

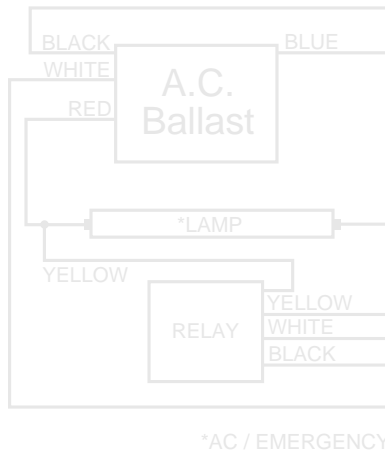
***Thomas&Betts***

**EMERGENCY BALLAST  
WIRING GUIDE**

rev. 103103



# HOW TO USE THE EMERGENCY BALLAST WIRING GUIDE



This Document has been customized to contain a wide library of individual diagrams for various installation applications. If a diagram cannot be found within this selection, consult Customer Service.

The diagrams are categorized primarily according to the number of lamps in the fixture, then followed by the ballast type. Sometimes a specific lamp type is listed (i.e: biax, circline, etc.). If a lamp type is not listed, the diagram shows a typical straight tube lamp configuration. In some cases, a specific ballast manufacturer is listed for AC ballasts that have unique wiring arrangements.

Diagrams for specific situations can be located within this PDF file by using the following methods:

## 1) USING THE NAVIGATION WINDOW

Use the Navigation window and select the Emergency Ballast for which the diagram is needed, then scroll through the list of applications to find the diagram(s) that meet the necessary criteria by clicking on the “plus” sign next to the Unit Model. (Many of the diagrams are bookmarked with identical descriptions. Examine the diagram for details as to whether or not it applies to your situation.)

NOTE: The order in which the pages are bookmarked is not indicative of the actual page order, therefore, continuing to the next page after a “Two Lamp Ballast” diagram may not necessarily take you to another “Two Lamp Ballast” diagram. To aid in locating specific diagrams, each has been bookmarked and categorized in the navigation window.

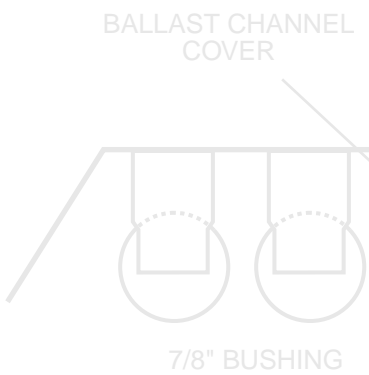
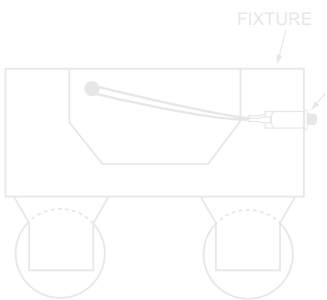
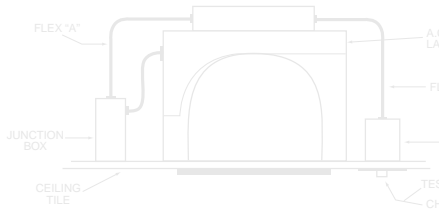
## 2) USING THE FIND COMMAND

Some diagrams feature a Model List for reference. If you know the actual model number of the AC ballast that the emergency unit is being wired to, you may use the “FIND” tool in the toolbar (Denoted by the binocular icon) to search the diagrams for that particular model. FIND commands may or may not be successful, since not all ballasts models are listed within this file.

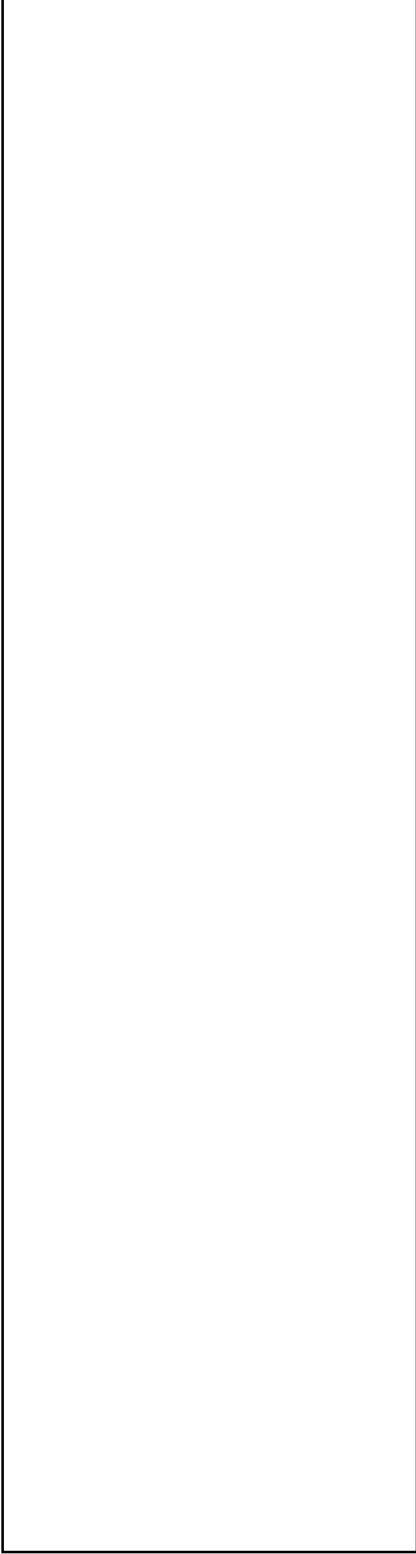
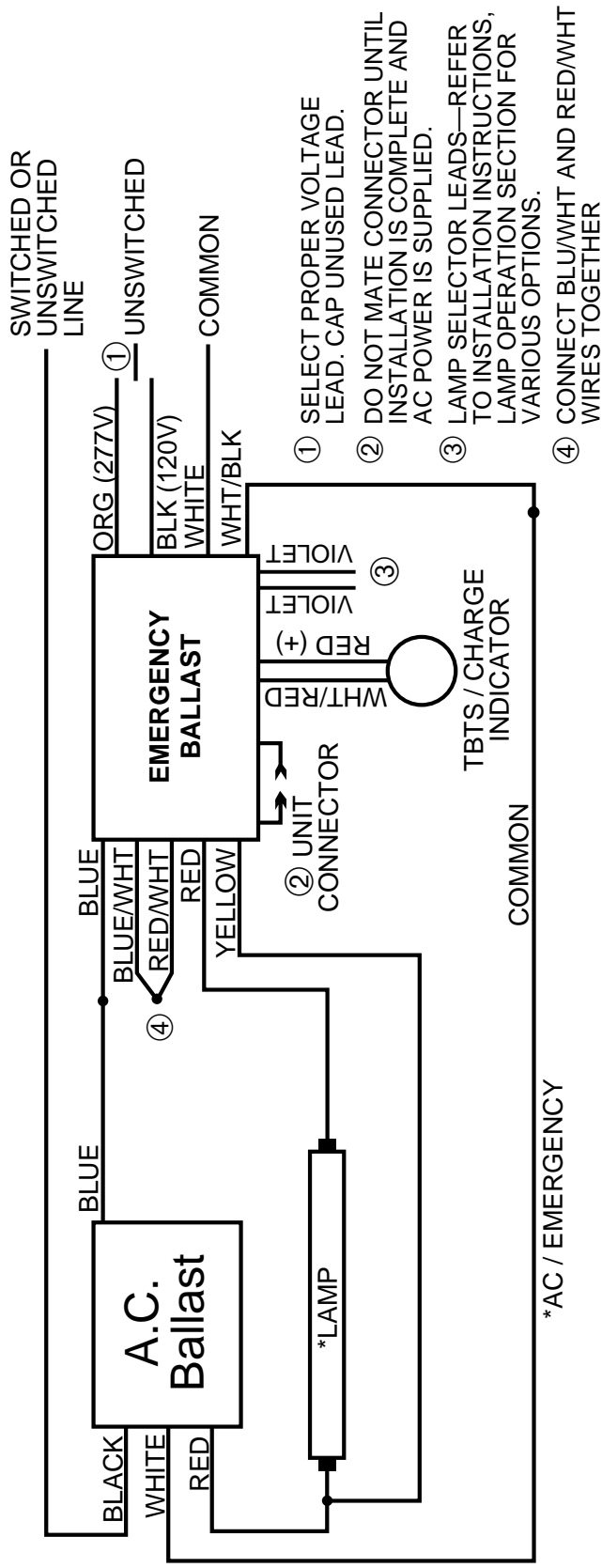
When using the FIND command, it may be helpful to search for only the first few letters or numbers of the model number (i.e. “RCN” or “ECO”) due to the nature of how the reference lists are compiled. Include any hyphens or slashes that may appear in the model number when using the FIND command.

This Guide is by no means an exhaustive record of all AC Ballast/Emergency Unit combinations. If a search using the FIND command or Navigation window is not successful, contact Customer Service for further assistance.

You may request an updated Wiring Diagram Guide at anytime. Please consult Customer Service to find out if a later version with any additions and/or corrections is available.

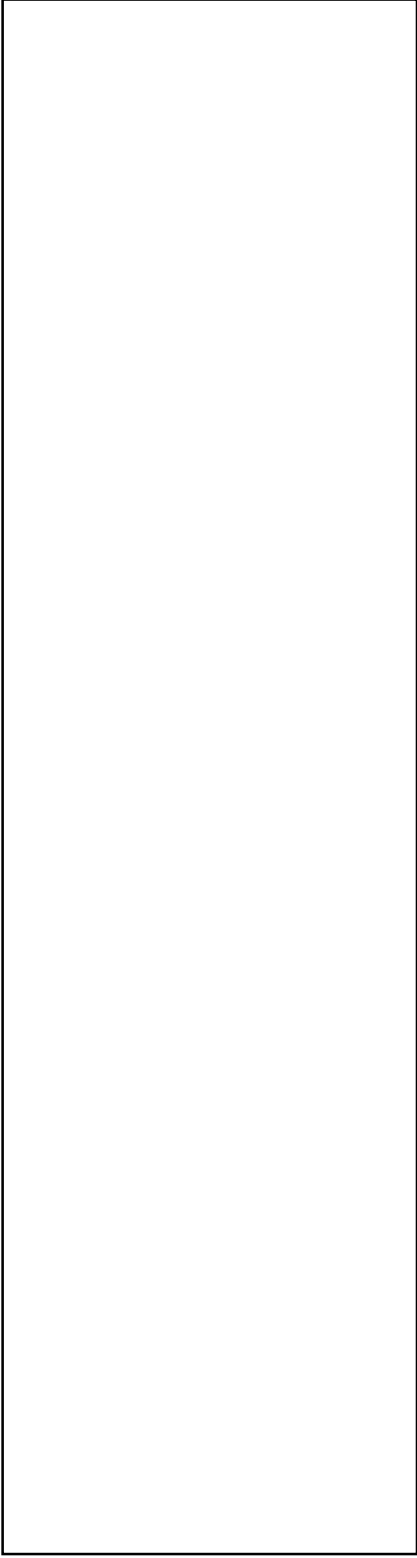
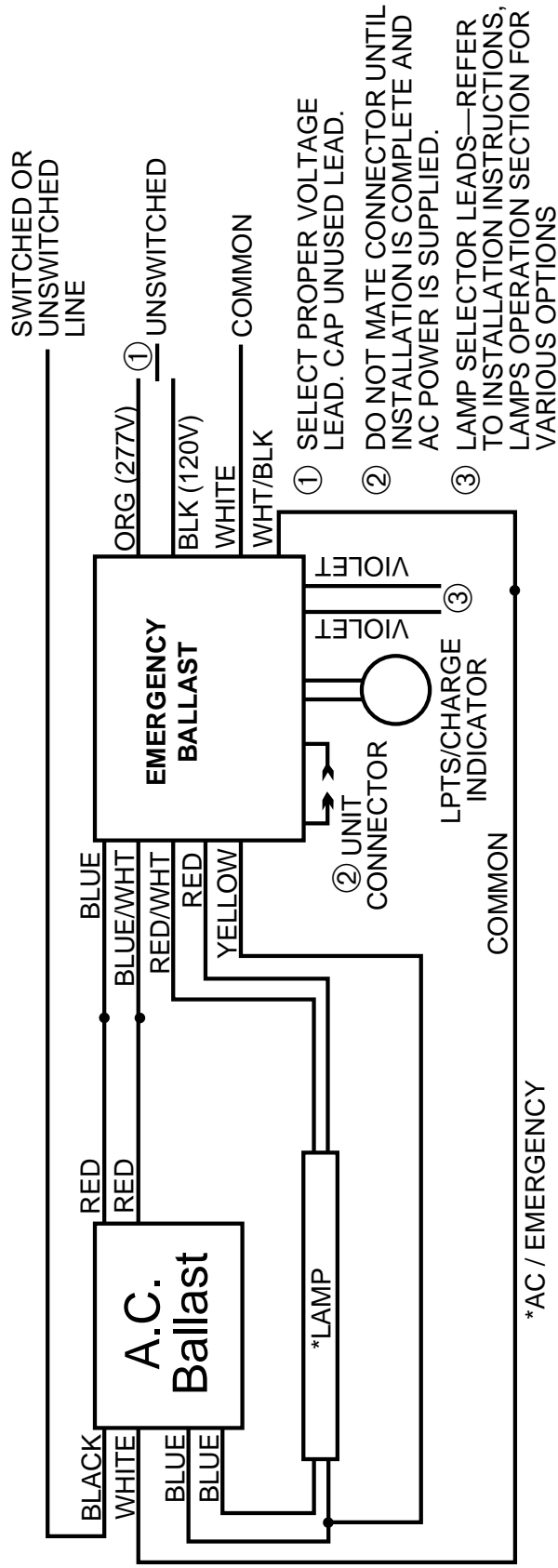


# ONE LAMP INSTANT START BALLAST

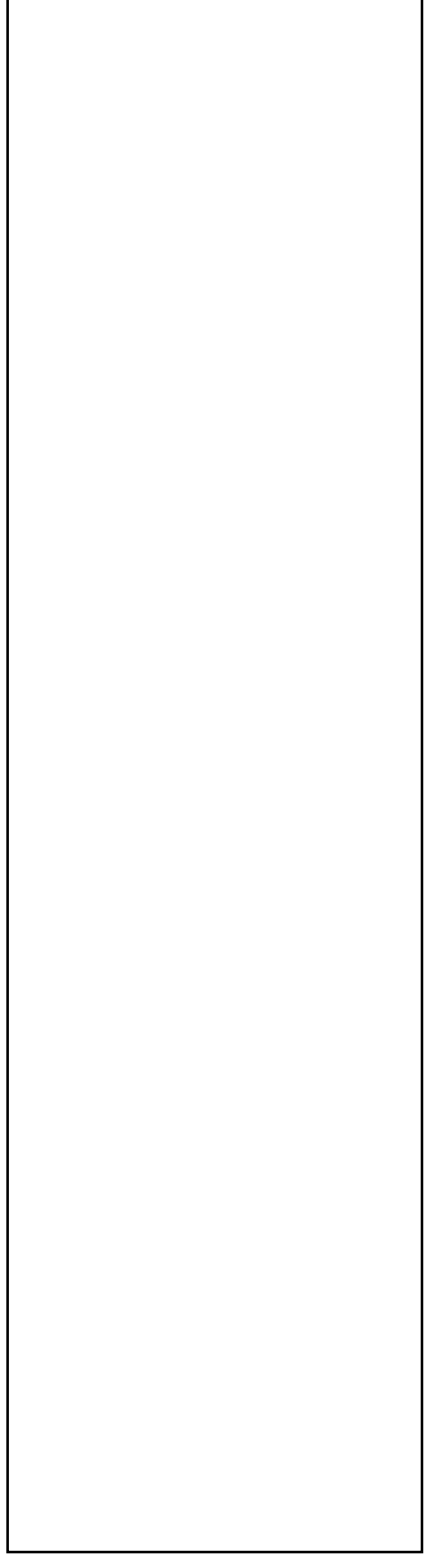
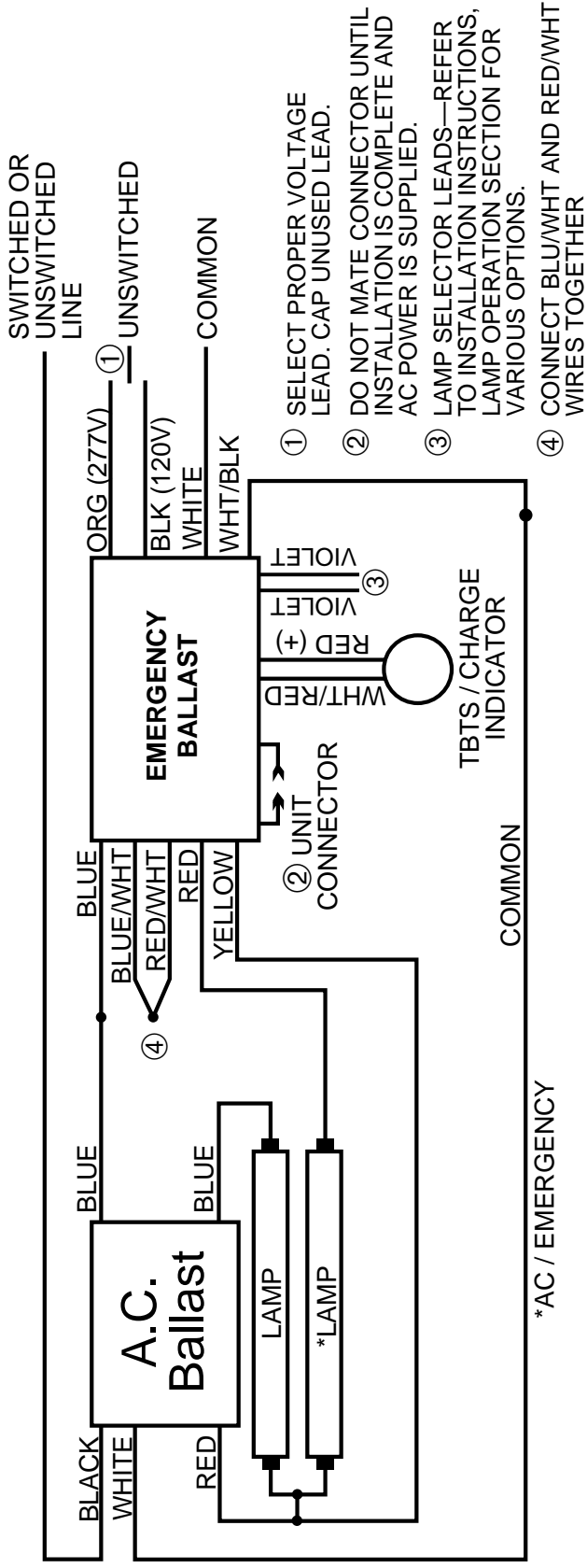




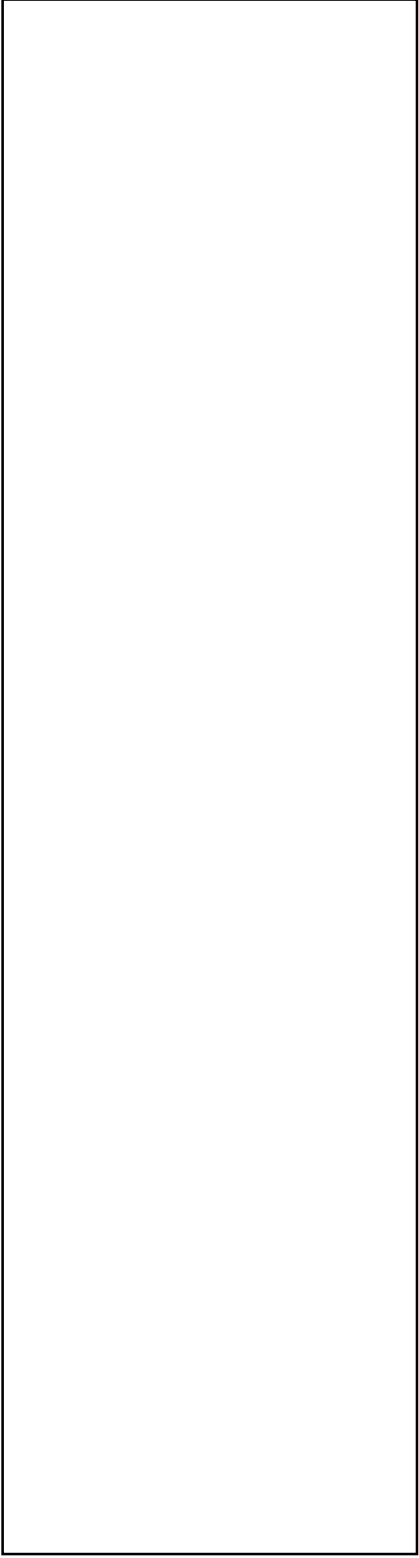
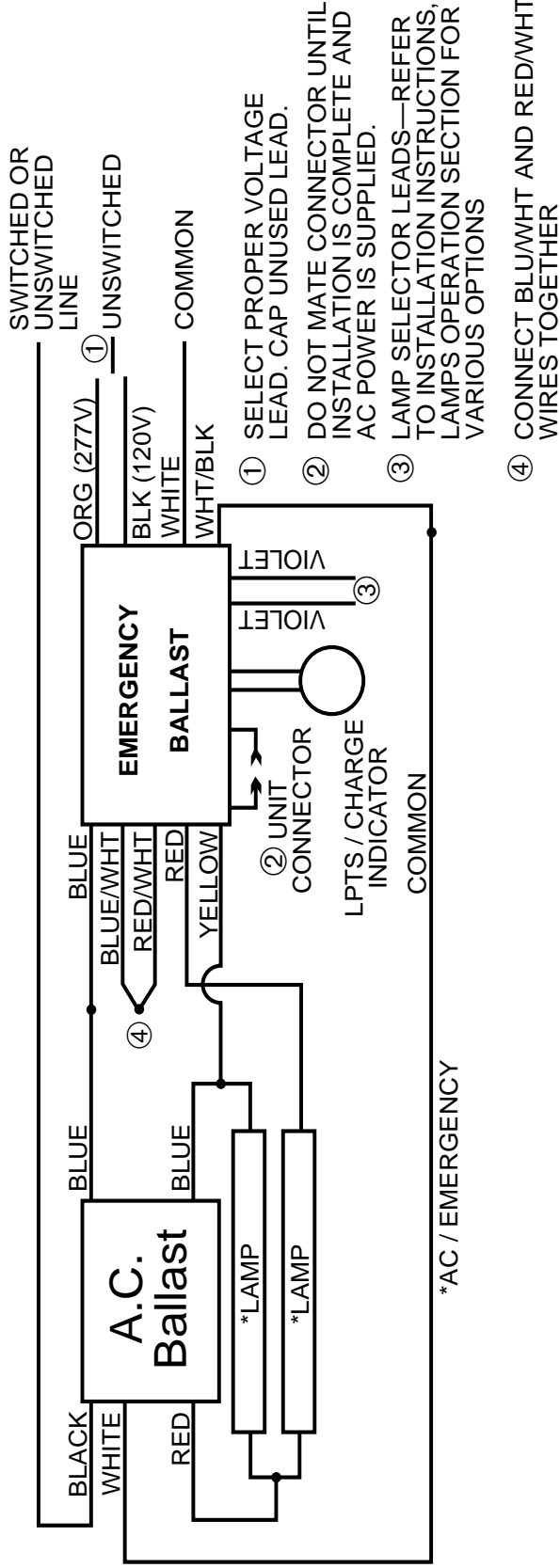
# ONE LAMP RAPID START BALLAST



# TWO LAMP INSTANT START BALLAST

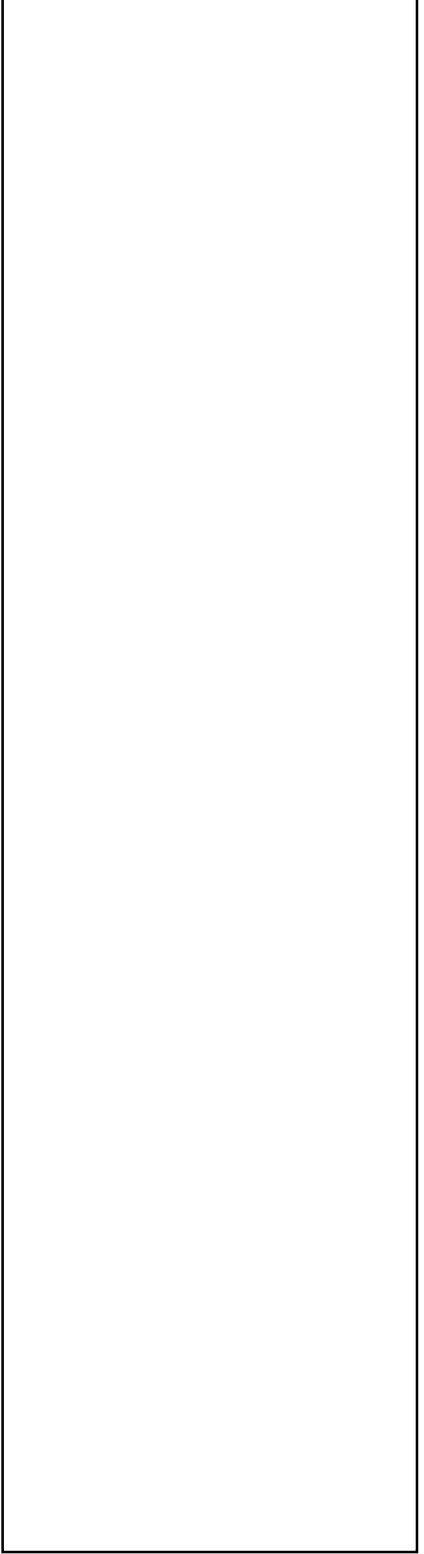
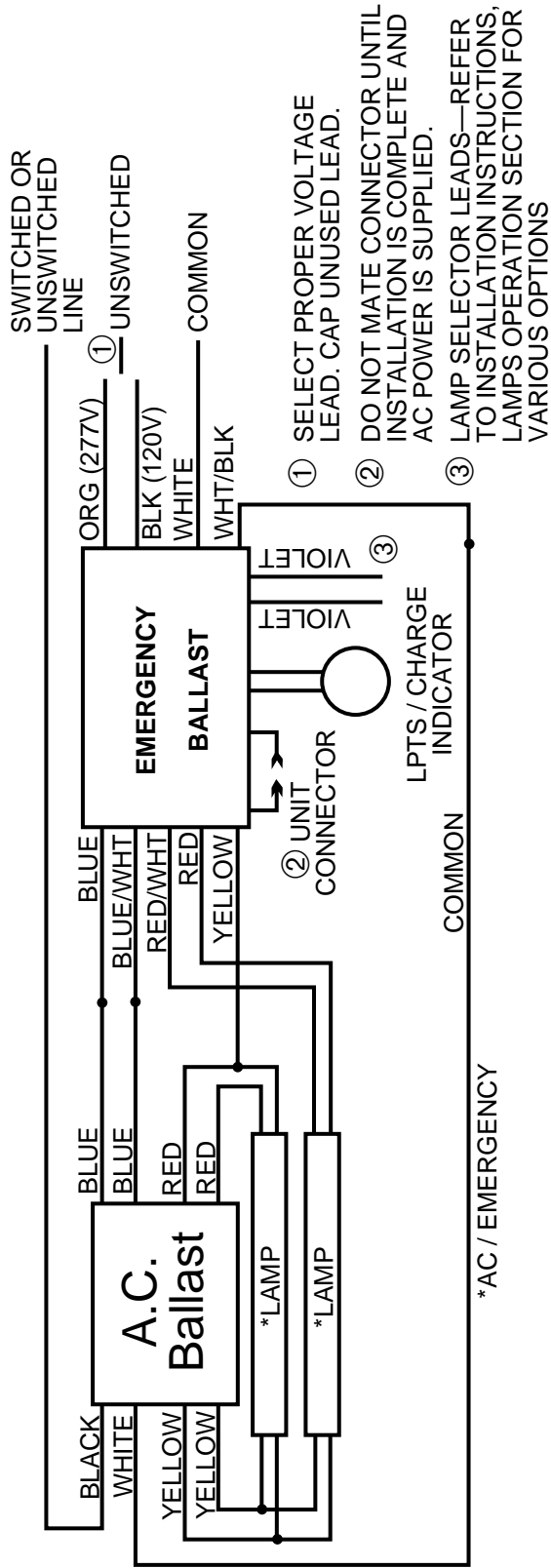


# TWO LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION

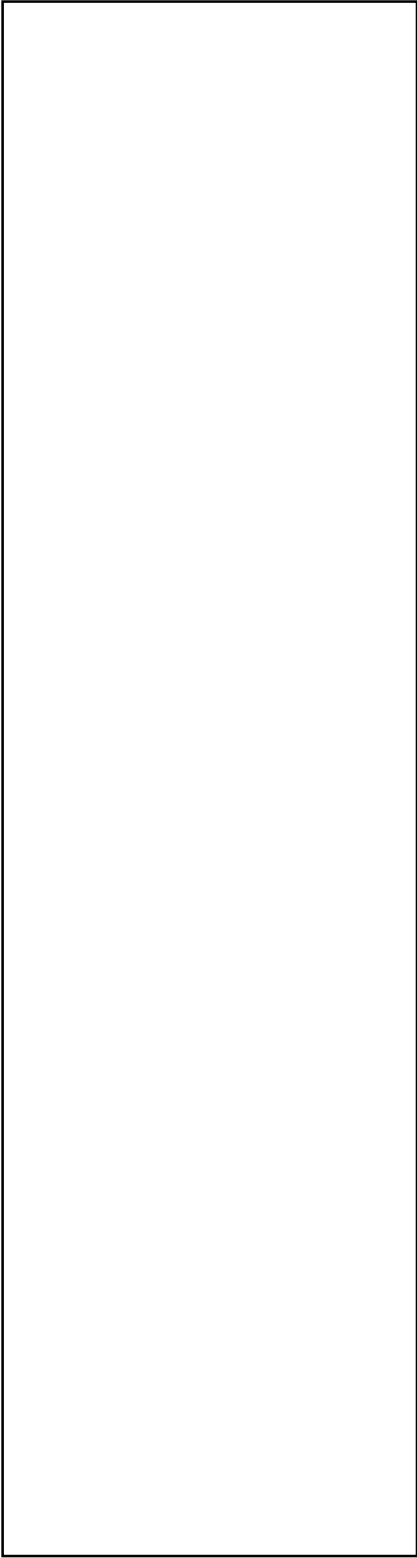
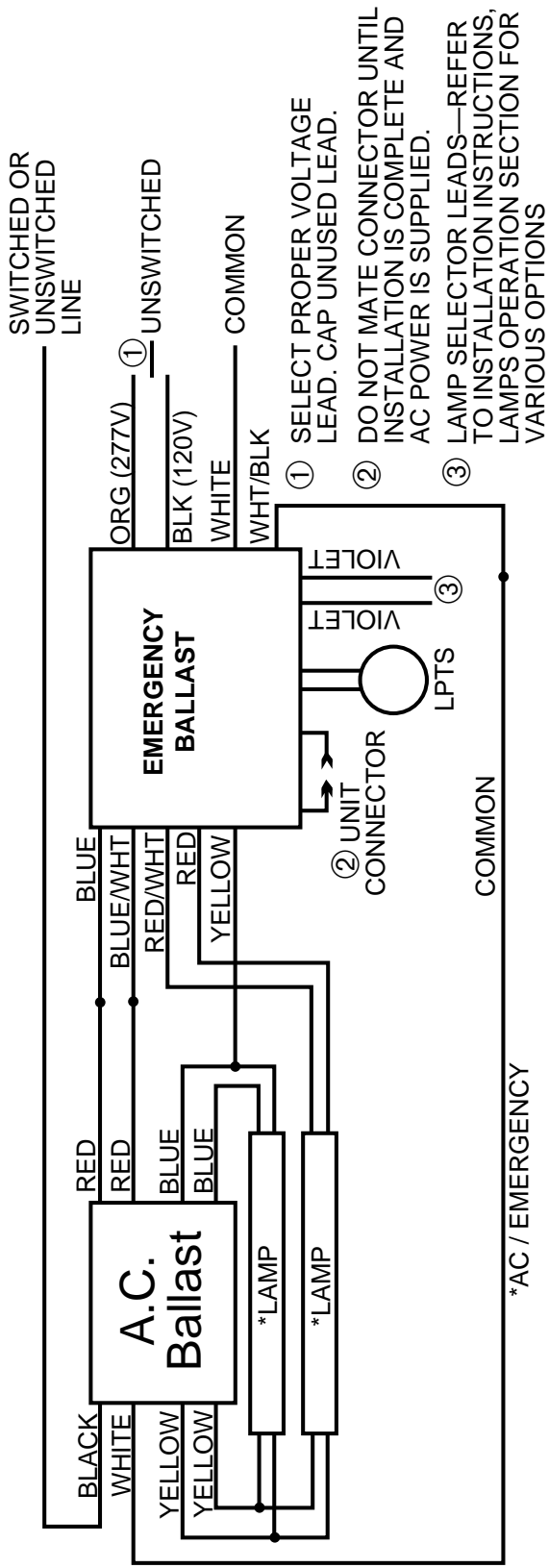




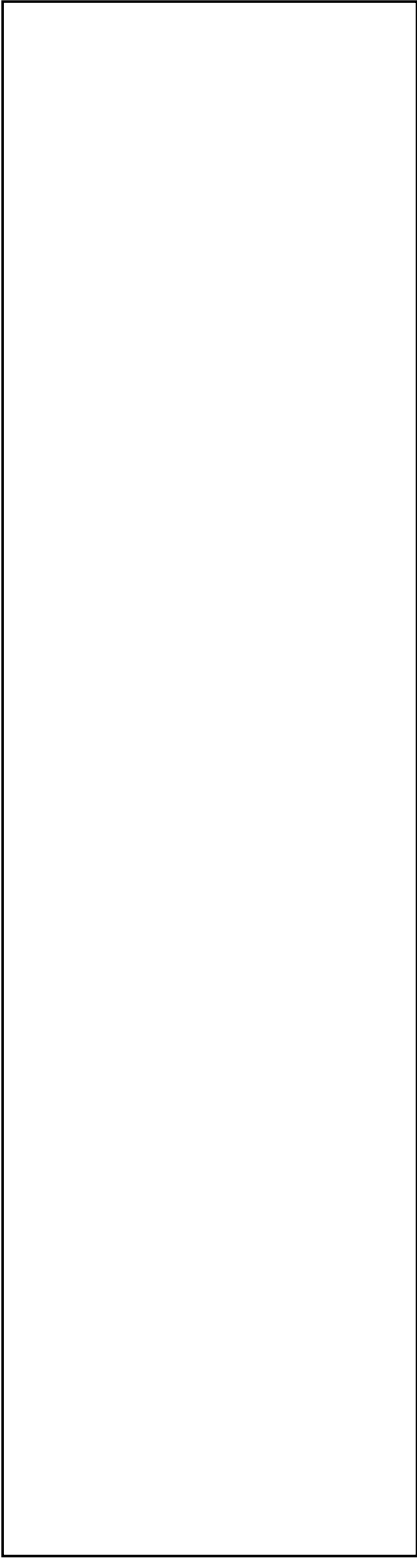
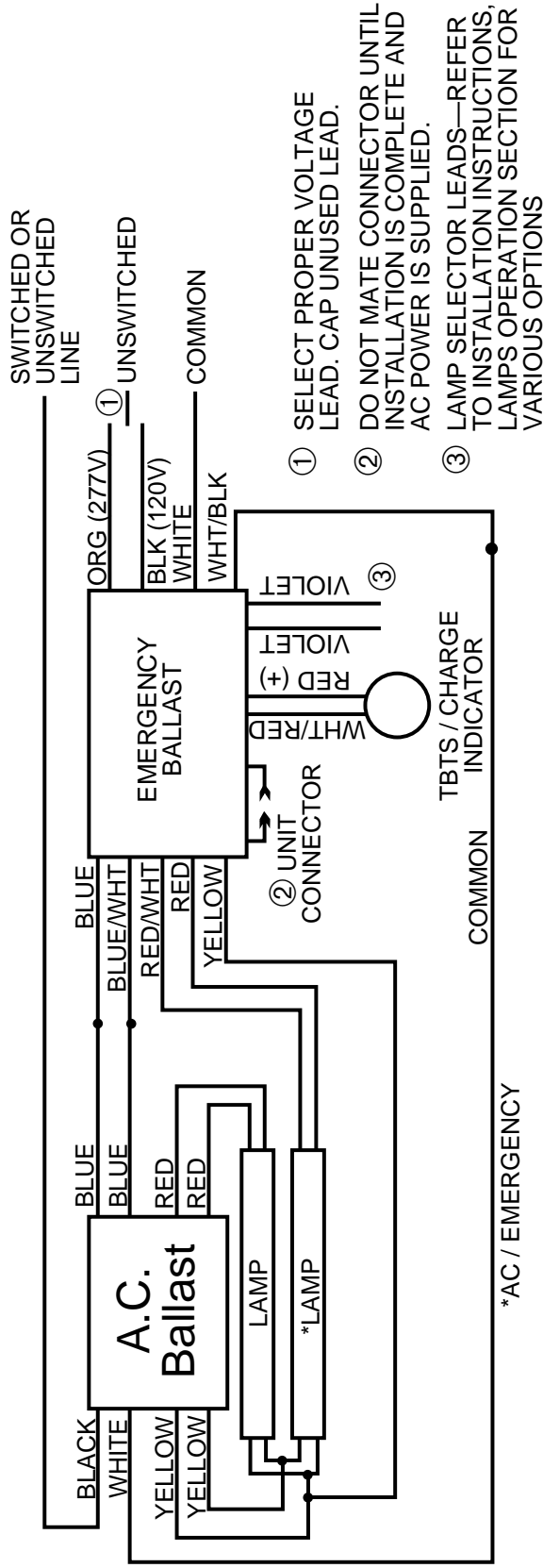
# TWO LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



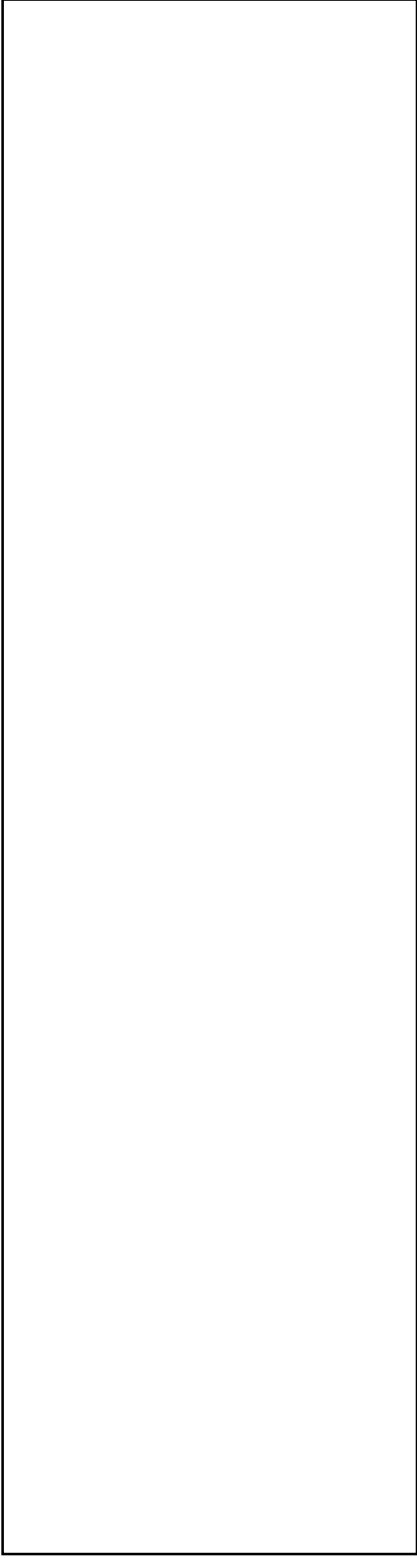
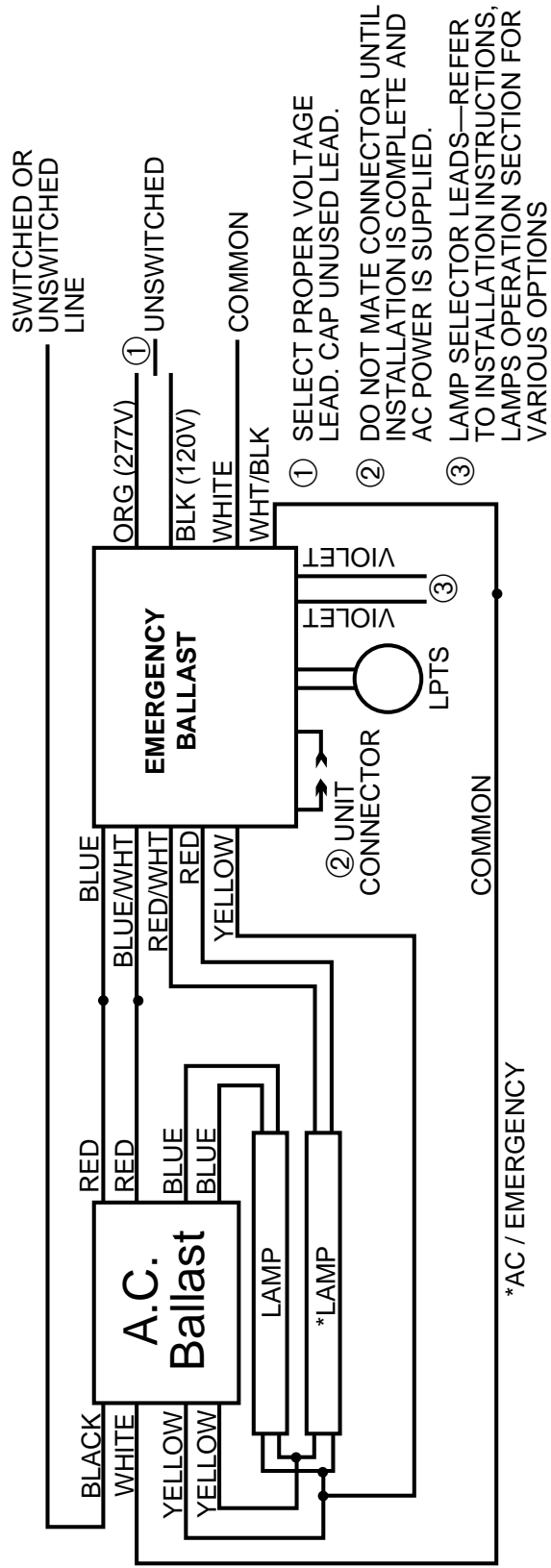
# TWO LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



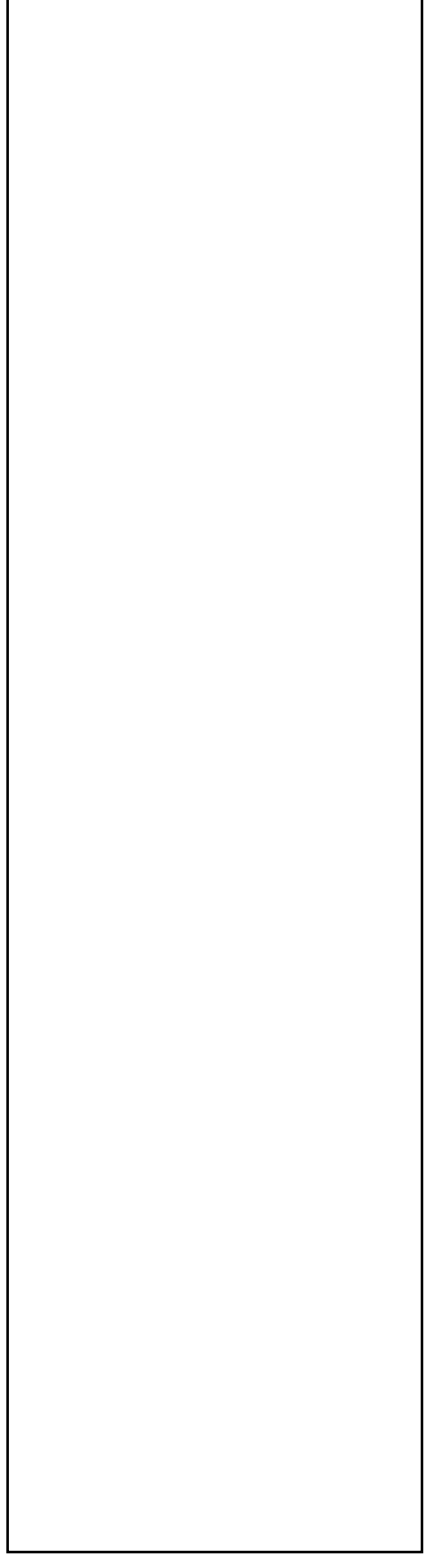
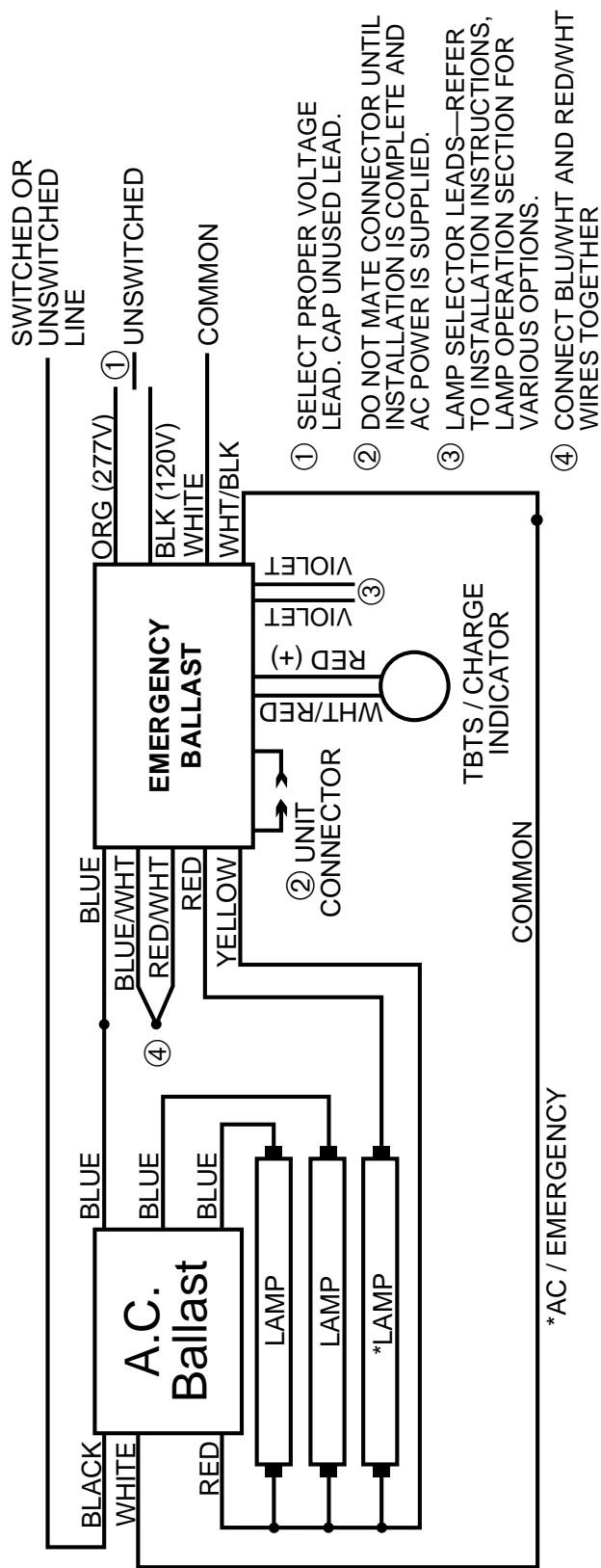
# TWO LAMP RAPID START BALLAST



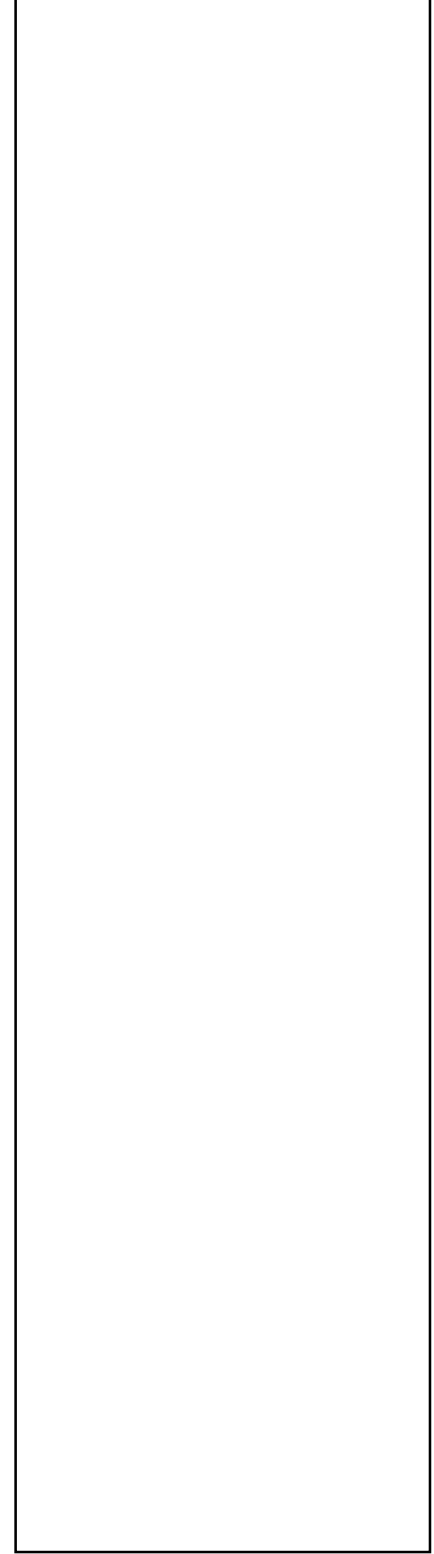
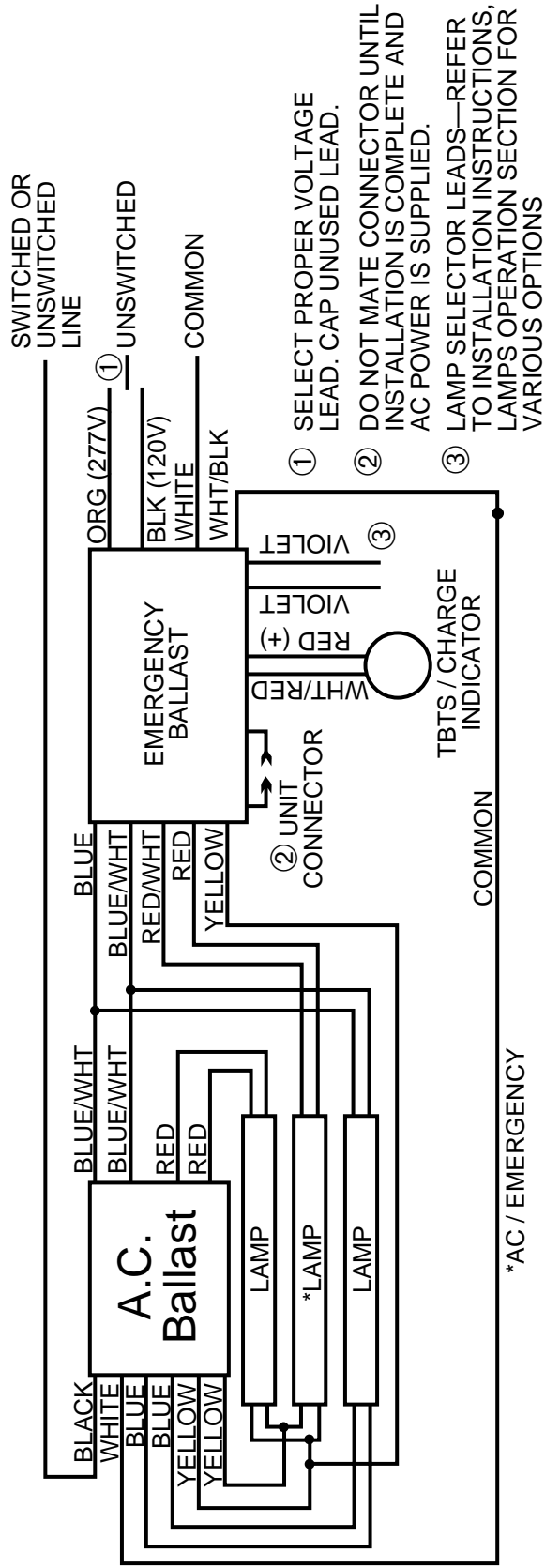
# TWO LAMP RAPID START BALLAST



# THREE LAMP INSTANT START BALLAST

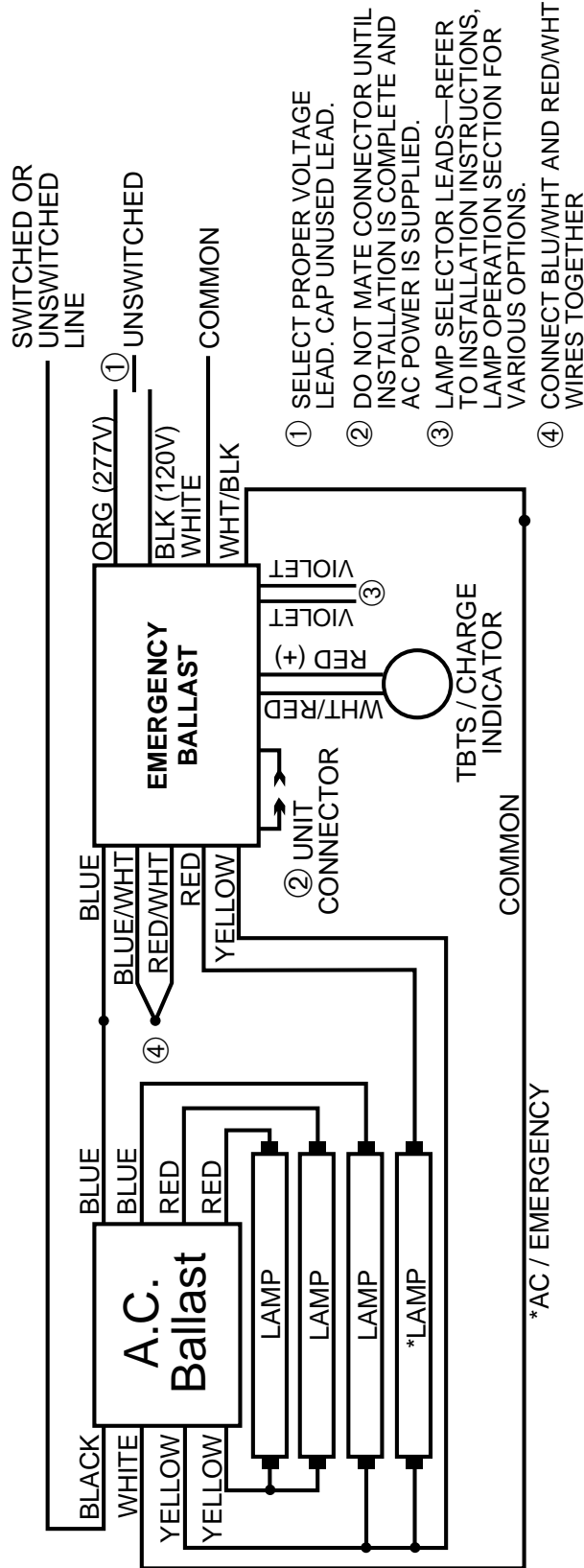


# THREE LAMP RAPID START BALLAST



4LISB\_D

## FOUR LAMP INSTANT START BALLAST



FOR 1 LAMP OPERATION REFER TO: YY20

### ADVANCE

RCN/VCN-4P32  
REL/VEL-4P32-RH-TP  
REL/VEL-4P32-LW-RH-TP

### EBT

SSB2-120/277-4/32 IS LH /-(75%)

### GE

G4-IN-T8-120/277

### GOLDSTAR

GB 4x32/FL/I/120-277  
GB 4x32/FL/I/120L-277L

### HOWARD

E4/32IS-120/277  
EC4/32IS-120/277

### KINGTEC

432K120-IS/277-IS  
432K120-75%

### MAGNETEK

B432120/277HP  
B432120/277RH

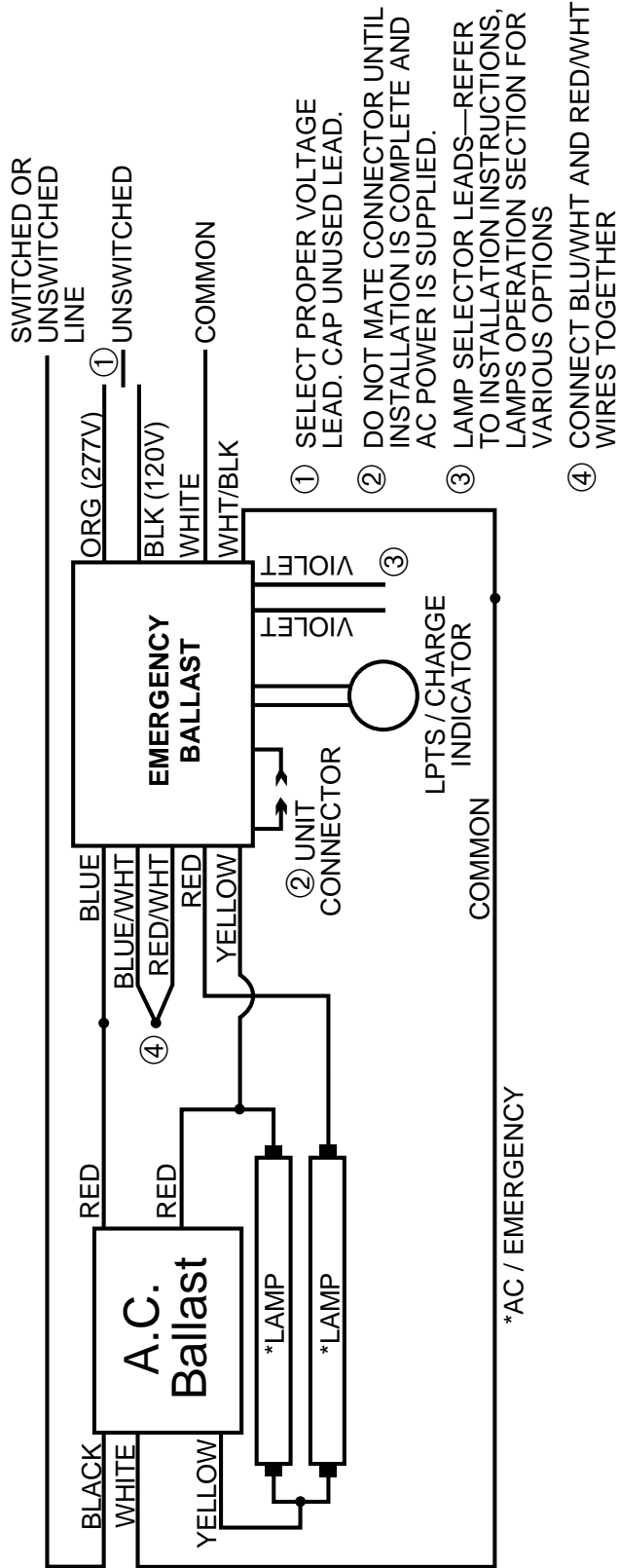
### MOTOROLA

M4-IL-T8-GP-A-120/277  
M4-IN-T8-A-120/277  
M4-IN-T8-D-120/277  
M4-IN-T8-GP-A-120/277

ALL COMPATIBLE BALLASTS MAY NOT BE LISTED.  
\*DIMMING CONTROL WIRES ARE NOT AFFECTED BY EM PACK

2LISFB2\_80D\_2LEO

## TWO LAMP INSTANT START BALLAST TWO LAMP EMERGENCY OPERATION



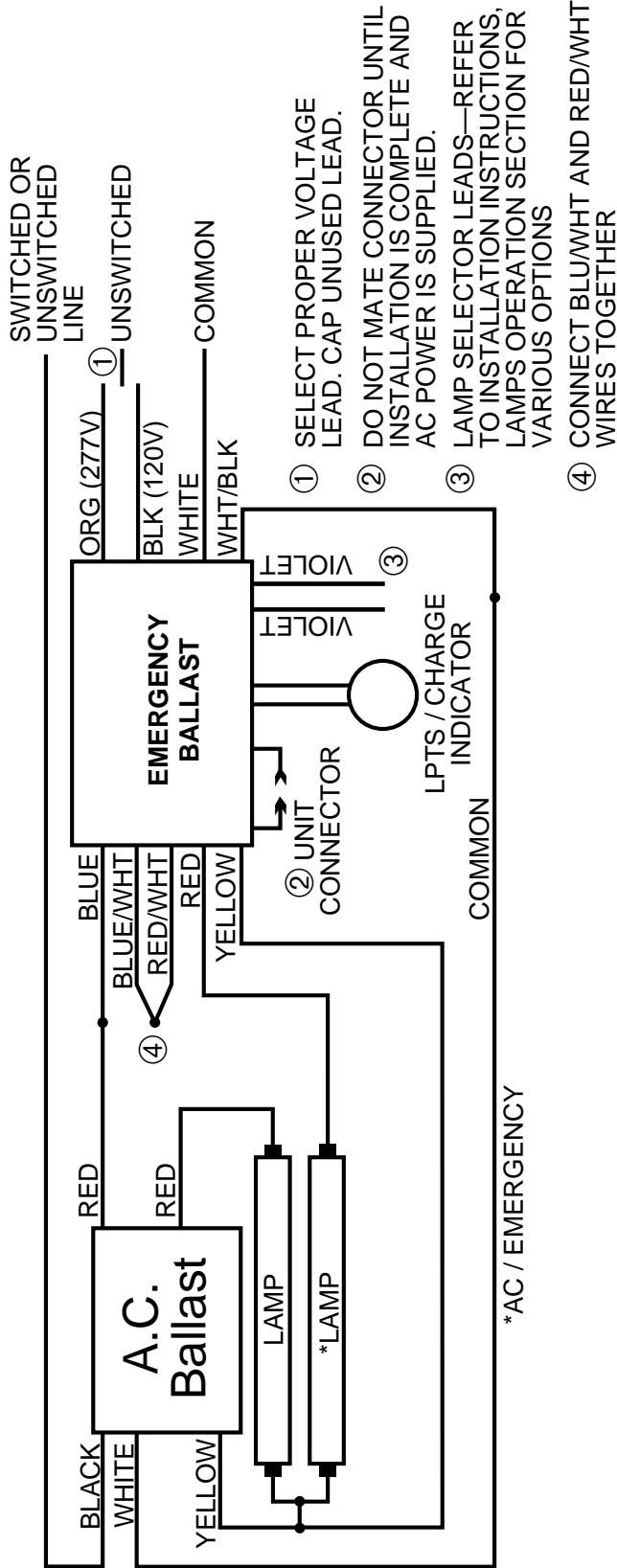
FOR 1 LAMP OPERATION REFER TO: YY15

**FULLHAM**

WORKHORSE 3

2LISFB2\_80D

## TWO LAMP INSTANT START BALLAST



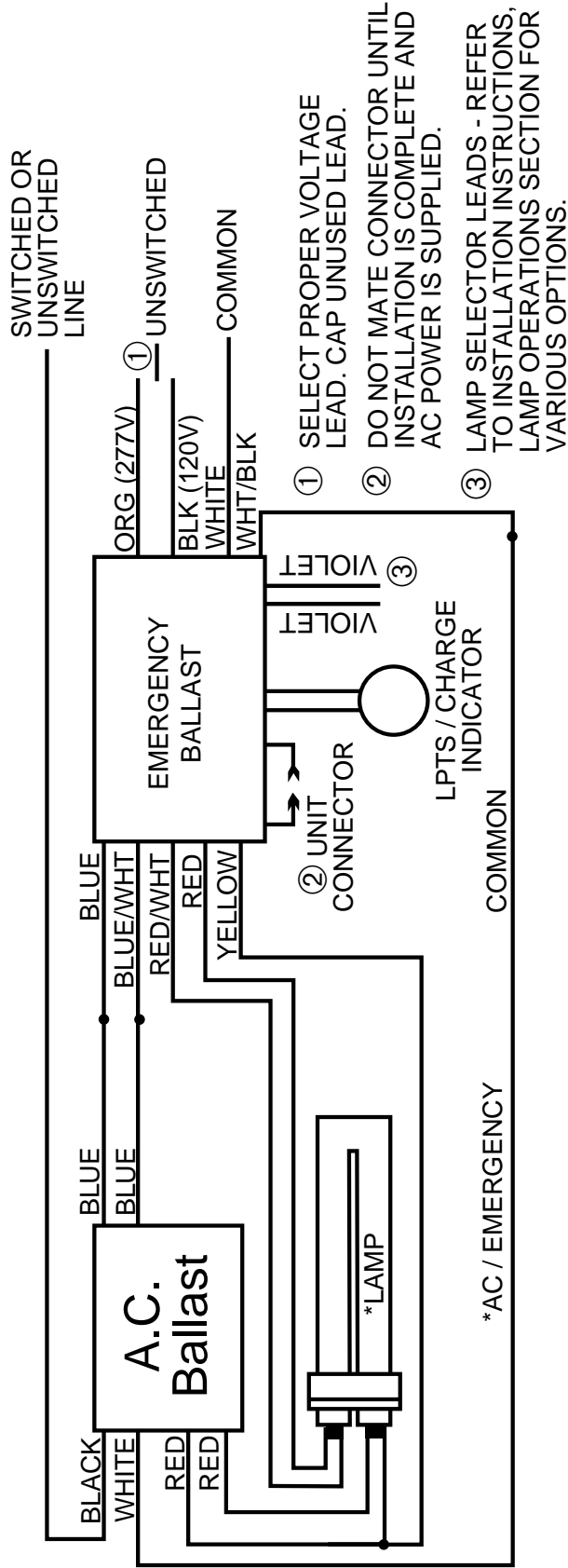
FOR 2 LAMP OPERATION REFER TO: YY14

### FULLHAM

WORKHORSE 3

1BXLRSB\_D

## ONE BIAx LAMP RAPID START BALLAST

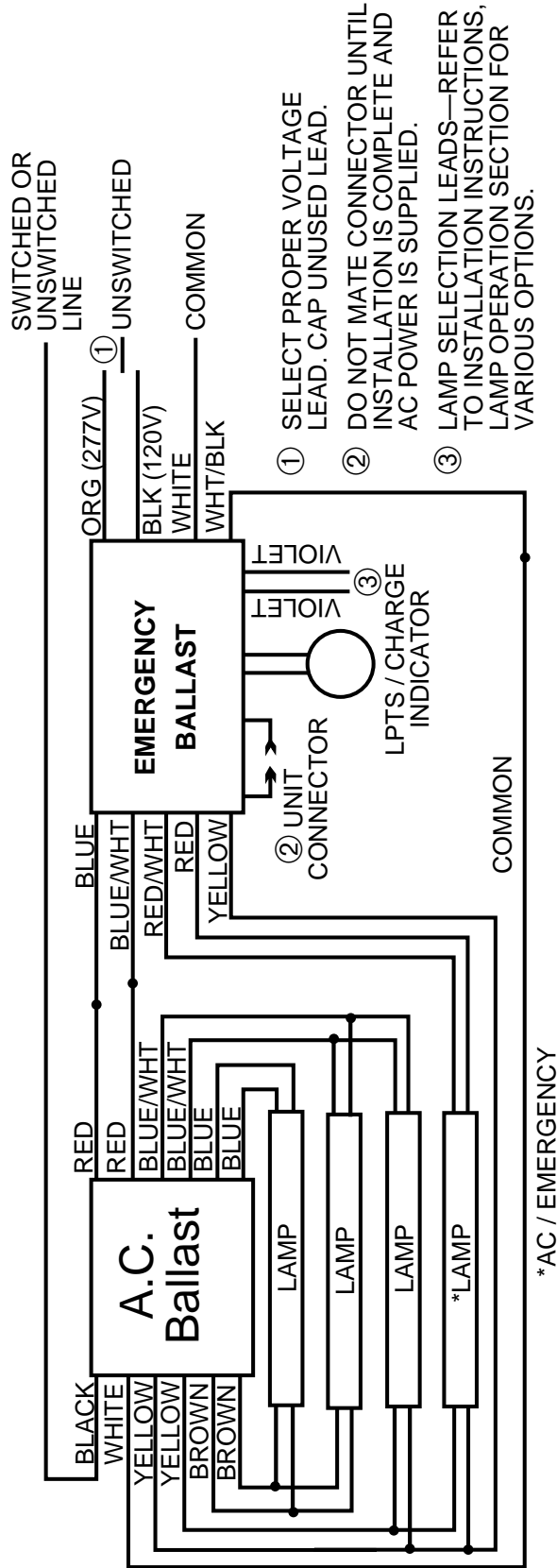


ADVANCE

ICF1Q70M3B5

ALL COMPATIBLE BALLASTS MAY NOT BE LISTED.  
\*DIMMING CONTROL WIRES ARE NOT AFFECTED BY EM PACK

# FOUR LAMP RAPID START BALLAST



**ADVANCE**

- RC-4S60-TP
- RC-4S85-TP
- VCN-4S32-SC

**GE**

- G4-RL-T8-1LL-120/277
- G4-RN-T8-10C-120/277
- G4-RN-T8-1LL-120/277

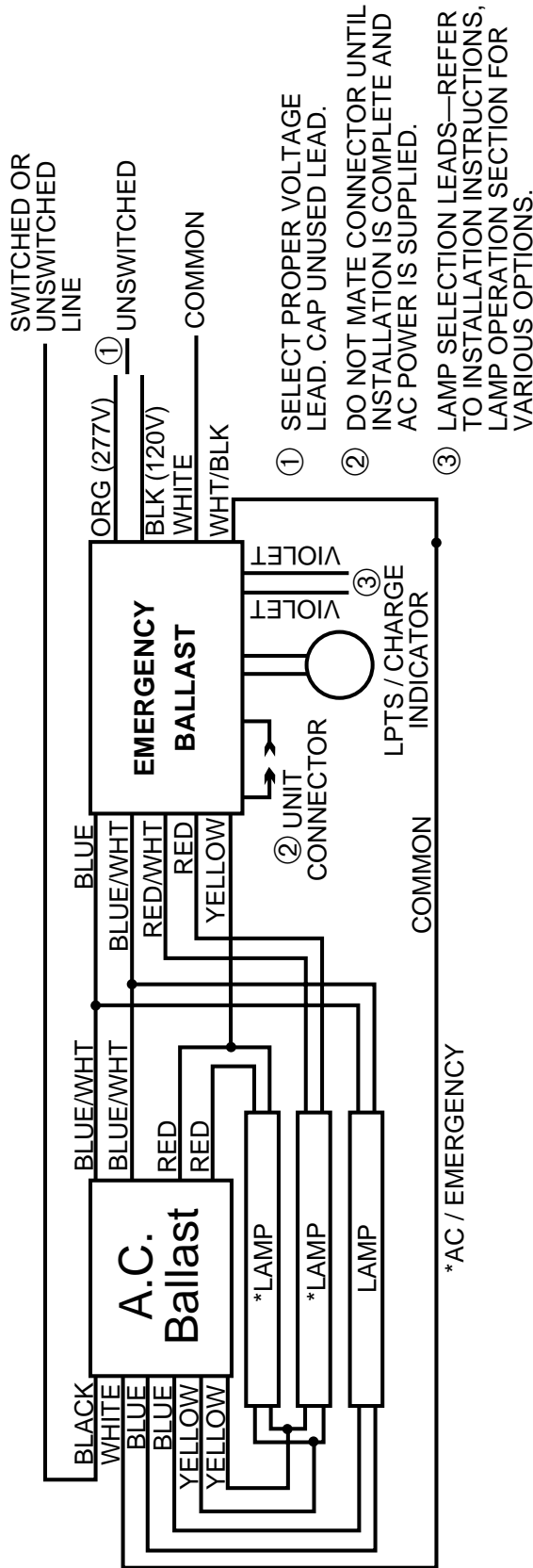
**MOTOROLA**

- M4-RL-T8-1LL-A-120/277
- M4-RL-T8-1LL-B-120/277
- M4-RN-T8-1LL-A-120/277
- M4-RN-T8-1LL-B-120/277

ALL COMPATIBLE BALLASTS MAY NOT BE LISTED.  
 \*DIMMING CONTROL WIRES ARE NOT AFFECTED BY EM PACK

3LR5B\_2LEO\_80\_D

## THREE LAMP RAPID START BALLAST WITH TWO LAMP EMERGENCY OPERATION



### ADVANCE

R/V-3S34-TP  
 RCN/VCN-3S32  
 RCN/VCN-3S40  
 REL/VEL-3S40-RH-TP  
 RIC/VIC-3S32-TP  
 RIC/VIC-3S40-TP  
 RK/VK-3S34-TP  
 RL-3SP20-TP  
 RZT/VZT-3S32\*  
 REZ/VEZ-3S32\*

### EBT

SSB1-120/277-3/32 LH  
 SSB1-120/277-3/40 LH

### GE

G3-RL-T8-1LL-120/277  
 G3-RN-T8-10C-120/277  
 G3-RN-T8-1LL-120/277  
 G3-RN-T12-1LL-120/277

### LUTRON

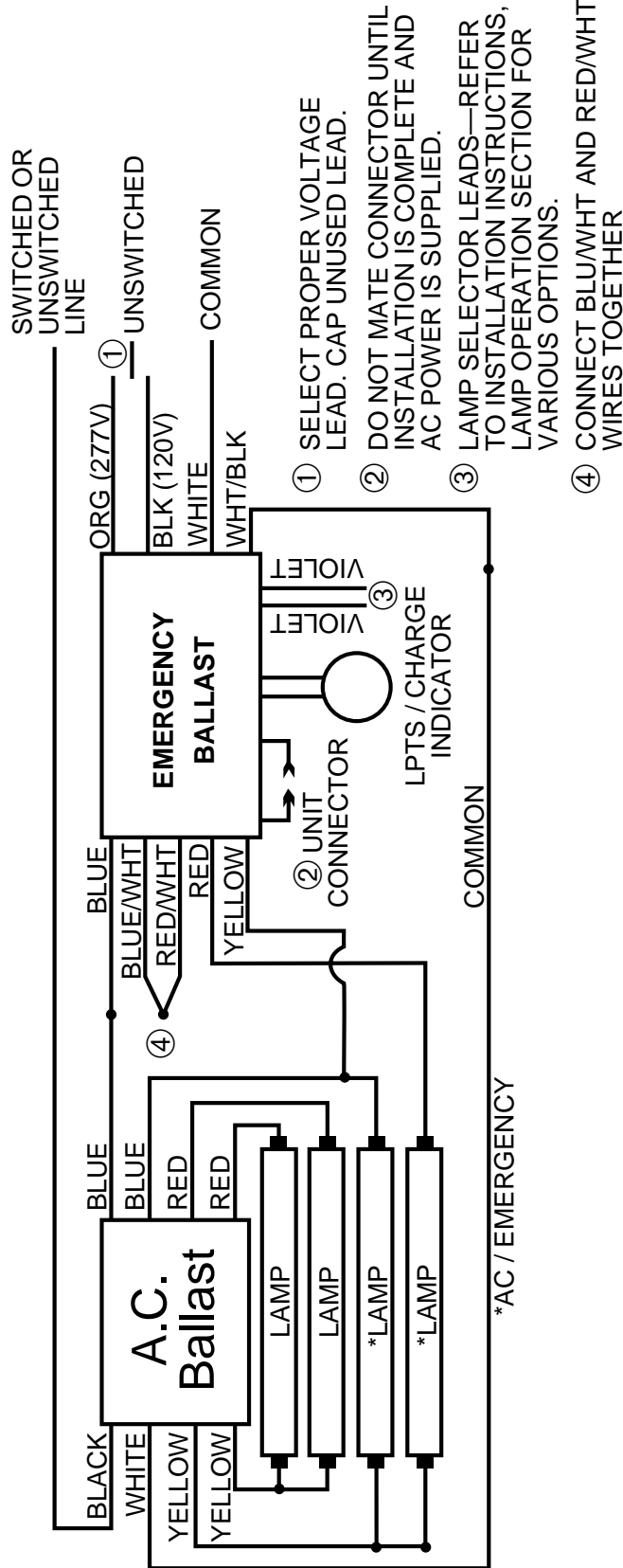
ECO-T832-120/277-3\*  
 FDB-4827-120/277-3\*

### MOTOROLA

M3-RL-T8-1LL-A-120/277  
 M3-RN-T12-1LL-B-120/277  
 M3-RN-T8-1LL-A-120/277

ALL COMPATIBLE BALLASTS MAY NOT BE LISTED.  
 \*DIMMING CONTROL WIRES ARE NOT AFFECTED BY EM PACK

## FOUR LAMP INSTANT START BALLAST WITH TWO LAMP EMERGENCY OPERATION



FOR 1 LAMP OPERATION REFER TO: YY13

**ADVANCE**

RCN/VCN-4P32  
REL/VEL-4P32-RH-TP  
REL/VEL-4P32-LW-RH-TP

**EBT**

SSB2-120/277-4/32 IS LH /-(75%)

**GE**

G4-IN-T8-120/277

**GOLDSTAR**

GB 4x32/FL/I/120-277  
GB 4x32/FL/I/120L-277L

**HOWARD**

E4/32IS-120/277  
EC4/32IS-120/277

**KINGTEC**

432K120-IS/277-IS  
432K120-75%

**MAGNETEK**

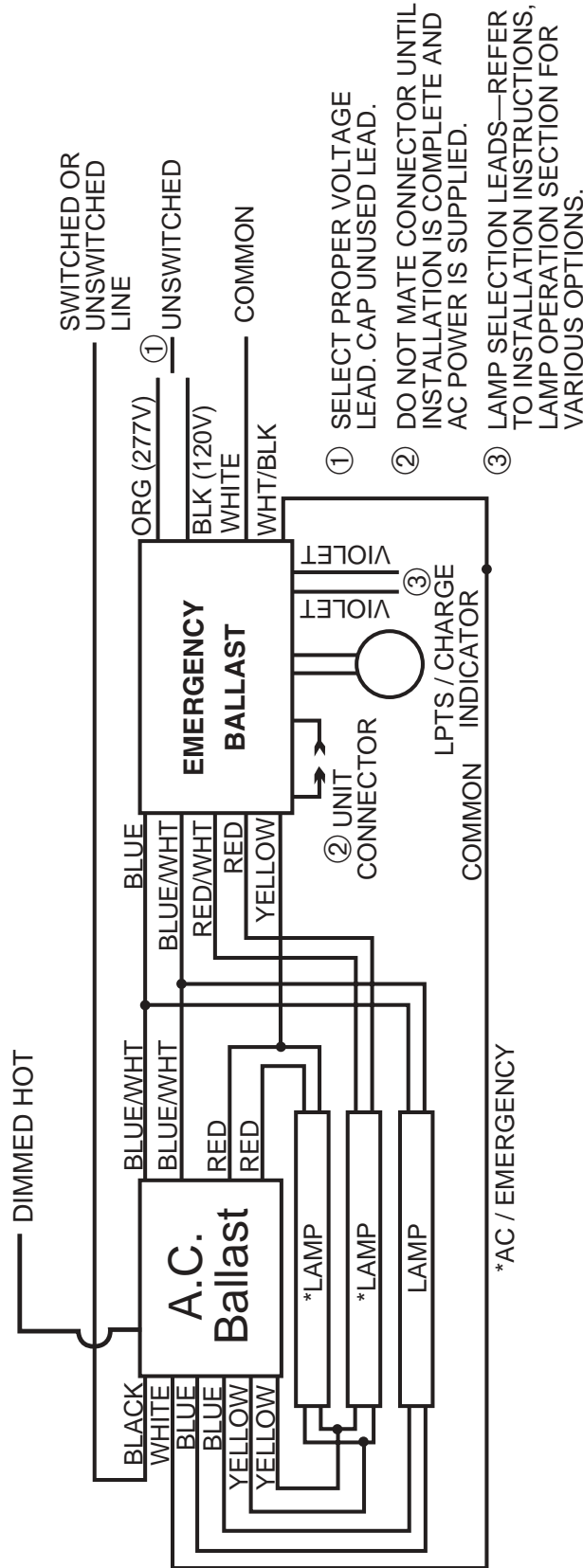
B4321120/277HP  
B4321120/277RH

**MOTOROLA**

M4-IL-T8-GP-A-120/277  
M4-IN-T8-A-120/277  
M4-IN-T8-D-120/277  
M4-IN-T8-GP-A-120/277

ALL COMPATIBLE BALLASTS MAY NOT BE LISTED.  
\*DIMMING CONTROL WIRES ARE NOT AFFECTED BY EM PACK

## THREE LAMP RAPID START BALLAST WITH DIMMING LEAD TWO LAMP EMERGENCY OPERATION



WITHOUT DIMMING LEAD REFER TO: YY19

ADVANCE
R/V-3S34-TP
RCN/VCN-3S32
RCN/VCN-3S40
REL/VEL-3S40-RH-TP
RIC/MIC-3S32-TP
RIC/MIC-3S40-TP
RK/VK-3S34-TP
RL-3SP20-TP
RZT/VZT-3S32*
REZ/VEZ-3S32*

EBT
SSB1-120/277-3/32 LH
SSB1-120/277-3/40 LH

GE
G3-RL-T8-1LL-120/277
G3-RN-T8-10C-120/277
G3-RN-T8-1LL-120/277
G3-RN-T12-1LL-120/277

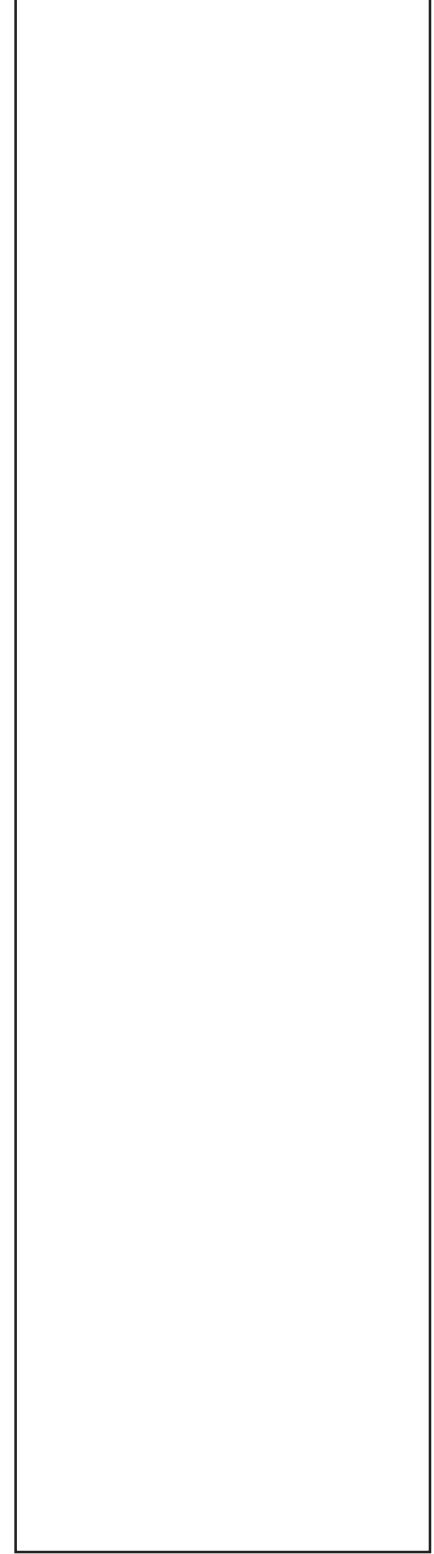
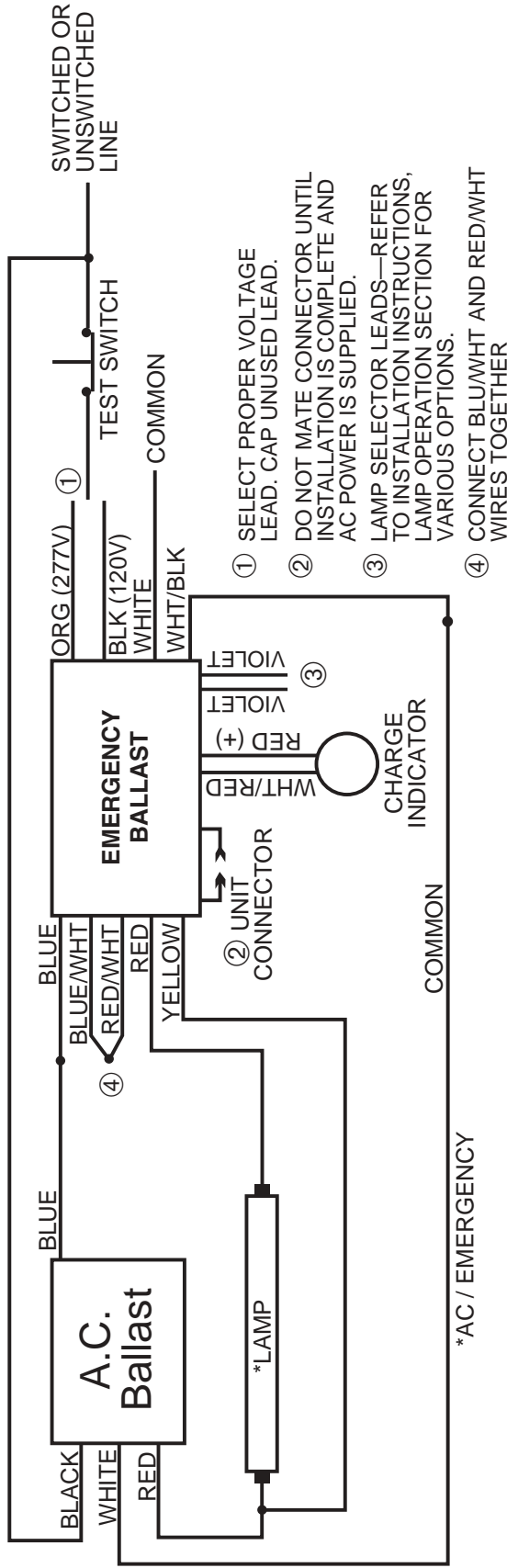
LUTRON
ECO-T832-120/277-3*
FDB-4827-120/277-3*

MOTOROLA
M3-RL-T8-1LL-A-120/277
M3-RN-T12-1LL-B-120/277
M3-RN-T8-1LL-A-120/277

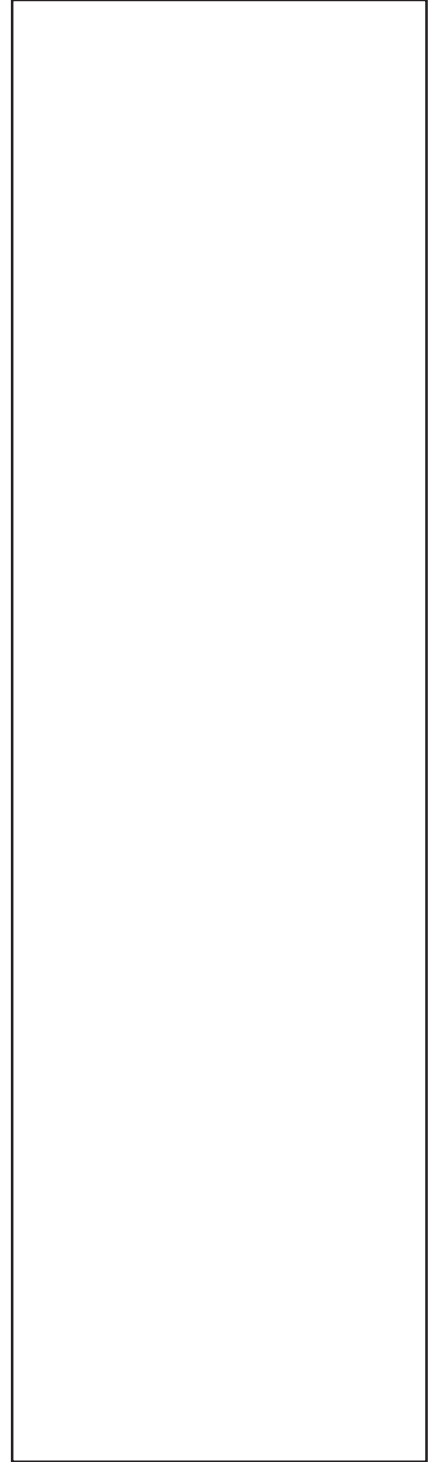
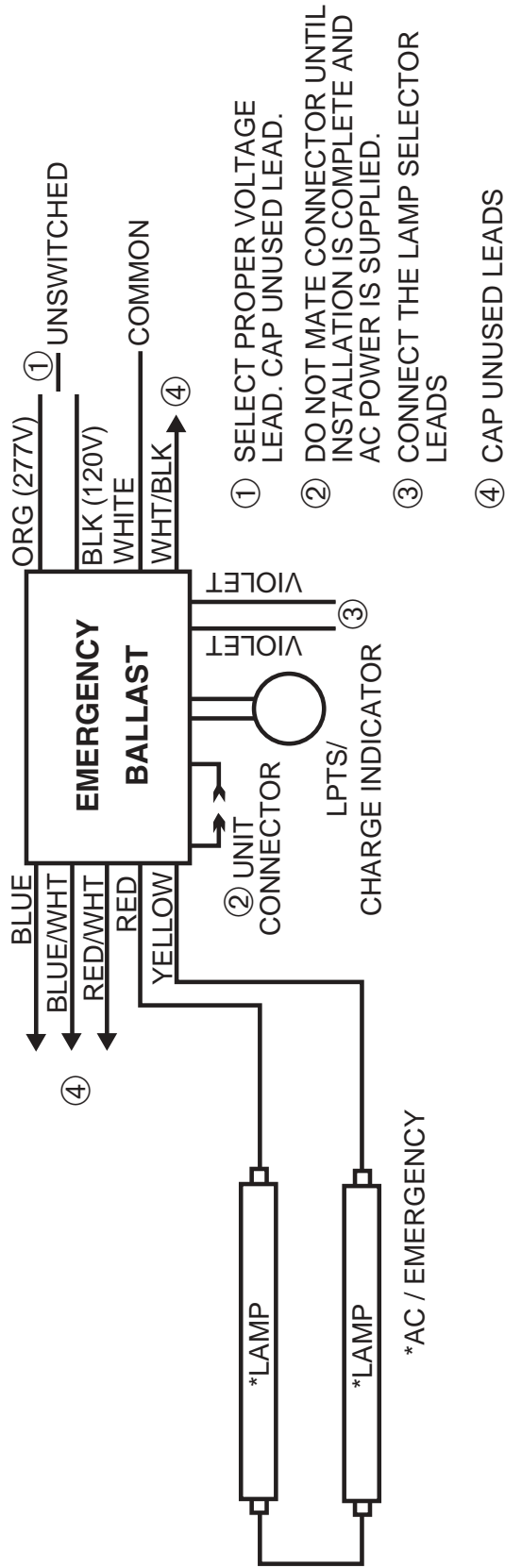
ALL COMPATIBLE BALLASTS MAY NOT BE LISTED.  
\*DIMMING CONTROL WIRES ARE NOT AFFECTED BY EM PACK

1LISB\_CL\_D

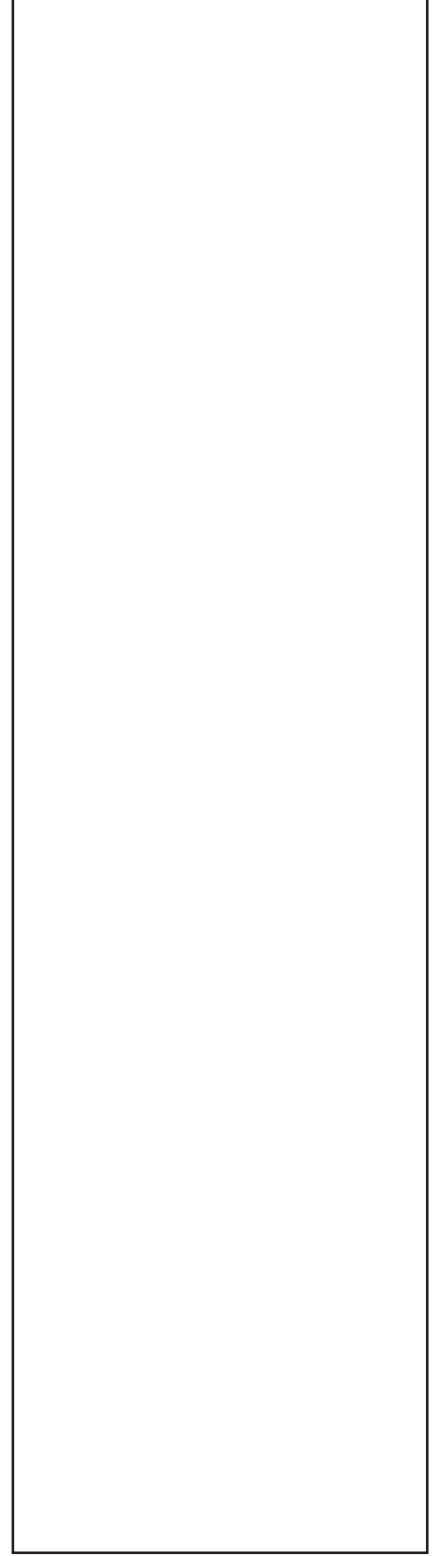
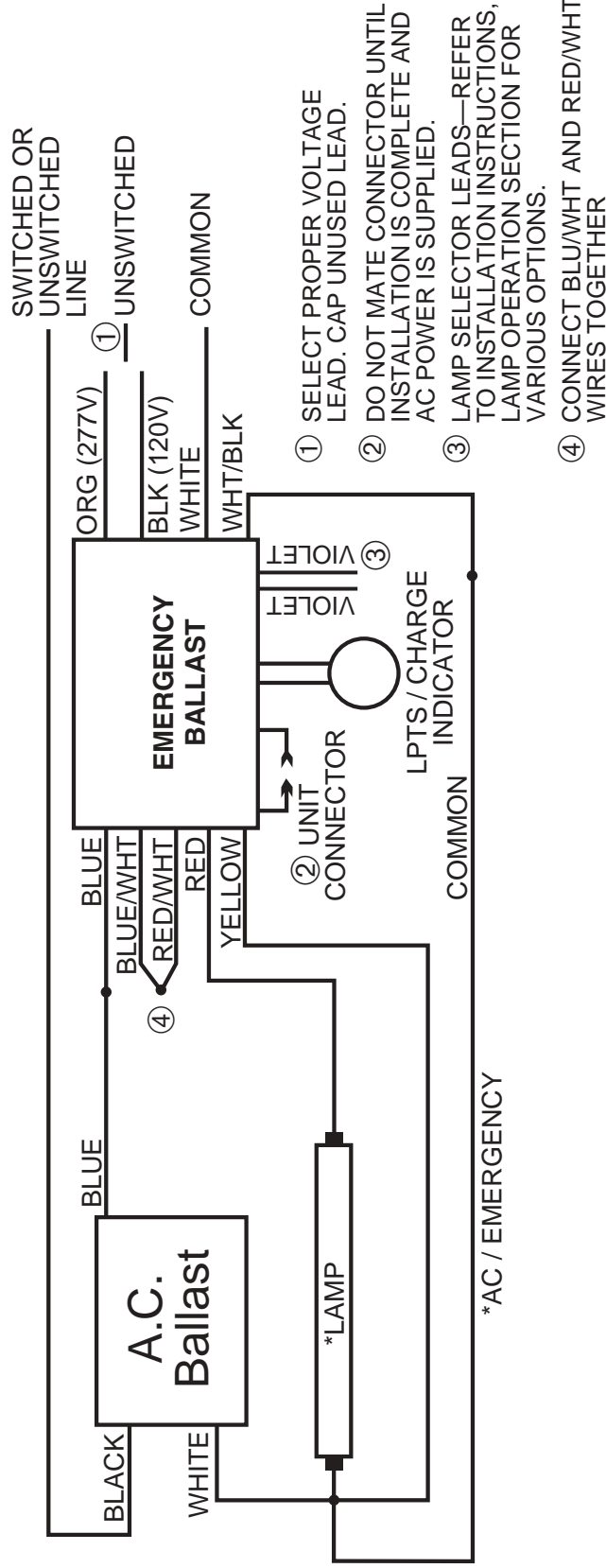
# ONE LAMP INSTANT START BALLAST WITH CHARGE INDICATOR AND TEST SWITCH



# TWO LAMP EMERGENCY ONLY

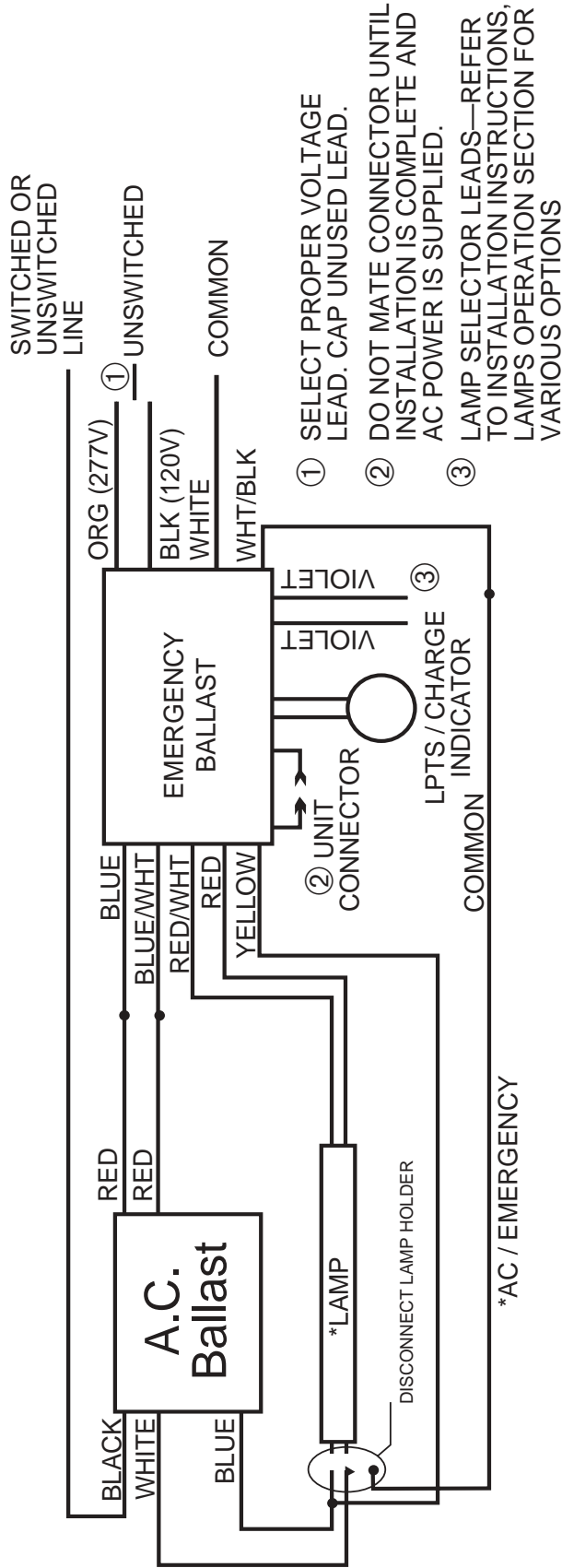


# ONE LAMP INSTANT START BALLAST



1LLAG\_D

## ONE LAMP LAG BALLAST



ADVANCE

RL-140-TP

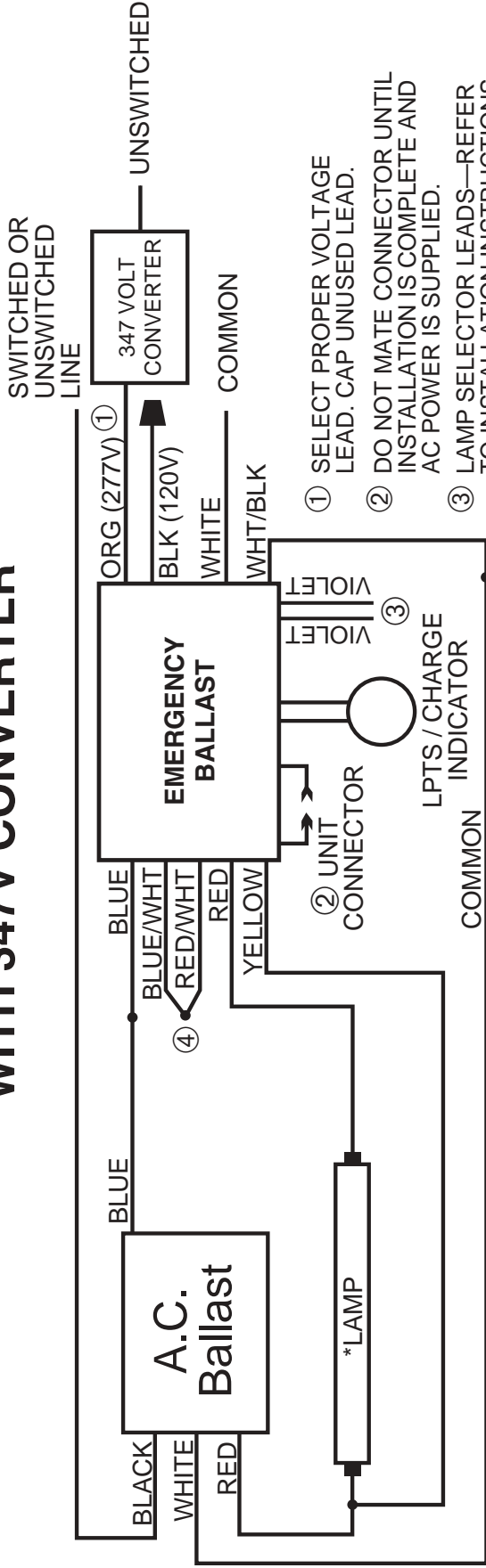
MAGNETEK

543-B

ALL COMPATIBLE BALLASTS MAY NOT BE LISTED.  
\*DIMMING CONTROL WIRES ARE NOT AFFECTED BY EM PACK

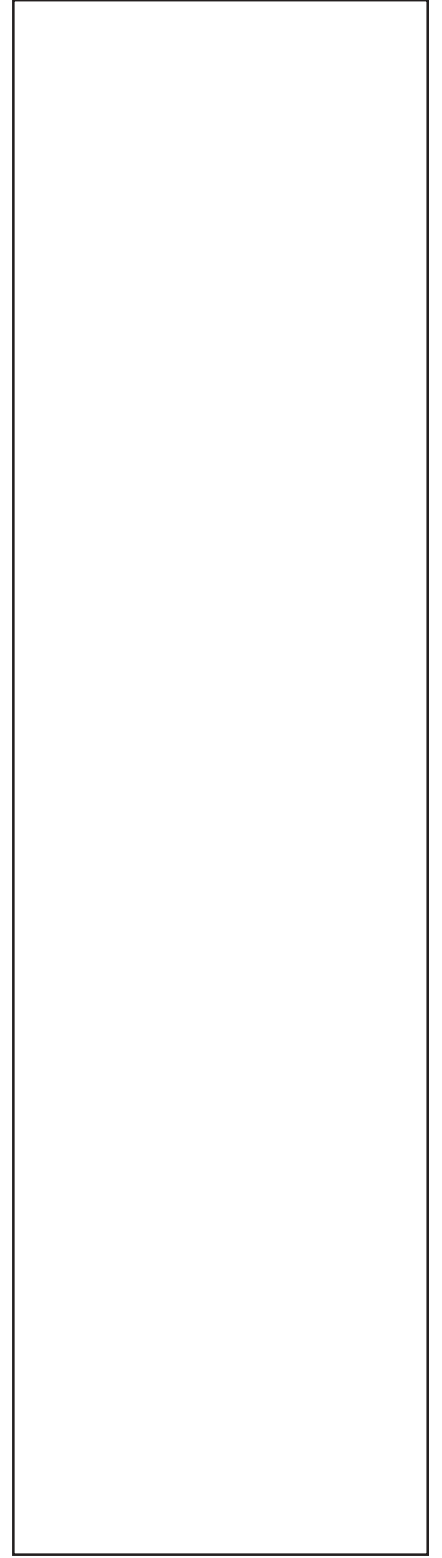
1LISB\_347\_D

## ONE LAMP INSTANT START BALLAST WITH 347V CONVERTER



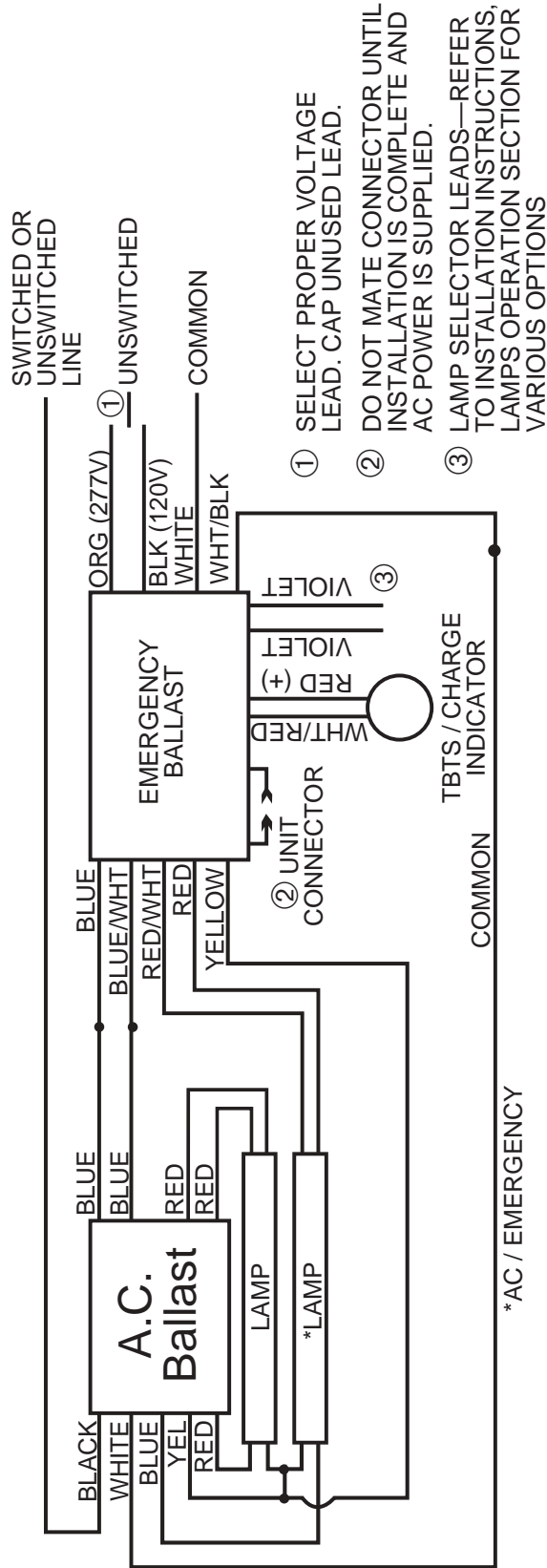
- ① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.
- ② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.
- ③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMP OPERATION SECTION FOR VARIOUS OPTIONS.
- ④ CONNECT BLU/WHT AND RED/WHT WIRES TOGETHER

\*AC / EMERGENCY



2LRSB\_D\_3

## TWO LAMP RAPID START BALLAST

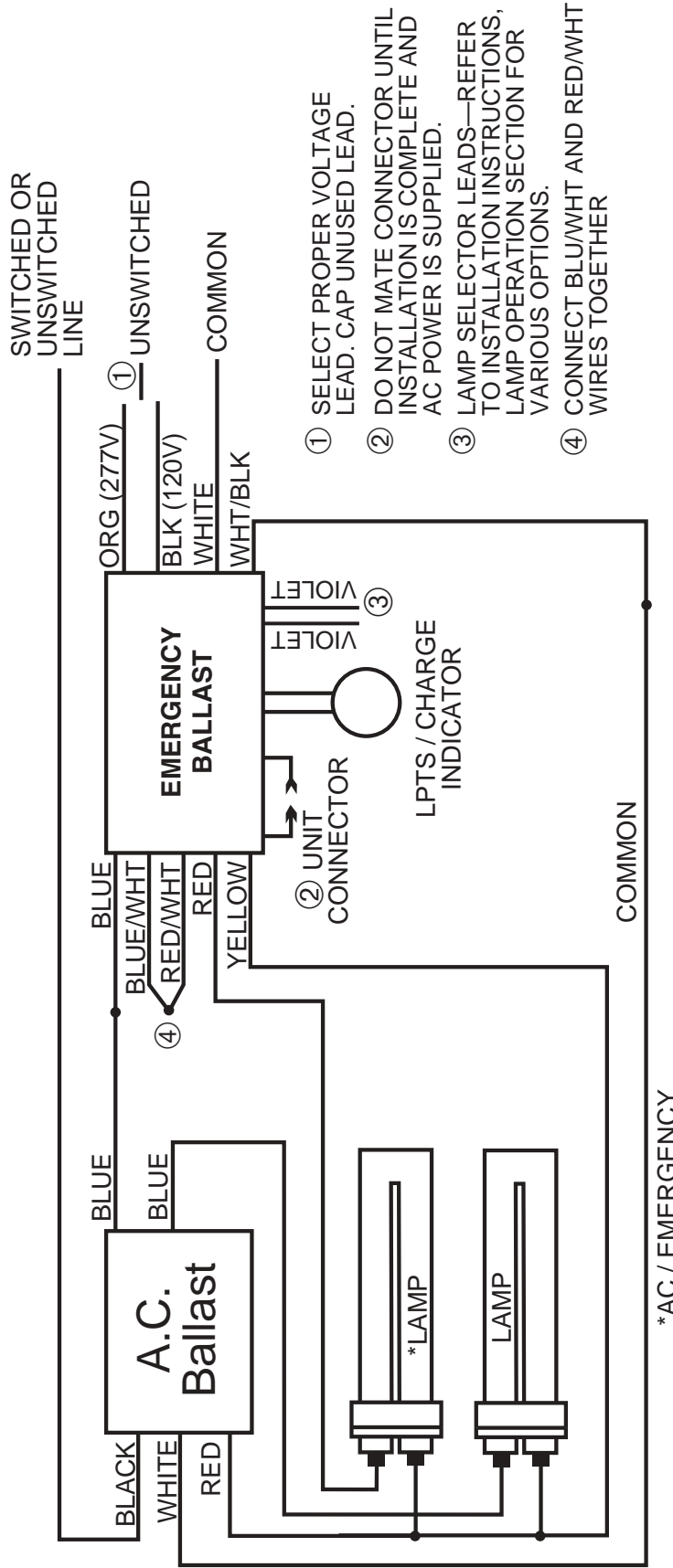


SUNPARK

SL-15P

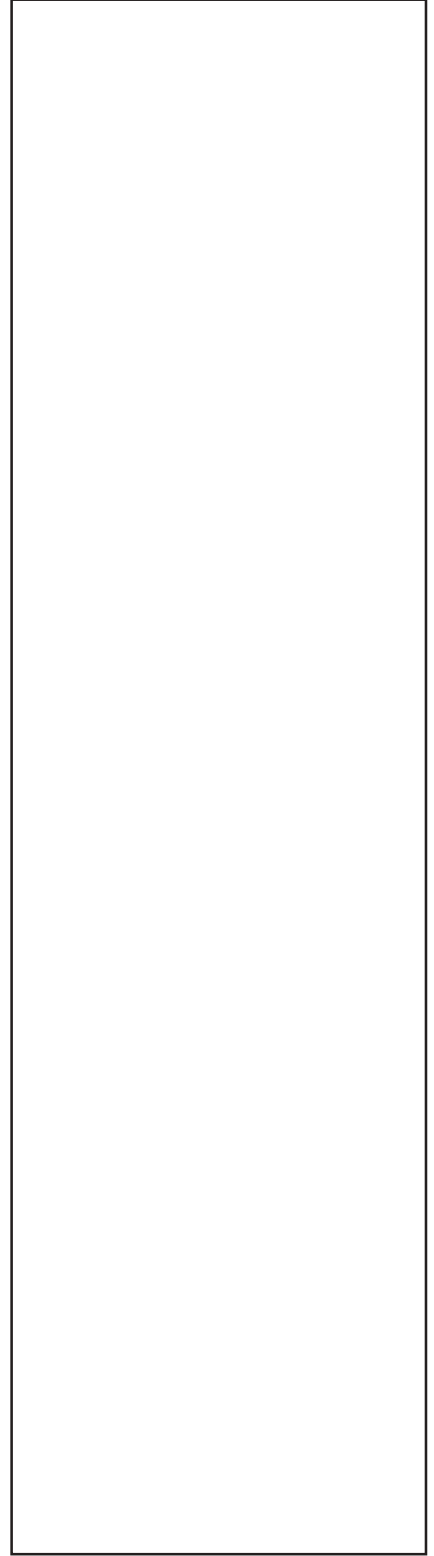
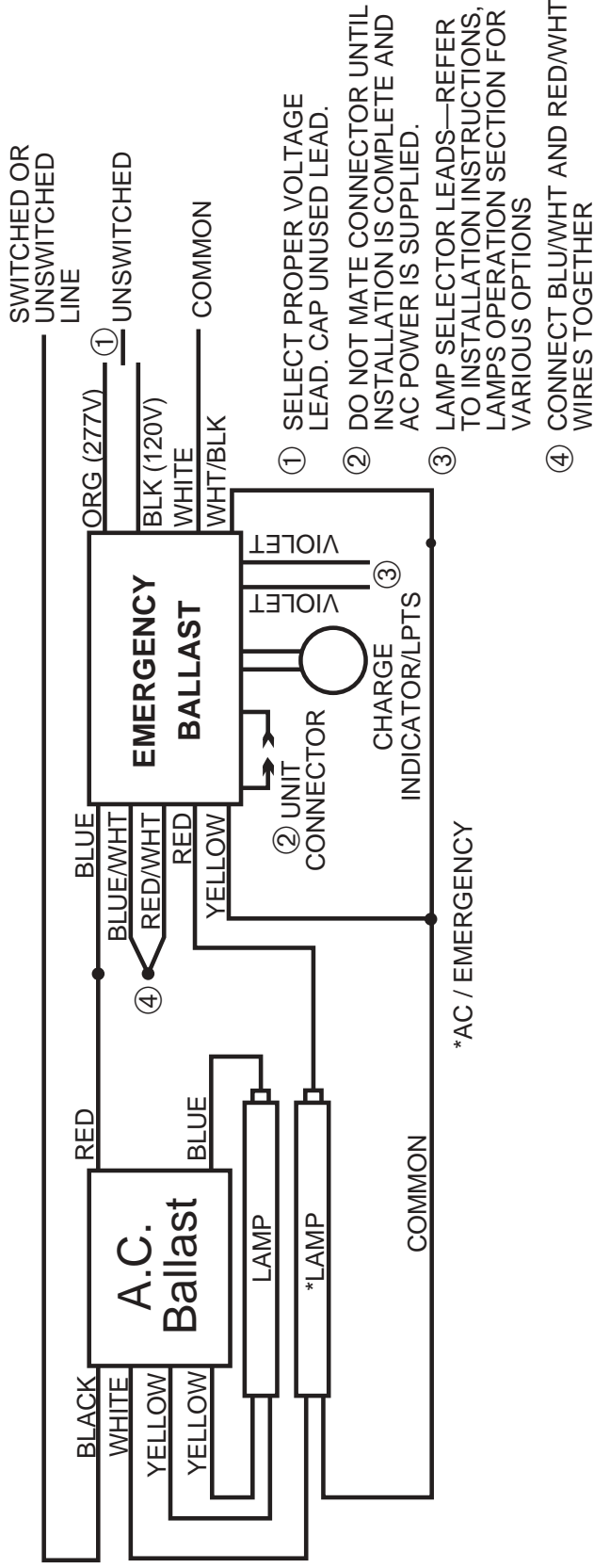
2LISBX\_D

## TWO BIAX LAMP INSTANT START BALLAST



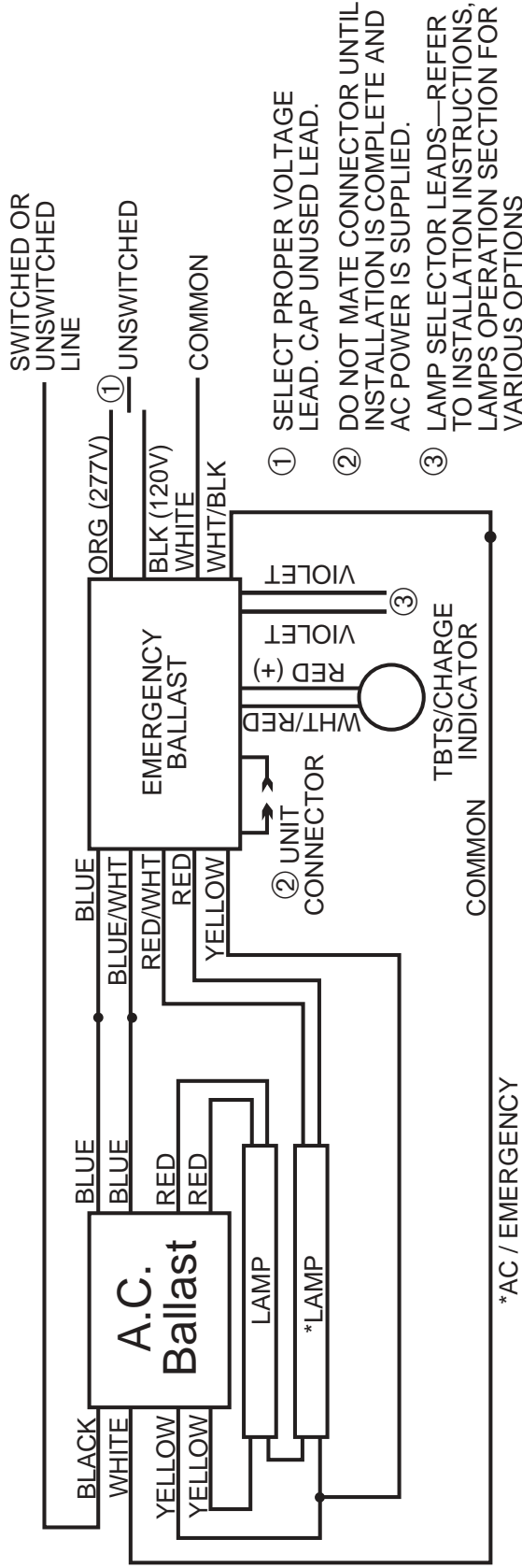
<b>ADVANCE</b>	
RCN-2TTP40	
<b>MAGNETEK</b>	
B2321120/277HP	
B2321120/277RH	
<b>MOTOROLA</b>	
M2-IL-T8-GP-120/277	
M2-IN-T8-D-120/277	
M2-IN-T8-1LL-D-120/277	
M2-IN-T8-GP-120/277	
ALL COMPATIBLE BALLASTS MAY NOT BE LISTED. *DIMMING CONTROL WIRES ARE NOT AFFECTED BY EM PACK	

## TWO LAMP BALLAST



2LR5B\_D\_4

# TWO LAMP RAPID START BALLAST



- ① SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.
- ② DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.
- ③ LAMP SELECTOR LEADS—REFER TO INSTALLATION INSTRUCTIONS, LAMPS OPERATION SECTION FOR VARIOUS OPTIONS

