



K102-MCL Wreath Machine with Mechanical Clutch

Instructions for Assembly and Use

GENERAL INFORMATION

The purpose of this manual is to assist the operator in assembling, operating, and maintaining the **Kelco K102-MCL Wreath Machine** with Mechanical Clutch. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance.

The information in this manual was current at time of printing. Due to possible engineering changes your machine may vary slightly in detail. Kelco Industries reserves the right to design and change the machine as may be necessary without notification.

NOTE: If you have ordered the **Kelco Mechanical Clutch Conversion Kit**, then you will receive only CARTON 1 and CARTON 2 from the list below. Also, follow only those steps in the Assembly Instructions that are marked by two asterisks (**).

PACKING LIST (5 Cartons)

CARTON 1 K102-MCRMC	1 Mechanical Clutch Motor (includes 3 each Motor Mounts, Carriage Bolts, Flat Washers, Lock Washers, and Nuts)		
CARTON 2 K102-MCA	1 Motor Plate 1 Drive Belt 1 Foot Pedal Strut with 2 Bolts and Nuts	1 Hinge Pin 2 Foot Pedals with Clutch Chain 1 Instructions	
CARTON 3 K102-FC	1 Frame Assembly Complete (includes Switch Box) 1 Left Frame Hanger 1 Red Hand Guard & Hand Guard Bracket 1 Roping Attachment Bolt Kit: 9 - 1/4" x 3/4" Hex Head Cap Screws 4 - 1/4" Lock Washers 3 - 1/4" x 3/8" Round Head Machine Screws	1 Main Wheel Complete 1 Right Frame Hanger 1 Black Wheel Guard 9 - 1/4" Flat Washers 4 - 1/4" Hex Nuts	
	NOTE: The following were used to attach the Frame Assembly to the shipping case; these will be used to attach the frame to the table: 4- 5/16" x 1" Hex Head Cap Screws 8- 5/16" Flat washers 4- 5/16" Hex Nuts		
CARTON 4 K102-TC	1 Table Top 1 Table Tray 1 Tray Bracket	Bolt Kit: 14 - 1/4" x 3/4" Hex Caps 14 - 1/4" Lock Washers 14 - 1/4" Flat Washers 14 - 1/4" Hex Nuts	
CARTON 5 K102-TL	4 Table Legs		

ASSEMBLY INSTRUCTIONS (USE THE DIAGRAM ON PAGE 4 AS A GUIDE)

NOTE: If you have ordered the **Kelco Mechanical Clutch Conversion Kit**, then follow only those steps in the **Assembly Instructions** that are marked by two asterisks (**). The **Kelco Mechanical Clutch Conversion Kit** allows you to convert your older **Kelco Wreath Machine** from the electronic clutch (old style) to the Mechanical Clutch Motor.

MOTOR ASSEMBLY

- ** 1. Install the three motor mounts on the Motor Base Plate, which is attached to the motor.
- ** 2. Place the Motor Plate on top of the Motor Mount. The label on the plate will indicate the top. Line up the three holes in the plate with the three holes in the base plate.
- ** 3. Insert the three carriage bolts down through the mounts and through the holes in the Motor Plate. Place one flat washer over each bolt and then add lock washers and nuts.
- ** 4. Tighten all three mounting bolts.

MACHINE ASSEMBLY

- ** 1. Place the Table Top (A) on two boxes, 2 to 3 feet high, with the center area clear, and the rear of the table away from you. NOTE: The four holes for mounting the Table Tray (B) are on the rear of the table.

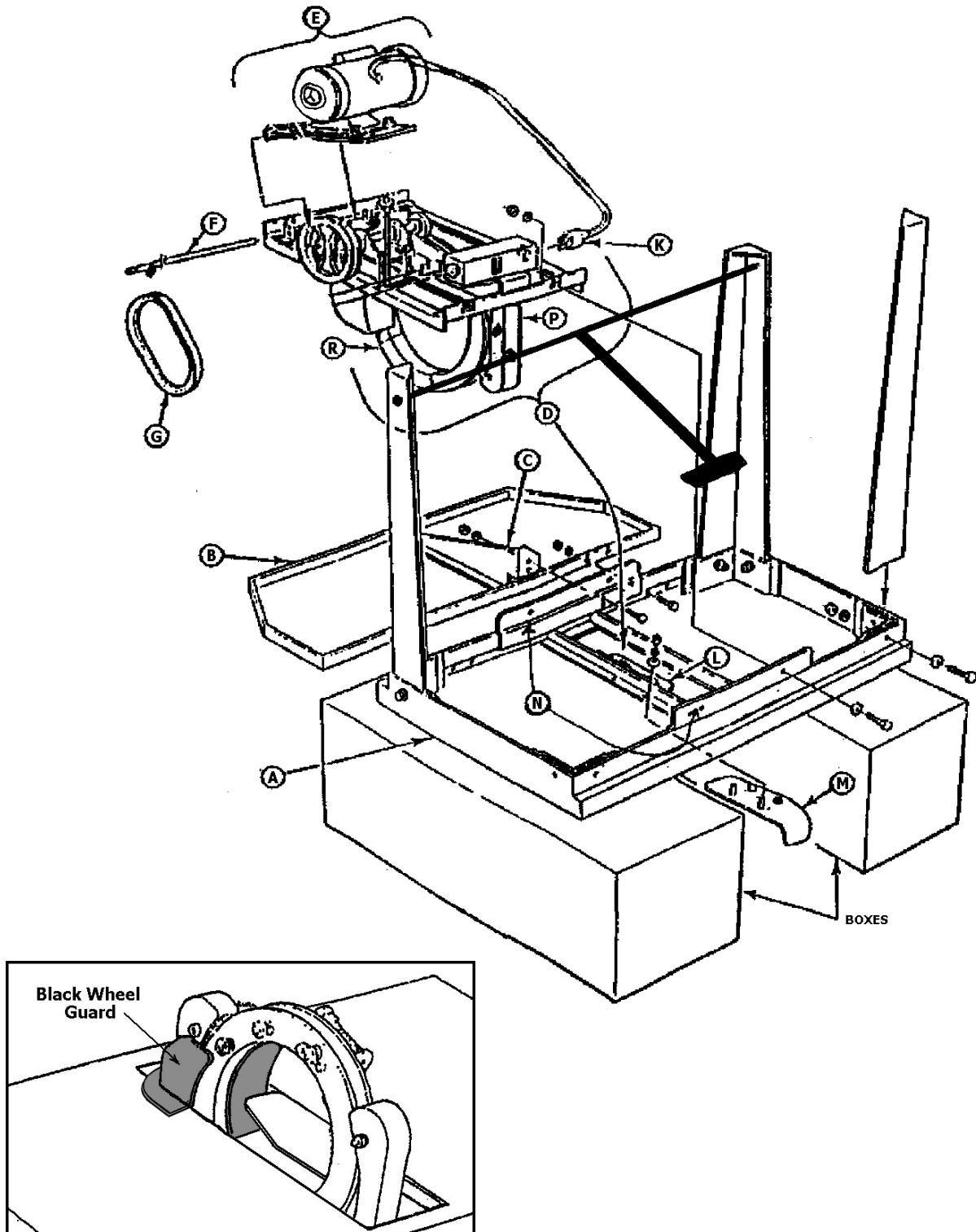
Note: For the Kelco Mechanical Clutch Conversion Kit, also do the following:
 - Unplug both the motor wire and the clutch wire from the Switch Box.
 - Slide out Hinge Pin (F) to remove your existing electric motor and electronic clutch.
- 2. Position the Hand Guard Bracket (L) as shown and fasten with two ¼" x ¾" bolts and flat washers.
- 3. Attach the Left and Right Frame Hangers (N) using five ¼" x ¾" bolts and flat washers.
- 4. Position the Red Hand Guard (M) from underneath (topside of the Table Top) into the Hand Guard Bracket (L) as shown and attach with two ¼" nuts, flat washers and lock washers and tighten in place.
- 5. Unbolt the Frame Assembly (D) from the packing crate (save the nuts, bolts and washers). Remove the Adjustable Idler Wheel Post (P) from the Frame Assembly by loosening the two set bolts. Set this aside until a later step. Lower the Frame Assembly onto the Table Top, as shown, and secure it using the nuts/bolts/washers from the packing crate. Place one flat washer behind the head of each 5/16" cap screw and the second behind the nut. Position the Frame Assembly so that the Switch Box is at the front of the table.
- ** 6. Place the Mechanical Motor/Clutch Assembly (E) between the hinge brackets on the Frame Assembly and insert Hinge Pin (F) all the way through. Each hinge bracket has a rubber vibration damper insert – make sure they remain in place. Place Drive Belt (G) on both pulleys making sure they are lined up. Belt adjustment is preset approximately correct at the factory. There should be a minimum of ½ inch play. Adjust using a 9/16" wrench.
- ** 7. Plug Motor Power Cord (K) into the socket on the electrical Switch Box attached to the Frame Assembly.

8. Insert all four Table Legs into the corner slots on the Table Top. Attach with eight ¼" x ¾" bolts (2 per leg) with flat washers, lock washers and nuts.
9. Attach the Tray Bracket (C) using two ¼" x ¾" bolts, nuts, washers and lock washers.
10. Attach Table Tray (B) using four ¼" x ¾" bolts, nuts, washers, and lock washers.
- ** 11. Turn the Kelco Wreath Machine onto its legs. It will take two people, one on each side.
- ** 12. Check the two rear Table Legs for an unused hole 2 inches above the floor (machines made before 1995 have no holes). These are used to attach the mechanical Foot Pedal.
- ** 13. If your Table Legs have no holes, drill two 3/8" holes – one in the rear of each rear leg. These holes should be 2 inches above the floor and in the center of each leg.
- ** 14. Attach the Foot Pedal Strut between the two rear Table Legs using the two bolts and nuts provided on this piece. The tabs and bolt at the center of the Strut must be facing the front of the Wreath Machine. Attach the Long Foot Pedal to the center tabs on the Foot Pedal Strut using the long bolt and nut attached to the tabs. The Foot Pedal will extend to the front of the Wreath Machine.
- ** 15. Attach the small Foot Pedal approximately to the mid-point of the large Foot Pedal, using the bolt and nut provided, so that it points to the left side of the table. This pedal is used to operate the machine from the side, which is done when making garlands or roping.
- ** 16. Attach one end of the Clutch Chain to the tab on the top of the Foot Pedal arm using one of the S-Hooks provided. Attach and adjust the other end to the Motor Actuator Arm using the other S-Hook. **Note: the Motor Actuator Arm should be perpendicular to the Clutch Chain.** You may have to change the position of the S-Hook on the Actuator Arm to make the clutch work satisfactorily. The wing nut and spring on the Mechanical Clutch Motor may be adjusted to make the foot pedal and clutch work to your satisfaction.
17. Position the aluminum Main Wheel (red and white) in the rectangular opening on the tabletop so that the bottom of the wheel rests on the drive wheel below and the back edge is against the rear idler wheel. Now replace the Adjustable Idler Wheel Post (P) (removed in step 5) by sliding it down the post until the front Idler Wheel fits gently into the groove on the Main Wheel. **Do not adjust it too tightly against the Main Wheel!** Secure the Adjustable Idler Wheel Post in position by tightening the two set bolts.
18. Attach the Black Wheel Guard around the rear Idler Wheel Post (the non-adjustable one) with two ¼" x ¾" bolts. (see inset on page 4)
19. Plug the main power cord (not shown) into any grounded 110-volt outlet and the Kelco K102-MCL Wreath Machine is ready to operate. **Do not use a three-prong plug adapter!** If an extension cord is used, it must be heavy duty (at least 12-gauge wire).

MECHANICAL CLUTCH/BRAKE INFO:

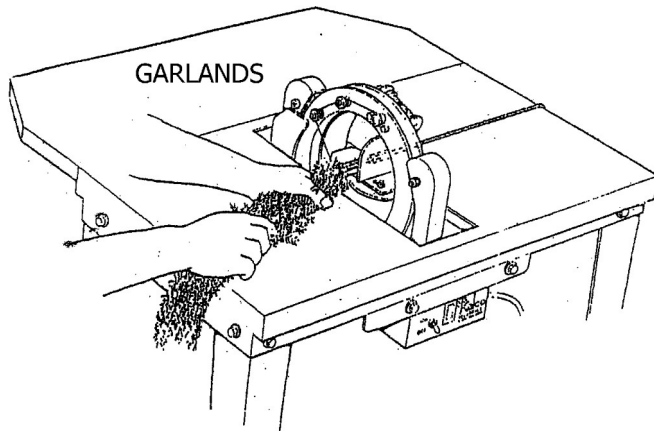
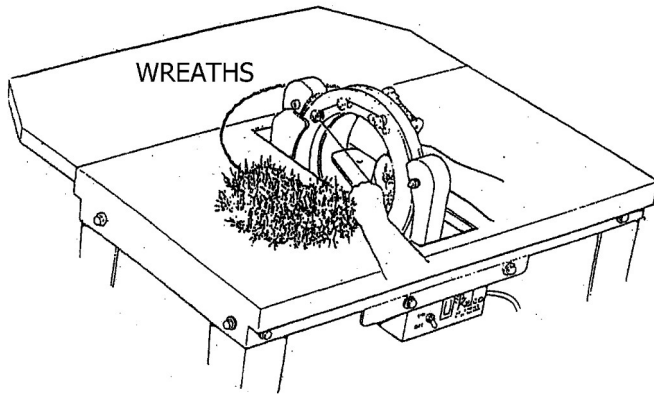
1. The Mechanical Clutch Motor can turn in both directions. The proper rotation for the K102-MCL is counter-clockwise. If the top of the Main Wheel rotates away from you as you stand in front of the machine it is hooked up properly. If it turns toward you, then you must do the following: (1) Unplug the main power cord from the wall outlet. (2) Check that the Mechanical Clutch Motor is at a standstill and not rotating. (3) Remove the square plastic plug from the back of the Mechanical Clutch Motor, rotate it 180 degrees and plug it back in. This will correct the problem.

2. The Mechanical Clutch Motor also has a switch on the back to change it to 220 volts. This switch must be in the 110-volt position.
3. The wing nut and spring on the Mechanical Clutch Motor may be adjusted to adequately lift the Foot Pedal and make the unit work properly.



OPERATING INSTRUCTIONS

IMPORTANT! Always turn off the power switch while opening and closing the gate on the Main Wheel so that the wheel will not inadvertently advance and cause injury to the operator. The Mechanical Clutch Motor will continue to spin (coasting) after the power switch is turned off. For safe operation, the operator must first shut off the power switch and then depress the foot pedal momentarily until the coasting stops. Then it is safe to open the gate (such as for removing a finished wreath).



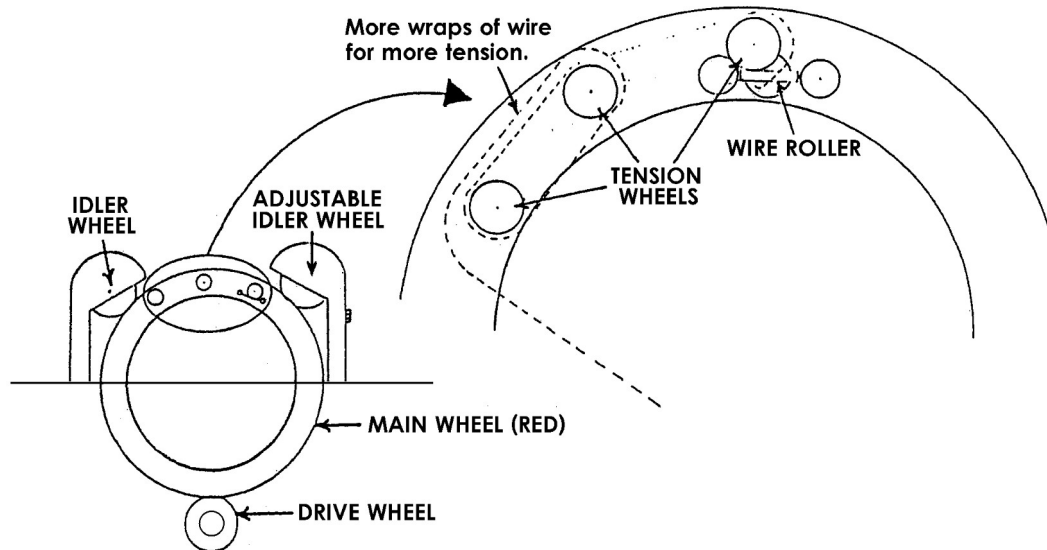
1. With the power switch off, open the gate on the Main Wheel and place a wreath ring in the center of the wheel. Close the gate and turn on the power switch.
2. With your left hand, hold the spool wire to the wreath ring, depress the Foot Pedal, and allow the Main Wheel to turn several revolutions to attach the wire to the ring.
3. Proceed as you would to make wreath by hand, using the machine to do the wrapping function.

ROPING ATTACHMENT INSTRUCTIONS

1. Fasten the Roping Attachment through three holes in the Table Top using the $\frac{1}{4}$ " x $\frac{3}{4}$ " Round-head Machine Screws. Please note that the Roping Attachment is shipped without the Roping-steadying Pin in place. Install this pin by sliding the pin through lower tube (has two small bolts attached). Tighten the small bolts to secure the Pin.
2. For most roping material, the pointed tip of the Roping-steadying Pin should extend approximately 1" (one inch) past the rectangular opening in the Table Top.
3. When using short greens (which is advanced slowly), adjust the pin $\frac{1}{2}$ " past the rectangular opening in the Table Top. When using long greens, (i.e. cedar, laurel, etc.) adjust the pin 1 $\frac{1}{2}$ " past the rectangular opening.
4. Thread twine through the upper tube of the Twine Guide, from the non-pointed end of the Roping-steadying Pin towards the pointed end of the Pin (twine serves as a core for the roping, and spool wire binds the greens to the twine). Set a light wire tension on the Tension Wheels.

ADJUSTMENTS

1. Wire tension may be adjusted by changing the number of wraps around the tension wheels (see diagram below). Correct tension depends on the type of greens used – heavy tension for Scotch Pine, light for Cedar or when making roping (garland).
2. Main Wheel adjustment is needed if it does not turn properly when the Drive Wheel is turning. Correct by raising or lowering the Adjustable Idler Wheel. Do not adjust it too tight! The rubber Idler Wheels should fit gently into the groove on the Main Wheel. Secure the Adjustable Idler Wheel by tightening the two set bolts.



MAINTENANCE

1. Use light oil (3-in-1 oil recommended).
2. Oil the Tension Wheels and Wire Roller lightly, twice a day.
3. Oil the two Idler Wheels periodically (once a week when machine is in daily use). Holes are provided in sides of Idler Wheel Heads. NOTE: Too much oil will spread to the groove in the Main Wheel and cause the Drive Wheel to slip.

WARRANTY

Your Kelco product is sent to you directly from our factory. If you should have any problems that can not be resolved with your machine by the enclosed literature, call us at 1-800-343-4057. If it cannot be corrected we will send you a new machine.

PARTS LIST

K102-IW	Idler Wheel	K102-RA	Roping Attachment
K102-TW	Tension Wheel Set w/Roller	K102-TC	Table Complete w/o legs
K102-WR	Wire Roller	K102-TL	Table Legs
K102-WG	Wire Guide Bushing	K102-TB	Table Tray w/Brackets
K102-SR	Spool Rod	K102-SB	Switch Box – Complete
K102-SRB	Spool Rod Brackets (2)	K102-DW	Drive Wheel