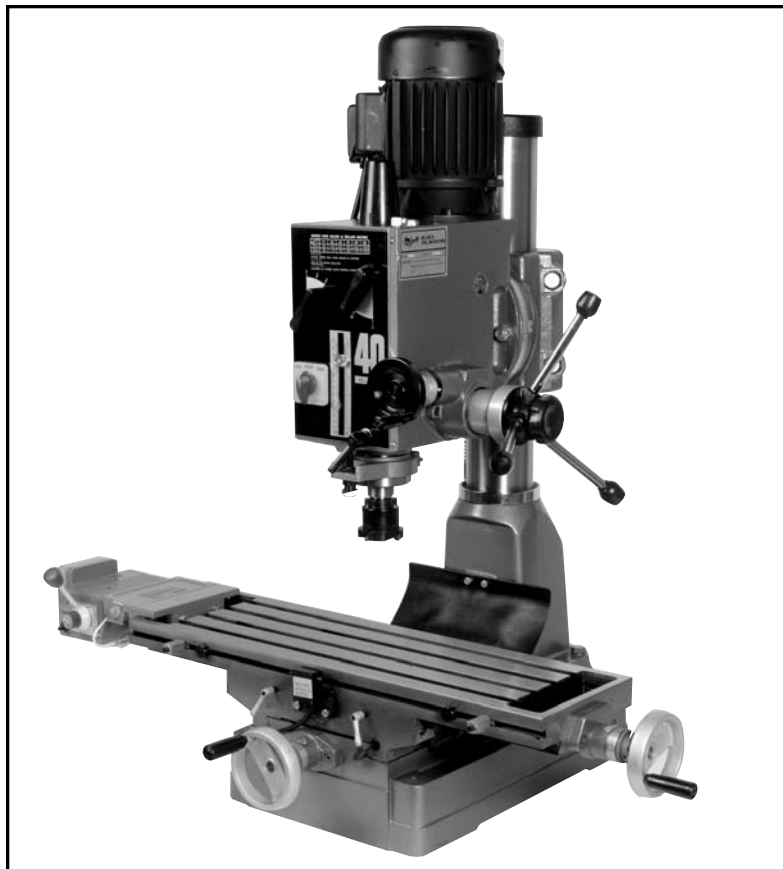




**GEAR HEAD MILL / DRILL  
MODEL G1126  
INSTRUCTION MANUAL**



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# **WARNING!**

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

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

**Your risk from these 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 specially designed to filter out microscopic particles.**

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## I. INTRODUCTION

We are proud to offer the Model G1126 Gear-Head Mill / Drill. The Model G1126 is part of a growing Grizzly family of fine metalworking machinery. When used according to the guidelines described in this manual, you can expect years of trouble-free, enjoyable operation and proof of Grizzly's commitment to customer satisfaction.

The Model G1126 is ideal for use in a small-to-medium sized machine shop or by the serious home craftsman. This mill / drill features a 1½ H.P., 110/220V single-phase motor. The Model G1126's precision gearbox and full reversing capabilities give it six working speeds in either spindle direction. The Model G1126 features a big 9½" x 32" table, which rides on wide precision dovetails, giving smooth and solid movement.

A number of accessories for the Model G1126, including an optional flycutter and a 52-pc. clamping kit, are available through the Grizzly catalog.

We are also pleased to provide this instructional manual with the Model G1126 Gear-Head Mill / Drill. This manual was written to guide you through assembly, review safety considerations and cover general operating procedures. It represents our latest effort to produce the best documentation possible. If you have any constructive criticisms or comments you feel we should include in our next printing, please write us at the address below.

Manager, Technical Documentation  
Grizzly Imports, Inc.  
P.O. Box 2069  
Bellingham, WA 98227

Finally, we stand behind our machines. We have two excellent regional service departments at your disposal, should the need arise. If you have any service questions or parts requests, please call or write us at the location listed below.

Grizzly Industrial, Inc.  
1203 Lycoming Mall Circle  
Muncy, PA 17756  
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E-Mail: techsupport@grizzly.com  
Web Site: <http://www.grizzly.com>

## II. COMMENTARY

To operate this, or any power tool, safely and efficiently, it is essential to become as familiar with its characteristics as possible. Take as much time as necessary to become acquainted with the Model G1126 Mill / Drill. The time you invest before you begin to use this machine will be time well spent. Also, read all of the safety procedures. If you do not understand something, do not operate this machine.

The specifications, drawings and photographs in this manual represent the Model G1126, as supplied when the manual was prepared. However, owing to Grizzly's policy of continuous improvement, changes to the Model G1126 may be made at any time with no obligation on the part of Grizzly.

The information in this manual has been obtained from sources believed to be reliable and as up-to-date as possible. While this manual is intended to be a good source for basic information, it is by no means the last word on milling or metalworking. Instead, we have focused primarily on the proper assembly and adjustment of the machine. We have also included some important safety measures which we believe to be essential to this machine's operation. Though most safety measures are generally universal, Grizzly cautions that each workshop is different and safety rules should be considered *as they apply to your individual situation*.

The Model G1126 is designed for highly-skilled individuals who have an understanding of metals and machining. A strong knowledge of metalworking is essential for the proper use of the mill / drill. We realize there are numerous kinds of cutters and specialized techniques used in metalworking. To list all of the techniques necessary to operate a mill / drill correctly for specific applications would require many volumes.

If you are not familiar with milling machines and their safe operation, we strongly suggest you obtain as many books on the subject as you can. A visit to the local library, or time spent browsing through back issues of machinist's magazines will prove beneficial in gaining knowledge of mill / drill operations.

### III. SAFETY RULES FOR ALL TOOLS

**WARNING!** As with all power tools, there is a certain amount of danger associated with the Model G1126 Gear-Head Mill / Drill. Using the tool with respect and caution will considerably lessen the possibility of mechanical damage or operator injury. However, if normal safety precautions are overlooked or ignored, injury to the operator or others in the area is possible.

There are certain applications for which this tool was designed. We strongly emphasize that this tool should never be modified and/or used for any application other than that for which it was designed. If you are confused about any aspect of this machine, **do not** use it until you have resolved any questions you might have. The following are important safety rules for all tools:

1. **KNOW YOUR POWER TOOL.** Read the owner's manual carefully. Learn the tool's applications and limitations, as well as its particular hazards.
2. **KEEP GUARDS IN PLACE** and in working order.
3. **GROUND ALL TOOLS.** If the tool is equipped with a three-prong plug, it should be plugged into a three-hole grounded outlet. If an adapter is used to accommodate a two-prong receptacle, the adapter plug must be attached to a known ground. Never remove the grounding prong.
4. **REMOVE ADJUSTING KEYS AND WRENCHES.** Make it a habit to ensure keys and adjusting wrenches are removed from the machine before turning it on.

5. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
6. **AVOID DANGEROUS ENVIRONMENTS.** Do not use power tools in damp or wet locations or expose them to rain. Keep your work area well lighted.
7. **KEEP CHILDREN AND VISITORS AWAY.** All children and visitors should be kept a safe distance away from your work area.
8. **MAKE WORKSHOP CHILD-PROOF** with padlocks, master switches, or by removing starter keys.
9. **DO NOT FORCE TOOL.** Tools work better and more safely when they are allowed to work at their own speed.
10. **USE THE RIGHT TOOL.** Do not use a tool or an attachment to do a job it wasn't intended for.
11. **WEAR PROPER APPAREL.** Do not wear loose clothing, gloves, neckties, or jewelry that might get caught in moving parts. Non-slip footwear is also recommended. Wear a hat or other protective head wear if your hair is long.
12. **USE SAFETY GLASSES AND EAR PROTECTION.** Also use a dust mask if the cutting operation creates dust or fumes.
13. **SECURE YOUR WORK.** Use clamps or a fixture to hold your work. It is safer than using your hands and frees up both hands for operating the tool.
14. **DO NOT OVERREACH.** Keep proper footing and balance at all times.
15. **MAINTAIN TOOLS IN TOP CONDITION.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DISCONNECT TOOLS FROM POWER** before servicing and when changing accessories, such as blades, bits and cutters.
17. **USE RECOMMENDED ACCESSORIES.** Consult the current catalog for recommended accessories. The use of improper accessories may be hazardous.
18. **AVOID ACCIDENTAL STARTING.** Make sure the switch is in the "OFF" position before plugging in the cord.
19. **NEVER STAND OR LEAN ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.
20. **CHECK DAMAGED PARTS.** Before further use of the tool, any part or guard that is damaged should be promptly repaired or replaced. Do not operate the machine until you are certain it is in perfect running condition. Failure to follow this precaution could result in further mechanical damage and operator injury.
21. **DIRECTION OF FEED.** Always feed your work against the direction of blade or cutter travel. Workpieces fed in the same direction as the cutter travel could be forced out of your control.

- 22. NEVER LEAVE THE TOOL RUNNING UNATTENDED - TURN POWER OFF.** Do not leave the tool until it comes to a full stop.
- 23. DRUGS, ALCOHOL, MEDICATION.** Do not operate the tool under the influence of drugs, alcohol, or any medication. Never operate machinery when overly fatigued.

## IV. UNPACKING

The Model G1126 comes from the factory in a wooden crate. While it is still on its pallet, use a forklift (if available) to move the machine to its permanent location. Once in place, carefully remove the crate surrounding the Model G1126 with a hammer or crowbar. Lift the Model G1126 with a sling wrapped around the milling head to lift the machine off the pallet and onto your bench. Make sure you tighten all the locks that restrict moving parts to avoid sudden shifts which could unbalance the machine.

**REMEMBER:** Always wear ANSI-approved safety glasses when uncrating equipment.

If you find the machine is damaged after you've signed for delivery and the truck and driver are already gone, you will need to file a freight claim with the carrier. Save the containers and all packing materials for inspection by the carrier or their agent. Without the packing materials, filing a freight claim can be difficult. If you need advice regarding this situation, please call us.

**Caution:** The mill / drill weighs a hefty 660 pounds in its packaging. DO NOT attempt to move this machine without proper lifting equipment.

## V. PIECE INVENTORY

Take a quick inventory of the parts and put them aside for assembly later.

Since the majority of the Model G1126 is pre-assembled at the factory, there aren't a lot of items to inventory. You should have the following:

- Mill / Drill Unit
- Power Feed
- Fly Cutter
- Handwheels
- Adjustment Wrench
- Flycutter
- Drill Chuck Arbor
- Quill Feed Rods (3 pcs.)
- 1/2" Drill Chuck and Key



## VI. CLEAN-UP BEFORE ASSEMBLY

All of the unpainted surfaces on this machine – and a few of the painted ones – are coated with a preservative oil, called Cosmolene, which prevents rust and corrosion during shipping. The coating can be removed with paint thinner (mineral spirits) and a good supply of paper towels, although you may find that careful scraping with a putty knife or plastic spatula may be necessary where the coating is particularly thick. Use caution when removing the coating with your putty knife to avoid scratching the table top or painted surfaces on the machine.

**DO NOT** use gasoline, lacquer thinner, acetone, or other highly-flammable solvents. The possibility of flash fire or explosion is far greater and they don't work much better anyway. Don't use chlorinated solvents, such as perchloroethelene; they will lift the paint and ruin the mill / drill's finish. Be careful when working around the drive belts. Any solvent that cuts grease will, in the long run, be harmful to rubber. While you are cleaning the mill / drill, please pay attention to the following rules:

1. Work only in a well-ventilated area.
2. Make sure there are no sources of open flame in your work area, such as pilot lights or woodstoves.
3. DO NOT smoke while you're working.
4. Dispose of soiled towels in a proper manner to avoid fire and environmental damage.

You may find some other small parts also covered with Cosmolene. The smaller pieces are best cleaned by placing them in a container of solvent for several minutes. After soaking, the remaining coating may be removed with firm pressure, using rags or paper towels. Some pieces may have to be pried apart using a putty knife. Once again, dispose of waste properly.

## VII. SITE PLANNING

When placing the Model G1126 in your shop, three considerations should be addressed; floor load, working clearances and electrical requirements. We'll look at the first two requirements now and leave the third for the next section.

### A. FLOOR LOAD

Your Model G1126 represents a fairly large weight load in a small footprint. For planning purposes, the intended workbench should be able to take a uniform distributed live load of 175 pounds per square foot. Most commercial and residential floors are suitable for the Model G1126, though some older wooden residential floors may require some additional build up to support the machine, the bench and the operator.

### B. WORKING CLEARANCES

Working clearances will vary from one customer to the next, depending on individual requirements. Place your Model G1126 in a position that can handle your most ambitious working requirements. The working area around the Model G1126 should be lit well enough to eliminate shadows.

## VIII. ELECTRICAL SERVICE REQUIREMENTS

The Model G1126 is furnished with a complete electrical package: A 1,720 RPM 1½ H.P. motor, ON-OFF starter switch, FORWARD/REVERSE switch and a cord set. The motor is single phase and can be wired for 110V or 220V. As delivered, the G1126 is ready for 110V operation. If you want 220V operation, the wiring system must be changed for the desired voltage.

### A. GENERAL

The Model G1126 comes with a standard 110V cord and plug. Under extreme load, the Model G1126's motor could draw a potential 22 amps. Yet under the majority of circumstances, the Model G1126 should work satisfactorily when connected to its own dedicated 20-amp circuit.

If you choose to re-wire the Model G1126 for 220V operation, use NEMA-approved connector plugs. See Figure 1 for examples of typical plug configurations. **You should also check with our service department for specific information on motor re-wiring requirements.** Your local building department or a licensed electrical contractor should also be able to help you if electrical requirements exceed your understanding.

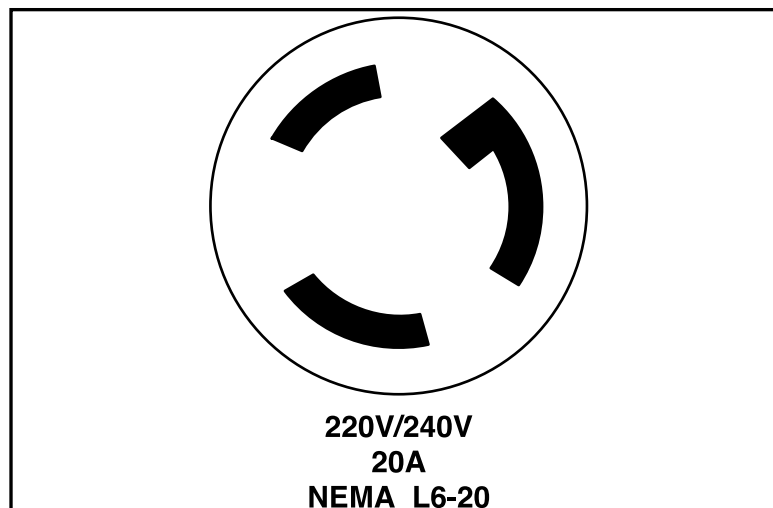


Figure 1

### B. GROUNDING

If you are plugging into an existing outlet, ensure that it is grounded. If not, it will be necessary to run a separate grounding wire, #10 copper or larger, from the frame of the machine to the grounding stud at your service panel.

If you find it necessary to use an extension cord with the Model G1126, make sure its conductors are rated at #10 or larger (for 220V). The cord should be rated for hard service (S-type jacket), with NEMA-approved connectors and a ground wire. An SJ-rated cord (#12-wire) should be sufficient for 110V.

**CAUTION:** Never cut the grounding pin from the plug. If you have problems with the electrical equipment supplied with the Model G1126, please contact our service department for assistance.

## IX. ASSEMBLY

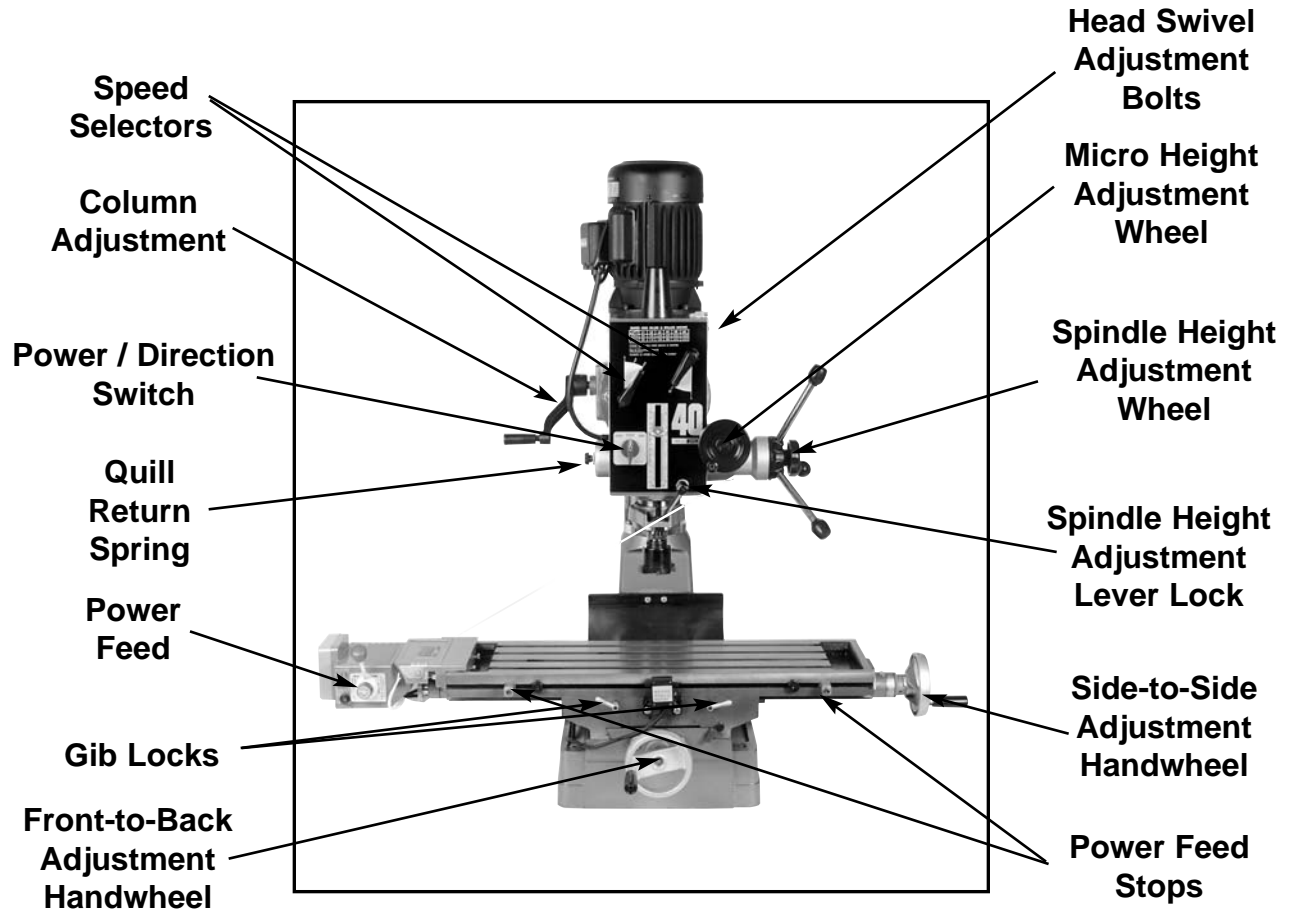


Figure 2

The Model G1126 is largely pre-assembled at the factory, so very little actual assembly is required. The motor is already mounted and all wiring is in place. The remaining parts which require assembly are:

- A. Power Feed
- B. Handwheels
- C. Cutter / Arbor Installation

The necessary assembly can be accomplished with a few hand tools. You'll need a 12mm wrench, a 14mm wrench, metric Allen wrenches and a Phillips head screwdriver. An adjustable wrench and a metric socket set are helpful, but not essential, for assembly.

### A. POWER FEED

The Model G1126 features a 110V auto-feed mechanism, allowing hands-free side-to-side passes while milling. The variable-speed feed control ensures greater consistency when milling large, flat surfaces. To install the auto-feed mechanism:

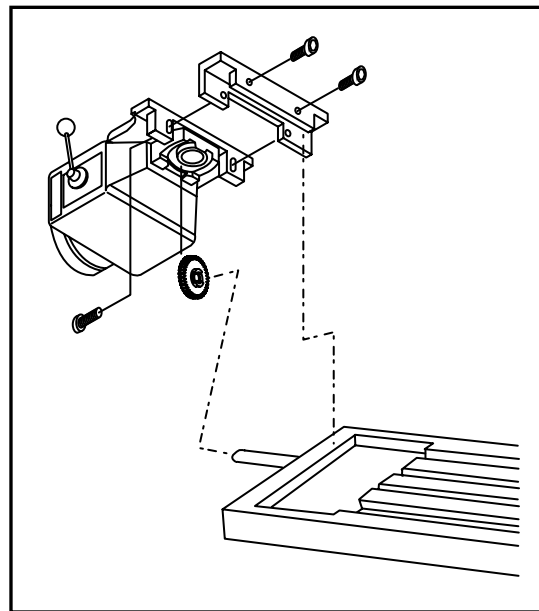
1. Attach the drive gear to the end of the table screw, using the attached setscrew. The gear couplers will lock in place with the matching coupler on the end of the table screw.
2. Attach the clamping bracket provided with the auto-feed mechanism, as shown in Figure 3.

3. When the auto feed and the clamping bracket are secured together, set the assembly on the end of the table, so the gears mesh. The clamping bracket will fit over the top of the table, allowing the bolts on the inboard side of the bracket to be tightened against the table's cast iron surface. Mark the point on the table's trough where the mounting bolts contact the table and spot drill to give the mounting bolts a surface to "bite" without slipping on the rough cast surface.

**NOTE:** Use care when aligning the leadscrew gears with the gearing on the power feeder. The fit is correct when you can just slightly wiggle one gear without moving the other. If there is too much space between the gears, teeth can be stripped under heavy loads. If the teeth mesh too tightly, the supporting bearings in the power feeder will wear out prematurely.

An alternative method for attaching the power feed is to eliminate the clamping bracket and mount the power feed directly to the table. As with the other method, you want to be certain that the gears are properly aligned. Once aligned, mark, drill and tap holes in the end of the table casting. Bolt the power feed to the casting.

In many ways, this method of attachment is much better than the other method. The removal of the clamping bracket provides more secure mounting and provides a greater area of flat table space.



**Figure 3**

4. Replace the center travel stop at the front of the table with the microswitch. The switch, when used with the adjustable stops, automatically limits table movement.

**Caution:** Before operating the Model G1126, make sure the placement of the auto feed's power cord and the control cord for the microswitch are both clear of any movements which could pinch or crush either cord. Before operating the power feed, mark the maximum distance the table can move before the power feed comes in contact with the machine's base. Use that as a reference mark each time you re-adjust your table stops to avoid possible damage to the power feed.

## B. HANDWHEELS

When the auto-feed mechanism is in place, attach the handwheel to the other end of the leadscrew. The handwheel coupling will lock, like the auto-feed mechanism, with the coupling on the leadscrew. Tighten the setscrew once the handwheel is in place.

Attach the other handwheel to the leadscrew at the front of the base casting. When the handwheel locks in place, tighten the setscrew.

## C. CUTTER / ARBOR INSTALLATION

The Model G1126 features an R-8 spindle which accepts all industrial collets and arbors. To install a collet or arbor:

1. Remove the spindle cap from the top of the mill head.
2. Insert the collet or cutting tool's arbor in the spindle housing, making sure to line up the keyway with the matching pin in the spindle opening.
3. Turn the hex head at the top of the drawbar clockwise until the threads at the bottom of the drawbar mesh with the female threads in the top of the collet or arbor. See Figure 4.
4. If you're using a collet with a bit or cutting tool, place the bit in the hole at the bottom of the collet and continue to tighten the drawbar until both the collet and bit are tightly in place.

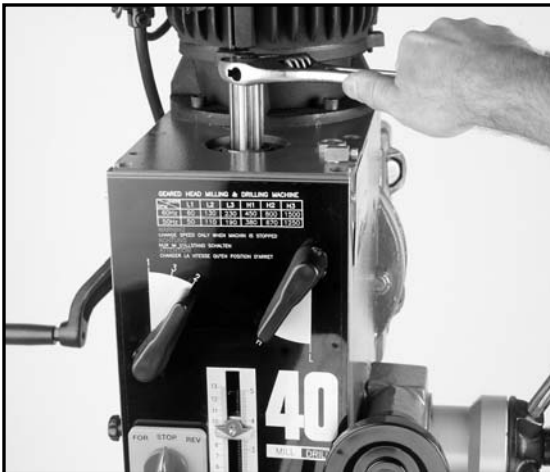


Figure 4

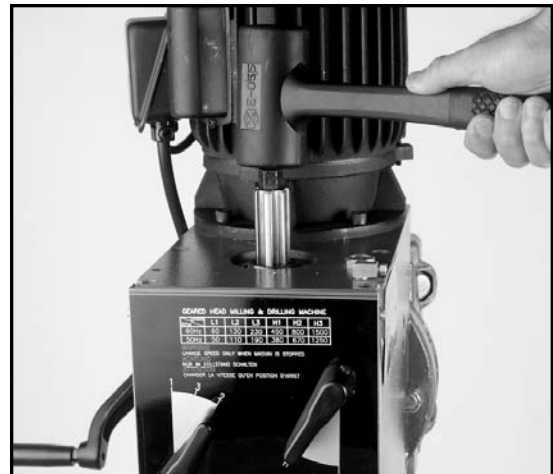


Figure 5

To remove a collet or arbor:

1. Loosen the drawbar (2 or 3 turns).
2. Tap on the top of the drawbar with a mallet. See Figure 5.
3. Once the collet or arbor is loosened from the taper, continue to turn the drawbar counterclockwise until the drawbar and the female threads of the arbor or collet are unattached. Hold the collet or arbor as you loosen the drawbar. Once loose, remove and replace with your desired cutter. **Remove cutting tools from arbor when not in use.**

## X. OPERATION

The bench-mounted Model G1126 Gear-Head Mill / Drill is a fundamental metalworking machine capable of most standard milling and drilling operations. In order to effectively use the machine, it's necessary to understand the various adjustments the Model G1126 features. This section deals with the specific adjustments required to operate the Model G1126.

### A. TABLE

The Model G1126's table rides on precision dovetail ways. Adjustment from side to side is accomplished by turning the handwheel at the end of the table, or by using the power feed. Movement from front to back is controlled by the handwheel at the front of the machine's base. The mill / drill's tables can be locked to eliminate unwanted movement in either direction by using the locking levers located just below the table. The side-to-side locks are located on either side of the power feed microswitch. The locks restricting movement from front to back are located on the drill / mill's base, just below the table. See Figure 6.

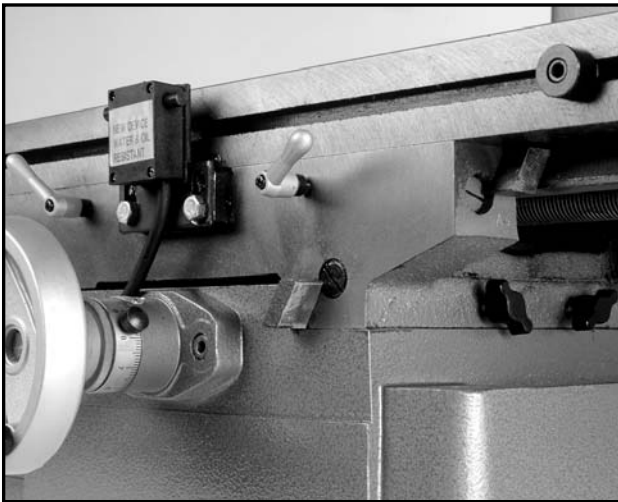


Figure 6

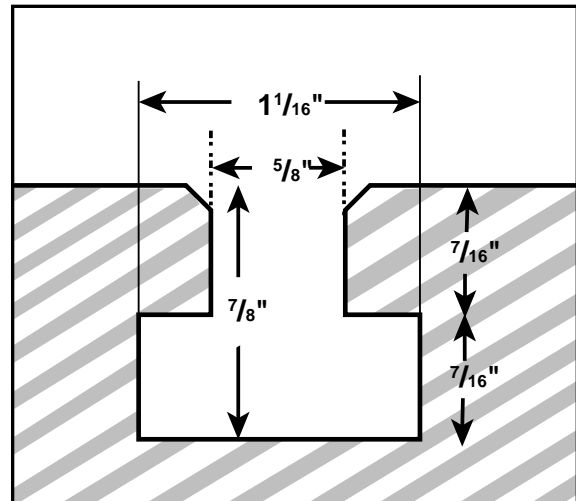


Figure 7

The table on your G1126 Gear-Head Mill / Drill is equipped with  $\frac{1}{2}$ " T-slots, which allow you to mount fixtures, such as vises, rotary tables and dividing heads to your machine. The T-slots are designed to accept  $\frac{1}{2}$ " T-bolts to anchor the optional equipment mentioned above. Keep in mind that T-bolts are measured at the thread, not at the head, so you'll want to use care when sizing T-bolts for use with the Model G1126. See Figure 7 for specific measurements.

### B. POWER FEED

The power feed supplied with your Model G1126 features a variable speed control, which allows you to adjust feed speed to fit specific materials you choose to mill. The power feed is activated by a switch mounted on the outboard end of the power feed gearbox.

A microswitch mounted on the front of the table casting allows you to limit table travel and also functions as an "auto pilot" for hands-free multiple passes.

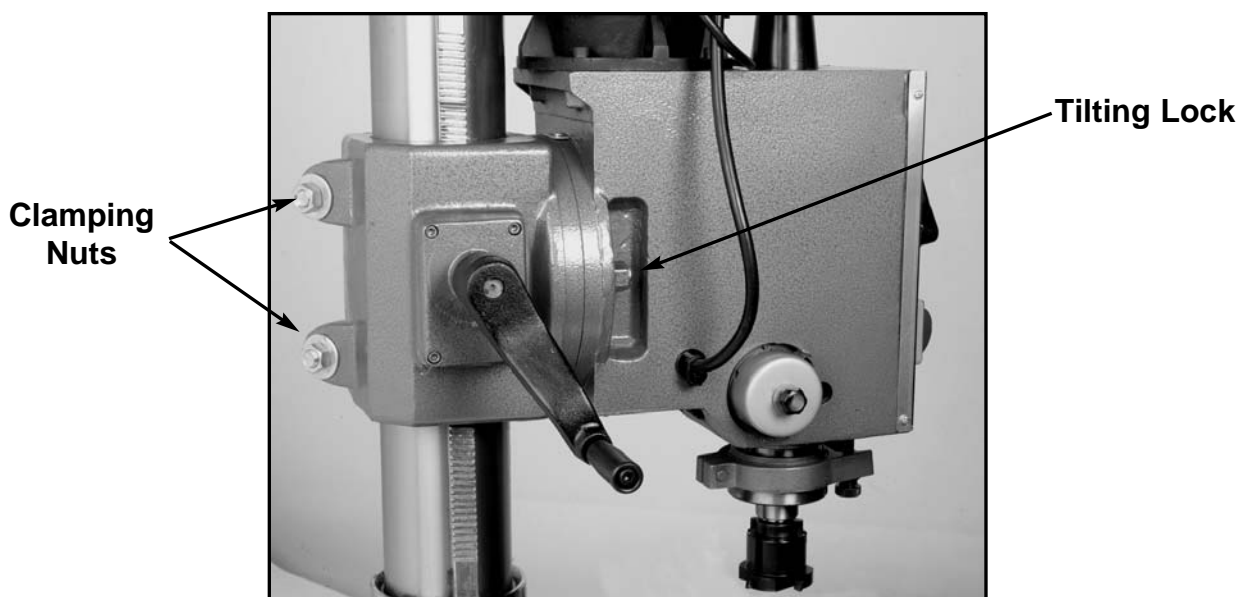
Establishing proper speeds for your power feed is just part of a complex equation that encompasses a number of variables, including; spindle speed, metal hardness, feed rate, cutting depth and cutter type. Because of the complexity of the equations necessary to determine optimum spindle speeds and feed rates, we suggest you obtain one of many good machinist's guides on the market. Community colleges and vocational schools are often good places to obtain informative textbooks which go into the necessary mathematics of machining in detail.

A number of fine consumer publications dealing specifically with metalworking and machining are also readily available. Check your local library or newsstand for availability in your area.

## C. COLUMN HEIGHT

The Model G1126 is capable of reaching a maximum spindle-to-table distance of 18<sup>1</sup>/<sub>2</sub>", making it an ideal choice for a wide variety of milling operations. Column height is adjusted by a large crank handle on your left side, when facing the front of the machine. To make height adjustments:

1. Loosen the two clamping nuts at the back of the mill head body with the lug wrench provided. See Figure 8.
2. Turn the cranking handle clockwise to raise the mill head or counterclockwise to lower it, until you reach the proper height for your project.
3. Re-tighten the clamping nuts.
4. Ensure that the lug wrench is removed from the machine before proceeding with milling operations.



**Figure 8**

**REMEMBER:** The mill head can be top-heavy in its fully-raised position. Be sure to mount the Model G1126 securely to your bench. Always make sure the clamping nuts are tightly secured before operating this machine.

## D. SPINDLE SPEED

The Model G1126 features an internally-gear head which offers six speeds, both in forward and reverse. Speed selection levers are located on the front of the mill head. See the chart below for specific spindle speeds in each gear range.

Gear Ranges – Model G1126						
Levers	L1	L2	L3	H1	H2	H3
Spindle RPM	60	130	230	450	800	1500

Establishing proper spindle speed is just part of the same complex equation that determines power feed rates. Like we noted before, the equation encompasses a number of variables, including; spindle speed, metal hardness, feed rate, cutting depth and cutter type. Because of the complexity of the equations necessary to determine optimum spindle speeds and feed rates, we suggest once again you obtain one of many good machinist's guides on the market. Community colleges and vocational schools are often good places to obtain informative textbooks which go into the necessary mathematics of machining in detail.

**REMEMBER:** Do not attempt to change gear speeds while the machine is running. Allow all moving parts to come to a full stop before making any adjustments.

**CAUTION:** Even at low spindle speeds, metal fragments from the cutting process can be expelled by the mill / drill. Always wear ANSI-approved eyewear and protective clothing when operating the Model G1126. Be sure that all observers are safely away from the machine while it is being operated.

## E. ON/OFF AND FORWARD/REVERSE SWITCHING

A 3-way toggle switch located on the front of the mill head controls both power and spindle direction. Always make sure the cutter is rotating in the direction required by your cutting tool. While most bits and cutters are designed to operate in a clockwise rotation, some are designed to work counterclockwise. Make sure the spindle direction is correct for your application.

**CAUTION:** Do not reverse the spindle direction while the machine is running. Allow the machine to come to a full stop before changing directions.



## F. SPINDLE HEIGHT

The Model G1126 uses rack-and-pinion gearing to control spindle height adjustment. The operator has two options for adjustment – a 3-handled downfeed control and a handwheel-operated micro adjustment control. See Figure 9.

To operate the micro-adjustment handwheel, tighten the locking knob on the 3-handled downfeed control. Once locked, the adjustment of spindle height will be transferred to the handwheel.

The calibration dial can be adjusted for individual applications by loosening the setscrew on the knurled surface and turning the indicator to “zero out” the dial. Once in place, tighten the setscrew.

A certain amount of backlash or play is typical in pinion gearing so keep in mind, while setting the measurement dial, to make your adjustments while there is downward pressure against the micro adjustment handwheel.



Figure 9

## G. DOWNFEED LIMITER

The downward movement of the spindle assembly can be limited by using the adjusting knob mounted on the forward portion of the feed base, just below the depth stop gauge on the front of the mill head. See Figure 10. Limiter distance can be set by using the indicator on the front of the milling head.



Figure 10

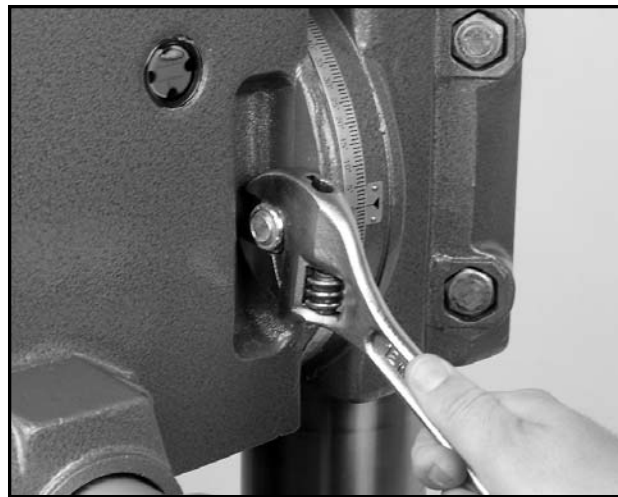
## H. HEAD ROTATION

The milling head on the Model G1126 is designed to swing up to 90° either left or right at the mill head, enabling it to perform tasks such as angled drilling or horizontal slotting. To rotate the head:

1. Loosen the lock nuts on either side of the milling head. See Figure 11.

**NOTE:** Make sure to provide support for the milling head so it doesn't unexpectedly rotate on its own. Always maintain control of the milling head.

2. Rotate the milling head to its desired position, using the reference guides provided on the right side of the machine.
3. Once in place, re-tighten the locking nuts.



**Figure 11**

Keep in mind that the head must be dialed in when it's returned to the "zero" position if high levels of accuracy are required. If you are able to use an angled vise to accomplish your milling operation without tilting the milling head, you will save yourself a good amount of set-up time.

## I. GIB AND LEADSCREW

After sustained use, the table on your Model G1126 may develop excessive play in the gibs and/or in the leadscrews. Keep in mind that some play is normal, particularly in the leadscrews. But, should you find the need to make adjustments, use the following guidelines:

The gibs are easily tightened by turning the large slotted screwheads in the front and right side of the table base until you feel a slight drag when you turn the handwheels. The screw at the front of the machine affects movement from front to back, while the screw under the right side of the table affects longitudinal movement. You can loosen the screws if your table seems excessively stiff.

The leadscrew adjusters require a bit more effort. To adjust leadscrew tightness from front to back, it's necessary to provide access to the underside of the base. A hole in the bench under the Model G1126's base will make adjustment fairly simple. The adjuster can be found midway along the lead-screw, inside the base. To eliminate excess leadscrew movement tighten the Allen head setscrew

on the adjuster midway along the leadscrew. The longitudinal leadscrew adjuster can be tightened with a long Allen wrench reached under the table. Once again, the setscrew in the tension adjuster is located just above the longitudinal leadscrew. These adjusters may require you to fabricate extensions for your hex wrenches. Make adjustments in small increments. Over-adjustment can add unnecessary wear to both the leadscrews and the adjusters.

## XI. EQUIPMENT MAINTENANCE

Your Model G1126 Gear Head Mill / Drill requires very little maintenance. A thorough cleaning, now and again, will increase the machine's durability and efficiency, by removing dust and grime that can gum up moving parts. Sharp cutters are essential for top performance. If you find that the machine cuts less efficiently than usual, inspect the cutters and repair or replace them as necessary. An occasional application of a protective spray coating will keep the Model G1126's table and other bare metal parts from rusting and pitting.

**REMEMBER:** When performing maintenance or repairs on shop equipment, always disconnect the machine from its power supply.

The Model G1126 features factory-sealed bearings. A sealed bearing requires no lubrication during its lifetime. Should a bearing fail, your mill / drill will probably develop a noticeable rumble, which will increase when the machine is put under load. If allowed to get worse, overheating of the journal containing the bad bearing could occur. If the bad bearing is not replaced, it will eventually seize – possibly doing damage to other parts of the machine. Bearings are standard sizes and can be replaced through Grizzly.

Points requiring periodic lubrication are:

1. *The internal spline drive assembly.* Insert top-quality non-hardening grease into the hole at the top of the spindle pulley spline once every six months.
2. *The main column.* A light film of oil will smooth action and prevent rust and corrosion.
3. *The quill.* A light coating of oil will ensure smooth movement.
4. *The quill return spring.* Oil annually with a light lubricant (SAE 20). Apply with a brush or squirt can.
5. *The gear box.* Replace lubricant annually with non-detergent SAE 30 oil.
6. *The quill pinion.* Lubricate every 90 days with non-hardening grease.

**Note:** Use care when performing maintenance. Never attempt maintenance procedures on the machine while it's running.

## XII. CLOSURE

The following pages contain the directory of parts for your Model G1126. Please feel free to write or call us if you have any questions about the machine or the manual. Thanks again for your business and continued support. We look forward to serving you again soon.

# XIII. MACHINE DATA

## GRIZZLY MODEL G1126 GEAR-HEAD MILL / DRILL

**Design Type** .....Bench Model

**Overall Dimensions:**

Height .....52<sup>1</sup>/<sub>2</sub>"  
 Length.....31<sup>1</sup>/<sub>2</sub>"  
 Width .....47<sup>1</sup>/<sub>2</sub>"  
 Column Diameter .....4<sup>1</sup>/<sub>2</sub>"  
 Table Size .....9<sup>1</sup>/<sub>2</sub>" x 32"  
 T-Slot Size.....<sup>5</sup>/<sub>8</sub>"  
 Quill Diameter.....3"  
 Spindle Taper.....R-8  
 Weight (Shipping) .....660 lbs.  
 Weight (In Place) .....594 lbs.

**Construction** .....Cast Iron

**Capacities:**

Drilling .....1<sup>1</sup>/<sub>2</sub>"  
 Face Milling .....3"  
 End Milling .....4<sup>1</sup>/<sub>4</sub>"  
 Swing .....21"  
 Max Distance Spindle to Table.....18<sup>1</sup>/<sub>2</sub>"  
 Spindle Stroke .....5"  
 Head Rotation (On Column) .....360°  
 Head Swivel .....180°  
 Longitudinal Travel.....24"  
 Cross Travel.....9"  
 Spindle Speeds (RPM) .....60, 130, 230, 450, 800, 1500

**Motor:**

Horsepower .....1<sup>1</sup>/<sub>2</sub> H.P.  
 Phase / Voltage .....Single Phase / 110V  
 Amps .....12  
 Cycle and RPM .....60 HZ/1720 RPM  
 Bearings.....Shielded and Lubricated-For-Life / Ball  
 Power Transfer.....Belt Drive

*Specifications, while deemed accurate at the time of publication, are not guaranteed.*

## **XIV. WARRANTY AND RETURNS**

### **LIMITED WARRANTY**

Grizzly Imports, Inc. warrants every product it sells for a period of one year on all parts and one year on all electric motors to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty for any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

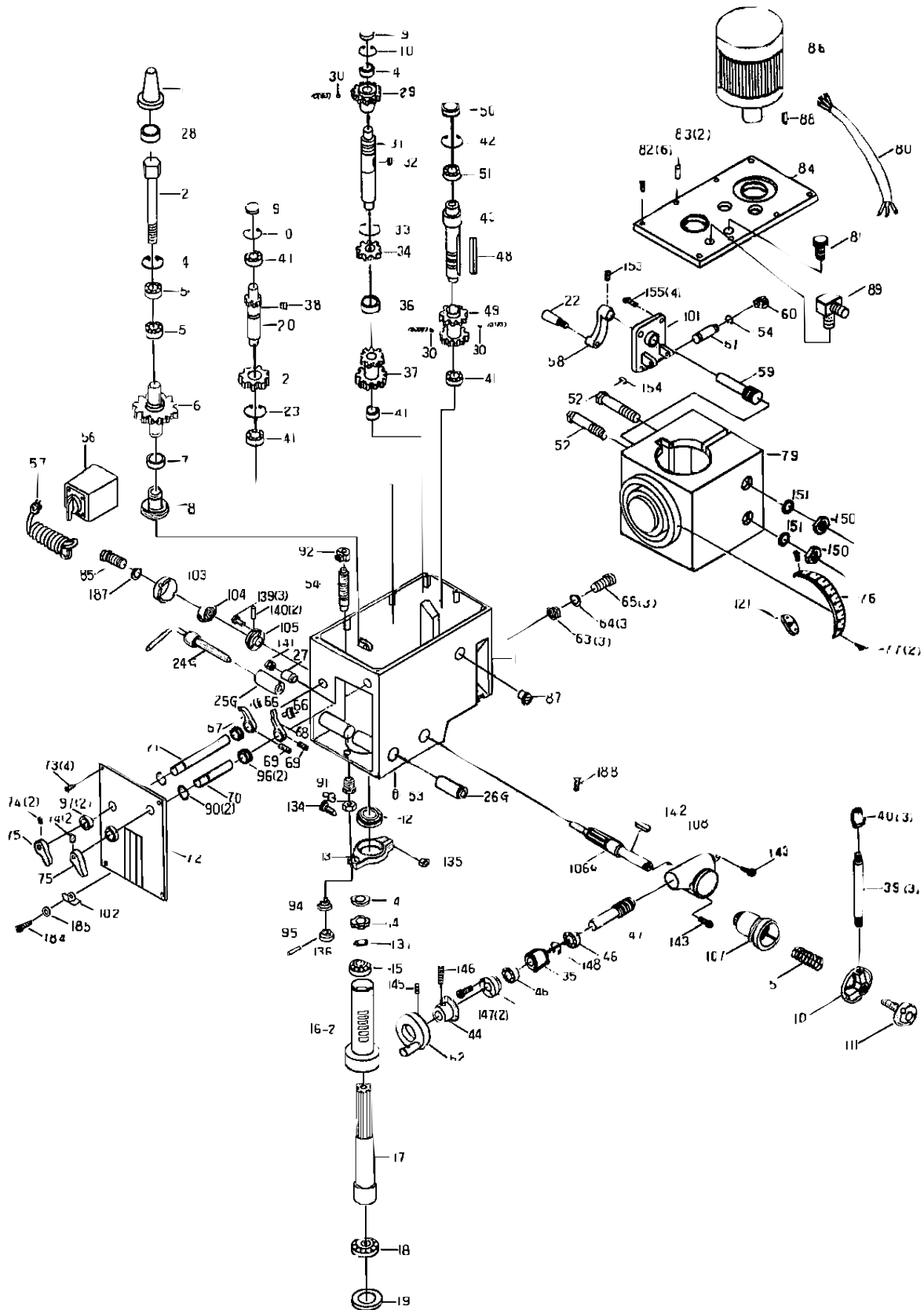
We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, the product or part must be returned to either our Bellingham or Williamsport warehouse, freight pre-paid. Proof of purchase must accompany the merchandise. The manufacturers reserve the right to change specifications at any time as they continually strive to achieve better quality equipment.

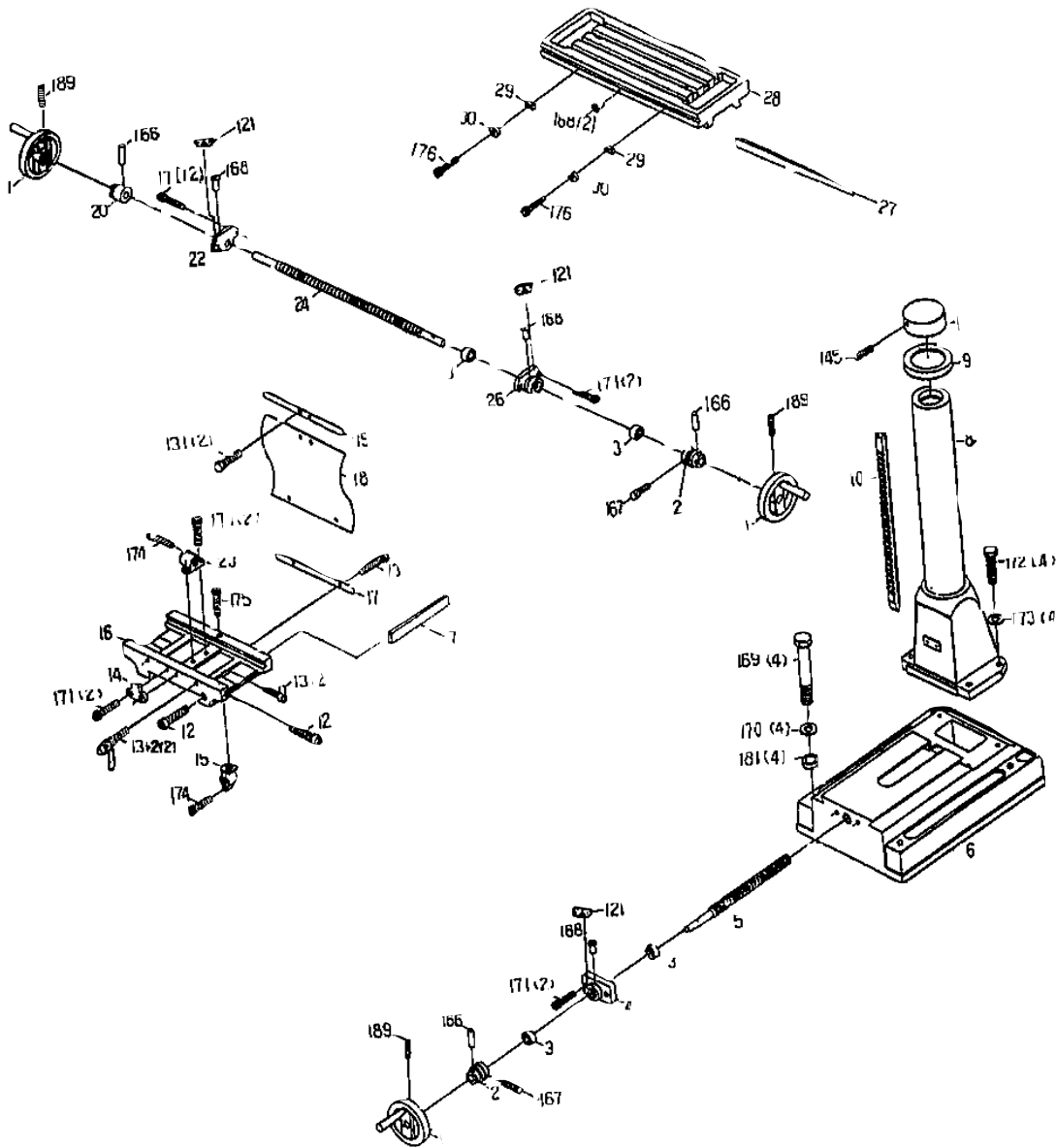
We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

# XV. MODEL G1126 PARTS DIAGRAMS

## A. MODEL G1126 MILL / DRILL HEAD PARTS DIAGRAM



# B. MODEL G1126 MILL / DRILL TABLE PARTS DIAGRAM



## XVI. MODEL G1126 MILL / DRILL PARTS LIST

Ref. #	Qty.	Description	Ref. #	Qty.	Description
1-01	1	Arbor Bolt Cover	1-46	2	Ball Bearing (6202zz)
1-02	1	Arbor Bolt	1-47	1	Worm Shaft
1-04	1	C-Retainer Ring	1-48	2	Key
1-05	2	Ball Bearing (6008zz)	1-49	1	Gear
1-06	1	Spindle Sleeve Gear	1-50	1	Oil Seal
1-07	1	Oil Seal	1-51	1	Ball Bearing (6007zz)
1-08	1	Seal Retainer	1-52	1	Head Body Fix Bolt
1-09	1	Cap	1-53	2	Oil Drain Plug
1-10	1	C-Retainer Ring	1-54	1	Graduated Rod
1-11	1	Head Body	1-56	1	Switch
1-12	2	Rubber Flange	1-57	1	Main Cable
1-13	1	Feed Base	1-58	1	Head Handle
1-14	2	Lock Nuts	1-59	1	Worm Shaft
1-15	1	Taper Roller Bearing (30206j)	1-60	1	Worm
1-16	1	Rack Sleeve	1-61	1	Shaft
1-17	1	Spindle Shaft	1-62	1	Handwheel
1-18	1	Taper Roller Bearing (30207j)	1-63	3	Nuts
1-19	1	Bearing Cap	1-64	3	Spring Washers
1-20	1	Gear Shaft	1-65	3	Bolts
1-21	1	Gear	1-66	2	Lever Bracket
1-22	4	Grip	1-67	1	Lever (Left)
1-23	1	Ring	1-68	1	Lever (Right)
1-24	1	Handle Rod	1-69	2	Screw
1-24	1	Sleeve	1-70	1	Level Shaft (Right)
1-25	1	Fixed Tight Collar	1-71	1	Level Shaft (Left)
1-26	1	Fixed Tight Collar (Thread)	1-72	1	Nameplate
1-27	1	Screw Key	1-73	4	Screw
1-28	1	Oil Seal	1-74	4	Screw
1-29	1	Gear	1-75	2	Speed Lever
1-30	3	Spring and Ball	1-76	1	Degree Meter
1-31	1	Gear Shaft	1-77	2	Rivet
1-32	1	Key	1-79	1	Torraise and Lower Body
1-33	1	Ring	1-80	1	Motor Cable
1-34	1	Gear	1-81	2	Oil Filler Plug
1-35	1	Bearing Spacer	1-82	6	Bolt
1-36	1	Sleeve	1-83	2	Pin
1-37	1	Gear	1-84	1	Head Body Cover
1-38	1	Key	1-85	1	Screw with Plum Knob
1-39	3	Handle Rod	1-86	1	Motor
1-40	3	Knob	1-87	1	Fluid Level Indicator
1-41	5	Ball Bearing (6202zz)	1-89	1	Radiator
1-42	1	Inner Ring	1-90	2	C-Ring
1-43	1	Shaft	1-91	1	Set Distance Nut
1-44	1	Micro Adjusting Indicator	1-92	1	Set Position Block
1-45	1	Worm Cover	1-93	1	Lock Nut



Ref. #	Qty.	Description	Ref. #	Qty.	Description
1-94	1	Support Base	2-10	1	Rack
1-95	1	Handle	2-11	1	Column Head
1-96	2	Oil Seal	2-12	2	Gib Strip Bolt
1-101	1	Raise Head Bracket	2-13	2	Leaf Screw
1-102	4	Limit Plate	2-13-2	2	Knob
1-103	1	Spring Cover	2-14	1	Moveable Fixed Block
1-104	1	Spring	2-15	1	Table Base Nut
1-105	1	Spring Base	2-16	1	Center Base
1-106	1	Pinion Shaft	2-17	1	Anti-dust Plate
1-107	1	Worm Gear	2-18	1	Anti-dust Plate
1-108	1	Feed Cover	2-19	1	Anti-dust Plate
1-110	1	Spring Base	2-20	1	Table Clutch
1-111	1	Lock Bolt With Knob	2-22	1	Left Flange
1-115	1	Spring	2-23	1	Table Nut
1-134	1	Hex Head Bolt	2-24	1	Table Screw
1-135	1	Hex Nut	2-26	1	Right Flange
1-136	1	Spring Pin	2-27	1	Gib Strip
1-137	1	Lockwasher	2-28	1	Table
1-139	3	Round Head Screw	2-29	2	Fixed Block
1-140	2	Spring Pin	2-30	2	Moveable Fixed Ring
1-141	1	Hex Nut	2-31	1	Stand (Option)
1-142	1	Key	2-37	1	Base Screw Collar
1-143	2	Hex Socket Head Screw	2-121	4	Meter Indicator
1-145	3	Hex Socket Headless Screw	2-131	4	Hex Head Bolt
1-146	1	Hex Socket Headless Screw	2-132	10	Washer
1-147	2	Hex Socket Head Screw	2-143	10	Hex Socket Head Screw
1-148	1	C-Retainer Ring	2-145	1	Hexagon
1-153	1	Hex Socket Headless Screw	2-166	3	Spring Pin
1-154	2	C-Retainer Ring	2-167	2	Indicated Zero With Screw
1-155	4	Hex Socket Head Screw	2-168	5	Oil Ball
1-156	1	Rod	2-169	4	Hex Head Bolt
1-157	1	Retainer	2-170	4	Washer
1-158	1	Knob	2-171	10	Hex Socket Head Screw
1-184	1	Screw	2-172	4	Socket Head Bolt
1-185	1	Washer	2-173	4	Spring Washer
1-187	1	Washer	2-174	2	Hex Socket Head Screw
1-188	1	Round Head Screw	2-175	1	Hex Socket Head Screw
<b>Table Base Parts</b>			2-176	2	Hex Socket Head Screw
2-01	3	Table Handle Wheel	2-177	1	Door Duckle
2-02	2	Dial Clutch	2-178	10	Round Head Screw
2-03	4	Thrust Bearings (S1103)	2-179	2	Hex Head Bolt
2-04	1	Square Flange	2-180	2	Washer
2-05	1	Table Screw	2-181	4	Washer
2-06	1	Base	2-183	2	Round Head Screw
2-07	1	Gib Strip	2-189	3	Hex Socket Headless Screw
2-08	1	Column Base			
2-09	1	Column Base Ring			