



Model 350

10" TILTING ARBOR SAW OPERATING AND MAINTENANCE INSTRUCTIONS

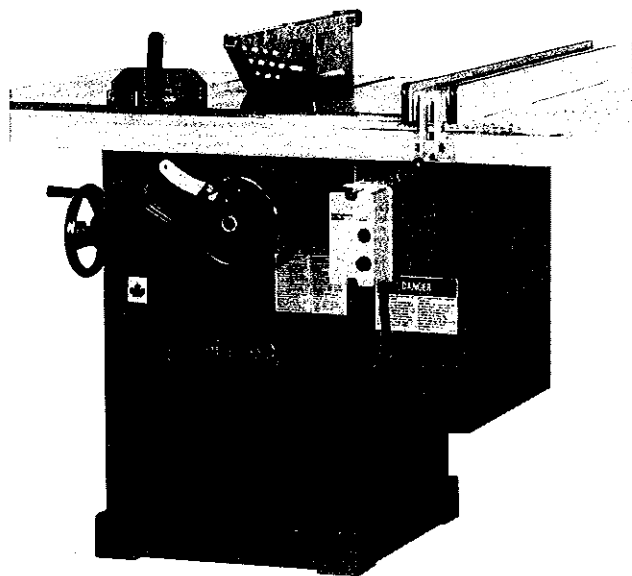
350

254 mm / 10" Tilting Arbor Saw (table 711.2 x 914.4 mm / 28" x 36") with guard and splitter, rapid-set rip fence, combination blade, miter gauge, motor pulley, motor cover, matched V-belts, wrench less motor and starter.

188 kg / 415 lbs.

Specifications

Maximum depth of cut..... 79.3 mm / 3-1/8"
 Diameter of arbor 15.8 mm / 5/8"
 Diameter of saw blade 254 mm / 10"
 Saw tilts to right..... 45 °
 Maximum depth of cut at 45 °..... 53.9 mm / 2-1/8"
 Maximum cut to right of blade..... 1270 mm / 50"
 Maximum width of cut-off (25,4 mm / 1" stock) 374.6 mm / 14-3/4"
 Maximum cut to left of blade 393.7 mm / 15-1/2"
 Maximum width of dado 20.6 mm / 13/16"
 Distance in front of blade at maximum cut 323.8 mm / 12-3/4"
 Maximum length of cut with extra long guide bars 3098 mm / 122"
 Table height..... 863.6 mm / 34"
 Table size.. 711.2 x 914.4 mm / 28" x 36"
 Overall dimension with guide bars and rip fence:
 Width..... 1155.7 mm / 45-1/2"
 Length..... 1016 mm / 40"
 T-Slot miter gauge groove 9.5 x 19 mm / 3/8" x 3/4"
 Rip fence front lock
 Speed of saw blade 4 000 R.P.M.
 Motor recommended T.E.F.C.
 3 600 T.P.M..... 3 H.P.
 Shipping weight 180 kg / 394 lbs.



Shown with General T Fence

MODEL NO.

350

SERIAL NO.

IMPORTANT: When ordering replacement parts, always give model number, serial number of machine and part number. Also give description and quantity of each item.

All replacements parts can be obtained from:

GENERAL MFG. CO. LTD.

835, Cherrier Street
 Drummondville, Quebec, Canada
 J2B 5A8
 Tel.: (819) 472-1161
 Fax: (819) 472-3266
 Web site: www.general.ca
 E-mail: general@general.ca

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IMPORTANT NOTICE

Working wood is inherently dangerous. Using hand or power tools improperly or neglecting standard safety practices can lead to permanent injury or death.

So don't try to perform operations you learn about in magazines, from friends or others until you're certain that they are safe for you and your shop situation.

We want you to enjoy your craft and to find satisfaction in the doing as well as in the finished work. So please keep safety foremost in your mind whenever you are in the shop.

GENERAL MFG. CO. LTD.

SAFETY RULES

Read carefully before operating the machine

- 1) Learn the machine's applications and limitations, as well as the specific potential hazards peculiar to this machine. Follow available operating instructions and safety rules carefully.
- 2) Keep working area clean and be sure adequate lighting is available.
- 3) Do not wear loose clothing, gloves, bracelets, necklaces, or ornaments. Wear face, eye, ear, respiratory, and body protection devices, as indicated for the operation or environment.
- 4) Do not use blade larger or heavier than the machine is designed to accommodate. Never operate a cutting tool at greater speed than recommended.
- 5) Keep hands well away from saw blade. Use a push stick or push block to hold or guide the work when working close to cutting tool.
- 6) Whenever possible, use properly locked clamps, jig, or vise to hold the work.
- 7) Be sure the power is disconnected from the machine before tools are serviced.
- 8) Never leave the machine with the power on.
- 9) Be positive that hold-downs and antikickback devices are positioned properly, and that the work-piece is being fed through the cutting tool in the right direction.
- 10) Do not use a dull, gummy, bent or cracked cutting tool.
- 11) Be sure that keys and adjusting wrenches have been removed before turning power on.
- 12) Use only accessories designed for the machine.
- 15) Adjust the machine for minimum exposure of cutting tool necessary to perform the operation.

GENERAL guarantee

All component parts of GENERAL machinery are carefully inspected during all production stages and each machine is thoroughly inspected upon completion of assembly. Because of quality GENERAL agrees to repair or replace any genuine part or parts which upon examination proves to be defective in workmanship or material within a period of 24 months. In order to obtain warrantee, all defective parts must be returned prepaid to General MFG. Co. Ltd. Repairs made without our written authorization voids all guarantees.

The General 10" Tilting Arbor Saw is well designed and constructed of rigid material and accurately built, its ease of operation makes it a favorite. It is designed for use in schools, work shops, cabinet shops, pattern shops and many other uses. It is easy to operate and requires little maintenance but a reasonable amount of care and attention is required to insure perfect performance and accurate work. Take a few moments to read and familiarize yourselves with these instructions and safety rules which will save you a lot of time and trouble.

Installation

The Tilting Arbor Saw which you have purchased has been carefully assembled and factory tested. Remove the crate and packing and clean the surface of the table and all other machined parts which have been covered with grease to prevent rusting. Use only mild solvent, never use a paint solvent to prevent damaging the paint finish. Place the saw on solid floor making sure that all four corners are levelled and are touching. Shim if necessary before securing machine in place. This is of utmost importance to keep the exactness of your saw.

Power required

The recommended motor is a minimum 3 HP single phase or three phase. For extra power if required, a maximum 5HP three phase with 3-5/16" motor pulley to obtain a cutting speed of 10,500 feet per minute or 4,000 Rpm. A totally enclosed motor is required for Circular Saws as the motor operates in a position where there is a great amount of dust. Totally enclosed motors are built to operate at higher temperatures and high temperature rise is normal, do not use open-type motor as it will overheat and burn out and could cause fire.

Installing motor

Place pulley which is supplied with the machine (motor pulley is for 3450 Rpm. motor) on the motor shaft. Do not force the pulley in place because this makes it difficult to remove and position pulley in line with the arbor pulley and heavy blows may damage the bearings causing noise and early bearing failure.

The pulley with the hub outside should measure 4-1/8" from its outside face to the center of the first hole in the motor base. Tilt the saw slightly and place one Vee-belt on the inner groove of the arbor pulley then position motor and placing the Vee-belt on the inner groove of the motor pulley and install screws, install the other belt and tighten all four screws making sure that the arbor pulley and motor pulley are in line. The tension of the belts should not be too tight. Motor is now ready to be connected to the starter.

When selecting the motor, care should be taken to ensure that our recommendations are followed carefully. The largest motor frame that can be used is NEMA No. 182 T.E.F.C. Magnetic starters provide overload, no voltage and low voltage protection. Always make sure that the machine is properly grounded.

Adjustments

Your tilting arbor saw leaves the factory completely adjusted, however a check up is recommended, both to familiarize yourself with it and to be sure that everything is in order. The front hand wheel is used to raise and to lower the saw blade. The saw blade will lower flush with the table and can be raised to a maximum of 3-1/8" above the table. Stops are provided to limit this travel. They are fixed at the factory and cannot be changed.

The left handwheel is used to tilt the saw blade from 90° to 45°. The saw blade can be locked at any height or at any angle of tilt by the knobs extending in front of the handwheel. Only a small amount of force is required to lock securely, any added force only puts unnecessary strain on the locking device. The saw blade should be placed at 90° and the stop screw adjusted. This is done through the motor opening by screwing the screw up or down and locking in place with the nut. The pointer should be adjusted at 0. It will now give the right reading. Tilt the saw blade to 45° and adjust the stop, proceeding in the same manner as above.

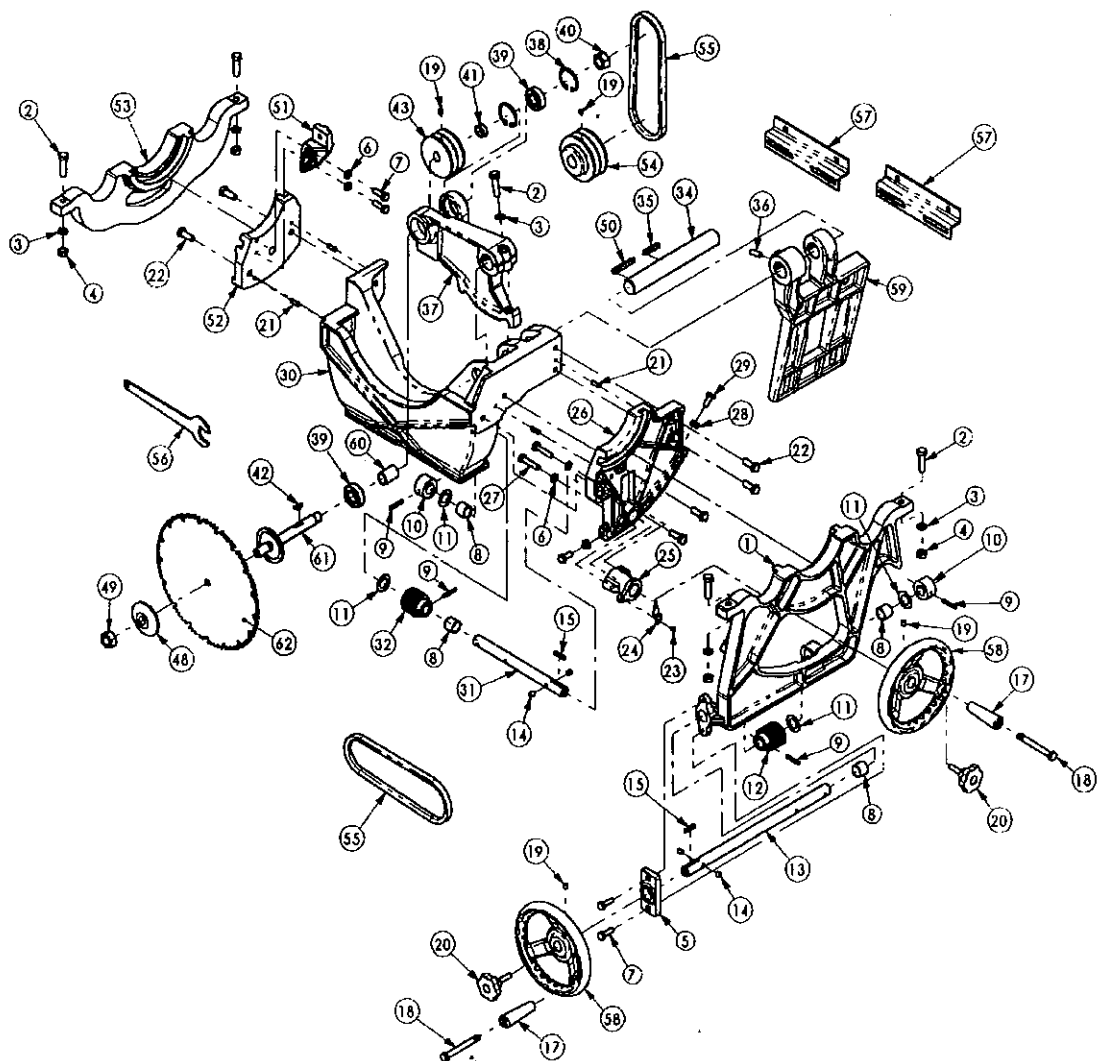
Arbor bracket adjustment

The arbor bracket is adjusted at the factory so that the blade is in the center of the opening of the table insert, at both 90° and 45°. If a derangement should occur, the arbor bracket can be adjusted as follows.

The arbor bracket is held in place on the pivot shaft with a key to prevent rotation, and a Hex. Head Screw clamping the split end of the bracket around the shaft, by loosening this screw, it is possible to move the arbor bracket sideways on the shaft to bring it into the alignment required. This screw can be reached by lowering the saw blade and tilting to 45°.

Mechanism

FIG. N° 1



| Item | Part No. | Description | Quant. | Item | Part No. | Description | Quant. |
|------|----------|--------------------------------------|--------|------|----------|-------------------------------------|--------|
| 1 | 354-1 | Front trunnion | 1 | 35 | 354-21 | Key | 1 |
| 2 | P-6 | Hex. HD. cap screw 3/8"-16 x 1-1/2" | 5 | 36 | P-304 | Socket head cap screw 5/16"-18 x 1" | 1 |
| 3 | P-15 | Lock washer 3/8" | 5 | 37 | 353 | Arbor bracket | 1 |
| 4 | P-17 | Nut 3/8"-16 | 4 | 38 | P-108 | Snap ring N-1308-168 | 2 |
| 5 | 354-11 | Flange | 1 | 39 | P-279 | Bearing (6203-2RS) | 1 |
| 6 | P-135 | Lock washer 5/16" | 4 | 41 | 353-4B | Small spacer | 1 |
| 7 | P-99 | Hex. HD. cap screw 5/16"-18 x 1" | 2 | 42 | P-4 | Woodruff key #9 3/16" x 3/4" | 1 |
| 8 | P-70 | Bronze bushing SS-2428-12 | 4 | 43 | 353-3 | Arbor pulley | 1 |
| 9 | P-126 | Spring pin 3/16" x 1-1/4" | 4 | 50 | 354-22 | Key | 1 |
| 10 | 354-6 | Collar | 2 | 51 | 357-12 | Front bracket | 1 |
| 11 | P-77 | Fiber washer 3/4" x 1-1/4" x 1/32" | 5 | 52 | 354-3 | Rear tilt trunnion | 1 |
| 12 | 354-5 | Worm gear (right) | 1 | 53 | 354-4 | Rear trunnion | 1 |
| 13 | 354-10 | Tilt shaft | 1 | 54 | 353-8 | Motor pulley (standard) 7/8" | 1 |
| 14 | 354-13 | Guide pin | 4 | 55 | P-109 | Belt A-21 23" LG. | 2 |
| 15 | 354-23 | Key | 2 | 56 | 353-7 | Wrench | 1 |
| 20 | 354-12SA | Locking screw assembly | 2 | 57 | 354-24 | Z Motor bracket | 2 |
| 21 | P-111 | Roll pin 1/4" x 3/4" | 4 | 58 | 354-9SA | Handwheel | 2 |
| 22 | P-35 | Hex. HD. cap screw 3/8"-16 x 1" | 6 | 17 | P-332 | Handle | 1 |
| 23 | P-120 | Tapping screw 8/32" x 1/4" | 1 | 18 | 354-15 | Handle shaft | 1 |
| 24 | 354-17 | Tilt pointer | 1 | 19 | P-7 | Set screw 5/16" x 5/16" | 1 |
| 25 | 354-8 | Tilt bracket | 1 | 58 | 354-9 | Handwheel | 1 |
| 26 | 354-2 | Front tilt trunnion | 1 | 59 | 354-19A | Motor base | 1 |
| 27 | P-305 | Hex. HD. cap screw 5/16"-18 x 1-1/2" | 2 | 60 | 353-5B | Large Spacer | 1 |
| 28 | P-51 | Jam nut 5/16"-18 | 2 | 61 | 353-1ASS | Arbor with flange & nuts | 1 |
| 29 | P-100 | Hex. H. screw 5/16"-18 x 3/4" | 2 | 40 | P-106 | Hex., jam nut 5/8"-18 | 1 |
| 30 | 354 | Chute | 1 | 48 | 353-2 | Flange | 1 |
| 31 | 354-7 | Elevating shaft | 1 | 49 | 353-6 | Arbor nut | 1 |
| 32 | 554-23 | Worm gear (left) | 1 | 61 | 353-1 | Arbor | 1 |
| 34 | 354-20 | Pin | 1 | 62 | P-1029 | 10" combination saw | 1 |

FIG. N° 2

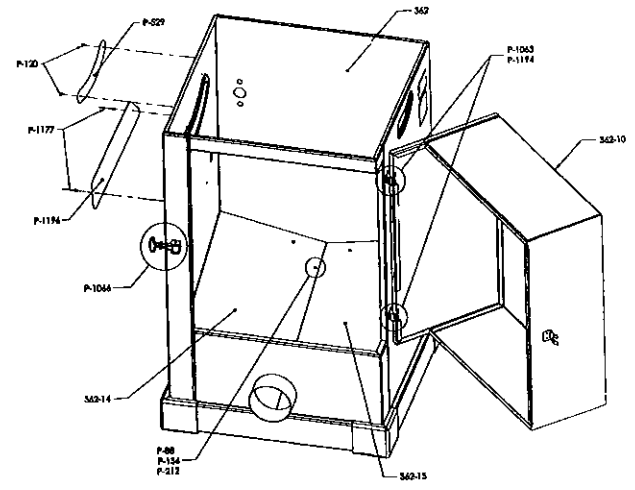
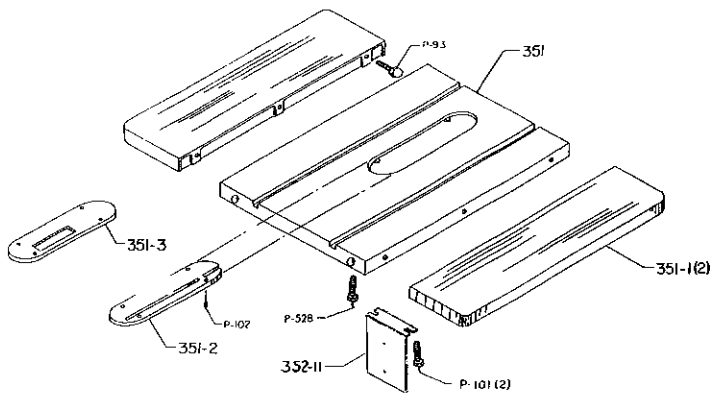


TABLE AND CABINET

Table parts

| Part No. | Description | Quant. |
|----------|--|--------|
| 351 | Table | 1 |
| 351-1 | Extension | 2 |
| 352-11 | Switch bracket | 1 |
| 350-2 | Table insert | |
| | 351-2 Table insert | 1 |
| | P-102 Socket set screw 1/4"-28 x 3/8" NYL. | 4 |

| Part No. | Description | Quant. |
|----------|--|--------|
| 350-3 | Dado insert (accessories) | |
| | 351-3 Dado insert | 1 |
| | P-102 Socket set screw 1/4"-28 x 3/8" NYL. | 4 |
| P-93 | Hex. HD. cap screw 7/16"-14 x 1" | 6 |
| P-101 | Hex. HD. cap screw 3/8"-16 x 5/8" | 2 |
| P-528 | Socket head cap screw 7/16"-14 / 3/4" | 4 |

Cabinet parts

| Part No. | Description | Quant. |
|----------|------------------------------------|--------|
| 362 | 10" saw blade | 1 |
| 362-10 | Cabinet door with motor 3 H.P. | 1 |
| 362-16 | Cabinet door with motor 5 H.P. | |
| 362-14 | Front bottom panel | 1 |
| 362-15 | Back bottom panel | 1 |
| P-88 | Hex. HD. cap. screw 1/4"-20 x 1/2" | 1 |
| P-1063 | Hinge cabinet 350 | 2 |
| P-1066 | Rubber latch | 1 |

| Part No. | Description | Quant. |
|----------|---------------------------------|--------|
| P-1177 | Pop rivet 1/8" x ,265 x ,125 | 2 |
| P-1194 | Hex. HD. cap. screw 6 mm x 8 mm | 2 |
| P-1196 | General Millennium plate | 1 |
| P-120 | Tapping screw 8-32 x 1/4" | 2 |
| P-136 | Lock washer 1/4" | 1 |
| P-212 | Jam nut 202-135 | 1 |
| P-529 | Scale 252-7 | 1 |

Saw blade

The machine is furnished with a combination saw blade, suitable for either ripping or cross cutting, which will save considerably time in a shop, where the amount of ripping and cross cutting is about equal.

The tilting arbor saw uses ripping saw, combination saw, cross cutting saw or planer saw, 10" diameter with hole 5/8" diameter. It is important that the saw blade be kept sharp at all times as dull blades requires several times more power that a sharp one. Always keep saw sharp and well set to obtain satisfactory work.

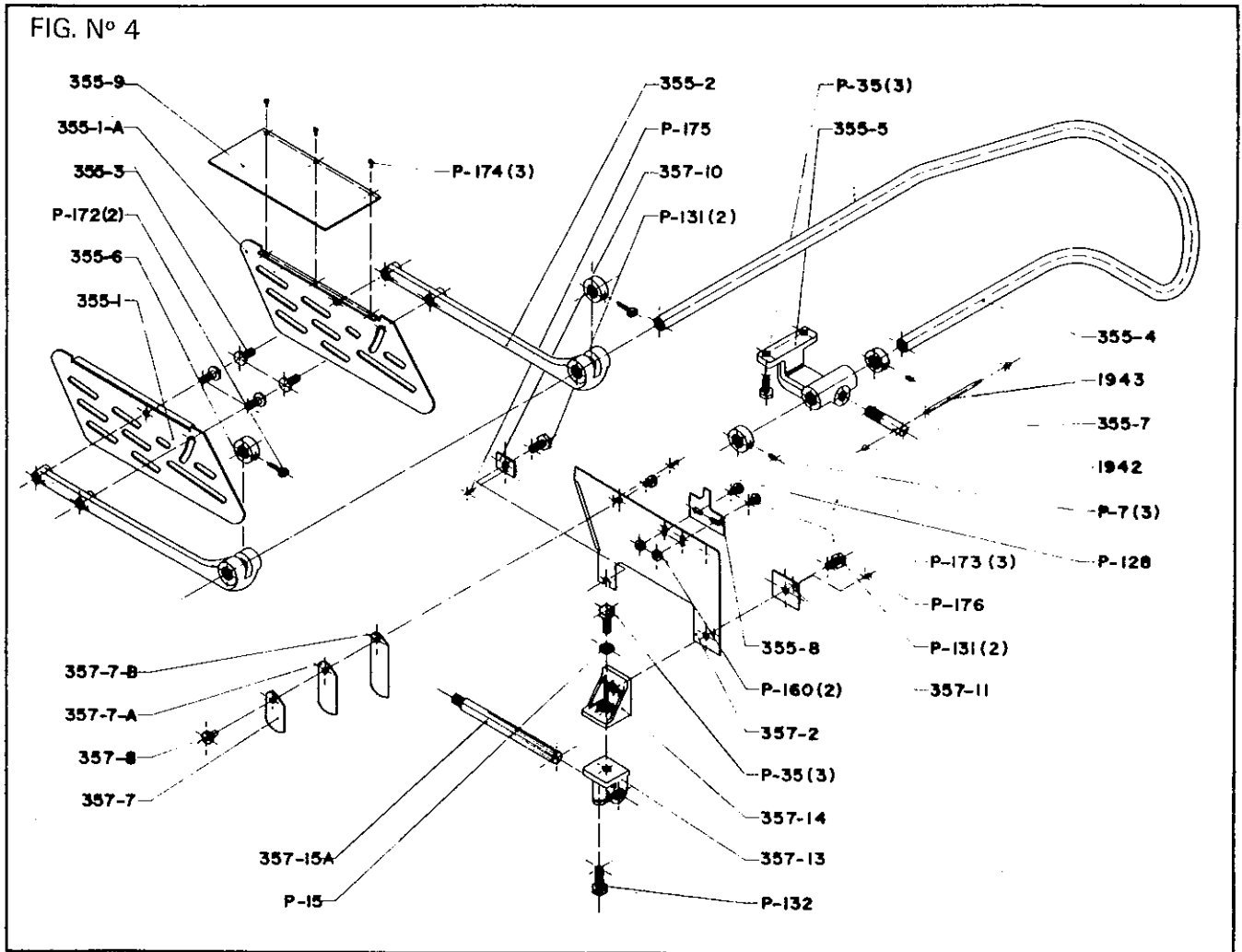
The saw blade is slipped on the arbor with teeth pointing toward front and placed firmly against the flange. The loose flange is then placed against the saw blade. Use the wrench, which is furnished, on the flat behind the arbor flange to prevent the saw arbor from turning while the nut is being drawn up tight. To change saws, reverse the procedure. Be sure that the flange, saw and nut are cleaned of dust when put back in place. Never strike on the nut to loosen or tighten it, this will damage the saw arbor.

Overarm safety guard No. 350-9

This is available in lieu of the splitter mounted guard which gives you complete protection when dadoing or using amoulding cutter head.

overarm safety guard is attached to the left hand extension wing using part number 355-5 and hex.

The overarm safety guard No. 350-9 offers complete safety when moulding and dadoing. The



NOTE : BE SURE TO USE NEW NUMBERS WHEN ORDERING

| New No. | Part No. | Description | Quant. | New No. | Part No. | Description | Quant. |
|---------|----------|--------------------|--------|---------|----------|--------------------------------|--------|
| | 355-1 | Right guard | 1 | | 357-13 | Rear bracket | 1 |
| | 355-1A | Left guard | 1 | | 357-14 | Adjustable bracket | 1 |
| | 355-2 | Arm | 2 | | 357-15A | Support rod | 1 |
| | 355-3 | Guard pivot | 4 | | 1942 | Ball | 2 |
| | 355-4 | Overarm | 1 | | 1943 | Handle | 1 |
| | 355-5 | Overarm bracket | 1 | | P-7 | Socket Set screw 5/16 x 5/16" | 3 |
| | 355-6 | Stop washer | 4 | | P-15 | Lockwasher 3/8" | 1 |
| | 355-7 | Lock screw | 1 | | P-35 | Hex. H. Screw 3/8 - 1 | 3 |
| | 355-8 | Adjustable support | 1 | P-24 | P-128 | Roll pin 3/16 x 1/2 | 1 |
| | 355-9 | Safety plate | 1 | | P-131 | Hex. H. Screw 3/8 x 3/4 | 2 |
| | 357-2 | Splitter | 1 | | P-132 | Hex. H. Screw 3/8 x 1 - 1/4 | 1 |
| | 357-7 | Short pawl | 1 | | P-160 | Hex. nut 1/4 | 2 |
| | 357-7A | Medium pawl | 1 | | P-172 | Thumb screw 5/16 x 3/4 | 2 |
| | 357-7B | long pawl | 4 | | P-173 | Rd H. Screw 1/4 x 3/8 | 3 |
| | 357-8 | Pawl pivot | 1 | | P-174 | Rd H. Screw 8 - 32 x 3/8" | 3 |
| | 357-10 | Front clamp plate | 1 | | P-175 | Groove Pin (type 2) 1/8 x 1/2 | 1 |
| | 357-11 | Rear clamp plate | 1 | | P-176 | Groove Pin (type 1) 3/16 x 3/8 | 1 |

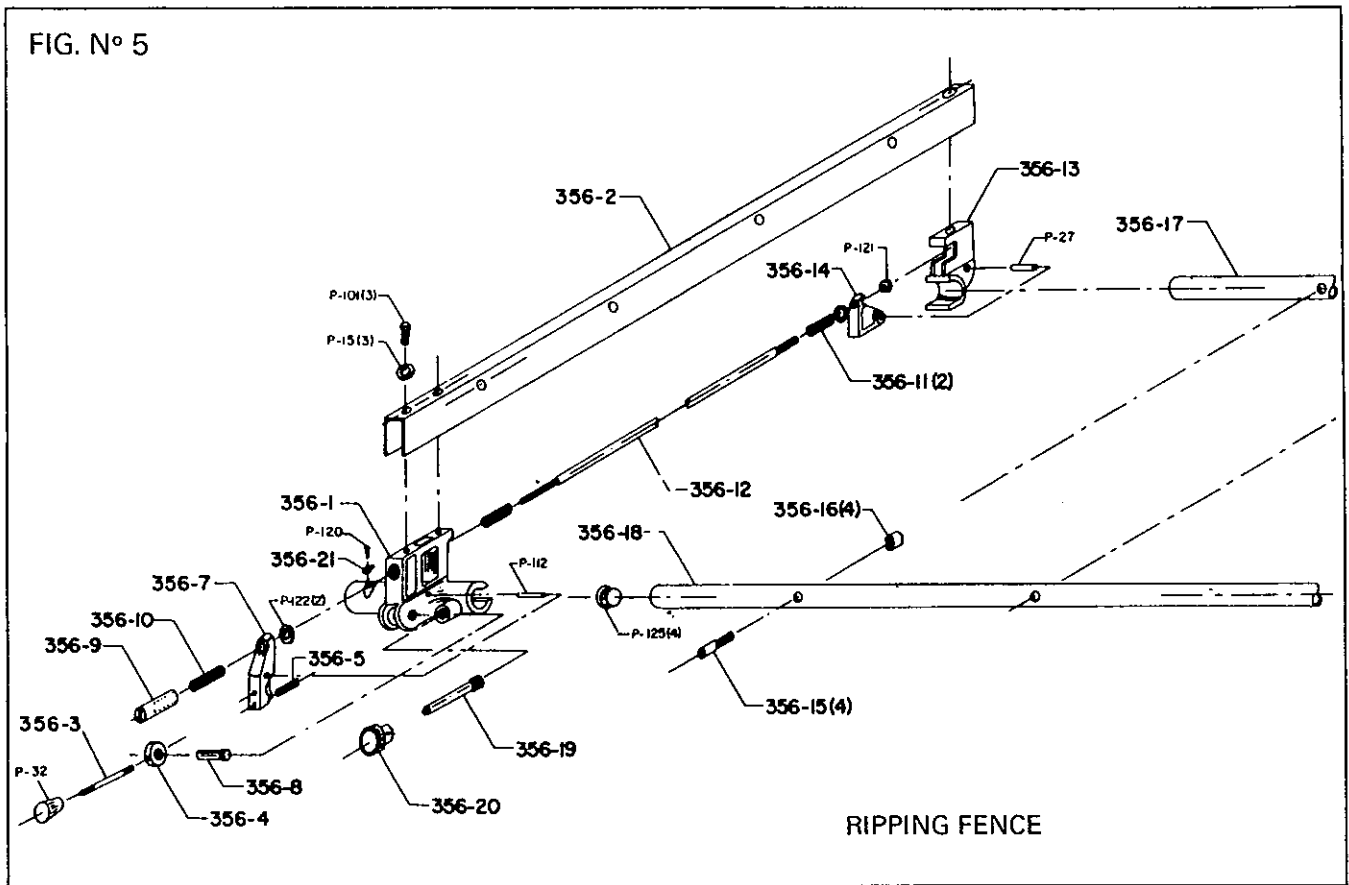
Fence

The fence guide bar with the graduation and rack is placed at the front of the table with the graduation up. Put the screws in the guide bar and into the drilled hole in front of the table with spacers in between, and lock in place with nuts. Place the rear guide bar in the same manner.

The rip fence is assembled on the saw by sliding the front bracket and rear bracket over the guide bars. Be sure that the locks are loose before trying to slide it on. The fence travels the full length of the table when unlocked. The most common position is on the right hand side of the saw blade. The fence should be parallel with the saw blade, and is

aligned by loosening the two front cap screws (P-101) on top. Tighten the front bracket while the rear is loose and adjust the fence parallel to the saw blade by moving the rear end to one side or the other then tighten again. The pointer for indicating the width of cut should be placed at 0 on the guide bar when the fence just touch the side of the saw blade.

Care should be taken when tilting, that the fence be moved away from the saw blade because, if it is too near, the saw blade will strike it damaging both your blade and fence.



NOTE : BE SURE TO USE NEW NUMBERS WHEN ORDERING

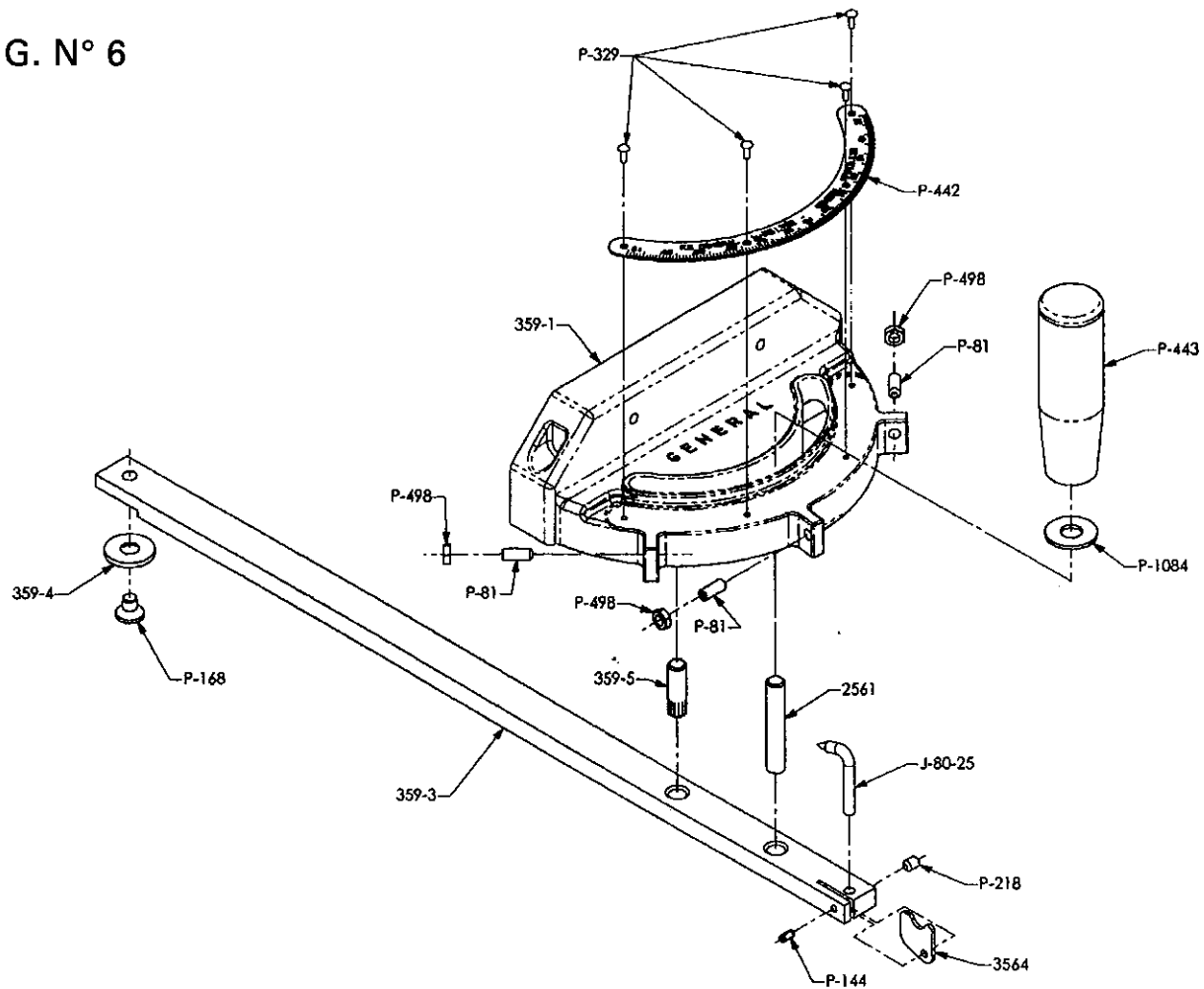
| New No. | Part No. | Description | Quant. | New No. | Part No. | Description | Quant. | |
|---------|----------|--------------------|--------|---------|----------|---------------------------------------|--------------------|---|
| | 356-1 | Front bracket | 1 | | 356-18 | Front bar | 1 | |
| | 356-2 | Fence | 1 | | 356-19 | Pinion | 1 | |
| | 356-3 | Clamping handle | 1 | | 356-20 | Knob | 1 | |
| | 356-4 | Locking came | 1 | | 356-21 | Pointeur | 1 | |
| | 356-5 | Compression spring | 1 | | P-15 | Flat Washer 3/8" | 3 | |
| | 356-7 | Clamping shoe | 1 | P-219 | P-27 | Roll Pin 1/4" x 1-1/4" | 1 | |
| | 356-8 | Pin | 1 | | P-32 | Knob No. 10017, 7/16" - 14 | 1 | |
| | 356-9 | Adjusting screw | 1 | | P-101 | Hex. H. Screw 3/8" x 5/8" | 3 | |
| | 356-10 | Compression spring | 1 | P-220 | P-112 | Roll Pin 5/16" x 1" | 1 | |
| | 356-11 | Compression spring | 1 | | P-120 | R.H. Screw - Type F No. 8 - 32 x 1/4" | 1 | |
| | 356-12 | Draw bar | 1 | | P-160 | P-121 | Hex. nut ESNA 1/4" | 1 |
| | 356-13 | Rear bracket | 1 | | P-122 | Flat washer 1/4" | 2 | |
| | 356-14 | Rear clamp | 1 | | P-125 | Tubing plug | 4 | |
| | 356-15 | Screw | 4 | | | | | |
| | 356-16 | Spacer | 4 | | | | | |
| | 356-17 | Rear bar | 1 | | | | | |

Miter gauge 350-5

The miter gauge supplied with this type of saw is a very usefoul tool and will enable you to cross cut at 90° or at any angle desired between 90° to 30° right to left. It is operated by loosening the hand knob and flipping the stop back, after setting to the angle desired, the knob is tightened.

N.B. Care should be taken not to use the miter gauge in the right groove when the saw is tilted as it comes very close to the blade.

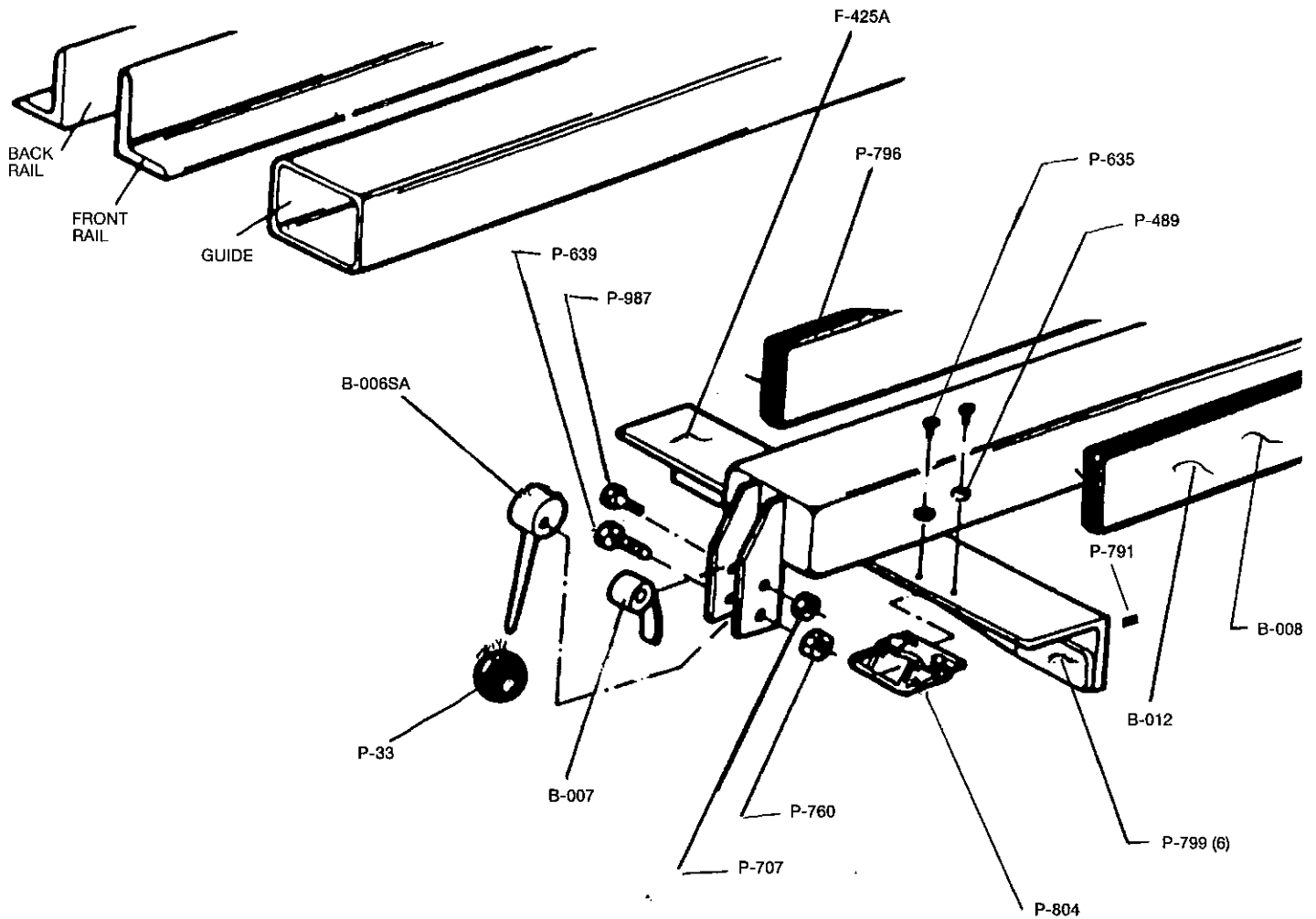
FIG. N° 6



Miter gauge parts

| Old No. | Part No. | Description | Quant. | Old No. | Part No. | Description | Quant. |
|---------|----------|--------------------------------|--------|---------|----------|---|--------|
| | 2561 | Lock stud | 1 | P-146 | P-168 | Flate head screw 1/4" x 3/8" | 1 |
| | 3564 | Stop | 1 | P-142 | P-218 | Socket H. screw (cut point) 10-32 x 1/4" | 1 |
| | 359-1 | Miter gauge bracket | 1 | | P-329 | Drive screw No. 4 x 1/4" | 4 |
| | 359-3 | Miter gauge bar | 1 | 359-8 | P-442 | Angle scale | 1 |
| | 359-4 | Guide washer | 1 | 359-6 | P-443 | Handle | 1 |
| | 359-5 | Pivot | 1 | P-143 | P-498 | Jam nut 10-32 | 3 |
| | J-80-25 | Pointer | 1 | | P-81 | Slot H. set screw 10-32 x 5/8" | 3 |
| | P-1084 | Flash washer 5/16" bolt pl. | 1 | | | | |
| | P-144 | Groove pin 1/8" x 1/4", type 2 | 1 | | | | |

GENERAL T FENCE



Guide parts

| Model | Front rail | Back rail | Guide |
|-------|------------|-----------|---------|
| T-50 | 12-501 | 12-502 | 12-503 |
| T-74 | 12-741 | 12-742 | 12-743 |
| T-98 | 12-981 | 12-982 | 12-983 |
| T-122 | 12-1221 | 12-1222 | 12-1223 |

P-21 Measuring tape 3/4" (left to right)

Fence guide parts

| Part No. | Description | Quant. | No. Pièce | Description | Quant. |
|----------|---|--------|-----------|--|--------|
| F-42SA | Fence | 1 | P-639 | Hex. head cap screw 1/4-20 x 1 3/4 Pl. | 1 |
| B-006SA | Cam and handle ass'y | 1 | P-707 | Nut 3/8-16 (nylon insert) Pl. | 1 |
| B-007 | Cam foot | 1 | P-760 | Nut 1/4-20 (nylon insert) 7/16 A.F. | 1 |
| B-008 | Side panel for 42" guide | 2 | P-791 | Socket set screw 3/8-16 x 5/16 | 2 |
| B-012 | Arborite guide cover for F-42 | 2 | P-796 | Black "T" mold 1/8 x 1/2 | 96 |
| P-33 | Handle 35C hole 3/8"-24 | 1 | P-799 | Nylon pad | 6 |
| P-489 | Flat washer 3/16 SAE Pl. | 2 | P-804 | Hairline pointer (Commercial) | 1 |
| P-635 | Round head slot machine screw 10-32 x 3/8 Pl. | 2 | P-987 | Hex. head cap screw 3/8-16 x 1 3/4 Pl. | 1 |