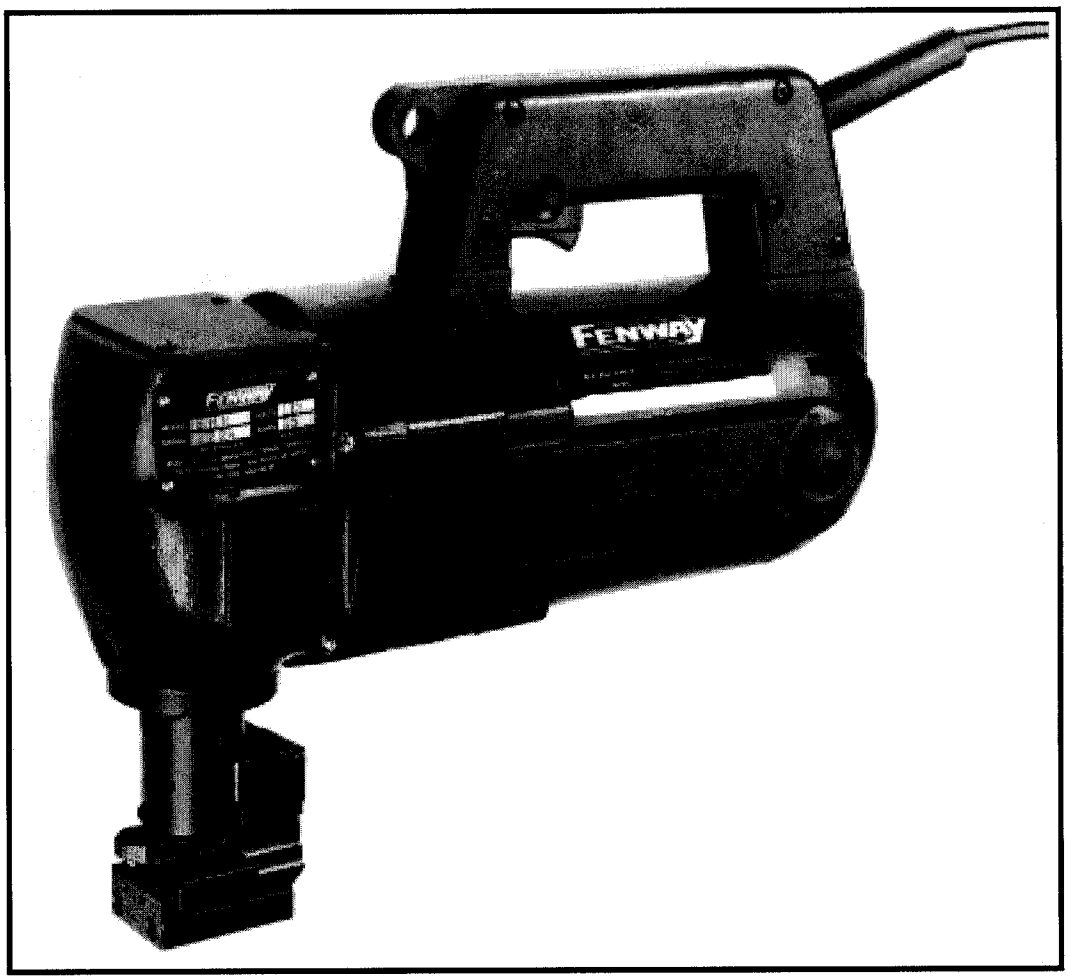
INSTRUCTION MANUAL

MODEL EHN NIBBLER

EXTRA HEAVY DUTY 3/16" CAPACITY



KETT
FENWAY

KETT TOOL COMPANY 5055 MADISON ROAD CINCINNATI, OHIO 45227-1494
513/271-0333
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MADE IN U.S.A.

KE ER

KETT EHN NIBBLER

SPECIFICATIONS

MAXIMUM MATERIAL THICKNESS (CUTTING CAPACITY)
MILD STEEL 3/16" (.1875 in. / 4,762 mm)
STAINLESS STEEL 10 ga. (.1345 in. / 3,42 mm)
NON-FERROUS 1/4" (.2500 in. / 6,35 mm)

MAXIMUM CUTTING SPEED
40"-45" INCHES PER MINUTE (.0,9 meters per minute.)

MINIMUM CUTTING RADIUS
8" inches (203.2 mm.)

MOTOR
2 H.P. (3300 watts), 110 volts*, 15 Amp
(*Available in 220 v at additional charge.)

STARTING HOLE SIZE
2-1/2" inches (63,5 mm) in diameter

SIZE OF CUT
3/16" (4,7625 mm)

LENGTH
13" (330mm) Long

WIDTH
5"(127mm) wide

HEIGHT
12 inches (305mm)

WEIGHT
21 lbs. (9,5Kgs.)

IMPORTANT OPERATING HINTS

1. **CAUTION: Always disconnect power cord before attempting adjustment or maintenance.**
2. Shim stripper to 1/16 inch above metal thickness being cut. See Table 1.
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 extend punch and die life.
7. Stop machine immediately if it should jam. Never force tool. **Disconnect power cord before attempting adjustment or maintenance.** 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. Guiding tool is all that is necessary. 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.
11 Make frequent checks on motor brushes, replacing if worn.

SERVICE • SAFETY FOR PORTABLE ELECTRIC TOOLS

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 an authorized service center.

REPLACEMENT PARTS

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

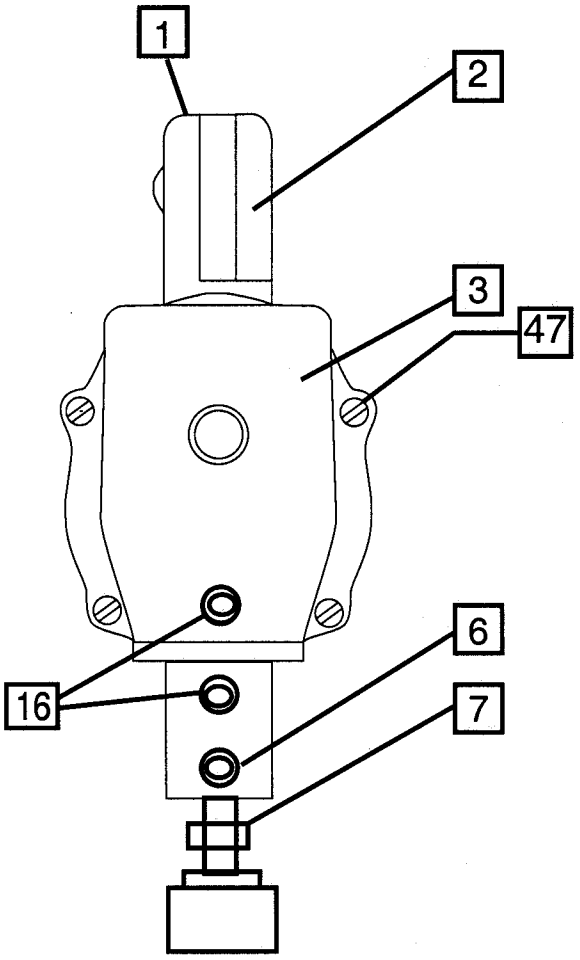
SAFETY PRECAUTIONS

1. ***DISCONNECT TOOLS***
   When not in use; before servicing, when changing accessories such as punch, die, brushes, etc.
2. ***KEEP WORK AREA CLEAN***
   Cluttered areas and benches invite accidents.
3. ***WHAT YOU DON'T SEE CAN HURT YOU***
   Keep work area well lit.
4. ***KEEP CHILDREN AWAY***
   All visitors should be kept a safe distance from work area.
5. ***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.
6. ***DON'T FORCE TOOL***
   It will do the job better and safer at the rate for which it was designed.
7. ***USE RIGHT TOOL***
   Don't force small tool or attachment to do the job of heavy-duty tool.
8. ***WEAR PROPER APPAREL***
   Loose clothing or jewelry may get caught in moving parts.
9. ***USE SAFETY GLASSES***
   Use safety glasses with all tools. Also face or dust mask if cutting operation is dusty.
10. ***DON'T ABUSE CORD***
    Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
11. ***SECURE WORK***
    Use clamps or vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
12. ***DON'T OVERREACH***
    Keep proper footing and balance at all times.
13. ***MAINTAIN TOOLS WITH CARE***
    Keep tools sharp and clean for best and safest performance. Follow operating instructions for adjustments, lubricating and changing accessories.
14. ***REMOVE ADJUSTING KEYS AND WRENCHES***
    Form the 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 your finger on the 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.

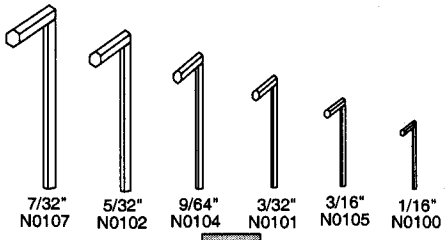
EHN PARTS LIST

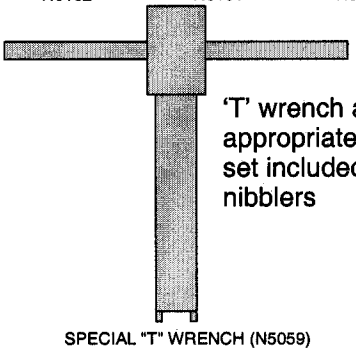
PARTS LIST

Item No.	Part No.	Qty.	DESCRIPTION
1	N3002	1	Handle
2	N3003	1	Handle Cover
3	N5037	1	Nose Housing
6	N3027	1	Screw, Stripper
7	N5030	1	Stripper
11	N5050	10	Lockwasher
12	N5035	1	Stripper Shim
13	N5028	1	Die
	N5028-1	1	Carbonized Die
14	N5058	2	Die Screw
16	N5027	1	Punch Locking Screw
17	N5036	1	Plunger
18	N5033	1	Punch
	N5033-1	1	Carbonized Punch
19	N5010	1	Punch Height Adjuster
20	N5009	1	Internal Lock Screw
21	N5040	2	Eccentric Shaft Bearing
22	N3059	1	Button Plug
23	N5038	1	Eccentric Shaft
24	N5039	1	Slider
25	N5018	2	Closing Cap Screw
26	N5065	1	Closing Cap
27	N5041	1	Large Gear
28	N5060	1	Woodruff Key
29	N3011	2	Ground Wire Screw
30	N3006	1	Ground Wire Assembly
31	N3007	1	Ground Wire Retainer
32	N3008	2	Switch Screw
33	N3009	1	Switch
34	N3012	2	Cord Clamp Screw
35	N3013	1	Cord Clamp
36	N3014	1	Cord Guard
37	N3015	1	Cord Assy.
38	N3004	5	Handle Cover Screw
39	N3017	2	Handle Locking Screw
40	N3016	2	Handle Nut, Locking
41	N5001	1	Motor Housing
42	N5048	1	Front ArmatureBearing
43	AN5053	1	Small Gear Assy.
44	N5054	2	Bearing Pinion
45	N5062	1	Nose Piece/Die Holder
46	N5045	2	Die Washer
47	N5057	4	Nose Housing Screw
48	N5042	1	Gear Housing
49	N5019	1	110V Field
50	N5021	1	110V Armature
51	N5032	2	Brush Holder Cap
52	N5099	2	Brushholder Plug
53	N5023	1	Rear Armature Bearing
54	N5024	1	Load Spring
55	N5044	2	Brush
56	N5026	2	Brush Holder(not sold seperately)
57	N5047	2	Field Screw
58	N3049	2	Dowel Pin
59	N5055	4	Nose Piece Screw



MAINTENANCE KIT

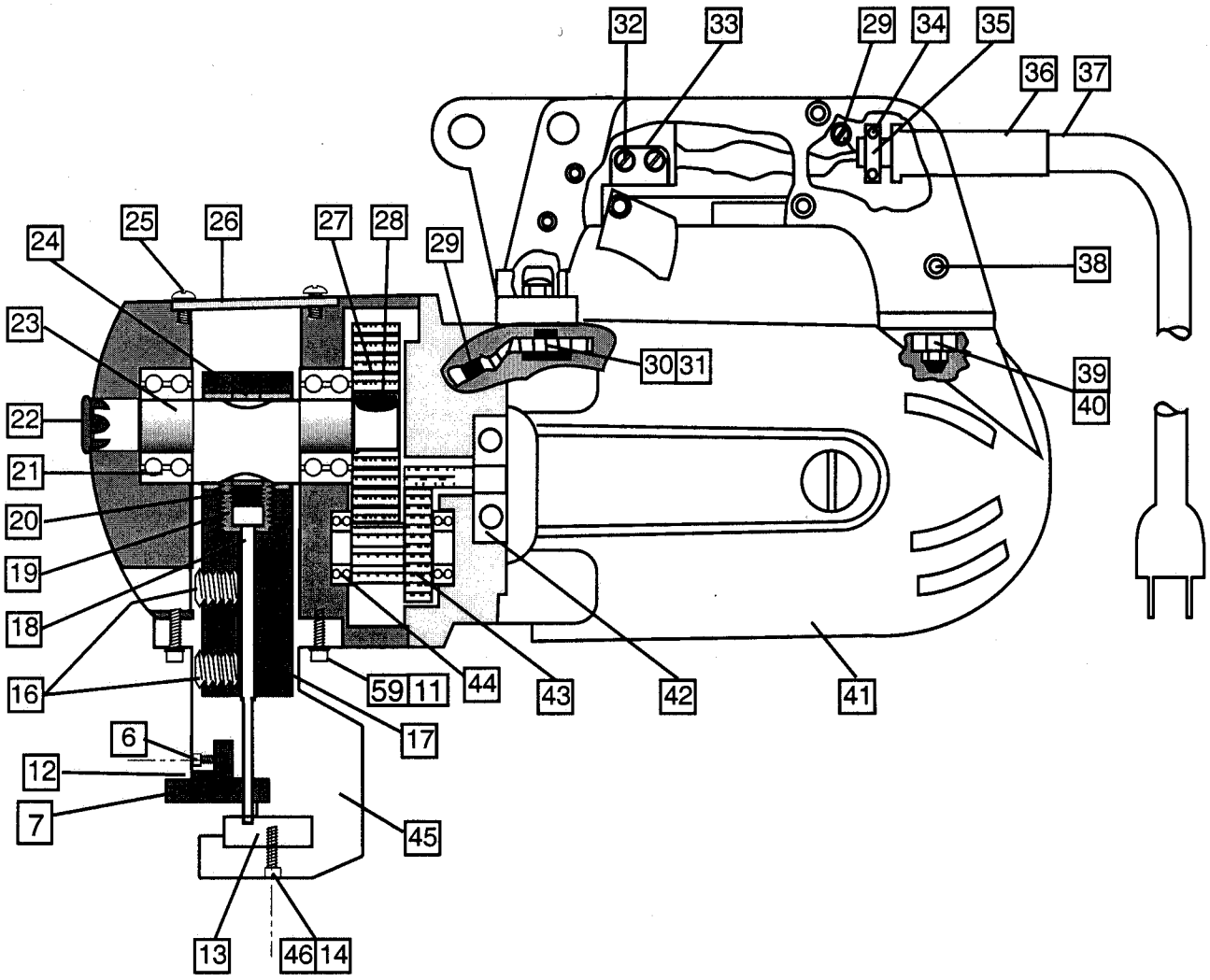




'T' wrench and appropriate hex key set included with all nibblers

SPECIAL "T" WRENCH (N5059)

N0109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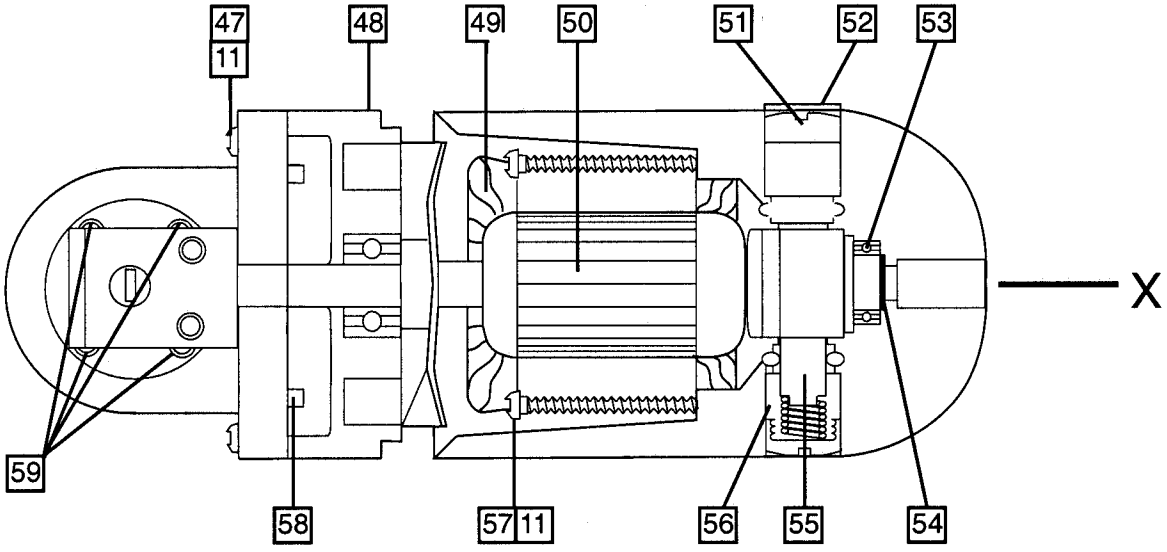
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EHN TOOL MAINTENANCE

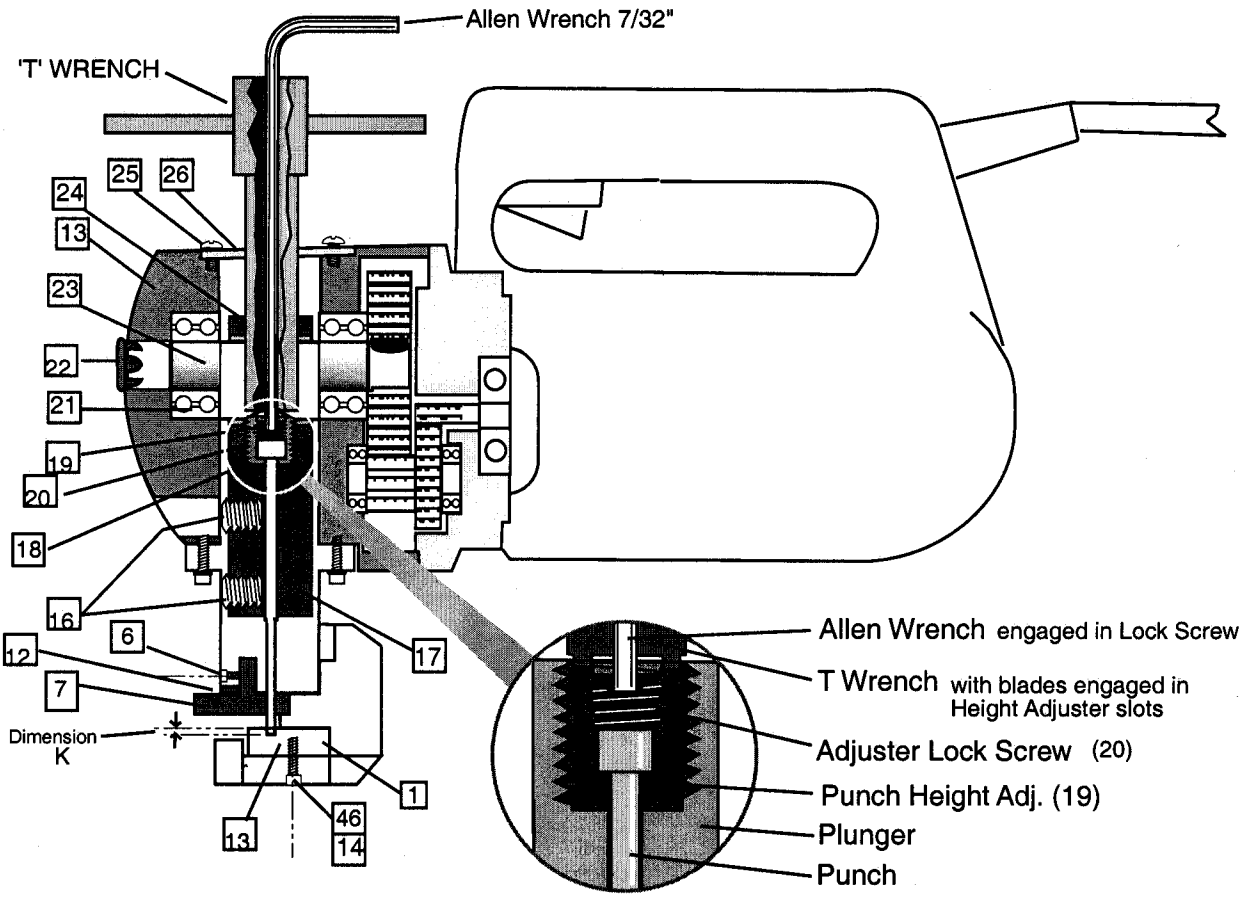

TABLE 1

Thickness US Std. Ga. No.	"A" Clearance	No. of "C" Shims
15(.063)	.005	5
13(.089)	.010	5
10(.136)	.015	4
8(.164)	.020	3
3/16"(.194)	.025	3
1/4"(.239)	.030	2

NOTE:

Adjust punch (18), so that at lowest position, as shown, it will be 5/64" minimum below surface of die (13). See "Dimension K" above.

To adjust punch (18), the eccentric shaft (23), must be at lowest position. This aligns openings and allows access to Punch Height Adjuster(19). To turn the eccentric shaft, use a screwdriver at point X. Remove button plug (22) for access.

REMOVING PUNCH

The punch (18 in the diagrams) is positioned in the plunger by a Punch Height Adjuster (19) and secured by a 7/32" Allen lock screw (20). To remove the punch without affecting its height adjustment, the height adjuster must be prevented from rotating while the lock screw is removed. Follow these instructions:

1. Remove closing cap (26) and button plug (22).
2. Insert screw driver in slot of eccentric shaft and rotate to bring plunger (17) to its lowest point. This will line up the holes in slider (24), plunger (17) and eccentric shaft (23), allowing access to the lock screw and height adjuster.
3. Insert T-wrench through top of tool to engage height adjuster. Insert Allen key *through* T-wrench into lock screw. Holding T-wrench stationary, turn Allen key counterclockwise until lock screw is disengaged from adjuster.
4. Remove Allen key with the lock screw, *then* remove the T-wrench.
5. Loosen two set screws (16) and push punch up from bottom and out through top of nose housing.

REPLACING PUNCH

1. Remove closing cap (26) and button plug (22). With a screwdriver, rotate eccentric shaft so that plunger is at its lowest point and the holes in the slider, plunger, and eccentric shaft are lined up.
2. With flat of punch facing front end of tool, insert punch through the top all the way down to die (13).
3. Insert T-wrench through top of tool to engage punch retainer. Using Allen key, insert lock screw *through* the T-wrench into punch retainer. Holding T-wrench stationary, tighten the lock screw.
4. Tighten the two set screws (16).

ADJUSTING PUNCH

1. Remove closing cap (26). With a screwdriver, rotate eccentric shaft so that plunger is at its lowest point and the holes in the slider, plunger, and eccentric shaft are lined up.
2. Loosen two set screws (16).
3. Insert T-wrench and 7/32" Allen key, engaging the punch retainer and the punch lock screw. Holding T-wrench stationary, turn Allen key 1/4 turn counterclockwise to loosen lock screw.
4. Turn both T-wrench and Allen key to adjust punch: clockwise for down, counterclockwise for up.
5. After adjustment is made, hold T-wrench stationary and tighten lock screw (clockwise).
6. Tighten two set screws (16).

REMOVING DIE

1. Loosen set screw (6) and raise stripper (7) to widest opening.
2. Remove two die screws (14) and lockwashers.
3. Remove die (13) by pulling die forward and over set screws (8).

REPLACING DIE

1. With stripper in its widest open position, place die in die holder. Make sure no debris prevents die from seating properly.
2. Start the die screws (14) with lockwashers into die *through* die holder.
3. Holding die firmly against the set screws at front of die holder, tighten die screws.

CAUTION: Before turning on power, make sure there is no binding. Turn eccentric shaft several revolutions with screwdriver at point "X" to move punch up and down.

REMOVING STRIPPER

1. Using a screwdriver, turn eccentric shaft (23) until punch (18) is in full up position.
2. Remove two die holder screws (15) and lockwashers (11).
3. Remove die holder (45) (LEAVING DIE ASSEMBLED) from nose piece (5).
4. Loosen stripper screw (6) and pull stripper from nose piece (5).

REPLACING STRIPPER

Reverse procedure for removing stripper. Remember to check that all screws, with lockwashers, have been replaced and tightened (6), (5).

CAUTION: Before turning on power, make sure there is no binding. Turn eccentric shaft several revolutions with screwdriver at point "X" to move punch up and down.

TO SET STRIPPER

1. Loosen stripper screw (6) and insert C shim between stripper (7) and nose piece (5). Consult Table 1 for number of "C" shims to use.