

AIR CONDITIONER / HEAT PUMP MODE: COOLING HEATING DATE: _____

REASON FOR SERVICE: _____

CUSTOMER: _____
 CITY, STATE: _____
 HOME PH: _____ WORK PH: _____

SUPPORT: DSS: _____
 DEALER: _____
 PH _____ FAX _____
 TECHNICIAN: _____

EQUIPMENT: INSTALLATION DATE _____

	<u>Model</u>	<u>Serial Number</u>
O/D	_____	_____
I/D BLW	_____	_____
COIL	_____	_____

EAC HUMIDIFIER ZONING DUAL FUEL

FILTER: Size _____ Type _____

Condition: CLEAN DIRTY CLOGGED

T/STAT: Part # _____ Mfg. _____

Type: ELECTROMECHANICAL ELECTRONIC

SERVICE HISTORY: _____

ELECTRICAL: WIRE SIZE _____ BRKR. AMPS: _____

	<u>No Load</u>	<u>Operating</u>
VOLTAGE MEASUREMENTS?		
LINE VOLTAGE?	_____	_____
LOW VOLTAGE?	_____	_____
AMPS:	<u>Starting</u>	<u>Operating</u>
COMP. Common	_____	_____
Start	_____	_____
Run	_____	_____
OD FAN	_____	_____

REFRIGERANT: Liquid and/or Discharge Suction

OPERATING	_____ psig	_____ psig	_____ psig
CHART	_____ psig	_____ psig	_____ psig
LINE TEMP.	_____ F	_____ F	_____ F
ACTUAL SUBCLG.	_____ F	SUPERHEAT	_____ F
CHART SUBCLG.	_____ F	SUPERHEAT	_____ F
OD TEMP.	_____ F db	_____ F wb	REFRIG. <input type="checkbox"/> R22 <input type="checkbox"/> R410A

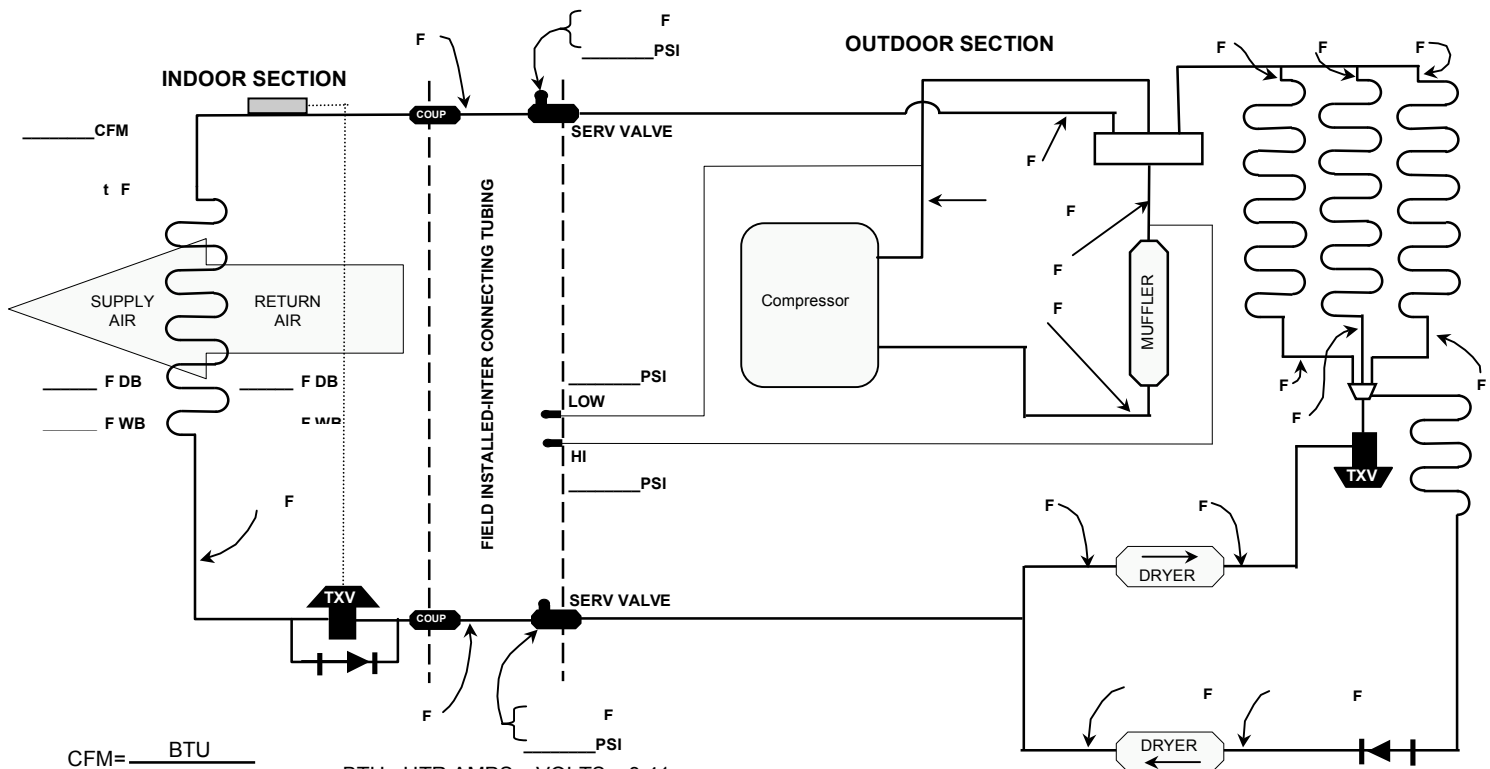
AIRFLOW: ACTUAL CFM _____ ID MTR AMPS: _____

TEMP: (Steady State) Inlet @ Blwr Outlet @ Coil t

ID DRY BULB	_____ F	_____ F	_____ F
ID WET BULB	_____ F	_____ F	_____ F

V.S. SWITCHES: 1↓↑ 2↓↑ 3↓↑ 4↓↑ 5↓↑ 6↓↑ 7↓↑ 8↓↑

OBSERVATION / DIAGNOSIS _____



CFM = $\frac{BTU}{1.08 \times t \times F}$ BTU = HTR AMPS x VOLTS x 3.41

Fill in all blanks, with the measured data, relative to the MODE of operation. Draw the position of the reversing valve slide on the schematic.

ELECTRICAL: DEFROST LED FLSH RATE ___/sec **T'STAT:** WIRE SIZE ___AWG WIRE LGTH ___ft

TESTED RUN CAP _____ F/V HOW? _____ **START CAP** GOOD BAD

VAR SPD OD MTR: BLU to YEL @ MTR _____ Vdc X2 CONTR ENERGIZED? YES NO

VOLTS: No Load Operating **OHMS: Comp** _____

COMP. LOCK ROTOR _____ V COMP TERM to GRD _____ Ohms

CIRCUIT PANEL _____ V _____ V **Sump Htr** _____ L to Grd _____

SUMP HEATER _____ V _____ V **CONT PTS:** Vlt drop _____ V _____ V

THERMISTOR: R to B _____ V R to T _____ V T to B _____ V

REFRIGERANT: LINE SIZE: SUCT _____ OD LIQ _____ OD Lgth: _____ ft FCCV SIZE _____

Fittings: QTY. 90 Ells: _____ Reducers: _____ Ell Radius: LONG SHORT TXV? GOOD BAD

EQUIP RELATION: OD above ID ID above OD Vert Separation _____ ft

ACID TEST, OIL? YES NO IF YES, GOOD ACIDIC METHOD? _____

DRIERS: OEM LIQ REMOVED? YES NO IF YES, INSTALL? _____ TYPE _____ SIZE

SUCT DRIER INSTALLED? YES NO IF YES, INSTALL? _____ TYPE _____ SIZE

AIRFLOW: STATIC PRES. SA _____ "wc RA _____ "wc **REGISTERS** Quantity Measured Cfm

TEMPS LONGEST RUN/SUPPLY _____ F SHORTEST _____ F

IF R/A IS DUCTED, GRILLE INLET _____ F CFM FLSH CD _____

HOW WAS CFM CALCULATED? _____

TOTAL HEAT CONTENT OF AIR (BTUH / lb of Dry Air; 1 CFM = 4.5# of Dry Air)

F wb	0	0.5
51	20.86	21.15
53	22.02	22.30
54	22.62	22.92
55	23.22	23.52
56	23.84	24.15
57	24.48	24.79
58	25.12	25.45
59	25.78	26.12
60	26.46	26.81
61	27.15	27.48
62	27.85	28.21
63	28.57	28.94
64	29.31	29.68
65	30.06	30.45
66	30.83	31.23
67	31.62	32.01
68	32.42	32.84
69	33.25	33.67
70	34.09	34.51
71	34.94	35.40
72	35.83	36.27
73	36.74	37.21
74	37.66	38.14
75	38.61	39.09
76	39.57	40.07
77	40.57	41.08
78	41.58	42.1
79	42.62	43.15
80	43.69	44.24
81	44.78	45.34
82	45.90	46.47
83	47.04	47.63
84	48.22	48.82
85	49.43	50.05

TROUBLESHOOTING AND PROCEDURES USED TO OBTAIN SOME OF THE DATA REQUESTED IN THIS FORM CAN BE FOUND IN HEAT PUMP DEFROST CONTROLS, REFRIGERANT PIPING, COMPRESSOR SERVICE, ECM MOTORS, AND SERVICE PROCEDURES MANUALS PUBLISHED BY TRANE. THESE PROCEDURES CANNOT SOLVE ALL SERVICE DIAGNOSTIC PROBLEMS BUT ARE A GENERAL GUIDE TO ADDRESS THE MOST OFTEN ENCOUNTERED ONES.