

JET[®]

Operating Instructions and Parts Manual Variable Speed Vertical Mill Model JTM-1055



For serial no. 120xxxx and higher

WALTER MEIER (Manufacturing) Inc.

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1.0 Warranty and Service

Walter Meier (Manufacturing) Inc., warrants every product it sells. If one of our tools needs service or repair, one of our Authorized Service Centers located throughout the United States can give you quick service. In most cases, any of these Walter Meier Authorized Service Centers can authorize warranty repair, assist you in obtaining parts, or perform routine maintenance and major repair on your JET® tools. For the name of an Authorized Service Center in your area call 1-800-274-6848.

MORE INFORMATION

Walter Meier is consistently adding new products to the line. For complete, up-to-date product information, check with your local Walter Meier distributor, or visit waltermeier.com.

WARRANTY

JET products carry a limited warranty which varies in duration based upon the product (MW = Metalworking, WW = Woodworking).

| | | | | | | | | | | | |
|--|------------------------------|---|------------------------------|---|------------------------------|-------------------|------------------------------|--|---|-------------------------------------|--|
| 90 DAY WARRANTY | 1 YEAR WARRANTY | Body Repair Kits Bottle Jacks Cable Pullers Cold Saws Hoists-Air Hoists-Electric Metal forming Mill/Drills Milling Machines MW Bandsaws MW Drill Presses MW Finishing Equipment MW Lathes MW Precision Vises | 2 YEAR WARRANTY | Palet Trucks Rigging Equip. Service Jacks Stackers Surface Grinders Tapping Trolleys-Air Trolleys-Electric Web Slings Winches-Electric | 3 YEAR WARRANTY | WW Benchtop Tools | 5 YEAR WARRANTY | Beam Clamps Chain Hoist- Manual Lever Hoists Pullers-JCH Models Scissor Lift Tables Screw Jacks Trolleys-Gearred Trolleys-Plain Winches-Manual WW Air Filtration WW Bandsaws WW Buffers | WW Drill Presses WW Dust Collectors WW Dust Filters WW Dust Fittings WW Jointers WW Lathes WW Planers WW Sanders WW Shapers WW Tablesaws | LIFE LIFETIME WARRANTY | Fastening Tools Mechanics Hand Tools Striking Tools Vises (no -precision) Clamps |
| Warranty reverts to 1 Year Warranty if woodworking (WW) products listed above are used for industrial or educational purposes. | | | | | | | | | | | |

WHAT IS COVERED?

This warranty covers any defects in workmanship or materials subject to the exceptions stated below. Cutting tools, abrasives and other consumables are excluded from warranty coverage.

WHO IS COVERED?

This warranty covers only the initial purchaser of the product.

WHAT IS THE PERIOD OF COVERAGE?

The general JET warranty lasts for the time period specified in the product literature of each product.

WHAT IS NOT COVERED?

Five Year Warranties do not cover woodworking (WW) products used for commercial, industrial or educational purposes. Woodworking products with Five Year Warranties that are used for commercial, industrial or education purposes revert to a One Year Warranty. This warranty does not cover defects due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair or alterations, or lack of maintenance.

HOW TO GET SERVICE

The product or part must be returned for examination, postage prepaid, to a location designated by us. For the name of the location nearest you, please call 1-800-274-6848.

You must provide proof of initial purchase date and an explanation of the complaint must accompany the merchandise. If our inspection discloses a defect, we will repair or replace the product, or refund the purchase price, at our option. We will return the repaired product or replacement at our expense unless it is determined by us that there is no defect, or that the defect resulted from causes not within the scope of our warranty in which case we will, at your direction, dispose of or return the product. In the event you choose to have the product returned, you will be responsible for the shipping and handling costs of the return.

HOW STATE LAW APPLIES

This warranty gives you specific legal rights; you may also have other rights which vary from state to state.

LIMITATIONS ON THIS WARRANTY

WALTER MEIER (MANUFACTURING) INC., LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG THE IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

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3.0 Safety warnings

1. Read and understand the entire owner's manual before attempting set-up or operation of this machine.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This manual is intended to familiarize you with the technical aspects of this milling machine. It is not, nor was it intended to be, a training manual.
5. This machine is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper safe use of milling machines, do not use this machine until proper training and knowledge has been obtained.
6. Do not use this mill for other than its intended use. If used for other purposes, Walter Meier (Manufacturing) Inc., disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
7. Always wear approved safety glasses/face shields while using this machine. Note: Everyday eyeglasses only have impact resistant lenses; they are **not** safety glasses.
8. Make certain the machine is properly grounded.
9. Before operating the machine, remove tie, rings, watches, other jewelry, and roll up sleeves above the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do **not** wear gloves.
10. Wear ear protectors (plugs or muffs) during extended periods of operation.
11. Keep the floor around the machine clean and free of scrap material, oil and grease. Provide adequate space surrounding work area and non-glare, overhead lighting.
12. Don't use this mill in a dangerous environment, or damp or wet locations, or expose it to rain.
13. Keep machine guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately upon completion of maintenance.
14. Make sure the mill is firmly secured before operating.
15. Make sure that workpiece is securely attached or clamped to the table. Never use your hand to hold the workpiece.
16. Make all machine adjustments or maintenance with the machine unplugged from the power source.
17. Remove adjusting keys and wrenches. Form a habit of checking to see that keys, wrenches, and other adjusting tools are removed from machine before turning it on.
18. Remove loose items and unnecessary workpieces from the area before starting the machine.
19. Don't force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and more safely.
20. Make certain the main switch is in the OFF position before connecting the machine to the power supply.
21. Give your work undivided attention. Looking around, carrying on a conversation, and "horse-play" are careless acts that can result in serious injury.
22. Maintain a balanced stance at all times so that you do not fall or lean against moving parts. Do not overreach or use excessive force to perform any machine operation.
23. Keep visitors a safe distance from the work area. *Keep children away.*
24. Use recommended accessories; improper accessories may be hazardous.
25. Keep hands away from all moving parts (belts, cutters, gears, etc.).
26. Never operate this machine under the influence of alcohol, drugs, or any medication which may impair your judgment.
27. Some coolants used for machining contain chemicals that may be hazardous to your health if not used properly. Read and understand all user information listed on the coolant container and protect yourself accordingly.
28. Turn off machine before cleaning. Use a brush or compressed air to removed chips and debris – do not use your hands.
29. Do not stand on machine; serious injury could occur if machine tips over.
30. Never leave the machine running unattended. Turn off power and do not leave the machine until it comes to a complete stop.

31. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead based paint
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from those exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specifically designed to filter out microscopic particles

32. Failure to comply with all of these warnings may cause serious injury.

Familiarize yourself with the following safety notices used in this manual:

CAUTION This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

WARNING This means that if precautions are not heeded, it may result in serious injury or possibly even death.

4.0 About this manual

This manual is provided by Walter Meier (Manufacturing) Inc. covering the safe operation and maintenance procedures for a JET Model JTM-1055 Mill. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. Your machine has been designed and constructed to provide years of trouble-free operation if used in accordance with the instructions as set forth in this document.

If there are questions or comments, please contact your local supplier or Walter Meier. Walter Meier can also be reached at our web site: www.waltermeier.com.

Retain this manual for future reference. If the machine transfers ownership, the manual should accompany it.

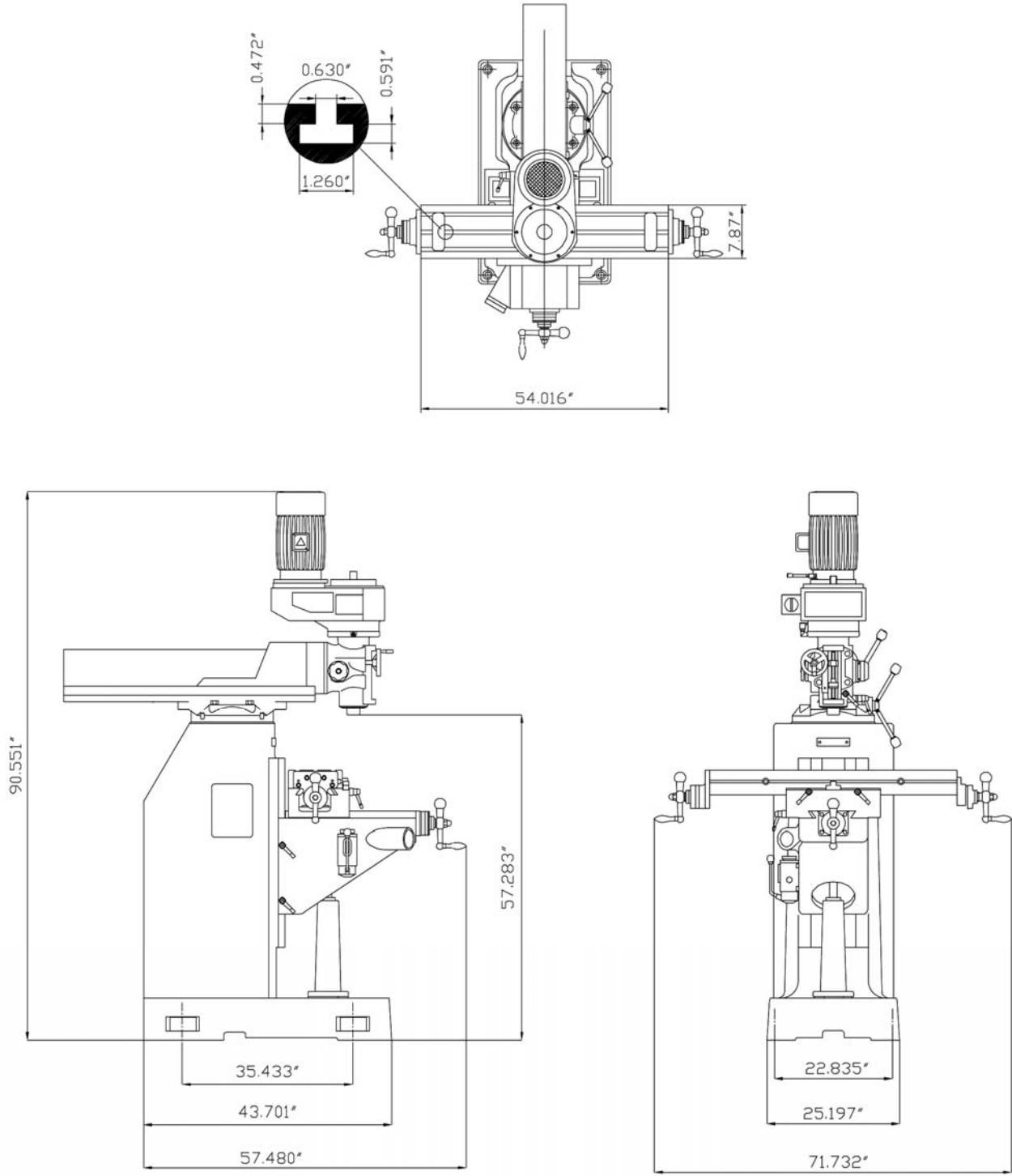
WARNING Read and understand the entire contents of this manual before attempting assembly or operation! Failure to comply may cause serious injury!

5.0 Specifications

| | |
|--|---|
| Model Number..... | JTM-1055 |
| Stock Number | 690055 |
| Spindle Taper..... | NST#40 |
| Diameter of Quill..... | 4 1/8" |
| Number of Spindle Speeds..... | Variable |
| Range of Spindle Speeds..... | 80 to 3800 RPM |
| Downfeeds per Revolution of Spindle..... | 0.0015", 0.003", 0.006" |
| Spindle Travel | 5" |
| Head Movement | 90° L and R |
| Turret Rotation | 360° |
| Maximum Distance Spindle to Table | 20" |
| Maximum Distance Spindle to Column..... | 26" |
| Collet Capacity | 1/8"-7/8" |
| Table Size..... | 10" x 54" |
| Longitudinal Table Travel | 32" |
| Table Cross Travel | 16" |
| Number of T-Slots..... | 3 |
| Size and Spacing of T-Slots | 5/8" x 2-1/2" |
| Maximum Table Load..... | 800 lbs. |
| Knee Travel..... | 17-1/2" |
| Overarm Travel | 16-1/2" |
| Overall Dimensions..... | 108"W x 80"D x 92"H |
| Motor..... | 5 HP, 3Ph., 230/460V prewired 230 Volt |
| Net Weight (approx.)..... | 3,300 Lbs. |

The specifications in this manual were current at time of publication, but because of our policy of continuous improvement, Walter Meier (Manufacturing) Inc., reserves the right to change specifications at any time and without prior notice, without incurring obligations.

6.0 JTM-1055 Layout



7.0 Setup and assembly

7.1 Shipping container contents

- 1 Mill
- 1 Flat Way Cover (rear)
- 1 Accordion Way Cover (front)
- 1 Elevating Crank
- 1 Quill Handle
- 1 Drawbar
- 1 Pin & Nut

- 1 ToolBox: *found in base through rear cover*
 - 1 Hex Wrench Set
 - 1 Wrench Set
 - 1 #2 Cross Point Screw Driver
 - 1 #2 Flat Blade Screw Driver
 - 1 Plastic Oil Can
 - 1 Owner's Manual
 - 1 Warranty Card
 - 1 Eye Bolt
 - 3 Handles
 - 4 Leveling Bolts
 - 4 Leveling Pads

7.2 Unpacking and cleanup

- 33. Finish removing the crate. Leave the mill bolted to the pallet until it is ready to be moved to its final location.
- 34. Remove the toolbox from the base. It is accessed by removing four screws that hold the rear cover in place.
- 35. Clean all rust protected surfaces with kerosene, or a light solvent. Do not use gasoline, paint thinner, or lacquer thinner. These will damage painted surfaces.
- 36. Cover all machined surfaces with a film of light machine tool oil to inhibit rust.

7.3 Site Preparation

CAUTION Mill must be supported equally under all four corners. Failure to comply may cause the column to twist and put a bind in the bedways.

The mill must be placed on an even surface, bolted to the floor, or placed on the leveling pads. Choose a location for the mill that is dry, has good lighting, and has enough room to be able to service the mill on all four sides. Review the JTM-1055 Layout in section 6.0.

7.4 Lifting the Mill

- 1. Remove the four nuts that hold the unit to the pallet.
- 2. Raise the head by loosening four nuts, (A, Fig. 1) with a 22mm wrench, just enough to allow

the head to raise into position. **Do not** remove the nuts; just break the nuts loose.

- 3. Turn the hex head of the worm shaft (B, Fig. 2) using a 19mm socket and breaker bar. Raise the head aligning the zero marks on the scales. With the help of another person support the head while it is raising.
- 4. Tighten the four bolts (A, Fig. 1).
- 5. Loosen the two ram locking handles (C, Fig. 1) and move the ram forward by turning the hex head of the ram pinion (D, Fig. 1) with a 19mm socket and breaker bar.
- 6. Tighten the ram locking handles before lifting.



Figure 1

The preferred method for lifting the mill is with a hook through the eye bolt in the ram (E, Fig. 1). Make sure the chain and hook are properly rated for the weight of the mill. Make sure the chain is not twisted and lift slowly. Make sure the mill is balanced before moving.

Carefully move the mill over the site. Lower the mill over the anchor bolts, or leveling pads. The leveling pads included in the toolbox and the leveling screws will help you to reach a level position. Check the mill for level with a machinist's level placed on the table. Mill must be level back to front and side to side. Shim if necessary when bolting to the floor, but remember that the mill must be supported equally at all four corners. Check for level before tightening the anchor bolt nuts and after tightening them. Adjust as necessary.

7.5 Electrical Connections

⚠WARNING All electrical connections must be made by a qualified electrician. Failure to comply may cause serious or fatal injury.

The JTM-1055 mill is rated at 230/460V, 3Ph and comes from the factory prewired at 230V.

Confirm power at the site matches power requirements of the mill before connecting to the power source. The power source should be dedicated to the JTM-1055 mill. The main power switch is located on the right side of the machine. Remove the cover, and run the main power cable through the box and attach the ground, followed by power leads. Replace the cover.

Check for proper spindle rotation in the high speed range. The spindle should rotate clockwise when viewed from the top of the machine. If the spindle rotates counter-clockwise, disconnect from the power source, and switch two of the power leads.

To change from 230V to 460V operation, remove the junction box cover on the motor, and change the wires according to the diagram found on the inside of the cover. Also see the wiring diagram at the back of this manual.

The mill must be properly grounded.

7.6 Lubrication

⚠CAUTION Do not operate the mill before lubricating the machine fully. Failure to comply may cause damage to the machine.

1. Spindle Bearings & Quill (A, Fig. 2)- fill oil cups once daily with Mobil DTE® Oil Light.
2. Oil Pump (B, Fig. 2)- fill reservoir as needed by removing cap on top of tank and filling with Mobil DTE® Oil Light. Pump oil with release handle daily. Way surfaces and leadscrews are lubricated in this manner.
3. Grease Fitting for Spindle Gear (not shown): located on the backside of the head's lower housing. Lubricate every month using Mobilith AW2.

8.0 Controls

- A. **Variable Speed Control** (A, Fig. 3) - located on the right side of the head assembly. Turn clockwise or counter-clockwise to adjust spindle speed.

⚠CAUTION Change speed only when spindle is turning.

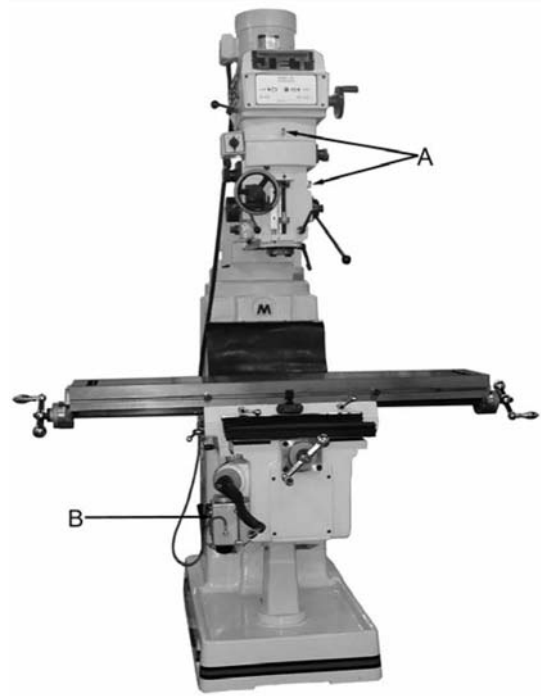


Figure 2

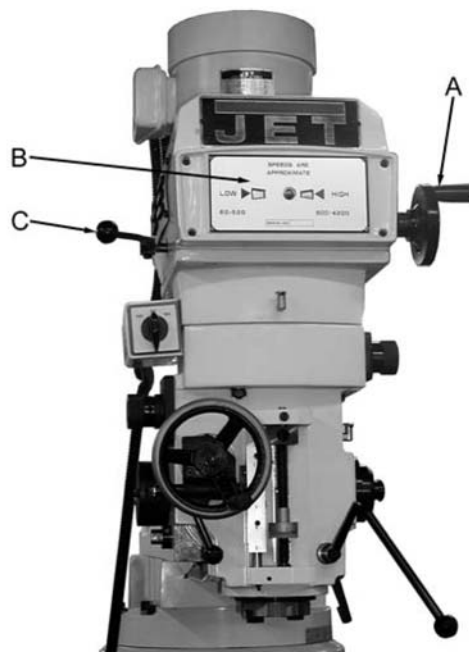


Figure 3

- B. **Variable Speed Dial Indicator** (B, Fig. 3) - located on the front of the head assembly. Indicates selected speed in high or low range.
- C. **Spindle Brake** (C, Fig. 3) - located on left side of the head. Move in either direction to stop spindle once power has been turned off.

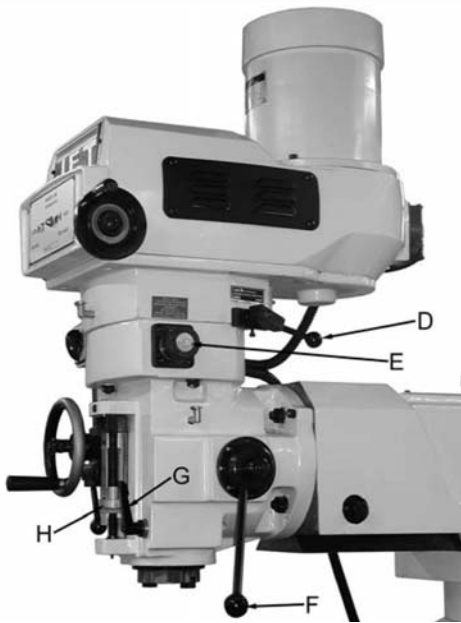


Figure 4

- D. **High-Neutral-Low Lever** (D, Fig. 4) - located on the right side of the head. The photo shows the lever in the low speed range. Push the lever in and rotate 90° clockwise for neutral. Rotate the lever another 90° for the high speed range.

CAUTION: Do not shift High-Low Gear while motor is running. Rotate the spindle by hand to facilitate changing lever positions.

- E. **Power Feed Transmission Engagement Knob** (E, Fig. 4) - located on right side of head. When pointer indicates towards the rear of the machine, power feed worm gear is engaged. To disengage power feed, turn so pointer indicates towards the front of the machine.

CAUTION: Power feed may be engaged when spindle is rotating, however, it must be engaged gently to avoid damage to the worm gear.

- Do not use power feed at speeds above 2700 R.P.M.
- It is recommended that the power feed worm gear be disengaged whenever the power feed is not required. This avoids unnecessary wear on the worm gear.
- Maximum loading is a 3/8" (9.5mm) diameter bit for drilling in steel. Use manual feed for bits larger than 3/8".

- F. **Quill Feed Handle** (F, Fig. 4) - located on right side of head. Rotate clockwise to lower spindle.

- G. **Quill Lock** (G, Fig. 4) - located on the right side of the head. Rotate the handle clockwise to lock the quill in a desired position. Rotate the handle counter-clockwise to release.

- H. **Micro Adjusting Nut** (H, Fig. 4), - located on the front of the head. Use for setting specific spindle depth. **Note:** One complete rotation of the micro nut equals 0.05".

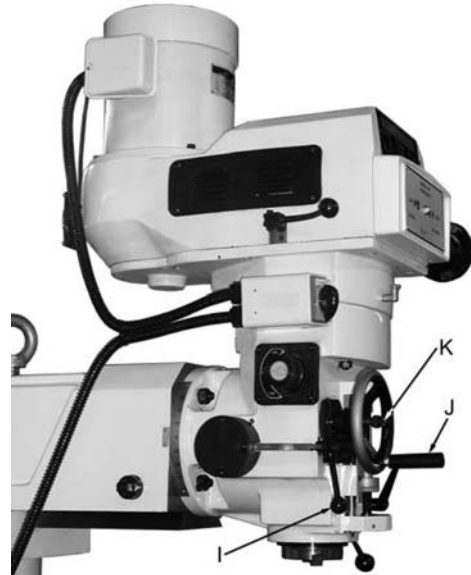


Figure 5

- I. **Feed Control Lever** (I, Fig. 5) - located on the left side of the head. Engages overload clutch on pinion shaft when the lever is positioned to the left. Stays engaged until quill stop comes in contact with micro adjusting nut (forcing feed control lever to drop out automatically), or until lever is released manually by positioning lever to the right.

- J. **Manual Feed** (J, Fig. 5) - located on the left front of the head. Feed reversing knob (K, Fig. 5) must be in the neutral position. The feed control lever (I, Fig. 5) must be engaged. **Note:** manual feed handle and handwheel may be taken off when not in use.

- K. **Feed Reversing Knob** (K, Fig. 5) - located in center of manual feed handwheel. Position of the knob depends upon the direction of spindle rotation. If boring with right hand cutting tools, pull feed knob towards operator until clutch becomes engaged. Neutral position is between forward and reverse position.

CAUTION: It is recommended that the knob be left in the neutral position when not in use.

- L. **Quill Stop** (L, Fig. 6) - located on the front of head. Used to disengage the automatic feed in either direction as well as the setting point for working to a given depth.
- M. **Quill Feed Speed Selector** (M, Fig. 6) - located on the left side of the head. Turn the knob and indicate pointer towards one of three feed speeds (0.0015", 0.003", and 0.006") per spindle revolution. Feed is more readily engaged when spindle is turning.
- N. **Reversing Switch** (N, Fig. 6) - located on the left side of the head. Switches rotation of spindle.
- O. **Drawbar** (O, Fig. 6) - located on the top of the head. Used to secure the tool holder in the taper. Use the spindle brake while tightening the drawbar

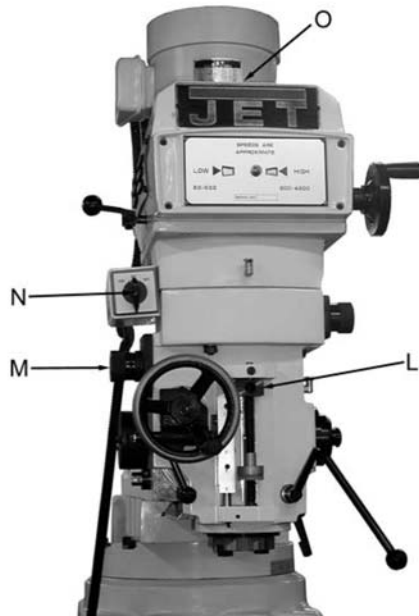


Figure 6

9.0 Operating Precautions

- Do not attempt to change spindle RPM while motor is stopped.
- Be certain the spindle brake is released before starting the motor.
- Rotate the spindle by hand to facilitate meshing of the clutch and gears.
- Do **not** use the quill power feed at speeds above 2700 RPM.

- It is recommended that the power feed worm gear be disengaged whenever the power feed is not required. This will avoid unnecessary wear on the worm gear.
- Maximum loading is a 3/8" (9.5mm) diameter bit for drilling in steel. Use manual feed for bits larger than 3/8".
- Overload clutch is factory set to hold up to 200 lbs. down feed pressure on the quill (accommodates drills up to 3/8"). Do **not** attempt to adjust clutch pressure.
- Only change spindle speeds while the motor is running.

10.0 Adjustments

10.1 Changing Speed Range

To change from high to low speed range, move lever (A, Fig. 7) by pressing in and rotating almost 180. Do not change gears while the spindle is running.

CAUTION: It is recommended to rotate the spindle by hand to ensure the clutch is engaged prior to turning on. Do not turn on the machine unless the spindle can be moved freely.



Figure 7

10.2 Manual Fine Feed (handwheel)

1. Disengage automatic feed by turning knob (B, Fig. 7) so that the pointer indicates towards the front of the machine.
2. Locate the feed reversing knob (C, Fig. 7) in the center or neutral position.
3. Engage feed trip lever (D, Fig. 7) by pulling away from the head assembly.

4. The quill can now be moved up or down by turning the hand wheel.

10.3 Manual Rapid Feed (handle)

1. Disengage automatic feed by turning knob (B, Fig. 7) so that the pointer indicates towards the front of the machine.
2. Locate the feed reversing knob (C, Fig. 7) in the center or neutral position.
3. Disengage feed trip lever (D, Fig. 7) by pushing towards head assembly.
4. Engage the manual quill handle (E, Fig. 7) and push, or pull to raise, or lower the quill.

10.4 Micro Adjusting Nuts for Manual Feed

1. Lower the quill to the required depth.
2. Tighten the quill lock (A, Fig. 8).
3. Screw the micro nut (B, Fig. 8) against the quill stop (C, Fig. 8), and tighten the micro jam nut (D, Fig. 8).
4. Loosen the quill lock.
5. Use rapid, or fine manual downfeed.

Note: Always make a test cut to verify that the depth of cut is correct.

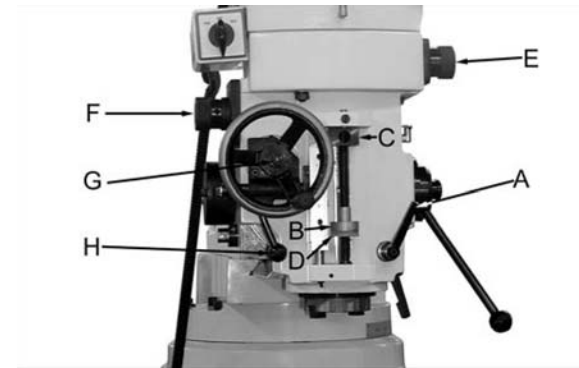


Figure 8

10.5 Setting Up for Automatic Feed

1. Ensure quill lock (A, Fig. 8) is off by rotating counter-clockwise.
2. Set micrometer dial (B/D, Fig. 8) to desired depth.
3. Engage auto quill feed knob (E, Fig. 8) by turning so pointer indicates towards the rear of the machine.
4. Select feed direction by pulling or pushing the knob (G, Fig. 8) for up/down feed, neutral is in the middle.

5. Select feed rate from feed selector knob (F, Fig. 8) 0.0015", 0.003", and 0.006" per spindle revolution. It is easier to change feed rate while the spindle is turning.

6. Engage feed trip lever (H, Fig. 8) by pulling away from head assembly.

CAUTION: Power feed may be engaged when spindle is rotating, however, it must be engaged gently to avoid damage to the worm gear.

- Do not use power feed at speeds above 2700 R.P.M.
- It is recommended that the power feed worm gear be disengaged whenever the power feed is not required.
- Maximum loading is a 3/8" (9.5mm) diameter bit for drilling in steel. Use manual feed for bits larger than 3/8".

10.6 Micro Adjusting Nuts for Auto Feed

1. Lower the quill to the required depth.
2. Tighten the quill lock (A, Fig. 8).
3. Screw the micro nut (B, Fig. 8) against the quill stop (C, Fig. 8), and tighten the micro jam nut (D, Fig. 8).
4. Loosen the quill lock, and engage the power feed knob (E, Fig. 8).
5. Choose the downfeed rate (F, Fig. 8).
6. Engage the feed reversing knob (G, Fig. 8).
7. Engage the feed trip lever (H, Fig. 8).

Note: Always make a test cut to verify that the depth of cut is correct.

10.7 Head Alignment

The quill housing, and ram were pinned at the factory. The pin has been removed for shipping. The pin can be found in the toolbox.

1. Loosen four nuts (A, Fig. 9) with a 22mm wrench, just enough to allow the head to pivot into position. **Do not** remove the nuts; just break the nuts loose.
2. Back off the nut so it is flush with the end of the pin. This will allow you to tighten the nut and remove the pin if needed.
3. Gently tap the pin into the hole while slightly rocking the hex head of the worm shaft (C, Fig. 9) back and forth.

The scales on the mill are guides only. Close tolerance work will require the use of a dial indicator to make sure the head is 90° to the table in the X and Y axis. Please note the table is fitted

to be slightly higher in the front, usually about .0005".

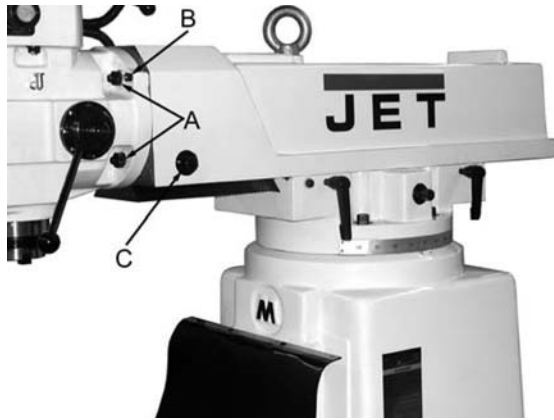


Figure 9

10.8 Pivoting the Head

1. Remove the pin (B, Fig. 9) by tightening the nut.
2. Loosen four nuts, (A, Fig. 9) with a 22mm wrench, just enough to allow the head to move into position. **Do not** remove the nuts; just break the nuts loose.
3. Turn the hex head of the worm shaft (C, Fig. 9) using a 19mm socket and breaker bar. Pivot the head aligning the scale marks to the desired angle.
4. Tighten the four bolts (A, Fig. 9).

Note: Always make a test cut to verify that the angle of cut is correct.

10.9 Pivot the Ram

1. Loosen four bolts, (A, Fig. 10) with a 21mm wrench.
2. Remove the pin (B, Fig. 10) by tightening the nut.
3. Pivot the head and ram assembly to the required angle and tighten four bolts.



Figure 10

10.10 Moving the Ram

1. Loosen two ram locking handles (A, Fig. 11).
2. Move the ram by turning the hex head of the ram pinion (B, Fig. 11) with a 19mm socket and breaker bar.



Figure 11

10.11 Table Movement

- A. **Longitudinal Movement** (A, Fig. 12) - handles located on opposite ends of the table; controls the X-axis.
- B. **Stops** (B, Fig. 12) - located on the front of the table; controls how far the table travels in either direction.
- C. **Table Locks** (C, Fig. 12) - located on the front of the saddle used for locking the table in position.
- D. **Cross Feed Movement** (D, Fig. 12) - located on the front of the knee; controls the Y-axis.
- E. **Knee Handle** (E, Fig. 12) - located on the corner of the knee; controls the Z-axis.

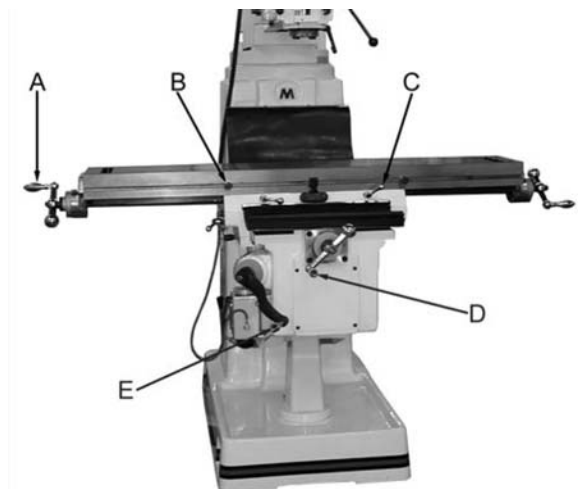


Figure 12

10.12 Feed Trip Adjustment

1. Loosen lock nut (A, Fig. 13).
2. Engage trip handle (C, Fig. 13) by pulling away from head assembly.
3. Adjust micro nuts (E, Fig. 13) against quill stop (B, Fig. 13).
4. Slowly turn adjusting screw (D, Fig. 13) until lever (C, Fig. 13) trips.
5. Tighten lock nut (A, Fig. 13)

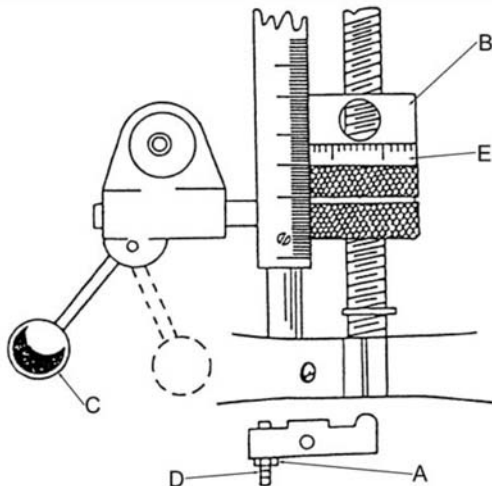


Figure 13

11.0 Maintenance

⚠WARNING Always disconnect the machine from the power source before doing any maintenance. If you do not have the knowledge or training to complete the maintenance, have an authorized JET service center maintain your mill. Failure to comply may cause serious bodily injury.

11.1 Knee Gib Adjustment

Note: When adjusting the gibs for the knee, the saddle, and the table always start with the knee first, the saddle second, and adjust the table last.

Adjust three gibs located between the knee and the base. Use a dial indicator to measure the amount of movement in the knee. Adjust the gib until the indicator reading is within 0.003”.

11.2 Saddle Gib Adjustment

Adjust two gibs located between the saddle and the knee. Use a dial indicator to measure the amount of movement in the saddle. Adjust the gib until the indicator reading is within 0.003”.

11.3 Table Gib Adjustment

Adjust one gib located between the table and the saddle. Use a dial indicator to measure the amount of movement in the table. Adjust the gib until the indicator reading is within 0.003”.

11.4 Ram Wear Plate Adjustment

Adjust one wear plate located between the ram and the turret. Use a dial indicator to measure the amount of movement in the ram. Adjust the wear plate until the indicator reading is within 0.003”.

11.5 Removing the Motor

1. Adjust the head to the lowest speed.
2. Disconnect the machine from the power source.
3. Remove three screws (A, Fig. 14) and plate (B, Fig. 14).
4. Use two screws (A-1, Fig. 14) to compress the spring (C, Fig. 14).
5. Rotate the high-neutral-low lever to the high speed range.
6. Remove the reversing switch from the belt housing.
7. Remove two locking nuts (D, Fig. 14).
8. Lift and tilt the motor so that it rests on stud (E, Fig. 14).
9. Ease the belt over the lower drive disc and remove the motor.

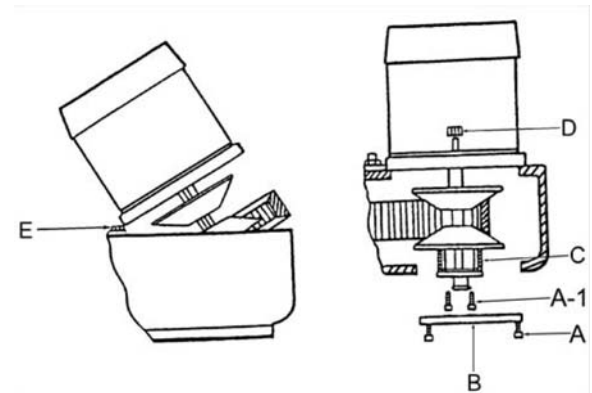


Figure 14

11.6 Timing Belt Replacement

1. Disconnect the machine from the power source.
2. Remove the motor.
3. Lower the quill to the full extent.
4. Remove the two lower screws from the variable speed housing (A, Fig. 15).
5. Remove the six screws (B, Fig. 15).

6. Remove the top assembly (C, Fig. 15) and tap to clear dowels.
7. Replace the belt.

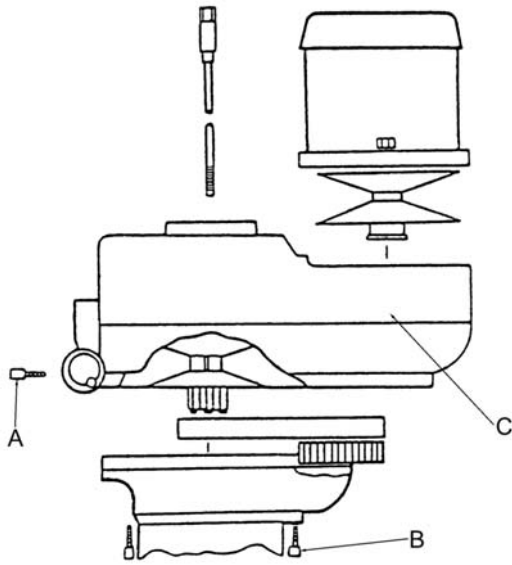


Figure 15

11.7 Drive Belt Replacement

1. Disconnect the machine from the power source.
2. Remove the motor.
3. Remove the three screws (A, Fig. 16). Thread the screws into the adjacent tapped holes and back off the cover (B, Fig. 16).
4. Remove the two screws and bushings (C, Fig. 16) from the tilting plate.
5. Remove four screws (D, Fig. 16) and one screw (E, Fig. 16).
6. Remove four screws from the variable speed housing (F, Fig. 16).
7. Remove the top housing (G, Fig. 16) and tap to clear dowels.
8. Replace the belt.

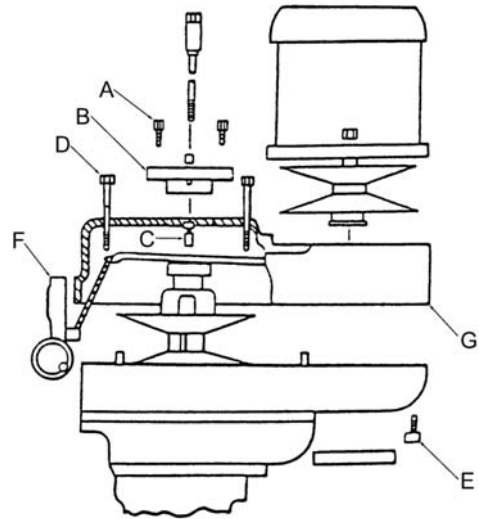


Figure 16

11.8 Brake Shoe Replacement

1. Disconnect the machine from the power source.
4. Remove the top section.
5. Remove the two screws (A, Fig. 17).
6. Remove the clutch hub assembly (B & D, Fig. 17).
7. Replace the brake shoes (C, Fig. 17).

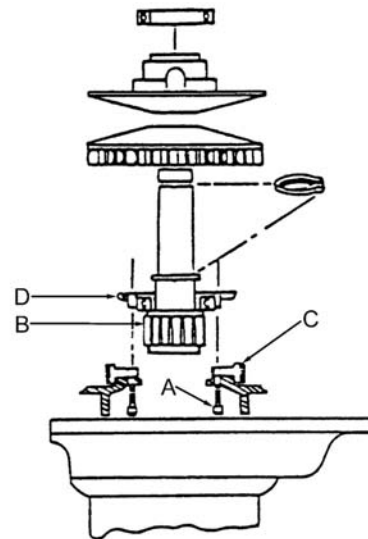
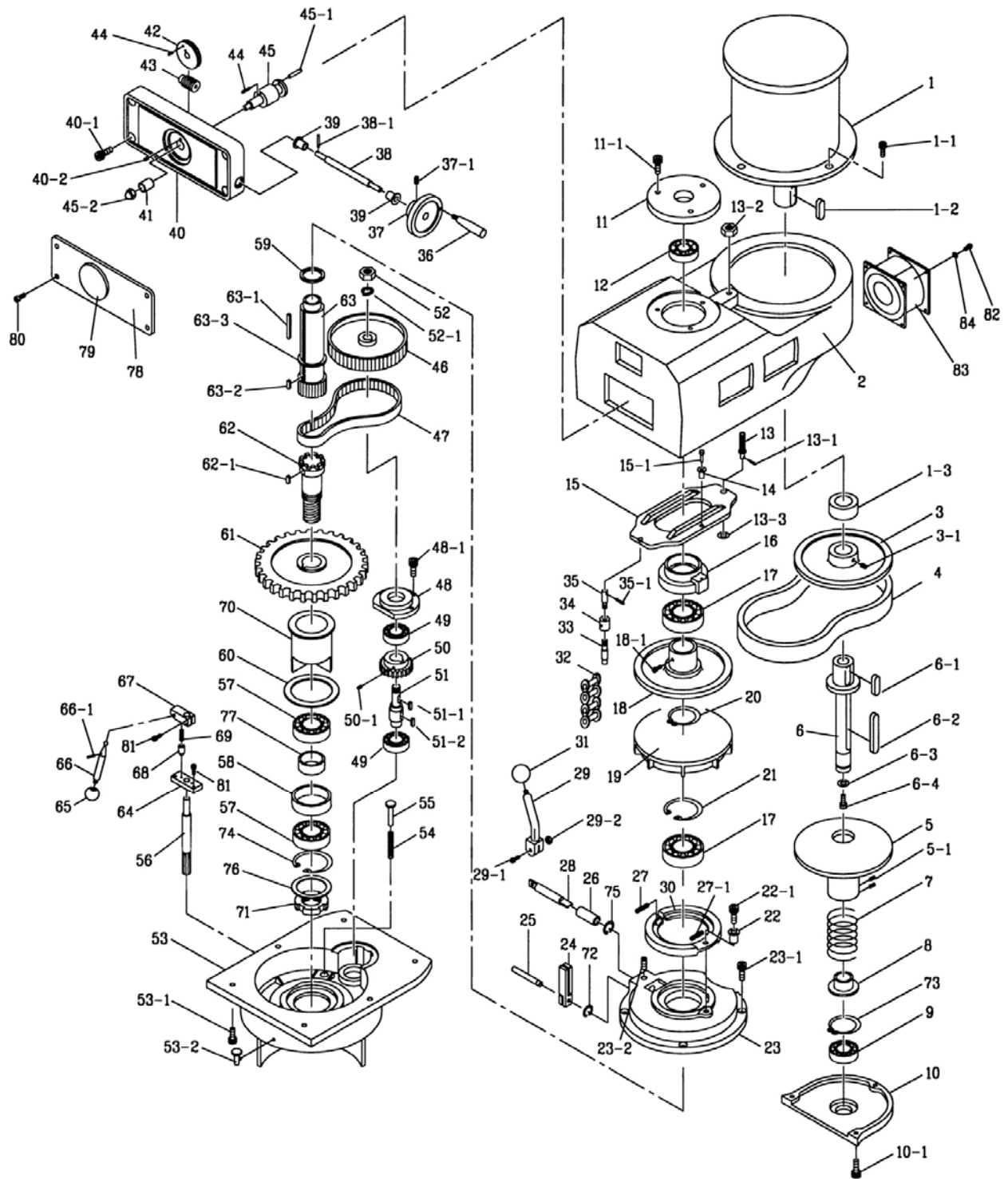


Figure 17

12.0 Replacement Parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday (see our website for business hours, www.waltermeier.com). Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

12.1.1 Variable Speed Head – Exploded View



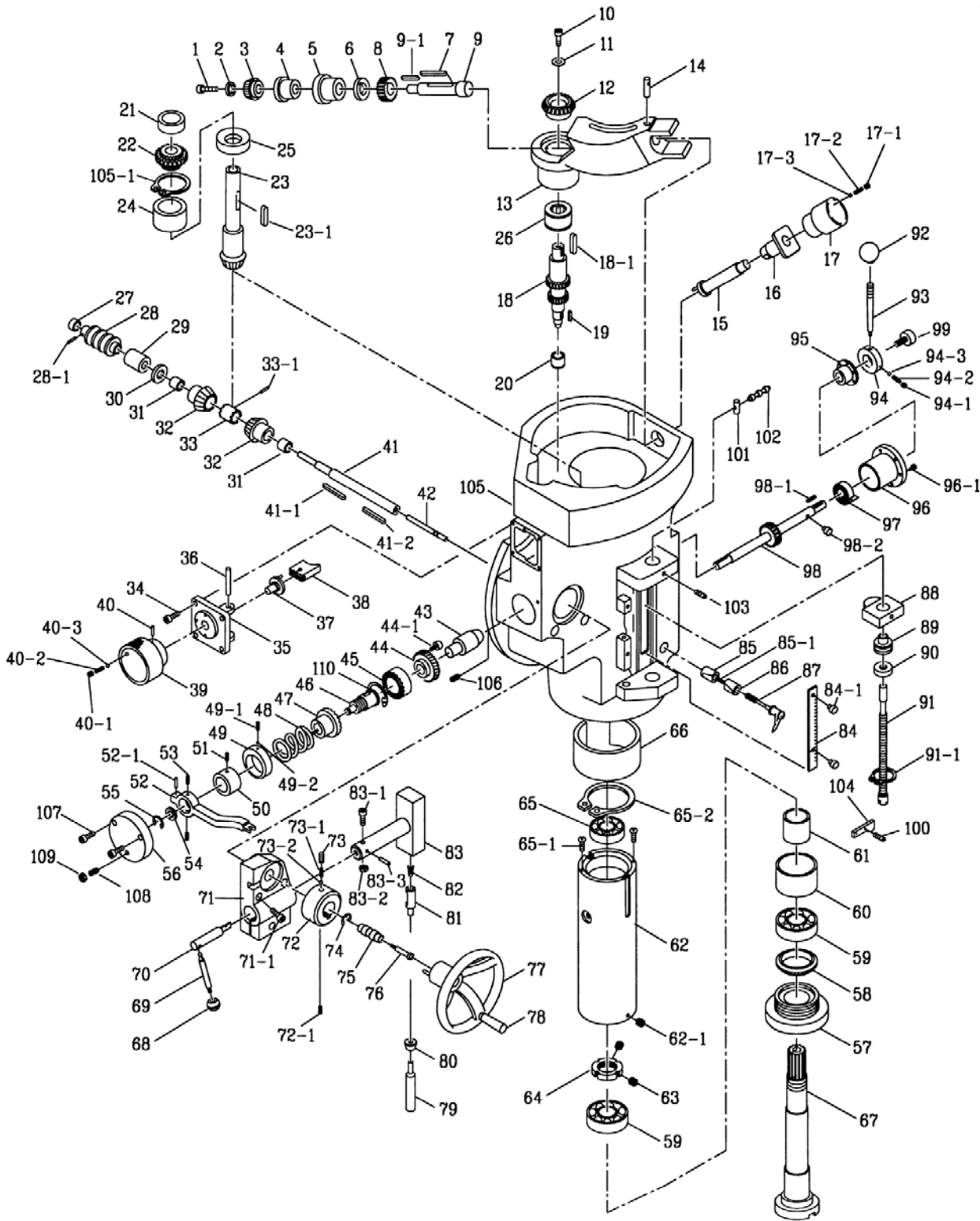
12.1.2 Variable Speed Head – Parts List

| Index No | Part No | Description | Size | Qty |
|----------|---------------|--|-----------|-----|
| 1 | JTM1055-V01 | Motor | | 1 |
| 1-1 | TS-0209051 | Hex Socket Cap Screw | 3/8"x1" | 3 |
| 1-2 | JTM1055-V01-2 | Key | 6x7x30 | 1 |
| 1-3 | JTM1055-V01-3 | Spacer | | 1 |
| 2 | JTM1055-V02 | Housing | | 1 |
| 3 | JTM1055-V03 | Motor Pulley | | 1 |
| 3-1 | JTM1055-V03-1 | Set Screw | | 1 |
| 4 | JTM1055-V04 | Belt | 900VC3830 | 1 |
| 5 | JTM1055-V05 | Motor Pulley | | 1 |
| 5-1 | JTM1055-V05-1 | Screw | | 2 |
| 6 | JTM1055-V06 | Shaft | | 1 |
| 6-1 | JTM1055-V06-1 | Key | 7x6x30 | 1 |
| 6-2 | JTM1055-V06-2 | Key | 7x7x55 | 1 |
| 6-3 | JTM1055-V06-3 | Flat Washer | M8 | 1 |
| 6-4 | TS-1504111 | Hex Socket Cap Screw | M8x55 | 1 |
| 7 | JTM1055-V07 | Spring | | 1 |
| 8 | JTM1055-V08 | Bushing | | 1 |
| 9 | BB-6005ZZ | Ball Bearing | 6005ZZ | 1 |
| 10 | JTM1055-V10 | Motor Pulley Cover | | 1 |
| 10-1 | TS-1502041 | Hex Socket Cap Screw | M5x16 | 3 |
| 11 | JTM1055-V11 | Bearing Cover | | 1 |
| 11-1 | TS-10503051 | Hex Socket Cap Screw | M6x20 | 3 |
| 12 | BB-6009ZZ | Ball Bearing | 6009ZZ | 1 |
| 13 | JTM1055-V13 | Regulating Screw | | 1 |
| 13-1 | JTM1055-V13-1 | Spring Pin | | 1 |
| 13-2 | JTM1055-V13-2 | Hex Nut | | 1 |
| 13-3 | JTM1055-V13-3 | Washer | | 1 |
| 14 | JTM1055-V14 | Bushing | | 2 |
| 15 | JTM1055-V15 | Tilter | | 1 |
| 15-1 | JTM1055-V15-1 | Screw | | 2 |
| 16 | JTM1055-V16 | Support | | 1 |
| 17 | BB-6012ZZ | Ball Bearing | 6012ZZ | 2 |
| 18 | JTM1055-V18 | Drive Pulley | | 1 |
| 18-1 | JTM1055-V18-1 | Drive Pulley Screw | | 1 |
| 19 | JTM1055-V19 | Steady Pulley | | 1 |
| 20 | JTM1055-V20 | C-Clip | S50 | 1 |
| 21 | JTM1055-V21 | C-Clip | R95 | 1 |
| 22 | JTM1055-V22 | Bushing | | 1 |
| 22-1 | TS-1052021 | Hex Socket Cap Screw | M5x6 | 1 |
| 23 | JTM1055-V23 | Lower Housing Cover | | 1 |
| 23-1 | TS-1504051 | Hex Socket Cap Screw | M8x25 | 3 |
| 23-2 | JTM1055-V23-2 | Set Screw | M6x6 | 1 |
| 24 | JTM1055-V24 | Brake Stud | | 2 |
| 25 | JTM1055-V25 | Brake Finger Pivot Stud | | 1 |
| 26 | JTM1055-V26 | Brake Shaft Sleeve | | 1 |
| 27 | JTM1055-V27 | Brake Spring | | 1 |
| 27-1 | JTM1055-V27-1 | Brake Spring (short) | | 1 |
| 28 | JTM1055-V28 | Brake Lock Shaft | | 1 |
| 29 | JTM1055-V29 | Brake Lock Handle | | 1 |
| 29-1 | TS-1503061 | Hex Socket Cap Screw | M6x25 | 1 |
| 29-2 | JTM1055-V29-2 | Hex Nut | M6 | 1 |
| 30 | JTM1055-V30A | Brake Assembly (Includes: #27, 27-1, 22, 22-1) | | 1 |
| 31 | JTM1055-V31 | Plastic Ball | | 1 |
| 32 | JTM1055-V32 | Chain | | 1 |
| 33 | JTM1055-V33 | Adjustment Stud | | 1 |
| 34 | JTM1055-V34 | Sleeve Nut | | 1 |

| Index No | Part No | Description | Size | Qty |
|----------|---------------|----------------------|----------|-----|
| 35 | JTM1055-V35 | Adjustment Stud | | 1 |
| 35-1 | JTM1055-V35-1 | Pin | | 1 |
| 36 | JTM1055-V36 | Wheel Handle | | 1 |
| 37 | JTM1055-V37 | Wheel | | 1 |
| 37-1 | TS-1523031 | Set Screw | M6x8 | 1 |
| 38 | JTM1055-V38 | Dial Control Shaft | | 1 |
| 38-1 | JTM1055-V38-1 | Spring Pin | | 1 |
| 39 | JTM1055-V39 | Bushing | | 2 |
| 40 | JTM1055-V40 | Dial Housing | | 1 |
| 40-1 | TS-1502081 | Hex Socket Cap Screw | M5x35 | 3 |
| 40-2 | JTM1055-V40-2 | Screw | | 1 |
| 41 | JTM1055-V41 | Bushing | | 1 |
| 42 | JTM1055-V42 | Worm Gear | | 1 |
| 43 | JTM1055-V43 | Worm | | 1 |
| 44 | JTM1055-V44 | Spring Pin | | 2 |
| 45 | JTM1055-V45 | Shaft | | 1 |
| 45-1 | JTM1055-V45-1 | Spring Pin | | 1 |
| 45-2 | JTM1055-V45-2 | Nut | | 1 |
| 46 | JTM1055-V46 | Timing Belt Pulley | | 1 |
| 47 | JTM1055-V47 | Belt | 8M560 | 1 |
| 48 | JTM1055-V48 | Bearing Retainer | | 1 |
| 48-1 | TS-1502051 | Hex Socket Cap Screw | M5x20 | 1 |
| 49 | JTM1055-V49 | Ball Bearing | 6203-2RS | 2 |
| 50 | JTM1055-V50 | Bull Gear | | 1 |
| 50-1 | JTM1055-V50-1 | Set Screw | M8x6 | 1 |
| 51 | JTM1055-V51 | Counter Shaft | | 1 |
| 51-1 | JTM1055-V51-1 | Key | 5x5x15 | 1 |
| 51-2 | JTM1055-V51-2 | Key | 5x5x18 | 1 |
| 52 | JTM1055-V52 | Nut | 5/8" | 1 |
| 52-1 | TS-0720131 | Lock Washer | 5/8" | 1 |
| 53 | JTM1055-V53 | Lower Housing | | 1 |
| 53-1 | TS-1504041 | Hex Socket Cap Screw | M8x20 | 6 |
| 53-2 | JTM1055-V53-2 | Oil Cup | | 1 |
| 54 | JTM1055-V54 | Spring | | 3 |
| 55 | JTM1055-V55 | Spring Shaft | | 3 |
| 56 | JTM1055-V56 | Pinion Gear | | 1 |
| 57 | JTM1055-V57 | Ball Bearing | 6910ZZ | 2 |
| 58 | JTM1055-V58 | Spacer | | 1 |
| 59 | JTM1055-V59 | Spacer | | 1 |
| 60 | JTM1055-V60 | Spacer | | 1 |
| 61 | JTM1055-V61 | Spindle Gear | | 1 |
| 62 | JTM1055-V62 | Spindle Gear Hub | | 1 |
| 62-1 | JTM1055-V62-1 | Key | 8x7x12 | 1 |
| 63 | JTM1055-V63 | Spindle Pulley Hub | | 1 |
| 63-1 | JTM1055-V63-1 | Key | 8x7x60 | 1 |
| 63-2 | JTM1055-V63-2 | Key | 8x8x20 | 1 |
| 63-3 | JTM1055-V63-3 | Spacer | | 1 |
| 64 | JTM1055-V64 | Deter Plate | | 1 |
| 65 | JTM1055-V65 | Plastic Ball | | 1 |
| 66 | JTM1055-V66 | Pinion Crank | | 1 |
| 66-1 | JTM1055-V66-1 | Spring Pin | | 1 |
| 67 | JTM1055-V67 | Pinion Block | | 1 |
| 68 | JTM1055-V68 | Detent | | 1 |
| 69 | JTM1055-V69 | Spring | | 1 |
| 70 | JTM1055-V70 | Rack Cup | | 1 |
| 71 | JTM1055-V71 | Lock Nut | | 1 |
| 72 | JTM1055-V72 | C-Clip | S8 | 1 |
| 73 | JTM1055-V73 | C-Clip | S25 | 1 |

| Index No | Part No | Description | Size | Qty |
|----------|-------------|--------------------------------|-----------|-----|
| 74 | JTM1055-V74 | C-Clip | R72 | 1 |
| 75 | JTM1055-V75 | C-Clip | S12 | 1 |
| 76 | JTM1055-V76 | Spacer | | 1 |
| 77 | JTM1055-V77 | Spacer | | 1 |
| 78 | JTM1055-V78 | Face Plate | | 1 |
| 79 | JTM1055-V79 | Dial Plate | | 1 |
| 80 | JTM1055-V80 | Screw | 1/8"x1/4" | 4 |
| 81 | TS-1502041 | Hex Socket Cap Screw | M5x16 | 4 |
| 82 | JTM1055-V82 | Screw | 1/8"x1" | 4 |
| 83 | JTM1055-V83 | Fan Assembly | | 1 |
| 84 | JTM1055-V84 | Flat Washer | 1/8" | 1 |
| | JTM1055-WBC | Wiring Box Cover (not shown) | | 1 |
| | JTM1055-PSC | Plastic Side Cover (not shown) | | 2 |
| | JTM1055-JET | JET Plaque (not shown) | | 1 |

12.2.1 Head Assembly – Exploded View



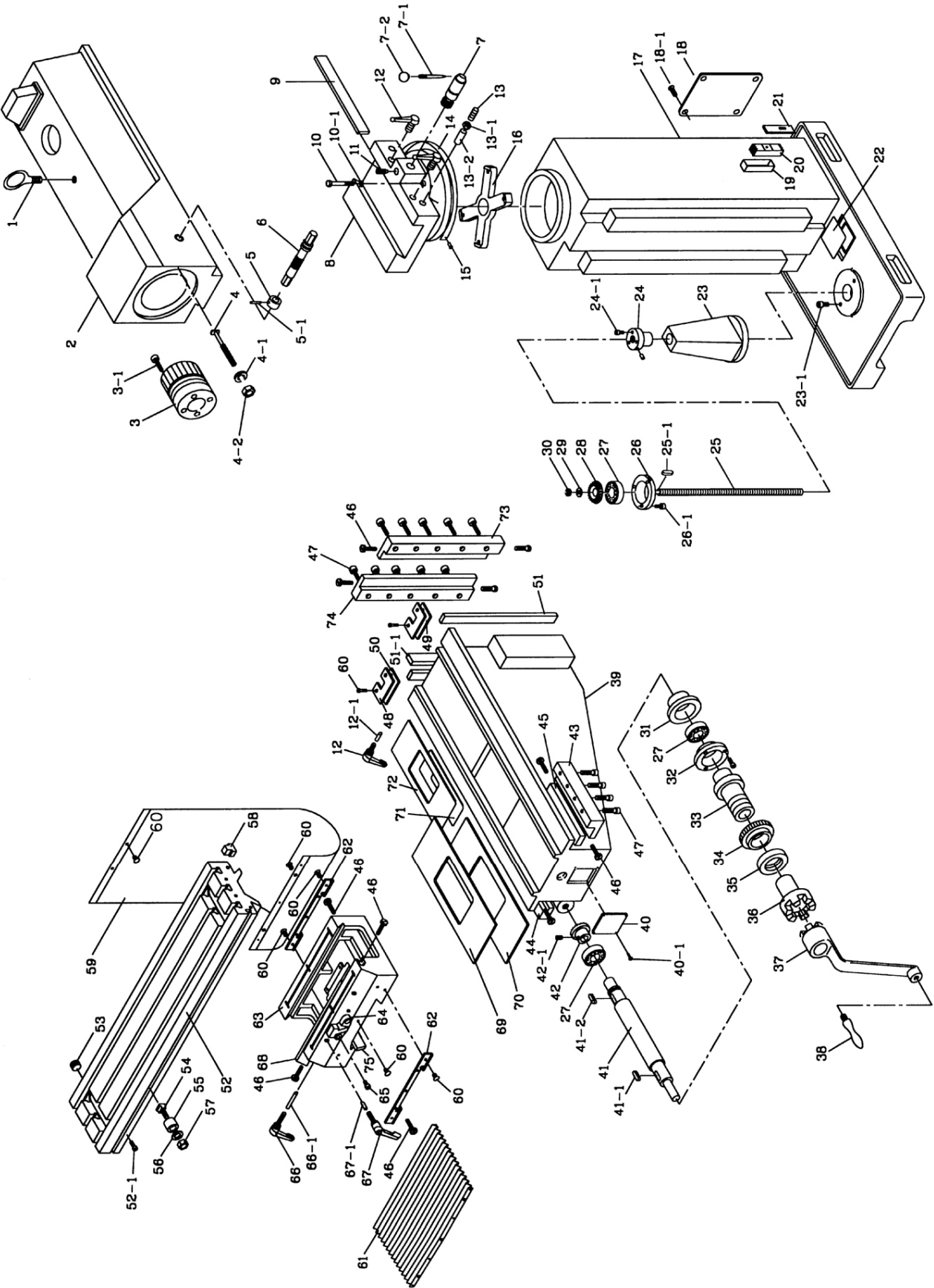
12.2.2 Head Assembly – Parts List

| Index No | Part No | Description | Size | Qty |
|----------|---------------|------------------------|------------|-----|
| 1 | JTM1055-H01 | Hex Socket Cap Screw | M5X12 | 1 |
| 2 | JTM1055-H02 | Washer | | 1 |
| 3 | JTM1055-H03 | Bevel Gear | | 1 |
| 4 | JTM1055-H04 | Shaft Sleeve | | 1 |
| 5 | JTM1055-H05 | Bushing | | 1 |
| 6 | JTM1055-H06 | Spacer | | 1 |
| 7 | JTM1055-H07 | Key | 3X3X20 | 1 |
| 8 | JTM1055-H08 | Gear | | 1 |
| 9 | JTM1055-H09 | Shaft | | 1 |
| 9-1 | JTM1055-H09-1 | Key | 3x3x10 | 1 |
| 10 | JTM1055-H10 | Hex Socket Cap Screw | 5/16"X1/2" | 1 |
| 11 | JTM1055-H11 | Washer | | 1 |
| 12 | JTM1055-H12 | Bevel Gear | | 1 |
| 13 | JTM1055-H13 | Worm Gear Cradle | | 1 |
| 14 | JTM1055-H14 | Feed Engage Pin | | 1 |
| 15 | JTM1055-H15 | Worm Gear Cradle Shaft | | 1 |
| 16 | JTM1055-H16 | Shaft Sleeve | | 1 |
| 17 | JTM1055-H17 | Knob | | 1 |
| 17-1 | JTM1055-H17-1 | Set Screw | M6x8 | 1 |
| 17-2 | JTM1055-H17-2 | Spring | | 1 |
| 17-3 | JTM1055-H17-3 | Steel Ball | | 1 |
| 18 | JTM1055-H18 | Gear Shaft | | 1 |
| 18-1 | JTM1055-H18-1 | Key | 5x5x8 | 1 |
| 19 | JTM1055-H19 | Key | 5x5x12 | 1 |
| 20 | JTM1055-H20 | Needle Bearing | BA78Z | 1 |
| 21 | JTM1055-H21 | Bushing | | 1 |
| 22 | JTM1055-H22 | Gear | | 1 |
| 23 | JTM1055-H23 | Shaft (w/bevel gear) | | 1 |
| 23-1 | JTM1055-H23-1 | Key | 4x4x45 | 1 |
| 24 | JTM1055-H24 | Bevel Gear Bushing | | 1 |
| 25 | JTM1055-H25 | Spacer | | 1 |
| 26 | JTM1055-H26 | Needle Bearing | TA2620Z | 1 |
| 27 | JTM1055-H27 | Bushing | | 1 |
| 28 | JTM1055-H28 | Worm Gear | | 1 |
| 28-1 | JTM1055-H28-1 | Spring Pin | | 1 |
| 29 | JTM1055-H29 | Bushing | | 1 |
| 30 | JTM1055-H30 | Washer | | 1 |
| 31 | JTM1055-H31 | Bushing | | 2 |
| 32 | JTM1055-H32 | Bevel Gear | | 2 |
| 33 | JTM1055-H33 | Feed Reverse Clutch | | 1 |
| 33-1 | JTM1055-H33-1 | Spring Pin | | 1 |
| 34 | TS-1513011 | Hex Socket Cap Screw | M5X10 | 4 |
| 35 | JTM1055-H35 | Cluster Gear Cover | | 1 |
| 36 | JTM1055-H36 | Shaft | | 1 |
| 37 | JTM1055-H37 | Gear Shift Crank | | 1 |
| 38 | JTM1055-H38 | Feed Gear Shift Fork | | 1 |
| 39 | JTM1055-H39 | Knob | | 1 |
| 40 | JTM1055-H40 | Set Screw | M6x6 | 1 |
| 40-1 | JTM1055-H40-1 | Set Screw | M6x6 | 1 |
| 40-2 | JTM1055-H40-2 | Spring | | 1 |
| 40-3 | JTM1055-H40-3 | Steel Ball | | 1 |
| 41 | JTM1055-H41 | Feed Worm Shaft | | 1 |
| 41-1 | JTM1055-H41-1 | Key | 5x5x15 | 1 |
| 41-2 | JTM1055-H41-2 | Key | 5x5x10 | 1 |
| 42 | JTM1055-H42 | Reverse Clutch Rod | | 1 |
| 43 | JTM1055-H43 | Brass Shaft | | 1 |

| Index No | Part No | Description | Size | Qty |
|----------|---------------|------------------------------|--------|-----|
| 44 | JTM1055-H44 | Worm Gear | | 1 |
| 44-1 | JTM1055-H44-1 | Round Head Screw | | 3 |
| 45 | JTM1055-H45 | Clutch Ring | | 1 |
| 46 | JTM1055-H46 | Overload Clutch Sleeve | | 1 |
| 47 | JTM1055-H47 | Overload Clutch | | 1 |
| 48 | JTM1055-H48 | Spring | | 1 |
| 49 | JTM1055-H49 | Clutch Lockout | | 1 |
| 49-1 | JTM1055-H49-1 | Set Screw | M6x8 | 1 |
| 49-2 | JTM1055-H49-2 | Brass Piece | | 1 |
| 50 | JTM1055-H50 | Brass Bushing | | 1 |
| 51 | JTM1055-H51 | Set Screw | | 1 |
| 52 | JTM1055-H52 | Clutch Trip Lever | | 1 |
| 52-1 | JTM1055-H52-1 | Spring Pin | | 1 |
| 53 | JTM1055-H53 | Flat Head Screw | | 2 |
| 54 | JTM1055-H54 | Clutch Washer | | 1 |
| 55 | JTM1055-H55 | E-Ring | | 1 |
| 56 | JTM1055-H56 | Clutch Arm Cover | | 1 |
| 57 | JTM1055-H57 | Nose Piece | | 1 |
| 58 | JTM1055-H58 | Spindle Dirt Shield | | 1 |
| 59 | JTM1055-H59 | Angular Bearing | 7010 | 2 |
| 60 | JTM1055-H60 | Spacer | | 1 |
| 61 | JTM1055-H61 | Spacer | | 1 |
| 62 | JTM1055-H62 | Quill | | 1 |
| 62-1 | JTM1055-H62-1 | Set Screw | M5x5 | 1 |
| 63 | JTM1055-H63 | Set Screw | M6x6 | 2 |
| 64 | JTM1055-H64 | Lock Nut | | 1 |
| 65 | JTM1055-H65 | Ball Bearing | 6008ZZ | 1 |
| 65-1 | JTM1055-H65-1 | Cross Head Screw | | 2 |
| 65-2 | JTM1055-H65-2 | C-Clip | S37 | 1 |
| 66 | JTM1055-H66 | Quill Skirt | | 1 |
| 67 | JTM1055-H67 | Spindle | | 1 |
| 68 | JTM1055-H68 | Black Plastic Ball | | 1 |
| 69 | JTM1055-H69 | Trip Handle | | 1 |
| 70 | JTM1055-H70 | Cam Rod | | 1 |
| 71 | JTM1055-H71 | Feed Trip Bracket | | 1 |
| 71-1 | TS-1513051 | Hex Socket Cap Screw | M5x25 | 2 |
| 72 | JTM1055-H72 | Hand Wheel Clutch | | 1 |
| 72-1 | JTM1055-H72-1 | Set Screw | M6x6 | 1 |
| 73 | JTM1055-H73 | Set Screw | M8x6 | 1 |
| 73-1 | JTM1055-H73-1 | Spring | | 1 |
| 73-2 | JTM1055-H73-2 | Ball | | 1 |
| 74 | JTM1055-H74 | C-Clip | | 1 |
| 75 | JTM1055-H75 | Reverse Knob | | 1 |
| 76 | JTM1055-H76 | Knob Stud | | 1 |
| 77 | JTM1055-H77 | Handle Wheel | | 1 |
| 78 | JTM1055-H78 | Handle | | 1 |
| 79 | JTM1055-H79 | Feed Trip Plunger | | 1 |
| 80 | JTM1055-H80 | Bushing | | 1 |
| 81 | JTM1055-H81 | Trip Plunger | | 1 |
| 82 | JTM1055-H82 | Spring | | 1 |
| 83 | JTM1055-H83 | Cam Rod Sleeve | | 1 |
| 83-1 | TS-1502051 | Hex Socket Cap Screw | M5x20 | 1 |
| 83-2 | JTM1055-H83-2 | Hex Nut | | 1 |
| 83-3 | JTM1055-H83-3 | Spring Pin | | 1 |
| 84 | JTM1055-H84 | Micrometer Scale | | 1 |
| 84-1 | JTM1055-V84-1 | Round Head Screw | | 2 |
| 85 | JTM1055-H85 | Quill Lock Sleeve (threaded) | | 1 |
| 85-1 | JTM1055-H85-1 | Spring | | 1 |

| Index No | Part No | Description | Size | Qty |
|----------|----------------|---|------------|-----|
| 86 | JTM1055-H86 | Quill Lock Sleeve | | 1 |
| 87 | JTM1055-H87 | Lock Handle | | 1 |
| 88 | JTM1055-H88 | Quill Stop Knob | | 1 |
| 89 | JTM1055-H89 | Quill Micro-Stop Nut | | 1 |
| 90 | JTM1055-H90 | Quill Micro-Jam Nut | | 1 |
| 91 | JTM1055-H91 | Quill Micro-Screw | | 1 |
| 91-1 | JTM1055-H91-1 | C-Clip | | 1 |
| 92 | JTM1055-H92 | Plastic Ball | | 1 |
| 93 | JTM1055-H93 | Handle | | 1 |
| 94 | JTM1055-H94 | Hub | | 1 |
| 94-1 | JTM1055-H94-1 | Set Screw | 5/16"x3/8" | 1 |
| 94-2 | JTM1055-H94-2 | Spring | | 1 |
| 94-3 | JTM1055-H94-3 | Steel Ball | | 1 |
| 95 | JTM1055-H95 | Hub Sleeve | | 1 |
| 96 | JTM1055-H96 | Spring Cover | | 1 |
| 96-1 | TS-1502101 | Hex Socket Cap Screw | M5x12 | 1 |
| 97 | JTM1055-H97 | Clock Spring | | 1 |
| 98 | JTM1055-H98 | Quill Pinion Shaft | | 1 |
| 98-1 | JTM1055-H98-1 | Key | 5x5x25 | 1 |
| 98-2 | JTM1055-H98-2 | T-Pin | | 1 |
| 99 | JTM1055-H99 | Pinion Shaft Hub | | 1 |
| 100 | JTM1055-H100 | Set Screw | | 1 |
| 101 | JTM1055-H101 | Plunger | | 1 |
| 102 | JTM1055-H102 | Lever | | 1 |
| 103 | JTM1055-H103 | Set Screw | | 1 |
| 104 | JTM1055-H104 | Feed Trip Lever | | 1 |
| 105 | JTM1055-H105 | Quill Housing | | 1 |
| 105-1 | JTM1055-H105-1 | C-Clip | | 1 |
| 106 | JTM1055-H106 | Set Screw | M6x8 | 1 |
| 107 | TS-1502071 | Hex Socket Cap Screw | M5x45 | 2 |
| 108 | JTM1055-H108 | Set Screw | M6x15 | 1 |
| 109 | JTM1055-H109 | Hex Nut | | 1 |
| 110 | JTM1055-H110 | C-Clip | S22 | 1 |
| | JTM1055-FRS | Forward Reverse Switch (not shown) | | 1 |
| | JTM1055-FRSC | Forward Reverse Switch Cover (not shown) | | 1 |
| | JTM1055-SC | Short Cable from Switch to Breaker (not shown) | | 1 |
| | JTM1055-LC | Long Cable from switch to Breaker Box (not shown) | | 1 |
| | JTM1055-SR | Plastic Strain Relief (not shown) | | 1 |

12.3.1 Base Assembly – Exploded View

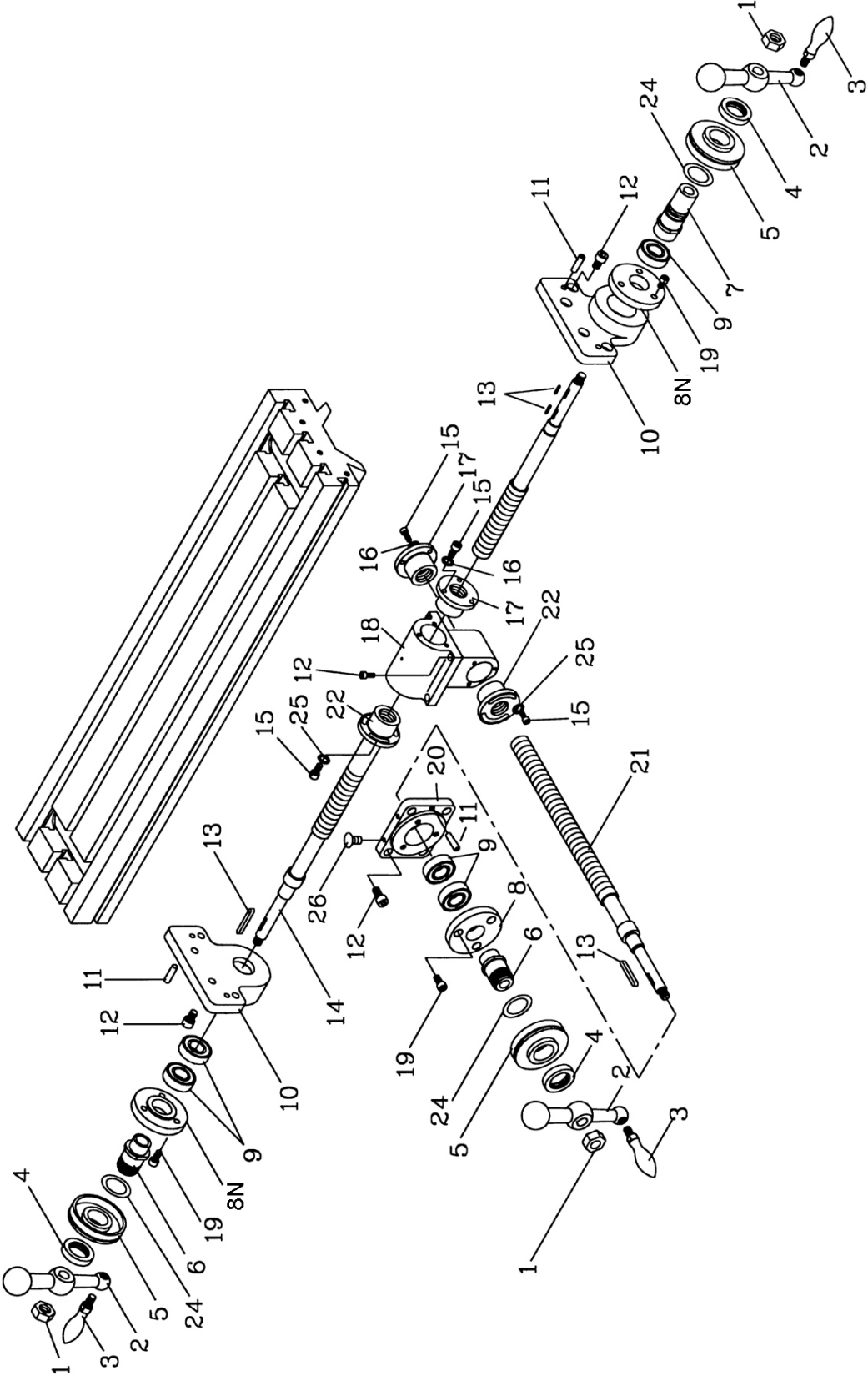


12.3.2 Base Assembly – Parts List

| Index No | Part No | Description | Size | Qty |
|----------|---------------|---|--------|-----|
| 1 | JTM1055-B01 | Eye Bolt | | 1 |
| 2 | JTM1055-B02 | Ram | | 1 |
| 3 | JTM1055-B03 | Head Tilt Block | | 1 |
| 3-1 | JTM1055-B03-1 | Hex Socket Cap Screw | M10x95 | 4 |
| 4 | JTM1055-B04 | Bolt | | 4 |
| 4-1 | JTM1055-B04-1 | Lock Washer | | 4 |
| 4-2 | JTM1055-B04-2 | Hex Nut | | 4 |
| 5 | JTM1055-B05 | Flange | | 1 |
| 5-1 | JTM1055-B05-1 | Spring Pin | | 1 |
| 6 | JTM1055-B06 | Worm Shaft | | 1 |
| 7 | JTM1055-B07 | Ram Pinion | | 1 |
| 7-1 | JTM1055-B07-1 | Handle | | 1 |
| 7-2 | JTM1055-B07-2 | Plastic Ball | | 1 |
| 8 | JTM1055-B08 | Turret | | 1 |
| 9 | JTM1055-B09 | Gib | | 1 |
| 10 | JTM1055-B10 | Bolt | | 4 |
| 10-1 | JTM1055-B10-1 | Washer | | 4 |
| 11 | JTM1055-B11 | Set Screw | | 1 |
| 12 | JTM1055-B12 | Lock Handle | | 2 |
| 12-1 | JTM1055-B12-1 | Brass Block | | 2 |
| 13 | JTM1055-B13 | Set Screw | M10X60 | 2 |
| 13-1 | JTM1055-B13-1 | Hex Nut | M10 | 2 |
| 13-2 | JTM1055-B13-2 | Block | | 2 |
| 14 | JTM1055-B14 | Scale Label | | 1 |
| 15 | JTM1055-B15 | Rivet | | 4 |
| 16 | JTM1055-B16 | Spider | | 1 |
| 17 | JTM1055-B17N | Base (<i>serial no. 120xxxx and higher</i>) | | 1 |
| 18 | JTM1055-B18 | Cover | | 1 |
| 18-1 | JTM1055-B18-1 | Round Head Screw | M5x10 | 4 |
| 19 | C-132A | Breaker Box (w/ #21) | | 1 |
| 20 | C-133 | Beaker | | 1 |
| 21 | C-134 | Breaker Box Cover | | 1 |
| | C-133A | Breaker Box Assembly (w/ #19-21) | | 1 |
| 22 | JTM1055-B22 | Strainer | | 1 |
| 23 | JTM1055-B23 | Lead Screw Housing | | 1 |
| 23-1 | TS-1503041 | Hex Socket Cap Screw | M6x16 | 3 |
| 24 | JTM1055-B24 | Flange | | 1 |
| 24-1 | TS-1503081 | Hex Socket Cap Screw | M6x35 | 2 |
| 25 | JTM1055-B25 | Lead Screw | | 1 |
| 25-1 | JTM1055-B25-1 | Key | 5x5x20 | 1 |
| 26 | JTM1055-B26 | Flange | | 1 |
| 26-1 | TS-1503051 | Hex Socket Cap Screw | M6x20 | 3 |
| 27 | BB-6204ZZ | Ball Bearing | 6204ZZ | 3 |
| 28 | JTM1055-B28 | Bevel Gear | | 1 |
| 29 | JTM1055-B29 | Washer | | 1 |
| 30 | JTM1055-B30 | Hex Nut | | 1 |
| 31 | JTM1055-B31 | Bearing Cover | | 1 |
| 32 | JTM1055-B32 | Bearing Stop | | 1 |
| 33 | JTM1055-B33 | Dial Holder | | 1 |
| 34 | JTM1055-B34 | Dial Ring | | 1 |
| 35 | JTM1055-B35 | Dial Lock Nut | | 1 |
| 36 | JTM1055-B36 | Gear Shear Clutch | | 1 |
| 37 | JTM1055-B37 | Elevating Crank | | 1 |
| 38 | JTM1055-B38 | Handle | | 1 |
| 39 | JTM1055-B39N | Knee (<i>serial no. 120xxxx and higher</i>) | | 1 |
| 40 | JTM1055-B40 | Knee Front Cover | | 1 |

| Index No | Part No | Description | Size | Qty |
|----------|----------------|---|-----------|---------|
| 40-1 | JTM1055-B40-1 | Cross Head Screw | M5x20 | 4 |
| 41 | JTM1055-B41 | Shaft | | 1 |
| 41-1 | JTM1055-B41-1 | Key | 3x3x10 | 1 |
| 41-2 | JTM1055-B41-2 | Key | 4x4x16 | 1 |
| 42 | JTM1055-B42 | Bevel Gear | | 1 |
| 42-1 | JTM1055-B42-1 | Set Screw | M6x20 | 1 |
| 43 | JTM1055-B43 | Gib Holder-R | | 1 |
| 44 | JTM1055-B44 | Gib Holder-L | | 1 |
| 45 | JTM1055-B045 | Gib | | 2 |
| 46 | JTM1055-B46 | Adjusting Screw | | 12 |
| 47 | TS-1506041 | Hex Socket Cap Screw | M12x35 | 18 |
| 48 | JTM1055-B48 | Wiper Cover | | 2 |
| 49 | JTM1055-B49 | Wiper-R | | 1 |
| 50 | JTM1055-B50 | Wiper-L | | 1 |
| 51 | JTM1055-B51N | Gib (<i>serial no. 120xxxx and higher</i>) | | 1 |
| 51-1 | JTM1055-B51-1N | Gib (<i>serial no. 120xxxx and higher</i>) | | 1 |
| 52 | JTM1055-B52 | Table | | 1 |
| 52-1 | TS-1502061 | Hex Socket Cap Screw | M5x25 | 2 |
| 53 | JTM1055-B53 | Plug | | 2 |
| 54 | JTM1055-B54 | T-Bolt | | 2 |
| 55 | JTM1055-B55 | Bushing | | 2 |
| 56 | JTM1055-B56 | Flat Washer | | 2 |
| 57 | JTM1055-B57 | Hex Nut | | 2 |
| 58 | JTM1055-B58 | Rubber T-Nut | | 6 |
| 59 | JTM1055-B59 | Chip Guard | | 1 |
| 60 | JTM1055-B60 | Screw | | 22 |
| 61 | JTM1055-B61 | Dust Protective Cover | | 1 |
| 62 | JTM1055-B62 | Wiper | | 2 |
| 63 | JTM1055-B62N | Saddle (<i>serial no. 120xxxx and higher</i>) | | 1 |
| 64 | JTM1055-B64 | Stop Block | | 1 |
| 65 | JTM1055-B65 | Hex Socket Cap Screw | | 2 |
| 66 | JTM1055-B66 | Handle | | 2 |
| 66-1 | JTM1055-B66-1 | Brass Block | | 2 |
| 67 | JTM1055-B67 | Handle | | 2 |
| 67-1 | JTM1055-B67-1 | Brass Block | | 2 |
| 68 | JTM1055-B68N | Gib (<i>serial no. 120xxxx and higher</i>) | | 1 |
| 69 | JTM1055-B69 | Chip Guard Assembly (includes: #69-72) | | 1 |
| 70 | | Chip Guard-L | | 1 |
| 71 | | Chip Guard-M | | 1 |
| 72 | | Chip Guard-S | | 1 |
| 73 | JTM1055-B73 | Gib Holder-R | | 1 |
| 74 | JTM1055-B74 | Gib Holder-L | | 1 |
| 75 | JTM1055-B75N | Gib (<i>serial no. 120xxxx and higher</i>) | | 1 |
| | JTM1055-TBC | Toolbox Complete (not shown) | | 1 |
| | JTM1055-LP | Leveling Pad (not shown) | | 4 |
| | JTM1055-LB | Leveling Bolt w/Nut (not shown) | | 4 |
| | STRIPE-1-3/4 | JET Striping (not shown) | 1-3/4" W. | per ft. |
| | JTM1055-ID | ID & Warning Label (not shown) | | 1 |

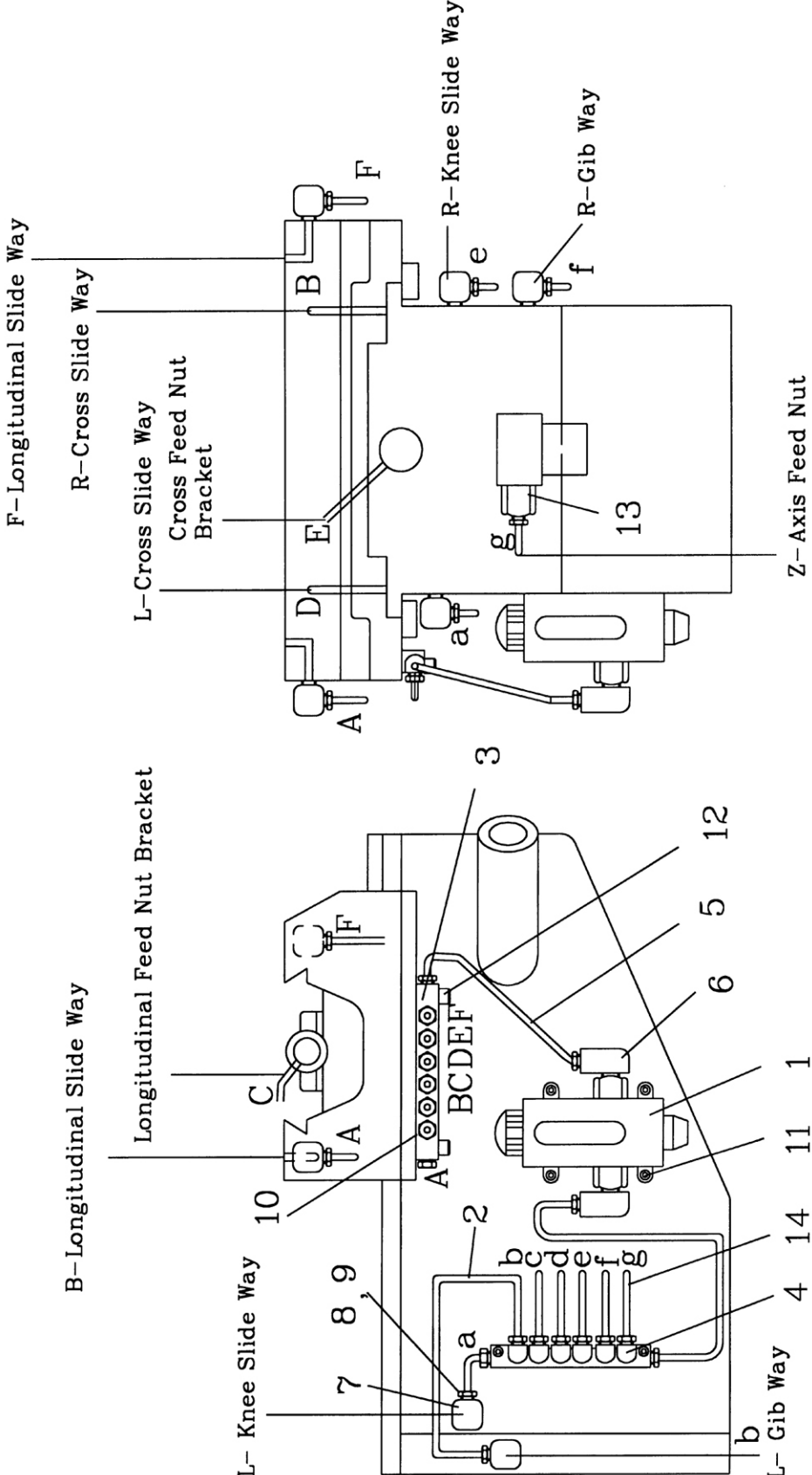
12.4.1 Lead Screw Assembly – Exploded View



12.4.2 Lead Screw Assembly – Parts List

| Index No | Part No | Description | Size | Qty |
|----------|--------------|--|-----------|-----|
| 1 | JTM1055-L01 | Nut | 1/2-20UNF | 3 |
| 2 | JTM1055-L02 | Ball Crank | | 3 |
| 3 | JTM1055-L03 | Handle | | 3 |
| 4 | JTM1055-L04 | Dial Lock Nut | | 3 |
| 5 | JTM1055-L05 | Dial | | 3 |
| 6 | JTM1055-L06 | Dial Holder | | 2 |
| 7 | JTM1055-L07 | Dial Holder-(left) | | 1 |
| 8 | JTM1055-L08 | Bearing Stop for Y-Axis | | 1 |
| 8N | JTM1055-L08N | Bearing Stop for X-Axis (<i>serial no. 120xxxx and higher</i>) | | 2 |
| 9 | BB-6204ZZ | Ball Bearing | | 5 |
| 10 | JTM1055-L10N | Extended Bearing Bracket (<i>serial no. 120xxxx and higher</i>) | | 2 |
| 11 | JTM1055-L11 | Spring Pin | M5X20 | 6 |
| 12 | TS-1505031 | Hex Socket Cap Screw | M10X25 | 16 |
| 13 | JTM1055-L13 | Key | 3X3X25 | 4 |
| 14 | JTM1055-L14N | Lead Screw for Ext. Bearing Bracket (<i>serial no. 120xxxx and higher</i>) | | 1 |
| 15 | TS-1503041 | Hex Socket Cap Screw | M6X25 | 8 |
| 16 | TS-1550041 | Washer | M6 | 2 |
| 17 | JTM1055-L17 | Feed Screw Nut | | 2 |
| 18 | JTM1055-L18 | Feed Nut Bracket | | 1 |
| 19 | TS-1514011 | Hex Socket Cap Screw | M6X12 | 9 |
| 20 | JTM1055-L20 | Cross Feed Bearing Bracket | | 1 |
| 21 | JTM1055-L21 | Cross Feed Screw | | 1 |
| 22 | JTM1055-L22 | Adjustable Cross Feed Nut | | 2 |
| 24 | JTM1055-L24 | Spacer | | 3 |
| 25 | JTM1055-L25 | Lock Washer | M6 | 2 |
| 26 | JTM1055-L26 | Cross Head Screw | | 2 |

12.5.1 One Shot Lubrication System – Diagram

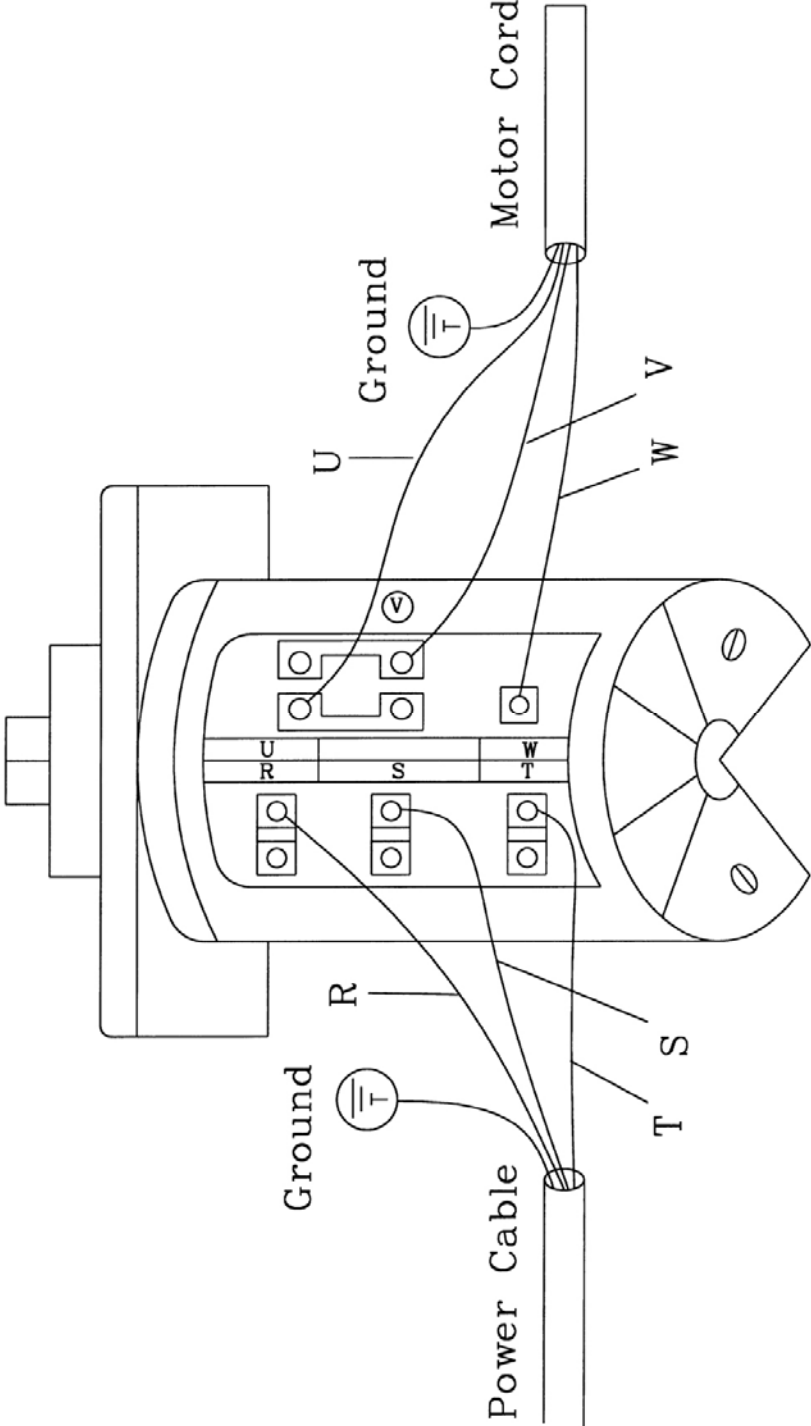


12.5.2 One Shot Lubrication System – Parts List

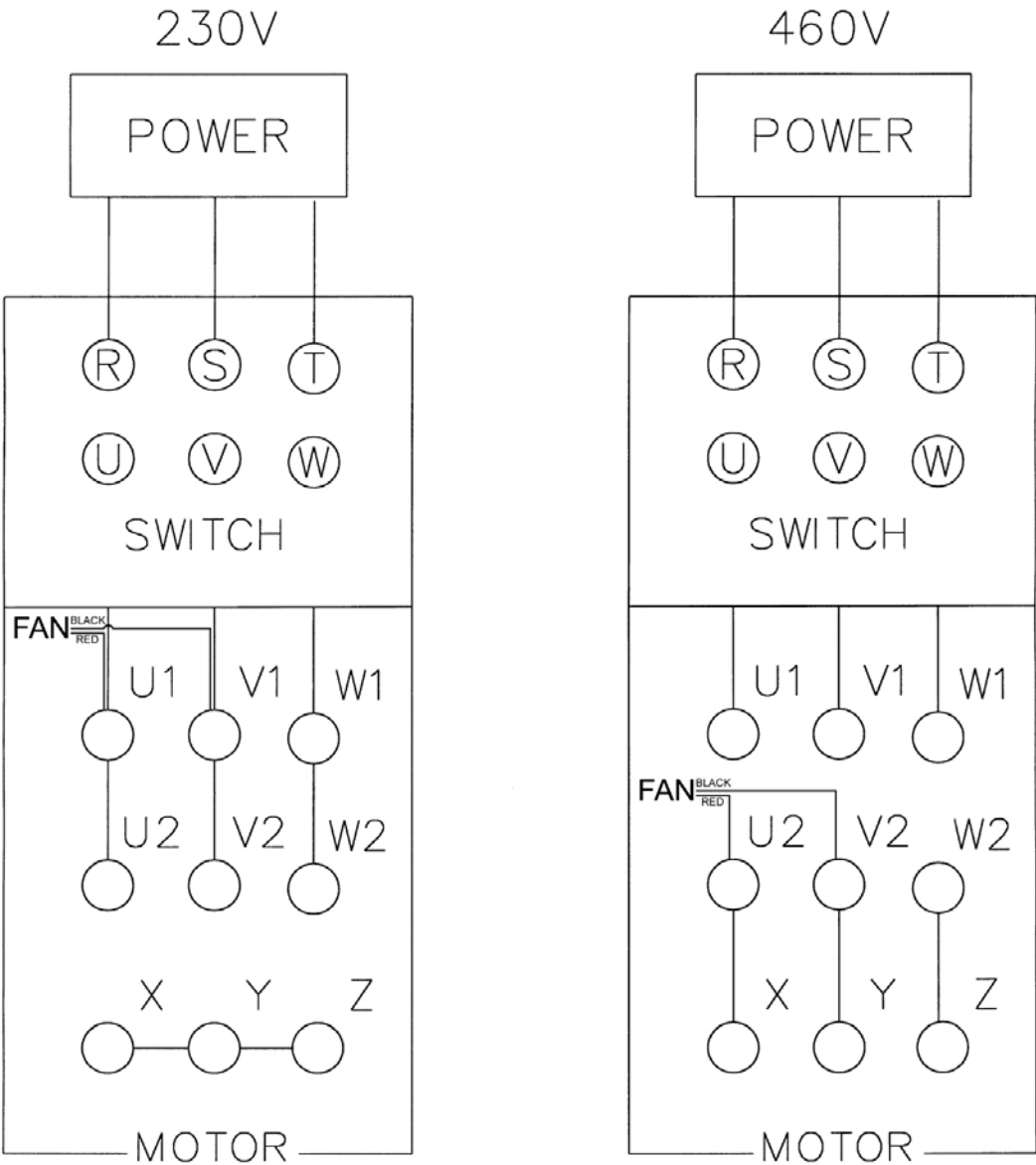
| Index No | Part No | Description | Size | Qty |
|----------|-------------|----------------------------|-----------|-----|
| 1 | JTM1055-CLA | Lubricating Pump | | 1 |
| 2 | ALMP-04 | Aluminum Pipe | 13.5x450L | 1 |
| 3 | A-8 | Oil Regulating Distributor | | 1 |
| 4 | JTM1055-A4 | Oil Regulating Distributor | | 1 |
| 5 | A-5 | Flexible Steel Tube | 4X550 | 1 |
| 6 | PH-4011 | Elbow joint | | 2 |
| 7 | PI-401 | Elbow joint | | 8 |
| 8 | PA-4 | Thimble Nut | | 26 |
| 9 | PB-4 | Thimble | | 26 |
| 10 | PG-004 | Union | | 1 |
| 11 | TS-1503031 | Hex Socket Cap Screw | M6X12 | 4 |
| 12 | TS-1502061 | Hex Socket Cap Screw | M5X25 | 4 |
| 13 | PD-401 | Straight Joint | | 1 |
| 14 | A-14 | Nylon Piece | 4X700 | 1 |

13.0 Electrical Connections

13.1 Forward/Reverse Switch Wiring



13.2 Wiring Diagram



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