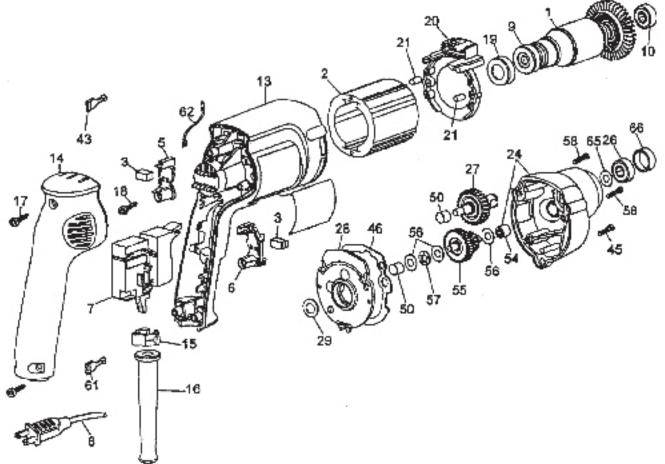


Component Motor Unit Model 253-59
Used on KD-440, KD-441, KD-442, KD-1493 and KD-1495 Shears
KS-423, KS-424, KS-426 and KSV-432 Saws

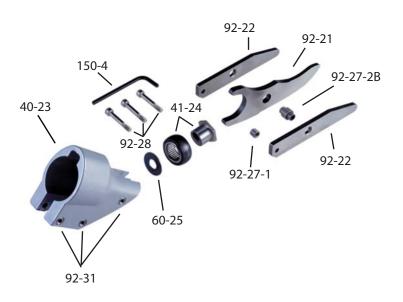
### **PARTS LIST**



		ACT.					
ITEM	PART	DESCRIPTION	REQ'D	ITEM	PART	DESCRIPTION	REQ'D
NO.	NO.		TOOL	NO.	NO.		TOOL
1	382299-01	Armature & Fan (6 Teeth)	1	*54	93129-00	Needle Bearing	1
2	176883-00	Field	1	55	176731-00	Pinion & Gear (15/37 teeth)	1
3	176846-02	Brush	2	56	176732-00	Thrust Washer	3
5	176801-02	Left Brush Holder (gray)	1	57	143079-00	Thrust Washer	1
6	176800-02	Right Brush Holder (black)	1	*58	330019-16	Screw	2
7	176830-39	Switch	1	61	136086-08	Terminal	2
*8	330072-98	Cord & Plug (18-2SJ)	1	62	176860-00	Lead	1
*9	176950-00	Ball Bearing	1	65	449892-00	Washer	1
*10	176950-00	Ball Bearing	1	66	449368-00	Bearing Cap	1
13	396969-09	Field Case	1				
14	176899-02	Handle Cover	1	*NOTES:			
*15	176829-00	Cord Clamp	1	8, 15	Cord clamp should be positioned, so that 30mm of cord jacket		
16	330005-01	Cord Protector	1	0	extends above the cl		
*17	330019-13	Screw	3	9 10		ator. Press to the tubing on armatur t, place bearing in vise and crush ou	
*18	176951-00	Screw	2	10		earing components, so that the inn	
*19	389824-00	Cup	1			320, Small Bearing Separator, to cla	
20	176811-01	Baffle	1			earing presses to shoulder.	
21	949638-02	Rubber Plug	2	17,45,58	Torque to 18-23 inch-lbs.		
*24	388657-00	Gear Case	1	18	Torque to 13 inch-lbs.		
*26	330003-09	Ball Bearing	1	19	Small diameter end to face commutator. Lightly lubricate before		
27	388668-00	Spindle & Gear	1	26	installing into field ca		and to food
*28	176650-00	Gear Case Cover	1	20	spindle and gear ass	eated completely in pocket. Rubber	sear to race
*29	23813-00	Fiber Washer	1	28	Includes 10 and 50.	citioty.	
43	136086-02	Terminal	4	29	Press to bearing (iter	n 10).	
*45	330019-14	Screw	1	54	Press flush with surface facing spindle and gear assembly.		
46	176655-00	Gasket	1				
*50	93128-00	Needle Bearing	2				K09
		e e					



# INSTRUCTIONS FOR THE CARE OF THE KETT 93-20 SHEAR HEAD



## CAUTION Disconnect Power Unit Before Servicing Tool

#### **PARTS LIST**

92-21 92-22 40-23	Center Blade Side Knife (2) Shear Housing
41-24	Eccentric Bearing Assembly
92-27-2B	Spacer Bushing
92-27-1	Spacer Bushing
92-28	Cap Screw (3)
92-31	Knurled Insert (3)
60-25	Thin Washer, Large
150-4	Allen Wrench

**DISASSEMBLY:** To remove the shear head from the motor loosen three cap screws (92-28). Remove shear head from motor by pulling head firmly forward. Slight tapping with a mallet may be required if head does not slide off easily.

To remove cutter blades from shear head remove three cap screws (92-28) from shear housing (40-23). Be careful not to lose rear spacer bushing (92-27-1) when removing the middle cap screw. Remove center blade (92-21) from shear housing by tapping blade gently rearward. Be careful not to lose spacer bushing (92-27-2B) from hole in center blade. Side knives (90-22) will now drop out of the shear housing.

To remove eccentric bearing assembly (41-24) from shaft use an appropriate wrench to loosen eccentric nut by turning counter clockwise.

**ASSEMBLY:** To install eccentric bearing assembly (41-24) onto shaft, make sure the large thin washer (60-25) is first inserted over the shaft. Screw eccentric bearing assembly on to shaft and tighten with appropriate wrench. Lubricate bearing with a good grade of bearing grease.

To install cutter blades into shear housing (40-23) place the side knives (92-22) into position in the

shear housing (40-23). Insert center cap screw (92-28) through the side knives (92-22) with rear spacer bushing (92-27-1) between them and start cap screw into thread just enough to hold blades in place. DO NOT TIGHTEN. Insert spacer bushing (92-27-2B) into hole in center blade (92-21) and lubricate with Molybdenum Disulfide grease (264-2) or equivalent. Install center blade into shear housing by tapping blade gently forward using a drift to line up hole in center blade with forward holes in housing. Insert and tighten forward cap screw (92-28) making sure spacer bushing (92-27-2B) in center blade stays in position. Apply Molybdenum Disulfide grease (264-2) or equivalent to clevis or yoke in center blade where it rides on the eccentric bearing assembly. Insert rear cap screw (92-28) into shear housing, but do not completely tighten.

To install shear head assembly onto drive motor make sure all cap screws (92-28) are loosened about three or four complete turns. Spread shear housing (40-23) slightly using a spreader (drift) near the rear cap screw (92-28). Place shear head onto unit, tap left side knife rearward as far as it will go, and tighten cap screws to 40-45 inch pounds. It may be necessary to gently tap the shear head into place if it does not readily slip onto the nose of the power unit.

WARNING: THE KETT TOOL CO. CANNOT ASSUME RESPONSIBLITY FOR DAMAGE TO OR MALFUNCTION OF A KETT SHEAR HEAD USED IN COMBINATION WITH ANY DRILL OTHER THAN THOSE REGULARLY SUPPLIED BY US.