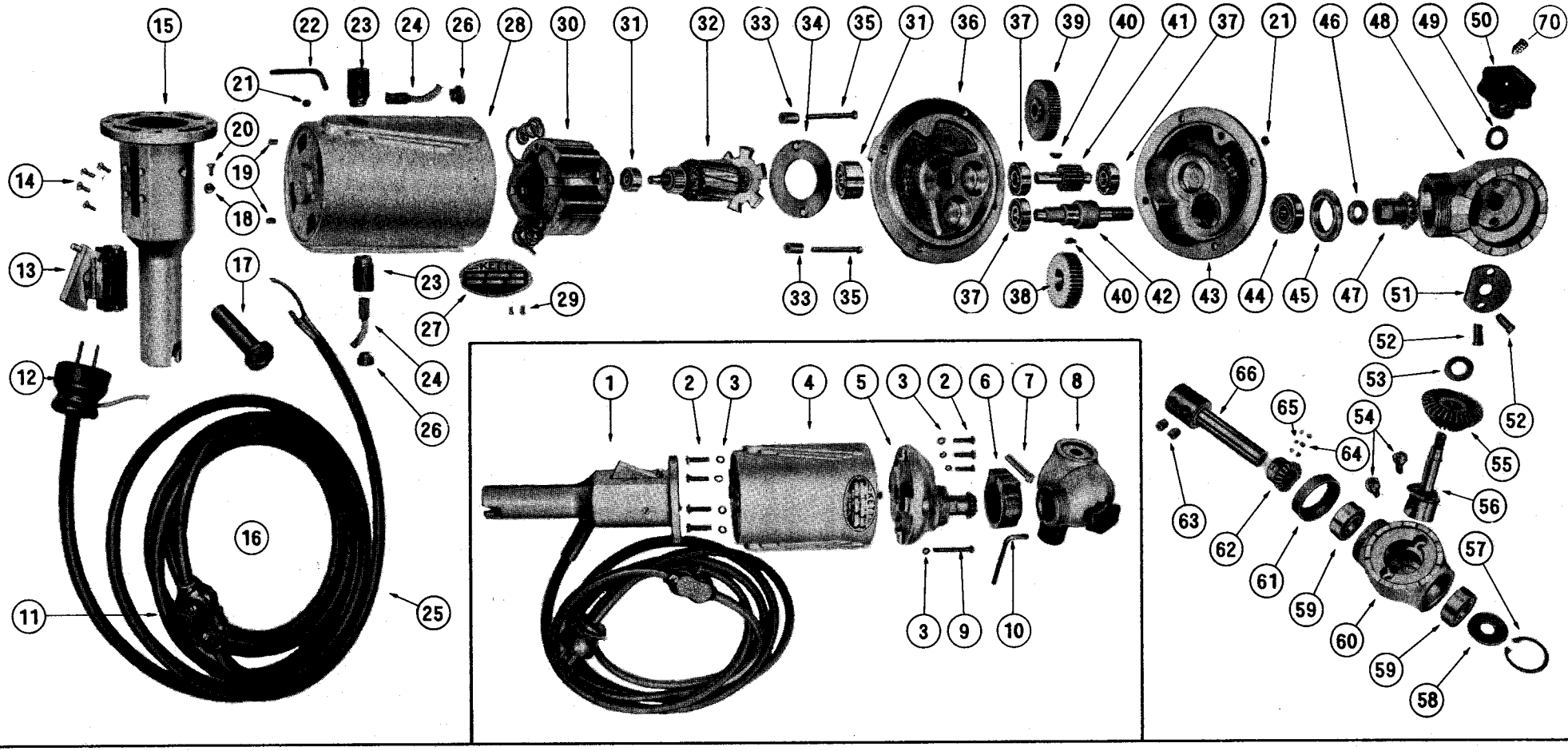
THE KETT TOOL CO. 5055 Madison Road CINCINNATI, OHIO 45227



PARTS LIST KU-21 TALL REACH JOIST BORER

Reference Number	Part Number	Description
1	214-1	Handle & Cord Assembly
2	163-6	Screw
3	165-2	Lockwasher
4	237-2	*Motor Assembly
5	248-1	*Gear Reduction Head Assembly
6	141-6	Clamp Ring
7	163-4	Clamp Ring Screw
8	213-5	All Angle Head Assembly
9	163-16	Screw
10	150-1	3/16" Socket Head Wrench
11	189-2	Line Switch
12	192-1	Electric Plug
13	189-1	Control Switch
14	163-9	Screw
15	188-1	Handle
16	187-3	Electric Cord Assembly
17	191-1	Electric Cord Bushing
18	138-4	Hex Nut
19	178-4	Set Screw
20	163-17	Screw
21	181-2	Screw Plug
22	150-2	1/8" Socket Head Wrench
23	*242-2	Brush Holder
	+242-7	Brush Holder
24	*244-2	Brush & Spring Assembly
	+244-7	Brush & Spring Assembly
25	190-1	Electric Cord
26	*243-2	Brush Holder Cap
	+243-6	Brush Holder Cap
27	197-2	Name Plate
28	*232-2	Motor Housing
	+232-6	Motor Housing
29	206-2	Drive Screw
30	*199-2	Field Assembly
	+199-10	Field Assembly
31	129-13	Ball Bearing
32	*241-3	Armature
	+241-11	Armature
33	154-12	Baffle Spacer
34	240-2	Baffle Plate
35	163-15	Baffle Screw
36	193-4	*Reduction Gear Housing Plate
37	129-14	*Ball Bearing
38	131-19	*Spindle Gear
39	131-14	*Intermediate Gear
40	177-2	*Woodruff Key
41	131-16	*Intermediate Pinion
42	139-6	*Drill Spindle
43	193-5	*Reduction Gear Housing
44	129-12	*Ball Bearing
45	180-2	*Adapter
46	154-10	*Spacer
47	131-9	Drive Pinion
48	130-5	*Drive Spindle Housing
49	165-10	Clamping Knob Washer
50	138-3	Clamping Knob
51	182-3	*Lock Plate
52	163-7	Lock Plate Screw
53	132-15	Shim Washer (Specify Thickness)
54	163-25	Intermediate Shaft Lock Screw
55	131-12	Intermediate Gear & Bushing
56	184-5	*Intermediate Shaft
57	141-4	Rear Bearing Retaining Ring
58	136-4	Rear Bearing Retaining Cap
59	129-5	Ball Bearing
60	137-4	*Drill Spindle Housing
61	136-3	Front Bearing Retaining Cap
62	131-6	Drill Spindle Gear
63	178-5	Set Screw (2)
64	178-3	Set Screw (3)
65	185-1	Steel Ball (3)
66	139-8	Drill Spindle
67	163-5	Lock Screw
68	166-4	Lock Ring
69	186-1	Foot Rest Or Stirrup
70	178-7	Clamping Knob Lock Screw
71	143-2	Stakon Terminal
72	191-5	Coil Spring Terminal
73	245-1	Fibre Washer
74	134-2	Flanged Bronze Bushing
75	154-26	Bronze Spacer

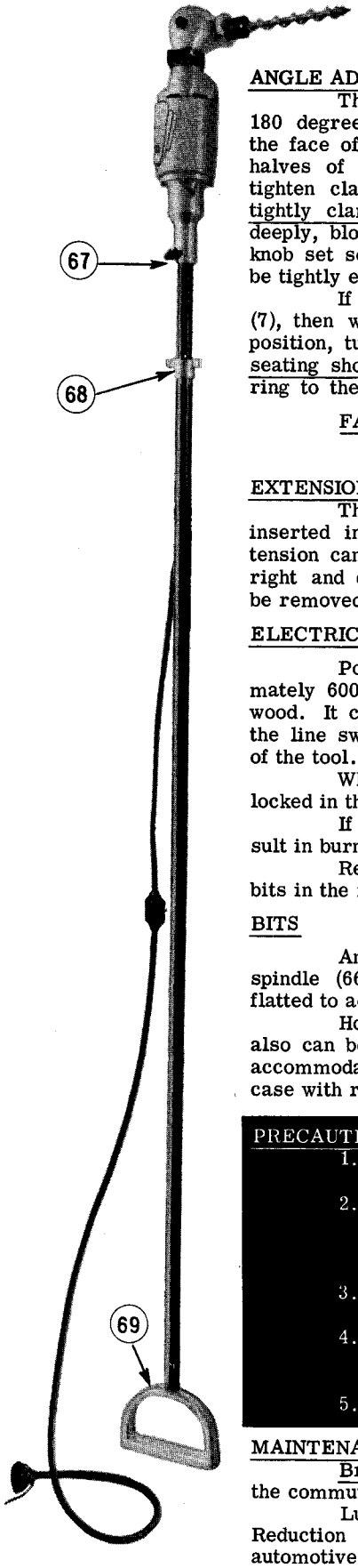
WHEN ORDERING PARTS INDICATED BY ASTERISK AND CROSS BE SURE TO SPECIFY TOOL SERIAL NUMBER

* PART NUMBERS APPLY TO TOOLS WITH SERIAL NUMBERS 1998 TO 5449.

+ PART NUMBERS APPLY TO TOOLS WITH SERIAL NUMBERS 5450 AND HIGHER.

K76-534

OPERATING INSTRUCTIONS



ANGLE ADJUSTMENTS

The all angle head (8) can be set in seven positions around the circle at angles of 45, 90, 135, and 180 degrees. To index the all angle head, loosen the clamping knob screw (70) until the head is flush with the face of the clamping knob (50), back up the clamping knob several turns, rap sharply to disengage the two halves of the head. Set the all angle head to the desired angle, re-engage the two halves of the head and tighten clamping knob securely. At this point check to see that the two halves of the all angle head are tightly clamped together. If there is any gap or play, possibly the clamping knob set screw (70) is set too deeply, blocking the tight engagement of the two halves of the head. If necessary, back out the clamping knob set screw a couple of turns and again tighten the clamping knob. The two halves of the head now should be tightly engaged. Finally, lock the head in position by pulling up firmly on the clamping set screw.

If found necessary to turn the all angle head (8) on the motor assembly, remove the clamp ring screw (7), then with the tool in an upright position, turn clamp ring (6) one turn left. Set head to the desired position, turn clamp ring right until the all angle head sets itself on the gear reduction head (5). This seating should be checked thru the split in the clamp ring. If there remains a gap, continue to turn the clamp ring to the right until the gap closes completely. Finally, replace the clamp ring screw and securely tighten.

FAILURE TO FOLLOW THE ABOVE ANGLE ADJUSTMENT INSTRUCTIONS TO THE LETTER WILL RESULT IN PREMATURE GEAR FAILURE

EXTENSION

The tool can be used on its extension for holes from 6 to 9 feet above floor level. The extension is inserted into the handle of the tool and riddly clamped by tightening the thumb screw. The telescopic extension can be locked at any height within its range by twisting the lock ring (68) a half turn either left or right and can be unlocked by twisting in opposite direction. If desired, the upper part of the extension can be removed and used separately.

ELECTRICAL

Power is supplied by a rugged Westinghouse motor reduced to provide a spindle speed of approximately 600 R. P. M. to permit drilling holes up to 3" in diameter in soft wood and up to 2" in diameter in hard wood. It can be used on 110 volts either A.C. or D.C. When the tool is used without the telescopic extension, the line switch (11) is left in the "ON" position, and Power is applied by the control switch (13) in the handle of the tool.

When the tool is used with the telescopic extension, the control switch in the handle of the tool is locked in the "ON" position and power is applied by the line switch.

If the motor stalls for any reason, disconnect the current immediately. Failure to do this may result in burning out the armature.

Reverse power rotation can be applied for backing out jammed bits by inserting the shank of such bits in the rear end of the drill spindle where a driving flat has been provided for this purpose.

BITS

Any auger bit having a 1/2" diameter shank can be used in this tool. Insert bit to desired depth into spindle (66) and tighten set screws (63) firmly with 3/16" socket screw wrench (10). Bit shank should be flatted to accommodate spindle set screws so as to eliminate possibility of bit slippage.

Hole Saws, Multi-spur type bits or carbide tipped masonry drills having a shank diameter of 1/2" also can be used in the tool. A Jacobs Chuck and adapter (KETT JC-2) can be had as an accessory that will accommodate drill shanks ranging from 1/8" to 1/2" diameter. A handy, serviceable and attractive carrying case with removable tray that will house the tool as well as many bits is also available.

PRECAUTIONS:

1. The two halves of the All Angle Head (8) must be firmly meshed and tightly locked together when the tool is in use. Failure to follow this precaution will result in premature gear failure in the head.
2. A stalled motor indicates overload. If the motor stalls, shut off the power immediately and work the bit free without power. Never attempt to work the bit free with power turned on, or attempt to help the bit through a tough spot by snapping the switch off and on. Such practice damages the switch, overheats the motor and will result in serious and expensive damage to the tool.
3. The Green ground wire connection on the cord at the plug is there for your own safety. Please use it. It is especially important that the tool be grounded when used where dampness is present.
4. Tool cannot be expected to drive Auger Type and Planetor Type Bits through nails. Such practice will lead to damaged bits, gear fractures and premature failure of the tool, responsibility for which will lie entirely with the user.
5. To obtain peak performance from tool keep bits sharp at all times.

MAINTENACE

Brush Replacement. Brushes should be checked frequently to make sure they are firmly seated against the commutator and that there is no excessive sparking. They should be replaced when necessary.

Lubrication. The only parts requiring periodic lubrication are the All Angle Head (8) and the Gear Reduction Head (5). These should be lubricated after each 300 hours of operation using any good grade light automotive grease.

To lubricate the All Angle Head, disassemble both halves and remove the intermediate gear (55). Pack both halves with grease and reassemble.

To lubricate the Gear Reduction head, remove the grease plug (21) in the Reduction Gear Housing (43), use grease gun to insert approximately 2 ounces of grease and replace plug.

The bearing on the commutator end of the armature can be greased when necessary thru the grease plug (21) provided in the motor housing (28) for this purpose. This bearing is normally assembled with sufficient grease to last the life of the tool.