

GENERAL POWER TOOL SAFETY WARNINGS



Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury.

Save all warnings and instructions for future use. The term “power tool” in these instructions refers to a mains-operated (corded) power tool or battery-operated (cordless) power tool.

Use the power tool, accessories, and tool bits in accordance with these instructions. Take into account working conditions and work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

Work Area Safety



Keep work area clean and well lit. Cluttered or dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, and/or dust. Power tools create sparks that may ignite the dust or fumes.

Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control of the tool.

Electrical Safety



Power tool plugs must match the corresponding outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce the risk of electric shock.

Avoid body contact with grounded surfaces like refrigerators, pipes, and radiators when using electric powered tools; this will reduce the likelihood of shock if your body is grounded.

Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.

Do not abuse the cord. Never use the cord for carrying, pulling, or unplugging the power tool. Keep the cord away from heat, oil, sharp edges, and/or moving parts. Damaged or entangled cords can increase the risk of electric shock.

When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.

If operating a power tool in a damp location is unavoidable, use a Residential Current Device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

Ensure your power supply agrees with the motor nameplate marking. Use alternating current (50-60 cycles) and 120 V. Voltage variation of more than 10% will cause loss of power and overheating.

Personal Safety

Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs,

alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

Use personal protective equipment. Always wear eye protection. Protective equipment such as a dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.

Prevent unintentional starting. Ensure the switch is in the off-position before connecting to a power source and/or battery pack. Carrying tools with your finger on the switch or energizing power tools that have the switch on invites accidents.

Remove any adjusting key or wrench before turning the power tool on. A wrench or key left attached to a rotating part of the power tool may result in personal injury.

Do not overreach. Keep proper footing and balance at all times; this enables better control of the power tool in unexpected situations.

Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.

If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

Power Tool Use and Care



Do not force the power tool. Use the correct power tool for your application. The correct power tool will complete the job better and safer at the rate for which it was designed.

Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive measures reduce the risk of starting the power tool accidentally.

Store idle power tools out of the reach of children, and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may impact the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.

Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.

Maintain labels and name plates. These carry important information. If unreadable or missing, contact a *KETT Tool Company* representative.

Service



Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

SYMBOLS



SGS Certification for Canada and the United States



Double Insulated Motor

n_0 XXXX min^{-1}

N_0 Load RPM



Alternating Current



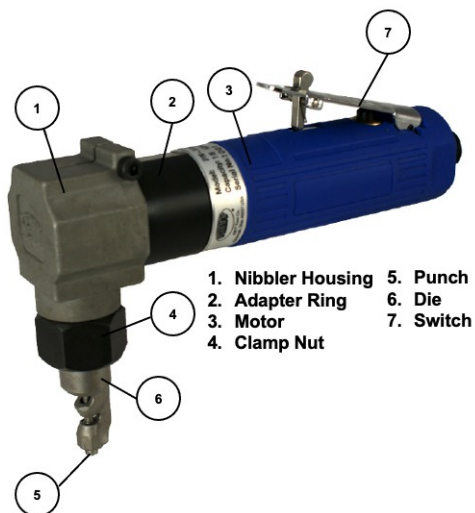
Volts

Amperes

SPECIFICATIONS

RPM	Power Source	Cutting Speed
0-2500	90 psi	Variable
Capabilities		
Cold-Rolled Mild Steel	Stainless Steel	
18 Gauge	20 Gauge	
Flat or Corrugated Materials		
Cuts up to 60 in/min with a cutting radius of 5/8 in.		

FUNCTIONAL DESCRIPTION



ASSEMBLY

WARNING To reduce the risk of injury, always unplug the power tool before attaching or removing accessories or adjusting. Use only

specifically recommended accessories. Others may be hazardous.

Installing the Eccentric Bushing (41-24-1) onto the Motor Unit (253-58) Spindle

To install the Eccentric Bushing (41-24-1) onto the Motor Unit (253-58) Spindle, first make sure that the Motor Unit Spindle's specific washer/spacer (157-57) is installed. Then screw the Eccentric Bushing completely onto the spindle with the wrench flats towards the Motor Unit and against the Spacer. Tighten the Eccentric Bushing onto the spindle by first holding the flats on the end of the spindle and then tightening the flats of the Eccentric Bushing with the appropriate wrench.

Installing the Punch (1022) and Die (1021)

To install the Punch (1022) and Die (1021), insert the Punch into the Plunger (1026) and secure with the Retainer Nut (1027).

If the Nibbler Head (1020) is removed from the Motor Unit (253-58), hold the Link Assembly (1024) and Plunger to keep the components from rotating. With the Brass Sleeve (1028) set into the upper lip of the Die, insert the Die into the Nibbler Housing (1023) while simultaneously inserting the Punch into the Die. Secure the Punch and Die using the Clamp Nut (1029). Be sure to orientate the Die correctly before completely tightening the Clamp Nut.

Installing the Nibbler Head (1020) onto the Motor Unit (253-58)

To install the Nibbler Head (1020) onto the Motor Unit (253-58), first lubricate the bearing surface of the Eccentric Bushing (41-24-1) with grease (264-2 or similar). Engage the Clamping Screw (M133-36) into the Nibbler Housing (1023) and loosen the screw a few turns. Then slide the Nibbler Housing onto the Motor Unit Adapter Ring while simultaneously inserting the Eccentric Bushing into the Link Assembly (1024). Once the Eccentric Bushing is fully inserted, tighten the Clamping Screw inside the Nibbler Housing to secure the Nibbler Head in the desired orientation on the Motor Unit Adapter Ring.

OPERATION

⚠ WARNING To reduce the risk of injury, always unplug the power tool before attaching or removing accessories or adjusting. Use only specifically recommended accessories. Others may be hazardous.

To reduce the risk of injury, wear safety goggles or glasses with side shields.

To operate, secure the work piece. To start the cut, place the Die (1021) opening of the Nibbler Housing (1023) slightly onto the edge of the work piece. This helps steady the tool and ready it for the cut. Depress the switch and guide the Nibbler into the work. Do not force the Nibbler. Avoid double thicknesses of material, which exceeds the recommended capacity.

For cutting within the perimeter of work piece, drill a 1/2-in diameter starting hole and follow instructions above. If resistance to the tool develops or cutting becomes difficult, discontinue cutting and check the following: lubrication; chip clogging, thickness of material, and sharpness of punch and die.

DISASSEMBLY

WARNING To reduce the risk of injury, always unplug the power tool before attaching or removing accessories or adjusting. Use only specifically recommended accessories. Others may be hazardous.

Removing the Nibbler Head (1020) from the Motor Unit (253-58)

To remove the Nibbler Head (1020) from the Motor Unit (253-58), begin by loosening the Clamping Screw (M133-36) inside the Nibbler Housing (1023). Then separate the Nibbler Head from the Motor Unit Adapter Ring. Once separated, the Eccentric Bushing (41-24-1) on the Motor Unit Spindle will be exposed.

Removing the Punch (1022) and Die (1021)

To remove the Die (1021), loosen the Clamp Nut (1029) from the Nibbler Housing (1023) and remove the nut completely. When the Clamp Nut is removed, the Die will slide off. If the Die slides off with the Brass Sleeve (1028), save the sleeve for reassembly. If the Die slides off without the Brass Sleeve, obtain the sleeve from inside the Nibbler Housing and save it for reassembly.

To remove the Punch (1022), loosen the Retainer Nut (1027) and slide the Punch out of the Plunger (1026). If the Punch is being removed while the Nibbler Head (1020) is removed from the Motor Unit (253-58), hold the Link Assembly (1024) and Plunger subassembly to keep the components from rotating while removing the Punch.

Removing the Eccentric Bushing (41-24-1) from the Motor Unit (253-58) Spindle

To remove the Eccentric Bushing (41-24-1) from the Motor Unit (253-58) Spindle, hold the flats on the end of the Motor Unit Spindle and loosen the flats of the Eccentric Bushing with the appropriate wrench.

MAINTENANCE

WARNING To reduce the risk of injury, always unplug the power tool before performing any maintenance. Tool may be cleaned and lubricated by the user, but any other servicing (including the changing of carbon brushes) should be performed by the manufacturer or authorized representative.

Motor

NOTICE This power tool will stop when the brushes wear to a preset length. This prevents damage to the motor.

Motors are factory tested. If the shear does not operate, check the following: lubrication, thickness of material, sharpness of cutting blades, and air pressure. The use of a 1 horsepower or larger compressor connected to an air tank of at least 40-gallon capacity is recommended.

Cable/Cord

The cable/cord is the "life line" of your tool. Keep cable/cord clean by wiping it off occasionally. Keep cable/cord out of oils and greases. Coil cable/cord neatly when not in use, and avoid dragging it across sharp surfaces or using it as a handle to lift the tool.

The pipe and fittings between the compressor and air hose outlets should be 1/2-inch pipe size. The air hose should at least have a 3/8-inch inner diameter.

When using the tool at a considerable distance from power source, an extension cable of adequate size must be used to prevent loss of power and overheating.

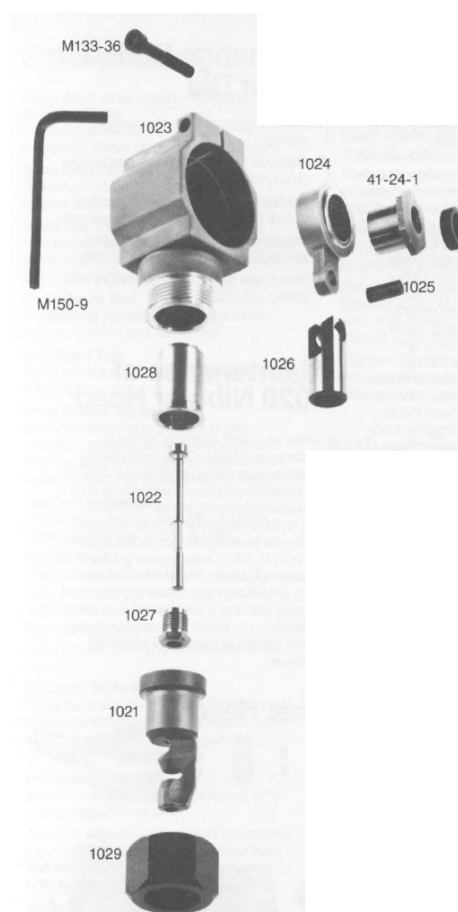
Extension Cord Length (feet)		
Up to 75	100	Up to 200
18-Gauge Wire	16-Gauge Wire	14-Gauge Wire

Lubrication

Once every three months, depending upon usage, remove the Nibbler Head (1020) from the Motor Unit (253-58) following the instructions given under the heading "Disassembly." Put a few drops of heavy oil on the Eccentric Bushing (41-24-1), so that it saturates the needle bearing. The outside surface of the Eccentric Bushing ring should also be greased (264-2 or similar).

Lubricate the air motor daily with a good grade of air motor oil. Use a continuous airline oiler with filter.

NIBBLER HEAD (1020) PARTS LIST



Part No.	Qty	Description
41-24-1	1	Eccentric Bushing
1021	1	Die
1022	1	Punch
1023	1	Nibbler Housing
1024	1	Link Assembly
1025	1	Pin
1026	1	Plunger
1027	1	Retainer Nut
1028	1	Brass Sleeve
1029	1	Clamp Nut

M133-36	1	Clamping Screw
M150-9	1	4mm Socket Key
154-57	1	Spacer (0.142 in thick)

MOTOR UNIT (253-58) PARTS LIST

Item No.	Part No.	Qty.	Description	Item No.	Part No.	Qty.	Description
1	103132	1	Inlet Bushing	17	0626-ZZ0A	2	Ball Bearing
1Q	103129	1	Exhaust Deflector	18	103116	1	Rear End Plate
5	303305	1	Motor Housing	19	P-0025-060	2	Pin
5A	103118-S	1	Housing Sleeve	20	303319	1	Rotor
6	103127	1	Lever	21	303115	5	Rotor Blades
7	P-0030-220	1	Lever Pin	22	303112	1	Cylinder
8	103126	1	Valve Bushing	23	303323	1	Front End Plate
8P	O-1100-120	2	O-Ring	23A	103322A	1	Washer
9	O-0500-150	1	O-Ring	24	303324	1	Key
10	103125	1	Throttle Valve	25	103323	3	Idler Gear
11	O-0500-200	1	O-Ring	26	K477TN	3	Needle Bearing
12	103123	1	Spring	27	303327	1	Idler Gear Plate
13	103122	1	Air Regulator	28	303328	1	Ring Gear
14	O-0700-180	1	O-Ring	29	6201-Z00A	2	Ball Bearing
15	O-1100-250	1	O-Ring	30	303330	1	Gear Cap
16	103119	1	Valve Screw	31	30331	1	Washer

