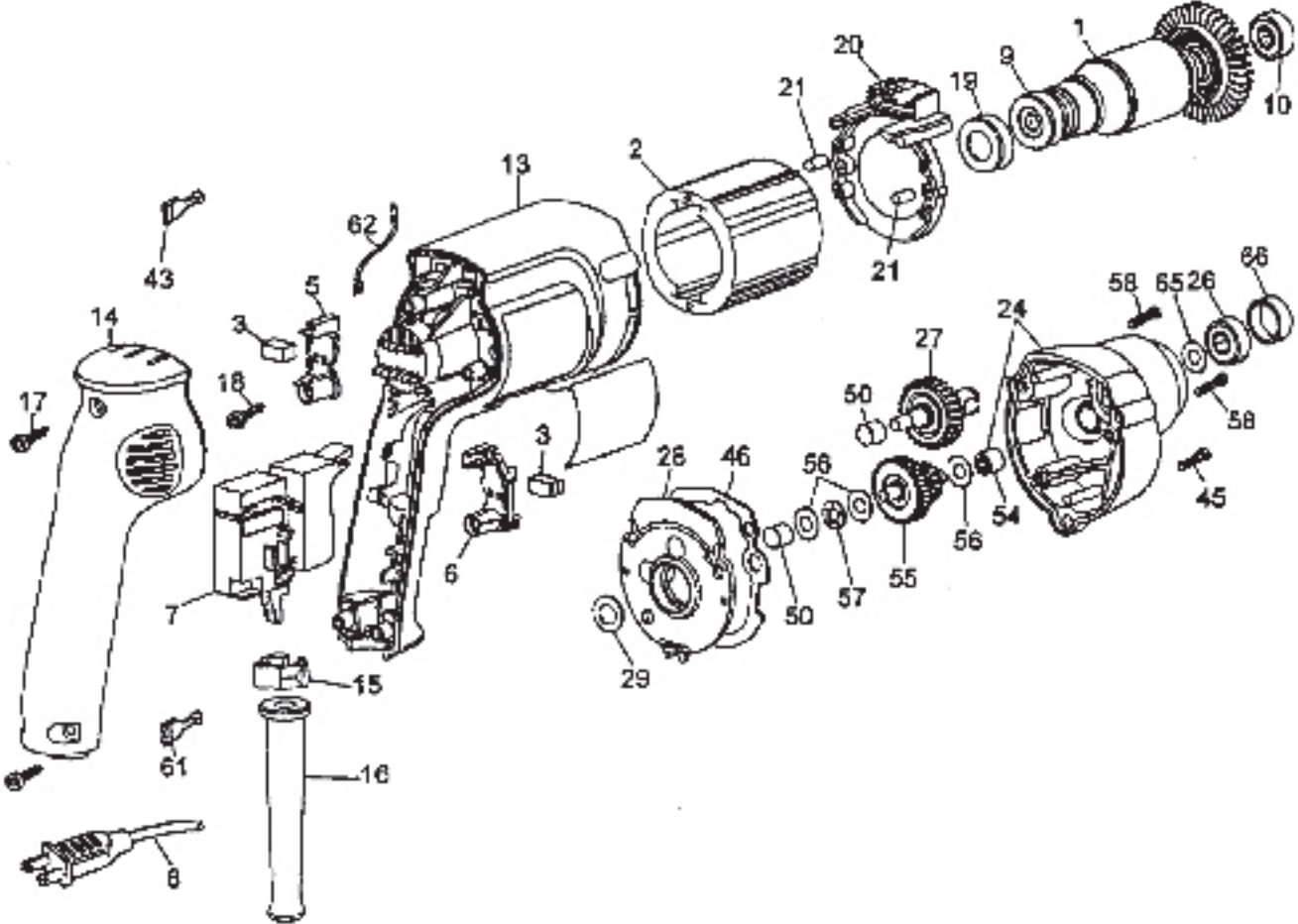




Component Motor Unit Model 253-59
Used on KD-400, KD-480, KD-440, KD-441, KD-442, KD-1493 and KD-1495 Shears
KS-421, KS-423, KS-424, KS-426 and KSV-432 Saws

PARTS LIST

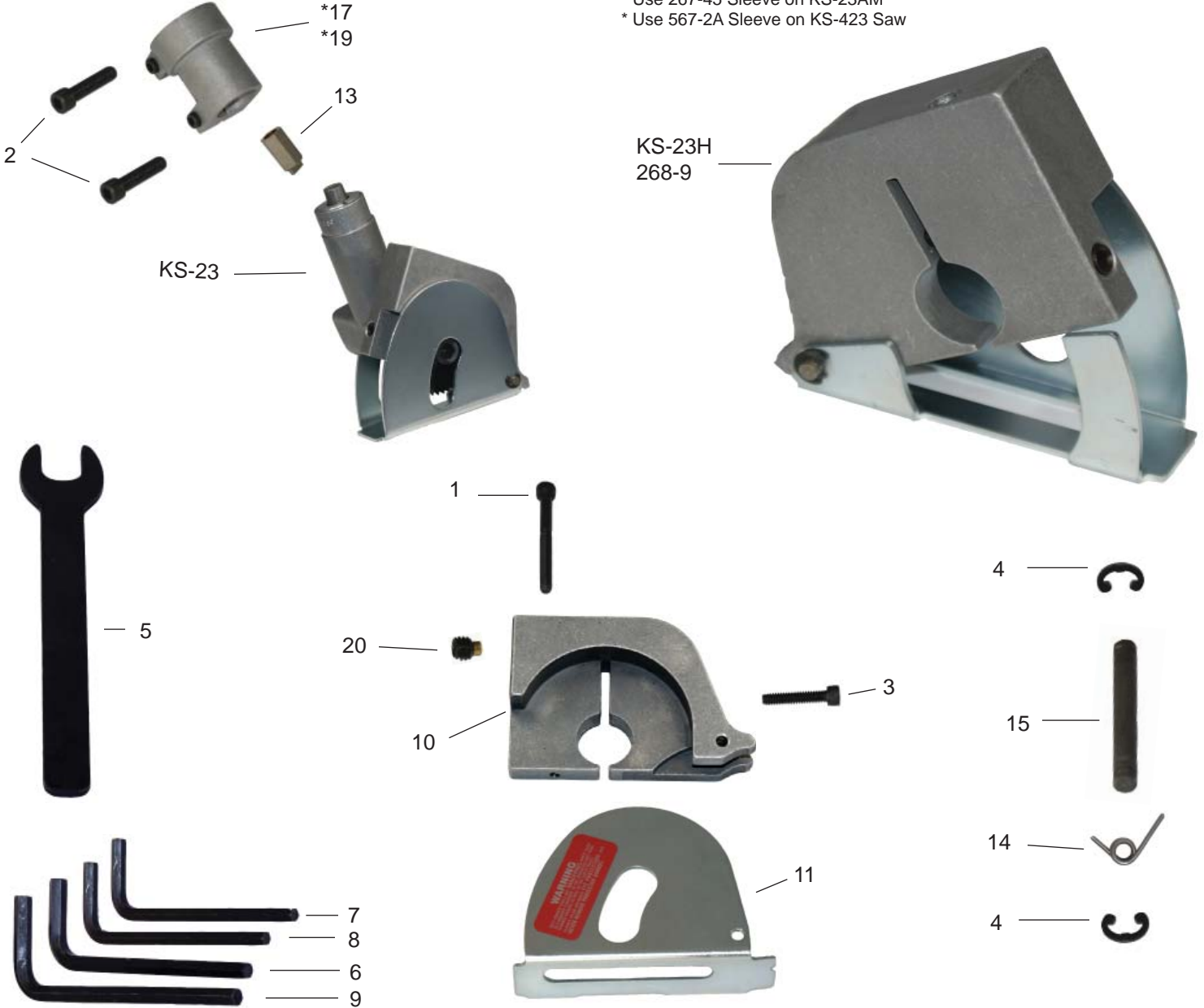


ITEM NO.	PART NO.	DESCRIPTION	REQ'D TOOL	ITEM NO.	PART NO.	DESCRIPTION	REQ'D TOOL
1	382299-01	Armature & Fan (6 Teeth)	1	*50	93128-00	Needle Bearing	2
2	176883-00	Field	1	*54	93129-00	Needle Bearing	1
3	176846-02	Brush	2	55	176731-00	Pinion & Gear (15/37 teeth)	1
5	176801-02	Left Brush Holder (gray)	1	56	176732-00	Thrust Washer	3
6	176800-02	Right Brush Holder (black)	1	57	143079-00	Thrust Washer	1
*7	176830-39	Switch	1	*58	330019-16	Screw	2
*7	621884-04	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	7	Use Switch 176830-39 for tools made before 11-25-2009 and 621884-04 on tools made after 11-25-2009.		
16	330005-01	Cord Protector	1	8, 15	Cord clamp should be positioned, so that 30mm of cord jacket extends above the clamp.		
*17	330019-13	Screw	3	9	Seal to face commutator. Press to the tubing on armature shaft.		
*18	176951-00	Screw	2	10	To remove from shaft, place bearing in vise and crush outer race. Remove all internal bearing components, so that the inner race is all that is left. Use SRT320, Small Bearing Separator, to clamp the inner race and press off. Bearing presses to shoulder.		
*19	389824-00	Cup	1	17,45,58	Torque to 18-23 inch-lbs.		
20	176811-01	Baffle	1	18	Torque to 13 inch-lbs.		
*21	949638-02	Rubber Plug	2	19	Small diameter end to face commutator. Lightly lubricate before installing into field case.		
*24	388657-00	Gear Case	1	26	Press Bearing until seated completely in pocket. Rubber seal to face spindle and gear assembly.		
*26	330003-09	Ball Bearing	1	28	Includes 10 and 50.		
27	388668-00	Spindle & Gear	1	29	Press to bearing (item 10).		
*28	176650-00	Gear Case Cover	1	54	Press flush with surface facing spindle and gear assembly.		
*29	23813-00	Fiber Washer	1				
43	136086-02	Terminal	4				
*45	330019-14	Screw	1				
46	176655-00	Gasket	1				



KS-23 SAW UNIT
 FOR TOOLS MADE AFTER JUNE, 2013 WITH NEW STYLE DEPTH STOP
PARTS LIST

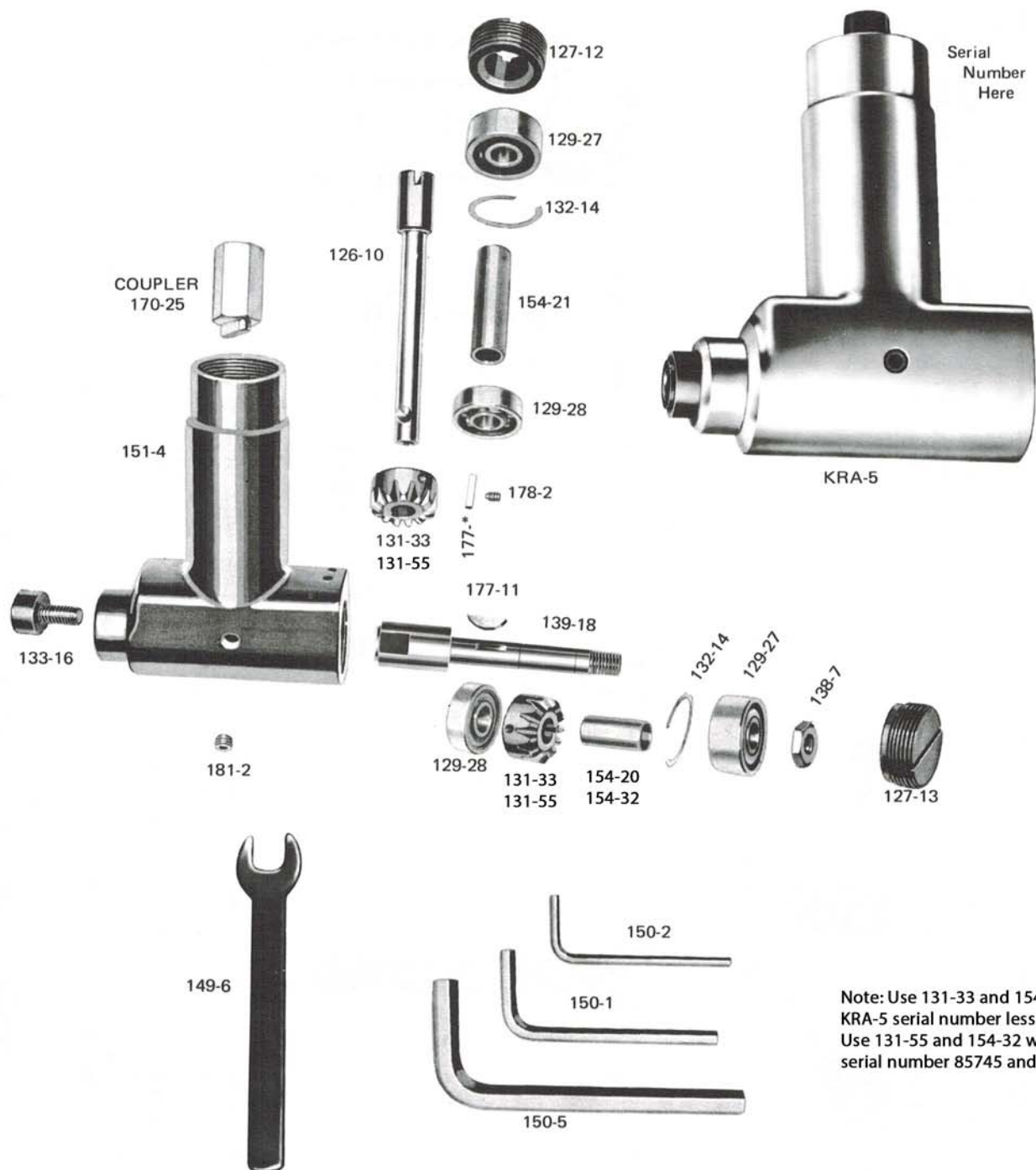
* Use 267-45 Sleeve on KS-23AM
 * Use 567-2A Sleeve on KS-423 Saw



ITEM NO.	PART NO.	DESCRIPTION	REQ'D TOOL	ITEM NO.	PART NO.	DESCRIPTION	REQ'D TOOL
1	133-13	Clamping Screw	1	11	160-9	Saw Guard	1
2	133-14	Clamping Screw for 267-45	1	13	170-25	Coupler	1
	M133-37	Clamping Screw for 567-2A	1	14	191-12	Coil Spring	1
3	133-29	Screw	1	15	210-1	Guard Pin	1
4	141-10	Retaining Ring	2	*17	267-45	Connecting Sleeve	1
5	149-6	Spindle Wrench	1	18	268-9	KS-23 Saw Body	
6	150-1	3/16" Socket Key	1			& Guard Assembly	1
7	150-2	1/8" Socket Key	1	*19	567-2A	Connecting Sleeve	1
8	150-4	5/32" Socket Key	1	20	N5027	Set Screw	1
9	150-5	5/18" Socket Key	1				
10	156-9	Saw Body	1				

COMPONENT PARTS FOR KRA-5 GEARED ANGLE HEAD

s/n 15241 & higher



Part No.	Description	Part No.	Description	Part No.	Description
126-10	Input Spindle	139-18	Output Spindle	177-*	Key (See serial number on neck of KRA-5 above)
127-12	Retaining Screw	149-6	Spindle Wrench		S/N 15240 & lower use 177-7 square key.
127-13	Retaining Screw	150-1	3/16 Socket Key		S/N 15241 & higher use 177-11 Woodruff Key
129-27	Ball Bearing	150-2	1/8 Socket Key		Socket Head Set Screw
129-28	Ball Bearing	150-5	5/16 Socket Key		Screw Plug
131-33	Mitre Gear	151-4	Housing	178-2	
131-55	Mitre Gear	154-20	Sleeve	181-2	
132-14	Shim	154-32	Sleeve		
133-14	Clamping Screw	154-21	Sleeve		
133-16	Spindle Bolt	170-25	Coupler		
138-7	Jam Nut	177-11	Woodruff Key		



KS-23 Saw Unit

Adjustment Instructions

Installing the KS-23H (268-9)

To install the KS-23H onto the KRA-5 (100-7), Loosen the 133-29 screw. Slide the KS-23H onto the KRA-5. Tighten the 133-29 screw.

Adjusting the Angle of the KS-23H

Loosen the 133-29 screw and rotate the KS-23H on the KRA-5 to the desired position, being careful to keep the saw blade in line with the vee sight of the saw guard. Tighten the 133-29 screw.

Adjusting the Depth of Cut

Loosen the set screw N5027. To increase the depth of cut turn the 133-13 clamping screw counter clockwise. To decrease the depth of cut turn the 133-13 clamping screw clockwise. Once the desired depth of cut is achieved, tighten the N5027 set screw. Ordinarily the saw blade should be extended approximately 1/16" to 1/8" more than the thickness of the material being cut. When cutting through a panel supported by ribs or other understructure that should be unmolested, extend the blade to the same distance as the measured thickness of the material being cut.

Replacing the Saw Blade

Insert the 149-6 open end spindle wrench behind the blade and span the flats on the 139-18 output spindle. Insert the 150-5 socket key into the hex socket of the 133-16 spindle bolt, loosen and remove both the bolt and the blade.

You will note the blade, which has a 7/16" bore, slips over the spindle and seats itself against the shoulder. This design provides for more concentricity resulting in smoother, faster and more accurate cutting. Slip the blade over the spindle, seat it against the shoulder, replace the spindle bolt