

12" TILTING ARBOR SAW

Operating and Maintenance Instructions

The working parts of the 12" Tilting Arbor Saw are completely enclosed in a welded steel cabinet. This machine is ruggedly constructed, has a large working capacity, light in weight and equipped for continuous heavy duty work in sash and door factories, carpenter shops, contractors', cabinet and pattern shops, lumber companies and other woodworking shops and plants. It can be used for ripping, cross-cutting, mitering and beveling. Accessories for dado and moulding operations can be purchased extra.

Maximum depth of cut is $4\frac{1}{8}$ inches. When the blade is tilted 45 degrees to the right, $2\frac{7}{8}$ 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" aluminum rip fence can be clamped at any point along the width of the table with the side extensions mounted.

The height of the table above the floor is 34 inches. Its size is 38 inches deep by 48 inches wide; when both side extensions are mounted, its size is 38 inches deep by 68 inches wide. The cabinet size is $26\frac{1}{2}$ by 30 inches and the motor cover projects 4 inches to the right beneath the table.

The 12" Tilting Arbor Saw is shipped assembled as shown in Fig. 1; however, for convenience in crating some parts are shipped in a separate carton.

Under the unit No. 34-350, the standard parts furnished with the machine are as follows: right side table extension, left side table extension, table insert, 12" combination blade, motor mounting bracket, motor cover, motor pulley, four matched V-belts, rip fence and guide rails, miter gage and stop rods, blade guard with splitter and anti-kick back fingers.

The motor, magnetic starter and electrical connections from the starter to the motor are mounted in the saw cabinet ready for connection to the customer's power line. The motor and electrical equipment furnished are according to the customer's specifications.

Accessories which may be purchased as additional equipment are the extra miter gage, 8 inch dado head with cutters, moulding cutter head and knives, special arbor extensions, and a special wood table insert for the moulding cutter head and dado head.

Refer to the photographs, drawings and Table I 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 greatly reduces the weight of the machine. This design also provides maximum safety for the operator and presents a machine of modern lines which can easily be kept in a neat condition. Details

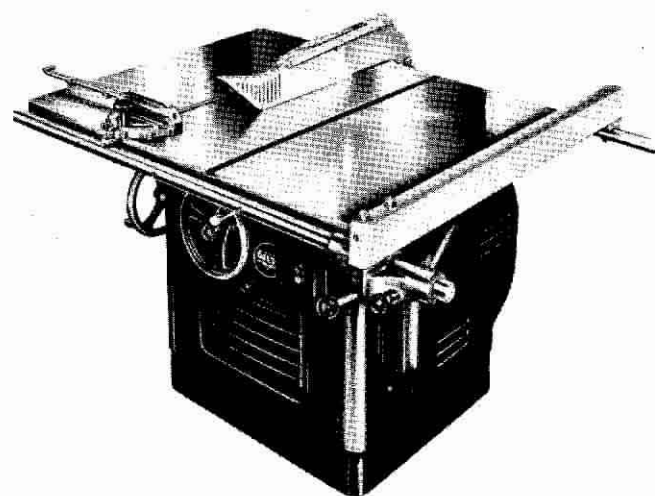


Fig. 1. 12" Tilting Arbor Saw.

of the cabinet, removable inserts and motor cover which give ready access to the working parts of the machine are shown in Fig. 2.

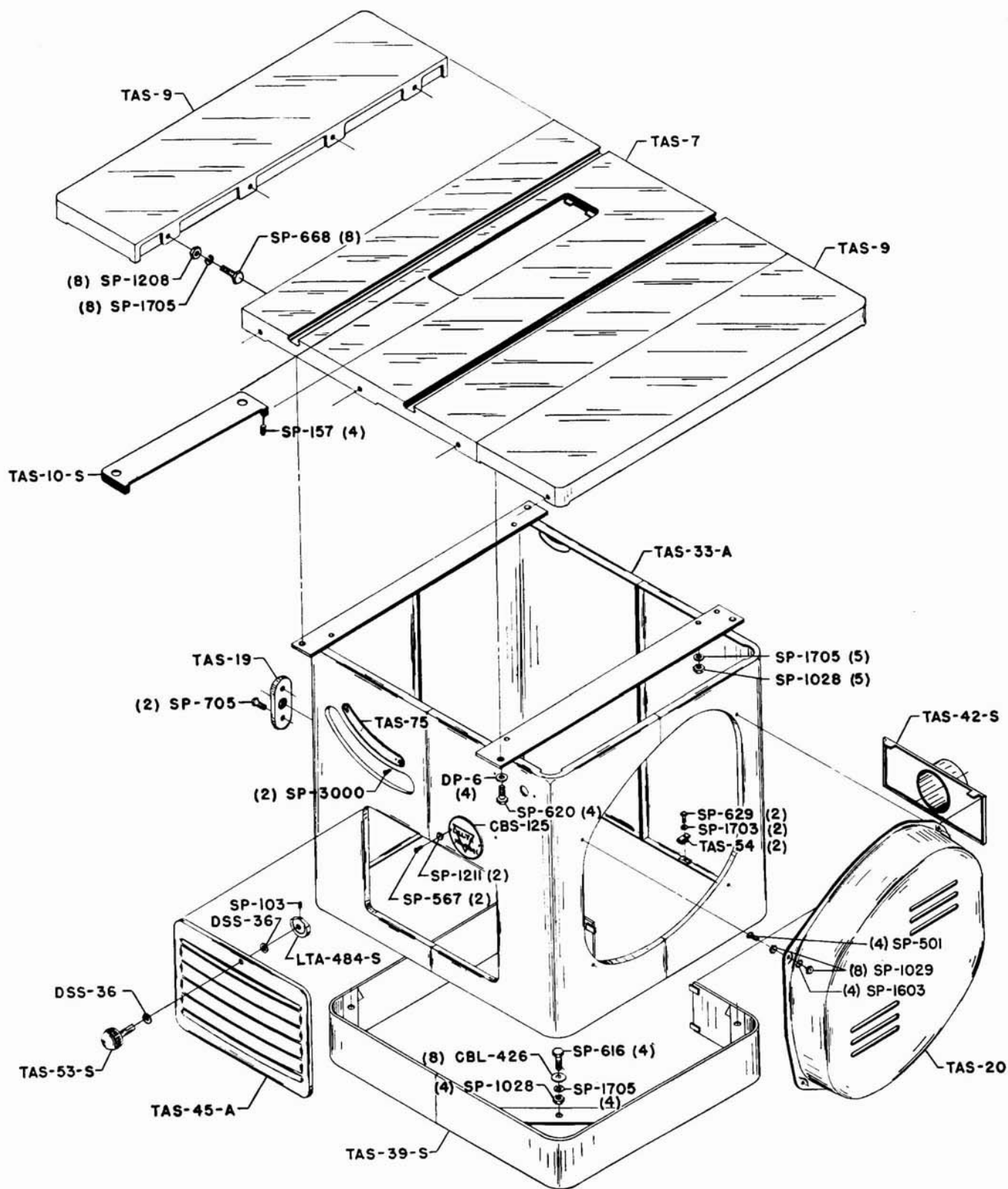
The aluminum rip fence extends the full depth of the table. It includes fully and independently adjustable micro set mechanisms which lock the front and rear of the fence simultaneously on the guide rails. The front clamp block has a polished lens set in it to magnify the graduations on the front guide rail.

On this machine 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 so it tilts with the saw blade at any angle without being cramped or cause crowding against the blade.

The heavily ribbed table with extensions, yoke, trunnions, trunnion brackets and motor mounting bracket are made of sturdy grey iron castings to produce maximum rigidity between the working parts of the machine.

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

Other features presented in this saw are the pressed steel saw dust deflector, removable arbor extensions, adjustable table inserts, 4 inch dust collector spout connection, porous bronze bushings in the front and rear trunnion which need no further lubrication and an auto set miter gage with stop rods. The saw arbor runs in sealed ball bearings, thus eliminating lubrication for the life of the bearings.



12" TILTING ARBOR SAW
TABLE AND CABINET

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Fig. 2

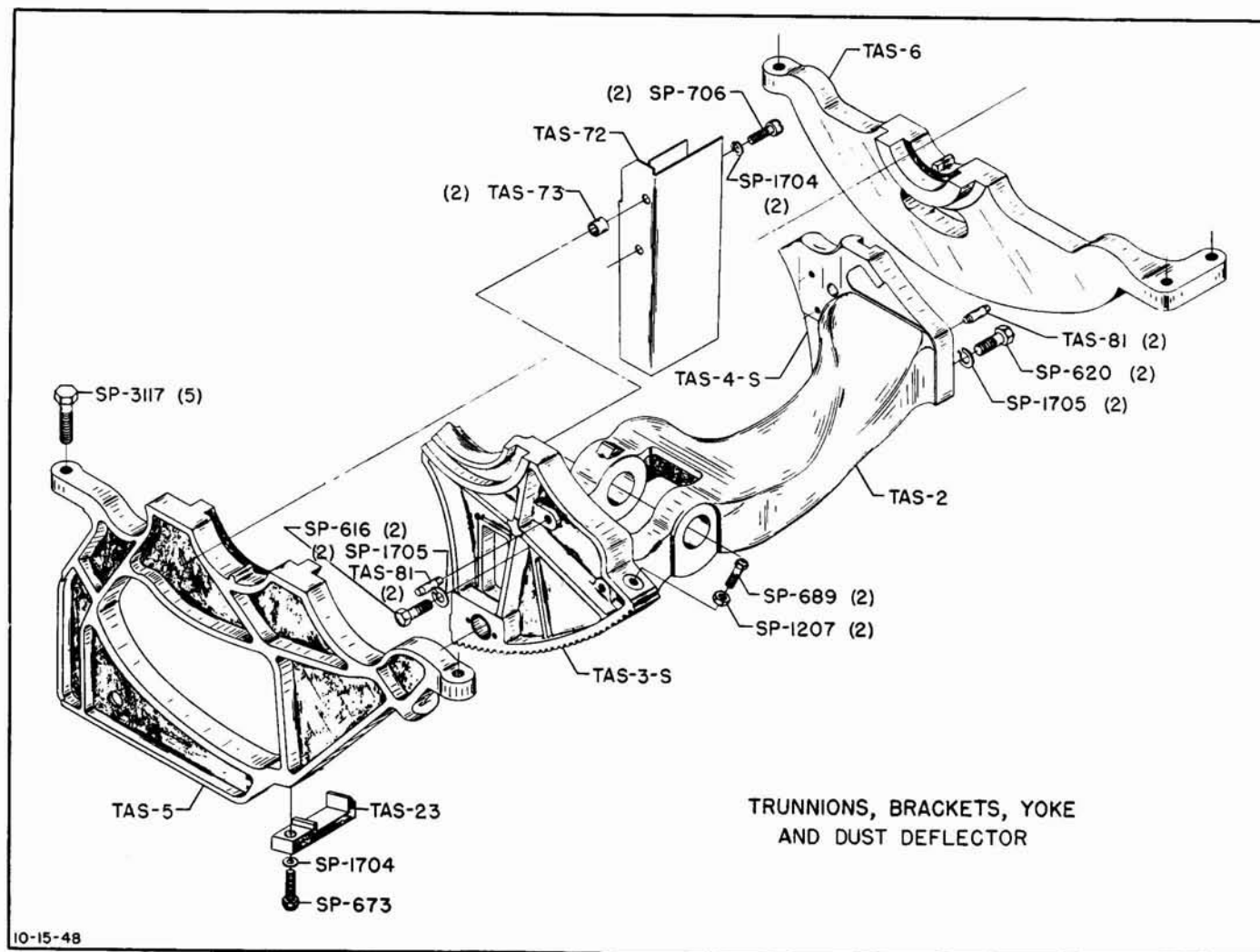


Fig. 3.

POWER AND SPEED

For average conditions a 3 hp motor will furnish ample power for this machine. When considerable heavy cutting is to be done, a 5 hp motor will be more effective. Use a constant speed motor.

In large commercial and industrial shops, we recommend that a 5 hp motor be purchased with the machine since heavy continuous duty work can be easily accomplished. Always use 3 phase power when it is available.

The correct motor speed with 60-cycle power is 3450 rpm, which will run the saw blade at 11,700 surface feet per minute. With 50-cycle current, a 2850 rpm motor should be used making the blade speed 9,300 surface feet per minute. The above speeds are obtained with a 12" saw blade, and using the 3 inch arbor pulley in conjunction with the 3 1/4 inch motor pulley furnished as standard equipment.

When operating the saw with a 25 cycle 1425 rpm motor, the blade surface speed is 9,300 feet per minute. In conjunction with the 25 cycle motor, use motor pulley No. 49-200 which is 6 5/8 inches in diameter.

All pulleys furnished for the machine have a 1 inch bore and 3/16 inch keyway. They will fit any of the Delta motors recommended for this machine. Consult your Delta dealer for the correct motor to meet your needs.

ASSEMBLY

Remove the crate and unbolt the base 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 from these parts.

Mount the left extension table on the saw using hexagon head cap screws SP-668, split lockwasher SP-1705 and hexagon nuts SP-1208.

The guide rails are mounted by using the saddle blocks between the table and rails, fillister head cap screws TAS-117, split lockwashers SP-1708 and hexagon nuts SP-1004.

The splitter attachment is mounted on the support rod TAS-141 which is slipped through the cabinet, rear trunnion bracket TAS-6 and mounted into the rear trunnion TAS-4. It is fastened to the trunnion by hexagon jam nut SP-1226. The splitter mounting bracket is also mounted to the rear trunnion by inserting the hexagon head cap screws SP-3118 and SP-602 through this bracket and into the tapped holes of the trunnion. Special steel washers LTA-520 are used with the above hexagon head cap screws. The clamp plate and splitter bracket is mounted on the end of the shaft projecting beyond the cabinet. Splitter blade TAS-134 is slotted to fit on the above mounting brackets and clamped to it with the necessary bolts

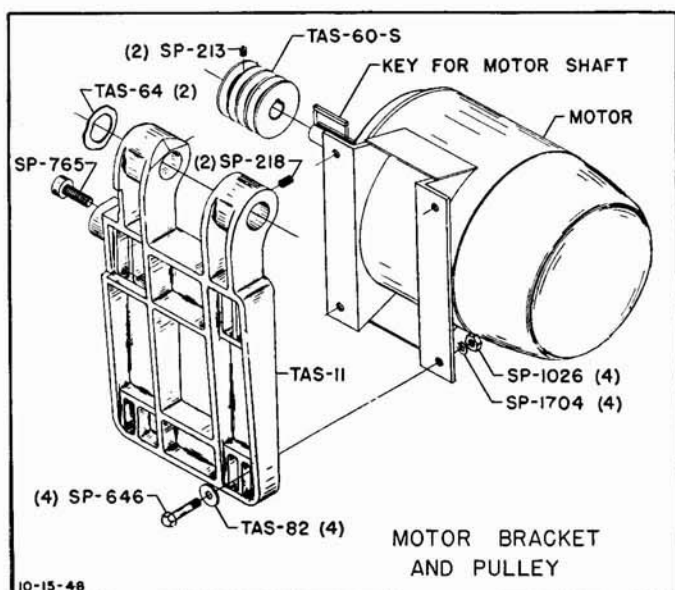


Fig. 4.

and washers. The splitter guard basket is mounted to the splitter blade. Refer to Fig. 16.

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

Holes inside the base of the saw cabinet provide for permanently mounting the machine to the shop floor.

MOUNTING THE MOTOR

Before installing the motor, be sure it runs 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 mounting bracket TAS-11, shown in Fig. 4, has slotted holes to receive NEMA No. 225

frame motors. For any other type motor the required mounting holes can easily be drilled.

Remove the motor cover TAS-20 from the cabinet. Tilt the machine face down on two or three small wood blocks; to bring it in a horizontal position use a low platform about one foot high to support the base of the machine. Adjust the motor bracket to a horizontal position so it is easily accessible. Refer to Fig. 5.

Slip the motor pulley on the motor shaft and insert the motor into the cabinet through the motor cover opening, as shown in Fig. 6, and attach it to the mounting plate by means of the $\frac{3}{8}$ inch hexagon head cap screws SP-646, special $\frac{13}{64}$ inch steel washers TAS-82, split lockwashers SP-1704 and hexagon nuts SP-1026 which are furnished in the envelope.

To prevent excess wear and loss of power the belts must run true. Place a straight edge across the faces

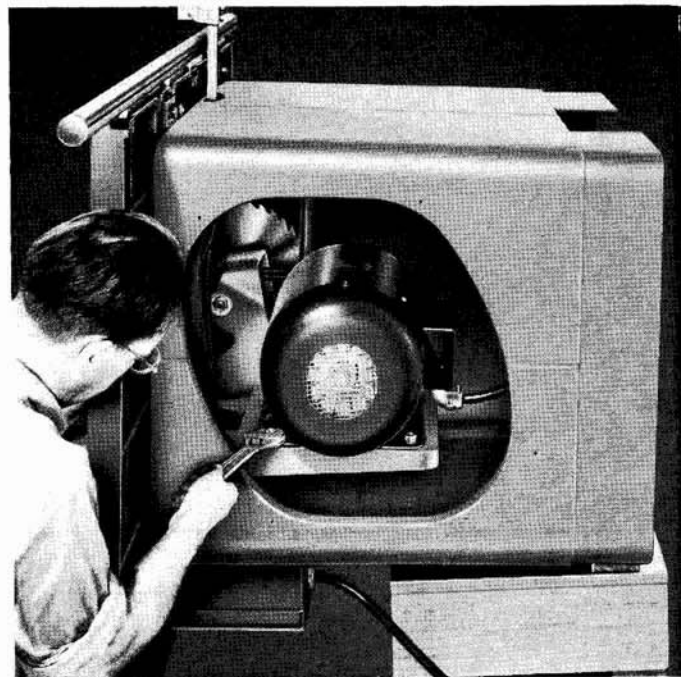


Fig. 6. Tightening Motor on Motor Bracket.

of the pulleys, working through the bottom of the cabinet, and shift the motor pulley on its shaft until it is in line. Tighten the set screws in the motor pulley. Refer to Fig. 7.

With the motor loosely bolted to the bracket, pull it tight against the four V-belts keeping the motor shaft parallel to the arbor. If this is done correctly, each V-belt will have about the same amount of tension. Lift the machine to its vertical position and replace the motor cover. When the machine is upright, the motor hangs from the motor bracket as shown in Fig. 8.

CHANGING V-BELTS

The V-belts for use with this saw are sold in matched sets of four only. Do not replace one V-belt at a time since this will cause all the V-belts to continue to wear rapidly. Resulting in a great strain on all the working parts of the machine as well as excessive loss of power. When operating on 50 and 60-cycle power with the standard motor pulley, TAS-60-S, use V-belts No. 49-150; on 25-cycle power use the special motor pulley No. 49-200 in conjunction with V-belts No. 49-151.

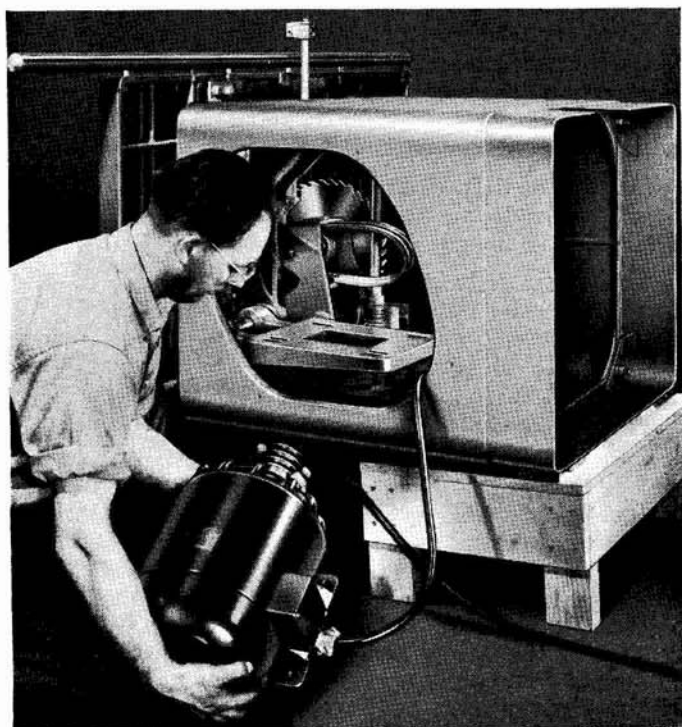


Fig. 5. Installing the Motor.

To replace the V-belts follow these directions: Remove the table and side extensions, motor cover TAS-20, special hexagon jam nut TAS-58, saw blade flange TAS-57, saw blade, arbor extension TAS-62 and the special hexagon jam nut LBS-86. Release the four hexagon nuts, SP-1026, which hold the motor on its bracket just enough to slip the V-belts off of the motor pulley. Lift the V-belts high enough from the arbor pulley TAS-59-S, to release the two hexagon socket set screws SP-201. Hold the arbor pulley with one hand and pull the arbor assembly out of the arbor bracket. Refer to Figs. 2, 4 and 9.

Replace the four matched V-belts, and reverse the above procedure to assemble. Retighten all hexagon nuts and set screws firmly. Refer to the paragraph on mounting the motor when realigning it on the motor bracket, and table alignment when remounting it on the cabinet.

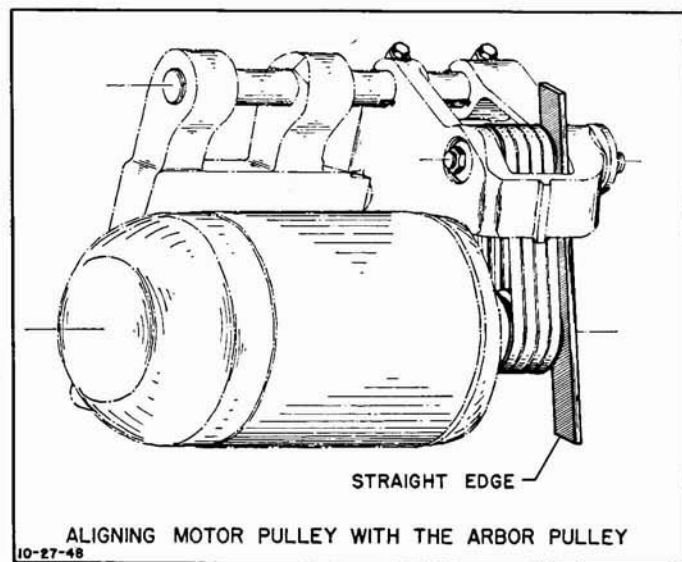


Fig. 7.

CONNECTING STARTER TO POWER LINE

The magnetic starter and motor are completely installed and wired at the factory. When connecting the power line to the starter box have your plant electrician check the following:

1. That the line voltage, phase and frequency match the motor name plate on the machine.
2. The proper size of wire is used in connecting the machine to the power line. Using too small a wire will cause an excessive loss of power.
3. The magnetic starter is of the proper voltage so the magnetic coil matches the line voltage.
4. The proper size of heater coils are used. Check this against the overload relay heater ratings which are posted on the inside of the starter cover.
5. Make sure that the motor and saw blade rotate in the proper direction.

LUBRICATION

The arbor is supported within the arbor bracket by a double row and a single row of sealed ball bearings which are pre-lubricated for their entire life. Both front and rear trunnion have press fitted porous bronze bushings which are lubricated for life.



Fig. 8. Motor Mounted.

Oil the hand-wheel locking device on the raising and tilting mechanism. Keep the T-slots of the table well oiled. Place a small amount of oil on the guide rails and the contact surfaces of the rip fence block from time to time. Wipe the ground table and extension surfaces with an oily cloth to prevent rusting.

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

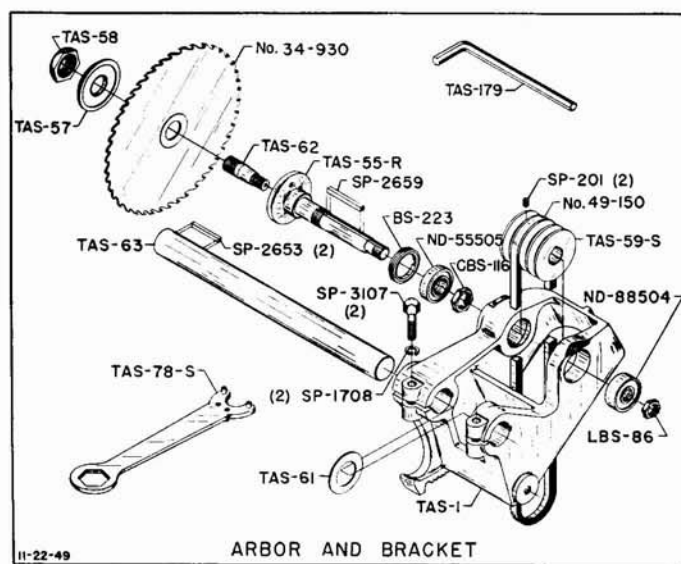


Fig. 9.

OPERATING ADJUSTMENTS

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

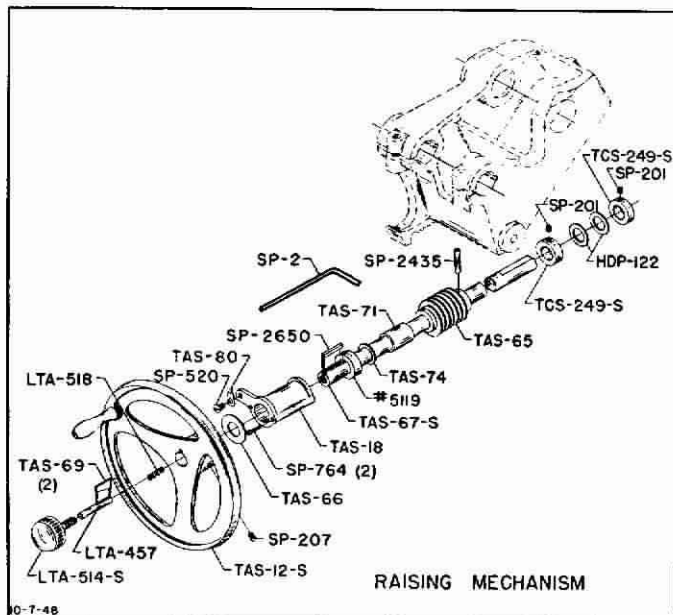


Fig. 10.

Table Alignment

Upon receiving the saw, it is best to check the alignment of the miter gage slot on the table to the saw blade. The saw blade and table are aligned at the factory, but it is advisable to recheck this alignment to obtain best results.

To check the alignment proceed as follows: Insert the miter gage in one of the T-slots and place 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 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.

Loosen the four hexagon head cap screws SP-620 which holds the table in place on the cabinet, and shift it at the front or rear until the correct position is found. Retighten the hexagon head cap screws securely to prevent the table from shifting. Refer to Fig. 2.

Replacing Saw Blade

Remove the special hexagon nut TAS-58 from the arbor extension TAS-62 and the saw blade flange TAS-57. Remove the saw blade from the machine, and slip the required blade on this arbor extension with the teeth pointing toward the front and placed firmly against the arbor flange. Before placing the saw blade on the arbor extension make sure the blade, collar and arbor flange are free from dirt and dust which can prevent the saw blade from running true. Place the saw blade flange against the saw blade and retighten the special hexagon nut TAS-58 on the arbor extension firmly. Use the spanner wrench TAS-78-S and the special hexagon wrench TAS-179 furnished with the machine, one on the special hexagon nut and the other in the arbor extension to prevent the saw arbor from turning, and tighten the nut securely against the saw blade flange. Refer to Fig. 9.

Raising Mechanism

The saw blade is raised by turning the front hand-wheel to the right and lowered by turning in the opposite direction. The pitch of the raising worm and the 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 assembly, TCS-273-S, which extends from the center of hand-wheel and into the steel shaft, TAS-67-S, locks it in any position by turning it moderately; any additional force merely places unnecessary strain upon this device. Refer to Fig. 10.

Tilting Mechanism

The saw blade is tilted by turning the hand-wheel on the left side of the cabinet. Each complete turn of the hand-wheel gives approximately one and one-half degrees of tilt. The hand knob extending from the center of the hand-wheel will lock it at any degree of tilt by turning it moderately. Do not cause additional strain upon the device by turning it with excessive pressure.

To check the degree of tilt, turn the saw blade at right angles to the table and check its squareness by using a combination square, then set the pointer, TAS-80, to the zero point. Tilt the saw to the 45 degree position and check the angle of tilt with a combination square.

The front trunnion, TAS-3-S, has two hexagon head cap screws, SP-689, with hexagon nuts, SP-1207, used as stops to control the degree of tilt. When the machine is tilted from 0 degrees to 45 degrees these stops hit against the bosses on the front trunnion bracket. This adjustment is set at the factory and should not require any further attention.

If for some reason an adjustment is required, remove the dust deflector plate from the machine. Reach through the table insert hole to adjust the left stop. When adjusting the right stop, tilt the machine to the 45 degree position and take off the motor cover plate. Then the stop can be reached and readjusted easily to the correct position. Refer to Fig. 11.

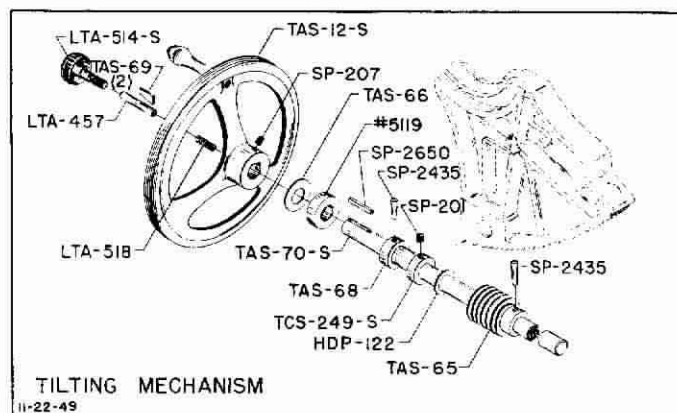


Fig. 11.

Adjusting Table Insert

The table insert TAS-10-S can be adjusted, if necessary, to make it flush with the table TAS-7. This adjustment is made by turning the four headless set screws SP-157 the required amount. The metal surrounding these set screws produces a slight drag, thus preventing them from turning loose. Refer to Fig. 2.

Rip Fence Attachment

Mount the front guide rail TAS-122 to the front edge of the table with its graduated scale on top; and the rear guide rail TAS-123 to the rear edge of the table. Use saddle blocks TAS-118 as spacers, and in-

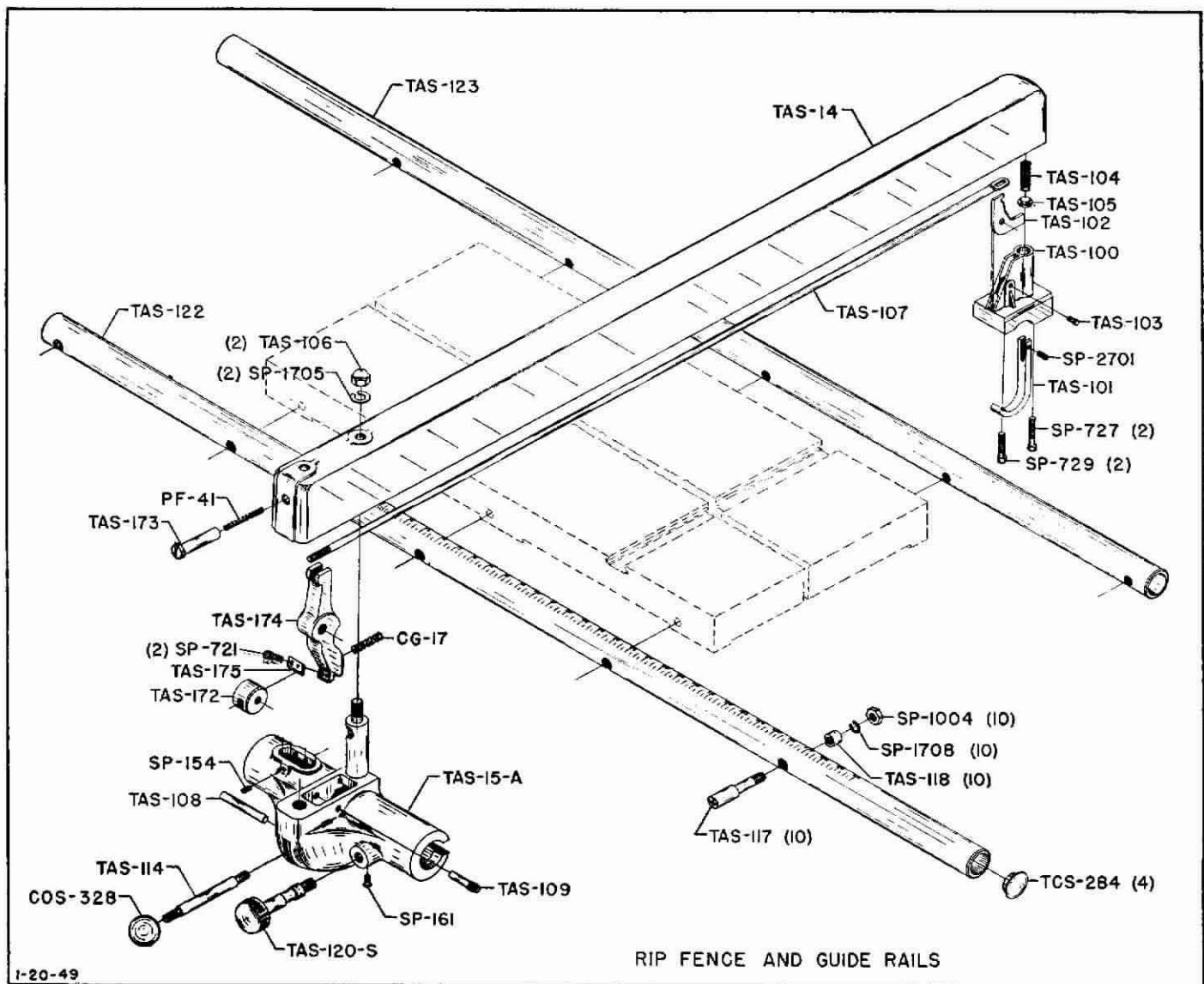


Fig. 12.

sert the special fillister head cap screws TAS-117 through the rails and blocks into the holes provided in the table edge; place split lockwashers SP-1708 and tighten with the hexagon nuts SP-1004 behind the apron.

Slide the fence on the rails to complete the assembly as shown in Fig. 12. To adjust the fence, move it to one of the miter gage T-slots in the table and lock the front clamp block TAS-15 on the rail by pushing down on the handle ball COS-328. If the fence is not parallel to the T-slot, release the special hexagon cap nuts TAS-106, shift the fence to the correct position, and tighten the nuts securely.

The rip fence is locked simultaneously at the front and the rear by pushing down on the handle ball, COS-328. To adjust the rear locking mechanism, unlock the fence, turn the adjusting sleeve, TAS-173, to the right to tighten and to the left to loosen. Set the adjusting sleeve to a position so the rear locking mechanism is loose approximately 1/16 inch. When the fence is properly adjusted, it should be held securely in place at the front and the rear when locked.

The pinion shaft TAS-120-S is provided for conveniently shifting the fence slightly to the right or left to make an exact setting on the scale; it must be pushed in to engage the rack teeth on the under side of the front guide rail while being used, and pulled out to disengage when sliding the fence across the table.

The magnifying lens TAS-116 is incorporated within the front clamp block to help the operator 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 the magnifying lens must be shifted to the right or left so the black line in the center of the lens is at the correct position. To do this, loosen the 3 headless set screws SP-154 enough to make the adjustment. Refer to Figs. 12 and 15.

Maximum capacity for ripping with this attachment is 30 inches to the right of the blade and 15 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 blade.

Splitter Attachment

The splitter guard consists of a splitter blade mounted on the support rod in such a manner that the blade guard basket falls over and covers the saw blade. It is made rigid enough to prevent side movement and support the guard properly. The purpose of it is to hold the saw kerf open so the stock cannot rub against the saw blade which will cause it to burn and bind, and also protect the operator from the blade.

It is fitted with four anti-kickback fingers which will effectively grab the stock and prevent it from being thrown back at the operator. To release these fingers, trip the hooked portion which extends above the right arm of the guard basket. This can easily be done without having the operator's hands come close to or in contact with the saw blade.

This guard pivots about a point at the rear of the table which permits it to ride the work with ease of operation. When the saw is tilted in any position, this guard will ride the work without cramping or crowding against the blade.

The support rod TAS-141 is fastened to the rear trunnion and extends out beyond the cabinet. The

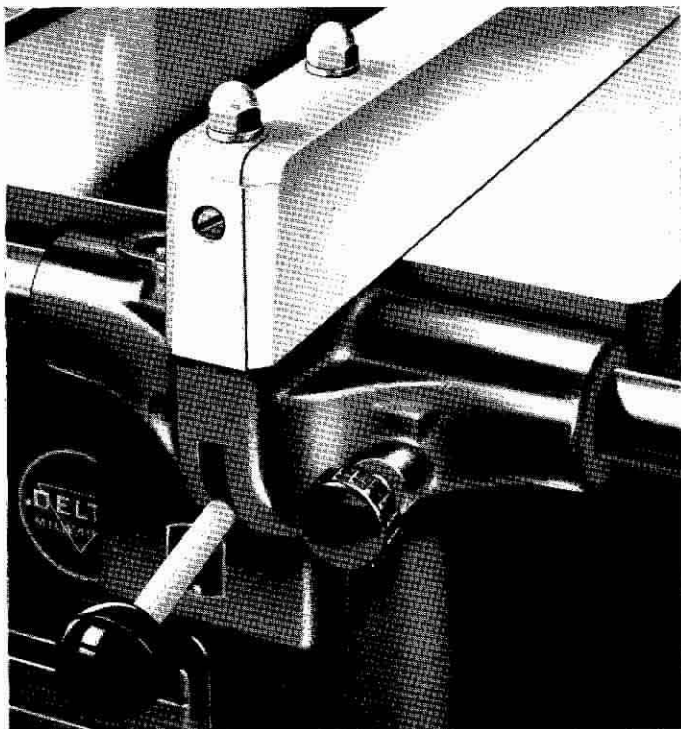


Fig. 13. Front Clamp Mechanism of Rip Fence.

lower half of the rear splitter mounting bracket LTA-525 is slipped on the extended portion of the rod and clamped in position by tightening the hexagon head cap screw SP-608. The upper half of this bracket LTA-526 can be shifted laterally on its way by loosening the hexagon head cap screw SP-602.

The front splitter mounting bracket TAS-21 is mounted on the rear trunnion and can be adjusted by loosening the two hexagon head cap screws SP-3118 and SP-602, and shifting it laterally in the oversize holes of the bracket.

When mounting the splitter guard, remove the table insert. Mount it so the splitter blade is in line with

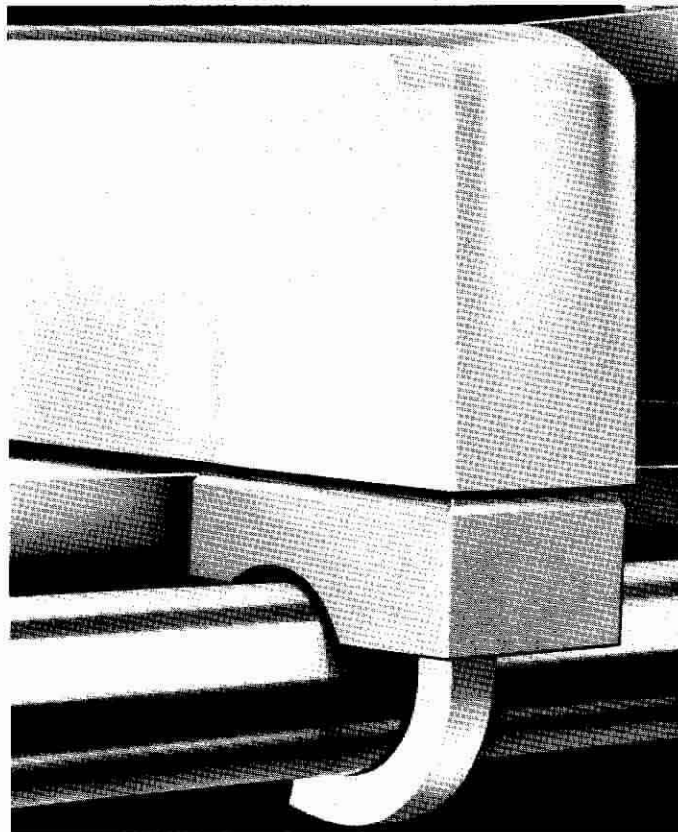


Fig. 14. Rear Clamp Mechanism of Rip Fence.

the saw blade and parallel to the rip fence. This is important since it will avoid cramping. Tighten both front and rear hexagon head cap screws SP-607 and SP-608 which holds the splitter blade securely. Refer to Fig. 16.

Miter Gage and Stop Rods

The No. 34-925 Miter Gage, Fig. 17, has a $9\frac{1}{2}$ inch face and $1\frac{1}{4} \times 7/16$ inch bar which fits the T-slots of the saw table. 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 TAS-84 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-158 by loosening the headless set



Fig. 15. Magnifying Lens in Front Clamp Block of Rip Fence.

screw SP-153 and bring the stop screw SP-158 against the link. Lock the stop screw in this position with the set screw 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, TAS-83, 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 SP-159 in the face of the miter gage and adjust the tapered pivot screw.

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

Fasten the straight rod TAS-92 to project from the side hole of the miter gage body and adjust the bent rod TAS-93 by means of the clamp plates TAS-96 and wing nut SP-1402 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 combination blade No. 34-930 is furnished on the machine and is suitable for ripping, cross cutting and miter work, to give the customer an all-around blade for all types of work. Other additional blades are also available for various operations.

We recommend the hollow ground blade No. 34-933 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 original 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 these two blades should use the No. 34-930 blades 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. 34-931 and the cross cut blade No. 34-932.

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.

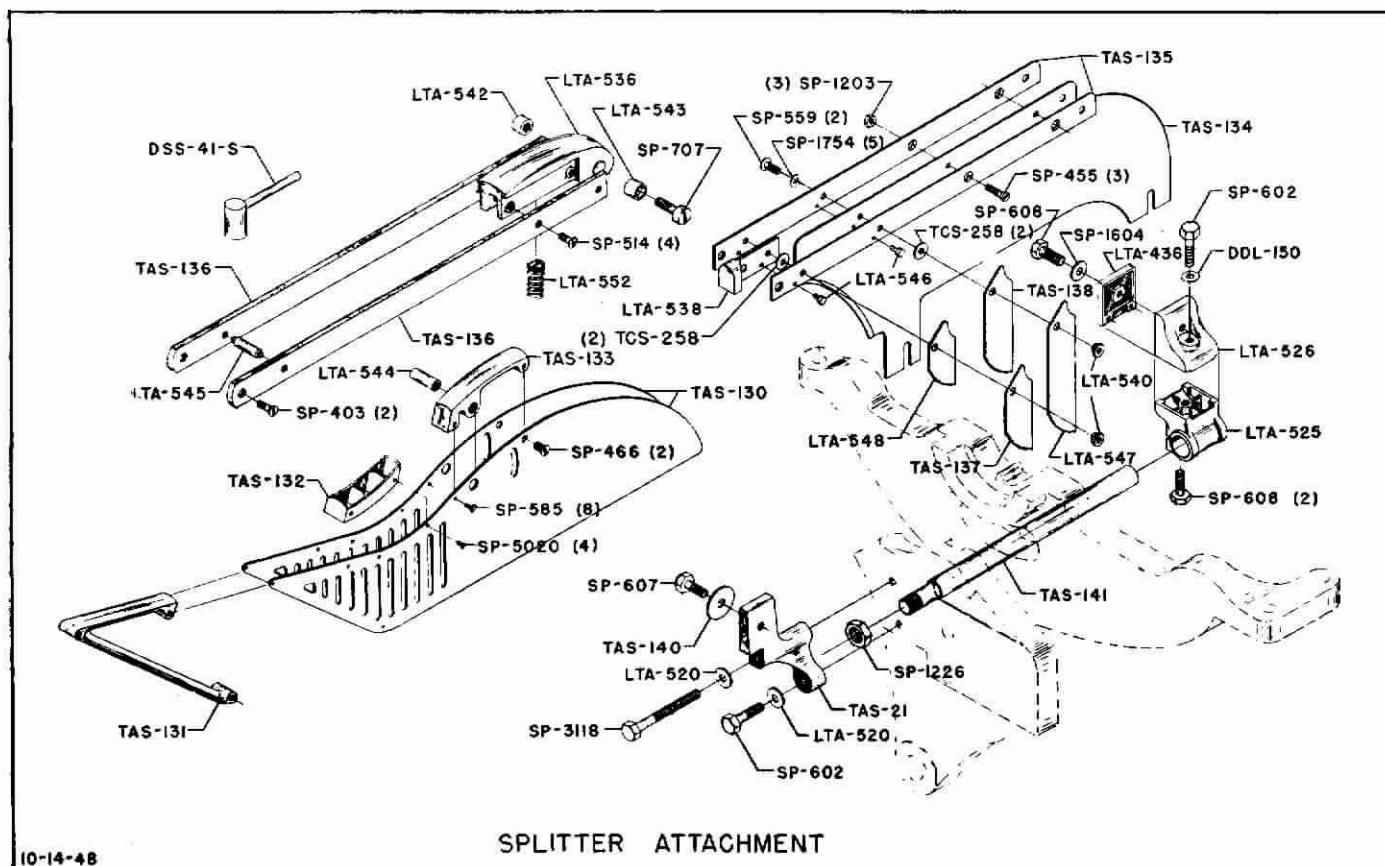


Fig. 16.

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 many factors. A true running arbor extension and flange, careful sharpening, shaping and spacing of the teeth. If the arbor runs untrue it will be magnified at the rim of the blade causing a rough cut.

To avoid any possible damage and obtain maximum performance, keep the 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. For instance, if a blade is left to become too dull, the filer must remove more metal to bring it back in service than if it were sharpened more frequently, thus reducing blade life.

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 blade to a sawyer for reconditioning.

Keep the blade bright and clean. When it collects gum and pitch on the sides, the blade 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.

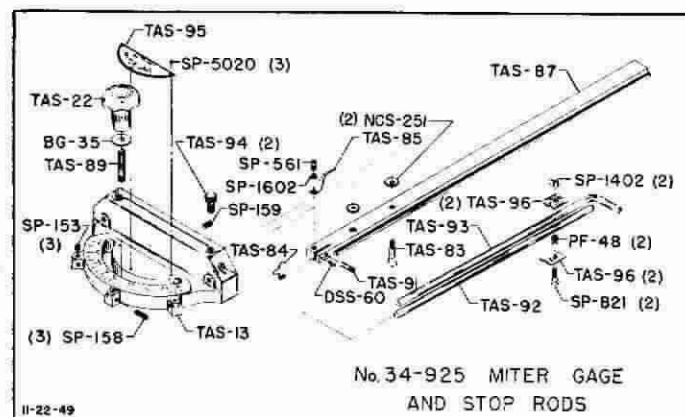


Fig. 17.

Sharpening rip, cutoff 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.

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

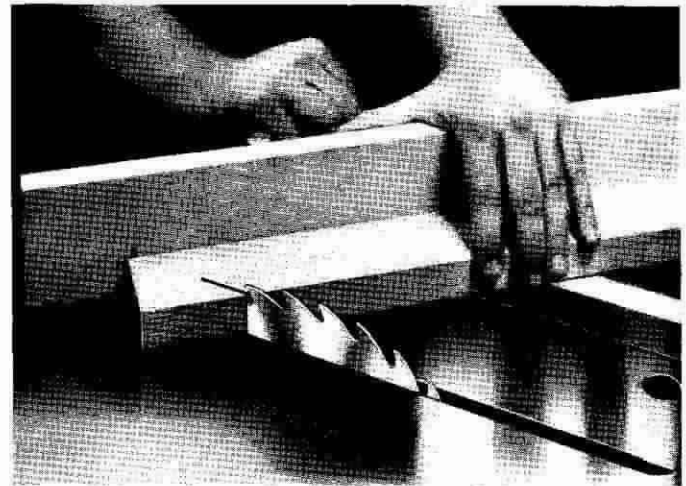


Fig. 18. Cutting a Miter Joint.

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 kickback as it is advanced in the saw blade.

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

Wherever 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.

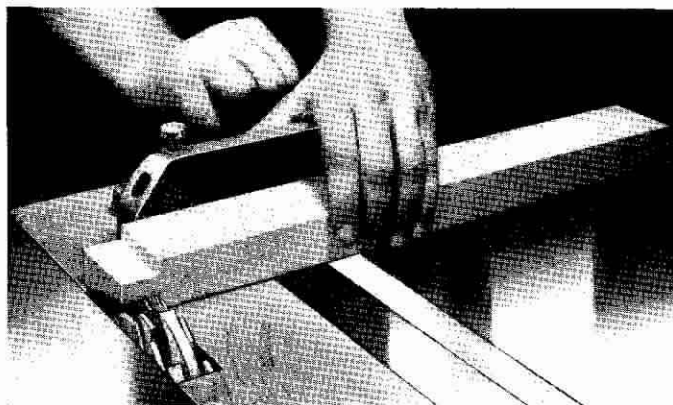


Fig. 19. Using Dado Head for Cutting a Tenon.

When ripping thin or narrow pieces of stock, it is sometimes desirable to remove the splitter attachment as shown in Fig. 16. In this case, the use of a push stick is convenient 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 it will prevent injury to the operator.

Mitering

Mitering is similar to cross cutting with the miter gage body set at the required angle. The stock should always be held in the position which makes the angle between the blade and the work less than 90 degrees, as shown in Fig. 18.

When stock is uniform in width and thickness, it can be turned over when the opposite angle is to be cut. For a non-uniform section, such as a picture moulding, place the miter gage in the right table groove and set the miter 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 a 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 wood screws through the holes which are provided for this purpose. 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 tilting the arbor by turning the hand-wheel on the left side of the machine. 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 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

Dado Head

The 8 inch dado head No. 34-940 is available when ordered for this machine. It consists of two outside cutters and 5 inside cutters.

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

When using the dado head, install the No. 34-942 arbor extension in place of the standard arbor extension TAS-62. Also replace the standard table insert TAS-10-S with the adjustable wooden insert No. 34-945. Cutting tenons as illustrated in Fig. 19 is one of the numerous operations that can be accomplished by means of these special cutters.

Complete directions are given in the instruction sheet PM-1715 which is packed with the dado head.

Moulding Cutter Head

The moulding cutter head No. 34-941 consists of a 3 knife cutter head 6 inches in diameter, with hexagon socket cap screws, MC-10, to clamp the knives in place and a $\frac{3}{16}$ inch hexagon wrench, MC-11-S, for tightening the socket cap screws.

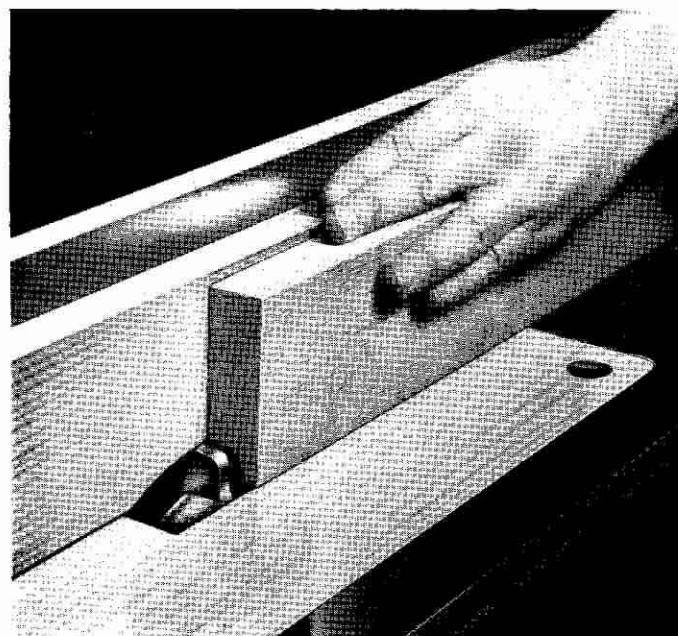


Fig. 20. Using the Moulding Cutter Head.

Moulding cutter blades are not included with the moulding cutter head. For various shapes of blades, 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 wooden table insert No. 34-945 in place of the standard insert. This insert is adjustable so it can be leveled with the table surface and any desired cut out can be made in it to do moulding operations. Mount a wooden face plate 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. 20. Use flat head machine screws through the mounting holes of the fence body to hold the face plate, and place a washer and nut on the end of each screw projecting from the opposite side of the fence body.

When operating the moulding cutter head, feed the work in the same manner as for ripping, but hold the work in contact with the fence as well as with the table throughout the entire cut. When required, clamp

the fence to the left of the cutter with the face plate fastened to the other side of the fence body, or attach wood face plates to both sides of the fence.

Complete directions for using this accessory are given in the instruction sheet PM-1714 which is furnished with the moulding cutter set.

DUST CONTROL

To deflect the sawdust, a pressed steel deflector TAS-72 is fastened to the front trunnion. This device deflects the dust into the cabinet part of the machine where it can be removed either through the removable cabinet door or by using a dust collector system.

At the rear of the cabinet in the base, a removable welded cover plate and spout will take a 4 inch inside diameter suction line. Refer to Fig. 2.

Where a master dust collection system has been installed, connection should be made directly on the spout. Suction should be sufficient to draw the saw dust out of the cabinet.

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					
CBL-426	Special $\frac{3}{8}$ " Steel Washer, $1\frac{1}{4}$ " O.D. x $\frac{1}{8}$ " Thick....	8	ND-55505	New Departure Ball Bearing.....	1
CBS-125	Name Plate, $3\frac{3}{4}$ " Diameter.....	1	ND-88504	New Departure Ball Bearing.....	1
DP-6	Special $\frac{3}{8}$ " Steel Washer, 1" O.D. x $\frac{3}{16}$ " Thick.....	4	TAS-1	Arbor Bracket, Casting Only.....	1
DSS-36	Special $\frac{1}{2}$ " Fiber Washer, $\frac{1}{8}$ " O.D. x $\frac{1}{16}$ " Thick.....	2	TAS-55-R	Arbor, with Flange, Spanner Nut, Ball Bearings and Special Hexagon Jam Nuts.....	1
LTA-484-S	Cam, with Set Screw, for Door Lock.....	1	TAS-57	Saw Blade Flange, $1\frac{1}{8}$ " Bore, $2\frac{3}{4}$ " Diam. x $\frac{5}{16}$ " Thick.....	1
TAS-7	Table, 38 x $28\frac{1}{4}$ ", with Two $\frac{1}{2}$ x 1" T-Grooves.....	1	TAS-58	Special $1\frac{1}{8}$ "-12 Hexagon Jam Nut.....	1
TAS-9	Side Table Extension, 38 x 10".....	2	TAS-59-S	3" 4-Belt Arbor Pulley, $\frac{15}{16}$ " Bore, with Set Screws....	1
TAS-10-S	Table Insert, with Leveling Screws.....	1	TAS-61	Special $1\frac{1}{8}$ " Fiber Washer, $2\frac{3}{8}$ " O.D. x $\frac{1}{8}$ " Thick....	1
TAS-19	Cover Plate, $\frac{1}{2}$ x 2 x 5", for Tilting Mechanism Shaft	1	TAS-62	Arbor Extension, $2\frac{1}{16}$ " Long, $1\frac{1}{8}$ "-12 L.H. ACME Thd..	1
TAS-20	Motor Cover for Cabinet, Aluminum.....	1	TAS-63	Steel Shaft, $1\frac{1}{2}$ x $16\frac{3}{8}$ ", with Keyway.....	1
TAS-33-A	Cabinet Body, Pressed Steel, Welded.....	1	TAS-78-S	Double End $1\frac{5}{8}$ " Hexagon Box and Spanner Wrench.....	1
TAS-33-S	Cabinet Body, with Base, Assembled.....	1	TAS-179	Special $\frac{1}{16}$ " Hexagon Wrench for Arbor Extension.....	1
TAS-39-S	Base Segments, w/Steel Gusset and Stop Plates, Welded	1	No. 34-930	12" Comb. Blade, 14 Gage, $1\frac{1}{8}$ " Hole, 44 Teeth....	1
TAS-42-S	Cover Plate, with 4" O.D. Dust Spout, Welded.....	1	No. 49-150	V-Belts, Set of 4, Matched, $28\frac{1}{4}$ " Outside Circumf....	1
TAS-45-A	Cabinet Door, with Brackets, Welded.....	1	SP-201	$\frac{5}{16}$ "-18 x $\frac{5}{16}$ " Hexagon Socket Set Screw.....	2
TAS-45-S	Cabinet Door, with Welded Brackets and Hand Knob	1	SP-1708	$\frac{1}{16}$ " Split Lockwasher.....	2
TAS-53-S	Hand Knob, with Lock Pin, Assembled.....	1	SP-2653	$\frac{1}{4}$ x $\frac{1}{4}$ x $1\frac{15}{16}$ " Straight Key.....	2
TAS-54	Spring Clip, $\frac{3}{4}$ " Wide, $\frac{11}{32}$ " Hole.....	2	SP-2659	$\frac{1}{4}$ x $\frac{1}{4}$ x $2\frac{1}{2}$ " Straight Key.....	1
TAS-75	Tilt Angle Scale, $1\frac{1}{4}$ x $7\frac{3}{4}$ ".....	1	SP-3107	$\frac{1}{16}$ x 14 x 2" Hexagon Head Cap Screw.....	2
SP-103	$\frac{5}{16}$ "-18 x $\frac{1}{4}$ " Headless Set Screw, Cup Point.....	1	RAISING MECHANISM		
SP-157	$\frac{1}{4}$ "-28 x $\frac{1}{2}$ " Headless Set Screw.....	4	HDP-122	Special $\frac{5}{16}$ " Fiber Washer, $1\frac{13}{32}$ " O.D. x $\frac{3}{64}$ " Thick....	2
SP-501	$\frac{1}{4}$ "-20 x 1" Round Head Machine Screw.....	4	LTA-457	Steel Pin, $\frac{3}{8}$ x $2\frac{1}{4}$ ", with $\frac{3}{32}$ " Wedge Slots.....	1
SP-567	#6-32 x $\frac{1}{4}$ " Round Head Machine Screw.....	2	LTA-514-S	Lock Stud, with Hand Knob, for Hand Wheel.....	1
SP-616	$\frac{1}{2}$ x 13 x $1\frac{1}{2}$ " Hexagon Head Cap Screw.....	4	LTA-518	Coil Spring, $\frac{3}{8}$ " Diameter, 1" Free Length, Flat Ends..	1
SP-620	$\frac{1}{2}$ "-13 x $1\frac{1}{4}$ " Hexagon Head Cap Screw.....	4	TAS-12-S	Hand Wheel, with Hand Grip and Set Screw.....	1
SP-629	$\frac{5}{16}$ "-18 x $\frac{3}{8}$ " Hexagon Head Cap Screw.....	2	TAS-18	Flanged Spacing Sleeve, with Mounting Lug for Pointer	1
SP-668	$\frac{1}{2}$ "-20 x $1\frac{3}{4}$ " Hexagon Head Cap Screw.....	8	TAS-65	Worm, $1\frac{1}{8}$ " O.D. x $2\frac{1}{8}$ " Long x $\frac{1}{8}$ " Bore, L.H.....	1
SP-705	$\frac{3}{8}$ "-16 x 1" Fillister Head Cap Screw.....	2	TAS-66	Special $\frac{29}{32}$ " Fiber Washer, $1\frac{1}{8}$ " O.D. x $\frac{1}{16}$ " Thick....	1
SP-1028	$\frac{1}{2}$ "-13 Hexagon Nut.....	9	TAS-67-S	Steel Shaft, with Worm and Tapered Pin, Assembled..	1
SP-1029	$\frac{1}{4}$ "-20 Hexagon Nut.....	8	TAS-69	Wedge, $\frac{3}{64}$ x 1" x $\frac{3}{32}$ " Thick.....	2
SP-1208	$\frac{1}{2}$ "-20 Hexagon Nut.....	8	TAS-71	Spacing Sleeve, $\frac{1}{8}$ " I.D., $1\frac{1}{16}$ " O.D. x $1\frac{13}{32}$ " Long....	1
SP-1211	#6-32 Hexagon Nut, Brass.....	2	TAS-74	Special $\frac{5}{64}$ " Steel Washer, $1\frac{1}{4}$ " O.D. x $\frac{1}{30}$ " Thick....	1
SP-1603	$\frac{1}{4}$ " Steel Washer.....	4	TAS-80	Pointer, $\frac{1}{2}$ x $1\frac{13}{32}$ ", $\frac{21}{64}$ " Hole, Bent.....	1
SP-1703	$\frac{5}{16}$ " Split Lockwasher.....	2	TCS-249-S	Set Collar, $\frac{1}{8}$ " I.D., with Set Screw.....	2
SP-1705	$\frac{1}{2}$ " Split Lockwasher.....	17	#5119	Nice Thrust Ball Bearing.....	1
SP-3000	6-32 x $\frac{1}{4}$ " Self-Tapping Round Head Mach. Screw....	2	SP-2	$\frac{5}{32}$ " Hexagon Wrench for Socket Screws.....	1
ARBOR AND BRACKET			SP-201	$\frac{5}{16}$ "-18 x $\frac{5}{16}$ " Hexagon Socket Set Screw, Flat Point...	2
BS-223	Spanner Nut, $1\frac{13}{64}$ " I.D., 2.09" O.D.-20 Thread.....	1	SP-207	$\frac{5}{16}$ "-18 x $\frac{1}{2}$ " Hexagon Socket Set Screw.....	1
CBS-116	Special .994"-28 Hexagon Jam Nut, $\frac{5}{16}$ " Thick.....	1	SP-520	$\frac{5}{16}$ "-18 x $\frac{3}{8}$ " Round Head Machine Screw.....	1
LBS-86	Special .802"-28 Hexagon Jam Nut, $\frac{3}{8}$ " Thick.....	1	SP-764	#10-32 x $1\frac{1}{2}$ " Hexagon Socket Cap Screw.....	2
			SP-2435	#4 x $1\frac{1}{2}$ " Tapered Pin.....	1
			SP-2650	$\frac{3}{16}$ x $\frac{3}{16}$ x $1\frac{3}{8}$ " Straight Key.....	1

(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
TILTING MECHANISM					
HDP-122	Special $\frac{3}{64}$ " Fiber Washer, $1\frac{1}{32}$ " O.D. x $\frac{3}{64}$ " Thick	1	TAS-123-A	Rear Guide Rail, with End Plugs	1
LTA-457	Steel Pin, $\frac{3}{8}$ x $2\frac{1}{4}$ ", with $\frac{3}{32}$ " Wedge Slots	1	TAS-172	Eccentric Collar, $\frac{1}{16}$ " I.D., $1\frac{5}{8}$ " O.D., Tapped $\frac{3}{8}$ "-24	1
LTA-514-S	Lock Stud, with Hand Knob, for Hand Wheel	1	TAS-173	Adjusting Sleeve, $\frac{9}{16}$ x $2\frac{3}{8}$ ", Tapped $\frac{9}{16}$ -18, Slotted Hd.	1
LTA-518	Coil Spring, $\frac{3}{8}$ " Diameter, 1" Free Length, Flat Ends	1	TAS-174	Front Clamp Lever	1
TAS-12-S	Hand Wheel, with Hand Grip and Set Screw	1	TAS-174-S	Front Clamp Lever, with Hardened Bearing Block	1
TAS-65	Worm, $1\frac{1}{8}$ " O.D. x $2\frac{1}{8}$ " Long x $\frac{3}{8}$ " Bore, L.H.	1	TAS-175	Bearing Block, $\frac{3}{16}$ x $1\frac{1}{2}$ ", with Two Counterbored Holes, Hardened	1
TAS-66	Special $\frac{29}{32}$ " Fiber Washer, $1\frac{1}{8}$ " O.D. x $\frac{1}{16}$ " Thick	1	TAS-185	Pointer	1
TAS-68	Spacing Collar, $\frac{1}{8}$ " I.D., $1\frac{1}{2}$ " O.D. x $\frac{3}{8}$ " Thick	1	TCS-284	End Plug for Guide Rail	4
TAS-69	Wedge, $\frac{3}{64}$ x 1 x $\frac{3}{32}$ " Thick	2	SP-154	#10-32 x $\frac{3}{8}$ " Headless Set Screw	1
TAS-70-S	Steel Shaft, with Worm, Collar and Tapered Pins	1	SP-161	#10-32 x $\frac{3}{8}$ " Shakeproof Set Screw	1
TCS-249-S	Set Collar, $\frac{1}{8}$ " I.D., with Set Screw	1	SP-721	#10-32 x $\frac{1}{2}$ " Fillister Head Machine Screw	2
#5119	Nice Thrust Ball Bearing	1	SP-727	$\frac{1}{4}$ -20 x $1\frac{1}{4}$ " Fillister Head Cap Screw	2
SP-201	$\frac{3}{16}$ -18 x $\frac{3}{16}$ " Hexagon Socket Set Screw, Flat Point	1	SP-729	$\frac{1}{4}$ -20 x $1\frac{1}{4}$ " Fillister Head Machine Screw	2
SP-207	$\frac{3}{16}$ -18 x $\frac{1}{2}$ " Hexagon Socket Set Screw	1	SP-1004	$\frac{1}{16}$ "-14 Hexagon Nut	10
SP-2435	#4 x $1\frac{1}{2}$ " Tapered Pin	2	SP-1705	$\frac{1}{2}$ " Split Lockwasher	2
SP-2650	$\frac{3}{16}$ x $\frac{3}{16}$ x $1\frac{3}{8}$ " Straight Key	1	SP-1708	$\frac{3}{8}$ " Split Lockwasher	10
			SP-2701	Steel Pin, .195" Diameter, $\frac{3}{64}$ " Long	1
TRUNNIONS, BRACKETS, YOKE AND DUST DEFLECTOR					
TAS-2	Trunnion Yoke	1	DDL-150	Special $\frac{21}{64}$ " Steel Washer, $\frac{21}{32}$ " O.D. x $\frac{1}{16}$ " Thick	1
TAS-3-S	Front Trunnion, with Bushing, Assembled	1	DSS-41-S	Hex. Socket Wrench, $\frac{1}{2}$ " Across Flats, with Handle	1
TAS-4-S	Rear Trunnion, with Bushing, Assembled	1	LTA-436	Splitter Clamp Plate	1
TAS-5	Front Trunnion Bracket	1	LTA-520	Special $\frac{21}{64}$ " Steel Washer, $\frac{11}{16}$ " O.D. x $\frac{1}{8}$ " Thick	2
TAS-6	Rear Trunnion Bracket	1	LTA-525	Splitter Mounting Bracket, Rear Lower Half	1
TAS-23	Guide Block for Front Trunnion	1	LTA-526	Splitter Mounting Bracket, Rear Upper Half	1
TAS-72	Dust Deflector, Pressed Steel	1	LTA-536	Hinge for Splitter Guard	1
TAS-73	Spacing Sleeve, $\frac{25}{64}$ " I.D., $\frac{5}{8}$ " O.D. x $\frac{9}{16}$ " Long	2	LTA-538	Guide Block for Splitter Guard	1
TAS-81	Dowel Pin, $\frac{3}{8}$ x $1\frac{1}{4}$ ", Tapered Ends	4	LTA-540	Brass Bushing, Thded. #10-32, $\frac{5}{16}$ " O.D. x $\frac{3}{8}$ " Thick	2
SP-616	$\frac{1}{2}$ -19 x $1\frac{1}{2}$ " Hexagon Head Cap Screw	2	LTA-542	Steel Bushing, Threaded $\frac{5}{16}$ -18, $\frac{5}{8}$ " O.D. x $\frac{3}{8}$ " Thick	1
SP-620	$\frac{1}{2}$ -13 x $1\frac{1}{4}$ " Hexagon Head Cap Screw	2	LTA-543	Steel Bushing, $\frac{21}{64}$ " I.D. x $\frac{3}{8}$ " O.D. x $\frac{1}{32}$ " Thick	1
SP-673	$\frac{3}{8}$ -24 x $1\frac{1}{4}$ " Hexagon Head Cap Screw	1	LTA-544	Steel Bushing, Threaded $\frac{1}{4}$ -20, $\frac{1}{16}$ " O.D. x $1\frac{1}{4}$ " Long	1
SP-689	$\frac{3}{8}$ -24 x $1\frac{1}{4}$ " Hexagon Head Cap Screw	2	LTA-545	Steel Pins, $1\frac{1}{4}$ x $1\frac{1}{4}$ ", Shouldered Ends	1
SP-706	$\frac{3}{8}$ -16 x $1\frac{1}{4}$ " Fillister Head Cap Screw	2	LTA-546	$\frac{1}{32}$ x $\frac{3}{16}$ " Stop Button, $\frac{5}{32}$ x $\frac{25}{64}$ " Hollow Rivet Shank	2
SP-1207	$\frac{3}{8}$ "-24 Hexagon Nut	2	LTA-547	Anti-Kickback Finger, $1\frac{1}{4}$ " Wide, $3\frac{1}{2}$ " Blade	1
SP-1704	$\frac{3}{8}$ " Split Lockwasher	3	LTA-548	Anti-Kickback Finger, $1\frac{1}{4}$ " Wide, 3" Blade	1
SP-1705	$\frac{1}{2}$ " Split Lockwasher	4	LTA-552	Coil Spring $\frac{21}{32}$ " Diam., $1\frac{1}{8}$ " Free Length, Flat Ends	1
SP-3117	$\frac{1}{2}$ -13 x 2" Hexagon Head Cap Screw	5	TAS-21	Splitter Mounting Bracket, Front	1
MOTOR BRACKET AND PULLEY					
TAS-11	Motor Mounting Bracket	1	TAS-130	Side Panel for Blade Guard Basket	2
TAS-60-S	$3\frac{1}{4}$ " 4-Belt Motor Pulley, 1" Bore, with Set Screws	1	TAS-130-S	Blade Guard Fasket, Assembled	1
TAS-64	Special $\frac{19}{16}$ " Spring Washer, $2\frac{1}{4}$ " O.D. x .042" Thick	2	TAS-131	Front Spacer for Blade Guard Basket	1
TAS-82	Special $\frac{13}{32}$ " Steel Washer, $1\frac{1}{8}$ " O.D. x $\frac{1}{8}$ " Thick	2	TAS-132	Dust Deflecting Spacer for Blade Guard Basket	1
SP-213	$\frac{3}{16}$ -18 x $\frac{1}{2}$ " Hex. Socket Set Screw, Half Dog Point	2	TAS-133	Rear Spacer for Blade Guard Basket	1
SP-218	$\frac{3}{8}$ -16 x $\frac{5}{8}$ " Hexagon Socket Head Set Screw	2	TAS-134	Splitter Blade, $\frac{3}{32}$ " Th., w/ Two $\frac{21}{64}$ " Mounting Slots	1
SP-646	$\frac{3}{8}$ -16 x 2" Hexagon Head Cap Screw	4	TAS-134-S	Blade Guard and Splitter, with Anti-Kickback Fingers	1
SP-765	$\frac{1}{2}$ -13 x $1\frac{1}{2}$ " Hexagon Head Cap Screw	1	TAS-135	Steel Bar, $\frac{1}{8}$ x 1 x $15\frac{3}{8}$ ", for Splitter Blade	2
SP-1026	$\frac{3}{8}$ "-16 Hexagon Nut	4	TAS-136	Arm for Blade Guard Basket, $\frac{3}{16}$ x 1 x 18" Steel Bar	2
SP-1704	$\frac{3}{8}$ " Split Lockwasher	4	TAS-137	Anti-Kickback Finger, $1\frac{1}{4}$ " Wide, $2\frac{1}{16}$ " Blade	1
RIP FENCE AND GUIDE RAILS					
CG-17	Coil Spring, $\frac{1}{16}$ " Diam., $1\frac{5}{8}$ " Free Length, Flat Ends	1	TAS-138	Anti-Kickback Finger, $1\frac{1}{4}$ " Wide, 5" Blade	1
COS-328	Handle Ball, $1\frac{3}{4}$ " Diam., Tapped $\frac{3}{8}$ "-24	1	TAS-140	Special $\frac{11}{32}$ " Steel Washer, $1\frac{1}{4}$ " O.D. x $\frac{1}{4}$ " Thick	1
PF-41	Coil Spring $\frac{1}{4}$ " Diam., $2\frac{1}{8}$ " Free Lg., Flat Ends	1	TAS-141	Support Rod $\frac{3}{4}$ x $11\frac{1}{4}$ ", Threaded $\frac{5}{8}$ "-18 One End	1
TAS-14	Rip Fence Body, $1\frac{1}{16}$ x $3\frac{3}{8}$ x $46\frac{3}{16}$ ", Aluminum	1	TAS-141-S	Support Rod, with Brackets	1
TAS-14-S	Rip Fence with Front and Rear Clamps, Assembled	1	TCS-258	$\frac{21}{64}$ " Shim Washer	4
TAS-15-A	Front Clamp Block, with Studs, Assembled	1	SP-403	$\frac{1}{4}$ -20 x $\frac{5}{8}$ " Flat Head Machine Screw	2
TAS-15-S	Front Clamp Block, Assembled	1	SP-455	#10-32 x $\frac{1}{2}$ " Flat Head Machine Screw	3
TAS-100	Rear Clamp Block	1	SP-466	#8-32 x $\frac{3}{8}$ " Flat Head Machine Screw	2
TAS-100-S	Rear Clamp Block, Assembled	1	SP-514	$\frac{1}{4}$ -20 x $\frac{3}{8}$ " Round Head Machine Screw	4
TAS-101	Hook for Rear Rip Fence Clamp	1	SP-559	#10-32 x $\frac{1}{2}$ " Round Head Machine Screw	2
TAS-102	Lever for Rear Rip Fence Clamp	1	SP-585	#8-32 x $\frac{3}{8}$ " Truss Head Machine Screw	8
TAS-103	Steel Pin, $\frac{5}{16}$ x $1\frac{13}{16}$ ", Knurled One End	1	SP-602	$\frac{5}{16}$ -18 x $1\frac{1}{4}$ " Hexagon Head Cap Screw	2
TAS-104	Coil Spring, $\frac{3}{8}$ " Diam., $2\frac{5}{8}$ " Free Length, Flat Ends	1	SP-607	$\frac{5}{16}$ -18 x $\frac{3}{4}$ " Hexagon Head Cap Screw	1
TAS-105	Spring Cap, $\frac{49}{64}$ " Diameter, $\frac{1}{4}$ " Thick, $\frac{1}{16}$ " Shank	1	SP-608	$\frac{5}{16}$ -18 x $\frac{7}{8}$ " Hexagon Head Cap Screw	3
TAS-106	Special $\frac{1}{2}$ "-13 Hex. Cap Nut, $2\frac{1}{32}$ " High, $\frac{3}{4}$ " Flats	2	SP-707	$\frac{5}{16}$ -18 x 1" Fillister Head Machine Screw	1
TAS-107	Rear Clamp Rod, $\frac{5}{16}$ -18" Thread One End $42\frac{7}{8}$ " Lg.	1	SP-1203	#10-32 Hexagon Nut	3
TAS-108	Steel Pin, $\frac{3}{8}$ x $2\frac{3}{8}$ " Chamfered Both Ends	1	SP-1226	$\frac{5}{8}$ "-18 Hexagon Jam Nut	1
TAS-109	Steel Pin, $\frac{5}{16}$ x $1\frac{13}{16}$ ", Knurled One End	1	SP-1604	$\frac{5}{16}$ " Steel Washer	1
TAS-114	Stud, $\frac{1}{2}$ x $4\frac{13}{16}$ " $\frac{3}{8}$ "-24 Threaded Ends	1	SP-1754	$\frac{3}{16}$ " Lockwasher	5
TAS-117	Special $\frac{1}{16}$ -14 x $1\frac{27}{32}$ " Fillister Head Cap Screw	10	SP-3118	$\frac{5}{16}$ -18 x 3" Hexagon Head Cap Screw	1
TAS-118	Saddle Block for Guide Rail	10	SP-5020	#0 x $\frac{1}{4}$ " Round Head Drive Screw	4
TAS-120-S	Hand Knob with Pinion Shaft, Assembled	1	NO. 34-925 MITER GAGE AND STOP RODS		
TAS-122	Front Guide Rail, $1\frac{1}{2}$ x $58\frac{1}{8}$ " Steel Tube	1	BG-35	Fiber Washer $\frac{25}{64}$ " I.D. $\frac{15}{16}$ " O.D., $\frac{1}{16}$ " Thick	1
TAS-122-A	Front Guide Rail, with End Plugs	1	DSS-60	Steel Pin, $\frac{3}{32}$ x $1\frac{13}{32}$ ", Tapered One End	1
TAS-123	Rear Guide Rail, $1\frac{1}{2}$ x $58\frac{1}{8}$ " Steel Tube	1	PF-48	Coil Spring, $\frac{11}{32}$ " Diameter, $\frac{5}{8}$ " Free Length, Flat Ends	2
			NCS-251	$\frac{1}{16}$ " Shim Washer, $\frac{3}{4}$ " O.D. x .010" Thick	2
			TAS-13	Miter Gage Body, $9\frac{1}{2}$ " Face, with Stop Lugs	1
			TAS-13-A	Miter Gage Body, Assembled	1

(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
TAS-22	Hand Knob, 2" Diameter, 2 $\frac{3}{16}$ " Long, $\frac{3}{8}$ "-16 Thread.	1	For 2 Phase 4 Wire 208-550 V Motors		
TAS-83	Special $\frac{1}{4}$ "-20 Tapered Pivot Screw, 1 $\frac{3}{8}$ " Long.	1	TAS-150	6' Power Cord, 4 #12 Type-S Wires.	1
TAS-84	Stop Link, 1 $\frac{1}{8}$ " Long, $\frac{3}{16}$ " Hole, with Finger.	1	TAS-150-S	Motor Lead, with Connectors and Terminals.	1
TAS-85	Pointer, $\frac{1}{16}$ x 1 $\frac{5}{8}$ ", $\frac{3}{32}$ " Hole, Bent.	1	SP-2457	90° Angle Connector, with $\frac{1}{2}$ " Pipe Thread.	2
TAS-87	Miter Gage Bar, $\frac{1}{16}$ x 1 $\frac{1}{4}$ x 23 $\frac{1}{8}$ ", T-Section.	1	SP-5016	Wire Terminal, STA-KON #C-10-10.	8
TAS-89	Stud, 2" Long, $\frac{3}{8}$ "-16 and $\frac{3}{8}$ "-24 Threaded Ends.	1	For Single Phase 230 V Motors		
TAS-91	Steel Pin, $\frac{3}{16}$ x $\frac{7}{8}$ ", Knurled One End.	1	TAS-151	6' Power Cord, 3 #12 Type-S Wires.	1
TAS-92	Stop Rod, $\frac{3}{8}$ x 14", Rounded Ends.	1	TAS-151-S	Motor Lead, with Connectors and Terminals.	1
TAS-92-S	Adjustable Stop Rods, with Clamps, Assembled.	1	SP-2457	90° Angle Connector, with $\frac{1}{2}$ " Pipe Thread.	2
TAS-93	Stop Rod $\frac{3}{8}$ x 14", Rounded Ends, Bent.	1	SP-5016	Wire Terminal, STA-KON #C-10-10.	4
TAS-94	Knurled Head Screw, $\frac{5}{16}$ -18 x $\frac{3}{4}$ ".	2	ACCESSORIES		
TAS-95	Name Plate, 1 $\frac{3}{16}$ x 4" Sector.	1	No. 34-925	Miter Gage, Complete with Stop Rods.	1
TAS-96	Clamp Plate for Stop Rod.	4	No. 34-930	12" Combination Blade, 14 Gage, 1 $\frac{1}{8}$ " Hole, 44 Teeth.	1
TAS-96-S	Stop Rod Clamps, with Bolt, Wing Nut, and Spring.	1	No. 34-931	12" Rip Saw Blade, 14 Gage, 1 $\frac{1}{8}$ " Hole, 36 Teeth.	1
TAS-183	Graduation Plate.	1	No. 34-932	12" Cross Cut Blade, 14 Gage, 1 $\frac{1}{8}$ " Hole, 100 Teeth.	1
SP-153	#10-32 x $\frac{1}{4}$ " Headless Set Screw.	3	No. 34-933	12" Hollow Ground Blade, 12-14-12 Gage, 1 $\frac{1}{8}$ " Hole, 90 Teeth.	1
SP-158	#10-32 x $\frac{3}{4}$ " Headless Set Screw.	3	No. 34-940	8" Dado Head, 1 $\frac{1}{8}$ " Hole, Capacity 1 $\frac{1}{16}$ x $\frac{1}{16}$ "-ths. Cut.	1
SP-159	$\frac{1}{4}$ -28 x $\frac{3}{8}$ " Headless Set Screw.	1	No. 34-941	Moulding Cutter Head, 6" Diameter, 1 $\frac{1}{8}$ " Hole.	1
SP-561	#10-32 x $\frac{3}{8}$ " Round Head Machine Screw.	1	No. 34-942	Arbor Extension with $\frac{1}{16}$ " Hexagon Wrench, 3 $\frac{3}{16}$ " Long, 1 $\frac{1}{8}$ "-12 L.H. ACME Thread, for Use with Moulding Cutter Head and Up to 1 $\frac{1}{16}$ " Dado Head.	1
SP-821	$\frac{1}{4}$ -20 x $\frac{3}{4}$ " Carriage Bolt.	2	No. 34-943	Arbor Extension with $\frac{1}{16}$ " Hexagon Wrench, 4 $\frac{3}{16}$ " Long, 1 $\frac{1}{8}$ "-12 L.H. ACME Thread, for use with Moulding Cutter Head and Up to 2" Dado Head.	1
SP-1402	$\frac{1}{4}$ "-20 Wing Nut.	2	No. 34-945	Wood Table Insert, with Leveling Screws, for use with Moulding Cutter Head and Dado Head.	1
SP-1602	$\frac{3}{16}$ " Steel Washer.	1	No. 34-947	Arbor Extension, with Special Arbor Flange and Nut, 2 $\frac{7}{8}$ " Long, 1"-12 L.H. ACME Thread, for Use with Saw Blades.	1
SP-5020	#4 x $\frac{3}{16}$ " Drive Screw.	3	No. 34-948	Arbor Extension, with Special Arbor Flange and Nut, 2 $\frac{7}{8}$ " Long, 1 $\frac{1}{4}$ "-12 L.H. ACME Thread, for Use with Saw Blades.	1
MOTOR LEADS			No. 34-949	Arbor Extension, with Special Arbor Flange and Nut, 4 $\frac{13}{16}$ " Long, 1"-12 L.H. ACME Thread, for Use with Moulding Cutter Head and Up to 2" Dado Head.	1
For 2 Phase 3 Wire and 3 Phase 208-550 V Motors			No. 34-950	Arbor Extension, with Special Arbor Flange and Nut, 4 $\frac{35}{32}$ " Long, 1 $\frac{1}{4}$ "-12 L.H. ACME Thread, for Use with Moulding Cutter Head and Up to 2" Dado Head.	1
TAS-142	6' Power Cord, 3 #12 Type-S Wires.	1	No. 49-150	V-Belts, Set of 4, Matched, 28 $\frac{1}{4}$ " Outside Circumference, Used in Conjunction with TAS-59-S Motor Pulley on 50 and 60 Cycle Motors Only.	1
TAS-142-S	Motor Lead, with Connectors and Terminals.	1	No. 49-151	V-Belts, Set of 4, Matched, 33 $\frac{3}{8}$ " Outside Circumference, Used in Conjunction with No. 49-200 Motor Pulley on 25 Cycle Motors Only.	1
SP-2457	90° Angle Connector, with $\frac{1}{2}$ " Pipe Thread.	2	No. 49-200	6 $\frac{5}{8}$ " 4-Belt Motor Pulley, 1" Bore, with Set Screws, for Use on 25 Cycle Motors Only.	1
SP-5016	Wire Terminal, STA-KON #C-10-10.	6			
For Single Phase 115 V Motors					
TAS-143	6' Power Cord, 3 #8 Type W.G.E. Geoprene Wires.	1			
TAS-143-S	Motor Lead, with Connectors and Terminals.	1			
SP-5006	Wire Terminal, STA-KON #E-71.	4			
SP-5026	90° Angle Connector, #9064-V-S Universal.	2			
For D.C. 115 V Motors					
TAS-145	6' Power Cord, 3 #8 Type W.G.E. Geoprene Wires.	1			
TAS-145-S	Motor Lead, with Connectors and Terminals.	1			
SP-5006	Wire Terminals, STA-KON #E-71.	6			
SP-5026	90° Angle Connector, #9064-V-S Universal.	2			
For D.C. 230 V Motors					
TAS-146	6' Power Cord, 3 #10 Type-S Wires.	1			
TAS-146-S	Motor Lead, with Connectors and Terminals.	1			
SP-2457	90° Angle Connector, with $\frac{1}{2}$ " Pipe Thread.	2			
SP-5016	Wire Terminal, STA-KON #C-10-10.	6			

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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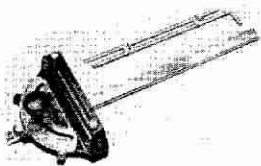
DELTA POWER TOOL DIVISION

Rockwell MANUFACTURING COMPANY

PITTSBURGH 8, PA.

Printed in the United States of America

ACCESSORIES AND ATTACHMENTS FOR THE 12 INCH TILTING ARBOR SAW



AUTO-SET MITER GAGE

To match the sturdiness of the 12 inch Tilting Arbor Saw, Delta has designed this accurate and well built miter gage. Full 180 degree swing with individually adjustable index stops at 90 and 45 degrees. The massive construction of the main body

gives full support. Tapered pivot, machined T-slot and T-bar all go into the making of this accurate miter gage.

No. 34-925—Auto Set miter gage complete with stop rods.



CIRCULAR SAW BLADES

Combination Blade—This is a double purpose blade which enables the user to rip or cross-cut without changing blades, doing either equally well.

No. 34-930—12 inch combination blade, 14 gage, 44 teeth and 1 1/8 inch arbor hole.

Ideal for accurate and fine work but not for rough cutting. The hollow ground blade is shipped with teeth un-set.

No. 34-933—12 inch hollow ground blade, 12-14-12

gage, and 1 1/8 inch arbor hole with 3 1/2 inch collar.

For ripping or cross-cutting, Delta offers two extra fine blades that will do many hours of accurate work.

No. 34-931—12 inch rip saw blade, 14 gage, 36 teeth and 1 1/8 inch arbor hole.

No. 34-932—12 inch cross cut blade, 14 gage, 100 teeth and 1 1/8 inch arbor hole.

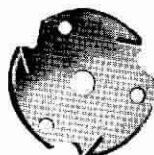


8 INCH DADO HEAD

For cutting grooves varying in width from 1/16 to 1-1/16 inches and up to 2 3/8 inches deep either with or across the grain. Made of the finest steel, carefully hardened and tempered. Includes 1/16 inch

special inside cutter. All cutters have 1 1/8 inch arbor hole.

No. 34-940—8 inch Dado Head consisting of 5 inside cutters and 2 outside cutters.

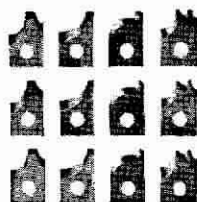


6 INCH MOULDING CUTTER HEAD

Made of strong durable steel for many hours of trouble free work. Nothing to get out of order and extremely safe in operation. A perfect moulding can be produced with one pass over the knives. A

deep cut may require more than one pass.

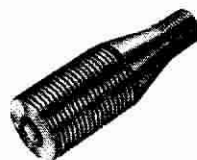
No. 34-941—6 inch Diameter Moulding Cutter head with 3/16 inch hexagon box wrench.



MOULDING CUTTER KNIVES

Cutters come in sets of three matched knives. Made of high speed steel, they will cut thousands of feet of moulding before resharpening. Used in No. 34-941 Moulding Cutter Head.

Number	Type	Number	Type
247.....	Cove	257.....	Glue Joint
250.....	Bead	258.....	O. G. Curve
251.....	Bead	259.....	Straight
252.....	Crown Mould	261.....	Flute Bead
253.....	Panel Strip	263.....	Flute and Cove Comb.
254.....	Glass Stop	264.....	Flute and Cove Comb.
255.....	Screen Mould	269.....	Flute and Cove Comb.
256.....	Drawer Joint		



ARBOR EXTENSION SHAFTS

To accommodate both a moulding cutter head and dado head, an arbor extension must be used. This threads into the arbor shaft, and lengthens the arbor.

No. 34-942—Arbor Extension with 7/16" Hexagon Wrench, 1 1/4" Diameter, for Use with Moulding Cutter Head and Up to 1-1/16" Dado Head.

No. 34-943—Arbor Extension with 7/16" Hexagon Wrench, 1 1/4" Diameter, for Use with Moulding Cutter Head and Up to 2" Dado Head.

No. 34-947—Arbor Extension, with Special Arbor Flange and Nut, 1" Diameter, for Use with Saw Blades.

No. 34-948—Arbor Extension, with Special Arbor Flange and Nut, 1 1/4" Diameter, for Use with Saw Blades.

No. 34-949—Arbor Extension, with Special Arbor Flange and Nut, 1" Diameter, for Use with Moulding Cutter Head and Up to 2" Dado Head.

No. 34-950—Arbor Extension, with Special Arbor Flange and Nut, 1 1/4" Diameter, for Use with Moulding Cutter Head and Up to 2" Dado Head.



DADO AND MOULDING CUTTER TABLE INSERT

Any desired length of slot can be cut in this insert for either a dado or moulding cutter head. A wood insert is used specifically for this purpose since a production job may require a small cut necessitating a small slot. The insert is shaped and formed,

ready to be placed over the head to make desired head clearance.

No. 34-945—Moulding Cutter and Dado Table Insert.



SETS OF MATCHED V-BELTS

To assure positive drive and full transmission of power to arbor, a set of four matched V-Belts is used. This drive prevents slippage and keeps the arbor turning at a constant speed.

No. 49-150—V-Belts, Set of 4, Matched, 28 3/4" Outside Circumference, Used in Conjunction with

TAS-59-S Motor Pulley on 50 and 60 Cycle Motors Only.

No. 49-151—V-Belts, Set of 4, Matched, 33 3/8" Outside Circumference, Used in Conjunction with No. 49-200 Motor Pulley on 25 Cycle Motors Only.