



### 20241

# 3 in 1 Shear Brake & Roll Machine



**Try Monster - Buy Monster - Be Monster** 

# Specification

### **Product Description**

This 3 in 1 Shear Brake & Roll machine is a versatile, hand operated machine that allows cutting, bending and shaping of mild steel sheet metal as well as other metals.

Designed for precision shearing, braking, and rolling tubes, cones or rings according to the specifications below. With a 12 inch wide capacity this combination machine will save valuable space on your shop and still bend, cut and shape metal any way you see fit.

We at Monster Group UK understand this is a new and exciting purchase, and although it is tempting to get stuck in please carefully read these instructions before you start using the machine.

Please refer to and read Safety Advice, Safe Working Practice to ensure prevention of injury or damage to the device before starting.

### **Product Specifics**

Capacity: 12 inches wide, 20gauge (1mm) thick

Roller: 1-1/2 inch (38mm)

Minimum Roll Diameter: 38mm I.D.

Die Set Sizes: 4 inch x 1, 3 inch x 1, 2 inch x 2 and 1 inch x 1

Weight: 45kg

#### Monster Guarantee

If you wish to return a product in perfect working order, we provide a 30 day returns policy as long as the item is unopened and in a resalable condition.

If for any reason a part is missing please get in touch with us within 7 days on receipt of your order. You can contact our friendly and helpful Customer Support Team via email or call. For full terms and conditions contact our Support Department via the details on the Contact Us page.

## **Contact Us**

### Sales Department

For information regarding this device or other products from our Monster divisions please use the following details below.

Tel: 01347 878888

Email: hello@monstershop.co.uk

#### Support Department

For queries about this device, warranty, returns or reporting faults please use the following details below.

Tel: 01347 878887

Email: help@monstershop.co.uk

#### Website

To view our product range and fantastic offers in the Monster divisions please visit our website

www.monstershop.co.uk

#### **Address**

To visit our office Monster House and view our products, send postal correspondence or return items our address is provided below.

Monster House, Alan Farnaby Way, Sheriff Hutton Industrial Estate, Sheriff Hutton, York YO60 6PG

# Safety Advice

## Safe Working Practice

Please read through the safe working practice to ensure prevention of injury or damage to the device.

Do not operate the device in areas of high temperature or humidity as the machine may not function correctly.

This product should only be used by a competent person who has read and understood this manual.

Do not modify this product in any way. Unauthorised modification may impair the function and/or safety and could decrease the life of the product.

If damaged, do not use.

Ensure the equipment is assembled securely before use.

Keep the working area clear from obstructions.

Wear appropriate clothing during use.

Do not exceed the capacities.

Do not use the product for applications other than which it was intended.

General cleaning and maintenance is required to prolong the working life of the product.

Do not use the tool where there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gases, or dust. The tool can create sparks, which may ignite dust or fumes.

Do not allow the tool to come into contact with an electrical source. Contact will cause a shock.

Keep children and bystanders away from the work area while operating the tool. Do not allow children to handle the tool.

# **Safety Advice**

### Safety Working Practice

Do not use the tool while you are tired or under the influence of drugs, alcohol, or medication.

Do not wear loose clothing, dangling objects, or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery, or long hair can be caught in moving parts.

Personal Protective Equipment (PPE) must be worn by the operator of this equipment.

Store the tool when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.

Only use accessories that are recommended by the manufacturer for use with your tool. Accessories that may be suitable for one tool may create a risk of injury when used with another.

Use on a sturdy and level work surface.

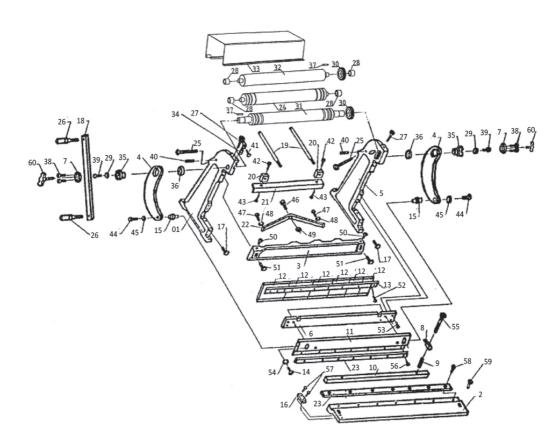
Keep fingers clear of the area in front and rear of the shear blades.

Keep fingers clear of the roller.



# Specification

#### **Product Features**



# Specification

### **Product Features**

Part No.	Description	Q'ty	Part No.	Description	Q'ty
1	Left frame	1	31	Lower roll bar	1
2	Work surface	1	32	Upper roll bar	1
3	Cross beam	1	33	Cover	1
4	Cranking arm	2	34	Eccentric shaft	1
5	Right frame	1	35	Eccentric bushing	2
6	Shear frame	1	36	Washer	1
7	Bushing cover	2	37	Key	2
8	Press plate bracket	2	38	Hex key screw	4
9	Spring	2	39	Hex key screw	2
10	Press plate	1	40	Bolt	2
11	Lower braking die	1	41	Hex key screw	1
12	Dies	1	42	Hex key screw	2
13	Upper die bracket	1	43	Hex key screw	2
14	Hex key screw	2	44	Hex key screw	2
15	Handle arm roll	2	45	Washer	2
16	Guide	1	46	Bolt	1
17	Adjustment screw	2	47	Hex key screw	2
18	Handle arm	1	48	Washer	2
19	Support rod	2	49	Nut	1
20	Support block	2	50	Bolt	2
21	Backstop	1	51	Hex key screw	2
22	Adjustment bar	1	52	Hex key screw	4
23	Shears	2	53	Hex key screw	4
24	Rear roll bar	1	54	Washer	2
25	Adjustment knob	2	55	Bolt	2
26	Handle	2	56	Hex key screw	4
27	Adjustment keys	2	57	Hex key screw	2
28	Bushing	4	58	Hex key screw	4
29	Washer	2	59	Hex key screw	2
30	Gear	2	60	knob	2

### **Assembly Instructions**

The 3 in 1 Shear Brake and Roll machine will come fully assembled; however you should ensure that the following accessories have been included.

Two hex key wrenches Two hex key bolts (Part #57)

If any parts or pieces are missing please check inside the packaging before contacting our Support team via the details on the Contact page.

When unpacking, you must remove the bolts that are used to mount the machine to the crate. Save these bolts for use when mounting to a solid and sturdy workbench.

The handle is mounted to the right hand side of the machine, if you wish to move the handle to the left hand side follow these instructions:

- 1) Remove one of the handles (Part #26).
- 2) Loosen the handle adjustment knob (Part #60).
- 3) Slide the handle arm onto the opposite side and tighten the adjustment knob.
- 4) Re-attach the handle to the handle arm.
- 5) The handle arm can be positioned in the eccentric bushing (Part #35) as desired for appropriate torque.

#### Before Each Use

The slip roller and dies are coated at the factory with a protector. To ensure proper fit and operation, remove the coating before first use. The coating is easily removed with a varnish thinner and a soft cloth.

Periodically check the machine for wear or damaged parts and that it is debris-free to perform its function. Check that the rollers, especially the gears and crank handle, are not worn or damaged.

Check the condition of the machine and that it is free of scraps or other debris and clean enough for operation.

Secure this machine to a well-lit area on a solid, level work bench. This location must allow access to all sides.

Rotate the handle and check whether the all moving parts have good, firm contact with each other.

Never operate the machine with a damaged part.

#### **Operation Instructions**

The 3 in 1 Shear, Brake and Roll machine has a variety of uses.

#### Shearing:

- 1) Attach the back measurement assembly (Part #19-21, 42 & 43) to the receiver holds in the back of the cross beam (Part #3).
- 2) If necessary, adjust the position of the back measurement assembly: first loosen the two hex key screws (Part #42), move the assembly forward and back to the desired position, re-tighten the screws.
- 3) If a precise 90 degree angle is required, attach the guide (Part #16) to the left side of the machine's work surface (Part #2) using the two hex key screws (Part #57).
- 4) Using the handle assembly (Part #18 & 26), raise the lower braking die (Part #11) to the highest position.
- 5) Insert the workpiece between the braking die and the machine's work surface.
- 6) Turn the handle (Part #18 & 26) to shear the workpiece.

#### Pressing:

1) Slide the press plate brackets (Part #8) of the press plate assembly (Part #8-10, 55) into the receiver holes of the lower braking die (Part #11).

Note: the press plate (Part #10) should be facing down.

- 2) Place the workpiece so that it is centred under the press plate.
- 3) Turn the handle assembly (Part #18 & 26) to press the workpiece.

### **Operation Instructions**

#### Braking:

- 1) Attach the back measurement assembly (Part #19-21, 42, 43) to the receiver holes in the back of the cross beam (Part #3)
- 2) If necessary, adjust the position of the back measurement assembly: first loosen the two hex key screws (Part #42), move the assembly forward and back to the desired position, re-tighten the screws.
- 3) Using the handle (Part #18 & 26), raise the cross beam up to its highest position.
- 4) Insert the workpiece between the upper (Part #12) and lower (Part #11) braking dies.
- 5) Turn the handle until the correct brake has been achieved. The material should feed itself through as you crank the handle.

#### Rolling - Sheet Metal:

- 1) Lift the Roller Cover (Part #33) and flip it back out of the way.
- 2) Drop the Rear Roll Bar (Part #24) by loosening the Adjustment Knob (Part #25).
- 3) Insert the leading edge of the sheet metal between the Upper Roller bar (Part #32) and the Lower Roll bar (Part #31), tighten the Adjustment Keys (Part #27) until the Roll bars are just snug against the sheet metal.
- 4) Turn the Adjustable Bolt (Part #25) to the desire tightness for the roll. The more the bolt is turned, the tighter the roll.
- 5) Turn the Handle Arm (Part #18) until the desired roll is achieved. The sheet metal should feed itself through the rollers as the Handle is turned (continued overleaf).

### **Operation Instructions**

Rolling - Wire & Rings:

- 1) Use the appropriate groove located towards the ends of the lower roll bars (Part #24 & #31).
- 2) Follow steps 2 to 5 of the "Rolling- Sheet Metal" instructions.

#### Maintenance

Keep your tool in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual.

Keep the handles dry, clean, and free from oil and grease.

Lubricate the eccentric mechanism daily with machine oil.

Periodically check all nuts, bolts and screws for tightness.

Place the cover over the rollers when not in use.

Grease the cranking arms (Part #4) as necessary using a grease gun with zerk fittings (grease nipple).

Grease the bolt holes in the sliding area after removing the hex screws (Part #14 & #51)

Keep all cutting components sharp and clean. Properly maintained cutting components with sharp cutting edges are less likely to bind and are easier to control.

When servicing only use identical replacement parts.

# **Troubleshooting**

#### **Resolution Guide**

Please read through the guide below if you have any issues or faults with your machine. The information covers and resolves the majority of frequently asked questions.

#### Q: The shear blade is causing uneven cuts.

A: During operation, the shear frame may come out of alignment causing uneven cuts.

To correct this problem simply tighten or loosen the bolt (Part #46) attached to the shear frame adjustment bar as needed. Tightening the bolt will cause the ends of the shear to bow out, loosening will cause them to bow in.

#### Aligning the shears

- 1) Lower the sheer assembly (Part #23) completely so that the two shears are even with each other
- 2) If one side of the lower shear (Part #23) is further away from the upper shear than the other, then you should adjust the machine's work surface (Part #2).
- 3) Loosen the bolts (Part #59) that secure the machine's work surface to the frames (Part #1 & 5).
- 4) Tighten or loosen either of the adjustment screws (Part #17) on the front underside of the machine's work surface, to make the two shears meet properly.

#### Q: The upper braking die has become uneven.

A: The best way to correct this problem is to cut a gauge from hard wood and make sure the gauge is even all the way across.

- 1) Raise the crossbeam (Part #3) completely.
- 2) Place the hardwood gauge underneath the die.
- 3) Loosen the bolts (Part #52) that hold the upper braking die bracket (Part #13) in place and allow the die to drop and contact the gauge.
- 4) Tighten the upper braking die bracket bolts.

# **Notes**


# **Notes**




Monster Group (UK) is one of the UK's fastest growing online retailers. We supply a diverse range of products which offer exceptional value for money. We strive to provide the best possible customer experience with free UK delivery across all our products and a Monster Guarantee for 100% satisfaction.

Our dedicated customer service team will be more than happy to help with any questions you may have.

Home & Garden
Storage Shelving
Sign & Digital
Retail & Hospitality
Commercial Equipment

Check out all our Monster brands at www.monstershop.co.uk