



Township Archives
Township of Brick, NJ
401 Chambers Bridge Rd, Brick, NJ 08723

***This File Contains Personal Identifiable
Information of Private Citizen(s).***

Certain information contained in this file is *Exempt from Release* under the Open Public Records Act (OPRA) (Public Law 2001, CHAPTER 404 (N.J.S.A. 47:1A-1 et seq.)) and Executive Orders issued by the Governor of New Jersey. The following information *MUST* be redacted prior to release:

- Social Security Numbers
- Drivers' License Numbers
- Unlisted Phone Numbers
- Credit Card Numbers
- Bank Account Numbers and Balances

For further information, consult with the Township Clerk, Township Archivist or Township Attorney prior to release.

A handwritten signature in black ink, appearing to read "Bryan J. Dickerson".

Bryan J. Dickerson, CA, CMR
Township Archivist

Issued: 8 January 2020



CONSTRUCTION PERMIT APPLICATION

C-21-001912

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII

I. IDENTIFICATION

1. Proposed Work Site at: 27 Brower Drive

2. Name of Owner in Fee: Danek Laskowski

T: [REDACTED] e-mail: [REDACTED]

Address 27 Brower St Brick 08723
street municipality zip code

3. Ownership in Fee: Public _____ Private _____

4. Principal Contractor: Piemco Tel. (732) 323-8784

Address 3208 Wilbur Ave e-mail _____
Manchester, NJ 08759

License No. OR, if new home, Builder Reg. No. 11358 Exp. Date 3/22

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____

Federal Emp. ID No. 22 334 7998 FAX: (732) 323-8794

5. Architect or Engineer _____ Contact _____

Address _____ e-mail _____

Tel. () _____ FAX: () _____

6. Responsible Person in Charge once Work has Begun Robert Prendimario

Tel. (732) 323 8784 FAX: (732) 323 8794

V. FEE SUMMARY (for office use only)

	Update	Update
1. Building	\$ <u>150</u>	
2. Electrical		
3. Plumbing		
4. Fire Protection		
5. Elevator Devices		
6. Subtotal		
7. Less 20% for State Plan Review	\$	
8. Subtotal	\$ <u>0</u>	
9. State Permit Surcharge Fee		
10. Subtotal	\$	
11. Cert. of Occupancy		
12. Other	\$ <u>152</u>	
13. TOTAL		

VI. BUILDING/SITE CHARACTERISTICS

	(office use only)
1. Number of Stories	
2. Height of Structure	ft.
3. Area — Largest Floor	sq. ft.
4. New Building Area	sq. ft.
5. Volume of New Structure	cu. ft.
6. Max. Live Load	
7. Max. Occupancy Load	
8. If Industrialized Building: State Approved _____ HUD _____	
9. Total Land Area Disturbed	sq. ft.
10. Flood Hazard Zone	
11. Base Flood Elevation	ft.
12. Wetlands yes _____ no _____	

IIa. PROPOSED WORK

- ☒ Minor Work ☐ New Building ☐ Addition ☐ Demolition
- ☐ Repair ☐ Alteration ☐ Renovation ☐ Reconstruction
- ☐ Asbestos Abat. -Subch. 8 ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

IIb. SUBCODES

(Check all that apply)

- ☐ Building
- ☒ Electrical
- ☐ Plumbing
- ☐ Fire Protection
- ☐ Elevator

FOR OFFICE USE ONLY (Optional)

Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Rejection	Re-viewer
<u>\$1000.00</u>	<u>CW</u>	<u>5/21</u>		<u>5-21-21</u>	<u>MM</u>			

TOTAL COST \$1000.00

III. PLAN REVIEW (optional)

DO YOU WANT:

1. ☐ Partial Releases
2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks
10. ☐ Swimming Pools, Spas and Hot Tubs
11. ☐ LPGas Tanks

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: _____
3. Change in Use Group, Indicate Present: _____
4. No. of dwelling units: Total Units Income-restricted
- Gained, Sale _____
- Gained, Rental _____
- Lost, Sale _____
- Lost, Rental _____

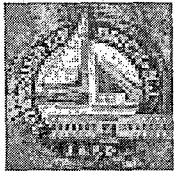
B. NON-RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: _____
3. Change in Use Group, Indicate Present: _____

C. MIXED USE -List secondary use(s):

D. Construct. Classification: Present

Proposed _____



Brick Township
401 Chambersbridge Rd
Brick, NJ 08723

Date Issued 06/29/2021
Control Number C-21-001912
Permit Number 21-1469
Permit Issue Date 06/03/2021
Certificate Number 21-1469

Certificate
Construction Code Division
(Certificate of Approval)

Identification

Work Site Location: 27 BROWER DR. Brick Township, NJ Block: 89.01 Lot: 40 Qual: _____
Owner in Fee: DANEK LASKOWSKI
Owner Address: 27 BROWER DR BRICK NJ 08723
Telephone: [REDACTED]
Contractor PEMCO ELECTRIC
Address 3208 WILBUR AVENUE MANCHESTER NJ 08759
Telephone: (732) 323-8784 Fax: (732) 323-8794 Federal Emp. Number: 22-3347998
License Number or Builders Registration Number: _____

Home Warranty Number: _____ Type of Warranty Plan: ☐ State ☐ Private

Use Group: U Construction Classification: _____

Maximum Live Load: 0 Maximum Occupancy Load: 0

Description of Work/Use: ELECTRICAL ALTERATIONS - ...BOAT LIFT

Certificate Comments:

☐ **Certificate of Occupancy**

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

☒ **Certificate of Approval**

This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

☐ **Certificate of Continued Occupancy**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ **Temporary Certificate of Compliance**

The following conditions must be met no later than or the owner will be subject to fine or order to vacate:

This certificate has an expiration date of:

Conditions to be met:

☐ **Certificate of Clearance - Lead Abatement 5:17**

This serves notice that based on written certification, lead abatement was performed as per NJAC5:17 to the following extent.

- ☐ Total removal of lead-based paint hazards in scope of work
☐ Partial or limited time period (years); see file

☐ **Certificate of Clearance - Asbestos Abatement**

This serves notice that based on written certification, asbestos abatement was performed to the following extent.

- ☐ Total removal of asbestos hazards in scope of work
☐ Partial or limited time period (years); see file

☐ **Certificate of Compliance**

This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until

☐ **Temporary Certificate of Occupancy**

The following conditions must be met no later than: or the owner will be subject to fine or order to vacate:

This certificate has an expiration date of:

Conditions to be met:

Daniel Newman Jr.

Construction Official

Date Printed: 06/29/2021

U.C.C. F260 (rev. 08/05)

Fee: \$0.00

Check Number: _____

Collected By: _____



ELECTRICAL SUBCODE TECHNICAL SECTION



Date Received
Control #

Date Issued
Permit #

6/3/21

27-1469

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 89-01 Lot 40 Qualification Code _____

Work Site Location 27 Brower Dr.

Owner in Fee Danek Laskowski

Address 27 Brower Dr.

Tel [REDACTED]

Contractor Pemco

Address 3108 Wilbur Ave

Manchester, NJ 08759

Tel (732) 323-8784 FAX (732) 323-8794

Contractor License No. 11358

Federal Emp. No. 22-3347998

B. ELECTRICAL CHARACTERISTICS

Use Group Present _____ Proposed ✓

[] Pole/Pad # _____ [] Temporary [] Other _____

Building Occupied as _____ Utility Co. _____

Est. Cost of Elec. Work \$ 1000.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW		Date		Initial		INSPECTIONS		Dates (Month/Day)			
[]	No Plans Required					Type:		Failure	Failure	Approval	Initial
	Joint Plan Review Required:					Rough					
[]	Building	[]	Plumbing			Barrier-Free					
[]	Fire	[]	Elevator			Trench					
☒	Elec. Plans Approved					Temp. Serv.					
Date:	<u>5-21-21</u>					Constr. Serv.					
Approved by:	<u>[Signature]</u>					TCO					
						Other					
						Service					
						Final					
						Barrier-Free					
SUBCODE APPROVAL											
[]	CO	[]	CCO	☒	CA	Temp. Cut-in-Card Date Issued _____					
Date:	<u>6-28-21</u>					Final Cut-in-Card Date Issued _____					
Approved by:	<u>[Signature]</u>					Annual Pool Inspection _____					
						Date of Grounding and Bonding Certification _____					

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Applicant's Signature/Contractor's Seal and Signature

☒ Licensed Elec. Contractor [] Certif'd Landscape Irrigation Contr [] Exempt Applicant

D. TECHNICAL SITE DATA

QTY.	SIZE	ITEMS
_____	_____	Lighting Fixtures
_____	_____	Receptacles
_____	_____	Switches
_____	_____	Detectors
_____	_____	Light Poles
_____	_____	Motors—Fract. HP
_____	_____	Emergency & Exit Lights
_____	_____	Communications Points
_____	_____	Alarm Devices/F.A.C. Panel
_____	_____	TOTAL NUMBERS
_____	_____	Pool Permit/with UW Lights
_____	_____	Storable Pool/Spa/Hot Tub
_____	_____	KW Elec. Range/Receptacle
_____	_____	KW Oven/Surface Unit
_____	_____	KW Elec. Water Heater
_____	_____	KW Elec. Dryer/Receptacle
_____	_____	KW Dishwasher
_____	_____	HP Garbage Disposal
_____	_____	KW Central A/C Unit
_____	_____	HP/KW Space Heater/Air Handler
_____	_____	KW Baseboard Heat
<u>2</u>	<u>1hp</u>	HP Motors 1/+ HP
_____	_____	KW Transformer/Generator
_____	_____	AMP Service
_____	_____	AMP Subpanels
<u>1</u>	<u>20</u>	AMP Motor Control Center
_____	_____	KW Elec. Sign/Outline Light

FEE (Office Use Only)

\$ _____

Administrative Surcharge \$ _____

Minimum Fee \$ _____

State Permit Surcharge Fee \$ _____

TOTAL FEE \$ _____



CONSTRUCTION PERMIT

Date Issued 6/3/21
Control # C-21-001912
Permit # 51-1469

IDENTIFICATION Block: 89.01 Lot: 40 Qualifier _____
Work Site Location: 27 BROWER DR. Brick Township, NJ Contractor: PEMCO ELECTRIC
Address: 3208 WILBUR AVENUE MANCHESTER NJ 08759
Owner, in Fee: DANEK LASKOWSKI
27 BROWER DR. BRICK NJ 08723 Telephone: (732) 323-8784
Telephone: _____ Lic. No. or Bldrs. Reg. No. 11358
Federal Employee. No. 22-3347998

Is hereby granted permission to perform the following work:

- ☐ BUILDING ☐ PLUMBING ☐ LEAD HAZARD ABATEMENT
☒ ELECTRICAL ☐ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT (Subchapter 8 only) ☐ OTHER

DESCRIPTION OF WORK:

ELECTRICAL ALTERATIONS BOAT LIFT

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$1,000

Construction Official _____

Date 5/24/21

U.C.C. F170
equiv (rev 1/04)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

PAYMENTS (Office Use Only)

Building _____ \$0
Electrical _____ \$150
Plumbing _____ \$0
Fire Protection _____ \$0
Elevator Devices _____ \$0
Other _____ \$0.00
DCA Training Fee _____ \$2
CO Fee _____
Other _____ \$0
Total _____ \$152

Check No. _____

Cash 34/03/21 21:00 PM 00155849148 \$0

Credit 4/03/21 12:03 PM 00155849148 \$0

Collected By _____ \$0

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

☒ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials; sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

☐ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.

GEM Remotes

356 Capri Blvd. Naples, FL 34113

Page 1 6-25-15

Wires GEM instructions 2015

Phone Number: **Read Troubleshooting Section First!**

Email: info@gemremotes.com WWW.GEMREMOTES.COM

Read All Directions Prior to Installation! Installation should be done By a qualified technician and be wired to the National Electric Code.

Customer user instructions are printed on the yellow face card inside the GEM box make sure they are read before use! Use of other wiring directions could result in damage to your GEM unit and/or the motors.

We have 30 years of experience. We recommend that you read and use the Step by Step Wiring Procedures before starting the installation. It could save you time and money.

Step by Step Wiring Procedures:

To ensure proper installation of your GEM Controller, use our directions in lieu of all others.

Tools: Philip's #2 and a flat head screwdriver, wire strippers, volt meter, wire cutters, wrench and wire nuts.

1. Turn off power at the circuit breaker. Check with a volt meter that you have 0 volts. Overload protection is not provided inside the GEM unit. Use properly sized circuit breaker and wire size based on total horsepower of motors. See wire chart below.
2. Remove face card screws, slowly open (be careful of the tail on the back side) if necessary unplug tail by pulling on black plastic part
3. Cut off drum(hand) switches, GEM units are not designed to be used in conjunction with these switches. Strip main feed and motor wires inside the GEM unit. If your drum switch had a corded GFI, you can use one as the main feed wire (120VAC only).

3.5 GEM offered a GFI inside the GEM unit from 1990 to 2013 if your unit has a GFI in the GEM unit find those instructions to wire unit

4. Main feed black goes to the Lug on bottom left side of the contactor marked L1. For 120VAC units you must hook up your Neutral (white) to L2 and also attach the GEM supplied white wire with a yellow tip to L2. (see page 4 1B) We recommend that your GEM unit be wired at 240VAC with a neutral. Wiring at 240VAC the neutral goes to the neutral bar on the bottom right side of the box your other main feed goes to L2. If you have neutral then do not rewire transformer. Also when wired at 240vac do not attach the GEM supplied white wire to L2. Special order 240 or 208VAC do not rewire transformer. If the unit is wired for 240VAC then your motors must be rewired for 240VAC. If you don't have a Neutral then see page 4 line #13.
5. Connect Motor #1 wires to Lugs on bottom right side of the contactor as labeled: Motor #1 Red(top), M#1 Black(middle), M#1 Orange(bottom). Motor #1 wires are on the same side of the lift as the limit switch (if auto-stop unit). When wiring at 120 VAC connect motor white wires to GEM motor neutral bar (Motor White wires not used at 240VAC) Motor #2 wires if a two motor system, attach wires color to color inside the GEM box (coming off the level switch) using wire nuts. If your lift only has one motor and you have a GR2 don't use Motor #2 wires, cap them off.
6. Connect green or bare wires to Green wire on the transformer. Green or bare wires must only be used as a ground. It is unsafe to use a ground as a neutral.

Use this chart to size wire and circuit protection. Measure the distance between the main breaker and the motors.

Recommended Wire Size for Installation of your GEM Controller-1 Phase, 75C Copper Wire

# of Motors	Motor HP	120 Volt AC Main Feed							240 Volt AC Main Feed						
		Amps to run	Breaker Size	50 Feet	100 Feet	200 Feet	300 Feet	400 Feet	Amps to run	Breaker Size	50 Feet	100 Feet	200 Feet	300 Feet	400 Feet
1	1/2	8.8	10 Amps	12	10	6	4	4	4.4	5 Amps	14	14	12	10	10
1	3/4	10.8	15	12	8	6	4	3	5.4	10	14	14	12	12	10
1	1	12.8	15	10	8	6	4	3	6.4	10	14	14	12	12	10
1	1 1/2	17.0	20	10	6	4	2	1	8.5	10	14	14	10	10	8
2	1/2	17.6	20	10	6	4	2	1	8.8	10	12	12	10	8	6
2	3/4	21.6	25	8	6	3	1	----	10.8	15	12	12	10	8	6
2	1	25.6	30	8	4	2	1	----	12.8	15	12	10	8	6	4
2	1 1/2	34.0	35	6	4	1	2/0	----	17.0	20	12	10	8	4	2
4	1/2	----	----	----	----	----	----	----	17.6	20	12	10	6	4	4
4	3/4	----	----	----	----	----	----	----	21.3	25	12	8	6	4	3
4	1	----	----	----	----	----	----	----	26.0	30	10	8	4	3	2
4	1 1/2	----	----	----	----	----	----	----	36	35	10	6	4	2	1
4	2	----	----	----	----	----	----	----	44.8	45	8	6	3	1	1/0

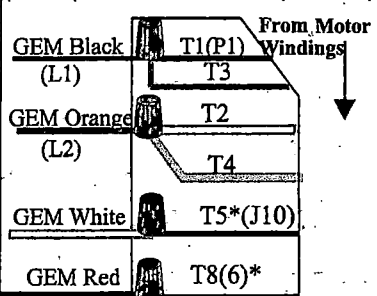
Breaker sizes are our recommendation. Please use motor label for proper size and code compliance.

7. Open motor covers and configure motor wires as shown below. **You may have to move wires inside the motor even though the hand switches worked (Regal Beloit's AO Smith motors)!** If your motor has terminals inside, check for the motor diagram on the next page otherwise use the Standard T Numbered Wired motor drawing or the Standard color motor-wired drawing below. **AO Smith 120/240 vac wired with terminals is below on the right, AO Smith 120 vac only motors are on the next page. Inspect wires inside each motor to ensure proper wire connections. Failure to do so could damage your motors. Not wired color to color inside the motor!** To reverse motor starting direction, swap wires **inside the motor!** Some motors have circuit protection and output wires from these might have different color wires. Also, some manufacturers pre-wire their motors with wires that don't match GEM wires. Some substitutions are blue for a green (ground), and yellow for a white wire.
8. If the GEM part # on the left side of the door has an "A" then your unit is an Auto-Stop. Your unit will not work without the limit switch wires hooked up. **Check that your lift stops in both the up and the down direction!** An Auto-Stop unit must have GEM limit-switches installed. **Failure to do so could result in damage to your lift and/or the boat and is against code and not insured.** See the auto-stop LED on the top of the unit. When red, the unit is in the auto-run mode, if it is flashing fast the lift is at the up limit and if slow then it is at the down limit. To toggle in and out of Auto-Stop (run) mode press the auto-stop button.
9. Attach the face card electronic tail to the receiver board, pin #1 goes on the left, replace face card screws.
10. To level the lift, turn off the Auto-stop mode (if equipped). Hold the level switch in the off position. This will turn off power to motor #2. While holding it down raise or lower one side. **Do not let go of the level switch until the lift has stopped.**
11. **Turn off the unit when not in use. Make sure the owner reads operating instructions printed on the yellow face card.** **Test the GFI** (if equipped) once every month and/or before each use. The emergency override holes bypasses GFI protection; and if the GFI is buzzing stop or the GFI will be damaged! GEM units have a three second delay before switching directions. This ensures that the motors go in the right direction.
12. A replacement transmitter (#7240) or a spare can be bought online at www.gemremotes.com. Loss of range or unit hiccups check battery, 2: 3 volts (Cr2032). Old, 6230 transmitters will not work with this unit.

Note: drum switch wire Orange might be pre-wired to Motor Blk (T5)*. GEM Orange needs to be attached to Pin2 or Motor Yel/T4. **240VAC WIRING with neutral (not GEM GFI units)**

Standard "T#" or # Wires Wired at 120 VAC. wire inside the motor!!!!

AO Smith, Baldor, Dayton, Deco
GE, Electorgear, Emerson, Iron
horse, Leeson, Lincon, Marathon,
SMC, WEG & other "T#" motors
(P1 is input for thermal overload protection)



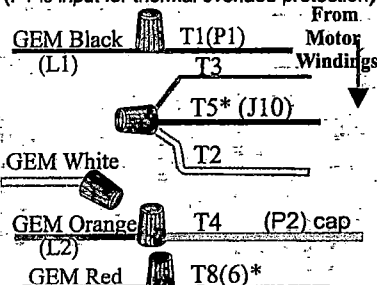
*To change motor direction, switch T5 & T8 motor wires.

To change from 120 to 240VAC:

1. Cap GEM White wire (not used).
2. Attach 3 motor wires together T3, T5* and T2.
3. FYI: GEM Blk to T1(P1), GEM Orange to T4, GEM Red to T8(6)*.

Standard "T#" or # Wires Wires Wired at 240 VAC.

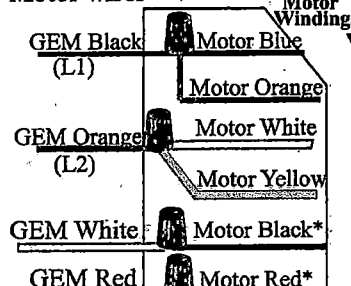
AO Smith, Baldor, Dayton, Deco
GE, Electorgear, Emerson, Iron
horse, Leeson, Lincon, Marathon,
SMC, WEG & other "T#" motors
(P1 is input for thermal overload protection)



*To change motor direction, switch T5 & T8 motor wires inside the motor!!!!

Standard Colored Motor Wired at 120 VAC. wire inside the motor!!!!

A.O. Smith, Baldor, Dayton,
Electorgear, Emerson, Elite,
Iron horse, Leeson, Lincon,
Marathon and other Colored
Motor wires



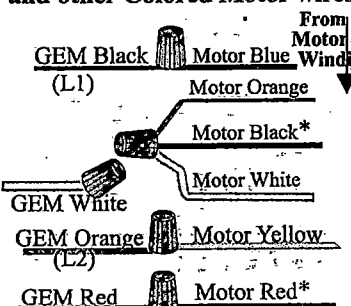
*To change motor direction, switch Motor Red and Motor Black wires.

To change from 120 to 240VAC:

1. Cap GEM White wire (not used).
2. Attach 3 motor wires together M Orange, M Blk* and M White.
3. FYI: GEM Black to Motor Blue, GEM Orange to Motor Yellow, GEM Red to Motor Red*.

Standard Colored Motor Wired at 240 VAC.

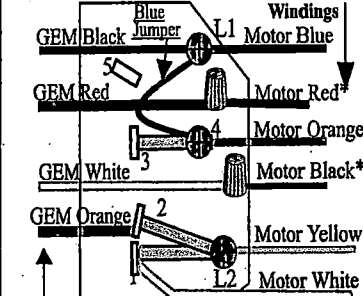
A.O. Smith, Baldor, Dayton,
Electorgear, Emerson, Iron
horse, Leeson, Lincon, Marathon
and other Colored Motor wires



*To change motor direction, switch Motor Red and Motor Black wires inside the motor!!!!

Regal Beloit's A.O. SMITH 120/240VAC Wired at 120 VAC.

Note: drum switch Orange might be pre-wired to Motor Black*. GEM Orange needs to be on pin 2. Also move White wires. See below.



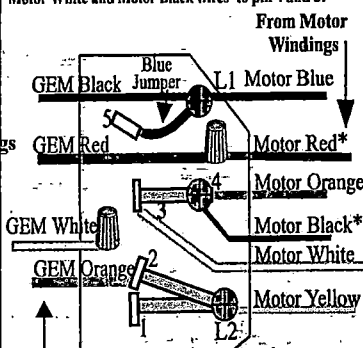
Wiring From GEM Unit
To change motor direction, switch Motor Black & Motor Red wires.

To change from 120 to 240VAC:

1. Cap GEM White wire (not used).
2. Place Motor Black on pin 4.
3. Move Motor Blue jumper from pin 4 to pin 5.
4. **GEM Orange is on pin 2!!!!**
5. Move Motor White from pin 1 to 3.

Regal Beloit's A.O. SMITH 120/240VAC Wired at 240VAC.

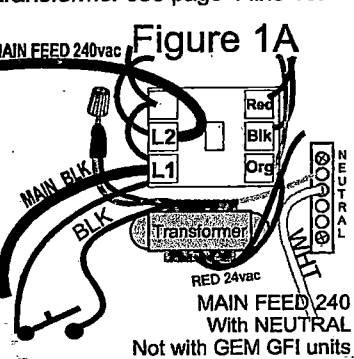
Note: Drum switch Orange might be pre-wired to Motor Black*. GEM Orange needs to be on pin 2. Also move Motor White and Motor Black wires to pin 4 and 3.



*To change motor direction, switch Motor Black & Motor Red wires.
Wiring From GEM Unit

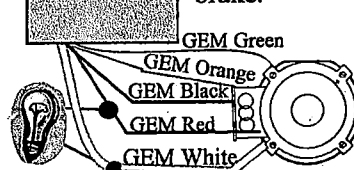
neutral (not GEM GFI units) Main Feed Connections

Hook your Main feed Neutral wire to motor white neutral bar. If you don't ave a Neutral rewire transformer see page 4 line 13.



Run Light or Brake

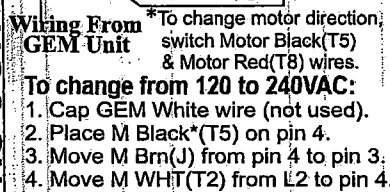
Fig 2
Run Light
or an electric
brake.



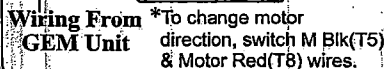
Attach the run light to the GEM Red & GEM White for 120VAC or 240 VAC systems that has a 120VAC neutral.

To run a 120VAC brake attach wires to GEM Orange and GEM Black when main feed is at 120VAC. If 240VAC brake is used, use GEM Orange and Blk. If you have 240VAC system and you only have a 120VAC brake then you must use GEM White & GEM Red. (The GEM white wire will be used at 240VAC).

**(BALDOR "T" NUMBERED WIRES
SEE NUMBERED WIRE DRAWING)
Wired at 120VAC From Motor**



(BALDOR "T" NUMBERED WIRES
SEE NUMBERED WIRE DRAWING)
Wired at 240VAC From Motor



Wired @ 120 VAC Motor Windings

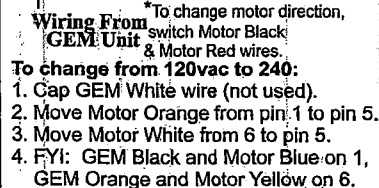


Diagram of a four-wire motor with the following labels and connections:

- 1** **GEM Black** (connected to Motor White)
- 2** **GEM Red** (connected to Motor Red*)
- 3** **Motor Blue** (connected to Motor Blk*)
- 4** **GEM Orange** (connected to Motor White)

To change from 120 to 240VAC:

- 1. Place Motor Black on pin 3!!!!!!**
2. Move Motor White from pin 1 to 3
3. Cap GEM White wire(not used)
4. Move Motor Blue jumper from pin 3 to pin 2.

**For EastBay Motor wiring
Instructions goto
GEMRemotes.com
wire diagram 2000-2008.**

To change from 120vac to 240:

1. Cap GEM White wire (not used)
Motor black on 4.
2. Move Motor Orange from 3 to 5.
3. Attach M Whit & M Org on pin 5.
4. FYI: GEM Org & M Yellow on 6.

From Motor Winding

1 M Yellow + Blk stripe

2 GEM Black

3 Motor Brown

4 Motor Black*

5 Motor Org

6 Motor White

GEM White not used

GEM Red

GEM Orange

Century AC/A.O. SMITH
C926 Wired @ 120 VAC

To change motor direction, switch Motor Red & Motor Yellow wires!

GEM White  **Motor Yellow**
Wired @ 240 VAC
To change from 120vac to 240:
1. Cap GEM White wire (not used)
Motor Yel with Motor WHT & Or
4. FYI: GEM Blk to M Blk, GEM R
to M R, GEM Orange to M Blue.

Blue Jumper (Brown)

GEM White Motor Red T8*

GEM Black Motor Yellow T4

GEM Orange Motor White T2

GEM Red Motor Black T5*

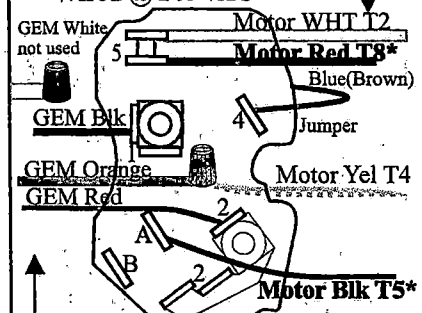
Wiring From GEM Unit

To change direction,

To change from 120vac to 240:

1. Cap. GEM White wire (not used).
2. Move Blue Jumper from 5 to 4.
3. Attach MWht & MRed*(T8) on pin 5.
4. FYI: GEM Org & M Yellow together.

Wired @ 240 VAC **Motor Windings**



Wiring From: To change direction,
GEM Unit switch Motor Black T5
& Motor Red T8 wires.

EMERSON
Wired at 120VAC

GEM BK 3

GEM Orange

GEM Red 2

GEM WH 4

Wiring from GEM Unit 6

A diagram of a 6-pin connector with the following labels and connections:

- GEM White**: Connected to **Pin 5**.
- GEM Orange***: Connected to **Pin 2**.
- GEM Black***: Connected to **Pin 4**.
- GEM Red**: Connected to **Pin 1**.
- Motor Brn** (Brown): Connected to **Pin 6**.
- Motor Yel** (Yellow): Connected to **Pin 3**.
- Motor Purple**: Connected to **Pin 2**.
- Motor Blue**: Connected to **Pin 1**.

An arrow labeled **Windings** points to the motor wires (Brn, Yel, Purple, Blue).

To change from 120vac to 240:

1. Move GEM White from pin 5 to 6.
2. Move motor Purple wire from 1 to 5.
3. Move motor Brown wire from 2 to 5.
4. *To change direction of the motor switch GEM Org & GEM Black wires.

Motor Purple

5

GEM Orange*

Motor Brn

GEM White

NOT USED

4

6

Motor Yel

1

GEM Black*

Motor Blue

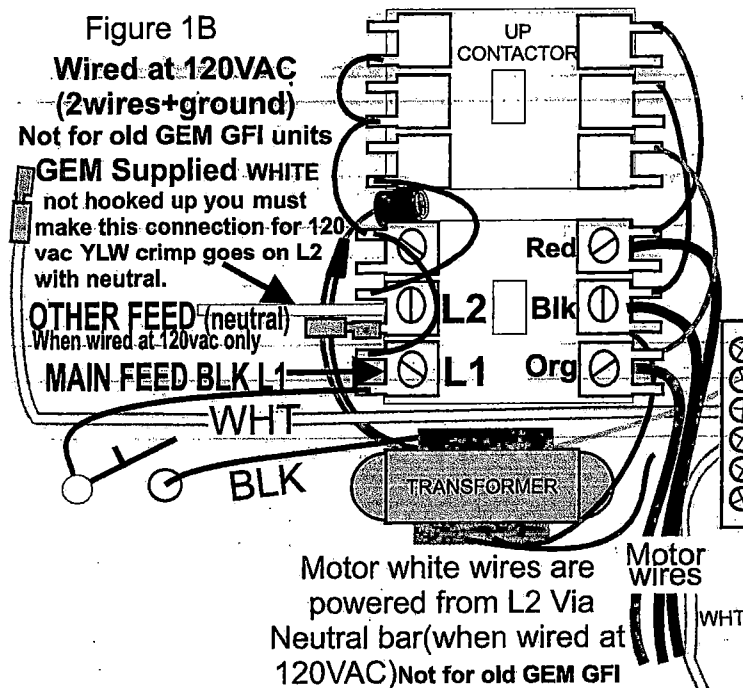
3

GEM Red

Wiring From GEM Unit
*To change motor direction switch
GEM Org & GEM Blk wires

To change from 120vac to 240:
(Cap GEM White wire.
Attach 3 m wires on 4
M WHT, M BLK & M Org.
FYI: Gem BLK & Motor
Blue on 3, GEM Org &
Motor Yellow on 1
GEM Red & Motor Red*
on 2.

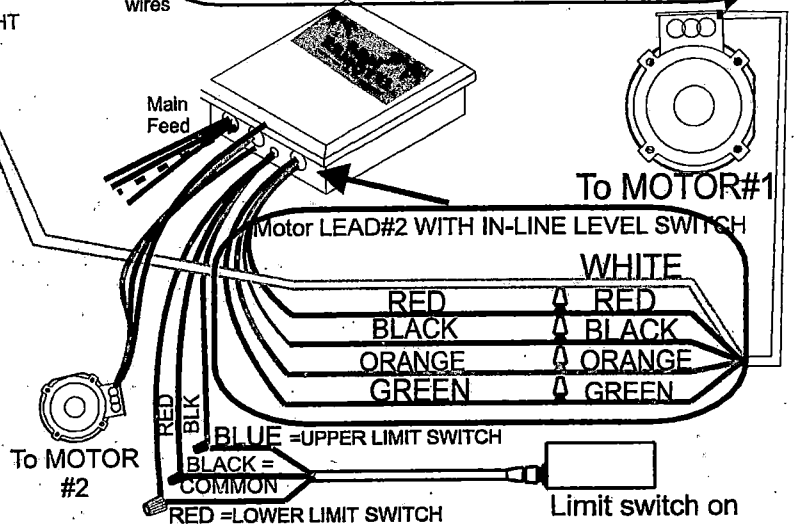
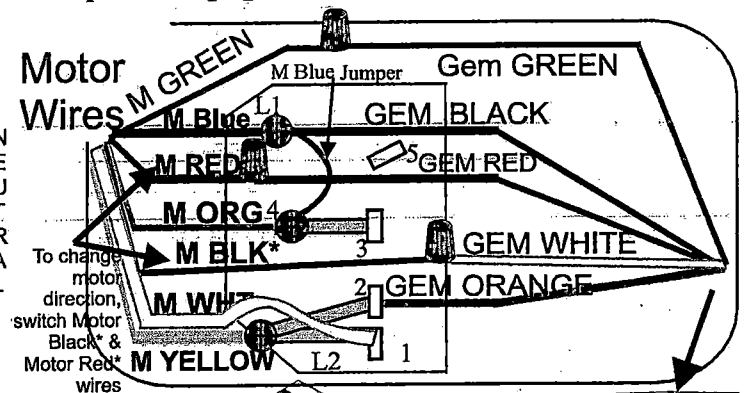
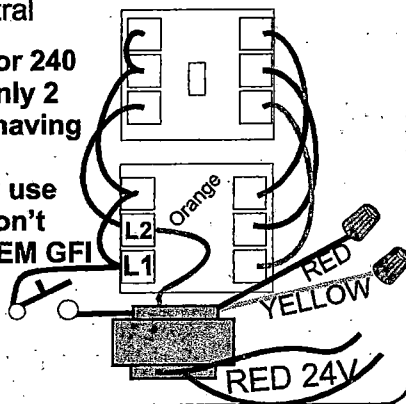
Figure 1B



This exploded view is inside the inspection panel of an A.O. SMITH motor wired at 120VAC to a GEM GR2A. **GEM ORANGE WIRE IS ON PIN 2!!!**
See previous pages for more motor wire diagrams.

240 VAC No Neutral

Rewire transformer for 240 Volt hook up using only 2 wires + ground (Not having a neutral 120vac) see #13 below. Only use this diagram if you don't have a neutral, old GEM GFI units needs 120VAC To work.

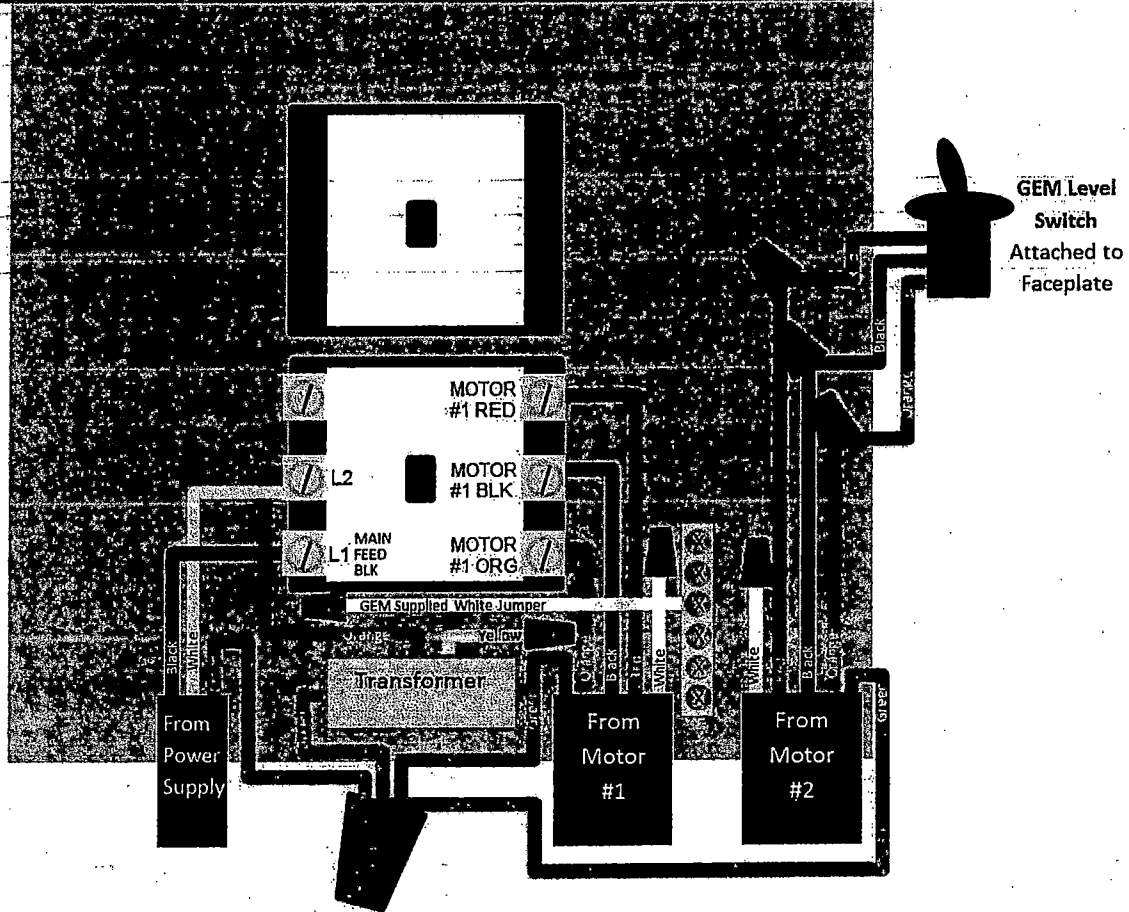


TROUBLESHOOTING:

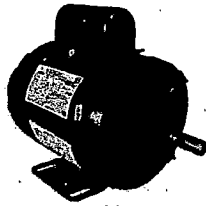
1. If your remote works but your membrane switch buttons don't work you need to plug in the M/S tail to the receiver board (6 pin connector top left).
2. You must cut off drum switches: They worked, but the GEM unit only works in one direction. You need to rewire inside motors GEM Orange wire!!
3. One or two motors turns in the wrong direction: Switch motor wires, wires inside the motor, check motor name plate for reversing directions.
4. Chatter or grumble in the contactor: Check for low voltage, when system is running. Check wire size vs run length all the way from the motors to the main breaker at the house. Example 2 3/4hp motors wired at 120vac 180' would need a #3 wire to the GEM unit. The motor wire size would come from the #1 motor chart. Use total distance from the motor to the breaker. 1.3/4hp motor wired at 120vac 200' would be # 6
5. Motor not working: Color-to-Color wiring inside the motor is incorrect. You must use GEM's motor wire diagrams. **A.O. Smith motors; move GEM Orange wire to pin 2!!** GEM units works with 120/240VAC 1 phase, cap. start, induction run motors. Three phase motors require a special unit please call. 1 1/2 horsepower motors and larger can have a capacitor start and a cap. run. The run cap. might not reverse or the run cap. can explode. It must be removed. This will increase the run amps that the motor will draw by three amps. Eastbay motors, 2 cap systems require no modifications.
6. Transmitter does not work a 3-second delay when switching direction. Check that LED on transmitter lights and check that the learn button LED lights when receiving from the transmitter. Relearn the transmitter, press the learn button 1 time and then push the Stop button the Learn LED should flash.
7. Short range or lift hiccups: If the red LED on the transmitter flickers, replace the batteries 2: 3Volt CR2032. Do not change the length of the antenna wire on the receiver board this will not help the range. You should have line of sight for the unit to have up to 300-foot range.
8. If the GEM unit is dead check that the LED flashes on powered up. If no flash then check your power you can also press in the middle of down contactor if the lift runs, you have main power but your 24 VAC transformer is not working (check neutral). **Auto-Stop units must be hooked up to a limit switch.** A fast flash on the LEDs = the up limit is reached a slow flash = the down limit. If the led are flashing fast then slow then both limits are open check to see if it hooked up or wires damage. **It's against the code & not covered by insurance without a GEM limit switch hooked up.**
10. Clearing the memory: Press and hold the Learn/Clear button for 7 seconds when the LED flashes stop pressing and the memory will be cleared. Test to see if any work. To relearn, press learn button once, then press the Stop button on the transmitter. The Learn LED will flash 2 times.
11. **TROUBLESHOOTING:** Old GEM GFI units needs a neutral. **GFI will not reset if it sees a fault or it does not have 120VAC.** Disconnect all motor wires, check to see if the GFI resets, press up and down note contactor pulling in, then hook up 1 motor at a time to find the fault.
12. **TROUBLESHOOTING: Wiring at 110-120VAC:** Motor Hum: 120VAC wiring connect the neutral bar/motor white wire to L2. See figure 1B. Use GEMs supplied white wire and attach to left side of bottom contactor marked L2. Over sizing the circuit breaker can damage your lift, motors and/or the boat. Use the correct size circuit breaker and wire size. Use a wire chart on page 1 and size breakers based on the total horse power of motors.
13. **TROUBLESHOOTING: Wiring at 220VAC-240VAC 50 to 60hz:** 4 motor, or special ordered 240V only units, do not have a Neutral bar. If ordered 240 only; then you only need 2 wires +ground-main feed. If you don't have 3+G then you will need to rewire the system for 240VAC only (2+Ground). Old GEM GFI units needs 120 to work so don't rewire transformer. Read the label, on top of the transformer BLK-ORG = 240 VAC. Remove yellow wire from neutral bar and cap it off. Find the Orange transformer wire, it should be hiding around the base of the contactor on the left it has a red wire taped to it. Attach the Orange transformer wire to L2. The red wire taped to this wire is used for 208 vac connections don't use.
14. **TROUBLESHOOTING: Wiring at 208VAC:** Rewire the transformer. Read label on transformer BLK-RED =208 Remove yellow wire from neutral bar and tape it off. Find Red transformer wire, it should be hiding around the base of the contactor on the left it is taped to is an Orange wire. Attach Red transformer wire to L2. The Orange wire that it was taped to is for 240 connections. GFI units need a 120vac to work.

Need more help? Call 239-642-0873 M-F 9:00-5:00 EST. The web page also has more information for after hours help.

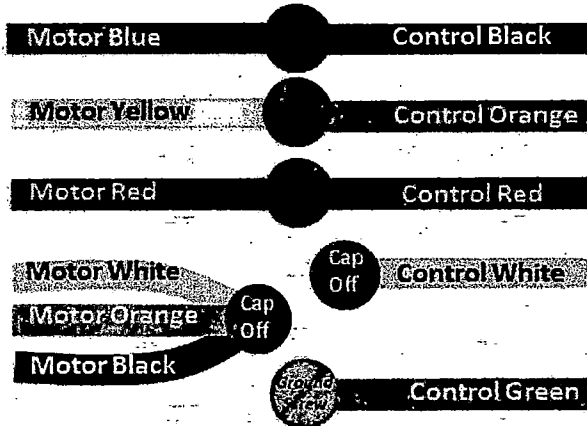
GEM WIRING INSTURCTIONS 230V



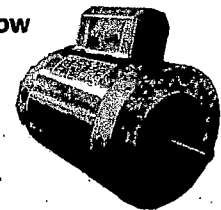
Use the diagram below if
your motor is a new 56
frame Aqua Marine
Supply motor from Regal
Beloit



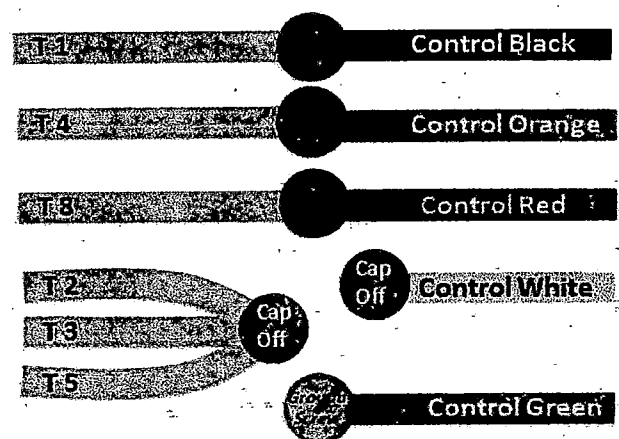
230V Connections



Use the diagram below
if your motor is a 56
frame Aqua Marine
Supply/LEESON
stainless steel motor

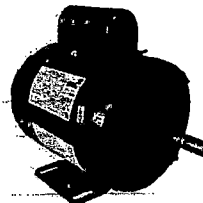


230V Connections

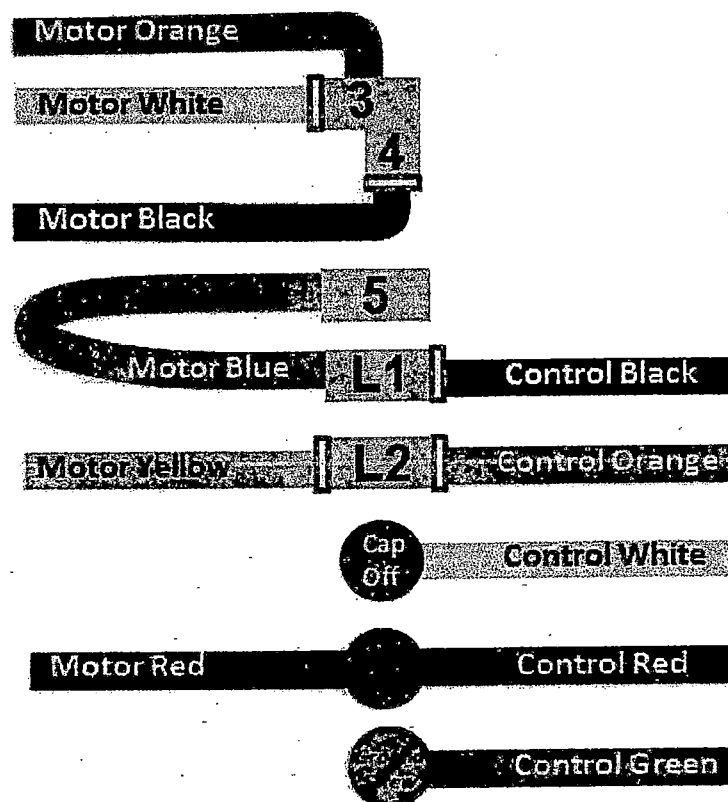


GEM WIRING INSTRUCTIONS 230V

Use the diagram below if your motor is a 56
frame Aqua Marine Supply motor from Regal
Beloit/AO Smith with terminal board



230V Connections



Aqua Marine Supply Wiring Instructions

Installation should be performed by a qualified professional only. Aqua Marine Supply is not responsible for any damage or injury that might occur during installation or wiring. Improper installation that results in damage is NOT covered under warranty. Make sure you have sufficient power and properly sized wires run to ensure no voltage drop. Motors and controls run under low-voltage are NOT covered under warranty. Wire and breaker size should be determined by a licensed electrical contractor only, Aqua Marine Supply cannot help with those calculations.

Motor Identification



Wire-to-Wire (Color Coded)

Regal Beloit/Aqua Marine Supply/AO Smith/Century motors such as C56AD35B17, etc.

This is the current wiring style

SEE PAGE 2



Wire-to-Wire (T-Wires)

Aqua Marine Supply stainless steel motors #13750, 13980, etc.

This is the current wiring style

SEE PAGE 3

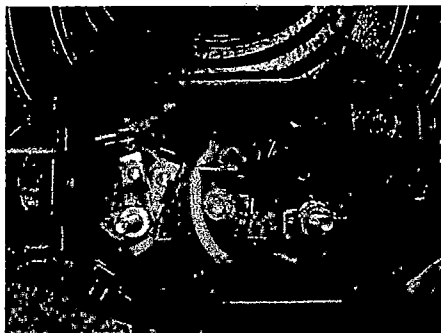


Terminal Board (48 Frame)

AO Smith/Regal Beloit/Aqua Marine supply motors such as C48D22B17, etc.

This is the current wiring style

SEE PAGE 4



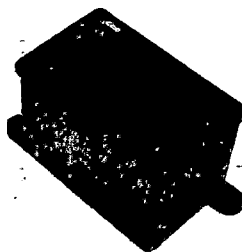
Terminal Board (56 Frame)

Regal Beloit/Aqua Marine Supply/AO Smith/Century motors such as C56AD35B17, etc.

This style is being phased out as of 2019

SEE PAGE 5

Control Identification



AMS Reversing Switch

Giovenzana (current)

Bremas (discontinued)

SEE PAGE 6



GEM Remotes

GEM GR1, etc.

**SEE GEM
INSTRUCTION SHEET**



Furnas Switch

Discontinued

SEE PAGE 7