



# SAFETY AND OPERATING MANUAL

## PIPE & BOLT THREADING MACHINE

MODEL NO. MCC 400/500/800

<u>MODEL NO.</u>		<u>CODE</u>
MCC 400	Manual Die Head	PMNG040
	Automatic Die Head	PMNA040
MCC 500	Manual Die Head	PMNG050
	Automatic Die Head	PMNA050
MCC 800	Manual Die Head	PMNG080
	Automatic Die Head	PMNA080

Record below and retain product model and Serial numbers which are located on nameplate

Model No.	Serial No.
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Thank you for purchasing MCC Pipe and Bolt Threading Machine.

### **Important**

For your own safety and effective operation, before assembling and operating this unit, read this Safety and Operating Manual carefully and completely. Learn the operation, applications and potential hazards peculiar to this unit.

Store this Manual in a readily available location.

## Save This Manual For Future Reference

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## NOTE :


**Certain machines may partly differ in specifications due to the latest modification.**


# SAFETY INFORMATION

## 1. Safety Symbols

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols, and the explanations with them, deserve your careful attention and understanding. The safety warnings do not by themselves eliminate any danger. The instructions or warnings they give are not substitutes for proper accident prevention measures.

SYMBOL	MEANING
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	<b>WARNING:</b> Failure to obey a safety warning can result in serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.
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	<b>CAUTION:</b> Failure to obey a safety warning may result in property damage or personal injury. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.
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<b>NOTE:</b>	Advises you of information instructions vital to the operation or maintenance of the equipment.
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## 2. General Safety

- 1) Read all these instructions in this manual completely and carefully for your protection against serious injuries.
- 2) Save this manual. Refer to them frequently and use them to instruct other users.

## 3. Personal Safety

- 1) Do not wear gloves, loose clothing or jewelry that can get caught in machine's moving parts and cause seroys injury. Cover up or tie up long hair.
- 2) Always wear safety glasses.
- 3) Protect your hearing by earmuffs or earplugs if you use machine daily or in a noisy area.
- 4) Protect your lungs by using dust mask when work area is dusty.
- 5) Stay alert. Never operate machine when tired or under the influence of drugs or alcohol.
- 6) Keep your hands and face away from dies, cutter blade, auto-chuck or other moving parts.

## 4. Electrical Safety

- 1) Unplug power cord when not in use, before servicing, while changing accessories such as dies.
- 2) When used outdoors, use only extension cord intended for use outdoors and so marked.
- 3) Guard against electric shock.
- 4) Do not abuse cord. Never carry machine by the cord or yank the cord to disconnect it from receptacle. Keep cord from heat, oil, and sharp edges.
- 5) Use extension cord in good condition. Make sure to use one heavy enough to carry the current the machine will draw. An undersized cord will cause a drop on line voltage resulting in loss of power and overheating. The extension cord chart on page 4 shows the correct sizes to use depending on cord length and voltage rating on Name Plate. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.

## **5. Work Area Safety**

- 1) Keep the work area clean. Cluttered work area invite accident.
- 2) Do not use machine in dangerous environment. Do not use machine near gasoline or other flammables or gases, or in damp locations. Do not expose machine to rain or direct sunlight. Keep work area well lighted.
- 3) Keep children away from work area. All visitors should be kept at a safe distance from the work area.
- 4) When not in use, machine should be stored in a dry and locked-up place out of the reach of children.
- 5) Never leave the machine running unattended. Turn off the power and stay there until machine comes to a complete stop.

## **6. Machine Safety**

- 1) Remove hex keys and adjusting wrenches from machine before operation.
- 2) Do not force machine. It will do the job better and safer at the rate for which it is designed.
- 3) Maintain the machine with care. Periodically check lubrication and consumables. Replace cutting oil or dies when necessary. Inspect extension cord periodically and replace if damaged.
- 4) Reduce the risk of unintentional start. Make sure the switch is in OFF position before plugging in power cord. Do not carry or move the machine when plugged in.
- 5) Use only manufacturer's recommended accessories. Consult this manual for recommended accessories. Using improper accessories may increase the risk of injury.
- 6) Do not use machine if switches are broken.
- 7) Check for broken or damaged parts before using machine. Repair or replace damaged parts by an authorized dealer to insure proper operation of the machine. Use only genuine MCC replacement parts.

## EXTENSION CORDS

When using machine at a considerable distance from a power source, use an extension cord heavy enough to carry the current that the machine draws. An undersized extension cord will cause a drop in line voltage, resulting in a loss of power and overheating. Use the chart provided to determine the minimum wire size required in an extension cord.

When working outdoors, use an extension cord that is designed for outside use.

**CAUTION:** Keep the cord away from the work area and position the cord so that will not be caught on the work piece, tools, or other objects during threading.



## ELECTRICAL CONNECTION

Your MCC Threading Machine is powered by a precision built electric motor.

It should be connected only to a power source that satisfies the power input listed on the machine's nameplates.

If the nameplate is marked 120V, AC, or 60 Hz, the machine must be operated only with alternating current (normal household current).

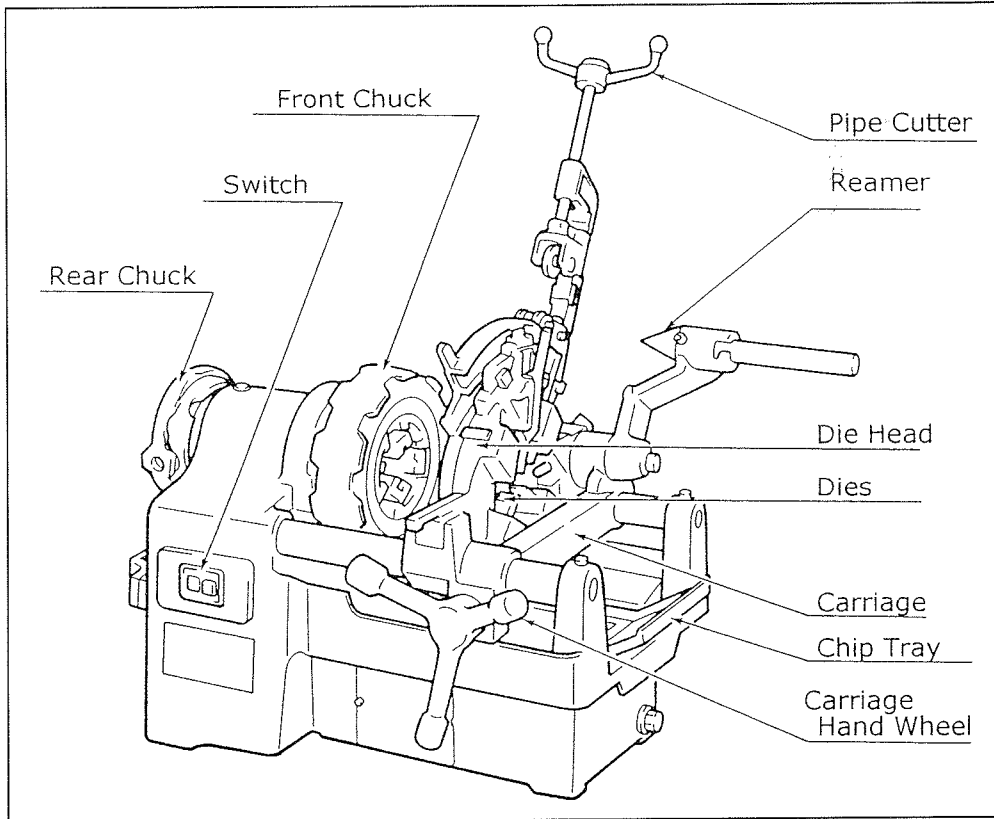
Never operate the machine with a direct current (DC), such as a generator. A substantial voltage drop will cause a loss of power and overheating.

If the machine does not operate when plugged into an outlet, double check the power supply rating.

# SAVE THESE INSTRUCTIONS

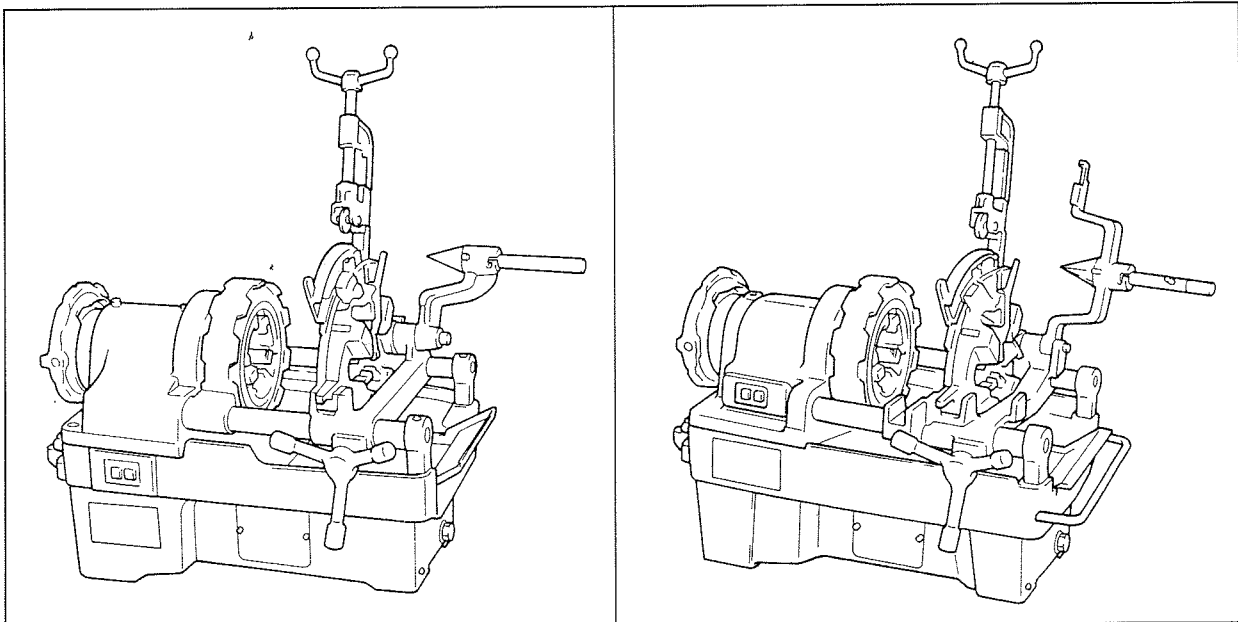
## Parts Name

MCC 400



MCC 500

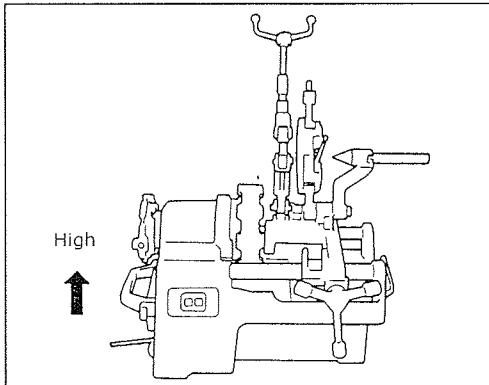
MCC 800



# Preparing for Operation

## 1. Legs/Stand Mounting

**WARNING:** When moving machine always use the handles.  
Only use machine on flat and stable area.  
Never use machine in wet or damp area.  
Do not use machine near flammable or volatile substances.  
Do not raise machine too high over waist height.



NOTE: MCC500 and 800 machines are equipped with each 1set of legs. MCC 400 machines are without legs.

- ① Insert Legs into machine base or mount the machine on a stand or bench.
- ② Set up the machine inclining as Rear Chuck is in higher position than the other parts.

\*This is to prevent cutting oil from flowing alongside and into the pipe.

## 2. Plugging Power Cord

**WARNING:** Be aware of High Voltage which may cause electrical shock or fires.  
Do not use machine if power cord is damaged.  
Never allow water or other liquids to come into contact with the electrical parts or Power cord.  
Use only the specified voltage.  
Do not touch power cord or machine with wet hands.  
Do not abuse the power cord. Do not move machine by pulling power cord or place Heavy, sharp object on the power cord.



- ① Ground machine with careful attention not to step on power cord.
- ② Make sure that switch is OFF before plugging in.
- ③ When an extension cord must be used to connect the machine to the wall socket, use a short, thick cabtyre cable. (The use of a long thin cable will result in voltage drop and motor inefficiency.) Use a cabtyre cable carefully. Never yank on the cord or place articles on the cord. Follow the instructions of "EXTENSION CORDS" of page 4.

### 3. Cutting Oil Lubrication

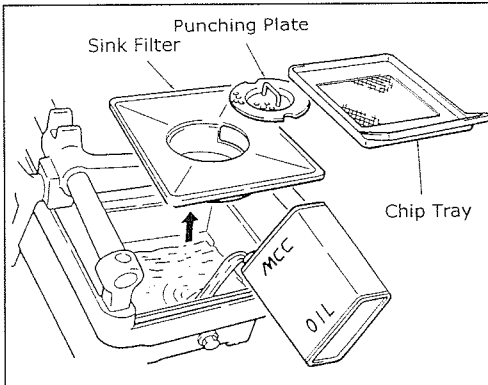
#### WARNING: FIRST AID TREATMENT



If oil gets in eyes, wash them with pure water and see a doctor.  
If oil sticks to skin, wash well with water and soap.  
If swallowed, do not induce vomiting and see a doctor.  
If inhaled mist, move to the clean place, cover with blanket, keep warm and quiet and See a doctor.

Use genuine MCC Cutting Oil W in 4 Liter can.

MCC cutting oil improves the finished screw surfaces and extends Die's service life.  
MCC Cutting Oil W is suitable for water works pipe for easy washing.



- ① Remove Chip Tray, Punching Plate and Sink Filter from oil tank.

#### [NOTE]

Remove foreign substance from oil tank.  
Change the whole oil if rain turns the oil cloudy or dirty.  
(See page 18.)

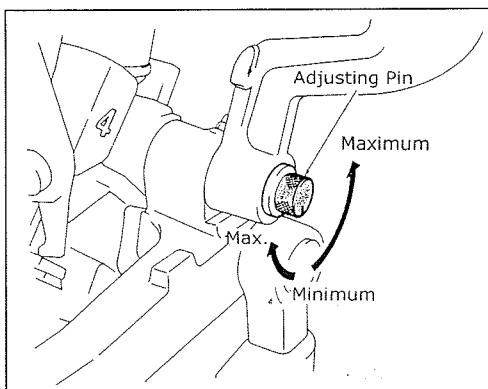
- ② Fill the tank 80% full with the cutting oil.
- ③ Reinstall Sink Filter, Punching Plate and Chip Tray.

#### STORAGE

Store machine in a place inaccessible to children and out of the way of people. This is chemical product. Never leave machine in an area exposed to direct sunlight. Always store it in a cool, dark location. Make sure that Punching Plate is tightly in place and the machine is covered when not in use to avoid contamination (e.g. dust and moisture).

#### Adjustment of the oil flow

The flow of oil out of die head can be increased or decreased by adjusting oil control pin.



- ① When Die Head is down in working position, the cutting oil starts to flow.
- ② To get maximum oil flow, turn the oil level adjustment pin fully to either left or right.
- ③ Then turn the pin from the position ② to either left or right to get adequate level of oil flow.

#### [REFERENCE]

When Die Head is swung back to out-of-way position, cutting oil does not flow.

**Preparation is over. Check safety around the machine before start working.**



# Machine Operation

## WARNING



- \* Always read and follow "Safety Information" (See Page 2) and "Preparing for Operation"(See Page 6)
- \* **SHARP!** Do not touch cutting edges.
- \* **Moving Parts!** Keep hands and face away from moving blades and parts. Moving parts could pull in objects such as clothing, hair, jewelry and fingers.
- \* If there is a problem or malfunction, **IMMEDIATELY** stop the machine and disconnect the power cord.
- \* Always remove the chip and keep machine clean before and after operation.
- \* After operation, switch off and disconnect Power Cord.

Failure to follow these instructions could result is Serious Personal Injury.

## 1. Installing and Removing Pipe

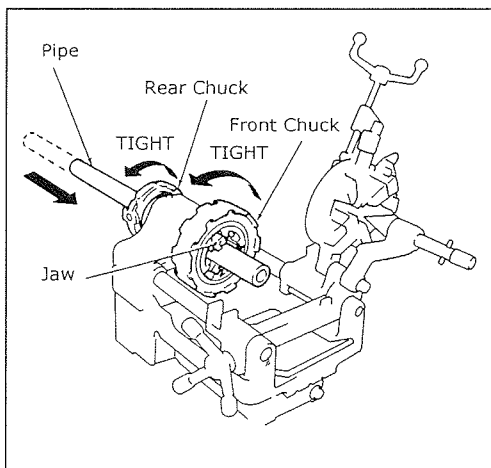
### Installing Pipe

## WARNING



- \* Keep power off and unplug power cord when installing pipe.
- \* Do not touch cutting edges.
- \* Make sure that work area is clear before inserting long pipe.

Failure to follow these instructions could result in Serious Personal Injury.



- ① Swing Pipe Cutter, Die Head and Reamer back to their up position.
- ② Open Rear Chuck and Front Chuck enough to insert pipe.
- ③ Insert pipe from Rear Chuck side.
- ④ Close Rear Chuck.
- ⑤ Holding pipe in right hand, close Front Chuck with left hand by rotating hand wheel toward you until Chuck Jaws engage pipe.
- ⑥ Tighten Chuck Jaws with a repetitive counterclockwise snap spin of external hand wheel of Front Chuck.

### Removing Pipe

## WARNING



**SHARP!** Do not touch cutting edge of Reamer with hands because it is sharp.

\* Reverse the installing procedure to remove pipe.

- ① Make sure machine is completely stopped.
- ② Open Front Chuck and Rear Chuck enough to remove the pipe.
- ③ Remove the pipe.

## [CAUTION]

Pipe can be dangerous.

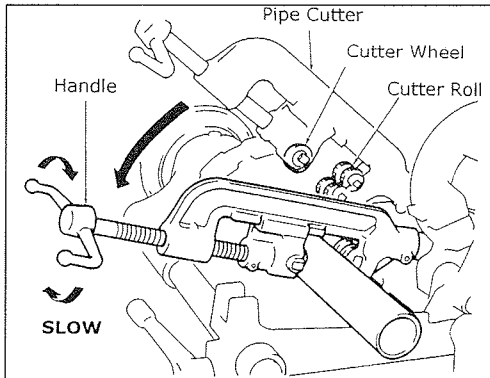
Check to see that there is no one around machine when removing pipe, especially long pipe.

## 2. Cutting Pipe

### WARNING



- \* Be sure to inspect machine for broken or damaged parts before using machine.
- \* **SHARP!** Do not touch cutting edges.
- \* Do not wear gloves, loose clothing or jewelry that can get caught in machine's moving parts and cause serious injury. Cover up or tie up long hair.
- \* Keep hands and head away from blades, moving part or chip flow chute.
- \* Use pipe support for long pipes.



- ① With Reamer and die head in their up position, loosen handle and open Cutter Wheel enough to insert pipe.
- ② Pull down Pipe Cutter toward you and move Carriage to line up Cutter Wheel to desired cut off mark.
- ③ Switch the power ON and cut the pipe by turning handle slowly.
- ④ When cutting is completed, switch the power OFF and return Pipe Cutter to out of way position.

### [ATTENTION]

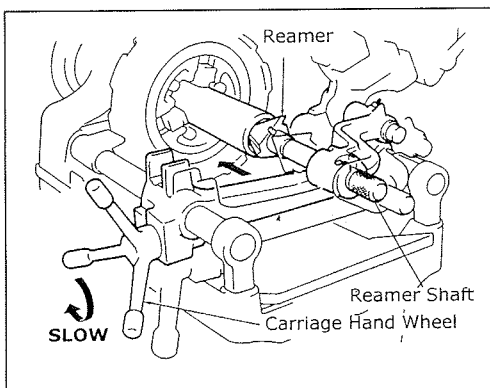
Cut slowly. Rapid cutting tends to produce inner burrs and pipe deformation.

## 3. Reaming Pipe

### WARNING



- \* Be sure to inspect machine for broken or damaged parts before using machine.
- \* **SHARP!** Do not touch cutting edges.
- \* Do not wear gloves, loose clothing or jewelry that can get caught in machine's moving parts and cause serious injury. Cover up or tie up long hair.
- \* Keep hands and head away from blades, moving part or chip flow chute.
- \* Use pipe supports.



### [CAUTION]

Reaming should always be done before threading. Reaming after threading will expand the bore of the Pipe resulting in thread deformation.

- ① With Pipe Cutter and die head in their up position, swing Reamer down into its operating position.
- ② Press Reamer shaft and secure Reamer in a protruding position.
- ③ Feed the Carriage toward pipe.
- ④ With slight hand wheel pressure, feed Reamer into pipe to achieve desired ream.
- ⑤ Turn machine off and return Reamer to out of way position.

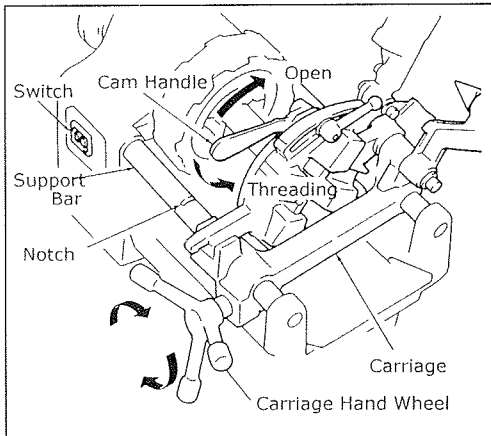
## 4. Threading Pipe

### (1) Manual Die Head

#### WARNING



- \* Be sure to inspect machine for broken or damaged parts before using machine.
- \* **SHARP!** Do not touch cutting edges.
- \* Do not wear gloves, loose clothing or jewelry that can get caught in machine's moving parts and cause serious injury. Cover up or tie up long hair.
- \* Keep hands and head away from blades, moving part or chip flow chute.
- \* Use pipe support for long pipes.



- ① Install desired size Die Head and proper die set. Refer to "Adjustment of Die Head" . (See Page 13.)

#### [ATTENTION]

**Make sure the notch on Support Bar is visible when dies touch the end of pipe. This secures enough length for pipe to thread and prevents Die Head from hitting against Front Chuck.**

- ② With die head in working position and Pipe Cutter and Reamer in out of way position, switch the power ON. Cutting oil automatically flows out from Die Head.

- ③ Feed Carriage towards Front Chuck to bring die head against end of pipe. Continue to apply pressure to hand wheel to start threading.

- ④ When pipe is threaded in proper length, gradually lift up Cam Lever to open position to move dies away from pipe.

#### [ATTENTION]

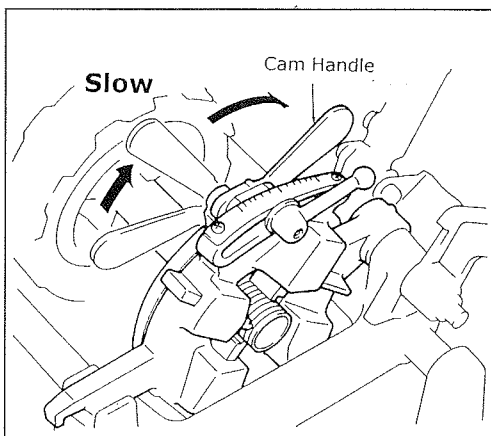
**Open slowly. Rapid opening tends to produce steps in the thread.**

- ⑤ Switch the power OFF. Turn Carriage Hand Wheel to back Carriage away from Front Chuck, and disengage die head from pipe

- ⑥ Check if thread length is correct.

- ⑦ Wash oil off the pipe.

\* **In the case of cutting the thread exceeding Dies-wide.**



- ① Cut the thread exceeding Dies-wide while lifting up Cam Lever gradually.

#### [ATTENTION]

**Threading with Cam Lever kept in low (closed) position Makes tapered thread as long as dies-wide only. Thread Exceeding dies-wide becomes straight thread which may Cause leakage.**

**Automatic die head is recommended to cut threads Exceeding dies-wide.**

## (2) Automatic Die Head

### WARNING



- \* Read and follow all warnings and instructions in "Manual die head" section (Page 10).
- \* Handle with care Automatic Opening Die System.

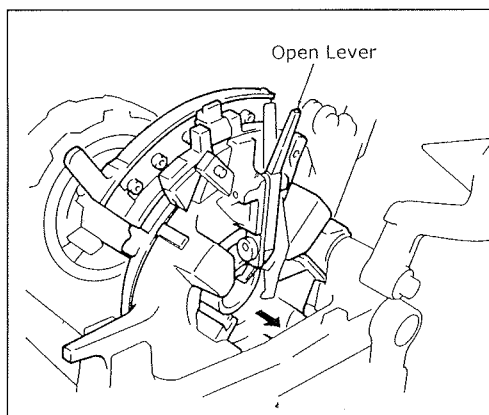
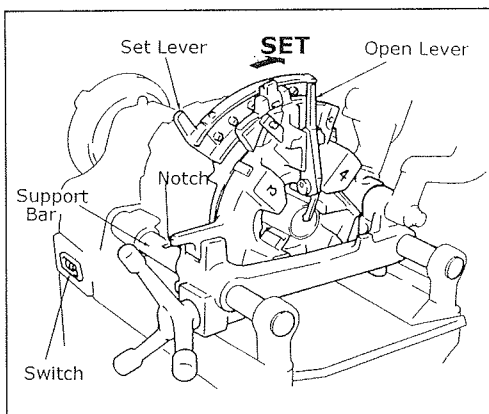
### CAUTION

#### Handling precautions of Automatic Die Head



- \* Handle with care to insure Automatic Open System accuracy.
- \* Before operation, ascertain whether Open Lever moves smoothly. If not, lubricate to the sliding parts. (See page 17.)
- \* When dust and cutting oil adhere to Die Head, wipe it with a dry cloth.

### 1. Automatic Die Head AD20(1/2-3/4B) AD40(1-1.1/2B) AD50(1-2B)



- ① Install desired size Die Head and proper die set. Refer to "Adjustment of Automatic Die Head". (See page 14.)
- ② With Die Head in working position and with Pipe Cutter and Reamer in out of way position, firmly push on Set Lever to Set Open Lever correctly.

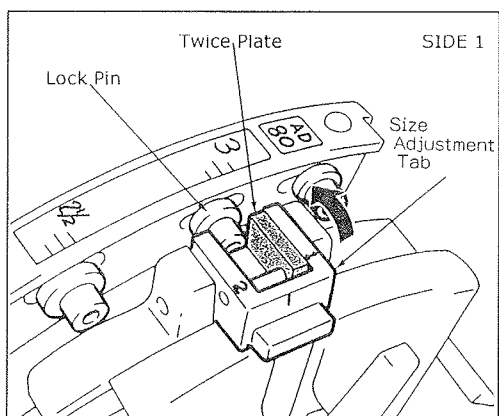
#### [ATTENTION]

**Make sure the notch on Support Bar is visible when dies Touch the end of pipe. This secures enough length for pipe to Thread and prevents die head from hitting against Front Chuck.**

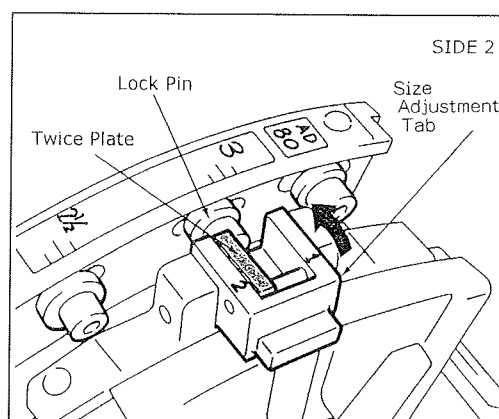
- ③ Switch ON, and cutting oil automatically flows out from die head.
- ④ Feed Carriage towards Front Chuck to bring die head against end of pipe. Continue to apply pressure to hand wheel until threading starts, then keep your hands off the wheel and let threading continue automatically.
- ⑤ When threading is done to the required length, Dies automatically opens by Open Lever.
- ⑥ Switch the power OFF. Turn Carriage Hand Wheel to back Carriage away from Front Chuck and disengage die head from pipe.
- ⑦ Check if the thread length is correct.
- ⑧ Wash oil off the pipe.

## 2. Automatic Die Head AD80(2.1/2-3B)

In the case of unstable voltage, Automatic Die Head AD80 (2.1/2-3B) has the function to thread twice. If the voltage is low, follow the procedure below to thread twice.



- ① Pull down Size Adjustment Tab and set into Lock Pin of desired size setting.
- ② Set Twice Plate into side 「1」.
- ③ Lift up Size Adjustment Tab and engage it to Lock Pin of desired size.
- ④ Cut the first threads. (shallow)



- ⑤ Pull down Size Adjustment Tab and set Twice Plate into side 「2」.
- ⑥ Lift up Size Adjustment Tab and engage it to Lock Pin of desired size.
- ⑦ Cut the second threads. (normal size)

# Adjustment of Die Head

## WARNING



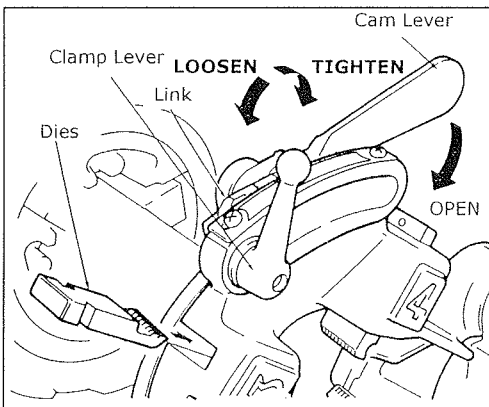
- \* Always read and follow "Safety Information" (see page 2) and "Preparing for Operation" (Page 6) before using machine.
- \* Always unplug power cord before servicing machine.
- \* Do not touch cutting edges because they are sharp.

Failure to follow these instructions could result in serious personal injury

## 1. Adjustment of Manual Die Head

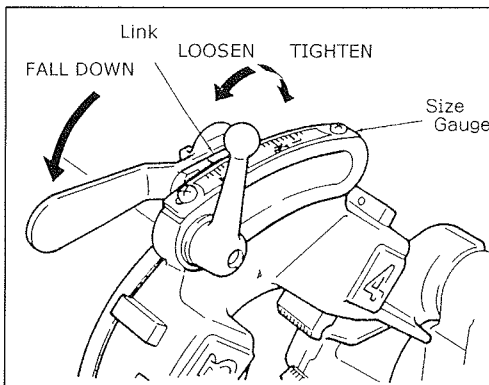
### (1) Replacement Dies

\* Die Heads do not have to be removed from Carriage to install or change dies.



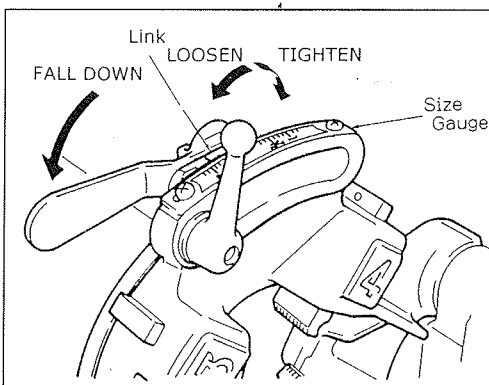
- ① Loosen Clamping Lever and press Cam Lever forward to open Dies.
- ② Pull the bottom of Cam Lever fully toward you.
- ③ Remove dies from die head.
- ④ Insert dies into slots making sure number on die agrees with number on die head.

\* Insert Dies into Die Head until ball position in die head engages V notch in die. Feel the click.



- ⑤ Lift and pull Cam Lever toward you and press it down completely.
- \* If Cam Lever cannot be turned down, adjust Dies to be in the correct position.
- ⑥ When all the Dies are set in correct position, with Cam Lever in down position toward you, line up link mark to desired size in Size Gauge, then tighten Clamping Lever.

### (2) Selection of Sizes

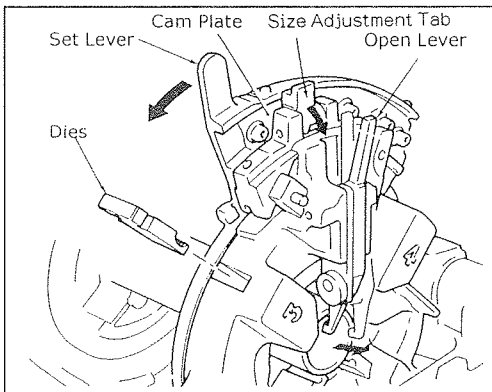


- ① With Cam Lever in down position toward you, loosen Clamping Lever.
- ② Line up link mark to desired size in Size Gauge, then tighten Clamping Lever.

## 2. Adjustment of Automatic Die Head

### (1) Replacement Dies

\* Die Heads do not have to be removed from Carriage to install or change dies.



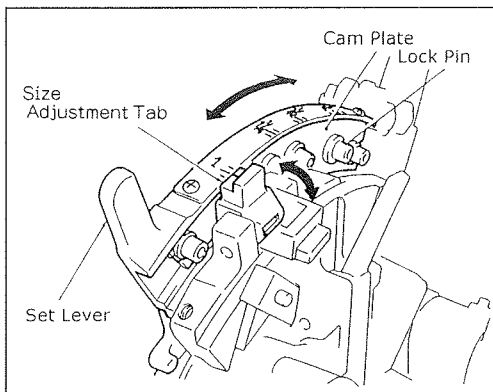
- ① Pull Open Lever to open Dies.
- ② Disengage Size Adjustment Tab from Lock Pin, and turn Cam Plate toward you completely.
- ③ Remove dies.
- ④ Insert dies into slots making sure number on die agrees with number on die head.

\* **Insert Dies into Die Head until ball position in die head engages V notch in die. Feel the click.**

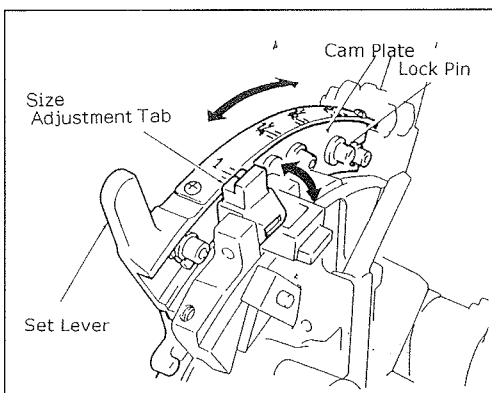
- ⑤ Make sure to press Set Lever forward to turn Cam Plate completely.

\* **If Cam Lever cannot be turned down, adjust Dies to be in the correct position.**

- ⑥ When all the Dies are set in correct position, rotate Cam Plate to desired size setting. Engage Size Adjustment Tab into the required Lock Pin. (Selection of Sizes)
- ⑦ Push Set Lever forward completely to set Open Lever.

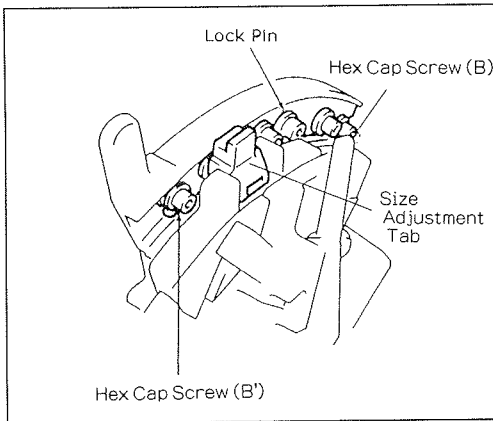


### (2) Selection of Sizes

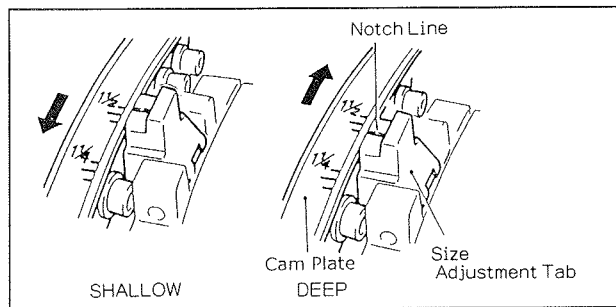
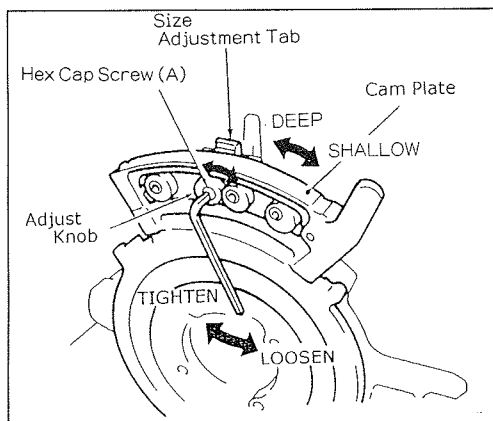


- ① Disengage Size Adjustment Tab from Lock Pin.
- ② Rotate Cam Plate and engage Size Adjustment Tab into the required Lock Pin.

### (3) Adjustment of Thread diameter (depth)



- ① Engage Size Adjustment Tab into Lock Pin of the required threading size.
- ② Loosen Hex Cap Screw (A) to untighten Adjust Knob.
- ③ Adjust thread diameter (depth) by slightly turning Adjust Knob by fingers.



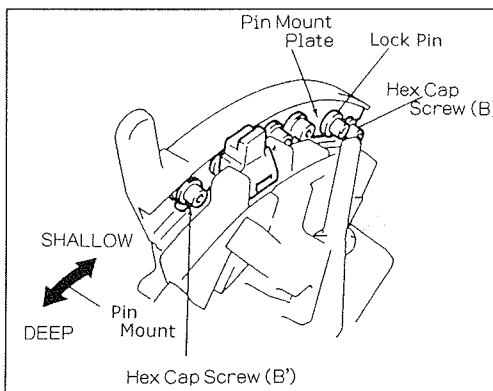
**[REFERENCE]**

To make shallower (larger dia.) thread: Turn Adjust Knob so that the Notch line on Size Adjustment Tab indicates upper (larger dia.) line of the Gauge.

To make deeper (smaller dia.) thread: Turn Adjust Knob so that the Notch line on Size Adjustment Tab indicates lower (smaller dia.) line of the Gauge.

- ④ Tighten Hex Cap Screw (A) and make a test cutting screw.

\* If desired thread diameter (depth) cannot be obtained by the above Adjust Knob operation.



- ① Loosen Hex Cap Screw (B&B').
- ② Adjust thread diameter by sliding Pin Mount Plate.

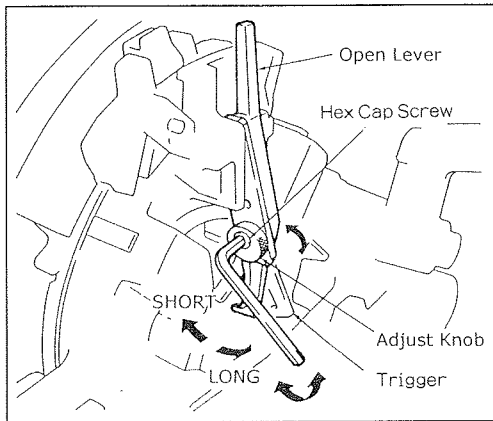
**[REFERENCE]**

Sliding Pin Mount Plate toward you makes deeper threads, and sliding forward makes shallower threads.

- ③ Tighten Hex Cap Screw (B&B'), and make a test cutting.



#### (4) Adjustment of Thread Length



- ① Loosen Hex Cap Screw located in the middle of Open Lever.
- ② Adjust thread length by slightly turning Adjust Knob with fingers.

#### [REFERENCE]

**Positioning the trigger closer to Front Chuck produces shorter thread form. Positioning the trigger away from Front Chuck produces longer thread form.**

- ③ Tighten Hex Cap Screw, and make a test cutting.

# Maintenance Instructions

## WARNING



Always unplug Power Cord before servicing machine.

## 1. Lubrication

### (1) Lubricating Bearing Oil

Fill attached Lubricating Oil about once a month Into Oil Inlets.

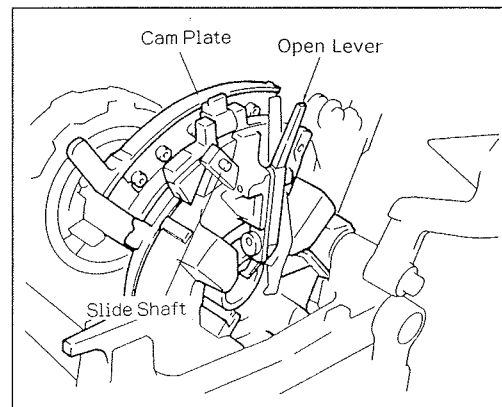
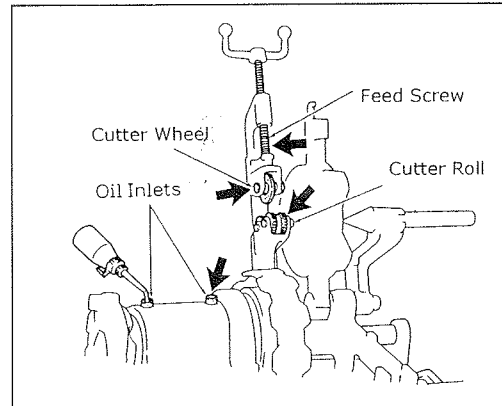
### (2) Where to lubricate

Lubricate to Feed Screw, Cutter Wheel, Cutter Roller and Carriage(Support Bar) for smooth Operation.

### (3) Automatic Die Head

When Open Lever does not move smoothly, Lubricate to the following parts.

- Open Lever
- Slide Shaft
- Cam Plate
- Slide Section



## 2. Carbon Brush Replacement

## WARNING



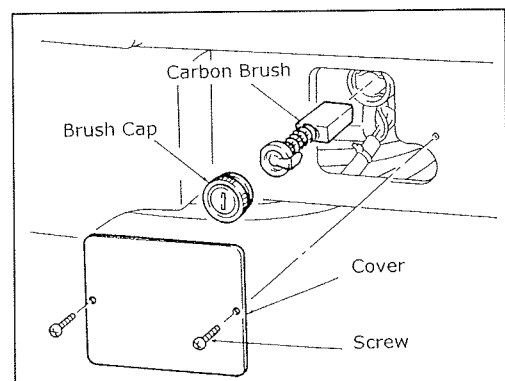
Always unplug Power Cord before servicing machine.

When Carbon Brush wears out, motor automatically stops. Follow the steps below to replace Carbon Brushes.

### [NOTE]

Replace both two Carbon Brushes at the same time.

- ① Loosen plus head screw and remove the cover on both sides of machine.
- ② Remove Carbon Brush Cap with a flathead screwdriver.
- ③ Remove Carbon Brushes and install new ones.
- ④ After installing new Carbon brushes, reverse the above procedures to close cover.



### 3. Cleaning

#### (1) Cleaning Oil Tank

**WARNING: FIRST AID TREATMENT**



If oil gets in eyes, wash them with pure water and see a doctor.

If oil sticks to skin, wash well with water and soap.

If swallowed, do not induce vomiting and see a doctor.

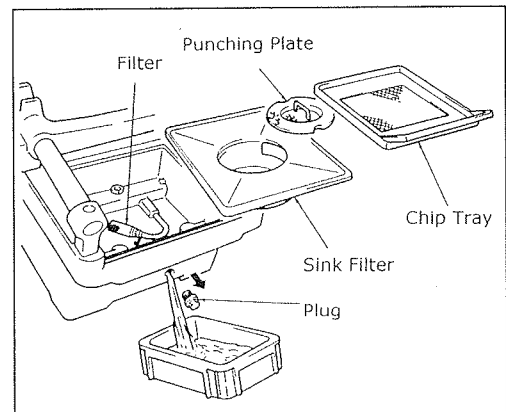
If inhaled mist, move to the clean place, cover with blanket, keep warm and quiet and See a doctor.

Clean Oil Tank about once a month and remove impurities and small metal chips.

**[NOTE]**

**Replace thread cutting oil when it becomes dirty or Contaminated.**

- ① Remove Chip Tray, Punching Plate and Sink Filter.
- ② Remove Drain Plug and drain the cutting oil.
- ③ Clean oil tank and filter.
- ④ Tighten drain plug and fill the oil tank 80% full with proper cutting oil. Do not dilute or mix proper oil with other oil or liquid.
- ⑤ Reinstall Sink Filter, Punching Plate and Chip Tray.
- ⑥ Seal the container of old oil and properly dispose it.



#### (2) Cleaning Carriage

Carriage should move smoothly. If not, clean Support Bar.

#### (3) Cleaning the surface

Wipe the surface of machine with soft dry cloth.

**[NOTE]**

Do not use thinner, benzine, gasoline, oil, earth oil, etc. to clean machine. Failure to follow this instruction may cause the surface finish to peel off.

#### (4) Clearing metal chips

Remove metal chips from the setting flutes of Die Head, Pipe Cutter and Reamer. Always keep Chip Tray clean.

# Trouble Shooting

## WARNING



Never attempt to repair the machine by yourself beyond the list of maintenance tips stated below. Always contact your nearest dealer or distributor for all service, maintenance and repair needs.

Failure to follow any of these instructions may cause electrical shock, serious personal injury, death or damages to machine.

The following list of suggestions may be helpful in handling minor problems. If any problems persist after attempting these remedies, IMMEDIATELY unplug power cord and contact nearest dealer.

SYMPTOMS	CAUSES	MAINTENANCE TIPS
Threading oil does not flow.	Is Oil Tank full of cutting oil? Is Chip Tray and Sink Filter clean? Is Pump working?	Fill Oil Tank to 80% full. (See page 7) Clean Chip Tray, Sink Filter and Oil Tank. Contact your dealer.
Low power	Is the power voltage high enough and not too low? Is the extension cord not too long or thin?	Make sure correct voltage is used. Extension cord should be over 2.0 mm <sup>2</sup> and as short as possible.
Motor does not start.	Is Power cord plugged in? Are Carbon brushes worn out?	Plug Power cord into outlet firmly. Replace Carbon brushes.
Threads are not normal.	Is cutting oil not contaminated or dirty? Is the pipe not deformed? Is the end of the pipe cut at a right angle? Are dies chipped or worn out?	Replace cutting oil and clean Oil Tank. Deformation of pipes causes non-standardized threads. Use non-deformed pipes. Cut the pipe at a right angle. Replace Dies. (See page 13 and 14.)
No thread can be made.	Is Dies size correct? Does number on die agree with number on die head? Is size adjustment of Die Head correct?	Check Dies size and replace them. (See page 13 and 14.) Match numbers on Dies and Die Head slots. (See page 13 and 14.) Find the correct size and follow instructions of "Adjustment of Die Head" section. (See page 13 and 14.)

# Specifications

## Standard Specifications

	<b>MCC 400</b>		<b>MCC 500</b>		<b>MCC 800</b>	
	PMNG040	PMNA040	PMNG050	PMNA050	PMNG080	PMNA800
<b>Die Head</b>	(Manual)	(Auto)	(Manual)	(Auto)	(Manual)	(Auto)
<b>Threading capacity</b>	1/4"~1.1/2" Pipe (BSPT or NPT) W3/8~1.1/4 Bolt (BSW) M8~M30 Bolt (ISO Metric)		1/4"~2" Pipe (BSPT or NPT) W3/8~1.1/4 Bolt (BSW) M8~M30 Bolt (ISO Metric)		1/4"~3" Pipe (BSPT or NPT) W3/8~1.1/4 Bolt (BSW) M8~M30 (ISO Metric)	
<b>Motor</b>	Single Phase Motor 550W 50/60Hz(Series)		Single Phase Motor 750W 50/60Hz(Series)		Single Phase Motor 750W 50/60Hz(Series)	
<b>Rotation speed (without load)</b>	48 r.p.m (60 Hz)		36 r.p.m (60 Hz)		27 r.p.m (60 Hz)	
<b>Dimensions</b>	(L) (W) (H) 533×386×345		(L) (W) (H) 598×401×390		(L) (W) (H) 784×452×428	
<b>Weight (kg)</b>	27		41		63	

## Standard Accessories

	<b>MCC 400</b>	<b>MCC 500</b>	<b>MCC 800</b>
<b>Pipe Die Head MDK</b> K-type(1/4"-2")	1 Set	1 Set	1 Set
<b>Pipe Die Head MD80</b> C1-type(2.1/2"-3")	N.A.	N.A.	1 Set
<b>Pipe Dies (BSPT)</b> K-type(1/2"-3/4")	1 Set	1 Set	1 Set
<b>Pipe Dies (BSPT)</b> K-type(1"-2")	1 Set	1 Set	1 Set
<b>Pipe Dies (BSPT)</b> C1-type(2.1/2"-3")	N.A.	N.A.	1 Set
<b>MCC Cutting Oil</b> (4 Liter Can)	1 PC.	1 PC.	1 PC.
<b>Lubricating Oil</b> (60 cc) Viscosity grade equates to ISO VG-56.	1 PC.	1 PC.	1 PC.
<b>Carbon Brush</b>	1 Set	1 Set	1 Set
<b>Hex Keys</b>	3, 4, 5, 8 mm	3, 4, 5, 6, 8 mm	3, 4, 5, 6, 8 mm
<b>Cross Point Screwdriver</b>	1 PC.	1 PC.	1 PC.
<b>Tool Box</b>	1 PC.	1 PC.	1 PC.
<b>Machine Cover</b>	1 PC.	1 PC.	1 PC.
<b>Legs</b>	N.A.	1 PC.	1 PC.

## Optional Specification

- \* Forward or backward rotation is available at buyer's request
- \* Special dies for stainless pipe
- \* Use for conduit pipes (MCC 500/800 only)

## Optional Accessories

### • Die-Head

Pipe Die Head	<del>H-Type 1/4~2 (BSPT or NPT)</del>	<del>1 Set</del>
	C1-Type 2.1/2~3 (NPT)	1 Set
Bolt Die Head	M8~M20 (Metric)	1 Set
	M22~M30 (Metric)	1 Set
	W3/8~W3/4(BSW)	1 Set
	W7/8~W1.1/4 (BSW)	1 Set
Light Conduit Pipe Die Head	C15~C75	1 Set
Heavy Conduit Pipe Die Head	PF1/2~PF3 , PF 3.1/2 ~ PF 4	1 Set
Self Opening Die Head (BSPT)	AD20(1/2~3/4), AD40(1~2), AD50(1~2), AD80(2.1/2~3)	Each 1 Set

### • Dies

Pipe Dies	K-Type 1/4~3/8 (BSPT or NPT)	1 Set
	K-Type 1/2~3/4 (NPT)	1 Set
	K-Type 1~2 (NPT)	1 Set
	<del>H-Type 1/4~3/8 (BSPT or NPT)</del>	<del>1 Set</del>
	<del>H-Type 1/2~3/4 (BSPT or NPT)</del>	<del>1 Set</del>
	<del>H-Type 1~2 (BSPT or NPT)</del>	<del>1 Set</del>
	C1-Type 2.1/2~3 (NPT)	1 Set
H.S.S. Pipe Dies (SKH)	K-Type 1/2~3/4 (BSPT or NPT)	1 Set
	K-Type 1~2 (BSPT or NPT)	1 Set
	C1-Type 2.1/2~3 (BSPT only)	1 Set
Bolt Dies	M8, M10, M12, M14, M16, M18, M20 M22, M24, M30 (Metric)	Each 1 Set
	W3/8, W1/2, W5/8, 3/4, W7/8, W1 W1.1/4 (BSW)	Each 1 Set
Light Conduit Pipe Dies	C15, C19~C25, C31~C51, C63~C75	Each 1 Set
Heavy Conduit Pipe Dies	PF1/2~PF3/4, PF1~PF1.1/4 PF1.1/2~PF2, PF2.1/2~PF3	Each 1 Set

- \* MCC400 can not use Conduit Pipe Die Head.  
MCC500 can use Dies from C15 to C51 and from PF1/2 to PF2 only.

**Remarks :** BSPT ..... British Standard Taper Pipe Threads.  
NPT ..... American Standard Taper Pipe Threads.  
W ..... British Standard Whitworth Threads for Bolt.  
M ..... ISO Metric Threads for Bolt.  
C ..... JIS Screw Threads for Light Conduit Pipe.  
PF ..... JIS Screw Threads for Heavy Conduit Pipe.

- **Pipe Support PM-PS23 :** available height  
295mm-480mm(for low raised)  
835mm-1020mm(for high raised)

• **Stand for MCC400**

• **Nipple Attachment :** BSPT (1/2, 3/4, 1, 1.1/4, 1.1/2, 2)

Nominal (R)	1/4	3/8	1/2	3/4	1	1.1/4	1.1/2	2
L (mm) minimum	40		45		50	60		65

L : maximum length of Nipple

• **Nipple Attachment Adapter :** BSPT (1/4, 3/8)

• **MCC Cutting Oil W** (for waterworks pipe)  
square 4 Liter Can  
16 Liter Can.

## **Warranty Policy**

All MCC machines and spare parts are guaranteed against defects in workmanship and material. This guarantee covers all MCC supplies for one year from shipment time. No replacement will be sent for machines and parts showing misuse or abuse. Claims cannot be allowed until the questioned product has been received for inspection at our factory. MCC is not liable for damage of any sorts including incidental and consequential damages.

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