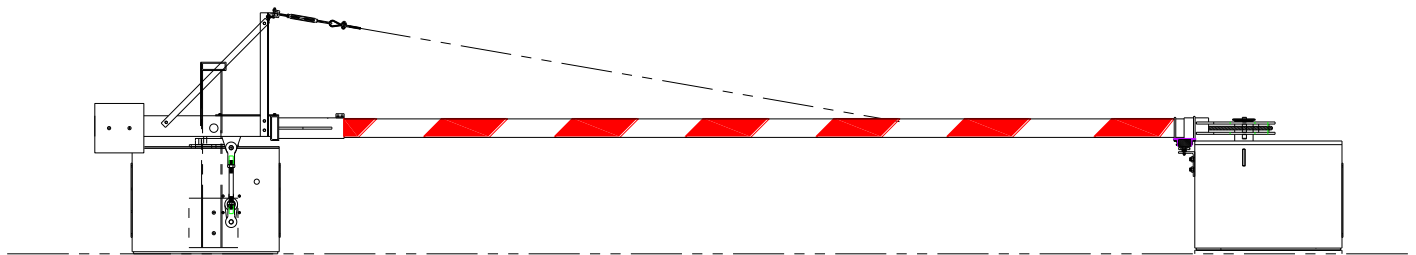




MODEL CR25P CABLE BEAM BARRIER

OPERATIONS & MAINTENANCE MANUAL



B&B ARMOR

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MADE IN THE USA

INTRODUCTION

Welcome

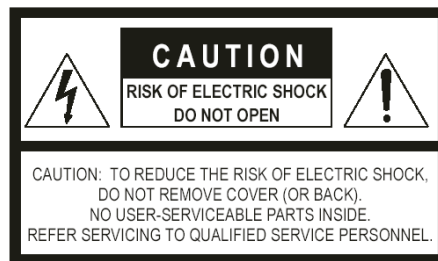
Congratulations on your purchase of a B&B ARMR warning gate. We have years of experience in all aspects of perimeter security and related disciplines, and our products are used throughout the world to control access and to protect people, equipment, and facilities. Your warning gate is designed to give you years of smooth, trouble-free operation.

In addition to providing detailed operating instructions, this manual describes how to install, maintain, and troubleshoot your vehicle barrier. To make it easy to locate the information you need, we've included a detailed Table of Contents immediately following this Introduction. All of this is important information, so be sure to keep the manual available for reference.

If you need help with any aspect of your vehicle barrier's installation or operation, please contact us. We offer a broad range of vehicle barrier and related security services, so you can also call on us for:

- Turnkey installations
- Routine barrier preventative maintenance or emergency repairs (including work on non-B&B ARMR products)
- Spare or replacement parts
- Custom designs or special installations
- Equipment upgrades
- Ancillary security equipment
- Technical support available by phone or in person with advanced scheduled notice.

Safety



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of non insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instruction in the literature accompanying the product.

Your safety is important to us. If you have any questions or are in doubt about any aspect of the equipment, please contact us. While B&B ARMR does not assume responsibility for injury to persons or property during installation, operation, or maintenance, we can provide verbal guidance, additional written instructions, or the services of a factory engineer. We're here to help you operate your vehicle barrier safely and effectively.

As the user, you are responsible for correct and safe installation, operation, and maintenance of this equipment. Users must follow the specific instructions and safety precautions located in this manual.

In addition:

- Be aware of and follow the safety standards of the Occupational Safety and Health Administration (OSHA), as well as other applicable federal, state, and local safety regulations and industry standards and procedures. For installation outside the United States, users must also follow applicable international, regional, and local safety standards.
- Engage only properly trained experienced staff to install, operate, and maintain the equipment.
- Ensure that all repairs are performed correctly, using properly trained staff and the right tools and equipment.

How to Contact Us

If you have any questions or experience any problems with your vehicle barrier—or if we can help you with any other facility security issues—please contact us directly at:

Corporate/Tech Support:

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1. ORIENTATION

The CR25 Vehicle Barrier Gate is designed to contain a vehicle impact and prevent that vehicle from entering a restricted access control area. The CR25 is comprised of 3 major components: Drive Stanchion, Receiver Bollard and Gate Arm. This section of the user manual shows these assemblies and details of each.

1.1 CR25 Drive Stanchion Overview

Please reference Figure 1 and the following table for a listing of the product components.

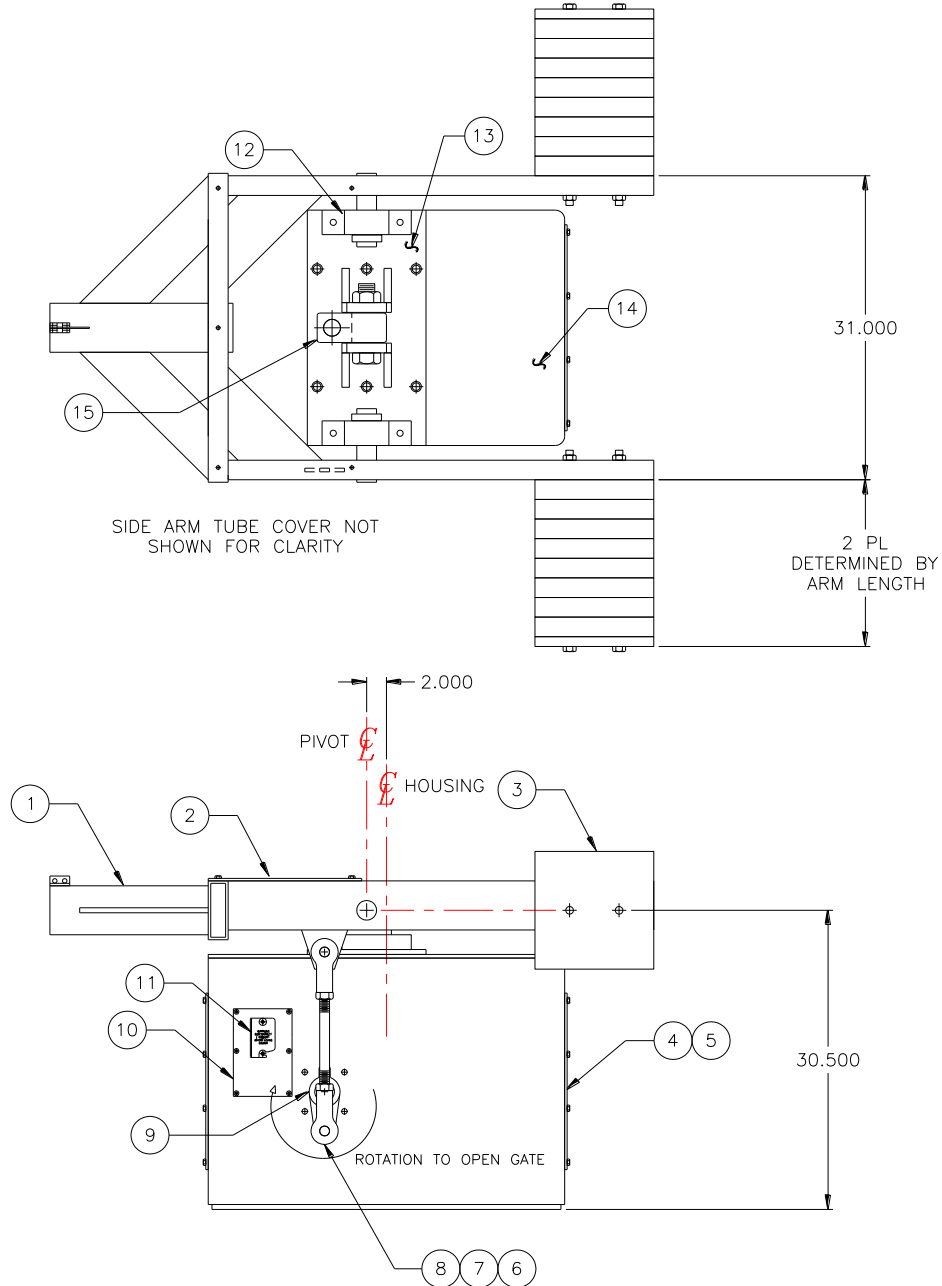


Figure 1 CR25 Drive Stanchion External Parts

15	1	0025-0506	ARM CABLE MTG BLOCK	0025AM0506	-
14	1	0025-0001-E/M	HOUSING	0025DM0001	-
13	1	0025-0503	PIVOT PLATE ASSEMBLY	0025DW0503	-
12	2	1701-0200	PIVOT BEARINGS	EA, 2" PILLOW BLOCK BEARINGS	2
11	1	0066-3026	COVER, CRANK HOLE	7010BM0559	-
10	1	0025-0555	BRAKE ACCESS COVER	0025BM0555	-
9	1	0025-0553-1	DRIVE SHAFT CRANK	0025-0006-C	-
8	1	0066-7761	ROD END, 1" LH	EA, AURORA, MG-16-Z-1	1
7	1	0025-0540	CONNECTING ROD	0025BM0510	-
6	1	0066-7760	ROD END, 1" RH	EA, AURORA, MW-16-Z-1	1
5	AR	0177-2825-1	DOOR GASKET	EA, .188 x 1" NEOPRENE	AR
4	2	0025-0514	HOUSING DOOR	0025BM0514	-
3	AR	0025-0504	COUNTERWEIGHTS	0025AD0504	-
2	1	0025-0505	S.A.T. COVER PLATE	0025BD0505	-
1	1	0025-0502	SIDE ARM TUBE	0025DW0502	-
ITEM NO	QTY	PART OR IDENTIFYING NO	DESCRIPTION	DRAWING NUMBER - MATERIAL DESCRIPTION	MATL ALLOC
PARTS LIST					

Table 1 CR25 Drive Stanchion External Parts List

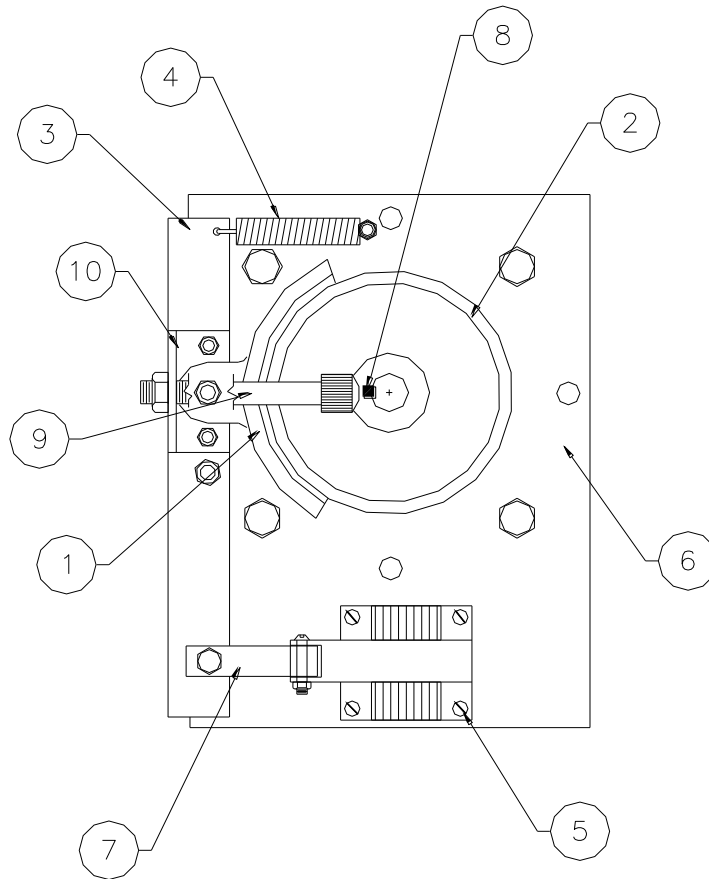


Figure 2 Brake Assembly

10	1	0040-0532	BRKT, MAN. RELEASE	0040BM0532	-
9	1	0040-0518	STUD ASSY. BRAKE RELEASE	0040BM0518	-
8	1	2201-0310	KEY, FEATHER	EA. 3/16" X 1" RND. ENDS	-
7	1	0040-0521	BAR, PLUNGER	004BM0521	-
6	1	0040-0519	PLATE, BRAKE MOUNTING	0040CM0519	-
5	1	BK	BRAKE, RELEASE, SOLENOID	SEE ELECT. DWG.	-
4	1	X785-LE037DE04M	BRAKE SPRING	-	-
3	1	0040-0520	BRAKE, BEAM	0040BM0520	-
2	1	0066-8357/C	DRUM, BRAKE ALUM.	0066CM0521	-
1	1	0066-1660	BRAKE SHOE, MACHINING	0066CM0151	-
ITEM NO	QTY	PART OR IDENTIFYING NO	DESCRIPTION	DRAWING NUMBER - MATERIAL DESCRIPTION	MATL ALLOC
PARTS LIST					

*Note BK for #5 depends on the motor voltage; XOL-120V, XOL-240V, or XOL-460V

Table 2 Brake Assembly

NOTES:
1. ITEMS DENOTED WITH ** ARE NOT SHOWN, BUT ARE INCLUDED.

**	40	4	XNUT-11-120C	NUT	EA, DOOR SWITCH	4
**	39	1	XKEY-0697	XMISION KEY	EA, .375 x 9.75" LONG	1
**	38	1	0025-0555	BRAKE COVER	0025BM0555	-
**	37	1	0000-0594	HCSS MTG BRKT	0000-0594-A	-
**	36	1	XSWI-DTE62RN	HAND CRANK SAFETY SWITCH	EA, DPDT	1
**	35	1	113-2660C-C	1 5/8-5 1/2 X 6	SOCKET CAP SCREW PLATED	-
**	34	1	113-2670C-C	1 5/8-5 1/2 X 7	SOCKET CAP SCREW PLATED	-
**	33	2	1241-0026NC	1 5/8-5 1/2	ELASTIC STOP NUT PLATED	-
**	32	20	1201-0016NF	NUT, HEX	EA., GRADE 8 PLATED	-
**	31	20	110-1625C-F	BOLT, 1"-14 X 2 1/2	EA., GRADE 8	-
**	30	20	1351-16	LOCKWASHER, 1" SPLIT	EA., GRADE 8 PLATED	-
**	29	1	0066-8357	DRUM, BRAKE ALUMINUM	0066AM0521	-
**	28	1	XKEY-0697	KEY, FEATHER	EA., 3/8 X 9 3/4 ROUND ENDS	-
**	27	2	XSEAL-17285	OIL SEAL	EA., CHICAGO RAWHIDE #17285	-
	26	-	-	-	-	-
	25	1	XSWI-E19-00M	DOOR SAFETY SWITCH	EA, DPDT	1
	24	2	0000-0595	DOOR SWITCH MTG. BRKT.	0000-0595-A	-
	23	1	-	BRACKET, PROX, CR25	-	-
	22	1	1001-050-1/2-2	ELECTRIC MOTOR	EA, 1/2 HP, 115/230V, 1ø	1
	21	3	-	COLLAR, PROX	-	-
	20	1	0025-0571	DRIVE SHAFT	0025-0571-A	-
	19	2	1700-0112-2	BEARING, 4 BOLT FLANGE	EA, 1.750" MB FC4-35-1	-
	18	1	0066-3026	COVER, HAND CRANK	7010BM0559	-
	17	1	0022-1050	HAND CRANK	0022CA1050	-
	16	2	0025-0586	MAIN CRANK	0025-0586-A	-
	15	-	-	-	-	-
	14	2	0025-0574	SEAL PLATE, DRIVE SHAFT	0025-0574-A	-
	13	2	0066-7761	ROD END, 1" LH	EA, AURORA MG-16-Z-1	-
	12	2	0025-0510	CONNECTING ROD	0025BM0510	-
	11	2	0066-7760	ROD END, 1" RH	EA, AURORA MW-16-Z-1	-
	10	1	0040-0533	ELECTRIC SUB PANEL	0040DM0533	-
	9	3	XPROX-FCM2-1204	SWITCH, PROXIMITY	-	-
	8	3	XCABLE-R-FA4TZ	CABLE, PROXIMITY SWITCH	-	-
	7	4	XKEY-0625	FEATHER KEY	EA. .375 X 2.500 RND ENDS	-
	6	1	0040-0003	UNIVERSAL BRAKE ASSY.	0040BA0023	-
	5	1	0025-6-500-1	GEAR REDUCER	EA, 1.750" HOLLOW T.S.	-
	4	-	-	-	-	-
	2	2	0025-0514	CR25 HOUSING, DOOR	0025BM0514	-
	1	1	0025-0572	CR25 HOUSING, MACHINING	0025-0572-A	-
ITEM NO	QTY	PART OR IDENTIFYING NO	DESCRIPTION	DRAWING NUMBER - MATERIAL DESCRIPTION	MATL ALLOC	
PARTS LIST						

Table 3 CR25 Drive Stanchion Internal Parts List

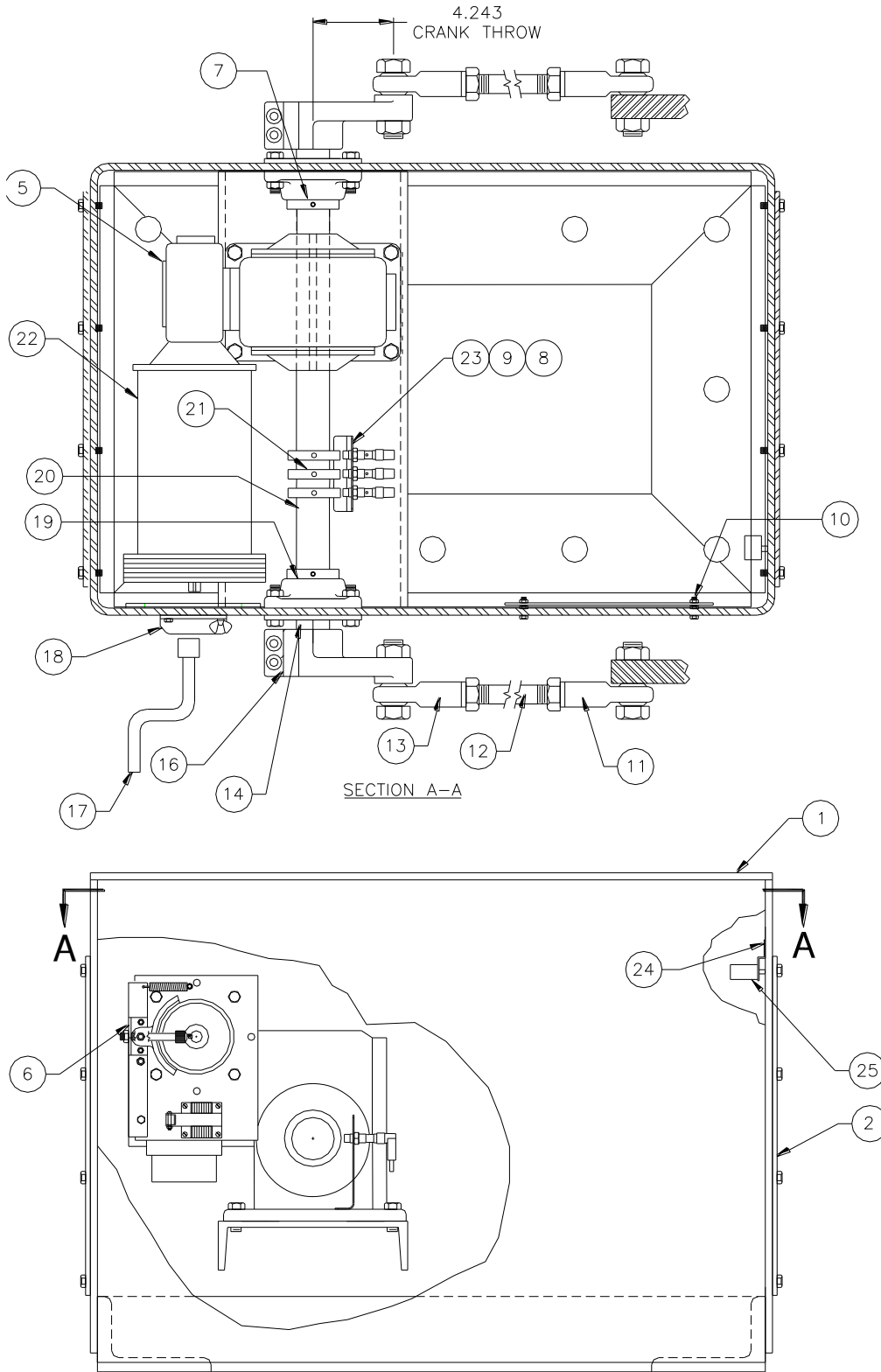


Figure 3 CR25 Drive Stanchion Internal Parts List

1.2 CR25 Receiver Bollard Overview

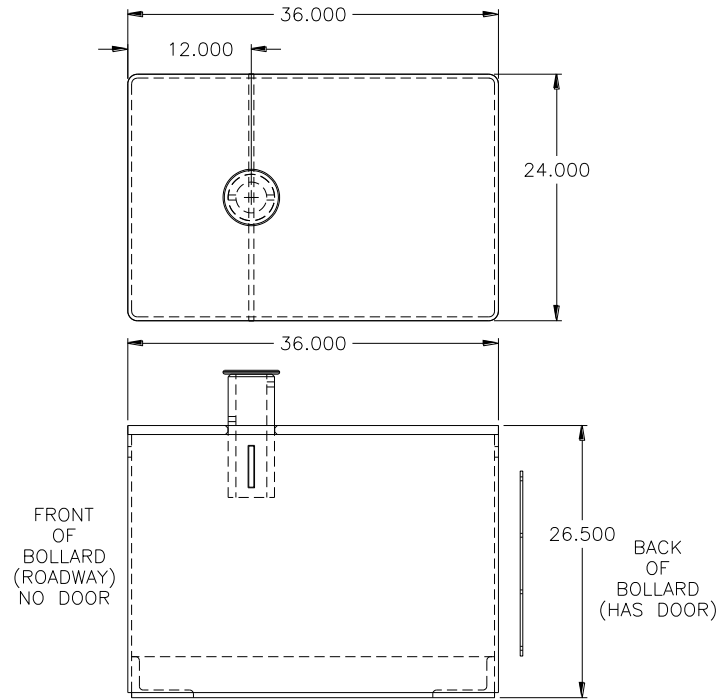


Table 4 Receiver Bollard

1.3 CR25 Gate Arm Overview

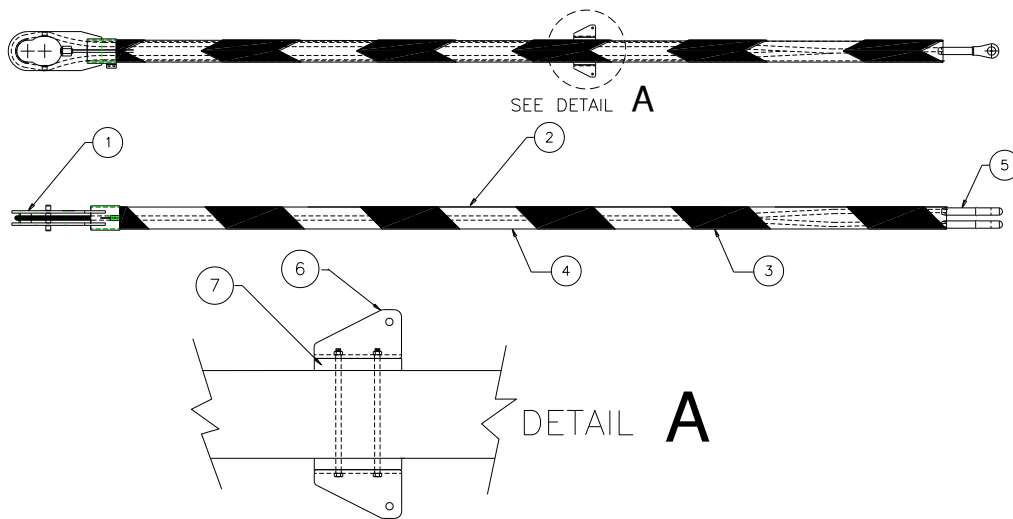


Figure 4 CR25 Gate Arm

7	2	0025-0583	ARM TRUSS SPACER	0025-0583-A	-
6	1	0100-0615	PR., TRUSS BRKT FOR TUBE	0100CM0615	-
5	1	0160-0006	7/8 ϕ ARM CABLE	0160AD0006	-
4	AR	0-1229-3290	16" x 45'	SQ FT, WHT REFLECTOR SHEET	-
3	AR	0-1229-3272	16" x 45'	SQ FT, RED REFLECTOR SHEET	-
2	1	AL05-0400X40	ARM	FT, 4" ϕ NOM SCH 40 PIPE	25
1	1	0025-0540	ARM CABLE GUIDE	0025BC0540	-
ITEM NO	QTY	PART OR IDENTIFYING NO	DESCRIPTION	DRAWING NUMBER - MATERIAL DESCRIPTION	MATL ALLOC

PARTS LIST

Table 5 CR25 Gate Arm

2. OPERATION

2.1 Control

The operation of the CR25 is normally controlled by simple dry contact control signals. Specific project sequence of operation is defined in the project submittal documentation.

2.2 Operation time

The operational cycle time for the CR25 is dependant on the transmission installed. The installed transmission is dependant on gate arm length and project specific application requirements. The following table shows the standard operational cycle times.

Time (Sec)	Time (Min)	Transmission Ratio (to1)	Raise Angle (Degrees)	Normal Motor RPM	Required Hand Crank turns	450 RPM Hand Drill (min)
5	0.08	300	89	3450	288	0.64
8	0.13	500	89	3450	460	1.02
13	0.22	750	89	3450	748	1.66

2.3 Emergency Operation Instructions

The CR25 is capable of being driven without power required in emergency situations.

1. Remove the rear operator door.
2. Disconnect power by flipping the disconnect switch to the "OFF" position.
3. Locate the hand-crank mounted inside the housing.
4. Slip the hand-crank onto the shaft extending through the brake. The brake will automatically release.
5. Turn the hand-crank to raise or lower the barrier, as needed. A tag on the brake indicates crank direction for opening or closing the barrier. (Clockwise for "Close", counter clockwise for "Open").
6. Remove the hand-crank.
7. To return to powered operation, turn the power disconnect switch back to the "ON" position.

2.4 Program Options

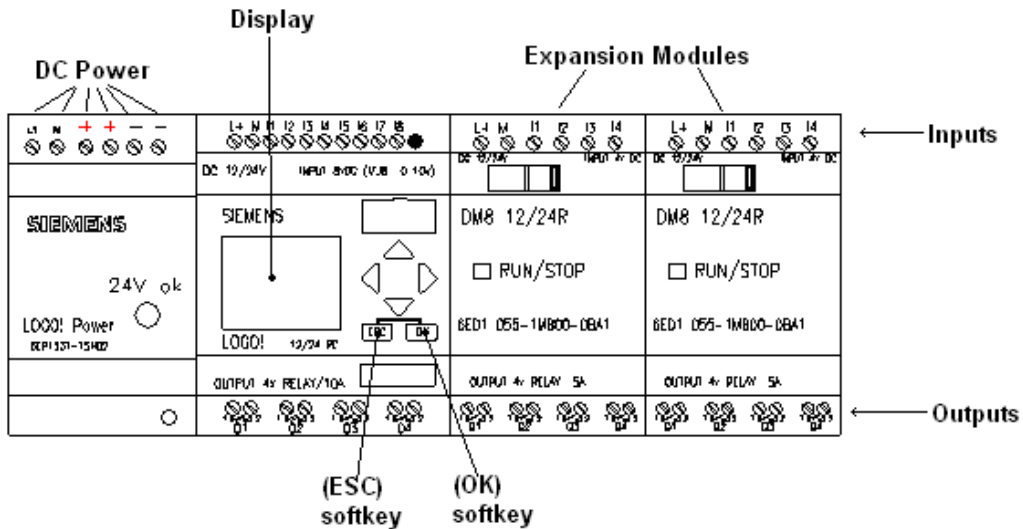
The CR25P is equipped with a programmable PLC that allows the installer to configure several different operational parameters. These parameters are stored in a non-volatile EPROM which keeps the parameters set even if the PLC power is removed.

To access the parameters from the screen that shows the date and time:

1. Press the ESC button.

2. Press down arrow button to highlight SET PARAM.
3. Press OK.
4. Press up or down arrow button to scroll through parameters.
5. Once parameter is found, press ENTER if value to be changed.
6. Use up or down arrow to change setting.
7. Press OK when complete.
8. Use down arrow to go to another parameter or press ESC to navigate to main screen.


To access the INPUT/OUTPUT status of the PLC relays, press the RIGHT arrow (from day/date screen). The highlighted numbers correlate to the input/output that is ON.



2.4.1 SF002 ECOEnable (Default= OFF)

Emergency Close Operation Enabled

When the softkey is ON, the barrier shall close when commanded regardless of the condition of the safety condition.

	Enabling this option may cause the gate to come down on top of vehicles. All safeties are disabled if this parameter is set to ON.
---	--

2.4.2 SF003 AutoCIEn (Default= ON)

Automatic Close Timer Enable

When the softkey switch is ON, the barrier in the full open position starts the T021 AutoCIs timer to time set. When the timer has reached its full value, the barrier is given a command to close.

2.4.3 SF004 InLtFlsh (Default= ON)

Flash Control Panel Indicator Lights

When the softkey is ON, the indication lights on the control panels blink anytime the gate is moving.

2.4.4 SF005 DlyOpen (Default= OFF)

Delay Open

When softkey switch is ON, the barrier waits the time limit (set in T028OpnDyTim) prior to moving after given a command to open,. Once T028 times out, the barrier begins to open. This time is adjustable in either the program or by changing the value TH in the PLC under “OpnDyTim” (currently set for 3 seconds)

2.4.5 SF006 DlyClose (Default=OFF)

Delay Close

When softkey switch is ON, the barrier waits the time limit (set in T027OpnDyTim) prior to moving after given a command to close,. Once T027 times out, the barrier begins to close. This time is adjustable in either the program or by changing the value TH in the PLC under “ClsDyTim” (currently set for 3 seconds)

2.4.6 SF011 SafeStop (Default=OFF)

Safe Stop Enable

When the softkey is ON and there is a safety condition while arm is coming down, the arm will stop. Once the safety condition is removed, the gate will continue down.

When the softkey is OFF and there is a safety condition while the arm is coming down, the arm will stop and reverse, and will go up until it reaches its fully up position.

2.4.7 SF015 ALDnFlsh (Default= OFF)

Flash Arm Lights When Down

When the softkey is ON, the optional arm lights flash when the barrier is in the down position.

2.4.8 SF017 ALtDnOff (Default=OFF)

Turn Arm Lights Off When in Down Position

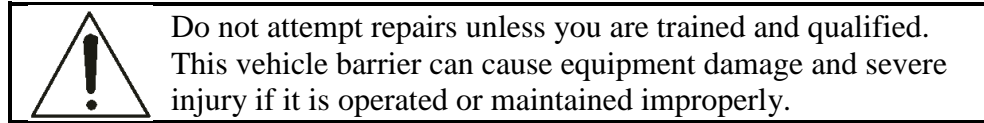
When the softkey is ON, the optional arm lights are off when barrier is in the down position.

2.4.9 SF019 ALMvgOn (Default=OFF)

Arm Lights On When Moving

When the softkey is ON, the optional arm lights are on steady when the barrier is moving.

3. MAINTENANCE



3.1 Lubrication Schedule

Mechanism lubrication should be checked at least once per month.

3.1.1 Transmission Lubrication

First gear drive box (High speed housing):

1. Remove the front door of the housing (roadway side).
2. Check oil by removing the oil level plug located on the left-hand vertical surface of the transmission a few inches below the motor.
Note: Some barriers may have site glasses.
 - a. If oil is visible, oil level is adequate - replace plug and go to next section.
 - b. If oil is not visible, go to step 3.
3. Remove fill plug of first gear box located on top of gear box facing door).
4. Fill the case to the level plug or site glass (removed in step two) with multigrade Mobil SHC 629 or a direct replacement. (See recommended replacement oils on the following page.)
5. Replace plugs.

Final drive gear box (Low speed housing):

1. Remove the back door of the housing (counterweight side).
2. Check the oil level by removing the oil level plug located on the left-hand vertical surface of transmission. *Note: Some barriers may have site glasses.*
 - a. If oil is visible, oil level is adequate - replace the plug and go to next section.
 - b. If oil is not visible, go to Step 2.
2. Remove oil fill plug on final gear box, on the left-hand vertical surface, top.
3. Fill the case to the level plug or site glass (removed in step one) with multi-grade Mobil SHC 629 or a direct replacement. (see recommended replacement oils on the following page)
4. Replace plugs.

Pillow Block Bearings:

1. Grease with Texaco Marfak 2 or equal.
2. Wipe off excess.

Connecting Rod Ends (Items 11 & 13):

1. Grease with Texaco Marfak 2 or equal.
2. Wipe off excess.

3.2 Lubrication Replacement Schedule

Lubricate mechanism every 12 months with a manufacturer approved lubricant.

First gear drive box (High speed housing):

1. Stand in front of the operator (roadway side), remove the door.
2. Locate drain plug on the bottom horizontal surface of the gear change box directly under the motor. (Motor is horizontally mounted).
3. Position catch pan under drain plug.
4. Remove the oil fill plug on the top of gear box facing door.
5. Remove the drain plug until the oil is completely drained, then replace plug.
6. Remove the oil level plug.
7. Refill gear change box until oil flows from the oil level hole. Re-plug the oil fill hole and the oil level hole.

Final drive gear box (Low speed housing):

1. Remove back door. Oil fill plug is located on the left-hand vertical surface, top. Remove oil fill plug.
2. Standing in front of the operator (roadway side), remove the door.
3. Locate drain plug on the vertical surface of the final output gear box.
4. Position catch pan under drain plug.
5. Remove the drain plug until the oil is completely drained, then replace plug.
6. Remove the oil level plug.
7. Refill final output box until oil flows from the oil level hole. Re-plug the oil fill hole and the oil level hole.

3.2.1 Recommended Oils and Grease

Replacement of oils is very complicated and should be considered carefully when doing so. The following oils are recommended by the manufacturer of the transmissions on the warning gates and barriers.

The multi-grade **Mobil SHC 629** synthetic oil is the manufacturer's first choice. If this oil is not available, **Exxon Terrestic SHP 150** can be used as a direct replacement. The temperature range is -30°F to 165°F.

If neither of the two above mentioned oils is available, almost any **ISO Grade 150** or **AGMA Lubricant #4** with a pour point of -40°F or less & a viscosity of approx. 726 (SUS@100°F) is acceptable.

The following grease is recommended by the manufacturer of the flange type bearings used on both the warning gates and barriers.

Texaco Marfax or Texaco Starplex grease is the manufacturer's first choice. If this grease is not available, consult your local supplier for an equivalent.

3.3 Safety Devices

All safety devices should be checked monthly to insure proper operation. Depending on the installation of your system, different safety devices might have been installed. This would include Infrared Beams, Loops, etc. Refer to your installation and verify the operation of the safety devices.

3.4 Brake System

The brake system should be checked monthly.

1. Remove the door from the side of the bollard to expose the brake mechanism.
2. Visually check the brake shoe to insure there is adequate pad remaining. Replace as necessary.
3. Check the hub to insure that there are no grooves that have been worn. Replace as necessary. If the pad on the brake shoes has worn down to the rivets, grooves may develop resulting in un-necessary wear on the brake shoe.

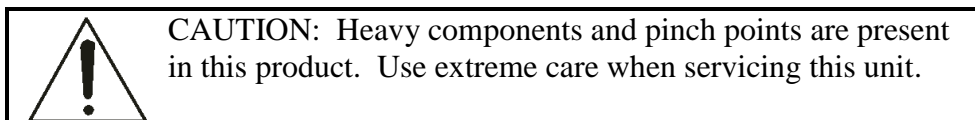
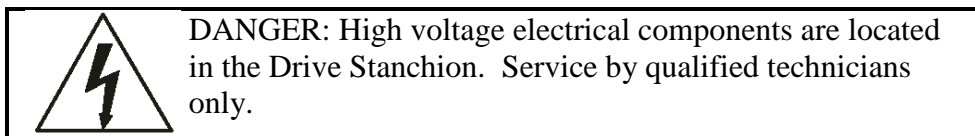
3.5 Barrier Arm Operation and Alignment

The barrier arm and its alignment to the receiver should be checked monthly.

1. With the arm in the closed position, visually check the position of the arm in relation to the receiver pin. The cable guide on the arm end should be centered over the pin and low enough for the guide to be below the lip edge of the receiver pin. Adjust the gate arm up, down, left or right as needed.
 - a. Refer to the installation of the gate arm, section 2.5 of this manual.

4. SERVICE REPLACEMENTS

Unauthorized service performed on the barrier may void the manufacturing warranty. Ensure only trained service technicians perform any service on this product.



4.1 Brake Assembly Replacement

IMPORTANT: Unless specified, the replacement brake assembly does not include a solenoid or a brake drum. If these items are required, they must be requested separately, please specify the motor voltage.

WARNING: DISCONNECT BARRIER POWER BY THROWING THE MAIN POWER SWITCH (S1) OFF BEFORE REMOVING THE OLD BRAKE ASSEMBLY.

Item numbers refer to the brake drawing included in the orientation section of this manual.

To remove the old assembly:

1. Remove the Brake Release Stub (Item 9) from its bracket.
2. Remove the Brake Drum (Item 2) set screw. The set screw is located on the side of the brake drum, even with the key in its center.
3. Pull the drum off of its shaft.
4. Disconnect the wires from the brake release solenoid (Item 5).
5. Remove the brake assembly mounting bolts, and lift off the brake assembly.

To mount the new assembly:

1. Place the new brake assembly on top of the motor, align the mounting holes, and tighten the mounting bolts.
2. Unless a new solenoid was requested, the brake solenoid from the old brake assembly will need to be re-mounted on the new assembly.
 - Disconnect the solenoid arm from the solenoid release rod (Item 7).
 - Remove the solenoid mounting screws.
 - Place the solenoid (Item 5) on the new brake assembly, align the holes and replace the mounting bolts.
 - Reconnect the solenoid plunger to the solenoid release rod.
 - Reconnect power wires to the solenoid.
3. Insert the brake drum onto the keyed shaft and tighten the set-screw.
4. Re-install the manual release stub onto its mounting bracket.
5. Re-apply power to the barrier, and test the brake by running the operator.
6. If the solenoid makes a loud buzzing sound, it is binding and needs to be adjusted.
 - Loosen the mounting bolts and activate the operator. The solenoid should seat itself properly.
 - Re-tighten the mounting bolts.

If the solenoid continues to buzz, the solenoid release rod may be out of alignment. Loosening the screw between the Solenoid Plunger and Release Rod (Item 7) should alleviate this. If the problem persists, contact the manufacturer.

4.2 Motor Replacement

IMPORTANT: Before replacing the motor, check that the new motor is identical to the old in voltage, phase and horsepower.

WARNING: DISCONNECT BARRIER POWER BY THROWING THE MAIN POWER SWITCH OFF BEFORE CHANGING MOTORS.

1. Remove the brake assembly (see previous instructions)
2. Have a qualified electrician disconnect the motor wires from the junction box on the side of the motor.
3. Remove the four motor mounting bolts located at the base of the motor.
4. Pull the motor up, out of the transmission, making sure the feather key comes out with the motor shaft.
5. Mount the new motor, inserting the keyed shaft into the transmission and aligning the mounting holes.
6. Have a qualified electrician reconnect the motor wires at the junction box on the side of the motor.
7. Re-mount the brake assembly (see previous instructions).
8. Re-apply power to the operator and run the barrier several times. If the barrier does not run satisfactorily, contact the manufacturer.

5. WARRANTY

BBRSS warranties for a period of one (1) year FOB manufacturing facility, unless otherwise specified by BBRSS in writing, from defects due to faulty material or workmanship. Damage due to handling during shipment and installation are not covered under warranty. BBRSS assumes no responsibility for service at customer site. BBRSS is in no event responsible for any labor costs under the warranty. Subject to the above limitation, all service, parts, and replacements necessary to maintain the equipment as warranted shall be furnished by others. BBRSS shall not have any liability under these specifications, other than for repair or replacement as described above for faulty product material or workmanship. Equipment malfunction or equipment failure of any kind, caused for any reason, including, but not limited to unauthorized repairs, improper installation, installation not performed by BBRSS authorized personnel, incoming supply power is outside the tolerance for the product, failure to perform manufacturer's suggested preventative maintenance, modifications, misuse, accident, catastrophe, neglect, natural disaster, are not under warranty.

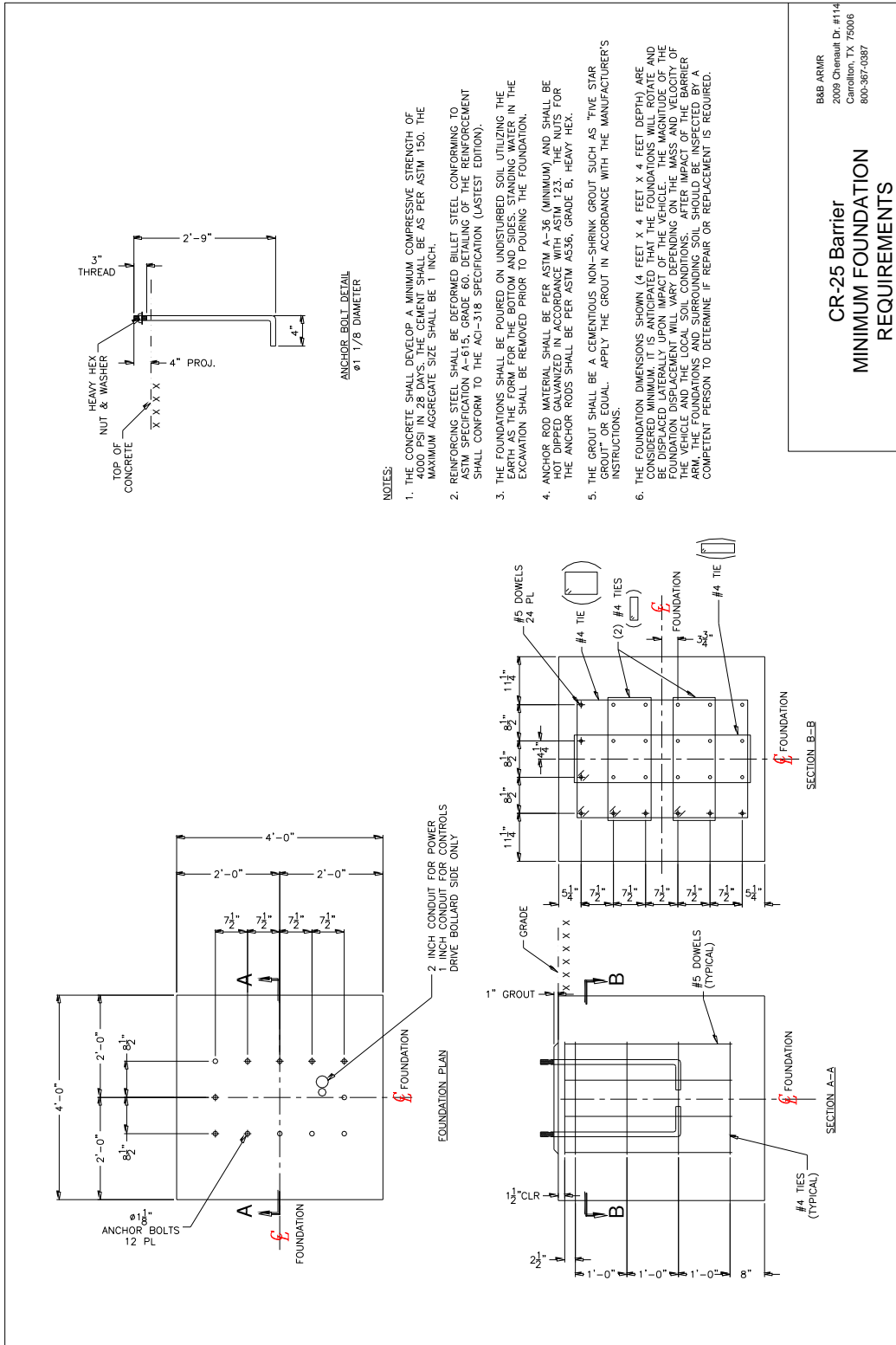
The exclusive remedy for breach of any warranty by BBRSS shall be the repair or replacement at BBRSS's option, of any defects in the equipment. **IN NO EVENT SHALL BBRSS BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES OR ANY KIND OF PERSONAL DAMAGES.** Except as provided herein, BBRSS makes no warranties or representations to consumer or to anyone else and consumer hereby waives all liability against BBRSS as well as any other person for the design, manufacture, sale, installation, and/or servicing of the Products.

THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. NO OTHER WARRANTIES EXIST.

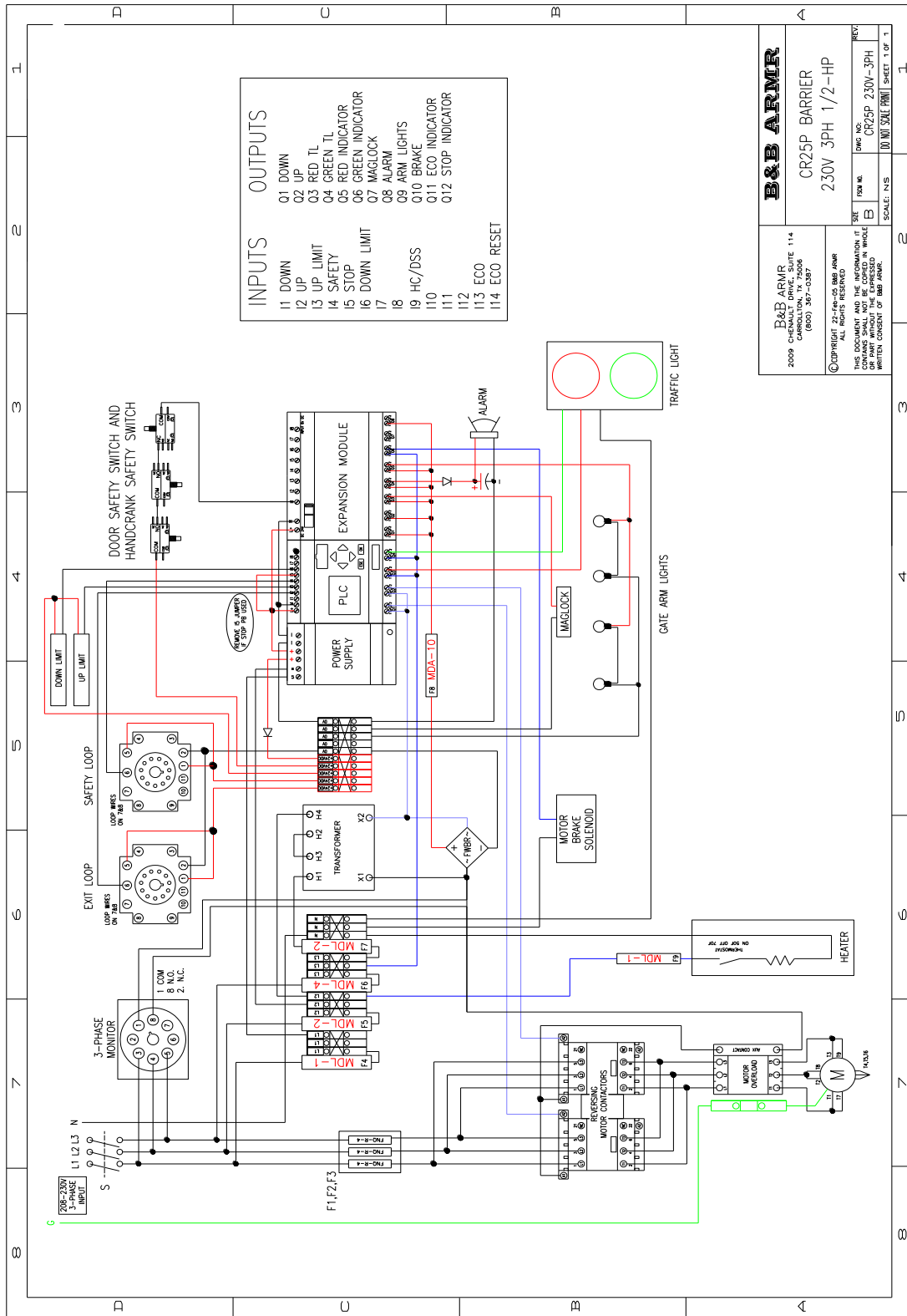
Any modification or alteration by anyone other than BBRSS will render the warranty herein as null and void.

6. APPENDIX

6.1 Foundation Requirements



6.2 Electrical- Typical 3 Phase



B&B ARMR 2008 CLARK ROAD, SUITE 114 CARROLLTON, TX 75006 (800) 367-0357		B&B ARMR CR25P BARRIER 230V 3PH 1/2-HP	
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6.3 Electrical- Typical Single Phase

