



SAFETY, INSTALLATION AND INSTRUCTION MANUAL Commercial Refrigerators





Made In Canada

501 Gordon Baker Road, Toronto, Ontario Canada M2H 2S6 Tel: 416-491-6008 Fax: 416-491-6982

Toll Free in Canada: 1-800-387-5398 Toll Free in U.S.A: 1-800-448-0244

www.habcotech.com

	£			

HABCO® COMMERCIAL REFRIGERATORS-CASSETTE® SAFETY, INSTALLATION AND INSTRUCTION MANUAL

CABINET MODELS: SE18, SE24, SE28, SE40e, SE42, SE46
"HC" Suffix indicates R290 refrigerant.



HABCO Management Systems are Certified to ISO 9001-2015

A 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® Commercial Refrigerators are designed for the commercial refrigerated storage and display. Not intended for use in outdoor, direct sun, damp, extreme heat and/or cold conditions.

Glossary

Term

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.

Table of Contents

Cubicat

Section	Subject	<u> Page</u>
	INFORMATION AND TABLE OF CONTENTS	2
	SAFETY	3
A.	INSPECTION & UNPACKING	4
B.	LOCATION	4
C.	ELECTRICAL	4
D.	START-UP	5
E.	THERMOSTAT LOCATION & ADJUSTMENT	5
F.	LIGHTING	6
G.	CASSETTE® ACCESS & REMOVAL	6
H.	DOORS	7
	Easy Mount Swing Door Reversal	7
	Sliding Door Removal and Adjustment	8
l.	PREVENTATIVE MAINTENANCE	10
J.	CLEANING PROCEDURES	10
K.	TROUBLE-SHOOTING	12



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.
- 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 or high humidity sources such as heating vents, baseboard heaters, ranges, and ovens, steam cookers, commercial dishwashers.
- Do not install directly beneath undiffused air conditioning vents
- Read, understand and observe Safety Warnings and Notices in this manual as many of these points will also contribute to energy savings and appliance efficiency.

Explanation/Alternate Term



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



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.
- DO NOT INSTALL OUTDOORS, IN DIRECT SUN, DAMP, EXTREME HUMIDITY, 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 REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; MOVING OR LIFTING
 CASSETTE®; MOVING OR LIFTING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.
- 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.
- HOLD DOOR AGAINST CABINET WHILE REMOVING BRACKET AND FASTENERS. MAGNETIC DOOR GASKET WILL ASSIST. REMOVAL OF THE SET-SCREW WILL LEAVE DOOR UNSECURED.
- PERSONAL PROTECTIVE EQUIPMENT (PPE) ARE REQUIRED WHEN SERVICING ANY PART OF THE APPLIANCE:



ļ

NOTICE

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

- DO NOT LOCATE APPLIANCE IN DIRECT SUNLIGHT OR IN CLOSE PROXIMITY TO HIGH HEAT OR HIGH HUMIDITY SUCH AS FRYERS, RANGES, DISHWASHRS, STEAM COOKERS 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 OVERLOAD CABINET WITH PRODUCT AND/OR LOAD PRODUCT HIGHER THAN THE LOAD LEVEL LINE, LOCATED ON LEFT HAND INTERIOR WALL.
 DO NOT OBSTRUCT AIR-RETURN GRILLS LOCATED INSIDE CABINET NEAR THE LOWER LEFT AND RIGHT OF THE REAR AIR DISTRIBUTION PANEL. DO NOT OBSTRUCT EXTERIOR, LOWER FRONT GRILL. FAILURE TO COMPLY WILL RESULT IN RESTRICTED AIR CIRCULATION, SUBSTANTIALLY REDUCED COOLING PERFORMANCE, FROZEN PRODUCT AND VOID WARRANTY. FAILURE TO COMPLY MAY RESULT IN RESTRICTED AIR CIRCULATION, SUBSTANTIALLY REDUCED COOLING PERFORMANCE AND DAMAGE TO REFRIGERATION COMPONENTS.
- THERMOSTAT SETTING CHANGES MAY INCREASE REFRIGERATION TO FREEZING CONDITIONS. FREEZING CONDITIONS CAN DAMAGE REFRIGERATION
 SYSTEM AND COMPONENTS, AND MAY CAUSE PRODUCT LOSS. ISSUES ARISING FROM ADJUSTMENTS OR CORRECTIONS DUE TO ADJUSTMENTS OF THE
 THERMOSTAT FACTORY PRESET TEMPERATURE IS 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 AND EVENLY, APPLYING EQUAL PRESSURE TO EACH SIDE OF CASSETTE®.
- 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 USE CORROSIVE AGENTS SUCH AS SOLVENT OR ACID TO CLEAN THE FREEZER. DO NOT USE ABRASIVE CLOTHS OR CLEANSERS.
- 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 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 THIS LIMITED COMMERCIAL WARRANTY.

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

HABCO® Commercial Refrigerators, 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

- 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.
- Advise your carrier, or HABCO (if shipped via our transport) of any damage immediately, noting the following items.
- 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.
- 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.

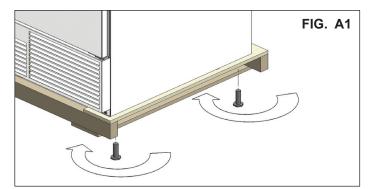
Shipping Platform Removal:



WARNING: RISK OF PERSONAL INJURY! EMPLOY BEST HEALTH AND SAFETY LIFTING PRACTICES WHEN REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.

Shipping Pallet - Commercial Refrigeration - FIG A1

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.



CASTER KIT INSTALLATION - OPTIONAL

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

- Install non-braking casters at rear of the refrigerator by threading into existing leg leveler hole.
- 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 OUT-WARD FROM THE CABINET FACE.
- When in place, engage brakes on front casters.

B. LOCATION

- Position appliance on level floor. The appliance MUST be level, otherwise door(s) may not close and condensate may not drain
- Allow 1" (2.54 cm) clearance at rear of appliance for power cord.



WARNING: RISK OF FIRE, AND ELECTROCUTION!

DO NOT ALTER, IMPACT OR PLACE PRESSURE ON POWER CORD. AL-LOW 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 DIS-PENSING FLAMMABLE AND/OR EXPLOSIVE MATERIALS OCCUR.

- Appliance must be positioned with front grill unobstructed.
 - 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 COOL-ING PERFORMANCE AND DAMAGE TO REFRIGERATION COMPONENTS AND VOID WARRANTY.

DO NOT LOCATE APPLIANCE IN DIRECT SUNLIGHT OR IN CLOSE PROXIM-ITY TO HIGH HEAT OR HIGH HUMIDITY SUCH AS FRYERS, RANGES, DISH-WASHRS, STEAM COOKERS AND/OR HEATING DUCTS

DO NOT INSTALL DIRECTLY BENEATH UNDIFFUSED AIR CONDITION-

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

C. ELECTRICAL



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

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

DO NOT ALTER, IMPACT OR PLACE PRESSURE ON POWER CORD. AL-LOW 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 PERMIS-SION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

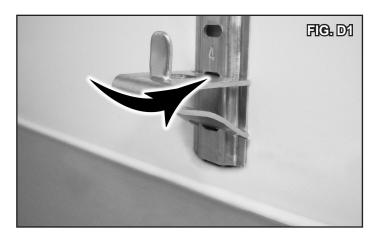
DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.

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

D. START-UP

Tools Required: Phillips Screwdriver (Glass Swing Door Models).

- 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)
- Install Door Handle (where applicable). Remove screws from handle supplied. Locate interior door frame mounting holes beneath
 the rubber gasket flap, and insert the screws outward so that the
 screw-ends protrude on the outside of the door frame. Insert handle positioning pins in upper and lower holes, and fasten screws to
 handle.
- 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.



- 4. 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: DIGITAL THERMOSTAT ADJUSTMENT FROM SPECIFIC PARAM-ETERS OUTLINED IN THIS GUIDE MAY CAUSE PRODUCT LOSS. ISSUES ARISING FROM ALTERATIONS OF FACTORY PRESET PARAMETERS ARE NOT COVERED UNDER WARRANTY.

All HABCO® Cassette® models are preset at the factory to maintain 33ºF (1ºC) to 38ºF (3.3ºC). Your HABCO® Cassette® will be equipped with a Micro-Processor Thermostat (Fig E1).

Digital Thermostat:

The HABCO® Commercial Refrigerator you have received has been factory calibrated for a customized temperature range as noted above.

The controller will require a short period of time to adjust to new temperature readings after door opening and product loading. Once the controller stabilizes on the new product temperature, refrigeration will begin and recover rapidly.

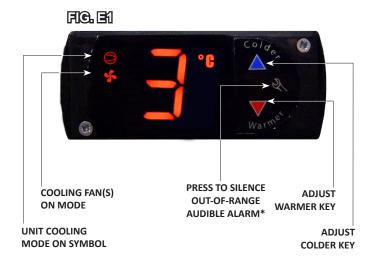
Note: This unit is not equipped with power failure alarm or back-up.

1. SET POINT ADJUSTMENT

- Press and hold the WRENCH KEY;
- The current set point temperature will flash;
- Using ADJUST UP or DOWN KEY select desired Set Point;
- Press WRENCH KEY again to save new setting.

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

Some Micro-Processor Thermostat equipped models may require removal of lower grill (see section G) to adjust thermostat. **Note: Follow Warnings noted previous in this section.**



2. CHANGING CONTROL DISPLAY SETTINGS BETWEEN °F AND °C:

- i. Hold the "wrench key" for at least 5 seconds until "P5" is visible
- ii. When "P5" is visible, press the "down" button until "EZY" is visible
- iii. When "EZY" is visible, press the "wrench key"
- iv. Press the "down" button until "4" is visible for Fahrenheit display or "1" for Celsius display
- v. Press and hold the "wrench key" for at least 5 seconds until the temperature is displayed

F. LIGHTING



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

DO NOT ACCESS MECHANICALLY FASTENED AREAS WITHOUT PERMIS-SION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED ARFAS.

MAINTENANCE AND REPLACEMENT OF LED LIGHT STRIPS AND RELAT-ED DRIVER COMPONENTS TO BE PERFORMED BY A QUALIFIED **TECHNICIAN ONLY.**

- Solid door models' lights are actuated automatically when door(s) are opened.
- SE18/24/28 model Light Switch is located on the right front face of the horizontal lighting assembly, as you face the appliance. Switch controls both sign and interior on SE18M and SE24M.
- SE42/46 model 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 PERMIS-SION 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 PERMIS-SION OF OWNER AND READING AND UNDERSTANDING PRODUCT MANUAL.

DISCONNECT POWER BEFORE ACCESSING MECHANICALLY FASTENED AREAS.



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

R290 Service Manual, available from HABCO Manufacturing Inc.

Marning: Risk of Personal Injury!

EMPLOY BEST HEALTH AND SAFETY LIFTING PRACTICES WHEN REMOV-ING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.

USE CARE WHEN HANDLING OR CLEANING METAL PARTS.

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

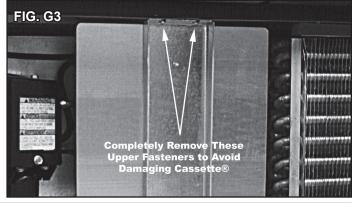


Then remove two screws located in flange at the top of air flow grill. Grill will lift up and off the bottom screws (Fig G1) Gently move grill away from front face of cabinet ensuring that you do not pull wiring attached to digital controller (Fig G2). Swing grill vertically upward and rest at left hand side of cabinet.



Double Door Added Step

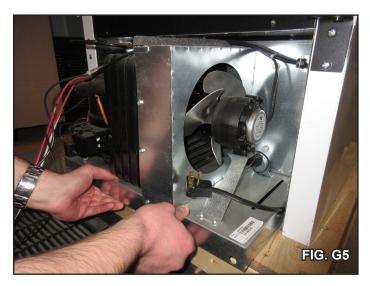
Double Door Cassette® models feature added support in the form of a bracket located between the Cassette® base and the Cassette® chamber ceiling. To remove the Cassette® from these models completely remove upper fastening screws, and slide Cassette® out of cabinet. Bracket will remain affixed to Cassette® (Fig G3).



 Disconnect the Cassette® from receptacle upper right wall of Cassette® chamber (Fig G4).



 Grasp mid-platform of the Cassette® ensuring plug is clear, and gently slide out (Fig G5).



- 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



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.

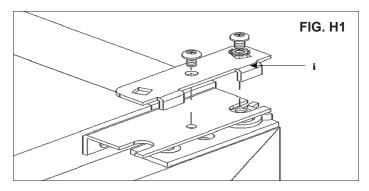


WARNING: RISK OF PERSONAL INJURY! EMPLOY BEST HEALTH AND SAFE-TY LIFTING PRACTICES WHEN REMOVING SHIPPING PLATFORM(S); LEVEL-ING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP. NOTICE: HABCO® WARRANTS FACTORY DOOR REVERSAL ONLY. ANY ISSUES AND SUBSEQUENT SOLUTIONS ARISING FROM 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.

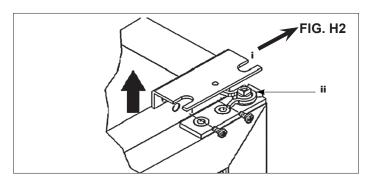
Easy Mount Swing Door Reversal

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

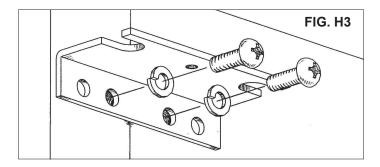
- 1. Remove Lower Grill and Sign/Header Assembly if applicable.
- Door closed remove hinge tensioning bracket (Fig H1i) and save two top retaining screws and one star washer (See Fig H1). Note: Though door gasket magnet will hold door in place, ensure unfastened door is secured from disengaging from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



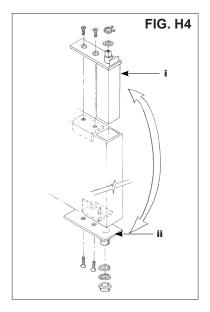
 Tilt door sideways out of the upper cabinet mounted bracket notch (Fig H2i) and lift to remove door bottom pivot pin from lower mounting bracket. Save nylon washers, upper bushing and stop spring from hinge shaft as shown in (Fig H2ii) and any nylon washers from bottom door pivot pin.



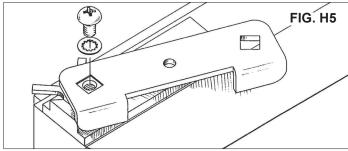
4. Remove upper cabinet mounted bracket and refasten screws to the opposing side of the cooler (Fig H3). Remove lower cabinet mounted bracket and re-install to opposing side of the cooler. Ensure nylon bushing remains in place in lower mounting bracket hole.



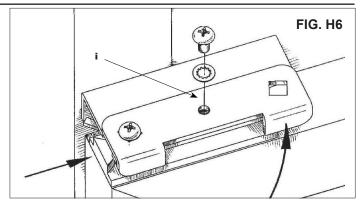
5. On the door, reverse door hinge (Fig H4i) and bottom pivot plate (Fig H4ii). Note: Floating steel fastening plates are installed inside door frame to fasten hinge and bottom pivot plate securely to door. To ensure door hardware is refastened securely, stand door upright and tilt towards hinge side. 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 180º to opposing hinge position. Door hinge now at top left with handle on right side.
- Place nylon washer on lower door pivot pin. Position the lower door pivot pin with washer into the lower mounting bracket bushing.
- 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.
- 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)).



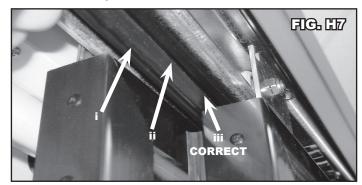
- Ensure door is mounted properly. Open the door 10° and it should close by itself.
- Reinstall lower air flow grill and sign/header assembly in place, if applicable.
- c. Restore power to appliance.

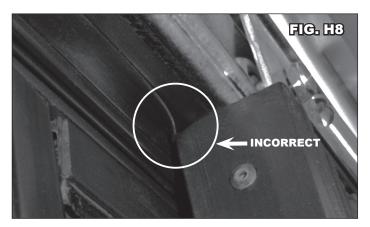
Sliding Door Removal and Adjustment

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.

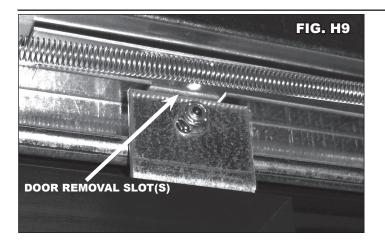
Sliding Door Removal:

 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).





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).



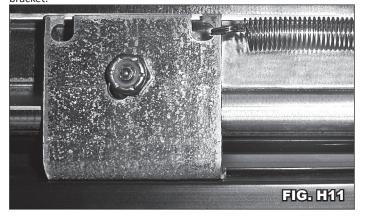
Move right hand door to center position within cabinet door opening (Fig H10).



- 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.
- Remove door from cabinet, down and away, resting against right front wall.
- 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.



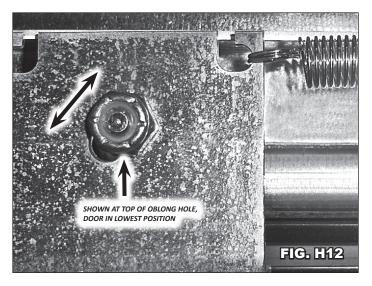
Sliding Door Reinstallation:

- 1. Review door removal steps.
- 2. Grasping right hand door firmly, one third from top, lift door into center position within cabinet opening.
- 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 4).
- 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;
 - 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

- 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.
- 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.



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 REMOVING SHIPPING PLATFORM(S); LEVELING CABINET; REVERSING DOORS; AND MOVING APPLIANCE. IF IN DOUBT, ASK FOR HELP.

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.

KEEP YOUR CONDENSER

(HEAT EXCHANGE) COIL CLEAN TO AVOID ELECTRICAL/COM-PONENT OVERHEATING AND POTENTIAL OF FIRE; PREVENT DAMAGE TO REFRIGERATION PARTS; AND, MAINTAIN OPTI-MUM COOLING PERFORMANCE. FAILURE TO DO SO WILL VOID WARRANTY.

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). Visually inspect the condenser coil for build-up of grease, floor wax, dust and lint monthly. At minimum, cleaning should be completed on a monthly basis. Use a dusting wand (Fig I1) and a vacuum with soft bristle nozzle, to remove light dust and debris.



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

-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!

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!

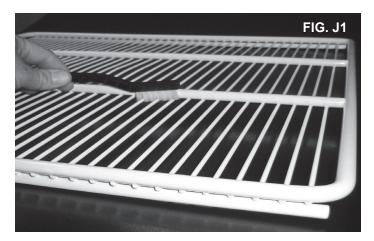
USE ONLY MILD ANTI-BACTERIAL, NON-ABRASIVE 'DISH SOAP' DETERGENT, AND SOFT CLOTH (OR BRISTLE BRUSHES WHERE SPECIFIED) FOR CLEANING YOUR APPLIANCE. FOR STUBBORN RESIDUE, SUCH AS GREASE BUILD-UP ON CONDENSER (HEAT-EXCHANGE) COIL, EMPLOY THE SERVICES OF A QUALIFIED PROFESSIONAL.

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, REFASTEN SECURELY.
- Interior Cabinet Cleaning: A mild mixture of anti-bacterial detergent and warm water with a soft cloth may be used. Rinse and dry thoroughly.
- Interior Stainless Steel Cleaning: For general cleaning of the stainless steel floor please follow instructions in section (i) noted above.
- 3. 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.
- 4. 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 AND EVENLY, APPLYING EQUAL PRESSURE TO EACH SIDE OF CASSETTE®.
 - i. 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.

- 5. 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.
- 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 LIQ-UIDS 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.





- Glass Cleaning: For everyday glass cleaning, a 50:50 Vinegar & Water mixture is recommended.
- 8. 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.
- Cleaning the Magnetic Positive-Seal Gasket: A mild solution of antibacterial 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.
- Pilaster Removal for Cleaning: Remove product and shelving. Remove each pilaster strip and clean beneath. Replace pilasters.
- 11. Air Distribution Panel Removal for Cleaning: Remove pilasters and rear Air Distribution Panel. Carefully remove Air Distribution Panel from cabinet ensuring that edges do not scratch interior surfaces. Sanitize surfaces and reinstall Air Distribution Panel.
- 12. 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 DI-RECT 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?

<u>Information to Provide to Qualified Service Professional:</u>

- 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.