

TECHNICAL INSTRUCTIONS

RAT2 INSTALLATION FOR APX™ EQUIPPED BELT DRIVE TRAILER UNITS (X2 2100/2500 OR X4 7300/7500) (CTD P/N 76-02038-00)

KIT CONTENTS

Quantity	Part Number	Part Description
1	22-03022-00	RAT2 Extension Harness
1	22-02973-09	RAT2 Sensor Assembly
24	58-00079-02	Tie Wrap
1	34-00373-51	Clamp
1	34-60044-00	Bolt
2	34-00662-11	Washer
1	34-01184-106	Nut
2	22-50078-46B	Terminal
2	22-50078-50A	Seal
1	42-00772-00	Foam Insulation 3" for suction line
2	42-00237-52	Foam Insulation 2.5" for hot gas and liquid line
1	98-50352-00	Technical Instruction

INSTRUCTIONS

1. Always turn unit off, unplug unit from shore, and disconnect the battery before performing electrical and/or mechanical work on unit. Ensure proper lockout / tagout procedures are followed.
2. Drill 2" hole in curb side of evaporator housing 7" up from lower corner and 2" toward front of trailer from back panel location. Drill 1/4" hole 1/4" below edge and 1/2" toward front of trailer from centerline of 2" hole. (Fig.1&2)

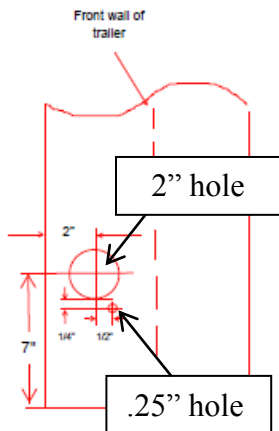


Fig.1



Fig.2

3. After removing back panel, use welding wire to pull the blunt cut end of RAT2 harness through road side pod caulking. (Fig. 3)



Fig.3

4. Route 22-02973-00 harness through evaporator section following routing of existing harnesses toward curbside section of evaporator and tie wrap to tubing/existing harnesses. (Figs. 4,5,6)

TECHNICAL INSTRUCTIONS

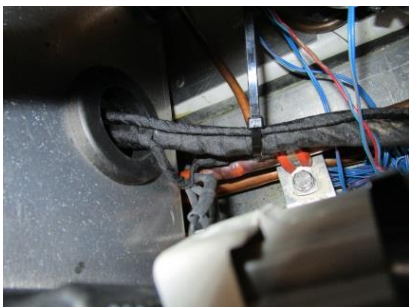


Fig.4 Road Side



Fig.5 Center



Fig.6 Curb Side

5. Open supplied clamp enough to accept thermistor and squeeze clamp around metal part of thermistor next to heat shrink portion.
6. Insert washer onto the bolt and insert the bolt through $\frac{1}{4}$ " hole. On inside of evaporator housing insert other washer, clamp with thermistor facing up, and lock nut onto bolt. Tighten nut until clamp is securely to prevent rotation of clamp, positioning thermistor so that the metal part spans the 2" hole. Reference Fig.2 from step 2 for clarification.
7. Thermistor should be mounted to inside of evaporator compartment to prevent damage of sensor. Route connector through curbside evaporator hole and plug into RAT2 harness. Mount assembled connector to the existing RAT connector.

8. Insulate the 3 copper tubes in the vicinity of this probe with the insulation provided in the kit. Apply the 2.5" length foam insulation to the hot gas and liquid lines. Apply the 3" length foam insulation to the suction line. (Figs. 7,8)

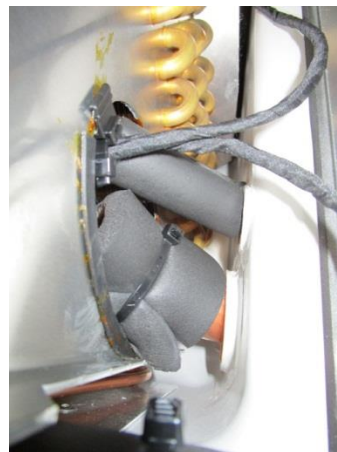


Fig.7



Fig.8

9. Crimp terminals and seals onto ends of 22-02973-00 jumper harness after securing harness to existing harnesses toward RMSN connector. Connect RAT2 jumper harness to the Remote Sensor 2 circuit in RMSN connector cap (terminals G & H). If there are existing wires in these cavities the unit may have an IAT (intake air temperature) option installed. (Fig.9)

TECHNICAL INSTRUCTIONS

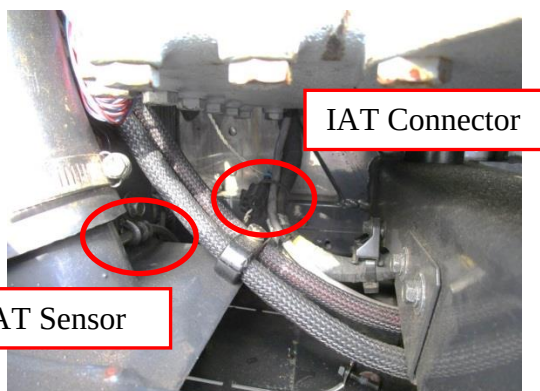


Fig.9

10. If IAT is installed, remove the existing wires from the RMSN1 connector cavities G and H and discard, as this feature is no longer functional.

11. Insert the wires from the RAT2 sensor into these cavities.
12. Install the latest version of software for feature functionality. NOTE: Must be at least revision 03.07.00. The latest version of software can be downloaded from TransCentral.
13. Configure the option active by entering Tech Mode and selecting the operation of this sensor.
Configuration – Remote Sensors – Sensor 2 – RAT2
14. Then select the desired controlling probe, in this case RAT2, by entering the functional parameters menu.
Functional Parameters – Temperature Settings – Temp Control – RAT2