-40N Shear, Brake, and Roll



## Parts List For The SBR-40N Shear, Brake, and Roll

Index No.	Part No.	Description	Size	Qty.
1	SBR40N-1	Frame (left)		1
2	SBR40N-2	Table		1
3	SBR40N-3	Cross Beam		1
4	SBR40N-4	Arm (right)		1
4A	SBR40N-4A	Zerk Fitting		2
5	SBR40N-5	Frame (right)		1
6	SBR40N-6	Spacer Bar		1
7	SBR40N-7	Cover		2
8	SBR40N-8	Pressure Plate Bracket		2
9	SBR40N-9	Spring		2
10	SBR40N-10	Press Plate		1
11	SBR40N-11	Cutter Plate		1
12-1	SBR40N-12-1	Brake Forming Die	15"	1
12-2	SBR40N-12-2	Brake Forming Die	10"	1
12-3	SBR40N-12-3	Brake Forming Die	7"	1
12-4	SBR40N-12-4	Brake Forming Die	4"	1
12-5	SBR40N-12-5	Brake Forming Die	2-1/2"	1
12-5	SBR40N-12-6	Brake Forming Die	2"	1
12-6	SBR40N-12-7	Brake Forming Die	1-1/2"	1
12-7	SBR40N-12-8	Brake Forming Die	1"	1
13	SBR40N-13	Press Plate		1
14	SBR40N-14	Hex Cap Bolt	M12x45	2
15	SBR40N-15	Pivot		2
16	SBR40N-16	Stop Block		1
17	SBR40N-17	Adjustable Bolt		2
18	SBR40N-18	Handle Bar		2
19	SBR40N-19	Guide Rod		2
20	SBR40N-20	Guide Block		2
21	SBR40N-21	Guide Plate		1
22	SBR40N-22	Support Plate		1
23	SBR40N-23	Cutter		2
24	SBR40N-24	Roll		1
25	SBR40N-25	Screw		2
26	SBR40N-26	Handle		4
27	SBR40N-27	Adjustable Bolt		2
28	SBR40N-28	Bushing		2
29	SBR40N-29	Cover		2
30	SBR40N-30	Gear		2
31	SBR40N-31	Lower Pressing Roll		1
32	SBR40N-32	Upper Pressing Roll		1
33	SBR40N-33	Cover		1
34	SBR40N-34	Lock Shaft		1
35	SBR40N-35	Eccentric Shaft		2
36	SBR40N-36	Bushing		2
37	SBR40N-37	Arm(right)		1
38	SBR40N-38	Key		2
39	SBR40N-39	Hex Socket Cap Screw	M6x16	4

39A.....	SBR40N-39A.....	Lock Bolt.....		2
40.....	SBR40N-40.....	Hex Cap Bolt.....	M6x16.....	2
41.....	SBR40N-41.....	Set Screw.....		2
42.....	SBR40N-42.....	Key.....		1
43.....	SBR40N-43.....	Hex Cap Bolt.....	M12x25.....	2
44.....	SBR40N-44.....	Hex Cap Bolt.....	M12x16.....	2
45.....	SBR40N-45.....	Hex Socket Cap Screw.....	M12X70.....	2
46.....	SBR40N-46.....	Washer.....	12.5.....	2
47.....	SBR40N-47.....	Hex Cap Bolt.....	M16x100.....	1
48.....	SBR40N-48.....	Hex Cap Bolt.....	M16x30.....	2
49.....	SBR40N-49.....	Washer.....	16.5.....	2
50.....	SBR40N-50.....	Adjustable Nut.....	M16.....	1
51.....	SBR40N-51.....	Hex Socket Cap Screw.....	M12x30.....	2
52.....	SBR40N-52.....	Hex Socket Cap Screw.....	M16x55.....	2
53.....	SBR40N-53.....	Hex Socket Cap Screw.....	M6x25.....	13
54.....	SBR40N-54.....	Hex Socket Cap Screw.....	M16x35.....	4
55.....	SBR40N-55.....	Washer.....	12.5.....	2
56.....	SBR40N-56.....	Hex Socket Cap Screw.....	M12x75.....	2
57.....	SBR40N-57.....	Hex Socket Cap Screw.....	M6x16.....	6
58.....	SBR40N-58.....	Hex Socket Cap Screw.....	M6x16.....	2
59.....	SBR40N-59.....	Hex Socket Cap Screw.....	M6x16.....	6
60.....	SBR40N-60.....	Hex Socket Cap Screw.....	M16x35.....	2
61.....	SBR40N-61.....	Washer.....	16.5.....	2
62.....	SBR40N-62.....	Hex Socket Cap Screw.....	M5x12.....	14
63.....	SBR40N-63.....	V-Block.....		7
64.....	SBR40N-64.....	Hex Nut.....	M5.....	14



