

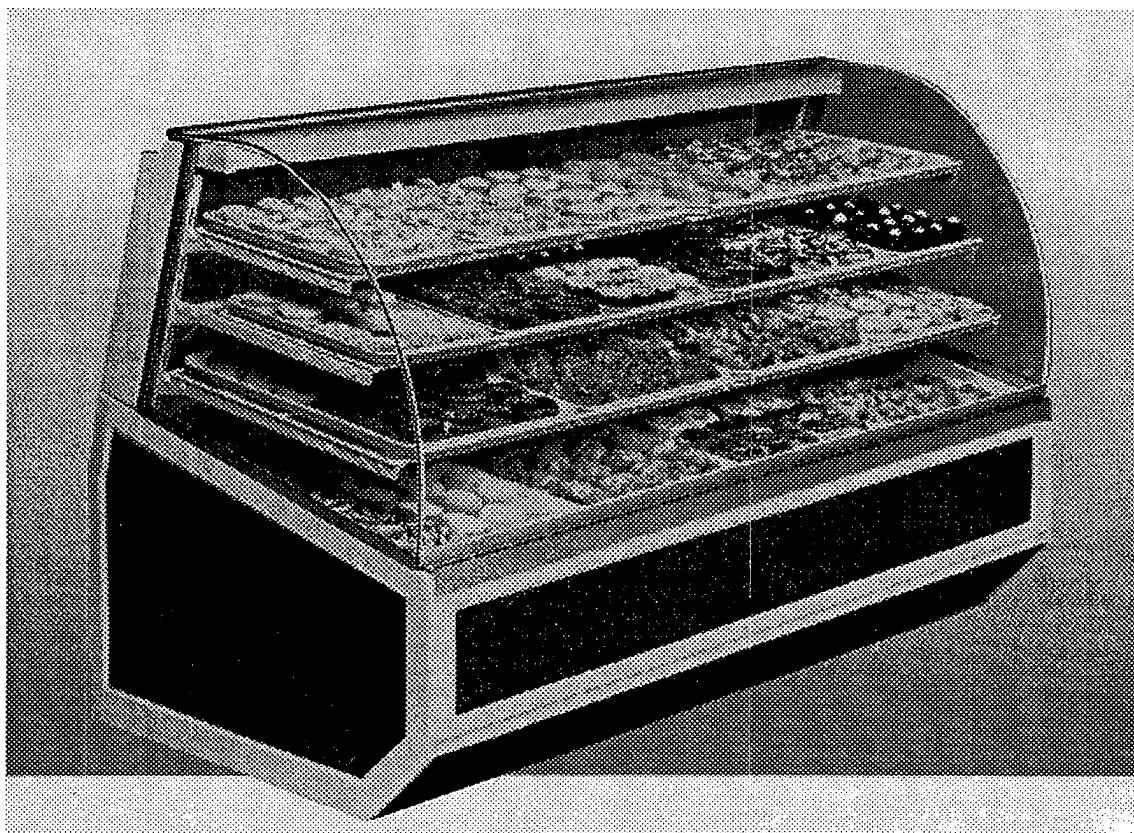
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FEDERAL INDUSTRIES

SN48, SN59, SN77

**Non-Refrigerated Units
INSTALLATION &
OPERATION INSTRUCTIONS**



KEEP THIS MANUAL FOR FUTURE REFERENCE

Engineering and technical data are subject to change without notice.

FEDERAL INDUSTRIES
Toll Free 1(800) 356-4206

215 Federal Avenue
WI Phone (608) 424-3331

Belleville WI 53508
Fax: (608) 424-3234

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INTRODUCTION

Thank you for purchasing a Federal Industries display case. This manual contains important instructions for installing and servicing the Series '90 Non-Refrigerated Bakery Cases. A repair parts list and wiring diagram are also included in the manual. Read all of these documents carefully before installing or servicing your case.



NOTICE

Read this manual before installing your case. Keep this manual and refer to it before doing any service on the equipment. Failure to do so could result in personal injury or damage to the case.



NOTICE

Installation and service of the electrical components in the case must be performed by a licensed electrician.

The portions of this manual covering electrical components contain technical instructions intended only for persons qualified to perform electrical work.



DANGER

Improper or faulty hookup of electrical components in the case can result in severe injury or death.

All electrical wiring hookups must be done in accordance with all applicable local, regional, or national standards.

Serial Number

Record the model and serial numbers of the case for easy reference. Always refer to both model and serial numbers in your correspondence regarding the case.

Case Model _____ Serial Number _____

This manual cannot cover every installation, use, or service situation. If you need additional information, call or write us:

**CUSTOMER SERVICE DEPARTMENT
Federal Industries
215 Federal Avenue
Belleville WI 53508
Toll Free (800) 356-4206 / WI Phone (608) 424-3331**

WARNING LABELS & SAFETY INSTRUCTIONS



This is the safety-alert symbol. When you see this symbol on your case or in the manual, be alert to the potential for personal injury or damage to your equipment.

Be sure you understand all safety messages and always follow recommended precautions and safe operating practices.



Notice to Employers

You must make sure that everyone who installs, uses, or services your case is thoroughly familiar with all safety information and procedures.

Important safety information is presented in this section and throughout the manual. The following signal words are used in the warnings and safety messages:

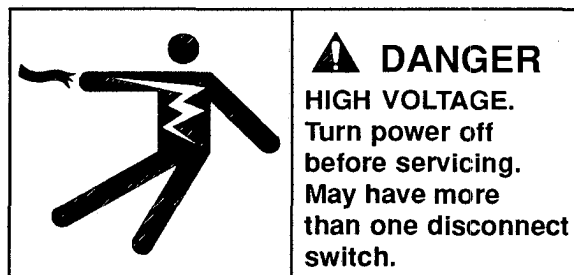
DANGER: Severe injury or death will occur if you ignore the message.

WARNING: Severe injury or death can occur if you ignore the message.

CAUTION: Minor injury or damage to your case can occur if you ignore the message.

NOTICE: This is important installation, operation, or service information. If you ignore the message, you may damage your case.

The warning and safety labels shown throughout this manual are placed on your Federal Industries case at the factory. Follow all warning label instructions. If any warning or safety labels become lost or damaged, call our customer service department at 1(800)356-4206 for replacements.



This label is located on the back of the display case.

PRE-INSTALLATION PROCEDURES


Inspection for Shipping Damage

You are responsible for filing all freight claims with the delivering truck line. Inspect all cartons and crates for damage as soon as they arrive. If damage is noted to shipping crates or cartons or if a shortage is found, note this on the bill of lading (all copies) prior to signing.

If damage is discovered when the case is uncrated, immediately call the delivering truck line and follow up the call with a written report indicating concealed damage to your shipment. Ask for an immediate inspection of your concealed damage item. Crating material must be retained to show the inspector from the truck line.

INSTALLATION INSTRUCTIONS

Removing Case from Shipping Skid

 **CAUTION: Do not push against the curved glass, end glass, doors, or door frames when removing the case from the skid or moving the case. Case damage or glass breakage could result.**

Move the case as near as possible to the final location before removing it from the shipping skid.

Remove the four (4) bolts that secure the case to the skid.

DO NOT REMOVE THE SHIPPING BRACKETS FROM THE CASE. THE BRACKETS ARE INTENDED TO BE USED AS HAND GRIPS FOR LOCATING THE CASE. REMOVE THE BRACKETS WHEN THE CASE IS IN THE FINAL LOCATION.

Removing Packaging Material

Remove the brackets that held the case to the shipping skid.

Remove the plastic ties that hold the wire shelves and shelf brackets in place. Remove the shipping tape that secures the doors and lift-up glass. If it is necessary to remove tape residue from plastic materials, use cleaning compounds recommended in the cleaning section of this manual.

Leveling the Case

Four leg levelers are provided for leveling the case. The leg levelers can be turned in and the case can be placed with the base frame on the floor.

The leveled case should be sealed to the floor using an NSF Listed Sealant.

Grill Removal



DANGER: Electrical Shock Hazard. Do not operate unit with panels removed.

The front of the case has a removable base panel to access the front leg levelers from the inside of the case. Normally it is not necessary to remove the panel to install the case. This panel must be in place for proper operation of the case.

There are two (2) removable panels on the back of the case. The left side panel allows access to the lamp ballasts and the field wiring connection box. Remove this panel to make field wiring connections.

The right side panel has the light switch and the auxiliary fan switch mounted to it. Removing the panel allows access to the terminal board. Normally it is not necessary to remove this panel to install the case.

Lights

Make certain that the light cord plugs are completely inserted into the sockets or arcing may result causing damage to the plugs and sockets.

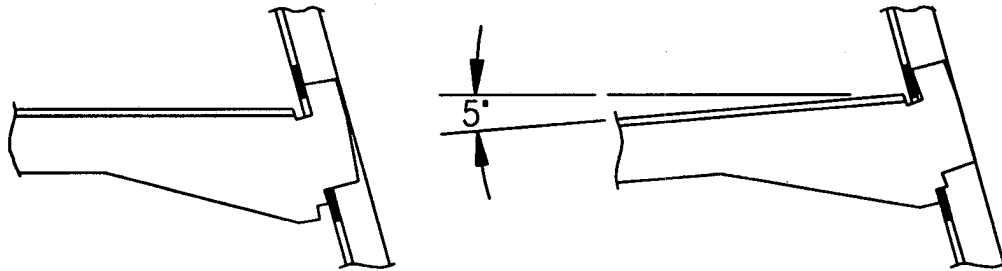
The ballasts used on this case allow removal of one or more shelf lights without affecting the remaining lights.

Shelving

Remove both rear doors from the track by lifting them upward until the bottom edge clears the lower door track and then outward.

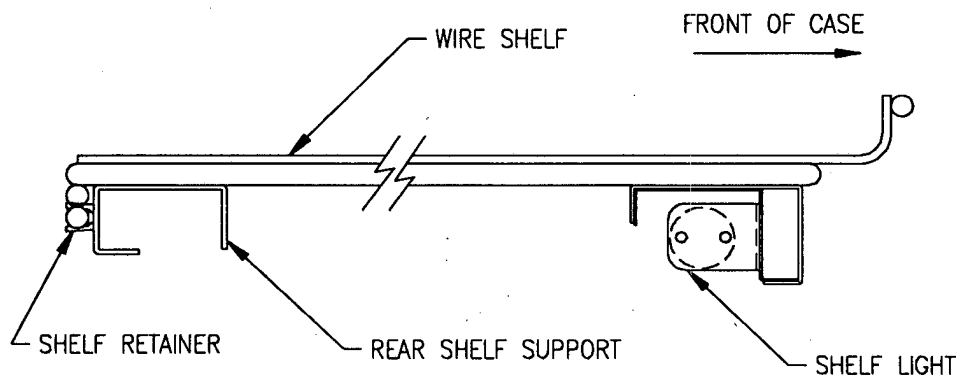
Lift up the front glass to the fully open position.

Put the shelf support assembly in the desired shelf standard slots.



Plug the shelf light cords in the appropriate light socket. Make certain that the light cords are completely inserted into the sockets or arcing may result causing damage to the plugs and sockets.

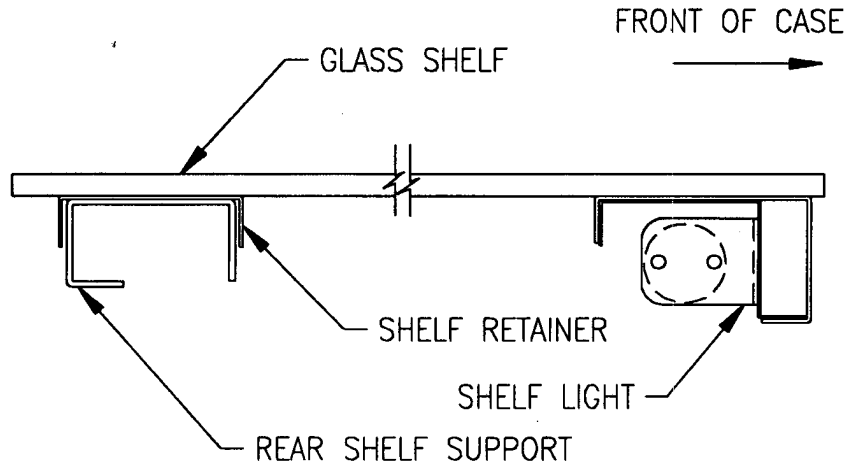
Put the wire shelves on the rear shelf support assembly as shown. Push the bar on the bottom of the wire shelf into the shelf retainer clip on the shelf support assembly. If the shelf is not in the proper position, it may disrupt the air flow in the case and cause product loss.



Close the front glass and reinstall both rear doors.

Optional Glass Shelves

Put the glass shelves on the rear shelf support and shelf light housing as shown. The shelf retainer should sit over the rear shelf support. If the shelf is not in the proper position, it may disrupt the air flow in the case and could cause product loss.



Reinstall both rear doors.

Cleaning

For initial setup, clean the case as outlined in the weekly cleaning section.

ELECTRICAL INFORMATION & GROUNDING

This Case Must Be Grounded



DANGER: Improper or faulty hookup of electrical components in the display case can result in severe injury or death.

All case electrical connections must be performed only by a licensed electrician.

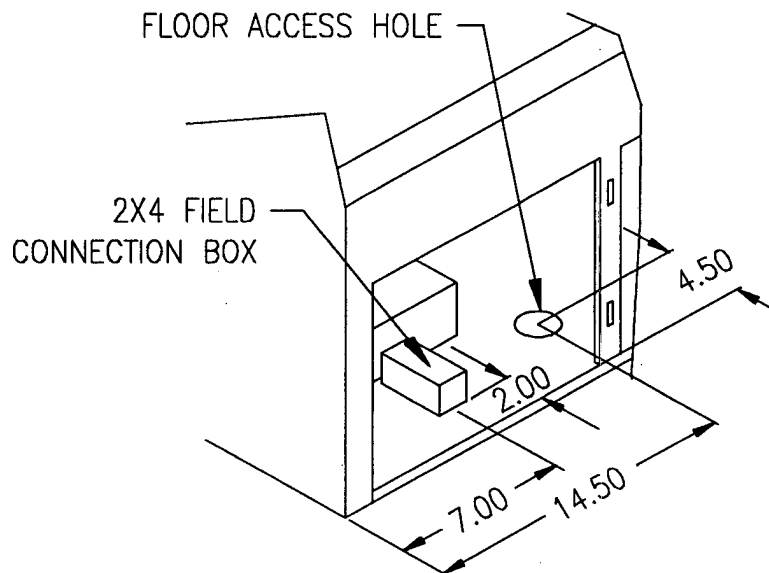
All electrical wiring hookups must be done in accordance with all applicable local, regional, or national electrical standards.

A separate circuit for each display case is recommended to prevent other appliances on the same circuit from overloading the circuit and causing malfunction.

The electrical service must be grounded upon installation.

This unit is designed for permanent connection to a power source. See the electrical data plate located next to electrical junction box for proper circuit size and wire ampacity.

A 7/8" diameter hole is provided in the back of the case for field wiring connection. An access hole is also provided in the unit base for running power supply up through the floor. See diagram below.



OPERATING INSTRUCTIONS

Initial Start-Up

After all the checks outlined in the installation section of this manual have been made, the case is ready to be put into service.

Controls

Light Switch

This switch controls the power to all shelf lights and top light. The rocker switch is red in the on position.

Auxiliary Fan Switch

This switch controls power to an exhaust fan located under the display pans. This fan removes excessive heat build-up caused by case lights.

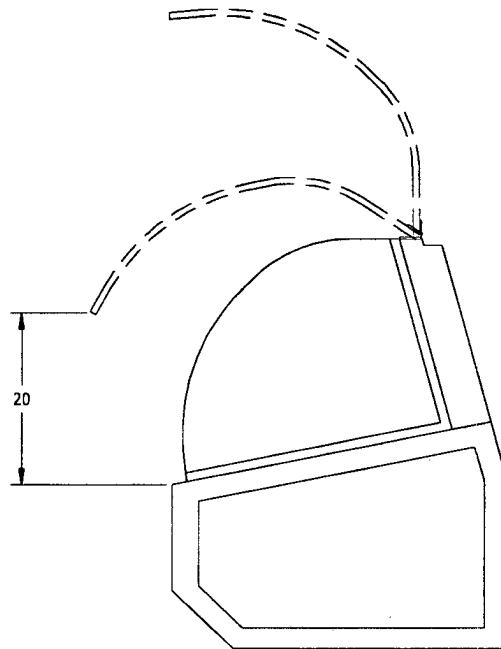
Doors

The doors can be removed by lifting the door up until the bottom clears the bottom track.

Clean the door track frequently for easy door operation. A very light film of lubricant, such as PAM, will help the doors slide easily.

Hinged Front Glass

The front glass hinges up for easy cleaning of the case interior. Pneumatic cylinders assist in lifting the glass. The glass will hold in any position beyond approximately the first 20" of travel. In the first 20" of travel, the glass will gently close. See diagram below:



The hinged glass mechanism will give years of reliable operation in normal usage. Service on the lift mechanism is required if . . .

- The glass becomes difficult to open.
- The glass does not hold in the open position.
- The glass closes fast.

Consult the factory if service is required.

CAUTION: OPERATION OF THE LIFT-UP GLASS IS TO BE DONE BY TRAINED STORE PERSONNEL ONLY. THIS CASE IS NOT INTENDED TO BE USED AS A SELF-SERVE UNIT. DO NOT ALLOW CUSTOMERS TO OPERATE LIFT-UP GLASS.



Light Replacement

The light fixtures use a spring loaded socket on one end. To remove a light, push the bulb toward the spring-loaded socket until the opposite end drops out of the socket.

The bulbs are furnished with plastic safety light shields. Make certain the light shields are always in place to safeguard against bulb breakage.,

When replacing lights, use direct equivalents to the original bulbs.

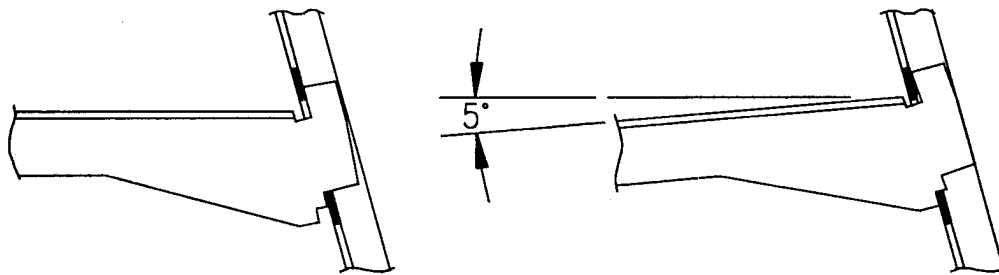
Shelves

The shelves are adjustable up and down in 2" increments. To reposition the shelves:

1. Turn the shelf lights off.
2. Unplug the shelf light cord.
3. Remove all shelves from the shelf supports.
4. Grasp the shelf support at each end.
5. Tip the front of the shelf support up until it can be removed from the shelf standard.
6. Reposition the shelf as desired.

The shelves can be installed horizontally or slanted at 5°. To change the shelf slant:

1. Remove the shelves from the shelf support.
2. Grasp the shelf support at each end.
3. Lift the shelf support up at the back until the brackets can be repositioned in the shelf standard slots. See diagram below:



CLEANING INSTRUCTIONS

Daily Cleaning

The case should be cleaned thoroughly, as described in the weekly cleaning section, before it is used for the first time.



NOTICE: Avoid splashing or soaking any electrical components with water to prevent electrical damage to the case.



NOTICE: Shut off light and remove all product from case.

Note: For major spills or foreign material buildup use complete weekly cleaning instruction.

1. Clean all foreign materials from the door opening.
2. Wipe complete interior of case using a damp cloth.
3. The glass can be cleaned with common window cleaners. The remaining exterior surface should be wiped down using any ammoniated cleansers or soapy warm water.

Note: Detergents are **not** recommended.

Weekly Cleaning

This procedure is recommended on a weekly basis. It may need to be performed more often if necessary to maintain a clean, sanitary case. The case should be cleaned to this procedure before using the first time.



NOTICE: Avoid splashing or soaking any electrical components with water to prevent electrical damage to the case.



NOTICE: Shut off light switch and remove all product from case.

Interior Cleaning

1. Remove rear doors from track by lifting door upward until the bottom of the door clears the lower door track and then outward. Remove the inner door in the same manner.
2. Lift up the front glass to the fully open position.
3. Remove all shelves from the case.
4. Unplug the shelf lights and lift the shelf support assembly out of the shelf standard slots.
5. Remove the two (2) thumb screws holding the shelf standard to the side wall and take the shelf standard out of the case.
6. Lift the display pans up and take them out of the case.
7. Clean the entire interior of the case using warm soapy water. Wipe off all soapy water with a damp cloth and allow to dry.

Note: Depending on the amount of usage and spillage of foreign material, some fasteners may have to be removed and parts disassembled to allow proper cleaning of the unit.

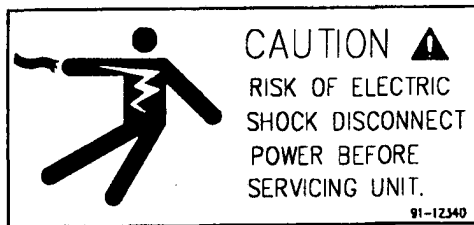
8. Clean all shelves, shelf support assemblies, shelf standards, and display pans using warm soapy water and a brush. Rinse thoroughly and allow to dry.
9. Clean all foreign material from inner and outer rear door tracks using warm soapy water and a brush. Apply a light film of lubricant, such as PAM, to make the doors operate smoother.
10. Clean both sides of the doors and interior of the front glass using any common window cleaner.
11. Reassemble the case in reverse order starting with Step 6.

Exterior Cleaning

1. Clean the front glass using any common window cleaner.
2. The exterior surfaces should be wiped down using any ammoniated cleansers or warm soapy water.

Plastic exterior surfaces can be cleaned with any ammoniated household cleaner. Stains can be removed by scrubbing with TRIAENE Soap, ETHYL CELLOSOLVE, CARBONA, or similar solvent base cleaning fluids. The surfaces must be thoroughly rinsed with water after using solvent based cleaners.

SERVICE INFORMATION



Before any service work is performed on the case, make sure all power is disconnected to the case.

Service problems or request for repair parts from authorized service agencies, trained service personnel, or owners should be referred to:

CUSTOMER SERVICE DEPARTMENT
Federal Industries
215 Federal Avenue
Belleville WI 53508
Toll Free: (800) 356-4206 / WI Phone (608) 424-3331
Fax: (608) 424-3234

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Pre-Service Checklist

You may avoid the cost and inconvenience of an unnecessary service call by first reviewing this checklist of frequently encountered situations that can cause unsatisfactory case performance.



CAUTION: Before servicing case turn off power at the main breaker of fuse box.

Lights Do Not Operate

- Check for disconnected power supply.
- Check for tripped breaker or blown fuse.
- Check that light switch is on.
- Be sure light is properly seated in the sockets.
- Check that light cord(s) are tight in the sockets.

SALE & DISPOSAL

Owner Responsibility

If you sell or give away your Federal Industries case you must make sure that all safety labels and the Installation-Service Manual are included with it. If you need replacement labels or manuals, Federal Industries will provide them free of charge. Contact the customer service department at Federal Industries at (800) 356-4206.

The customer service department at Federal Industries should be contacted at the time of sale or disposal of your case so records may be kept of its new location.

ELECTRICAL DATA

All Models are 120 Volts, 1 Phase, 60 Hertz

	SN48	SN59	SN77
AMPS	2.0	2.0	2.0

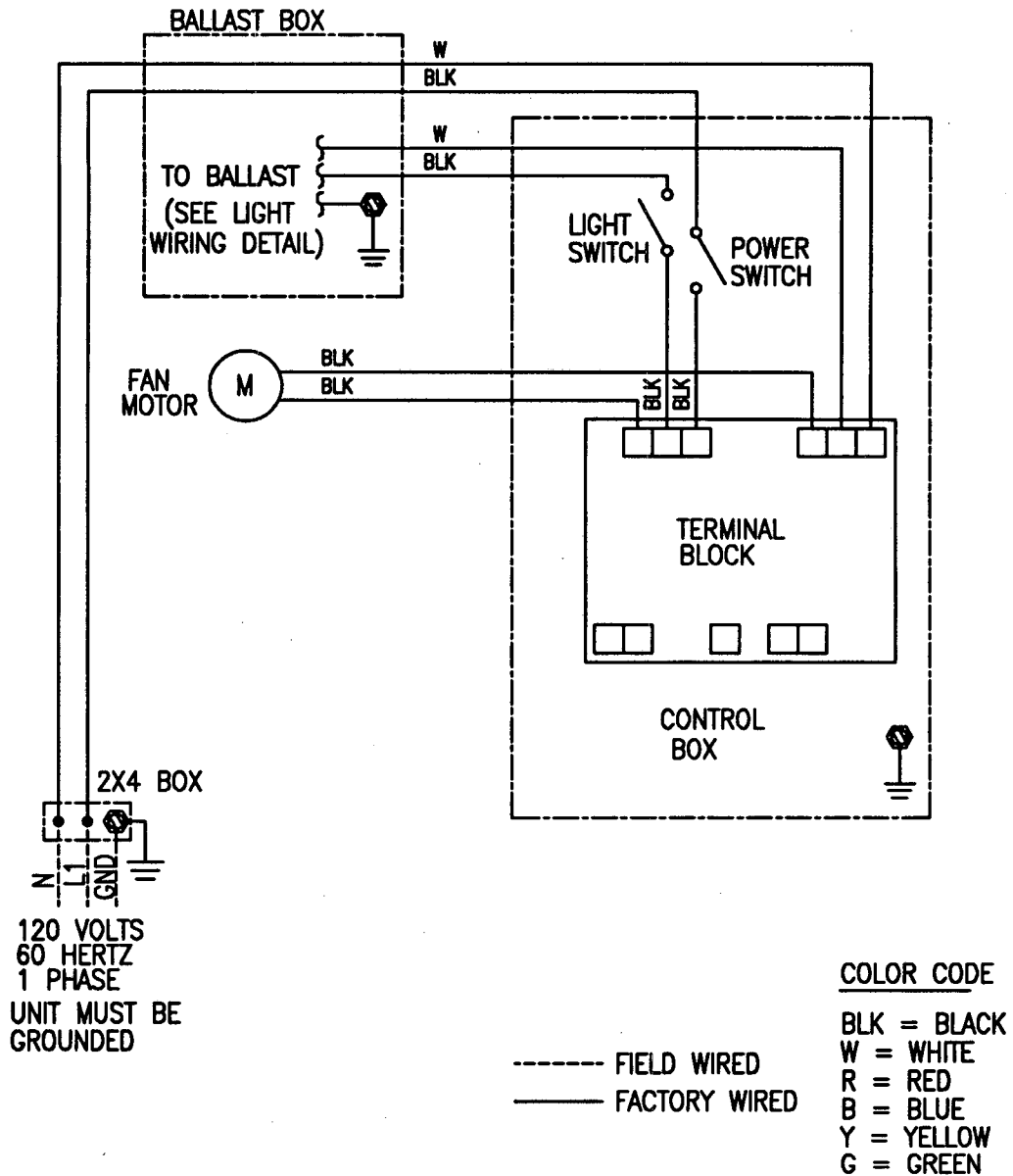
Refer to the rating plate data attached to the rear of the case for Maximum Fuse Size and Minimum Circuit Ampacity.

REPLACEMENT PARTS

MODELS SN48, SN59 & SN77

Part Description	Part Number		
	SN48	SN59	SN77
<u>Electrical Components</u>			
Light Switch	41-11066	41-11066	41-11066
Auxiliary Fan	41-11170	41-11170	41-11170
Auxiliary Fan Switch	39-11066	39-11066	39-11066
Terminal Block	45-11056	45-11056	45-11056
Ballast	39-12904	39-12904	39-12902
Light Bulb	42-11069	42-11070	42-11071
Light Cord (w/Receptacle)	43-10988	43-10988	43-10988
Light Cord (w/Plug)	43-10989	43-10989	43-10989
Light Socket (Stationery)	42-10834	42-10834	42-10834
Light Socket (Spring Loaded)	42-10833	42-10833	42-10833
<u>Misc. Components</u>			
Front Glass	50-10995	50-10996	50-10998
End Glass - Clear	51-11168	51-11168	51-11168
Reflective End L.H.	50-11174	50-11174	50-11174
Reflective End R.H.	50-11173	50-11173	50-11173
Door L.H. - Clear	53-11091	53-11095	53-11099
Door R.H. - Clear	53-11092	53-11096	53-11110
Door L.H. - Reflective	53-11093	53-11097	53-11101
Door R.H. - Reflective	53-11094	53-11098	53-11102
Wire Shelf - Top	63-11025	63-11028	63-11031
Wire Shelf - Middle	63-11026	63-11029	63-11032
Wire Shelf - Bottom	63-11027	63-11030	63-11033
Glass Shelf Top	52-11214	52-11217	52-11220
Glass Shelf Middle	52-11215	52-11218	52-11221
Glass Shelf Bottom	52-11216	52-11219	52-11222
Light Shield	42-30212	42-30212	52-30212
Decal <i>Electrical Hazard</i>	91-10743	91-10743	91-10743
Glass Handle	66-11106	66-11107	66-11109
Clamp (Glass)	81-11043	81-11044	81-11045
Gas Cylinder	81-11046	81-11047	81-11046
Pivot Hinge	66-11076	66-11076	66-11076
Leg Leveler	65-11116	65-11116	65-11116

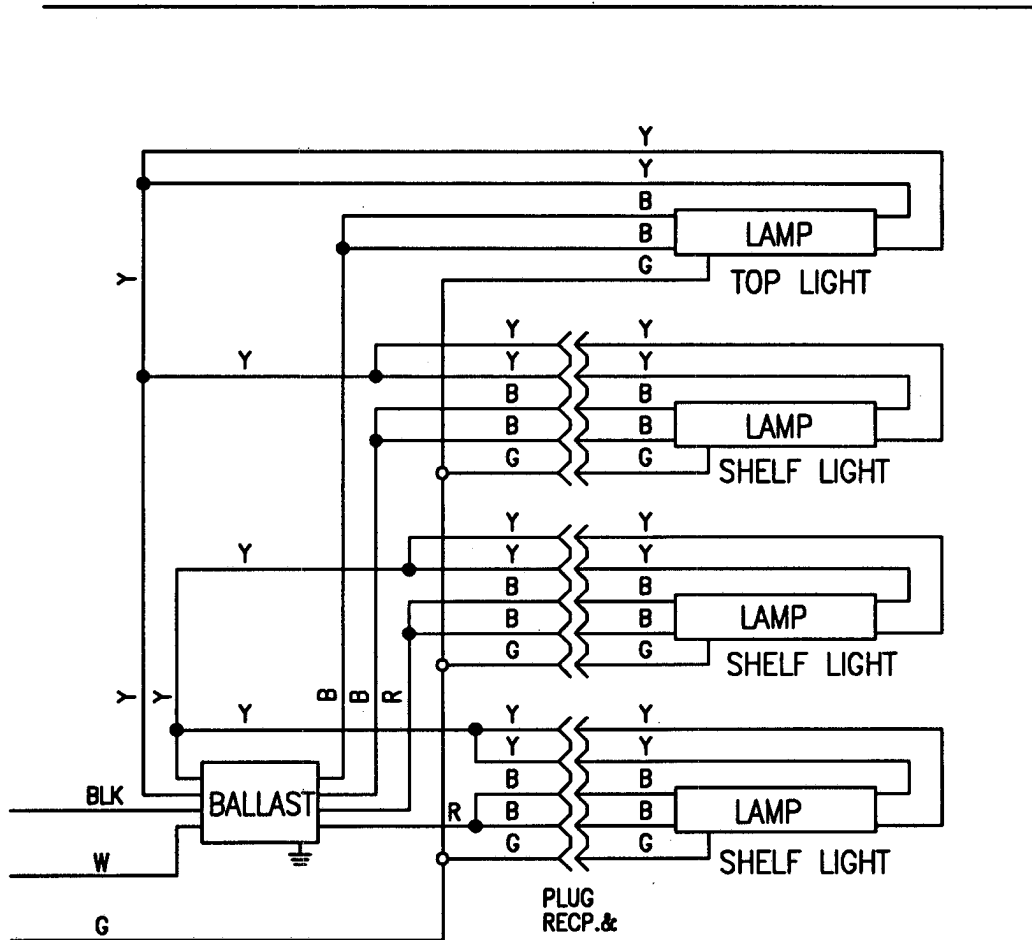
WIRING DIAGRAM - MAIN WIRING



SN-48,59,77

E-1417 4/23/96 SES WIRING, SN 120V

WIRING DIAGRAM - SN48 & SN59 W/LIGHTS



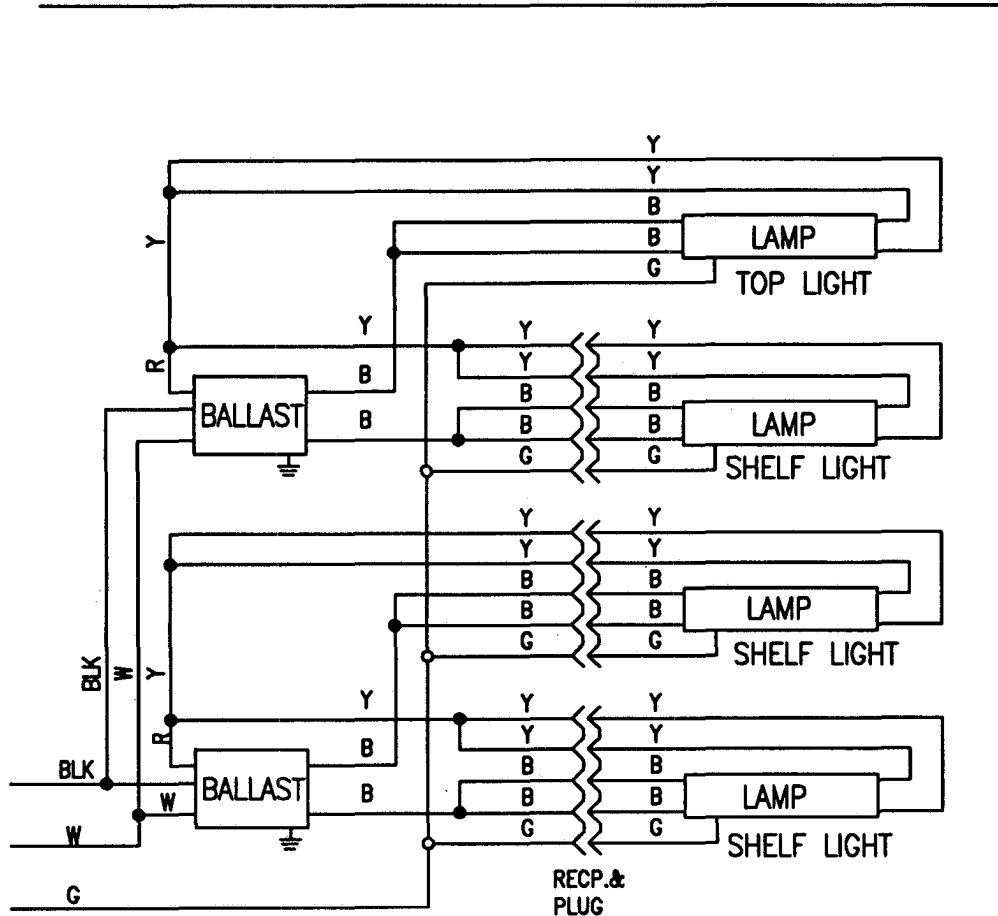
COLOR CODE

BLK = BLACK
 W = WHITE
 R = RED
 B = BLUE
 Y = YELLOW
 G = GREEN

(4) F017T8, F025T8, F032T8

E-1326 11/20/95

WIRING DIAGRAM - SN77 W/LIGHTS



COLOR CODE

BLK = BLACK
 W = WHITE
 R = RED
 B = BLUE
 Y = YELLOW
 G = GREEN

(4) F040T8

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