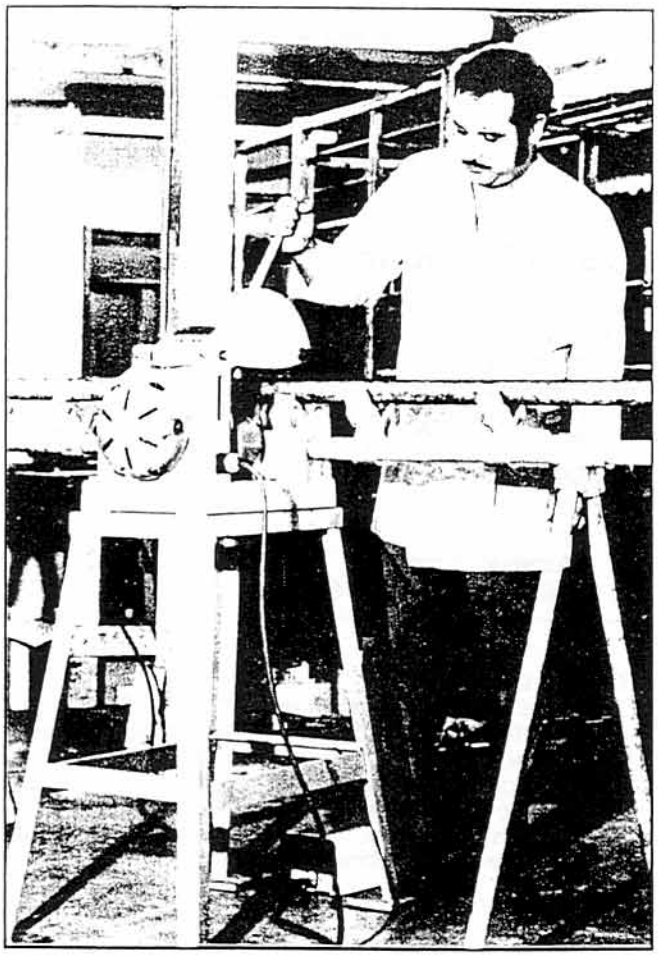
Operator Safety Instructions

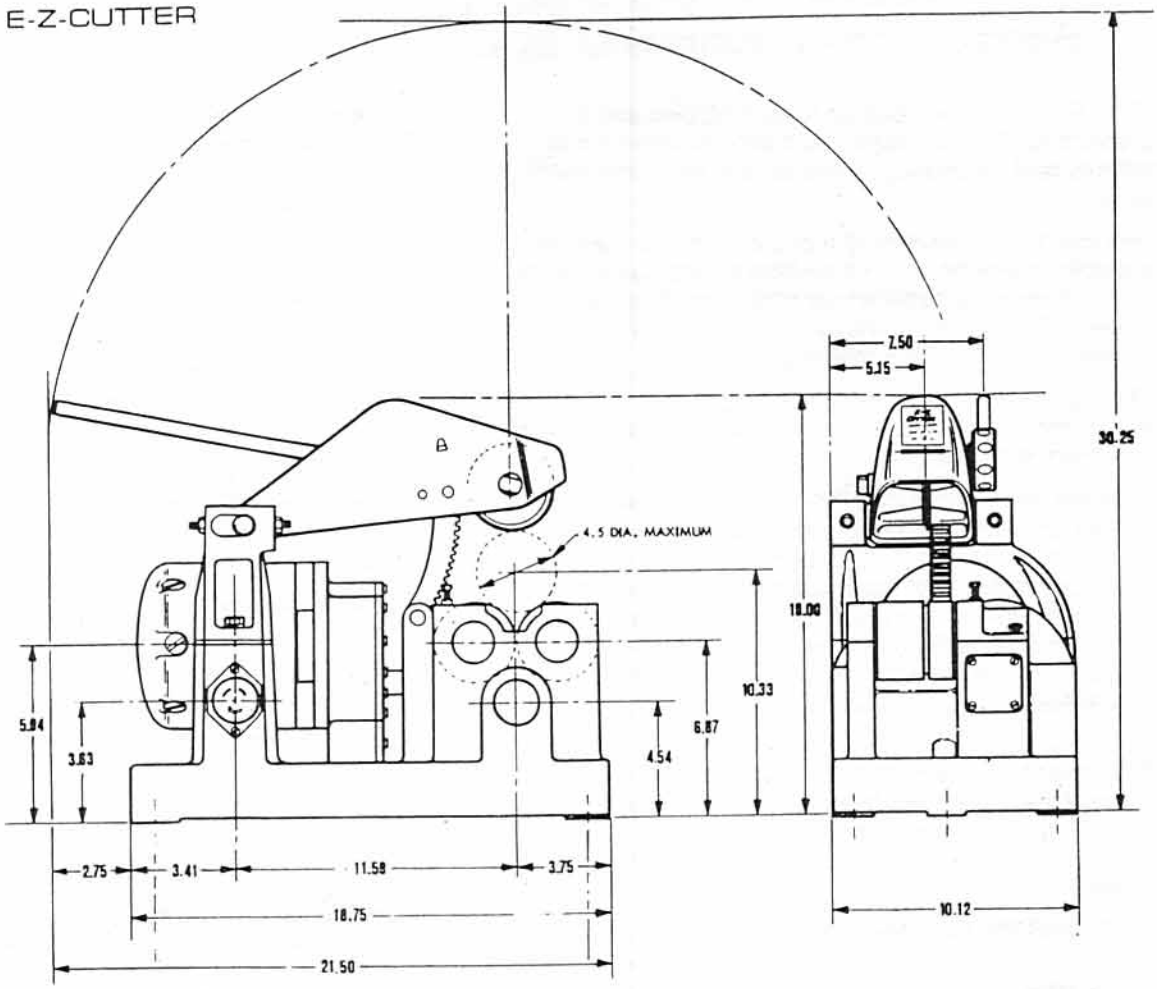
This E-Z Cutter is designed for cutting pipe and tubing as specified. To accomplish the cutting function requires dexterity and mechanical skills as well as sound safety habits.

Although this machine is manufactured for safe, dependable operation, it is impossible to anticipate those combinations of circumstances which could result in an accident. The following instructions are recommended for safe operation of the machine.

The operator is cautioned to always practice "Safety First" during each phase of use, including setup and maintenance of this unit.

1. **Read and understand the Instruction Manual**. Before operating or performing maintenance on this machine, read carefully the operator's manual. Become familiar with the machine's operations, applications and limitations. Be particularly aware of its specific hazards. Store the operator's manual in a clean area and always at a readily available location. Additional copies are available for a nominal charge.
2. **Inspect the equipment**. Prior to starting the machine, check the movable parts for obstructions such as rags, packing remnants, etc. Be sure that guards and machine parts are properly installed and secured.
3. **Ground the machine**. The machine power cord includes a plug with a ground connector. Be certain the machine is connected to an internally grounded electrical system.
4. **Keep work area clean**. Keep the work area adjacent to the machine clear of clutter for unobstructed movement of the operator.
5. **It is mandatory to use a pipe/tubing support system with the Collins E-Z Cutter**. (See pages 6 and 7 for suggested systems.)
6. **Wear proper clothing**. Loose clothing can get easily entangled in moving parts. When operating machine, do not wear unbuttoned jackets, loose sleeve cuffs, neckties, long hair, etc. Safety glasses and shoes should be worn.
7. **Secure machine and work**. Make certain that the machine is bolted to a heavy work bench or proper stand.
8. **Always maintain machine**. Keep machine clean and cutting tools sharp for safe, dependable operation. Follow lubricating instructions. Report any unsafe condition for immediate correction.
9. **Keep alert**. Do not operate machine if ill or drowsy from medication or fatigue. Avoid horseplay around equipment and keep bystanders a safe distance from equipment.
10. **Operate on switch side only**. Machine should be operated on switch side only. Never reach across moving parts or material being worked on. Switch should always be accessible to operator.
11. **Operate in proper environment**. Machine should not be operated in damp locations. Wear hearing protection in noisy shop environments. Ensure of proper illumination in work area.
12. **Do not misuse machine**. Perform only the functions for which the machine is designed. Do not force machine.
13. **Disconnect power cord prior to servicing**. Repair should be attempted only by authorized personnel. Always disconnect power cord before making any adjustments or servicing the machine.
14. **Keep visitors away**. All visitors should be kept at a safe distance from work area.
15. **Use recommended accessories only**. Refer to Operator's Manual. Use of improper accessories may be hazardous.





Specifications

Material	Material Diameter	Wall Thickness	Recommended Blade
Galvanized pipe	¼"-3" I.D.	Schedule 10-80	3224
Black iron pipe	¼"-3" I.D.	Schedule 40-80	3223
Steel tubing	⅝"-3½" O.D.	1/32"-5/16"	3225
Plastic pipe	¼"-4" I.D.	Schedule 80	3231
Copper tubing	⅝"-3½" O.D.	1/32"-5/16"	3225
Aluminum tubing	⅝"-3½" O.D.	3/32"-¼"	3225
Stainless Steel (316 S.S.)	⅝"-2¾" O.D.	1/32"-5/16"	3225

Cutting Capacity:
The factory recommends using the E-Z Cutter only for the material specified above. Cutting of material not specified may be possible, however. Please contact the factory for an evaluation of the E-Z Cutter's capability to cut the material in question. Using the E-Z Cutter on material not listed above or not approved, invalidates the machine's warranty.

Motor
Single phase
- **a** 115 V. 50/60 Hz, 15 Amps., ½ H.P., 6 brush universal type
- **b** 230 V. 50/60 Hz, 8 Amps, ½ H.P., 6 brush universal type

Switch
Foot switch — on/off, heavy duty, oil and water tight, with safety guard.

Gear Box
Motor Gear Box — helical heat treated steel gear construction
Roller Gear Box — helical heat treated steel gear construction

Roller Speed
Free Running.....403 RPM
Under Load.....375 RPM
Cutter Wheels.....High Speed Tool Steel
Noise Level.....84 dB max.("A" scale,slow response)
Shipping Weight.....125 LBS

Standard Equipment

The Collins E-Z Cutter comes complete with heavy duty foot switch, cutter wheel, two roller supports and two stationary supports.

Accessories

Cutter Wheel with Bearings

Pipe cutter wheel	#3221
Tube cutter wheel	#3222
Soil pipe cutter wheel	#3223
Plastic cutter wheel	#12597

Ball Bearing Pipe Support #13206

Weight	4 lbs.
Dimensions	5½x5x2"

Stationary Support #3405

Weight	3 lbs.
Dimensions	6⅛x5⁹/₁₆x1½"

Pipe Support Fitting #13324

Weight	3 lbs.
Dimensions	4½x4¾x2"

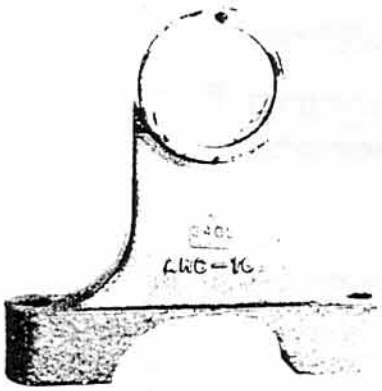
Accepts 1¼" steel pipe through support hole and 1" steel pipe for legs

E-Z-Cutter Stand #3420

Weight	42 lbs.
Dimensions	30x17x27"

Foot Switch #14330

Weight	8 lbs.
Dimensions (packed)	10x5x6"



STATIONERY SUPPORT
#3405

PIPE SUPPORT
FITTING
#13324

E-Z-CUTTER STAND #3420

BALL BEARING
PIPE SUPPORT
#13206

FOOT SWITCH
#14330

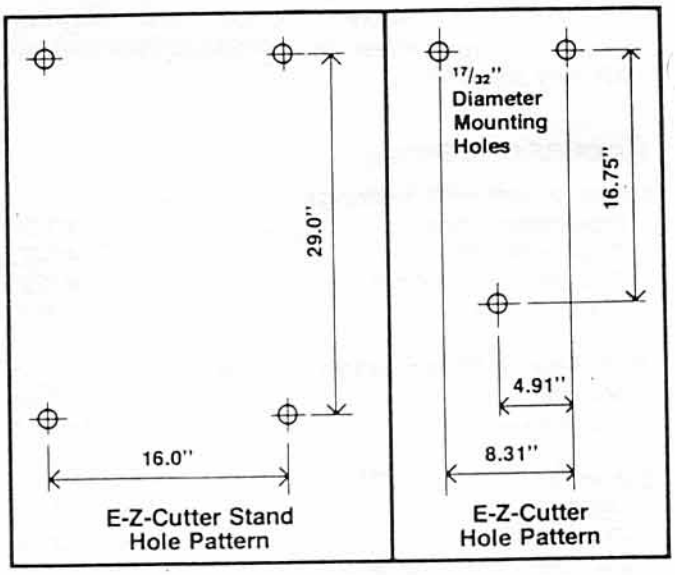
Preparing for Operation

Installation

Your E-Z Cutter may be mounted on a bench or on the E-Z Cutter Stand (#3420) which is available as an accessory.

Bench Mounting: Ensure that the E-Z Cutter is mounted on a bench sturdy enough to support the E-Z-Cutter's weight and the pressure generated by normal cutting operation. The E-Z-Cutter should be bolted solidly to the bench with ½" diamater bolt. Bolt the unit at the approximate location relative to your pipe support system (see next pages).

E-Z-Cutter Stand Mounting: Insure that the E-Z-Cutter is bolted securely to the stand with ½" bolts and that the machine is placed on a level area and bolted to the floor with ½" studs after you have established your pipe support system.



Power	Cord Length	Wire Size
115 V	Below 50' 50'-100'	12-3 10-3
220 V 1 Phase	Below 50' 50'-100'	14-3 12-3

Power

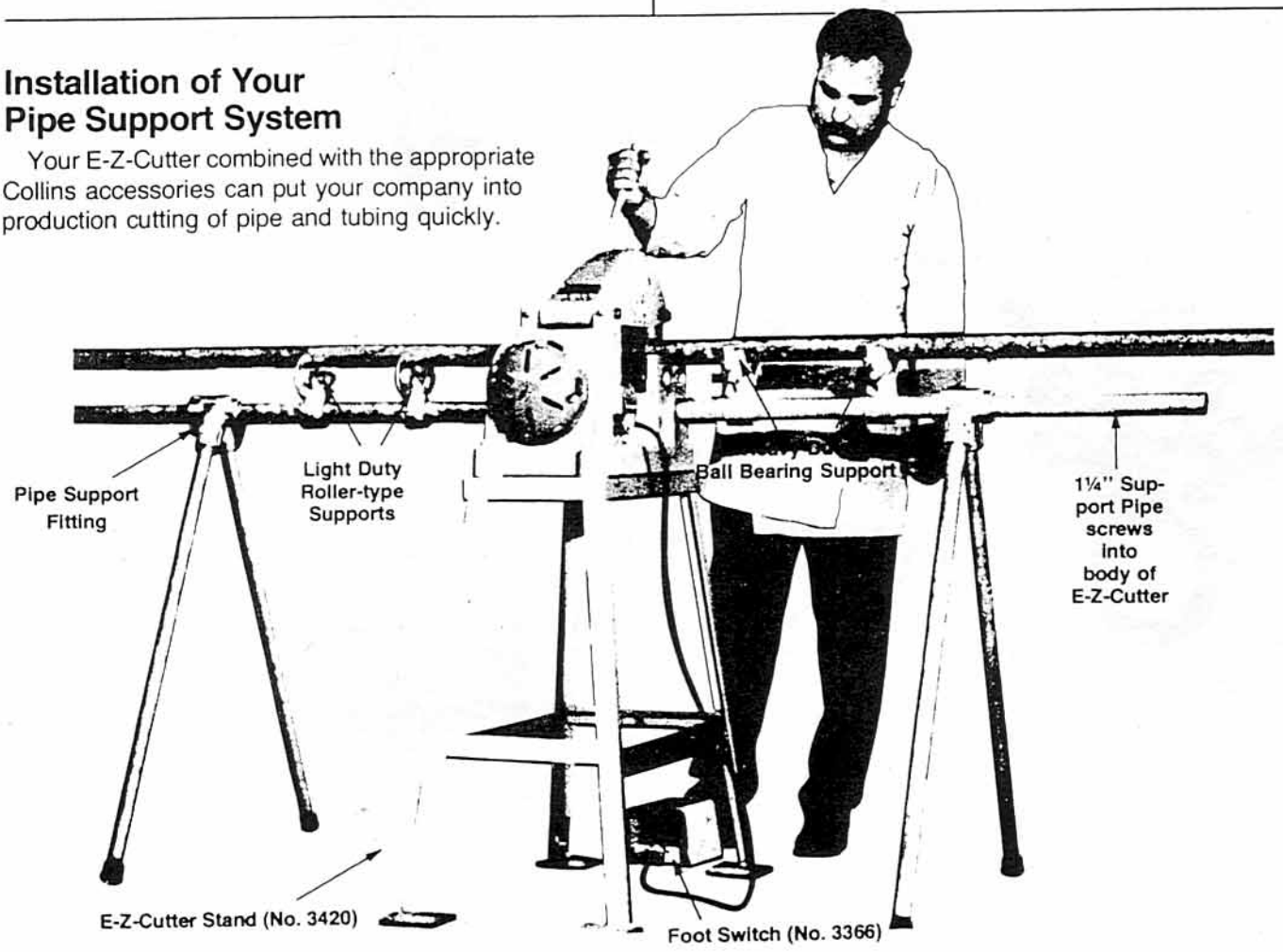
Use proper electric current as shown on name plate.

To prevent power loss, extension cord of sufficient capacity must be used.

To avoid electric shocks when operating in the field, connect the ground wire of the extension cord.

Installation of Your Pipe Support System

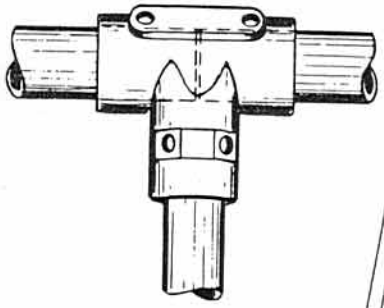
Your E-Z-Cutter combined with the appropriate Collins accessories can put your company into production cutting of pipe and tubing quickly.



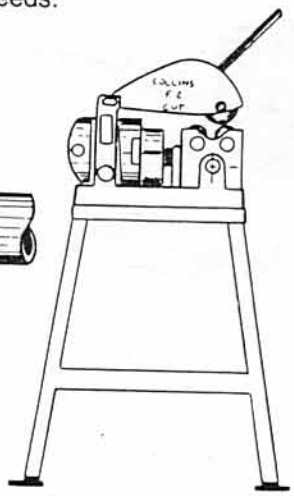
E-Z-Cutter Bench Mounting: There are two tapped holes on either side of the E-Z-Cutter that will accept 1¼" NPT threaded pipe. By securing a length appropriate to your needs of 1¼" pipe into the sides of the unit, you can establish a support base as long as required. The 1¼" pipe is maintained stationary and level by the Collins Stationary Support (#3405). Two ⅜" bolts or screws are needed to secure the Stationary Support to the bench. Order as many as required from your local Collins distributor.

Now select either the heavy duty ball bearing support or light duty roller-type support for your feed system. It is best to space the roller or wheel supports every 5'. All supports go easily on the 1¼" pipe and are held stationary by a thumbscrew.

E-Z-Cutter Stand Mounting: You can make your own pipe support system for a stand mounted E-Z-Cutter. You will need 1" pipe, Collins pipe support fittings and either Collins ball bearing pipe supports or light duty roller-type supports. The number of accessories you require will depend on your individual needs.



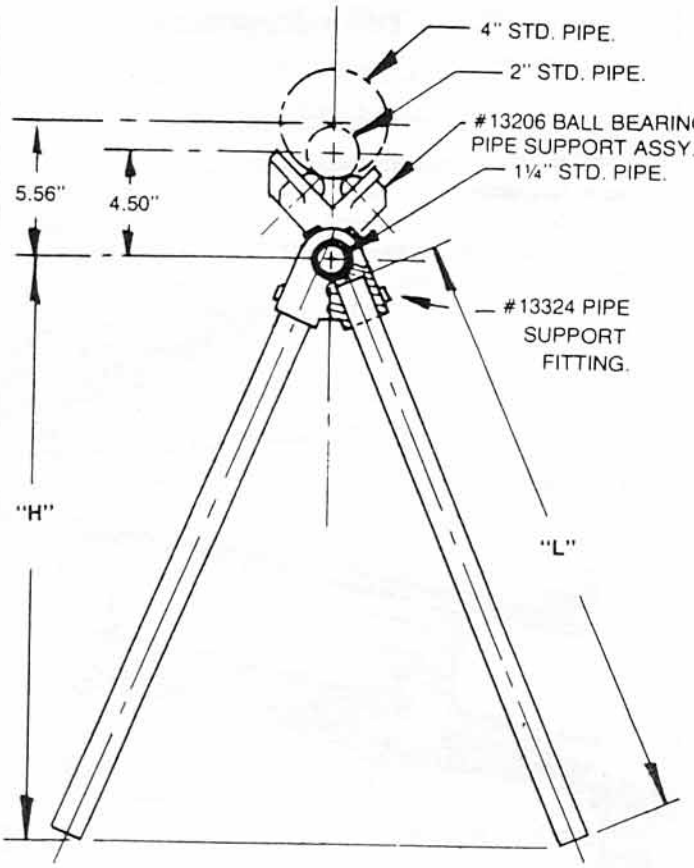
PIPE SUPPORT FITTING #13324



STAND MOUNTED E-Z CUTTER

Follow the steps below to set up your pipe support system.

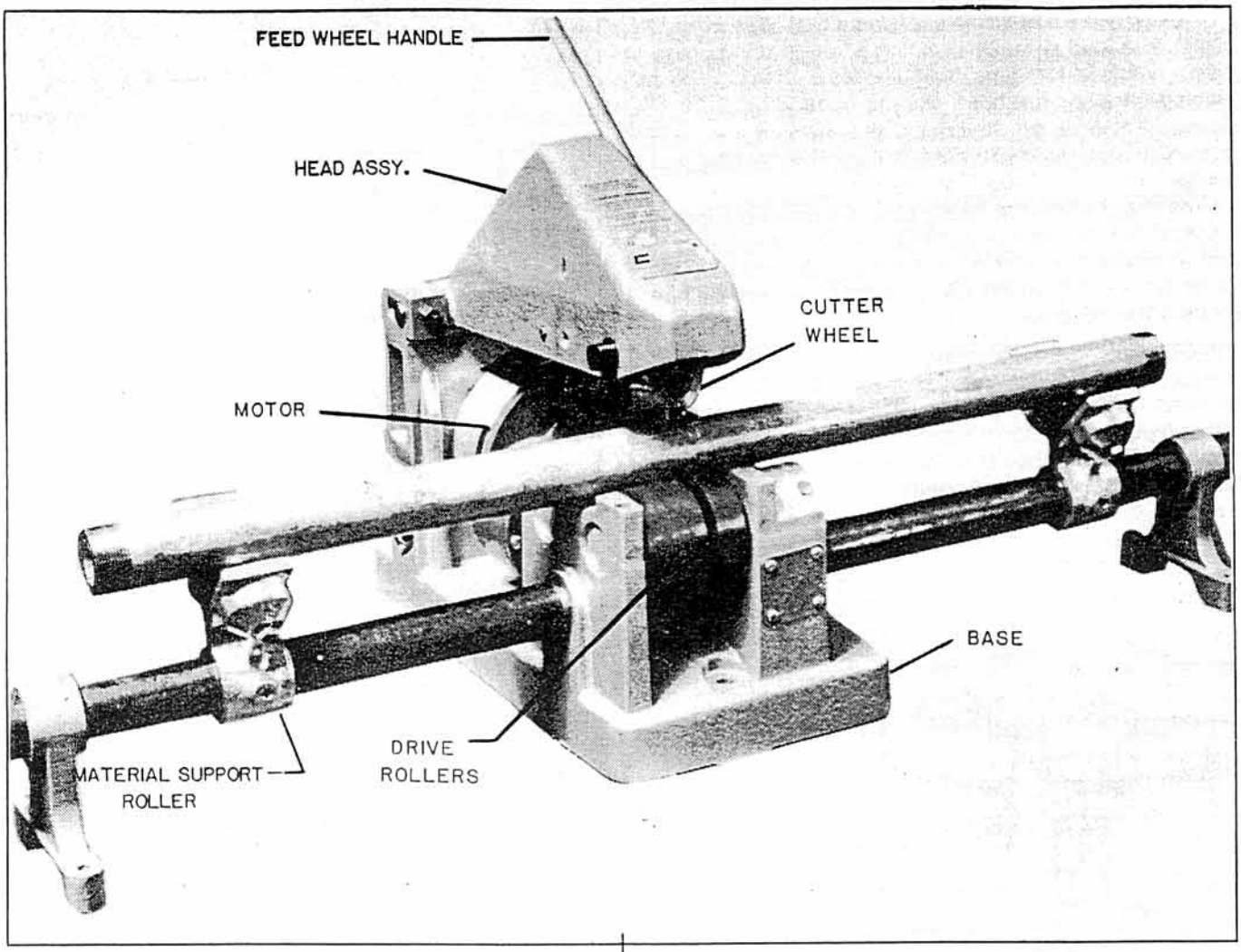
1. Measure the height from the center of the E-Z Cutter Pipe Support mounting hole to the ground.
2. Using the table to the right, determine the length of the 1" pipe support legs.
3. After cutting the legs to the desired length, put a rubber mounting pad at one end of the pipe and insert the other end into the #13324 pipe support fitting. Tighten the attaching screws.
4. Slide two heavy duty ball bearing pipe supports onto a 10-foot length of 1¼" standard pipe. At the non-threaded end of the pipe, mount the pipe support fitting. Do not tighten the attaching screws until the threaded pipe end is installed in the mounting hole of the E-Z-Cutter base.
5. The heavy duty roller supports should be located a maximum of five feet apart.
6. There are four attaching screws on the fitting which allow an extra support section to be coupled in the fitting.



1. Determine height "H" required and cut 1" standard pipe to length "L" shown in table below.
2. All dimensions are in inches.

"H"	"L"
40.5	42.94
40.0	42.37
39.5	41.87
39.0	41.31
38.5	40.75
38.0	40.25
37.5	39.69
37.0	39.12
36.5	38.56
36.0	38.06
35.5	37.50
35.0	37.00
34.5	36.37
34.0	35.87
33.5	35.31
33.0	34.75
32.5	34.25

"H"	"L"
32.0	33.69
31.5	33.19
31.0	32.62
30.5	32.06
30.0	31.50
29.5	31.00
29.0	30.44
28.5	29.87
28.0	29.37
27.5	28.87
27.0	28.25
26.5	27.75
26.0	27.19
25.5	26.62
25.0	26.06
24.5	25.50
24.0	25.00



Operating Instructions

WARNING: Do not wear gloves, rings, or loose clothing while operating E-Z-Cutter. Remove all burrs from material to be cut.

1. Before making electrical connection, set the E-Z-Cutter for the material you intend to cut:
   (a) Lift the head casting with feed wheel bar removed from the sprocket.
   (b) Feed your material underneath the cutter wheel.
   (c) Lower the headcasting until the cutter wheel rests on the material to be cut.
   (d) Put the feed wheel bar into the appropriate sprocket that allows you to pull down comfortably through the material.
   (e) Push feed wheel bar back towards the motor until it stops against the rest of the head casting.
2. Make electrical connection: (Voltage of outlet must be the same as voltage indicated on the tag and name plate.) Put twist lock plug into side of E-Z-Cutter, position safety foot switch and plug into proper outlet.
3. While E-Z-Cutter is off, feed material with left hand to desired cut off location underneath cutter wheel. Bring cutter wheel down with feed wheel bar so it rests easily on your cut off mark and apply slight pressure on feed wheel bar.
4. Remove left hand from material.
5. Turn machine on with foot switch. Power driven rollers will rotate the pipe.
6. Pull down on feed wheel bar until material parts. Do not force the cut, let the machine do the work.

WARNING: Insure you have the proper support for the cut material.

7. After material parts, lift head casting by pushing back on feed wheel bar while turning off machine.

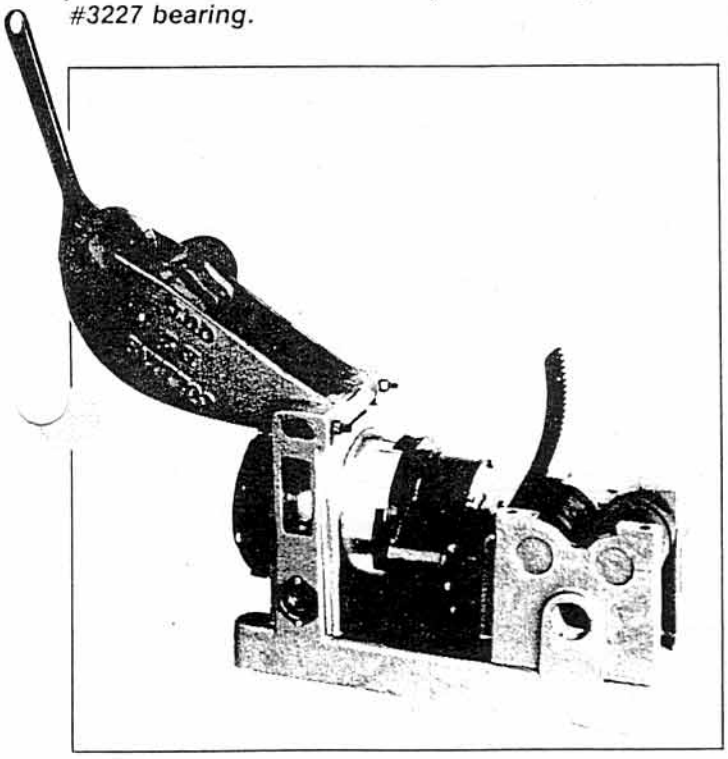
WARNING: Do not grasp rotating stock.

8. After stock stops rotating, feed again and repeat process.

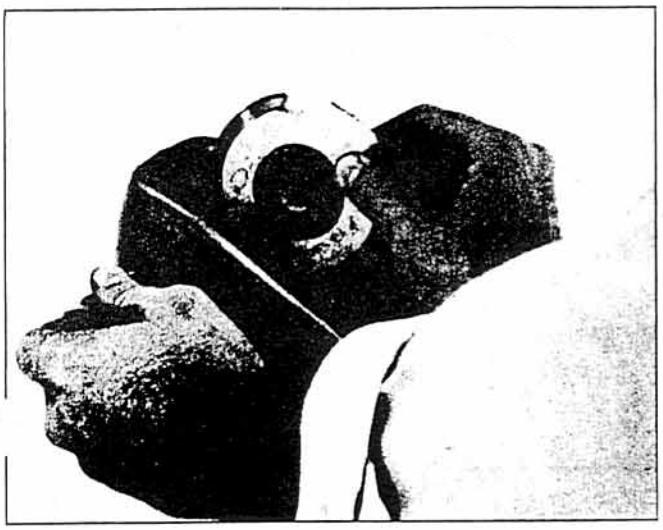
Cutter Wheel Replacement

1. Rotate head casting to full back position.
2. Use appropriate sized adjustable wrench and turn cutter wheel shoulder screw counter clockwise. As you withdraw shoulder screw from head casting, remove wheel as it is released from shoulder screw.
3. Replace cutter wheel by positioning cutter wheel in the head casting over hole for shoulder wheel screw. Insert shoulder screw and tighten with adjustable wrench.

NOTE: If you choose to buy a cutter wheel without a bearing it will be necessary for you to remove the bearing from your existing wheel and press it into your new wheel. Insure that you use only a Collins #3227 bearing.



Head casting in full back position



Positioning cutter wheel

Parts for E-Z-Cutters with Serial Number 5851 and Below

NOTE: The parts listed in this catalog can be used on all Collins E-Z-Cutters. However, some parts on earlier model E-Z-Cutters have been replaced or modified. If you have an E-Z-Cutter with a serial number of 5851 or lower please read and follow the instructions below regarding replacement parts.

Foot Switch Assembly

For machines prior to Serial #5851:

Replace #3366 foot switch assembly with #13730 (115 V.) or #13731 (230 V.) foot switch assemblies. In addition to this, the male receptacle connector #3372 must be replaced with #13732 (115 V.) or #3372 must be replaced with #13732 (115 V.) or #13733 (230 V.) receptacle.

Rack Gear

For machines prior to Serial #5000:

Replace #3044 rack gear and/or #3213 pinion gearshaft with #3444 rack gear and pinion conversion kit since individual parts are not interchangeable. This conversion kit includes the following parts:

#3441 guide roller (replaces #3219)
#3442 rack gear (replaces #3044)
#3443 pinion gearshaft (replaces #3213)
#3220 guide roller pin (replaces #3220)
#W-806 Woodruff key (replaces #1385)
#12697 rack gear pin (replaces #3045)

Rollers

For machines prior to Serial #5645 (October 1974):

Although the #3019 grooved roller and the #3021 smooth roller can be directly replaced with the new #12689 grooved roller and the #12690 smooth roller using the old #3024 grease retainer felt, it is recommended that the #3024 grease retainer felt also be replaced with the #13054 Seal Bushing and the #13072 "O"-ring seal for better grease retention. Order one seal bushing and one "O" ring seal per roller.

Base, Motor Yoke and Bearing Caps

For machines prior to Serial #5645 (October 1974):

If any one of the #3012 base, #3013 motor yoke, #3054 R.H. bearing cap or #3055 L.H. bearing cap needs replacement it is recommended that the complete #13069 base assembly be ordered. This base assembly includes the following parts:

A-306	2	Screw, hex, hd. cap, 3/8-16x1¼"
F-208	2	Screw, soc. hd. cap, 5/16-18x1½"
F-206	2	Screw, soc. hd. cap, 5/16-18x1"
12688	1	Cap, bearing, left hand
12687	1	Cap, bearing, right hand
12686	1	Yoke, Motor
12685	1	Base

Maintenance

Lubrication Instructions

Motor Gear Case: It is lubricated permanently and requires no periodic lubrication. The lubrication oil used in the motor gear case is SAE 90.

Roller Gear Case: It is packed with grease and sealed, requiring no periodic lubrication. In case service is required, replenish lubricant with Moly-Shield ST-200 or equivalent.

Hinge Bar: Directly above the hinge bar located on the head casting are two ⅛" lubricating holes. Fill holes with lubricating oil (SAE 30) every 8 hours of operation.

Pinion Gear: On the outside of the head casting directly opposite the pinion gear are two ⅛" lubricating holes for the oiling of the pinion gear shaft. Lubricate every 8 hours of operation with lubricating oil (SAE 30).

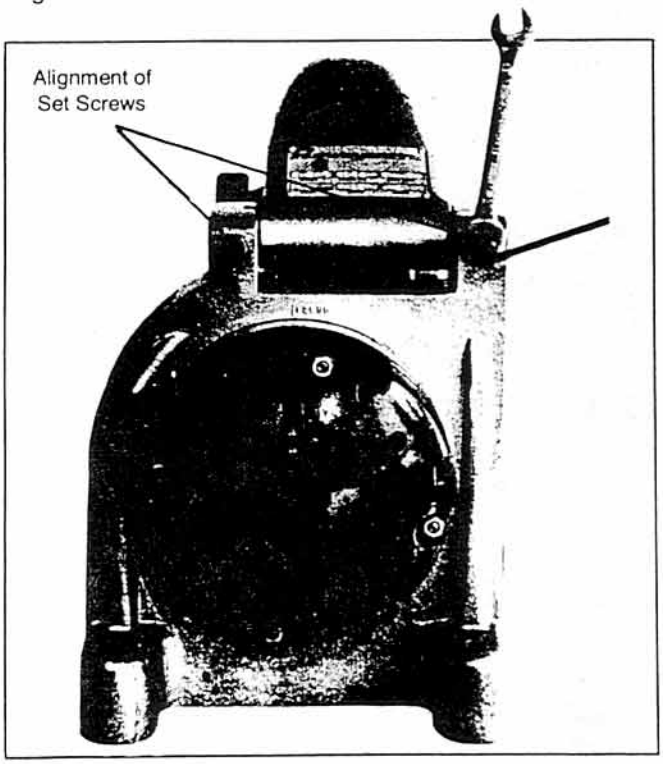
Motor: Requires no lubrication. All ball bearings are sealed.

Ball Bearing Pipe Support: Use light duty spray lubricant to keep ball bearings turning freely.

Cutter Wheel Alignment

Your E-Z-Cutter wheel is aligned professionally by our factory assemblymen prior to its shipping. If for some reason your E-Z-Cutter becomes out of alignment, you will observe that the wheel is not cutting but making thread marks on your stock.

To align the E-Z-Cutter, loosen the appropriate head aligning set screws and adjust the head to the right or left as required. Tighten the set screws once the wheel is aligned.



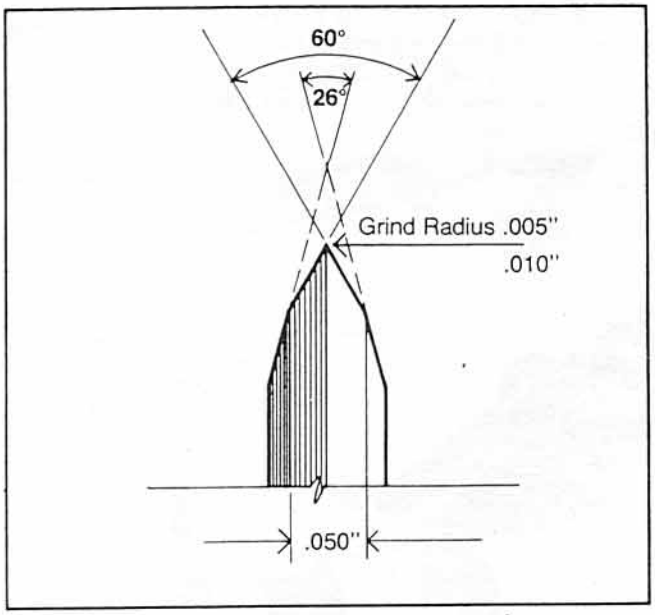
E-Z cutter as seen from rear

Motor Brushes

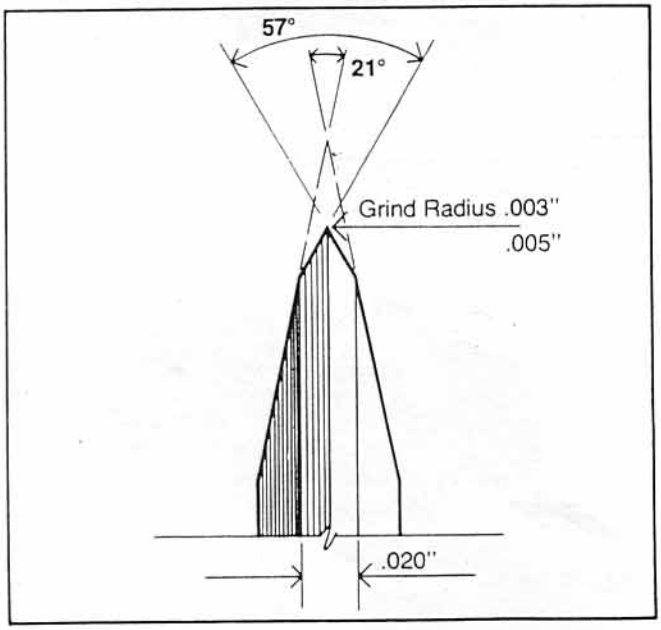
Check motor for brush wear every six months. If motor lacks power due to a dirty commutator, use a commutator cleaner stick or fine emery cloth.

Cutter Wheel Sharpening

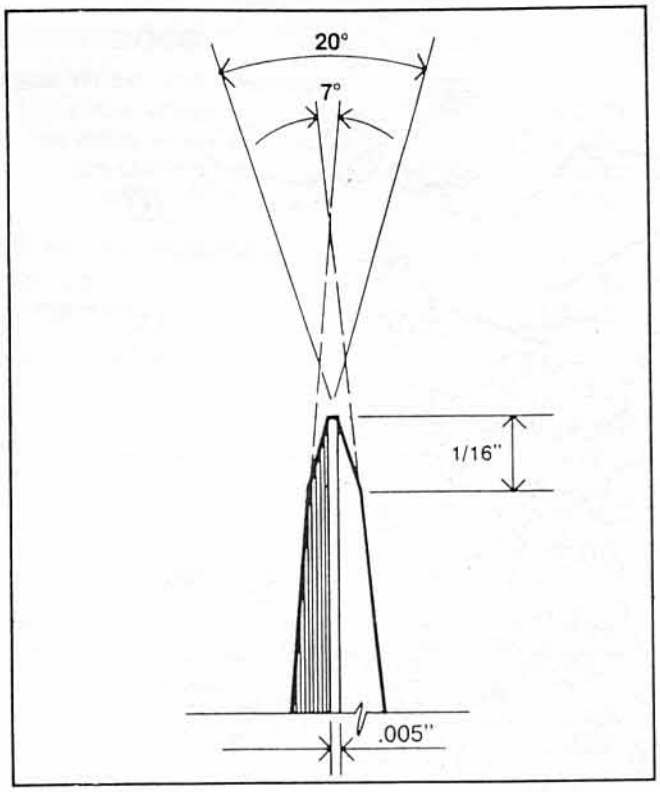
Collins Machinery has a factory resharpening service. Please return your wheels for resharpening through your local distributor. If you have resharpening capability locally, the following drawings are provided for your convenience.



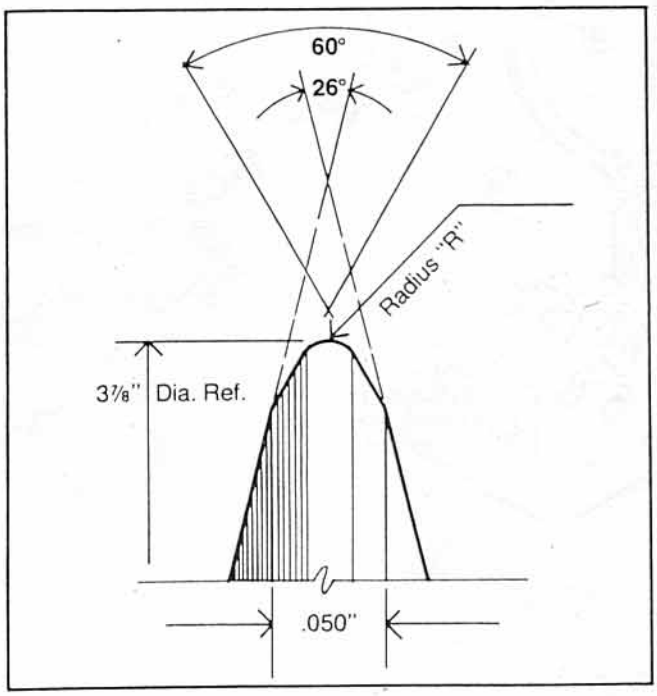
Pipe Cutter Wheel # 3221



Tube Cutter Wheel #3222



Plastic Cutter Wheel #12597



Soil Pipe Cutter Wheel #3223

Maintenance Record

MACHINE SERIAL NO.: _____

MACHINE MANUFACTURE DATE: _____

DATE OF LAST MOTOR BRUSH CHECK:

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

_____ _____ _____ _____

CUTTER WHEEL SHARPENING

_____ DATE

_____ DATE

_____ DATE

_____ DATE

_____ DATE

_____ DATE

_____ DATE

_____ DATE

_____ DATE

_____ DATE

_____ DATE

_____ DATE

OTHER SERVICE:

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE

ACTION _____ DATE