

OPERATING INSTRUCTIONS

AND

PARTS LIST

Model 65 Tilting Arbor Saw

For Serial Numbers From 100 Up

POWERMATIC MACHINE COMPANY

McMinnville, Tennessee

PRICE \$1.00

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SAFETY RULES FOR SAW OPERATION

ADJUSTMENTS ON THE MACHINE.

1. When setting up the machine for any sawing job, see that the saw revolves freely, that it is securely fastened to the arbor, and that the screws or clamps on the fences are tightened. The saw table should also be free from tools and material except the stock to be cut.
2. Use the splitter guard, saw guard and a push stick or any other safety devices for all operations where they can be used.
3. Keep the saws sharp and properly set. It is very dangerous to work with dull and insufficiently set tools.
4. Always stop the machine before changing any adjustments.
5. Keep the floor around the machine in good condition, clean and free from scraps, sawdust, oil or grease, so that there will be no danger of slipping.
6. Do not look around or carry on a conversation when operating the machine, but give it your undivided and uninterrupted attention.
7. Stock to be sawed must always be held against one of the fences. Never try to saw "frechand", that is, without holding the stock against a fence. It must have a straight, true edge, and lie flat on the table. Stock "in wind" or with rough, uneven edges should not be worked on the circular saw.
8. The saw blade must not project more than $\frac{1}{8}$ inch above any stock being sawed.
9. Stand to one side of the saw, and do not allow any other person to stand in line with the saw.
10. Do not reach over the saw. Have a helper or "tail man" to take away the stock.
11. Use the clearance block when crosscutting short pieces. Never use the ripping fence as a stop when crosscutting. It may cause a "kickback."
12. Roll up your sleeves or wear a shop coat with tight fitting and rather short sleeves. Tuck in your necktie and do not wear gloves. Loose-fitting, torn, or ragged clothing is dangerous, because it may be caught by the saw and the operator's hand or arm pulled against the saw blade and seriously injured.

GENERAL SET-UP AND ALIGNMENT

1. RECEIVING

Uncrate and check for shipping damage. Clean all coated and greased surfaces. Read instructions thoroughly. Locate all lubrication points; adjustments; methods of drive.

2. MOUNTING

Mount machine securely to solid foundation. Locate in clean, dry and well ventilated building if possible. Motor and electrical connections should be protected when not in operation or if exposed to weather elements.

3. INSPECTION

The above machine requires the minimum amount of attention in service. Periodic or regular inspections are recommended to insure machine is in proper adjustment, positive electrical connections; and bearings heating or loose.

4. BEFORE OPERATING

Check motor nameplate data or wiring diagram of motor and switch for proper voltage connection before wiring into line. Run motor without load to check the connections and direction of rotation. Always refer to motor nameplate for rotation connections.

OPERATING ADJUSTMENTS

- OR & DRIVE:** Saw is powered by a C flange motor, bolted to the motor mount base with four cap screws (No. 1, fig. 1). The motor mount base is mounted on to saw arm flange and pivots on the saw arm shaft. Saw arbor is driven with three "A" section V belts. Belts are adjusted by loosening the two cap screws (No. 2, fig. 1) on either side of motor mount and turning the motor (No. 3, fig. 1) to the right to loosen or to the left to tighten. If belts are operated without proper tension, excessive heating and wear will result, shortening belt life.
- V ARBOR:** Saw is equipped with a $\frac{5}{8}$ " arbor, operating in sealed ball bearings, requiring no lubrication. To remove saw arbor, remove nut (No. 4, Fig. 2) and V belt sheave (No. 5, fig. 2). Remove set screw (No. 6, fig. 2). Bump end of arbor with a wooden block and it will slide out.
- ISING
CHANISM:** Saw arm is raised with a worm gear, operated by the handwheel mounted on front of saw. Saw blade may be locked at any desired height by tightening knurled handwheel in center of front handwheel.
- TING
CHANISM:** Saw blade is tilted by means of a worm gear, operated by handwheel on right side of saw base. Blade may be locked at any desired angle by tightening knurled handwheel in center of tilting handwheel. The tilting mechanism has stops at 45 and 90 degree positions, and may be adjusted to "0" setting with adjusting screws (No. 7 and 8, fig. 2).
- BLE
IGNMENT:** If saw blade fails to align with miter slots, loosen the four cap screws that hold table on saw frame and shift table until miter slots are parallel with saw blade. Tighten cap screws.
- PLACING
AW BLADES:** Remove insert plate and raise saw blade to highest position. Remove arbor nut and outer saw collar. If arbor nut is exceptionally tight, hold saw by wedging a short board into teeth of blade. This will keep arbor from turning. When replacing saw blade, arbor and flange should be free from dust or shavings. Make SURE saw teeth point toward front of saw.
- LIGNING
PLITTER BAR:** If splitter bar does not line up with saw blade, realignment is simple through adjusting screws (No. 9, fig. 2).
- IP FENCE
DJUSTMENT:** The rip fence is supported by two round bars mounted on the front and rear of saw table. Fence may be locked in any position on tables with handles (No. 1 and 2, fig. 3). Handle No. 1, in the extreme down position, locks front of fence, properly aligning rear of fence, which may then be locked with handle 2. When handle No. 1 is raised to the center position, fence is free for sliding to any position on table. In the extreme up position, vernier adjustments may be accomplished by turning handle No. 1 to left or right.
- To check fence alignment, move fence to the edge of the miter gauge slot. If fence does not line up with miter slot after it has been locked in place with handle No. 1, insert allen wrenches in the side of the fence as shown in (No. 3, Fig. 3). By loosening the screw in one side and tightening screw in other side, fence can be aligned with miter gauge slot.
- Front fence lock can be adjusted with screw (No. 4, fig. 3).
- Rear fence lock can be adjusted with screw (No. 5, fig. 3) located directly under the rear table bar.

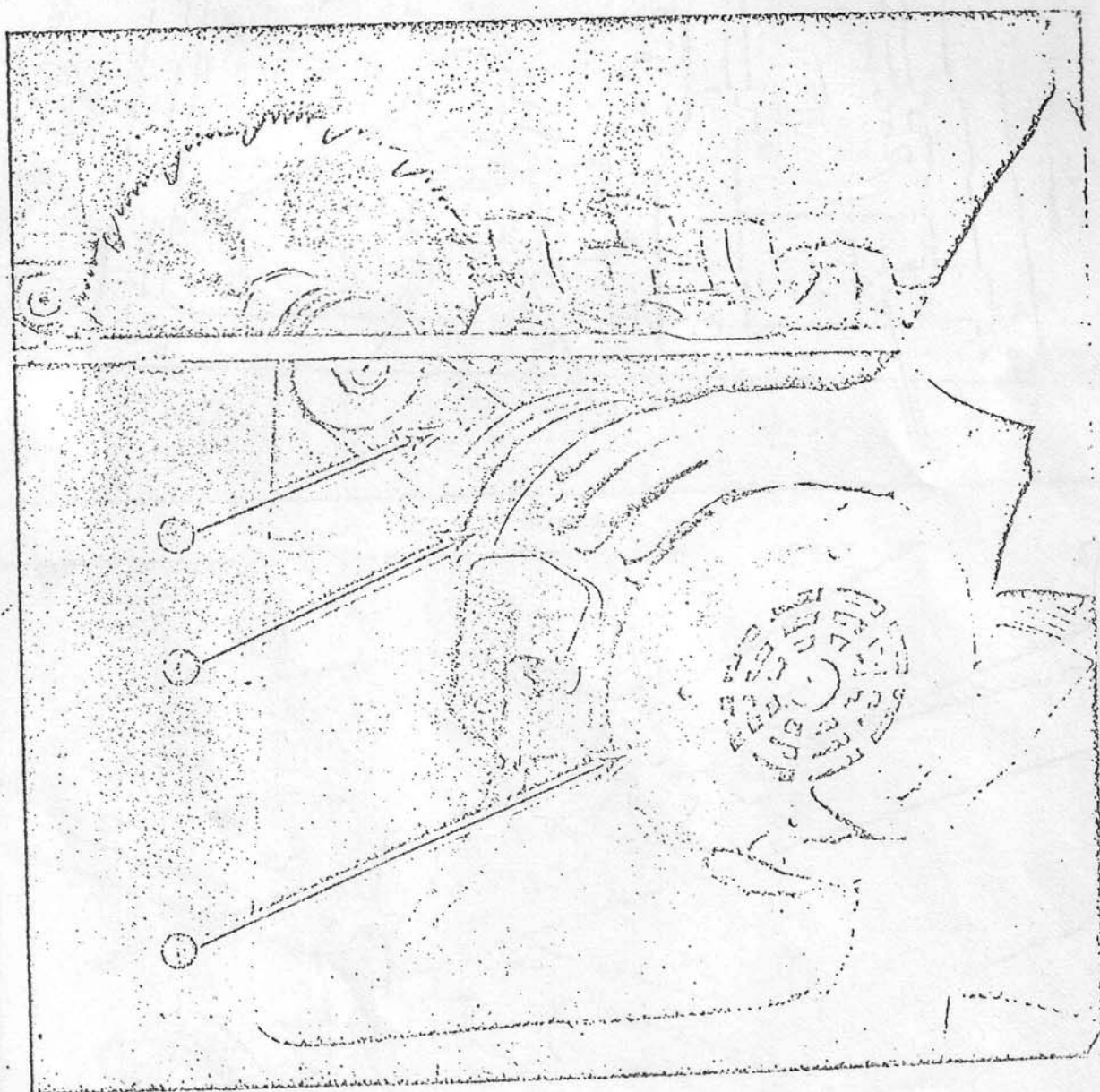


FIGURE 1

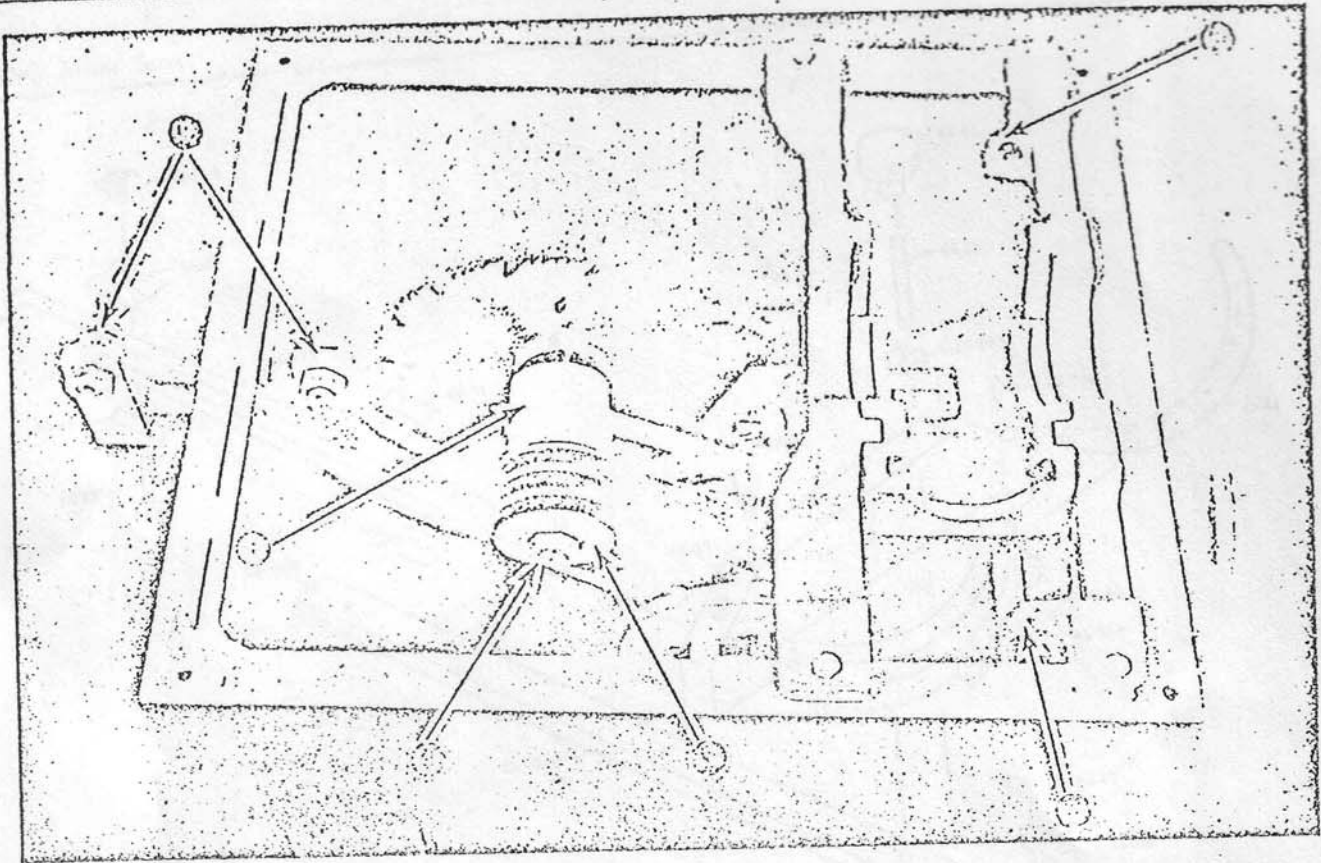


FIGURE 2

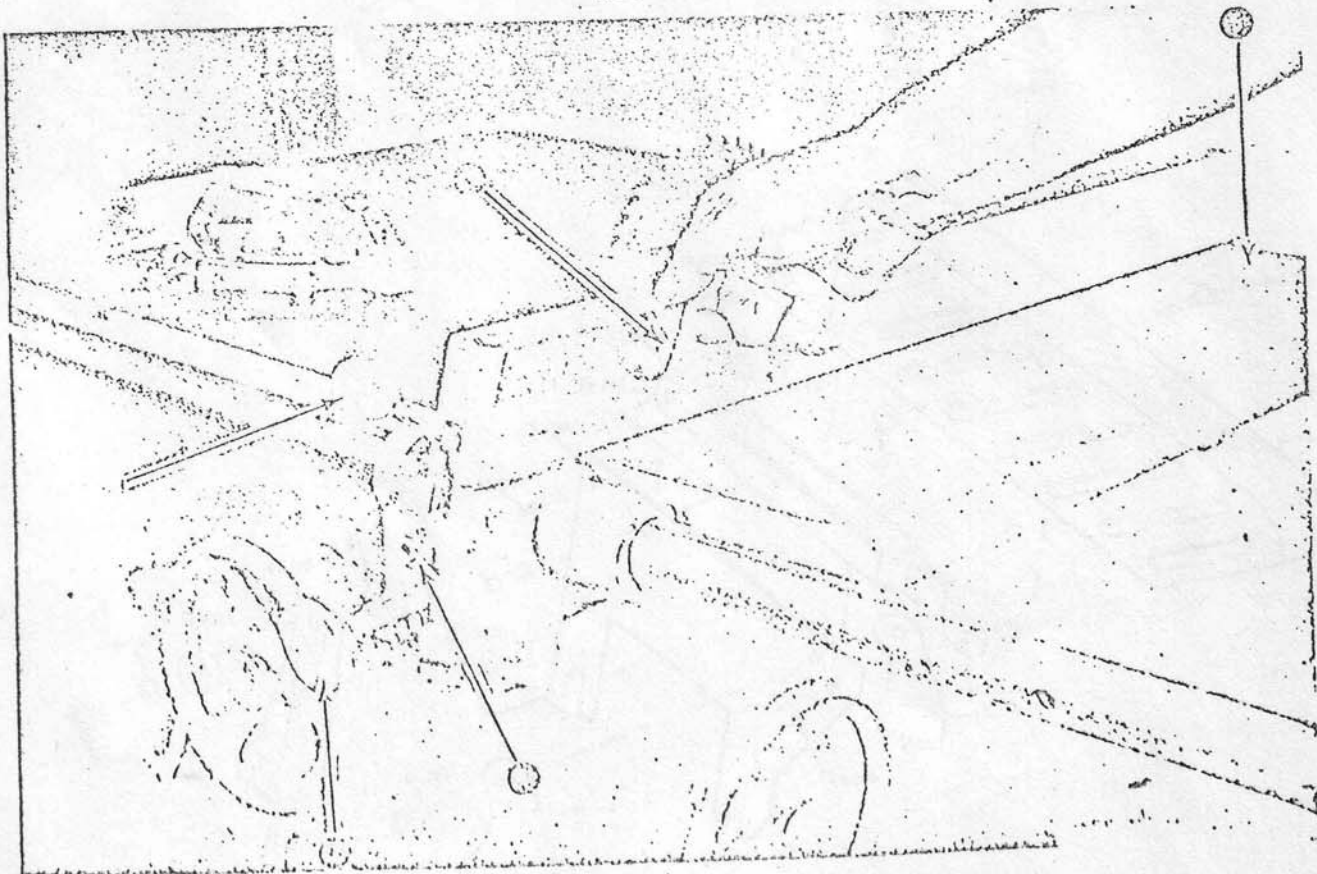
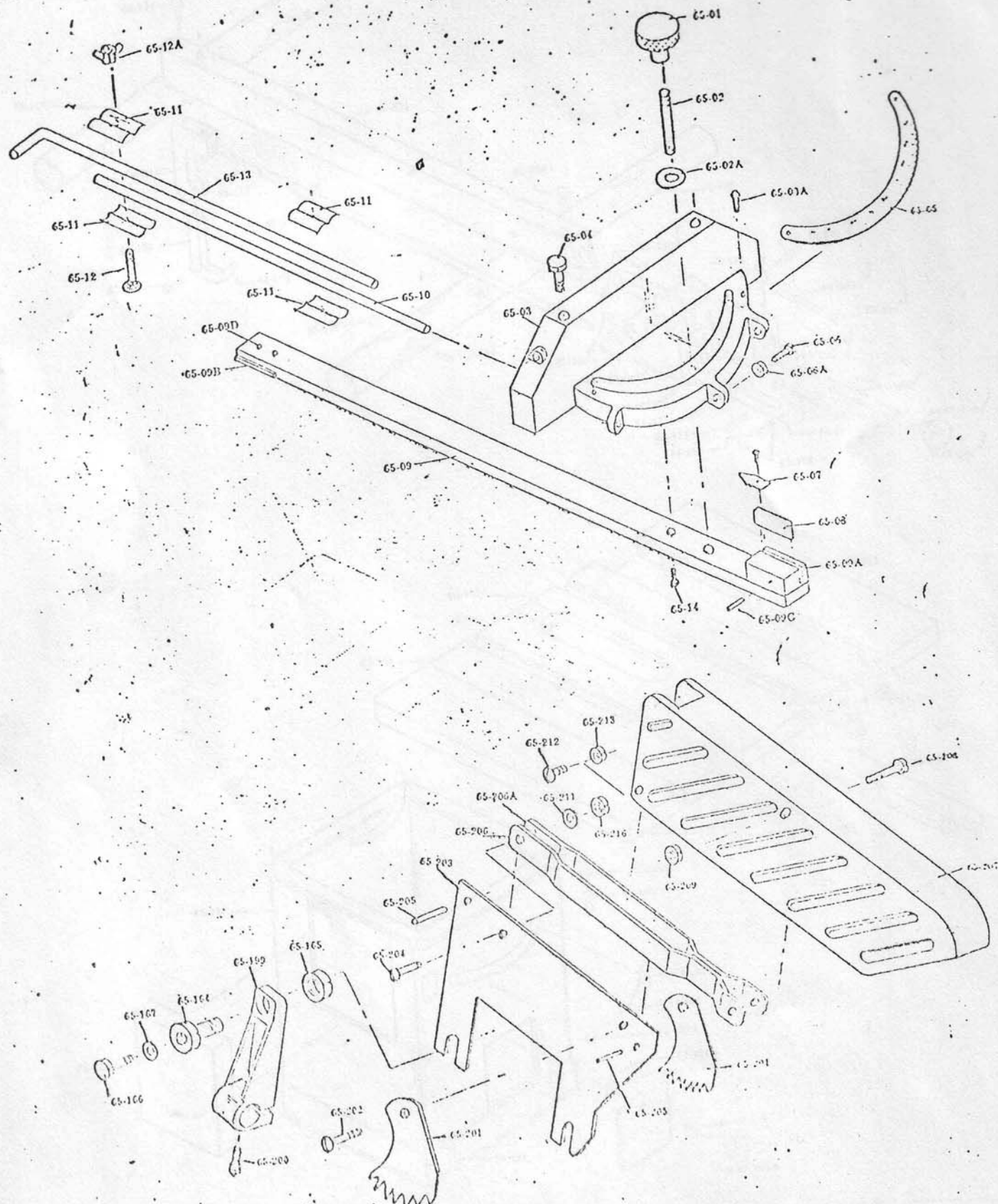
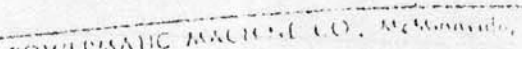
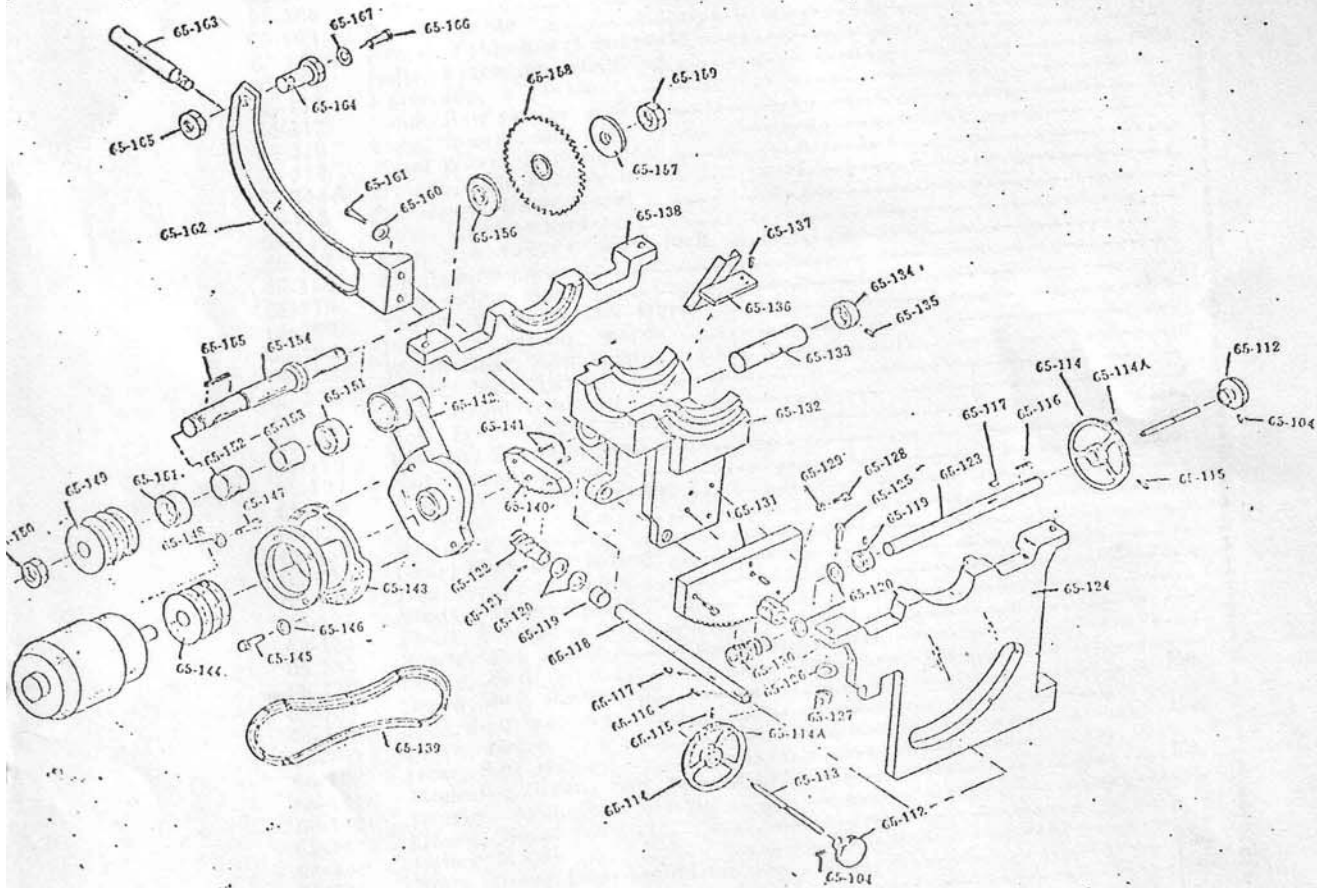


FIGURE 3







PARTS LIST

		Number Required
	Coupling, Machine cover	1
65-100	Cover, motor	1
65-100A	Base, Machine	1
65-101	Door, Dust removal	1
65-102	Knob, Door latch	1
65-103	Latch Door	1
65-104	Set screw, Latch knob	1
65-104A	Pin, Latch knob	Ea. 4
65-105	Bolt, Table mounting	Ea. 4
65-106	Washer, Table mounting bolt	1
65-106A	Gauge, Tilting	Ea. 2
65-107	Screw, Tilting gauge	1
65-107A	Table	1
65-108	Insert, Table	Ea. 7
65-109	Screw, Table insert supports	Ea. 3
65-109A	Bolts, Extension mounting	1
65-110	Extension, 8" table	1
65-111	Knob, Saw raising lock	1
65-112	Pins, Saw raising lock	1
65-113	Hand Wheel, Saw raising	1
65-114	Handle, Saw raising wheel	1
65-114A	Set screw, Hand wheel	1
65-115	Key, Hand wheel	1
65-116	Key, Saw raising shaft lock	1
65-117	Shaft, Saw raising	1
65-118	Lock collar, Shaft	Ea. 2
65-119	Thrust Washer, Saw worm	1
65-120	Pin, Saw raising worm	1
65-121	Worm Gear, Saw raising	1
65-122	Shaft, Saw tilting	Ea. 4
65-123	Rail, Front trunnion	Ea. 4
65-124	Bolt, Trunnion rail mounting	Ea. 4
65-125	Washer, Trunnion bolt	Ea. 4
65-126	Nut, Trunnion Bolt	1
65-127	Stop screw, Saw tilting	1
65-128	Nut, lock	1
65-129	Worm, Saw tilting	1
65-130	Gear, Rack saw tilting	1
65-131	Box, center trunnion	1
65-132	Shaft, Saw arm pivot	1
65-133	Shaft, Set collar	1
65-134	Screw, Set collar	Ea. 2
65-135	Chute, dust	1
65-136	Screw, dust chute	Ea. 3
65-137	Rail, Rear trunnion	1
65-138	Belts, Drive	Ea. 2
65-139	Gear, Saw raising	1
65-140	Mounting Screw, Saw raising gear	1
65-141	Bearing Arm, Saw raising	1
65-142	Mount, Motor base	Ea. 2
65-143	Pulley, Motor	Ea. 2
65-144	Bolts, Motor base mounting	Ea. 4
65-145	Washers, Motor base mounting	Ea. 4
65-146	Bolts, Motor Mounts	1
65-147	Washers, Motor mounts	1
65-148	Pulley, Arbor	Ea. 2
65-149	Nut, Arbor pulley	1
65-150	Bearing, Saw arbor (W204-PP)	1
65-151	Spacer, outer bearing	1
65-152	Spacer, inner bearing	1
65-153	Shaft, Saw arbor	1
65-154	Key, Arbor shaft	1
65-155	Collar, Arbor shaft inner	1
65-156	Collar, Arbor shaft outer	1
65-157	Blade, Saw	Ea. 2
65-158	Nut, Arbor shaft	1
65-159	Washer, Splitter casting mounting bolt	1
65-160	Bolt, Splitter casting mounting	1
65-161	Casting, Splitter	1
65-162	Shaft, Splitter support	1
65-163	Bolt, Splitter mounting	1
65-164	Nut, Mounting bolt	1
65-165	Bolt, Splitter	1
65-166	Washer, Splitter mounting bolt	1
65-167		