

# Film-Tech

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These manuals are designed to facilitate the exchange of information related to cinema projection and film handling, with no warranties nor obligations from the authors, for qualified field service engineers.

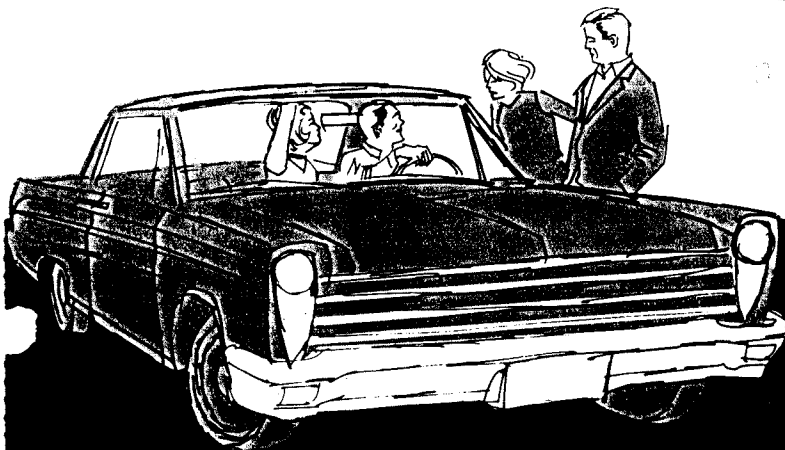
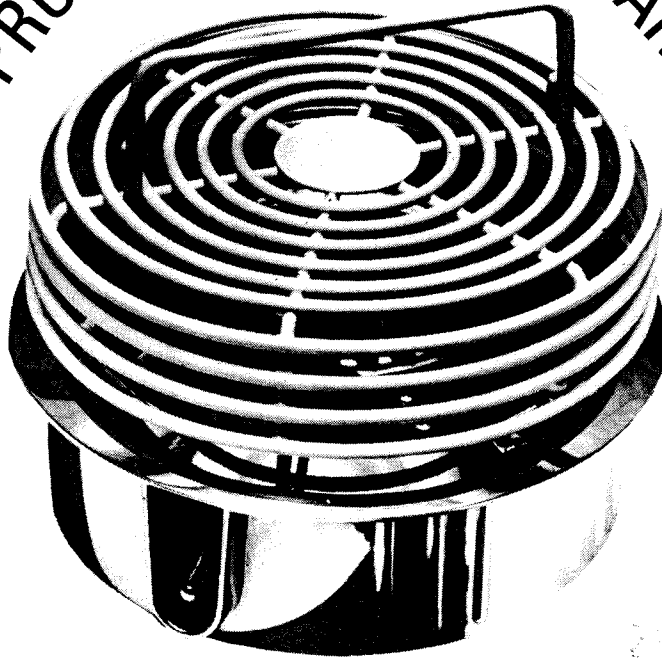
If you are not a qualified technician, please make no adjustments to anything you may read about in these Adobe manual downloads.

[www.film-tech.com](http://www.film-tech.com)

**"CIRCLE-R" ELECTRIC IN-CAR  
HEATER AND ACCESSORY**

**CATALOG**

**BLOW CARS AROUND COMPETITION  
INCREASE PROFITS WITH FULL YEAR OPERATION**



IT'S A PEOPLE BUSINESS



**DRIVE-IN**

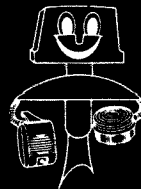
*Theatre*

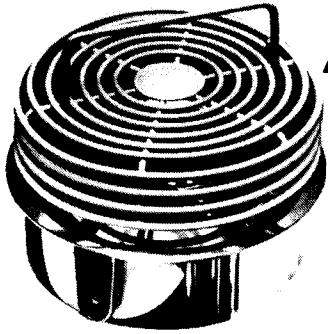
**MFG. CO., INC.**

709 North 6th Street

Kansas City, Kansas 66101

Area Code 913-FA 1-3978





## "CIRCLE-R" IN-CAR HEATER

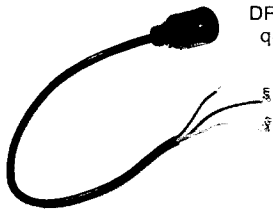
U.S. Patent No. 3,229,070 applies

provides greater customer comfort during cold weather and extended drive-in season. Chrome plated housing. EPOXY coated top guard resists elements.

- Complete YEAR warranty
- Fast circular heating
- Quiet operation
- Snap action thermostat
- Eliminates frosty windshields
- Safe, easy to handle
- Theftproofed housing screws
- Motor will not burn out
- No assemblies to buy
- Drop-proofed switch guard
- The only U.L. and C.S.A. approved unit with 100 watt capacity. Wide wattage variety also available, U.L. and C.S.A. approved.

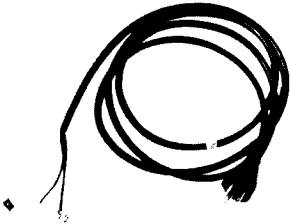
## HEAVY-DUTY NEOPRENE CORDS

DRIVE-IN's cords are listed by U.L. and C.S.A. to assure you of quality products. Heavy duty neoprene cords are available for "hand-out" installation (with molded plug) or "permanent" installation (with quick disconnect terminal) for connection to DRIVE-IN's fuse box without soldering.



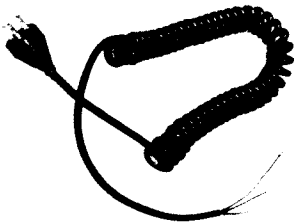
### ◆ 18" POST OUTLET CORD

with molded female receptacle for heaters handed out to customers as they drive in.



### 8' STRAIGHT ◆ CORD

available with molded plug or without plug, and with slip-on flag terminals.

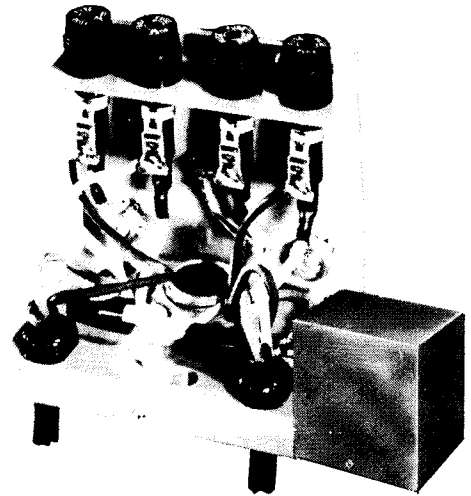
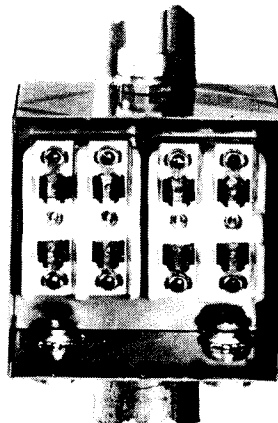


### ◆ 10' KOILED KORD

(stretched length) with molded plugs or without plugs, with slip-on flag terminals.

## POST GROUP MAKE-UP BOX

To meet the electrical code and preferred practice requirements, use fuses or circuit breakers to connect the runs from the field breaker panels to group wiring of four or five panels. Box is available as junction box, junction box with fuses, or circuit breakers. 4" x 6" x 6" rain-tight steel box, painted, with pipe clamps for mounting direct to existing 2" pipe. Custom boxes are available, please advise as to your requirements.



## DRIVE-IN'S EXCLUSIVE FUSE-JUNCTION BOX

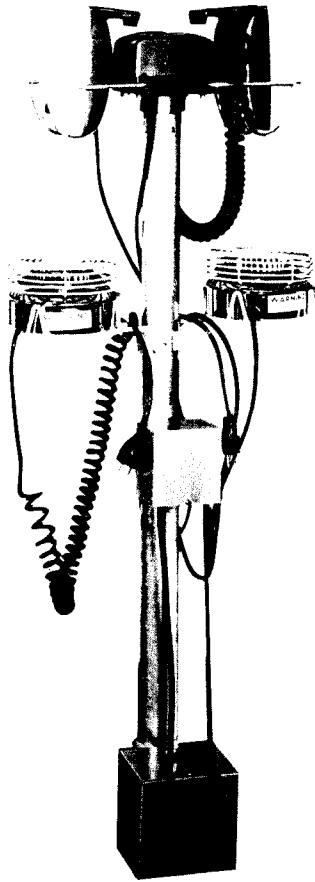
Eliminate expensive custom installation in the field and expensive soldering for seasonal changes. This is the industry's ONLY approved fuse-junction box. Lower price, better operation than any method on the market.

- Fuse two individual heaters
- Compatible with any heater
- Quick, safe disconnect terminal facilities for seasonal changes or repairs
- Meets local electrical requirements
- Plug-in or permanent connection
- Weatherproofed box and chassis



## POST HANGER BRACKET

Heater may be placed in any manner. Easy to install. White epoxy coated steel. Vertical flanges eliminate heater falling from basket. Clamps post at any desired height.



**INDOOR COMFORT FOR YEAR-ROUND OPERATION**

## **INCREASE PROFITS WITH 25% MORE USEABLE HEAT**

- NO MORE FROSTED WINDSHIELDS
- EVEN AND EFFICIENT HEAT OVER A FULL CIRCLE

### **“CIRCLE-R” IN-CAR HEATER ONE YEAR WARRANTY**

- SAFE-EASY TO HANDLE
- DIECAST ALUMINUM HOUSING

- Individual parts  
No assemblies to purchase
- Top and bottom bearings  
can be oiled  
without any disassembly  
Quick disconnect flag terminals
- Shaded pole motor  
Will not burn out when stalled
- Snap action over-temperature control  
Prevents overheating
- Easy to grip handle
- All cords heavy duty SJ neoprene
- Theft proof housing screws
- Post hanger brackets  
White plasti-cellcoated
- Post outlet cords  
Heavy duty SJ neoprene-molded plug
- All wattages-voltages
- Straight and coiled kords

**ENGINEERING SERVICES AVAILABLE  
WIRING LAYOUTS PROVIDED  
WEATHER PROOFED—NOT AFFECTED BY SNOW-ICE-RAIN**

## **TELL YOUR CUSTOMERS YOU HAVE HEATERS**

Alert your community to the equipment you installed for their comfort. Increased customer enjoyment and comfort means a longer and more profitable season.

Educate your present customers to benefits and heater's operation in a striking trailer. DRIVE-IN assists you in creating new awareness through an effective merchandising program. DRIVE-IN serves your promotional needs in a complete program of:

- |                            |                            |
|----------------------------|----------------------------|
| ■ Newspaper mats           | ■ News releases            |
| ■ Radio spot announcements | ■ Available free of charge |

### **INDIVIDUALIZED SERVICE**

DRIVE-IN's engineering and design staff carefully checks your electrical requirements and plans the most economical installation. Wiring survey forms are furnished to assist you. DRIVE-IN prepares detailed wiring plans to meet your individual specifications for wire sizes, runs, fuse boxes, and load requirements. DRIVE-IN eliminates guesswork to assure you accurate electrical bids, economical and efficient installation. DRIVE-IN saves you money on underground burial wire in a variety of sizes. DRIVE-IN supplies a spare parts kit, Gulmite screw driver and Heyco pliers for each job.

# Sales And Technical Information

## "CIRCLE-R" IN CAR HEATER

### HEATING ELEMENT

The "CIRCLE R" heating element has more radiating surface than other types. Also being of a larger diameter there is more surface exposed to the air flow. All heat developed by the element is utilized, and a combination of radiant as well as hot air flow is developed, *with approximately 20 to 25% more heat than standard practices.* The element is sealed in an incoloy sheath. Due to its large diameter the element is very rigid and the mounting method provides extreme strength. A wide selection is provided, 500-600-750-1000 watts at 120-208 or 240 volts.

### MOTOR AND AIR-ROTOR

The blower is a centrifugal air-rotor to assure less turbulent and more efficient air flow on a 360 degree plane, to place the heat where it is needed and not directly at you, thus assuring no hot spots. The motor is a shaded pole induction motor that cannot be harmed and will not overheat if rotor should be locked. The bearings have large circular wick type oil reservoirs, and is factory lubricated for operation up to two years, under normal conditions. The bearings may be easily oiled without dismantling the heater. The motor has a stainless steel shaft and all parts are weather corrosion resistant.

### THERMO SAFETY SWITCH

Thermoswitch is a trouble free unit tested for 100,000 cycle operation and approved by U. L. and C.S.A. for operation at this current and voltage. It is of the snap action type and will not pit the contacts by a partial "on" position, possible in other type thermoswitches.

### CONNECTIONS

All connections are made by approved API quick disconnect terminals. No soldering necessary when changing parts.

### AIR-ROTOR GUARD AND HANDLE

Guard is of heavy gauge steel wire, fabricated by one of the largest fan guard manufacturers in the U.S. By combining the heavy gauge wire with design for maximum strength a fan guard is provided to withstand the abuse of drive-in theatre operation. Epoxy coated to eliminate all corrosion.

### CORDS

All cords, straight and coiled, are SJO heavy duty U.L. and C. S. A. approved with molded on plug. Cords are also available without the plug.

Heyco strain relief bushings are used on all heaters to secure the cord to the casting. It is made of tough nylon and is U. L. approved. Prevents cord from turning or being pushed in or pulled out of housing.

### HOUSING

The rugged lightweight diecast alloy metal housing is designed to withstand rough treatment and is chrome plated.

### SWITCH

Switch is heavy duty U. L. and C. S. A. approved, double pole, double throw and disconnects both sides of electric line. Also the switch has a guard to protect breakage.

### PARTS AND MAINTENANCE

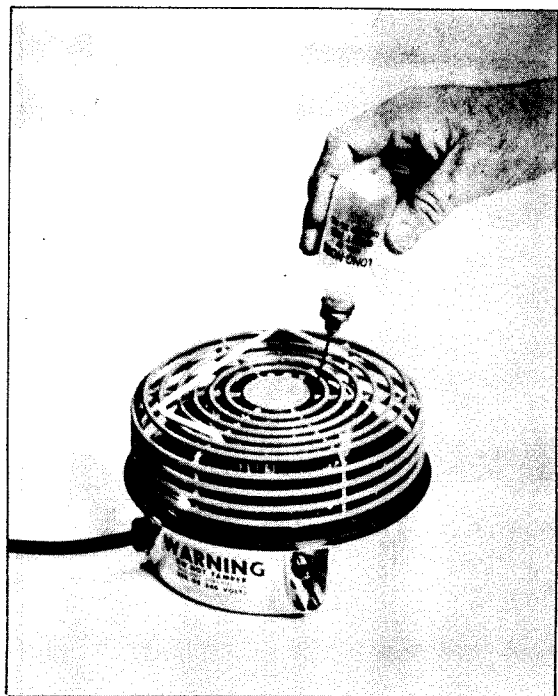
All parts are U. L. and C. S. A. approved, corrosion resistant, easy to install, *and are available individually without the necessity of purchasing associated assemblies to get the part you want.* Heater is designed for simplified servicing and may be disassembled in approximately one minute.

Post outlet cord (commonly called pig tail) has female connector and 20" of cord, for one heater.

Post hanger bracket is made of steel, epoxy coated, designed for ease of use, simple to install and economically priced.

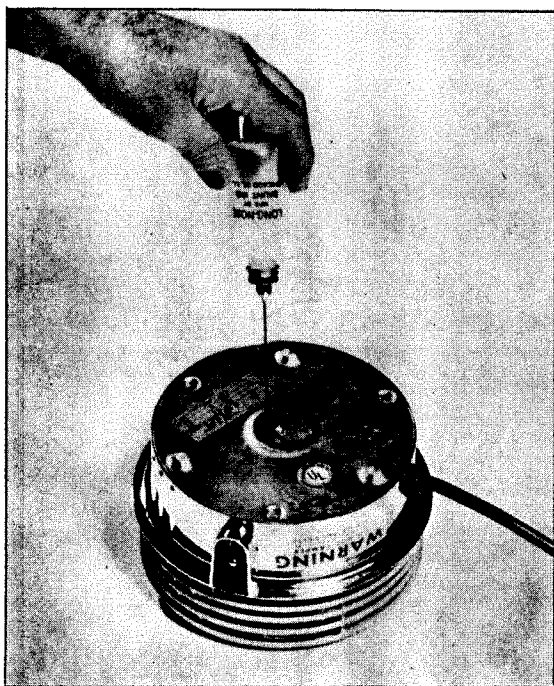
## *Announcing An Important Heater Maintenance Improvement*

# The Motor in DRIVE IN'S 68-69 Heater Can be Oiled Without Any Disassembly of the Heater



## OILING THE TOP BEARING

The top bearing is oiled by inserting the oil can tube through the hole next to the hub of the blower wheel, and rotating the wheel to line up with the access hole in the casting which is in line with the oil hole in the top bearing.



## OILING THROUGH THE BOTTOM PLATE

The 68-69 heater has an oil access hole through the bottom plate that is matched to the oil hole in the bottom bearing.

**REPEATING: You now can saturate the bearing oil wicks without any disassembly of the heater!**

*When it comes to*

*Contact Your Theatre Supply Dealer or*

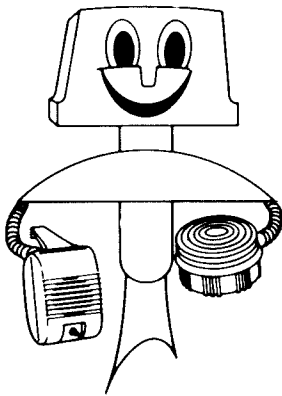
**DRIVE-IN *theatre* MFG. CO., INC.** 709 North Sixth Street  
Kansas City, Kansas 66101 — (913) 321-3978

# CATALOG OF HEATER PARTS AND ACCESSORIES

Chrome  
Heater  
Parts

Alliance  
Motor  
Parts

Brevel  
Motor  
Parts



Heater  
Accessories

Blue  
Heater  
Parts

Heater  
Junction  
Boxes And  
Parts

Fuse  
Junction  
Box Parts

Multiple  
Heater  
Junction  
Box Parts

*Contact your  
theatre supplier or contact:*

**DRIVE-IN** *theatre*  
Manufacturing Company, Inc.

709 North Sixth Street, Kansas City, Kansas 66101  
(913) 321-3978

# DRIVE-IN'S HEATER PARTS FOR CHROME HEATER



10002 Motor 208 Volt  
w/Faston Terminals  
10003 Motor 240 Volt  
w/Faston Terminals  
10004 Motor 120 Volt  
w/Faston Terminals



10020CC Heating Element  
500W 208V  
10020D Heating Element  
500W 240V  
10020G Heating Element  
500W 120V

10020BB Heating Element  
600W 208V  
10020C Heating Element  
600W 240V  
10020H Heating Element  
600W 120V  
10020AA Heating Element  
750W 208V  
10020D Heating Element  
750W 240V  
10020F Heating Element  
1000W 208V  
10020A Heating Element  
1000W 240V  
10020E Heating Element  
1000W 120V



008 Coiled Kord w/Tan-  
dem Plug w/Faston Termi-  
nals Attached On Other End  
18-3 Neoprene



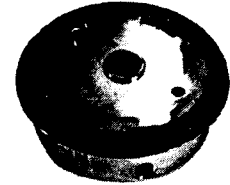
10009 Coiled Kord Less Plug  
w/Faston Terminals At-  
tached On One End and  
Bare Leads On Other End  
18-3 Neoprene



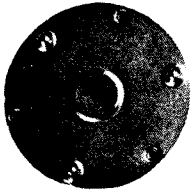
10052 Coiled Kord w/Tan-  
dem Plug Less Faston Ter-  
minals 18-3 Neoprene



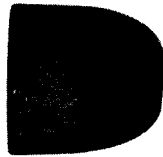
10053 Coiled Kord Less Plug  
Less Faston Terminals On  
Both Ends 18-3 Neoprene



10000 Bottom Casting  
Chrome Plated



012 Bottom Casting Plate



10054 Rubber Feet For Bot-  
tom Plate w/Screws



10026 Guilmit Screw For  
Bottom Plate



10014 Switch—Heavy Duty



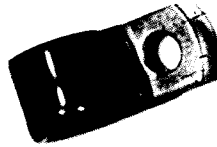
10016 Screw For Mounting  
Motor



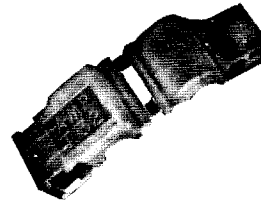
098 Nut For Holding Top  
Guard



10061 Jumper Wire (Brown)  
w/Faston Terminals Both  
Ends  
10032 Jumper Wire (White)  
w/Faston Terminals Both  
Ends  
10033 Jumper Wire (Black)  
w/Faston Terminals Both  
Ends



10062 Strain Relief Clamp—  
Attaches To Motor



10063 Insulating Boot For  
Switch



070 Flat Plastic Washer



10071 Flat Steel Washer



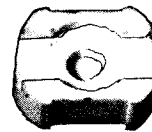
10072 Top Or Bottom Bearing

## BREVEL MOTOR PARTS

# HEATER PARTS FOR BLUE HEATER



10056 Thermostat w/Porcel-  
lain Holder



10057 Porcelain Holder For  
Thermostat



10058 Hold Down Bracket  
For Thermostat



00 Switch Guard

## HEATER ACCESSORIES





10019 Straight Cord w/Tandem Plug Less Faston Terminals 18-3 Neoprene 8'



10007 Straight Cord Less Plug Less Faston Terminals 18-3 Neoprene 8'



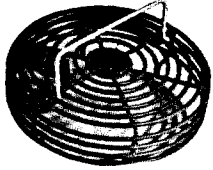
10006 Straight Cord w/Tandem Plug w/Faston Terminals Attached Other End 18-3 Neoprene 8'



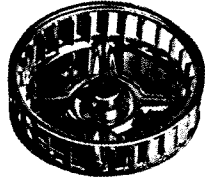
10050 Straight Cord Less Plug w/Faston Terminals Attached Both Ends 18-3 Neoprene 8'



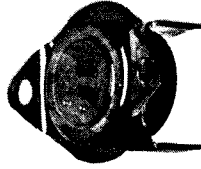
10051 Straight Cord Less Plug w/Faston Terminals Attached One End Only—Other End Bare 18-3 Neoprene 8'



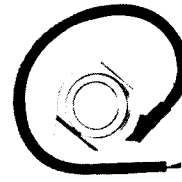
10001 Top Guard w/Handle Epoxy Coated



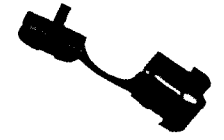
10005 Air Rotor w/Set Screw



10010 Thermostat Less Lead Wires



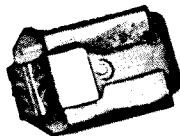
10055 Thermostat With One Lead Wire Attached



10011 Anchor Clamp (Heyco Nut) For Kord



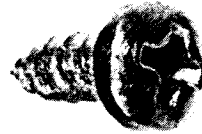
10017 Ring Terminal For Ground Wire



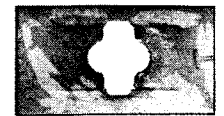
10018 Faston Terminal



10029 Hold Down Bracket For Heating Element

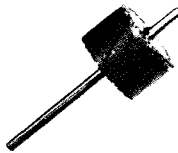


10030 Screw For Heating Element Hold Down Bracket and Ground Screw



10031 Tinnerman Nuts For Holding Top Guard

# ALLIANCE MOTOR PARTS



10067 Armature



10068 Felt Washers



10069 Cup Washer



10073 Top Bearing



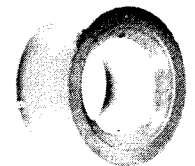
10074 Bottom Bearing



10075 Flat Plastic Washer



10076 Armature



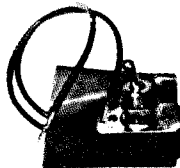
10077 Tall Plastic Spacer



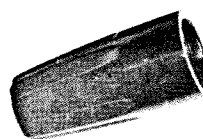
10059 Bottom Casting Plate



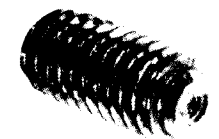
10013 Rubber Feet For Bottom Plate



10060 Switch w/Two Lead Wires



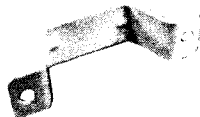
10099 Bakelite Wire Nut Connectors



10015 Set Screw For Heating Element



10A20 Post Hanger Bracket White Plastic Coated



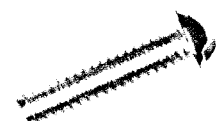
10064 Half Bracket to Match Above Hanger Bracket For Hanging One Heater Per Post



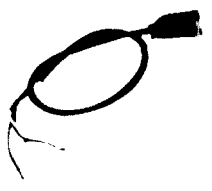




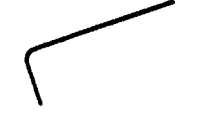
10035 #8 Gulmite Screw Driver








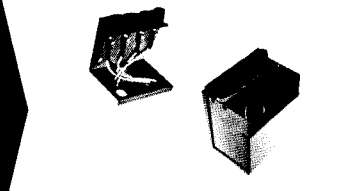
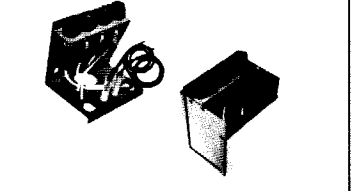
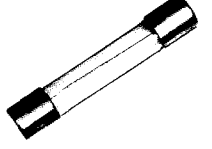
10065 Nuts For 10A20 Post Hanger Bracket


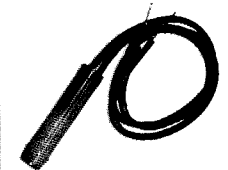
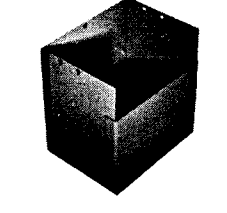
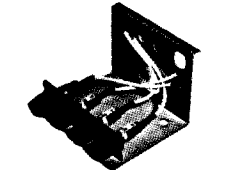
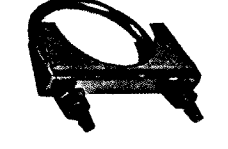



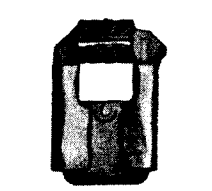



10066 Screw For 10A20 Post Hanger Bracket

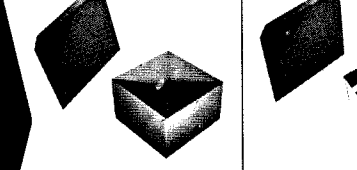
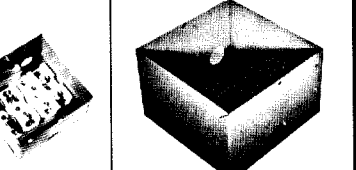

					
0A21 Post Outlet Kord (Female Plug—18" Kord)	10084 Handi Hex Driver w/Allen Wrench For Torrington Air Rotor Set Screw	10083 Handi Hex Driver w/Allen Wrench For Torrington Air Rotor Set Screw	10085 Long Nose Oiler	10089 Heyco Pliers Adjustable	10080 Hex Key For Rev cor Air Rotor Set Screw

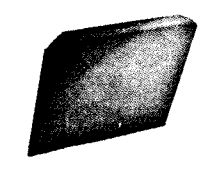
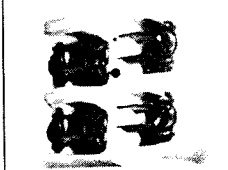
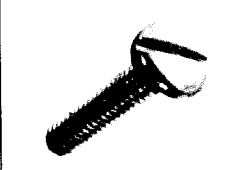

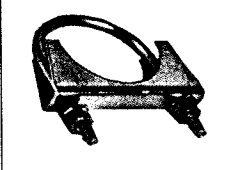
					
0079 Hex Key For Torrington Rotor Set Screw	10081 Warning Labels	10086 Heater Oil—½ Pt. Special Hi-Lo Impregnating Oil	10087 Heater Oil—1 Pt. Special Hi-Lo Impregnating Oil	10088 Heater Oil—1 Qt. Special Hi-Lo Impregnating Oil	

<b>FUSE JUNCTION BOXES AND PARTS</b>				
		10040 Fused Junction Box—Less Lights	10044 Fused Junction w/ Neon Lights	10043 6 Amp Fuses

					
10042 Fuse Holder Assembly Less Fuse	10045 Neon Downlights w/Leads Attached	10038 Cover—Metal	10037 Fuse Box Chassis w/4 Fuse Holders & Fuses	10041 U-Bolt Clamp Assembly	10011 Heyco Strain Relief Bushing

				
10018 Faston Terminal	10017 Ring Terminal Connector For Ground Wire	10046 Screw For Ring Terminal & Cover Box	10048 Jumper Wire w/ One Faston Terminal Attached	

<b>MULTIPLE HEATER JUNCTION BOX PARTS</b>				
		10091 Multiple Heater Junction Box (4x6x6) (Handle Eight Heaters) w/U-Clamp Only	10092 Multiple Heater Junction Box (4x6x6) w/Porcelain Fuse Blocks and U-Clamp	10093 Cover For Multiple Heater Junction Box 4x6x6

				
10094 Bottom For Multiple Heater Junction Box 4x6x6	10095 Porcelain Fuse Block	10096 Screws For Porcelain Fuse Block	10097 Screws For Cover	10041 U-Bolt Clamp Assembly

**DRIVE-IN** *theatre*

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