



OPERATING AND MAINTENANCE INSTRUCTIONS For 10" Circular Saw Guards

No one saw guard is suitable for all types of work, consequently it is important that a customer obtain that type of guard best suited for his particular work. The Unisaw Tilting Arbor Circular Saw was designed with that end in view, therefore, provisions were made for mounting splitters, splitter guards, basket swing guard, solid hood guard, and combinations of the above. In order to give the customer a clear picture of the different units available, they will be described separately as follows:

NO. 1471 SUPER SAFE GUARD

The No. 1471 is designed to overcome the objections that exist in all splitter mounted guards. Due to the unique method of mounting the splitter, together with the re-inforcing bars at the top, it is possible to make the splitter rigid enough to support a guard properly. In addition to this, the re-enforcing bars extend forward from the splitter and support a guide shoe, which guides the guard basket, preventing side movement of the guard.

The splitter also has four kickback fingers. These fingers, can be released at will without the necessity of having the operator's hands come close to the blade. A small hook shaped part extends upward thru the guard, which can be tripped without danger, as shown in Fig. 1.

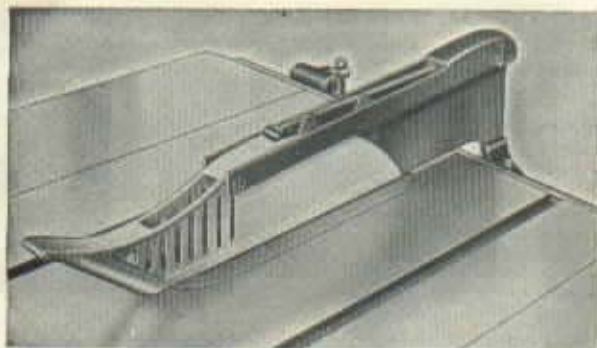


FIG. 1

Due to the fact that this guard raises and lowers by pivoting around a point well back of the table, it is possible to make the guard ride the work with very little effort. Even when the saw is tilted to 45 degrees it raises and lowers without cramping or crowding against the blade. We believe the No. 1471 to be the safest saw guard on the market.

The splitter for the No. 1471 guard is mounted to the rear trunnion of the saw, being fastened to the same bracket as used for the No. 1473 splitter; however, to obtain additional rigidity, it is also fastened to an additional bracket behind the saw table. This bracket LTA-525 is clamped to a post LTA-539 which

is mounted into the rear trunnion of the saw. An opening in the saw cabinet in the rear is provided.

To mount the No. 1471 splitter guard, proceed as follows: Remove the saw blade and mounted splitter bracket post LTA-539 into rear trunnion, tightening nut FJ-313 securely. Assemble splitter bracket LTA-525 to post, and tighten so that the vertical face of the adjustable bracket LTA-526 is parallel to the saw arbor flange, and so that both the front and rear clamp screws fit in splitter slots.

Clamp splitter in place both front and rear by tightening hexagon head cap screws SP-608. Before using the splitter be sure to check the alignment. It is necessary that the splitter be aligned perfectly with the blade in order to avoid cramping. It is also important that the rip gage be perfectly parallel to the saw blade and splitter. If any misalignment occurs, make the necessary adjustments to prevent the work from leading away from the rip fence or binding against it. Most splitters are flexible enough or floating to follow the saw cut without difficulty; however, the splitter on the No. 1471 is made rigid and any slight misalignment will cause difficulty. Therefore, be sure to adjust properly. **THIS IS IMPORTANT.**



FIG. 2

Both the front splitter bracket LTA-435, which comes with the Unisaw, and the rear splitter bracket LTA-526 are adjustable. The LTA-435 front bracket is adjusted by loosening the two hexagon head cap screws which hold it to the rear trunnion. Oversize holes in this bracket allow sufficient lateral movement to assure proper adjustment. The rear bracket LTA-526 can be shifted laterally on its ways by loosening the one hexagon head cap screw SP-602 shown in Fig. 2.

The addition of the No. 1471 Super Safe Guard has made necessary a slight change to our miter gauge body to provide clearance for the guard when the saw

is tilted, and the miter gauge is used on the right hand side. Miter gauge body with clearance at "A" shown in lower left hand corner of repair parts drawing. This part can be purchased if desired (see parts price list.)

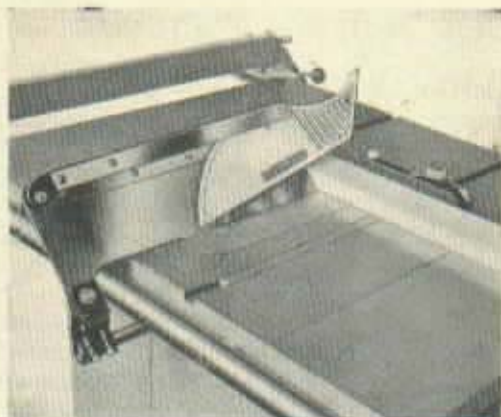


FIG. 3

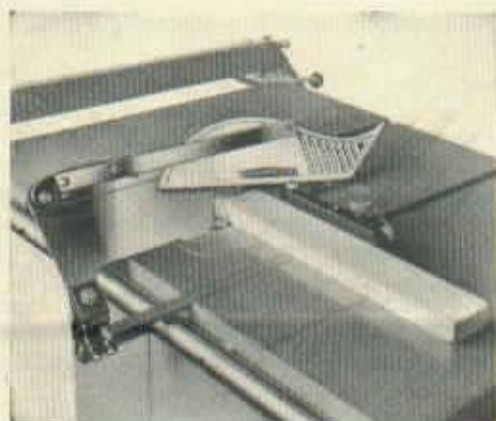


FIG. 4

The operation of the No. 1471 Super Safe Guard is shown in Figs. 3 and 4. Fig. 3 shows the position the guard takes when the saw is tilted and the work is being fed in. Notice how the rear of the guard remains down on the table, giving complete protection. Fig. 4 shows how the front of the guard drops to the table as soon as the work has passed the center of the saw blade. The guard pivot bar hinge is so constructed that a coil spring rests on top of the splitter. This counteracts the weight of the guard basket assembly, making the guard easy to operate.

NO. 1165 SWING GUARD

The No. 1165 guard for the 10" Tilting Table Circular Saw, Fig. 5, is an extra attachment. To install, the guard support bracket TCS-242 should be attached to the left side of the machine with the capscrews SP-673. The bent arm TCS-243 is then slid through the bracket, the end collar on the arm removed and the guard-basket bracket slid in place.

Adjust the basket and arm so that the basket covers the saw blade properly, then set and lock the collars keeping the basket bracket on the arm and the arm in the guard-support bracket as shown in the drawing. The basket should be adjusted so that it clears the left side of the body about $\frac{1}{8}$ "; it will then cover the dado head also.

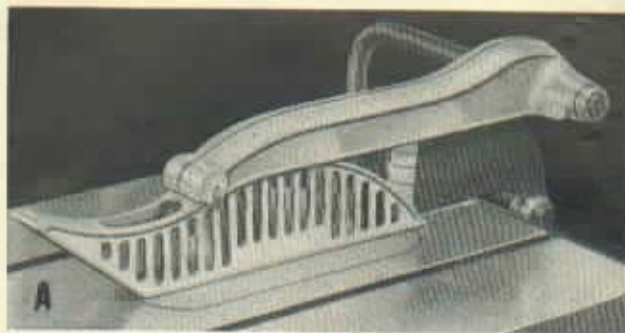


FIG. 5

The splitter is attached by sliding one collar onto the lower portion of the bent arm TCS-243, hooking the upper part of the splitter blade under the upper part of the arm, below the basket-support bracket, then slipping the hole in the blade over the lower end of the arm and putting on the outer collar. The splitter should be adjusted exactly in line with the saw blade, and the collars holding it should be adjusted so that the blade "floats" slightly. The anti-kickback attachment is attached to the blade by means of screw TCS-251, with the teeth pointing as indicated in the drawing.

NO. 1472 SWING-BACK GUARD

The No. 1472 Swing-back Guard shown in Fig. 6 is similar to the No. 1165, used with 10" Tilting Table Circular Saw and being fastened to the table it does not tilt with the blade. This limits the guard to use on square cuts or cuts at a slight angle. The No. 1472 can be used in combination with the No. 1473 splitter and kick-back fingers.

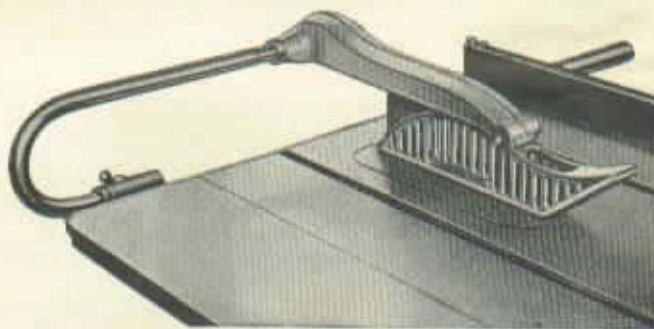


FIG. 6

The maximum angle of cut for which this guard can be used depends on the clearance inside the guard. The guard can be adjusted to a position to give maximum clearance by loosening the collars TCS-249 and shifting to suit. Do not allow splitter or blade to come closer than $\frac{1}{8}$ " to the inside of the guard. This guard, being mounted independently of the splitter, can be used for dadoing or routing by removing the splitter, and can be swung back, out of the way, by merely loosening ball handle lock screw TCS-247-S allowing the guard and bent arm bracket to pivot, as shown in Fig. 7. Due to the solid mounting, this guard is more rigid than any splitter type guard, and we recommend its use for all average straight work. When a considerable amount of angular work is to be done, we recommend our No. 1471 Super Safe guard shown in Fig. 1.



FIG. 7

SPLITTER AND ANTI-KICK BACK DEVICE

The No. 1473 Splitter and Anti-Kick Back Device shown in Fig. 8 consists of the splitter blade, which is fastened to the rear trunnion of the Unisaw Tilting Arbor Circular Saw. Due to this mounting the splitter tilts with the saw blade.



FIG. 8

Upon removing the saw table insert, there will be found a bracket LTA-435 immediately behind the blade. A clamp plate LTA-436 which clamps the splitter against the bracket by means of SP-608 hex. head cap screw is guided on the bracket by two pins engaged in holes in the clamp plate. These pins straddle lugs on the lower end of the splitter, which is slotted to clear the clamp bolt. It is unnecessary to remove the clamp plate, but merely loosen it sufficiently to allow the splitter to slip between. Be sure the splitter is pushed way down, when inserting to assure proper positioning. By straddling the lock screw and fitting between the guide pins, the splitter is held in the right position. Consequently the lock screw SP-608 does not need to be drawn extremely tight.

The splitter has the leading edge tapered to a blunt knife edge so as to center the saw kerf without interference.

The No. 1473 splitter and kick back fingers can be removed in one minute by loosening one screw, in case dado head work or tenoning is to be done on the machine.

The anti-kick back device consists of six fingers saw toothed at the bottom and pivoted so as to swing clear, and rest on top of the work. The fingers are so

shaped so the work can be pushed forward without interference, however, any slight backward movement of the work immediately causes one or more of the fingers to lock the work in place. This prevents the work from being thrown out toward the operator, if it should pinch on the blade.

The splitter itself tends to prevent pinching; however, when cutting green lumber, a severe twist occasionally occurs which no splitter can prevent, and it is, therefore, essential that a splitter and the anti-kick back device be used together.

NO. 1155 ABRASIVE WHEEL GUARD

The No. 1155 Abrasive Wheel Guard hood and cast link is mounted on a bent arm bracket No. 1470 for the Unisaw Tilting Arbor Circular Saw. This bent arm bracket is the same as used for the No. 1472 swing back guard.

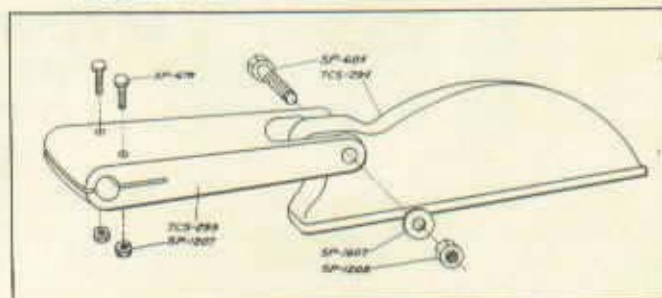


FIG. 9

The functions of No. 1155 Abrasive Wheel Guard Fig. 9, in addition to protecting the operator's hand is to prevent injury from sparks and from flying pieces due to wheel breakage. Due to its mounting, this guard does not tilt with the saw blade, but can be swung out of the way when not needed.

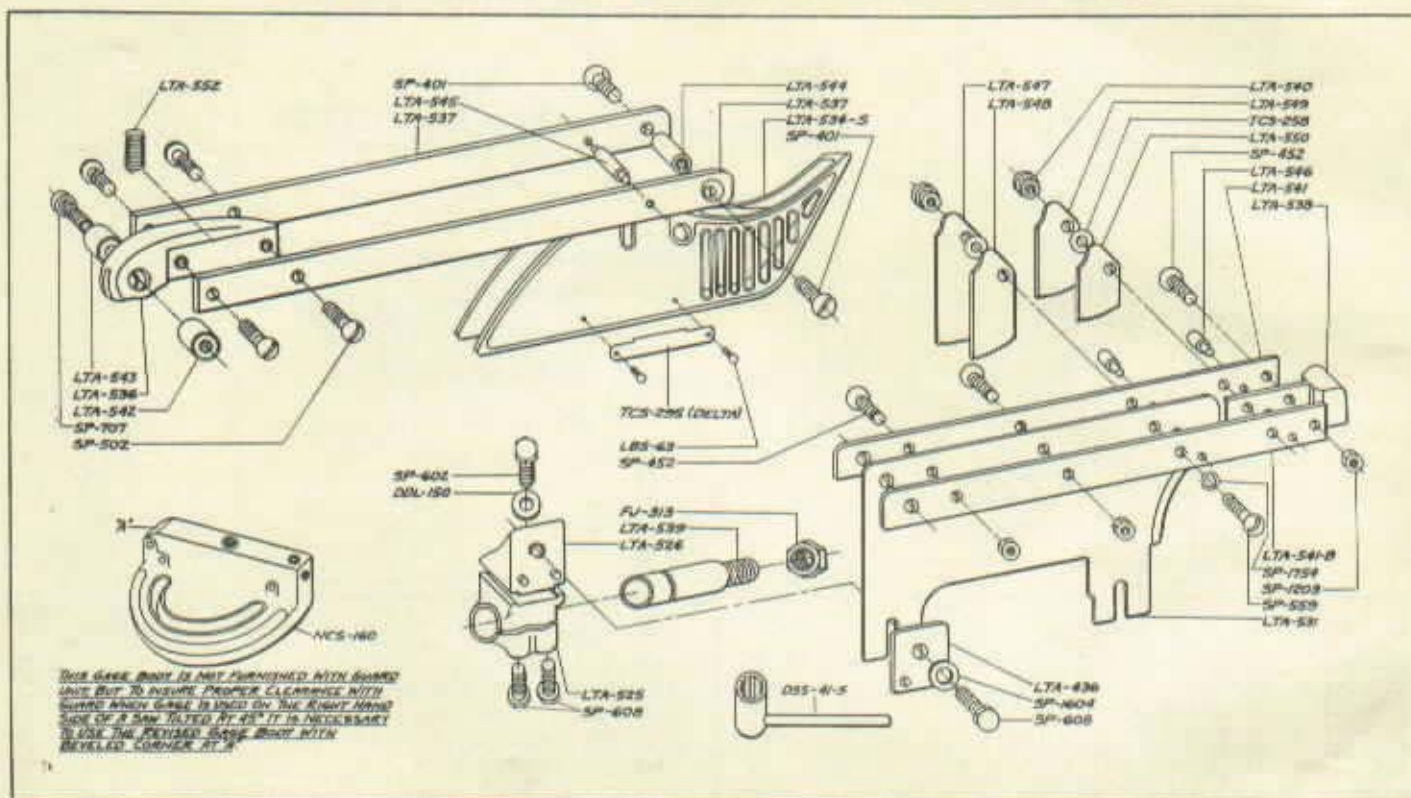
In operation the guard may either be allowed to rest on the table, be raised by the work or it may be clamped in any position allowing the work to pass under it.

ABRASIVE WHEEL GUARD PARTS



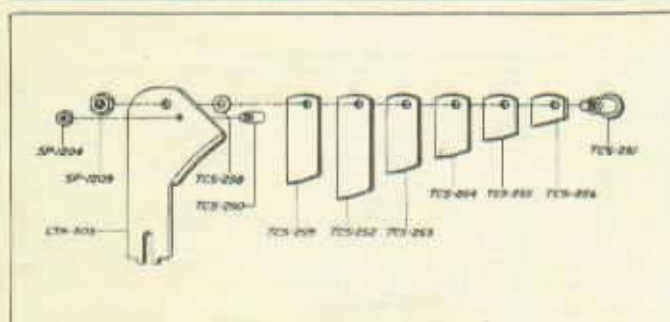
| Part No. | Description | No. Req. | Price Each |
|----------|--------------------------------------------------------------------|----------|------------|
| TCS-293 | Guard Link | 1 | \$1.75 |
| TCS-294 | Guard | 1 | 1.50 |
| SP-279 | $\frac{1}{8}$ -24 x 2 Hex. Hd. Cap Screw | 2 | .10 |
| SP-684 | $\frac{1}{2}$ -20 x 2 $\frac{3}{4}$ Hex. Hd. Cap Screw .. | 1 | .10 |
| SP-1207 | $\frac{1}{8}$ -24 Hex. Nut | 2 | .10 |
| SP-1208 | $\frac{1}{2}$ -20 Hex. Nut | 1 | .10 |
| SP-1607 | $1\frac{1}{4}$ x $\frac{1}{2}$ x $\frac{5}{64}$ Steel Washer | 1 | .10 |

REPLACEMENT PARTS FOR No. 1471 SUPER SAFE GUARD



| Part No. | Description | No. Req. | Price Each | Part No. | Description | No. Req. | Price Each |
|-----------|------------------------------|----------|------------|-----------|------------------------------------|----------|------------|
| LTA-436 | Splitter Bracket Clamp Plate | 1 | \$.10 | LTA-550 | Kickback Finger | 1 | \$.15 |
| LTA-525 | Splitter Bracket, Lower Half | 1 | .35 | LTA-552 | Coil Spring | 1 | .10 |
| LTA-526 | Splitter Bracket, Upper Half | 1 | .25 | TCS-258 | Shim Washer | 2 | .10 |
| LTA-531 | Splitter | 1 | .80 | TCS-295 | Nameplate | 1 | .10 |
| LTA-534-S | Guard Basket | 1 | 2.75 | LBS-63 | Rivet | 2 | .10 |
| LTA-536 | Guard Hinge | 1 | .85 | FJ-313 | 3/8-18 Hex. Half Nut | 1 | .10 |
| LTA-537 | Pivot Bar | 2 | .20 | DDL-150 | 21/32 x 21/64 x 1/8 Steel Washer | 1 | .10 |
| LTA-538 | Guide Block | 1 | .20 | DSS-41-S | Socket Wrench | 1 | .30 |
| LTA-539 | Support Post | 1 | .35 | NCS-130-A | Miter Gauge Body with Stop Screws | 1 | 2.20 |
| LTA-540 | Kickback Finger Spacer | 2 | .10 | SP-401 | 3/4-20 x 1/2 Fl. Hd. Machine Screw | 2 | .10 |
| LTA-541 | Guard Support Bar | 1 | .25 | SP-452 | #10-32 x 1/2 Fl. Hd. Machine Screw | 3 | .10 |
| LTA-541-B | Guard Support Bar | 1 | .25 | SP-502 | 3/4-20 x 1/2 Rd. Hd. Machine Screw | 4 | .10 |
| LTA-542 | Threaded Clamp Button | 1 | .10 | SP-559 | #10-32 x 1/2 Rd. Hd. Machine Screw | 2 | .10 |
| LTA-543 | Plain Clamp Button | 1 | .10 | SP-602 | 1/8-18x1 1/4 Hex. Head Cap Screw | 1 | .10 |
| LTA-544 | Threaded Spacer | 1 | .10 | SP-608 | 1/8-18x3/8 Hex. Head Cap Screw | 3 | .10 |
| LTA-545 | Stop Spacer | 1 | .10 | SP-707 | 1/8-18x1 Fil. Head Cap Screw | 1 | .10 |
| LTA-546 | Stop Pin | 2 | .10 | SP-1203 | #10-32 Hex. Nut | 3 | .10 |
| LTA-547 | Kickback Finger | 1 | .15 | SP-1604 | 3/4x1 1/2x1/4 Steel Washer | 1 | .10 |
| LTA-548 | Kickback Finger | 1 | .15 | SP-1754 | 1/2x1 1/2 Shakeproof Lockwasher | 2 | .10 |
| LTA-549 | Kickback Finger | 1 | .15 | | | | |

No. 1473 SPLITTER ATTACHMENT PARTS



| Part No. | Description | No. Req. | Price Each |
|----------|--------------------------------|----------|------------|
| LTA-503 | Blade | 1 | \$.50 |
| TCS-250 | Pin | 1 | .10 |
| TCS-251 | Shoulder Bolt | 1 | .10 |
| TCS-252 | Kickback Finger 3 1/8" | 1 | .10 |
| TCS-253 | Kickback Finger 2 1/8" | 1 | .10 |
| TCS-254 | Kickback Finger 2 1/8" | 1 | .10 |
| TCS-255 | Kickback Finger 1 5/8" | 1 | .10 |
| TCS-256 | Kickback Finger 1 1/4" | 1 | .10 |
| TCS-258 | Steel Washer 21/32x21/64x1/64" | 1 | .10 |
| TCS-259 | Kickback Finger 3 1/8" | 1 | .10 |
| SP-1204 | #8-32 Hex. Nut | 1 | .10 |
| SP-1209 | 1/4"-28 Hex. Nut | 1 | .10 |

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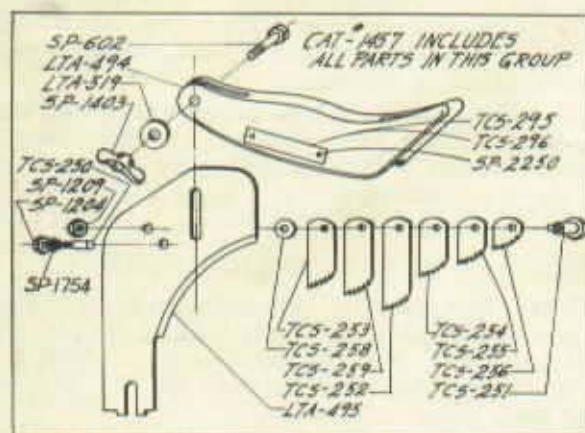
| Part No. | Description | No. Req. | Price Each | Part No. | Description | No. Req. | Price Each |
|-----------|------------------------|----------|------------|----------|-----------------------------------|----------|------------|
| TCS-240 | Basket Bracket | 1 | \$2.50 | TCS-253 | Kickback Finger 1 1/4" | 1 | \$.10 |
| TCS-241-A | Basket | 1 | 3.80 | TCS-256 | Kickback Finger 1 1/2" | 1 | .10 |
| TCS-242 | Support Bracket | 1 | 1.55 | TCS-257 | Pivot Pin | 1 | .10 |
| TCS-243 | Support Arm | 1 | 2.35 | TCS-258 | Steel Washer 21/32x21/64x1/64" | 1 | .10 |
| TCS-244 | Splitting 3/4" thick | 1 | .65 | TCS-295 | Name Plate | 1 | .10 |
| TCS-245 | Splitter 5/64" thick | 1 | .70 | LBS-63 | Rivet | 2 | .10 |
| TCS-246 | Splitter 7/64" thick | 1 | .93 | NCS-37 | Special 3/8" Allen Screw | 1 | .10 |
| TCS-247-S | Hall Pin Lock Bolt | 4 | .40 | SP-673 | 3/4-24x1 1/4" Hex. Head Cap Screw | 2 | .10 |
| TCS-249 | Collar 1 1/2x1 1/2" | 1 | .20 | SP-1204 | #8-32 Hex. Nut | 1 | .10 |
| TCS-250 | Pin | 1 | .10 | SP-1209 | 5/8-28 Hex. Nut | 1 | .10 |
| TCS-251 | Shoulder Bolt | 1 | .10 | SP-1526 | 5/8-18x3/4" Tumb. Screw | 1 | .10 |
| TCS-252 | Kickback Finger 3/8" | 1 | .10 | SP-1704 | 5/8x1 1/2x3/4" Lock Washer | 2 | .10 |
| TCS-253 | Kickback Finger 2 1/8" | 1 | .10 | SP-2102 | 3/4x3/4" Cotter Pin | 2 | .10 |
| TCS-254 | Kickback Finger 2 1/4" | 1 | .10 | | | | |

SP-201
TCS-240
TCS-240
SP-100
SP-407
SP-200
L7A-601
TCS-247-3
TCS-240-4
SP-200
TCS-201
L7A-62
TCS-200
L7A-602
L7A-600
SP-700
SP-470

| | | | | | | | |
|-----------|--------------------------|---|--------|---------|--------------------------------|---|--------|
| LTA-438 | Bracket | 1 | \$1.50 | TCS-295 | Name Plate | 1 | \$.10 |
| LTA-502 | Guard Support Bent Arm | 1 | 3.25 | SP-201 | 5/16x3/4 Allen Set Screw | 1 | .10 |
| LTA-551 | 1 1/2x1x3/4 Thick Collar | 2 | .20 | SP-607 | 5/16x1 1/4 Hex. Head Cap Screw | 1 | .10 |
| TCS-240 | Guard Basket Bracket | 1 | 2.50 | SP-675 | 5/16x2x3/4 Hex. Head Cap Screw | 2 | .10 |
| TCS-313 | Pin | 1 | .20 | SP-1001 | 5/16 Hex. Nut | 1 | .10 |
| TCS-241-A | Basket Assembly | 1 | 5.80 | SP-1708 | 3/4 Lockwasher | 2 | .10 |
| TCS-247-S | Ball Pin Lock Bolt | 1 | .40 | SP-2102 | 3/4x1 1/2 Cotter Pin | 2 | .10 |
| TCS-249 | 1 1/2x1x3/4 thick Collar | 3 | .20 | LBS-63 | Rivets | 2 | .10 |

NOTE: Prices in this list apply only to parts ordered for repair and replacement. They cannot be used for computing allowance values when a machine is ordered "less" certain parts.

REPLACEMENT PARTS FOR NO. 1165 SPLITTER GUARD



An old style splitter mounted guard, used for general purposes. Being mounted on the splitter, it tilts with the saw blade. It is equipped with kick finger. This guard, when left loose, rides up and over the work, practically covering all exposed parts of the blade. The guard may also be clamped on the splitter with a thumb nut to hold it in any position above the table. While this exposes more of the saw, it eliminates the necessity of raising the guard with the work.

| Part No. | Description | No. Req. | Price Each |
|----------|-----------------------------------------------------------|----------|------------|
| LTA-494 | Guard | 1 | \$2.00 |
| LTA-495 | Splitter for 1459 | 1 | .45 |
| LTA-519 | Spring Washer $\frac{3}{4} \times 21/64 \times 1/32$ | 1 | .10 |
| TCS-250 | Stop Pin | 1 | .10 |
| TCS-251 | Shoulder Bolt | 1 | .10 |
| TCS-252 | Kickback Finger | 1 | .10 |
| TCS-253 | Kickback Finger | 1 | .10 |
| TCS-254 | Kickback Finger | 1 | .10 |
| TCS-255 | Kickback Finger | 1 | .10 |
| TCS-256 | Kickback Finger | 1 | .10 |
| TCS-258 | Special Washer $21/32 \times 21/64 \times .010$.. | 5 | .10 |
| TCS-259 | Kickback Finger | 1 | .10 |
| TCS-295 | Guard Nameplate | 1 | .10 |
| SP-602 | $5/16-18 \times 1\frac{1}{4}$ Hex. Hd. Cap Screw .. | 1 | .10 |
| SP-1204 | #8-32 Hex. Nut | 1 | .10 |
| SP-1209 | $\frac{1}{4}$ -28 Hex. Nut | 1 | .10 |
| SP-1403 | $5/16$ Wing Nut | 1 | .10 |
| SP-1754 | Lock Washer | 1 | .10 |
| SP-2250 | #4 $\times 3/16$ Drive Screw | 2 | .10 |

