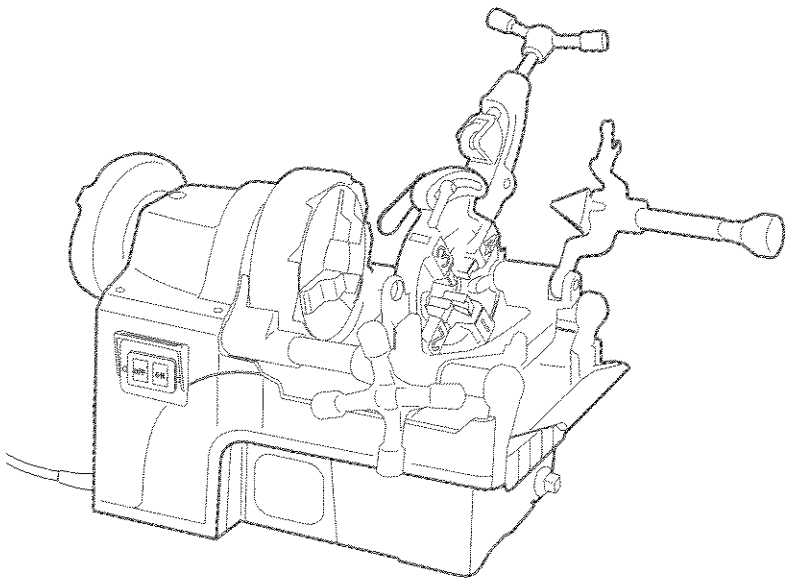
PIPE MACHINE

REX

Model No.7890

Wheeler-REX

OPERATION MANUAL



Be sure to read this
Operation Manual before
using the machine

- Note -

- Be sure to hand this operation manual to the user.
- To ensure safe and efficient use of this machine, read this operation manual very carefully before use.
- Be sure to keep this operation manual where the operator can refer to it whenever necessary.

Date of purchase: Year Month

Sales agent:

- Be sure to observe the Safety Precautions described below to prevent accidents such as fire, electric shock and injury.
- Read these Safety Precautions carefully before using the machine, and operate the machine according to the instructions.
- Do not use the machine in any way other than as described in this operation manual.

CONTENTS

Definitions of ⚠ WARNING and ⚠ CAUTION

In this operation manual, warnings are divided into ⚠ WARNING and ⚠ CAUTION.

⚠ WARNING : indicates actions which could possibly result in death or severe injury to the user if the machine is used incorrectly.

⚠ CAUTION : indicates actions which could possibly result in injury to the user, or physical damage, if the machine is used incorrectly.

Even items described as ⚠ CAUTION could have serious results under certain conditions.

Be sure to observe these warnings carefully as they greatly affect safety.

- If this operation manual is lost or damaged, promptly order a replacement from our agent or sales agent.
- Parts and specifications are subject to change without prior notice, due to improvements in quality, performance or safety standards. In such cases, the contents, photographs, illustrations, etc. of this manual may be different from the product you have purchased.

⚠ WARNING

① Ensure you use the correct voltage.
- Be sure to use the voltage indicated on the name plate of the main unit or in the operation manual. If the voltage is different from the voltage indicated overheating, smoke or fire may occur.

② Check the switch is OFF, before inserting the plug into the power supply socket.
- If the plug is inserted into the power supply when the switch is ON, the machine may start operation abruptly, and is liable to cause accidents. Be sure to check the switch is OFF.

③ Be sure to avoid electric shock.
- Do not touch the plug with wet hands.
- Do not use the machine in rain or in places where water can easily get into the machine.
- Be sure to ground the machine to avoid electric shock.

④ Take notice of conditions at the work site.
- Do not use the machine in rain, humid or damp places, or places where water can easily get into the machine. Humidity will lower insulation of the motor and cause electric shock.
- Do not use close to flammable fluids or gases, such as gasoline and paint thinner. Fire or explosion might occur.

⑤ Use designated accessories and attachments.
- Do not use accessories and attachments other than those designated in the operation manual or our catalogs. Accidents or injuries might result.

⑥ In the following cases, turn the main unit OFF and pull the plug out of the power supply socket :
- when the machine is not in use or parts are changed, repaired, cleaned or inspected
- when accessories are changed
- when hazards are expected (including electric power failure).

When the plug is inserted, the main unit may start operation unexpectedly, causing accidents.

⑦ If any abnormality is noticed, stop operation immediately.
- When operation of the machine is not smooth or abnormalities such as unusual smells, vibration or noise are detected, immediately stop operation of the machine.
- Check symptoms against the items in " Troubleshooting " (page17) in this manual and follow the corresponding instructions. If the machine is used continuously, overheating, smoke or fire might occur, causing accidents or injuriy.
- If overheating or smoke from the main unit occurs, do not attempt an overhaul but ask for an inspection and repair.

⑧ Keep the work site clean.
- Ensure you keep the work table and the work site in good order, and well lit. A cluttered site and work table are liable to cause accidents.

⑨ Do not let unauthorised personnel come near the machine.
- Do not let any people other than authorised personnel touch the main unit or the power supply cord or operate the machine.
- Do not let people other than authorised personnel enter the work site, especially children. Injuries might occur.

⑩ Do not use the machine with force.
- Use the machine only for its designated purpose. Operate according to the capacity of the main unit, to assure safe and effective operation. Applying force may not only cause damage to the product but also accidents.
- Do not use the machine in any way that could cause the motor to lock, or cause smoke or fire.

⑪ Do not use for applications other than thread cutting.
- Do not use this unit for anything other than cutting threads. Use for other applications (such as tightening joints, etc.) may result in damage to the machine or the motor, possibly leading to accident or failure.

⑫ Wear appropriate clothing.
- Do not wear neck ties, clothes with open sleeves, loose clothing, accessories such as necklaces, etc., which could get caught in the rotating parts.
  When working outdoors, it is recommended to wear rubber gloves and anti-slip shoes. Slippery gloves and shoes are liable to cause injuries.
- Cover long hair with caps or hair nets, to prevent them getting caught in rotating parts.
- Wear safety caps, safety shoes, etc. according to the working environment.

Safety Precautions

⚠ WARNING

⑬ Do not work in an unnatural posture.
- Keep a firm footing and balance to avoid falling over and injuring yourself.

⑭ Remove tools such as wrenches.
- Before turning ON the switch, check that tools used for inspection and adjustment have been removed. If you use the machine when tools are left inside it, accidents and injuries may occur.

⑮ Operate the unit with great care.
- Always work with great attention to handling the machine, working methods and surrounding conditions. Carelessness may result in accidents and injuries.
- Do not operate the machine when your concentration is lowered such as when tired, after drinking alcohol, when sick, affected by medicines, etc.

⑯ Handle the power supply cord with care.
- Do not carry the product by the cord, or pull the plug out of the socket with the cord.
- Do not place the cord near heated objects, fats & oils, cutters and other objects with sharp edges.
- Take care not to step on the cord, pull the cord or apply unnecessary force resulting in damage to the cord. Electric shock or short-circuit may occur, causing fire.

⑰ Perform careful maintenance daily.
- When changing accessories and parts, follow the operation manual.
- Periodically inspect the power supply cord and plug. If damaged, ask your sales agent or our sales branch for repairs. If an extension cord is used, inspect the cord periodically and, if damaged, replace it.
- If extension cords are used outdoors, use cords designed for outdoor use to prevent electric shock, short-circuit or fire.
- Keep grips dry and clean and free of oil and grease. Slipping may cause injury.

⑱ Check for damaged parts.
- Before using the machine, carefully check for damage to the protective cover and other parts, and check both normal operation and specified functions.
- Check for any abnormalities such as in adjustment of movable parts, tightening, damage to parts, and all parts affecting operation.
- Do not use machines if the stop and start switches do not work.
- In replacing or repairing a broken protective cover and other parts, follow the operation manual. If no instructions are specified in the operation manual, ask your sales agent or our sales branch for repairs.

⑲ Store carefully when the machine is not in use.
- Store in a dry place away from children and locked with a key.

⑳ For overhaul and repair of the machine, ask an appointed agent.
- Our products comply with corresponding safety standards. Do not remodel.
- Be sure to ask your sales agent or our sales branch for any repairs. If repairs are carried out by unskilled or unqualified personnel, the performance of the unit will be adversely affected and may result in accident or injury.

Threading work

⚠ WARNING

① **Take care when handling blades and other sharp objects.**
To prevent accidents and injury, take special care when handling blades and other sharp objects such as the dies, reamer, pipe cutter and carbide cutter, etc.

② **Do not place your hands or face close to rotating parts while the machine is operating.**
Inserting your hands into rotating parts and dies will result in accidents and injury.

③ **Do not perform the next operation until the machine has stopped rotating completely.**
Rotation does not come to a complete standstill when you turn the switch OFF.
Before starting the next job, check that rotating parts have stopped. Failure to do so may result in accidents and injury.

④ **Do not wear gloves while operating the unit.**
・Gloves can get caught in the rotating parts or blade, resulting in accident or injury.

⑤ **Do not leave the machine while it is still rotating**
・Others may be injured.

⑥ **If the machine is accidentally dropped or hit, check carefully for damage such as cracks, broken parts, or deformation.**
・If any abnormalities are detected, ask your sales agent or our sales office for inspection and repair. Continuing to use the machine in such a state may result in malfunction, accidents or injury.

⑦ **Do not touch the dies just after threading**
・The dies will be very hot just after completing threading. To avoid burns and other injuries, avoid touching them until they have cooled down.

⑧ **Die head and dies.**
・Use the die head and dies that correspond to the diameter of the pipe to be threaded.
・Attach the die head correctly to the carriage.
・Before starting threading, set the die head to the threading position, turn the switch ON, and make sure the threading oil flows correctly from the die head and that the oil flows onto the dies. Also, make sure there is sufficient oil in the tank to cover the strainer completely. This will prevent not only incorrect threading of the pipe, but also malfunction of the machine, accidents and injury.

⑨ **Make sure you start threading from the correct position.**

⑩ **Use a pipe support when threading long pipes.**
・When threading long pipes, use the pipe support to prevent vibration from warping while the pipe is rotating. The support will also prevent the machine from becoming unstable under the weight of the material.
・Failure to use the pipe support may not only result in imperfect threads and malfunction of the machine, but may even lead to accidents and injury.

⑪ **Be sure to attach accessories according to the Operation Manual.**
・If accessories and attachments are not fitted correctly, such parts may drop off during operation or the unit may fall over resulting in accident and injury.

Safety Precautions

● Reaming

⚠ WARNNING

① To prevent injury, do not touch the reamer blade direcly with your hands as it is extremely sharp.

● Threading Oil

⚠ CAUTION

① Wear goggles

· Touching the eyes with oil may cause inflammation.
Emergency treatment: Wash eyes with clean water for about 15 minutes and seek medical attention.

② When handling cutting oil, wear protective gloves.

· If the oil comes in contact with your skin, it may cause irritation.
First Aid: Wash the affected area thoroughly with soap and water.

③ Take care not to breathe in oil mist or steam.

· Breathing in oil mist or steam may cause nausea.
Emergency treatment: Carry the person out into the fresh air, cover them with a blanket, keep them warm and relaxed, and seek medical attention.

④ Do not thin the oil or mix it with threading oil produced by other companies.

⑤ If the threading oil gets contaminated with water during the threading operation and the oil changes to a milky white, or the quality of the oil deteriorates significantly resulting in a poor finish to the thread, replace the oil immediately.

⑥ Do not drink the oil

· Drinking the oil may cause diarrhea or vomiting
Emergency treatment: Do not let the person vomit forcibly; seek medical attention immediately.

⑦ Do not place the oil where it is easily reached by small children.

⑧ Be particularly careful about the risk of fire. Depending on the country of use, the oil may be classified as a hazardous material. To prevent fire or explosions, always familiarize yourself with and comply with local laws and regulations pertaining to the handling of such materials.

⑨ Storage

· Always close the lid after use to prevent the oil from being contaminated by dust, water or other foreign bodies.
· Store in a dark place away from direct sunlight

⑩ Handling waste oil and oil cans

· The handling of waste oil and oil cans is governed by local laws and regulations. Always comply with the laws and regulations governing methods of disposal and cleaning.

⑪ Precautions with oil cans / drums / jugs / pail

· Do not apply pressure to empty oil cans / drums / jugs / pail or they may burst.
· Never attempt to weld, heat, make holes in or cut the drums, as this could possibly lead to explosion or fire from any residue left in the cans / drums / jugs / pail .

● Using threading oil for stainless steel pipes

⚠ WARNING

① **Do not burn off the oil.**
- This oil contains chlorine compounds and generates toxic gas when burnt.
- In the case of an emergency in which someone has inhaled such toxic gases, carry the affected person out into the fresh air and seek medical attention.

② **Disposal of waste oil and cans.**
- The disposal of waste materials is governed by local laws and regulations. Follow all laws related to the disposal and cleaning of waste materials.

Names of Parts, Standard Specifications · Standard Accessories

Names of Parts

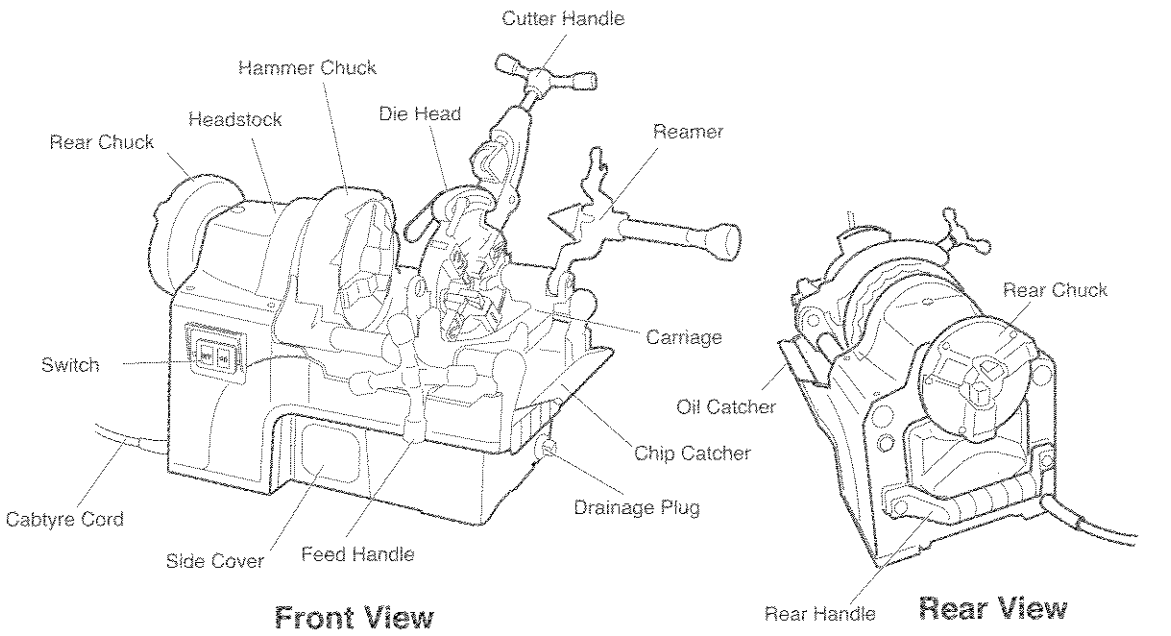


Fig. 1

Standard Specifications

Threading capacity	½ B (15A) ~ 1½ B (40A)
Type of Threads	Tapered threads
Power	110 - 120 V (50/60 Hz)
Motor	Single phase 500 W series motor
Rotation speed	56 rpm (w/o load)
Net weight	32 kg
Dimensions (L x W x H)	21.4 x 13.6 x 14 (inch) / 540 x 345 x 355 (mm)
Chuck	RT type chuck / NS type chuck jaw insert

Table 1

Standard Accessories

Die head		Manual cutting die head (½"- 1½") (one)
Dies		½ - ¾ " ; 1 - 1½" (1 set each)
Pipe cutter		Wheel cutter
Threading oil		Miyagawa 246-R (1 can x 2 liters (0.528 gal.)
Toolbox	Screwdriver	Phillips screwdriver (1)
	Hexagonal keys	3, 4, 5, 6 mm (1 each)
	Bearing oil	Oiler (1 can containing oil)
	Carbon brush	1pair
	Cutter Wheel	1
Adapter (with grounding)		1

Table 2

Pre-operation Instruction:Transporting the Machine, Positioning the Machine, Oil, Attaching and Removing the Die Head

1. Transporting the Machine (Fig. 2)

Before moving and transporting the machine, remove the oil catcher. There is no need to drain the threading oil.

For the machine with the manual die head

Fasten the cut end of a pipe firmly in place with the chuck, loosen the die head lever nut and open up the dies. (Set the cut lever to the threading position to make sure the dies do not come out.)

Before moving the machine, pull down the pipe cutter so the pipe is held securely by the cutter roller and cutter blade.

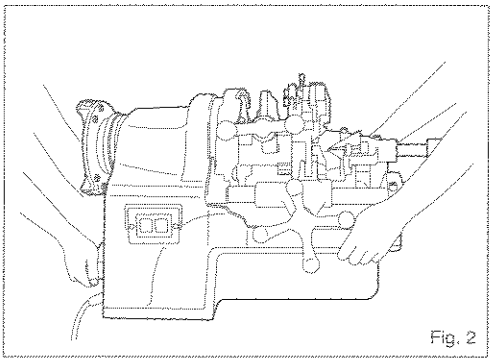


Fig. 2

2. Positioning the Machine (Fig. 3)

Place the machine so the rear section is raised. (Even when placed on a flat surface, the machine is designed so that the rear section will be slightly raised.)

⚠ CAUTION

If the rear chuck is too low, oil will drain out of the rear of the pipe, etc., soiling the floor and wasting oil.
Once the machine is set up, be sure to attach the oil catcher in the proper position.

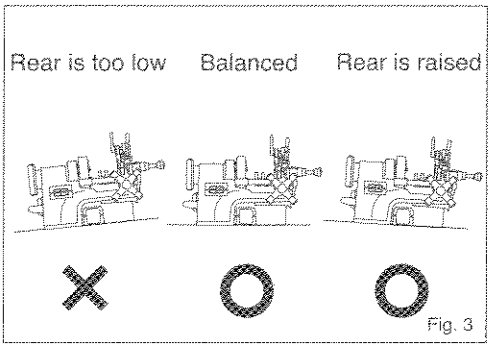


Fig. 3

3. Oil (Fig. 4)

Fill the tank with the threading oil included with the machine.
Always use genuine threading oil.

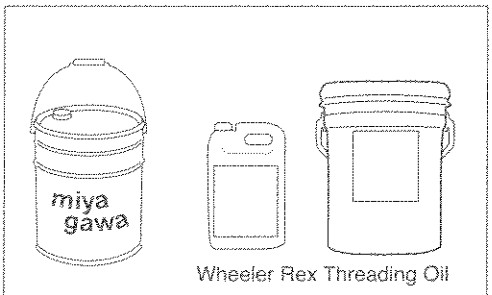


Fig. 4

4. Attaching and Removing the Die Head

Attach the die head that matches the size of the pipe to be threaded.

Attaching the die head

(1) Align the post on the die head with the die head mounting hole on the carriage. Then, while moving the die head up and down, press in until it contacts the carriage.

(2) Lower the die head and make sure the die head is properly in position.

※ To remove the die head, perform the procedure for attaching it in reverse.

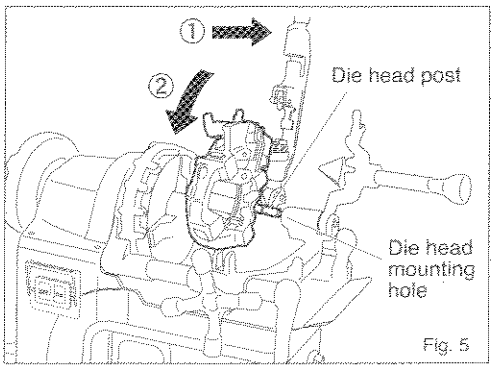


Fig. 5

Pre-operation Instructions: Attaching and Removing the Dies (Blades)

5. Installing and Removing the Dies (Blades)

For the machine with the manual die head (manual cutting die head)

(There is no need to remove the die head from the machine)

▩ Removing the Dies (Fig. 6)

(1) Push the eccentric handle in the direction shown by arrow (1) in Fig. 6. Then loosen the lever nut and move the eccentric handle assembly all the way to the left. This will allow you to remove dies 3 and 4.

(2) Next, lift the die head to remove dies 1 and 2.

▩ Installing the Dies

(1) Match the number shown on the die head with the number on the die, and insert the proper die, pushing it all the way into the die notch.

(2) Next, push the eccentric handle in the direction shown by arrow (2) in Fig. 6. The die will be inserted toward the center of the die head.

※If the eccentric handle does not move, press lightly on the handle and simultaneously move the die up and down to correct the position of the die.

※ The four dies form a set. If a die is replaced with another one that is not from the same set, it may not be possible to thread pipes properly. Always use the dies as a set.

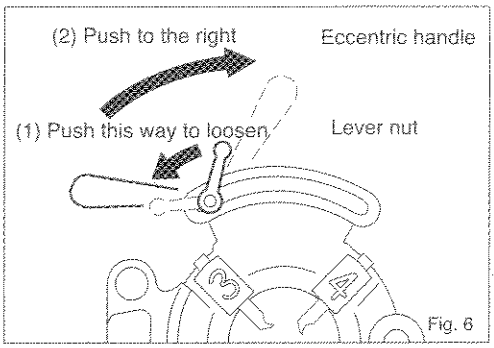


Fig. 6

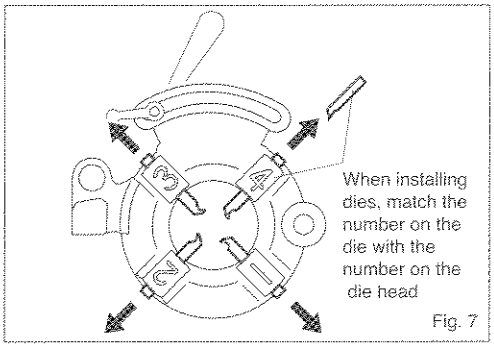


Fig. 7

Pre-operation Instructions: Inserting and Removing Pipes, Power Supply

6. Inserting and Removing Pipes (Fig. 8)

⚠ WARNING

Do NOT attempt to insert or remove pipes when operating the machine or when the machine is still rotating immediately after the switch has been set to the OFF position. This could result in an accident or serious injury if you should become caught in the machinery. Before inserting or removing pipes, check to make sure that the machine has stopped moving completely, and remove the power plug from the outlet. Accident or injury could result if the machine were to start operating unexpectedly.

(1) Open the rear chuck and hammer chuck to a position wider than the diameter of the pipe, then insert the pipe from the rear chuck side. (If the pipe is short, however, insert it from the hammer chuck side.)

(2) Close the rear chuck and then, supporting the pipe with your right hand, close the hammer chuck gently with your left hand and align the chuck jaw insert against the pipe. Then fasten the pipe securely in place.

(3) To remove the pipe, turn the hand wheel in the opposite direction to loosen the hammer chuck. Then loosen the rear chuck and remove the pipe.

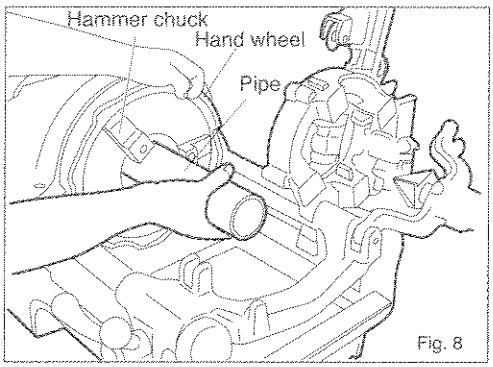


Fig. 8

▩ Mounting short pipes (Fig. 9)

Clamp the pipe lightly with the hammer chuck and bring the dies lightly into contact with the cutting end of the pipe where the thread will be cut, making sure the pipe is properly centered. Then, once again, pull the hammer chuck toward you to fasten the pipe tightly in place. This will ensure that the pipe does not vibrate and threads are cut smoothly.
However, be sure to chuck the pipe with the pipe protruding at least 3.5" (90 mm) from the end of the chuck jaw inserts.

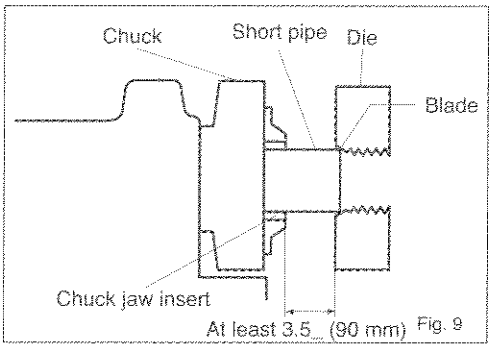


Fig. 9

▩ Mounting long pipes

When cutting threads on long pipes, use a pipe support to ensure that the pipe does not vibrate due to warping as it rotates, and to ensure that the machine does not become unstable due to the weight of the pipe.

Use a pipe support.

Support long pipes so they are stable during processing.

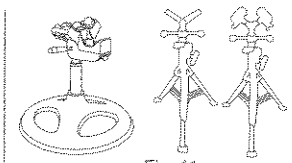


Fig. 11

⚠ WARNING

Failure to use a pipe support may make proper threading impossible and may result in accident, injury or damage to the equipment.

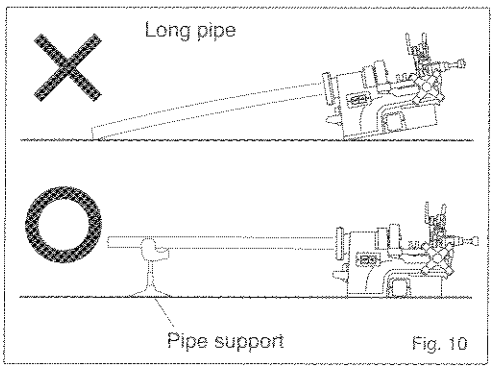


Fig. 10

7. Power Supply (Fig. 12)

- Plug the machine into a 110 - 120 V AC power supply (20A min.). If an extension cord is used, it must be a cabtyre cord at least 2 mm in thickness, and the length should be as short as possible. If you use a long, thin cord to connect the power supply, it may cause the voltage to drop, resulting in motor damage or other problems.

⚠ WARNING

Make sure the machine is grounded properly before use. Failure to do so may result in electric shock.

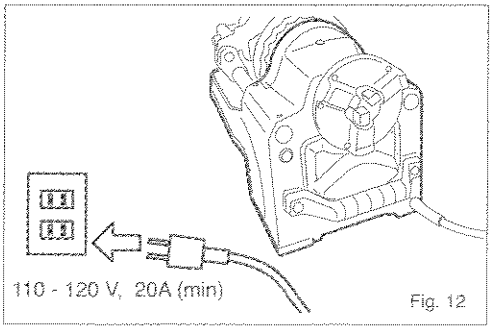


Fig. 12

Pre-operation Instructions

8. Pre-Operational Inspection (Fig. 13)

⚠ WARNING

Before cutting or threading pipes, be sure to check the following. If anything is out of the ordinary, consult the Troubleshooting table (in "Before Requesting Repairs or Servicing") and take the appropriate action as noted in the table. Failure to check and resolve problems may result in accident or injury.

(1) Set the switch to the ON position and operate the spindle.

· Make sure there is no abnormal noise or odor coming from the motor.

· Make sure the pipe does not vibrate. If the pipe is vibrating, etc., turn off the power and fasten the pipe in place again.

· Make sure cutting oil is flowing out of the die head. Check to make sure the machine is filled with at least one liter of threading oil (tank capacity: approx. ¼ gallon (1.3 L)).

(2) Let the machine idle for a few minutes.

· Make sure the motor does not heat up excessively, etc.

(3) Set the switch to the OFF position to stop the machine.

·Check to make sure that the machine stops rotating immediately.

The motor is equipped with a brake for added safety. Familiarize yourself with the precautions for the use of the motor, which is fitted with a brake, and be sure to use the machine properly.

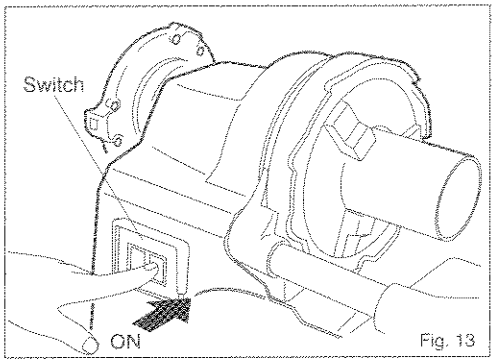


Fig. 13

9. Cutting Pipes

(1) As the die head and reamer will not be used when cutting pipes, lift them out of the way.
(2) Determine the position at which the pipe is to be cut, then fasten the pipe securely.
(3) Open the pipe cutter to a position wider than the pipe diameter. Place the cutter in the pipe as shown in the figure, aligning the blade with the cutting position on the pipe. Then use the handle to move the roller and blade until they rest lightly against the pipe.
(4) Set the switch to the ON position, then turn the cutter handle up to 1/2 turn for each rotation of the pipe (Fig. 14). Avoid cutting with excessive force from the beginning, or the shape of the pipe may become distorted, preventing you from making accurate circular threads. Throughout the process, turn the cutter handle against the pipe lightly and evenly.

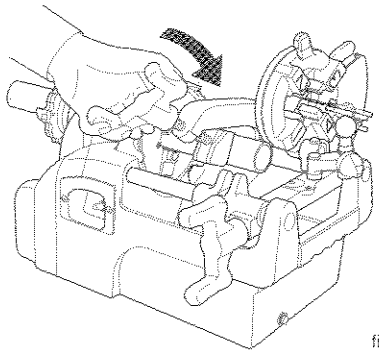


fig. 14

⚠ CAUTION

Make sure the cutter is placed in the proper position before turning the pipe. If the cutter is improperly positioned, the pipe may suffer harmful scratches or the cutter may be damaged.

Precautions when cutting with other pipe cutters

We strongly recommend that only the pipe cutter mounted on the machine be used to cut the pipes that are to be threaded. If another cutting method is used, be sure to cut the pipe square, so the center line of the pipe and the end are at right angles, as shown by diagram A in Fig. 15.
If pipes that have been cut as shown by diagrams B and C are threaded, the threads may be unsuitable. Such cuts are usually caused by the following:

Causes of B in Fig. 15
- Loose bearings in the cutter
- Applying too much force when pressing the grindstone against the pipe. (This tends to occur particularly with large diameter pipes.)
- Pipe has been clamped at an angle during cutting.

Causes of C in Fig. 15
- If a large-diameter pipe were clamped and re-clamped two or three times after the grindstone has become reduced in size.

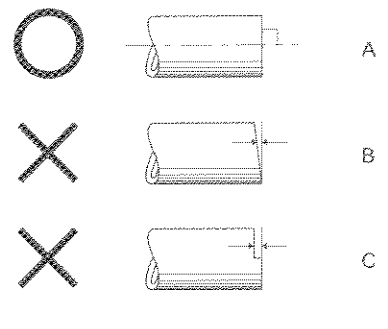


fig. 15

⚠ CAUTION

Looseness or level differences in the surface to be cut will not only prevent proper thread cutting but may also result in accident, injury, or damage to the machine.

Operating Instructions: Cutting & Reaming

10. Reaming

After cutting the pipe with the pipe cutter, be sure to use the reamer to ream the inside of the pipe before cutting threads.

(1) As the die head and cutters will not be used when reaming, lift them out of the way.

(2) Pull the reamer down and set it in position on the carriage. Then push the reamer knob so the reamer sticks out as shown by arrow 1 in Fig. 16.

※ If a long pipe is held by the chuck, reaming is possible without pushing the reamer shaft.

(3) Turn the knob counter-clockwise to set the reamer in place in the holder. (see arrow 2 in Fig. 16)

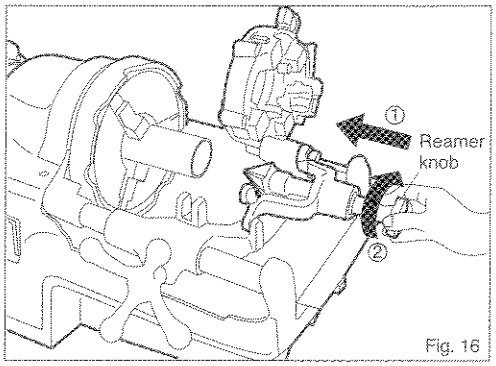


Fig. 16

(4) Set the switch to the ON position to start the pipe rotating, and then use the feed handle to place the reamer against the pipe. When the pipe has made at least one complete revolution, remove the reamer from the pipe. This completes the reaming process. (Fig. 17)

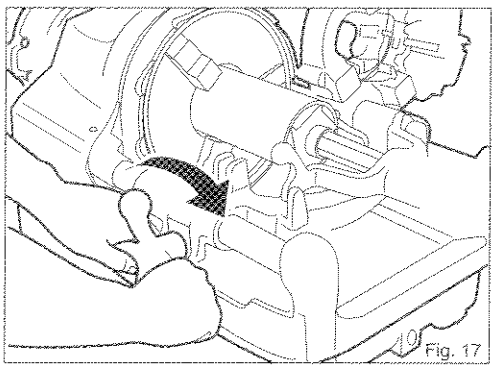


Fig. 17

⚠ CAUTION

Do not use excessive force when pressing the reamer against the pipe. Doing so may produce harmful scratches in the pipe or damage the machine.
Note also that the reamer blade is extremely sharp. NEVER touch it with your bare hands, as you may be seriously injured.

Precautions when Threading (Fig. 18)

(1) When first cutting the pipe with the die:
Place the blade of the die gently against the end of the pipe. Placing the blade against the pipe with excessive force may damage the die and shorten its life. When the blade comes in contact with the end of the pipe, initially press it lightly and turn the feed handle clockwise, then gradually increase the amount of force so the unit cuts firmly. Once 3 of 4 threads have been cut, the Die head will feed itself without further pressure.

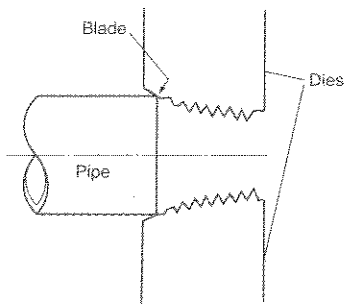


Fig. 18

11. Cutting Threads with the manual Die Head

The machine is equipped with a manual cutting die head (½- 1½) and two sets of dies: ½-¾ and 1 - 1½. Make sure you use the right set of dies for the pipe size.

⚠ WARNING

Begin cutting threads with the carriage to the right of the red line on the pipe support end (front). Failure to do this may result in accident or damage.

(1) To adjust the size, align the scale on the eccentric platform (Fig. 22) to the appropriate size on the scale on the die head, and fasten the lever nut in the appropriate position. (Fig. 19)

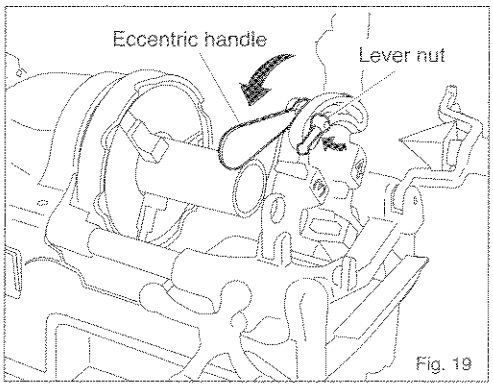


Fig. 19

(2) Set the switch to the ON, and in case of foot switch model, depress the foot switch. Oil will be supplied from the die head automatically.

(3) Turn the feed handle clockwise and press the dies against the pipe to begin cutting. Once three or four threads have been cut, the remainder will be cut automatically. The series motor used on this machine changes speed automatically according to the load. (Fig. 20)

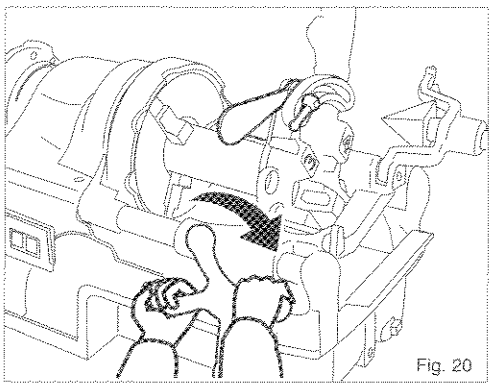


Fig. 20

(4) When the prescribed thread length is reached, slowly lift the eccentric handle in the direction indicated by the arrow to open the die and finish cutting the threads. (Opening the die too quickly will create a step in the threads, resulting in a poor finish.) (Fig. 21)

(5) To complete the thread cutting process, use the feed handle to retract the die head from the pipe. When the die head is returned to the upper position, the flow of oil will stop.

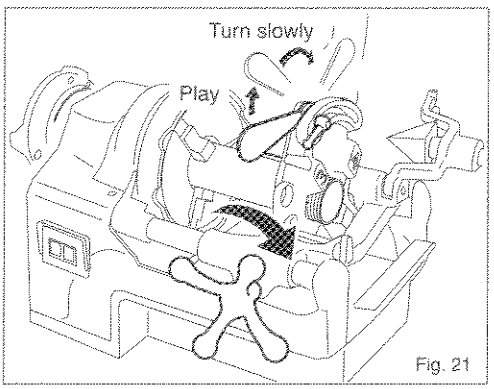


Fig. 21

Precautions when matching the thread cutting size

(1) When matching the thread cutting size, be sure to pull the eccentric handle down toward the front before matching the thread cutting size on the die head with the scale on the eccentric platform. (Fig. 22-1)

(2) Tighten the lever nut securely.

(3) To cut wider or narrower threads, adjust the scale on the eccentric platform to the position of the size scale line. Moving the eccentric platform scale forward will result in deeper threads. Moving it in the other direction will result in shallower threads. (Fig. 22-2)

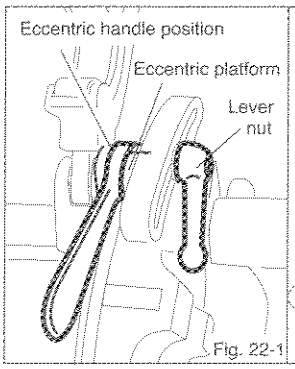


Fig. 22-1

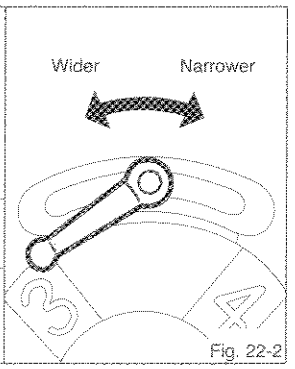


Fig. 22-2

12. Regulating the Flow of Cutting Oil (Fig. 23)

It is possible to regulate the amount of cutting oil supplied from the die head.

(1) Put the die head in threading mode and remove the oil catcher. Then, while threading, check the amount of oil being discharged.

(2) Turn the oil flow regulating knob on the relief valve located on the carriage to adjust the amount of oil to an appropriate quantity.

※ The amount of oil changes to match the rotation speed depending on the load when threading.

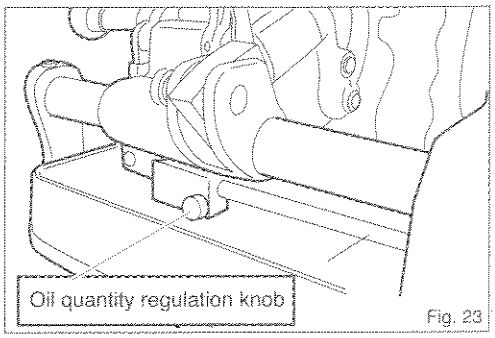


Fig. 23

⚠ WARNING

- Before inspecting or performing maintenance on the machine, always set the switch to the OFF position and remove the plug from the outlet. If the machine is left plugged in, it may begin operating unexpectedly, resulting in injury.
- If you discover any problems during inspection or maintenance, look up the symptoms in the "Troubleshooting" table (in "Before Requesting Repairs or Servicing") and take the appropriate action recommended in the table. Continued use of the machine without correcting the problem may result in overheating, smoke or fire, and may lead to accident or injury.

1. Oiling the Machine (Fig. 24)

(1) Oiling the spindle bearings
About once each month, oil the spindle with spindle or machine oil. (Fig. 24-①)

(2) Oiling the pipe cutter
Each time you use the machine, oil the threads, roller shaft, blade and other moving parts. (Fig. 24-②)

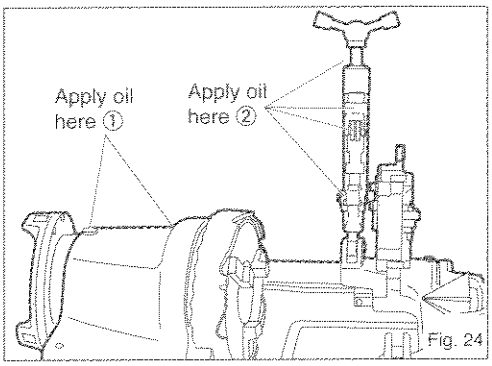


Fig. 24

2. Replacing the Carbon Brushes (Fig. 25)

- This machine is equipped with two auto-stop carbon brushes to protect the motor. When these brushes become worn, the motor will not operate even when the machine is turned on.
- Be sure to use the recommended type of carbon brush. Use of other brushes will adversely affect motor performance, possibly leading to failure.

■How to replace the carbon brushes
(1) Check to make sure that the power cord plug has been removed from the outlet.
(2) Remove the side covers from both sides of the base.

(3) Using a flathead screwdriver, remove the carbon brush cap and then replace the carbon brush.

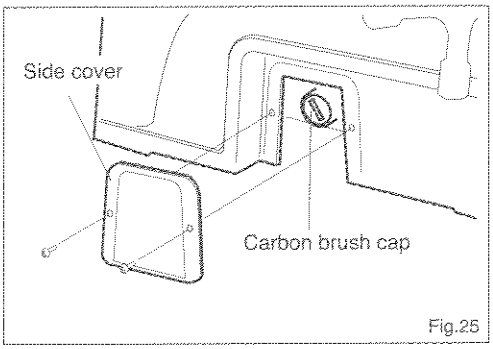


Fig.25

⚠ WARNING

- When replacing the carbon brushes, always make sure the machine is in a stable position. Attempting to replace the brushes with the machine tilted is extremely dangerous, as the machine may topple or fall.
- Be sure to replace both carbon brushes.
- Be sure to use the recommended type of carbon brush.

Daily Inspection & Care

3. Cleaning the Oil Tank (Fig. 26)

The oil tank is designed to prevent fine chips and dust from being sucked into the oil pump. However, these chips and dust will collect in the tank, so the interior of the tank should be cleaned about once a month. This will improve the flow of threading oil and prolong the life of the pump.

The tank is designed to hold approximately ½ gallon (1.3 liters) of cutting oil. For best results, use genuine threading oil.

■ Procedure

(1) Grasp the tank lid and pull up to remove.

(2) Using a Phillips screwdriver, loosen the round-head screw holding the strainer oil hose in place and remove the strainer.

(3) Remove the drain plug to drain the cutting oil from the tank.

(4) After discharging the chips and dust from the tank, replace the drain plug. Then replace the strainer and fill the tank with cutting oil.

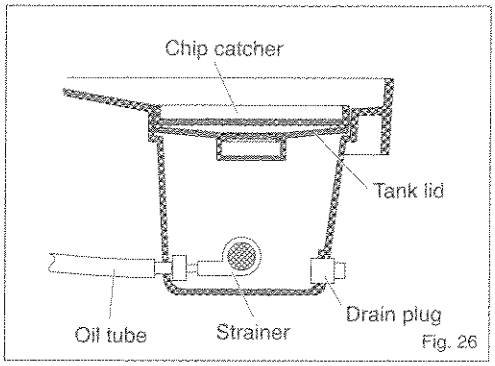


Fig. 26

4. Chuck Configuration and Care (Figs. 27, 28)

The chuck jaw insert at the end of the chuck jaw is made up of four parts, as shown in Fig. 28. To replace the insert, make sure the hand wheel groove is directly over the insert, then remove the set screw from the insert and replace the tip.

Threading may be affected if the six mounting bolts holding the chuck in place are loose. Inspect the bolts from time to time to make sure they are securely fastened.

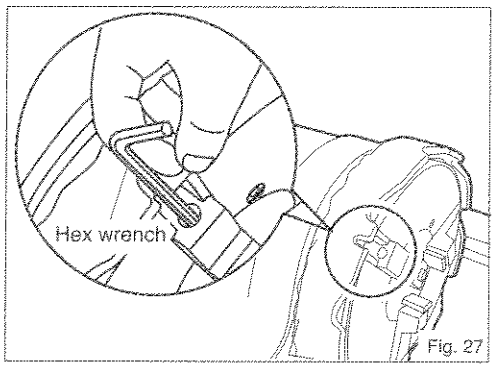


Fig. 27

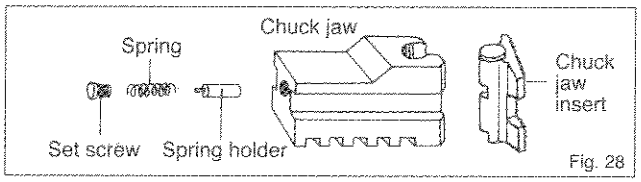


Fig. 28

Requesting repairs

This machine is produced with great precision; therefore, should the machine fail to operate normally, do not repair it by yourself, but call for repairs.

If parts are required or if you have any questions, please contact us at your earliest convenience.

Before Requesting Repairs or Servicing

⚠ WARNING

- Do NOT attempt to disassemble or repair the machine yourself, even if none of the problems or procedures noted here seem to apply.
- If none of the problems or procedures noted here seem to apply, or if "Repair" is indicated, arrange to have the machine repaired by authorized dealer.
- Repair by untrained or unskilled personnel may prevent the machine from exhibiting optimum performance or may lead to accident or injury.

Trouble Shooting

Problem		Possible Causes	Corrective measures
The machine does not operate even when the switch is set to the ON position.	The motor is not running.	The power supply plug is disconnected from the outlet.	Insert the power supply plug into the plug socket.
		The carbon brushes are worn out.	Replace with new carbon brushes according to the instructions on Pg.15.
		The voltage is low.	Connect to a proper power supply (see Pg.9).
		The motor is burned out.	Repair.
		The switch is damaged.	Repair.
	The motor is running.	The gear is broken.	Repair.
Spindle rotation is defective.		The voltage is low.	Connect to a proper power supply (see Pg.9).
		The motor is burned out.	Repair.
The machine does not stop immediately even when the switch is set to the OFF position (the brake does not work properly).		The carbon brushes are worn out.	Replace with new carbon brushes in accordance with the procedure on Pg.15.
		The cable from the motor has become disconnected.	Make sure connections are in accordance with the proper wiring or repair.
		Other cause	Refer to the section on the brake (motor) on Pg.10.
Oil doesn't flow properly.		The amount of oil is low.	Replenish the oil.
		The tank is clogged with chips and dust.	Remove the chips and dust from the oil tank.
		The die head is not fitted correctly.	Place the die head in the proper position.
Oil is dripping from the back of the pipe, etc.		The machine is positioned with the rear chuck too low.	Reposition the machine to raise the rear chuck.
The die head cannot be attached.		Chips and dust are in the way.	Remove the chips and dust sticking to the die head mounting shaft and hole.
		A pipe on the tank top cover is in the way.	Remove the piece of pipe, etc.
Moving parts do not move smoothly.		Chips and dust are clogging up the machine.	Remove chips and dust.
The dies do not engage the pipe properly.		The dies are worn out.	Replace the dies with new ones.
		The dies are chipped.	Replace the dies with new ones.
		The dies have not been placed in the proper position.	Insert the dies properly according to the numbers on the die head.
Threads are of poor quality.	Thick, thin	The die head is not adjusted correctly.	Use the procedure on Pg.13 to adjust the die head.
	Long, short	The die head is not adjusted correctly.	Use the procedure on Pg.13 to adjust the die head.
		The dies are worn out.	Replace the dies with new ones.
		The dies are chipped.	Replace the dies with new ones.
		The thread cutting oil has deteriorated.	Replace with new thread cutting oil.
		The dies have not been placed in the correct position.	Insert the dies properly according to the numbers on the die head.

Table 3

WHEELER REX PIPE TOOLS

WHEELER MANUFACTURING

Div. of REX International U.S.A., Inc.:
P.O.Box 688 · 3744 Jefferson Road · Ashtabula, Oh 44005
Ph:440 - 998 - 2788 · Fax.: 440 - 992 - 2925
Toll Free: 1 - 800 - 321 - 7950
Web Site: www.wheelerrex.com

Manufacturer:

REX
www.rexind.co.jp

REX INDUSTRIES CO., LTD.

No.7890-W1
0610D 0100