



HOSHIZAKI AMERICA, INC.

SERVICE BULLETIN

SB93-0008

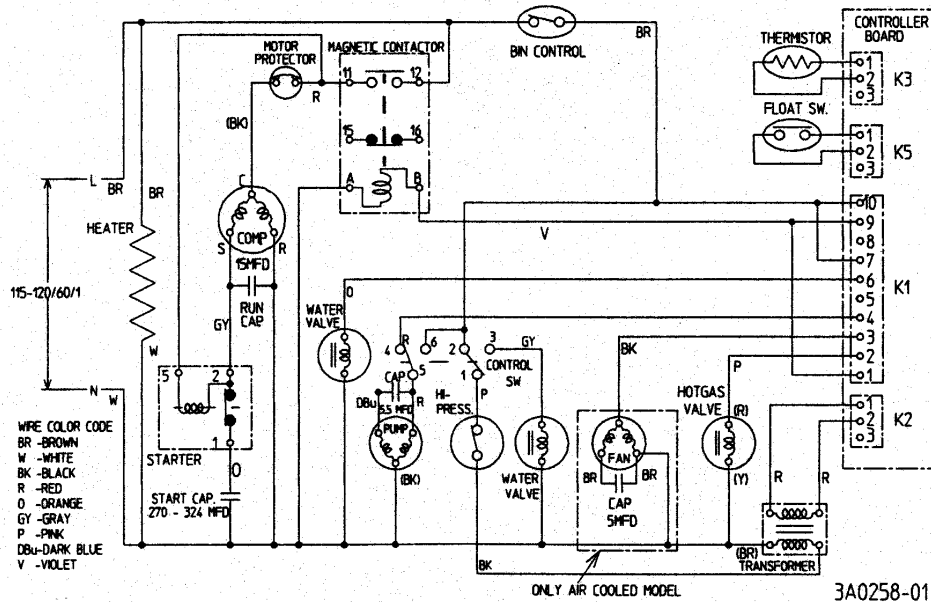
Dec. 7, 1993

SUBJECT: SERVICE INFORMATION FOR R-22 UNITS

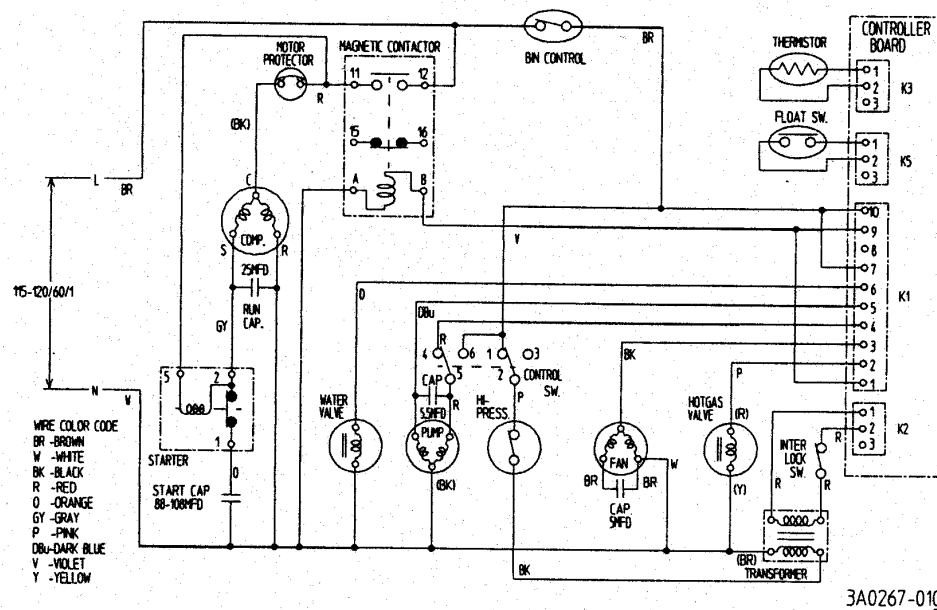
Utilize the following information for service diagnosis on R-22 models KM-250B_E and KM-500 M_E.

KM-250B_E

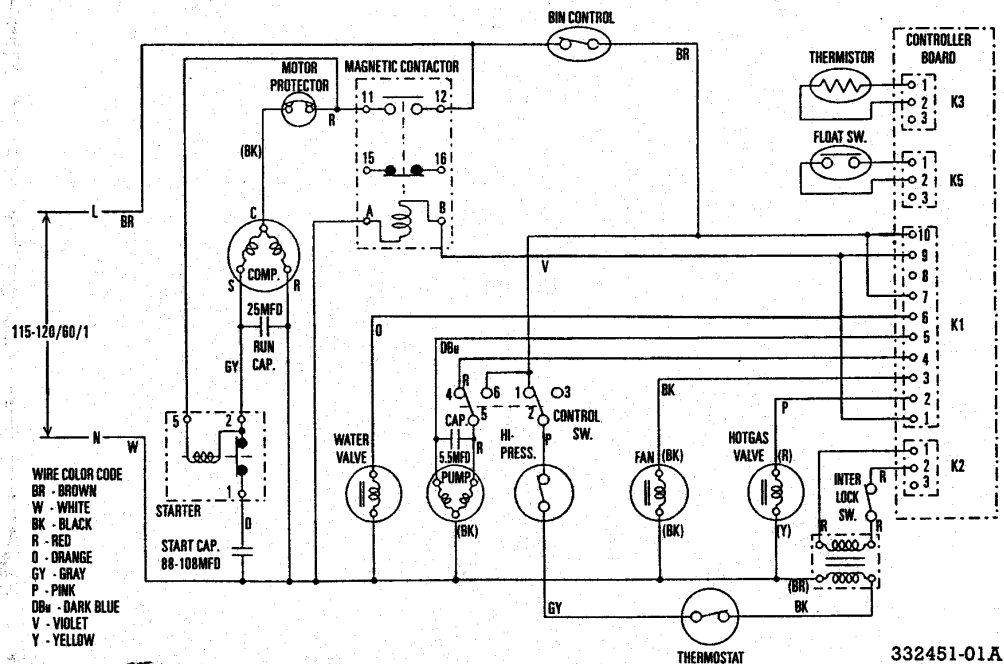
WIRING DIAGRAM



WIRING DIAGRAM

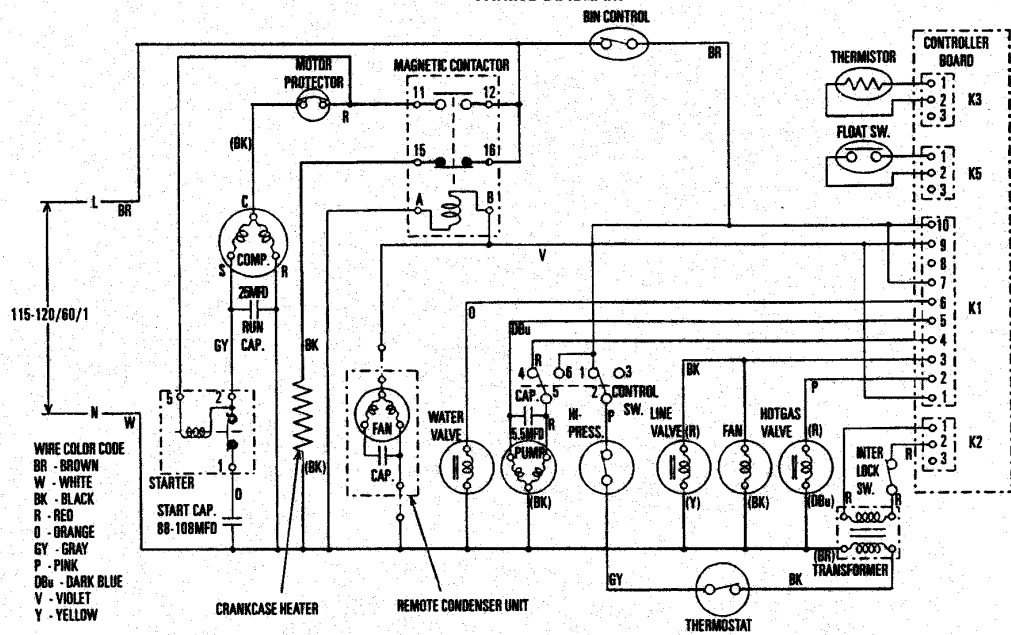


WIRING DIAGRAM



KM-500MRE

WIRING DIAGRAM



332452-01A

MODEL KM-250BWE

Ambient Temp. (°F)	Water Temp. (°F)		
	50	70	90
70	*215(98)	*198(90)	179(81)
80	213(97)	194(88)	176(80)
90	210(95)	*170(80)	174(79)
100	209(95)	175(79)	170(77)
70	*743	777	780
80	750	780	783
90	755	*786	790
100	760	790	790
70	228(0.86)	340(1.29)	660(2.50)
80	245(0.93)	345(1.31)	670(2.54)
90	255(0.97)	353(1.34)	750(2.84)
100	265(1.00)	360(1.36)	800(3.03)
70	18	20.5	23
80	18	22	23.5
90	18	22	24
100	19	22.5	27
70	4.5	4	4
80	5	4	4
90	5	4	4
100	5	4	4
70	236(16.5)	236(16.5)	247(17.3)
80	236(16.5)	236(16.5)	248(17.4)
90	236(16.5)	236(16.5)	249(17.5)
100	236(16.5)	236(16.5)	249(17.5)
70	39(2.7)	40(2.8)	44(3.3)
80	40(2.8)	43(3.3)	44(3.3)
90	40(2.8)	43(3.3)	44(3.3)
100	41(2.9)	44(3.3)	49(3.5)

MODEL KM-250BAE

Ambient Temp. (°F)	Water Temp. (°F)		
	50	70	90
70	*230(104)	194(88)	183(83)
80	194(88)	185(84)	152(69)
90	170(77)	*165(75)	146(66)
100	140(64)	135(61)	130(59)
70	*795	800	840
80	800	820	850
90	810	*842	860
100	840	855	870
70	97(0.37)	90(0.34)	85(0.32)
80	90(0.34)	80(0.30)	72(0.27)
90	79(0.30)	71(0.27)	65(0.25)
100	71(0.27)	67(0.25)	62(0.23)
70	21	22	23
80	22	24	26.5
90	23.5	29	28.5
100	25.5	29.5	38.5
70	5	4	4
80	4	4	4
90	4	4	3.5
100	3.5	3.5	3.5
70	245(17.2)	255(17.9)	269(18.9)
80	284(20.0)	290(20.4)	303(21.3)
90	316(22.2)	318(22.4)	326(22.9)
100	339(23.8)	343(24.1)	356(25.0)
70	48(3.4)	50(3.5)	51(3.6)
80	48(3.4)	50(3.5)	53(3.7)
90	50(3.5)	50(3.5)	53(3.7)
100	50(3.5)	51(3.6)	54(3.8)

APPROXIMATE
ICE PRODUCTION
PER 24 HR. (MAX. CUBE SIZE)

lbs./day (kg/day)

APPROXIMATE ELECTRIC
CONSUMPTION

watts

APPROXIMATE WATER
CONSUMPTION PER 24 HR.

gal./day (m³/day)

FREEZING CYCLE TIME

min.

HARVEST CYCLE TIME

min.

HEAD PRESSURE

PSIG (kg/cm²G)

SUCTION PRESSURE

PSIG (kg/cm²G)

MODEL KM-500MAB (Air-cooled)				MODEL KM-500MWE (Water-cooled)				MODEL KM-500MRE (Remote air-cooled)				
APPROXIMATE ICE PRODUCTION PER 24 HR. (MAX. CUBE SIZE)	Ambient Temp. (°F)	Water Temp. (°F)			Ambient Temp. (°F)	Water Temp. (°F)			Ambient Temp. (°F)	Water Temp. (°F)		
		50	70	90		50	70	90		50	70	90
lbs./day (kg/day)	70	*470(214)	435(197)	410(186)	70	*470(214)	445(202)	390(177)	70	*450(204)	435(197)	415(188)
	80	440(200)	400(181)	370(168)	80	460(209)	435(197)	380(173)	80	420(191)	405(184)	385(175)
	90	405(184)	*370(168)	330(150)	90	450(205)	*420(191)	365(166)	90	390(177)	*380(172)	355(161)
	100	375(170)	340(154)	290(132)	100	440(200)	405(184)	345(156)	100	360(163)	350(159)	325(147)
APPROXIMATE ELECTRIC CONSUMPTION watts	70	*1210	1210	1210	70	*1200	1240	1250	70	*1300	1320	1330
	80	1220	1230	1240	80	1200	1250	1260	80	1320	1340	1350
	90	1240	*1250	1270	90	1210	*1260	1280	90	1330	*1360	1370
	100	1270	1280	1290	100	1210	1280	1300	100	1340	1370	1380
APPROXIMATE WATER CONSUMPTION PER 24 HR. gal./day (m ³ /day)	70	*207(0.78)	137(0.52)	127(0.48)	70	*660(2.50)	765(2.90)	1480(5.60)	70	*240(0.91)	185(0.70)	169(0.64)
	80	140(0.53)	119(0.45)	111(0.42)	80	670(2.54)	782(2.96)	1519(5.75)	80	185(0.70)	172(0.65)	155(0.59)
	90	110(0.42)	*100(0.38)	95(0.36)	90	685(2.59)	*800(3.03)	1558(5.90)	90	162(0.61)	*150(0.57)	138(0.52)
	100	98(0.37)	92(0.35)	85(0.32)	100	700(2.65)	818(3.10)	1614(6.11)	100	140(0.53)	130(0.48)	122(0.46)
FREEZING CYCLE TIME min.	70	30	32	33	70	29	31	35	70	30	32	33
	80	34	35	37	80	29	31	37	80	34	35	37
	90	36	38	42	90	30	32	38	90	36	38	42
	100	38	42	48	100	33	34	40	100	38	42	48
HARVEST CYCLE TIME min.	70	3.5	2	2	70	3	2	2	70	3.5	2	2
	80	2	2	2	80	3	2	2	80	2	2	2
	90	2	2	2	90	3	2	2	90	2	2	2
	100	2	2	2	100	3	2	2	100	2	2	2
HEAD PRESSURE PSIG (kg/cm ² G)	70	216(15.2)	219(15.4)	220(15.5)	70	232(16.3)	232(16.3)	238(16.7)	70	199(14.0)	199(14.0)	203(14.3)
	80	239(16.8)	249(17.5)	253(17.8)	80	232(16.3)	233(16.4)	238(16.7)	80	218(15.3)	222(15.6)	223(15.7)
	90	264(18.6)	270(19.0)	284(20.0)	90	232(16.3)	235(16.5)	239(16.8)	90	235(16.5)	238(16.7)	245(17.2)
	100	292(20.5)	302(21.2)	320(22.5)	100	232(16.3)	235(16.5)	239(16.8)	100	256(18.0)	262(18.4)	270(19.0)
SUCTION PRESSURE PSIG (kg/cm ² G)	70	40(2.8)	41(2.9)	43(3.0)	70	28(2.3)	43(3.0)	44(3.1)	70	34(2.4)	37(2.6)	43(3.0)
	80	41(2.9)	43(3.0)	46(3.2)	80	28(2.3)	43(3.0)	46(3.2)	80	37(2.6)	38(2.7)	43(3.0)
	90	43(3.0)	46(3.2)	50(3.5)	90	28(2.3)	47(3.3)	47(3.3)	90	40(2.8)	40(2.8)	43(3.0)
	100	44(3.1)	46(3.2)	54(3.8)	100	34(2.4)	46(3.2)	50(3.5)	100	43(3.0)	44(3.1)	44(3.1)