



Zee Systems Inc.

AIRBORNE AIR CONDITIONING SYSTEMS & COMPONENTS

FAA APPROVED MANUFACTURER'S MAINTENANCE FACILITY NO. 243-14

SERVICE LETTER 43-003

SUBJECT: Brush Inspection and T.B.O. for the SZ43-SERIES Motor.

EFFECTIVITY: All SZ43-SERIES Motors.

INTERVALS: **BRUSH INSPECTION:** 1000 HRS of motor operation.

MOTOR T.B.O.: 2000 HRS of motor operation.

NOTE: IF THE MOTOR IS TO BE REMOVED FROM THE SYSTEM FOR THIS INSPECTION REFER TO APPLICABLE MAINTENANCE OR SERVICE INSTRUCTIONS FOR SPECIFIC REMOVAL AND INSTALLATION INSTRUCTIONS.

INSPECTION PROCEDURE:

1. Remove brush cover.

2. Lift the brush spring and slide the brush from the holder. The brush should slide easily up and down in the holder. If the brush is tight or there is excessive side to side movement in the holder the motor should be removed for further inspection.

NOTE: Always return the brush to the same holder.

3. Check each brush for chips, cracks, pitting, signs of excessive arcing or overheating. Check each brush for even wear (SEE FIG.2). Check the leads for fraying or other deterioration. Replace any defective brush. If brush to be replaced has more than 1/8" (.125) wear from new length (SEE FIG. 1) replace all four brushes.

4. Inspect each brush. Replace all four brushes if any brush is worn to the wear line on the side of the brush (SEE FIG. 1). Order Brush Kit P/N: SZ43-Pl9C8351.

5. With the brushes removed inspect the armature commutator for signs of unusual wear. A BLACKED SMOOTH FILM OF CARBON ON THE COMMUTATOR IS NORMAL. Check for grooving or other signs of uneven wear on the commutator. Check for signs of discoloration due to overheating. If any defect is suspected or noted the motor should be removed for further inspection.

6. After inspection return the brush to the holder. Gently lower the brush spring onto each brush. DO NOT drop the spring on to the top of the brush as damage to the brush may result.

7. After brush run-in replace the brush cover.

SL 43-003

1 of 2

JUL 98

P.O. BOX 791165 • SAN ANTONIO, TEXAS 78279

PH: (210) 342-9761 • 1-800-988-COOL (2665) • FAX: (210) 341-2609



Zee Systems Inc.

AIRBORNE AIR CONDITIONING SYSTEMS & COMPONENTS

FAA APPROVED MANUFACTURER'S MAINTENANCE FACILITY NO. 243-14

SERVICE LETTER 43-003

SUBJECT: Brush Inspection and T.B.O. for the SZ43-SERIES Motor.

EFFECTIVITY: All SZ43-SERIES Motors.

INTERVALS: **BRUSH INSPECTION:** 1000 HRS of motor operation.

MOTOR T.B.O.: 2000 HRS of motor operation.

NOTE: IF THE MOTOR IS TO BE REMOVED FROM THE SYSTEM FOR THIS INSPECTION REFER TO APPLICABLE MAINTENANCE OR SERVICE INSTRUCTIONS FOR SPECIFIC REMOVAL AND INSTALLATION INSTRUCTIONS.

INSPECTION PROCEDURE:

1. Remove brush cover.

2. Lift the brush spring and slide the brush from the holder. The brush should slide easily up and down in the holder. If the brush is tight or there is excessive side to side movement in the holder the motor should be removed for further inspection.

NOTE: Always return the brush to the same holder.

3. Check each brush for chips, cracks, pitting, signs of excessive arcing or overheating. Check each brush for even wear (SEE FIG.2). Check the leads for fraying or other deterioration. Replace any defective brush. If brush to be replaced has more than 1/8" (.125) wear from new length (SEE FIG. 1) replace all four brushes.

4. Inspect each brush. Replace all four brushes if any brush is worn to the wear line on the side of the brush (SEE FIG. 1). Order Brush Kit P/N: SZ43-Pl9C8351.

5. With the brushes removed inspect the armature commutator for signs of unusual wear. A BLACKED SMOOTH FILM OF CARBON ON THE COMMUTATOR IS NORMAL. Check for grooving or other signs of uneven wear on the commutator. Check for signs of discoloration due to overheating. If any defect is suspected or noted the motor should be removed for further inspection.

6. After inspection return the brush to the holder. Gently lower the brush spring onto each brush. DO NOT drop the spring on to the top of the brush as damage to the brush may result.

7. After brush run-in replace the brush cover.

SL 43-003

1 of 2

JUL 98

P.O. BOX 791165 ● SAN ANTONIO, TEXAS 78279

PH: (210) 342-9761 ● 1-800-988-COOL (2665) ● FAX: (210) 341-2609