



Rockwell MANUFACTURING COMPANY

DELTA POWER TOOL DIVISION
PITTSBURGH 8, PENNSYLVANIA



PM-1822

4-2-59

CAT. NO. 34-425, 10" TILTING ARBOR BENCH SAW

Your Delta 10-inch Tilting Arbor Saw, Bench Model, Catalog No. 34-425 is composed of the following items. Please make sure you have received all of these before starting to assemble the unit.

One carton containing the assembled saw with guide rails, rip fence, miter gage and stop rod assembly.

One bag assembly composed of necessary nuts, bolts and lockwashers for mounting purposes.

One envelope assembly composed of your instruction sheet and reply card.

One motor extension shaft and pulley assembly.

One steel cable core "V" belt.

One Belt Guard.

ASSEMBLY

1. If you have purchased a Delta Push Button Switch, see mounting instructions contained within this package. The switch should be assembled before mounting the saw on a bench or Delta stand.

2. Mount Saw on bench or stand. If you have purchased a Delta Steel Stand, assemble stand per instructions contained in package.

3. Assemble front and rear guide rails using spacers and special screws provided for this. The front guide rail to have inch marks on it and these are to be on top side. See Figs. 1 and 6 for location of parts.

4. Mount rip fence on guide rails. See Figs. 1 and 6.

5. The Delta 1 or 1½ horsepower single phase or the 1 or 1½ horsepower 3 phase motors have been especially designed for your saw. Assemble motor to motor hinge bracket, see Fig. 2. Care should be taken to have

motor shaft parallel to the top of the saw table. Elongated slots in motor base are provided for this adjustment. After motor has been mounted, carefully swing motor to its lowest position. To obtain proper spring tension, loosen set screw in the motor pivot shaft casting next to pulley. Make sure the set screw in the spring collar is tight. Place a wrench on flats of shaft and while holding shaft securely with wrench, loosen set screw in other pivot shaft casting and turn shaft in clockwise direction until spring raises motor base to approximately 45 degrees. Hold shaft in this position and retighten set screw in pivot shaft casting opposite pulley first and then retighten set screw in other pivot shaft casting to hold shaft in this position.

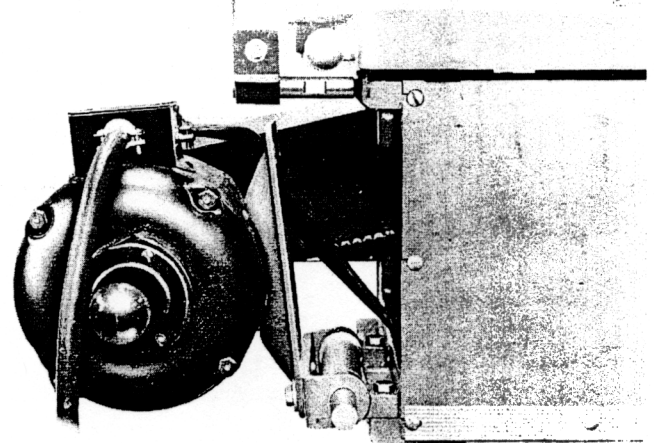


Figure 2

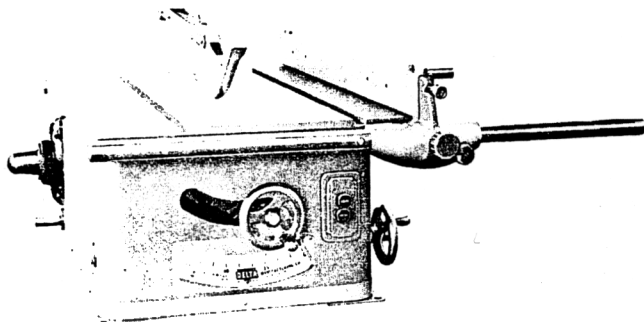


Figure 1

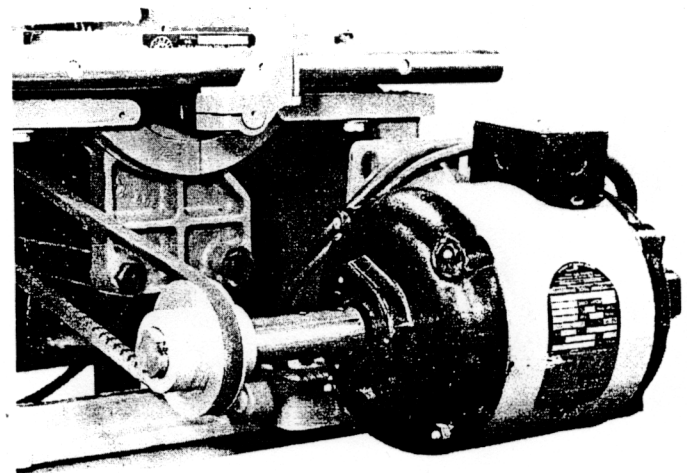


Figure 3

6. Insert one rubber grommet (Key 94) in saw cabinet and one rubber grommet (Key 93) in motor base, see Fig. 6. Place 7½" long machine bolt (Key 103) through saw cabinet and motor base and fasten in place with hex nut (Key 86). The long bolt is to serve as a safety factor.

7. Assemble motor extension shaft assembly over the motor shaft and lock in place with the two set screws, see Figs. 3 and 7. Make sure the pulley slides freely along motor extension shaft. **Do not oil**, as the pulley rides on three "Teflon" Dowel Pins which are self-lubricating.

8. Install "V" belt, see Fig. 3. This is a newly developed special belt which has tremendous pulling power.

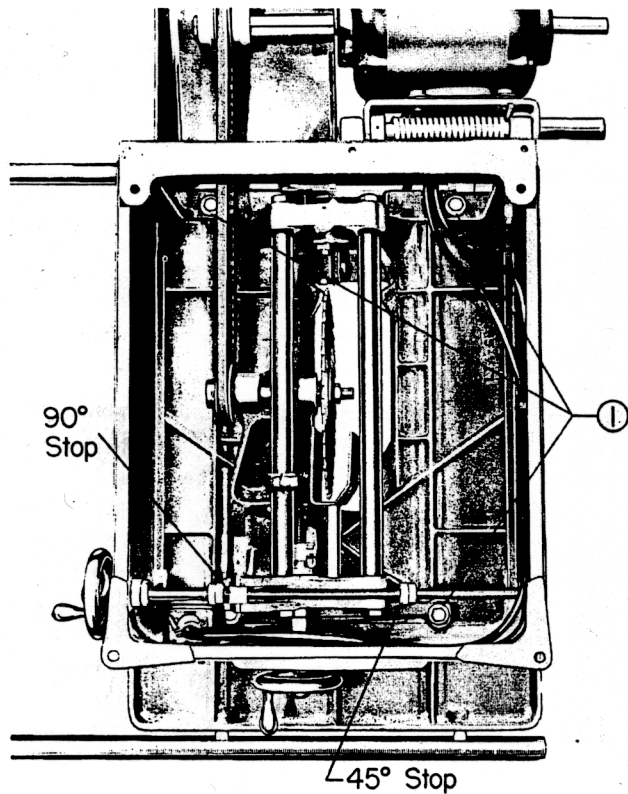


Figure 4

9. To adjust belt tension, refer to procedure outlined in paragraph 5 for increasing tension of shaft to raise motor for proper belt tension. This adjustable spring loaded motor mounting gives you maximum belt life by maintaining the correct belt tension at all times.

10. Check arbor nut holding the saw blade on the shaft and make sure it is tight. Lower saw blade to complete down position by using the hand-wheel which lowers and raises the saw arbor. This hand-wheel is located on the front of the cabinet. Place saw blade in vertical position by using the tilt hand-wheel on the right side of cabinet. See Figure 1.

11. Complete the wiring from the push-button station to the motor as per instructions received with your wiring kit.

12. Before plugging in single phase motors, a check of the circuit should be made for the correct wire size, type of outlet, fuse type and size. We recommend that a time lag fuse be used. If you have purchased a 3 phase unit, an electrician should connect 3 phase power units to the power source in compliance with the National Electric code and local electrical codes.

13. Install the saw blade insert. It should be flush

with the saw table. Adjustment can be made to make it flush by re-setting the four small screws on the bottom of the insert. See Figure 6. Start the saw. **Observe the direction of rotation of saw blade. The saw teeth should be coming up in back and going down in the front or clockwise when viewed from the left side of the saw. Should the saw blade run backwards, instructions for changing rotation of single phase motors can be found on the motor name plate. For three phase installations, see your electrician.**

ADJUSTMENTS

1. Rip Fence. The face of the rip fence should be parallel to the edge of the miter gage slot in the table top. If it is not, adjustment can be made by moving the rip fence to the edge of the miter gage slot. Clamping the front only, and loosening the two hexagon head bolts on top of the fence. See Figure 6. Align face on the fence with the slot and tighten the rear fence clamp. Tighten two hexagon head bolts on the top of the fence.

2. Saw blade alignment with the Miter Gage. Raise the saw blade to complete up position. Place a scale along the face of the miter gage and slide one edge of the scale against the saw blade just under the set in the teeth. Mark this spot on the saw blade. Holding the scale tightly against the miter gage face, move the gage to the rear of the table and rotate the saw blade until the scale is again opposite the mark on the blade. The scale should be touching the saw blade just under the set. If not, adjustment can be made by loosening the four trunnion mounting screws (1), Fig. 4, and (Key 100), Fig. 7 Tap one side or the other of the table with a plastic or rawhide hammer until the blade has been properly aligned. Re-tighten the screws.

3. Tilt stops at zero (90) and 45 degrees. With the saw blade raised in its highest position, place a try square or combination square on the table so that one edge of it extends up along the saw blade. Adjust the blade by using the tilt hand-wheel on the right side of the cabinet, see Fig. 1 until blade is parallel to the edge of the square. We suggest that a final test be made by making an actual cut. Use a piece of wood at least 2½ inches wide and test for squareness. Tighten friction knob. From the back of the cabinet and using two open end wrenches, tighten adjusting nut and then, second adjusting nut against the first. Tilt the saw blade to 45 degrees as measured by a bevel protractor. Repeat operation above, see Fig. 4. A few drops of oil on the elevating and tilting screws, see Fig. 4, is the only lubrication saw needs, all bearings are lubricated and sealed for life. Return saw blade to vertical position against stop nuts and lock. Loosen set screw (Key 78), Fig. 7, and adjust pointer (Key 29) to zero and re-tighten set screw.

4. Install Belt Guard, see Fig 5.

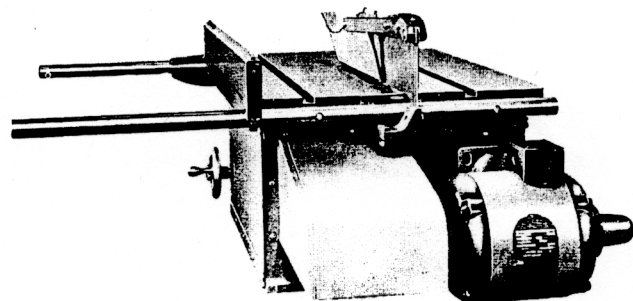


Figure 5

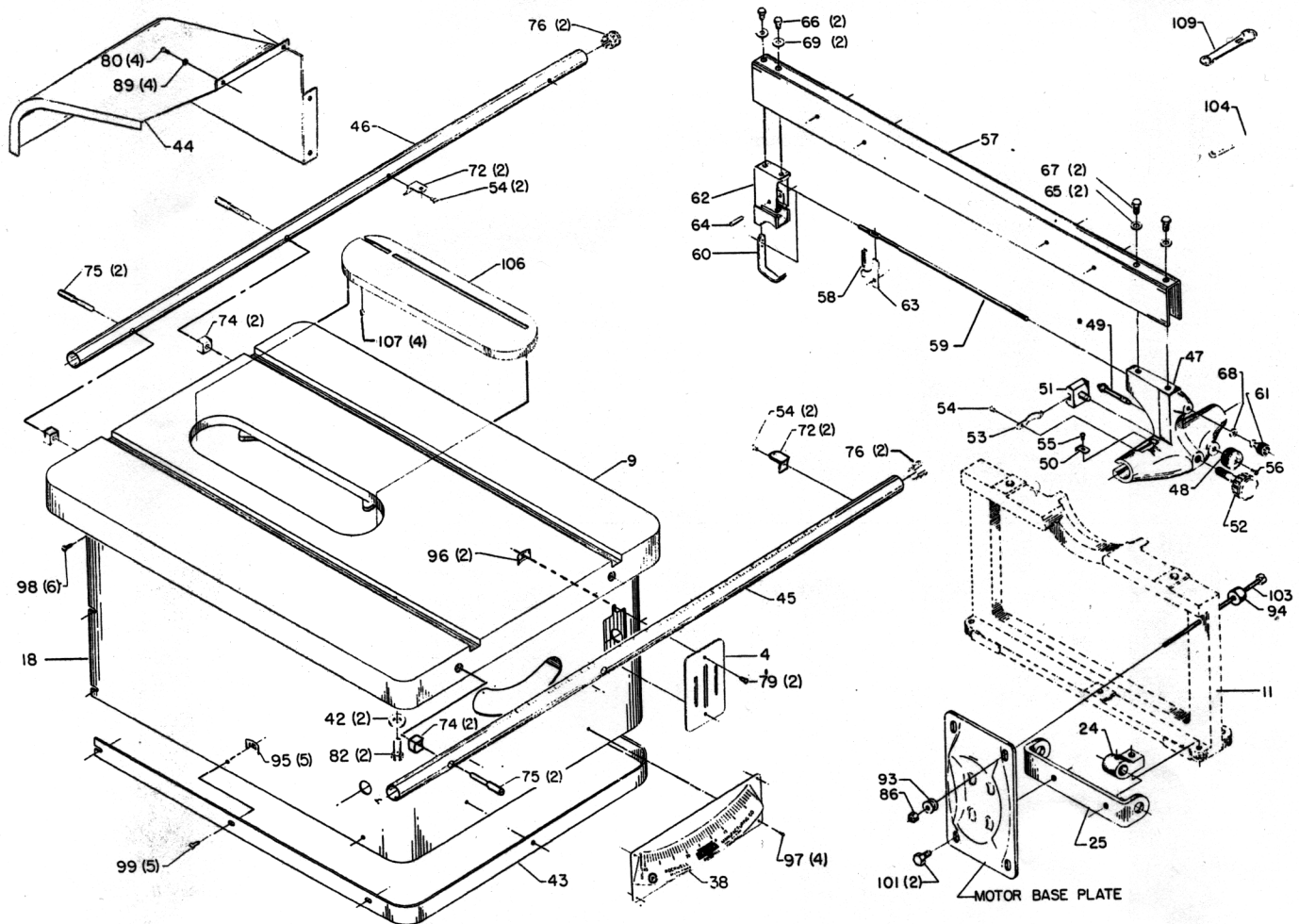
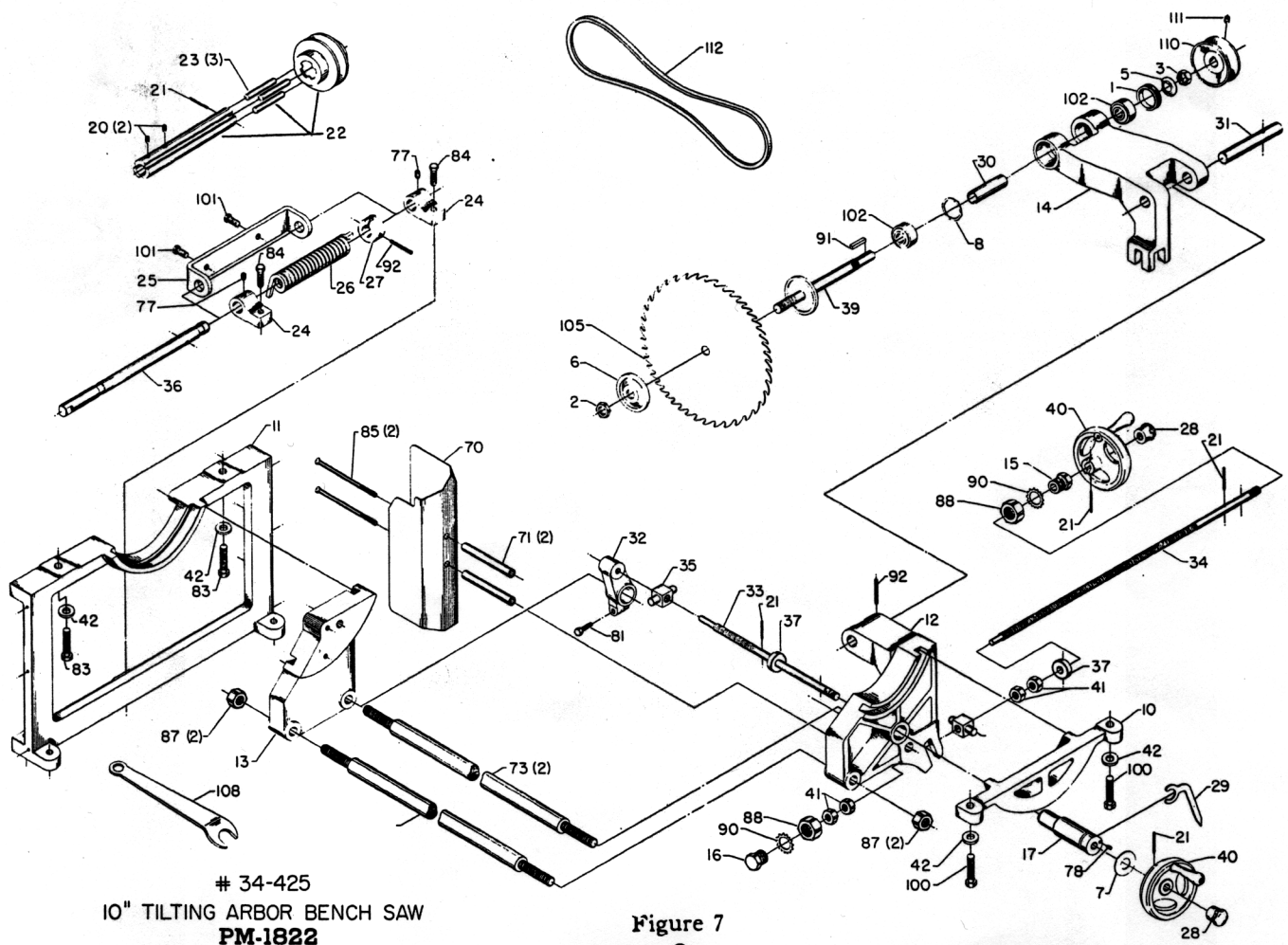


Figure 6



34-425
10" TILTING ARBOR BENCH SAW
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Figure 7
3



PARTS LIST

Key No.	Part No.	Description	Key No.	Part No.	Description
1	BG-12	S-anner Nut	77	SP-206	5/6-18 x 5/16" Set Screw
2	BG-23	Hex. Jam Nut, L. H. Acme Thread	78	SP-286	No. 8-32 x 1/4" Set Screw, Fl. Pt.
3	BM-23	Hex. Jam Nut	54	SP-551	No. 10-32 x 1/4" Rd. Hd. Mach. Screw
4	DP-572	Switch Cover	79	SP-564	No. 6-32 x 3/8" Rd. Hd. Mach. Screw
5	DP-722	Keyed Lockwasher	80	SP-593	No. 10-24 x 3/8" Binding Hd. Mach. Screw
6	LTA-411	Flange	81	SP-603	1/4-20 x 7/8" Hex. Hd. Cap Screw
7	LTA-461	Washer	82	SP-610	7/16-14 x 3/4" Hex. Hd. Cap Screw
8	LTA-516	Bearing Spring	83	SP-615	7/16-14 x 13/4" Hex. Hd. Cap Screw
9	LTA-801-R	Table	84	SP-642	3/8-16 x 1" Hex. Hd. Cap Screw
10	LTA-802	Front Trunnion Bracket	85	SP-954	1/4-20 x 4" Fl. Hd. Stove Bolt
11	LTA-803	Rear Trunnion Bracket	86	SP-1076	1/4-20" ESNA Nut
12	LTA-804	Front Trunnion	87	SP-1226	5/8-18" Hex. Jam Nut
13	LTA-805	Rear Trunnion	88	SP-1290	7/8-14" Hex. Jam Nut
14	LTA-806	Arbor Bracket	89	SP-1775	No. 10 Int. Tooth Lockwasher
15	LTA-807	Tilt Shaft Bushing (right)	90	SP-1792	7/8" Ext. Tooth Lockwasher
16	LTA-808	Tilt Shaft Bushing (left)	91	SP-2655	3/16 x 3/16 x 7/8" Straight Key
17	LTA-809	Elevating Shaft Bushing	92	SP-2730	3/16 x 1 1/2" Roll Pin
18	LTA-810-A	Cabinet	21	SP-2735	1/8 x 1 1/4" Roll Pin
22	LTA-816-S	Motor Pulley, Including:	93	SP-2853	Rubber Grommet
20		SP-1191 1/4-20 x 5/16" Set Screw	94	SP-2854	Rubber Bumper
23		LTA-813 "Tafion" Roller	95	SP-2953	Tinnerman Nut
21		SP-2735 1/8 x 1 1/4" Roll Pin	96	SP-2954	Tinnerman Nut
24	LTA-817	Motor Base Mount	97	SP-3000	No. 6-32 x 1/4" Self Tapping Screw
25	LTA-818	Motor Hinge	98	SP-3023	No. 10-32 x 1/2" Self Tapping Scr., Truss Hd.
26	LTA-819	Torsion Spring	99	SP-3025	Sheet Metal Screw, Truss Head
27	LTA-820	Spring Loading Collar	100	SP-3080	7/16-14 x 1 1/2" Hex. Hd. Cap Screw
28	LTA-822	Hand Knob	101	SP-3123	3/8-16 x 5/8" Hex. Hd. Cap Screw
29	LTA-823	Tilt Pointer	102	SP-5344	Bearings
30	LTA-824	Spacer	103	SP-6057	1/4-20 x 7 1/2" Bolt
31	LTA-825	Arbor Bracket	104	Cat. No. 194	Hex. Wrench
32	LTA-826	Elevating Stop	105	Cat. No. 1015	10" Combination Saw Blade
33	LTA-827	Elevating Shaft	106	Cat. No. 1451	Table Insert, Including:
34	LTA-828	Tilt Shaft	107		NCS-371 1/4-28 x 3/8" Set Screw
35	LTA-829	Knuckle	108	Cat. No. 1525	Wrench
36	LTA-831	Motor Base Shaft	109	Cat. No. 1534	Hex. Bar Wrench
37	LTA-835	Thrust Washer, Slotted	110	C. No. 5300-B	3" Dia. Pulley, 5/8" Bore, Including:
38	LTA-836	Tilt Angle Scale	111		SP-201 5/16-18 x 5/16" Set Screw Fl. Pt.
39	LTA-837-S	Arbor with Flange	112	C. No. 49-160	V-Belt
40	LTA-839-S	Hand Wheel			* NOT SHOWN
41	LTA-840	Zero Adj. Nut			
42	LTA-841	1/2" I.D., 1" O.D. x 1/8" Steel Washer			
43	LTA-842	Cabinet Trim Strip			
44	LTA-843-S	Pulley Guard			
45	LTA-845	Front Guide Rail			
46	LTA-846	Rear Guide Rail			
*	LTA-849-S	Rip Fence Complete, Consisting of:			
	LTA-849-A	Front Clamp Block, Including:			
47		LTA-849 Front Clamp Block			
48		LTA-851 Hand Knob			
49		LTA-852-S Pinion and Shaft			
50		LTA-855 Pointer			
51		TAM-145 Wedge			
52		TAM-148-S Lock Stud			
53		TAM-160 Spring Clip			
54		SP-551 No. 10-32 x 1/4" Rd. Hd. M. S.			
55		SP-591 Binding Hd. Mach. Screw			
56		SP-3801 No. 8-32 x 3/8" Lockwasher S.			
57		LTA-451-S Rip Fence Body			
58		LTA-465 Coil Spring			
59		LTA-468 Rear Clamp Rod			
60		LTA-850 Rear Clamp Hook			
61		NCS-272 Knob			
62		TCS-261 Rear Clamp Block			
63		TCS-264 Lever			
64		TCS-265 Pin			
65		SBS-55 Washer			
66		SP-629 5/16-18 x 3/8" Hex. Hd. Cap Scr.			
67		SP-677 3/8-24 x 1/2" Hex. Hd. Cap Scr.			
68		SP-1603 1/4" Steel Washer			
69		SP-1604 5/16" Steel Washer			
70		Dust Chute			
71	LTA-853	Spacer			
72	LTA-854	Clip			
73	LTA-857	Tie Rod			
74	TAM-143	Saddle Block			
75	TAM-144	Shoulder Bolt			
76	TAM-198	End Plug			

It is important that the motor pulley slides freely along the motor pulley shaft when the saw arbor is being tilted. Both the motor pulley and the motor pulley shaft are manufactured to very close tolerances. To insure trouble free operation, we will furnish both of these parts as an assembly only.

ACCESSORIES

Cat. No. 865	Clamp Attachment for Miter Gage
Cat. No. 1172	Tenoner
Cat. No. 1452	Dado Head Insert
C. No. 34-333	6" Dado Head Set
C. No. 34-875	Super-Safe Splitter Mounted Guard
C. No. 49-364	Retractable Caster Set
C. No. 50-315	Steel Stand

THINGS TO REMEMBER

1. Always turn off motor before making adjustments.
2. Your line current to motor and fuse is correct for your installation.
3. Your saw blade is sharp and rotating in the correct direction.
4. Your adjustments are important and should be checked periodically.
5. Taking a chance is foolhardy; always follow good safety rules when operating your saw. See publications offered, packed with your saw.