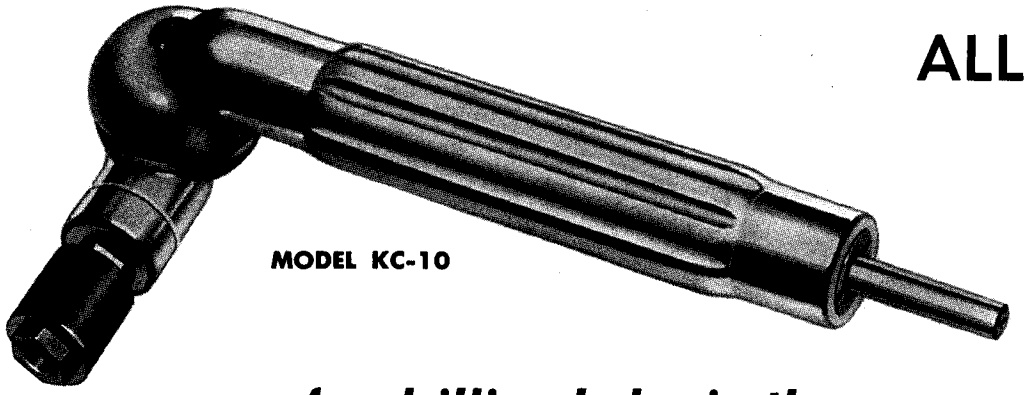
Versatility plus . .

the KETT *Universal*

ALL ANGLE DRILLING HEAD

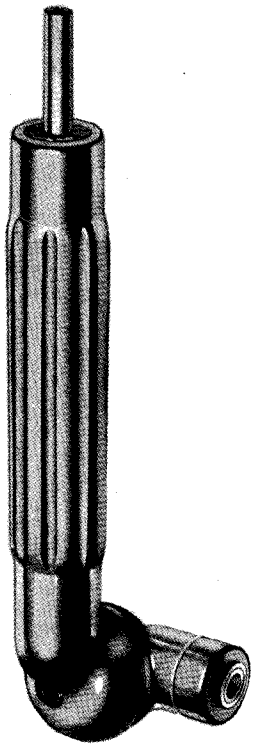


MODEL KC-10

. . . for drilling holes in those hard-to-get-at-places.

FEATURES...

- **DIRECT CHUCK-IN DRIVE** . . . always ready for use. Simply chuck-up the drive bit into any 1/4 capacity portable drill.
- **360° ALL ANGLE HEAD** . . . quickly adjustable . . . can be set at any angle in 360° circle . . . Settings are infinite . . . not limited by stops.
- **ANTI-FRICTION BEARINGS THRUOUT** . . . insure cool running tool . . . give long, trouble-free service.
- **TERNALLOY HOUSNGS** . . . non-corrosive . . . combine maximum strength with minimum weight.
- **GENERATED GEARS — HARDENED AND GROUND SHAFTS — INTERCHANGEABILITY OF PARTS.**

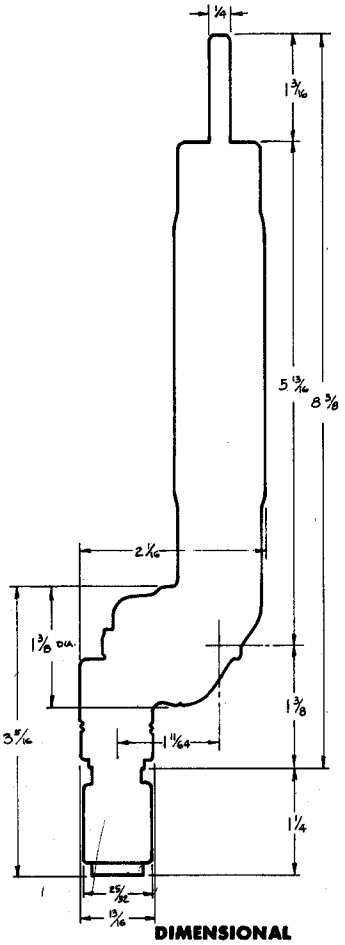


MODEL KC-11

The KETT Universal All Angle Drilling Head with Chuck-In Drive is easily one of the handiest, most versatile, yet lightest weight all angle drilling heads available. It weighs only 14 ounces. Its heavily ribbed grip combined with its light weight makes it comfortable to hold and easy to control. It can be adjusted quickly to any angle and once set will not slip. Complete adjustability around a 360° circle in two planes makes it extremely flexible for drilling holes in places that otherwise would be practically inaccessible. The KETT M-3 Three-Jaw Power Grip Chuck eliminates the need for a full range of collets.

MODEL KC-10 comes equipped with M-3 Three-Jaw Power Grip Chuck with capacity for straight shank drills from No. 70 to 1/4 inch. The M-3 Chuck can be removed to make accessible 1/4 - 28 threaded spindle for threaded shank drills and drill adapters.

MODEL KC-11 comes without chuck. Output spindle is machined with 1/4 - 28 thread to accommodate threaded shank drills and drill adapters.



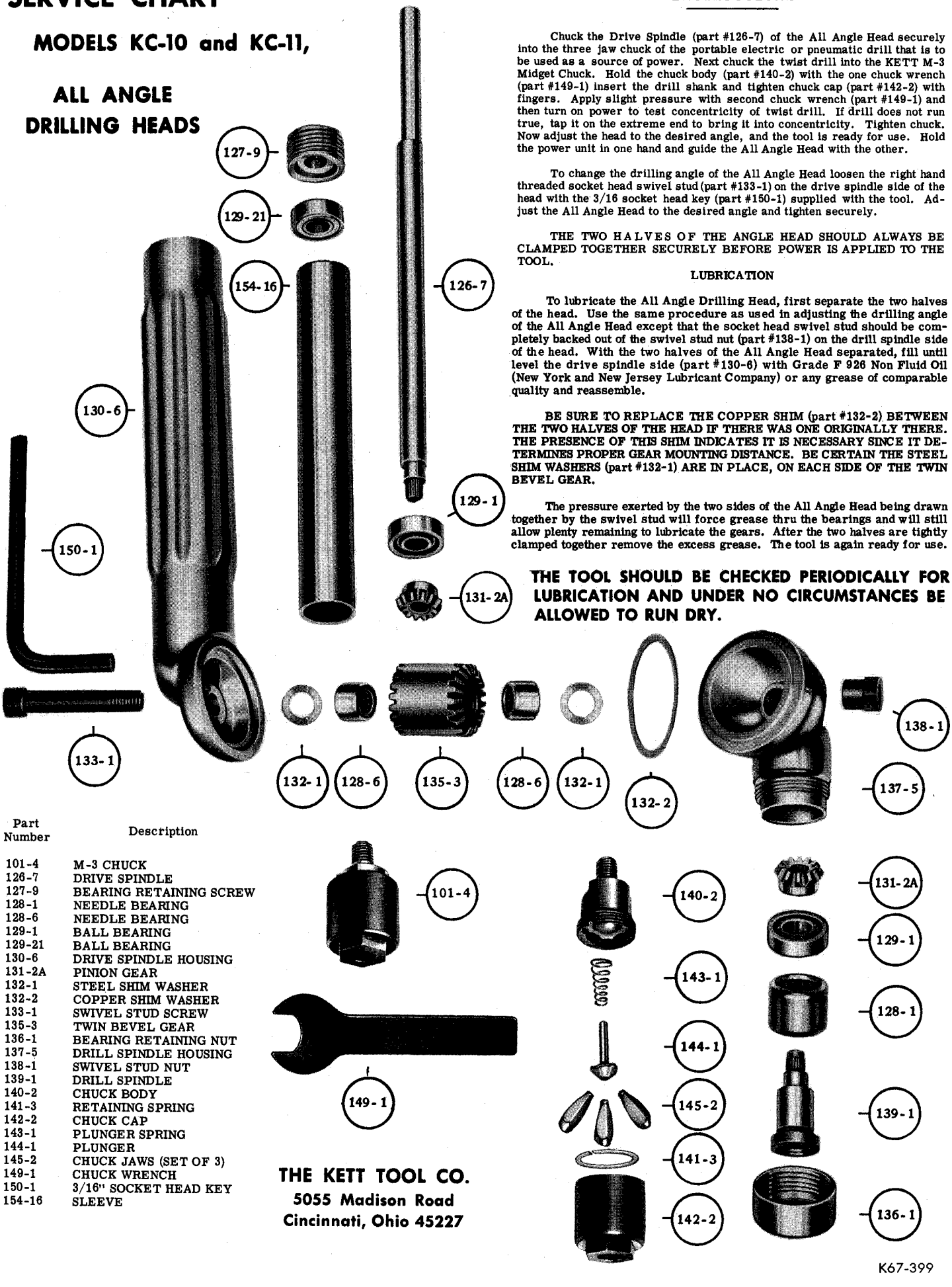
DIMENSIONAL CHARACTERISTICS

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

SERVICE CHART

MODELS KC-10 and KC-11,

ALL ANGLE DRILLING HEADS



Part Number	Description
101-4	M-3 CHUCK
126-7	DRIVE SPINDLE
127-9	BEARING RETAINING SCREW
128-1	NEEDLE BEARING
128-6	NEEDLE BEARING
129-1	BALL BEARING
129-21	BALL BEARING
130-6	DRIVE SPINDLE HOUSING
131-2A	PINION GEAR
132-1	STEEL SHIM WASHER
132-2	COPPER SHIM WASHER
133-1	SWIVEL STUD SCREW
135-3	TWIN BEVEL GEAR
136-1	BEARING RETAINING NUT
137-5	DRILL SPINDLE HOUSING
138-1	SWIVEL STUD NUT
139-1	DRILL SPINDLE
140-2	CHUCK BODY
141-3	RETAINING SPRING
142-2	CHUCK CAP
143-1	PLUNGER SPRING
144-1	PLUNGER
145-2	CHUCK JAWS (SET OF 3)
149-1	CHUCK WRENCH
150-1	3/16" SOCKET HEAD KEY
154-16	SLEEVE

THE KETT TOOL CO.
5055 Madison Road
Cincinnati, Ohio 45227

INSTRUCTIONS

Chuck the Drive Spindle (part #126-7) of the All Angle Head securely into the three jaw chuck of the portable electric or pneumatic drill that is to be used as a source of power. Next chuck the twist drill into the KETT M-3 Midget Chuck. Hold the chuck body (part #140-2) with the one chuck wrench (part #149-1) insert the drill shank and tighten chuck cap (part #142-2) with fingers. Apply slight pressure with second chuck wrench (part #149-1) and then turn on power to test concentricity of twist drill. If drill does not run true, tap it on the extreme end to bring it into concentricity. Tighten chuck. Now adjust the head to the desired angle, and the tool is ready for use. Hold the power unit in one hand and guide the All Angle Head with the other.

To change the drilling angle of the All Angle Head loosen the right hand threaded socket head swivel stud (part #133-1) on the drive spindle side of the head with the 3/16 socket head key (part #150-1) supplied with the tool. Adjust the All Angle Head to the desired angle and tighten securely.

THE TWO HALVES OF THE ANGLE HEAD SHOULD ALWAYS BE CLAMPED TOGETHER SECURELY BEFORE POWER IS APPLIED TO THE TOOL.

LUBRICATION

To lubricate the All Angle Drilling Head, first separate the two halves of the head. Use the same procedure as used in adjusting the drilling angle of the All Angle Head except that the socket head swivel stud should be completely backed out of the swivel stud nut (part #138-1) on the drill spindle side of the head. With the two halves of the All Angle Head separated, fill until level the drive spindle side (part #130-6) with Grade F 926 Non Fluid Oil (New York and New Jersey Lubricant Company) or any grease of comparable quality and reassemble.

BE SURE TO REPLACE THE COPPER SHIM (part #132-2) BETWEEN THE TWO HALVES OF THE HEAD IF THERE WAS ONE ORIGINALLY THERE. THE PRESENCE OF THIS SHIM INDICATES IT IS NECESSARY SINCE IT DETERMINES PROPER GEAR MOUNTING DISTANCE. BE CERTAIN THE STEEL SHIM WASHERS (part #132-1) ARE IN PLACE, ON EACH SIDE OF THE TWIN BEVEL GEAR.

The pressure exerted by the two sides of the All Angle Head being drawn together by the swivel stud will force grease thru the bearings and will still allow plenty remaining to lubricate the gears. After the two halves are tightly clamped together remove the excess grease. The tool is again ready for use.

THE TOOL SHOULD BE CHECKED PERIODICALLY FOR LUBRICATION AND UNDER NO CIRCUMSTANCES BE ALLOWED TO RUN DRY.

K67-399