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MODEL HN NIBBLER

MAXIMUM DUTY 10 GAUGE CAPACITY



KETT TOOL COMPANY 5055 MADISON ROAD CINCINNATI, OHIO 45227-1494

513/271-0333

FAX 513/271-5318

MADE IN U.S.A.

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SPECIFICATIONS

MAXIMUM MATERIAL THICKNESS (CUTTING CAPACITY)

MILD STEEL	10 Ga. (.1345 in. / 3,42 mm)
STAINLESS STEEL	12 Ga. (.1046 in. / 2,66 mm)
NON-FERROUS	8 Ga. (.1644 in. / 4,18 mm)

MAXIMUM CUTTING SPEED

55 INCHES PER MINUTE (1.2 meters per minute)

MINIMUM CUTTING RADIUS*

6 inches (152,4 mm)

PHYSICAL SIZE

12-5/8" (321 mm) Long, 4-1/8"(105 mm) wide

HEIGHT

10-1/2" inches (267 mm)

WEIGHT

14 lbs. (6,35 kgs.)

MOTOR

1 H.P. 120 volts* 6 amp

STARTING HOLE SIZE

2 inches (50,8 mm) in diameter

SIZE OF CUT WIDTH

3/16" (4,77 mm) x 3/32 (2,37 mm)

IMPORTANT OPERATING HINTS

1. Always disconnect power cord before attempting adjustment or maintenance.
2. Minimize air gap between stripper foot and material with the appropriate shim provided.
3. Tighten all screws and check punch and die clearance at least once daily.
4. Keep punch and die sharp and a spare in stock.
5. Turn nibbler on before engaging material.
6. When possible, spread a thin film of oil on surfaces being cut as this will greatly life of extend punch and die.
7. Stop machine immediately if it should jam. Never force tool. Back out punch by inserting screwdriver in operating slot at rear of motor and turning motor shaft counter clockwise.
8. Let nibbler do the work as guiding tool is all that is necessary and forcing will only cause it to operate improperly.
9. Only cut the gauge metal that is recommended or servicing and expensive part damage will occur.
10. Observe lubrication instructions.
10. Always make frequent checks on motor brushes, replacing if worn.

REPLACEMENT PARTS

When servicing, use only original KETT / FENWAY replacement parts.

FOR ALL TOOLS - GROUNDED AND DOUBLE INSULATED

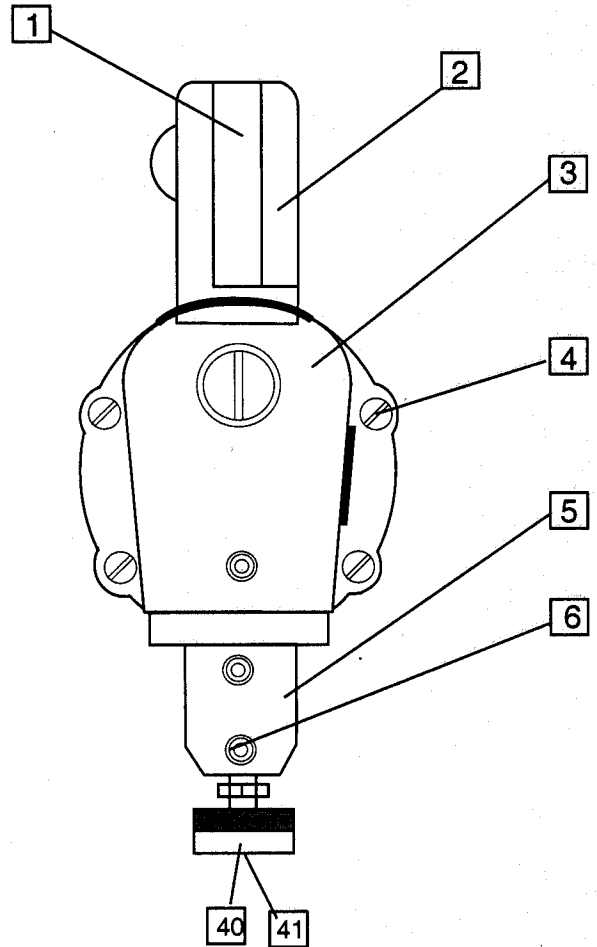
1. **KEEP WORK AREA CLEAN**
Cluttered areas and benches invite accidents.
2. **AVOID DANGEROUS ENVIRONMENT**
Keep work area well lit.
3. **KEEP CHILDREN AWAY**
All visitors should be kept a safe distance from work area.
4. **STORE IDLE TOOLS WHEN NOT IN USE**
Tools should be stored in a dry, high, or locked-up place out of the reach of children.
5. **DON'T FORCE TOOL**
It will do the job better and safer at the rate for which it was designed.
6. **USE RIGHT TOOL**
Don't force small tool or attachment to do the job of heavy-duty tool.
7. **WEAR PROPER APPAREL**
No loose clothing or jewelry to get caught in moving parts.
8. **USE SAFETY GLASSES**
Use safety glasses with all tools. Also face or dust mask if cutting operation is dusty.
9. **DON'T ABUSE CORD**
Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
10. **SECURE WORK**
Use clamps or vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
11. **DON'T OVERREACH**
Keep proper footing and balance at all times.
12. **MAINTAIN TOOLS WITH CARE**
Keep tools sharp and clean for best and safest performance. Follow operating instructions for adjustments, lubricating and changing accessories.
13. **DISCONNECT TOOLS**
When not in use and before servicing or when changing accessories such as punch, die, brushes, etc.
14. **REMOVE ADJUSTING KEYS AND WRENCHES**
Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
15. **AVOID ACCIDENTAL STARTING**
Don't carry plugged in tool with finger on switch. Be sure switch is off when plugging in.
16. **OUTDOOR USE EXTENSION CORDS**
When tool is used outdoors, use only extension cords marked "suitable for use with outdoor appliances."
Store indoors when not in use.

SERVICING INSTRUCTIONS:

All repairs and maintenance of the electrical components, armature, field, switches and cords of either double insulated or grounded tools must be performed by KETT TOOL COMPANY.

PARTS LIST

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ITEM No.	PART No.	QTY	DESCRIPTION
1	N3002	1	Handle
2	N3003	1	Handle Cover
3	N3037	1	Nose Housing
4	N3057	4	Body Screw
5	N3074	1	Nose Piece / Die Holder
6	N3031	1	Stripper Set Screw
7	N2018	2	Closing Cap Screw
8	N3065	1	Closing Cap
9	N3039	1	Slider
10	N3040	2	Eccentric Shaft Bearing
11	N3038	1	Eccentric Shaft
12	N3059	1	Button Plug
13	N3027	1	Punch Adjusting Screw
14	N3035	2	Punch Set Screw
15			Gear Pinion Shaft (not sold seperately)
16	N3033	1	Punch
17	N3036	1	Plunger
18	N3030	1	Stripper
19	N3028	1	Die
20	N3050	4	Lockwasher
21			
22	N3054	2	Small Ball Bearing
23	AN3053	1	Small Gear Assy.
24	N3001	1	Motor Housing
25	N3017	2	Handle Locking Screw
26	N3016	2	Handle Nut, Self Locking
27	N3004	5	Handle Cover Screw
28	N3015	1	Cord Assy
29	N3014	1	Cord Guard
30	N3013	1	Cord Clamp
31	N3012	2	Cord Clamp Screw
32	N3011	2	Wire Retainer Screw
33	N3009	1	Switch
34	N3008	2	Switch Mounting Screw
35	N3007	1	Ground Wire Retainer
36			
37	N3042	1	Gear Housing
38	N3060	1	Woodruff Key
39	N6041	1	Large Gear
40	N3058	2	Die Screw
41	N3045	2	Die Washer
42	N3019	1	Motor Field (110v)
43	N3021	1	Motor Armature (110v)
44			
45	N3023	1	Rear Armature Bearing
46	N3025	1	Spacer
47	N3024	1	Load Spring
48	N3026	2	Brush Holder
49	N3044	2	Brush Set
50	N3047	2	Field Screw
51	N3048	1	Front Armature Bearing
52	N3049	2	Dowel Pin
53			
54	N5099	2	Brush Holder Cap Protector
55	N3055	4	Nose Piece

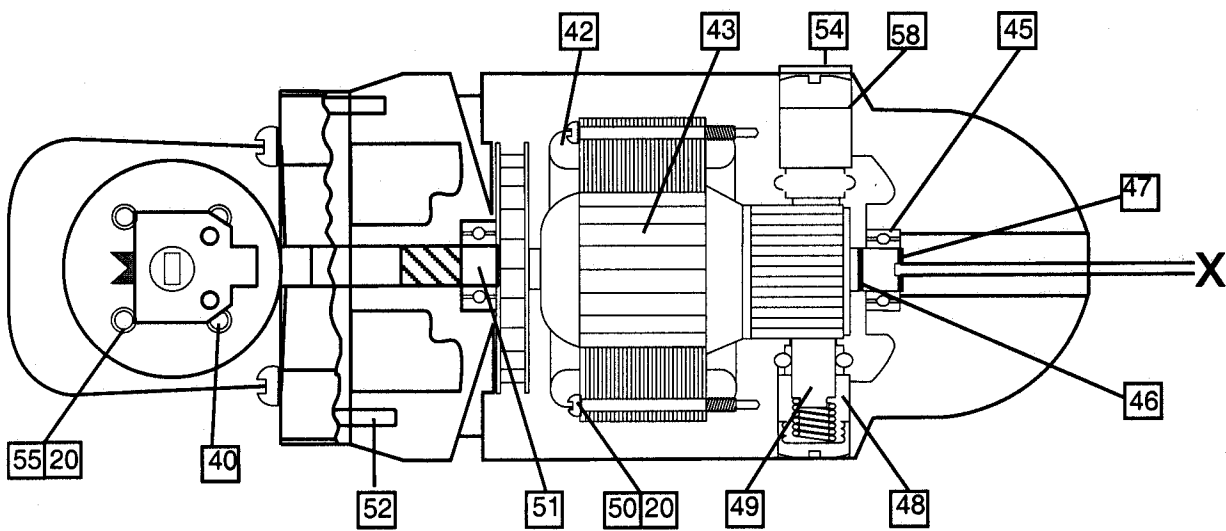
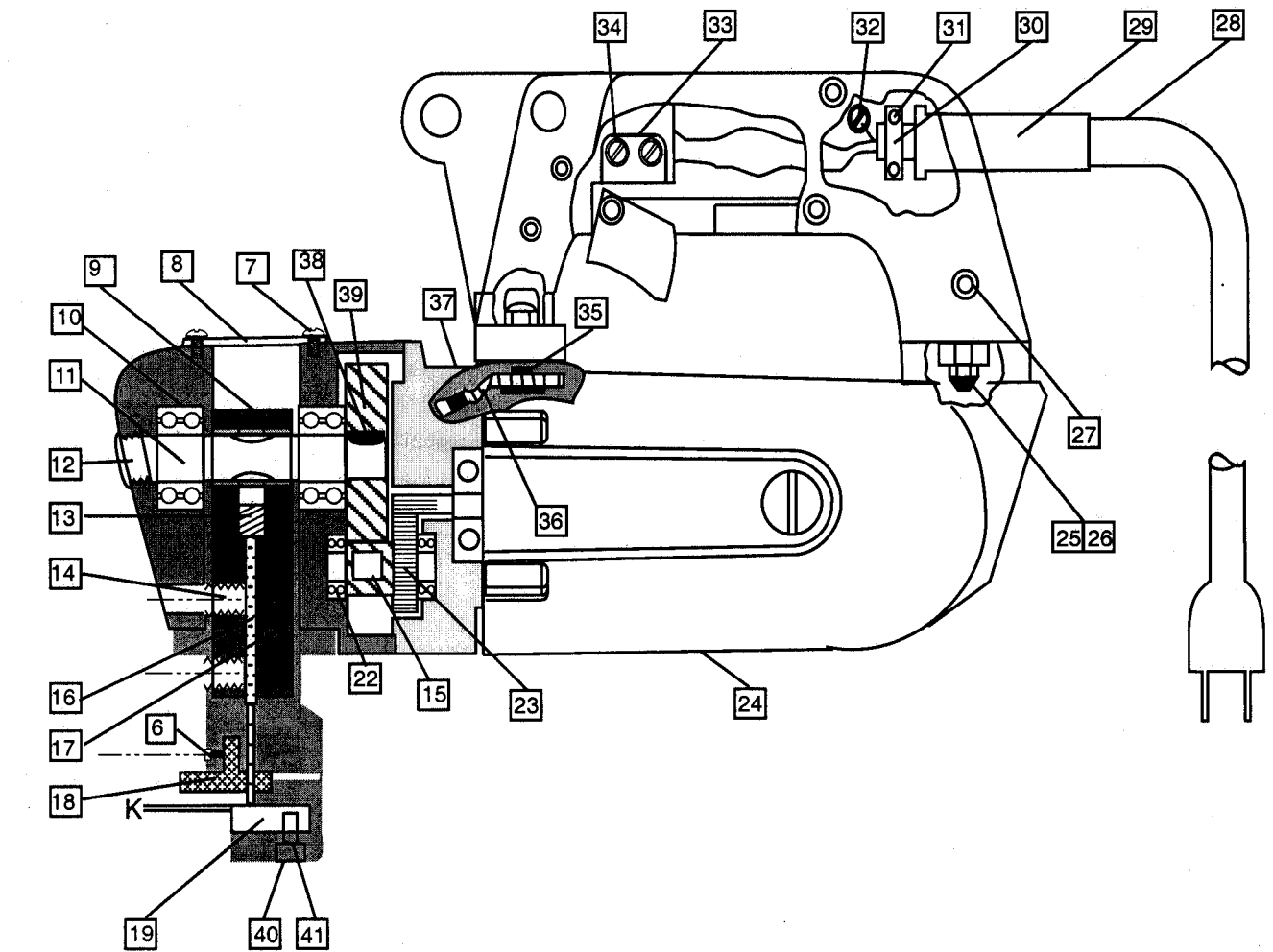


ACCESSORIES

These hex keys are provided with all HN nibblers.

May be ordered from
KETT TOOL COMPANY

(N0109)



Basic Adjustments

Caution: Before making any adjustments, unplug the tool.

To adjust punch (16), the eccentric shaft (11) must be at the lowest position, so that all holes will be aligned to provide access to adjusting screws (13).

Rotate the eccentric shaft by turning the motor shaft with a screwdriver. Access is at the rear of the tool, marked "X" on the bottom view diagram (previous page).

Adjust punch height so that at lowest position, it will be 1/16" minimum below surface of die (19) (clearance "K").

Removing Punch

1. Remove closing cap (8).
2. Insert screwdriver in slot of armature shaft and rotate motor until hole in eccentric shaft (11) is lined up with hole in slider (9) as seen from top. Punch should be in full "up" position, clear of die.
3. Remove two die screws (40) and lockwashers (41).
4. Remove die.
5. Loosen set screw (6) and remove stripper (18).
6. Rotate armature shaft with screwdriver until eccentric shaft is in the full "down" position.
7. Loosen set screw (6) and pull punch downward and out of tool.

Replacing Punch

1. Remove die and stripper as in steps 3, 4 and 5 above.
2. With the foat side facing front, insert punch upward into plunger until it touches the adjusting screw.
3. Tighten set screws against flat of punch.
4. Using screwdriver, rotate the armature until punch is in full "up" position.
5. Replace stripper and tighten set screw.
6. Replace die and two screws with lockwashers(41).
7. Using screwdriver, rotate armature shaft until punch is in the full "down" position.
8. Punch should enter die 1/16". Adjust punch height. After punch is properly adjusted, replace closing cap.

Adjusting Punch

1. Remove closing cap.
2. Using a screwdriver, rotate armature until punch is in full "down" position. You should now be able to access the Punch Set Screws (6) from the front and the Punch Adjusting Screw (13) from the top.
3. Slightly loosen Punch Set Screws (6) and holding punch firmly against the adjusting screw, turn adjusting screw enough so that punch enters die 1/16" at full "down" position.
4. Tighten Screws. Make sure screws are firmly against punch so adjustment cannot change.
5. **CAUTION: Turn armature several revolutions to make sure there is no binding.**

Removing Die

1. Loosen set screw (6) and raise stripper (18) to widest opening.
2. Remove two die screws (40) and lockwashers (41).
3. Remove die by pulling it forward and over adjusting block.

Replacing Die

1. Place die in die holder, Insert die screws and lockwashers.
2. **CAUTION: Turn armature several revolutions to make sure there is no binding before turning on power.**

Adjusting Stripper

1. Loosen stripper screw (6) and adjust stripper clearance to approximately 1/64" above guage of metal being cut.
2. Tighten stripper screw (6).

Lubrication

After 30 hours of operation (or whenever either punch or die is removed):

Remove cap and add 6-8 drops of heavy gear oil (SAE 90 to SAE140) into hole on top of plunger. With a screwdriver, turn armature several revolutions to distribute oil. Repeat procedure three more times.

Drop 6 to 8 drops of the same lubricant into Punch Set Screw access hole. Replace cover, lay nibbler on its side and run it for several seconds to distribute the oil.

Check motor brushes for excessive wear.

After 100 hours of operation or every 6 months:

Remove motor brushes and four nose housing bolts, remove and separate nose housing and gear housing.

Remove old grease