

# **MONARCH** **POWER CAN CRUSHER**



**MODEL 8450**

- **THE ULTIMATE AID IN DISPOSING OF EMPTY ALUMINUM BEVERAGE CANS IN BARS AND RESTAURANTS**
- **CRUSHES CANS INTO THIN WAFER TO GREATLY REDUCE VOLUME**

## INTRODUCTION

Your Monarch Model 8450 Can Crusher has been designed and manufactured under rigid standards and Monarch Specialty Systems, Inc., has great interest in having your unit provide the ultimate in performance and maximum service life.

This manual provides information for installation, operation and service of the unit.

**READ THIS MANUAL AND TOTALLY FAMILIARIZE YOURSELF WITH ITS CONTENTS BEFORE YOU ATTEMPT TO INSTALL OR PUT THE UNIT IN OPERATION.**

Should a question or problem develop, contact the dealer from whom the unit was purchased. In the event your dealer is unable to supply the service you require, contact Monarch Specialty Systems, Inc.

## SAFETY PRECAUTIONS

Monarch Specialty Systems, Inc. has made every effort to provide you with safe equipment, however, the following safety precautions must be observed:

- (1) Always disconnect the power supply (PULL THE PLUG) before attempting to remove a can jam, remove the top cover or, clean the unit.
- (2) Be certain the electrical outlet used for the power supply is fully grounded or, attach a separate ground wire to the frame of the crusher to a proper grounding source according to national and local electrical codes.
- (3) Never place hands or fingers in the can inlet chamber or, the crushed can discharge opening while the electric power is connected.
- (4) Instruct all personnel fully on the operation of the machine and these safety precautions.
- (5) NEVER LET CHILDREN OPERATE THE MACHINE.**



## ASSEMBLY

Remove the crusher body from the carton and lay it top down on a blanket or clean cardboard to protect the finish from scratches or damage. Bolt the (4) support legs to the body with the 5/16 x 3/4" cap screw, flat washers and lock washers supplied with the unit. A ratchet wrench, 8" extension and 1/2" socket are ideal tools for the assembly. Before fully tightening the bolts, be certain the outer edges of the support legs and the crusher housing are aligned. (Oversize holes in the support legs permit movement for alignment) With the support legs bolted in place, set the crusher upright being certain to lift the crusher and setting it down on all (4) legs equally.

## LOCATING THE CRUSHER

Ideally, locate the crusher under or near the bar so the crusher is easily accessible when empty beverage cans are removed from the bar or tables to permit immediate crushing of the containers.

## INSTALLATION

The crusher is equipped with a 3-prong grounding type attachment plug that provides for grounding of the unit when plugged into a fully grounded outlet. IF A FULLY GROUNDED OUTLET PLUG IS NOT AVAILABLE, USE AN ADAPTER AND ATTACH A GROUNDED WIRE TO THE TAB ON THE ADAPTER AND GROUND TO A PROPER GROUNDING SOURCE OR, ATTACH A GROUND WIRE TO THE FRAME OF THE CRUSHER TO A PROPER GROUNDING SOURCE.

**WARNING! NEVER CUT OR REMOVE THE ROUND GROUNDING PRONG FROM THE ATTACHMENT PLUG.**

If an electrical extension cord is used in addition to the cord length provided on the unit, be certain the wire size is at least #16 and length does not exceed 10'.

FOR UNITS WITHOUT SUPPORT LEGS it will be necessary to provide an opening for the crushed can discharge and also for air circulation on a table or counter. When the unit is located, bolt the crusher to the support surface by drilling holes to correspond with the holes normally used to attach the support legs on the bottom corners of the crusher frame. 5/16"-18 (course thread) nuts are welded to the inside frame and it is necessary to use only cap screws for attachment.

## OPERATION

THE CONTROL PANEL in the recessed area on the front of the unit contains an On-Off Rocker Switch, Power "On" Monitor Light and a circuit breaker for electrical overload on the motor. With electrical supply attached to the 115 volt outlet, turn the Rocker Switch "On" and the Monitor Light will come on to indicate the unit is in a "Ready" Mode

PLACE A CONTAINER, preferably plastic, under the left front of the unit to receive the crushed cans. CAUTION! Be certain the container DOES NOT EXCEED 14 INCHES IN HEIGHT. Taller containers can block the crushed can discharge, when full, and cause the crusher to jam.

PLACE (2) CANS in the inclined ramp in the top cover to initially "Load" the unit. Note that these cans are not crushed until additional cans are put into the unit and (2) cans will always remain in the area directly below the inlet opening.

ADD ADDITIONAL CANS in the same manner and as they strike the actuator projecting in the can inlet opening, the unit begins to operate and will continue to operate until the last can enters the chamber and it returns to the "Ready" Mode.

LEAVE THE ROCKER SWITCH "ON" DURING NORMAL BUSINESS HOURS and turn it "Off" during periods when it will not be attended.

CAUTION! CANS SHOULD BE EMPTY OF ANY LIQUID BEFORE PLACED IN UNIT. BADLY DE-FORMED CANS CAN CAUSE THE UNIT TO "JAM". "POP" THE CANS BACK TO A REASONABLY ROUND SHAPE BEFORE PLACING THEM INTO THE UNIT TO PREVENT PROBLEMS.

THE CIRCUIT BREAKER in the panel will trip when an electrical overload condition exists on the motor of the crusher. When tripped, the center white portion with the numeral "5" will extend out about 1/4". If a tripped condition exists, let the unit cool for approximately 10 minutes and then push the white button in and resume operation. NOTE! The button will not stay in if the breaker has not cooled sufficiently. In this case wait another 5 minutes and attempt to reset again. If the unit is put in operation and the breaker trips again, see the Trouble Shooting Section.



## MAINTENANCE

THE RECEIVING RAMP AND THE TOP COVER SHOULD BE CLEANED DAILY to remove beverage residue. The sticky residue will retard cans from moving down the ramp easily. Use a damp towel or sponge with a mild detergent, if necessary, to remove the residue.

CAUTION! Do not use abrasive type cleaners on any of the painted surfaces or decals. ALWAYS UNPLUG THE POWER WHEN CLEANING. CANS EQUIPPED WITH STA-TABS will many times have their tabs “POP” off during the crushing process and some will accumulate on top of the ram body where the (2) cans are retained in the unit. If allowed to accumulate in numbers, the built in holding feature will be lost and (2) cans may enter the crushing chamber simultaneously and will likely cause a “JAM”. To remove a Tab Accumulation, UNPLUG THE ELECTRICAL POWER CORD and remove the (2) cans in the lower chamber. With a longer flat object pull the tabs into the can receiving area so they can be removed by hand.

THE MOTOR is equipped with pre-lubricated bearings and will not require lubrication. If the gear reduction housing on the motor should require re-lubrication, use AMOCO type “L-industrial 30” grease or it’s equivalent. THE RAM BODY AND CONNECTING LINK TO THE MOTOR are equipped with pre-lubricated materials and do not require lubrication.

CAN JAMS IN THE CRUSHING CHAMBER may be indicated in (2) ways:

- (1) The unit continues to operate, but cans are not feeding into receiving chamber.
- (2) Motor Overload Circuit Breaker trips repeatedly when re-set.

Badly deformed cans may get turned in such a manner that they will not roll over the ½” ledge at the front edge of the ram body and drop into the crushing chamber. This ledge is a holding feature for the waiting cans and, normally operating, a can rolls over the ledge on the return stroke of the ram. DO NOT FORCE THE CAN OVER THE LEDGE BY APPLYING PRESSURE ON THE OTHER CANS IN THE CHAMBER; IT WILL LIKELY ENTER THE CRUSHING CHAMBER IN A MANNER THAT WILL CAUSE A MORE DIFFICULT JAM TO REMOVE. Follow instructions in next paragraph to properly remove.

If (2) or more cans have entered the crushing chamber a jam will result to stop total operation of the unit by tripping the motor overload circuit breaker.

TO REMOVE EITHER TYPE JAM, UNPLUG THE ELECTRICAL POWER CORD and the (2) screws on each side retaining the top cover. Remove the top cover and check the can holding area through the large slot on top and the slots on either side to determine where the jam is located.



If there is a badly deformed can on the ram, use a screwdriver to push it back to the receiving chamber and remove it by hand.

If cans are wedged between the ram and crushing head, reverse the motor to remove the pressure on the wedged cans and use a screwdriver to release them to drop out the discharge chute.

Grasping the crank on the motor shaft and turning can reverse the motor. (Since this is a gear reduction motor, the shaft will turn hard)

Most jams can be removed without removing the can ramp assembly. Should it be necessary to remove the can ramp, remove the (6) 8-32 Hex Nuts and Washers and lift the assembly upward. If the (2) wires are removed from the Micro Switch on the assembly, be certain to replace them in their original places.

If the unit is to be test run prior to replacement of the top cover, it will be necessary to hold down the white button on the safety switch at the top edge of the rear panel.

**CAUTION! EXERCISE EVERY SAFETY MEASURE WHEN OPERATING THE UNIT WITH THE TOP COVER REMOVED. KEEP ALL HANDS OUTSIDE THE HOUSING.**

**REMEMBER! CAN JAMS CAN BE VIRTUALLY ELIMINATED BY NOT PUTTING BADLY DEFORMED CANS INTO THE UNIT OR USING A CONTAINER FOR THE CRUSHED CANS THAT BLOCKS THE DISCHARGE OPENING WHEN THE CONTAINER IS FULL.**

**THE OPERATION OF THE UNIT IS CONTROLLED BY (2) MICRO SNAP ACTION SWITCHES** operating through a relay to form an electrical interlock.

The upper switch attached to the can ramp has an actuator extending into the can receiving chamber to start the unit when a can is inserted. With the unit shut off by the main On-Off Switch, a click should be heard after the actuator is moved inward approximately 1/8", manually, the click is the action of the switch making contact. If no click is heard, the unit will not start and the switch will need to be checked for adjustment.

To adjust, **UNPLUG THE ELECTRICAL POWER CORD** and remove the (2) screws on each side of the top cover and remove the cover. Manually bend the arm of the switch to obtain a click when the actuator is moved inward about 1/8". Be conservative on the amount of bending done before a test. In all probability only a small amount of adjustment will be necessary.

The lower Micro Switch stops the unit on the return stroke of the ram by breaking the inter-lock. (As long as there is a can in the receiving chamber, the upper Micro Switch keeps the unit running.) If the lower Micro Switch does not open; the unit will continue to run even though no can is in the receiving chamber.

To adjust, UNPLUG THE ELECTRICAL POWER CORD and remove the top cover. With the ram in a forward stroke and not making contact with the arm of the switch, move the switch arm manually and bend arm until a click is heard when the arm is about 1/8" away from it's resting point on the ram housing.

NOTE! WHEN THE UNIT OPERATES CONTINUOUSLY ALWAYS CHECK THE OPERATION AND ADJUSTMENT OF BOTH MICRO SWITCHES.

## TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSE
1. Unit won't Start	Rocker Switch Not "On". Motor Overload Breaker Tripped. Unit not connected to "Live" Outlet. Upper Micro Switch is out of Adjustment or is defective.
2. Motor Overload Breaker Keeps Tripping.	Can Jam In Crushing Chamber. Motor Defective. Overload breaker defective. In-adequate electric power supply.
3. Unit Runs All the time when Rocker Switch is "On" position.	Lower Micro Switch Not breaking Circuit or, defective. Upper Micro Switch stuck in closed
4. Frequent Can Jams	Badly deformed cans. Sta-Tabs built up on top of Ram body. Container for crushed cans too high, Blocking discharge.



# Limited Warranty

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MONARCH SPECIALTY SYSTEMS, INC. warrants products of their manufacture to be free from defects in material and workmanship for a period of 12 months after purchase by the end-user. During this warranty period, MONARCH SPECIALTY SYSTEMS, INC.'S obligation under this warranty shall be limited to the repair or replacement, at MONARCH SPECIALTY SYSTEMS, INC.'S option, of such product which may prove defective, provided that the product is returned, transportation costs prepaid, to MONARCH SPECIALTY SYSTEMS, INC. Decatur, Indiana; and in no event shall MONARCH SPECIALTY SYSTEMS, INC. be liable for consequential or special damages or for transportation, or other expenses which shall arise in connection with such product. This warranty covers only defects in material or workmanship in normal use and does not cover damages resulting from accident, negligence, misuse, lack of responsible care, alteration, or other unreasonable use. THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. MONARCH SPECIALTY SYSTEMS, INC. MAKES NO WARRANTIES EXPRESS, OR IMPLIED, AS TO MERCHANTABILITY OR THE PRODUCT OR AS TO THE FITNESS OF THE PRODUCT FOR ANY PARTICULAR PURPOSE, AND MONARCH SPECIALTY SYSTEMS, INC. SHALL NOT BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECTLY OR INDIRECTLY, ARISING FROM THE USE OF SUCH PRODUCT OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. MONARCH SPECIALTY SYTEMS, INC. reserves the right to make changes in products manufactured and/or sold by them at any time without incurring any obligation to make the same or similar changes on products previously manufactured and/or sold by them. No other representations or warranties have been made by MONARCH SPECIALTY SYSTEMS, INC. or relied upon by the purchaser. No waiver, alteration, or modification of the foregoing warranties shall be valid unless made in writing and signed by an executive officer of MONARCH SPECIALTY SYSTEMS, INC.

## SERVICE OR WARRANTY CONSIDERATION

If service or warranty considerations are required, contact the dealer from whom the unit was purchased. In the event local service cannot be obtained or, questions remain, contact:

MONARCH SPECIALTY SYSTEMS, INC.  
6691 W. St. Rd. 124  
Decatur, IN 46714  
(260) 565-2244

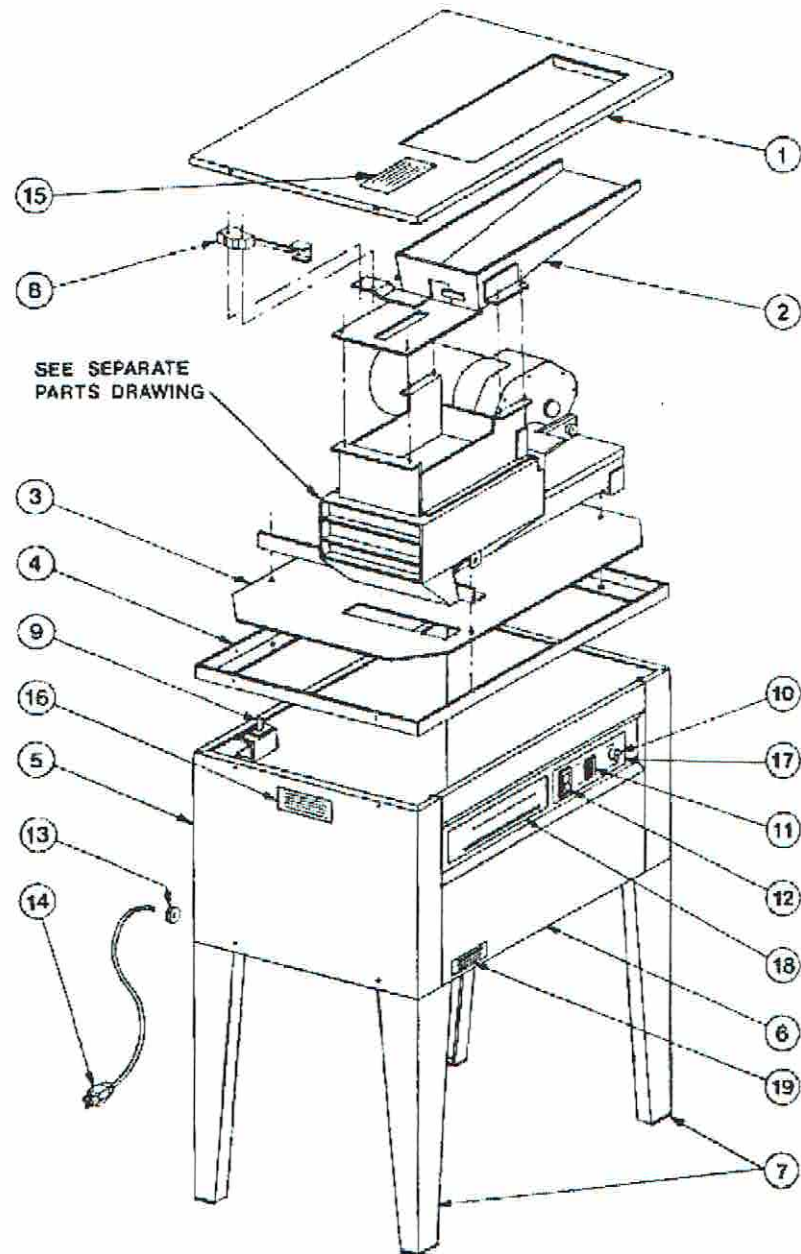
Always contact Monarch Specialty Systems, Inc. before returning any item for Warranty Consideration. Monarch Specialty Systems, Inc. will authorize all necessary returns in writing.

**REPLACEMENT PARTS  
8450 CAN CRUSHER  
(SERIAL #486156 & AFTER)**

ITEM	PART NO.	DESCRIPTION	QTY.
1	2A1119	Top Cover Assy.	1
2	2A1131	Can Inlet Chute Assy.	1
3	2A1129	Bottom Panel	1
4	2A1121	Base Support Assy.	1
5	2A1118	Housing Assy.	1
6	2A1130	Front Panel	1
7	2A1120	Support Leg Assy.	4
8	2A1128	Micro Switch Assy.	1
9	4A346	Pushbutton Switch	1
10	4A347	Circuit Breaker	1
11	4A173	Light - Amber	1
12	4A192	Rocker Switch	1
13	4A349	Grommet	1
14	2A1137	Power Cord Assy.	1
15	9A549	Decal	1
16	9A547	Decal	3
17	9A546	Decal	1
18	9A545	Decal	1
19	9A548	Decal	2
20	3A250	Gear Motor	1
21	2A1166	Crank Assy.	1
22	2A1167	Spacer	1
23	2A1135	Spacer	1
24	10A244	Connector Link (w/Bushing & Brg.)	1
25	2A1124	Ram Assy. (w/Wear Plates)	1
26	2A1123	Wear Plate	6
27	4A10G3	Micro Switch	1
28	2A1132	Crusher Body Assy.	1
29	2B1127	Can Stop Assy.	1
30	4A345	Relay	1
31	4A334G1	Cable Clamp	3
32	7A35	Bushing	1
33	9A555	Spring	1
34	9A32	Shaft Collar	1
35	8A760G1	Shoulder Bolt	1
36	7A36	Needle Bearing	1
37	7A37	Bearing Inner Race	1
38	2A1180	Bottom Support *	1
39	2A1181	Top Support *	2

\* Shipped on Production Units on Serial #287190 and After.





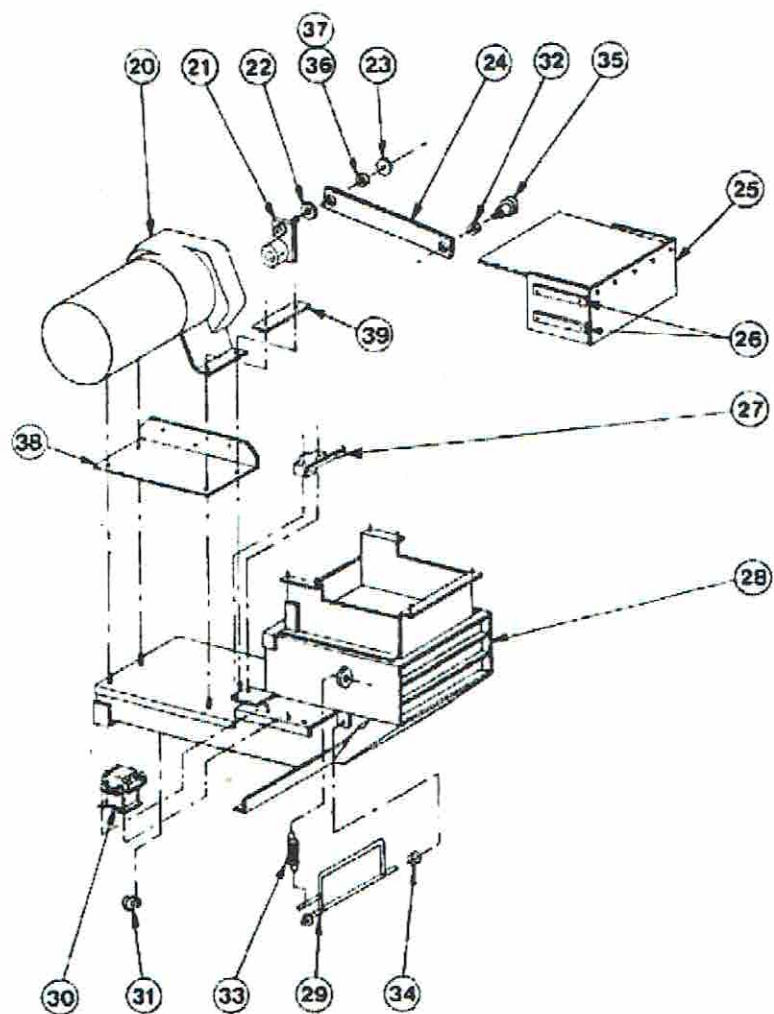
REPLACEMENT PARTS  
B450 CAN CRUSHER

**REPLACEMENT PARTS  
8450 CAN CRUSHER  
(SERIAL #486156 & AFTER)**

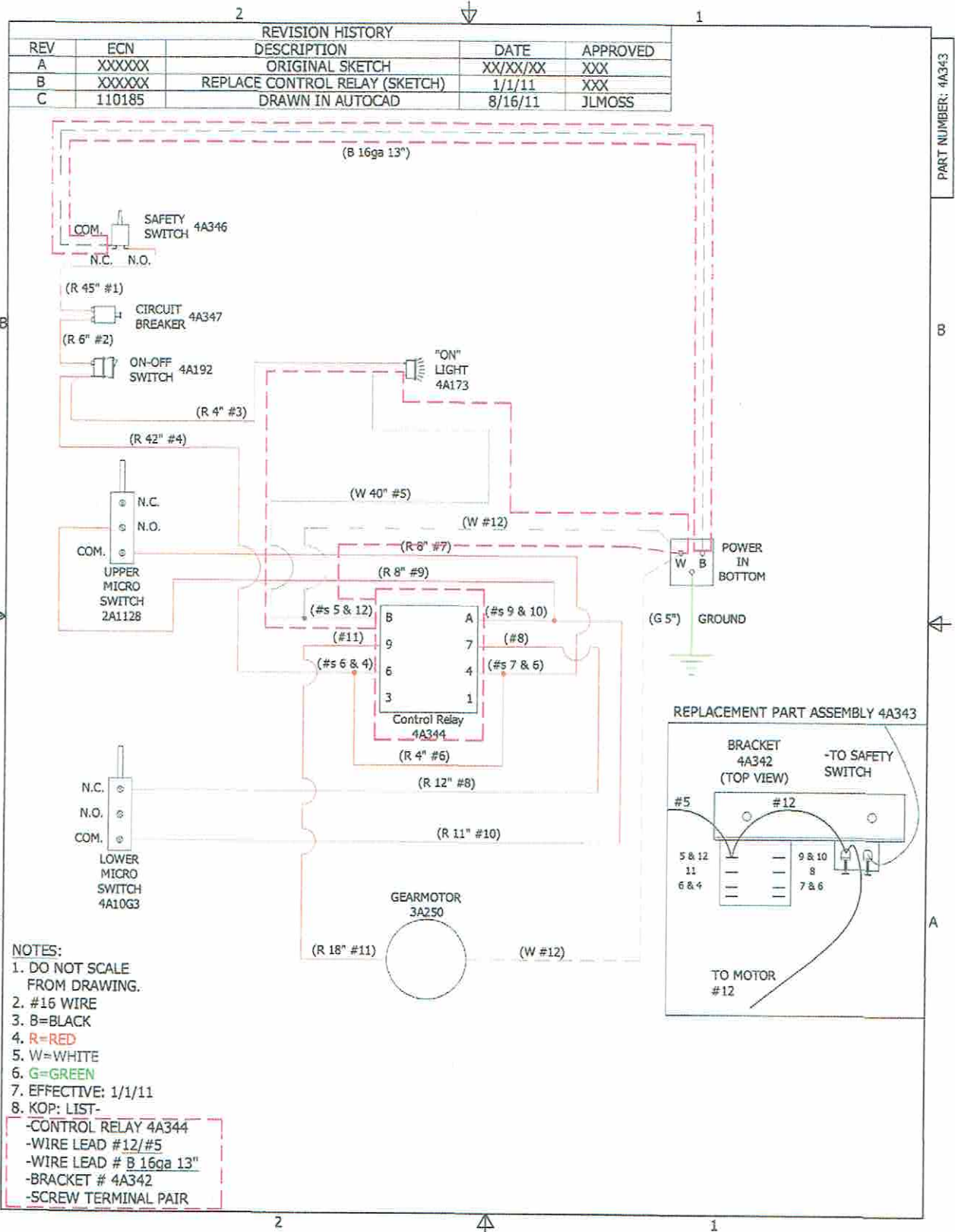
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26	2A1123	Wear Plate	6
27	4A10G3	Micro Switch	1
28	2A1132	Crusher Body Assy.	1
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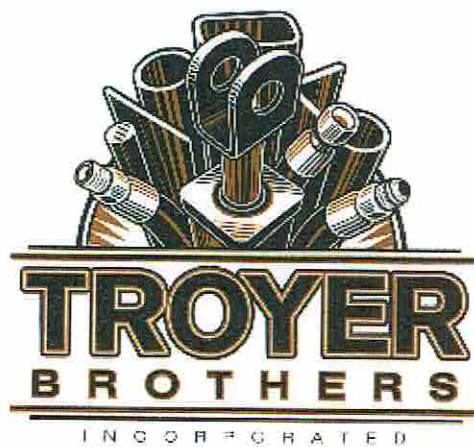




REPLACEMENT PARTS  
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**Manufacturer of Monarch Can Crusher**