

Carrier

TRANSCOLD

Carrier Transcold Division
Carrier Corporation
P.O. Box 4805
Syracuse, New York 13221

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CTD KIT PART NUMBER	DESCRIPTION	U.S. ECCN
76-02139-00	SUPRA S-SERIES MODELS	NSR

INSTRUCTIONS:

1. RECLAIM / EVACUATE R-404A REFRIGERANT

2. REMOVE AND REPLACE WITH NEW FILTER DRIER (ITEM 5) (SEE SHEET 2 FOR LOCATION)

3. PLACE THE FOLLOWING REQUIRED R-452A DECALS ON UNIT. ANY DECAL REFERENCE TO R-404A REFRIGERANT MUST BE REMOVED OR COVERED WITH REQUIRED R-452A DECAL PLACED OVER EXISTING R-404A DECAL(S).
CLEAN EXISTING SURFACES WHERE LABELS ARE TO BE PLACED TO ENSURE GOOD ADHESION.

a. R452A CONVERSION DECAL (ITEM 15 REF.):

I. PLACE DECAL NEAR EXISTING NAME PLATE (REF ILLUSTRATIONS ON SHEET 2).

II. WITH PERMANENT MARKER RECORD R-452A CONVERSION DATE ON DECAL. (IMPORTANT FOR REGISTRATION)

b. R-452A REFRIGERANT DECAL (ITEM 20 REF.)

I. PLACE ONE (1) DECAL OVER EXISTING R-404A DECAL ON TOP OF THE CONDENSOR (REF ILLUSTRATIONS ON SHEET 2).

4. CHARGE SYSTEM WITH R-452A REFRIGERANT REFERENCING THE UNIT NAME PLATE FOR REFRIGERANT CHARGE AMOUNT.

5. CHECK AND RE-ADJUST THE THERMODYNAMIC EXPANSION VALVE (TXV) ON THE HOST UNIT (SINGLE TEMP) IN ORDER TO BE COMPLIANT WITH THE SUPERHEAT VALUES ACCORDING TO THE "TXV ADJUSTMENTS INSTRUCTIONS" SECTION.

6. WHEN CARRYING OUT THIS R-452A REFRIGERANT CONVERSION KIT INSTRUCTION, PROCEDURE AND /OR ANY RELATED R-452A REFRIGERANT POLICY LAID OUT BY THE MANUFACTURER, ONE MUST STRICTLY ADHERE TO THE PRODUCT SERVICE MANUAL, AND THESE INSTRUCTIONS.

NOTICE:

UPDATE MODEL NUMBER IN OPERATING SYSTEM TO ACCOMMODATE R452A OPERATION.

NOTES:

1. REFER TO PRODUCT TECHNICAL SERVICE MANUAL FOR FURTHER SPECIFIC DETAILED INSTRUCTION.

2. DO NOT CHARGE SYSTEM WITH A MIXTURE OF R-404A REFRIGERANT AND R-452A REFRIGERANT.

3. ANY DECAL REFERENCE TO R-404A REFRIGERANT ON PRODUCTS CONVERTED TO R-452A REFRIGEANT MUST BE REMOVED OR COVERED WITH REQUIRED R-452A DECAL PLACED OVER EXISTING R-404A DECAL(S).

4. SPECIAL CARE IS REQUIRED WHEN RECLAIMING R-452A REFRIGERANT. (REFER TO PRODUCT SERVICE MANUAL)

5. IN ORDER TO BE COMPLIANT WITH AHRI RULES, IT IS RECOMMENDED TO CHECK WITH YOUR LOCAL AHRI AUTHORITIES IF ANY PROCEDURES EXIST TO DECLARE THE CONVERSION (CHANGE OF REFRIGERANT).

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TXV ADJUSTMENT INSTRUCTIONS

COMPARTMENT TEMPERATURE	SUPERHEAT SETTINGS
32°F (0°C)	12-14°F (7-8°C)
0°F (-18°C)	8-10°F (5-6°C)

NOTE:

ENSURE UNIT HAS THE PROPER CHARGE OF REFRIGERANT PRIOR TO STARTING PROCEDURE.

NOTE:

AMBIENT SHOULD BE 45°F (7.5°C) OR HIGHER WHEN PERFORMING THIS PROCEDURE.

NOTE:

FOR MULTI-TEMP UNITS MAKE SURE ONLY ONE EVAPORATOR IS OPERATING AT A TIME AND IN THE COOL MODE.

1) LOOSEN INSULATING WRAP AROUND TXV SENSING BULB AND INSERT A THERMOCOUPLE TO THE SUCTION LINE AS CLOSE AS POSSIBLE TO THE TXV SENSING BULB, REINSTALL INSULTING WRAP.

2) ATTACH A SUCTION GAUGE TO THE ACCESS PORT ON THE EVAPORATOR OUTLET LINE.

3) RUN THE UNIT, IN THE COOL MODE, WITH A SET POINT OF 0°F (-18°C). UNIT SHOULD BE OPERATED IN THIS MODE FOR A MINIMUM OF 20 MINUTES.

4) WHEN COMPARTMENT TEMPERATURE REACHES 32°F (0°C). RECORD SUCTION PRESSURE AND TEMPERATURE OF EVAPORATOR OUTLET LINE A MINIMUM OF 5 TIMES APPROXIMATELY 5 MINUTES APART. TRY TO MAINTAIN THE BOX TEMPERATURE AS CLOSE TO 32°F (0°C) AS POSSIBLE WHEN ENTERING AND EXITING THE COMPARTMENT.

5) USING A P/T (PRESSURE/TEMPERATURE) CHART, CONVERT THE SUCTION PRESSURE TO A SATURATION TEMPERATURE FOR EACH OF THE READINGS TAKEN ABOVE.

6) SUBTRACT THE SATURATION TEMPERATURE FROM THE OUTLET LINE TEMPERATURE FOR EACH OF THE READINGS.

7) ADD THE SOLUTION FROM EACH READING TOGETHER AND DIVIDE BY THE NUMBER OF READINGS TAKEN. THIS WILL GIVE YOU THE AVERAGE SUPERHEAT SETTING OF THE TXV.

8) IF THE SUPERHEAT SETTING IS HIGHER OR LOWER THAN REQUIRED, USING THE ADJUSTING SCREW ON THE SIDE OF THE TXV, ADJUST THE ADJUSTING SCREW COUNTERCLOCKWISE TO DECREASE SUPERHEAT AND CLOCKWISE TO INCREASE SUPERHEAT. ADJUSTING SCREW SHOULD NOT BE ADJUSTED MORE THAN ¼ TURN AT A TIME.

9) RUN UNIT THROUGH DEFROST AND UPON COMPLETION ALLOW THE UNIT TO RUN IN THE COOL MODE FOR 20 TO 30 MINUTES AND REPEAT STEPS 4 THROUGH 7 UNTIL DESIRED SETTING IS REACHED.

10) REMOVE THERMOCOUPLE FROM EVAPORATOR OUTLET LINE AND REINSULATE THE TXV SENSING BULB. REMOVE THE SUCTION GAUGE FROM THE SERVICE PORT AND REINSTALL THE ¼ FLARE CAP. REINSTALL THE CAP OVER THE ADJUSTING SCREW.

A	INITIAL RELEASE.	4 MAR 21	MGC			ECN1142184	THIRD ANGLE PROJECTION		UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS SHOWN ARE IN MILLIMETERS, WITH IMPERIAL CONVERSIONS IN [INCHES]	TITLE	INSTRUCTIONS [DECAL KIT]	DRAWING NO. 98-03407 SHEET 1 of 2	REV
SYM	REVISION RECORD	DATE	BY	ENGR.	M.E.	NPCA NO.							A

