



CHAPTER 4 PARTS

PARTS BY PICTORIAL

This chapter describes assemblies/subassemblies/parts considered replaceable at on-site field installation.

NOTE: The following is a breakdown description for Serial Numbers:

Serial Number Location - Rear Cabinet top right hand side.

Example: 0192A0101

01 Month MFG.
92 Year MFG.
A Serial Rev.
0101 Number of Units Built.

NOTES: *MRC-400/450 WITH A DATE CODE OF XX92 AND EARLY XX93 MAY HAVE THE LETTERS A, B, OR C. THESE ARE SERIAL A UNITS. PLEASE CONFIRM BY CHECKING SOFTWARE LEVEL, SEE BELOW.*

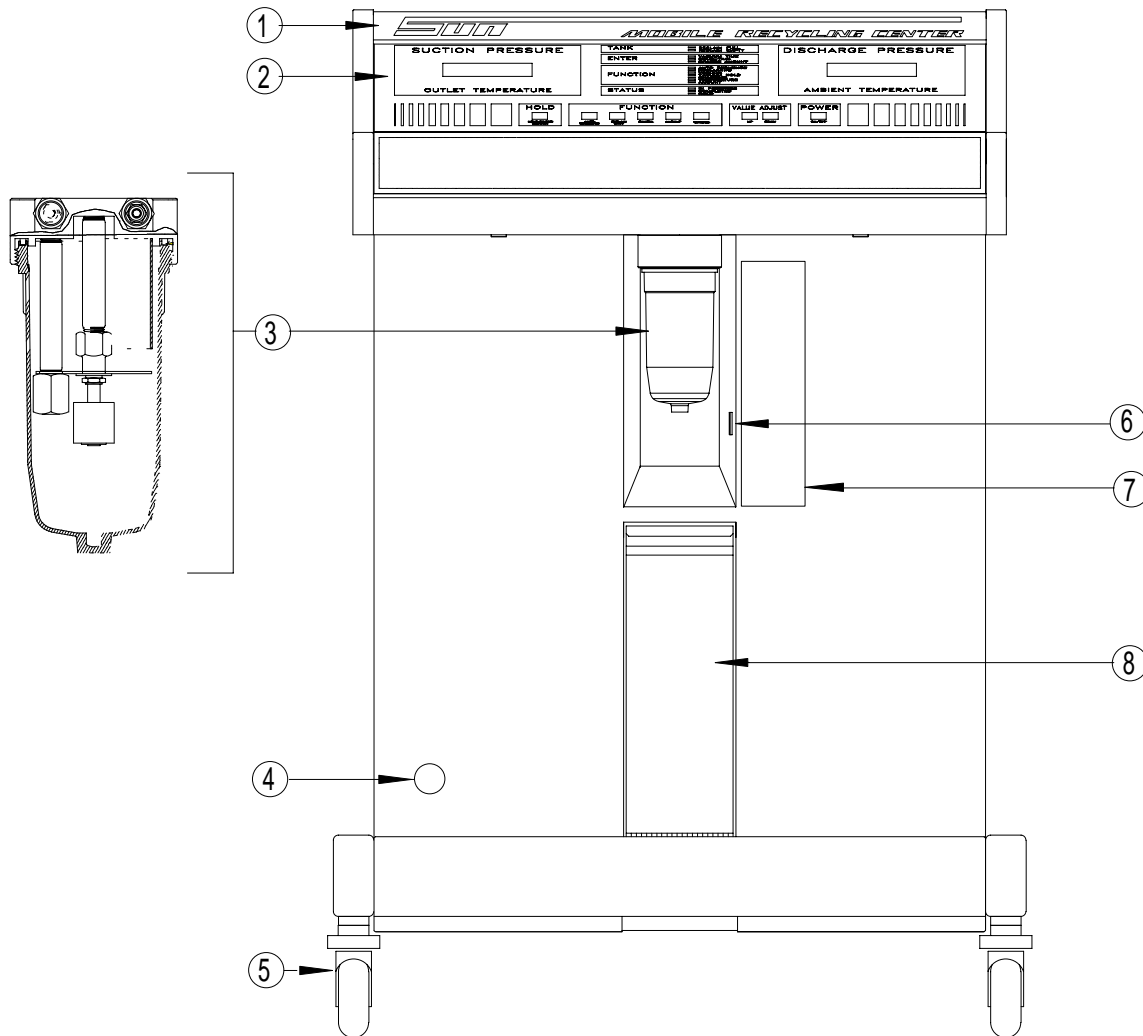
SERIAL A SOFTWARE STARTS WITH 1. XX ON POWER UP.

KEY NS = Not Shown

* = Ford

= Crysler

FRONT VIEW

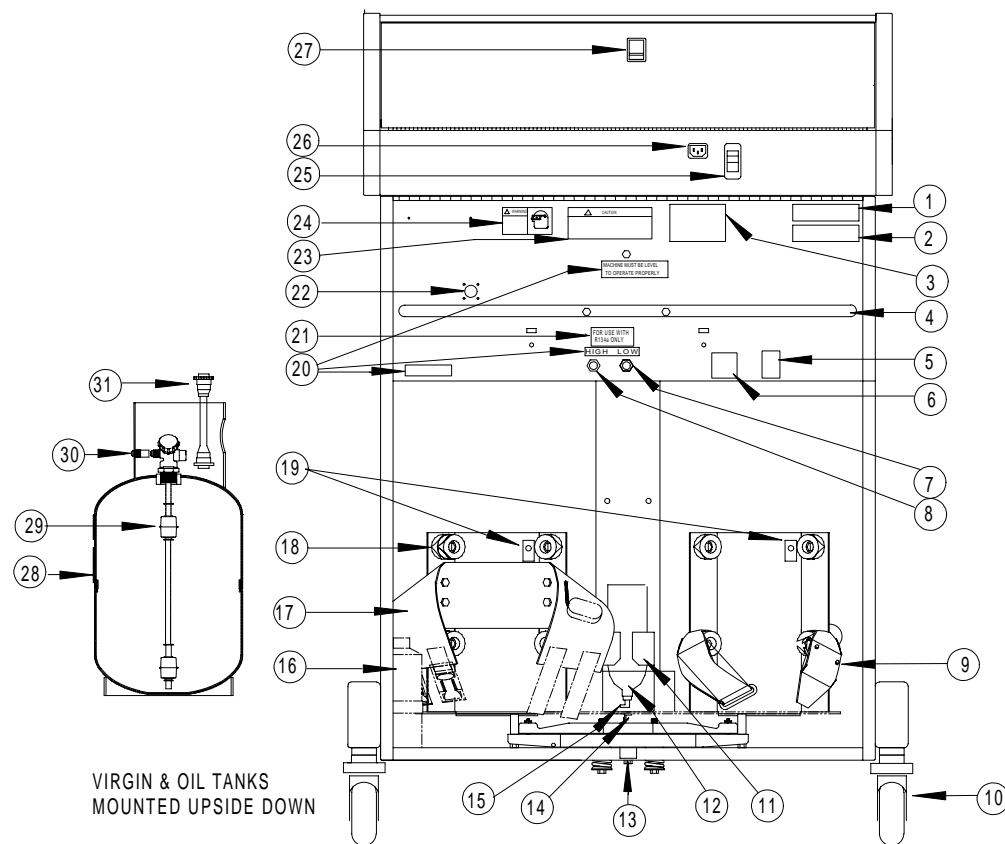


ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1a.	Headsign, Sun Decal	0682-0964-01	6.	Switch, Service	0764-0254-01
1b.	FOR GENERIC P/N's	SEE PAGE 4-15	7.	Label, Service	0682-0969-01
2.	Control Panel, Assy.	See Page 4-5	8a.	Master Filter Kit R12	1095-0178-04
3.	Suction Separator Bowl	See Page 4-9	8b.	Master Filter Kit (R134a)¼"	1095-0178-02
4.	Moisture Indicator	7009-2346-01	N.S.	Desiccant Bags (Qty. 10)	0671-1018-02
5a.	Caster, W / Brake (Shaft)	3645-0054-02	N.S.	Master Filter Drier	7009-2099-01
5b.	Caster, W / Brake (Bolt)	3645-0056-02	N.S.	Gasket	4053-0020-01

NOTE: * = Included in Master Filter Kit

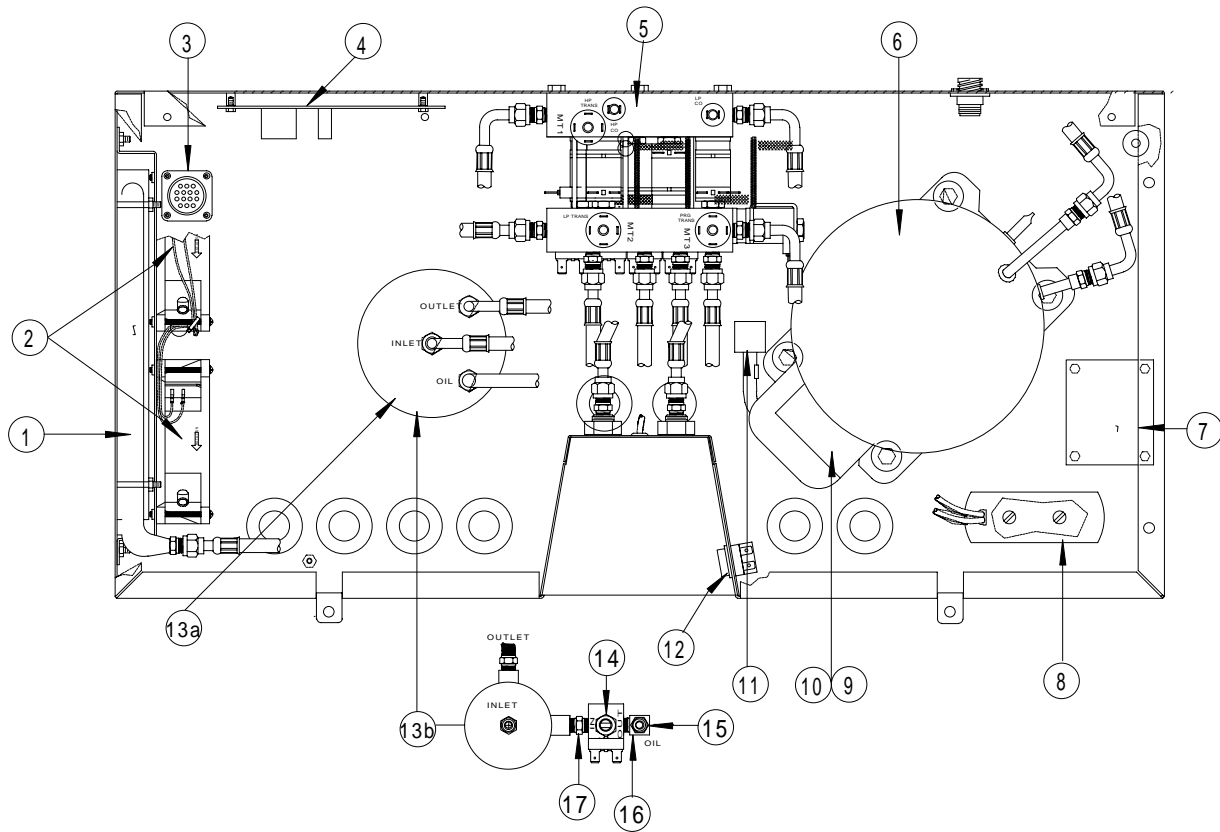
NOTE: Casters for Sun version use shaft type. Casters for Snap-On version use bolt type.

REAR VIEW



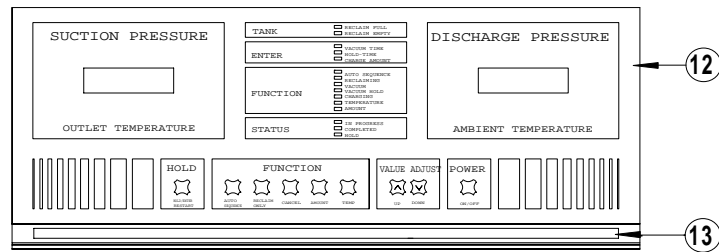
ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1.	Label, "Caution Vent"	0682-1038-01	15.	90 Degree Fitting	0647-0198-01
2.	Label, "French Use of"	0682-1039-01	16.	Plastic Bottle	0382-0510-01
3.	Label, "Caution Use of"	0682-0873-01	17a.	Heater Blanket 110VAC	0518-0024-01
4.	Bracket	7012-1369-01	17b.	Heater Blanket 220VAC	0518-0024-02
5.	Label, "Service Procedure"	0682-0969-01	18.	Bumpers	1489-0017-01
6.	Label, "Warning"	0682-0968-01	19.	Tank Switches (2)	0799-0237-01
7.	Bulkhead fittings R12	0647-0285-01	20.	Label, Info Guide	0682-0970-01
8.	Bulkhead fittings R134a	0647-0286-01	21.*	Label, R134a ONLY	0682-0760-01
9a.	Strap Right (30 lb.)	0424-0806-01	22.*	CPC 4 Pin Connector	4162-0831-01
9b.	Strap Right (50 lb.)	0424-0806-02	23.	Label, Caution	0682-1052-01
9c.	Strap Left	0424-0805-02	24.	Label, Eye Warning	0682-1051-01
10a.	Caster, W/O Brake (Shaft)	3645-0054-01	25.	On/Off/Circuit Breaker	1922-0118-01
10b.	Caster, W/O Brake (Bolt)	3645-0056-01	26.	A.C. Socket	4162-7015-01
11a.	Bracket, Oil	7012-1468-01	27.	Latch	5666-0049-01
11b.	Thumb screw	0675-0157	28a.	R12 Reclm. tk. 30 lb.	7009-2331-01
12a.	Cyl. Disposable Oil	0271-0071-01	28b.	R12 Reclm. tk. 50 lb.	7009-2331-02
12b.	Cyl. FORD Oil	0271-0072-01	28c.	R134a Reclm. tk. 30 lb.	7009-2331-03
12c.	Cyl. R134a Polyol Ester Oil	EAK0163L00A	28d.	R134a Reclm. tk. 50 lb.	7009-2331-04
13a.	Load Cell	7009-2335-01	29.	Switch Double Float	0764-0253-01
13b.	Scale Assembly 400	7009-2324-01	30a.	R12 Inline Filter 1/4"	7009-2417-01
13c.	Scale Assembly 450	7009-2324-02	30b.	R134a Inline Filter 1/2"	7009-2418-01
13d.	Scale Assy.400 (220VAC)	7009-2324-03	31.	Tank Float Cable	6004-0760-01
13e.	Scale Assy. 450 (220v)	7009-2324-04	N.S.	A.C. Cord	6001-0197-01
13f.	Shock Mount Assy.	7009-2306-01	N.S.	Temp. Probe (Vehicle)	6004-0777-01
14.	Oil switch	2207-0034-01			

TOP VIEW OF PUMP COMPARTMENT

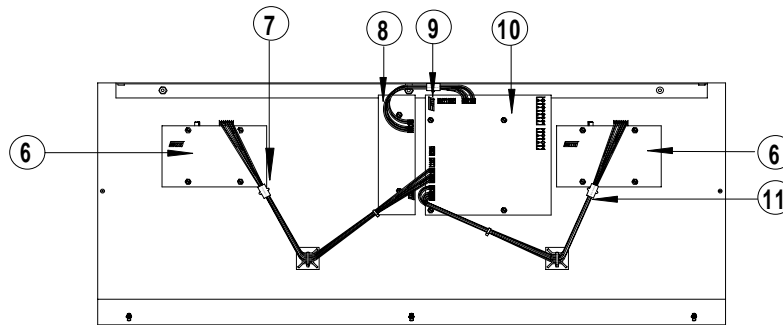


ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1.	Condenser	0111-0703-01	10a.	Relay (On Pump 110v)	0303-0109-07
2a.	Fan, Axial (115v)	0587-0504-01	10b.	Relay (On Pump 220v)	0303-0109-06
2b.	Fan, Axial (220v)	0587-0507-01	11a.	Cap (Pump Relay 110v)	7009-2348-01
3.	Connector, 14 Pin	4162-0832-01	11b.	Cap (Pump Relay 220v)	7009-2348-02
4.	Plumbing Board	7001-2185-01	11c.	Resister	0684-0686-01
5.	Manifold Block	See Page 4-6	12.	Switch (Momentary)	0764-0254-01
6a.	Compressor (110)	7009-2258-02	13a.	Oil Reservoir, Temprite	7009-2100-02
6b.	Compressor (220)	7009-2258-04	13b.	Oil Separator, Small	0111-0906-01
NS.	Compressor Oil 3GS/300 viscosity (24oz.)	0681-0179-02	14.	Solenoid, Separator	0304-0057-01
7.	Relay Board	7001-2230-01	15.	1/4" Flare fitting (Ser. A)	0647-0223-01
8a.	Capacitor, Start (110v)	0303-0109-09	16.	Elbow, 90°	0647-0044
8b.	Capacitor, Start (220v)	0303-0111-04	17.	Nipple, Hex	4982-0076-01
9.	Klixon, Overload protector	0303-0109-08			

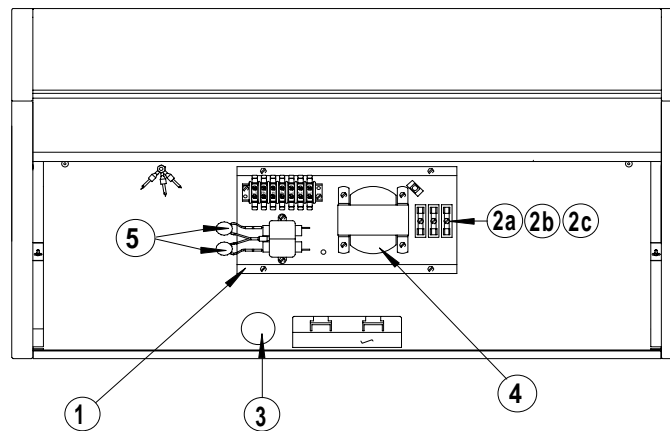
TOP OF HEADFRAME



MRC/MTC CONTROL PANEL



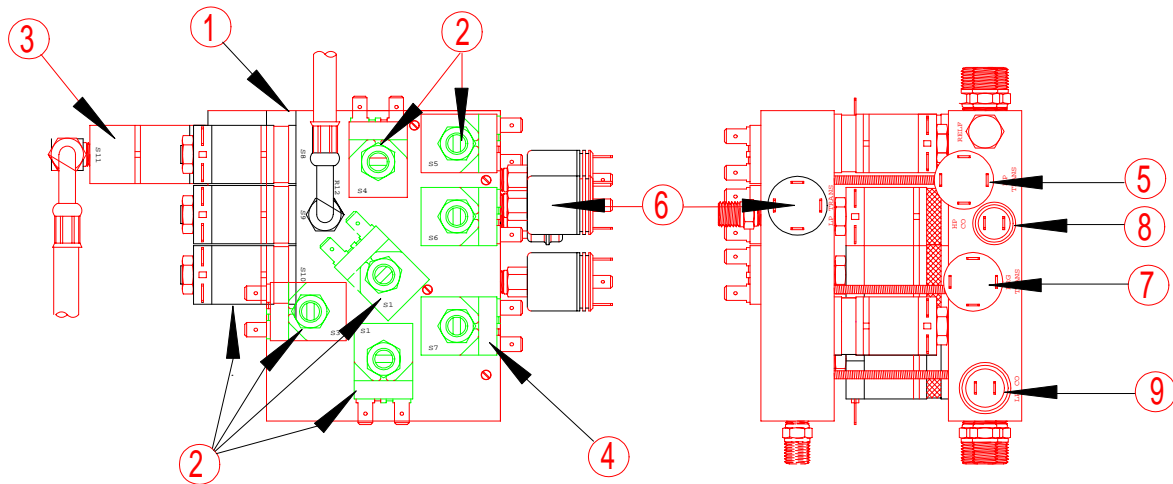
UNDER CONTROL PANEL



TOP VIEW

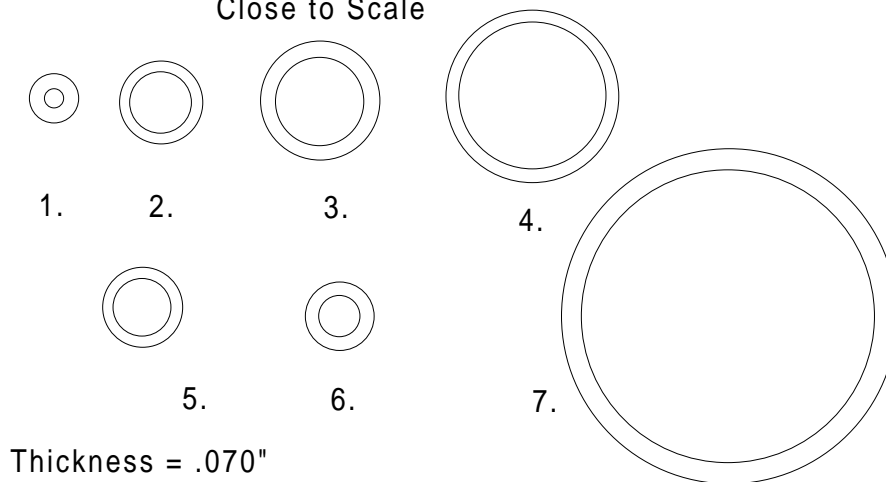
ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1a.	Power Supply (110V.A.C.)	7009-2323-01	6.	LCD Driver Bd.	7001-2153-01
1b.	Power Supply (220V.A.C.)	7009-2323-03	7.	W. H. (Rt. Display)	7076-0897-01
1c.	Power Supply (100V.A.C.)	7009-2323-02	8.	Led Driver Bd.	7001-2159-01
2a.	Fuse F1 (.25 amp)	0739-0119-01	9.	W.H. (Led Display)	7076-0896-01
2b.	Fuse F2 (1 amp)	0739-0040	10.	Processor Board.	7001-2188-01
2c.	Fuse F3 (3 amp)	0739-0103	11.	W.H. (Left Display)	7076-0897-02
3.	Alarm	0316-0205-01	12a.	Control Panel MRC400A	7005-2475-01
4.	Transformer	7009-2333-01	12b.	Control Panel Generic For labels see page 4-15	7005-2499-01
5a.	Varistor (115 V)	7009-1320	13a.	MRC-400, label	0682-1055-01
5b.	Varistor (220 V)	7009-1320-02	13b.	MRC-450, label	0682-1067-01
			NS.	A.C. Cord	6001-0197-01

MANIFOLD BLOCK ASSEMBLY



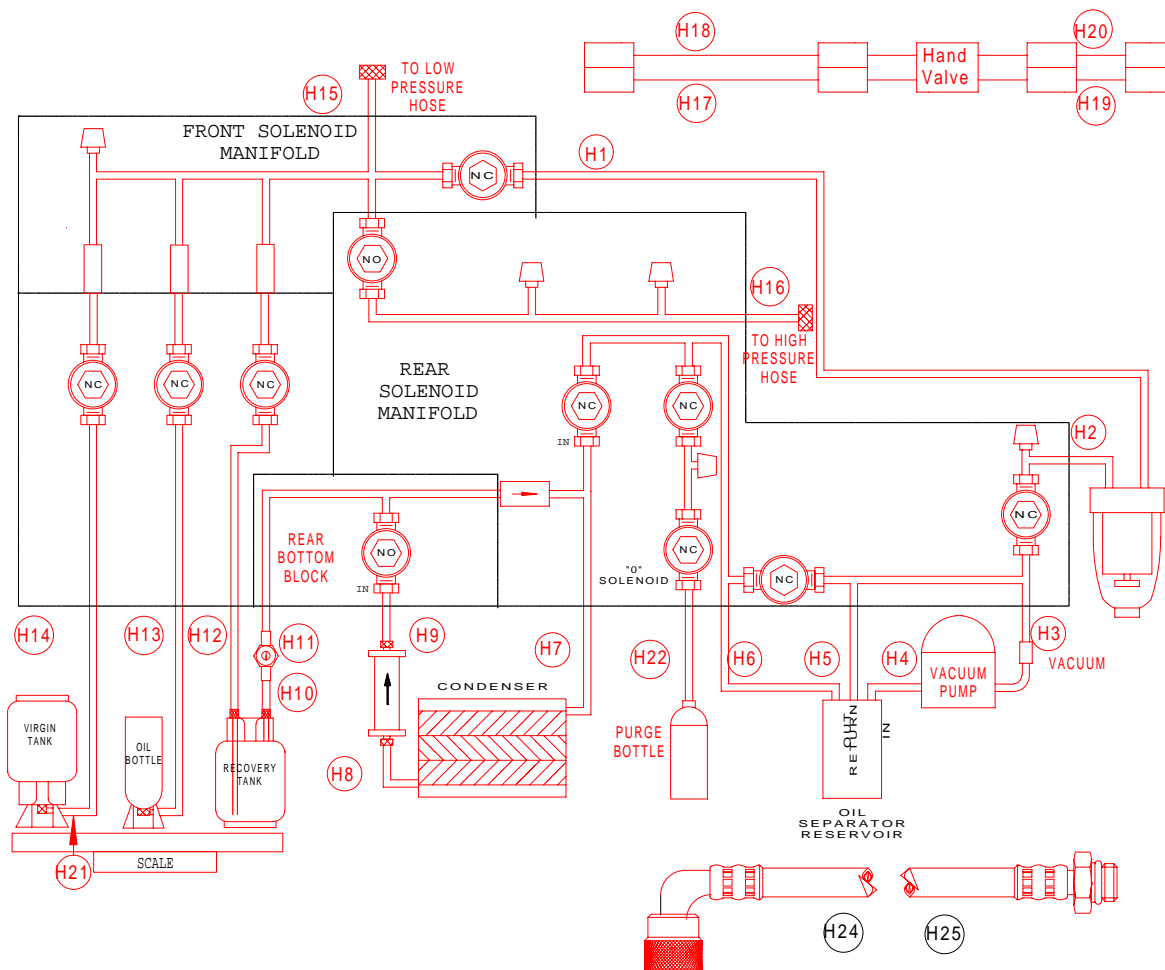
ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1.	Manifold Assembly	7009-2347-04	6.	Transducer Low Pres.	0514-0029-01
2.	Solenoid N.C.	0304-0905-01	7.	Transducer Purge Pres.	0514-0030-01
3.	Solenoid N.O.(S11 Liquid)	0304-0905-02	8.	Switch, High Pressure	0549-0036-01
4.	Solenoid N.O.(S7 X-Over)	0304-0905-03	9.	Switch, Low Pressure	0549-0035-01
5.	Transducer, High Pressure	0514-0030-01	NS.	Check Valve	1-4481

Close to Scale



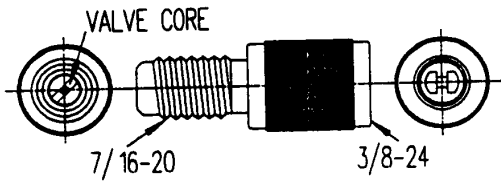
ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
1.	O-Ring (Tiny S7) (od 7/32)	0617-0211-01	6.	O-Ring (Liq. Sol.) (od .309)	0617-0211-06
2.	O-Ring (Small) (od 1/2)	0617-0211-02	7.	O-Ring 2 oz. oil cyl.(od .1.5)	0617-0219-01
3.	O-Ring (Medium) (od 11/16)	0617-0211-03	8.	O-Ring Block Kit (Qty 37)	0617-0211-05
4.	O-Ring (Large) (od 15/16)	0617-0211-04	NS	Screw, Phillips	0406-0148-01
5.	O-Ring Inline valve (od 3/8)	0617-0212-01	NS	Permabond	0626-0575-01
			NS	Super Lube, 3 oz.	0681-0193-03

HOSE PART NUMBERS

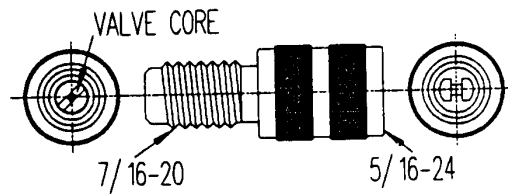


ITEM	DESCRIPTION	PART NUMBER	ITEM	DESCRIPTION	PART NUMBER
H1.	Red 16"	3988-0265-01	H16.	Red 16"	3988-0265-01
H2.	Red 10"	3988-0265-02	H17.	Blue 96"	3988-0243-01
H3.	Red 18"	3988-0272-01	NS.	Blue Multi. (W/90°) 96"	3988-0292-01
H4.	Red 24"	3988-0272-02	H18.	Red 96"	3988-0244-01
H5.	Yel. 18"	3988-0270-01	NS.	Red Multi. (W/90°) 96"	3988-0293-01
H6.	Red 18"	3988-0272-01	H19.	Hand Valve w/Blue 10"	3988-0234-02
H7.	Red 16"	3988-0265-01	H20.	Hand Valve w/Red 10"	3988-0233-02
H8.	Blue 21"	3988-0267-01	H21.	R134a (6") adapter	3988-0277-01
H9.	Blue 33"	3988-0267-02	H22.	Vent tube to bottle	0669-0282-01
H10.	Red 27"	3988-0268-01	H23.	Hand Valve	5121-0004-01
H11.	Blue 38"	3988-0254-02	H24.	R134a Red 96" (W90°)	EAH0001C01A
H12.	Blue 37"	3988-0271-01	H25.	R134a Blue 96" (W90°)	EAH0001C02A
H13.	Yel. 33"	3988-0273-01	NS.	Crush Washer, Copper	0647-0296-01
H14.	Blue 45"	3988-0271-02	NS.	Anti-Blow Back Val. ¼"	4719-0055-01
H15.	Blue 18"	3988-0301-01	NS.	Anti-Blow Back Val. ½"	4719-0055-02

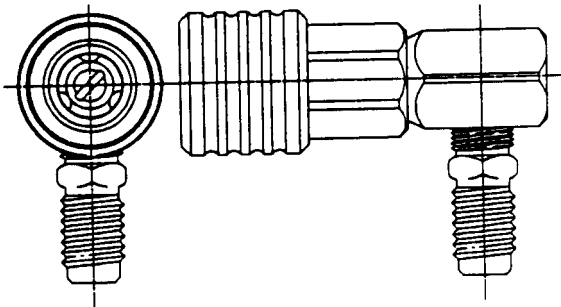
ADAPTERS / FITTINGS



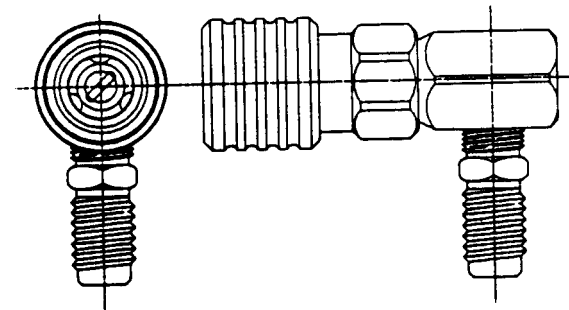
GM ADAPTER
0647-0196-01



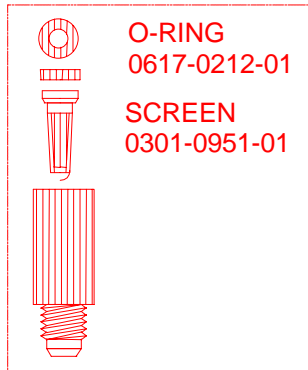
FORD ADAPTER
0647-0200-01



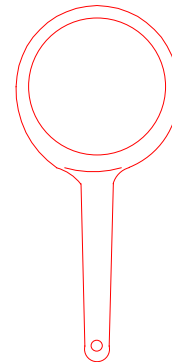
LARGE GM ADAPTER QUICK DISCONNECT
0647-0199-01



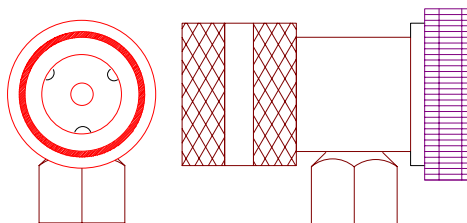
GM/FORD ADAPTER QUICK DISCONNECT
0647-0197-01



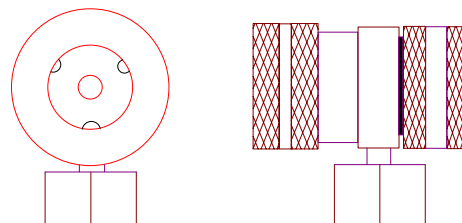
INLINE FILTER
7009-2417-01 (R-12)
7009-2418-01 (R134a)



FILTER WRENCH
0001-0067-01

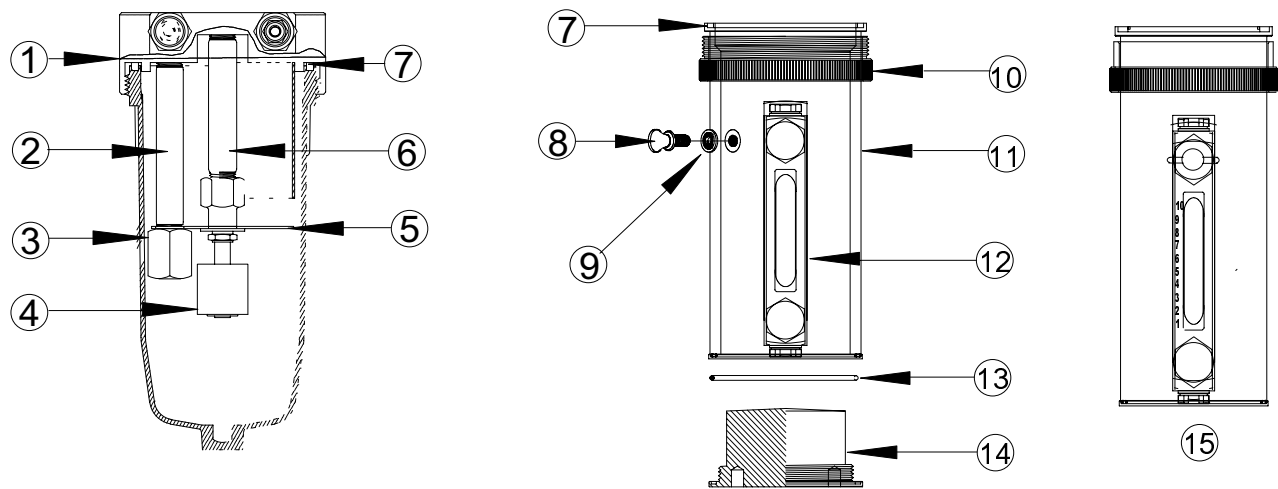


HIGH
LOW
O-Ring Kit
0647-0287-07
0647-0287-08
EAK0027C00AS



HIGH
LOW
ARG 0404 (10 each)
0647-0287-09
0647-0287-10

SUCTION SEPARATOR



ITEM	DESCRIPTION	EQUI SERV #
1.	Cap and shield	7020-1982-01
2.	Fitting, nipple	4982-0074-01
3.	Atomizer Fitting	7024-0511-01
4a.	Float Switch Assembly	7009-2102-01
4b.	Float	0546-0017-01
5.	Plate	4982-0076-01
6.	Fitting, nipple	4982-0073-01
7.	Gasket, Bowl	4053-0020-01
8.	Thumbscrew	0938-0158-01
9.	Washer	0400-5605-01
10.	Ring, Mounting Bowl	0382-0512-01
11.	Bowl, Suction Separator (Aluminum)	0382-0513-01
12.	Gauge, Liquid Level	0330-0010-01
13.	O-Ring, Bottom Cap	0617-0220-01
14.	Bowl, Bottom Cap	0382-0514-01
15.	Metal Bowl Kit (Solid bowl)	EAA0088C00A

PARTS IN ALPHABETICAL ORDER

<u>NAME</u>	<u>PART NUMBER</u>	<u>400</u>	<u>450</u>	<u>COMMENTS</u>
Adapter, Ford	0647-0200-01	X		
Adapter, GM	0647-0196-01	X		
Adapter, GM,	0647-0199-01	X		Large, QK. Dis., 90°
Adapter, GM/Ford	0647-0197-01	X		
Adapter, R134a	0647-0287-07		X	
Adapter, R134a	0647-0287-08		X	
Alarm	0316-0205-01	X	X	
Board, LCD Driver	7001-2153-01	X	X	
Board, Led Driver	7001-2159-01	X	X	
Board, Plumbing	7001-2185-01	X	X	
Board, Processor	7001-2188-01	X	X	
Board, Relay	7001-2230-01	X	X	
Bottle, Plastic	0382-0510-01	X	X	
Bowl	0382-0009-02	X	X	
Bowl, Separator	0382-0513-01	X	X	Metal bowl
Bowl, Bottom Cap	0382-0514-01	X	X	Metal bowl
Bowl, Metal Kit	EAK0071C00AS			
Bowl, Metal (Solid)	EAA0088C00A	X	X	Solid Metal bowl
Bracket, Oil	7012-1468-01	X		
Bracket, Rear hose	7012-1369-01	X	X	
Breaker, On/Off/Circuit	1922-0118-01	X	X	
Bulkhead fittings R12	0647-0285-01	X		
Bulkhead fittings R134a	0647-0286-01		X	
Bumpers	1489-0017-01	X	X	
Cable, Tank Float	6004-0760-01	X	X	
Cap and Shield	7020-1982-01	X	X	Top of S. S. bowl
Capacitor	7009-2348-01	X	X	(Pump Relay 110v)
Capacitor	7009-2348-02	X		(Pump Relay 220v)
Capacitor, Start	0303-0109-09	X	X	(110v)
Capacitor, Start	0303-0111-04	X	X	(220v)
Caster, W / Brake	3645-0054-02	X	X	
Caster, W / O Brake	3645-0054-01	X	X	
Caster, W / Brake	3645-0056-02	X	X	
Caster, W / O Brake	3645-0056-01	X	X	
Compressor	7009-2258-02	X	X	110 VAC
Compressor	7009-2258-04	X	X	220 VAC
Compressor Oil	0681-0179-02	X	X	3GS/300 viscosity (24oz.)
Condenser	0111-0703-01	X	X	
Connector, 14 Pin	4162-0832-01	X	X	
Connector, CPC 4 Pin	4162-0831-01	X	X	
Control Panel	7005-2499-01	X	X	Generic
Control Panel	7005-2475-01	X		MRC-400A
Cord, A.C.	6001-0197-01	X	X	
Crush Washer,	0647-0296-01	X	X	Copper
Cylinder, Disposable Oil	0271-0071-01	X		Naphtheric, mineral oil
Cylinder, Disposable Oil	0271-0072-01	X		Ford, Paraffinic mineral oil
Cylinder, R134a Oil	EAK0163L00A		X	Ester oil in a Disposable cylinder
Desiccant Bags	0671-1018-01	X		(Qty. 10)
Desiccant Bags	0671-1018-02		X	(Qty. 10)
Elbow, 90°	0647-0044	X	X	
Fan, Axial	0587-0504-01	X	X	(115v)
Fan, Axial	0587-0507-01	X	X	(220v)
Filter, Inline 1/2"	7009-2418-01		X	R134a
Filter, Inline 1/4"	7009-2417-01	X		R12
Fitting	0647-0198-01	X	X	90 Degree

<u>NAME</u>	<u>PART NUMBER</u>	<u>400</u>	<u>450</u>	<u>COMMENTS</u>
Fitting	0647-0223-01	X	X	1/4" Flare
Fitting, Atomizer	7024-0511-01	X	X	
Fitting, nipple	4982-0074-01	X	X	S.S. Bowl
Float Switch Assembly	7009-2102-01	X	X	
Float	0546-0017-01	X	X	
Fuse, F1	0739-0119-01	X	X	(.25 amp)
Fuse, F2	0739-0040	X	X	(1 amp)
Fuse, F3	0739-0103	X	X	(3 amp)
Gasket	4053-0020-01	X	X	Suction Separator Bowl
Gauge, Liquid level	0330-0010-01	X	X	Metal bowl
Headsign, Sun Decal	0682-0964-01	X	X	
Heater Blanket	0518-0024-02	X	X	220VAC
Heater Blanket	0518-0024-01	X	X	110VAC
Hose, Blue 10"	3988-0234-02	X		
Hose, Blue 18"	3988-0271-02	X	X	
Hose, Blue 21"	3988-0267-01	X	X	
Hose, Blue 33"	3988-0267-02	X	X	
Hose, Blue 37"	3988-0271-01	X	X	
Hose, Blue 38"	3988-0254-02	X	X	
Hose, Blue 45"	3988-0271-02	X	X	
Hose, Blue 96"	3988-0243-01	X		
Hose, Blue Multi.	3988-0292-01	X		96" (W/90°)
Hose, R134a	3988-0277-01		X	(6") adapter
Hose, R134a Blue	EAH0001C02A		X	96" (W90°)
Hose, Red 10"	3988-0265-02	X	X	
Hose, Red 10"	3988-0233-02	X		
Hose, Red 16"	3988-0265-01	X	X	
Hose, Red 16"	3988-0265-01	X	X	
Hose, Red 16"	3988-0265-01	X	X	
Hose, Red 18"	3988-0272-01	X	X	
Hose, Red 18"	3988-0272-01	X	X	
Hose, Red 24"	3988-0272-02	X	X	
Hose, Red 27"	3988-0268-01	X	X	
Hose, Red 96"	3988-0244-01	X		
Hose, Red Multi.	3988-0293-01	X		96" (W/90°)
Hose, Red,	EAH0001C01A		X	96" (W90°) R134a
Hose, Yel. 18"	3988-0270-01	X	X	
Hose, Yel. 33"	3988-0273-01	X	X	
Inlet Tube	4982-0074-01	X	X	
Kit, Master Filter	1095-0178-04	X		R-12 (1/4" Fittings)
Kit, Master Filter	1095-0178-02		X	R-134a Serial A (1/4" Fittings)
Kit, Master Filter	1095-0178-03		X	R-134a Serial B (1/2" Fittings)
Label	0682-1038-01	X	X	"Caution Vent"
Label	0682-0873-01	X	X	"Caution Use of"
Label	0682-0968-01	X	X	"Warning"
Label	0682-1052-01	X	X	Caution
Label	0682-1051-01	X	X	Eye Warning
Label	0682-1055-01	X		Front panel MRC-400 label
Label	0682-1067-01		X	Front panel MRC-450 label
Label	0682-0970-01	X	X	Info Guide
Label	0682-0760-01		X	R134a ONLY
Label	0682-0969-01	X	X	"Service Procedure"
Label	0682-1039-01	X	X	"French Use of"
Latch	5666-0049-01	X	X	Rear Glove Box
Load Cell	7009-2335-01	X	X	
Manifold Assembly	7009-2347-04	X	X	
Master Filter Drier	7009-2426-01		X	R-134a, 1/2" fitting
Master Filter Drier	7009-2099-01	X		R-12, 1/4" fitting

CHAPTER 4 PARTS (A)

<u>NAME</u>	<u>PART NUMBER</u>	<u>400</u>	<u>450</u>	<u>COMMENTS</u>
Moisture Indicator	7009-2346-01	X	X	
Nipple, Hex	4982-0076-01	X	X	
O-Ring	0617-0211-06	X	X	(Liq. Sol.) (od .309)
O-Ring Block Kit	0617-0211-05	X	X	(Qty 37, for pneumatic block)
O-Ring	0617-0211-04	X	X	(Large)
O-Ring	0617-0211-03	X	X	(Medium)
O-Ring	0617-0211-02	X	X	(Small)
O-Ring (Small)	0617-0211-01	X	X	(Small)
O-Ring	0617-0212-01	X	X	Inline hand valve
O-Ring	0617-0219-01	X	X	2 ounce oil charge cylinder
O-Ring, bottom of bowl	0617-0220-01	X	X	Metal bowl
Oil Reservoir, Temprite	7009-2100-02	X	X	
Oil Separator, Small	0111-0906-01	X	X	
Permabond	0626-0575-01	X	X	
Power Supply	7009-2323-02	X	X	(100V.A.C.)
Power Supply	7009-2323-01	X	X	(110V.A.C.)
Power Supply	7009-2323-03	X	X	(220V.A.C.)
Relay	0303-0109-07	X	X	(On Pump 110v)
Relay	0303-0109-06	X	X	(On Pump 220v)
Resister	0684-0686-01	X	X	
Scale Assembly	7009-2324-01	X	X	
Scale Assembly	7009-2324-03	X	X	(220VAC)
Scale Assembly	7009-2324-02	X	X	
Scale Assembly	7009-2324-04	X	X	(220VAC)
Screw, Phillips	0406-0148-01	X	X	In Block. (Qty. = 4)
Screw, Thumb	0675-0157	X		For Oil Bracket
Shock Mount Assy.	7009-2306-01			X-brace for scale
Socket, A.C.	4162-7015-01	X	X	
Solenoid N.C.	0304-0905-01	X	X	Most solenoids.
Solenoid N.O.(S11)	0304-0905-02	X	X	Liquid
Solenoid N.O.S7	0304-0905-03	X	X	X-Over
Solenoid, Separator	0304-0057-01	X	X	Small oil separator
Strap, Velcro	0424-0805-02	X	X	Left
Strap, Velcro Right	0424-0806-01	X	X	(30 lb.)
Strap, Velcro Right	0424-0806-02	X	X	(50 lb.)
Suction Separator Assy.	7009-2185-01	X	X	
Super Lube,	0681-0193-03	X	X	3 oz.
Switch Float	7009-2102-01	X	X	
Switch Oil	2207-0034-01	X	X	
Switch, (Momentary)	0764-0254-01	X	X	
Switch, Double Float	0764-0253-01	X	X	
Switch, High Pressure	0549-0036-01	X	X	
Switch, Low Pressure	0549-0035-01	X	X	
Switch, Service	0764-0254-01	X	X	
Switch, Tank (2)	0799-0237-01	X	X	
Tank, R12 Recovery	7009-2331-01	X		30 lb.
Tank, R12 Recovery	7009-2331-02	X		50 lb.
Tank, R134a Recovery	7009-2331-03		X	30 lb.
Tank, R134a Recovery	7009-2331-04		X	50 lb.
Temp. Probe	6004-0777-01	X	X	(Vehicle)
Thumbscrew	0938-0158-01	X	X	Metal bowl
Transducer, High Pres.	0514-0030-01	X	X	
Transducer, Low Pres.	0514-0029-01	X	X	
Transducer, Purge Pres.	0514-0030-01	X	X	
Transformer	7009-2333-01	X	X	
Valve, Anti-Blow Back	4719-0055-02		X	1/2", (R134a)
Valve, Anti-Blow Back	4719-0055-01	X		1/4", (R-12)
Valve, Hand	5121-0004-01	X	X	

<u>NAME</u>	<u>PART NUMBER</u>	<u>400</u>	<u>450</u>	<u>COMMENTS</u>
Varistor	7009-1320	X	X	(115 V)
Varistor	7009-1320-02	X	X	(220 V)
Vent tube to bottle	0669-0282-01	X	X	
Washer	0400-5605-01	X	X	Metal bowl

PARTS IN NUMERICAL ORDER

<u>NAME</u>	<u>PART NUMBER</u>	<u>400</u>	<u>450</u>	<u>COMMENTS</u>
Condenser	0111-0703-01	X	X	
Oil Separator, Small	0111-0906-01	X	X	
Cylinder, Disposable Oil	0271-0071-01	X		Naphtheric, mineral oil
Cylinder, Disposable Oil	0271-0072-01	X		Ford, Paraffinic mineral oil
Relay	0303-0109-06	X	X	(On Pump 220v)
Relay	0303-0109-07	X	X	(On Pump 110v)
Capacitor, Start	0303-0109-09	X	X	(110v)
Capacitor, Start	0303-0111-04	X	X	(220v)
Solenoid, Separator	0304-0057-01	X	X	Small oil separator
Solenoid N.C.	0304-0905-01	X	X	Most solenoids.
Solenoid N.O.(S11)	0304-0905-02	X	X	Liquid
Solenoid N.O.S7	0304-0905-03	X	X	X-Over
Alarm	0316-0205-01	X	X	
Gauge, Liquid level	0330-0010-01	X	X	Metal bowl
Bowl	0382-0009-02	X	X	
Bottle, Plastic	0382-0510-01	X	X	
Bowl, Separator	0382-0513-01	X	X	Metal bowl
Bowl, Bottom Cap	0382-0514-01	X	X	Metal bowl
Washer	0400-5605-01	X	X	Metal bowl
Screw, Phillips	0406-0148-01	X	X	In Block. (Qty. = 4)
Strap, Velcro	0424-0805-02	X	X	Left
Strap, Velcro Right	0424-0806-01	X	X	(30 lb.)
Strap, Velcro Right	0424-0806-02	X	X	(50 lb.)
Transducer, Low Pres.	0514-0029-01	X	X	
Transducer, High Pres.	0514-0030-01	X	X	
Transducer, Purge Pres.	0514-0030-01	X	X	
Heater Blanket	0518-0024-01	X	X	110VAC
Heater Blanket	0518-0024-02	X	X	220VAC
Float	0546-0017-01	X	X	
Switch, Low Pressure	0549-0035-01	X	X	
Switch, High Pressure	0549-0036-01	X	X	
Fan, Axial	0587-0504-01	X	X	(115v)
Fan, Axial	0587-0507-01	X	X	(220v)
O-Ring (Small)	0617-0211-01	X	X	(Small)
O-Ring	0617-0211-02	X	X	(Small)
O-Ring	0617-0211-03	X	X	(Medium)
O-Ring	0617-0211-04	X	X	(Large)
O-Ring Block Kit	0617-0211-05	X	X	(Qty 37, for pneumatic block)
O-Ring	0617-0211-06	X	X	(Liq. Sol.) (od .309)
O-Ring	0617-0212-01	X	X	Inline hand valve
O-Ring	0617-0219-01	X	X	2 ounce oil charge cylinder
O-Ring, bottom of bowl	0617-0220-01	X	X	Metal bowl
Permabond	0626-0575-01	X	X	
Elbow, 90°	0647-0044	X	X	
Adapter, GM	0647-0196-01	X		
Adapter, GM/Ford	0647-0197-01	X		
Fitting	0647-0198-01	X	X	90 Degree
Adapter, GM,	0647-0199-01	X		Large, QK. Dis., 90°
Adapter, Ford	0647-0200-01	X		
Fitting	0647-0223-01	X	X	1/4" Flare
Bulkhead fittings R12	0647-0285-01	X		
Bulkhead fittings R134a	0647-0286-01		X	
Adapter, R134a	0647-0287-07		X	
Adapter, R134a	0647-0287-08		X	
Crush Washer,	0647-0296-01	X	X	Copper
Vent tube to bottle	0669-0282-01	X	X	

NAME	PART NUMBER	400	450	COMMENTS
Desiccant Bags	0671-1018-01	X		(Qty. 10)
Desiccant Bags	0671-1018-02		X	(Qty. 10)
Screw, Thumb	0675-0157	X		For Oil Bracket
Compressor Oil	0681-0179-02	X	X	3GS/300 viscosity (24oz.)
Super Lube, Label	0681-0193-03	X	X	3 oz.
Label	0682-0760-01		X	R134a ONLY
Label	0682-0873-01	X	X	"Caution Use of"
Headsign, Sun Decal	0682-0964-01	X	X	
Label	0682-0968-01	X	X	"Warning"
Label	0682-0969-01	X	X	"Service Procedure"
Label	0682-0970-01	X	X	Info Guide
Label	0682-1038-01	X	X	"Caution Vent"
Label	0682-1039-01	X	X	"French Use of"
Label	0682-1051-01	X	X	Eye Warning
Label	0682-1052-01	X	X	Caution
Label	0682-1055-01	X		Front panel MRC-400 label
Label	0682-1067-01		X	Front panel MRC-450 label
Resister	0684-0686-01	X	X	
Fuse, F2	0739-0040	X	X	(1 amp)
Fuse, F3	0739-0103	X	X	(3 amp)
Fuse, F1	0739-0119-01	X	X	(.25 amp)
Switch, Double Float	0764-0253-01	X	X	
Switch, (Momentary)	0764-0254-01	X	X	
Switch, Service	0764-0254-01	X	X	
Switch, Tank (2)	0799-0237-01	X	X	
Thumbscrew	0938-0158-01	X	X	Metal bowl
Kit, Master Filter	1095-0178-02		X	R-134a Serial A (1/4" Fittings)
Kit, Master Filter	1095-0178-03		X	R-134a Serial B (1/2" Fittings)
Kit, Master Filter	1095-0178-04	X		R-12 (1/4" Fittings)
Bumpers	1489-0017-01	X	X	
Breaker, On/Off/Circuit	1922-0118-01	X	X	
Switch Oil	2207-0034-01	X	X	
Caster, W / O Brake	3645-0054-01	X	X	
Caster, W / Brake	3645-0054-02	X	X	
Caster, W / O Brake	3645-0056-01	X	X	
Caster, W / Brake	3645-0056-02	X	X	
Hose, Red 10"	3988-0233-02	X		
Hose, Blue 10"	3988-0234-02	X		
Hose, Blue 96"	3988-0243-01	X		
Hose, Red 96"	3988-0244-01	X		
Hose, Blue 38"	3988-0254-02	X	X	
Hose, Red 16"	3988-0265-01	X	X	
Hose, Red 16"	3988-0265-01	X	X	
Hose, Red 16"	3988-0265-01	X	X	
Hose, Red 10"	3988-0265-02	X	X	
Hose, Blue 21"	3988-0267-01	X	X	
Hose, Blue 33"	3988-0267-02	X	X	
Hose, Red 27"	3988-0268-01	X	X	
Hose, Yel. 18"	3988-0270-01	X	X	
Hose, Blue 37"	3988-0271-01	X	X	
Hose, Blue 18"	3988-0271-02	X	X	
Hose, Blue 45"	3988-0271-02	X	X	
Hose, Red 18"	3988-0272-01	X	X	
Hose, Red 18"	3988-0272-01	X	X	
Hose, Red 24"	3988-0272-02	X	X	
Hose, Yel. 33"	3988-0273-01	X	X	
Hose, R134a	3988-0277-01		X	(6") adapter
Hose, Blue Multi.	3988-0292-01	X		96" (W/90°)
Hose, Red Multi.	3988-0293-01	X		96" (W/90°)

CHAPTER 4 PARTS (A)

<u>NAME</u>	<u>PART NUMBER</u>	<u>400</u>	<u>450</u>	<u>COMMENTS</u>
Gasket	4053-0020-01	X	X	Suction Separator Bowl
Connector, CPC 4 Pin	4162-0831-01	X	X	
Connector, 14 Pin	4162-0832-01	X	X	
Socket, A.C.	4162-7015-01	X	X	
Valve, Anti-Blow Back	4719-0055-01	X		1/4", (R-12)
Valve, Anti-Blow Back	4719-0055-02		X	1/2", (R134a)
Fitting, nipple	4982-0074-01	X	X	S.S. Bowl
Inlet Tube	4982-0074-01	X	X	
Nipple, Hex	4982-0076-01	X	X	
Valve, Hand	5121-0004-01	X	X	
Latch	5666-0049-01	X	X	Rear Glove Box
Cord, A.C.	6001-0197-01	X	X	
Cable, Tank Float	6004-0760-01	X	X	
Temp. Probe	6004-0777-01	X	X	(Vehicle)
Board, LCD Driver	7001-2153-01	X	X	
Board, Led Driver	7001-2159-01	X	X	
Board, Plumbing	7001-2185-01	X	X	
Board, Processor	7001-2188-01	X	X	
Board, Relay	7001-2230-01	X	X	
Control Panel	7005-2475-01	X		MRC-400A
Control Panel	7005-2499-01	X	X	Generic
Varistor	7009-1320	X	X	(115 V)
Varistor	7009-1320-02	X	X	(220 V)
Master Filter Drier	7009-2099-01	X		R-12, 1/4" fitting
Oil Reservoir, Temprite	7009-2100-02	X	X	
Float Switch Assembly	7009-2102-01	X	X	
Switch Float	7009-2102-01	X	X	
Suction Separator Assy.	7009-2185-01	X	X	
Compressor	7009-2258-02	X	X	110 VAC
Compressor	7009-2258-04	X	X	220 VAC
Shock Mount Assy.	7009-2306-01			X-brace for scale
Power Supply	7009-2323-01	X	X	(110V.A.C.)
Power Supply	7009-2323-02	X	X	(100V.A.C.)
Power Supply	7009-2323-03	X	X	(220V.A.C.)
Scale Assembly	7009-2324-01	X	X	
Scale Assembly	7009-2324-02	X	X	
Scale Assembly	7009-2324-03	X	X	(220VAC)
Scale Assembly	7009-2324-04	X	X	(220VAC)
Tank, R12 Recovery	7009-2331-01	X		30 lb.
Tank, R12 Recovery	7009-2331-02	X		50 lb.
Tank, R134a Recovery	7009-2331-03		X	30 lb.
Tank, R134a Recovery	7009-2331-04		X	50 lb.
Transformer	7009-2333-01	X	X	
Load Cell	7009-2335-01	X	X	
Moisture Indicator	7009-2346-01	X	X	
Manifold Assembly	7009-2347-04	X	X	
Capacitor	7009-2348-01	X	X	(Pump Relay 110v)
Capacitor	7009-2348-02	X		(Pump Relay 220v)
Filter, Inline 1/4"	7009-2417-01	X		R12
Filter, Inline 1/2"	7009-2418-01		X	R134a
Master Filter Drier	7009-2426-01		X	R-134a, 1/2" fitting
Bracket, Rear hose	7012-1369-01	X	X	
Bracket, Oil	7012-1468-01	X		
Cap and Shield	7020-1982-01	X	X	Top of S. S. bowl
Hose, Red,	EAH0001C01A		X	96" (W90°) R134a
Hose, R134a Blue	EAH0001C02A		X	96" (W90°)
Bowl, Metal Kit	EAK0071C00AS			
Cylinder, R134a Oil	EAK0163L00A		X	Ester oil in a Disposable cylinder

GRAPHICS KITS P/N'S FOR GENERIC UNITS IN BRAND NAME ORDER:**NOTE:** 1091 KITS ARE IN FINISHED GOODS STOCK.

Kit #	HEADSIGN #	FRONT FACIA #	DESCRIPTION
1091-0280-03	0682-1074-01	0682-1075-01	ATLAS EAC-400
1091-0277-03	0682-1074-01	0682-1090-01	ATLAS EAC-450
1091-0261-04	0682-1023-01	NA	CAR QUEST MTC-4000
1091-0261-08	0682-1027-01	NA	CAR QUEST MTC-4500
1091-0261-02	0682-1021-01	NA	EVERCO MTC-4000
1091-0261-06	0682-1025-01	NA	EVERCO MTC-4500
1091-0261-03	0682-1022-01	NA	MURRAY MTC-4000
1091-0261-07	0682-1026-01	0682-1099-01	MURRAY MTC-4500
1091-0261-01	0682-1020-01	NA	NAPA MTC-4000
1091-0261-05	0682-1024-01	NA	NAPA MTC-4500
1091-0280-04	0682-1097-01	0682-1098-01	NAPA MTC-4000
1091-0277-04	0682-1097-01	0682-1099-01	NAPA MTC-4500
SPECIAL CONSIDERATIONS			
1091-0280-02	0682-0966-01	NA	ROTUNDA MTC-4000 "WARNING" LABEL 0682-1051-01 "CAUTION" LABEL 0682-1052-01
1091-0277-02	NA	0682-1053-01	ROTUNDA MTC-4500 "R134a ONLY"0682-1050-01 "WARNING"0682-1051-01 "DO NOT MIX" 0682-1052-01

ADD THIS TO ACT4100 SERIAL (B) MANUAL AFTER PAGE 4-17 .
THIS EXPLAINS WHAT EACH WIRING HARNESS DOES

H1 MAIN AC POWER CORD , PART# 6001 0197 1

H2	7076 0902 1 CONNECTS TRANSFORMER TO PRO-BO AT [J 4]
*	PROVIDES 15 VOLTS AC THROUGH FUSE (F1) TO PINS 3 & 4 , RED STRIPE WIRES
*	PROVIDES 05 VOLTS AC THROUGH FUSE (F2) TO PINS 1 & 2 , BLUE STRIPE WIRES
*	PROVIDES 24 VOLTS AC THROUGH FUSE (F3) TO PINS 7 & 8 , ORANGE STRIPE WIRES
NOTE	IF DISCONNECTED - UNIT WILL NOT POWER UP
F1	0739-0119-01 (.25 AMPS SLO-BLO) - - - " IF BLOWN YOU GET ERROR CODE
F2	0739-0040 (1 AMP SLO-BLO) - - - " IF BLOWN YOU GET ERROR CODE
F3	0739- 0103 (3 AMPS SLO-BLO) - - - " IF BLOWN YOU ERROR CODE
NOTE	SEE TSB# 717 IF F1 IS BLOWN

ALLOW A VERY WIDE RANGE OF TOLERANCE WHEN MEASURING TRANSFORMER VOLTAGES

H3	7076 0897 2 CONNECTS PRO-BO [J2] TO LCD BOARD (SUCTION -SIDE) [J1]
*	PROVIDES 5 VOLTS DC (REGULATED) TO LCD BOARD [J1 - PIN 6]
*	PROVIDES COMMUNICATION FROM PRO-BO TO LCD DRIVERS
OSC1	FROM PRO-BO [J2 PIN 2] TO SUCTION LCD [J1 PIN 1]
OCS2	FROM PRO-BO [J2 PIN 1] TO SUCTION LCD [J1 PIN 2]
CLOCK	FROM PRO-BO [J2 PIN 3] TO SUCTION LCD [J1 PIN 3]
DATA	FROM PRO-BO [J2 PIN 4] TO SUCTION LCD [J1 PIN 4]
PIN 7	H3 GROUNDS LCD'S THROUGH [J1 PIN 7] TO PRO-BO [J2 PIN 7]
NOTE	IF DISCONNECTED SUCTION SIDE LCD'S REMAIN DARK

H4	7076 0896 1 CONNECTS PRO-BO [J5] TO L.E.D. BOARD [J1]
5 VDC	PROVIDES 5 VDC REGULATED FROM PRO-BO [J5 PIN 3] TO L.E.D. BRD [J1 PIN 3]
NOTE	5VDC USED BY IC'S ON L.E.D BOARD
12 VDC	PROVIDES 12 VDC REGULATED , PRO-BO [J5 PIN 5] TO L.E.D. BRD [J1 PIN 5]
NOTE	12VDC POWERS L.E.D. DRIVER
CLOCK	PRO-BO [J5 PIN 1] TO LED BOARD [J1 PIN 3]
DATA	PRO-BO [J5 PIN 2] TO LED BOARD [J1 PIN 5] " COMMUNICATION WITH PROCESSOR "
NOTE	IF DISCONNECTED -

H5	7076 0898 1 CONNECTS ALARM SPEAKER TO PRO-BO AT [J1]
24VDC	UNREGULATED 24VDC FROM PRO-BO [J1 PIN 1] TO SPEAKER
	PRO-BO [J1 PIN 2] CONNECTS BEEPER DRIVER TO SPEAKER
NOTE	POWERED BY (D3) ON PRO-BO FUSED BY (F3) , IF ALARMS SOUNDS THEY ARE OK

H6	7076 0897 1 CONNECTS PRO-BO [J8] TO LCD BOARD (DISCHARGE) [J1]
*	PROVIDES 5 VOLTS DC (REGULATED) TO LCD BOARD [J1 – PIN 6]
*	PROVIDES COMMUNICATION FROM PRO-BO TO LCD DRIVERS
OSC1	FROM PRO-BO [J8 PIN 2] TO DISCHARGE LCD [J1 PIN 1]
OCS2	FROM PRO-BO [J8 PIN 1] TO DISCHARGE LCD [J1 PIN 2]
CLOCK	FROM PRO-BO [J8 PIN 3] TO DISCHARGE LCD [J1 PIN 3]
DATA	FROM PRO-BO [J8 PIN 4] TO DISCHARGE LCD [J1 PIN 4]
PIN 7	H3 GROUNDS LCD'S THROUGH [J1 PIN 7] TO PRO-BO [J8 PIN 7]
NOTE	IF DISCONNECTED DISCHARGE SIDE LCD'S REMAIN DARK

H7	7076 0900 1 CONNECTS PRO-BO [J6] TO PLUM-BO [J8]
GROUND	PRO-BO [J6 PIN 1] TO PLUM-BO [J8 PIN 1] SYSTEM COMMON PCB GROUND
DATA IN	PRO-BO [J6 PIN 4] TO PLUM-BO [J8 PIN 4]
DATA OUT	PRO-BO [J6 PIN 3] TO PLUM-BO [J8 PIN 3]
CLOCK	PRO-BO [J6 PIN 2] TO PLUM-BO [J8 PIN 2]
NOTE	(H7) CARRIES THE MULTIPLEXED OUTPUTS FROM :
	(HPT) – HIGH PRESSURE TRANSDUCER (MEASURE AT D7)
	(LPT) – LOW PRESSURE TRANSDUCER (MEASURE AT D6)
	(PPT) – PURGE PRESSURE TRANSDUCER (MEASURE AT D5)
	(LC) - AMPLIFIED OUTPUT FROM LOAD CELL (SCALE)
	(EXT) – EXTERNAL VEHICLE TEMP PROBE (H15)
	(INT) - AMBIENT TEMP SENSOR MOUNTED ON RC TANK STRAP
	IF DISCONNECTED : MAIN POWER ON GIVES NO SYMPTOMS, [ON / OFF SWITCH]
	GIVES (ERROR 13)
ERROR 13	= HIGH PRESSURE TRANSDUCER LESS THAN 30 HG

H8	7076 0899 1 CONNECTS PRO-BO [J3] TO PLUM-BO [J5]
5 VDC	PROVIDES 5VDC REGULATED FROM PRO-BO [J3 PINS 1 & 2] TO PLUM –BO [J5 PINS 1& 2]
GRND	PRO-BO [J3 PINS 3,7,&8] CONNECT PLUM-BO [J5 PINS 3,7,&8] TO GROUND PLANE ON MAIN PROCESSOR PCB (PRO-BO)
NOTE	THE SOURCE OF THIS 5 VDC ON [J5 PINS 1 & 2] IS THE 5 VOLTS DC REGULATOR ON THE MAIN PROCESSOR, WHICH IS SUPPLIED BY (D1) VIA 5VAC FROM TRANSFORMER
TIP	IF SUCTION SEPARATOR SERVICE SWITCH WILL LITE UP WHEN PRESSED 5VDC IS OK
	IF (H8) IS DISCONNECTED UNIT WILL BEEP 3 TIMES AND DISPLAY ERROR CODE 1 WHEN THE MAIN POWER SWITH IS TOGGLED ON, PRESSING [ON/OFF SWITCH] WILL CAUSE ALL L.E.D.'S TO LITE UP AND STAY ON , NO OPERATOR KEYS RESPOND

H9	7076 0901 1 CONNECTS PRO-BO [J7] TO PLUM-BO [J1]
15 VDC	UNREGULATED FROM PRO-BO [J7 PIN 1] TO PLUM-BO [J1 PIN 1]
NOTE	SUPPLIES 15 VOLT REGULATOR ON PLUM-BO FOR LOAD CELL , EXT TEMP PROBE, & AMBIENT TEMP SENSOR
24 VDC	UNREGULATED FROM PRO-BO [J7 PIN 4] TO PLUM-BO [J1 PIN 4]
NOTE	FROM D3 ON PRO-BO SUPPLIES , RELAY PCB , SOLENOIDS , & K1 ON PLUM-BO
SOL-GRD	FROM PRO-BO [J7 PINS 5&6] TO PLUM-BO [J1 PINS 5&6]
NOTE	ALLOW WIDE TOLERANCES WHEN MEASURING THE VOLTAGES
NOTE	IF (H9) DISCONNECTED , MAIN PWR SWITCH ON CAUSES NO SYMPTOMS, WHEN YOU PRESS [ON/OFF SWITCH] DISPLAYS CODE 13

H10	FROM PLUM-BO [J11] TO HIGH, LOW, & PURGE PRESSURE TRANSDUCERS
5VDC	[J11 PIN 1] , RED WIRE 5 VOLTS TO HPT TERMINAL #4 (MT1-4)
NOTE	NO 5VDC AT MT1-4 = ERROR CODE 13 WITH 3 BEEPS WHEN [ON/OFF] KEY PRESSED
5VDC	[J11 PIN 6] , RED WIRE 5 VOLTS TO LPT TERMINAL#4 (MT2-4)
NOTE	NO 5VDC AT MT2-4 = ERROR CODE 15 WHEN [ON/OFF] KEY IS PRESSED
5VDC	[J11 PIN 11], RED WIRE 5 VOLTS TO PPT TERMINAL #4 (MT3-4)
NOTE	NO 5VDC AT MT3-4 = ERROR CODE 17 WHEN [ON/OFF] KEY IS PRESSED (3 BEEPS)
GRND	[J11 PIN 4] ,BLACK WIRE GROUNDS HPT TERMINAL#2 (MT1-2)
-NOTE-	IF NO GROUND TO (MT1-2) , - NO SYMPTOMS EXCEPT HI-PRESS TRANSDUCER HAS VERY LOW GAIN < SUSPECT IF DISCHARGE PRESSURES OR VACUUM TOO LOW >
GRND	[J11 PIN 9] ,BLACK WIRE GROUNDS LPT TERMINAL #2 (MT2-2)
-NOTE-	IF NO GROUND TO (MT2-2) - < 2 PROBABLE SYMPTOMS > < 1 > SUCTION PRESSURES DISPLAYED TOO LOW , ALSO HG READS LOW . < 2 > BECAUSE OF LOW GAIN FROM LOW PRESS TRANSDUCER UNIT WILL EVER COMPLETE RECOVERY CYCLE, COMPRESSOR MAY NEVER STOP RUNNING .
GRND	[J11 PIN 14], BLACK WIRE GROUNDS PPT TERMINAL#2 (MT3-2)
-NOTE-	IF NO GROUND TO (MT3-2) – SEEMS TO HAVE NO EFFECT ON OPERATION; HOWEVER THE UNIT MAY NOT EVER PURGE OR WILL NOT PURGE RC TANK DOWN TO PROPER PRESSURE PER TEMPERATURE . (DUE TO LOW GAIN OF PURGE TRANSDUCER)
OUTPUT	[J11 PINS 2&3] – OUT PUT FROM (MT1) HIGH PRESSURE TRANSDUCER
	MT1- 1 WHITE WIRE (TERMINAL# 1 HPT)
-NOTE-	IF NO OUTPUT FROM MT1-1 , YOU GET ERROR CODE 14 (3 BEEPS) WHEN [ON/OFF] KEY IS PRESSED
	MT1-3 GREEN WIRE (TERMINAL # 3 HPT)
-NOTE-	IF NO OUTPUT FROM MT1-3, YOU GET EROR CODE 13 (3 BEEPS) WHEN [ON/OFF] KEY IS PRESSED

H10 – CONTINUED ON NEXT PAGE

H10 CONTINUED

H10	FROM PLUM-BO [J11] TO HP, LP, & PURGE TRANSDUCERS
OUTPUT	[J11 PINS 7 & 8] OUTPUT FROM (MT2) – LOW PRESSURE TRANSDUCER
	MT2-1 WHITE WIRE , TERMINAL# 1 (LPT)
-NOTE -	IF NO OUTPUT FROM MT2-1 , YOU GET ERROR CODE 16 WHEN [ON/OFF] KEY IS PRESSED (3 BEEPS)
	MT2-3 GREEN WIRE , TERMINAL# 3 (LPT)
-NOTE-	IF NO OUTPUT MT2-3, YOU GET BAD SUCTION- SIDE PSI & HG READINGS
OUTPUT	[J11 PINS 12&13] OUTPUT FROM (MT3) PURGE PRESSURE TRANSDUCER
	MT3-1 WHITE WIRE , TERMINAL# 1 (PPT)
-NOTE-	IF NO OUTPUT FROM MT3-1, YOU GET ERROR CODE 18 (3 BEEPS) WHEN [ON/OFF] KEY IS PRESSED
	MT3-3 GREEN WIRE , TERMINAL# 3 (PPT)
-NOTE -	IF NO OUTPUT FROM MT3-3, YOU GET ERROR CODE 17 (3 BEEPS) WHEN [ON/OFF] KEY IS PRESSED
-NOTE -	IF [J11] IS DISCONNECTED FROM HARNESS YOU GET

H 11	FROM PLUM-BO [J3] TO OIL-ON, VIRGIN-ON, & RC TANK-ON MICRO- SWITCHES
5VDC	FROM [J3 PINS 1, 5, & 7]
GROUND	[J3 PINS 2, 6, & 9] PROVIDE PCB GROUND TO ALL 3 TANK-ON SWITCHES
- NOTE -	IF [J3] LEFT DISCONNECTED YOU GET ERROR CODE 19 , (2 BEEPS) WHEN YOU PRESS THE [ON/OFF] KEY

H 12	6004 0760 1, CABLE CONNECTS RECLAIM TANK FLOAT ASSY TO HARNESS (H 13)
- NOTE -	IF LEFT DISCONNECTED BOTH , [RECLAIM FULL] & [RECLAIM EMPTY] L.E.D.'S LITE UP WHEN [ON/OFF] KEY IS PRESSED
PIN 2	BRINGS 5VDC TO RC TANK EMPTY FLOAT SWITCH
PIN 4	BRINGS 5VDC TO RC TANK FULL FLOAT SWITCH
PIN 3	GROUND TO RC TANK FULL FLOAT SWITCH
PIN 1	GROUND TO RC TANK EMPTY FLOAT SWITCH

H 13	7076 0904 1, CONNECTS PLUM-BO [J2] TO (H 12) CABLE RC TANK
5VDC	[J 2 PIN 1] , SUPPLIES 5VDC TO RC TANK FULL FLOAT SWITCH
5VDC	[J 2 PIN 5] , SUPPLIES 5VDC TO RC TANK EMPTY FLOAT SWITCH
GROUND	[J 2 PIN 2] CONNECTS GROUND BUS TO RC TANK FULL FLOAT SWITCH
GROUND	[J 2 PIN 4] CONNECTS GROUND BUS TO RC TANK EMPTY FLOAT SWITCH
-NOTE -	IF LEFT DISCONNECTED HAS SAME SYMPTOMS AS (H 12)

H 14	6004 0769 01 PLUM-BO [J 9] TO CONNECTOR [P 9]
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CONT'D	ON NEXT PAGE
H 14	6004 0769 01 – HARNESS PLUM-BO [J 9] TO TEMP PROBE (OUT LET – TEMP) [J 9] PIN [1] = 15 VDC TO TEMP PROBE
-NOTE-	IF DISCONNECTED NO SYMPTOMS OCCUR , EXCEPT OUTLET TEMP DISPALYS (----)

H 15	6004 0777 1 - TEMP PROBE (VEHICLE OUTLET)
- NOTE -	EXTERNAL PROBE
- NOTE -	HAS SAME SYMPTOMS AS H 14

H 16	7076 0987 1 - HARNESS PLUM-BO [J7] TO SOLENOIDS & HIGH PRESSURE SWITCH
J7 PIN 1	TAKES 24VDC TO SOLENOID S-9 (VIRGIN TANK CHARGE)
J7 PIN 2	TAKES 24VDC TO S-10 (RECOVERY TANK LIQUID –CHARGE)
J7 PIN 7	TAKES 24VDC TO S- 13 (LIQUID SOLENOID)
J7 PIN 10	TAKES 24VDC TO S- 12 (ZERO SOLENOID)
J7 PIN 12	TAKES 24VDC TO S- 8 (OIL CHARGE SOLENOID)
J7 PIN 18	GROUND PATH FOR S-9 , S-10, S-13, S-12, & S-8 . CONTACTS OF K1 CONNECT TO (GRD)
J7 PIN 3	TAKES 24VDC TO S-7 (CROSS-OVR SOLENOID)
J7 PIN 4	TAKES 24VDC TO S- 6 (VACUUM SOLENOID)
J7 PIN 5	TAKES 24VDC TO S- 5 (SUCTION SEPARATOR SOLENOID)
J7 PIN 8	TAKES 24VDC TO S – 1 (CONDENSER SOLENOID)
J7 PIN 6	TAKES 24VDC TO S – 4 (OIL RETURN SOLENOID) NOTE: USED TO BE BYPASS SOL
J7 PIN 16	GROUND PATH FOR S-7, S-6, S-5, S-1 , & S-4 . THROUGH CONTACTS OF K1
J7 PIN 9	TAKES 24VDC TO S – 14 (PURGE SOLENOID)
J7 PIN 11	TAKES 24VDC TO S – 3 (VENT SOLENOID)
J7 PIN 17	GROUND PATH FOR S –14 , & S – 3 . (CONTACTS OF K1)
J7 PIN 20	TAKES 5VOLTS DC TO HIGH PRESSURE SWITCH
J7 PIN 14	PROVIDES A GROUND TO HIGH PRESSURE SWITCH
-NOTE -	HIGH PRESSURE SWITCH CONTROLS COIL OF K1 THROUGH Q2
-NOTE -	IF DISCONNECTED GOES TO CODE (04) WHEN MAIN SWITCH IS ON

H 17	7076 0928 1 HARNESS PLUM-BO [J4] TO COMPRESSOR ELECTRONICS BOX
J4 PIN 3	IF 110 VOLTS AC PRESENT COMPRESSOR IS ON OVERLOAD KLIXON OK
CODE 06	IF K1 ON RELAY BOARD IS ACTIVE BUT PLUM-BO [J4] PIN 3 IS NOT HOT
CODE 06	IF LEFT DISCONNECTED

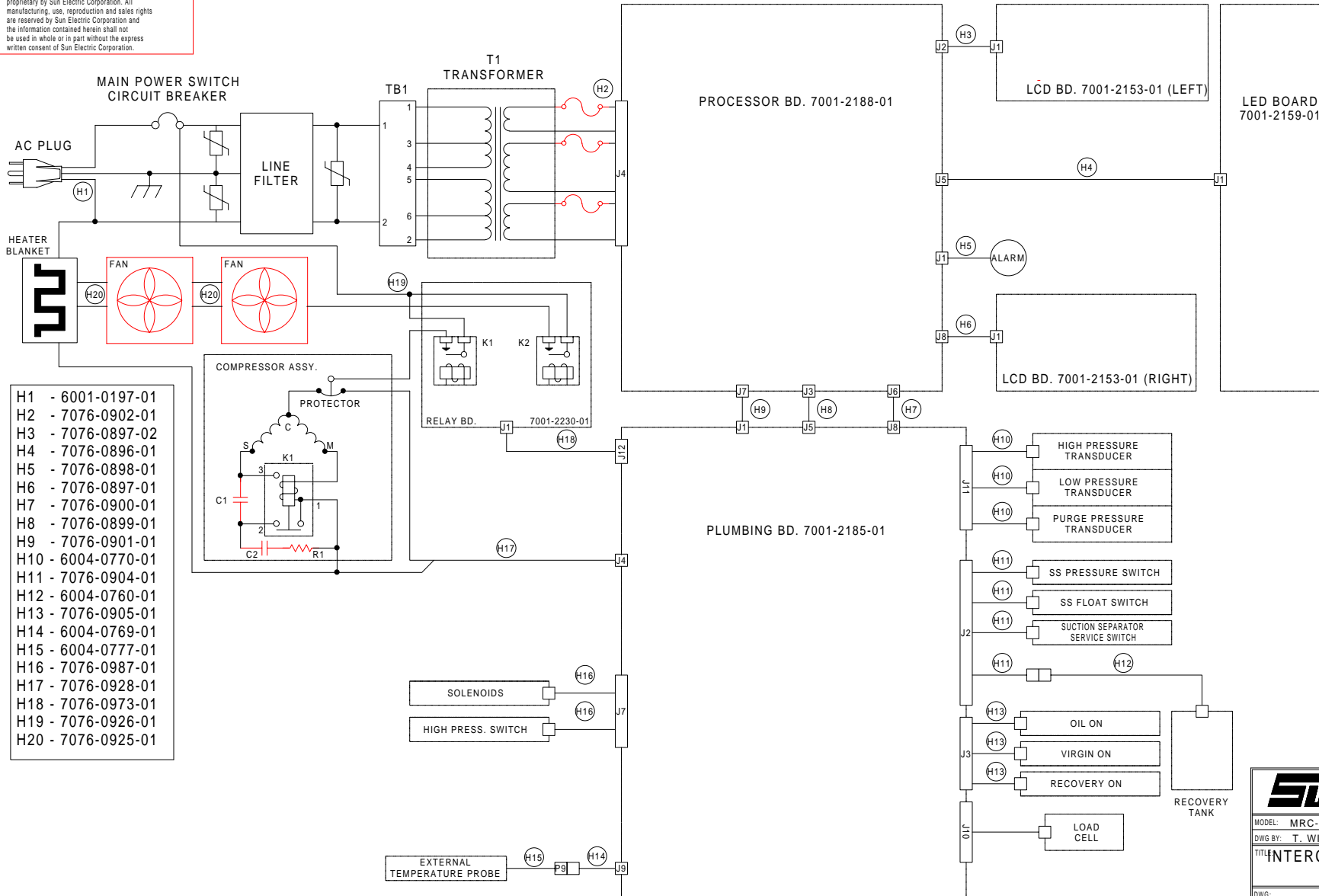
H 18	7076 0973 1 HARNESS PLUM-BO [J12] TO RELAY PCB [J 1]
PURPOSE	TAKES 24 VOLTS FROM PLUM-BO TO COILS OF K1 & K2 ON RELAY PCB
24VDC	PLUM-BO [J12 , PIN 2] TO RELAY PCB [J1 , PIN 2]
-NOTE -	IF DISCONNECTED - NO CONDENSER FANS, HEATER BELT COLD, NO COMPRESSOR

-NOTE-	IF [J1] ON RELAY PCB IS CONNECTED BACKWARDS – COMPRESSOR RUNS ALWAYS
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H 19	7076 0926 1 AC POWER HARNESS
PURPOSE	HARNESS MAIN POWER SWITCH TO RELAYS K1 & K2 (CONTACTS) RELAY PCB
	AC TO K1 & K2 ON RELAY PCB
-NOTE-	IF DISCONNECTED NO FANS, NO HEAT TO VIRGIN TANK, NO COMPRESSOR

H 20	7076 0925 1 AC POWER HARNESS – (CONDENSER FANS)
PURPOSE	AC TO CONDENSER FANS
-NOTE-	HEATER BELT TO VIRGIN TANK ALSO CONNECTS HERE

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- H1 - 6001-0197-01
- H2 - 7076-0902-01
- H3 - 7076-0897-02
- H4 - 7076-0896-01
- H5 - 7076-0898-01
- H6 - 7076-0897-01
- H7 - 7076-0900-01
- H8 - 7076-0899-01
- H9 - 7076-0901-01
- H10 - 6004-0770-01
- H11 - 7076-0904-01
- H12 - 6004-0760-01
- H13 - 7076-0905-01
- H14 - 6004-0769-01
- H15 - 6004-0777-01
- H16 - 7076-0987-01
- H17 - 7076-0928-01
- H18 - 7076-0973-01
- H19 - 7076-0926-01
- H20 - 7076-0925-01

SUN		SUN ELECTRIC CORPORATION One Sun Parkway Crystal Lake, Illinois 60014 U.S.A.	
MODEL: MRC-400/450	DWG BY: T. WILSON	DWG REV: 0895 REV A.	CHK BY: F. ZOFINSKI / T. WILSON
TITLE: INTERCONNECTION DIAGRAM SERIAL A			
DWG: 4-1	PAGE: 4-19		