

ZEE SYSTEMS, INC.

MAINTENANCE AND PARTS MANUAL

SZ78-001-1

EVAPORATOR ASSEMBLY

ZEE SYSTEMS, INC.

MAINTENANCE AND PARTS MANUAL SZ78-001-1 Evaporator Assembly

Evaporator Assembly

The SZ78-001-1 Evaporator Assembly was designed with compactness in mind utilizing a side mounted electric motor configuration. The Evaporator Assembly needs no routine inspection other than cleaning the filter (fig 1-13) as required and checking motor belt tension whenever possible. Note, when replacing filter insure that the filter does not touch the coil face as this can cause moisture from the coil to run through the filter and outside of the drip pan. The washable filter can be cleaned with water and any suitable detergent.

Expansion Valve

The expansion valve (fig.1-2) is externally balanced with an external balance line connection and thermostatic bulb attached to the suction line (fig.1). If the expansion valve is replaced the thermostatic bulb must have full contact with the suction line (outlet) and must be thoroughly sealed with insulation tape. The expansion valve has a line screen that prevents foreign matter from entering the expansion valve and can be seen by removing DS103 fitting (fig.1-3). This screen should only be cleaned as a trouble shooting step when the system pressure is fully discharged.

Evaporator Motor/Blower Wheel Assembly

The motor/blower wheel assembly SZ63-015-1 and -2 should be handled as one unit (figure 2) and can very easily be removed from the evaporator assembly by removing 3 screws per motor/blower wheel assembly (fig.1-23), one screw is under cover SZ63-005-3 (fig.2-2) and the appropriate plug button (fig.2-12) will have to be removed to allow access to the screw (see view A-A figure 1).

Belt replacement or adjustment.

Belt replacement - Loosen both pulley set screws (fig.2-11), slide both pulleys off the shafts at the same time. The motor is mounted to SZ63-008-1 and -2 Motor Mount Plate Assembly (fig.2-3) with two AN364-1032A nuts (fig.2-13), which are covered by the plug buttons installed on the SZ63-005-3 cover (fig.2-2). Using a screw driver pop-off the plug buttons and loosen the motor attach nuts with the special tool shown on figure 3.

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Belt replacement or adjustment. (Cont'd)

The motor attach nut on the hole marked with an "X" is the belt tension adjusting attachment, the other attachment is the pivot point. Replace the belt on the pulleys and slide the pulleys back on the shafts at the same time. With thumb pressure on the motor shaft end tighten the motor pulley so that it has a 1/16" clearance gap between SZ63-005-3 cover (fig.2-2) and the pulley.

The wheel shaft has no play, so that only a 1/16" clearance gap need be maintained on the wheel pulley and tighten. Turn the motor on the pivot attachment until the belt is properly tensioned and tighten the adjusting nut. Proper belt tension is obtained when one side of the belt is pushed by finger and the belt will bottom (not move further) with a 3/8" belt deflection.

Where belt adjustment is only required follow the belt adjustment steps given above.

Blower Wheel replacement

The blower wheel on the assembly is precisely balanced and can be replaced easily by loosening the set screw, removing and replacing. Note. When replacing the blower wheel it is very important to maintain the dimension shown on figure 2. Extreme care should be exercised in handling the blower wheel because damage inflicted by rough handling can unbalance the blower wheel causing vibration on evaporator operation and shortened bearing life.

It is recommended that complete Motor/Blower Wheel Assemblies SZ63-015-1 and SZ63-015-2 be stocked as a replacement item. Removed assemblies maybe returned to the factory for rework. This will minimize your downtime and insure proper functioning components.

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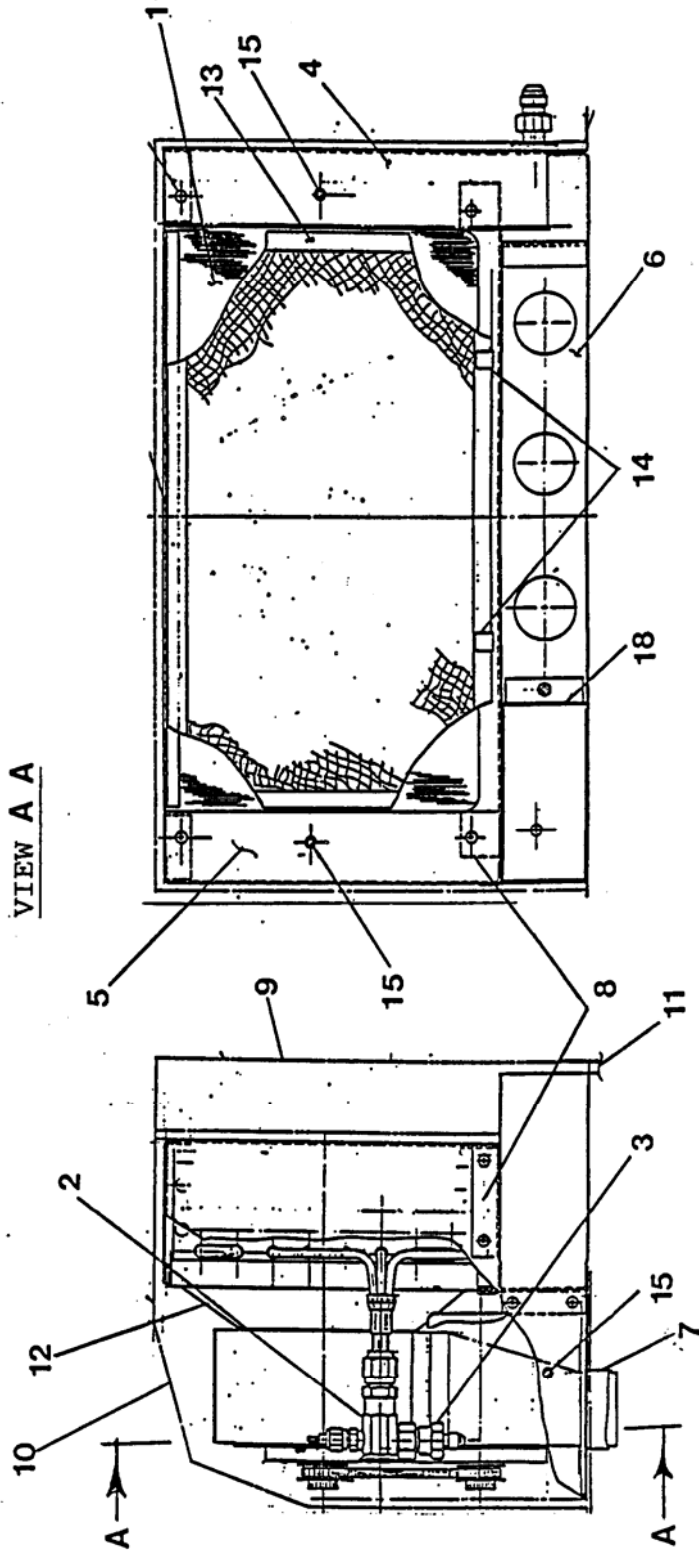
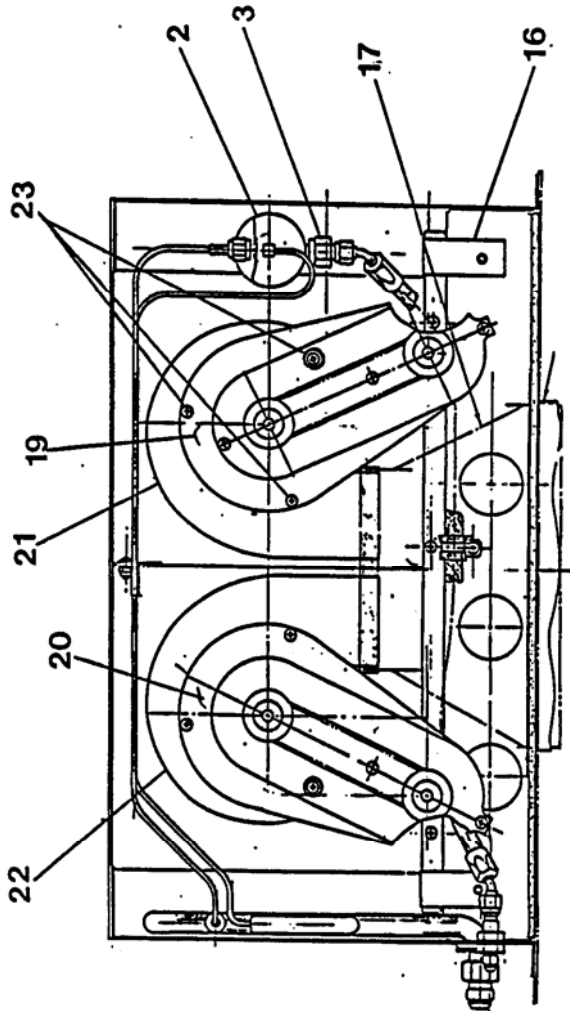


FIGURE 1

ZEE SYSTEMS INC

PARTS LIST

FIG NO.	PART NO.	DESCRIPTION	USAGE AND QUANTITY PER ASSY		
			units		
				per assy	
1	SZ78-001-1	Evaporator Assembly			
1-1	SZ67-004-1	.Coil Assembly		1	
1-2	1FE2CP60 ½	Expansion Valve		1	
1-3	DS103	.Fitting		1	
1-4	SZ70-006-1	.Panel Assembly-RH		1	
1-5	SZ70-007-1	.Panel Assembly-LH		1	
1-6	SZ70-008-1	.Channel Assembly		1	
1-7	SZ70-009-1	.Duct Transition Assembly		1	
1-8	SZ70-012-1	.Drain Pan Assembly		1	
1-9	SZ70-013-1	.Cover Assembly		1	
1-10	SZ70-014-1	.Box Assembly		1	
1-11	SZ70-016-1	.Cover Assembly		1	
1-12	SZ70-017-1	.Duct Assembly		1	
1-13	SZ70-018-1	.Filter Assembly		1	
1-14	SZ48-017-3	.Filter Clip		2	
1-15	AN526-832R10	.Screw		4	
1-16	SZ70-019-1	.Clip Assembly		2	
1-17	SZ70-020-1	.Duct Assembly		1	
1-18	SZ70-021-1	.Cover		1	
1-19	SZ63-015-1	.Motor/Wheel Assembly		1	
1-20	SZ63-015-2	. " " "		1	
1-21	675L	.Blower Housing		1	
1-22	675R	.Blower Housing		1	
1-23	MS35206-24S	.Screw		6	
	AN960-8L	.Washer		6	
	AN935-8	.Lock Washer		66	

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MAINTENANCE AND PARTS MANUAL
SZ78-00101 Evaporator Assembly

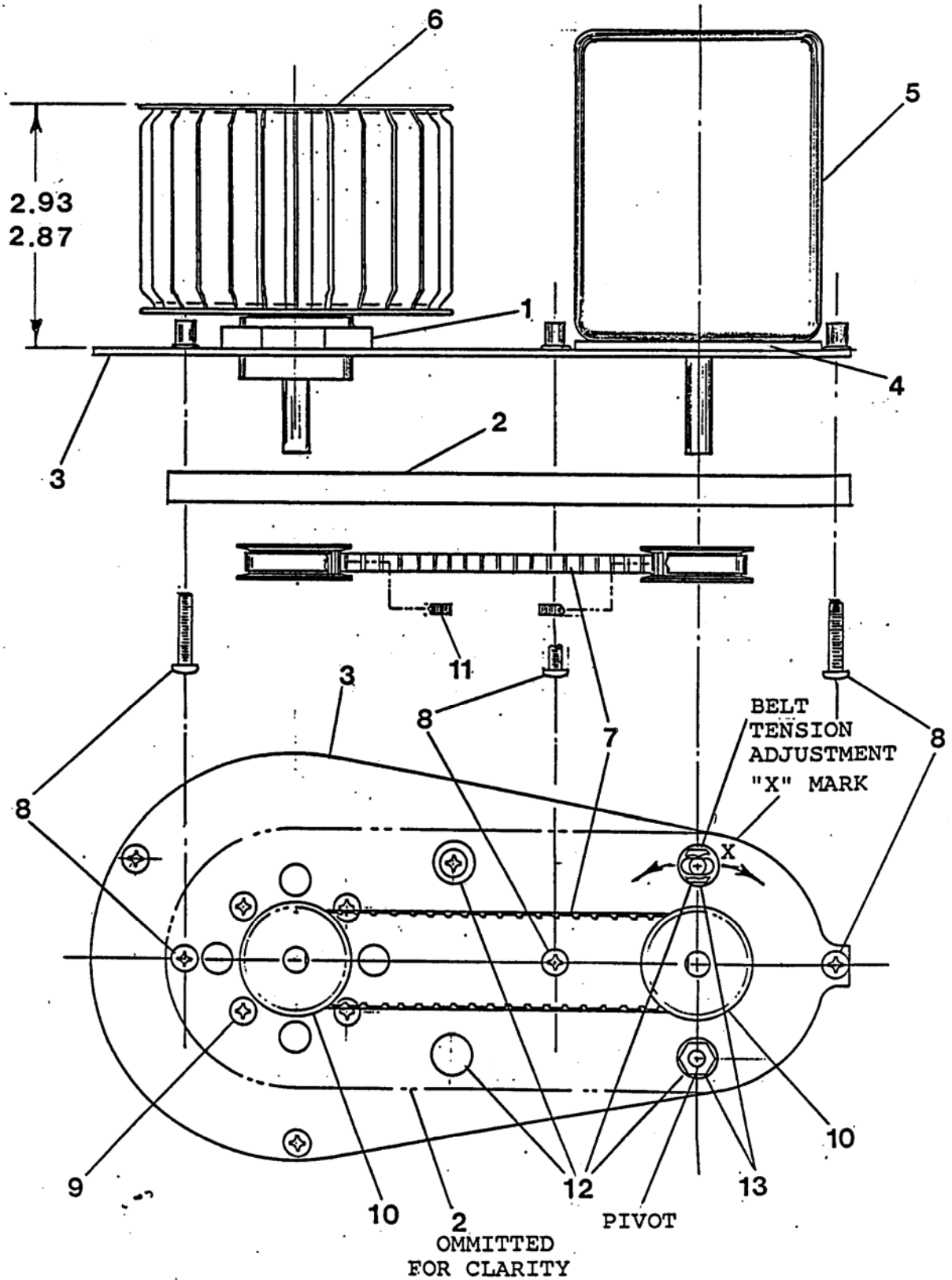


FIGURE 2

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PARTS LIST

FIG NO.	PART NO.	DESCRIPTION	USAGE AND QUANTITY PER ASSY		
			-1	-2	
	SZ78-001-1	Evaporator Assembly			
2	SZ63-015-1	.Motor/Wheel Assembly (shown)			
	SZ63-015-2	.Motor/Wheel Assembly (opposite)			
2-1	SZ63-003-1	..Bearing/Shaft Assembly	1	1	
2-2	SZ63-005-3	..Support Plate	1	1	
-3	SZ63-008-1	..Motor Mount Plate Assembly	1		
	SZ63-008-2	..Motor Mount Plate Assembly		1	
-4	SZ63-010-3	..Spacer	1	1	
-5	2807-513-056	..Motor 24 Volt DC	1	1	
-6	AA326-215L	..Blower Wheel LH	1		
	AA326-215R	..Blower Wheel RH		1	
-7	6R3-067-025	..Belt	1	1	
-8	AN515-8R14	..Screw	3	3	
	AN935-8	..Lock Washer	3	3	
	AN960-8L	..Washer	3	3	
-9	AN515-8R8	..Screw	4	4	
	AN935-8	..Lock Washer	4	4	
-10	6A3-18DF02510	..Pulley	2	2	
-11	8-32 x ¼	..Set Screw	2	2	
-12	3752	..Plug Button	4	4	

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The tool required to loosen and tighten the electric motor attach nuts is a standard 3/8 inch socket with a notch cut on it as shown on figure 3 below.

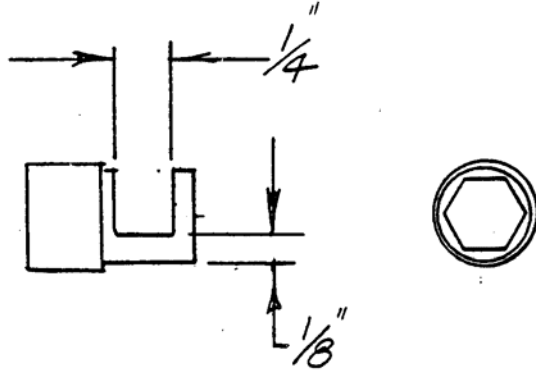


FIGURE 3