

## ZEE SYSTEMS, INC.

MAINTENANCE AND PARTS MANUAL  
SZ71-001 Evaporator AssemblyEvaporator Assembly

The SZ71-001 and SZ71-001-1A Evaporator Assemblies were designed with compactness in mind utilizing a side mounted electric motor configuration. The evaporator assemblies need no routine inspection other than cleaning the filter (fig. 1-4) as required and checking motor belt tension whenever possible. NOTE: when reinstalling the filter make sure that the filter does not touch the evaporator coil face as this can allow moisture from the coil to run through the filter and overflow 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 (fig. 1-2A) attached to the suction line. 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 (fig. 2) and can very easily be removed from the evaporator assembly by removing 3 screws per motor/blower wheel assembly (fig. 1-17), 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 AN364-1C32A 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 1.

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8271-001 Evaporator Assembly

Belt replacement or adjustment (Cont'd)

The motor attachment nut on the hole marked with an "X" is the belt tension adjusting attachment. The other adjustment 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 tightened. Turn the motor on the pivot attachment until the belt is properly tensioned and tighten the adjustment nut. Proper belt tension is obtained when one side of the belt is pushed by finger and a 3/8" belt deflection is obtained.

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 may be returned to the factory for rework. This will minimize your down time and insure proper functioning components.

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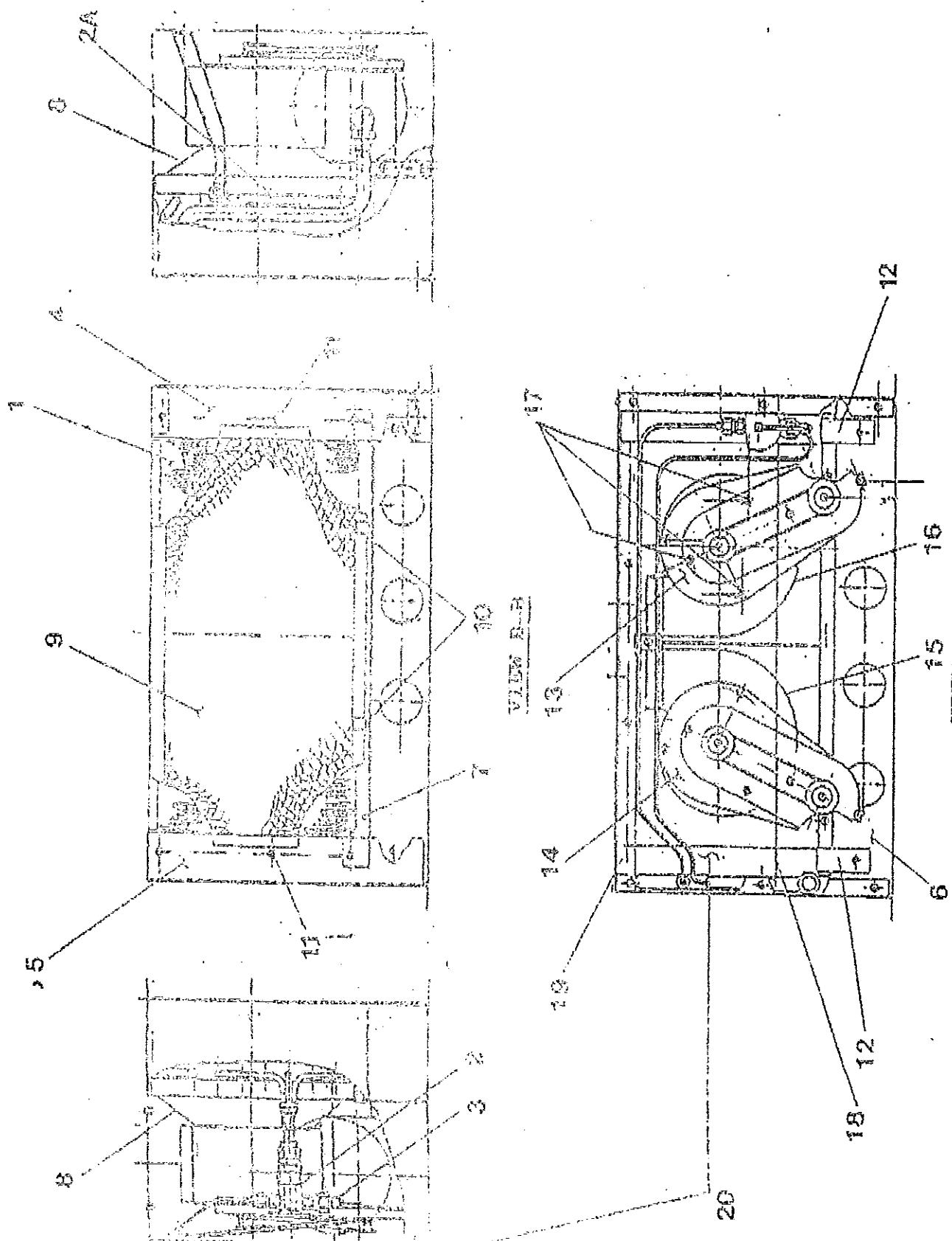


FIGURE 1

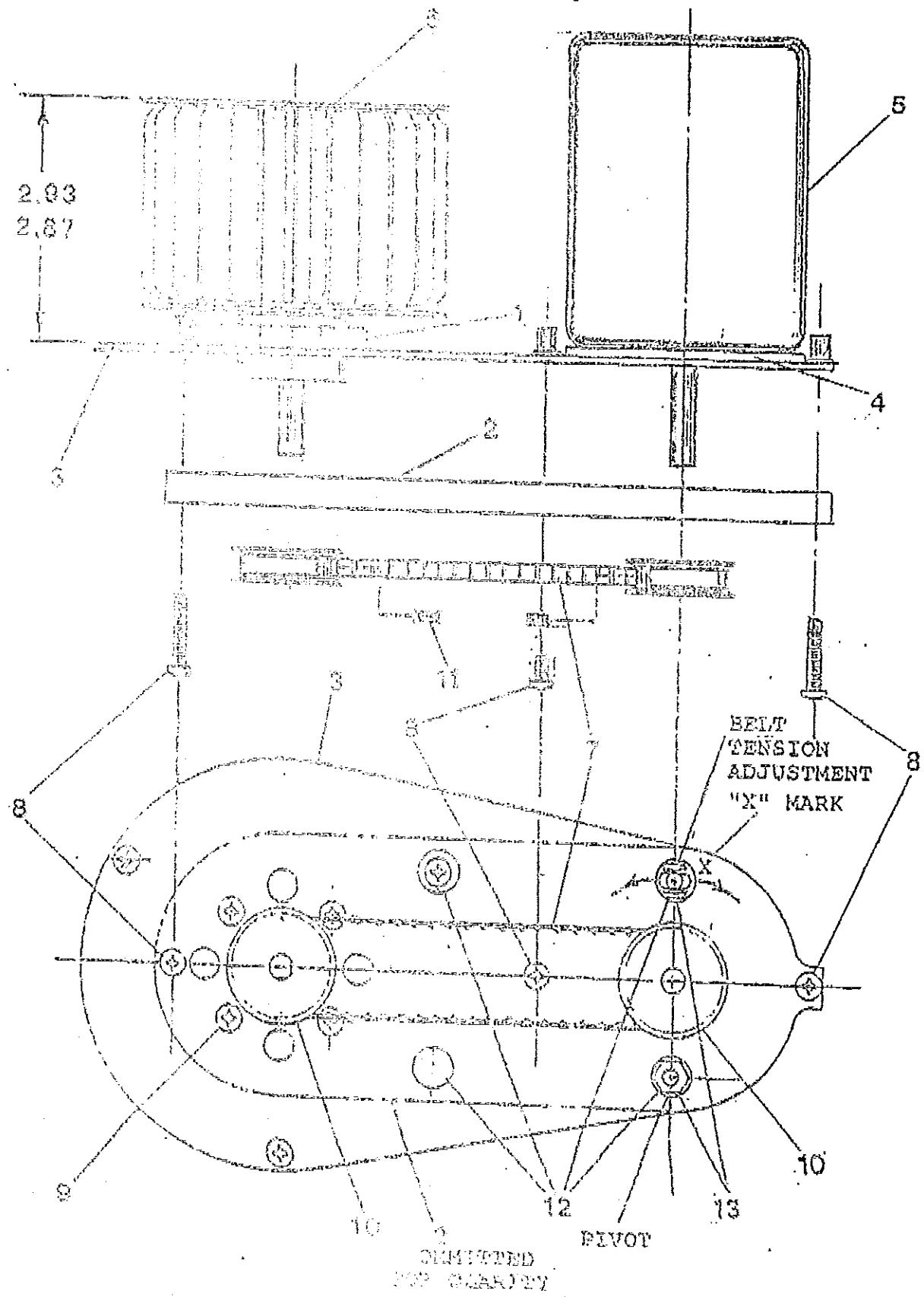
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## PARTS LIST

| FIG<br>NO. | PART NO.     | DESCRIPTION          | USAGE AND<br>QUANTITY PER ASSY |     |  |
|------------|--------------|----------------------|--------------------------------|-----|--|
|            |              |                      | -1                             | -1A |  |
| 1          | SZ71-001-1   | Evaporator Assembly  |                                |     |  |
|            | SZ71-001-11  | Evaporator Assembly  |                                |     |  |
| 1-1        | SZ67-004-5   | Coil Assembly        | 1                              | 1   |  |
| 1-2        | 3FEDC001     | Expansion Valve      | 1                              | 1   |  |
| 1-3        | DS103        | Fitting              | 2                              | 1   |  |
| 1-4        | SZ71-002-1   | Panel Assembly-RH    | 1                              | 1   |  |
| 1-5        | SZ71-002-1   | Panel Assembly-LH    | 1                              | 1   |  |
| 1-6        | SZ70-008-1   | Channel Assembly     | 1                              | 1   |  |
| 1-7        | SZ70-012-1   | Drain Fan Assembly   | 1                              | 1   |  |
| 1-8        | SZ70-017-1   | Duct Assembly        | 2                              | 2   |  |
| 1-9        | SZ71-003-1   | Filter               | 1                              | 1   |  |
| 1-10       | SZ48-017-3   | Clip-Filter          | 2                              | 2   |  |
| 1-11       | AN526-632R10 | Screw                | 4                              | 4   |  |
| 1-12       | SZ70-019-1   | Clip Assembly        | 2                              | 2   |  |
| 1-13       | SZ63-025-1   | Motor/Wheel Assembly | 1                              | 1   |  |
| 1-14       | SZ63-015-2   | Motor/Wheel Assembly | 1                              | 1   |  |
| 1-15       | 675L         | Blower Housing       | 1                              | 1   |  |
| 1-16       | 675R         | Blower Housing       | 1                              | 1   |  |
| 1-17       | MS35206-24S  | Screw                | 6                              | 6   |  |
|            | AN560-8L     | Washer               | 6                              | 6   |  |
|            | AN535-8      | Lock Washer          | 6                              | 6   |  |
| 1-18       | SZ71-005-1   | Panel Assembly       | 1                              | -   |  |
| 1-19       | SZ71-003-3   | Panel Assembly       | -                              | 1   |  |
| 1-20       | SZ71-004-3   | Panel Rear           | -                              | 1   |  |

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S271-201 Evaporator Assembly



# PARTS LIST

| FIG<br>NO. | PART NO.      | DESCRIPTION                     | USAGE AND<br>QUANTITY PER ASSY |    |
|------------|---------------|---------------------------------|--------------------------------|----|
|            |               |                                 | -1                             | -2 |
|            | SZ70-001-1    | Drive Motor Assembly            |                                |    |
| 2          | SZ63-015-1    | Motor Mount Assembly (shown)    |                                |    |
|            | SZ63-015-2    | Motor Mount Assembly (opposite) |                                |    |
| 2-1        | SZ51-001-1    | Braking Plate Assembly          | 2                              | 1  |
| 2-2        | SZ41-010-2    | Support Plate                   | 1                              | 1  |
| 2-3        | SZ61-012-1    | Mounting Mount Plate Assembly   | 1                              |    |
|            | SZ63-017-1    | Mounting Mount Plate Assembly   |                                | 1  |
| -4         | SZ63-010-3    | Spacer                          | 1                              | 1  |
| -5         | 2807-013-006  | Motor 24 Volt DC                | 1                              | 1  |
| -6         | AA316-215L    | Blower Wheel LS                 | 2                              |    |
|            | AA326-225R    | Blower Wheel RP                 |                                | 1  |
| -7         | 6R3-667-025   | Bolt                            | 1                              | 1  |
| -8         | AN515-BR24    | Screw                           | 3                              | 3  |
|            | AN935-8       | Lock Washer                     | 3                              | 3  |
|            | AN960-S1      | Washer                          | 3                              | 3  |
| -9         | AN515-GR8     | Screw                           | 4                              | 4  |
|            | AN935-8       | Lock Washer                     | 4                              | 4  |
| -10        | 6A3-16SF02310 | Pulley                          | 2                              | 2  |
| -11        | 8-32 x 1/8    | Set Screw                       | 2                              | 2  |
| -12        | 3752          | Plug Button                     | 4                              | 4  |

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Maintenance and Parts Manual  
SZ71-012 Evaporator Assembly

The tool required to tighten and tighten the electric motor attach nuts is a lock nut wrench which has a slot with a notch cut on it as shown in drawing below:



FIGURE 2