

Two-Speed Blower Upgrade Kit



Product Notes

EK-SMBKU-PN. A01

Purpose:

Users who buy at least one 7200-rpm hard drive, for example, part number SWXD3-SE, to install in an SWXSE-01 or SWXSE-02 (BA350 series) storage pedestal must install this upgrade kit. The part number of the kit is SWXBF.

The kit contains dual-speed blowers to replace the single-speed blowers standard in the SWXSE-01 or -02 (BA350 series) storage pedestal. Users also install air flow control blocks as part of the upgrade to direct cooling air effectively. Each pedestal requires one upgrade kit. The dual-speed blowers and air flow control blocks are required to meet the

increased cooling requirements of the 7200-rpm drive(s) and other StorageWorks Building Blocks (SBBs).

Each pedestal accepts a limit of six, 7200-rpm hard drives with the standard power supply installed. If seven drives are installed, replace the storage pedestal's standard 131-watt power supply with a 150-watt unit (part number SWXBP-SD).

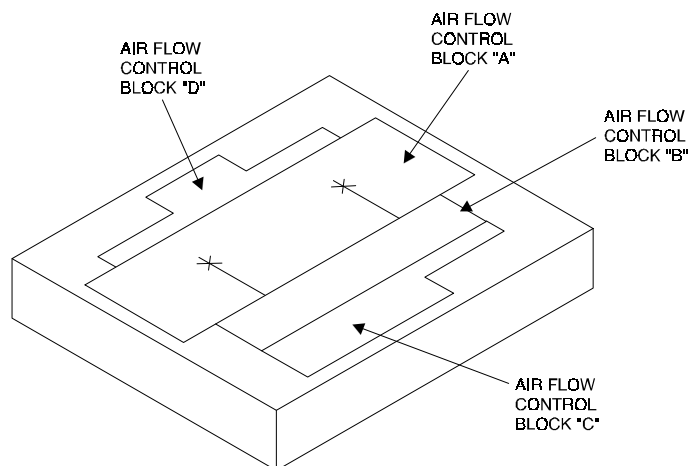
Contents:

Unpack each upgrade kit and check that it contains:

- These Product Notes
- Two dual-speed blowers -- Dual-speed blowers look physically identical to single-speed blowers. Identify a dual-speed blower by the following marking on its housing:
 - One pre-cut foam block (Figure 1) containing four air flow control blocks that may be punched out as required to match configuration requirements for single, dual, or multiple pedestals -- The pre-cut foam block is packaged in a plastic bag to distinguish it from packing material.

2X

Figure 1 Pedestal Air Flow Control Blocks



BLWUPK-01

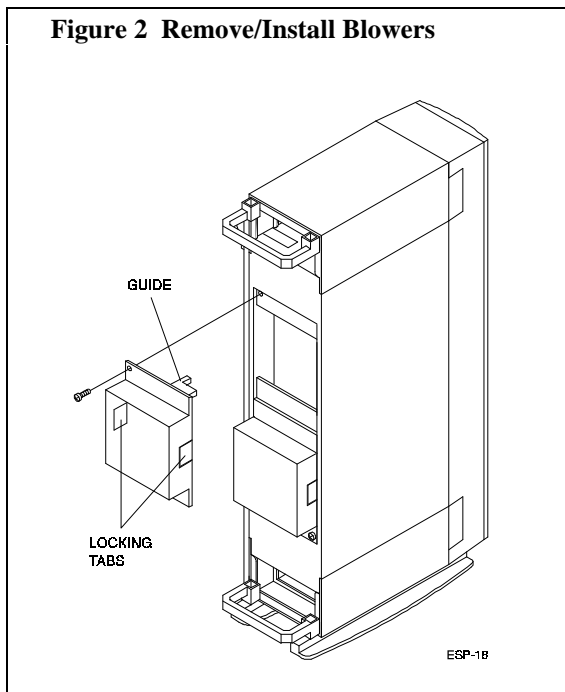
Instructions for Upgrade:

Remove Single-Speed Blowers

WARNING

To avoid shock hazard and possible equipment damage, de-energize the pedestal before starting the upgrade. Position the power switch on the ac distribution unit to *off* and disconnect the power cord from its ac source.

1. Remove rear bezel from pedestal.
2. Using a Phillips screwdriver, remove screw from upper left corner of top blower and bottom right corner of lower blower (Figure 2). Save screws for installing new dual-speed blowers.
3. Press side locking tabs on top blower and remove blower by pulling straight out.
4. Press side locking tabs on lower blower and remove blower by pulling straight out.
5. If configuration includes additional pedestals, repeat steps 1 through 4 for each pedestal.



Install Dual-Speed Blowers

1. Take either dual-speed blower, identified by "2X" marking, and position it with connector at upper right as shown in Figure 2.

2. Press side locking tabs on blower and push unit into upper blower position on pedestal until it's firmly seated. (Locking tabs spring outward when blower seats properly.)

3. Take other dual-speed blower and position it with connector at upper right.

4. Press side locking tabs on blower and push unit into lower blower position on pedestal until it's firmly seated.

5. Using Phillips screwdriver, install screw (previously saved) at upper left corner of top blower.

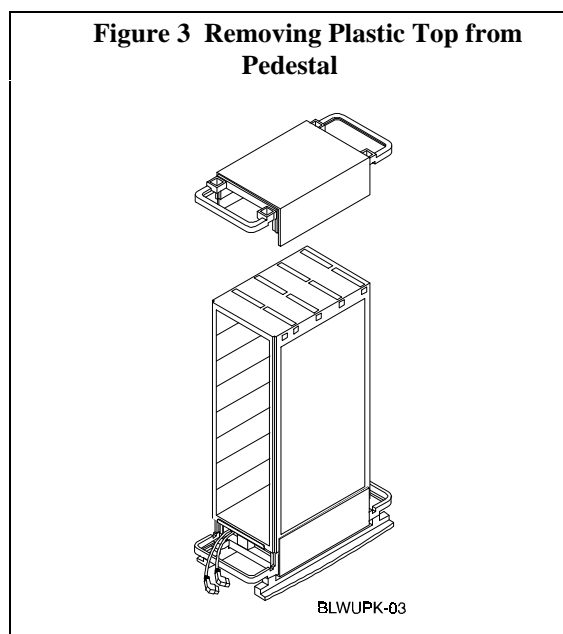
6. Install second saved screw at lower right corner of lower blower.

7. If configuration includes additional pedestals, repeat steps 1 through 6 for each pedestal.

Install Air Flow Control Blocks in Single-Pedestal Configuration

If your configuration includes two pedestals, go directly to: Install Air Flow Control Blocks in Dual-Pedestal Configuration. If your configuration includes more than two pedestals, go directly to: Install Air Flow Control Blocks in Multiple-Pedestal Configuration.

1. Remove air flow control blocks "A" and "B" from foam block (Figure 1).
2. Remove front bezel from pedestal.
3. Lift plastic top off pedestal as shown in Figure 3.

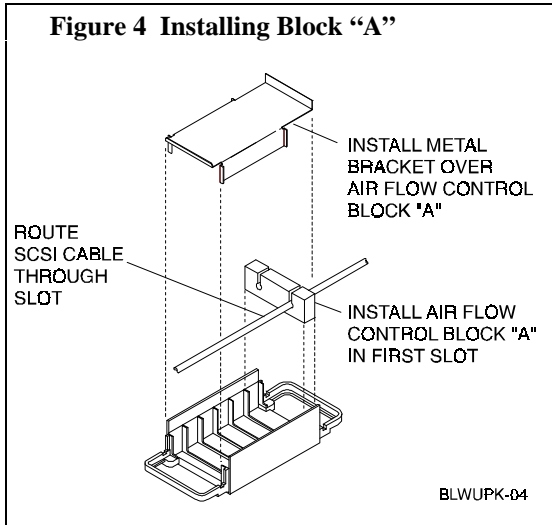


NOTE

For ease of reassembly, note how the metal bracket fits into the plastic top before performing the following step.

4. Invert plastic top on work surface and remove metal bracket from plastic top.

5. Insert air flow control block "A" into first slot of plastic top as shown in Figure 4. Route SCSI cable(s) through slot(s) in block "A".



6. Replace metal bracket in plastic top.

7. Replace plastic top on pedestal.

NOTE

Steps 8 through 11, can be omitted by carefully tilting the pedestal back to access the plastic base.

8. Locate two ac power cables coming from front of ac distribution unit and unplug them. (Second cable is already unplugged unless there's a redundant power supply.)

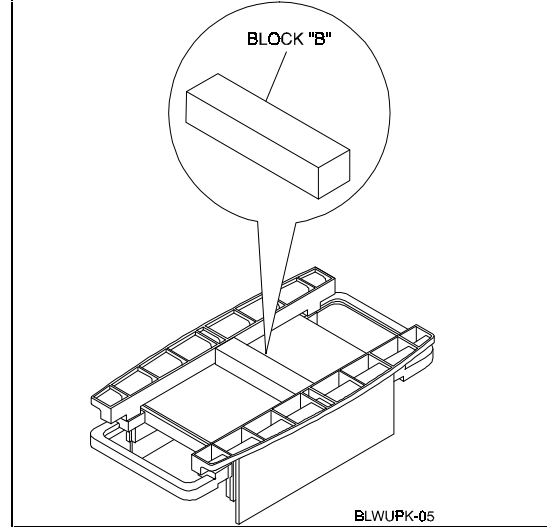
9. Lift pedestal off ac distribution unit.

10. Remove ac distribution unit from plastic base.

11. Invert plastic base on work surface so feet are on top.

12. At center of plastic base, install air flow control block "B" between feet as shown in Figure 5.

Figure 5 Installing Block "B", Bottom View



13. Turn over plastic base and reinstall ac distribution unit.

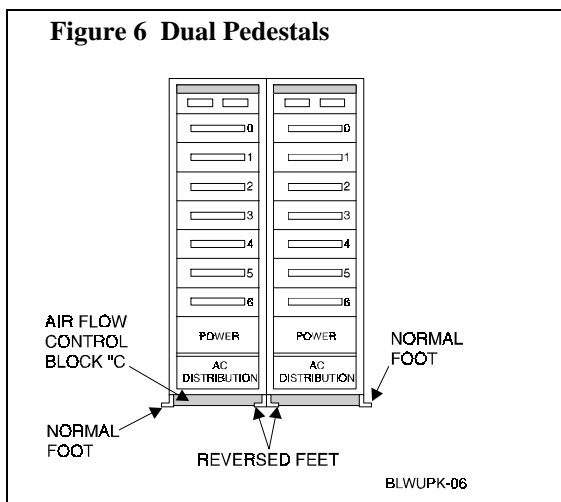
14. Replace pedestal on ac distribution unit.

15. Reconnect ac power cable(s) removed in step 8.

16. Go directly to: Install SBBs.

Install Air Flow Control Blocks in Dual-Pedestal Configuration

Notice the orientation of the feet in the dual-pedestal configuration shown in Figure 6. The outer feet of both pedestals are oriented like a single-pedestal configuration, with the flanges pointing out. The inner feet are reversed with the flanges pointing in, so the two pedestals may be positioned closer together. The reversal changes the spacing of the feet. Air flow control block "C" fits this spacing.



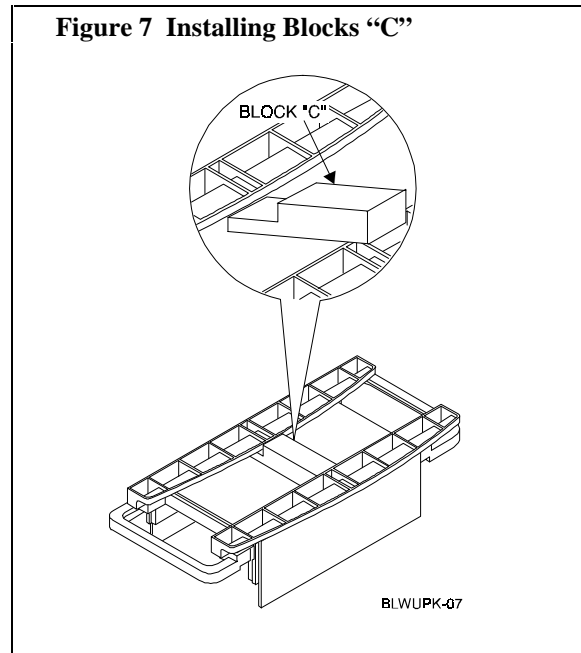
1. Remove air flow control blocks “A” and “C” from foam block in both upgrade kits (Figure 1).

2. Working with either pedestal, perform steps 2 through 11 under Install Air Flow Control Blocks in Single-Pedestal Configuration.

3. Working with other pedestal, perform steps 2 through 11 under Install Air Flow Control Blocks in Single-Pedestal Configuration.

4. Install air flow control blocks “C” between feet on both plastic bases as shown in Figure 7.

5. Working with either pedestal, perform steps 13 and 14 under Install Air Flow Control Blocks in Single-Pedestal Configuration.



6. At front of ac distribution unit, reconnect ac power cable previously removed from power supply. If there's a redundant power supply, connect second ac power cable to it.

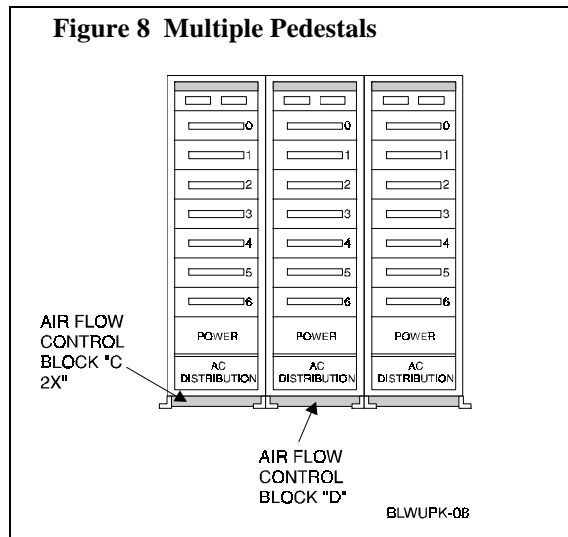
7. Working with other pedestal, perform steps 13 and 14 under Install Air Flow Control Blocks in Single-Pedestal Configuration.

8. Perform step 6, above.

9. Go directly to: Install SBBs.

Install Air Flow Control Blocks in Multiple-Pedestal Configuration

Notice the orientation of the feet in the multiple-pedestal configuration shown in Figure 8. The outer pedestals have feet positioned identically to the dual-pedestal configuration detailed above. The inside (center) pedestal has a different arrangement with the flanges of both feet pointing in. This arrangement introduces a new spacing requirement. Air flow control block “D” fits between the feet of the inside pedestal.

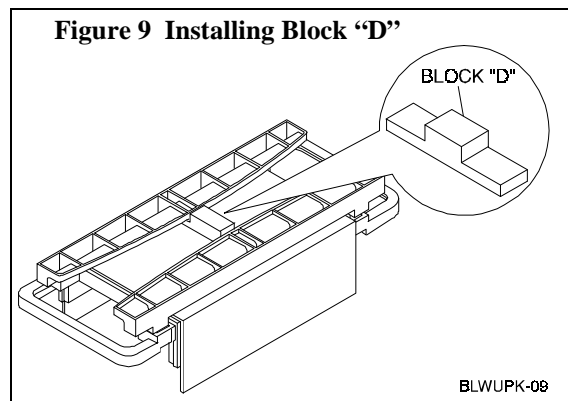


If additional pedestals are configured, all inside units will be arranged with the flanges on the feet pointing in.

To install air flow control blocks in multiple pedestals use these guidelines:

1. Start with two outer pedestals. Refer to: Install Air Flow Control Blocks in Dual-Pedestal Configuration.

2. For inner pedestals refer to: Install Air Flow Control Blocks in Single-Pedestal Configuration, but use block “D” in place of block “B”. Figure 9 shows installation of block “D”.



Install SBBs

Use the procedure below to install the new SBBs. For more details, refer to the *Expansion Storage Pedestal User's Guide*, Order Number: EK-SMCPA-UG.

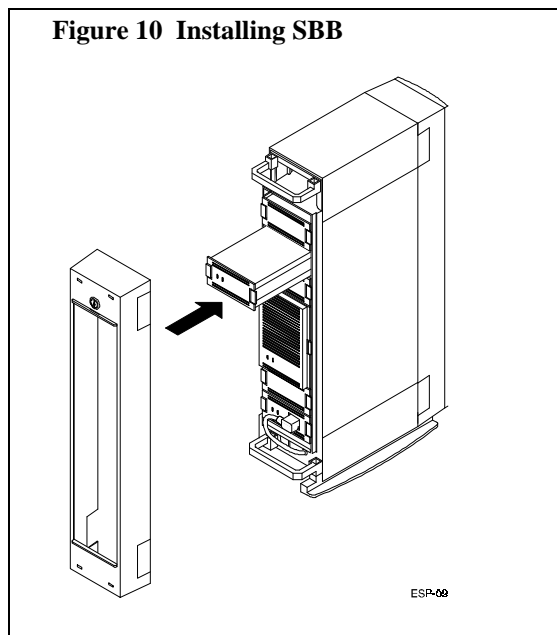
If the SBB does not have SCSI address switches, the SCSI address is the same as its slot number in the pedestal. If an SBB has address switches, the factory sets them so the SBB automatically defaults to the address of the slot where the SBB is installed.

SBBs come in two sizes: 3.5-inch and 5.25-inch. A 3.5-inch SBB requires one slot and a 5.25-inch device occupies three slots.

CAUTION

Don't exceed six, 7200-rpm drives in one pedestal without replacing the standard power supply in that pedestal with a 150-watt supply.

1. Remove filler panel(s) from designated slot(s) by squeezing side mounting tabs and pulling out.
2. Insert SBB into guide grooves as shown in Figure 10 and push it in until tabs click in place.



3. Perform Power-on Test below.
4. After successful completion of power-on test, install front and rear bezels.

Power-on Test

If more than one pedestal is configured, perform the power-on test for each pedestal independently.

1. Check that power switch on ac distribution unit is in *off* position, then connect ac distribution unit power cord to ac source.
2. Position power switch on ac distribution unit to *on*.