BODY AND HAND POSITION (FIG. V)

Proper positioning of your body and hands when operating the miter saw will make cutting easier and safer. Never place hands near the cutting area. Place hands at least 8-3/4 in. away from the path of the blade. Hold workpiece firmly against the fence to prevent movement toward the blade. Keep hands in position until the trigger has been released and the blade has completely stopped. Before making a cut, with the power switch in the OFF position bring the saw blade down to the workpiece to see the cutting path of the blade.

- Keep children away. Keep all visitors a safe distance from the miter saw. Make sure bystanders are clear of the miter saw and workpiece.
- Do not force the tool. It will do the job better and safer at its designed rate. Feed the saw into the workpiece slowly with a firm downward motion.

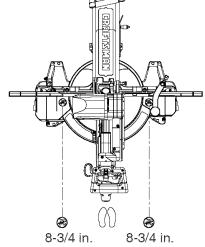
Before freeing jammed material.

- Turn switch OFF.
- Unplug the miter saw.
- Wait for all moving parts to stop.

After finishing a cut.

Fig. V

- Keep holding the power head down.
- Release the switch, and wait for all moving parts to stop before moving your hands.
- If the blade doesn't stop within 6 seconds, unplug the saw and follow the instructions in THE TROUBLESHOOTING GUIDE section for adjusting the blade brake before using the saw again.



TURNING THE SAW ON (FIG. W)

Depress the trigger switch (1) to turn on the miter saw. started.

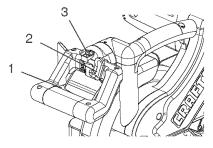
THREE POSITION ROTATING HANDLE (FIG. W)

The handle of the miter saw has been designed to rotate and lock at three different positive stops; 45° left, 0°, and 45° right for operator convenience. To rotate the handle:

1. Unlock the handle locking lever (2) by pulling it toward the front of the machine.

- 2. Pull the handle-locking latch (3) to the front of the saw and hold in position.
- Rotate the handle to the desired positive stop and release the handle locking latch.
 NOTE: After releasing the handle locking latch, rotate the handle left and right to make sure the latch engages into the positive locking position.
- 4. Lock the handle locking lever (2) by pushing it IN toward the rear of the handle.

Fig.W



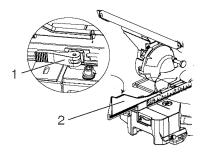
SLIDING FENCE (FIG. X)

WARNING

Failure to extend the sliding fence will not allow enough space for the blade to pass through which could result in serious injury. At extreme miter or bevel angles the saw blade may also contact the fence.

- 1. Unlock the fence cam locking lever (1) by pushing it toward the rear of the machine.
- 2. Extend the fence (2) by sliding it out to match the degree of the bevel cut. Lock the fence cam locking lever by pushing it IN toward the fence. NOTE: When transporting the saw, always secure the sliding fence in the collapsed position (toward the saw blade).

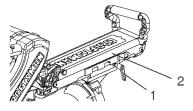
Fig. X



SLIDING CARRIAGE SYSTEM (FIG. Z)

- 1. For a chop cutting operations on small workpieces, slide the cutting head assembly completely toward the rear of the unit and tighten the carriage lock handle (1).
- 2. To cut wide boards up to 12 in., the carriage lock handle should be loosened to allow the cutting head to slide freely.





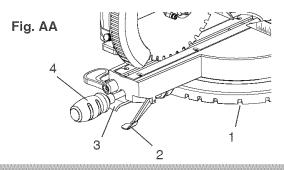
WARNING

To avoid injury from materials being thrown, always unplug the saw to avoid accidental starting, and remove small pieces of material from the table cavity. The table insert may be removed for this purpose, but always reattach the table insert prior to performing a cutting operation.

MITER CUT (FIG. AA)

The sliding compound miter saw is equipped with ten positive miter stops (1) on the saw base. The locations are at 0, 15, 22.5, 31.6 and 45 degrees left and right, and 60° right. These locations represent the most common angles for cutting operation. To make a miter cut:

- 1. Unlock the miter table by lifting up on the miter quickcam table lock (2).
- 2. While raising the positive stop locking lever up (3), grasp the miter handle (4) and rotate the miter table left or right to the desired angle.
- 3. Release the positive stop locking lever and set the miter at the desired angle making sure the lever snaps into place. **NOTE:** The lever will only lock into place at one of the ten positive stops.
- 4. Once the desired miter angle is achieved, press down on the quick cam miter table lock to secure the table into position.
- 5. If the miter angle desired is NOT one of the ten positive stops noted above, simply lock the table at the desired angle by pressing down on the quick-cam miter table lock (2).



BEVEL CUT (FIG. BB)

WARNING

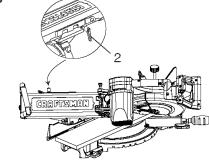
The sliding fences must be fully extended to the left or right when making bevel cuts. Failure to extend the sliding fence may not allow enough space for the blade to pass through which could result in serious injury. At extreme miter or bevel angles the saw blade may also contact the fence.

A WARNING

The sliding fences must be fully extended to the left or right when making any bevel cut.

Tilt the cutting head to the desired angle as shown on the bevel scale. The blade can be positioned at any angle, from a 90° straight cut (0° on the scale) to a 45° left and right bevel. Tighten the lock handle (2) by pushing down to lock the cutting head in position. Bevel positive stops are provided at 0°, 33.9° and 45°.





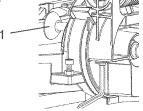
NOTE: The saw comes with a 33.9° bevel detent pin for setting up crown molding cuts.

33.9° BEVEL DETENT PIN FOR CROWN MOULDING (FIG. CC)

NOTE: A bevel detent pin is incorporated into this machine for quick bevel adjustments when the desired bevel angle is 33.9°.

 Loosen the bevel lock handle and tilt cutting arm to the 33.9° left bevel positive stop by pulling out on the bevel detent pin to move the arm from the 0° on the bevel angle, then by pushing in on the bevel detent pin toward the rear of the machine and allowing the upper arm assembly to stop at the 33.9°.

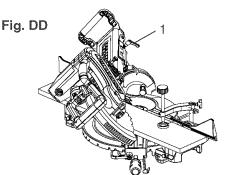
FIG. CC



NOTE: View from rear of machine

COMPOUND CUT (FIG. DD)

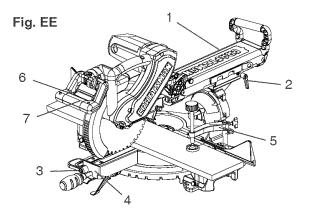
- 1. Fully extend the sliding fence by sliding it out.
- 2. Set the desired bevel angle using the bevel lock handle (1).
- 3. Set the desired miter angle and lock into position. See "Miter CUT".



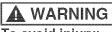
CHOP CUTTING NARROW BOARDS-90° CROSSCUT (FIG. EE)

- 1. For a chop cutting operations on small workpieces, slide the cutting head assembly completely toward the rear of the unit and tighten the carriage lock handle (2).
- 2. Position the cutting head to the 0° bevel position and lock the bevel lock handle.
- 3. Position the table to the 0° miter angle and lock the quick cam miter table lock.
- 4. Position the workpiece on the table and against the fence. Use a hold down clamp (5) attached to the base, whenever possible.
- 5. Pull the trigger (6), turning on the saw. Lower the blade by pushing the handle (7) down into the workpiece with slow and even pressure.

6. When the cut is complete, release the switch and allow the blade to stop before raising the cutting head assembly.



SLIDE CUTTING WIDE BOARDS UP TO 12 in. WIDE (FIG. EE)

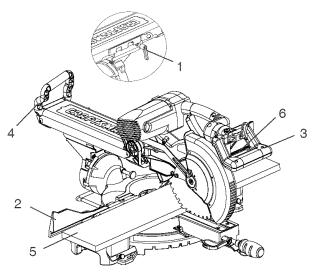


To avoid injury:

- Never pull the cutting head assembly and spinning blade toward you during the cut. The blade may try to climb up on the top of the workpiece, causing the cutting assembly and spinning blade to kick back, forcefully. The cutting head assembly should be drawn back completely then pushed forward when sawing.
- Let the blade reach full speed before cutting. This will help reduce the risk of a thrown workpiece.
- Extend the fence by sliding it out.

TO SLIDE CUT WIDE BOARDS (FIG. FF)

- 1. Unlock the carriage lock handle (1) and allow the cutting head assembly to move freely.
- 2. Set both the desired bevel angle and/or the miter angle and lock into position.
- 3. If bevel cutting, set both the left and right sliding fences (2) to their proper location.
- 4. Use a hold down clamp to secure the workpiece.
- 5. Grasp the saw handle (3) and pull the carriage (4) forward until the center of the saw blade is over the front of the workpiece (5).
- 6. Pull the trigger (6) to turn the saw on.
- 7. When the saw reaches full speed, push the saw handle down, slowly, cutting through the leading edge of the workpiece.
- 8. Slowly move the saw handle toward the fence, completing the cut.
- 9. Release the trigger and allow the blade to stop spinning before allowing the cutting head to raise.

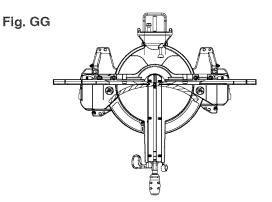


CUTTING BOWED MATERIAL (FIG. GG)

WARNING

To avoid injury from materials being thrown, always unplug the saw to avoid accidental starting and remove small pieces of material from the table cavity. The table insert may be removed for this purpose, but always reattach table insert prior to performing a cutting operation.

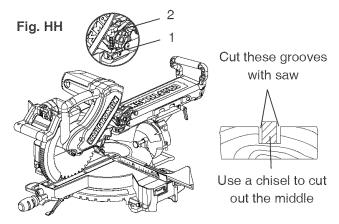
Before cutting a workpiece, check to make sure it is not bowed. If it is bowed, the workpiece must be positioned and cut as illustrated. Do not position the workpiece incorrectly or try to cut the workpiece without the support of the fence. This will cause the blade to bind and could result in personal injury.



ROUGH CUTTING A DADO (FIG. HH)

- 1. Mark lines identifying the width and depth of the desired cut on the workpiece and position on the table so the inside tip of the blade is positioned on the line. Use a hold down clamp to secure the workpiece.
- 2. Lower the cutting head so the tip of the blade touches the top surface workpiece at the marked line.

- While holding the upper arm in position, turn the stop knob (2) until it touches the stop plate (1).
- 4. Cut two parallel grooves as shown below.

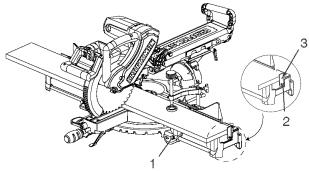


WORKPIECE SUPPORT & REPETITIVE CUTTING USING THE STOP PLATE (FIG. II)

Long pieces need extension table support.

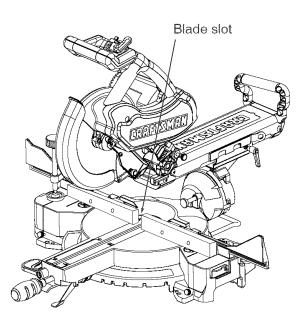
- 1. Loosen the knob (1) then slide the extension table to desired position and tighten the knob.
- The stop plate is designed for use during repetitive cutting. Only use one stop plate at a time. Loosen the locking bolt (2), rotate the stop plate (3) to vertical position, and retighten the locking bolt.

Fig. II



AUXILARY WOOD FENCE (FIG. JJ)

Holes are provided in the saw fence to attach an auxiliary wood fence (this provides additional depth of cut). This fence should be constructed of straight auxiliary wood approximately 3/4 inch thick by 1-1/2 inches high by 22-3/4 inches long. Attach the wood fence securely and make a full depth cut to make a blade slot. Check for interference between the wood fence and the lower blade guard. Adjust if necessary. When making multiple or repetitive cuts that result in cut-off pieces of one inch or less, it is possible for the saw blade to catch the cut-off piece and throw it out of the saw or into the blade guard and housing, possibly causing damage or injury. To minimize this an auxiliary wood fence can be mounted to your saw.

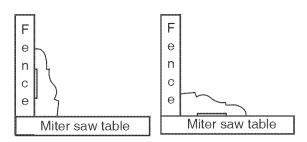


CUTTING BASE MOLDING (FIG. KK)

Base moldings and many other moldings can be cut on a compound miter saw. The setup of the saw depends on molding characteristics and application, as shown. Perform practice cuts on scrap material to achieve best results:

- Always make sure moldings rest firmly against fence and table. Use hold-down, crown molding vise or C-clamps, whenever possible, and place tape on the area being clamped to avoid marks.
- 2. Reduce splintering by taping the cut area prior to making the cut. Mark the cut line directly on the tape.
- 3. Splintering typically happens due to an incorrect blade application and thinness of the material.

Fig. KK



NOTE: Always perform a dry run cut so you can determine if the operation being attempted is possible before power is applied to the saw.

CUTTING CROWN MOLDING (FIG. KK, LL)

A WARNING

Fully extend the sliding fences when making any bevel angle cuts.

This fence must also be removed whenever a 45° bevel angle is desired with a miter angle greater than 22.5°.

Your compound miter saw is suited for the difficult task of cutting crown molding. To fit properly, crown molding must be compound-miterd with extreme accuracy. The two surfaces on a piece of crown molding that fit flat against the ceiling and wall are at angles that, when added together, equal exactly 90°.

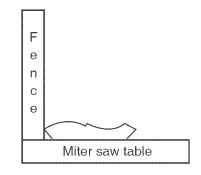
Most crown molding has a top rear angle (the section that fits flat against the ceiling) of 52° and a bottom rear angle (the section that fits flat against the wall) of 38°.

In order to accurately cut crown molding for a 90° inside or outside corner, lay the molding with its broad back surface flat on the saw table.

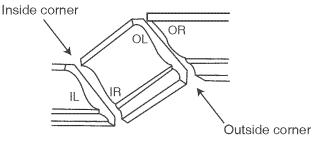
When setting the bevel and miter angles for compound miters, remember that the settings are interdependent; changing one changes the other, as well. Also keep in mind that the angles from crown molding are very easy for these angles to shift slightly, all settings should be tested on scrap molding.

Use safety clamp whenever possible and place tape on the area being clamped to avoid marks. There is crown molding chart for your reference on page 25.





NOTE: The chart below references a compound cut for crown molding ONLY WHEN THE ANGLE BETWEEN THE WALLS EQUALS EXACTLY 90°. Settings for standard crown molding lying flat on compound miter saw table



Compound cut crown moldings

Bevel/Miter Settings

NOTE: The chart below references a compound cut for crown molding ONLY WHEN THE ANGLE BETWEEN THE WALLS EQUALS EXACTLY 90°.

| KEY | BEVEL | SETTING | TYPE OF CUT |
|-----|---------|----------------|--|
| | SETTING | | |
| | | | Inside corner-Left side |
| | 33.9° | 31.6° Right | Position top of molding against fence. Miter table set at RIGHT 31.6°. LEFT side is finished piece. |
| | | 2 | Inside corner-Right side |
| IR | 33.9° | 31.6° Left | Position bottom of molding against fence. Miter table set at LEFT 31.6°. LEFT side is finished piece. |
| | | | Outside corner-Left side |
| OL | 33.9° | 31.6° Left | Position bottom of molding against fence. Miter table set at LEFT 31.6°. RIGHT side is finished piece. |
| | | | Outside corner-Right side |
| OR | 33.9° | 31.6° Left | Position top of molding against fence. Mitertable set at RIGHT 31.6°. RIGHT side is finished piece. |

CHANGING THE LASER BATTERIES

CHANGING THE BATTERIES (FIG. NN)

Unplug your saw.

WARNING

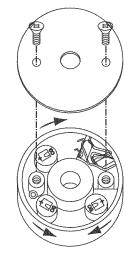
Failure to unplug your saw could result in accidental starting causing possible serious personal injury.

- 1. Remove the laser guide from the saw.
- 2. Loosen and remove the two screws, then remove the laser guide cover.
- 3. Remove the three batteries with a toothpick and replace new batteries.
- 4. Replace the laser guide cover and two screws and tighten.

Note: Replace the batteries with batteries that have a rating of 1.5 volts (Number LR44).

When replacing the batteries, the battery cover should be thoroughly cleaned. Use a soft paintbrush or similar device, to remove all sawdust and debris.

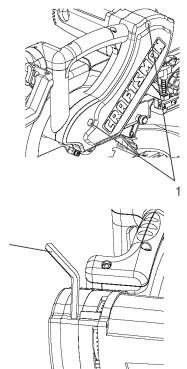
Fig. NN



CHANGING THE BELT (FIG. OO)

- Unplug your saw.
- 1. Loosen the bolts (1) and remove the belt cover.
- 2. Turn the screw (2) anti-clockwise with an Allen wrench to move the motor to forward.
- 3. Remove and replace the belt.
- 4. Turn the screw (2) clockwise with an Allen wrench to move the motor to rearward. Do not over tighten.
- 5. Replace the belt cover and tighten the bolts.

Fig. OO



CROWN MOLDING CHART

Compound Miter Saw Miter and Bevel Angle Settings Wall to Crown Molding Angle

| | 52/38° Cro | wn Molding | 45/45° Cro | wn Molding |
|------------------------|---------------|---------------|---------------|---------------|
| Angle Between Walls | Miter Setting | Bevel Setting | Miter Setting | Bevel Setting |
| 67 | 42.93 | 41.08 | 46.89 | 36.13 |
| 68 | 42.39 | 40.79 | 46.35 | 35.89 |
| 69 | 41.85 | 40.50 | 45.81 | 35.64 |
| 70 | 41.32 | 40.20 | 45.28 | 35.40 |
| 71 | 40.79 | 39.90 | 44.75 | 35.15 |
| 72 | 40.28 | 39.61 | 44.22 | 34.89 |
| 73 | 39.76 | 39.30 | 43.70 | 34.64 |
| 74 | 39.25 | 39.00 | 43.18 | 35.38 |
| 75 | 38.74 | 38.69 | 42.66 | 34.12 |
| 76 | 38.24 | 38,39 | 42.15 | 33.86 |
| 77 | 37.74 | 38.08 | 41.64 | 33.60 |
| 78 | 37.24 | 37.76 | 41.13 | 33.33 |
| 79 | 36.75 | 37.45 | 40.62 | 33.07 |
| 80 | 36.27 | 37.13 | 40.12 | 32.80 |
| 81 | 35.79 | 36.81 | 39.62 | 32.53 |
| 82 | 35.31 | 36.49 | 39.13 | 32.25 |
| 83 | 34.83 | 36.17 | 38.63 | 31.98 |
| 84 | 34.36 | 35.85 | 38.14 | 31.70 |
| 85 | 33.90 | 35.52 | 37.66 | 31.42 |
| 86 | 33.43 | 35.19 | 37.17 | 31.34 |
| 87 | 32.97 | 34.86 | 36.69 | 30.86 |
| 88 | 32.52 | 34.53 | 36.21 | 30.57 |
| 89 | 32.07 | 34.20 | 35.74 | 30.29 |
| 90 | 31.62 | 33.86 | 35.26 | 30.00 |
| 91 | 31.17 | 33.53 | 34.79 | 29.71 |
| 92 | 30.73 | 33.19 | 34.33 | 29.42 |
| 93 | 30.30 | 32.86 | 33.86 | 29.13 |
| 94 | 29.86 | 32.51 | 33.40 | 28.83 |
| 95 | 29.43 | 32.17 | 32.94 | 28.54 |
| 96 | 29.00 | 31.82 | 32.48 | 28.24 |
| 97 | 28.58 | 31.48 | 32.02 | 27.94 |
| 98 | 28.16 | 31.13 | 31.58 | 27.64 |
| 99 | 27.74 | 30.78 | 31.13 | 27.34 |
| 100 | 27.32 | 30.43 | 30.68 | 27.03 |
| 101 | 26.91 | 30.08 | 30.24 | 26.73 |
| 102 | 26.50 | 29.73 | 29.80 | 26.42 |
| 103 | 26.09 | 29.38 | 29.36 | 26.12 |
| 104 | 25.69 | 29.02 | 28.92 | 25.81 |
| 105 | 25.29 | 28.67 | 28.48 | 25.50 |
| 106 | 24.89 | 28.31 | 28.05 | 25.19 |
| 107 | 24.49 | 27.96 | 27.62 | 24.87 |
| 108 | 24.10 | 27.59 | 27.19 | 24.56 |
| 109 | 23.71 | 27.23 | 26.77 | 24.24 |
| 110 | 23.32 | 26.87 | 26.34 | 23.93 |
| 111 | 22.93 | 26.51 | 25.92 | 23.61 |
| 112 | 22.55 | 26.15 | 25.50 | 23.29 |
| 113 | 22.17 | 25.78 | 25.08 | 22.97 |
| 114 | 21.79 | 25.42 | 24.66 | 22.66 |
| 115 | 21.42 | 25.05 | 24.25 | 22.33 |
| 116 | 21.04 | 24.68 | 23,84 | 22.01 |
| 117 | 20.67 | 24.31 | 23.43 | 21.68 |
| 118 | 20.30 | 23.94 | 23.02 | 21.36 |
| 119 | 19.93 | 23.57 | 22.61 | 21.03 |
| 120 | 19.57 | 23.20 | 22.21 | 20.70 |
| 121 | 19.20 | 22.83 | 21.80 | 20.38 |
| 122 | 18.84 | 22.46 | 21.40 | 20.05 |
| 123 | 18.48 | 22.09 | 21.00 | 19.72 |

| | 52/38° Cro | wn Molding | 45/45° Cro | wn Molding |
|------------------------|---------------|---------------|---------------|---------------|
| Angle Between Walls | Miter Setting | Bevel Setting | Miter Setting | Bevel Setting |
| 124 | 18.13 | 21.71 | 20.61 | 19.39 |
| 125 | 17.77 | 21.34 | 20.21 | 19.06 |
| 126 | 17.42 | 20.96 | 19.81 | 18.72 |
| 127 | 17.06 | 20.59 | 19.42 | 18.39 |
| 128 | 16.71 | 20.21 | 19.03 | 18.06 |
| 129 | 16.37 | 19.83 | 18.64 | 17.72 |
| 130 | 16.02 | 19.45 | 18.25 | 17.39 |
| 131 | 15.67 | 19.07 | 17.86 | 17.05 |
| 132 | 15.33 | 18.69 | 17.48 | 16.71 |
| 133 | 14.99 | 18.31 | 17.09 | 16.38 |
| 134 | 14.66 | 17.93 | 16.71 | 16.04 |
| 135 | 14.30 | 17.55 | f | 15.70 |
| | | | 16.32 | 1 |
| 136 | 13.97 | 17.17 | 15.94 | 15.36 |
| 137 | 13.63 | 16.79 | 15.56 | 15.02 |
| 138 | 13.30 | 16.40 | 15.19 | 14.62 |
| 139 | 12.96 | 16.02 | 14.81 | 14.34 |
| 140 | 12.63 | 15.64 | 14.43 | 14.00 |
| 141 | 12.30 | 15.25 | 14.06 | 13.65 |
| 142 | 11.97 | 14.87 | 13.68 | 13.31 |
| 143 | 11.64 | 14.48 | 13.31 | 12.97 |
| 144 | 11.31 | 14.09 | 12.94 | 12.62 |
| 145 | 10.99 | 13.71 | 12.57 | 12.29 |
| 146 | 10.66 | 13.32 | 12.20 | 11.93 |
| 147 | 10.34 | 12.93 | 11.83 | 11.59 |
| 148 | 10.01 | 12.54 | 11.46 | 11.24 |
| 149 | 9.69 | 12.16 | 11.09 | 10.89 |
| 150 | 9.37 | 11.77 | 10.73 | 10.55 |
| 151 | 9.05 | 11.38 | 10.36 | 10.20 |
| 152 | 8.73 | 10.99 | 10.00 | 9.85 |
| 153 | 8.41 | 10.60 | 9.63 | 9.50 |
| 154 | 8.09 | 10.21 | 9.27 | 9.15 |
| 155 | 7.77 | 9.82 | 8.91 | 8.80 |
| 156 | 7.46 | 9.43 | 8.55 | 8.45 |
| 157 | 7.14 | 9.04 | 8.19 | 8.10 |
| 158 | 6.82 | 8.65 | 7.83 | 7.75 |
| 159 | 6.51 | 8.26 | 7.47 | 7.40 |
| 160 | 6.20 | 7.86 | 7.11 | 7.05 |
| 161 | 5.88 | 7.47 | 6.75 | 6.70 |
| 162 | 5.57 | 7.08 | 6.39 | 6.35 |
| 163 | 5.26 | 6.69 | 6.03 | 6.00 |
| 164 | 4.95 | 6.30 | 5.68 | 5.65 |
| 165 | 4.63 | 5.90 | 5.32 | 5.30 |
| 166 | 4.32 | 5.51 | 4.96 | 4.94 |
| 167 | 4.01 | 5.12 | 4.61 | 4.59 |
| 168 | 3.70 | 4.72 | 4.01 | 4.39 |
| 169 | | 4.72 | 4.25 | 3.89 |
| | 3.39 | | <u> </u> | |
| 170 | 3.08 | 3.94 | 3.54 | 3.53 |
| 171 | 2.77 | 3.54 | 3.19 | 3.10 |
| 172 | 2.47 | 3.15 | 2.83 | 2.83 |
| 173 | 2.15 | 2.75 | 2.48 | 2.47 |
| 174 | 1.85 | 2.36 | 2.12 | 2.12 |
| 175 | 1.54 | 1.97 | 1.77 | 1.77 |
| 176 | 1.23 | 1.58 | 1.41 | 1.41 |
| 177 | 0.92 | 1.18 | 1.06 | 1.06 |
| 178 | 0.62 | 0.79 | 0.71 | 0.71 |
| 179 | 0.31 | 0.39 | 0.35 | 0.35 |

MAINTENANCE

MAINTENANCE

DANGER

Never put lubricants on the blade while it is spinning.

WARNING

To avoid fire or toxic reaction, never use gasoline, naphtha acetone, lacquer thinner or similar highly volatile solvents to clean the miter saw.

A WARNING

To avoid injury from unexpected starting or electrical shock, unplug the power cord before working on the saw.

WARNING

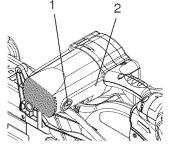
For your safety, this saw is double-insulated. To avoid electrical shock, fire or injury, use only parts identical to those identified in the parts list. Reassemble exactly as the original assembly to avoid electrical shock.

REPLACING CARBON BRUSHES (FIG. PP)

The carbon brushes furnished will last approximately 50 hours of running time, or 10,000 ON/OFF cycles. Replace both carbon brushes when either has less than 1/4 in. length of carbon remaining, or if the spring or wire is damaged or burned. To inspect or replace brushes, first unplug the saw. Then remove the black plastic cap (1) on the side of the motor (2). Remove the cap cautiously, because it is spring-loaded. Then pull out the brush and replace. Replace the other side in the same manner. To reassemble, reverse the procedure. The ears on the metal end of the assembly go in the same hole the carbon part fits into. Tighten the cap snugly, but do not overtighten.

NOTE: To reinstall the same brushes, first make sure the brushes go back in the way they came out. This will avoid a break-in period.

Fig. PP



LOWER BLADE GUARD

Do not use the saw without the lower blade guard. The lower blade guard is attached to the saw for your protection. Should the lower guard become damaged, do not use the saw until the damaged guard has been replaced. Develop a regular check to make sure the lower guard is working properly. Clean the lower guard of any dust or buildup with a damp cloth.

CAUTION: Do not use solvents on the guard. They could make the plastic "cloudy" and brittle.

WARNING

When cleaning the lower guard, unplug the saw from the power source receptacle to avoid unexpected startup.

SAWDUST

Periodically, sawdust will accumulate under the work table and base. This could cause difficulty in the movement of the worktable when setting up a miter cut. Frequently blow out or vacuum up the sawdust.

WARNING

If blowing sawdust, wear proper eye protection to keep debris from entering eyes.

LUBRICATION (FIG. QQ)

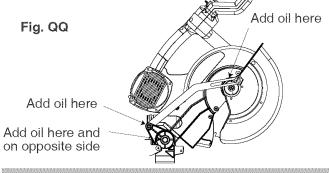
All the motor bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions; therefore, no further lubrication is required.

Lubricate the following as necessary:

Chop pivot: Apply light machine oil to points indicated in illustration.

Central pivot of plastic guard: Use light household oil (sewing machine oil) on metal-to-metal or metal-toplastic guard contact areas as required for smooth, quiet operation. Avoid excessive oil, to which sawdust will cling.

Link: (which actuates the lower guard movement) may be oiled at the rear pivot, greased at ball bearing contact, and oiled where the link actuates the acetyl roller of the lower guard, if the down chop motion is hard to start.



TROUBLESHOOTING GUIDE

WARNING

To avoid injury from accidental starting, always turn switch OFF and unplug the tool before moving, replacing the blade or making adjustments.

Consult your Sears Service Center if for any reason the motor will not run.

TROUBLESHOOTING GUIDE - MOTOR

| PROBLEM | PROBLEM CAUSE | SUGGESTED CORRECTIVE ACTION |
|---------------------------|---|--|
| Brake does not stop blade | 1. Motor brushes not sealed or | 1. Inspect / clean / replace brushes. See |
| within 6 seconds. | lightly sticking. | MAINTENANCE section. |
| | Motor brake overheated from use of defective or wrong size blade or rapid ON/OFF cycling. | 2. Use a recommended blade. Let cool down. |
| | 3. Arbor bolt loose. | 3. Retighten. |
| | 4. Other. | 4. Sears Service Center. |
| Motor does not start | 1. Fuse Blown | 1. Check and use15-Amp time delay fuse, or |
| | 2. Brush worn. | circuit breaker. |
| | 3. Other. | 2. Replace brushes. See MAINTENANCE |
| | | section. |
| | | 3. Sears Service Center. |
| Brush spark when switch | 1. Brush worn. | 1. Replace Brushes. |
| released. | 2. Other. | 2. See Sears Service Center. |

TROUBLESHOOTING GUIDE - SAW OPERATION

| PROBLEM | PROBLEM CAUSE | SUGGESTED CORRECTIVE ACTION |
|----------------------------|---------------------------------------|---------------------------------------|
| Blade hits table. | 1. Misalignment. | 1. See ADJUSTMENT section. |
| Angle of cut not accurate. | 1. Miter table unlocked. | 1. See OPERATION Section. |
| Can't adjust miter. | 2. Sawdust under table. | 2. Vacuum or blow out dust, |
| | | WEAR EYE PROTECTION. |
| Cutting arm wobbles. | 1. Loose pivot points. | 1. See ADJUSTMENT Section. |
| Cutting arm won't fully | 1. Part failure. | 1. Sears Service Center. |
| | 2. Pivot spring not replaced properly | 2. Sears Service Center. |
| fully close. | after service. | 3. Clean and lubricate moving parts. |
| | 3. Sawdust build-up. | |
| Blade binds, jams, burns | 1. Improper operation. | 1. See BASIC SAW OPERATION section. |
| wood. | 2. Dull blade. | 2. Replace or sharpen blade. |
| | 3. Improper blade size. | 3. Replace with 10in. diameter blade. |
| | 4. Warped blade. | 4. Replace blade. |
| Saw vibrates or shakes. | 1. Saw blade not round. | 1. Replace blade. |
| | 2. Saw blade damaged. | 2. Replace blade. |
| | 3. Saw blade loose. | 3. Tighten arbor bolt. |
| | 4. Other. | 4. Sears Service Center. |

PARTS LIST

10 in. SLIDING COMPOUND MITER SAW

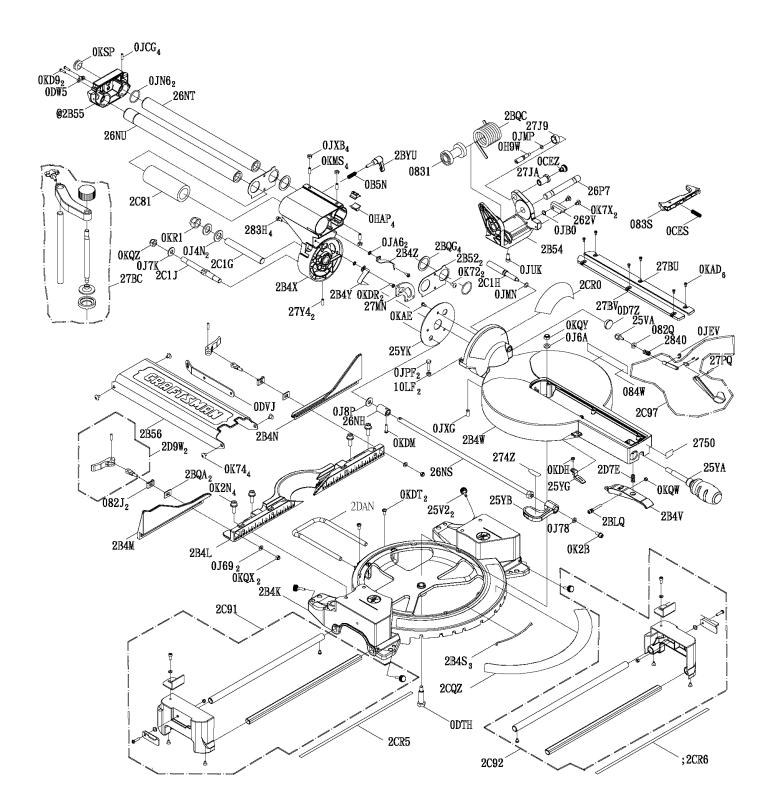
MODEL NO. 137.212070

A WARNING

When servicing use only CRAFTSMAN replacement parts. Use of any other parts many create a HAZARD or cause product damage. Any attempt to repair or replace electrical parts on this Miter Saw may create a HAZARD unless repair is done by a qualified service technician. Repair service is available at your nearest Sears Service Center. **PARTS LIST FOR SCHEMATIC A**

| I.D NO | Description | Size | Qty | I.D. NO | Description | Size | Qty |
|--------|------------------------------------|-----------------------|-----|-----------|--------------------------|-----------|-----|
| 082J | CUSHION | | 2 | 25YB | HANDLE | #AW | 1 |
| 082Q | LOCK NUT | | 1 | 25YG | NEEDLE POINTER | | 1 |
| 0831 | SHAFT SLEEVE | | 1 | 25YK | SET PLATE | | 1 |
| 0835 | TRIGGER | | 1 | 262V | ANCHOR PLATE | | 1 |
| 084W | WARNING LABEL | | 1 | 26NH | SPECIAL NUT | | 1 |
| OB5N | COMPRESSION SPRING | L=25 D=φ8 DW=0.8 N=10 | 1 | 26NS | LOCKING ROD | | 1 |
| oces | COMPRESSION SPRING | | 1 | 26NT | MITER BAR | | 1 |
| OCEZ | PLUNGER HANDLE | | 1 | 26NU | MITER BAR | | 1 |
| 0D7Z | KNOB-HANDLE | | 1 | 26P7 | SHAFT-PIVOT | | 1 |
| ODTH | CENTER SHAFT | | 1 | 2750 | CAUTION LABEL | | 1 |
| 0DVJ | HEX WRENCH | | 1 | 274Z | CAUTION LABEL | | 1 |
| 0DW5 | POWER CORD CLAMP | | 1 | 27BC | SAFETY CLAMP ASS'Y | | 1 |
| 0H9W | CLEVIS PIN | | 1 | 27BU | TABLE INSERT | #23 | 1 |
| OHAP | slide-bar guide clamp | | 4 | 27BV | TABLE INSERT | #23 | 1 |
| 0J4N | FLAT WASHER | φ16*30-3 | 2 | 27J9 | SET NUT | | 1 |
| 0J69 | FLAT WASHER | φ6*13-1 | 2 | 27JA | SCREW STOP | | 1 |
| 0J6A | FLAT WASHER | φ8*16-2.5 | 1 | 27MN | ANCHOR PLATE | | 1 |
| 0J78 | FLAT WASHER | 1/4*1/2-3/32 | 1 | 27PQ | ROLL PIN | φ4-22 | 1 |
| OJ7K | FLAT WASHER | 3/8*29/32-5/64 | 1 | 27Y4 | HEX. SOC. SET SCREW | M6*1.0-16 | 2 |
| 0J8P | FLAT WASHER | 3/8*29/32-5/64 | 1 | 2840 | COMPRESSION SPRING | | 1 |
| 0JA6 | WASHER | φ5 | 2 | 283H | HEX.SOCKET HD.CAP SCREWS | | 4 |
| OJBO | WAVE WASHER | | 1 | 2B4K | BASE | #AW | 1 |
| 0JCG | SPRING PIN | | 4 | 2B4L | FENCE | #AW | 1 |
| OJEV | E-RING | | 1 | 2B4M | ASSIST-FENCE | #AW | 1 |
| OJMN | O-RING | | 1 | 2B4N | ASSIST-FENCE | #AW | 1 |
| OJMP | O-RING | | 1 | 2B4S | SLIDE PLATE | | 3 |
| OJN6 | O-RING | 30*2.5 | 2 | 2B4V | PLUNGER HANDLE | | 1 |
| OJPF | HEX. HD. BOLT | M6*1.0-25 | 2 | 2B4W | TABLE | #AW | 1 |
| OJUK | HEX, SOC, HD, CAP BOLT | M6*1.0-16 | 1 | 2B4X | ARM-MITER | #AW | 1 |
| OJXB | HEX. SOC. SET SCREW | M6*1.0-16 | 4 | 2B4Y | NEEDLE POINTER | #23 | 1 |
| 0JXG | HEX. SOC. SET SCREW | M8*1.25-16 | 1 | 2B4Z | NEEDLE POINTER | #23 | 1 |
| OK2B | HEX SOC, HD, CAP SCREW | M6*1.0-16 | 1 | 2B52 | PLATE COVER | | 2 |
| 0K2N | HEX SOC, HD, CAP SCREW | M8*1.25-25 | 4 | 2B54 | SLIDE-BAR SEAT (FRONT) | #AW | 1 |
| 0K72 | CRRE, TRUSS HD, SCREW | M5X0.8-12 | 2 | 2B55 | SLIDE-BAR SEAT (REAR) | #AW | 1 |
| 0K74 | CRRE, TRUSS HD, SCREW | M6*1.0-8 | 4 | 2B56 | SLIDE-BAR BLADE GUARD | | 1 |
| OK7X | CR. RE. TRUSS HD. ROUND NECK SCREW | M6X1.0-10 | 2 | 2BLQ | Hex.socket hd.cap screws | M5*0.8-40 | 1 |
| OKAD | CR.RE. PAN HD. TAPPING SCREW | M4*0.7-8 | 6 | 2BQA | PLATE | | 2 |
| OKAE | CR.RE. PAN HD. TAPPING SCREW | M5*0.8-10 | 1 | 2BQC | TORSION SPRING | | 1 |
| OKD9 | CR. RE. PAN HD. SCREW | M4*0.7-16 | 2 | 2BQG | BLANKET WASHER | | 4 |
| OKDH | CR. RE. PAN HD. SCREW | M5*0.8-8 | 1 | 2BYU | Locking handle ass'y | | 1 |
| OKDM | CR. RE. PAN HD. SCREW | M5*0.8-20 | 1 | 2C1G | SHAFT-PIVOT | | 1 |
| OKDR | CR. RE. PAN HD. SCREW | M5*0.8-10 | 2 | 2C1H | LOCATING BAR | | 1 |
| OKDT | CR. RE. PAN HD. SCREW | M6*1.0-8 | 2 | 2C1J | SPECIAL BOLT | | 1 |
| okms | HEX. NUT | M6*1.0 T=5 | 4 | 2C81 | LINEAR MOTION BEARING | | 1 |
| OKQW | LOCK NUT | M5*0.8 T=5 | 1 | 2C91 | EXTENTION WING ASS'Y | | 1 |
| OKQX | NUT | M6*1.0 T=6 | 2 | 2C92 | EXTENTION WING ASS'Y | | 1 |
| OKQY | NUT CHUCK | M8*1.25 T=8 | 1 | 2C97 | LOCKING HANDLE ASS'Y | | 1 |
| OKQZ | NUT | M10*1.5 T=10 | 1 | 2CQZ | BRACKET-TILT | | 1 |
| OKR1 | NUT CHUCK | M16*2.0 T=16 | 1 | 2CR0 | BRACKET-TILT | | 1 |
| OKSP | STRAIN RELIEF | φ15.875 | 1 | 2CR5 | BRACKET-TILT | | 1 |
| 10LF | HEX. NUT | M6*1.0 T=4 | 2 | 2CR6 | BRACKET-TILT | | 1 |
| 25V2 | KNOB | | 2 | 2D7E | COMPRESSION SPRING | | 1 |
| | | | | 2D9W | LOCKING HANDLE ASS'Y | | 2 |
| 25VA | SCREW STOP | | 1 | 1 2127 88 | | | |

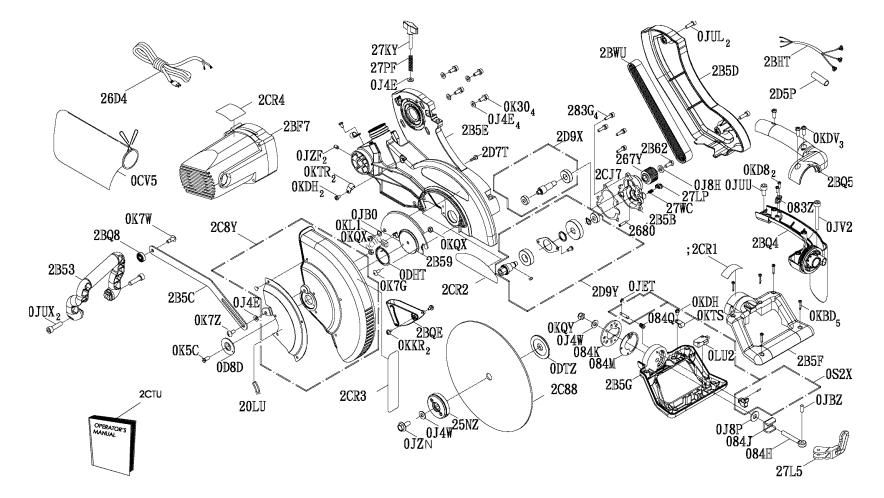
10 in. SLIDING COMPOUND MITER SAW SCHEMATIC A



10 in. SLIDING COMPOUND MITER SAW PARTS LIST FOR SCHEMATIC B

| I.D NO | Description | Size | Qty | I.D. NO | Description | Size | Qty |
|--------|---|----------------|-----|---------|--------------------------|-------------------------|-----|
| 083Z | CORD CLAMP | | 1 | OS2X | lock handle ass'y | | 1 |
| 084H | BOLT | |] | 20LU | CAUTION LABEL | | 1 |
| 084J | CUSHION | | 1 | 25NZ | ARBOR COLLAR LASER ASS'Y | | 1 |
| 084K | SET PLATE | | 1 | 267Y | PULLEY | | 1 |
| 084M | STOP CLAMP | | 1 | 2680 | LOCATOR PIN | | 1 |
| 084Q | COMPRESSION SPRING | | 1 | 26D4 | POWER CABLE | | 1 |
| 0CV5 | DUST BAG ASS'Y | | 1 | 27KY | CLAMP BOLT | | 1 |
| 0D8D | COLLAR | | 1 | 2715 | CLAMP HANDLE | #23 | 1 |
| 0CHG | BUMPER | | 1 | 27LP | LOCK KNOB | #23 | 1 |
| ODHT | SPRING GUARD | | 1 | 27PF | COMPRESSION SPRING | L=40 D=φ8.1 DW=0.8 N=10 | 1 |
| ODTZ | ARBOR COLLAR | | 1 | 27WC | COMPRESSION SPRING | L=11 D=φ4.6 DW=0.7 N=5 | 1 |
| OJ4E | FLAT WASHER | φ6*13-1 | 6 | 283G | HEX.SOCKET HD.CAP SCREWS | M5*0.8-20 | 4 |
| 0J4W | FLAT WASHER | φ8.2*18-1.5 | 2 | 2853 | SEGMENT HADELE | | 1 |
| 0J8H | FLAT WASHER | 1/4*5/8-3/32 | 1 | 2859 | CUTTER SHAFT GUARD | #AW | 1 |
| 0J8P | FLAT WASHER | 3/8*29/32-5/64 | 1 | 285B | GEAR BOX COVER | #AW | 1 |
| OJBO | WAVE WASHER | | 1 | 285C | LEVER | | 1 |
| OJBZ | PARALLEL PIN | φ6.0-16 | 1 | 285D | PULLEY COVER | | 1 |
| OJET | E-RING | | 1 | 285E | ARM | #AW | 1 |
| OJUL | HEX, SOC. HD, CAP BOLT | M6*1.0-20 | 2 | 285F | MOTOR HANDLE | | 1 |
| OJUU | HEX, SOC. HD, CAP BOLT | M8*1.25-16 | 1 | 285G | MOTOR HANDLE | #06;#23 | 1 |
| XULO | HEX, SOC. HD, CAP BOLT | M8*1.25-30 | 2 | 2862 | HEX. HD. BOLT | M6*1.0-16 | 1 |
| 0JV2 | HEX, SOC. HD, CAP BOLT | M8*1.25-60 | 1 | 28F7 | MOTOR ASS'Y | | 1 |
| OJZF | HEX, SOC. SET SCREW | M6*1.0-10 | 2 | 2BHT | LEAD WIRE ASS'Y | | 1 |
| ojzn | HEX WASHER HD BOLT | M8*1.0-20 | 1 | 28Q4 | SEGMENT HADELE | #AW | 1 |
| 0K30 | HEXAGON SOCKET TRUSS HEAD & WASHER ASSEMBLIED | M6*1.0-16 | 4 | 2BQ5 | SEGMENT HADELE | | 1 |
| 0K5C | CR. RE. COUNT HD. SCREW | M6*1.0-16 | 1 | 28Q8 | COLLAR | | 1 |
| 0K7G | CR. RE. ROUND WASHER HD. SCREW | M5*0.8-12 | 1 | 2BQE | PLATE | | 1 |
| 0K7W | CR. RE. TRUSS HD. ROUND NECK SCREW | M6*1.0-18 | 1 | 28WU | V-RIBBED BEIT | | 1 |
| OK7Z | CR. RE. TRUSS HD. ROUND NECK SCREW | M6*1.0-14 | 1 | 2C88 | BLADE | | 1 |
| OKBD | CR.RE, PAN HD, TAPPING SCREW | M4*18-25 | 5 | 2C8Y | PC-GUARD ASS'Y | | 1 |
| 0KD8 | CR. RE. PAN HD. SCREW | M4*0.7-12 | 2 | 2CJ7 | OIL PAPER | | 1 |
| OKDH | CR. RE. PAN HD. SCREW | M5*0.8-8 | 3 | 2CTU | INSTRUCTIONS MANUAL | | 1 |
| 0KDV | CR. RE. PAN HD. SCREW | M6*1.0-16 | 3 | 2CR1 | TILTING SCALE | | 1 |
| OKKR | CR.RE, PAN HD, ROUND NECK SCREW | M4*0.7-7.5 | 2 | 2CR2 | TRADE-MARK LABEL | | 1 |
| OKL1 | CR.RE, PAN HD, ROUND NECK SCREW | M6*1.0-12 | 1 | 2CR3 | WARNING LABEL | | 1 |
| OKQX | NUT | M6*1.0 T=6 | 2 | 2CR4 | LABEL | | 1 |
| OKQY | LOCK NUT | M8*1.25 T=8 | 1 | 2D5P | INSULATING SLEEVE | φ20-120 | 1 |
| OKTR | CABLE CLAMP | | 2 | 2D7T | CRRE. TRUSS HD. SCREW | M3*0.5-12 | 1 |
| okts | CABLE CLAMP | | 1 | 2D9X | GEAR SHAFT SAA'Y | | 1 |
| OLU2 | LIMIT SWITCH | | 1 | 2D9Y | CUTTER SHAFT ASS'Y | | 1 |

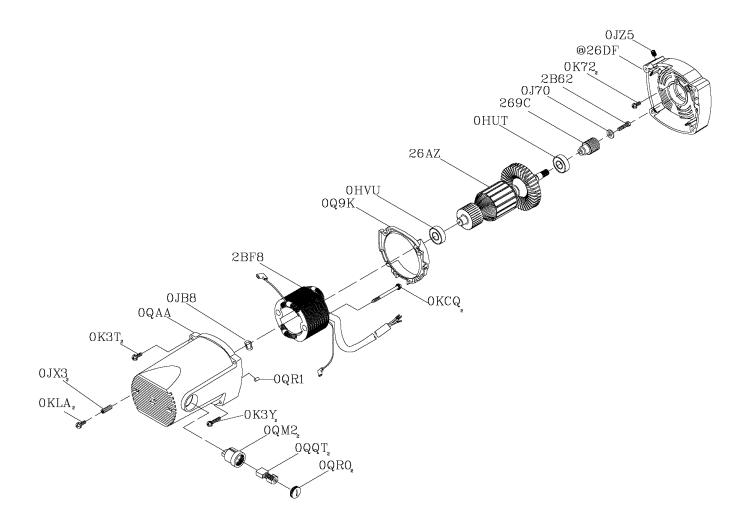
10 in. SLIDING COMPOUND MITER SAW SCHEMATIC B



10 in. SLIDING COMPOUND MITER SAW PARTS LIST FOR MOTOR

| I.D. NO | Description | Size | Qty |
|---------|------------------------------------|--------------|--|
| OHUT | BALL BEARING | 6202LLB | Para |
| OHVU | BALL BEARING | 6200ZZ | press |
| 0J70 | FLAT WASHER | 1/4*3/4-7/64 | prove |
| OJB8 | WAVE WASHER | | a de la dela dela dela dela dela dela de |
| 0JX3 | HEX. SOC. SET SCREW | M5*0.8-8 | 2 |
| OJZ5 | HEX. SOC. SET SCREW | M6*1.0-12 | presso |
| 0K3T | CR.RE. PAN HD. SCREW & WASHER | M5*0.8-25 | 2 |
| 0K3Y | CRRE. PAN HD. SCREW & WASHER | M5*0.8-50 | 2 |
| 0K72 | CRRE. TRUSS HD. SCREW | M5*0.8-12 | 2 |
| 0KCQ | CRRE.PAN HD.TAPPING SCREW & WASHER | M5*0.2-65 | 2 |
| OKLA | PLASTIC SCREW | M5*0.8-6 | 2 |
| 0Q9K | FLOW GUIDE | | la se |
| OQAA | MOTOR HOUSING ASS'Y | | press |
| 0QM2 | BRUSH HOLDER ASS'Y | Ф27*26.5 | 2 |
| 0QQT | BRUSH ASS'Y | | 2 |
| 0QR0 | BRUSH COVER | | 2 |
| 0QR1 | RUBBER PIN | | prov |
| 269C | MOTOR PULLEY | | 2 |
| 26AZ | ARMATURE ASS'Y | | press |
| 26DF | FRONT HOUSING | | P |
| 2B62 | HEX. HD. BOLT | M6*1.0-16 | Part of the second seco |
| 2BF8 | FIELD ASS'Y | | para a |

10 in. SLIDING COMPOUND MITER SAW SCHEMATIC FOR MOTOR



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