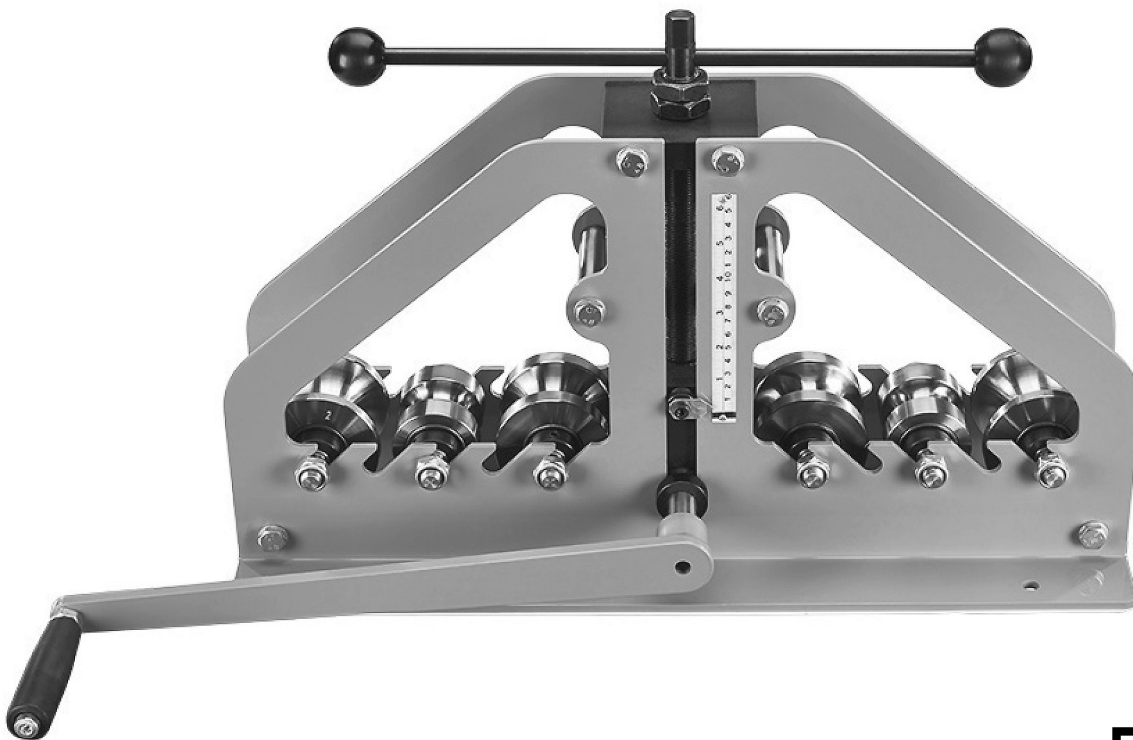




Edition : 1
Date: (09/26)

Instruction Manual

MANUAL TUBE ROLLER TR-38

Order Code: (S6700)

MACHINE DETAILS

MACHINE.	Manual Tube Roller
MODEL NO.	TR-38
SERIAL NO.	
DATE OF MANF.	

IMPORTED BY

AUSTRALIA



www.machineryhouse.com.au

NEW ZEALAND



www.machineryhouse.co.nz

NOTE:

This manual is only for your reference. At the time of the compiling of this manual every effort to be exact with the instructions, specifications, drawings, and photographs of the machine was taken. Owing to the continuous improvement of the METALMASTER machine, changes may be made at any time without obligation or notice. Please ensure the local voltage is the same as listed on the specification plate before operating any electric machine.

SAFETY SYMBOLS:

The purpose of safety symbols is to attract your attention to possible hazardous conditions



WARNING Indicates a potentially hazardous situation causing injury or death



CAUTION Indicates an alert against unsafe practices.

Note: Used to alert the user to useful information



NOTE:

In order to see the type and model of the machine, please see the specification plate. Usually found on the back of the machine. See example (Fig.1)

Fig.1

	
PRODUCT SPECIFICATIONS	
Model: TR-38	Capacity: 38mm
Nett Weight: 43kg	MFG Date:
SERIAL No:	
Imported by www.machineryhouse.com.au	Made in China www.machineryhouse.co.nz

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WARNING!

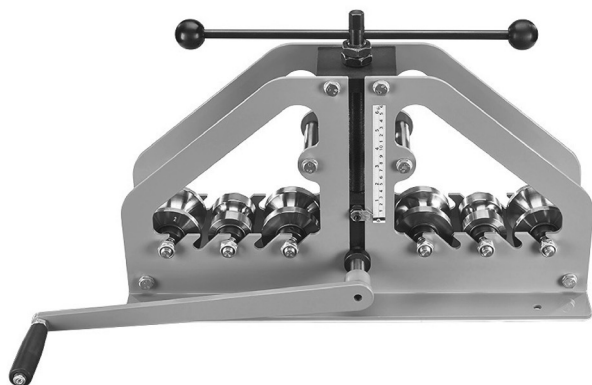
The machine is the sole responsibility of the owner for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training, proper inspection and maintenance, manual availability and comprehension. The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

SPECIFICATIONS

Order Code	S6700
MODEL	TR-38
Capacity Tube Diameter (inch)	2"
Bending Roll Positions	5
Minimum Roll Radius for 1.5"	20"
Minimum Roll Radius for 2.0"	60"
Mild Steel Tube Wall Thickness 1"	0.125"
Mild Steel Tube Wall Thickness 1-1/4"	0.110"
Mild Steel Tube Wall Thickness 1-1/2"	0.110"
Stainless Steel Tube Wall Thickness 1"	0.110"
Stainless Steel Tube Wall Thickness 1-1/4"	0.095"
Stainless Steel Tube Wall Thickness 1-1/2"	0.095
Aluminium Tube Wall Thickness 1"	0.2"
Aluminium Tube Wall Thickness 1-1/4"	0.15"
Aluminium Tube Wall Thickness 1-1/2"	0.15"
Weight	43kg

PACKING LIST

1. Tube rolling machine
2. Instruction Manual
3. 1pc of 3/4" round tube roller set
4. 1 set of 1" round tube rollers
5. 1 set of 1-1/4" round tube rollers
6. 1 set of 1-1/2" round tube rollers
7. 1 set of adjust square tube rollers

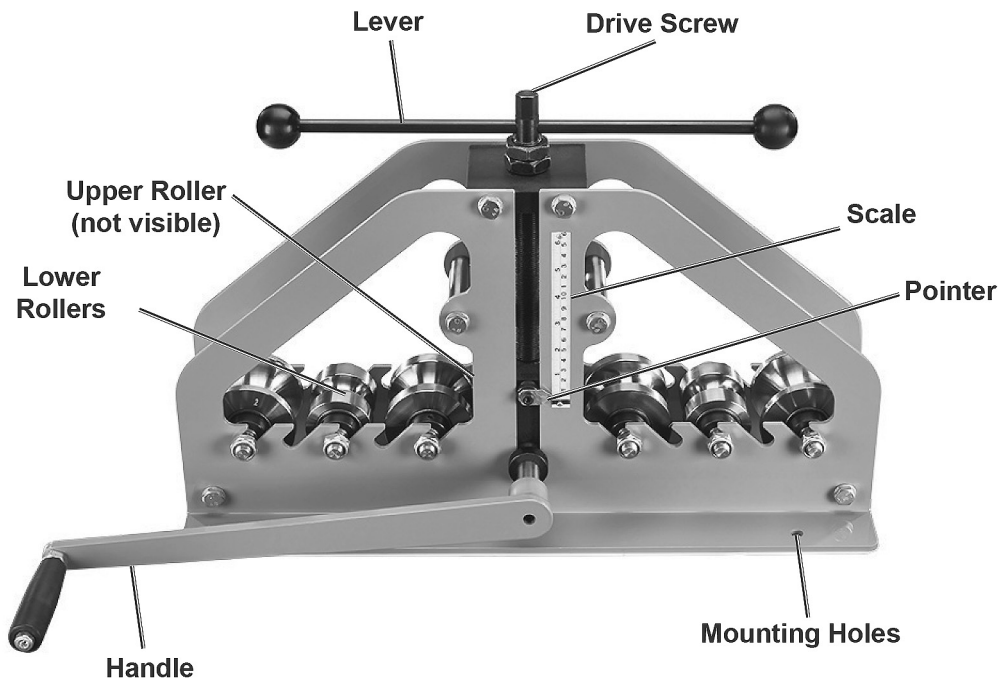


WARNING!

Always check the capacity of the machine. Exceeding the capacity of the machine may result in sudden breakage that ejects dangerous metal debris at the operator or bystanders.

IDENTIFICATION

Become familiar with the names and locations of the controls and features shown below to better understand the instructions when mentioned later in this manual.



IMPORTANT SAFETY INFORMATION

1. Do not attempt to roll tubes that are larger than 1-1/2 in diameter.
2. To prevent injury from burns, do not apply heat to the tube.
3. Do not attempt to roll wood or plastic rods. Brittle materials such as these can break without warning, causing injury or damage.
4. Dress Properly - Do not wear loose clothing or jewelry. They can be caught in moving parts. Use of rubber gloves and substantial footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
5. Do not Overreach - Keep proper footing and balance at all times.
6. Study, understand, and follow all instructions before operating this device.
7. Keep rollers clean. If tube rests on obstruction, it creates an uneven surface, causing excess stress & possible breakage
8. Do not use on painted tube or tube that has debris on it.
9. STOP and release compression if you suspect imminent structural failure. If safe, inspect thoroughly and reposition tube before proceeding.
10. Wear ANSI-approved safety goggles, heavy-duty work gloves, and steel-toe work boots during set up and/or use.
11. Keep bystanders out of work area.
12. Do not leave the roll bender unattended when loaded.
13. Inspect before every use; do not use if parts are loose or damaged.
14. No alterations shall be made to this product.
15. Only use with accessories rated to handle the forces exerted by this tool during operation. Other accessories not designed for the forces generated may break and forcefully launch pieces.

IMPORTANT SAFETY INFORMATION

16. Never attempt to roll any tube which is pressurized or contains wire or any other objects inside.
17. Industrial applications must follow OSHA requirements.
18. This product is not a toy. Keep it out of reach of children.
19. Maintain labels and nameplates. These carry important safety information. If unreadable or missing, contact the seller for a replacement.
20. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.
21. Forcing Machinery. Do not force the machine. It will do the job safer and better at the rate for which it was designed.
22. Never stand on machine. Serious injury may occur if the machine is tipped or if crush points are unintentionally contacted
23. Stable Machine. Unexpected movement during operation greatly increases risk of injury or loss of control. Before using the machine , verify that it is stable
24. Maintain with care. Follow all maintenance instructions and lubrication schedules to keep the machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.
25. Owner's Manual. Read and understand this owner's manual before using the machine.

SET-UP

UNPACKING

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. If items are damaged, please contact your distributor.

NOTE: Save all the packaging materials until you are completely satisfied with the machine and have resolved any issues with the distributor, or the shipping agent.

When unpacking, check the packing list to make sure that all parts shown are included. If any parts are missing or broken, please contact your distributor.

CLEAN - UP

The unpainted surfaces of the machine have been coated with a waxy oil to protect them from corrosion during shipment. Remove the protective coating with a solvent cleaner or a citrus based degreaser.

Optimum performance from your machine will be achieved when you clean all moving parts or sliding contact surfaces that are coated with rust preventive products.

It is advised to avoid chlorine based solvents, such as acetone or brake parts cleaner, as they will damage painted surfaces and strip metal should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

SITE PREPARATION

When selecting the site for the machine, consider the largest size of work-piece that will be processed through the machine and provide enough space around the machine for operating the machine safely. Consideration should be given to the installation of auxiliary equipment. Leave enough space around the machine as required for the maintenance and service as described in this manual.

ASSEMBLY

The machine must be fully assembled before it can be operated. First clean any parts that are coated in rust preventative to ensure the assembly process can proceed smoothly.

1. Attach Handle to Drive Shaft with Screw (31) with Washer (33), then tighten the Screw.
2. Remove a Knob from the Lever. Insert the lever into the drive Screw. Re-attach the knob to the end of Lever. (Fig. 2)

SAFETY
FIRST

WARNING!

Make sure that the machine is fully assembled before operating. Failure to do so could cause injury and damage to the machine

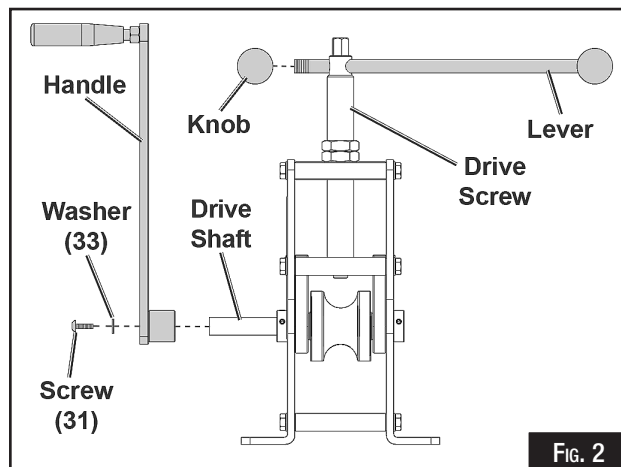


FIG. 2

MOUNTING

Note: The mounting surface must be solid, level and capable of supporting weight of Roll Bender, the tube, and the pressure applied during bending.

1. Using Roll Bender as a template, mark the mounting holes on the bench surface. Allow room for the handle and tube movement during operation.
2. Use appropriate hardware (sold separately) to secure Roll Bender to the mounting surface.

MOUNTING THE MACHINE

It is recommended to fix the machine to a workbench using the four holes provided.

- Holes must be drilled in the workbench which align with those on the machine base.
- Each corner must be secured to the workbench using nuts and bolts long enough to go through the workbench (not supplied). (Fig. 3)
- The workbench must be large enough to prevent tilting of the machine when working.

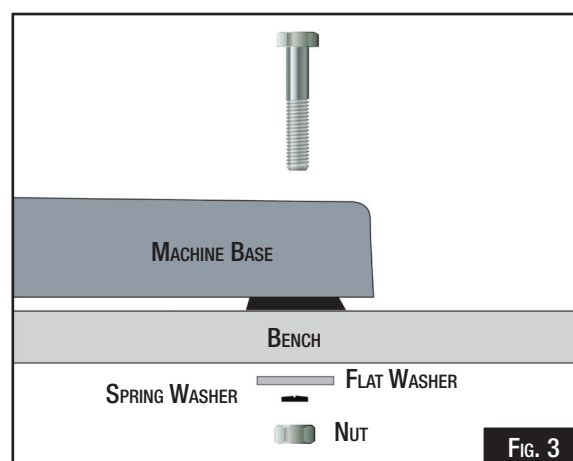


FIG. 3



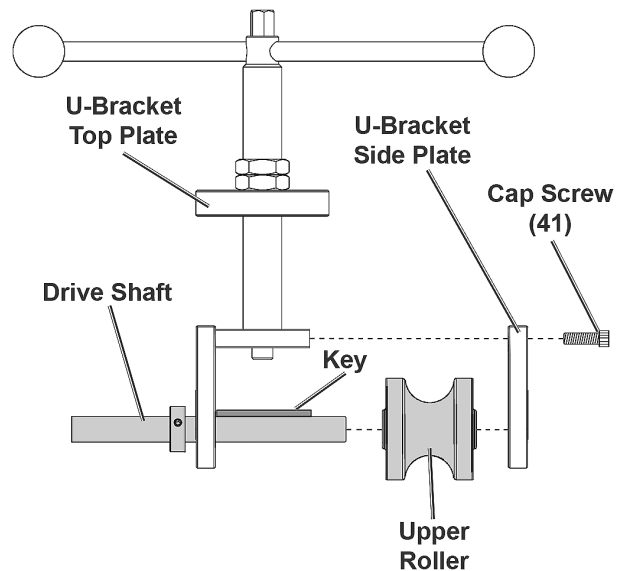
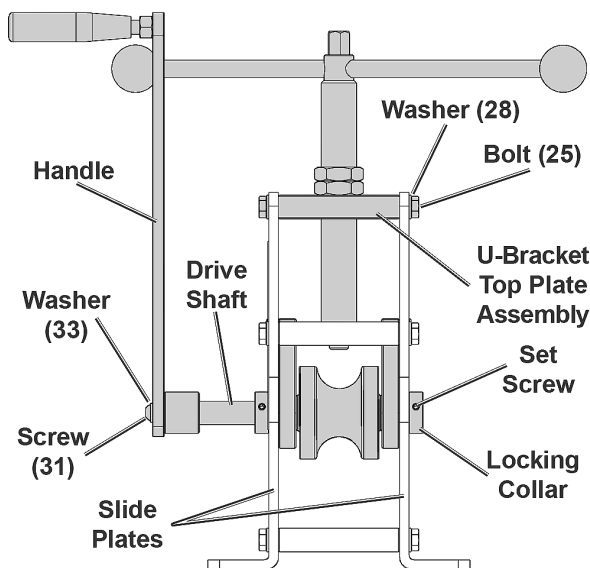
WARNING!

There is potential danger when operating any machine. Accidents are frequently caused by failure to pay attention or a lack of familiarity. Always use the machine with respect and caution to reduce the risk of operator injury. When normal safety precautions are overlooked or ignored, serious personal injury can occur.

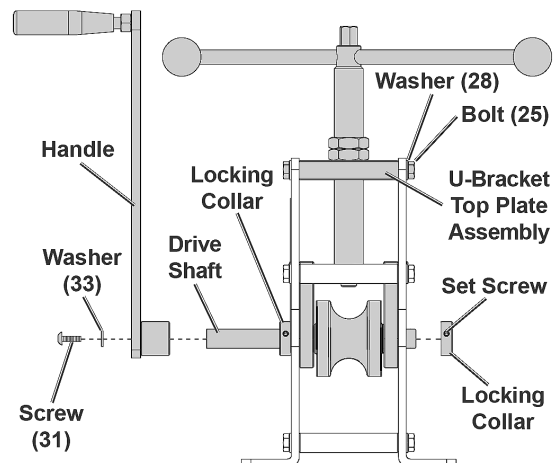
CHANGING ROLLS

Note: Keep Rollers oiled with a lightweight general purpose oil.

1. Select the Upper Roller size that matches the size of tube to be bent.
2. Remove Screw (31), Washer (33), and Handle from Drive Shaft.
3. Loosen Set Screw on Locking Collar (opposite side from Handle); then remove Collar.
4. Remove four Bolts (25) and Washers (28) securing the U-Bracket Top Plate. Assembly to the Slide Plates.
5. Lift the Assembly from the Slide Plates.
6. Remove the Cap Screws (41) then remove the U-Bracket Side Plate from Top Plate.
7. Pull Upper Roller from Drive Shaft and replace with desired Upper Roller, making sure Key is fully inserted into its slot on Drive Shaft and aligned with slot in Upper Roller.
8. Replace U-Bracket Side Plate with Cap Screws (41).



9. Slide the U-Bracket Top Plate Assembly between Slide Plates and secure in place with Bolts (25) and Washers (28).
10. Attach the Handle to Drive Shaft with Screw (31) with Washer (33). Tighten Screw.
11. With Drive Shaft Locking Collar (the Handle side) flush against Slide Plate, replace Locking Collar (opposite Handle side) onto Drive Shaft flush against Slide Plate and secure with Set Screw.

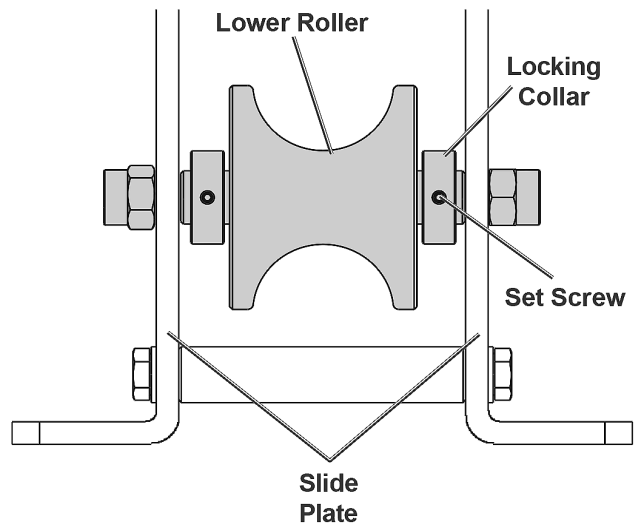


LOWER ROLLERS

1. Select the Lower Roller size that matches the size of tube to be bent.
2. Install and evenly space the Lower Rollers into the Slide Plates according to the desired bend radius. Locking Collars should be loose and allow the Lower Roller to float.

Note: The distance between the Lower Rollers determines the bend radius. Spacing the Rollers farther apart will form a larger radius, while installing them closer to the center will form a tighter radius. Experiment on a scrap tube to determine optimum radius.

3. Rotate the Handle counterclockwise to raise the Upper Roller until there is just enough space to install the tube.
4. Install the tube so that it is supported on both ends by the Lower Rollers.
5. Rotate the Handle until the Upper Roller just makes contact with the tube and is firm but not bending the tube. This centers the tube on the Lower Rollers.
6. Slide the Locking Collars against the Lower Rollers and tighten the Set Screws. Repeat for both Collars on both Lower Roller dies.



ROLLING TUBE

NOTE: A certain amount of deformation will occur when using this Tube Bender. Choosing the right tube will reduce deformation.

Note: Use only with tube that fits the bending Roller exactly. Tube will deform significantly if it does not fit the Bending Roller exactly.

1. Mark the middle of the tube.
2. Match Rollers to the tube size being used and install Rollers into Roll Bender, see Changing Rollers on page 8.
3. Rotate the Lever counterclockwise to raise the Upper Roller enough to allow tube to be inserted.
4. Place the tube between the Upper and Lower Rollers.
5. Rotate the Lever clockwise to lower the Upper Roller
6. Rotate Lever until it contacts tube, then tighten 1/2 turn more.
7. Rotate the Handle clockwise and then counter clockwise to the ends of the tube.
8. Return the tube to middle position and repeat steps 5 and 6 until desired radius has been reached.
9. Use the Scale as a reference if identical roll radius is required for multiple tubes.
10. Rotate Lever counterclockwise to open Rollers.
11. Remove the Tube. If necessary, remove the Roller(s) to allow room to remove the tube.
12. Cut off straight portions at each end of the tube.
13. After use, store indoors out of reach of children

MAINTENANCE



CAUTION!

Some service processes should only be carried out by professional maintenance personnel. If you are unsure of your ability to complete a task, please contact your local HAFCO Metalmaster service centre.

1. **BEFORE EACH USE**, inspect the general condition of the Roll Bender. Check for:

- Loose hardware,
- Misalignment or binding of moving parts,
- Cracked or broken parts,
- Any condition that may affect its safe operation.

If a problem occurs, have the problem corrected before further use.

Do not use damaged equipment.

2. **AFTER EACH USE**, wipe with a clean cloth.

Store indoors out of children's reach.

TROUBLESHOOTING

Flattening or Kinked Tubing

Cause: Wall thickness is too thin, or the incorrect die size is used for the tube outer diameter.

Fix 1: Switch to a matched die set that fits the exact outer diameter, or use tubing with a heavier wall thickness.

Fix 2: Ensure the pressure setup or follower block is tightly and evenly supporting the radius.

Tube Slipping During the Bend

Cause: Low clamping force, worn clamp dies, or oily residue on the gripping surfaces.

Fix 1: Clean any lubricant or debris off the clamp face and the tube.

Fix 2: Adjust the clamp pressure higher or replace worn-out clamping dies.

Inaccurate or Inconsistent Angles (Spring-back)

Cause: Metal naturally "springs back" slightly after release, or the material batch varies.

Fix 1: Over-bend the tube by an extra 1 to 3 degrees to compensate for material spring-back.

Fix 2: Secure the manual bender firmly to a heavy workbench or vise so the base frame does not flex during leverage application.

Scratches, Galling, or Tool Marks

Cause: Sharp die edges, trapped debris, or wrong lubrication.

Fix 1: Blend and smooth out any sharp or damaged edges on your tooling.

Fix 2: Apply a high-pressure bending lubricant rather than a thin spray lubricant like WD-40.



WARNING!

Before operating any machine, take time to read and understand all safety signs and symbols. If not understood seek explanation from trade magazines or an experienced operator.

MANUAL TUBE ROLLER

TR-38

Order Code: (S6700)

The following section covers the spare parts diagrams and lists that were current at the time this manual was originally printed. Due to continuous improvements of the machine, changes may be made at anytime without notification.

HOW TO ORDER SPARE PARTS

1. Have your machines model number, serial number & date of manufacture on hand, these can be found on the specification plate mounted on the machine.
2. A scanned copy of your parts list/diagram with required spare part/s identified.

NOTE: SOME PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY

3. Go to www.machineryhouse.com.au/contactus and fill out the inquiry form attaching a copy of scanned parts list.



WARNING!

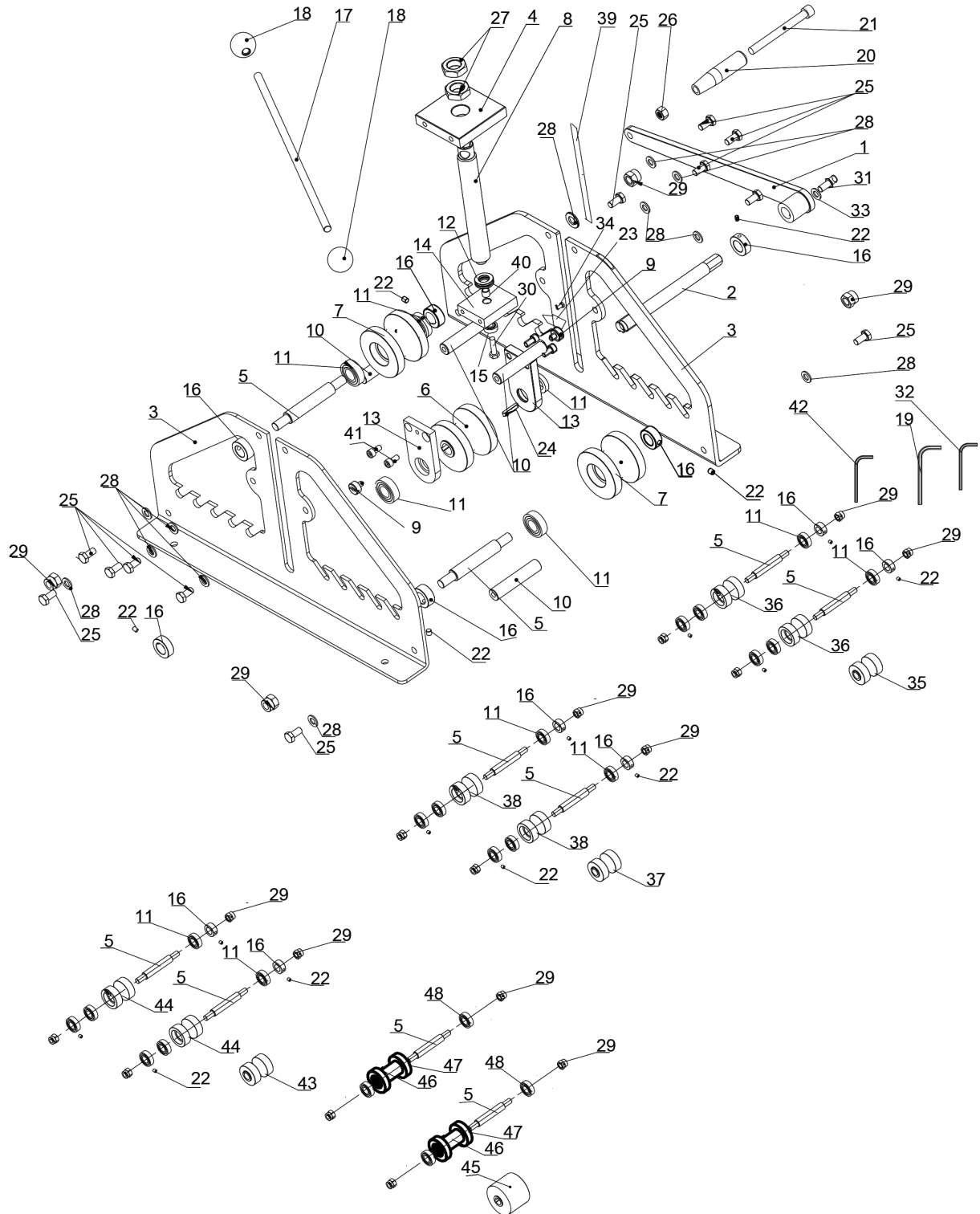
Read and understand the instructions in this manual, before operating this machine to reduce the risk of serious injury or even death. Save all warnings and instructions for future reference.



CAUTION!

It is impossible to cover all possible hazards Every workshop environment is different. These are designed as a guide to be used to compliment training and as a reminder to users prior to equipment use. Always consider safety first, as it applies to the individual working conditions.

PARTS DIAGRAM



PARTS LIST

ITEM	DESCRIPTION	QTY	ITEM	DESCRIPTION	QTY.
1	HANDLE	1	25	BOLT M10 X 20	12
2	DRIVE SHAFT	1	26	NUT M12	1
3	SLIDE PLATE	2	27	NUT M30 X 2	2
4	TOP PLATE	1	28	WASHER 10 MM	12
5	LOWER ROLLER SHAFT	10	29	NUT M14	20
6	UPPER 1-1/2" ROLLER	1	30	BOLT M8 X 30	1
7	LOWER 1-1/2" ROLLER	2	31	SCREW M8 X 20	1
8	DRIVE SCREW	1	32	HEX KEY WRENCH 3MM	1
9	GUIDE SHAFT	2	33	WASHER 8 MM	1
10	SHAFT	4	34	SCREW M6 X 8	1
11	BEARING 6004	18	35	UPPER 1" ROLLER	1
12	BEARING 51103	1	36	LOWER 1" ROLLER	2
13	U-BRACKET SIDE PLATE	2	37	UPPER 3/4" ROLLER	1
14	U-BRACKET TOP PLATE	1	38	LOWER 3/4" ROLLER	2
15	BEARING 608	1	39	SCALE	1
16	LOCKING COLLAR 20MM	18	40	BUSHING	1
17	LEVER	1	41	CAP SCREW M8 X 20	4
18	KNOB	2	42	HEX KEY WRENCH 6MM	1
19	HEX KEY WRENCH 5MM	1	43	UPPER 1-1/4" ROLLER	1
20	HANDLE COVER	1	44	LOWER 1-1/4" ROLLER	2
21	SCREW M12 X 120	1	45	UPPER ADJUSTABLE ROLLER	1
22	SET SCREW M6 X 8	18	46	LOWER ADJUSTABLE ROLLER	2
23	POINTER	1	47	LOCKING COLLAR 40MM	4
24	KEY 6 X 32	1	48	BEARING 6804	4

NOTE: SOME INDIVIDUAL PARTS MAY ONLY BE AVAILABLE AS AN ASSEMBLY



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

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