

# McGUIRE ETR

ELECTRIC VEHICLE  
RESTRAINT



## OWNER'S MANUAL & INSTALLATION GUIDE

**IMPORTANT:** Thoroughly read and understand entire contents of this manual prior to installation and/or operation of this equipment.

**CAUTION:** Be sure that installation and maintenance are performed by authorized personnel.



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**Do not install, operate or service this W. B. McGuire ETR Series Vehicle Restraint until you have read and understand the entire contents of this manual.**

Congratulations! You have purchased one of the industry's finest electrically operated and safety oriented vehicle restraint devices, the ETR Series from the W. B. McGuire Company. When properly installed, serviced and operated, this vehicle restraint can offer substantially improved dock safety conditions. The ETR Series is the result of the efforts of many skilled workers and its design, manufacture, safety aspects and operation are regarded with pride by the W. B. McGuire Company.

The ETR Series by W. B. McGuire is part of a dock safety equipment concept, designed to provide a safer work place for personnel involved at shipping and receiving dock areas. All those who install, operate and service this equipment should observe all safety considerations. Read this manual completely through to understand all installation, operation and maintenance instructions and functions before attempting to install, operate or service this vehicle restraint. Pay special attention to all warnings and/or caution statements.

**Important Note:** W. B. McGuire recommends the use of minimum 4" thick bumpers with this vehicle restraint.

Contact your authorized W. B. McGuire distributor or a Technical Support Representative at 1-800-624-8473 for the answer to any questions.

## DEFINITION AND FUNCTION

The W. B. McGuire ETR Vehicle Restraint is a device designed to be fully electric in operation and self-aligning with an intact and proper rear impact guard, RIG, assembly on the truck/trailer rear. Its function is to aid in the prevention of possible accidents at the dock. When properly installed, serviced and operated the restraint is designed to safely capture the RIG at the trailer rear. This vehicle restraint will then aid in the prevention of premature trailer separation from the dock by creating a barrier noticeable to the truck driver should the driver accidentally try to pull the truck/trailer away while it is being serviced. It will also assist in the prevention of excessive trailer movement away from the dock during the loading/unloading process. This trailer "creep" can create a situation whereby an unsafe void is created between the face of the dock and the rear end of the trailer. The prerequisite for proper restraint engagement is a trailer parked firmly against a 4" thick bumper with the brakes locked and an intact and proper RIG. This is now a Federal Mandate on size and location on all trailer bodies. The restraint is then operated by pushing the "raise" button to operate the restraint. Pushing the "store" button will restore the unit to a safe stored position. The dock attendant controls the activation/deactivation of the restraint solely from the inside of the building.

**IT IS THE RESPONSIBILITY OF THE DOCK ATTENDANT TO DETERMINE THE QUALITY OF RESTRAINT THAT HAS BEEN ACHIEVED, TAKING ALL OF THESE FACTORS INTO ACCOUNT.**

**Important Note: The dock attendant or driver should determine if a safe restraint condition cannot be achieved, and may choose to apply an alternative method with such vehicles (i.e., wheel chocks or blocks).**

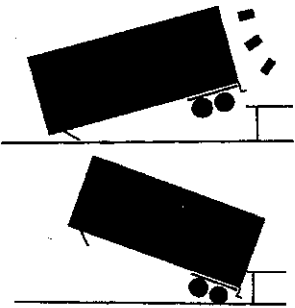
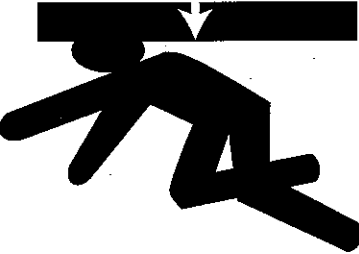

W. B. McGuire provides, in addition to the restraint, two exterior caution signs (one standard read and one reverse read), one inside caution/operation sign and control panel with communication light system designed to enhance communication between dock personnel and the truck driver.

**NOTE:** At times the trailer may move forward just enough to effectively trap the RIG against the safety barrier of the restraint. It will require the driver to back the trailer up slightly to enable the restraint to be restored.

# OVERVIEW OF POTENTIAL HAZARDS

## WARNING!

The W. B. McGuire ETR vehicle restraint device is designed to provide a safer work place for personnel at shipping and receiving dock areas. Read this manual completely before attempting to install, service or use this equipment. Pay special attention to all warnings and safety instructions. If you do not understand an instruction or have questions, contact your local representative or the W. B. McGuire Technical Support Team immediately at 800-624-8473.

POTENTIAL HAZARD	EFFECT	PREVENTION
 <p><b>TIPPING TRAILERS</b></p>	<p>Can cause serious injury or death.</p>	<ul style="list-style-type: none"> <li>• Chock wheels and use stabilizing jacks when trailer is not hooked to tractor.</li> <li>• Check RIG for strength.</li> <li>• Do not move trailer while loading or unloading</li> <li>• Release restraint arm before moving trailer.</li> </ul>
 <p><b>MOVING EQUIPMENT</b></p>	<p>Can cause injury.</p>	<ul style="list-style-type: none"> <li>• Always operate latch from dock.</li> <li>• Keep hands and feet clear of pinch points.</li> <li>• Don't use as a step.</li> <li>• Do not take linear actuator apart.</li> </ul>
 <p><b>ELECTRIC SHOCK</b></p>	<p>Will cause injury or death.</p>	<ul style="list-style-type: none"> <li>• Turn power off before touching wires or terminals.</li> </ul>

In the following text, the word...

**DANGER** means that severe injury or death *will* result from failure to follow instructions.

**WARNING** means that severe injury or death can result from failure to follow instructions.

**CAUTION** means that minor injury or property damage can result from failure to follow instructions.

**NOTE** means that special attention should be given to the instruction.

# SAFETY PRACTICES

**WARNING:** Read and understand all safety practices and operating instructions before installing, operating or servicing the vehicle restraint. Failure to follow the safety practices may result in property damage, serious bodily injury or death.

**CAUTION:** The installer and/or operator MUST be very familiar with the operation, function and various parts of the McGuire vehicle restraint PRIOR to installation and/or operation. If this is not the case, it is IMPERATIVE that the installer and/or operator read, and fully understand, the entire contents of this manual. **Be certain to read and understand all warning and caution statements contained in this manual prior to any installation, operation or servicing of this unit.**

1. Do not operate this equipment while under the influence of drugs or alcohol.
2. Do not stand in the driveway between the vehicle restraint and a truck backing or pulling away.
3. Be sure the vehicle restraint is properly engaged and the trailer is held in place before attempting to load or unload a trailer.
4. Do not use the vehicle restraint if it looks broken or does not seem to work right. Tell your supervisor immediately.
5. Do not operate the vehicle restraint with materials or people in front of the restraint. Only operate restraint with no obstructions or a trailer to engage.
6. Be certain that equipment or people are free of the trailer before allowing the vehicle restraint to be stored and the trailer to depart.
7. Keep clear of the vehicle restraint when it is moving. Never place your hands, arms, feet or legs in a position where a moving vehicle restraint could cause injury. **If in doubt, do not do it!**
8. Do not attempt to manually lift the vehicle restraint with personnel or other equipment. If the vehicle restraint is not working properly using the operation instructions in this manual, do not use the restraint. Contact your authorized W. B. McGuire representative.
9. Check to make sure the vehicle restraint has returned to a safe stored position after you have used the store button and the truck has pulled away. Also check to see the unit has automatically restored and the alarm has come on in the event of operation with no rear impact guard present.
10. Never attempt to work on, service or repair the vehicle restraint without properly marking off the area at the dock and in front of the unit. If electrical make sure the power source has been turned off and locked out.
11. If electrical and a power disconnect, by others, is provided place it in the OFF position and tag the control panel OUT OF SERVICE prior to doing any work on the body of the restraint. If no power disconnect is provided or cannot be found then station a second person by the control panel to insure no unauthorized use.
12. Damage to the vehicle restraint, personal injury or death can result from abuse and/or negligent use of this equipment.
13. If you have any questions, or if a malfunction occurs which is not understood, ask your supervisor to contact your authorized W. B. McGuire representative for assistance PRIOR to attempting any corrective measures.

# ETR INSTALLATION INSTRUCTIONS

**CAUTION:** Installation to be performed by authorized, experienced personnel **ONLY!**

**WARNING:** ALWAYS USE SAFE WORK HABITS! Read and understand entire contents of this manual, paying particular attention to all warning, caution and important statements before attempting to install, service or operate this restraint. Failure to observe these and other safe work habits may result in property damage, personal injury or death.

**NOTE:** McGuire recommends the use of minimum 4" thick bumpers with this restraint.

## Equipment Check

1. Remove packaging from restraint. Check that all items listed in checklist below to insure that all components are included.

- |  |   |
|--|---|
| <input type="checkbox"/> A. Restraint Unit                             | <input type="checkbox"/> F Outside Light Assembly   |
| <input type="checkbox"/> B. Control Handle                             | <input type="checkbox"/> G. Inside Light/Control Box Assembly                                       |
| <input type="checkbox"/> C. Outside Sign - Mirrored                    | <input type="checkbox"/> H. Owner's/installation Manual   |
| <input type="checkbox"/> D. Outside Sign - Standard                    | <input type="checkbox"/> I. New Construction Mounting Plate (option)                                |
| <input type="checkbox"/> E. Inside Caution/Operating Instructions Sign | <input type="checkbox"/> J. Edge of Dock Blockout (optional, used when installing with EOD leveler) |

2. Check the vehicle restraint for possible damage that may have occurred in transit. If any damage, contact your supervisor for proper handling.

**DO NOT INSTALL A DAMAGED RESTRAINT!**

## Dock Face Mounting Area Check

1. Check the dock face for proper construction. Check for any possible obstructions. Make sure the dock face is plumb and at 90° from driveway grade.
2. Any curve up from driveway to dock face (water runoff area) must be removed and turned into a 90° angle before mounting vehicle restraint to the dock face.

## Installing the vehicle restraint

**CAUTION:** Refer to the installation diagram(s) on the following pages for dimensional data and to insure proper installation.

**WARNING:** Observe all safety warnings and safety practices before proceeding with installation procedures and before working on or around vehicle restraint.

1. Mark centerline of door opening on face of dock, below dock leveler.
2. Position mount plate of restraint as shown on the installation diagram, page 6.

**NOTE:** If ETR is being installed with an Edge of Dock leveler, skip step 4 and proceed to step 4A in the shaded box below.

3. Mount restraint to dock face and flush with grade with eight (8) 5/8" x 6" long Rawl Plug Co. Rawl-Bolt #6945 concrete bolts through the eight (8) 11/16" diameter holes provided in the backplate. On thin wall construction, use 4" Rawl Bolt #6942 or 5" Rawl Bolt #6944. An alternative to bolts can be the Rawl double Machine Bolt Anchor #9530, or equal. (All perimeter fasteners by others.)

## ETR INSTALLATION INSTRUCTIONS (continued)

### STEP 3A, INSTALLATION WITH EOD LEVELER

Mount blockout (Part # 513-194, optional extra by McGuire) to dock face, flush with grade, with eight (8) 5/8" x 6" long Rawl Plug Co. - Rawl-Bolt #6945 concrete bolts through the eight (8) 11/16" diameter holes provided in the blockout. On thin wall construction, use 4" Rawl Bolt #6942 or 5" Rawl Bolt #6944. An alternative to bolts can be the Rawl double Machine Bolt Anchor #9530. (All perimeter fasteners by others.)

After mounting blockout to dock face, mount restraint to blockout with eight (8) 5/8" x 2 1/4" Grade 5 bolts with lock washers, flat washers and nuts (by others).

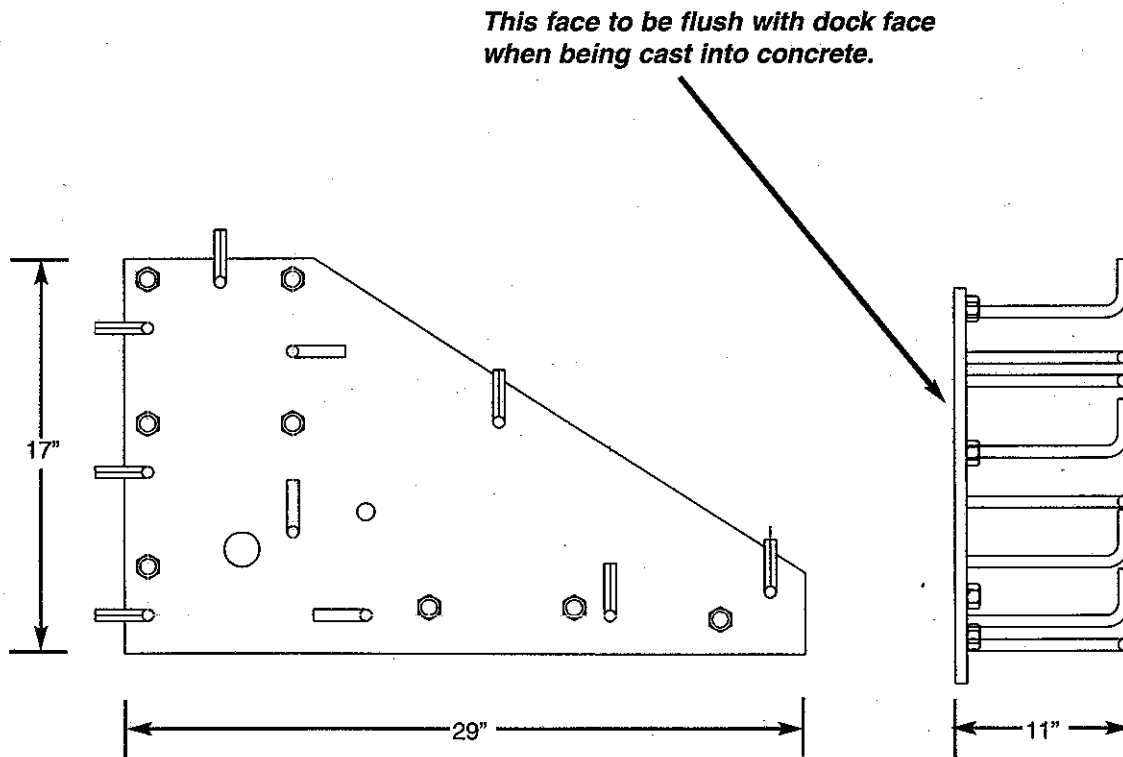
4. Mount the outside standard sign to the right side of door opening (facing building) at approximately 7' off grade to the top of the sign. Mount the mirrored sign 14" above the standard sign. Mount both signs far enough to the right of the door jamb to allow for the installation of dock seals or shelters if required. Mount inside "Caution" sign to the left side of door opening looking out, approximately 5-1/2' from floor.
5. Using suitable fasteners, mount the outside light assembly between the two "Caution" signs mounted on the outside dock wall in step 5 above.
6. Using suitable fasteners, mount the control panel to the inside wall approximately 6" below the "Caution" sign.
7. Mount junction box to dock face to right side of door opening (facing building) in line with outside lights and signs approximately 18" from grade.
8. See section "Field Wiring Diagram" on page 8 for electrical hook-up. All field wiring must be done by a licensed electrician.
9. When running conduit into light box and junction box, use watertight connections. Recommend either 1/2" straight fitting (LT50m-Thomas & Betts or equal) or 90° 1/2" fitting (LT950m-Thomas & Betts or equal).
10. Use flex conduit to route wires from upper arm to junction box leaving enough slack to allow for full range of motion of restraint. Recommend 1/2" Seal-tite non-metallic or equal.



# OPTIONAL NEW CONSTRUCTION MOUNTING PLATE

A new construction steel mounting plate is a 1/2" thick steel plate that has concrete anchors and mounting studs attached. This plate is cast into the dock face when the concrete is poured. This eliminates the need to drill the dock face and use concrete anchors to attach the ETR vehicle restraint.

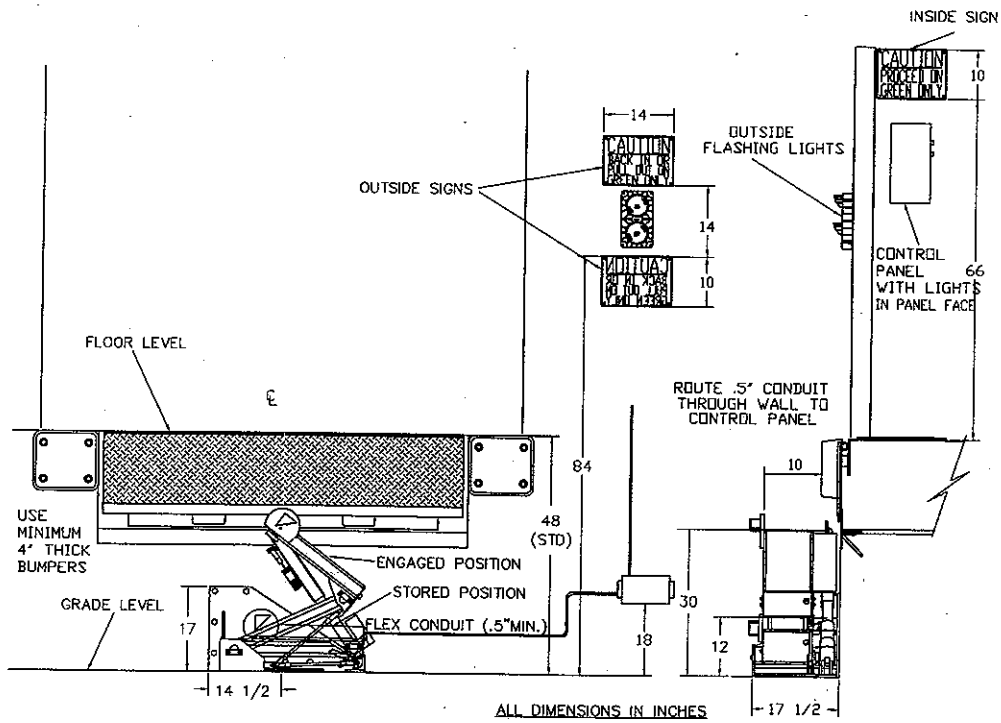
After the mounting plate has been installed and the concrete is dry, simply slide the ETR over the threaded studs of the mount, re-install the nuts and washers and tighten.



*New construction mounting plate, part number 602-016*

# ETR INSTALLATION DIAGRAM

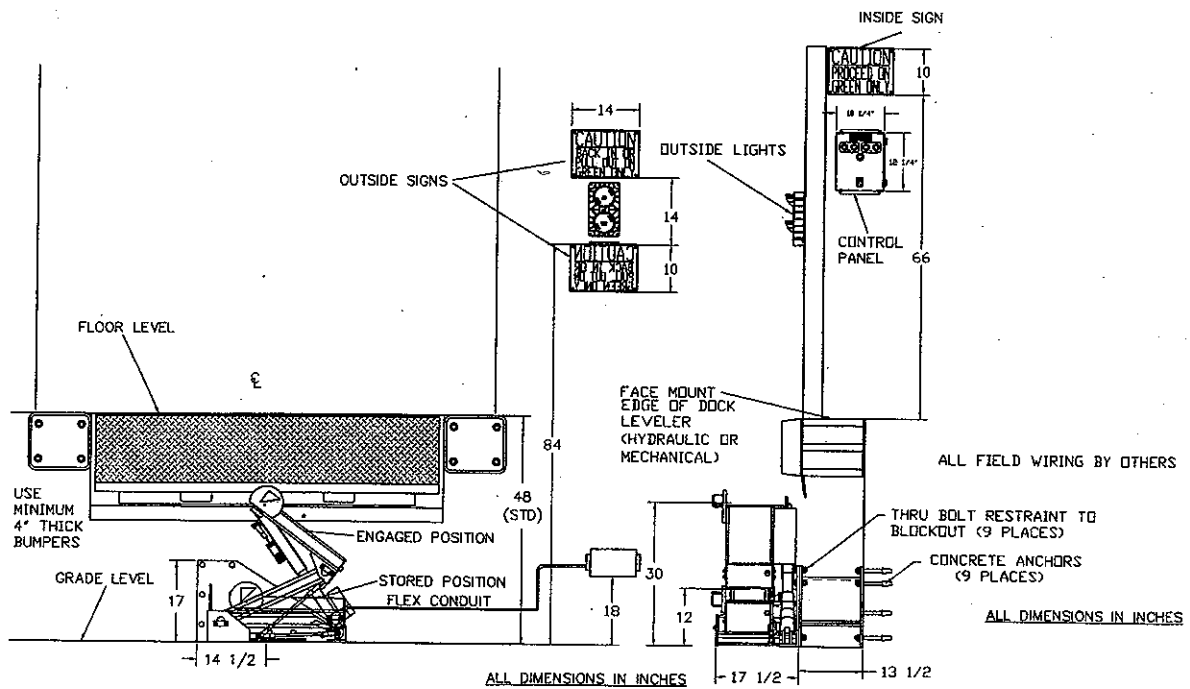
## WITH CONVENTIONAL PIT TYPE LEVELER



ETR GENERAL ARRANGEMENT

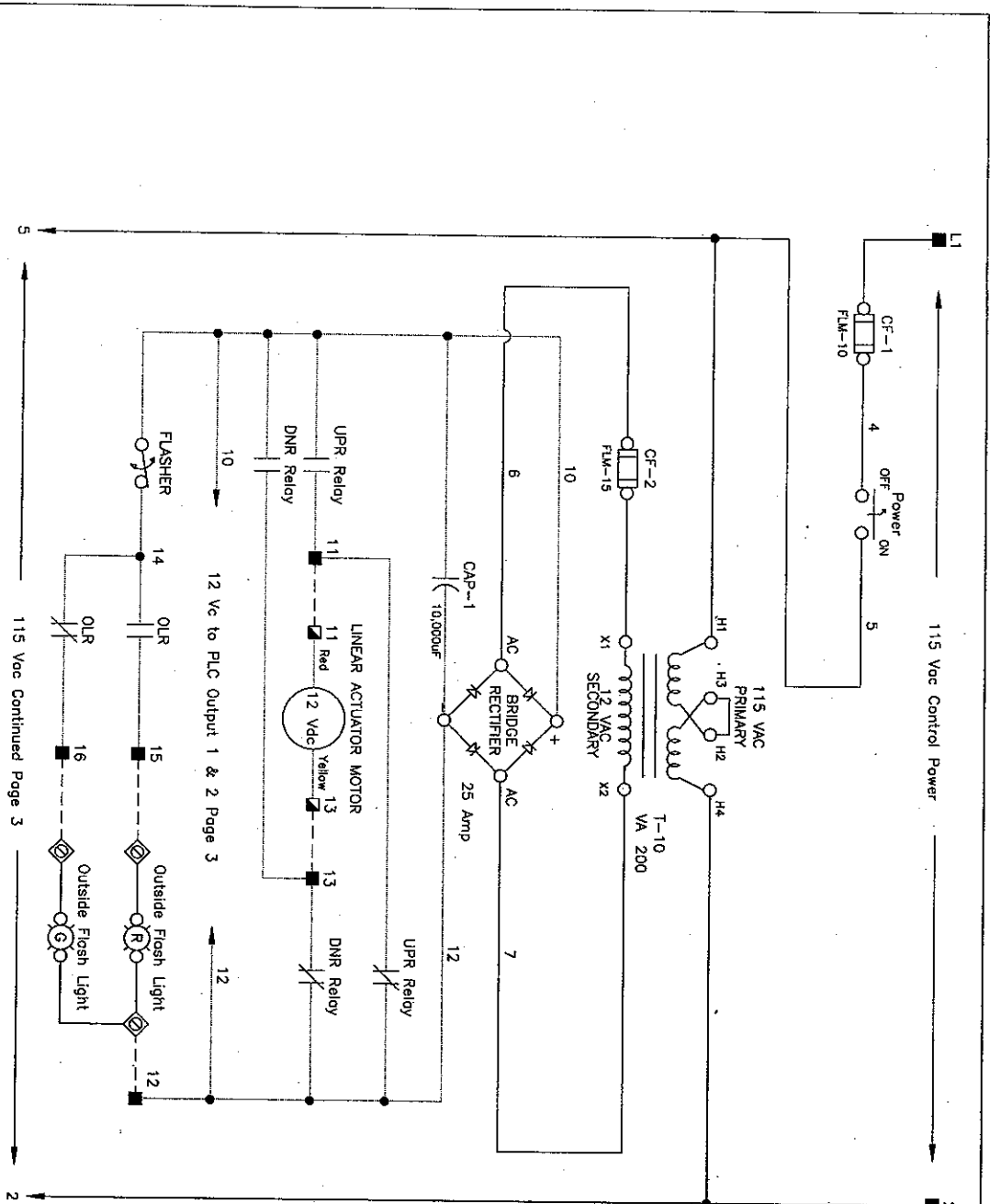
# ETR INSTALLATION DIAGRAM

## WITH EDGE OF DOCK LEVELER



# ETR ELECTRICAL SCHEMATICS

120 Volt AC, 60Hz, Single phase power is required for proper operation.



No.	REVISION	DATE	TITLE
			12 Vdc ETR Restraint Control Panel
			Wiring Diagram

DRAWN BY: THS	DATE: 03-15-2001	SCALE: None
FILE: 612-079-01	DRAWING No. 612-079-01	

W. B. Mc Guire Co., Inc.  
Hudson, New York 12534

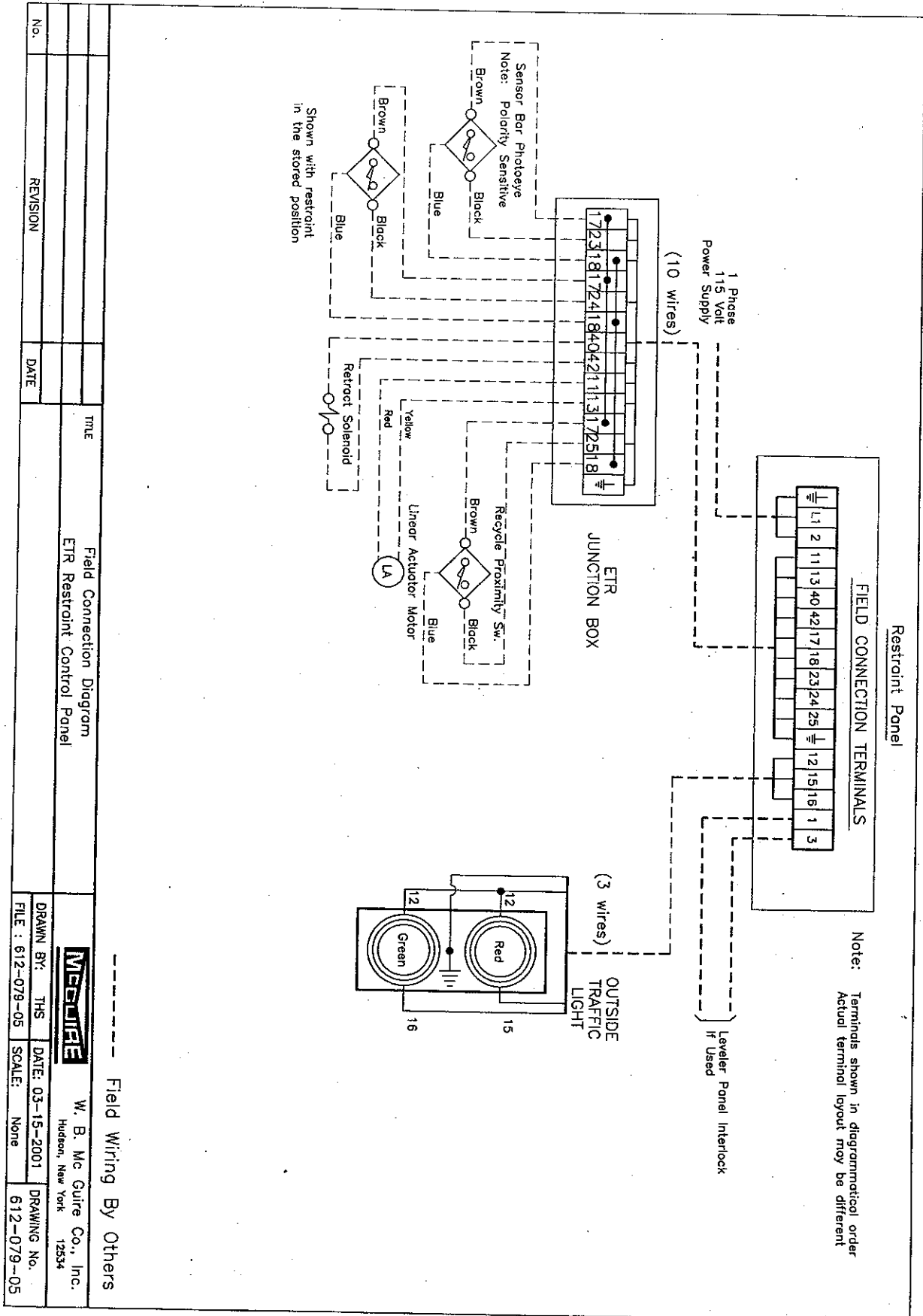
- <Restraint Panel Terminal
- ▣ <Junction Box Terminal
- ◇ <Outside Light Box Terminal





# ETR FIELD WIRING DIAGRAM

120 Volt AC, 60Hz, Single phase power is required for proper operation.



# ETR OPERATION INSTRUCTIONS

**WARNING:** Before operating the vehicle restraint, read and understand all Safety Practices found in this manual. Use by untrained personnel can result in property damage, serious bodily injury or death. Read and understand complete Operation Instructions before attempting to operate this vehicle restraint. Follow all OSHA regulations regarding the use of this equipment. **Do not use the vehicle restraint if it is broken or does not function properly.** Contact your authorized W. B. McGuire Service Representative.

**WARNING:** Trucks must be secured at the dock. ALWAYS be certain that the vehicle restraint has attained a safe and proper connection with the rear impact guard (RIG) of the trailer. **Where a safe restraint condition cannot be achieved, alternative methods must be used with such vehicles (i.e., wheel chocks or blocks).**

1. Truck should be backed against bumpers and brakes set.
2. Before engaging restraint, a visual check should be made to insure that a RIG is present. If the RIG is damaged or not present, use an alternate method to secure truck at dock such as wheel chocks, then refer to **Restraint Bypass Operating Instructions** following this section. The restraint bypass selector should be in the **NORMAL** position.
3. After confirming that a RIG exists on the truck, push the "RAISE" button to power the linear actuator forward for two (2) seconds to release restraint arm. The restraint arm will rise until it contacts the RIG. The photoeye will detect positive RIG contact. The inside light will turn steady GREEN, while the outside light remains flashing RED.
4. After positive contact is made, the linear actuator motor reverses for two (2) seconds, retracting to its home position. The leveler interlock relay contact will close in the restraint panel allowing the operation of the dock leveler (if equipped).
5. If positive RIG contact HAS NOT BEEN ACHIEVED, the audible alarm will sound steadily for six (6) seconds. At the end of the six (6) seconds, the alarm will silence and the linear actuator will recycle, returning the restraint to the stored position. The outside light will flash GREEN and the inside lights will flash simultaneously alerting the dock attendant that positive contact has not been made. The inside lights will flash simultaneously until the control selector is returned to the STORE position. The inside light will turn RED. The operator should then proceed with the **Restraint Bypass Operating Instructions**.
6. When positive RIG contact has been achieved, the dock attendant should make a visual check. The normal loading/unloading operation may begin. The restraint will float with the vertical movement of the trailer, ensuring that positive contact is maintained during operations. After normal loading/unloading operations are finished, return the dock leveler to its stored position.
7. The restraint must be returned to its stored position. Push the "STORE" button to return the restraint to the stored position. The inside light will turn RED and the outside light will flash GREEN.

8. The truck may now depart safely. The unit is ready to accept another truck at the dock. Repeat the entire operation sequence for each trailer received at the dock.

**WARNING: A buzzer alarm will sound if positive contact is not made. Recycle the arm to make positive contact. If the alarm continues, the RIG may be faulty. USE ANOTHER METHOD TO SECURE THE TRAILER TO THE DOCK, (such as wheel chocks) and refer to the RESTRAINT BYPASS OPERATING INSTRUCTIONS.**

## RESTRAINT BYPASS OPERATION

**WARNING: Using the Restraint Bypass Operation means that positive contact with the RIG has not been made. Make sure the truck is secured by wheel chocks or other means.**

1. When contact with RIG has not been made, press the "STORE" button to return the restraint to the stored position. After manually securing the truck by wheel chocks or other methods, turn the restraint bypass selector to the LIGHTS ONLY mode. The inside lights will alternate GREEN and RED indicating the truck has not been secured by the restraint and the outside light will flash RED. If restraint is interlocked with leveler, the lights only mode will allow the user to operate the dock leveler.
2. After step #1 is completed, loading/unloading operations may begin.
3. After loading/unloading is completed, the operator must return the dock leveler to its stored position. Wheel chocks (or other means of securing the trailer) must be removed and stored.
4. Turn the INTERLOCK SELECTOR to the NORMAL position. The inside RED light will be on, and the outside light will be flashing GREEN. The restraint will be in its stored position.

## MANUAL RESTRAINT OPERATION (POWER OUTAGE)

1. If the restraint is in the up position, and positive contact with the RIG is made, and loss of electrical power occurs, use the control handle from dock level, and insert between dock and trailer after you have stored any dock leveler. Position the control handle on the upper arm, one inch in front of the reflector.
2. Push down on the upper arm until the restraint rests in its stored position. The truck is safe to pull away from the dock.

**WARNING: DUE TO LOSS OF ELECTRICAL POWER, PLC CONTROL AND COMMUNICATION LIGHT SYSTEM WILL NOT OPERATE. VISUAL CHECK AND MANUAL RESTRAINT (WHEEL CHOCKS) WILL BE REQUIRED.**

**WARNING: IF ANY OF THE OPERATIONAL FEATURES OF THIS VEHICLE RESTRAINT DO NOT FUNCTION AS PREVIOUSLY STATED DO NOT USE THE VEHICLE RESTRAINT! CONTACT YOUR AUTHORIZED W. B. McGUIRE SERVICE REPRESENTATIVE OR W. B. McGUIRE TECHNICAL SUPPORT AT 1-800-624-8473.**

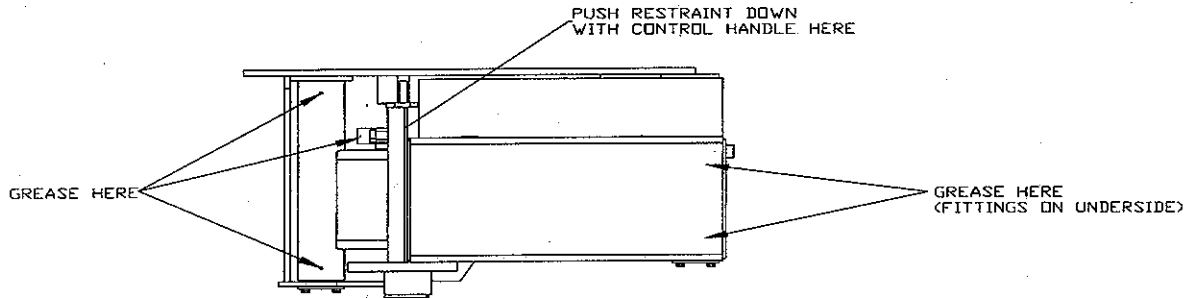


# MAINTENANCE AND SERVICE

On site maintenance personnel can follow the enclosed service and trouble-shooting instructions or you can arrange for professional service through your authorized W. B. McGuire distributor.

1. Turn power off and lock out before performing maintenance on restraint.
2. An operational check should be made daily to insure the unit is functioning properly, that it travels its full upward stroke and that there are no worn or damaged parts which could result in the failure of equipment and/or personal injury.
3. Check to insure that the warning label is in place and legible. Also insure that the yellow and black striped tape is in place. Also insure all caution signs are in place.
4. Lubricate the unit monthly with a minimal amount of a light weight, low temp grease. There are four (4) grease fittings; two (2) at each end of the lower restraint arm. Any excess grease should be wiped away to prevent the attraction of foreign matter that may impede the operation of the restraint. Refer to illustration below for grease fitting locations.
5. Check all mount bolts for tightness monthly.
6. Remove any debris from the dock area as required that may impede the operation of the restraint.

## LUBRICATION POINTS



TOP VIEW OF RESTRAINT

## TROUBLE-SHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	CORRECTIVE ACTION
Restraint arm does not rise.	A. Inoperative gas spring. B. Binding. C. No electrical power.	A. Replace gas spring. B. Determine cause and correct as necessary. C. Determine cause and correct as necessary.
Restraint arm does not stay down when returned to stored position.	A. Latch not engaging.	A. Check to see if latch is rotating freely. B. Check for broken return spring.
Restraint arm rises slowly or does not rise to its full upward travel.	A. Binding. B. Weak gas spring.	A. Determine cause and correct as necessary. B. Replace as required.
Light system does not operate.	A. No power. B. Inoperative photo eye or limit switch. C. Burned out bulb.	A/B. Determine cause and correct as necessary. C. Replace bulb.

# PREVENTIVE MAINTENANCE CHECKLIST

## Mechanical / Electrical Vehicle Restraints

CUSTOMER:	DOCK #	DOCK #	DOCK #	DOCK #
Restraint Model:	Serial #:	Serial #:	Serial #:	Serial #:
1	Clean debris from area			
2	Inspect lift arms			
3	Inspect hooking plate			
4	Inspect gas spring			
5	Inspect linear actuator			
6	Tighten fittings			
7	Inspect all welds			
8	Tighten anchor bolts			
9	Inspect condition of caution signs and safety labels			
10	Inspect communication light system			
11	Inspect control panel			
12	Inspect electrical connections			
13	Inspect photo eye			
14	Inspect audible alarm			
15	Cycle unit for proper operation			
16				
17				

Dock #	Comment or Description of Repair(s) Needed	Approval	Completed

Customer Signature

Date

Technician Signature

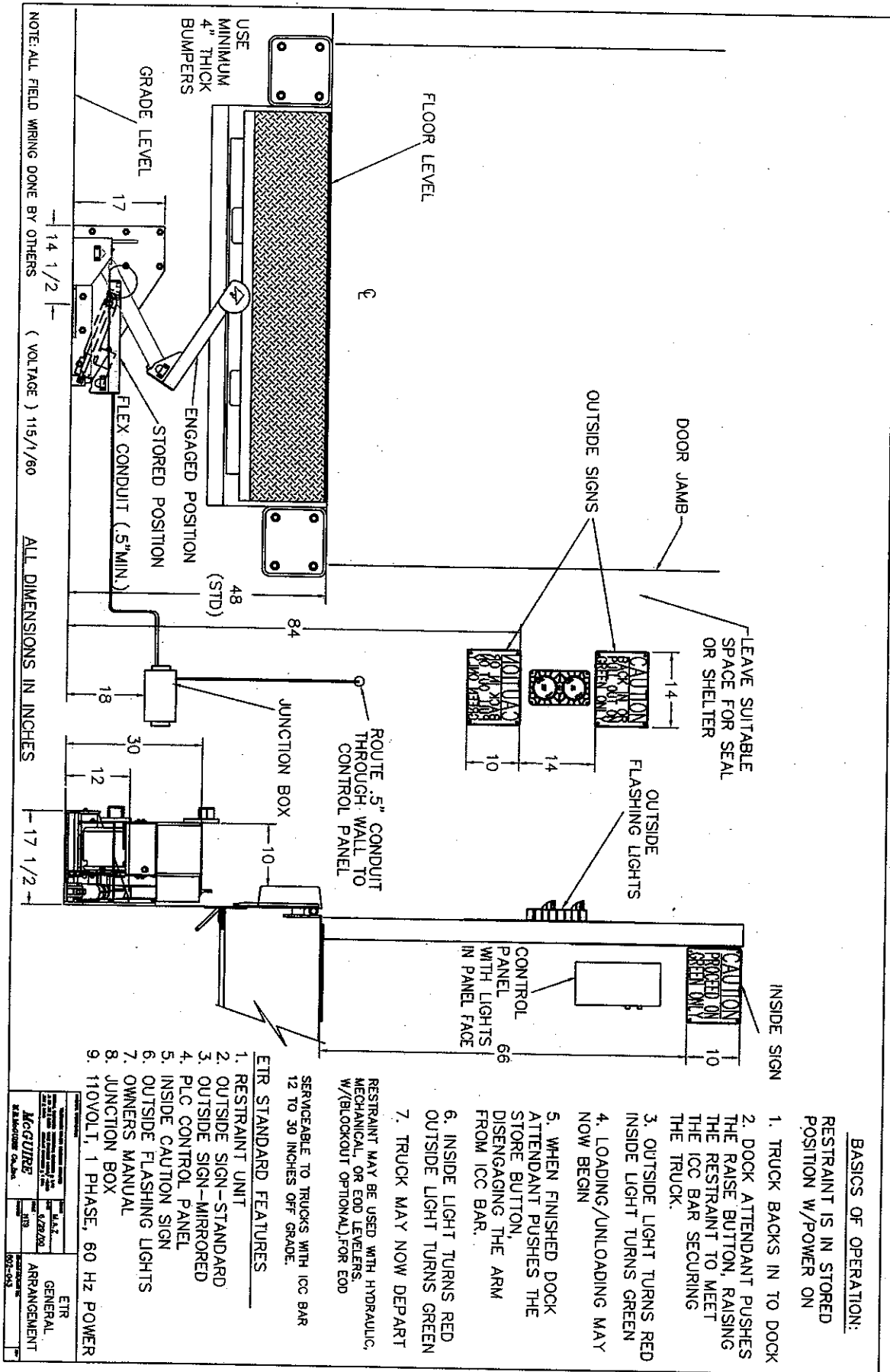
Date

Phone Number

PMP-5

Assistant's Signature

# ETR GENERAL ARRANGEMENT



## BASICS OF OPERATION:

RESTRAINT IS IN STORED POSITION w/POWER ON

1. TRUCK BACKS IN TO DOCK
2. DOCK ATTENDANT PUSHES THE RAISE BUTTON, RAISING THE RESTRAINT TO MEET THE ICC BAR SECURING THE TRUCK.
3. OUTSIDE LIGHT TURNS RED INSIDE LIGHT TURNS GREEN
4. LOADING/UNLOADING MAY NOW BEGIN
5. WHEN FINISHED DOCK ATTENDANT PUSHES THE STORE BUTTON, DISENGAGING THE ARM FROM ICC BAR.
6. INSIDE LIGHT TURNS RED OUTSIDE LIGHT TURNS GREEN
7. TRUCK MAY NOW DEPART

RESTRAINT MAY BE USED WITH HYDRAULIC, MECHANICAL, OR EOD LEVELERS. W/(BLOCKOUT OPTIONAL), FOR EOD

SERVICEABLE TO TRUCKS WITH ICC BAR 12 TO 30 INCHES OFF GRADE.

## ETR STANDARD FEATURES

1. RESTRAINT UNIT
2. OUTSIDE SIGN--STANDARD
3. OUTSIDE SIGN--MIRRORED
4. PLC CONTROL PANEL
5. INSIDE CAUTION SIGN
6. OUTSIDE FLASHING LIGHTS
7. OWNERS MANUAL
8. JUNCTION BOX
9. 110VOLT, 1 PHASE, 60 Hz POWER

McGUIRE		ETR GENERAL ARRANGEMENT	
Model No.	678/200	Part No.	601-025
Rev.	1/78	Rev.	1/78
Drawn By	JTB	Checked By	JTB
Approved By	JTB	Approved By	JTB

## LINEAR ACTUATOR SPECIFICATIONS

- 12 Volt DC motor
- Weather-protected
- Overload clutch
- Self-locking screw, does not require brake
- 250 pound load capacity
- Steel spur gears in drive system
- Maintenance free operation
- Stainless steel extension tube
- Thermal overload protected
- Temperature range of -15 degrees F to 150 degrees F
- Zinc housing

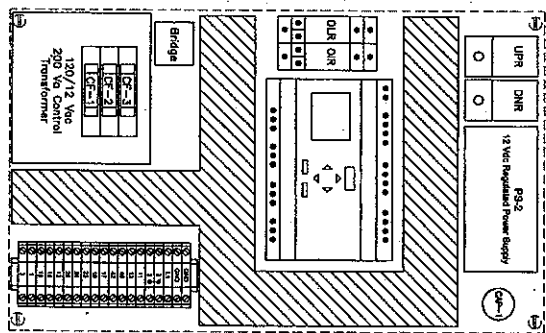
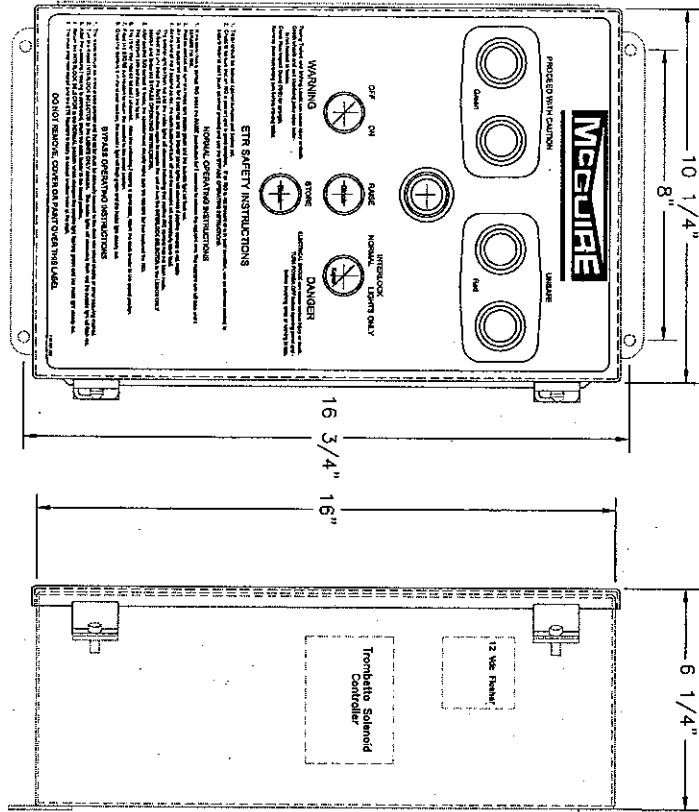
## PLC SPECIFICATIONS

- Compact dimensions:
- 4.96" x 3.54" x 2.17"
- 19 integrated functions
- Ambient temperature range 0 to +55 degrees C
- Storage temperature range -40 to +70 degrees C

## ELECTRICAL SPECIFICATIONS

- 120 Volt AC, 60 Hz, Single Phase Power required for proper amperage-draw operation.
- Incoming power supply by others to be 120 Volt AC, 60 Hz Single Phase.
- 30 Amp. Rated Fused Disconnect with 10 Amp. Non-Time Delay Fuse, all by others, is to be part of incoming power supply by others and located right before the control panel.
- Power Supply Disconnect or Protection Device by others is to be supplied at time of installation and hook-up. It is suggested that 60°/75° Copper Wire minimum be used.
- 4 Amp, 10 Amp and 15 Amp protection supplied inside control panel at appropriate areas.

# CONTROL PANEL

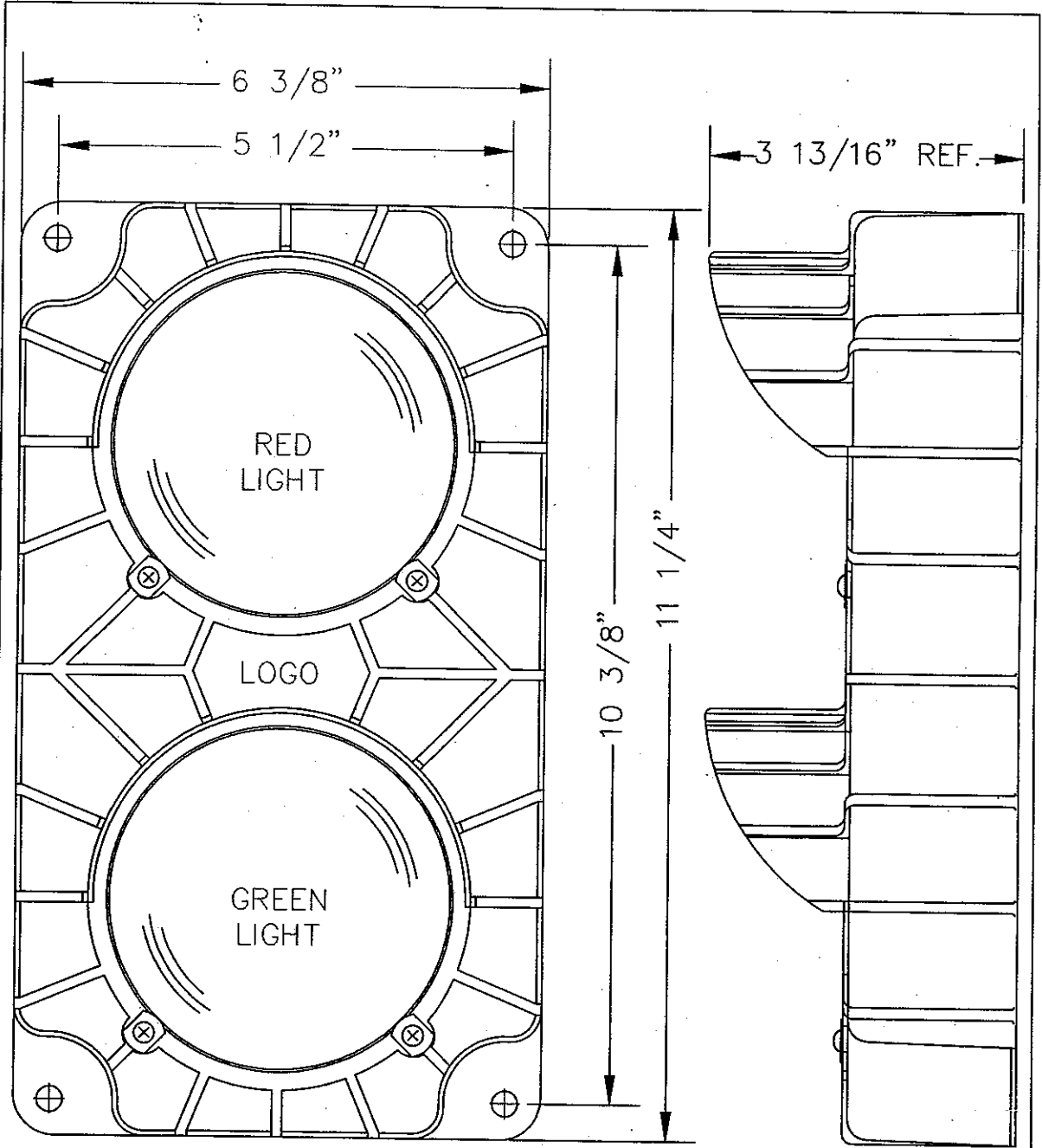


Notes: Exterior Lights to be Tri. Light Signal Type  
Enclosure is Nema 12 Rotted

UL File: E164162

No.		REVISION	DATE	TITLE	 W. B. Mc Quirre Co., Inc. Hudson, New York 12534
				Panel Layout Diagram	DRAWN BY: THS DATE: 03-15-2001
				ETR Restraint Control Panel	
					FILE: 612-079-04

# EXTERIOR LIGHTS



MATERIAL SPECIFICATION		MODEL S&G 115VAC		OUTSIDE LIGHT BOX	
TOLERANCES UNLESS OTHERWISE SPECIFIED		DRAWN	MSL		
DECIMAL DIMENSION FRACTIONAL DIMENSION + 1/16		DATE	8/4/99		
.X OR .XX ± 0.030 HOLE DIAMETER +0.015/ -0.005		SCALE	NTS		
.XXX ± 0.010 ANGULAR DIMENSION + 1 DEG.		CHECKED		DRAWING NO/PART NO.	REV
<b>McGUIRE</b> W.B. McGUIRE Co., Inc.				112-634	



# ETR COMPLETE PARTS LIST

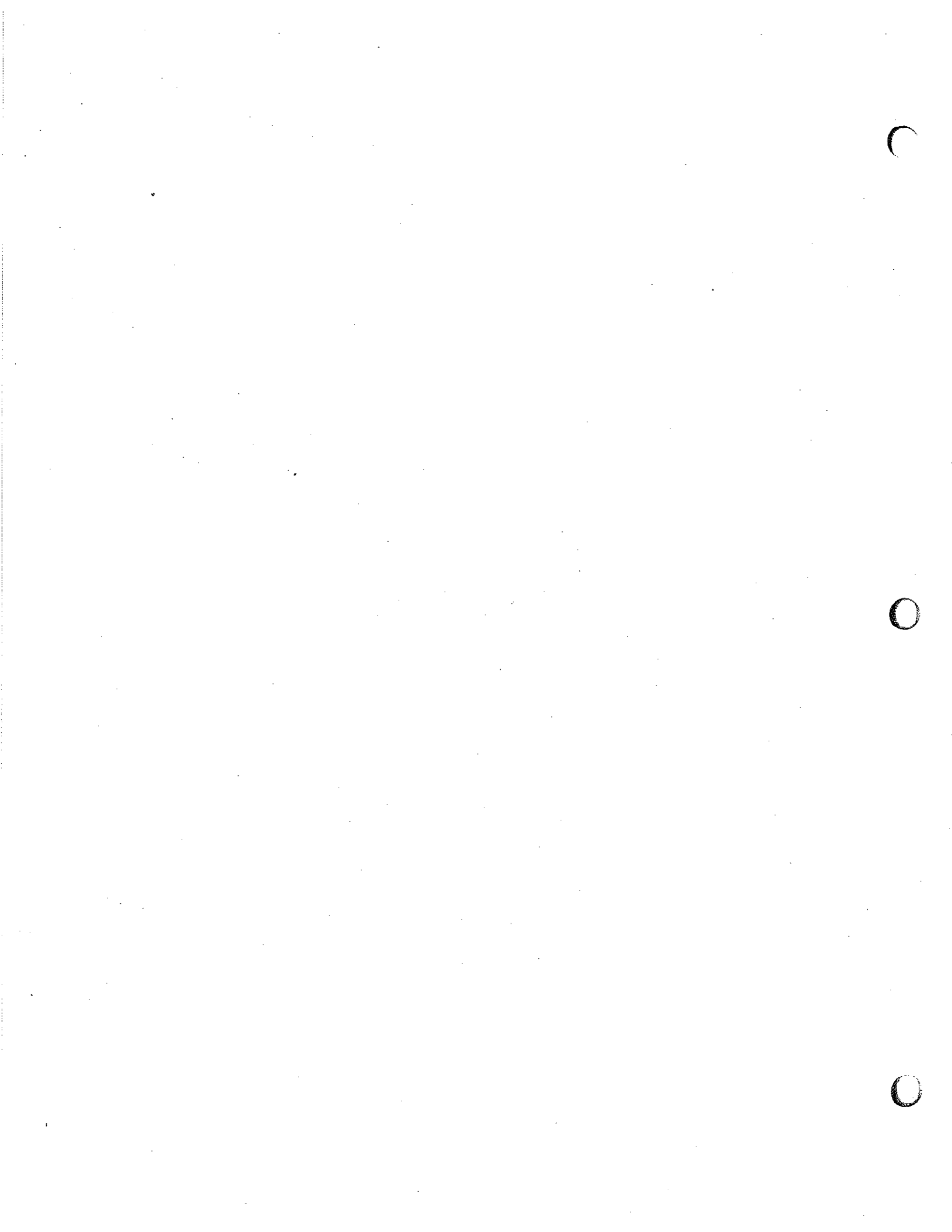
ITEM #	PART DESCRIPTION	PART NUMBER	QTY
1	BASE FRAME ASSEMBLY	612-080	1
2	LOWER ARM ASSEMBLY	612-081	1
3	UPPER ARM ASSEMBLY	612-082	1
4	3 <sup>RD</sup> LINK ASSEMBLY	612-062	1
5	TUBE WELDMENT ASSEMBLY	621-100	1
6	ACTUATOR ASSEMBLY	612-083	1
7	RETAINER PLATE	622-075	3
8	PIN	622-074	1
9	PIN	622-073	1
10	1/4" LOC WASHER	121-056	8
11	HEXBOLT 1/4" X 1/2"	122-154	8
12	ACTUATOR PIN	113-068	1
13	LATCH	622-161	1
14	GAS SHOCK	113-291	1
15	CONTROL PANEL	612-079	1
16	SOLENOID	112-683	1
17	SOLENOID MODULE	112-684	1
18	COLLAR W/SCREWS	113-136	1
19	GREASE FITTINGS	113-112	4
20	RUBBER GROMMETTS	123-056	2
21	REFLECTOR	112-477	1
22	LOCKWASHER #8	121-041	4
23	REFLECTOR RETAINER	622-129	1
24	CLEVIS PIN 3 <sup>RD</sup> LINKAGE	113-183	2
25	CLEVIS SOLENOID YOKE END	113-298	1
26	SMALL COTTER PIN/ CLEVIS PIN SOLENOID	113-348	1
27	PROXIMITY SWITCH	112-700	1
28	STORE SWITCH	112-701	1
29	PHOTO EYE W/BRACKET	112-702	1
30	SCREWS/ REFLECTOR CONTAINER	122-005	2
31	COTTER PIN ACTUATOR	113-073	1
32	PHOTOEYE SCREWS	122-006	2
33	SCREWS STORE SWITCH	122-090	2



## ETR COMPLETE PARTS LIST (con't)

ITEM #	PART DESCRIPTION	PART NUMBER	QTY
34	LARGE COTTER PIN SOLENOID	113-349	1
35	DECAL	131-160	1
36	3" WARNING TAPE	131-154	1
37	FLAT WASHER	121-055	2
38	COTTER PIN	113-073	1
39	OWNERS MANUAL	602-042	





# W.B. McGUIRE COMPANY

## ETR Electric Vehicle Restraint Warranty

The W. B. McGuire Company warrants that its electric vehicle restraint device (model ETR) will be free from defects in materials and workmanship under normal use and service for a period of two (2) years from the date of installation.

W. B. McGuire's sole obligation under this warranty is limited to repairing or replacing any part which shall be determined by W. B. McGuire to be defective, and is conditioned upon the buyer giving written notice of any such defect within the warranty period. If W. B. McGuire concludes that repair or replacement is necessary, work will commence within a reasonable time period after the decision to repair or replace has been made.

This warranty will not apply to any product that has been altered, modified, damaged or which has deteriorated due to abuse, neglect, misuse or by accident. Warranty will be VOID if any repairs are made or attempted to be made by any person not designated by W. B. McGuire. Proper application, installation, maintenance and operation are required to keep warranty in force.

Programmable logic controllers are factory preset. No adjustments are required during installation or maintenance. Any reprogramming by an unauthorized W. B. McGuire representative that results in improper operation of the unit will VOID this warranty. W. B. McGuire assumes no liability in the event of the PLC being reprogrammed.

This warranty is W. B. McGuire's exclusive expressed warranty. Warranty is limited to value of components only. W. B. McGuire assumes no liability for loss of the use of any equipment and expressly disclaims any liability for incidental or consequential damages. Warranties implied by law are limited in duration to the two year period described above.



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The specifications described herein were in effect at the time of printing. However, W.B. McGuire Company reserves the right to change specifications and designs or to discontinue models at any time without incurring obligation.

**Represented By:**