



## **Ice Machine Parts List for Series S500 Models**

**SD0502A**

**SY0504A**

**SD0503W**

**SY0505W**

**SD0592N**

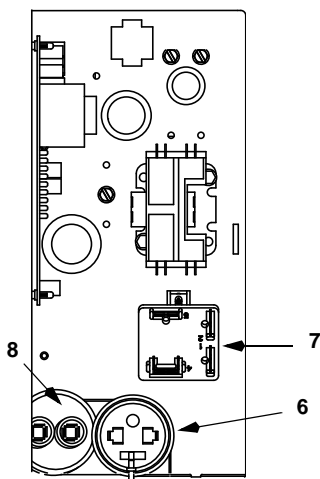
**SY0594N**

**SR0500A**

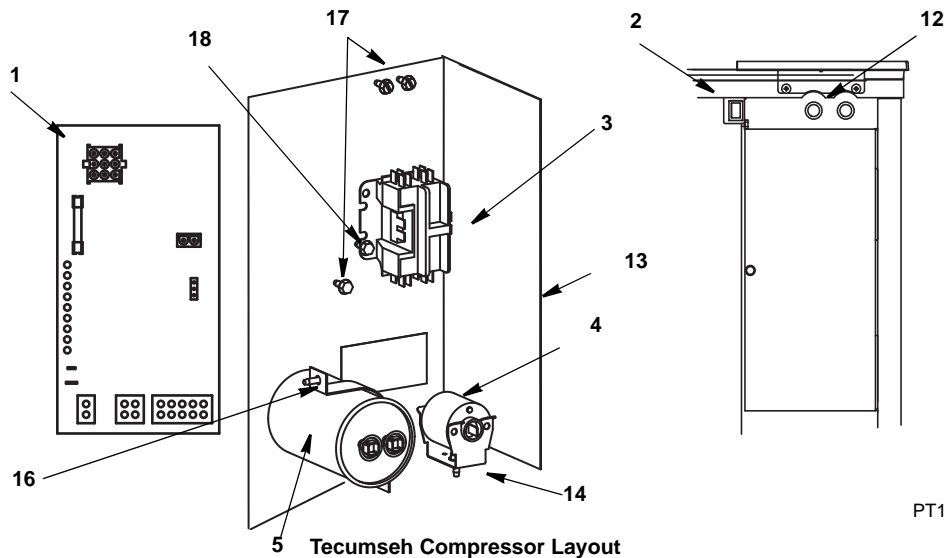
**SR0501W**

**SR0590N**

# S500 CONTROL BOX



Danfoss Compressor Layout



Tecumseh Compressor Layout

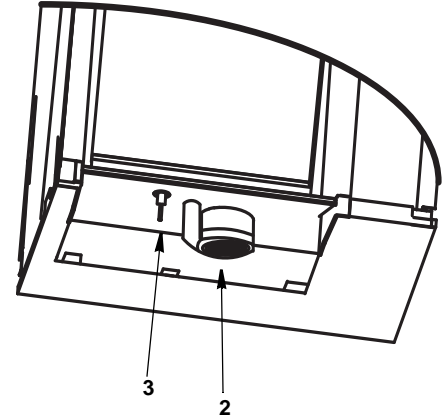
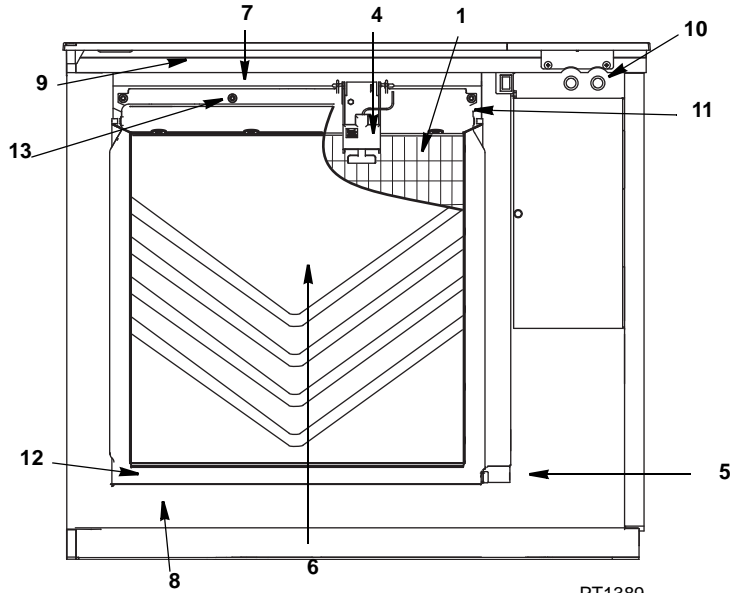
PT1388

## DESCRIPTION

**NOTE:** Replace a Tecumseh compressor/start components with a Tecumseh compressor/start components and a Danfoss compressor/start components with a Danfoss compressor/start components.  
**DO NOT INTERCHANGE COMPRESSORS OR START COMPONENTS.**

		<b>PART NO.</b>
1	<b>Control Board (for use with all voltages)</b> .....	20-0619-9
a.	7 Amp Fuse – Mounted on Control Board. ....	25-1100-3
2	<b>Toggle Switch Only</b> .....	20-0793-9
a.	Toggle Switch Wiring Harness .....	20-0807-9
b.	Toggle Switch Box .....	40-1163-9
3	<b>Contactor</b> .....	
a.	115V/60 Hz/1 Ph. ....	20-0658-9
b.	208-230V/60 Hz/1 Ph or 230V/50 Hz/1 Ph .....	20-0659-9
4	P.T.C.R. Compressor Starter Tecumseh Compressor Only .....	85-0500-3
5	<b>Tecumseh Compressor Run Capacitor (Before Serial Number 110074051)</b> .....	
a.	115V/60 Hz/1 Ph. ....	20-1014-3
b.	208-230V/50/60 Hz/1 Ph) .....	85-0400-3
6	<b>Danfoss Compressor Start Capacitor (Serial Number 110074051 through 110684316)</b> .....	
a.	115/60/1 .....	85-0577-3
b.	208-230/50-60/1 .....	000000022
7	<b>Danfoss Compressor Start Relay (Serial Number 110074051 through 110684316)</b> .....	
a.	115/60/1 .....	20-0205-3
b.	208-230/60/1 .....	20-0763-3
c.	220-240/50/1 .....	20-0792-9
8	<b>Danfoss Compressor Run Capacitor (Serial Number 110074051 through 110684316)</b> .....	
a.	115/60/1 .....	20-1014-3
b.	208-230/50-60/1 .....	20-0949-3
9	<b>Danfoss Compressor Start Capacitor (After Serial Number 110684316)</b> .....	
a.	115/60/1 .....	85-0577-3
b.	208-230/50-60/1 .....	85-0383-3
10	<b>Danfoss Compressor Start Relay (After Serial Number 110684316)</b> .....	
a.	115/60/1 .....	20-0205-3
b.	208-230/60/1 .....	20-0792-9
c.	220-240/50/1 .....	20-0792-9
11	<b>Danfoss Compressor Run Capacitor (After Serial Number 110684316)</b> .....	
a.	115/60/1 .....	20-1014-3
b.	208-230/50-60/1 .....	85-0400-3
12	<b>Refrigeration Service Valve Assembly</b> .....	83-7326-3
<b>Miscellaneous – Brackets, Screws, etc.</b>		
13	<b>Control Box</b> .....	76-0214-3
a.	Control Box Cover (Not shown) .....	76-0215-3
14	P.T.C.R. Compressor Starter Mounting Bracket .....	85-0502-3
15	Control Board Mounting Supports (Not shown) .....	43-0225-3
16	Capacitor Mounting Strap .....	602495-1
17	Screw, #10-24 x .50 Ground .....	52-0216-9
a.	Star Washer .....	55-7320-9
18	Screw, #10-24 x .50 .....	52-0206-9
19	<b>Tecumseh Compressor - Control Box Wiring Harness (Before Serial Number 110074051) (Not shown)</b> .....	
a.	115/60/1 .....	20-0730-9
b.	230/60/1 .....	20-0734-9
c.	230/50/1 .....	20-0735-9
d.	F2 Remote .....	20-0838-3
e.	Ground Wire .....	20-0869-3
20	<b>Danfoss Compressor - Control Box Wiring Harness (After Serial Number 110074051) (Not shown)</b> .....	
a.	115/60/1 .....	20-0827-3
b.	230/60/1 .....	20-0828-3
c.	230/50/1 .....	20-0828-3
d.	F2 Remote .....	20-0838-3
e.	Ground Wire .....	20-0869-3

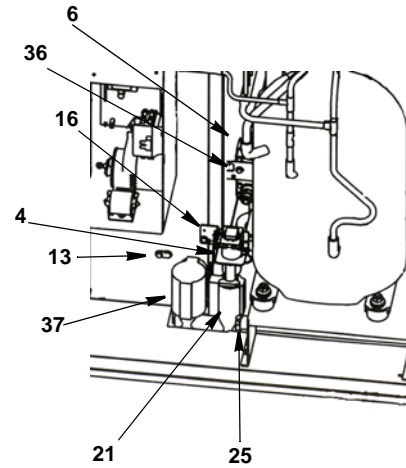
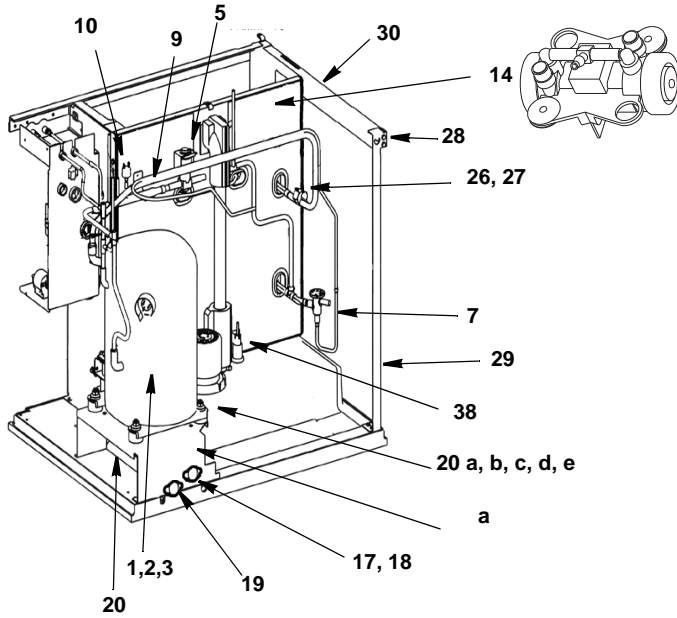
# S500 EVAPORATOR COMPARTMENT



## DESCRIPTION

DESCRIPTION	PART NO.
<b>1 Evaporator Assembly</b>	
a. Dice Cube .....	76-0283-9
b. Half Dice Cube .....	76-0284-9
c. Regular Cube .....	76-0285-9
<b>2 Water Pump</b>	
a. 115V/60/1 PH .....	82-5112-9
b. 230V/60/1 PH .....	20-0739-9
c. 230V/50/1 PH .....	82-5210-9
<b>3 Water Level Probe</b>	
a. Wire, control box to probe .....	20-0654-9
<b>4 Ice Thickness Control Probe</b>	20-0798-9
<b>5 Magnetic Bin Switch</b>	20-0802-9
<b>6 Water Curtain</b>	20-0681-9
<b>7 Water Distribution Assembly</b>	40-1097-9
a. O-Rings (Back of Distribution Assembly) .....	76-0219-3
<b>8 Water Trough</b>	50-0464-9
<b>9 Evaporator Top Filler Panel</b>	40-0360-9
a. Filler Panel Bracket .....	40-0846-9
b. Bracket Screw .....	606333-9
<b>10 Access Valve</b>	52-0209-3
<b>11 Evaporator Top Frame Assembly</b>	83-7326-3
<b>12 Water Diverter</b>	76-0220-3
a. Thumbscrew .....	76-0221-3
a. Thumbscrew .....	53-0512-3
<b>Miscellaneous – Brackets, Screws, etc.</b>	
<b>13 Screw, (Water Distribution Tube Mounting) Each</b> .....	50-0479-9
a. O-Ring .....	50-0462-9
<b>14 Screw, #12-16 x .687 (Used to Mount Evaporator) Each</b> .....	50-0461-9
<b>15 Water Pump Base O-Ring</b> .....	50-0465-9
<b>16 Water Pump Outlet O-Ring</b> .....	50-0467-9
<b>17 Vinyl Tubing 0.625 ID (dump valve to drain adapter)</b> .....	000001382
a. Insulation .....	603883-1

# S500 REFRIGERATION COMPARTMENT – COMMON PARTS



## DESCRIPTION

## PART NO.

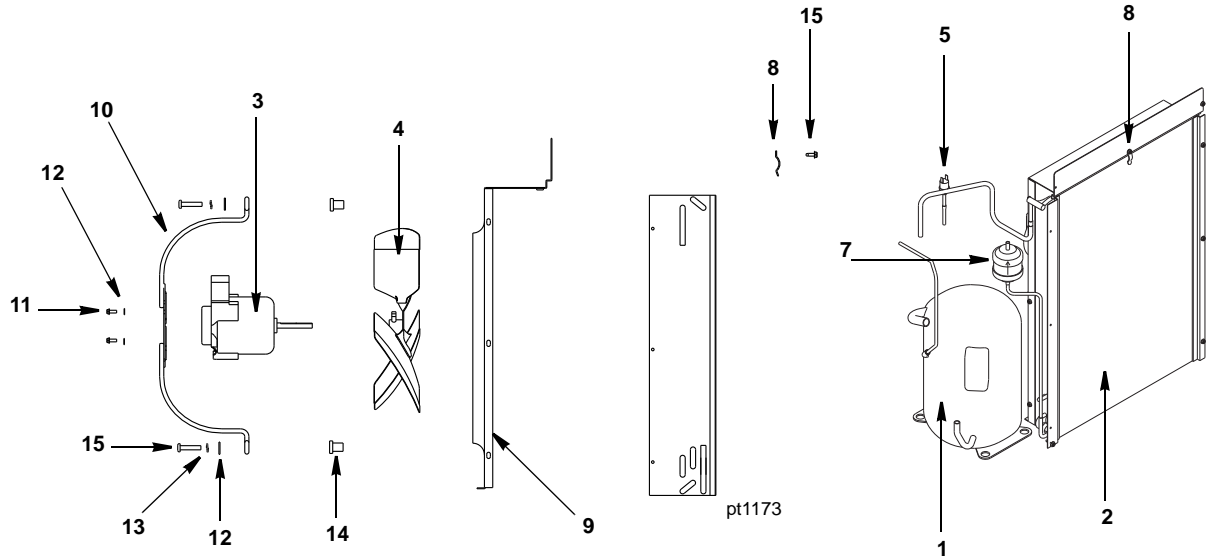
**NOTE:** Replace a Tecumseh Compressor with a Tecumseh Compressor and a Danfoss Compressor with a Danfoss Compressor.  
Do not interchange compressors.

<b>1</b>	<b>Tecumseh Compressor (Before Serial Number 110074051)</b>	
a.	115V/60 Hz/1 Ph. ....	76-2810-3
b.	208-230V/60 Hz/1 Ph. ....	76-2812-3
c.	230V/50 Hz/1 Ph. ....	76-2811-3
<b>2</b>	<b>Danfoss Compressor (Serial Number 110074051 through 110684316)</b>	
a.	115V/60 Hz/1 Ph. ....	76-0294-3
b.	208-230V/60 Hz/1 Ph. ....	76-0295-3
c.	230V/50 Hz/1 Ph. ....	76-0296-3
<b>3</b>	<b>Danfoss Compressor (After Serial Number 110684316)</b>	
a.	115V/60 Hz/1 Ph. ....	000003919
b.	208-230V/50-60 Hz/1 Ph. ....	000003920
<b>4</b>	<b>Water Dump Valve</b>	
a.	115V/60 Hz. ....	000001767
b.	208-230V/50-60 Hz. ....	000001768
	<b>Dump Valve Rebuild Kit</b>	No Longer Available
<b>5</b>	<b>Harvest Valve Including Electrical Coil</b>	
a.	115V/60 Hz. ....	76-3002-1
b.	208-230V/50-60 Hz. ....	76-3008-1
	<b>Harvest Valve Coil Only</b>	
a.	115V/60 Hz. ....	000005156
b.	208-230V/50-60 Hz. ....	000005157
<b>6</b>	<b>Water Inlet Valve with Coil</b>	
a.	115V/60 Hz. ....	000000377
b.	208-230V/50/60 Hz. ....	000000378
<b>7</b>	<b>Expansion Valve (use with Tecumseh Compressor)</b>	76-0286-9
a.	Expansion Valve Body Insulation Boot. ....	40-0036-3
b.	Expansion Valve Bulb Insulation Boot. ....	40-0720-3
<b>8</b>	<b>Expansion Valve (use with Danfoss Compressor)</b>	76-0158-3
a.	Expansion Valve Body Insulation Boot. ....	40-0036-3
b.	Expansion Valve Bulb Insulation Boot. ....	40-0720-3
<b>9</b>	<b>Manifold Strainer (in front of hot gas valve).</b>	82-5100-3
<b>10</b>	<b>High Pressure Cut-out (Auto Reset)</b>	20-0124-3
<b>11</b>	<b>Electrical Box on Rear of Ice Machine</b>	
a.	Box. ....	Included in Back Panel Assembly
b.	Terminal Block 3 Pole. ....	20-0614-9
c.	Groundscrew #10-24 x .50. ....	52-0216-9
<b>12</b>	<b>Compressor Compartment Wiring Harness</b>	
a.	Water. ....	20-0732-9
b.	Air. ....	20-0731-9
c.	Remote. ....	20-0733-9
<b>13</b>	Bin Switch. ....	20-0681-9
<b>14</b>	<b>Air Assist Pump</b>	
a.	115V. ....	20-0934-3
b.	230V. ....	20-0935-3
c.	Manifold. ....	40-1179-9
d.	Bracket. ....	000001496
<b>15</b>	<b>Air Assist Pump - Wiring Harness</b>	
a.	Air. ....	000002327
b.	Water. ....	000002328
c.	Remote. ....	000002329

**Miscellaneous – Brackets, Screws, etc.**

16	Dump Valve Mounting Bracket	605845-9
17	Water Inlet Valve Wing Adapter	87-0609-3
18	Water Inlet Valve Wing Adapter Plastic Fitting	13-6096-1
19	Water Drain Female Wing Adapter	87-0608-3
20	Water Drain Clear Tubing, .625 ID x 12 inches	44-2038-3
21	Dump Valve Tubing (3.25 inches)	44-2038-3
22	Tecumseh Compressor Mounting	
	a. Base	606170-9
	b. Rubber Grommet	† 85-0306-9
	c. Sleeve	85-0394-9
	d. Bolt	50-0481-9
	e. Nut	50-0482-9
23	Danfoss Compressor Mounting	
	a. Base	606170-9
	b. Rubber Grommet	† 85-0306-9
	c. Sleeve	85-0394-9
	d. Bolt	50-0481-9
	e. Nut	50-0482-9
24	Compressor Wiring Harness (Not Shown)	20-0855-9
25	Clamp, Water Drain	56-5070-9
26	Clamp, Expansion Valve Bulb	56-5052-9
27	Copper Bulb Strap	30-0083-3
28	Screw, #10-24 x .50	52-0206-9
29	Left Corner Post	606293-1
30	Left Top Channel	606864-9
31	Right Corner Post (Not Shown)	606292-1
32	Right Top Channel (Not Shown)	606257-9
33	Insulated Tube (vinyl tubing from distribution tube to water pump & dump valve)	000003405
	a. Clamp .859/.989 ID	56-5060-3
	b. Clamp .799/.899 ID	56-5070-3
34	Water Inlet Valve Tubing (Not Shown)	40-1043-9
35	Connector (Water inlet valve)	13-6098-9
36	Water Inlet Valve Bracket	605845-9
37	<b>Check Valve Replacement</b> (includes water diverter, vinyl tubing & insulation)	000002473
38	Holder, Water Level Probe	20-0655-9
	a. Screw (mounts Water Level Probe Holder)	52-0206-9

# S500 REFRIGERATION COMPARTMENT – AIR-COOLED



## DESCRIPTION

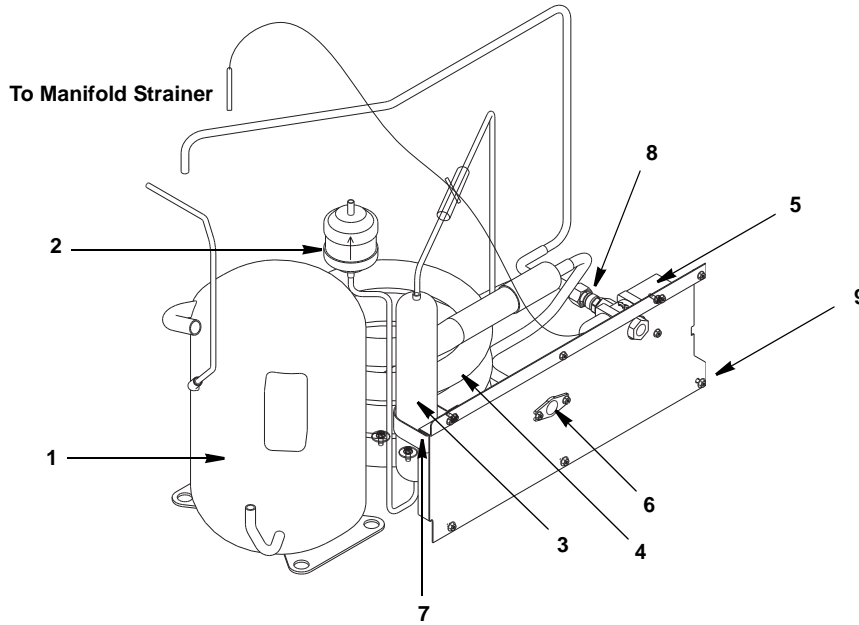
	<b>PART NO.</b>
1 Compressor (Refer to COMMON PARTS Page)	Page S500-4
2 Air Condenser	82-5213-3
3 Fan Motor	
a. 115V/60 Hz	24-1292-9
b. 208-230V/60 Hz or 230V/50 Hz	24-1293-9
4 Fan Blade	24-1620-3
5 Fan Cycling Control	20-0126-3
6 Air Filter (Not shown)	30-0556-9
7 Drier	89-3025-9

## Miscellaneous – Brackets, Screws, etc.

8 Air Filter Clip	† 56-5069-9
9 Fan Shroud	605640-9
10 Fan Motor Mounting Bracket	606186-9
11 Fan Motor Mounting Screw	50-3238-9
12 Fan Bracket Mounting Lockwasher	† 55-4510-9
13 Fan Bracket Mounting Flatwasher	† 55-7305-9
14 Fan Bracket Mounting Rubber Wellnut	† 54-2955-9
15 Screw, #10-24 x .50	50-3238-9

† Refer to Cross Reference Guide

# S500 REFRIGERATION COMPARTMENT – WATER-COOLED



pt1200

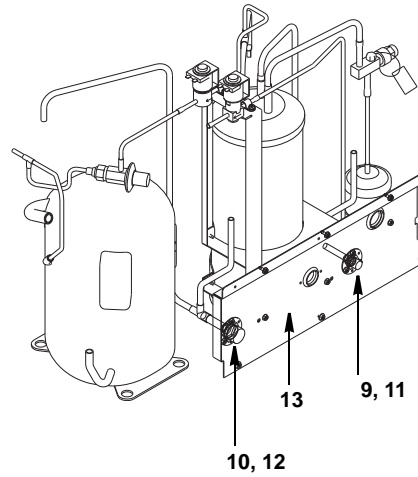
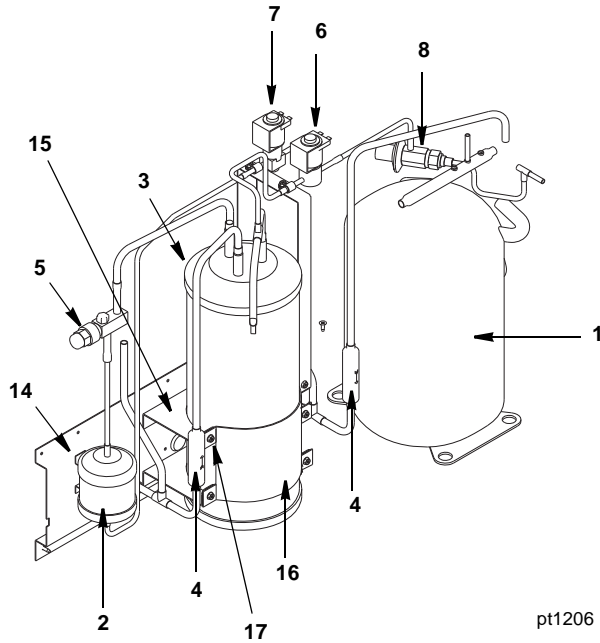
## DESCRIPTION

	<b>PART NO.</b>
1 Compressor (Refer to COMMON PARTS Page) .....	Page S500-4
2 Drier .....	89-3025-9
3 Receiver .....	12-0003-1
4 Water-cooled Condenser .....	88-6533-3
5 Water Regulating Valve	
a. Before Serial Number 110684316 .....	83-7206-9
b. After Serial Number 110684316 .....	82-5282-3
6 Water Drain Female Wing Adapter .....	87-0608-3

## Miscellaneous – Brackets, Screws, etc.

7 Receiver Strap .....	600054-1
8 Elbow .50 MF x .375 MPT .....	50-0224-9
9 Screw, #10-24 x .50 .....	52-0206-3
10 Washer (mount water condenser) .....	55-7341-9
11 Base, Water Condenser/Receiver .....	605865-9

## S500 REFRIGERATION COMPARTMENT – REMOTE



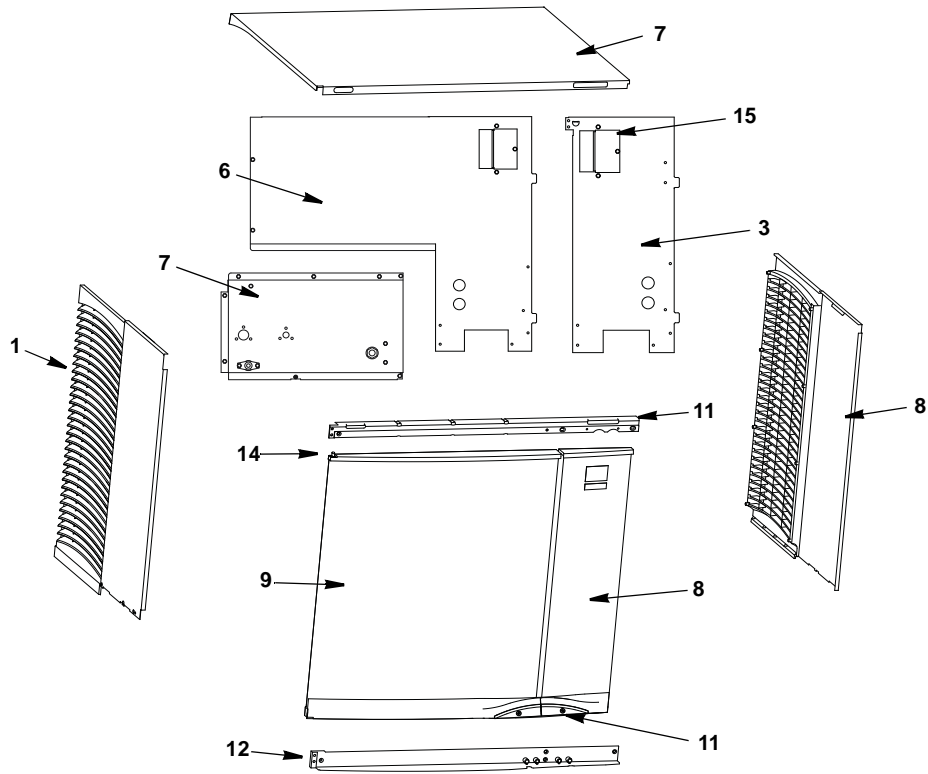
### DESCRIPTION

	<b>PART NO.</b>
1 Compressor (Refer to COMMON PARTS) . . . . .	Page S500-4
2 Drier . . . . .	89-3027-9
3 Receiver . . . . .	82-5058-3
4 Magni-Check Valve. . . . .	† 83-7314-9
5 Refrigeration Service Valve . . . . .	† 83-7316-9
a. Cap for Refrigeration Service Valve . . . . .	56-5075-9
6 <b>Harvest Pressure Regulating Solenoid (HPR) Valve</b>	
a. HPR Valve Including 115V 60 Hz Electrical Coil (Danfoss) . . . . .	76-3000-1
b. HPR Valve 115V 60 Hz Coil Only Danfoss . . . . .	000005156
c. HPR Valve Including 208/230V 50/60 Hz Electrical Coil (Danfoss). . . . .	† 76-3006-1
d. HPR Valve 208/230V 50/60 Hz Coil Only Danfoss . . . . .	000005157
7 <b>Liquid Line Solenoid (LLS) Valve</b>	
a. LLS Valve Including 115V 60 Hz Electrical Coil (Danfoss) . . . . .	76-3000-1
b. LLS Valve 115V 60 Hz Coil Only Danfoss . . . . .	000005156
c. LLS Valve Including 208/230V 50/60 Hz Electrical Coil (Danfoss) . . . . .	† 76-3008-1
d. LLS Valve 208/230V 50/60 Hz Coil Only Danfoss. . . . .	000005157
8 Harvest Pressure Regulating Valve (HPR) . . . . .	† 83-6779-3
9 Coupling – Male, 5/8-18 . . . . .	† 83-6034-3
10 Coupling – Male, 1-1/6-12 . . . . .	† 83-6035-3
<b>Miscellaneous – Brackets, Screws, etc.</b>	
11 Coupling Mounting Flange for 5/8-18 . . . . .	83-6005-3
12 Coupling Mounting Flange for 1-1/16-12 . . . . .	83-6006-3
13 Back Panel . . . . .	606173-9
14 Drier Support Bracket . . . . .	56-5061-9
15 Receiver Mounting Bracket. . . . .	606303-9
16 Receiver Mounting Strap . . . . .	606314-9
17 Screw, #10-24 x .50 . . . . .	† 52-0206-9
18 Base (Receiver Mounting) . . . . .	606304-9

† Refer to Cross Reference Guide



# S500 PANELS



## DESCRIPTION

- 1 Left Side Panel . . . . .
- 2 Right Side Panel . . . . .

### Air-Cooled Back Panels)

- 3 Back Panel with Electrical Connection Box, Air-cooled Models . . . . .
- 4 Air Filter (Not Shown) . . . . .
- 5 Air Baffle (Not Shown) . . . . .

### Water-Cooled & Remote Air-Cooled Back Panels)

- 6 Back Panel with Electrical Connection Box . . . . .
- 7 Back Coupling Panel, Water Connections . . . . .

### Aluminum Front Top Support on machine (replace all)

- 8 Top Cover . . . . .
- 9 Right Door . . . . .
- 10 Left Door . . . . .
- 11 Front Top Rail . . . . .
- Mounting Screw Left Side 8-32 x 1 . . . . .
- Mounting Screw Right Side 10-24 x .50 . . . . .

### Plastic Front Top Support on machine (replace as needed)

- 7 Top Cover . . . . .
- 8 Right Door . . . . .
- 9 Left Door . . . . .
- 10 Front Top Rail . . . . .
- Mounting Screw Left Side 8-32 x 1 . . . . .
- Mounting Screw Right Side 10-24 x .50 . . . . .

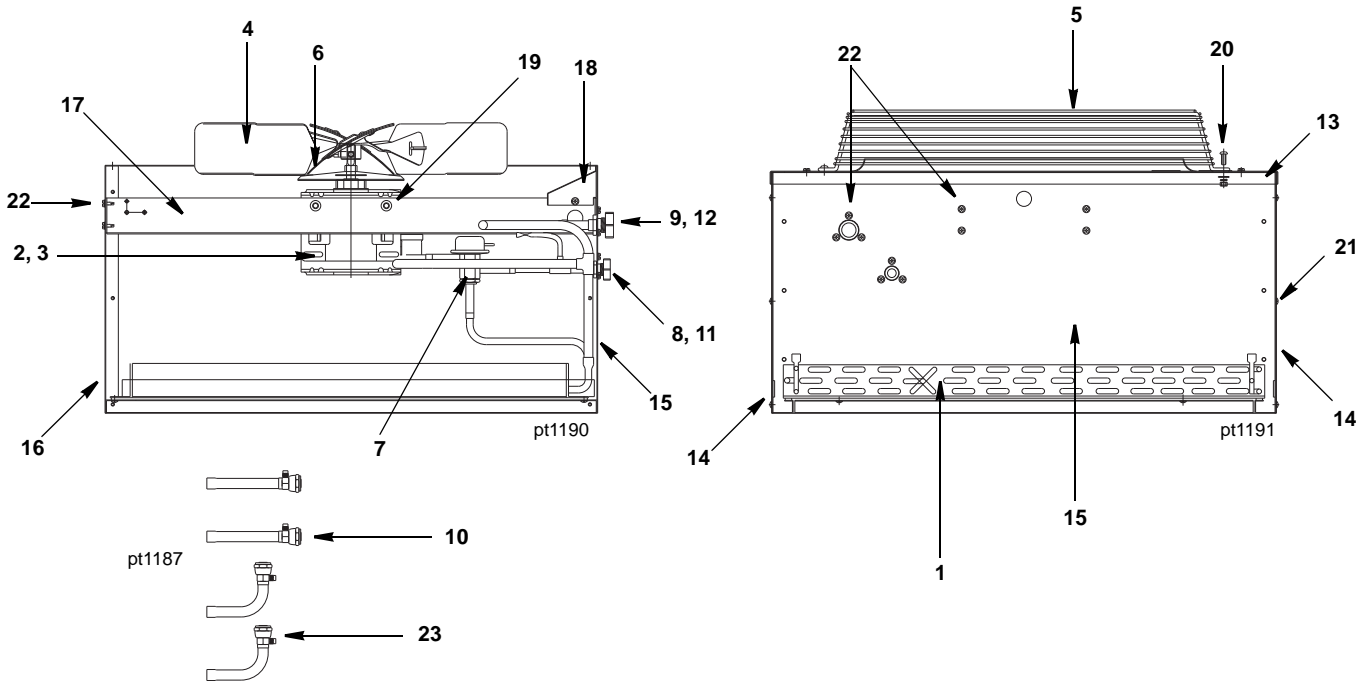
### Miscellaneous – Brackets, Screws, etc.

- 11 Right/Left Door Screw . . . . .
- 12 Bottom Door Frame (Not Shown) . . . . .
  - a. Mounting Screw Left Side 8-32 x 1 . . . . .
  - b. Mounting Screw Right Side 10 x 24 x .50 PHIL . . . . .
- 13 Door Catch Bracket (RHD) . . . . .
  - a. Mounting Screw 8-32 x .50 Phil . . . . .
- 14 Left Door Pivot Leaf Hinge (Top or Bottom) . . . . .
  - a. Mounting Screw 10-24 x .5 TCS-23 PHIL/FL . . . . .
- 15 Electrical Connection Box Cover . . . . .
- 16 Sachet Holder (Not Shown - Inside Left Door) . . . . .
  - a. Mounting Screws 8-32 x 3/8 . . . . .
- 17 Top Air Discharge Kit Option (replaces standard top and side panels to discharge air out of top of machine) . . . . .
  - a. Top Cover Only . . . . .
  - b. Left Side Panel Only . . . . .
  - c. Right Side Panel Only . . . . .
  - d. Screws 10-24 x 1/2 . . . . .

## PART NO.

- 606053-1
- 606052-1
- 606296-9
- 30-0556-3
- 606077-9
- 606605-9
- 606173-9
- 40-1548-3
- 607166-1
- 607165-1
- 000000295
- 50-0537-9
- 50-0509-9
- 40-1548-3
- 607166-1
- 607165-1
- 000000295
- 50-0537-9
- 50-0509-9
- 50-0489-9
- 76-0226-3
- 50-0537-9
- 52-0206-9
- 606236-9
- 50-2624-9
- 30-0557-9
- 50-0537-9
- Included in Back Panel Assembly
- 40-0459-3
- 50-0479-9
- K00379
- 000000480
- 606675-1
- 606676-1
- 52-0209-9

# JC0495 REMOTE CONDENSER



## DESCRIPTION

	<b>PART NO.</b>
1 Air Condenser . . . . .	† 88-5063-9
2 Fan Motor (115V/60 Hz/1 Ph) . . . . .	† 76-2942-3
3 Fan Motor Run Capacitor . . . . .	No Longer Available
4 Fan Blade . . . . .	24-1611-3
5 Fan Guard . . . . .	34-0064-3
6 Rain Slinger . . . . .	24-1505-3
7 Head Pressure Control . . . . .	83-6809-3
8 Coupling – Male, 5/8-18 . . . . .	† 83-6034-3
9 Coupling – Male, 1-1/6-12 . . . . .	† 83-6035-3
10 Female Line Set Coupling Kit (Sold as Finished Goods Sales Kit) . . . . .	Sales K0129

## Miscellaneous – Brackets, Screws, etc.

11 Coupling Mounting Flange (for 5/8-18) . . . . .	83-6005-3
12 Coupling Mounting Flange (for 1-1/16-12) . . . . .	83-6006-3
13 Top Cover . . . . .	† 601775-1
14 Panel – Side . . . . .	† 601774-1
15 Panel – Rear . . . . .	† 601773-1
16 Panel – Front . . . . .	† 601772-1
17 Fan Motor Mounting Bracket . . . . .	† 601768-1
18 Electrical Box Cover . . . . .	† 601776-1
19 <b>Fan Motor Mounting Screw</b> (5/16-18 x 5/8) . . . . .	† 50-3565-9
a. Fan Motor Mounting Flatwasher . . . . .	† 55-7309-9
b. Fan Motor Mounting Lockwasher . . . . .	† 55-7313-9
c. Fan Motor Mounting Hexnut . . . . .	54-2975-9
20 <b>Fan Guard Mounting Screw</b> (1/4-20 x 5/8) . . . . .	† 50-3345-9
a. Fan Guard Mounting Flatwasher . . . . .	† 55-7304-9
b. Fan Guard Mounting Lockwasher . . . . .	† 55-4511-9
c. Fan Guard Mounting Hexnut . . . . .	† 54-2952-9
21 <b>Panel/Condenser Mounting Screw</b> (#8 x 1/2) . . . . .	† 51-2153-9
a. Panel/Condenser Mounting Lockwasher . . . . .	† 55-4459-9
22 Screw (#10-24 x 1/2) . . . . .	† 52-0206-9
23 Valve Cores (used in linesets) . . . . .	76-2684-3

† Refer to Cross Reference Guide