OPTION KITS

CENTER WALL DIVIDE BULKHEAD 76-00527-00
DOOR SWITCH SHUTDOWN 76-00703-01
REMOTE CONTROL/INDICATOR PANEL SURFACE 2 COMP. 76-60796-01
FLUSH 2 COMP. 76-60796-02

MULTI-TEMP INSTALLATION PROCEDURE

IMPORTANT: INSTALLATION OF REMOTE EVAPORATORS MUST BE DONE, IN PART, BY A TECHNICIAN IN POSSESSION OF A CURRENT EPA SECTION 608 CERTIFICATION IN THE USA, OR OTHER APPROPRIATE CERTIFICATION OUTSIDE THE USA.

1. SELECT LOCATION FOR REMOTE EVAPORATOR WHICH OPTIMIZES AIR CIRCULATION.

CAUTION: TRUCK BODY MFR TO DETERMINE IF ADJUSTMENT IN CORNER MOLDING IS NECESSARY TO AVOID INTERFERENCE WITH EVAPORATOR MOUNTING.

2. THE TRUCK BODY MANUFACTURER TO PROVIDE SMOOTH FLAT SURFACE IN SAME PLANE TO ACCEPT MOUNTING OF EVAPORATOR. INSTALL REMOTE EVAPORATOR. SEE BODY PREPARATION, SHEET 2.

3. CEILING MOUNTING STUDS SHOULD BE LOCATED BY THE BODY BUILDER PER EVAPORATOR DRAWING LOCATIONS. EVAPORATORS ARE DELIVERED WITH 1 1/2 INCH NUTS TO ACCOMMODATE MOUNTING STUD SIZE 1/2-13UNC. ON AN 1100 EVAPORATOR, SHIMS (11.00) ARE TO BE INSTALLED BETWEEN THE CEILING AND EVAPORATOR TO PROVIDE A SUFFICIENT DRAINAGE SLOPE. TWO (2) SHIMS ARE TO BE INSTALLED ON EACH MOUNTING STUD CLOSEST TO THE EVAPORATOR DRAIN AND ONE (1) SHIM INSTALLED ON THE CENTER MOUNTING STUDS. AN ADDITIONAL TWO (2) SHIMS ARE PROVIDED FOR SPECIAL MOUNTING APPLICATIONS (i.e., MOUNTING AN EVAPORATOR GUARD). NO SHIMS ARE REQUIRED ON THE STUDS LOCATED FARTHEST FROM THE DRAIN SIDE OF THE EVAPORATOR.

3.1 FOR 1100 EVAPORATORS ONLY, THE TWO CENTER MOUNTING STUDS ARE NOT REQUIRED WHEN 1/2-13 UNC STUDS ARE USED ON THE FOUR CORNER MOUNTING LOCATIONS.

4. AFTER MAIN UNIT IS MOUNTED, ROUTE REFRIGERANT LINES FROM MAIN UNIT TO REMOTE EVAPORATOR. APPLY A LIGHT COAT OF CLEAR REFRIGERANT OIL TO ORINGS AT MAIN UNIT AND REMOTE EVAPORATOR (S) BEFORE ASSEMBLY.

5. TROUGH LOCATIONS:

5.1 WHEN USING A WALL TROUGH FOR TUBING AND ELECTRICAL WIRING, THE TROUGH SHOULD BEGIN AT A POINT 11/2 INCHES DOWN FROM THE CEILING. THIS WILL ALLOW THE TUBING FROM EVAPORATOR TO DIRECTLY ENTER THE TROUGH BEFORE MAKING THE FIRST BEND TOWARDS THE HOST UNIT.

5.2 IF A WALL TROUGH IS USED, THE TROUGH SHOULD CONTINUE TO A POINT 6 INCHES PAST THE SIDE TUBING CONNECTIONS OF A DUAL DISCHARGE EVAPORATOR.

5.3 IF A CEILING TROUGH IS USED, THE TROUGH SHOULD CONTINUE TO WITHIN 6 INCHES FROM THE REAR OF A SINGLE DISCHARGE EVAPORATOR.

CONTINUED ON SHEET 2

SEE SEPARATE PARTS LIST
6. REFRIGERANT LINE SIZES:
   6.2 WHEN CONNECTING THE REMOTE EVAPORATORS, STEP UP THE SUCTION LINE SIZE NEAR THE EVAPORATOR AND RUN THE ENTIRE LENGTH WITH 1-1/8 INCH PIPE.
   6.4 THE SUCTION & HOT G A S LINES MUST BE INSULATED. IT IS NOT NECESSARY TO INSULATE THE LI Q U I D L I N E.

7. REFRIGERANTS:
   7.1 IF R-404A REFRIGERANT IS TO BE USED, IT IS MANDATORY THAT NITROGEN FLUSHING BRAZING TECHNIQUES ARE USED ON EVERY SOLDER TUBE JOINT. IT IS RECOMMENDED THAT THIS SAME PROCEDURE BE USED ON R-22 REFRIGERANT UNIT BUT IS NOT MANDATORY. THIS TECHNIQUE ELIMINATES OXIDATION WHICH WILL REDUCE SYSTEM RELIABILITY.
   7.2 LEAK TEST AND THEN EVACUATE THE SYSTEM THROUGH RECEIVER PORT AND SUCTION PORT. SEE SERVICE MANUAL FOR PROPER PROCEDURE.

8. ELECTRICAL CONNECTIONS:
   8.1 THE WIRING HARNESS FOR THE REMOTE EVAPORATOR SHOULD BE RUN ALONG WITH THE SUCTION, H O T G A S AND LI Q U I D LINE TO THE HOST UNIT.
   8.2 AFTER ROUTING THE WIRING HARNESS(S) AND INSTALLING THE REMOTE EVAPORATOR(S), DETERMINE REQUIRED HARNESS LENGTH(S) AND CUT HARNESS AT THE REMOTE EVAPORATOR END.

CAUTION: DISCONNECT ALL BATTERIES BEFORE WORKING ON ELECTRICAL SYSTEM.

8.3 USE THE PRE-INSULATED TERMINALS SUPPLIED (11.2) AND PROPER CRIMPING TOOL (APP #56244-1) TO MAKE ELECTRICAL CONNECTIONS.
   8.4 COMPLETE ALL ELECTRICAL CONNECTIONS ON THE MAIN UNIT AND ON THE REMOTE EVAPORATOR PER WIRING INSTRUCTIONS ON SHEETS 5 & 6.
   8.5 IF A REAR MOUNTED REMOTE CONTROL/INDICATOR PANEL IS USED, THE CONTROL CABLE MAY BE RUN WITH THE SUCTION, HOT GAS, LIQ U I D LINE AND THE EVAPORATOR WIRE HARNESS TO THE HOST UNIT OR UNDERNEATH THE TRUCK BODY TO THE HOST UNIT.

9. DRAIN TUBE CONNECTIONS:
   9.1 DEFROST DRAIN TUBES PROVIDED BY THE TRUCK MANUFACTURER SHOULD BE CENTERED ON THE EVAPORATOR AND PLACED 10 TO 11 INCHES FROM THE CEILING. A 7/8 INCH I.D./15/16 INCH O.D. DRAIN TUBE IS SUPPLIED FOR CONNECTION OF THE REMOTE EVAPORATOR DRAIN OUTLET WHICH IS TO BE INSTALLED INTO THE TRUCK O.M.S. SUPPLIED WALL DRAIN. THE DRAIN TUBE SUPPLIED BY CARR IER IS DESIGNED TO GO INSIDE THE WALL DRAIN PIPE SUPPLIED BY THE BODYBUILDER O.M.
   9.2 THE 11002 EVAPORATOR USES ONLY ONE OF THE TWO DEFROST DRAIN; THE UNUSED DRAIN IS PLUGGED WITH PLUG PROVIDED WITH THE EVAPORATOR.
   9.3 THE 2200W H D EVAPORATOR USES BOTH DEFROST DRAINS UNLESS IN 96" WIDE APPLICATIONS.

10. CONSULT APPLICATION ENGINEERING FOR PROPER INSTALLATION OF FEATURES NOT SUPPLIED BY CARRIER.

INSTALLATION TIPS

(A) USE FLAT FLOORING IN THE FLOOR SECTION UNDER THE BULKHEAD.
(B) PROVIDE A THERMAL BREAK IN THE FLOOR UNDER THE BULKHEAD, FOR MOVABLE LOCATION BULKHEADS, USE RUBBERIZED HARDWOOD FLOORS.
(C) COVER REFRIGERANT LINES TO AVOID IMPACT DAMAGE.
(D) INSTALL A GUARD AROUND THE EVAP. TO PREVENT IMPACT DAMAGE.

TRUCK BODY PREPARATION FOR EVAPORATOR
TUBING INSTRUCTIONS

CAUTION: HOST UNIT IS SHIPPED FULLY CHARGED FROM FACTORY.

1.0 PUMP DOWN REFRIGERATION SYSTEM AND REMOVE CAPS FROM EVAPORATOR CONNECTIONS.

2.0 ROUTE TUBING TO REAR EVAPORATORS TO MINIMIZE EXPOSURE TO DAMAGE.

3.0 FOR COPPER TO COPPER BRAZING IT IS RECOMMENDED THAT A BRAZING MATERIAL OF 15% SILVER, 5% PHOSPHORUS BE USED.

4.0 CLOSED CELL FOAM INSULATION IS RECOMMENDED TO COVER THE ENTIRE SUCTION & HOT GAS LINE LENGTH.

IMPORTANT: USE ONLY NEW O-RINGS SUPPLIED IN KIT WHEN INSTALLING UNIT. DISCARD FACTORY INSTALLED O-RINGS TO INSURE PROPERLY SEAL DJE CONNECTIONS.

CAUTION: MAKE SURE ALL BRAZING IS COMPLETE AND HAS COOLED COMPLETELY BEFORE INSTALLING O-RINGS; OTHERWISE O-RING DAMAGE WILL OCCUR.

2 COMPARTMENT INSTALLATION

REFRIGERANT LINE ROUTING

CEILING TROUGH CONFIGURATION

WALL TROUGH CONFIGURATION
ELECTRICAL CONNECTIONS (SEE SHT 1)

1.0 CONNECT THE WIRE COLORS IN ACCORDANCE TO THE FOLLOWING CHARTS.

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MAIN CONTROL BOX

1CP...COMPARTMENT 1
2CP...COMPARTMENT 2

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TERMINAL | C10/PM | DESCRIPTION |
----------------------|---------|-------------|
0460-204-1214 | 22-55079-97C | LARGE |
0460-215-1614 | 22-55078-78A | SMALL W/GRN STRIP |
0460-202-1614 | 22-01613-14 | SMALL |
114017       | 22-01650-08 | SEAL PLUG |
EVAPORATOR WEIGHT
MTS-1100 106.1 lbs (48.1 Kg)
INSULATE THE ENTIRE LENGTH OF TUBING.

LIQUID LINE 3/8
HOT GAS 1/2
SUCTION 1-1/8

PARTS SHOWN ARE SUPPLIED WITH REMOTE EVAPORATORS

USE NEW O-RINGS,
IT'S 62, 65 & 68
(SEE SM.2)

DRAIN Morse (REF)
(SUPPLIED WITH THE REMOTE EVAPORATOR)

CEILING TROUGH SHOWN (REF)

PIPING SCHEMATIC
SCHEMATIC FOR INFORMATION ONLY
EXACT PIPING TO BE DETERMINED BY REMOTE EVAPORATOR STYLE, APPLICATION AND LOCATION.

2 COMPARTMENT SYSTEMS WITH TWO 1100 SIZE REMOTE EVAPORATORS

SYSTEM A
2 MTS 1100-2 SINGLE DISCHARGE EVAP'S

SYSTEM B
1 MTS 1100-2 SINGLE DISCHARGE EVAP AND
1 MTD 1100-2 DUAL DISCHARGE EVAP