

## ML1.5 VERTICAL FLUORESCENT DIMMING LIGHT FIXTURE

### General Notes

1. It is important that the armored cable be installed during electrical rough in.
2. When surface mounted, the armored cable should be routed behind the cabinets through the wall cavity.
3. When recessed mounted, the armored cable is routed above the master fixture then back down to the remote.
4. The light fixtures can be dimmed with the proper dimmer. See Page 7 for recommended dimmers.
5. When using the fixtures between cabinets use the 1.5GKIT (sold separately)
6. If you experience any problems with your light, or require parts, contact your dealer or Robern customer service directly between 8 and 5p.m.E.S.T. Robern, Inc.  
701 North Wilson Ave - Bristol, Pa 19007  
800-877-2376 – Fax 215-826-9633

### Limited Warranty One Year Term

ROBERN warrants to the original purchaser that, it will, at its election repair, replace, or make appropriate adjustment to products made by this company shown to have significant defects in material or workmanship which are reported to ROBERN in writing within one (1) year from the date of delivery. ROBERN is not responsible for installation costs.

The warranty is void in the event the product is damaged in transit, or if damage or failure is caused by abuse, misuse, abnormal usage, faulty installation, damage in an accident, improper maintenance, or any repairs other than those authorized by ROBERN. At the expiration of the one year warranty period, ROBERN shall be under no further obligation under any warranty, expressed or implied, including the implied warranty of merchantability.

ROBERN shall not be liable for any consequential damages arising out of or in connection with the use or performance of its products. Some states do not allow limitations on how long an implied warranty lasts or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

Any liability against ROBERN under any implied warranty, including the warranty of merchantability, is expressly limited to the terms of this warranty. Permission to return any merchandise under this warranty must be authorized by ROBERN and returned prepaid by the purchaser. Claims under this warranty should be sent directly to your dealer.

### Part List – Dimming Light Fixture

- A. (1) Light Fixture master
- B. (1) Light Fixture remote
- C. (2) Bulb Cover
- D. (2) Fluorescent Bulb
- E. (4) End Cap
- F. (1) 72" Armored Cable
- G. (4) Connecting Blocks (Supplied separately w/1.5GKIT)
  
- Hardware Bag Containing the Following:
- H. (4) Cross Bracket
- I. (4) Keyhole Bracket
- J. (4) Mounting Bracket
- K. (4) #6 Thumbscrews
- L. (4) Wire Nut
- M. (4) #10 x 3/4" Flat Head Screw
- N. (4) #10 x 3" Pan Head Screw
- O. (16) #10 x 1/2 Pan Head Screw

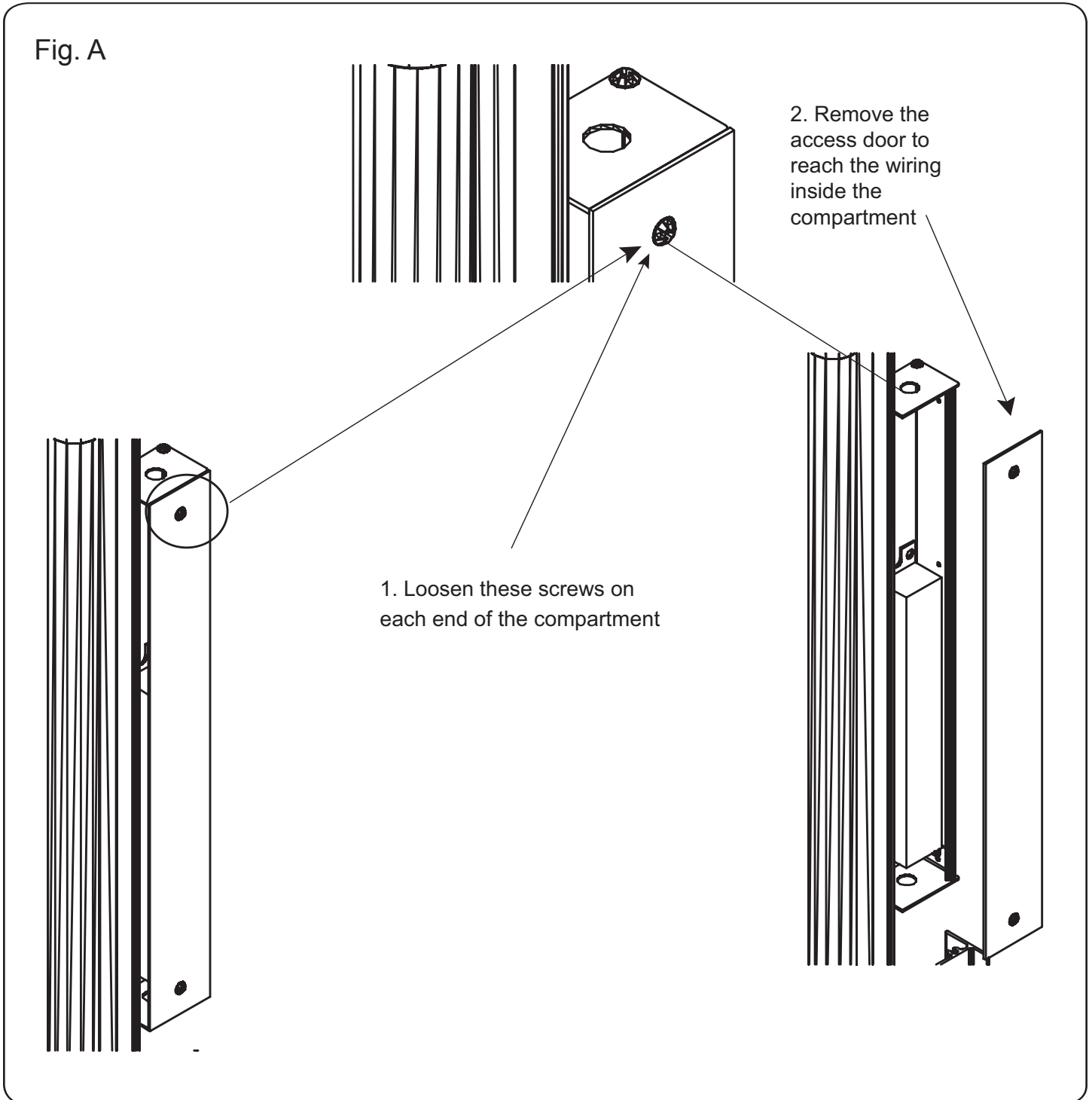
**Do not throw away Carton until you have checked the carton and all internal packing completely for hardware.**

INSTALLER: PLEASE LEAVE THESE INSTRUCTIONS WITH HOMEOWNER.

RECORD SERIAL NO. \_\_\_\_\_

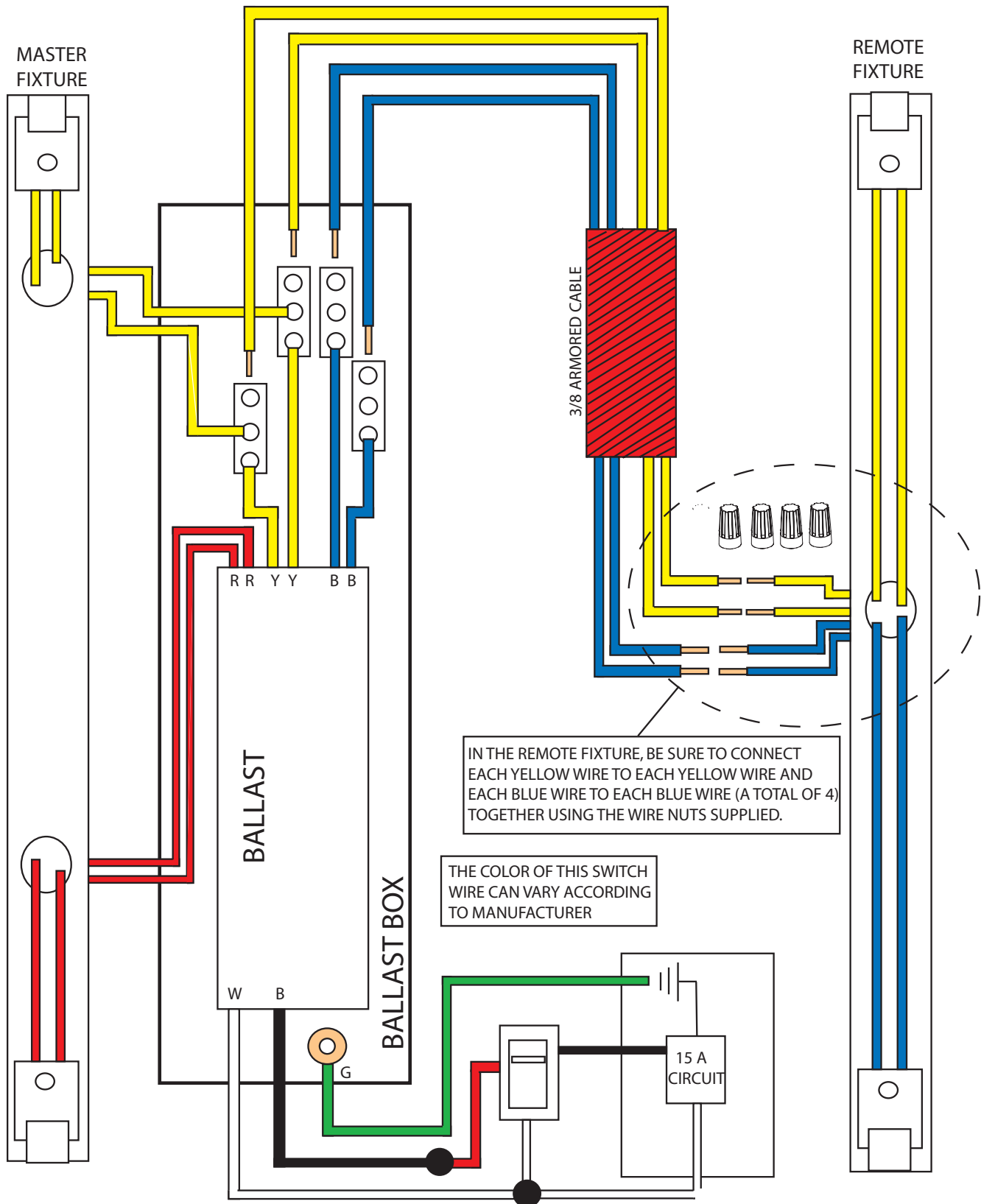
# 1. Wiring the Dimming Light Fixture

1. The fixture pair is configured as a "Master" and "Remote". The Master has the wiring compartment while the Remote does not. See Figure A
2. The wiring compartment of the Master contains supply and ground connections and the fixture-to-fixture connections for the supplied armored cable. See Figure B.
3. Wiring of the units before installing the lights is recommended.
4. Wire the light fixtures as shown in Figure B.



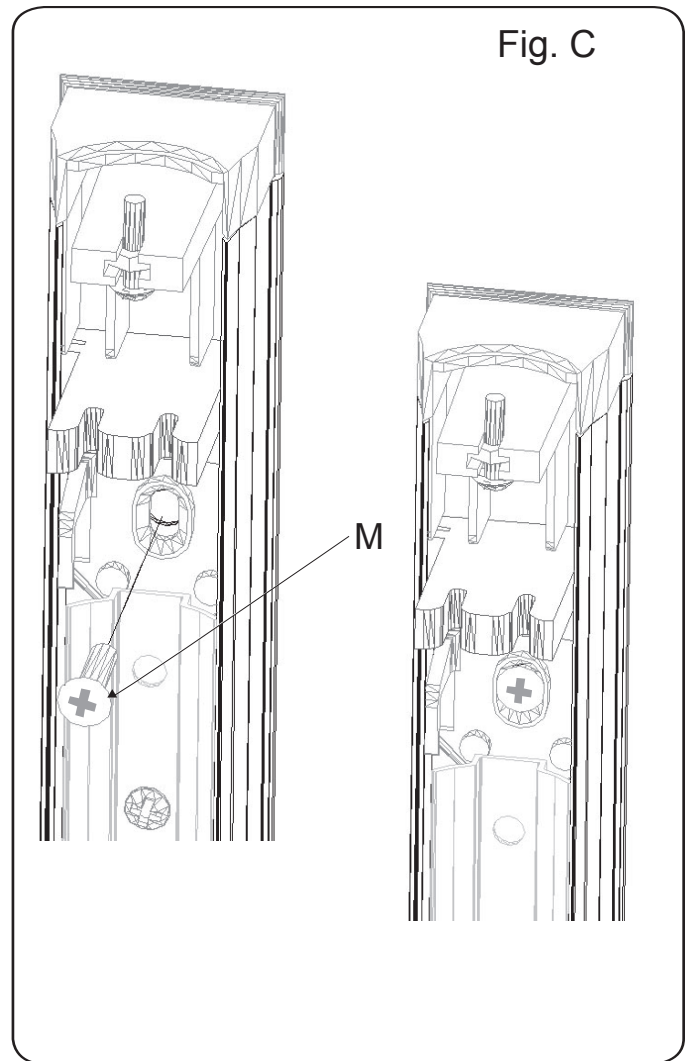
# Fixture Wiring Diagram (Dimming)

Fig. B



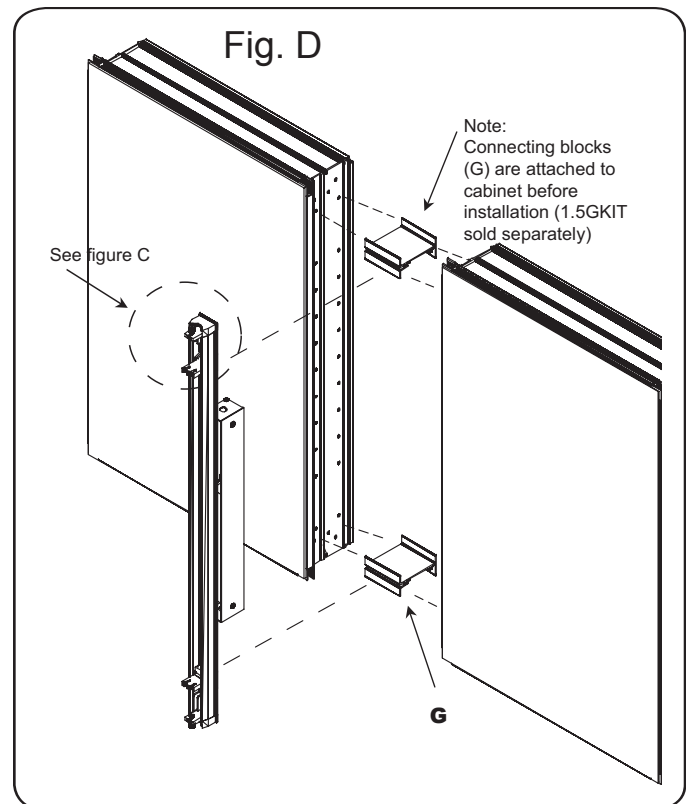
## 2. Installing the Dimming Light fixture during a cabinet-to-cabinet installation

1. Attach the light fixture to Connecting Blocks (G) (sold separately as 1.5GKIT) by inserting and tightening the fixture to the connecting blocks using screw (M). See Figure C & D.
2. Slide the Fluorescent Bulb (D) into the Bulb cover (C) and push them into the lamp sockets, and twist. See Figure H & I on page 6.
3. Snap the End Caps (E) over Bulb cover (C) being sure that the threaded stud at the end of the fixture protrudes out of the end of the End Cap. See Figure J on page 6.
4. Thread the Finger Nuts (K) onto the threaded studs on each end. See Figure K on page 6.
5. Test the lights; if there is a problem refer to the troubleshooting section starting at the bottom of page 8.



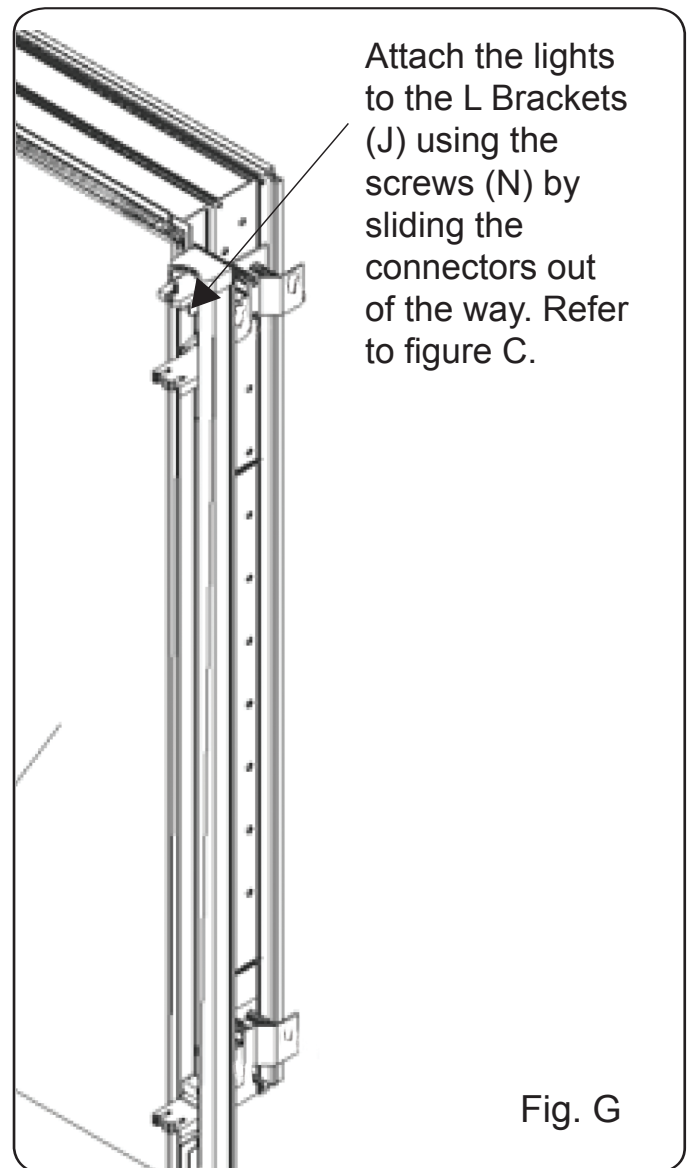
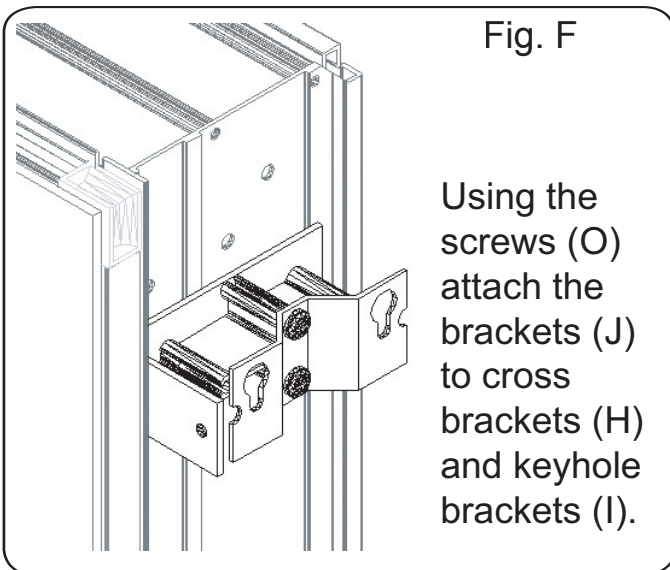
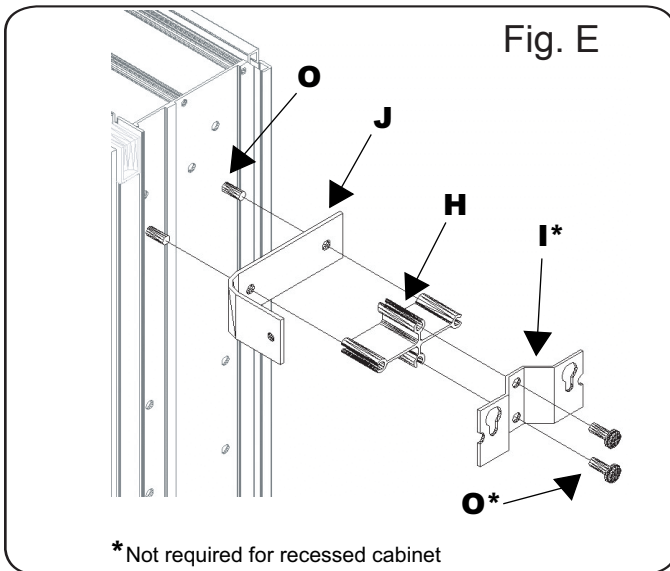
## 3. Installing the Dimming Light Surface mounted with a single cabinet

1. Using screw (O) and cross bracket (H) attach mounting bracket (J). See Figure E & F on page 5.
2. Attach keyhole bracket (I) using screw (O) to the cross bracket (H). See Figure E & F on page 5.
3. Attach the light fixture to mounting brackets (J) by inserting and tightening the fixture to the connecting blocks using screw (O). See Figure C & G.
4. Slide the Fluorescent Bulb (D) into the Bulb cover (C) and push them into the lamp sockets, and twist. See Figure H & I on page 6.
5. Snap the End Caps (E) over Bulb cover (C) being sure that the threaded stud at the end of the fixture protrudes out of the end of the End Cap. See Figure J on page 6.
6. Thread the Finger Nuts (K) onto the threaded studs on each end. See Figure K on page 6.
7. Test the lights; if there is a problem refer to the troubleshooting section starting at the bottom of page 8.
8. Figure F on page 5 shows the keyhole bracket for the side kit mirror. See note at the bottom of page 5 for attaching the side kit mirror.



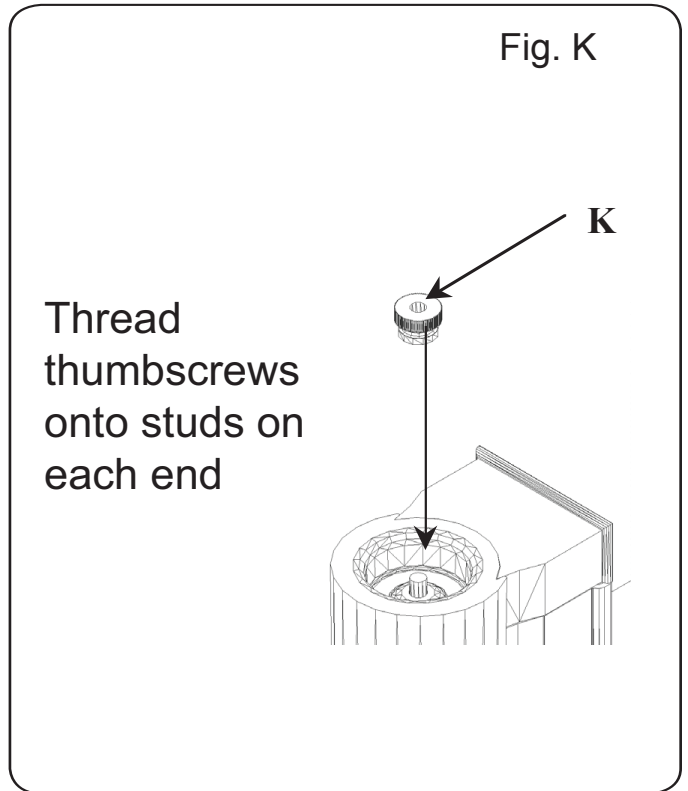
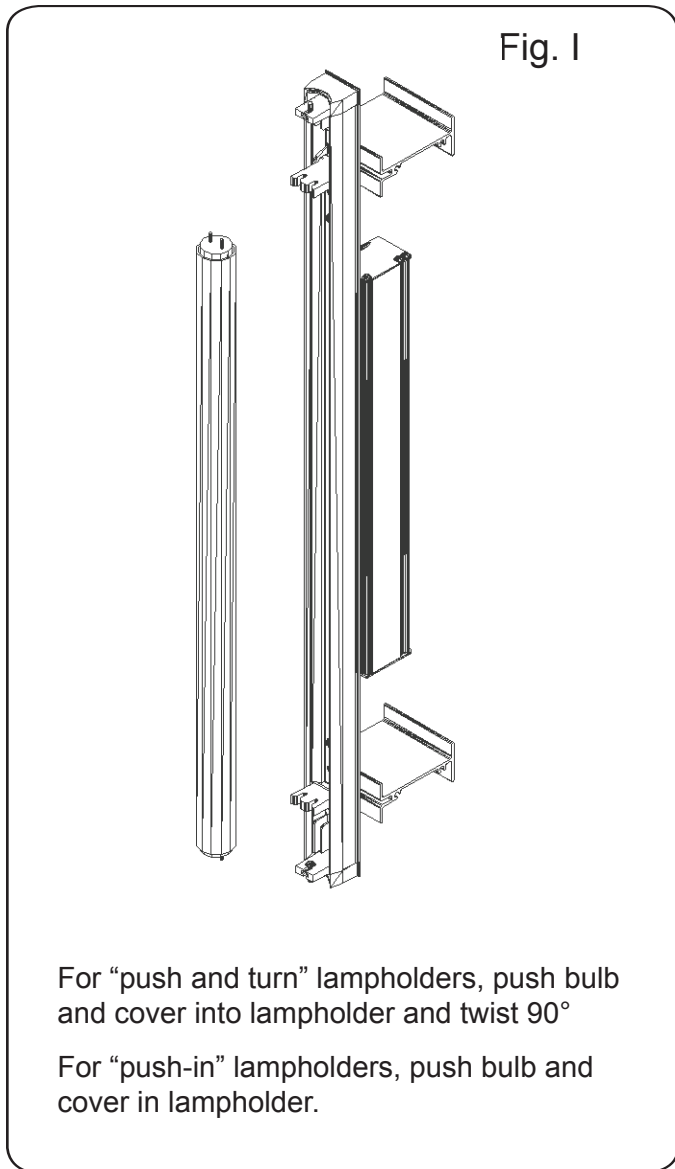
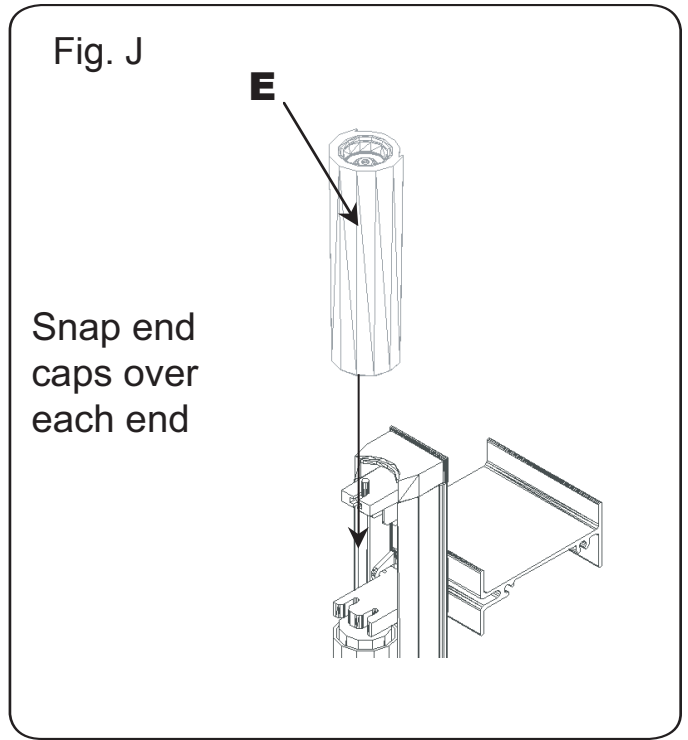
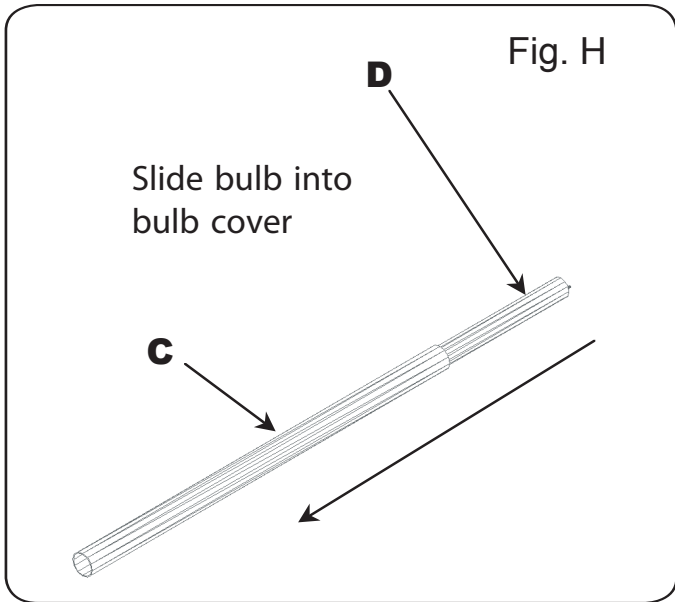
## 4. Installing the Dimming Light Recessed mounted with a single cabinet

1. Using screw (O) and cross bracket (H) attach mounting bracket (J). See Figure E & F.
2. Attach the light fixture to mounting brackets (J) by inserting and tightening the fixture to the connecting blocks using screw (M). See Figure C & G. (Note: Keyhole bracket not required.)
3. Slide the Fluorescent Bulb (D) into the Bulb cover (C) push them into the lamp sockets, and twist. See Figure H & I on page 6.
4. Snap the End Caps (E) over Bulb cover (C) being sure that the threaded stud at the end of the fixture protrudes out of the end of the End Cap. See Figure J on page 6.
5. Thread the Finger Nuts (K) onto the threaded studs on each end. See Figure K on page 6.
6. Test the lights; if there is a problem refer to the troubleshooting section starting at the bottom of page 8.



Note: Use 8 additional screws when mounting sidekit. Screw two #10 x 1/2" screws into each bracket on sidekit mirror. Leave enough room under head for a penny to slide.

Hang on keyholes. Adjust screws if required for snug fit.



# Notes Concerning Dimming

## Lamps

The dimmable electronic ballast are designed for F17, 25, T8 Lamps only. The lamps supplied with the fixture are the best color rendering lamps available.

## Suitable Dimmers

The Lightolier dimmer are recommended because they have an adjustment to set the minimum light level. With the adjustment wheel you can set the light level so that the lamps will not “flicker” or go out at the minimum setting. Minimum setting is approximately 10% of full brightness.

Lutron Dimmers for Controlling Advance Mark X® Electronic Ballasts

<b>Lutron Dimmer Family:</b>	<b>Lutron Dimmer Model Number:</b>
Nova	NFTU-5A
Nova T*	NTFTU-5A
Diva® Satin Colors®	DVSCFTU-5A3P
Diva	DVFTU-5A3P
Skylark®	SFTU-5A3P
GRAFIK Eye QS	QSGRJ-XP
GRAFIK Eye QS with EcoSystem	QSGRJ-XE, QSGR-XE

Other Dimmers: Dimmer suitable for “Mark 10” or “Mark X” Powerline ballast can also be used

## Installation

The dimmer uses standard wiring used with standard dimmers. The cable between the fixtures allows the use of on ballast to operate 2 fixtures. If the armored cable cannot be used due to wall access or distances between the fixtures, standard plastic jacketed cable can be used if local code allows. Maximum wire length should be kept to under 6 feet. Grounding of the remote fixture will be necessary.

To avoid lamp “flickering,” it is extremely important that the fixtures be grounded and the supply wire ground is connected to both the fixture and the ballast. Positive contact of the bulb in the socket is also important.

## Initial start up

New fluorescent lamps go through a process of initial forming in their first 100 hours of operation. Especially rapid changes are occurring during the first 10 minutes of operation and it is undesirable to even test the dimmer until the lamps have burned at full power for 10 minutes. After this 10 minute warm up at full power you can set the minimum light level using the thumbwheel on the dimmer. Adjust the dimmer by sliding to its lowest setting and turn the wheel until the lamps light evenly without “flicker.”

Once the installation is working satisfactorily operate the lamps primarily at full brightness for approximately 100 hours before using them for extensive periods of dimming.

## Troubleshooting

Grounding – Both fixture and ballast must be connected to a building ground

Filaments – T8 lamps require both pins to be secure in order to operate dim, even though they can produce light at full power with only one pin connected. The fixtures are supplied with either “push and turn” or “push-in” lampholders. For “push and turn” lampholders, the bulb must be turned 90° for correct operation. For “push-in” lampholders, be sure that the bulbs are fully engaged for proper operation. If the lamp end pins are dirty, clean with scotchbrite and re-install.

Premature end blackening – If one end of one lamp is black after only a few days, and no other lamp has become black, check for faulty filament (Pin) connections or faulty ground connections before assuming the lamp is defective.

Final note for electrician – If everything is working fine leave the lamps on full brightness so that the lamp forming process can be completed as soon as possible. Explain to the customer that 4 days (100 hours) of full bright operation are needed before the lamps can be dimmed without damaging them.

# **WARNING: RISK OF FIRE**

Most homes built before 1985 have wire rated 60°C.

Consult a qualified electrician before installing for supply connections. Use wire rated for at least 90°C.

For more information, contact a licensed electrician.

# robern®

## 209-1030 ML1.5 DIMMING LIGHT FIXTURE INSTRUCTIONS