

HABCO®

Built to Perform. Crafted to Last.®

SAFETY, INSTALLATION AND INSTRUCTION MANUAL ***Cold Space Merchandiser®***



SHIPPED STANDARD WITH WHITE,
SCREEN-READY, TRANSLUCENT SIGN PANELS.
DOOR ADVERTISING IS NOT INCLUDED.



Made In Canada

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HABCO® COLD SPACE MERCHANDISER® SAFETY, INSTALLATION AND INSTRUCTION MANUAL

MODEL SKU's: ESM10, ESM12, ESM14, ESM18, ESM24, ESM28,
ESM42, ESM46, ESM47, ESM49

"HC" Suffix indicates R290 refrigerant.



HABCO Management Systems are Certified to ISO 9001-2015.

LANGUAGE: Translation of this document is completed with the utmost care, utilizing the resources of an ISO 9001 Certified Translation firm. In rare instances where translation is imperfect or imprecise, the parent English document will take precedence.

WARNING

IMPROPER OR UNSAFE use of this appliance other than intended by the manufacturer, can result in death, serious bodily injury, property damage and/or appliance damage!

This manual contains important information about product safety. Read and understand this manual BEFORE operating the appliance. Please keep this manual available for other users and owners before they use the appliance. Store this manual in a secure location.



DANGER: RISK OF FIRE OR EXPLOSION. FLAMMABLE REFRIGERANT USED. TO BE REPAIRED ONLY BY TRAINED SERVICE PERSONNEL. DO NOT USE MECHANICAL DEVICES TO DEFROST REFRIGERATOR. DO NOT PUNCTURE REFRIGERANT TUBING. R290 REFRIGERATION SYSTEM (CASSETTE) SHOULD ONLY BE USED IN A HABCO UNIT THAT IS DESIGNED AND APPROVED FOR R290.

INTENDED USE

HABCO® Cold Space Merchandisers® are designed for the commercial refrigerated merchandising and/or storage of non-hazardous aseptic (packaged) products. Not intended for use in outdoor, direct sun, damp, extreme heat and/or cold conditions.

Glossary

Term	Explanation/Alternate Term
Cold Space Merchandiser®	Appliance
Cold Space Merchandiser®	CSM
Cassette	Self-Contained, Removable Refrigeration Package
Compressor	Refrigerant Compressing Motor Mounted to Front of Cassette®
Evaporator (Coil)	Cooling Coil Mounted to Rear of Cassette®
Free&Clear™, Finless Condenser (Coil)	Circular Formed Heat Exchange Coil Mounted to Front of Cassette®
R290	Propane, A Flammable Refrigerant
Cassette® Chamber	Refrigeration Enclosure
Evaporator Chamber	Cooling Coil Enclosure Located within Cassette® Chamber
Set-Point	Temperature setting at which refrigeration ceases operation
Temperature	Stabilized Product
Mechanically Fastened Areas	Overall product temperature when it reaches specified Set-Point
Trained Professional	Areas Requiring a Tool to Access
Owner	Professional Refrigeration and/or Electrical Contractor
Fascia	Person or Company Holding Legal Title to Appliance
Shipping Pod™	Backlit Upper Sign Panel
	Black Plastic Foot Installed for Beverage CSM Transport

MEANINGS OF SIGNAL WORDS AND SYMBOLS

WARNING indicates potentially hazardous situations which, if ignored, could result in death or serious injury.

WARNING indicates potentially hazardous situations which, if not avoided, may result in minor or moderate injury.

! **NOTICE** emphasizes essential information or that which may cause appliance damage or environmental harm.

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ENERGY EFFICIENCY TIPS

HABCO® Commercial Refrigerators bearing the ENERGY STAR® logo are manufactured and designed to perform within the most stringent energy efficiency guidelines. The following energy efficiency tips, however, pertain to all commercial refrigerators and should be followed for best energy efficiency results.

1. Maintain a clean condenser coil.
2. Turn off lighting when not in use.
3. Maintain clean door seals and ensure bottom door guide is clear of debris at all times.
4. Do not install in direct vicinity of high heat sources such as heating vents, baseboard heaters, ranges, and ovens.
5. Read, understand and observe Safety Warnings and Notices in this manual as many of these points will also contribute



SAFETY - IMPORTANT! READ AND UNDERSTAND THIS INFORMATION FIRST
SERVICE AND MAINTENANCE MUST BE PERFORMED BY QUALIFIED PROFESSIONAL



WARNING

RISK OF DEATH, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR OTHER PERSONAL INJURY!

- R290 REFRIGERATION SYSTEM (CASSETTE) SHOULD ONLY BE USED IN A HABCO UNIT THAT IS DESIGNED AND APPROVED FOR R290.
- PLUG INTO A DEDICATED, 3 PRONG GROUNDED ELECTRICAL RECEPTACLE AND DO NOT USE EXTENSION CORDS, POWER BARS, AND/OR ADAPTERS TO POWER THIS APPLIANCE. IF IN DOUBT, EMPLOY A CERTIFIED ELECTRICIAN TO CONFIRM YOUR POWER SUPPLY MEETS CRITERIA.
- DO NOT ALTER, IMPACT OR PLACE PRESSURE ON POWER CORD. ALLOW ADEQUATE SPACE FOR POWER CORD TO FLOAT FREELY BETWEEN CABINET AND WALL AND DO NOT STRAIN AND/OR STRETCH POWER CORD TO REACH ELECTRICAL RECEPTACLE.
- INSPECT POWER CORD FOR ANY DAMAGE PRIOR TO POWERING AND WHENEVER HABCO® CASSETTE® IS EXCHANGED OR APPLIANCE IS MOVED. DO NOT PLUG THIS APPLIANCE INTO WALL RECEPTACLE IF POWER CORD IS DAMAGED.
- DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMISSION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.
- DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.
- MAINTENANCE AND REPLACEMENT OF LED LIGHT STRIPS AND RELATED DRIVER COMPONENTS TO BE PERFORMED BY A QUALIFIED TECHNICIAN.
- DO NOT INSTALL OUTDOORS, IN DIRECT SUN, DAMP, EXTREME HEAT AND/OR COLD CONDITIONS.
- DO NOT INSTALL APPLIANCE WHERE STORAGE, HANDLING AND/OR DISPENSING FLAMMABLE AND/OR EXPLOSIVE MATERIALS OCCUR.
- WHEN STORING APPLIANCE, BLOCK DOOR SLIGHTLY AJAR, BUT SECURE TO AVOID ACCIDENTAL ENTRAPMENT.
- WHEN DISPOSING OF APPLIANCE, REMOVE DOORS TO AVOID ACCIDENTAL ENTRAPMENT AND POTENTIAL OF SUFFOCATION.
- KEEP PLASTIC PACKAGING MATERIAL AWAY FROM CHILDREN AND ANIMALS, AND DISPOSE SAFE AND SECURE.



WARNING

POTENTIAL RISK OF PERSONAL INJURY!

- EMPLOY BEST HEALTH AND SAFETY LIFTING PRACTICES WHEN INSTALLING CASTERS OR LEGS, REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.
- DO NOT TILT OR PIVOT APPLIANCE WITH LEGS OR CASTERS INSTALLED. CABINET IS NOT STABLE WHEN BALANCED ON ONE OR TWO LEGS/CASTERS WHICH MAY LEAD TO PERSONAL INJURY, AS WELL AS CABINET DAMAGE.
- EMPLOY BEST HEALTH AND SAFETY PERSONAL PROTECTION PRACTICES AND ADHERE TO MANUFACTURER'S WARNINGS WHEN USING TOOLS AND CLEANING AGENTS.
- DO NOT CLIMB AND/OR HANG ON CABINET, SHELVING AND/OR DOORS.
- USE CARE WHEN HANDLING OR CLEANING METAL PARTS.
- PERSONAL PROTECTIVE EQUIPMENT (PPE) ARE REQUIRED WHEN SERVICING ANY PART OF THE APPLIANCE:



NOTICE

ESSENTIAL INFORMATION, OR THAT WHICH MAY CAUSE APPLIANCE DAMAGE OR ENVIRONMENTAL HARM!

- DO NOT OVERLOAD CABINET WITH PRODUCT. LOADING PRODUCT HIGHER THAN THE LOAD LEVEL LINE MAY RESULT IN RESTRICTED AIR CIRCULATION AND SUBSTANTIALLY REDUCED COOLING PERFORMANCE AND/OR FROZEN PRODUCT.
- DO NOT LOCATE APPLIANCE IN DIRECT SUNLIGHT OR IN CLOSE PROXIMITY TO HIGH HEAT SUCH AS FRYERS, RANGES, AND/OR HEATING DUCTS.
- USE ONLY MILD ANTI-BACTERIAL, NON-ABRASIVE 'DISH SOAP' DETERGENT, AND SOFT CLOTH (OR BRISTLE BRUSHES WHERE SPECIFIED) FOR CLEANING YOUR APPLIANCE. FOR STUBBORN RESIDUE, SUCH AS GREASE BUILD-UP ON CONDENSER (HEAT-EXCHANGE) COIL, EMPLOY THE SERVICES OF A QUALIFIED PROFESSIONAL.
- CABINET MUST BE LEVELED FRONT TO BACK AND SIDE TO SIDE TO ENSURE OPTIMUM PERFORMANCE AND UTILITY.
- MAINTAIN A CLEAN CONDENSER COIL (BOX-SHAPED COMPONENT LOCATED BEHIND THE LOWER GRILL) TO PREVENT DAMAGE TO REFRIGERATION PARTS AND POOR PERFORMANCE NOT COVERED UNDER WARRANTY. QUALIFIED PROFESSIONAL TO DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.
- DO NOT OBSTRUCT AIR-RETURN GRILLS LOCATED INSIDE CABINET NEAR THE LOWER LEFT AND RIGHT OF THE REAR AIR DISTRIBUTION PANEL. DO NOT BLOCK EXTERIOR, LOWER FRONT GRILL. FAILURE TO COMPLY MAY RESULT IN RESTRICTED AIR CIRCULATION, SUBSTANTIALLY REDUCED COOLING PERFORMANCE AND DAMAGE TO REFRIGERATION COMPONENTS.
- THERMOSTAT DIAL SETTING CHANGES: ELECTRO-MECHANICAL - REFRIGERATION SYSTEM MAY BE ADJUSTED WARMER (COUNTER-CLOCKWISE) OR TURNED-OFF (FULL COUNTER-CLOCKWISE). ANY ADJUSTMENT FURTHER CLOCKWISE FROM THE FACTORY PRESET POSITION WILL CAUSE REFRIGERATOR TO EXPERIENCE COLDER OR POTENTIALLY FREEZING CONDITIONS. FREEZING CONDITIONS CAN DAMAGE REFRIGERATION SYSTEM AND COMPONENTS, AND MAY CAUSE PRODUCT LOSS. CHANGES TO THE THERMOSTAT SETTING SHOULD BE MADE BY A QUALIFIED PROFESSIONAL AFTER DISCONNECTING POWER TO APPLIANCE. ISSUES ARISING FROM ALTERATIONS OF FACTORY PRESET POSITION ARE NOT COVERED UNDER WARRANTY.
- DO NOT PUSH, LEAN-ON OR FORCE STAINLESS STEEL TUBE EXTENDING FROM CABINET IN THE CASSETTE® REFRIGERATION CHAMBER. DO NOT FORCE REFRIGERATION CASSETTE® WHEN REINSTALLING. SLIDE INTO PLACE GENTLY.
- ENSURE THAT APPLIANCE, REFRIGERANT AND/OR COMPONENTS ARE DISPOSED OF IN A MANNER IN KEEPING WITH LOCAL AND FEDERAL REGULATIONS.
- APPLIANCE MUST BE RUN FOR A PERIOD OF 24 HOURS PRIOR TO USE.
- AFTER ACCESSING REFRIGERATION OR ANY OTHER MECHANICALLY FASTENED AREAS OF THE APPLIANCE, REFASTEN SECURELY.
- DO NOT STORE OUTDOORS, IN DIRECT SUN, DAMP, EXTREME HEAT AND/OR COLD CONDITIONS.
- DO NOT INSTALL DIRECTLY BENEATH UNDIFFUSED AIR CONDITIONING VENTS.
- DOOR REVERSALS COMPLETED AT FACTORY OR BY HABCO® ARE WARRANTED. ANY ISSUES AND SUBSEQUENT SOLUTIONS ARISING FROM CUSTOMER REVERSED DOORS ARE THE RESPONSIBILITY OF THE END-USER. DOOR ADJUSTMENTS ARE NOT COVERED UNDER WARRANTY. INSPECT DOOR HARDWARE FOR WEAR WHEN REVERSING OR SERVICING.

CONSEQUENTIAL, ECONOMIC AND/OR PRODUCT LOSS OR SPOILAGE IS NOT COVERED BY HABCO® COMMERCIAL LIMITED WARRANTY.

FAILURE TO COMPLY WITH THE INFORMATION OUTLINED IN THIS MANUAL WILL VOID
HABCO® COMMERCIAL LIMITED WARRANTY.

HABCO® Cold Space Merchandisers, Powered by Cassette®, are designed and engineered to the highest standards using only quality components for years of reliable service. Any use of the product for purposes other than which it was designed, will void any and all manufacturer's warranty, stated or implied.

A. INSPECTION & UNPACKING

1. A thorough inspection of the appliance should be made prior to formally receiving the goods from the carrier. If there are any markings (ie. scuffs, dents, scratches) of the packaging, please note this on the carrier's delivery slip and have driver sign your copy acknowledging damage. Common practice will have the carrier report your concerns before leaving the premises.
2. Advise your carrier, or HABCO (if shipped via our transport) of any damage immediately, noting the following items.
3. Retain all packaging and forward HABCO a copy of the Delivery Slip signed by carrier acknowledging damage, Serial Number of Unit, and digital photos of area damaged and packaging next to location of damage.
4. Once the appliance has been received in good condition, remove stretch-wrap, corners protectors and bag.

⚠ WARNING: RISK OF SUFFOCATION! KEEP PLASTIC PACKAGING MATERIAL AWAY FROM CHILDREN AND ANIMALS, AND DISPOSE SAFE AND SECURE.

5. Shipping Platform Removal:

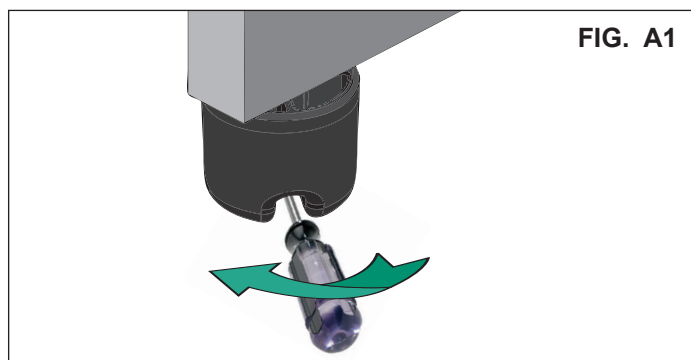
⚠ WARNING: RISK OF PERSONAL INJURY!

EMPLOY BEST HEALTH AND SAFETY LIFTING PRACTICES WHEN INSTALLING CASTERS OR LEGS, REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.

DO NOT TILT OR PIVOT APPLIANCE WITH LEGS OR CASTERS INSTALLED. CABINET IS NOT STABLE WHEN BALANCED ON ONE OR TWO LEGS/CASTERS WHICH MAY LEAD TO PERSONAL INJURY, AS WELL AS CABINET DAMAGE.

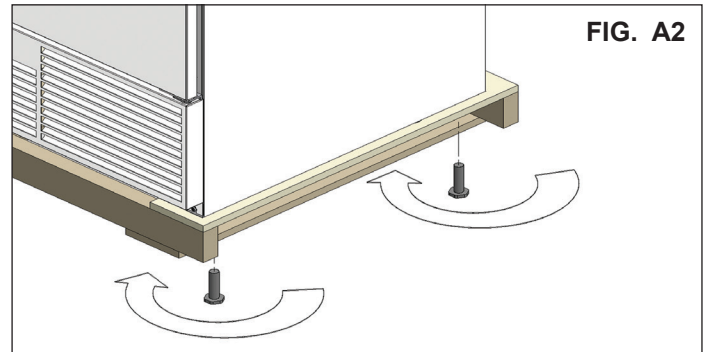
Shipping Pod™ - Beverage - FIG A1

- a. Four (4) leveller legs provided are shipped in place with each appliance - holding the Shipping Pods™ secure. To remove, twist counter-clockwise (Shipping Pod™ acts as a key to unscrew leveller leg). Insert 1/2" metal bar through two (2) openings at the base of Shipping Pod™, then twist to loosen. Once removed, the leveller legs are to be returned to their original location.



Shipping Pallet - Commercial Refrigeration - FIG A2

- b. HABCO® Foodservice and Commercial appliances are shipped on pallets. Pallets are fastened with the appliance leg levelers. Insets on each side of skid are provided to allow easy access for 1-3/8" wrench or socket to remove the levelers and skid respectively. Once pallet is removed, reinstall levelers and level cabinet front to back and side to side.



B. LOCATION, PLACEMENT AND MOUNTING OPTIONS

⚠ WARNING: RISK OF FIRE, AND ELECTROCUTION!

DO NOT ALTER, IMPACT OR PLACE PRESSURE ON POWER CORD. ALLOW ADEQUATE SPACE FOR POWER CORD TO FLOAT FREELY BETWEEN CABINET AND WALL AND DO NOT STRAIN AND/OR STRETCH POWER CORD TO REACH ELECTRICAL RECEPTACLE.

DO NOT INSTALL OUTDOORS AND/OR IN DAMP CONDITIONS.

DO NOT INSTALL APPLIANCE WHERE STORAGE, HANDLING AND/OR DISPENSING FLAMMABLE AND/OR EXPLOSIVE MATERIALS OCCUR.

⚠ WARNING: RISK OF PERSONAL INJURY!

EMPLOY BEST HEALTH AND SAFETY LIFTING PRACTICES WHEN INSTALLING CASTERS OR LEGS, REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.

DO NOT TILT OR PIVOT APPLIANCE WITH LEGS OR CASTERS INSTALLED. CABINET IS NOT STABLE WHEN BALANCED ON ONE OR TWO LEGS/CASTERS WHICH MAY LEAD TO PERSONAL INJURY, AS WELL AS CABINET DAMAGE.

! NOTICE: RISK OF APPLIANCE DAMAGE!

DO NOT OBSTRUCT AIR-RETURN GRILLS LOCATED INSIDE CABINET NEAR THE LOWER LEFT AND RIGHT OF THE REAR AIR DISTRIBUTION PANEL. DO NOT BLOCK EXTERIOR, LOWER FRONT GRILL. FAILURE TO COMPLY MAY RESULT IN RESTRICTED AIR CIRCULATION, SUBSTANTIALLY REDUCED COOLING PERFORMANCE AND DAMAGE TO REFRIGERATION COMPONENTS AND VOID WARRANTY.

DO NOT LOCATE APPLIANCE IN CLOSE PROXIMITY TO HIGH HEAT SUCH AS FRYERS, RANGES, AND/OR HEATING DUCTS.

DO NOT INSTALL DIRECTLY BENEATH UNDIFFUSED AIR CONDITIONING VENTS.

DO NOT INSTALL OUTDOORS, IN DIRECT SUN, DAMP, EXTREME HEAT AND/OR COLD CONDITIONS.

1. The appliance MUST be level, otherwise door(s) may not close and condensate may not drain properly.

- i. Position appliance on a relatively level floor.
 - ii. Level appliance front to back and side-to-side, rotating leveler legs provided.
2. Allow 1" (2.54 cm) clearance at rear of appliance for power cord.
 3. Appliance must be positioned with front grill unobstructed.

IN ORDER TO BE IN COMPLIANCE WITH NSF STANDARD 7, PLEASE EMPLOY ONE OF THE FOLLOWING MOUNTING OPTIONS

CABINET SEALED TO THE FLOOR – OPTIONAL

HABCO® Commercial Refrigerators are designed with flush bases to allow sealing to the floor where required. To seal the cabinet to the floor follow these procedures:

- i. Allow 1" (2.54 cm) clearance at rear of appliance for power cord. Disconnect power to cooler.
- ii. Level the cooler front to back and side to side.
- iii. Draw an outline of the base of the cabinet on the floor.
- iv. Lift cooler up.
- v. Apply an adequate amount of "NSF Approved Sealant" (Refer to <http://www.nsf.org/>) at about 0.5" (1.27 cm) inside the drawn outline.
- vi. Lower the cooler back down
- vii. Ensure that all gaps and openings between the bottom perimeter of the refrigerator and floor are sealed without gaps.
- viii. Connect the appliance to power.

CASTER KIT INSTALLATION - OPTIONAL

HABCO® Commercial Refrigerators may be equipped with an optional caster kit. To install caster kit, follow these procedures:

- ix. Disconnect power and lift the cooler up.
- x. Twist levelers counter-clockwise to loosen and remove.
- i. Install non-braking casters at rear of the refrigerator by threading into existing leveler leg hole.
- ii. Install braking casters at front of the refrigerator by threading into existing leg leveler hole. WHEN ROLLING REFRIGERATOR INTO POSITION, ENSURE THE FRONT CASTERS EXTEND OUTWARD FROM THE CABINET FACE.
- iii. Position the cooler according to HABCO Install Guide and connect power.
- iv. When in place, engage brakes on front casters.

LEG KIT INSTALLATION – OPTIONAL

HABCO® Commercial Refrigerators may be equipped with an optional leg kit to provide a minimum unobstructed clearance of 6.0 inches (150 mm) beneath the unit. To install leg kit, follow these procedures:

- v. Disconnect power and lift the cooler up.
- vi. Twist levelers counter-clockwise to loosen and remove.
- vii. Thread legs from kit into existing leveler holes.
- viii. Level the cooler front to back and side to side using the end of the leg to adjust.
- ix. Position the cooler according to HABCO Install Guide and connect power.

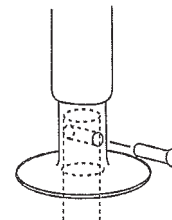
SECURITY/SEISMIC LEG KIT INSTALLATION – OPTIONAL

HABCO® Commercial Refrigerators and Freezers may be equipped with an optional security/seismic leg kit to provide a minimum unobstructed clearance of 6.0 inches (150 mm) beneath the unit and secure to the floor. To install leg kit, follow these procedures:

- i. If new appliance, remove leveler legs that fasten shipping pallet. Do not plug-in.
- ii. If existing appliance, disconnect power.
- iii. Lift appliance and securely block on all four sides at a height of 10".
- iv. If existing appliance, twist levelers counter-clockwise to loosen and remove.
- v. * Optional Seismic Restraint Option see below.
- vi. Thread legs, with flanged toe threaded into leg, into existing leveler holes.
- vii. Lower appliance to rest on flanged toe.
- viii. Gently position the cooler according to HABCO Install Guide.
- ix. Level the cooler front to back and side to side using the flanged toe end to adjust.
- x. Once leveled and positioned, fasten flanged toe end to floor through holes provided (floor mounting fasteners and anchors not supplied) according to local codes.
- xi. Connect power.

*** Optional Seismic Restraint Requirement:**

Easily modified to meet SMACNA seismic restraint requirement. First, drill a 16mm (5/8") hole in flanged toe to accommodate anchored rod (not provided). Then drill a 6mm (1/4") hole through the toe portion which allows the leg to be pinned (Pin not provided).



The information above is intended for reference purposes only. This install requires technical expertise beyond the scope of these instructions.

C. ELECTRICAL



WARNING: RISK OF DEATH, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR OTHER PERSONAL INJURY!

PLUG INTO A DEDICATED, 3 PRONG GROUNDED ELECTRICAL RECEPTACLE AND DO NOT USE EXTENSION CORDS, POWER BARS, AND/OR ADAPTERS TO POWER THIS APPLIANCE. IF IN DOUBT, EMPLOY A CERTIFIED ELECTRICIAN TO CONFIRM YOUR POWER SUPPLY MEETS CRITERIA.

DO NOT ALTER, IMPACT OR PLACE PRESSURE ON POWER CORD. ALLOW ADEQUATE SPACE FOR POWER CORD TO FLOAT FREELY BETWEEN CABINET AND WALL AND DO NOT STRAIN AND/OR STRETCH POWER CORD TO REACH ELECTRICAL RECEPTACLE.

INSPECT POWER CORD FOR ANY DAMAGE PRIOR TO POWERING AND WHENEVER HABCO® CASSETTE® IS EXCHANGED OR APPLIANCE IS MOVED. DO NOT PLUG THIS APPLIANCE INTO WALL RECEPTACLE IF POWER CORD IS DAMAGED.

DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMISSION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

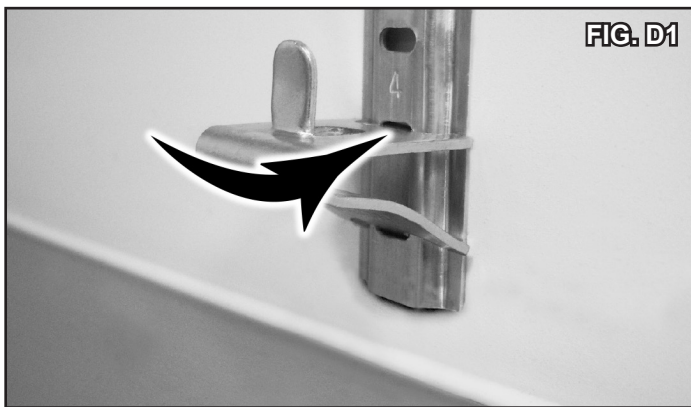
1. Check that the power supply conforms to the data plate located on the upper right interior wall of the cabinet.

D. START-UP

Tools Required: Phillips Screwdriver (Signage ESM42/46 and Curved Sign equipped appliances).

! NOTICE: NO PACKAGING MATERIAL IS LOCATED IN CASSETTE® CHAMBER! DO NOT REMOVE LOWER AIR FLOW GRILL WITHOUT READING AND UNDERSTANDING THIS MANUAL.

1. Ensure that you have received pieces supplied within cooler.
 - Corresponding number of shelves standard with appliance.
 - Corresponding number of shelf clips (four per shelf)
 - Safety, Installation and Instruction Manual
 - Door Handle with mounting screws (where applicable)
 - Illuminated Sign Fascia and Mounting Hardware (where equipped).
2. Install shelving in the desired location (Fig D1), top tab first, then snapping bottom tab securely into shelf pilaster. Shelf clips adjustable in 1/2" increments.



3. POWER UP APPLIANCE. Allow adequate time for appliance to pull-down to optimal temperature and load with product.

! NOTICE: RISK OF APPLIANCE DAMAGE!

APPLIANCE MUST BE RUN FOR A PERIOD OF 24 HOURS PRIOR TO USE.

DO NOT OVERLOAD CABINET WITH PRODUCT. LOADING PRODUCT HIGHER THAN THE LOAD LEVEL LINE. MAY RESULT IN RESTRICTED AIR CIRCULATION AND SUBSTANTIALLY REDUCED COOLING PERFORMANCE AND/OR FROZEN PRODUCT.

E. THERMOSTAT LOCATION & ADJUSTMENT

! WARNING: RISK OF DEATH, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR OTHER PERSONAL INJURY!

DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMISSION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

! NOTICE: RISK OF APPLIANCE DAMAGE! ELECTRO-MECHANICAL THERMOSTAT DIAL SETTING CHANGES MAY TURN REFRIGERATION SYSTEM OFF (90° COUNTER-CLOCKWISE) OR INCREASE REFRIGERATION TO FREEZING CONDITIONS (ANY ADJUSTMENT FURTHER CLOCKWISE). MICROPROCESSOR THERMOSTAT SETTING CHANGES MAY INCREASE REFRIGERATION TO FREEZING CONDITIONS. FREEZING CONDITIONS CAN DAMAGE REFRIGERATION SYSTEM AND COMPONENTS, AND MAY CAUSE PRODUCT LOSS. CHANGES TO THE THERMOSTAT DIAL SETTING SHOULD BE MADE BY A QUALIFIED PROFESSIONAL AFTER DISCONNECTING POWER TO APPLIANCE. ISSUES ARISING FROM ALTERATIONS OF FACTORY PRESET POSITION ARE NOT COVERED UNDER WARRANTY.

All HABCO® Cassette® models are preset at the factory to maintain 33°F (1°C) to 38°F (3.3°C). Your HABCO® will be equipped with either an Electro-Mechanical Thermostat (Fig E1 and E2) or, a Micro-Processor Thermostat (Fig E3). Thermostats are concealed to avoid tampering and located onboard the Cassette®, mid to upper left hand side and will require removal of lower grill (see Section G) to adjust thermostat. **Note: Follow Warnings noted previous in this section.**

E1. Electro-Mechanical Thermostat Equipped Models (R134 models):

Tools Required: Phillips Screwdriver (for lower grill removal only)
Long Shaft Slot Head Screwdriver

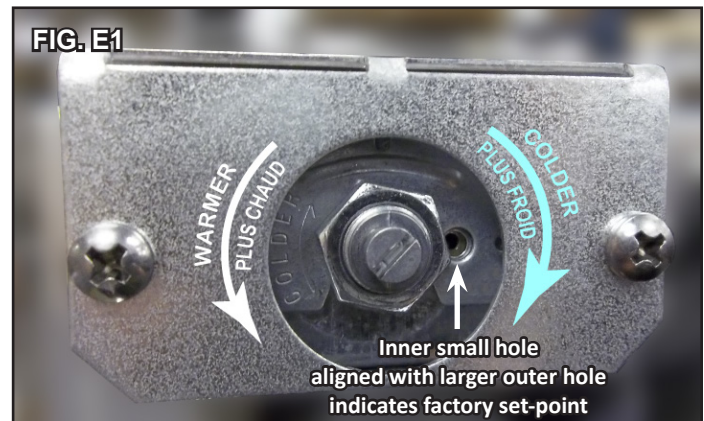


Image shown E1 is typical position of control with set screw at approximate 2 o'clock position. Factory set-point will be indicated by hole in hole alignment shown.

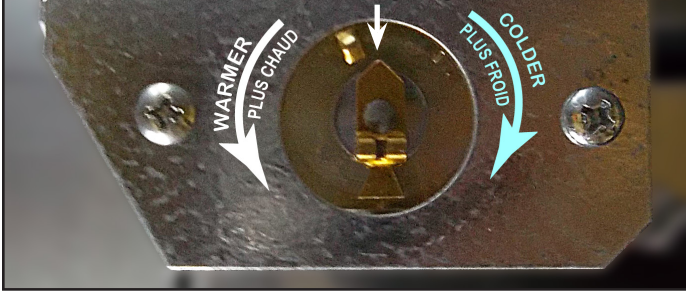
1. Insert slot head screwdriver into the notch of set screw. Turn as indicated to reduce refrigeration or increase refrigeration.

HABCO® recommends 1/8 diameter adjustments, if needed. After adjustment, it will take at minimum 2 hours for the cabinet temperature to stabilize at the new setting. For each adjustment, follow this procedure with waiting period thereafter.

E2. Electro-Mechanical Thermostat Equipped Models (R134 models):

Tools Required: Phillips Screwdriver (for lower grill removal only)
Long Shaft Slot Head Screwdriver

FIG. E2 Dial Arrow at approximate 12 o'clock position indicates factory set-point



Dial arrow will be at the 12 o'clock position.

1. Insert slot head screwdriver into the notch of arrow shaped indicator. Turn as indicated to reduce refrigeration or increase refrigeration.

HABCO® recommends 1/8 diameter adjustments, if needed. After adjustment, it will take at minimum 2 hours for the cabinet temperature to stabilize at the new setting. For each adjustment, follow this procedure with waiting period thereafter.

E3. Micro-Processor Thermostat Equipped Models (ESM14 and ESM28HC models):

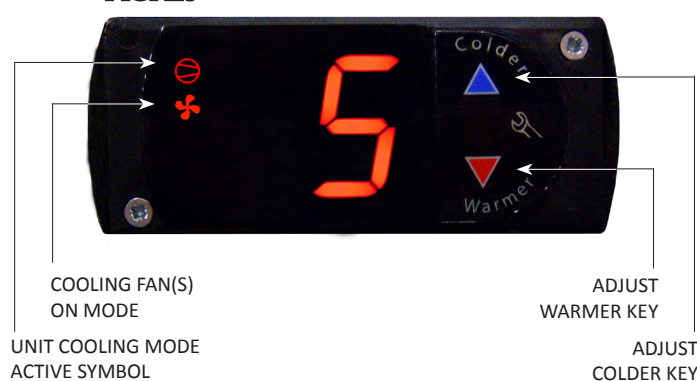
Tools Required: Phillips Screwdriver (for lower grill removal only)

Thermostat displays a numeric setting range. It is preset at mid-range numeral of "5" to maintain product temperatures at the factory preset.

1. Press RED or Blue arrow to adjust numeric setting.

HABCO® recommends a single numeral adjustment at a time, if needed. After adjustment, it will take at minimum 2 hours for the cabinet temperature to stabilize at the new setting. For each adjustment, follow this procedure with waiting period thereafter.

FIG. E3



F. LIGHTING

⚠ WARNING: RISK OF DEATH, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR OTHER PERSONAL INJURY!

DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMISSION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

MAINTENANCE AND REPLACEMENT OF LED LIGHT STRIPS AND RELATED DRIVER COMPONENTS TO BE PERFORMED BY A QUALIFIED TECHNICIAN ONLY.

1. ESM10/12/14/18/24 Light Switch is located on the right front face of the horizontal lighting assembly, as you face the appliance.
2. ESM28 Light Switch is located on the right front face of the vertical lighting assembly, as you face the appliance.
3. ESM42/46 Light Switch is located at the rear top of the center post above the lighting array.

G. CASSETTE® ACCESS & REMOVAL FOR STANDARD MAINTENANCE

⚠ WARNING: RISK OF DEATH, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR OTHER PERSONAL INJURY!

DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMISSION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

INSPECT POWER CORD FOR ANY DAMAGE PRIOR TO POWERING AND WHENEVER HABCO® CASSETTE® IS EXCHANGED OR APPLIANCE IS MOVED. DO NOT PLUG THIS APPLIANCE INTO WALL RECEPTACLE IF POWER CORD IS DAMAGED.

DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMISSION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

R290 SERVICE MANUAL AVAILABLE FROM HABCO MANUFACTURING INC.



DANGER: RISK OF FIRE OR EXPLOSION. FLAMMABLE REFRIGERANT USED. TO BE REPAIRED ONLY BY TRAINED SERVICE PERSONNEL. DO NOT USE MECHANICAL DEVICES TO DEFROST REFRIGERATOR. DO NOT PUNCTURE REFRIGERANT TUBING. R290 REFRIGERATION SYSTEM (CASSETTE) SHOULD ONLY BE USED IN A HABCO UNIT THAT IS DESIGNED AND APPROVED FOR R290.

⚠ WARNING: RISK OF PERSONAL INJURY!

EMPLOY BEST HEALTH AND SAFETY LIFTING PRACTICES WHEN INSTALLING CASTERS OR LEGS, REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.

DO NOT TILT OR PIVOT APPLIANCE WITH LEGS OR CASTERS INSTALLED. CABINET IS NOT STABLE WHEN BALANCED ON ONE OR TWO LEGS/CASTERS WHICH MAY LEAD TO PERSONAL INJURY, AS WELL AS CABINET DAMAGE.

USE CARE WHEN HANDLING OR CLEANING METAL PARTS. MUST WEAR PERSONAL PROTECTIVE EQUIPMENT (PPE)!

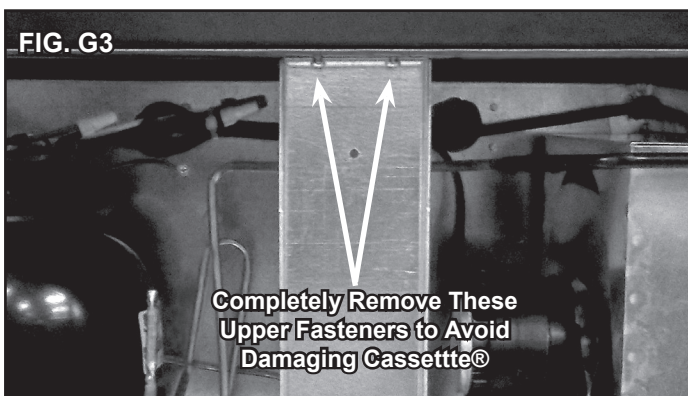
1. To access Cassette® loosen two bolts located on the lower kick plate of the air flow grill (Fig G1).



2. Then remove two screws located in flange at the top of air flow grill. Grill will lift up and off the bottom screws (Fig G2).



- i. Double Door Added Step (Not applicable to ESM14 models)
Double Door Cassette® models feature added support in the form of a bracket located between the Cassette® base and the Cassette® chamber ceiling. To remove the Cassette® from these models completely remove upper fastening screws, and slide Cassette® out of cabinet. Bracket will remain affixed to Cassette® (Fig G3).

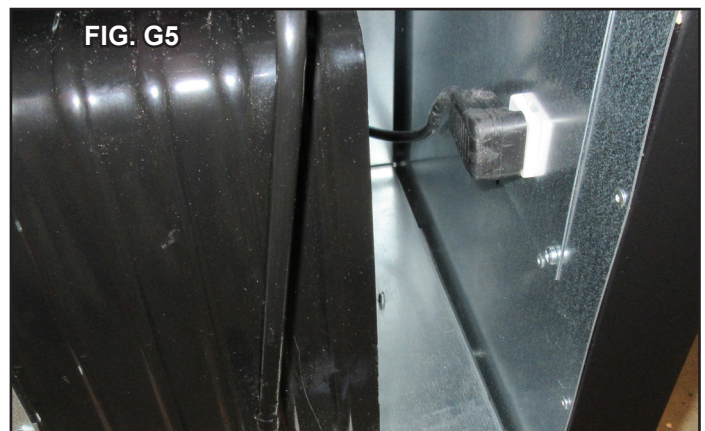


- ii. ESM14SL Models

ESM14SL Cassette® is secured with screws in Cassette® side flanges (Fig G4). Locate and remove.



3. Disconnect the Cassette® from receptacle upper right wall of Cassette® chamber (Fig G5).

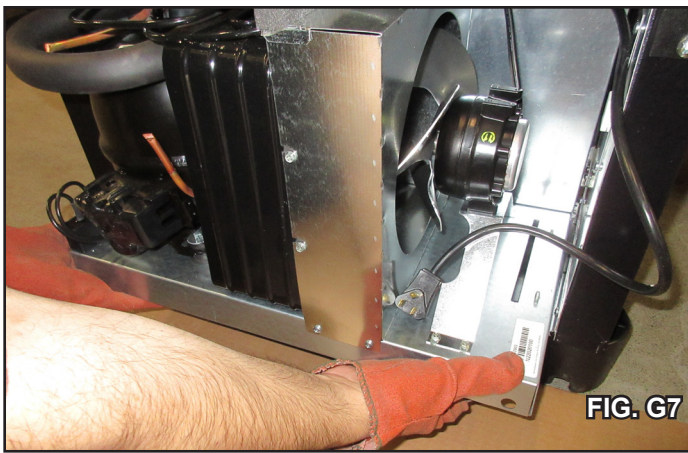


- i. ESM14SL Models

Cassette® power cord is plugged into a molded harness on the left wall of cabinet within the Cassette® compartment. Locate and disconnect (Fig G6).



4. Grasp platform of the Cassette® ensuring power cord is clear, and gently slide out (Fig G7).



5. Use of hand cart to transport the Cassette® is recommended to minimize undue lifting.

! NOTICE: RISK OF APPLIANCE DAMAGE! AFTER ACCESSING REFRIGERATION OR ANY OTHER MECHANICALLY FASTENED AREAS OF THE APPLIANCE, RE-FASTEN SECURELY.

H. DOORS AND ELECTRONIC DOOR LOCKS

! WARNING: RISK OF DEATH, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR OTHER PERSONAL INJURY!

DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMISSION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

! WARNING: RISK OF PERSONAL INJURY!

EMPLOY BEST HEALTH AND SAFETY LIFTING PRACTICES WHEN INSTALLING CASTERS OR LEGS, REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.

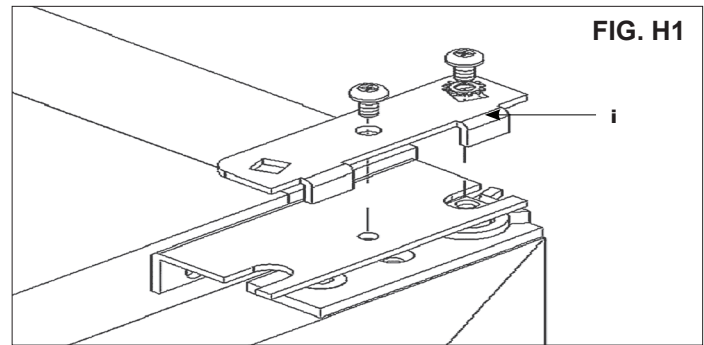
DO NOT TILT OR PIVOT APPLIANCE WITH LEGS OR CASTERS INSTALLED. CABINET IS NOT STABLE WHEN BALANCED ON ONE OR TWO LEGS/CASTERS WHICH MAY LEAD TO PERSONAL INJURY, AS WELL AS CABINET DAMAGE.

! NOTICE: HABCO® WARRANTS FACTORY DOOR REVERSAL ONLY. ANY ISSUES AND SUBSEQUENT SOLUTIONS ARISING FROM FIELD REVERSED DOORS ARE THE RESPONSIBILITY OF THE CUSTOMER. DOOR ADJUSTMENTS ARE NOT COVERED UNDER WARRANTY. INSPECT DOOR HARDWARE FOR WEAR WHEN REVERSING OR SERVICING.

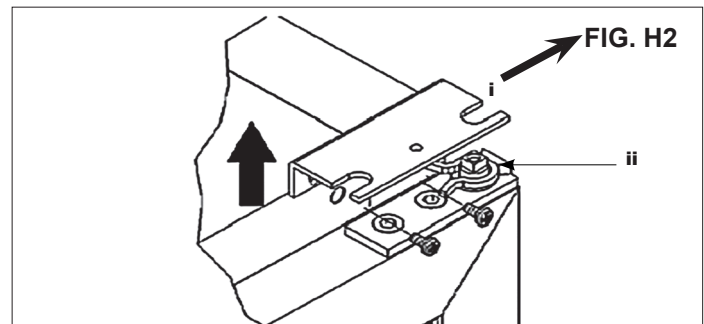
Easy Mount Swing Door Reversal

Door is mounted at factory with handle on left hand side and hinge on right side.

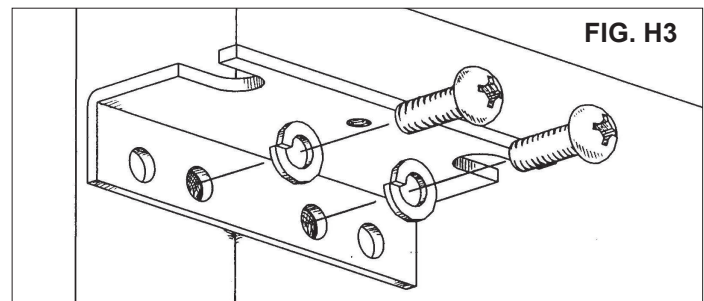
1. Remove Lower Grill and Sign/Header Assembly – if applicable.
2. Door closed remove hinge tensioning bracket (Fig H1i) and save two top retaining screws and one star washer (See Fig H1). Note: Though door gasket magnet will hold door in place, ensure unfastened door is secured from disengaging from cabinet.



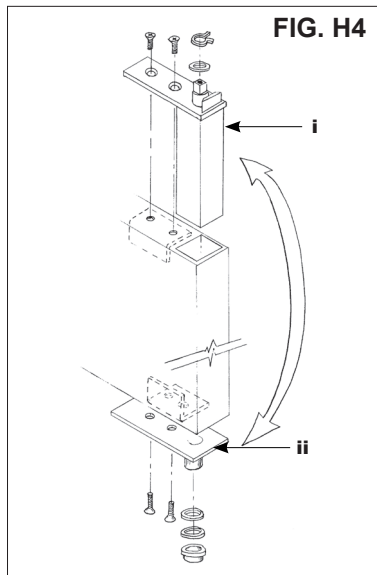
3. Tilt door sideways out of the upper cabinet mounted bracket notch (Fig H2i) and lift to remove door bottom pivot pin from lower mounting bracket. Save nylon washers, upper bushing and stop spring from hinge shaft as shown in (Fig H2ii) and any nylon washers from bottom door pivot pin.



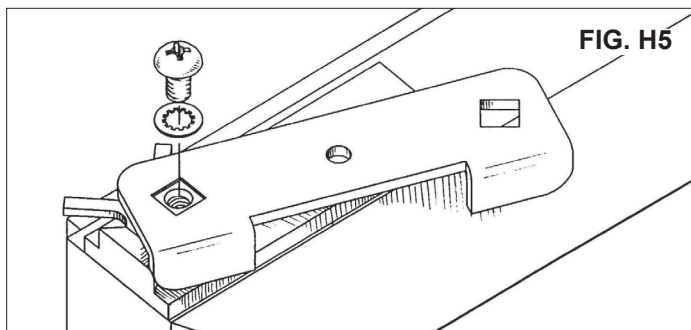
4. Remove upper cabinet mounted bracket and refasten screws to the opposing side of the cooler (Fig H3). Remove lower cabinet mounted bracket and re-install to opposing side of the cooler. Ensure nylon bushing remains in place in lower mounting bracket hole.



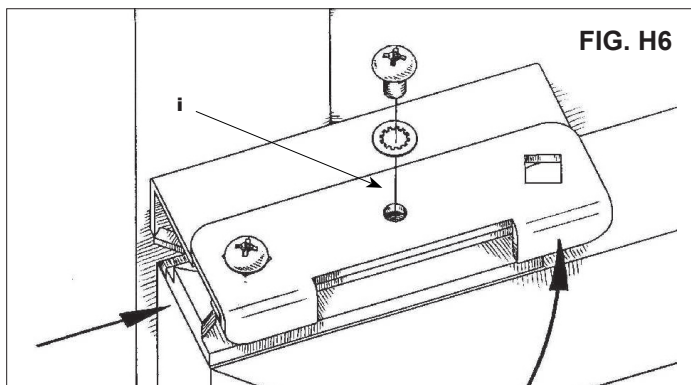
5. On the door, reverse door hinge (Fig H4i) and bottom pivot plate (Fig H4ii). Note: Floating steel fastening plates are installed inside door frame to fasten hinge and bottom pivot plate securely to door. To ensure door hardware is refastened securely, stand door upright and tilt towards hinge side. Floating steel fastening plates will slide into place (can be seen through mounting holes in door when in position). Refasten both Pivot Plate and Hinge.



6. Rotate door 180° to opposing hinge position. Door hinge now at top left with handle on right side.
7. Place nylon washer on lower door pivot pin. Position the lower door pivot pin with washer into the lower mounting bracket bushing.
8. Place nylon washer and stop spring onto hinge post. Position door hinge post in the upper cabinet mounted bracket, sliding the hinge post into outer notch located on the cabinet mounted bracket.
9. Door in position, reinstall hinge tensioning bracket onto the square portion of the hinge post at 45° angle from face of cabinet (Fig H5).



10. Push hinge tensioning bracket into tensioned position (flush to face of cabinet mounted bracket) and fasten securely with set -screw (center hole of the hinge tensioning bracket (Fig H6i)).



- a. Ensure door is mounted properly. Open the door 10° and it should close by itself.

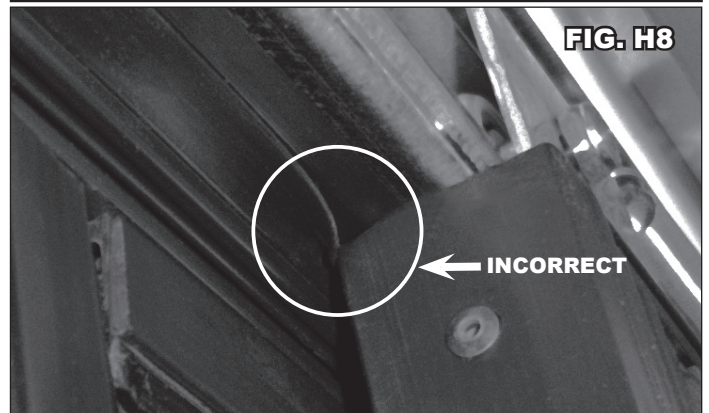
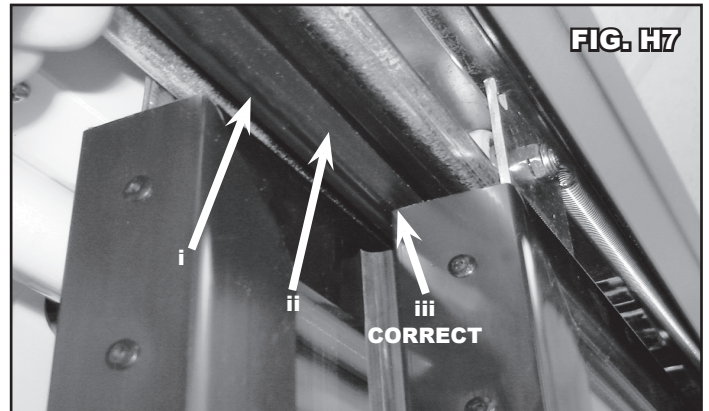
- b. Reinstall lower air flow grill and sign header assembly in place, if applicable.
- c. Restore power to appliance.

Sliding Door Removal and Adjustment

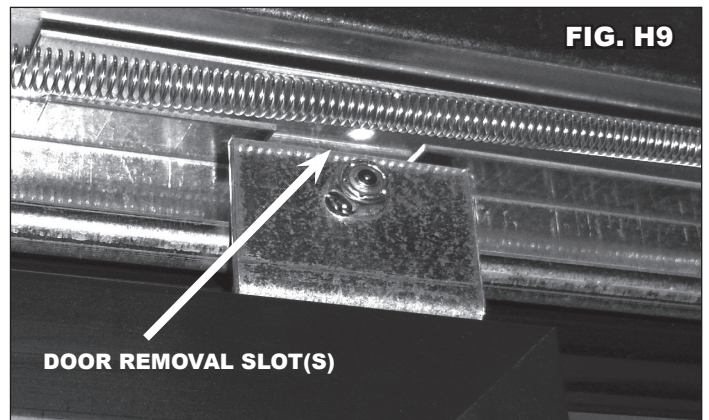
Instructions below outline removal of HABCO® Sliding Doors for maintenance and door roller skew adjustment. Periodically, door skew may require adjustment due to use and settling of cabinet.

Sliding Door Removal:

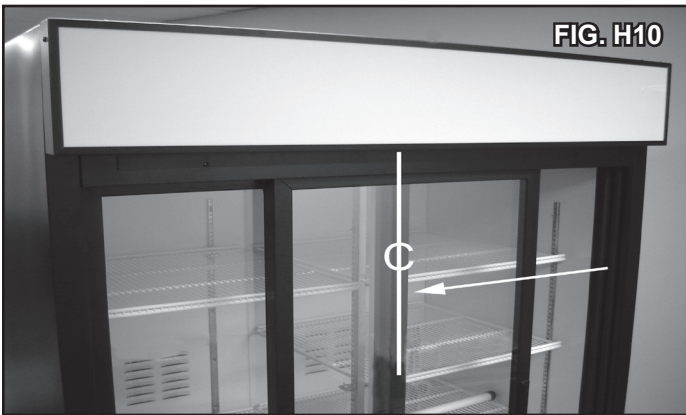
1. Looking up under the upper rail cover where the two sliding doors meet in the center, make note of how the "V" shaped door track sealer strip (Fig H7i), freely rests atop inner (Fig H7ii) and outer door frame (Fig H7iii) edges to create a seal. Ensure that sealer strip does not curl over and bind against the vertical surface of door frame (Fig H8).



2. Standing in front of left hand sliding door, identify door roller removal slot as this is where you will index the door roller (Fig H9).



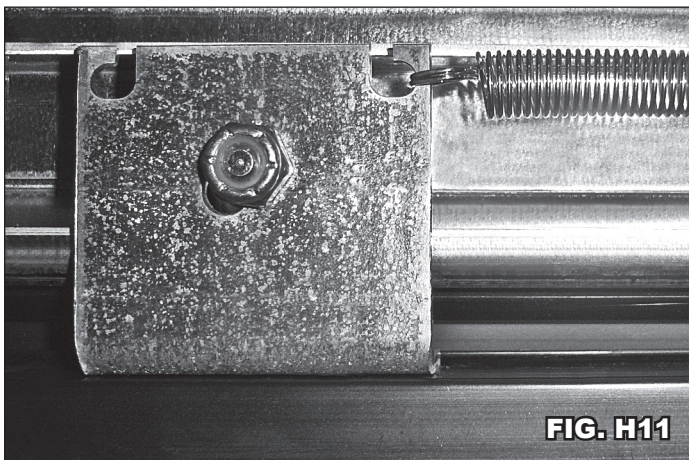
3. Move right hand door to center position within cabinet door opening (Fig H10).



4. Grasping right hand door firmly, one third from top, lift door upward and out off top track, then swing the door bottom up and away from bottom track.
5. Remove door from cabinet, down and away, resting against right front wall.
6. Remove inner, left door, in the same manner except rather than lifting up and out off track, lift door rollers up and swing bottom of door into cabinet. Tilt door, lifting and resting against left front wall.

Correct Door Closure Spring Orientation:

Right hand door closure spring must be installed on the right hook of the left roller bracket (as shown Fig. H11). Conversely, the left hand door closure spring must be installed on the left hook of the right roller bracket.



Sliding Door Reinstallation:

1. Review door removal steps.
2. Grasping right hand door firmly, one third from top, lift door into center position within cabinet opening.
3. Tilting the top of door inward, lift it upward onto upper track using roller slots for adequate clearance. Still grasping the door firmly, swing the bottom into the lower track.
4. Ensure that both rollers are seated into the door track at top, and door bottom is contained within bottom track.
5. Inspect upper horizontal top door track "V" shaped sealer strip to ensure that it is not binding, but freely resting atop inner and outer door frame edges to create a seal (Fig H7).

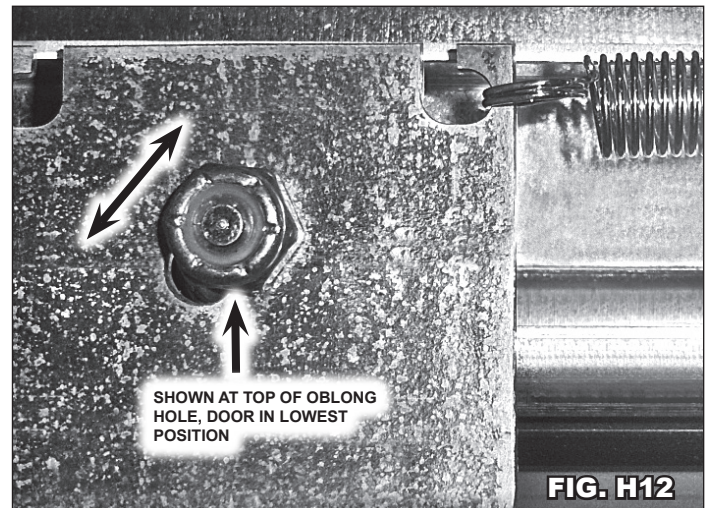
6. Test both inner and outer doors to ensure they do not bind. If there is resistance on opening or closure, then check:
 - a. rollers are seated into upper door track;
 - b. upper horizontal top door track "V" shaped sealer strip is freely resting on inner and outer door frame edges (should move left and right, up and down slightly when shaken);
 - c. door frame(s) is positioned within bottom "W" track.

Sliding Door Skew Adjustment:

HABCO® sliding doors have a skew adjustment feature.

Tools Required: Adjustable Wrench 3/16" Allen Key

1. Locate roller track cover at top of appliance above doors. Remove screws located on both walls and ceiling behind roller track cover.
2. Remove doors, following instructions within this section.
3. Adjustable mounting brackets are pre-installed at the lowest setting and tested for fluid motion prior to packaging. At the lowest setting, the door hangs at the lowest point relative to the bottom track of the cabinet (Fig H12).
4. Using wrench and Allen key reposition rollers, on one door first, to the mid-point setting. Reinstall door with spring and check that there is no interference between the bottom of door and bottom "W" track. If the door rides freely above the bottom of the track, adjust the second door similarly, and reinstall.
Note: Adjustment of door roller should only be made to mid-point setting or mounting screw heads will interfere with reinstallation.
5. Reinstall the roller panel cover with existing screws.



Electronic Door Locks:



ATTENTION! PLEASE READ THIS FIRST

To ensure proper start-up, follow the steps below:

1. Plug unit to power
2. Open control access panel and turn battery switch beside digital control to ON (FIG. H13a and FIG. H13b)
3. Digital Control will display "od" (operating delay) for 4 minutes. When display changes from "od" to "loc"(locked), press and hold the ↑ and ↓ buttons on control simultaneously for 5 seconds
4. Unit is now unlocked and in Service "ser" mode for 30 minutes



FIG. H13a



FIG. H13b

CHANGING SET POINT ON ESM28HC-HL, ESM28HCTD-HL CONTROLS:

1. Press P button once, "SP" will show up followed by the current set-point (refrigerator 'turn off' temperature).
2. Adjust the set-point using up and down arrows to desired value. Options are limited by a predetermined range.
3. Press P button once to set the new value.

Important Operating Instructions

Warning:

- Do not load warm product into the unit.
- Allow 24 hours for the unit to run before loading it with cold product.
- **KEEP THESE INSTRUCTIONS IN A SAFE PLACE FOR FUTURE REFERENCE**

Battery:

Back-up battery pack (mounted on inside of grill) allows control to monitor products and engage health lock if products spoils during a power failure. Steps below must be followed to preserve life expectancy of batteries.

- Turn on the battery pack when the unit is turned on
- Turn off the battery pack when the unit is turned off (except during power failure)

To ensure uninterrupted battery back-up, manufacturer recommends replacement of batteries once a year.

Emergency Door Unlock:

An alternative method of manually opening the door lock is to insert any key into the slot on side of refrigerator by the door lock. Insert straight in, hold firmly and push downwards as shown in Figure H14.

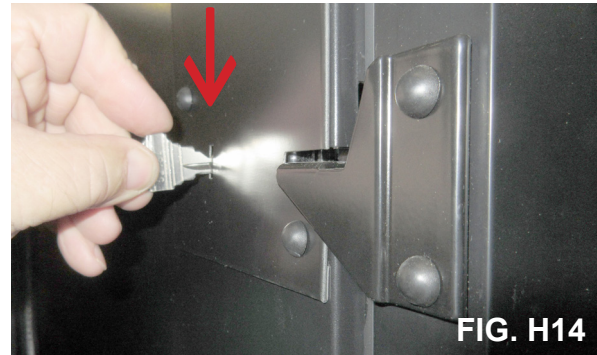


FIG. H14

Note:

"loc" and "H1/H2" will still be displayed if above alternative method is applied.

Control Display Glossary:

"39.8" (or similar number) – Displayed when unit is in normal operating mode. The number displayed identifies the average product temperature inside refrigerator.

"loc" – Locked – Displayed following Operating Delay on initial start up or following a high temperature event (unit reached 41F or higher for 30 minutes or longer).

To unlock, press the "Up" and "Down" buttons on control simultaneously for 5 seconds or follow the Emergency Unlock procedure as above.

"od" – Operating Delay – Displayed for 4 minutes upon initial power up of unit.

"op" – Door Open – Displayed while door is open (or when door did not fully close after access to refrigerator).

"ser" – Service Mode – Displayed after pressing the "Up" and "Down" buttons on control simultaneously for 5 seconds. Service mode allows the loading/unloading of products without triggering the high temperature alarm and health lock by delaying the health lock timer by an extra 30 minutes.

"H1/H2" - One or both of these alarms will display during a high temperature event until service mode is triggered.

Lock Function Field Evaluation:

- Make sure the door is unlocked, and if not, press and hold the up & down arrow buttons together for 4 seconds to unlock it. Note: if the unit displays 'od', wait until 'od' is no longer displayed (should be 4 minutes or less)
- Make sure the battery switch is off (O position)
- Unplug the unit, wait 1 minute, and turn the unit back on. The door should lock right away

I. PREVENTATIVE MAINTENANCE

⚠ WARNING: RISK OF DEATH, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR OTHER PERSONAL INJURY!

DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMISSION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

⚠ WARNING: RISK OF PERSONAL INJURY!

EMPLOY BEST HEALTH AND SAFETY LIFTING PRACTICES WHEN INSTALLING CASTERS OR LEGS, REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.

DO NOT TILT OR PIVOT APPLIANCE WITH LEGS OR CASTERS INSTALLED. CABINET IS NOT STABLE WHEN BALANCED ON ONE OR TWO LEGS/CASTERS WHICH MAY LEAD TO PERSONAL INJURY, AS WELL AS CABINET DAMAGE.

EMPLOY BEST HEALTH AND SAFETY PERSONAL PROTECTION PRACTICES AND ADHERE TO MANUFACTURER'S WARNINGS WHEN USING TOOLS AND CLEANING AGENTS.

USE CARE WHEN HANDLING OR CLEANING METAL PARTS.

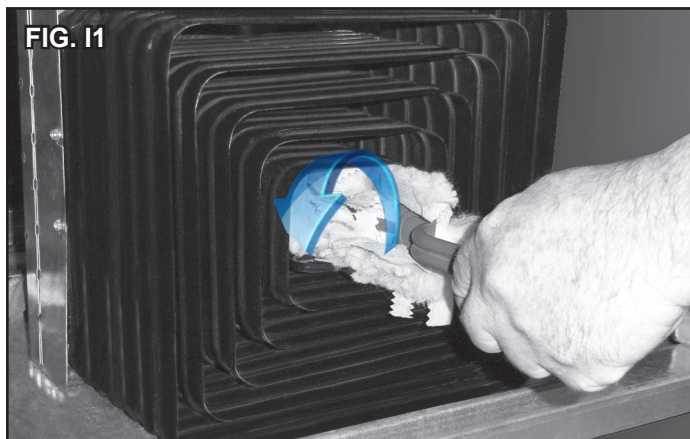
! NOTICE: RISK OF APPLIANCE DAMAGE!
MAINTAIN A CLEAN CONDENSER COIL (BOX-SHAPED COMPONENT LOCATED BEHIND THE LOWER GRILL) TO PREVENT DAMAGE TO REFRIGERATION PARTS AND POOR PERFORMANCE NOT COVERED UNDER WARRANTY. QUALIFIED PROFESSIONAL TO DISCONNECT APPLIANCE FROM ELECTRICAL RECEPTACLE PRIOR TO REMOVING AIR FLOW GRILL FOR MAINTENANCE OR SERVICE.

USE ONLY MILD ANTI-BACTERIAL, NON-ABRASIVE 'DISH SOAP' DETERGENT AND SOFT CLOTH OR BRISTLE BRUSHES FOR CLEANING YOUR APPLIANCE. FOR STUBBORN RESIDUE, SUCH AS GREASE BUILD-UP ON CONDENSER (HEAT-EXCHANGE) COIL, EMPLOY THE SERVICES OF A QUALIFIED PROFESSIONAL.

Free&Clear™, Finless Condenser Coil



Commercial Refrigerators require the grill to be removed for condenser (heat-exchange) coil cleaning (Fig I1). All refrigeration devices require thorough cleaning of the condenser coil (heat exchange coil located behind the lower grill on Commercial Refrigerators). Visually inspect the condenser coil for build-up of grease, floor wax, dust and lint weekly. At minimum, cleaning should be completed on a monthly basis. Use a dusting wand (Fig I1) and a vacuum with soft bristle nozzle.



If the build-up proves to be too difficult to manage, please contact a qualified professional.

Combating Odors:

-An open box of baking soda placed on a shelf at the rear of the cabinet will help prevent odors. The box should be replaced every three months.

-Maintain clean cooler, inside and out, at all times.

J. CLEANING PROCEDURES

⚠ WARNING: RISK OF DEATH, FIRE, EXPLOSION, ELECTRICAL SHOCK AND/OR OTHER PERSONAL INJURY!

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DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

⚠ WARNING: RISK OF PERSONAL INJURY!

USE ONLY MILD ANTI-BACTERIAL, NON-ABRASIVE 'DISH SOAP' DETERGENT, AND SOFT CLOTH (OR BRISTLE BRUSHES WHERE SPECIFIED) FOR CLEANING YOUR APPLIANCE. FOR STUBBORN RESIDUE, SUCH AS GREASE BUILD-UP ON CONDENSER (HEAT-EXCHANGE) COIL, EMPLOY THE SERVICES OF A QUALIFIED PROFESSIONAL.

USE CARE WHEN HANDLING OR CLEANING METAL PARTS.

! NOTICE: RISK OF APPLIANCE DAMAGE! AFTER ACCESSING REFRIGERATION OR ANY OTHER MECHANICALLY FASTENED AREAS OF THE APPLIANCE, RE-FASTEN SECURELY.

- i. Interior Cabinet Cleaning: A mild mixture of anti-bacterial detergent and warm water with a soft cloth may be used. Rinse and dry thoroughly.
- ii. Interior Stainless Steel Cleaning: For general cleaning of the stainless steel floor please follow instructions in section (I) noted above.
- iii. Evaporator Chamber Cleaning: Refrigeration Cassette® must be removed according to Section G of this manual. A mild mixture of anti-bacterial detergent and warm water with a soft cloth, may be used to clean the general surfaces within the appliance evaporator chamber. Rinse and dry thoroughly. Inspect foam gaskets located on cold air side of insulated Cassette® bulkhead for any signs of bacterial contamination (decomposition and/or odor) . If contamination is at all prevalent, the foam gaskets must be replaced. Call for service.
- iv. Cleaning Condensate Drain Tubes: Refrigeration Cassette® must be removed according to Section G of this manual. Condensate drain tubes run from the evaporator pan to the condensate pan on all HABCO® Cold Space Merchandiser® models.

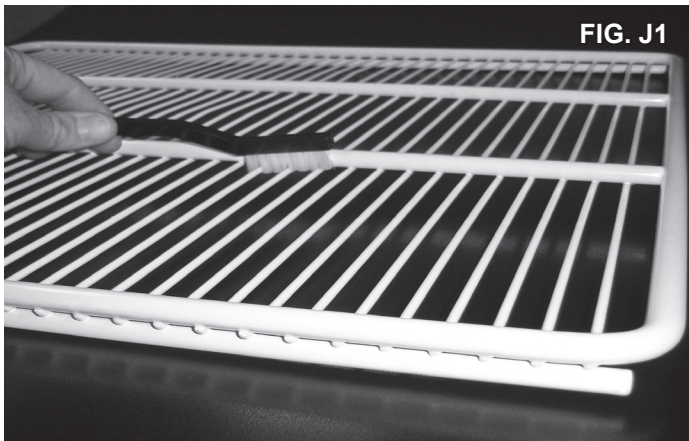
! NOTICE: RISK OF APPLIANCE DAMAGE! DO NOT PUSH, LEAN-ON OR FORCE STAINLESS STEEL TUBE EXTENDING FROM CABINET IN THE CASSETTE® REFRIGERATION CHAMBER. DO NOT FORCE REFRIGERATION CASSETTE® WHEN REINSTALLING. SLIDE INTO PLACE GENTLY.

- v. Place a pan beneath the condensate-tray-end of the stainless steel tube. Remove debris with a nylon soft bristle, bottle brush soaked in anti-bacterial detergent and warm water. Flush with a mild mixture of antibacterial detergent and warm water several times to remove debris or residue. Rinse thoroughly.

- vi. **Cleaning Refrigeration Cassette® & Seals:** A mild solution of anti-bacterial detergent and warm water with a damp cloth or sponge should be used to clean foam gaskets within the evaporator chamber, and rubber Cassette® compression gaskets. Do Not Pull, Remove, Place Undo Stress on, or Submerge Cassette® or Gaskets while cleaning. Dirt, abrasion and cleanser residue will reduce suppleness of gaskets. Cleaning these items will enhance product life. HABCO® does not otherwise recommend cleaning of the refrigeration Cassette® except for procedures outlined under “Preventative Maintenance Procedures”, unless performed by a Qualified Professional.
- vii. **Shelf Cleaning:** Remove shelf from cabinet. Using soft cloth with mild solution of antibacterial detergent and warm water, wash shelf by hand.

! NOTICE: RISK OF APPLIANCE DAMAGE! DO NOT SOAK SHELF IN ANY LIQUIDS OTHER THAN WATER AND DETERGENT.

For areas of shelf where cloth cannot fully reach, use brush (HABCO® P/N C097589) with soap solution to remove any remaining contaminants (see Figures J1 and J2). Once all contaminants are removed, rinse and dry thoroughly with soft cloth. Allow shelf to air dry completely before returning it to cabinet.



- viii. **Glass Cleaning:** For everyday glass cleaning, a 50:50 Vinegar & Water mixture is recommended.
- ix. **Sliding Door Channel Cleaning:** Sliding door channels should be vacuumed daily to remove debris, which may hinder smooth operation. Use a mild solution of anti-bacterial detergent and warm water with a soft damp cloth for cleaning. For stubborn residue, gently massage with soapy solution and a soft bristle nylon brush.

Occasionally, syrup or food products may dry and harden in the tracks impeding the operation of the doors. Remove Immediately! Improper door closure will tax the refrigeration system, increase energy consumption, and may cause excessive condensation. Failure to maintain unobstructed door closure will lead to damage not covered by HABCO® Limited Commercial Warranty.

- x. **Cleaning the Magnetic Positive-Seal Gasket:** A mild solution of anti-bacterial detergent and warm water with a damp cloth or sponge should be used to clean all appliance door gaskets. Do Not Pull, Remove, Place Undo Stress on, or Submerge Any Door Gaskets While Cleaning.
- xi. **Pilaster Removal for Cleaning:** Remove product and shelving. Remove each pilaster strip and clean beneath. Replace pilasters.
- xii. **Air Distribution Panel and Air Circulation Duct Cleaning:** Remove screws on pilaster strips and on rear Air Distribution Panel. Carefully remove the pilaster strips and the rear Air Distribution Panel ensuring that edges do not scratch interior surfaces. Sanitize all general surfaces on the Air Distribution Panel and Air Circulation Duct. A mild mixture of anti-bacterial detergent and warm water with a soft cloth may be used. Rinse and dry thoroughly. Reinstall Air Distribution Panel and pilaster strips.

- xiii. **Preparing the Refrigerator for Extended Shutdown & Storage:**



WARNING: RISK OF ENTRAPMENT! WHEN STORING, ENSURE THAT DOOR IS BLOCKED SLIGHTLY AJAR, BUT SECURED NOT TO OPEN.



NOTICE: RISK OF APPLIANCE DAMAGE! DO NOT STORE OUTDOORS, IN DIRECT SUN, DAMP, EXTREME HEAT AND/OR COLD CONDITIONS.

Disconnect power to refrigerator. Clean thoroughly following section J instructions. Remove shelving and clean according to instructions. Leave an open box of baking soda inside with door blocked slightly ajar, but secured not to open. Cover entire refrigerator with appropriate, breathable cover.

K. TROUBLE-SHOOTING

Prior to calling for service, check the following:

- Is the appliance plugged-into dedicated, grounded 3 prong wall receptacle?
- Is the circuit breaker thrown or fuse blown?
- Is there adequate power?
- Is the circuit prone to power fluctuations?
- Are there other appliances on the same circuit drawing power?
- Has an extension cord, power bar or adapter, been improperly used to connect power?
- Is the appliance overloaded with product?
- Is there adequate ventilation?
- Is the condenser plugged with grease and/or dirt?
- Are the doors closing properly?
- Do the gaskets seal snugly?
- Is the lower guide track free from debris and spillage?
- Are the shipping pods/shipping pallet removed and is the appliance level?

Information to Provide to Qualified Service Professional:

- Serial Number of appliance (upper left interior wall);
- Appliance Installation Address and Contact Information;
- Installation Location Hours of Operation;
- Nature of Problem;
- Any reports of power interruptions;
- Recent service or maintenance completed on appliance;
- Has the appliance been relocated from original installation;
- Clear access to the appliance;
- Safety, Installation and Instruction Manual.