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WHAT TO DO WHEN YOU NEED ASSISTANCE

1-1

THANK YOU FOR PURCHASING A MARATHON ROTARY RECYCLER.

This product is designed to give you reliable service and superior performance for years to come. To guarantee top performance and the safest operation of the rotary recycler, each person involved in the operation, maintenance, and installation of the rotary recycler should read and thoroughly understand the instructions in this manual and follow all warnings.

The employer involved in the operation, maintenance, and installation of the rotary recycler should read and understand the most current version of the following applicable standard:

OSHA 29 CFR, Part 1910.147, "The control of hazardous energy (lockout/tagout)"

Any service or repairs that go beyond the scope of this manual should be performed by factory authorized personnel only.

IF YOU SHOULD NEED FURTHER ASSISTANCE, PLEASE CONTACT YOUR DISTRIBUTOR. YOU WILL NEED TO PROVIDE THE RECYCLER SERIAL NUMBER, INSTALLATION DATE, AND ELECTRICAL SCHEMATIC NUMBER TO YOUR DISTRIBUTOR.

IF YOU HAVE ANY SAFETY CONCERNS WITH THE EQUIPMENT, OR NEED FURTHER INFORMATION, PLEASE CONTACT US AT:

Marathon Equipment Company P.O. Box 1798 Vernon, AI 35592-1798 Attn: Field Service Department 1-800-633-8974



1-3

PRE-OPERATION INSTRUCTIONS



DANGER: KEEP HANDS OUT



THE ROTARY RECYCLER IS A HIGH SPEED VOLUME REDUCTION UNIT. THE INFEED ROLLERS DIRECT OBJECTS FROM THE FEED HOPPER INTO THE INNER CRUSHING ROLLS OF THE MACHINE. DO NOT PLACE ANY PART OF THE BODY INSIDE THE FEED HOPPER OR AROUND ANY MOVING PART OF THE MACHINE. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH!

NEVER ENTER ANY PART OF THE ROTARY RECYCLER UNLESS THE DISCONNECT SWITCH HAS BEEN TURNED OFF AND PADLOCKED. Before starting the Rotary Recycler, be sure no one is inside. Be certain that everyone is clear of all points of operation and pinch point areas before starting. See Lock-Out & Tag-Out instructions in the Maintenance section.



THE EMPLOYER SHOULD ALLOW ONLY AUTHORIZED AND TRAINED PERSONNEL TO OPERATE THE ROTARY RECY-CLER. The Rotary Recycler is equipped with a key operated locking system. The key(s) should be in the possession of only authorized personnel.

THE ROTARY RECYCLER IS DESIGNED TO PROCESS SMALL ALU-MINUM AND STEEL CANS, PET BOTTLES, AND HDPE BOTTLES. DO NOT PLACE ANY OBJECT NOT INTENDED FOR VOLUME REDUCTION PRO-CESSING INTO THE FEED HOPPER OF THE MACHINE. <u>ABSOLUTELY NO</u> <u>GLASS MATERIALS, AEROSOL CANS, OR ROPE/STRING ITEMS</u> <u>SHOULD BE FED INTO THE MACHINE!</u>

DO NOT REMOVE ACCESS COVERS EXCEPT FOR SERVICING. Only authorized service personnel should be allowed inside. **See Lock-Out & Tag-Out instructions in the Maintenance section.**



ONLY AUTHORIZED PERSONNEL SHOULD BE ALLOWED INSIDE THE PANEL BOX. The panel box contains high voltage components. See Lock-Out & Tag-Out instructions in the Maintenance section.



STANDARD CONTROLS

1-4

DESCRIPTION

- 1. **START SWITCH**, KEYED 2 POSITION This switch is a 2 position switch requiring a key to activate it. The key is inserted into the switch in the OFF position and rotated up to the START position. The key is then depressed to start the machine.
- STOP PUSHBUTTON This pushbutton is a red mushroom head button that shuts down machine operation when depressed. (NOTE: Complete Lock-out and Tag-out is required before entering any portion of the machine for any reason. See the Lockout and Tag-out Instructions on page 2-1.)
- 3. DISCONNECT SWITCH The disconnect switch turns off the electrical power or turns on the electrical power to the machine. The disconnect switch has a springloaded slotted tab in the center of the handle that is pulled out when the switch is in the OFF position and a lock and tag applied for Lock-out and Tag-out. See page 2-1. The switch has another spring-loaded button on the top, right side that must be pulled down to open the panel box door (the main disconnect switch must be in the OFF position).



OPERATING INSTRUCTIONS

1-5



IN CASE OF EMERGENCY: Push the large red button to STOP

WARNING: DO NOT OPERATE THE ROTARY RECYCLER UNTIL THE PRE-OPERATING INSTRUCTIONS AND OPERATING INSTRUCTIONS ARE THOR-OUGHLY UNDERSTOOD. DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.

OPERATING INSTRUCTIONS

BEFORE OPERATING THE MACHINE, make sure that all persons are clear of the machine. Turn the disconnect switch to the ON position.

- 1. Insert the key into the keyswitch, turn the key to the START position, and depress the key momentarily. The Rotary Recycler will start as soon as the key is depressed.
- 2. Feed material into the machine.
- 3. To shut the Rotary Recycler down, depress the red mushroom head STOP button. Turn the keyswitch to the OFF position and take the key with you.

DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.

DECALS

1-6

WARNING DECAL REQUIREMENTS

The following decals are used on the RE 800 VRM Rotary Recycler. See the following page for the proper decal placement. If the decals on your rotary recycler are damaged or missing, additional decals should be purchased through your distributor or by calling Marathon Equipment Company at 1-800-633-8974.

Decal Number 06-0039 - DANGER: DO NOT ENTER.

Decal Number 06-0100 - MARATHON EQUIPMENT COMPANY (5" X 3")

Decal Number 06-0101 - DANGER: 208 VOLTS. or

Decal Number 06-0102 - DANGER: 230 VOLTS. or

Decal Number 06-0103 - DANGER: 460 VOLTS.

Decal Number 06-0116 - DANGER: KEEP HANDS OUT.

- Decal Number 06-0120 DANGER: DISCONNECT AND LOCK OUT POWER BEFORE OPENING THIS PANEL
- Decal Number 06-0249 DANGER: LOCK OUT AND TAG OUT POWER BEFORE PERFORMING ANY MAINTENANCE, REPAIR, OR ADJUST-MENT. REFER TO SERVICE MANUAL FOR COMPLETE LOCK OUT AND TAG OUT PROCEDURE OR CALL 1-800-633-8974.

Decal Number 06-0274 - ROTARY RECYCLING EQUIPMENT

DECAL PLACEMENT - RE 800 VRM



1-7

LOCK-OUT & TAG-OUT INSTRUCTIONS

2-1



ANY MAIN LENANCE, REPAIR, OR ADJUSTMENT. REFER TO SERVICE MANUAL FOR COMPLETE LOCK OUT AND TAG OUT PROCEDURE OR CALL 1-800-633-8974. Never enter any part of the Rotary Recycler unless the power is off and the machine is locked-out and taggedout in accordance with OSHA and ANSI requirements. <u>FAILURE TO DO SO CAN RESULT IN SERIOUS INJURY</u> <u>OR DEATH!</u> Make sure that all sources of energy have been disabled and all potential hazards have been eliminated. The specific lock-out and tag-out instructions may vary from company to company. The following instructions are provided as minimum guidelines.

THE DISCONNECT SWITCH (ON THE PANEL BOX)



INSTRUCTIONS

1. Move the disconnect switch to the off position, padlock it, and take the key with you. Along with the padlock, place an appropriate weatherproof warning tag. The tag should provide a warning such as: "Danger: Do not operate equipment. Person working on equipment. Warning - do not energize without the permission of

2. After locking and tagging the machine, try to start and operate the machine to make sure the lock-out is effective. If the lock-out is effective, remove the key from the keyswitch and take with you.



The panel box contains high voltage components. Authorized service personnel should not be allowed inside until after the Rotary Recycler has been locked out and tagged out. See Lock-out and Tag-out instructions above.

PERIODIC MAINTENANCE

WARNING: DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.

<u>DAILY</u>

1. Rake out any debris that might have accumulated on top of the bottom guard under the recycler.

<u>WEEKLY</u>

- 1. Remove the two side panels and lightly lubricate all chains with S.A.E. 30 oil or a chain lubricant.
- 2. Grease each rod end bearing connecting the debridger pivot shaft to the debridger drive shaft.
- 3. For machines that operate continuously, grease each bearing housing on the end of each shaft. One to two small shots of no. 2 lithium based grease will be adequate. Too much grease will damage the bearing seals and shorten bearing life. For machines ran 8 to 12 hours per day, apply one to two small shots of grease once per month.

<u>MONTHLY</u>

- 1. Check the tension on the drive belts. Correct tension will be when the belts can be pressed in 1/2" by hand. If adjustment is necessary, loosen the motor mounting bolts and slide the motor in or out as required. Then retighten bolts. Make sure that the motor shaft/sheave is aligned and square with the flywheel.
- 2. Check the tension on all drive chains. Correct tension will be when each chain can be pressed in 0" to 1/4" by hand (this tension will vary from chain to chain and is dependent on the distance from shaft to shaft of the chain). Each chain can be adjusted by loosening the bearing housing bolts slightly and moving the housing by turning the adjustment screws. This adjustment should be made in 1/32" increments and must be made on each end of the shaft to assure proper shaft alignment. It is critical that measurements be taken from one side of the machine to the other and that the measurements be identical to assure that all shafts are parallel. Retighten bolts after making any adjustment.

NOTE: Too much drive chain tension will cause premature wear on the shaft bearings.

3. Check all bolts to make sure that they are tight.

<u>ANNUALLY</u>

1. Electric motor bearings should be lubricated once a year per the manufacturers instructions.

CRUSHING ROLL ENGAGEMENT

2-3

WARNING:

DO NOT MAKE ANY INSPECTION OF THE CRUSHING ROLLS OR ANY ADJUSTMENT TO THE CRUSHING ROLLS UNTIL THE ROTARY RECYCLER HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE INSTRUCTIONS ON PAGE 2-1.

The Marathon Equipment Company Model No. RE 800 VRM Rotary Recycler uses two crushing rolls to flatten the material fed into the machine. The correct engagement of the crushing rolls is critical to the successful volume reduction of the processed material.

To inspect the crushing roll engagement, first remove the hood/cover from the discharge end of the machine. Look up inside of the discharge opening of the Rotary Recycler and sight-verify the setting using a small steel rule or other similar measuring device. If the crushing rolls are set with a space between them (as suggested for steel and aluminum cans), a feeler gauge or plate of a known thickness can be used.

The diagram on the following page shows where to inspect and also shows examples of suggested crushing roll engagement settings for processing aluminum cans, steel cans, HDPE bottles, and PET bottles. These settings were derived from past experience and may require modification depending on size of material being processed, through-put and volume of material being processed.

The adjustment of the crushing rolls is accomplished by raising or lowering the hinged upper jaw of the machine containing the upper crushing roll, and by correctly adjusting the tension on the upper jaw-to-body tension springs. These adjustments are described in detail in the **PROCEDURE - CRUSHING ROLL ENGAGEMENT ADJUSTMENT** and **PROCEDURE - SPRING ADJUSTMENT DIAGRAM** later in this section.

NOTE: It is very important to note the upper crushing roll orientation to the lower crushing roll. See the diagram in the upper right on the next page. The crushing edge of one roll should be directly over the notch of the other roll. See the side views showing the different settings and notice the correct orientation of the upper roll to the lower roll.

NOTE: The Marathon Equipment Company Model No. RE 800 VRM Rotary Recycler uses two in-feed rolls to pull the material to be processed into the machine. These in-feed rolls do not require any adjustment for the various materials that can be processed other than the tensioning of the drive chains. See PERIODIC MAINTENANCE in the MAINTENANCE section of this manual for correct chain and drive belt tension.

CRUSHING ROLL ENGAGEMENT DIAGRAM





SETTING FOR: PET BOTTLES

* NOTE: WHEN PROCESSING PET BOTTLES, IF IT IS DESIRABLE NOT TO CRUSH THE NECK OF THE BOT-TLE, THE CRUSHING ROLL ENGAGEMENT WILL NEED TO BE OPENED TO 3/8".







PROCEDURE - CRUSHING ROLL ENGAGEMENT ADJUSTMENT 2-5

WARNING: DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.

Use the following procedure to adjust the engagement of the upper crushing roll to the lower crushing roll in the Model No. RE 800 VRM Rotary Recycler. See the diagram on the next page.

- 1. Lock-out and tag-out the machine.
- 2. Remove the access covers on each side of the machine. Place cover screws in a safe place for re-assembly. The Rotary Recycler will not operate without the covers secured in place.
- 3. Loosen the locking nut on each of the two tension springs located on each side of the machine (at the front). Loosen the adjusting nut on each of the tension springs.
- 4. Slightly loosen the two adjusting foot mounting bolts holding each adjusting foot (one each side of machine). It is best to break the clamp load of each bolt and rotate the bolt only another turn so the foot is easier to control during the adjustment.
- 5. Loosen the jam nut on each of the adjustment bolts. There are two adjustment bolts located vertically over each adjusting foot.
- 6. See the CRUSHING ROLL ENGAGEMENT diagram earlier in this section of the manual to determine the suggested engagement for your material. To inspect the crushing roll engagement, look up inside of the discharge opening of the Rotary Recycler and sight-verify the setting using a small steel rule or other similar measuring device. DO NOT PLACE THE HANDS OR ANY OTHER PART OF THE BODY IN CONTACT WITH THE CRUSHING ROLLS.
- 7. Turn the adjustment bolts clockwise to raise the upper crushing roll or counter-clockwise to lower the upper crushing roll. The turning of these bolts raises or lowers the hinged upper jaw which houses the upper crushing roll. IT IS VERY IMPORTANT TO RAISE OR LOWER EACH SIDE OF THE MACHINE EQUALLY TO ASSURE PARALLELISM BETWEEN ROLLS.
- 8. When the proper adjustment has been made, tighten the adjusting foot mounting bolts on each foot. Tighten the jam nuts on each of the adjustment bolts. Adjust each tension spring as described in the SPRING ADJUSTMENT procedure later in this section of the manual.
- 9. Replace the access covers and all cover screws.

PROCEDURE - CRUSHING ROLL ADJUSTMENT DIAGRAM 2-6

WARNING: DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.



PROCEDURE - SPRING ADJUSTMENT DIAGRAM

WARNING: DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.



2-7

PROCEDURE - DEBRIDGER TORQUE LIMITER ADJUSTMENT 2-8

WARNING: DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.

The Model RE 800 VRM Rotary Recycler uses a torque limiter to provide overload protection to the debridger arm by supplying a controlled and adjustable slip level. The torque limiter should provide trouble-free service when set properly. To adjust the torque limiter to the proper friction level follow these steps:

See the diagram on the next page for part location.

- 1. Lock-out and tag-out the machine.
- Remove the right-hand side access cover. Place cover screws in a safe place for re-assembly. The Rotary Recycler will not operate without the cover secured in place.
- 3. Loosen the 3 adjustment bolts on the torque limiter collar.
- 4. Back off the torque limiter collar 2 to 3 turns.
- 5. Wrench-tighten the 3 adjustment bolts until the heads are snug against the collar.
- 6. Hand-tighten the collar as tight as possible. The ends of the 3 adjustment bolts will be contacting the torque limiter backing plate.
- 7. Loosen the 3 adjustment bolts a 1/2 turn.
- 8. Re-tighten the collar by hand as tight as possible.
- 9. Re-tighten the 3 adjustment bolts with a wrench until the heads are firmly secured against the collar.
- 10. Replace the access covers and all cover screws.

NOTE: It is normal for the friction discs to wear over time. The amount of wear will depend on the application and the consistent flow of material through the machine. It is suggested that the discs be replaced when they wear down to a thickness of .060". Replacement discs are available from Marathon Equipment Company or a Browning distributor.

PROCEDURE - DEBRIDGER TORQUE LIMITER ADJUSTMENT DIAGRAM

2-9

WARNING: DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.



PROCEDURE - MAGNETIC INTERLOCK TESTING

2-10

The RE 800 VRM Rotary Recycler is equipped with three magnetic interlocks. There is one interlock on each side access cover and one on the hopper access door. The side cover interlocks are positioned so that the machine will not operate if the access covers are not installed properly. The hopper door interlock prevents the machine from operating if the door is open.

- To test each side cover interlock, remove the side cover. **Make sure that all personnel are clear of the machine**. Try to start the machine. The machine should not start with the cover removed.
- To test the hopper door interlock, open the access door. **Make sure that all personnel are clear of the machine**. Try to start the machine. The machine should not operate with the door opened.

If the machine does start with either cover removed or the hopper door opened, depress the STOP button. Remove the key from the keyswitch, and lock-out and tag-out the machine per the Lock-Out and Tag-Out Instructions on page 2-1 until repairs can be made.



PROCEDURE - LUBRICATION DIAGRAM

2-11

WARNING: DO NO ENTER THE MACHINE FOR ANY REASON UNTIL THE MACHINE HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.



PRINCIPLES OF OPERATION

2-12

OPERATING CHARACTERISTICS - ROTARY RECYCLER MODEL N0. 824

When the keyed START button is depressed, a contact is made which energizes the motor starter and starts the electric motor. The electric motor drives the main flywheel using one sheave and four belts. The main flywheel shaft drives the remaining shafts and rollers through a series of roller chain assemblies. See the LUBRICATION DIA-GRAM on the previous page for chain location and orientation.



R.H. SIDE VIEW

CHARTS

2-13

FUSES AND CIRCUIT BREAKERS					
MOTOR SIZE	VAC	FULL LOAD AMP.	DUAL ELEMENT FUSE MAX. SIZE	CIRCUIT BREAKER MAX. SIZE	SERVICE DISCONNECT AMP.
10 HP, 3 PH	208 230 460 575	30.8 28.0 14.0 11.0	50 50 25 20	80 70 35 30	60 60 30 30

WIRE SIZES		THW Copper 75°C (165°F)		
MOTOR SIZE	VOLTAGE	LENGTH		
		TO 100'	TO 200'	TO 300'
10 HP, 3 PH	208 230 460 575	8 8 10 12	6 6 8 10	4 4 6 8

MOTOR STARTER & HEATER ELEMENTS			
MOTOR SIZE	VOLTAGE	STARTER SIZE	<u>HEATER ELEMENT</u> A-B
10 HP, 3 PH	208	2	W-64
	230	2	W-63
	460	1	W-55
	575	1	W-53

PARTS LIST

2-14

Rotary Recycler Model No. RE 800 VRM				
Part No.	Description			
03-0106	Heater Element, W-55, 460V			
03-0191	Fuse, 2 Amp Control			
03-0195	Operator 30 Pushbutton,Keyed			
03-0196	Operator 30 Pushbutton,Mushroom Head, Red			
03-0211	Motor Starter, Size 1, AB			
03-0288	Transformer, 150 VA, Tri-Volt			
03-0590	Disconnect, 60 Amp			
03-0345	Motor, Electric, 10 HP, 215 TEFC Rigid Base			
03-0498	Switch, Magnetic Interlock w/ Armored Cable			
05-0596	Sheave, Main Motor, 4 Groove, 4TB34			
05-0612	Belt, V, Main Drive			
05-0613	Chain, Roller, ANSI No. 60 (SPECIFY SHAFT TO SHAFT I.D. LETTERS)			
05-0614	Chain, Roller, ANSI No. 80 (SPECIFY SHAFT TO SHAFT I.D. LETTERS)			
05-0618	Link, Connecting, For ANSI No.80 Roller Chain			
05-0619	Link, Offset, For ANSI No.80 Roller Chain			
05-0620	Link, Connecting, For ANSI No.60 Roller Chain			
05-0621	Link, Offset, For ANSI No.60 Roller Chain			
06-0038	Decal, Caution: Do Not Remove Access Cover			
06-0039	Decal, Danger: Do Not Enter			
06-0100	Decal, Marathon Equipment Company, 3" X 5"			
06-0101	Decal, Danger: 208 Volts			
06-0102	Decal, Danger: 230 Volts			
06-0103	Decal, Danger: 460 Volts			
06-0116	Decal, Danger: Keep Hands Out			
06-0249	Decal. Danger: Lock Out and Tag Out Power Before			

See PARTS LIST DIAGRAM next page for bearing and sprocket part numbers.

PARTS LIST DIAGRAM

2-15







ELECTRICAL SCHEMATIC

2-17



3 INSTALLATION

GENERAL INSTALLATION REQUIREMENTS

3-1

CAUTION:

REVIEW THIS MANUAL BEFORE BEGINNING THE INSTALLATION. STUDY THE JOBSITE AND INSTALLATION REQUIREMENTS CAREFULLY TO BE CERTAIN ALL NECESSARY SAFEGUARDS AND OR SAFETY DEVICES ARE PROVIDED TO PROTECT ALL PERSONNEL AND EQUIPMENT DURING THE INSTALLATION AND AS A COMPLETED SYSTEM.

Marathon does not assume responsibility for the installation procedures of this equipment. The installer should be experienced in all installation aspects including off-loading of the machinery, anchoring, connection of electrical power, and any attaching installation of chutes, hoppers, conveyors or similar devices. Conformance to applicable local, state, and federal laws concerning installation rests with the customer.

OFF-LOADING OF THE RECYCLER

The RE 800 VRM Rotary Recycler weighs approximately 4000 lbs. Make sure that proper handling procedures and equipment are used to off-load and install the recycler. DO NOT lift the recycler under the center of the machine. The bottom guard will be damaged if the recycler is supported underneath.

CONCRETE PAD

The recycler should be supported on a minimum 4" thick steel reinforced 3000 psi concrete slab or equivalent. If the recycler is to be installed on a conveyor system, the supporting framework should be adequately designed to support the weight of the 4000 lb. recycler. For good housekeeping practices, it is recommended that a drain be incorporated into the concrete pad connecting to a sanitary sewer. The drain should be located in the vicinity of the discharge of the recycler.

ANCHORING

Anchor the Rotary Recycler to the concrete slab through the anchor plate at the bottom of each leg. Four 1/2" anchor bolts are required, Red Head type recommended. If the recycler is mounted to a frame as part of a conveyor system, use four 1/2" -13 UNC, Grade 5 bolts with flatwashers and self-locking nuts to secure the recycler to the frame.

INSTALLATION IN A CONVEYOR SYSTEM

If the recycler is fed by conveyor, a customer supplied enclosure hood should cover the feed hopper and the end of the conveyor, designed such that no part of the human body can enter the feed hopper on the recycler. In a conveyor system, an Emergency Stop button or trip-bar device, designed to stop the conveyor AND recycler when touched, should be mounted for easy access at the junction of the conveyor and recycler.

3 INSTALLATION

ELECTRICAL INSTALLATION



The panel box contains high voltage components. Only authorized service personnel should be allowed inside. See Lock-Out & Tag-Out instructions in the maintenance section.

WARNING: BEFORE MAKING ANY ELECTRICAL CONNECTION, BE SURE THAT THE DISCONNECT SWITCH HAS BEEN LOCKED-OUT AND TAGGED-OUT PER THE LOCK-OUT AND TAG-OUT INSTRUCTIONS ON PAGE 2-1.

- 1. Use the FUSE AND CIRCUIT BREAKER chart and the WIRE SIZE chart in the MAINTENANCE section of this manual for reference during the electrical installation.
- 2. Before connecting power to the recycler, check the incoming line voltage with a voltmeter. Also, check voltage wiring in the recycler panel box. If the recycler is not wired to the proper voltage, make necessary corrections before proceeding.
- 3. A lockable disconnect switch is provided on the recycler and is sized in accordance with the recycler. Three phase power should be connected to the top of this switch. Be careful not to let incoming wires touch each other. A properly sized equipment ground lug should be connected to the enclosure ground lug.

REMOTE CONTROL STATION

If the recycler is supplied with controls that are not located on the recycler, a separate STOP button must be mounted on the recycler that will shut down all power to the recycler and any incoming feed equipment in the event of an emergency.

3 INSTALLATION

START-UP INSTRUCTIONS

3-3

WARNING: BEFORE START-UP, MAKE SURE THAT ALL COVERS ARE SECURED IN PLACE.

CAUTION: MAKE SURE PERSONS AND MATERIAL ARE CLEAR OF FEED HOP-PER AREA.

- 1. After the electrical connections are complete, check motor rotation by the following:
 - a. Turn disconnect switch to the ON position.
 - b. Turn the keyswitch to the ON position and start the machine. Check motor rotation by standing on the right-hand side of the machine and watching the upper in-feed roller rotation. Rotation of that roller should be counter-clockwise on the model RE 800 VRM.

2. MAKE SURE THAT THE OPERATORS ARE TRAINED IN THE PROPER USE OF THIS EQUIPMENT. SEE SECTION 1 OF THIS MANUAL.