

E-Z CUT INC.

MK-5

CARPET/VINYL CUTTING MACHINE

M A N U A L

EXCELLENCE IN CUTTING

WINNIPEG

1995

CANADA

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1:0 Introduction

The **E-Z Cut MK5** is the first of a new generation of carpet cutting machines. The machine has been designed to make it simpler for the operator to use, to provide accurate measurement for both carpet and vinyl, and to provide the operator with more features than any other machine on the market.

Measurement is done in **Feet** and **Inches**, removing the problem of having to use conversion tables to convert inches to decimals of feet on older style machines.

Because this machine use a powerful industrial computer (PLC) it can measure either Carpet or Vinyl accurately. Older style machines must be manually reprogrammed depending on type of material used. This machine also automatically compensates the speed between the left and right roller to maintain proper tension on the carpet as it is being measured, regardless of the method of feeding.

If the carpet is not being fed in a straight line, the Cross Feeder can be used to automatically align the carpet properly to give you a nice straight roll.

The cutter is high speed and has a warning beeper to ensure safe operation.

As the carpet is starting to be rolled up, there is a Roll Up gate which holds the carpet in place until the roll has started. The machine automatically senses the speed and creates a pulse at higher speed Roll Up to ensure nice tight rolls.

The machine automatically selects the proper speed for the length of carpet or vinyl you wish to cut, and automatically slow the drives down at the proper place to ensure accurate measurement. This takes all guess work on the operators part out and ensures accurate repeatable operation.

The machine can be used to log data, each time a cut is made, either Carpet or Vinyl, the length is added to the total length of Carpet or Vinyl cut and displayed on the electronic display panel. This feature can be used to keep track of daily or weekly usage.

Advanced design features make the MK-5 the simple to use, accurate for both carpet and vinyl and easy to maintain.

- 2:0 Installation;
Read this section carefully and follow the directions as closely as possible. If you have any questions please call our customer service representative before proceeding.
- 2:1 Operating Conditions: The MK-5 is designed and built to operate in reasonably clean areas which are well lit and have temperatures between 50 and 95 Degrees F, and relative humidity between 5-85 % non condensing.
- 2:2 Electrical Connections: The MK-5 is provided with a twenty foot four conductor cable. The machine requires a twenty ampere, single phase, 208 or 230 Volt system complete with a neutral and separate ground wire. If the machine is to be in a fixed position it may be hard wired by your electrician, if it is to be movable, a four conductor receptacle must be provided and a matching four conductor plug placed on the cable. Protection for the MK-5 should be provided by a 20 Ampere Circuit Breaker or Fuses, and wire should be not less than 12 AWG for all power wiring. **WARNING** This machine should not be installed in an area where large electrical motors are being switched frequently. If you suffer frequent Brown Outs or if your electrical power is of poor quality you may require additional protection for your machine. Please contact E-Z Cut's customer service department if you have any problems in this area.
- 2:3 Pneumatic Installation: The machine comes complete with it's own regulator and filter equipped with an automatic draining kit. If you have an existing Air Supply it can be used with the MK-5 providing it meets the following conditions. First the air must be clean and dry. The system should be capable of delivering from 6.5 to 8.0 CFM at 90 - 120 PSI. The Receiver Tank should be at least 11 - 20 U.S. Gallons. The machine comes with a 20 Foot 3/8 Air Hose for connection via a Foster Male 17-3 connector to your Air Supply. A separate Foot hose and Tee are provided for the operator's Floor Switch. This hose should be looped from the control panel through the floor support loops around the machine back to the control panel and connected to the Tee provided. When the hose is in place and the Tee connected, the hose should be filled with about 5 Ounces of Wind Shield Washing Liquid (not diluted). After this hose is filled the top of the Tee should be connected to the hose coming from the bottom of the control panel. When this is done you should press the button on the left side of the control panel marked "Atmospheric Pressure Relief Switch" for at least 5 seconds. If the operation of the Foot switch becomes erratic, that is either it turns on by itself or it fails to turn on when you step on it, press the Switch" again for at least 5 seconds. Temperature variation might cause this to happen. If the problem is not solved by using this switch, check to make sure that the liquid in the hose has not been lost.
- 2:4 Levelling and Moving the Machine: The machine has a "Raise Lower" Switch on the left hand side of the machine near the top. When you have air connected to the machine you can raise the machine and lower the wheels in the four corners, the lower the machine onto the wheels. The machine has an internal auxiliary air tank so that it can be raised or lowered at least three times without any external source. One man can easily move the MK-5 without help. This makes it possible

if space is at a premium to move the machine when not in use. When the machine is first put in place an ordinary carpenter's level should be used to ensure that the machine is sitting properly. There are threaded legs in each corner. The "Raise Lower" Switch can be used to raise the machine and the legs can be adjusted until it is sitting properly.

3:0 Control Panel Left Side:

- 3:1 Power On Off Switch: This switch shuts off all power to the control portion of the MK-5. The power to some parts of the machine are still on, therefore no one other than an experienced Electrician or Technician should ever open the control panel door unless the machine is unplugged or the Circuit Breaker or Fusible Disconnect protecting the machine has been disconnected. The Power On Off switch should be used to turn the machine on when the machine is to be used. **WARNING** the Left roller System will be automatically positioned each time the machine is started. Operators should be aware of this and make sure that no person or property can be harmed by this motion. When the machine is not in use the Power On Off Switch should be turned to the Off position.
- 3:2 Left Arm Switch, Dump Position: The Left Arm Switch is normally left in the Normal Position. If the operator wishes to dump the carpet or vinyl off of the left side onto the floor, the Left Arm Switch should be turned to the left, the switch is spring return so that it will automatically return to the Normal Position after it is released from the dump Position. Once the operator has performed this function the Left Arm will go down, hold for a brief period and then return to the normal position.
- 3:3 Left Arm Normal Position: This is the position the switch should be in for most operations. The machine will automatically return to this position after a dump. When the Left Arm has been used in the Hold Position the switch must be returned manually to the Normal Position.
- 3:4 Left Arm Switch, Hold Position: This position is only used when a very large roll of carpet or vinyl is being measured or cut. When the Left Arm Switch is put into the Hold Position the left arm will be raised to provide greater support and stability for the roll. When the Left Arm has been used in the Hold Position the switch must be returned manually to the Normal Position.
- 3:5 Cross Feeder, Manual Automatic Switch: The Cross feeder is a unique feature on the MK-5 which when properly used can prevent or decrease Telescoping in the carpet or vinyl roll. The Cross feeder has two photo cells which look for the edge of the carpet or vinyl. If the edge is crooked, the photo cell will sense that and move the Left Arm slightly to bring the edge back to a nice straight line, resulting in rolls which are straight, without noticeable telescoping. **WARNING** This feature should not be used after the point at which the Roll on the Right Arm is Larger than the Roll on the Left Arm. When the Cross Feeder, Manual Automatic Switch is in the Automatic Position the above described operation will be automatically performed.
- 3:6 Cross Feeder, Forward/Return Switch: The operator may choose to operate the Cross feeder manually. to do so he must place the Cross Feeder, Manual Automatic Switch in the Manual Position, and the use the Cross Feeder, Forward/Return Switch to operate the Cross Feeder. In the Forward position the cross feeder will move away from the control panel, in the Return position it will return the cross feeder to the control panel.

- 3:7 Counter Weight: When the carpet or vinyl has been positioned to start a measurement, that is, when the carpet or vinyl has been fed across the measuring wheel and aligned so that the edge of the carpet or vinyl is even with the cutting slot (the slot along which the Cutter travels) the Counter Weight, that is the wheel which keeps pressure on the carpet or vinyl as it passes over the measuring wheel to ensure accurate measurement, should be put down by turning the Counter Weight Switch to the Down Position. When the carpet or vinyl is being fed into the machine or removed from the machine the Counter Weight should be up. to put the Counter Weight to the up position the Counter Weight Switch should be returned to the Up position.
- 3:8 Cutter Forward/Return Switch: The MK-5 features a high speed cutter. When the carpet or vinyl has been measured and is ready to be cut, the operator should check to see what the position of the cutter is. If it is closest to the control panel the Forward position of the cutter should be used, this will move the blade away from the control panel. If the blade is at the far end of the machine away from the control panel, the Return position of the Cutter Forward/Return Switch will return the cross feeder toward the control panel. When the Cutter Forward/Return Switch is operated an annoying high frequency beeper will sound for two seconds. This is to warn any personnel to keep at a safe distance because the cutter is going to operated to prevent any injuries from the high speed cutter.

- 4:0 Display: The Mk-5 has a sophisticated display system which allows the operator to monitor the operation of the machine , change the operation of the machine and immediately spot any problems which might arise.
- 4:1 Opening Screen: When the Power On Switch is first turned on the Display will show "E-Z Cut Mk-5" for about 15 seconds. During this time the Cross feeder is being aligned and the machine should not be used.
- 4:2 After fifteen seconds the Main Menu will appear. The Main Menu shows the operator the "soft keys" which are used to go to each of the operating pages, for example F1 will bring the operator to the Main Measuring and Cutting Screen etc. The operator can return to the main menu at any time simply by pressing the main menu Push Button on the key pad of the display unit.
- 4:3 F1 Measuring and Cutting Screen (Carpet and Vinyl): This is the most important and the most frequently used screen. The top line on this screen is where the operator enters the length of carpet or vinyl he wishes to cut. You will notice that there is a cursor (a flashing black square) over the place you enter the required number of feet you wish to measure. If the operator wishes to change this number, he simply enters the new number in the numeric key pad and then presses the Enter Key. If the operator does not wish to change the number of feet, but wishes to change the inches he simply presses the enter key and the cursor will move to the data field where inches are entered. The operator can enter any value from zero to eleven inches (the machine will not accept any larger number of inches). When the operator has entered the correct number of inches he once again presses the Enter Key. This machine is unique in that it can measure either Carpet and Vinyl with great accuracy. Most machines are factory set to measure one or the other accurately but not both. To the right of the display the letters CAR or VIN will appear. This will tell the operator which mode the machine is in. To change the mode simply press the Enter Button. To measure the carpet or vinyl the Counter Weight is raised, the Carpet or Vinyl is fed through until the leading edge is even with Cutter Slot. The Counter Weight is then lowered, F6 is pushed to zero the lower or indicating part of the F1 display and the measuring operation can begin.
- 4:4 F2 Total Measurement (Carpet or Vinyl): This screen is used when the operator wishes to measure a full roll of Carpet or Vinyl without cutting. To measure the carpet or vinyl the Counter Weight is raised, the Carpet or Vinyl is fed through until the leading edge is even with Cutter Slot. The Counter Weight is then lowered, F6 is pushed to zero the lower or indicating part of the F1 display and the measuring operation can begin. When you first open this screen you will notice that the display shows 6 inches. This is because this is the distance between the measuring wheel and the Cutting Slot. When you have fed the entire roll of carpet or vinyl through, the reading on your display will be the total length of the roll, there is no need to make any corrections to the measurement. This machine is unique in that it can measure either Carpet and Vinyl with great accuracy. Most machines are factory set to measure one or the other accurately but not both. To the right of the display

the letters CAR or VIN will appear. This will tell the operator which mode the machine is in. To change the mode simply press the Enter Button.

- 4:5 F3 Daily Weekly Total Measurement (Carpet and Vinyl) Each time a piece of Carpet or Vinyl is cut the length of the piece cut is added to an accumulator so that you can keep track of the amount of carpet or vinyl you have cut in a given period. When you press F3 a display will appear which will show the total length of carpet or vinyl which has been cut since this page has been reset.
- 4:6 F4 Total Measurement (Carpet and Vinyl) Each time a piece of Carpet or Vinyl is cut the length of the piece cut is added to an accumulator so that you can keep track of the amount of carpet or vinyl you have cut in a given period. When you press F4 a display will appear which will show the total length of carpet or vinyl which has been cut since the machine has been in operation.
- 4:7 F5 Check Battery Screen/ Set Up Screen: The operator may turn to this page to check the battery status. E-Z Cut representatives can also enter a password on this screen so that they can make adjustments to the machine. Only factory authorized personnel are given this password.
- 4:8 F6 Reset Button: This button is used on several pages to perform several reset functions.
- 4:9 Under no circumstances should the two blue buttons be pressed simultaneously. This provides access to menus for programming. In the advent of such a situation, contact E-Z CUT for assistance. **The result may be the loss of the program and loss of interface for the operator.** If this should occur the operator interface will have to be removed and shipped to the manufacturer for reprogramming.

5:0 Control Panel Right Side:

- 5:1 Roller Motor Speed Selector Switch: There is only one speed selector switch for both roller motors. This is because the two rollers must always work in the proper relationship to each other in order to keep the proper tension on the carpet or vinyl. For most applications the Speed Selector switch should be left in the Automatic Position, in the Automatic Position the machine's computer will automatically select the proper speed for the length of carpet or vinyl you wish to cut. If there is an unusual situation, the operator can use his discretion and set the speed manually. If the operator leaves the Speed Selector Switch in any position other than Automatic, a message will appear on the screen each time he goes to the Measuring and Cutting Screen. If he turns the switch to Automatic the warning screen will turn off and the operator can continue. If the operator wishes to use the machine with a manually selected speed the warning screen will turn off after about six seconds and the operation can proceed.
- 5:2 Roller Motors Left Side: This selector switch will allow the operator to change the direction of the Left Roller Motor, or to stop the Left Roller Motor. Normally the carpet or vinyl will be placed on the left side in such a manner that the material will be fed from the bottom of the roll (see diagram items A and B). the switch should be in the Forward Position if the material is fed from the top of the roll (see diagram items C and D). the switch should be in the Reverse Position. When the Right Roller only is being used, for example to wrap the finished roll, this switch should be turned to the Off position to conserve power.
- 5:3 Standard Normal Switch: When the Left Side Roller switch is in the Reverse position, and you are using both Rollers, the "Standard/Special Switch located on the left side of the Control Panel should be turned to the Special Position. At all other times this switch should be in the Standard Position. When this switch is in the Special Position the Indicators above the function keys will flash. if you see the indicators flashing check and make sure that this switch is in the proper position, that is the Standard Position for unless the Left Side Roller is in reverse.
- 5:4 Roller Motors Right Side: This selector switch will allow the operator to change the direction of the Right Roller Motor, or to stop the Right Roller Motor. Normally the carpet or vinyl will be fed onto the right side in such a manner that the material will be rolled up from the bottom of the roll (see diagram items A and C). the switch should be in the Forward Position if the material is rolled up from the top of the roll (see diagram items B and D). the switch should be in the Reverse Position. When the Left Roller only is being used, for example to when a new roll is being fed from the Left side into the machine this switch should be turned to the Off position to conserve power.
- 5:5 Right Arm Switch, Dump Position: The Right Arm Switch is normally left in the Normal Position. If the operator wishes to dump the carpet or vinyl off of the right side onto the floor, the Right Arm Switch should be turned to the left, the switch is spring return so that it will automatically return to the Normal Position after it is released from the

dump Position. Once the operator has performed this function the Right Arm will go down, hold for a brief period and then return to the normal position.

- 5:6 Right Arm Normal Position: This is the position the switch should be in for the start of operations. The machine will automatically return to this position after a dump. When the Right Arm has been used in the Roll Up Position the switch must be returned manually to the Normal Position.
- 5:7 Right Arm Switch, Roll Up Position: This position is used when a roll of carpet or vinyl is being measured or cut. When the Right Arm Switch is put into the Roll Up Position the right arm will be raised to provide greater support and stability for the roll after it has been started. The Arm will automatically pulsate to keep the roll tight. When the roll has reached a large enough diameter to be stable, the Right arm will automatically return to the hold position. When the Right Arm has been used in the Roll Up Position if the Roll does not become large enough to automatically return the arm to the Normal position, the switch must be returned manually to the Normal Position.
- 5:8 Roll Start Push Button: This switch is used at the beginning of the operation to raise a gate which keeps the edge of the carpet in a tight roll. once the roll is established you can release this Push Button.

6:0 Trouble Shooting/ Maintenance:

- 6:1 Check Blades/Air Supply: The machines computer automatically checks the time it takes to make a cut of carpet or vinyl. If this time is greater than it should be there can be several reasons. first the blades may be dull and need replacement, second the Air Pressure may be too low causing problems and third the material may be tougher than usual slowing the cutter. If the machine senses a problem on three consecutive cuts (so that you do not have nuisance indications after cutting one or two very tough pieces) the operator will see a warning displayed on the screen telling him to check the blades and or the Air Pressure. To clear this screen the operator should press F6 the reset key.
- 6:2 VFD Failure: The Roller Motors are driven by Variable Frequency Drives which are automatically adjusted to the proper speed for each operation. These units have a very sensitive protection system which will shut them in down most cases before any damage is done to the machine or the motors. If this happens the Rollers will stop and a warning screen will appear telling the operator to shut the power off to the machine for at least thirty seconds and then back on again. If this problem occurs again the drives should be examined to see if there is any mechanical problems such as binding etc. or the E-Z Cut factory service representative should be contacted.
- 6:3 Change Battery: The machines computer or PLC is backed up by a small lithium battery. This battery must be replaced once about every five years. When the battery is low a warning screen will come up when the machine is turned on and remain on the screen for until the reset button F6 is pressed. When this happens it is not cause for immediate concern, as you have about thirty days after this alarm to change the battery. The battery should be changed only by knowledgable personnel.
- 6:4 Press Air Press. Reset & F6 to Go Alarm: If the E-Z Cut MK5 has not been used for more than 30 minutes the drives will be locked out and can not be started until the operator presses the Air Pressure reset Push Button on the left side of the control panel and then presses F6 on the Display/Control Panel. The reason for this is that if the machine is left on over night or on the weekend it cannot be accidently turned on by someone stepping on the foot switch etc.

"MK5" OPERATING INSTRUCTIONS

CARPET PROCEDURES

LOADING THE ROLL OF CARPET

Place the roll on the Left Side Cradle and ensure that the "feed edge" is coming from the BOTTOM towards the Counter with the "Pile" facing up. This will provide an accuracy measurement as the Counting Wheel will be measuring the back of the carpet. - NEVER MEASURE WITH THE PILE FACING DOWN AS YOU WILL GET INACCURATE READINGS. For the best results, the roll of carpet should be rolled up fairly tight. To tighten a loose roll, turn the Left Side Rollers in REVERSE, depress the Operating Foot Hose or Jog Button, and allow the roll to rotate for a few turns until it tightens up.

PREPARING TO MEASURE

Switch the Counter Weight Arm to the UP position, Advance the carpet towards the Right Hand Side by switching both the Left and Right Side Rollers into FORWARD and depressing on the Operating Foot Hose or Jog Button. Please note that you may find that it is easier to get the roll started by using the Jog Button instead of the Operating Foot Hose, but either will suffice. Stop the advancement of the carpet at the Cutting Track. Should the carpet not be lined up properly over the Counting Wheel, you can adjust the carpet's position by switching the Cross Feeder to shift the carpet into position. Lower the Counter Weight Arm down onto the carpet.

PROGRAMMING THE COUNTER

Refer to Section 4:3.

STARTING THE ROLL UP PROCESS

With both Rollers in the FORWARD position, advance the carpet by depressing the Jog Button as well as assisting the carpet by hand until it is into the Right Side Cradle. Guide the carpet into the Right Side Cradle Roller. Although it is not necessary, should you require a cardboard core, it can now be placed on top of the carpet laying in the Right Side Cradle.

ROLLING UP THE CARPET

Turn the Right Arm Switch to ROLL UP and the Right Side Cradle will automatically fold up. Switch the Speed Selector to LOW. Press and hold the Jog Button until the edge of the carpet curls up and just passes the White Plastic Roll Up Fingers on the Fold Up Cradle. Now, by pressing and holding down the Roll Start Button, the White Fingers swing into place. While continuing to hold down the Roll Start Button, press and hold the Jog Button until the carpet curls downward and begins its rotation. At this time, release the Roll Start Button and allow the White Fingers to return to their original position and release the Jog Button as well. Switch the Speed Selector back to AUTO and depress the Operating Foot Hose to continue on the roll up. (PLEASE NOTE; IF YOU CONTINUE THIS ROLL UP PROCEDURE BY PRESSING THE "JOG BUTTON" INSTEAD OF THE "OPERATING FOOT HOSE", THE MACHINE WILL NOT STOP AUTOMATICALLY AT YOUR PRE-SET LENGTH.) As the roll up process continues, the Fold Up Arm will slowly return to its original position and provide you with a very snug roll up. Should you prefer a more loose roll up of your carpet, just switch the Right Arm Switch back to its NORMAL position after the first couple rotations of the carpet. NOTE: You may notice that at the start of the roll up process, the carpet may buckle slightly on the table as the roll up begins. You can eliminate this buckling by momentarily turning the Left Side Rollers Switch to OFF and then quickly turning it back to FORWARD.

ROLLING UP THE CARPET STRAIGHT

Although the Electronic Sensor Eye will keep the carpet from shifting for the most part, you can assist in this procedure as well. Once you have the roll up started, you can further prevent the roll from coning or telescoping by adjusting the roll up slightly in the Right Side Cradle. Move to the Right Side of the machine and continue the roll up process by depressing the Operating Foot Hose that runs along the Right Side of the unit. By adjusting the carpet by hand (much like you would if you were rolling it up on the floor), you can eliminate any serious coning. If the carpet is rolled up straight and the end of the roll is flush and not coned, then your cut will be straight and square.

NOTE: When measuring Commercial Carpet with a Salvage Edge, pay extra attention to the roll up when handling Commercial Carpets to ensure a straight and proper roll up.

PRIOR TO CUTTING

Prior to making your cut, there may be a slight buckle of carpet on the table once the carpet stops rolling up. To correct this, turn the Right Side Rollers in the FORWARD position and the Left Side Rollers in REVERSE, and then tap the Jog Button.

CUTTING THE CARPET

To prevent the carpet from moving during the cutting process, turn both Roller Switches to their OFF positions. To make the cut, turn and hold the Cutting Bar Switch to FORWARD. Warning Beeps will sound for 3 seconds indicating that the Cutter is about to be activated. Following these 3 seconds, the Cutter will advance down the Cutting Track and make the cut in less than 2 seconds! Once the Cutter has completed its cut, you can release the Cutting Bar Switch back to NORMAL. Since it is a 2-way Cutter, you do not have to return the Cutter to the home end of the machine for the next cut.

NOTE: SINCE it doesn't take very long for the Cutter to make the cut, be sure to keep any hazards clear of the Cutting Track during this procedure. Should you need to stop the Cutter at any time, just release the Cutting Bar Switch back to its NORMAL position at any time.

WRAPPING THE ROLLS

To wrap up your cut piece, turn the Right Side Rollers to FORWARD and turn the Left Side Rollers to OFF. Position your stretchfilm or plastic under the edge of the carpet, step on the Operating Foot Hose along the side of the machine, and wrap the roll accordingly. The same can be done to the roll on the Left Side Cradle by turning the Left Side Rollers to REVERSE and the Right Side to OFF.

REMOVING/DUMPING THE ROLLS FROM THE MACHINE

Once cutting and wrapping is complete, you can now remove the rolls from the machine's cradles without the need of a lift truck. Simply switch the Right Arm Switch to DUMP and the cradle will automatically release downwards. The cradle will stay in this "down" position for approximately 10 seconds and then return to its original position. You can repeat this same procedure on the Left Side Cradle by activating the Left Arm Switch in the same manner.

NOTE: Heavier rolls and cuts can be removed easier than lighter pieces during this procedure. Smaller and lighter weight rolls/cuts may need a push to assist them off the cradle.

REVERSE ROLLING CARPET PROCEDURES

LOADING THE ROLL OF CARPET

Follow the same steps as previously mentioned for this procedure.

PREPARING TO MEASURE

Follow the same steps as previously mentioned for this procedure.

PROGRAMMING THE COUNTER

Follow the same steps as previously mentioned for this procedure.

STARTING THE ROLL UP PROCESS

When Reverse Rolling carpet, a cardboard core no wider than 4" in diameter must be used. With both Rollers in the FORWARD position, advance the carpet by depressing the Jog Button as well as assisting the carpet by hand and stop its progress once it is half way between the First and Second Rollers in the Right Side Cradle. At this time, place your cardboard core into the cradle so it is positioned alongside the LEFT side of the Second Roller. Adjust and flip the carpet so it rests on top of and covers the left half of the core. Turn the Right Arm Switch to ROLL UP so the cradle automatically folds up and pinches the carpet up against the core.

ROLLING UP THE CARPET

Once the carpet is pinched in place, switch the Speed Selector to LOW. Switch the Right Side Rollers to REVERSE and keep the Left Side Rollers in FORWARD. Press and hold the Jog Button until the carpet makes one to two rotations around the core.

NOTE: Like before, the carpet may buckle slightly coming across the table during this process. This buckling can be eliminated by momentarily turning the Left Side Rollers to OFF and then quickly turning it back to FORWARD>

Return the Right Arm switch to NORMAL, switch the Speed Selector back to AUTO, and continue the roll up procedure by depressing the Operating Foot Hose. Again, please note that if you continue this roll up procedure by pressing the "Jog Button" instead of the "Operating Foot Hose", the machine will not stop automatically at your Pre-Set length.

ROLLING UP THE CARPET STRAIGHT

Follow the same steps as previously mentioned for this procedure.

CUTTING & WRAPPING

Follow the same steps as previously mentioned for this procedure.

VINYL PROCEDURES

PLEASE NOTE THAT VINYL FLOORING CAN BE HANDLED IN THE EXACT SAME FASHION AS PREVIOUSLY MENTIONED IN THE CARPET PROCEDURES. THE ONLY EXCEPTION WOULD BE DURING THE "PROGRAMMING THE COUNTER" SECTION WHERE THE "VINYL" MODE MUST BE SELECTED FOR MEASURING.

REVERSE ROLLING VINYL PROCEDURES

LOADING THE ROLL OF VINYL

Place the roll on the Left Side Cradle and ensure that the "feed edge" is coming from the TOP (NOT the BOTTOM like with carpet) towards the Counter with the "Pattern" facing up.

PREPARING TO MEASURE

Switch the Counter Weight Arm to the UP position. Advance the vinyl by switching the Left Side Rollers into REVERSE, the Right Side Rollers in FORWARD, and depressing the Operating Foot Hose or Jog Button. Stop the advancement of the vinyl at the Cutting Track. Should the vinyl not be lined up properly with the Counting Wheel, adjust accordingly as before with carpet. Lower the Counter Weight Arm down onto the vinyl.

STARTING THE ROLL UP PROCESS

Once again, a cardboard core not wider than 4" in diameter must be used during this procedure. Advance the vinyl into the Right Side Cradle and stop its progress once it is half way between the First and Second Rollers. At this time, place your cardboard core into the cradle and position it alongside the LEFT side of the Second Roller. Adjust and flip the vinyl so it rests on top of and covers the left half of the core. Turn the Right Arm

Switch to ROLL UP so the cradle automatically folds up and pinches the vinyl up against the core.

NOTE: AS PER THE VINYL MANUFACTURER'S SPECIFICATIONS REGARDING TENSION BACKED MATERIAL, YOU MUST ALWAYS TAPE BOTH THE PAPER AND VINYL SECURELY TO THE CORE PRIOR TO ROLL UP PROCEDURES.

ROLLING UP THE VINYL

Once the vinyl is pinched in place, switch the Speed Selector to LOW. Switch the Right Side Rollers to REVERSE as well. Press and hold the Jog Button until the vinyl makes one or two rotations around the core.

NOTE: Like before, the vinyl may buckle slightly as it comes across the tale during this process. This buckling can be eliminated by momentarily turning the Left Side Rollers to OFF and tthen quickly returning it back to REVERSE.

Return the Right Arm Switch to NORMAL , the Speed Selector to AUTO, and continue the roll up by depressing the Operating Foot Hose.

ROLLING UP THE VINYL STRAIGHT

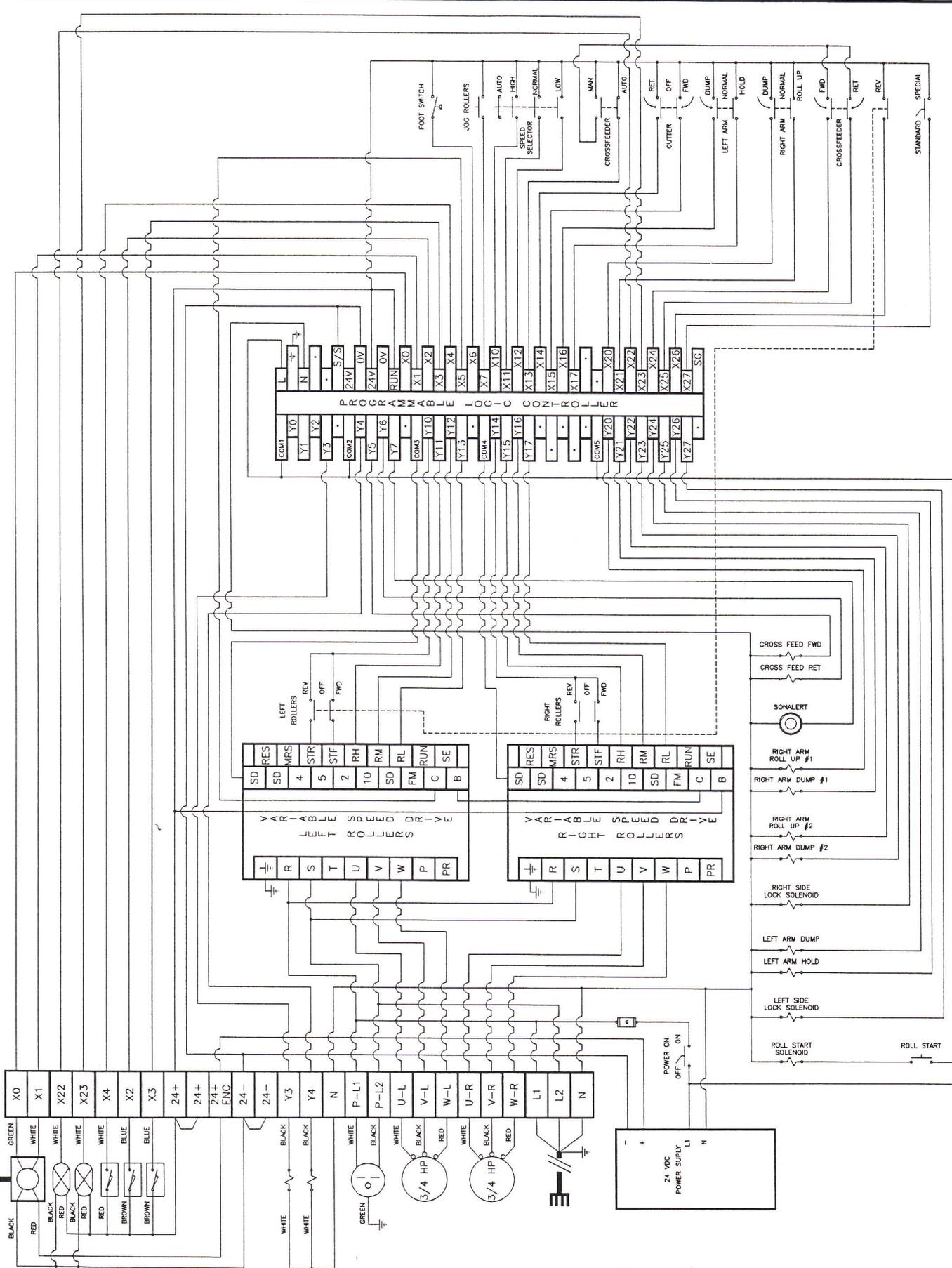
Follow the same steps as previously mentioned in the CARPET procedures

CUTTING AND WRAPPING

Follow the same steps as previously mentioned in the CARPET proedures.

REMOVAL/DUMPING

You can follow the same steps as previously mentioned in the CARPET procedures but due to vinyl's physical make-up, you may want to remove it with a little more care than you do with carpet..



ENCODER A PHASE
 ENCODER B PHASE
 PHOTO CELL DARK
 PHOTO CELL LIGHT
 CYLINDER REED SWITCH
 REED SW. RETURN
 REED SW. FORWARD

CUTTER SOL. FORWARD
 CUTTER SOL. RETURN

220 VOLT OPTIONAL
 EQUIPMENT RECEPTACLE

LEFT ROLLERS MOTOR

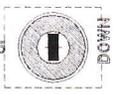
RIGHT ROLLERS MOTOR

MAIN POWER CABLE



BUILT FOR : E-Z CUT			
TITLE : MK-5 ELECTRICAL			
DRAWN BY : LCK	CHK'D BY : MW	DWG. NO. : IA450	
SCALE : NTS	DATE : 02/01/95		

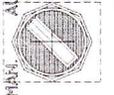
COUNTER WEIGHT
UP DOWN



LEFT ARM
DUMP HOLD



MANUAL



POWER OFF



CROSSFEEDER

RET. FWD.



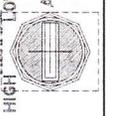
CUTTER RET. FWD.



Control panel layout:

- Function keys: F1, F2, F3, F4, F5, F6
- Number keys: 7, 8, 9, 4, 5, 6, 1, 2, 3, -, 0, .
- Special keys: MAX HOLD, ENTER

SPEED SELECTOR
HIGH MEDIUM LOW



AUTO.

LEFT OFF. FWD.



ROLLERS

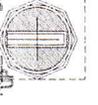
JOG



RIGHT OFF. FWD.



RIGHT ARM
ROLL NORMAL DUMP



ROLL START



E-Z CUT



INDUUS
AUTOMATION INC.

BUILT FOR: E-Z CUT INC.

TITLE: CARPET CUTTER
FACE PLATE LAYOUT

DES. NO.	1A373
DATE	12/17/94
CHK'D BY	LCK
APP'D BY	AJB
SCALE	1:1



FIGURE A



CARPET OR VINYL MOVING FROM LEFT TO RIGHT

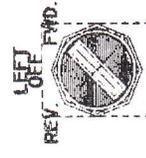


FIGURE B



CARPET OR VINYL MOVING FROM LEFT TO RIGHT

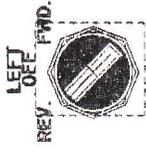


FIGURE C



CARPET OR VINYL MOVING FROM LEFT TO RIGHT



FIGURE D



CARPET OR VINYL MOVING FROM LEFT TO RIGHT

