

REX

100ADX II • 150A

GROOVING / BEVELING DIE HEAD

OPERATION MANUAL

Ref. No. 198707



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, read the manual thoroughly before using the machine.
- Be sure to keep the manual where the operator can refer to it whenever necessary.

Date of purchase:

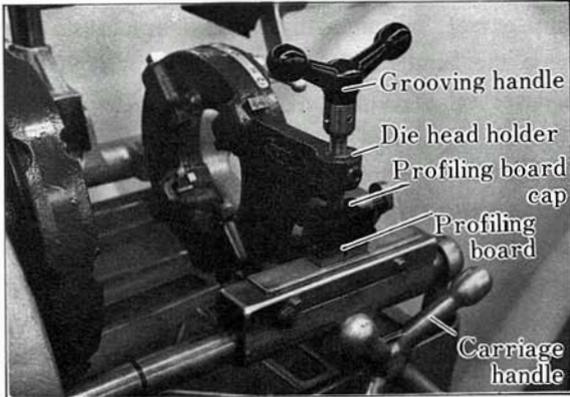
Year

Month

Distributor:

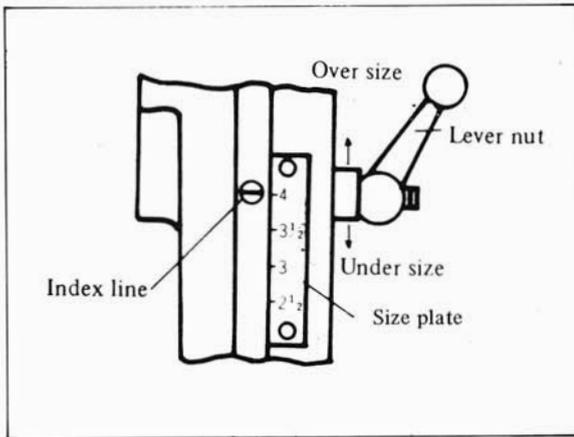
Grooving

1 Preparation for grooving



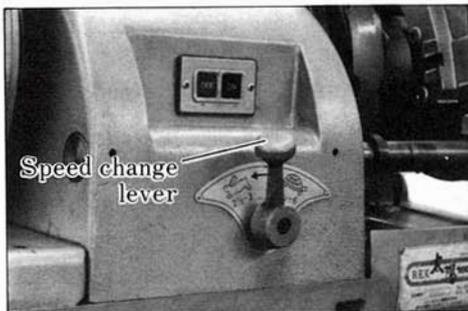
Put the profiling board cap on the profiling board and screw in the bolt.

1-1. Place the required grooving head in position on the carriage.



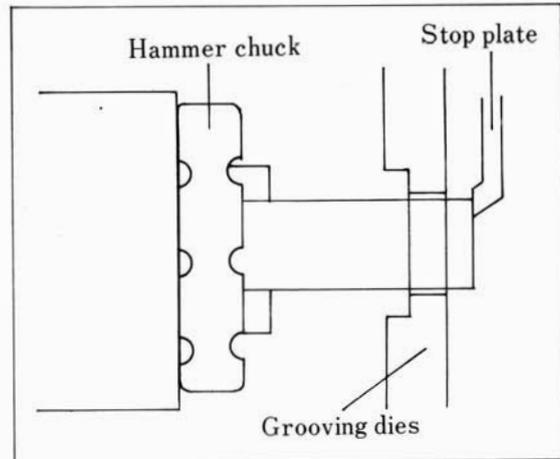
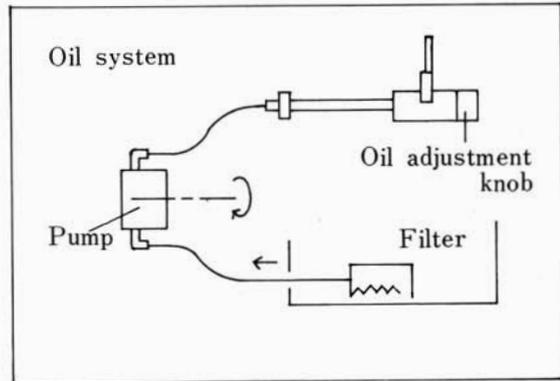
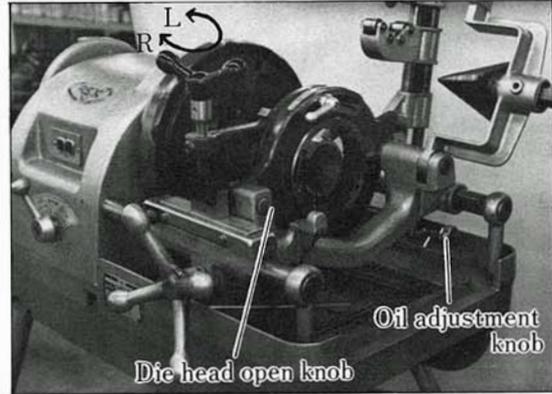
1-2. Loosen the lever nut, move the index line and set it at the desired grooving size. Then, by hand, screw on the lever nut again.

1-3. Open the grooving blades wider than the pipe diameter by turning the grooving handle to the left.



1-4. Set the speed change lever to the high speed position (rabbit mark). If it is impossible to put the speed change lever into the high speed position when the motor is stopped, then the lever can be set after the motor is running.

2 Grooving

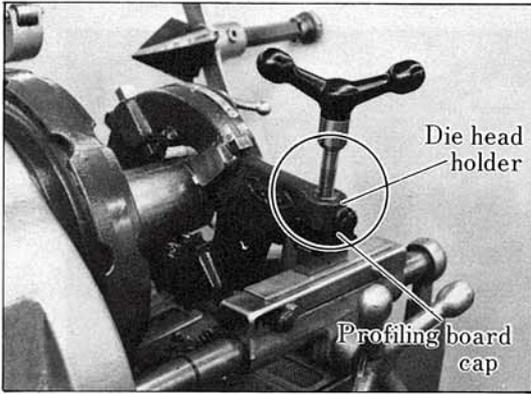


2-1. Switch the unit on when the stop plate is touching end of the pipe. Threading oil is automatically supplied from the grooving head. Adjust the oil flow with the oil adjustment knob below the carriage.

2-2. With the stop plate lightly in position against the end of the pipe, keep turning the grooving handle to the right until the blades are lightly touching the pipe.

2-3. Occasionally the pipe may wobble off its axis as it turns. If this happens, turn the handle gently until this eccentric movement stops.

2-4. Keep turning the grooving handle until it is impossible to turn it any further.

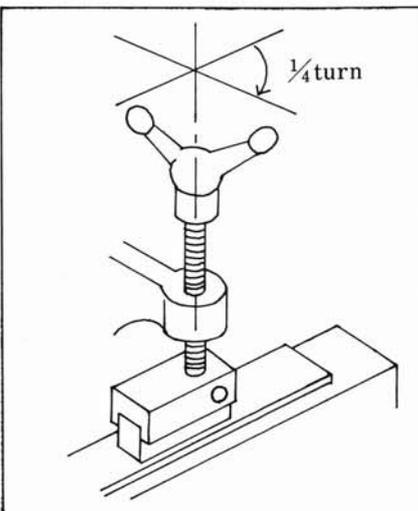


2-5. After grooving is completed, turn the grooving handle to the left till the grooving head holder touches the profiling board cap. Then switch OFF.



2-6. The pipe can be easily inserted or removed by raising the grooving head.

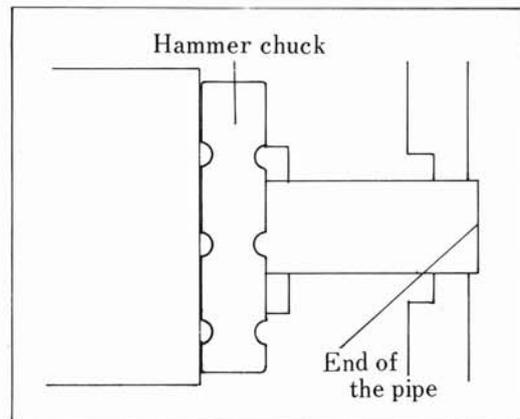
3 Precautions and instructions for the grooving process



3-1. Precautions to be taken when turning the grooving handle.

It is possible to keep turning the grooving handle to any extent, but normally for each revolution of the pipe the handle should be turned through 90° (one-quarter of a revolution). If the grooving handle is turned too far the motor may stop, and if left in this condition for long, it will overheat and break down. Also turning the handle too far may result in the blades getting warped and damaged.

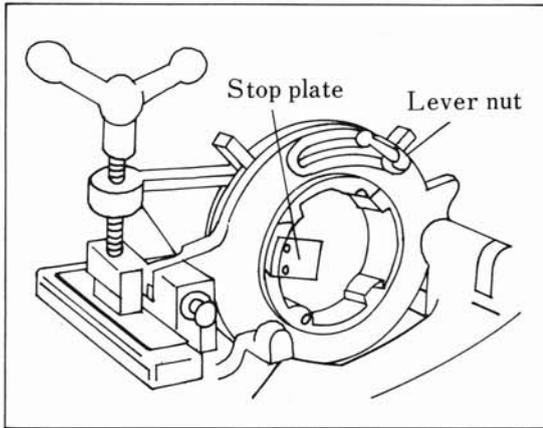
3-2. Instructions for adjusting the groove depth. The size scale is already set in the correct position to produce the standard groove depth, but if greater or lesser depths are required, the index line can be moved to achieve the desired groove depth. If the index line is moved upwards a lesser depth is achieved, and moving it downwards results in a greater groove depth. If a greater or lesser groove depth than the standard is always required, then the size scale can also be moved up or down by loosening the two screws at either end, to bring the standard mark in line with the index line.



3-3. Instructions for grooving short pipes.

First insert the pipe into the hammer chuck and lightly fix it in position. Then hold the end of the pipe with the grooving blades, and turn the grooving handle to the right until the blades are lightly resting on the outside of the pipe. Then fasten the hammer chuck tightly on the pipe. This will prevent any eccentric movement of the pipe, and will ensure a high-quality groove.

4 Blade installation and replacement



4-1. Blade installation and precautions.

- Set the desired grooving head on the carriage.
- Turn the grooving handle to the left till the grooving head holder touches the profiling board cap.
- Loosen the lever nut, move the whole lever nut apparatus right to the other end, then screw it on lightly but firmly, so that it will not move.
- Insert blades 1 and 2 into the same numbered slots in the grooving head. Be careful about blade insertion: if it is incorrect, optimum grooving will be impossible. Since the blades are matched as a set, be sure to use them as a set. When one blade is to be exchanged, change the rest to avoid damaged groove.

NOTE:

When a blade is installed to the correct depth in the blade holder slot, a detent will engage the detent notch. The blade is then properly positioned.

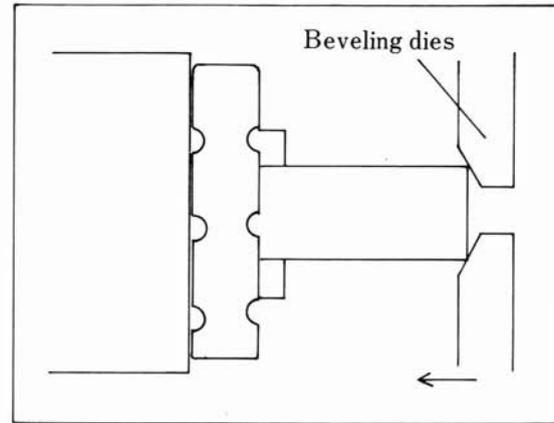
- Raise the grooving head and pull the grooving head holder forward and dies 3 and 4 can be installed. The die fits quite lightly into its groove. If it is not correctly installed it will cause such problems as chipped grooves, etc., so install blades very carefully.
- The blades should fit quite easily into their slots. If the blade does not fit into its slot, do not attempt to force it in. The reason may be that dirt, metal-chips or other foreign matter has got into the slot, or on the blade itself. So take out the blade, clean it and the slot thoroughly, and replace it in the slot.

4-2. Blade removal

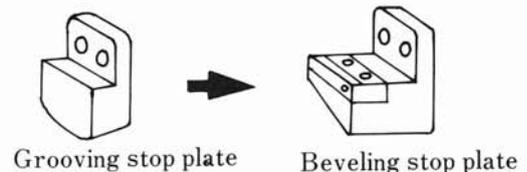
- Follow steps b and c in the previous section (blade installation).
- Remove the two blades from the upper slots in the grooving head.
- Pull the die head lock knob and raise the grooving head.
- Then pull the grooving head holder forward and the three blades can be removed.

Beveling

1 Preparation for beveling



- Place the desired beveling grooving head in position on the carriage.
- Take off the grooving stop plate by removing the screws with a 5mm hexagonal key and screw the beveling stop plate into position.



- Loosen the lever nut and move the index line and set it at the desired beveling size for pipe diameter. Then screw on the lever nut again.

Caution: Although the pipe size is uniform there is considerable variety in thickness depending on the type of pipe. If there is some difference in the beveling angle, loosen the lever nut and adjust the index line accordingly, up or down.

- Turn the grooving handle to the left until it cannot be turned any further.

Caution: Before the beveling blades touch the edge of the pipe, make sure the handle has been turned as far as it will go to the right, in other words, it is touching the grooving head holder.

- Set the speed change lever to the high speed position (rabbit mark).

From this point beveling can begin.

2 Beveling

- When the blades are touching end of the pipe, switch the unit on.
- Apply slight pressure on the forwarding handle.
- After beveling is completed, move the carriage away by means of the forwarding handle, separate the grooving head from the pipe, and then turn off the switch.

Grooving die head (Beveling die head)

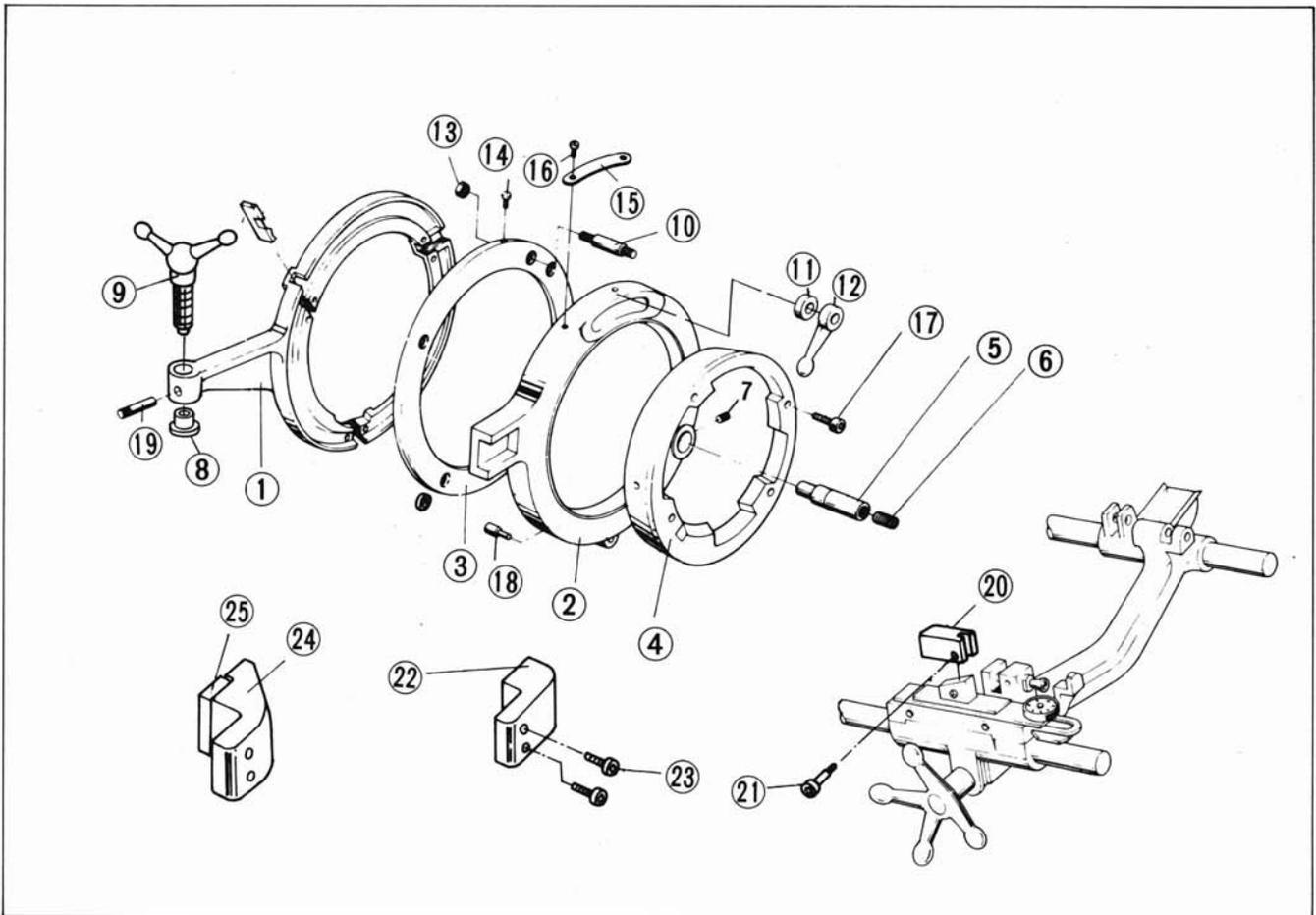
Size	Grooving dies	Beveling dies
2½" ~ 4"	2½" ~ 3½" 4"	2½" ~ 4"
5" ~ 6"	5" ~ 6"	5" ~ 6"

Grooving dies

Size	Grooving		Guiding	
2½" ~ 3½" 4"	 1	Insert grooving dies (1) and (3) or (1), (3) and (5) into the same numbered slots in the grooving head.	 2	Insert grooving dies (2) and (4) into the same numbered slots in the grooving head.
	 3		 4	
5" ~ 6"	 1		 2	
	 3		 4	
	 5			

NOTE:

For old grooving dies installation, see attached instructions.



No.	Part No.	Part Name	Set	Weight (g)
1	A701	Grooving head body (2½ ~ 4)	1	3,000
	E701	Grooving head body (5 ~ 6)	1	2,550
2	A702	Die head receiver plate (2½ ~ 4)	1	3,000
	E152	Die head receiver plate (5 ~ 6)	1	2,840
3	A157	Cam plate (2½ ~ 4)	1	1,840
	E153	Cam plate (5 ~ 6)	1	1,240
4	A703	Retaining ring (2½ ~ 4)	1	1,090
	E703	Retaining ring (5 ~ 6)	1	830
5	A160	Die head post	3	230
6		Plug (¼ x 11)	3	10
7		Hex-socket set screw (8 x 8)	3	30
8	E706	Feed female screw	2	30
9	E712	Grooving handle	2	8
10	A163	Cam plate fixed bolt	2	65
11	A166	Cam plate fixed bolt washer	2	40
12	A705	Lever nut	3	70
13		Hexagon nut	2	
14	A171	Die head index pin	2	
15	A712	Die head size plate (2½ ~ 4)	1	
	E709	Die head size plate (5 ~ 6)	1	
16		Truss screw	6	
17		Socket head cap screw (6 x 35)	8	
18	A161	Die head position pin	2	
19		Hex-socket set screw (M8 x 10)	1	
20	E707	Profiling board cap	1	
21	E711	Profiling board cap bolt	1	
22		Grooving stop plate	1	
23		Socket head cap screw (6 x 20)	2	
24		Beveling stop plate	1	
25		Tool	1	

! Guarantee and Exemption from Liability

1. Should the machine happen to break down for no apparent reason, despite normal and correct use, repairs and service parts shall be provided free of charge as outlined below.

Repairs shall be provided free of charge for a period of one year from date of purchase. Dates, procedures and methods for providing repairs and service parts shall be decided in consultation with the customer.

After the one-year guarantee period, all repairs and service parts will be charged.

Repairs may be charged even within the guarantee period under the following circumstances:

- if the machine has not been used according to the instructions in the Operation Manual
- if it has been used for anything other than its intended purpose
- if it has not been repaired according to the Operation Manual or if it has been remodeled
- if blades or consumables need replacing
- if the machine has been handled in an inappropriate way.

2. REX will accept no responsibility under the following circumstances:

- if a malfunction or accident occurs as a result of fire, abnormal fluctuations in voltage, damage from flood, earthquakes, lightning or other natural disasters, war, conflict, riot, terrorism or pollution, etc.
- when the machine has not been operated according to the Operation Manual
- when the machine has been used incorrectly, repaired or remodelled inappropriately
- when a malfunction or accident results from using a thread made on the machine, or leaving it lying around and/or if it is exposed to the elements
- when a malfunction or accident results from using a thread produced on the machine either while or after connecting it to a joint.

3. Any costs incurred by the manufacturer shall not exceed the purchase price of the machine.

REX

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