

HEMECRAFT 8" BENCH MODEL TILTING ARBOR SAW

Operating and Maintenance Instructions

The Delta Homecraft 8" Bench Model Tilting Arbor Saw can perform all operations commonly done on larger and more expensive machines of its type. The working parts are enclosed in a welded steel cabinet. It is light in weight, has a large working capacity and is ruggedly designed. Cross cutting, ripping, mitering and beveling operations can be easily accomplished. Accessories for dado and moulding operations may be purchased extra.

Maximum depth of cut is $2\frac{1}{4}$ inches. When the saw blade is tilted 45 degrees to the right, $1\frac{9}{16}$ inches depth of cut can be obtained. The "Auto-Set" miter gage is adjustable for cuts at any angle up to 60 degrees right or left. The "Micro-Set" rip fence can be clamped at any point along the entire width of the table including the side extensions when mounted.

The table height should be approximately $34\frac{1}{2}$ inches above the floor when mounted. Its size is 15 inches wide by 22 inches deep; when both side extensions are mounted, its size is 25 inches wide by 22 inches deep. The cabinet size is $13\frac{1}{2}$ inches wide, 14 inches deep by $11\frac{1}{2}$ inches high.

Under the basic unit, No. 34-500, the standard parts furnished with the machine are as follows: No. 325 8 inch combination saw blade, No. 5225 $2\frac{1}{4}$ inch arbor pulley, switch name plate, "Micro-Set" rip fence and guide rails, No. 864 "Auto-Set" miter gage, No. 34-961 table insert for saw blade and a 3 foot power cord to connect the motor and switch.

Accessories which may be purchased as additional equipment are the No. 34-966 splitter attachment, combination, rip and cross-cut saw blades, No. 864 extra miter gage, special table inserts, Nos. 34-963 and 34-962, for dado and moulding cutter head respectively, No. 333 6 inch dado head with cutters, No. 265 4 inch moulding cutter head and knives, No. 34-964 two side table extensions, No. 865 clamp attachment for the miter gage, No. 50-810 steel stand, No. 5500 5 inch motor pulley, No. 5250 $2\frac{1}{2}$ inch motor pulley, No. 49-154 40 inch V-belt, No. 49-152 36 inch V-belt, No. 49-330 two pole toggle switch and No. 34-965 V-belt and motor pulley guard.

The motors, motor pulleys and V-belts, furnished for the machine will vary according to the customers choice.

Refer to the photographs, drawings and Table 1 to identify the parts mentioned in the following instructions.

CONSTRUCTION FEATURES

Use of a welded steel cabinet ruggedly constructed as a frame for mounting the table and carrying the working parts provides maximum safety for the operator and presents a machine of modern lines which can easily be kept in a neat condition. Details of the cabinet which allows ready access to the working parts of the machine are shown in Fig. 2.

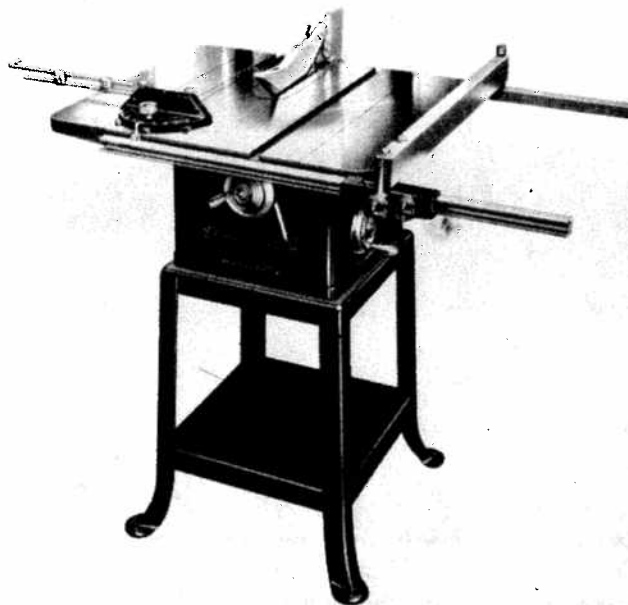


Fig. 1. Delta Homecraft 8" Bench Model Tilting Arbor Saw.

The use of a heavily ribbed table, side table extensions, arbor bracket, trunnions and trunnion brackets made of sturdy grey iron castings produces maximum rigidity between the working parts of the machine.

The arbor is ground to a close tolerance and its flange is finish faced accurately after it is assembled. These manufacturing refinements assure a true running arbor on which the blade is mounted and held square with the axis of rotation.

The rip fence extends the full depth of the table. It includes front and rear locking devices independent of one another. The rip fence can be moved along the graduated scale on the front guide rail without having to measure the distance from the saw blade each time since the pointer incorporated in the front clamp enables the operator to read this distance directly.

The blade guard with splitter and anti-kickback fingers gives maximum protection to the operator and view of the saw blade at all times. It is mounted on the machine in such a way that it tilts with the saw blade at any angle without cramping or crowding against the saw blade.

The raising and tilting mechanisms are operated by hand-wheels with free turning hand grips and useful locking devices which are located in convenient positions on the machine.

Other features presented in this saw are the adjustable table inserts, heavily constructed tie rods, porous

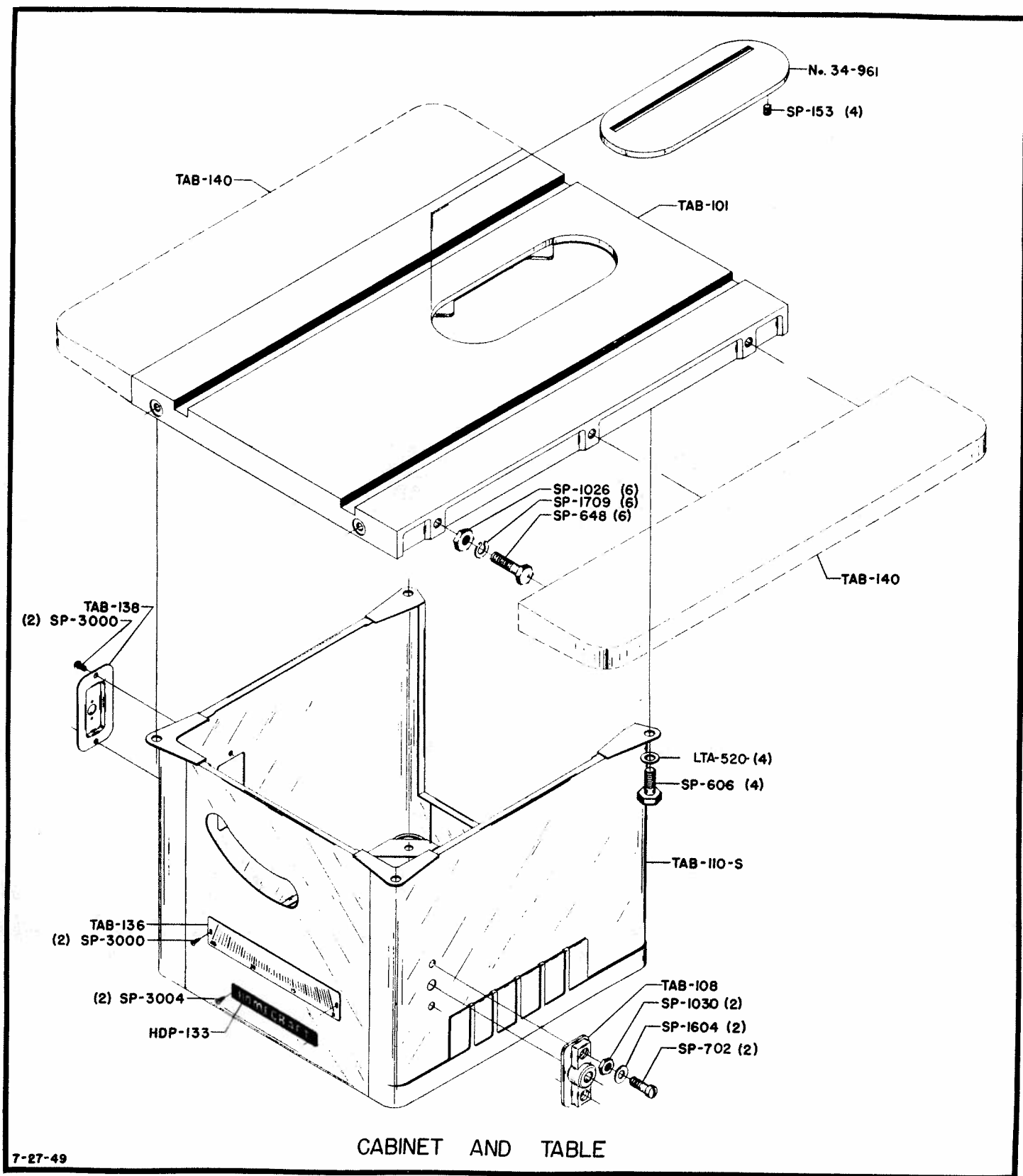


Fig. 2.

bronze bushings in the arbor bracket pivot which need no further lubrication, "Auto-Set" miter gage with stop rods and a motor bracket and plate conveniently mounted at the rear of the machine. The saw arbor runs in pre-lubricated sealed ball bearings, thus eliminating lubrication for the life of the bearings.

MOTORS, PULLEYS AND BELTS

For average conditions, a $\frac{1}{2}$ hp motor will furnish ample power for this machine. When considerable continuous cutting is to be done, a $\frac{3}{4}$ hp motor will be more effective. Use 6 inch frame constant speed motors only on this machine.

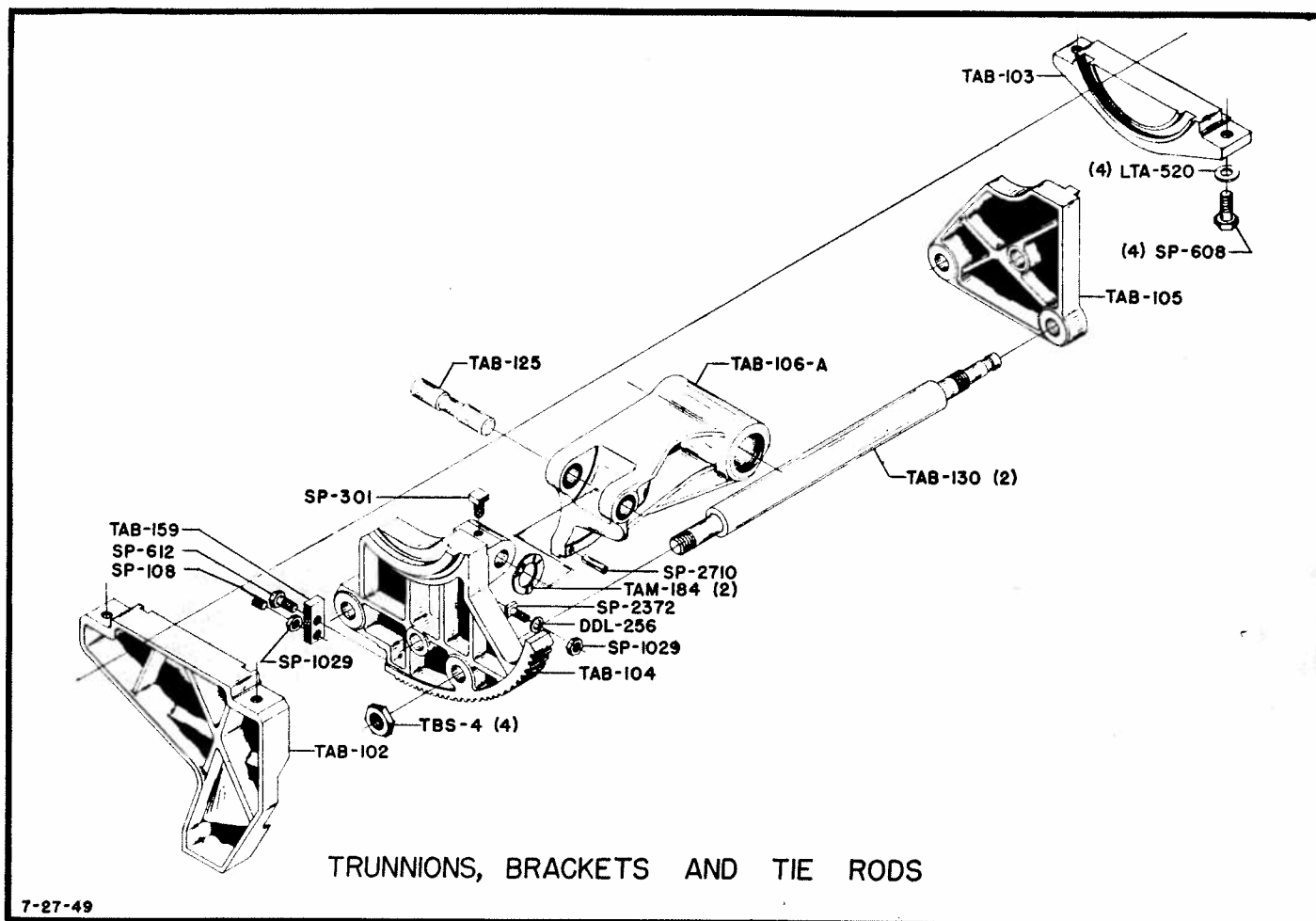


Fig. 3.

The motor speed of the No. 62-650 $\frac{1}{2}$ hp motor with 60 cycle power is 1725 rpm, which will run the arbor at 3850 rpm or the 8 inch saw blade at 8100 surface feet per minute. These speeds are obtained with No. 5225 $2\frac{1}{4}$ inch arbor pulley in conjunction with No. 5500 5 inch motor pulley. Use No. 49-154 V-belt which has an outside circumference of 40 inches.

The motor speed of the No. 62-250 $\frac{3}{4}$ hp motor with 60 cycle power is 3450 rpm, which will run the arbor at 3850 rpm or the 8 inch saw blade at 8100 surface feet per minute. These speeds are obtained with No. 5225 $2\frac{1}{4}$ inch arbor pulley in conjunction with No. 5250 $2\frac{1}{2}$ inch motor pulley. Use No. 49-152 V-belt which has an outside circumference of 36 inches.

The Delta motors recommended for this machine are equipped with a switch and an 8-foot power cord with plug. The instruction sheet, PM-1554, packed with each motor, gives complete directions for mounting and operating.

MOUNTING SAW AND MOTOR

The 8 inch bench model tilting arbor saw is assembled ready to mount on a stand or bench. Remove the carton and unbolt the cabinet from the skid. Wipe the protective coating thoroughly from the working parts of the machine. Unpack the other items in the separate cartons which come with the saw and wipe the protective coating thoroughly from these parts.

When mounting the splitter attachment on this saw, place the support rod in the hole of the rear trunnion,

TAB-105, and fasten it in place using the special hexagon jam nut. The lower half of the splitter mounting bracket, TAM-113, is mounted on the end of the shaft projecting beyond the rear of the table. The splitter blade is slotted to fit the hexagon head cap screw, SP-607, and clamped in place between the upper half of the splitter mounting bracket, TAM-112, and the splitter clamp plate, TAM-182, by tightening the hexagon head cap screw. The splitter guard basket is mounted to the splitter blade. Refer to Figs. 16 and 17.

When mounting the side table extensions, use the hexagon head cap screws, SP-648, split lockwashers, SP-1709, and hexagon nuts, SP-1026. Refer to Fig. 2.

Mount the front and rear guide rail, NCS-125 and NCS-126, respectively, using the spacing collars, TAB-153, between the table and rails. Insert the fillister head shoulder screws, NCS-122, through the rails, spacing collars and into the tapped holes of the table flange. Refer to Fig. 13.

Slide the rip fence on the guide rails and place the miter gage into one of the table slots.

When selecting a location for the machine, allow sufficient space in front of and behind the table for ripping long pieces. We suggest mounting the saw on No. 50-810 steel stand which is $21\frac{1}{2}$ inches high and may be ordered extra. Refer to Fig. 1.

Having decided upon the arrangement most suitable for your needs, fasten the saw to the steel stand or bench top, using SP-506 round head machine screws

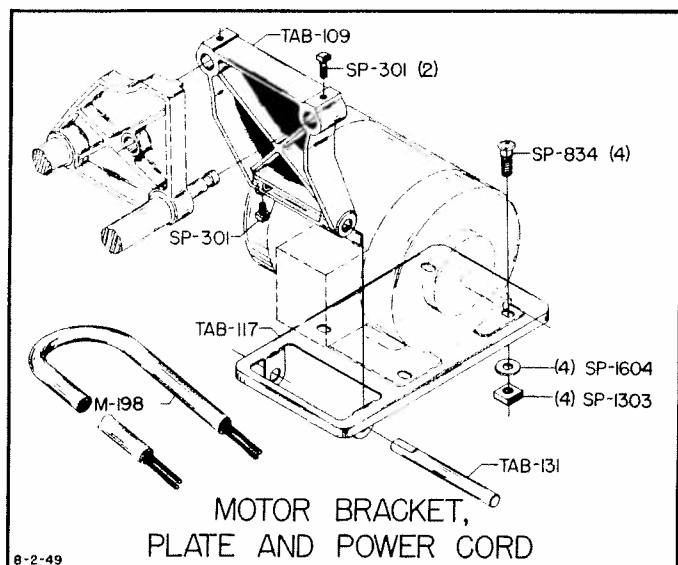


Fig. 4.

through the holes inside the saw cabinet, SP-1604 steel washers and SP-1303 square nuts on the ends projecting through the top of the steel stand or bench.

Before installing the motor, make sure it rotates in the right direction. To run the blade forward through the table, the correct rotation of the motor is counter-clockwise when viewed from the right side of the machine. If the motor runs the wrong way, reverse it according to the manufacturer's directions.

The motor bracket, TAB-109, is mounted on the projecting ends of the tie rods at the rear of the cabinet and fastened in place by tightening the square head set screws, SP-301. The motor mounting plate TAB-117, is placed over the lower end of the motor bracket so the holes in each match and the motor plate rod, TAB-131, is slipped in place. This rod is fastened in place by tightening the set screw, SP-301. The motor plate is designed to receive 6 inch frame motors only. Refer to Figs. 4 and 5.

Place the motor on the motor plate with the slotted holes in the motor foot over the holes of the motor plate and insert the carriage bolts, SP-834, steel washers, SP-1604, and square nuts, SP-1303, fastening them

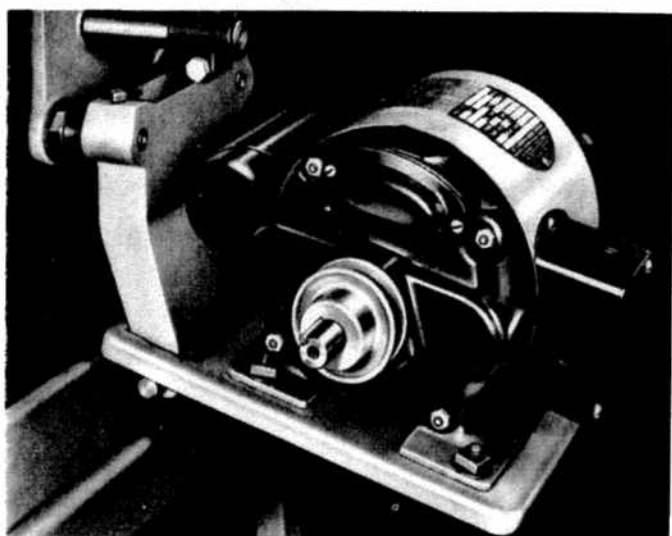


Fig. 5. Motor Mounted.

loosely so the motor can be shifted to place tension on the V-belt. Refer to Figs. 4 and 5.

Slip the motor pulley on the motor shaft with its hub extending away from the motor and tighten it in place. To prevent excess wear and loss of power, the V-belt must run true. Place a straight edge across the faces of the pulleys—working through the opening in the rear of the cabinet—and shift the motor pulley on its shaft until it is in line and tighten its set screw. Refer to Fig. 6.

Place the V-belt over the arbor pulley, then lift the motor plate slightly to stretch the V-belt over the motor pulley. The weight of the motor will give the V-belt the correct tension. Refer to Fig. 5.

POWER CONNECTIONS

Before connecting the motor to the power line, be sure the electric current is of the same characteristics as stamped on the motor name plate.

Do not connect the motor to a circuit which will be overloaded. If an extension cord is used, it must have adequate capacity. All line connections should make good contact. Running on low voltage will injure the motor.

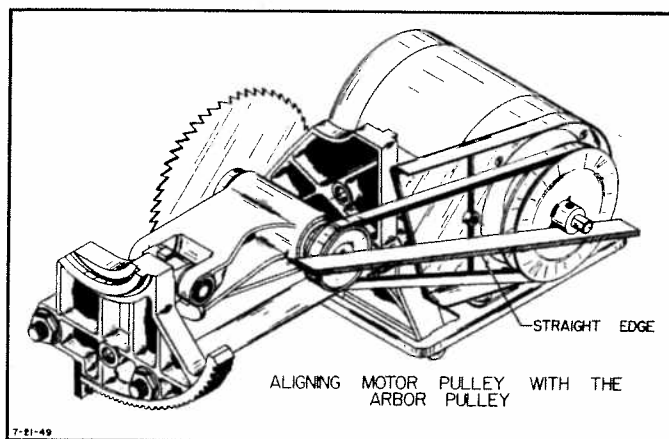


Fig. 6.

The switch name plate furnished with the saw will receive the switch which is installed in the motor conduit box. The customer can buy the special switch No. 49-330 with single hole mounting and a bat type lever which gives a better appearance.

LUBRICATION

The arbor is supported within the arbor bracket by two sealed single row ball bearings which are pre-lubricated for their entire life. The arbor bracket pivot also has porous bronze bushings which are press-fitted and lubricated for life.

Occasionally, place a good grade of light grease on the raising and tilting worms, and on the teeth of the front trunnion and arbor bracket. Keep the sliding ways of the front and rear trunnion brackets well oiled to operate freely.

Frequently, wipe the table slots and the ground surfaces of the table and side extensions with an oily cloth to prevent rusting.

OPERATING ADJUSTMENTS

The controls and adjustments described below are important for accuracy and convenience in various operations. Follow these directions for best results.

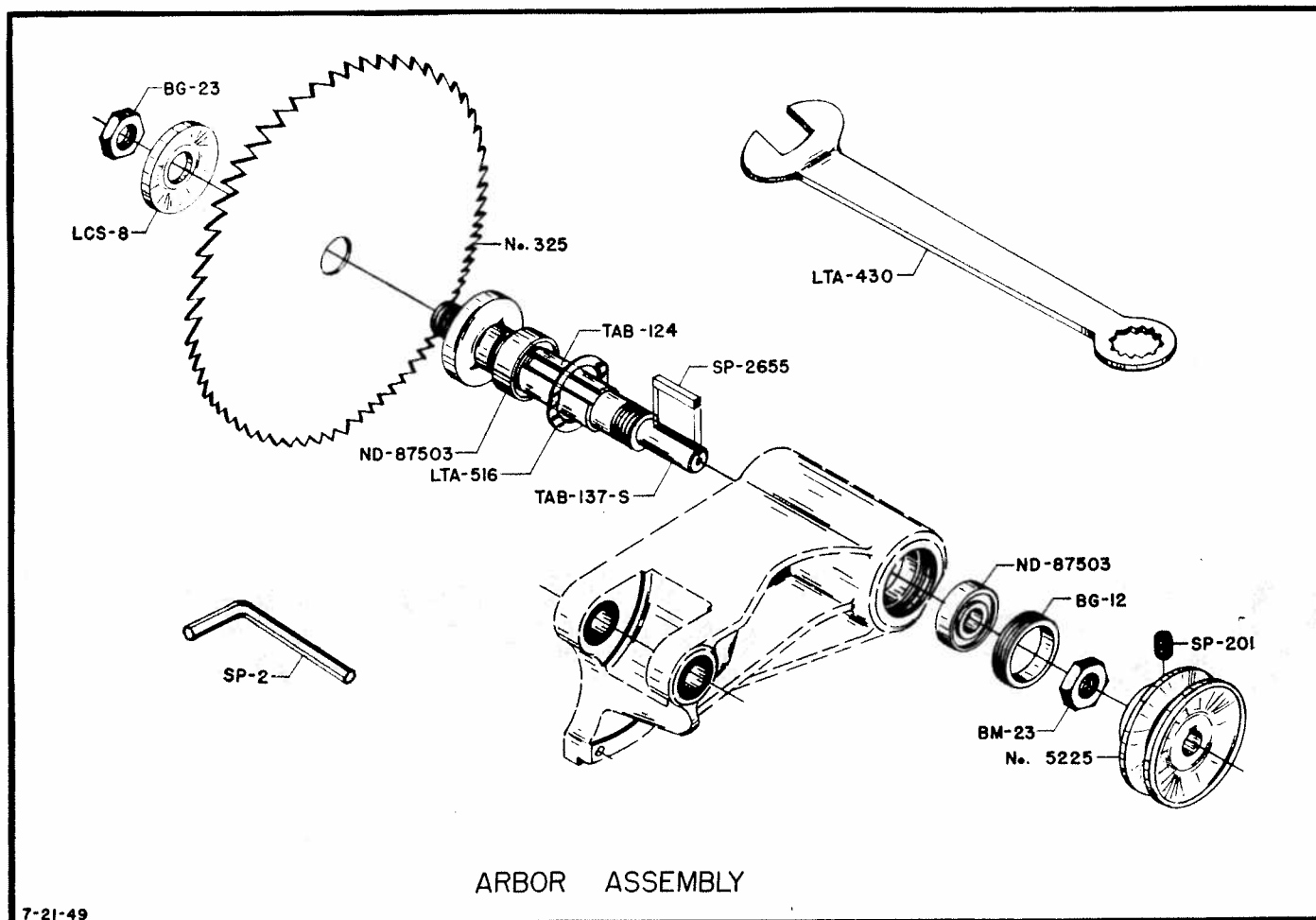


Fig. 7.

Table Alignment

Accurate cuts are possible only when the miter gage grooves of the table are parallel to the saw blade. The saw arbor and miter gage grooves are aligned at the factory, but upon receiving the saw, it is best to check the alignment of the miter gage slot on the table with the saw blade.

To check this alignment, proceed as follows: Place the miter gage in one of the table slots and insert a short dowel pin in the stop rod hole on the same side as the saw blade. Set this dowel pin so it just touches a tooth of the saw blade at the front and rear position. Since there might be a slight variation in the set of the teeth, it is best to check against the same tooth. If the end of the stop rod just touches at both positions, the miter gage grooves are parallel to the blade. If the rod leaves a gap or extends beyond the tooth an adjustment must be made.

Remove the switch from the switch name plate, TAB-138. Remove the motor on the motor mounting plate, TAB-117, from the motor bracket, TAB-109, by loosening the square head set screw, SP-301, and slip the steel rod, TAB-131, from beneath the motor plate. Remove the hand knob, TAB-160, hand-wheel assembly, TAB-165-S, special fiber washer, DDL-161, and the pointer, TAB-123, from the raising mechanism at the front of the machine. Remove the hand knob, TAB-160, hand-wheel assembly, TAB-165-S, special fiber washer, DDL-161, and the bearing plate, TAB-108, from the tilting mechanism on the right side of the cabinet. Refer to Figs. 2, 4, 9 and 10.

To remove the table together with its unit parts from the cabinet, remove the four hexagon head cap screws, SP-606, with the steel washers, LTA-520, which holds the steel cabinet to the underside of the table. Grasp the front and rear flange of the table with a firm grip and tilt it slightly to the right pulling up at an angle toward the rear left corner of the machine. We suggest resting each corner of the table on wooden blocks approximately 10 inches high on a table or bench of good working height so its unit parts are easily accessible. If the two side extensions, TAB-140, are attached we suggest removing them from the machine. Remove the table insert for the saw blade from the machine. Replace the hand-wheel assembly, TAB-165-S, with the hand knob, TAB-160, on the raising and tilting mechanism shafts, set the unit on the table so the tilting mechanism is away from the operator.

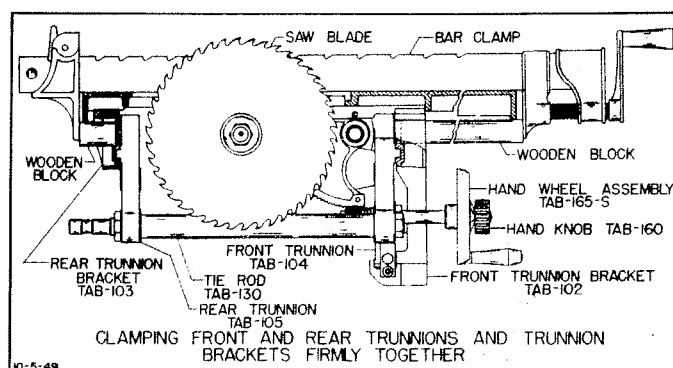


Fig. 8.

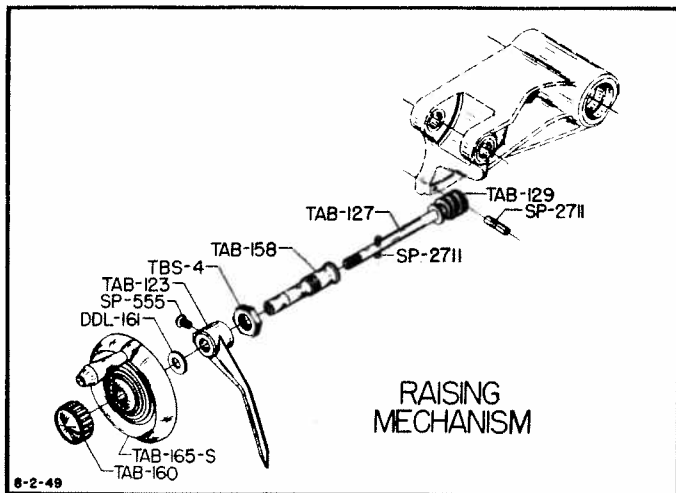


Fig. 9. Rear Clamp Mechanism of Rip Fence.

It should be kept in mind that it is very important when making adjustments that the front and rear trunnion brackets, TAB-102 and TAB-103 respectively, must be held together firmly against the front and rear trunnions, TAB-104 and TAB-105 respectively. To do this effectively, we suggest cutting two wooden blocks about 1 inch in diameter approximately $1\frac{1}{2}$ and 9 inches long respectively. Place the $1\frac{1}{2}$ inch wooden block against the center of the rear trunnion bracket casting and the 9 inch wooden block against the center of the front trunnion bracket casting so they project just beyond the edge of the table flange. Place a bar clamp, which can be adjusted to clamp approximately 2 feet, across the table surface and clamp the two wooden blocks firmly together. Refer to Fig. 8.

Draw the four hexagon jam nuts, TBS-4, which hold the tie rods, TAB-130, firmly in place. Also draw up the hexagon jam nut, TBS-4, which holds the steel sleeve, TAB-158, of the raising mechanism firmly in place. These nuts can be drawn up firmly by the use of an open end wrench. To get at the nuts against the front trunnion bracket it will be necessary to tilt the saw blade to the 45 degree position. Refer to Figs. 3 and 9.

Loosen slightly the four hexagon head cap screws, SP-608, which hold the front and rear trunnion brackets to the underside of the table. As previously described, check the saw blade with respect to the miter gage slot. If there is a gap at the front so the dowel pin does not touch a tooth of the saw blade, we suggest tapping the front or rear trunnion bracket to bring the saw blade parallel to the miter gage slot. Always hold a wooden block against the heavy edge of the casting when tapping it with a hammer, since a direct blow may break the casting.

When the adjustment is completed, tighten firmly the four hexagon head cap screws, SP-608, which hold the front and rear trunnion brackets to the underside of the table. Place the table insert for the saw blade in the table and tilt the blade to the 45 degree position, to see that the blade does not rub against the side of the slot in the insert. If it does touch a readjustment must be made as described above.

After it has been adjusted properly, remove the hand-wheel assembly from the raising and tilting mechanisms and reassemble the machine.

The table, arbor bracket, trunnion brackets and

trunnions are assembled together as a unit. Therefore, if the table should be cocked on the cabinet, this does not mean that the saw blade is out of alignment with respect to the table slot.

Replacing Saw Blade

Remove the special hexagon nut, BG-23, from the arbor. Replace the saw blade on the machine with the correct blade for the operation. Place it on the arbor so the teeth point toward the front and against the arbor flange firmly. Before placing the saw blade on the arbor, make sure the blade, saw blade flange and arbor flange are free from dirt, dust and grease which can prevent the saw blade from running true. Place the saw blade flange on the arbor with its concave side against the saw blade and tighten firmly the special hexagon nut, BG-23. Do not use excessive pressure when tightening this nut, since it only places unnecessary strain on the arbor flange, saw blade and arbor assembly. Refer to Fig. 7.

Raising Mechanism

The saw blade is raised by turning the front hand-wheel to the right and lowered by turning it in the opposite direction. The pitch of the raising worm and spacing of the teeth on which it rides are such that one complete turn of the hand-wheel moves the blade approximately $5/16$ inch.

The hand knob, TAB-160, which extends from the center of the hand-wheel assembly, screws onto the steel shaft, TAB-127, and locks the saw blade at the desired height by tightening it moderately, any additional force merely places unnecessary strain upon the raising mechanism. When making an adjustment for depth of cut always raise the saw blade to the proper height, then lock it in position to avoid a slight change in height which might occur. Refer to Fig. 9.

To prevent the arbor from raising too high a steel pin, SP-2710, has been placed in the arbor bracket assembly, TAB-106-A. This steel pin strikes against the square head machine bolt, SP-2372, projecting from the front trunnion, TAB-104, which is used as a positive stop. To make this adjustment, lower the saw blade and tilt it slightly, loosen the hexagon nut, SP-

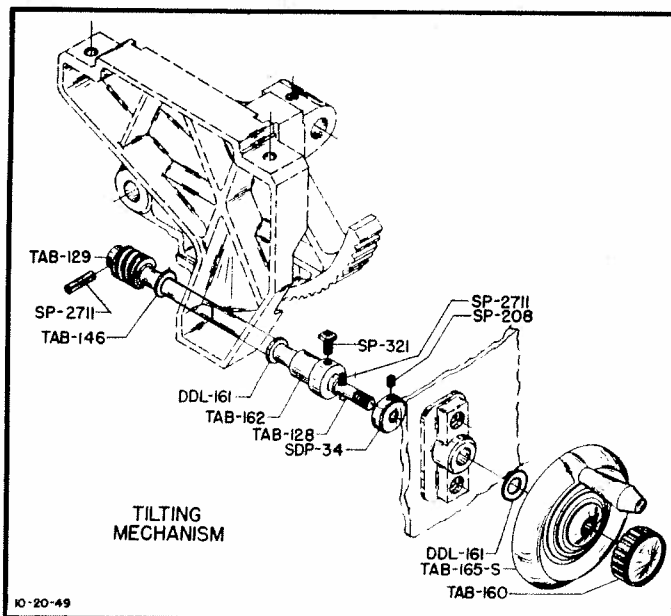


Fig. 10.

1029, and turn the square head of the machine bolt slightly to correct the condition which exists. This adjustment is set at the factory and in most cases no further adjustment will be necessary. Refer to Fig. 3.

Tilting Mechanism

The saw blade is tilted by turning the hand-wheel on the right side of the cabinet. Each complete turn of the hand-wheel gives approximately one and one-half degrees of tilt.

The hand knob, TAB-160, which extends from the center of the hand-wheel assembly, screws onto the steel shaft, TAB-128, and locks the saw blade at the desired angular position by tightening it moderately; any additional force merely places unnecessary strain upon the tilting mechanism. Refer to Fig. 10.

The front trunnion, TAB-104, has a steel plate, TAB-159, with a headless set screw, SP-612, used as a stop to control the squareness of the blade with respect to the table surface. When the blade is at the zero point, this stop should strike against the end of the worm on the tilting shaft. This adjustment is set at the factory and should not require any further attention. Refer to Fig. 3.

Place the saw blade at right angles to the table and check its squareness by using a combination square, then set the pointer, TAB-123, to the zero point.

If for some reason an adjustment is required, tilt the saw blade slightly and reach through the opening at the rear of the cabinet to adjust this stop.

Adjusting The Table Insert

The table inserts can be adjusted, if necessary, to make them flush with the table surface. This adjustment is easily made by turning the four headless set screws, SP-153, the required amount. Refer to Fig. 2.

Rip Fence Attachment

Mount the front guide rail, NCS-125, to the front flange of the table with its graduated scale on top, and the rear guide rail, NCS-126, to the rear flange of the table. Use spacing collars, TAB-153, between the

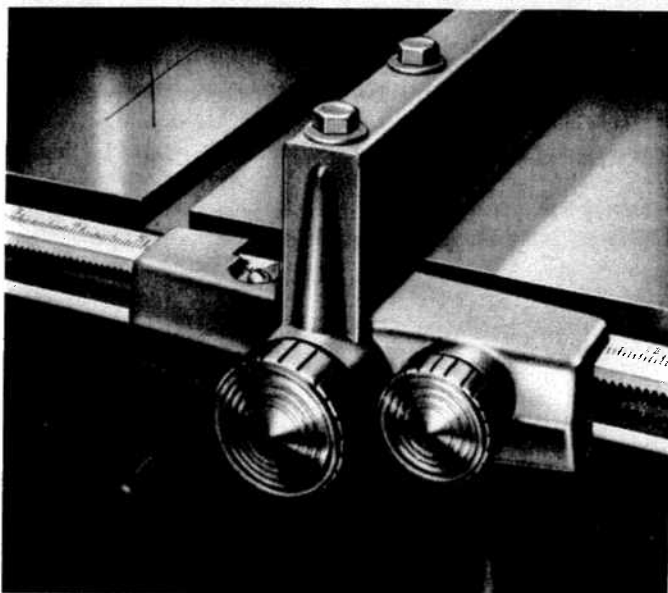


Fig. 11.

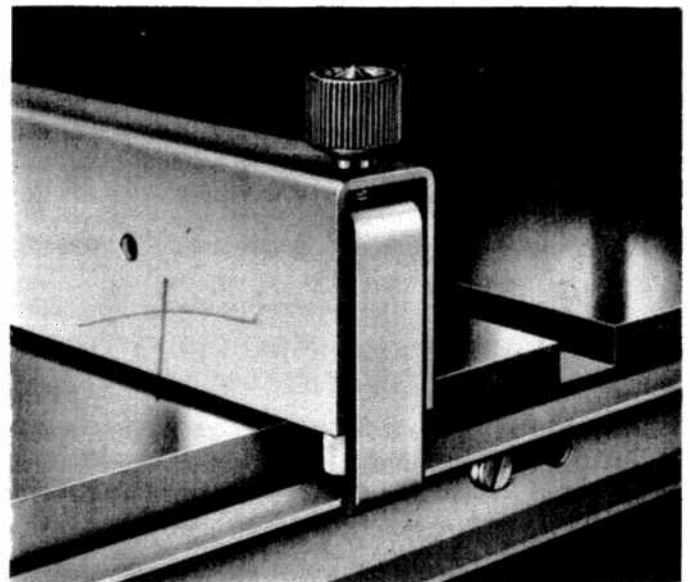


Fig. 12.

guide rail and the table flange, and insert the special fillister head shoulder screws, NCS-122, through the holes in the rails, spacers and into the tapped holes provided in the table flange. Refer to Fig. 13.

Slide the fence on the guide rails to complete the assembly as shown in Fig. 1. To adjust the fence, move it to one of the miter gage slots in the table and lock the front clamp block on the guide rail by turning to the right on the large hand knob assembly, TAB-148-S. If the fence is not parallel to the table slot, release the hexagon head cap screws, SP-605, shift the fence to the correct position, and tighten the cap screws securely. Test to see if the rip fence is parallel by locking the front and rear clamping devices.

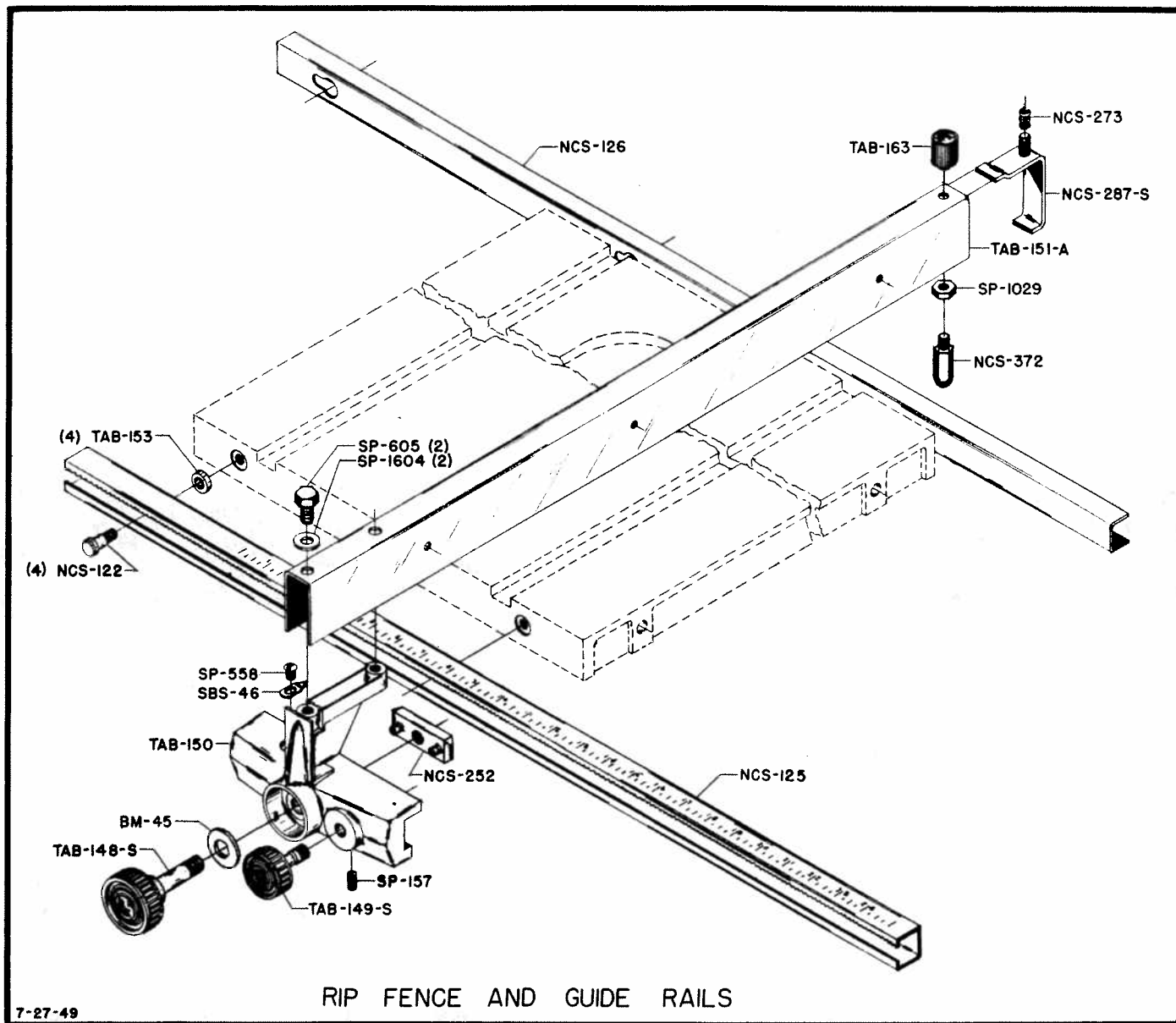
When locking the rear clamping device, make sure the hook assembly, NCS-287-S, is under the upper flange of the rear guide rail. Turn the knurled hand knob, TAB-163, to the right when tightening this device and in the opposite direction when loosening it.

The "Micro-Set" adjustment which is incorporated within the front clamp block assembly is located to the right of the locking device. It is the small knurled hand knob assembly, TAB-149-S, used to conveniently shift the fence slightly to the right or left when making an exact setting on the scale; it must be pushed in to engage the teeth on the upper flange of the front guide rail while being used, and pulled out to disengage when sliding the fence across the table.

The front clamp block has a small recess in it with a pointer which will aid the operator to make the final adjustment. The fence can be used to the left of the blade as well as to the right, extending the full length of the guide rails. When a blade with a different set in the teeth is used, this pointer must be shifted slightly to the left or to the right to place it in the correct position. Refer to Figs. 11, 12 and 13.

Maximum capacity for ripping with this attachment is 24 inches to the right and 5 inches to the left.

The graduated scale is accurately calibrated to render correct readings the width of any cut made in contact with the fence to the right of the saw blade.



RIP FENCE AND GUIDE RAILS

Fig. 13.

Miter Gage and Stop Rods

The No. 864 miter gage, Fig. 14, has a 7 inch face and $\frac{3}{8} \times \frac{3}{4} \times 18$ inch bar which fits the table slot. It can be set at any angle up to 60 degrees right or left, and has adjustable stops for instantaneous settings at zero and 45 degrees right or left.

To adjust this unit, flip the stop link, NCS-170, away from the stop screw at the 90 degree mark. Take a piece of scrap wood and make a trial cut, check the cut with a combination square resetting the gage until the cut is square. Lift the stop link and adjust the stop screws, SP-723, and the special hexagon jam nuts, NCS-173; bring the stop screw, SP-723, against the link. Lock the stop screw in this position with the special hexagon nut and take another trial cut to recheck the setting. The right and left 45 degree stops should be adjusted in the same manner as described above. From time to time, check the accuracy of the cut by using a combination square.

The tapered pivot screw, NCS-168, holds the miter gage head so the bar can be adjusted to compensate for wear or loosening the head to suit the operator. To do this, loosen the headless set screw, NCS-177, in the

face of the miter gage and adjust the tapered pivot screw. Refer to figure 14.

The stop rods of the miter gage are used for cutting a number of pieces of a required length. They may be used in either hole on the right and left side of the miter gage head.

Fasten the straight rod, NCS-175, to project from the side hole of the miter gage body and adjust the bent rod, NCS-176, by means of the clamp, CS-21, and wing nut, SP-1401, so the bent end of the rod is the required distance from the saw blade.

Use the stop rods only on the outside of the miter gage away from the saw blade. Check the setting before starting the motor to be sure that the rods will not contact the blade when the miter gage is advanced.

SAW BLADES

The 8 inch combination saw blade No. 325 is furnished on the machine and is suitable for ripping, bevel ripping, cross cutting, bevel cross cutting, and miter work, to give the customer an all-around blade for all types of work. Other additional blades are available for various operations.

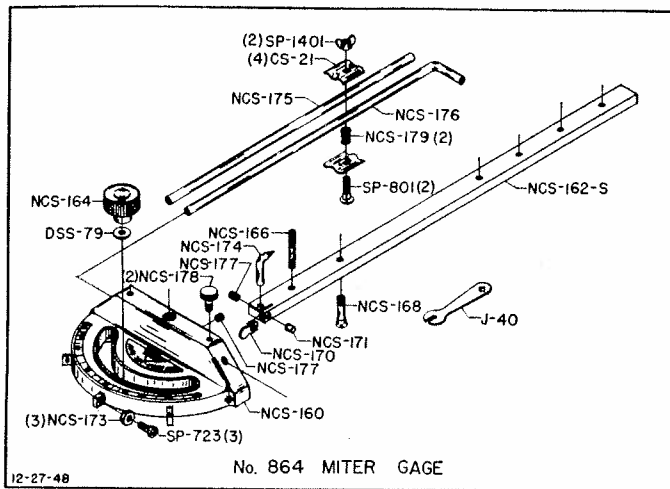


Fig. 14.

We recommend the hollow-ground blade No. 326 for fine cuts. This is also a combination blade, suitable for all types of work, but it will make a smoother, more accurate cut than the No. 325 saw blade. Hollow-ground blades are so named because they are flat ground to reduce the thickness from the cutting edge toward the center, thus providing clearance in the cut to eliminate friction and prevent jamming in the work. The teeth of hollow-ground blades, therefore, are not set for clearance and they make a smoother, more uniform cut.

An operator having two blades should use the No. 325 blade for all ordinary work, rough cuts and those which are to be jointed or sanded. The fine blade should be reserved for accurate finish cuts, such as miter corners which are to be glued. Hollow-ground blades do not remain sharp as long as blades which have spring-set teeth.

When a considerable amount of ripping and cross cutting is to be done, we suggest purchasing the special rip saw blade No. 334 and the cross-cut blade No. 335.

Saw blades are cutting tools which have been developed to a high standard. Each saw blade has been designed for certain purposes. The additional cost of special blades is justified when work of the corresponding class is to be done in quantity. Consult your Delta dealer for special blades to meet your requirements.

Trace the saw tooth pattern of your new blades on a heavy piece of paper and keep it for a record of the original tooth shape. Refer the sawyer to the pattern, who can then duplicate the original condition of each blade.

CARE AND SHARPENING OF CIRCULAR SAW BLADES

A circular saw should not require an unreasonable amount of force to feed the wood, but should make a clean cut easily. After a certain amount of use, the saw teeth will become dull and the blade will no longer cut smoothly. Continued operation of a dull blade will result in a great strain on the saw and upon the machine as well as decreased production. If a blade is set too heavily, an excessive saw kerf will be cut, and a blade with an uneven set will make a rough cut.

Efficient sawing depends upon several factors: A true running arbor and flange, careful sharpening and spacing of the teeth.

To avoid any possible damage and obtain maximum performance, keep the saw blades both round and sharp. If a saw blade does not cut easily, usually it has lost its set or swage or has become dull. To run a blade in this condition will cause the rim to heat and crack. It may also cause the blade to lose its tension and warp. Do not use a blade which wobbles and cuts unevenly.

Frequent sharpening of the blade gives maximum production and holds down the cost of operation. If a blade is allowed to become too dull, the filer must remove more metal to bring it back in service than if it were sharpened more frequently.

Frequently check the corners of the swage or set of the teeth. If it is found that there is a slight roundness on the corners, the blade will feed hard and it will not be cutting properly because of the binding just back of the points. If this condition exists, we suggest sending the saw blade to a sawyer for reconditioning.

Keep the saw blade bright and clean. When gum and pitch collects on the blade it may run warm and cause it to snake. Remove the hardwood gum from the sides of the blade by soaking it in hot water for a few minutes, then wipe it with a clean rag. Never scrape off the gum and pitch with a sharp tool, because when a blade is scratched, it will collect gum and pitch that much faster.

Sharpening rip, cut-off and flat ground combination blades require the following operations in their respective order: Rounding, gumming, setting and filing. When sharpening hollow-ground blades, the following operations are required in order: Rounding, gumming and filing. Do not attempt to sharpen a dull blade unless you are skilled in this trade. Send the blade to an expert sawyer; sharpening service is listed in the classified directory of most cities. Consult your Delta dealer if you do not find saw sharpening service available in your locality.

CIRCULAR SAW OPERATIONS

The following instructions will give the inexperienced operator a start on the usual tilting arbor saw operations. Use scrap material for practice, getting the feel of the machine before attempting the job at hand.

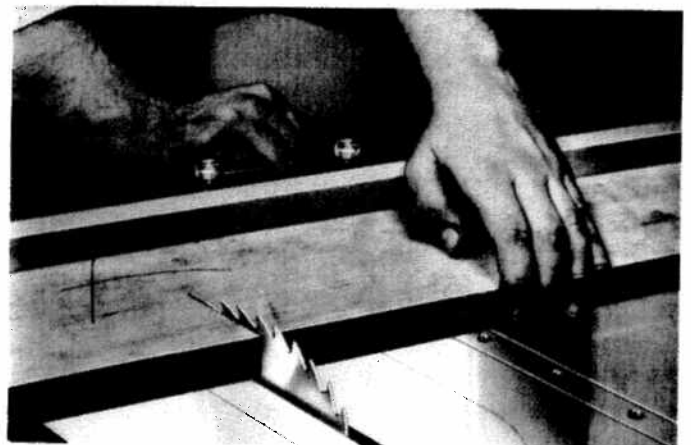


Fig. 15. Cutting a Miter Joint.

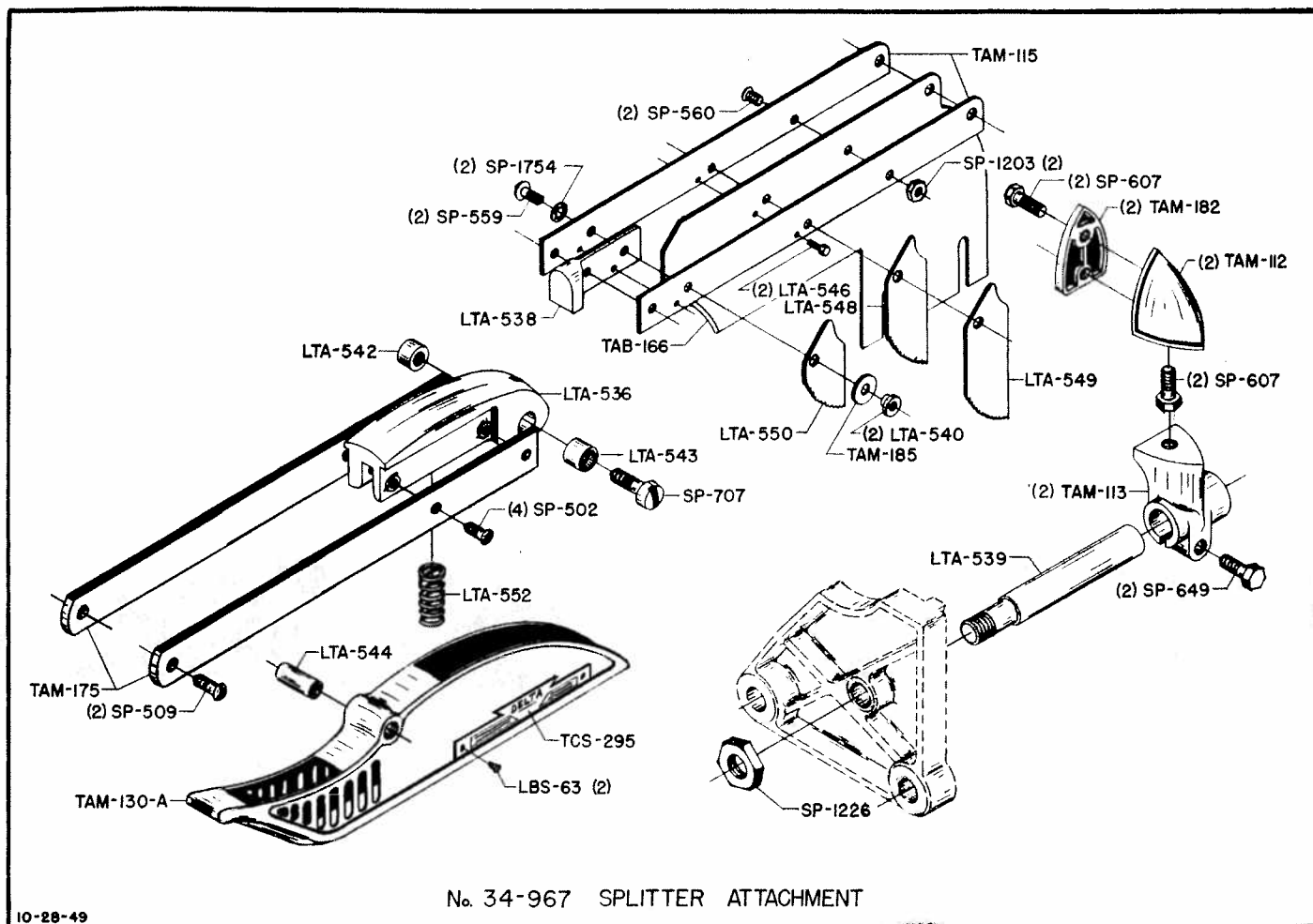


Fig. 16.

Cross Cutting

When making cross cuts, always use the miter gage. Hold the work firmly against the miter gage body to avoid shifting and advance it in one steady motion until the blade has completed the cut. The edge of the work which is held against the miter gage should be straight, otherwise the piece may twist and kick back as it is advanced in the cut.

For accurate work, line up the location of the cut with the blade before starting the motor. Allow for the width of the saw kerf, which varies according to the type of blade, when cutting to length.

Reverse the miter gage so the bar projects forward when cutting a board which is wider than the clear table space in front of the blade.

Whenever cross cutting is to be done, always remove the rip fence. Do not use the rip fence as a stop for cutting pieces to length since it invites injury to the blade and operator. Use the stop rods which are a part of the miter gage, or a wooden face plate with a stop block, on the miter gage for this purpose.

Ripping

When ripping stock to the required widths, use the rip fence to guide the work so the cut will be parallel to the edge.

Make all adjustments before starting the motor. Measure from the fence to the saw teeth to check the required width before clamping it in position. Use the

splitter attachment whenever possible. The splitter keeps the saw kerf open, thus making a smooth, clean cut.

The edge of the work which slides against the fence should be straight. Feed the work with a smooth, steady, continuous motion until the cut has been completed.

When a fine saw blade is used on straight material, it is possible to obtain a smooth, even cut. However, most work requires subsequent jointing or sanding, and allowance must be made for material removed in such finishing operations if the final result is to be of exact width.

Remove the miter gage during ripping operations. To avoid an accident, keep the table clear of material other than the piece being cut.

When ripping thin or narrow pieces of stock, it is sometimes desirable to remove the splitter attachment. In this case, the use of a push stick is recommended whenever the piece is not wide enough for a safe hand grip away from the blade. The push stick is easily made from scrap material and will prevent injury to the operator. Refer to Figs. 16 and 17.

Mitering

Mitering is similar to cross cutting with the miter gage body set at the required angle. The stock should be held in the position as shown in Fig. 15.

When stock is uniform in width and thickness, it can be turned over when the opposite angle is to be

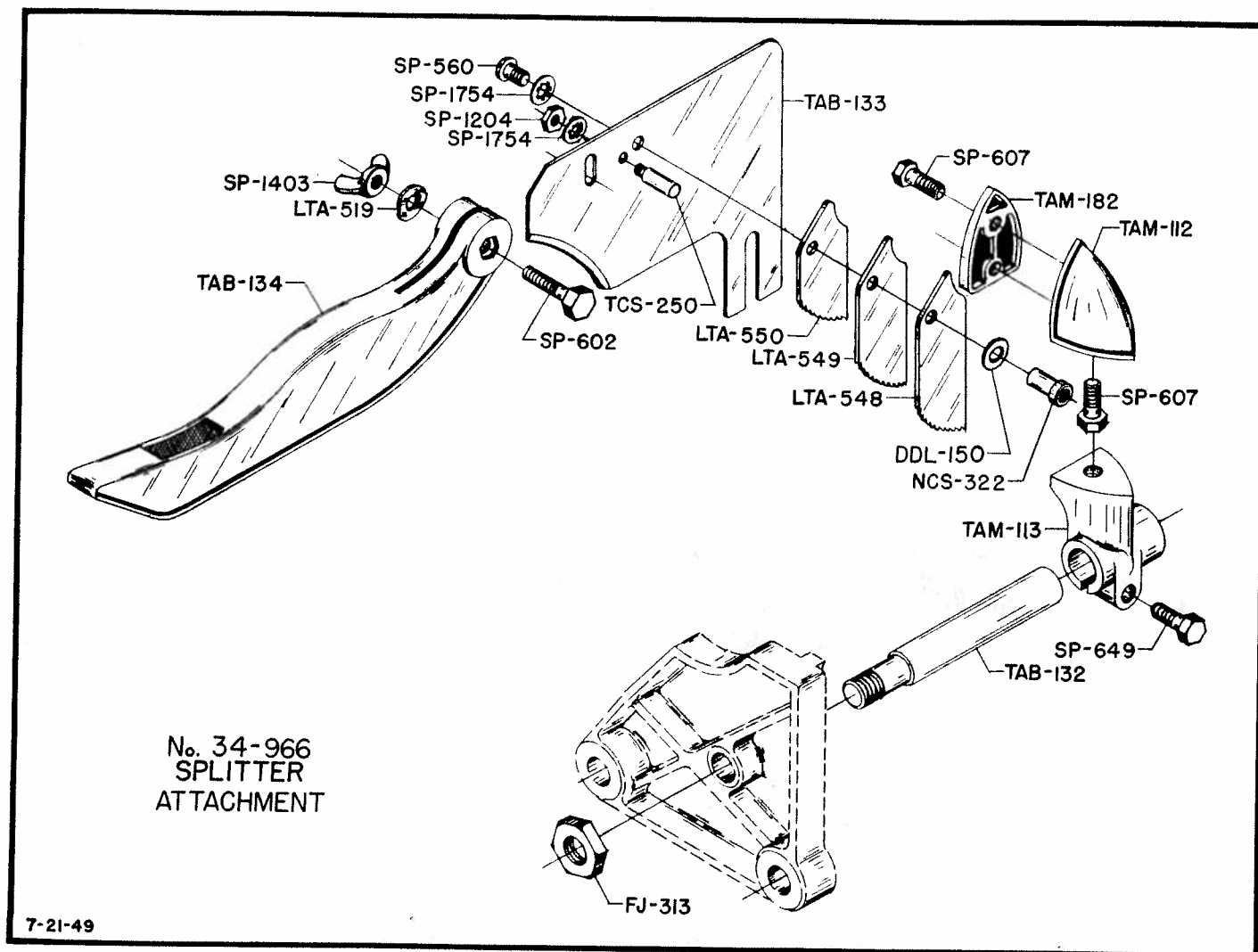


Fig. 17.

cut. For a non-uniform section, such as a picture moulding, the opposite angle can be cut by placing the miter gage in the right table groove and setting the desired angle to the left.

The stock tends to creep toward the saw blade when mitering it, making the cut inaccurate, unless it is held firmly against the miter gage body. The amount of creep may be equal to the set of the saw teeth or the taper of the hollow-ground blade.

To prevent creep, the stock can be clamped to the miter gage body. Mount a straight wooden face plate $\frac{3}{4}$ to 1 inch thick on the miter gage body using flat head machine screws through the face plates and the holes in the fence which are provided for this purpose. Place a washer and nut on each screw projecting in the counter bored holes of the face plate. Insert two anchor pins, such as thin phonograph needles, in the face plate so the points project about $\frac{1}{16}$ inch. The points will hold the work, preventing it from shifting, without marring the surface.

Beveling

Bevel cuts up to 45 degrees may be made by turning the hand-wheel on the right side of the machine to tilt the blade to the desired angle. The scale on the front of the machine may be used to read the degree of tilt directly. The operation is the same as for square cuts;

it is either a rip cut using the fence as in other ripping operations or a cross cut using the miter gage.

When making bevel cross cuts, the stock must be held firmly against the miter gage body to prevent spoiling the cut.

An indefinite length of stock can easily be cross cut to a bevel at 45 degrees on this saw limited only by the length of the room.

Compound Miters

This saw makes it simple to take a cut at a compound angle by tilting the saw blade the required amount and setting the miter gage at the same time. The tilt of the blade controls the angle between the cut and the face of the work; the miter gage determines the angle between the cut and the edge of the stock.

ACCESSORIES Splitter Attachments

The No. 34-967 "Super-Safe" splitter attachment gives the operator maximum protection. This attachment has a double clamping arrangement at the rear to give it stability. The supporting arms of this attachment are pivoted at the rear of the splitter blade to give it maximum ease of operation. These features are found only on more expensive woodworking machines.

The No. 34-966 splitter attachment is not a "Super-Safe" attachment, but it does give protection to the

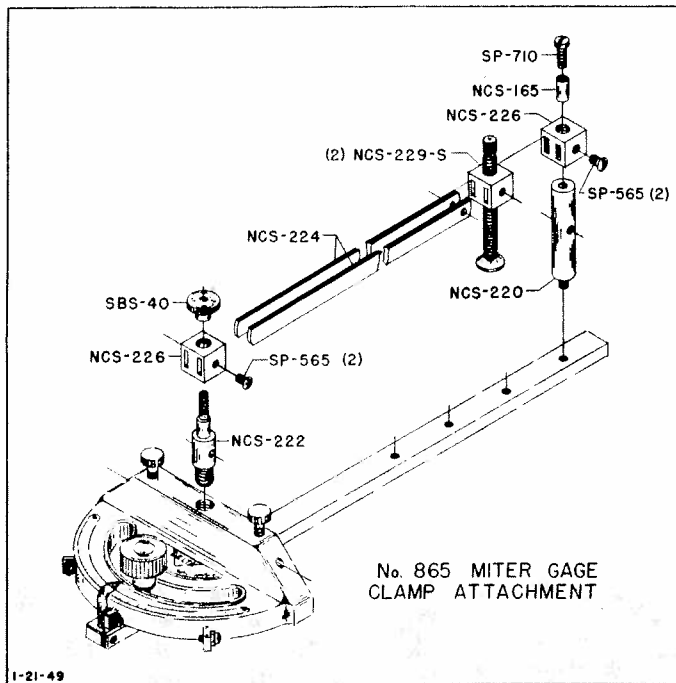


Fig. 18.

operator. It is made rigid enough to prevent side movement and support the guard properly. It has one clamping arrangement at the rear to give it stability. The guard basket pivots on the splitter blade to give it ease of operation.

The above attachments are supported on a stud in such a manner that the splitter blade can be easily aligned with the saw blade and permits the blade guard basket to cover the saw blade. The purpose of the splitter is to hold the saw kerf open so the stock cannot pinch the saw blade which will cause it to burn and bind. The guard basket protects the operator from the saw blade.

The splitter is fitted with three anti-kickback fingers which will effectively grab the stock and prevent the work from being thrown back toward the operator. To release these fingers, trip the hooked portion which extends above the splitter blade. This can easily be done without the operator's hands coming close to or in contact with the saw blade.

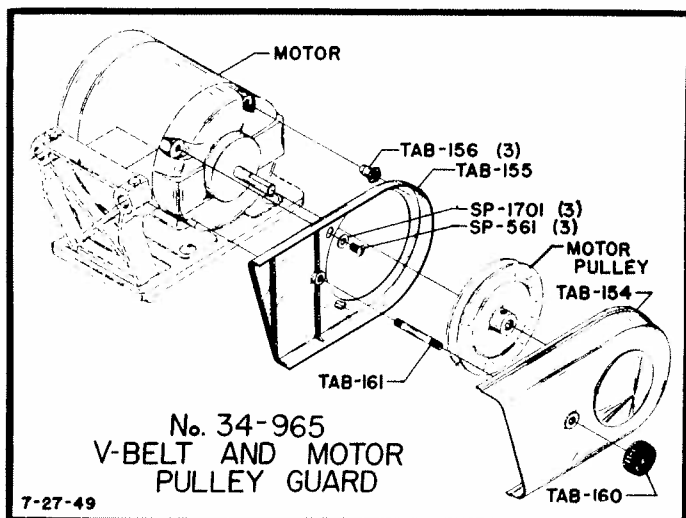


Fig. 19.

The support rod is fastened to the rear trunnion and extends out beyond the cabinet. The lower half of the rear splitter mounting bracket, TAM-113, is mounted on the extended portion of the rod and clamped in position by tightening the hexagon head cap screw, SP-649. Mount the splitter attachment so the splitter blade is in line with the saw blade and parallel to the rip fence. The upper half of the bracket, TAM-112, can be shifted slightly in the oversize holes by loosening the hexagon head cap screw, SP-607, which fastens it to the lower half. This is important since it will avoid cramping. Tighten the cap screw, SP-607, which holds the splitter blade securely. Refer to Figs. 16 and 17.

Miter Gage Clamp Attachment

The No. 865 clamp attachment for the miter gage should be used when bevel mitering the ends of wide work, and in other operations where accurate miters or angle cuts are required. This attachment will eliminate creep toward or away from the saw blade and make the operation safer, since the hands need not come near the blade.

This attachment is mounted on the miter gage. Installation or removal requires only a few minutes time.

Place the $\frac{1}{2}$ "-20 threaded end of the clamp rail post, NCS-222, into the large center hole on the top edge of the miter gage body. Turn the other clamp rail post, NCS-220, into the miter gage bar, selecting the correct hole for the width of the work. When tightening or removing the posts, use a drift pin through the holes in the posts.

Slide the two clamp screws, NCS-229-S on the rails by means of their sliding block. Slip the rail mounting blocks, NCS-226, on the end of the rail post, NCS-222, and tighten with the knurled hand knob, SBS-40. Place the rear rail block on the clamp rail post, NCS-220, with spacing sleeve, NCS-165, inside, using the fillister head machine screw, SP-710.

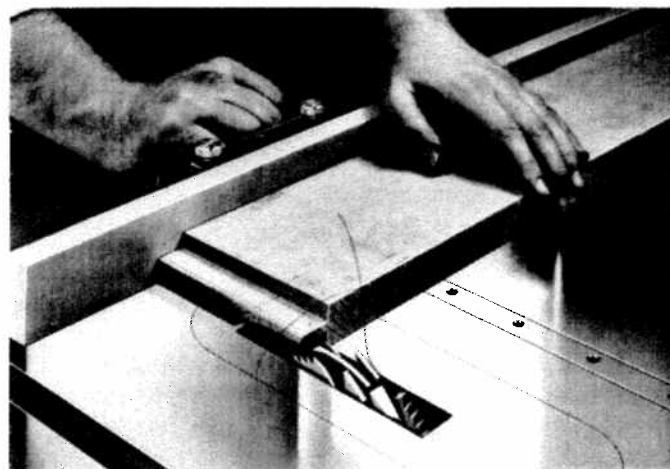


Fig. 20. Using Dado Head for Cutting a Tenon.

Do not dismantle this attachment when removing or adjusting it for the width of the work. To make either adjustment, loosen the knurled hand knob, SBS-40, and the fillister head machine screw, SP-710, so the front and rear clamp rail post can be loosened by means of a drift pin.

To avoid springing the miter gage bar and clamp rails, set the rear clamp rail post and clamp screws as

close to the edge of the work as possible. Tighten the clamp screws by hand just enough to hold the work firmly; excessive pressure is not necessary.

When changing the head of the miter gage at a different angle, loosen the knurled hand knob, NCS-164, on the miter gage and the knurled hand knob, SBS-40, of the clamp attachment. Retighten both hand knobs after each setting. Refer to Fig. 18.

No. 34-965 V-Belt and Motor Pulley Guard

The V-belt and motor pulley guard should be used to avoid getting your hands or clothing caught between the motor pulley and V-belt while in operation.

This attachment is mounted on the end bell of the motor and installation requires only a few minutes time.

Remove three of the hexagon nuts from the ends of the tie rods which project from the end bell and screw the three adapters, TAB-156, on the end of these rods.

Place the slotted holes of the rear half of the V-belt and motor pulley guard over the adapters. Insert the round head machine screws, SP-561, through the split lockwashers, SP-1701, the slotted holes of the guard and into the three adapters. Turn the stud, TAB-161, into the tapped hole of the rear half of the guard. The motor pulley should then be placed on the motor shaft. Align the motor pulley with the arbor pulley as described under "Mounting Saw and Motor." Place the front half of the V-belt and motor pulley guard on the rear half of the guard. Turn the hand knob, TAB-160,

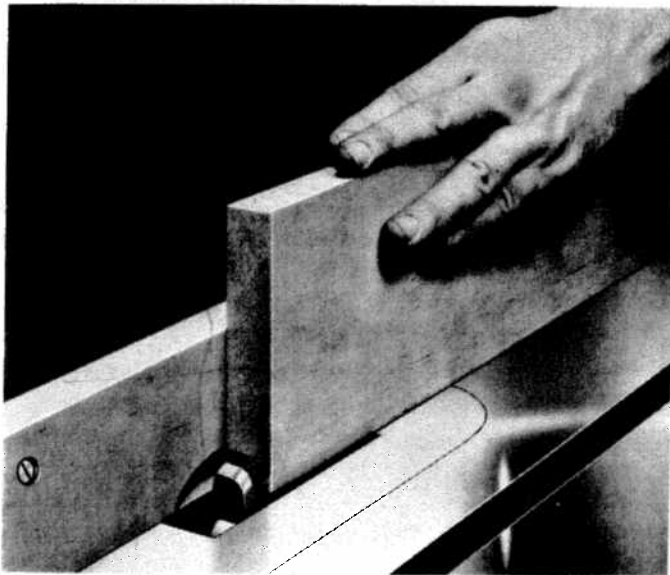


Fig. 21. Making an Ogee Cut with the Moulding Cutter Head.

on the stud which projects through a hole in the front half of the guard. Refer to Fig. 19.

Dado Head

Another useful accessory available for this machine is the 6 inch dado head, No. 333. It consists of two outside cutters and four inside cutters.

This combination of cutters will make grooves $\frac{1}{8}$, $\frac{1}{4}$ to $\frac{13}{16}$ " wide, increasing by thicknesses of $\frac{1}{16}$ inch. The dado head will make a clean cut in any direction of the wood up to $1\frac{1}{8}$ inches in depth.

When using the dado head, install the No. 34-963, special table insert, instead of the standard table insert for use with the saw blades. Cutting tenons as illustrated in Fig. 18 is one of the numerous operations that can be accomplished by means of this accessory. Refer to Fig. 20.

Complete directions are given in the instruction sheet, PM-1555, which is packed with the dado head.

Moulding Cutter Head

The moulding cutter head, No. 265, consists of a 3-knife cutter head, 4 inches in diameter, with hexagon socket cap screws, MC-10, to clamp the knives in place. A special $\frac{3}{16}$ inch hexagon wrench—available when ordered extra—can be used for tightening or removing the socket cap screws without taking the cutter head off of the arbor.

Moulding cutter knives are not included with the moulding cutter head. For various shapes of knives, to make different designs, Nos. 247 through 269 are available when ordered. The plain set of blades, No. 259, can be used for making special shapes when required.

When the moulding cutter head is to be used, install the special table insert, No. 34-962, in place of the standard insert. This insert is adjustable so it can be leveled with the table surface. Mount wooden face plates on the rip fence with the center section cut out in the shape of an arch to span the cutter being used, as shown in Fig. 19. Use flat head machine screws through the face plates and holes in the fence body. Place a washer and nut on each screw projecting in the counter bored holes of the face plate.

When operating the moulding cutter head, feed the work in the same manner as for ripping, holding the work in contact with the fence as well as with the table throughout the entire cut. If required, the fence can be clamped to the left of the blade equally as well as on the right. Refer to Fig. 21.

Complete directions for using this accessory are given in the instruction sheet, PM-1652, which is furnished with the moulding cutter set.

Table 1. REPLACEMENT PARTS

IMPORTANT: Give both the Part Number and the Description of each item when ordering from this list; also the Serial Number of the machine on which the parts are to be used.

Part No.	Description	Number Required	Part No.	Description	Number Required
CABINET AND TABLE					
HDP-133	Name Plate, $\frac{1}{16}$ x $4\frac{3}{4}$ ", Horizontal, Homcraft	1	SP-153	#10-32 x $\frac{1}{4}$ " Headless Set Screw	4
LTA-520	Special $\frac{2}{16}$ " Steel Washer, $\frac{1}{16}$ " O.D. x $\frac{1}{8}$ " Thick	4	SP-606	$\frac{5}{16}$ -18 x $\frac{5}{8}$ " Hexagon Head Cap Screw	4
TAB-101	Table, 15 x 22", with $\frac{3}{8}$ x $\frac{3}{4}$ " Miter Gage Grooves	1	SP-648	$\frac{3}{8}$ -16 x $1\frac{1}{4}$ " Hexagon Head Cap Screw	6
TAB-108	Cover Bearing Plate, $1\frac{1}{2}$ x 3", for Tilting Shaft	1	SP-702	$\frac{5}{16}$ -18 x $\frac{3}{4}$ " Fillister Head Cap Screw	2
TAB-110-S	Welded Steel Cabinet, Assembled	1	SP-1026	$\frac{3}{8}$ "-16 Hexagon Jam Nut	6
TAB-136	Tilt Angle Scale, $1\frac{3}{8}$ x $8\frac{1}{2}$ "	1	SP-1030	$\frac{5}{16}$ "-18 Hexagon Nut	2
TAB-138	Switch Name Plate, 2 x $3\frac{5}{8}$ ", Vertical	1	SP-1604	$\frac{5}{16}$ " Steel Washer	2
TAB-140	Side Table Extension, 5 x 22"	2	SP-1709	$\frac{3}{8}$ " Split Lockwasher	6
No. 34-961	Table Insert, with Leveling Screws	1	SP-3000	#6-32 x $\frac{1}{4}$ " Self-Tapping Round Head Machine Screw	4
			SP-3004	#4-40 x $\frac{1}{4}$ " Self-Tapping Round Head Machine Screw	2

(Continued on next page)

Table 1. REPLACEMENT PARTS (Continued)

IMPORTANT: Give both the Part Number and the Description of each item when ordering from this list; also the Serial Number of the machine on which the parts are to be used.

Part No.	Description	Number Required	Part No.	Description	Number Required
TRUNNIONS, BRACKETS AND TIE RODS					
DDL-256	Special $\frac{1}{4}$ " Steel Washer, $\frac{1}{16}$ " O.D. x $\frac{3}{4}$ " Thick	1	NCS-125	Front Guide Rail, $\frac{7}{8}$ x 1 x $32\frac{3}{4}$ " Steel Channel	1
LTA-520	Special $\frac{1}{4}$ " Steel Washer, $\frac{1}{16}$ " O.D. x $\frac{1}{8}$ " Thick	4	NCS-126	Rear Guide Rail, $\frac{5}{8}$ x 1 x $32\frac{3}{4}$ " Steel Channel	1
TAB-102	Front Trunnion Bracket	1	NCS-252	Clamp Plate, $\frac{5}{16}$ x $\frac{3}{4}$ x $2\frac{1}{4}$ ", Tapped $\frac{7}{16}$ "-14	1
TAB-103	Rear Trunnion Bracket	1	NCS-273	Coil Spring, $\frac{1}{2}$ " Diam., $\frac{1}{4}$ " Free Length, Flat Ends	1
TAB-104	Front Trunnion	1	NCS-287-S	Hook, w/Adjusting Screw, for Rear Rip Fence Clamp	1
TAB-105	Rear Trunnion	1	NCS-372	Support Button, $1\frac{1}{2}$ " Long, Threaded $\frac{1}{4}$ -20 x $\frac{1}{2}$ "	1
TAB-106-A	Arbor Bracket, with Bushings and Steel Pin, Assembled	1	SBS-46	Pointer, $\frac{5}{16}$ x $2\frac{3}{4}$ " Flat	1
TAB-125	Steel Shaft, $\frac{5}{8}$ x $3\frac{1}{8}$ ", w/ $\frac{9}{16}$ " Diameter for Set Screw	1	TAB-148-S	Lock Stud, with Hand Knob and Spacer	1
TAB-130	Tie Rod, $14\frac{1}{16}$ " Long, Threaded .639"-20	2	TAB-149-S	Hand Knob, with Pinion Shaft, Assembled	1
TAB-159	Steel Plate, $\frac{5}{16}$ x $\frac{5}{8}$ x $1\frac{1}{16}$ "	1	TAB-150	Front Clamp Block	1
TAM-184	Brg. Loading Spring, $\frac{5}{16}$ " I.D., $1\frac{1}{2}$ " O.D. x .022" Th.	2	TAB-150-S	Front Clamp Block, Assembled	1
TBS-4	Special .639"-20 Hexagon Jam Nut, $\frac{1}{2}$ " Thick	4	TAB-151-A	Rip Fence Body, 1 x 2 x $24\frac{7}{8}$ ", Reinforced	1
SP-108	$\frac{1}{4}$ -20 x $\frac{3}{4}$ " Headless Set Screw	1	TAB-151-S	Rip Fence, Assembled	1
SP-301	$\frac{1}{4}$ -20 x $\frac{1}{2}$ " Square Head Set Screw	1	TAB-153	Spacer, $\frac{1}{2}$ " I.D., $\frac{5}{8}$ " O.D. x $\frac{3}{16}$ " Thick	4
SP-608	$\frac{5}{16}$ -18 x $\frac{7}{8}$ " Hexagon Head Cap Screw	4	TAB-163	Knurled Hand Knob, $\frac{3}{4}$ " Diam., $2\frac{1}{2}$ " Long, $\frac{1}{4}$ "-20 Thd.	1
SP-612	$\frac{1}{4}$ -20 x $\frac{5}{8}$ " Hexagon Head Cap Screw	1	SP-157	$\frac{1}{4}$ -28 x $\frac{1}{2}$ " Headless Set Screw	1
SP-1029	$\frac{1}{4}$ "-20 Hexagon Nut	2	SP-558	#8-32 x $\frac{1}{4}$ " Round Head Machine Screw	1
SP-2372	$\frac{1}{4}$ -20 x $1\frac{1}{4}$ " Square Head Machine Bolt	1	SP-605	$\frac{5}{16}$ -18 x $\frac{1}{2}$ " Hexagon Head Cap Screw	2
SP-2710	$\frac{3}{16}$ x $\frac{7}{8}$ " Roll-Pin	1	SP-1029	$\frac{1}{4}$ "-20 Hexagon Nut	1
			SP-1604	$\frac{5}{16}$ " Steel Washer	2
RAISING MECHANISM					
DDL-161	Special $\frac{1}{2}$ " Fiber Washer, $\frac{7}{8}$ " O.D. x $\frac{1}{2}$ " Thick	1	NO. 864 MITER GAGE AND STOP RODS		
TAB-123	Pointer, with $\frac{1}{2}$ " Hole, Tapped #8-32, Bent	1	CS-21	Clamp Plate for Stop Rods	4
TAB-123-S	Pointer, with Machine Screw	1	CS-21-S	Stop Rod Clamp, with Bolt, Wing Nut and Spring	1
TAB-127	Steel Shaft, $\frac{3}{8}$ x $6\frac{1}{4}$ " Threaded $\frac{5}{16}$ "-18 One End	1	DSS-79	Special $\frac{1}{4}$ " Fiber Washer, $\frac{9}{16}$ " O.D. x $\frac{1}{16}$ " Thick	1
TAB-127-S	Steel Shaft, with Worm, Assembled	1	J-40	$\frac{5}{16}$ " Open End Steel Wrench, $\frac{1}{2}$ " Square Hole	1
TAB-129	Worm, $\frac{7}{8}$ " O.D. x $1\frac{1}{2}$ " Long, $\frac{3}{8}$ " Bore, L.H.	1	NCS-160	Miter Gage Body, 7" Face, with Stop Lugs and Scale	1
TAB-158	Steel Sleeve for Raising Shaft, $3\frac{1}{2}$ " Long	1	NCS-160-A	Miter Gage Body, with Stop Screws, Assembled	1
TAB-160	Hand Knob, $1\frac{3}{16}$ " Diameter, Tapped $\frac{5}{16}$ "-18 x $\frac{1}{2}$ "	1	NCS-160-S	Miter Gage Body, Assembled	1
TAB-165-S	Hand Wheel, with Free Turning Hand Grip	1	NCS-162-S	Miter Gage Bar, w/Stop Link, Pointer and Stop Stud	1
TBS-4	Special .639"-20 Hexagon Jam Nut, $\frac{1}{2}$ " Thick	1	NCS-164	Knurled Hand Knob, $\frac{1}{4}$ " Diam., 1" Lg., $\frac{1}{4}$ "-28 Thd.	1
SP-555	#8-32 x $\frac{3}{8}$ " Round Head Machine Screw	1	NCS-166	Stud, $\frac{1}{4}$ -28 x $1\frac{1}{16}$ ", Threaded Both Ends	1
SP-2711	$\frac{1}{8}$ x $\frac{5}{8}$ " Roll-Pin	2	NCS-168	Special #8-32 Tapered Pivot Screw	1
			NCS-170	Stop Link, $\frac{7}{8}$ " Long, $\frac{1}{4}$ " Hole	1
TILTING MECHANISM					
DDL-161	Special $\frac{1}{2}$ " Fiber Washer, $\frac{7}{8}$ " O.D. x $\frac{1}{2}$ " Thick	2	NCS-171	Steel Pin, .197 x $\frac{1}{4}$ ", Chamfered Ends	1
SDP-34	Set Collar, $\frac{1}{2}$ " I.D., 1" O.D. x $\frac{1}{32}$ " Thick	1	NCS-173	Special #8-32 Hexagon Jam Nut, $\frac{1}{2}$ " Thick	3
SDP-34-S	Set Collar, with Set Screw	1	NCS-174	Pointer Rod, $\frac{5}{16}$ x 1", Bent	1
TAB-128	Steel Shaft, $\frac{1}{2}$ x $9\frac{1}{16}$ ", Threaded $\frac{5}{16}$ "-18 One End	1	NCS-175	Steel Rod, $\frac{5}{16}$ x $11\frac{1}{4}$ ", Round Ends	1
TAB-129	Worm, $\frac{7}{8}$ " O.D. x $1\frac{1}{2}$ " long, $\frac{3}{8}$ " Bore, L.H.	1	NCS-175-S	Adjustable Stop Rods, with Clamps, Assembled	1
TAB-129-S	Steel Shaft, with Worm, Assembled	1	NCS-176	Steel Rod, $\frac{5}{16}$ x 11", Round Ends, Bent	1
TAB-146	Special $\frac{1}{2}$ " Fiber Washer, $\frac{5}{8}$ " O.D. x $\frac{1}{16}$ " Thick	1	NCS-177	Special $\frac{1}{4}$ -28 x $\frac{1}{4}$ " Headless Set Screw	2
TAB-160	Hand Knob, $1\frac{3}{16}$ " Diameter, Tapped $\frac{5}{16}$ "-18 x $\frac{1}{2}$ "	1	NCS-178	Knurled Head Screw, $\frac{1}{4}$ -28 x $\frac{1}{2}$ "	2
TAB-162	Special Set Collar, $\frac{1}{2}$ " I.D., 1" O.D. x $1\frac{1}{4}$ " Long	1	NCS-179	Coil Spring, $\frac{1}{2}$ " Diam., $\frac{5}{8}$ " Free Length, Flat Ends	2
TAB-165-S	Hand Wheel, with Free Turning Hand Grip	1	SP-723	#8-32 x $\frac{1}{2}$ " Fillister Head Machine Screw	3
SP-208	$\frac{1}{4}$ -20 x $\frac{1}{4}$ " Hexagon Socket Set Screw	1	SP-801	$\frac{3}{16}$ -24 x $\frac{3}{4}$ " Carriage Bolt	2
SP-321	$\frac{1}{4}$ -20 x $\frac{3}{8}$ " Square Head Set Screw	1	SP-1401	$\frac{3}{16}$ "-24 Wing Nut	2
SP-2711	$\frac{1}{8}$ x $\frac{5}{8}$ " Roll-Pin	2			
ARBOR ASSEMBLY					
BG-12	Spanner, Nut $1\frac{1}{2}$ " I.D., 1.6" O.D.-20 Thd., $\frac{5}{16}$ " Thick	1	No. 265	3-Knife Moulding Cutter Head, 4" Diam., $\frac{5}{8}$ " Bore	1
BG-23	Special $\frac{5}{8}$ "-12 Hex. Jam Nut, $\frac{1}{4}$ " Thick, L.H. Thd.	1	No. 325	8" Combination Blade, 16 Gage, $\frac{5}{8}$ " Hole, 44 Teeth	1
BM-23	Special .679"-28 Hexagon Jam Nut, $\frac{1}{4}$ " Th., R.H. Thd.	1	No. 326	8" Hollow-Ground Blade, 14-16-14 Gage, $\frac{5}{8}$ " Hole, 70 Teeth	1
LCS-8	Saw Blade Flange, $\frac{1}{4}$ " Diam., $\frac{5}{8}$ " Bore, $\frac{1}{8}$ " Thick	1	No. 333	6" Dado Head, 2 Outside Saws and 4 Inside Cutters	1
LTA-430	Double End $\frac{7}{8}$ " Open and $\frac{5}{8}$ " Hexagon Box Wrench	1	No. 334	8" Rip Saw Blade, 18 Gage, $\frac{5}{8}$ " Hole, 36 Teeth	1
LTA-516	Brg. Loading Spring, $1\frac{1}{16}$ " I.D., $1\frac{3}{4}$ " O.D. x .020" Th.	1	No. 335	8" Cross Cut Blade, 18 Gage, $\frac{5}{8}$ " Hole, 100 Teeth	1
ND-87503	New Departure Ball Bearing	2	No. 864	Miter Gage and Stop Rods	1
TAB-124	Spacer, .680" I.D., $\frac{7}{8}$ " O.D. x 2.018" Long	1	No. 865	Clamp Attachment for Miter Gage	1
TAB-137-S	Arbor, with Flange and Hog Ring, Assembled	1	No. 873	Sliding Block, with Clamp Screw, Complete	1
No. 325	8" Combination Blade, 16 Gage, $\frac{5}{8}$ " Hole, 44 Teeth	1	No. 5250	$2\frac{1}{2}$ " Motor Pulley, with Set Screw (Specify $\frac{1}{2}$, $\frac{5}{8}$, or $\frac{3}{4}$ " Bore) for 6 Inch Frame Motors, 60 Cycle, 3450 rpm	1
No. 5225	$2\frac{1}{4}$ " Arbor Pulley, $\frac{5}{8}$ " Bore, with Set Screw	1	No. 5500	5" Motor Pulley, with Set Screw (Specify $\frac{1}{2}$, $\frac{5}{8}$, or $\frac{3}{4}$ " Bore) for 6 Inch Frame Motors, 60 Cycle, 1725 rpm	1
SP-2	$\frac{5}{16}$ " Hexagon Wrench for Socket Screws	1	No. 34-961	Standard Table Insert, with Leveling Screws, for Saw Blade	1
SP-201	$\frac{5}{16}$ -18 x $\frac{5}{16}$ " Hexagon Socket Set Screw	1	No. 34-962	Table Insert, with Leveling Screws, for Moulding Cutter Head	1
SP-2655	$\frac{3}{16}$ x $\frac{3}{16}$ x $\frac{7}{8}$ " Straight Key	1	No. 34-963	Table Insert, with Leveling Screws, for Dado Head	1
			No. 34-964	Two Side Table Extensions, 5 x 22", with Bolts, Nuts and Washers	1
MOTOR BRACKET, PLATE AND POWER CORD					
M-198	3' Power Cord, #16 Gage, 2 Wires	1	No. 34-965	V-Belt and Motor Pulley Guard, Complete	1
TAB-109	Motor Bracket	1	No. 34-966	Blade Guard and Splitter, with Anti-Kickback Fingers	1
TAB-117	Motor Mounting Plate	1	No. 49-152	V-Belt, 36" Outside Circumference	1
TAB-131	Steel Rod, $\frac{1}{2}$ x $4\frac{1}{16}$ ", with Flat for Set Screw	1	No. 49-154	V-Belt, 40" Outside Circumference	1
SP-301	$\frac{1}{4}$ -20 x $\frac{1}{2}$ " Square Head Set Screw	3	No. 49-330	2 Pole Toggle Switch, 1 HP, AC-DC, 125-250 V, Single Hole Mounting, Bat Type Lever	1
SP-834	$\frac{5}{16}$ -18 x $\frac{3}{4}$ " Carriage Bolt	4			
SP-1303	$\frac{5}{16}$ "-18 Square Nut	4			
SP-1604	$\frac{5}{16}$ " Steel Washer	4			
 RIP FENCE AND GUIDE RAILS					
BM-45	Special $\frac{1}{32}$ " Spring Washer, $\frac{7}{8}$ " O.D. x $\frac{1}{2}$ " Thick	1			
NCS-122	Special $\frac{1}{4}$ -28 x $\frac{1}{32}$ " Fillister Head Shoulder Screw	4			

(Continued on next page)

Table 1. REPLACEMENT PARTS (Continued)

IMPORTANT: Give both the Part Number and the Description of each item when ordering from this list; also the Serial Number of the machine on which the parts are to be used.

Part No.	Description	Number Required	Part No.	Description	Number Required
No. 50-810	Steel Stand, 15 x 15 x 21½", with Screws, Nuts and Washers for Assembly.	1	SP-607	⅝"-18 x ¾" Hexagon Head Cap Screw	2
No. 865 Miter Gage Clamp Attachment			SP-649	⅝"-18 x 1" Hexagon Head Cap Screw	1
NCS-165	Spacing Sleeve, ¼" I.D., ⅝" O.D. x ¾" Long	1	SP-1204	#8-32 Hexagon Nut	1
NCS-220	Clamp Rail Post, ⅝ x 2⅝"	1	SP-1403	⅝"-18 Wing Nut	1
NCS-220-S	Clamp Rail Post, ⅝ x 2⅝", with Rail Mounting Block	1	SP-1754	⅝" Lockwasher, Internal Teeth	2
NCS-222	Clamp Rail Post, ⅝ x 2⅝"	1	No. 34-967 Splitter Attachment		
NCS-222-S	Clamp Rail Post, ⅝ x 2⅝", with Rail Mounting Block	1	LBS-63	¾ x ⅝" Tubular Brass Rivet, ⅝" Head	2
NCS-224	Clamp Rail, ⅝ x 1½ x 13⅝", ⅝" Hole One End	2	LTA-536	Hinge for Splitter Guard	1
NCS-226	Rail Mounting Block, ¾ x ¾ x ⅞"	2	LTA-538	Guide Block for Splitter Guard	1
NCS-229-S	Sliding Block, with Clamp Screw, Complete	2	LTA-539	Stud ¾ x 7⅞", Threaded ⅝"-18 One End	1
SBS-40	Knurled Hand Knob, ⅞" Diameter, ½" Long	1	LTA-540	Brass Bushing, Threaded #10-32, ⅝" O.D. x ⅝" Thick, Flanged	2
SP-565	#6-32 x ⅝" Round Head Machine Screw	4	LTA-542	Steel Bushing, Threaded ⅝"-18, ⅝" O.D. x ⅝" Thick	1
SP-710	¼-20 x ⅞" Fillister Head Machine Screw	1	LTA-543	Steel Bushing, ⅝" I.D. x ⅝" O.D. x 1⅝" Thick	1
No. 34-965 V-Belt and Motor Pulley Guard			LTA-544	Steel Bushing, Threaded ¼"-20, ⅞" O.D. x 1¼" Lg.	1
TAB-154	V-Belt and Motor Pulley Guard, Front Half	1	LTA-546	⅝ x ⅝" Stop Button, ⅝ x ⅝" Hollow Rivet Shank	2
TAB-155	V-Belt and Motor Pulley Guard, Rear Half	1	LTA-548	Anti-Kickback Finger, 1¼" Wide, 3⅝" Blade	1
TAB-156	Adapter, 1¼" Long, Tapped Both Ends #8-32	3	LTA-549	Anti-Kickback Finger, 1¼" Wide, 2⅝" Blade	1
TAB-160	Hand Knob, 1⅝" Diameter, Tapped ⅝"-18 x ½"	1	LTA-550	Anti-Kickback Finger, 1¼" Wide, 1¾" Blade	1
TAB-161	Stud, ⅝ x 2⅝", Threaded Ends ⅝"-18	1	LTA-552	Coil Spring, ⅝" Diam., 1⅝" Free Length, Flat Ends	1
SP-561	#10-32 x ⅝" Round Head Machine Screw	3	TAB-166	Splitter Blade, #14 Gage, w/Two ⅝" Mounting Slots	1
SP-1701	⅝" Split Lockwasher	3	TAB-166-A	Splitter Blade, with Reinforcing Bars and Anti-Kickback Fingers, Assembled	1
No. 34-966 Splitter Attachment			TAB-166-S	Blade Guard and Splitter, with Anti-Kickback Fingers	1
DDL-150	Special ⅝" Steel Washer, ⅝" O.D. x ⅝" Thick	1	TAM-112	Splitter Mounting Bracket, Rear Upper Half	2
FJ-313	Special ⅝"-18 Hexagon Jam Nut, ⅝" Thick	1	TAM-113	Splitter Mounting Bracket, Rear Lower Half	2
LTA-519	Special ⅝" Spring Washer, ¾" O.D. x ½" Thick	1	TAM-115	Steel Bar, ⅝ x 1 x 10⅝", for Splitter Blade	2
LTA-548	Anti-Kickback Finger, 1¼" Wide, 3" Blade	1	TAM-130-A	Blade Guard Basket, with Name Plate	1
LTA-549	Anti-Kickback Finger, 1¼" Wide, 2⅝" Blade	1	TAM-175	Arm for Blade Guard Basket, ⅝ x 1 x 12⅝" Steel Bar	2
LTA-550	Anti-Kickback Finger, 1¼" Wide, 1¾" Blade	1	TAM-182	Splitter Clamp Plate, Rear	2
NCS-322	Flanged Spacing Sleeve, #10-32 Thread, ⅝" O.D. x 1½" Long	1	TAM-185	Special ⅝" Steel Washer, ⅝" O.D. x .065" Thick	1
TAB-132	Stud, ¾ x 5⅞", Threaded ⅝"-18 One End	1	TCS-295	Name Plate, 1½ x 4", Horizontal	1
TAB-133	Splitter Blade, #14 Gage, w/One ⅝" Mounting Slot	1	SP-502	¼-20 x ¼" Round Head Machine Screw	4
TAB-134	Blade Guard Basket	1	SP-509	¼-20 x ½" Round Head Machine Screw	2
TAM-112	Splitter Mounting Bracket, Rear, Upper Half	1	SP-559	#10-32 x ½" Round Head Machine Screw	2
TAM-112-S	Splitter Mounting Bracket, Rear, Assembled	1	SP-560	#10-32 x ⅝" Round Head Machine Screw	2
TAM-113	Splitter Mounting Bracket, Rear, Lower Half	1	SP-607	⅝"-18 x ¾" Hexagon Head Cap Screw	4
TAM-182	Splitter Clamp Plate, Rear	1	SP-649	⅝"-18 x 1" Hexagon Head Cap Screw	2
TCS-250	Steel Pin, ⅝ x 1⅝", Threaded One End #8-32	1	SP-707	⅝"-18 x 1" Fillister Head Machine Screw	1
SP-560	#10-32 x ⅝" Round Head Machine Screw	1	SP-1203	#10-32 Hexagon Nut	2
SP-602	⅝"-18 x 1¼" Hexagon Head Cap Screw	1	SP-1226	⅝"-18 Hexagon Jam Nut	1
			SP-1754	⅝" Lockwasher, Internal Teeth	2

CONSULT YOUR DELTA DEALER FOR PRICES OF REPLACEMENT PARTS, ACCESSORIES AND TOOLS TO FACILITATE HANDLING WE SUGGEST ORDERING ALL PARTS THROUGH YOUR DELTA DEALER

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Distribution in the United States, its possessions except Puerto Rico and the Canal Zone, and in Canada and the Philippine Islands is by authorized Delta Dealers.

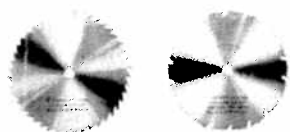


POWER TOOL DIVISION

Rockwell MANUFACTURING COMPANY

MILWAUKEE 1, WISCONSIN

ACCESSORIES AND ATTACHMENTS FOR THE 8" BENCH MODEL TILTING ARBOR SAW



8 INCH CIRCULAR SAW BLADES

No. 325—8 Inch Combination Blade, 16 Gage, $\frac{5}{8}$ Inch Arbor Hole, 44 Teeth.

No. 326—8 Inch Hollow Ground Blade, 14-16-14 Gage, $\frac{5}{8}$ Inch Arbor Hole, 70 Teeth.

No. 334—8 Inch Rip Saw Blade, 18 Gage, $\frac{5}{8}$ Inch Arbor Hole, 36 Teeth.

No. 335—8 Inch Cross Cut Blade, 18 Gage, $\frac{5}{8}$ Inch Arbor Hole, 100 Teeth.

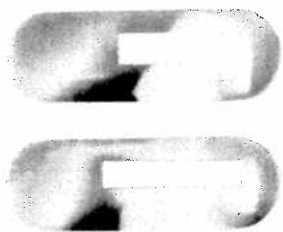


TABLE INSERTS

No. 34-961—Standard Table Insert, with Leveling Screws, for use with Saw Blade.

No. 34-962—Table Insert, with Leveling Screws, for use with Moulding Cutter Head.

No. 34-963—Table Insert, with Leveling Screws, for use with Dado Head.

These additional table inserts can be adjusted so they fit flush with the table surface and are available when ordered.



4 INCH MOULDING CUTTER HEAD

Made of strong, durable steel for many hours of trouble-free work. Nothing to get out of order and extremely safe in operation. Moulding cutter blades are not included with the the moulding cutter

head. For various shapes of blades, Nos. 247 through 269 are available when ordered extra.

No. 265—4 Inch Diameter Moulding Cutter Head.



6 INCH DADO HEAD

To cut clean grooves varying in width from $\frac{1}{8}$, $\frac{1}{4}$, to $\frac{13}{16}$ inches wide and up to a full $1\frac{1}{8}$ inches in depth with or across the grain. Made of the finest steel, carefully hardened and tempered. All cutters

have a $\frac{5}{8}$ inch arbor hole.

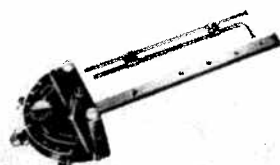
No. 333—6 inch Dado Head consisting of two outside cutters and four inside cutters.



STEEL STAND

To give the operator the correct working height and a rigid base we offer a steel stand which can be assembled in a few minutes time.

No. 50-810—Steel Stand with Machine Screws, Nuts and Washers for assembly.



AUTO-SET MITER GAGE

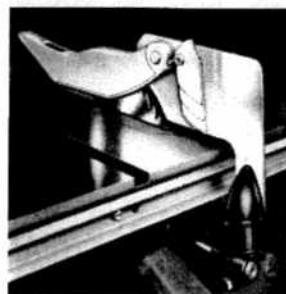
The miter gage has a 7 inch face and a $\frac{3}{8} \times \frac{3}{4} \times 18$ inch bar which fits the table slot of circular saws and other machines. It can be set at any angle up to 60 degrees to the right or left, and it has adjustable stops for instantaneous settings at zero and 45 degrees to the right or left. It can be adjusted to compensate for wear or loosening the

head by merely loosening or tightening a special tapered pivot screw.

No. 864—Miter Gage Complete with Stop Rods.

No. 865—Clamp Attachment for the Miter Gage.

No. 873—Extra Sliding Block Complete with Clamp Screw.



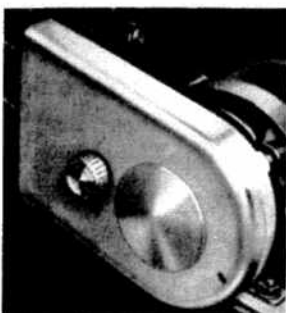
BLADE GUARD AND SPLITTER ATTACHMENTS

The "Super-Safe" splitter attachment gives the operator maximum protection. It has a double clamping arrangement at the rear to give it stability. The supporting arms of this attachment are pivoted at the rear of the splitter blade to give it maximum ease of operation. These features are found only on more expensive woodworking machines.

No. 34-967—"Super-Safe" Blade Guard and Splitter Complete with Anti-Kickback Fingers.

The standard splitter attachment is not a "Super-Safe" attachment, but does give protection to the operator. It is made rigid enough to prevent side movement and support the guard properly. It has one clamping arrangement at the rear to give it stability. The guard basket pivots on the splitter blade to give it ease of operation.

No. 34-966—Blade Guard and Splitter Complete with Anti-Kickback Fingers.



V-BELT AND MOTOR PULLEY GUARD

This guard completely protects the operator from the motor pulley and V-belt. It prevents a child's hands from being accidentally caught between the

V-belt and motor pulley while in operation.

No. 34-965—V-Belt and Motor Pulley Guard Complete.

Please place your order for these items with your Delta Dealer. For prices see latest price list.