CT7-2E INCREMENTAL CHANGE Release Notification Date: 08/13/2021

MM 72-60-00
ACCESSORY SECTION MODULE - INSPECTION

DISCLAIMER

The Incremental Changes published by GE Aviation are considered Instructions for Continued Airworthiness. These Incremental Changes, along with the current Manual revision and published Temporary Revisions, constitute the latest Instructions for Continued Airworthiness.

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HIGHLIGHTS

HIGHLIGHT REFERENCE	DESCRIPTION OF CHANGE
tk72-60-00-200-801	Technical Change: Changed the WARNINGS throughout the pageblock to update to the latest format and added metric equivalents throughout the pageblock where applicable.
tk72-60-00-200-801	Technical Change: Changed inspection of the particle separator blower in Table 602 and Figure 602 to add data for CT7-2E1 modified to SB 72-0023.

*** * * FOR CT7-2E1**

TASK 72-60-00-200-801

1. General Information.
   This section provides inspection procedures for components of the accessory section module. Before starting any of the following inspections, read INSPECTION section in Standard Practices Manual GEK 9250, 70-30-00.
2. Radial Drive Shaft Assembly.
   Go to Table 601.

TABLE 601. INSPECTION OF RADIAL DRIVE SHAFT ASSEMBLY

Inspect	Usable Limits	Max Repairable Limits	Corrective Action
A. Axis-A cover assembly (8, Figure 601) for:			
(1) Cracks.	None permitted.	Not repairable.	Replace cover assembly.
(2) Nicks and scratches on:			
(a) Sealing surfaces.	None permitted.	Not repairable.	Replace cover assembly.
(b) All other	Any number, without high	Any number, with high	Remove high metal (GEK

	areas.	metal.	metal.	9250, 70-42-00).
	(3) Dents.	Any number, 0.125 inch (3.18 mm) deep that do not affect assembly.	Not repairable.	Replace cover assembly.
B.	Axis-A boot (6) for:			
	(1) Tears.	Minor tears permitted.	Not repairable.	Replace boot.
	(2) Crazing present when boot is stretched.	None permitted.	Not repairable.	Replace boot.
C.	Retaining rings (4, 7) for damage.	None permitted.	Not repairable.	Replace retaining ring.
D.	Radial drive shaft (5) splines for visible steps on teeth.	Not permitted.	Not repairable.	Replace radial drive shaft.
E.	Upper shaft shoulder of shaft (5) for indentations caused by radial contact with spline teeth.	Any number 0.100 inch (2.54 mm) long.	Not repairable.	Replace radial drive shaft.
F.	Extension shaft (3) for damage or wear on square and hex.	Any amount, if shaft assembly can be driven with wrench.	Not repairable.	Replace extension shaft.

*** * * FOR CT7-2E1**

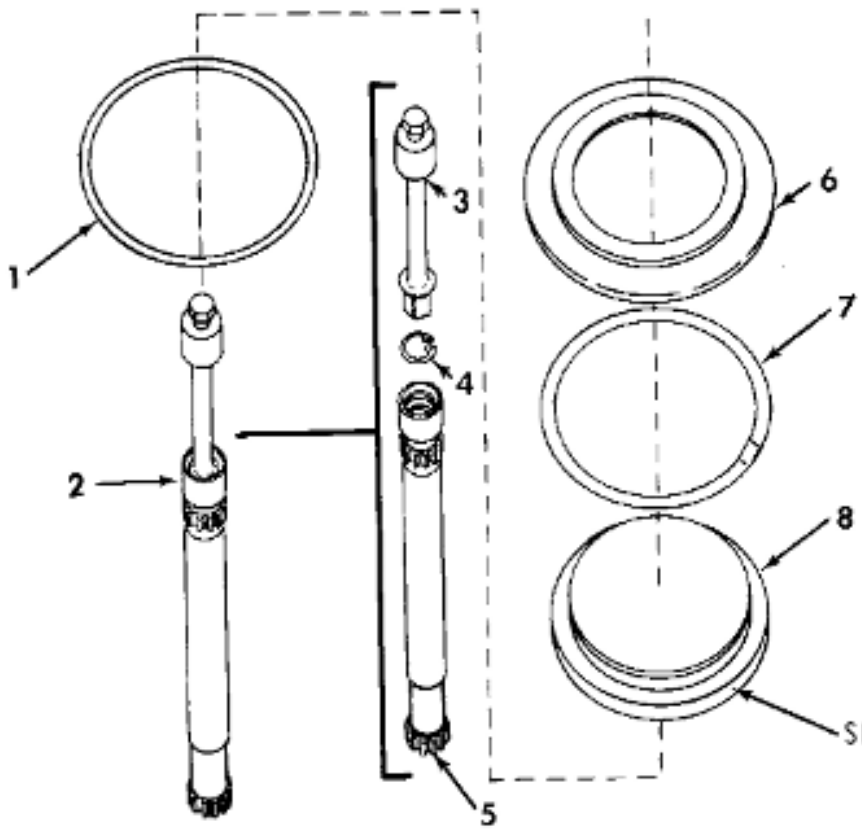

Figure 601 Radial Drive Shaft Assembly - Inspection

3. Particle Separator Blower and V-Band Coupling Assembly.

Preliminary Inspection Procedure.

A. Inspect impeller vanes (4, Figure 602, sheet 1 or sheet 2) for erosion with shroud installed. If erosion is more than 0.375 inch (9.53 mm) from face of shroud, replace blower.

NOTE: The particle separator blower is a single-bearing support item. Axial and radial play in the shaft is normal. For proper operation, the shaft requires support from a second bearing located in the accessory gearbox. Without the second support bearing, the drive shaft will not spin freely if an uninstalled blower is held in the horizontal position.

B. If a bearing failure is suspected, do the following:

(1) With particle separator blower held in the vertical position (with shaft upward), hold drive shaft (5) and spin housing by hand.

(2) If the housing does not spin freely, or if the bearing is noisy, then a more detailed inspection must be made of the impeller and shroud.

NOTE: Shroud (2) is only removed for access so that a more detailed inspection can be made of the impeller and shroud.

C. Remove shroud (2) as follows:

*** * * FOR CT7-2E1 NOT MODIFIED TO SB 72-0023**

(1) Remove two screws (3, Figure 602, sheet 1) that secure the shroud (2) to the particle separator blower.

*** * * FOR CT7-2E1 MODIFIED TO SB 72-0023**

(1) Remove 51 screws (3, Figure 602, sheet 2) that secure the shroud (2) to the particle separator blower.

*** * * FOR CT7-2E1**

(2) Remove shroud (2, Figure 602, sheet 1 or sheet 2).

(3) Clean impeller (6), impeller vanes (4), and shroud (2) as follows:

WARNING: REFER TO THE PRODUCT LABEL AND THE MANUFACTURER'S (MATERIAL) SAFETY DATA SHEET (SDS) FOR INSTRUCTIONS ON THE HAZARDS, STORAGE, SAFE HANDLING AND PROPER USE OF THIS PRODUCT.

CAUTION:
* DO NOT IMMERSE BLOWER IN CLEANING COMPOUND OR SOLVENT.
* AVOID WASHING GREASE FROM GREASE PACKED BEARING. OTHERWISE, BEARING WILL BE DAMAGED.

(a) Using a lint-free towel saturated with dry cleaning solvent, remove grease, oil, and dirt from impeller (6), impeller vanes (4), and shroud (2). Do not allow dry cleaning solvent to get on bearing.

WARNING: USE EYE PROTECTION WHEN YOU USE COMPRESSED AIR TO CLEAN, COOL, OR DRY PARTS OR TOOLS. PARTICLES CAN CAUSE AN INJURY TO YOUR EYES. ENSURE COMPRESSED AIR PRESSURE IS LESS THAN 30 PSIG (207 KPA). DO NOT POINT COMPRESSED AIR AT YOURSELF OR OTHER PERSONS.

(b) Dry impeller (6), impeller vanes (4), and shroud (2) with dry, filtered compressed air.

(4) While holding drive shaft (5) in the vertical position (with shaft upward), spin blower housing. If the housing does not spin freely, or if the bearing is noisy, replace the blower.

(5) If housing spins freely and if there is no noise, inspect blower (Table 602).

D. Go to Table 602. When inspection is completed, install shroud (2) as follows:

(1) Align holes on shroud (2) with holes on particle separator blower.

*** * * FOR CT7-2E1 NOT MODIFIED TO SB 72-0023**

(2) Install two screws (3, Figure 602, sheet 1) to secure the shroud (2).

*** * * FOR CT7-2E1 MODIFIED TO SB 72-0023**

(2) Install 51 screws (3, Figure 602, sheet 2) to secure the shroud (2).

*** * * FOR CT7-2E1**

(3) Torque screws (3, Figure 602, sheet 1 or sheet 2) to 7 to 9 lb in. (0.8 to 1.0 N.m).

E. Go to Table 602.

TABLE 602. INSPECTION OF PARTICLE SEPARATOR BLOWER AND V-BAND COUPLING ASSEMBLY

Inspect	Usable Limits	Max Repairable Limits	Corrective Action
A. Impeller vanes (4, Figure 602, sheet 1 or sheet 2) for:			
(1) Cracks.	None permitted.	Not repairable.	Replace blower.
(2) Erosion.	Erosion hook on full vane is 0.375 inch (9.53 mm) from forward face of impeller shroud (2).	Not repairable.	Replace blower.
(3) Nicks and scratches.	Any number, 0.015 inch (0.38 mm) deep.	Not repairable.	Replace blower.
(4) Rubs on tips.	Any amount, if impeller tips are not more than 0.015 inch (0.38 mm) from normal shape.	Not repairable.	Replace blower.
(5) Dents.	Any number, 0.125 inch (3.18 mm) in diameter.	Not repairable.	Replace blower.
B. Forward face of impeller shroud (2) for:			
(1) Erosion damage.	Up to 50% of plating eroded away.	Not repairable.	Replace blower.
(2) Nicks and scratches.	Any number, 0.015 inch (0.38 mm) deep if plating damage is within a 2 inch (51 mm) circle.	Not repairable.	Replace blower.
(3) Dents.	Any number, 0.125 inch (3.18 mm) in diameter if plating damage is within a 2 inch (51 mm) circle.	Not repairable.	Replace blower.
(4) Rubs.	Not permitted.	Not repairable.	Replace blower.
C. Impeller (3, sheet 3 or sheet 4) for nicks,			

	dents, and scratches on:			
	(1) Area A (Vane to hub fillet area).	None permitted.	Not repairable.	Replace blower.
	(2) Area B (hub).	Any number, 0.015 inch (0.38 mm) deep. No more than 5 defects 0.020 inch (0.51 mm) deep.	Not repairable.	Replace blower.
	(3) Area C (vane sides).	No more than 5 defects 0.020 inch (0.51 mm) deep.	Not repairable.	Replace blower.
	(4) Area D (lower leading edge).	No more than 5 defects 0.015 inch (0.38 mm) deep.	Not repairable.	Replace blower.
	(5) Area E (upper leading edge).	Any number, 0.030 inch (0.76 mm) deep.	Not repairable.	Replace blower.
D.	Impeller (3) for cracks or missing pieces.	None permitted.	Not repairable.	Replace blower.
E.	Drive shaft (1, sheet 3 or sheet 4) for:			
	(1) Failure (shearing).	Not permitted.	Not repairable.	Replace blower.
	(2) Chipped or missing spline teeth.	Not permitted.	Not repairable.	Replace blower.
	(3) Visible wear steps on spline.	Not permitted.	Not repairable.	Replace blower.
	(4) Nicks and scratches on:			
	(a) Floor of packing groove (2).	Any number, 0.005 inch (0.13 mm) deep, without sharp edges.	Not repairable.	Replace blower.
	(b) Walls of packing groove (2).	Any number, 0.016 inch (0.41 mm) deep, without sharp edges.	Not repairable.	Replace blower.
F.	V-band coupling assembly (Figure 603) for:			
	(1) Cracks in:			
	(a) Circumferential band.	None permitted.	Not repairable.	Replace coupling.
	(b) Spot weld.	None permitted.	Not repairable.	Replace coupling.
	(2) Nicks, dents, scratches, and gouges.	Any number, 0.010 inch (0.25 mm) deep, without high metal.	Same as usable limits, with high metal.	Remove high metal (GEK 9250, 70-42-00).
	(3) Damaged threads.	One thread total, without crossed threads or high metal.	Same as usable limits, with high metal.	Remove high metal and chase threads (GEK 9250, 70-42-00).
	(4) Rolled edges on nut hex.	Any amount if wrench fits properly. No high metal permitted.	Any amount if wrench fits properly, with high metal.	Remove high metal (GEK 9250, 70-42-00).

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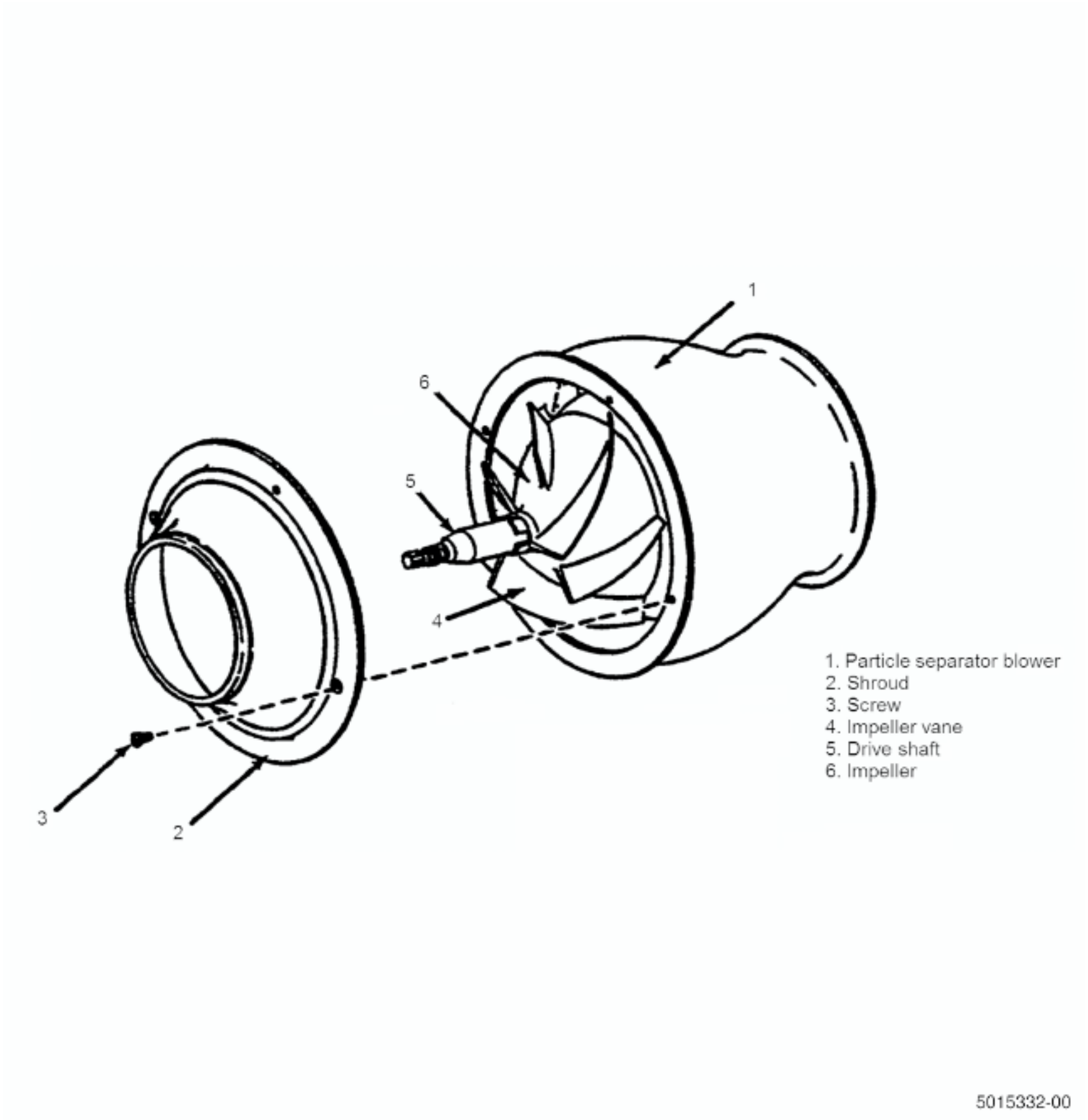

Figure 602 (Sheet 1) Particle Separator Blower - Inspection

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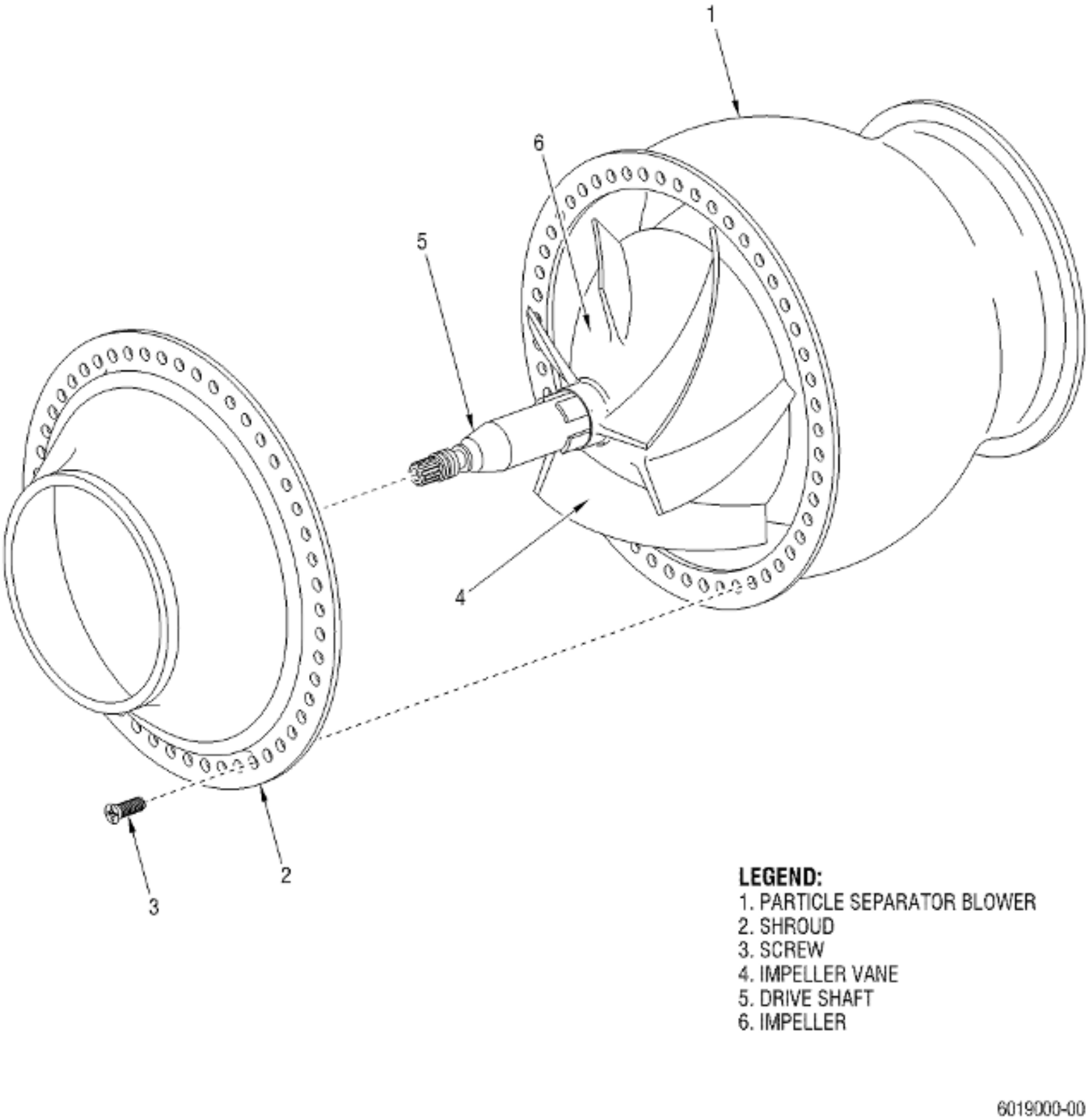

Figure 602 (Sheet 2) Particle Separator Blower - Inspection

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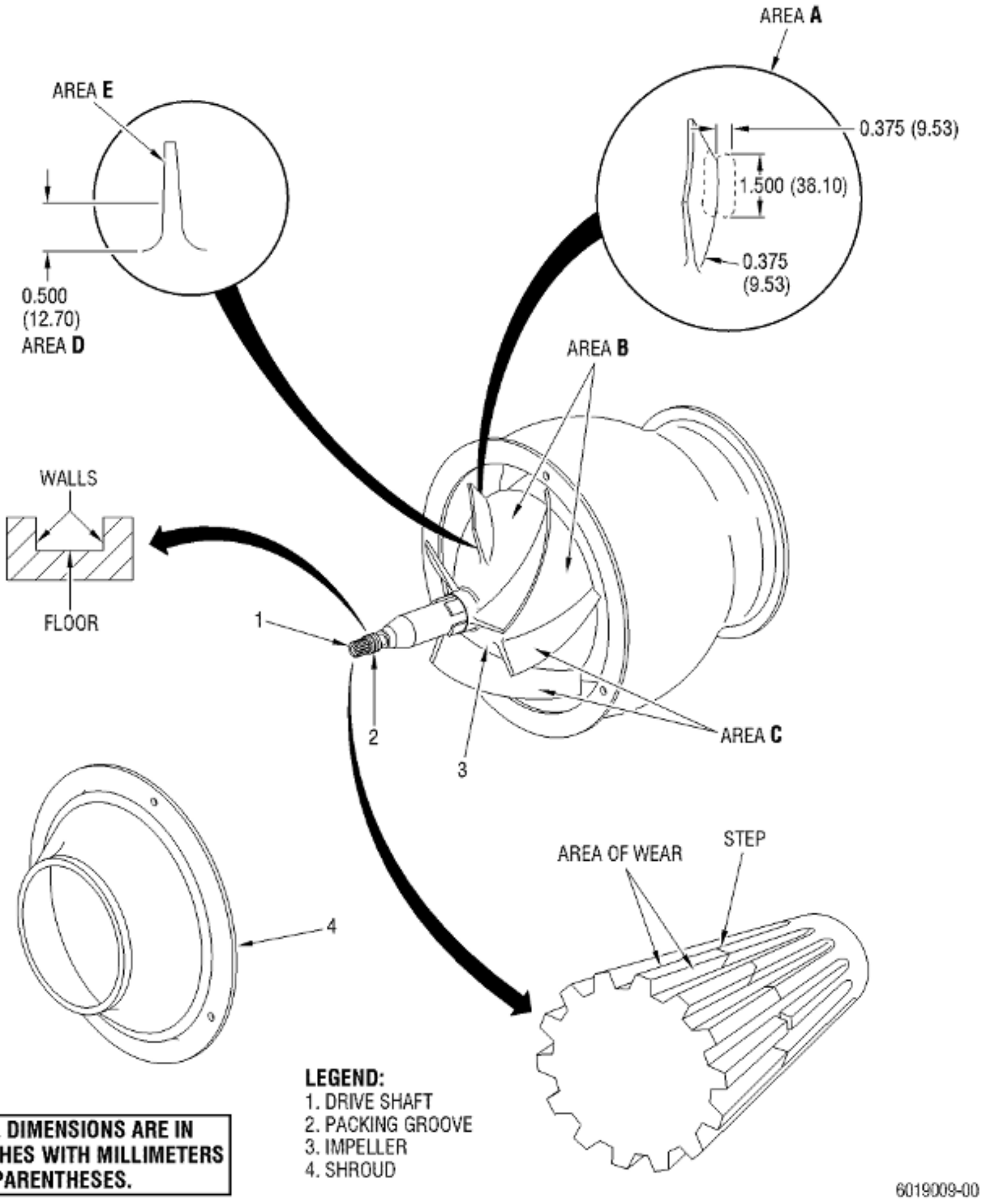

Figure 602 (Sheet 3) Particle Separator Blower - Inspection

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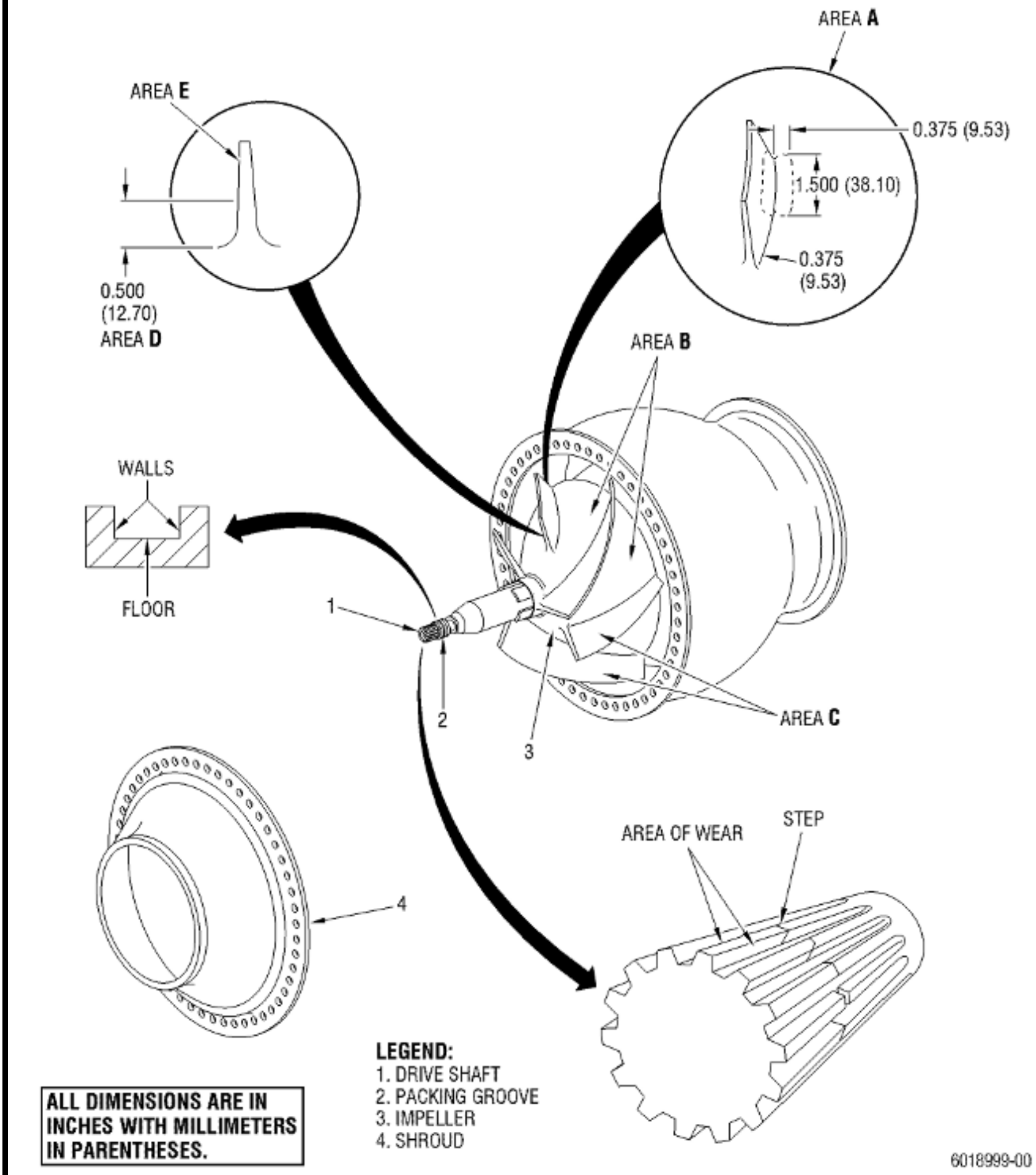

Figure 602 (Sheet 4) Particle Separator Blower - Inspection

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Figure 603 V-Band Coupling Assembly - Inspection

4. Particle Separator Inlet Duct.
   A. Fluorescent penetrant-inspect duct (GEK 9250, 70-32-02, Class C).
   B. Go to Table 603.

TABLE 603. INSPECTION OF PARTICLE SEPARATOR INLET DUCT

Inspect		Usable Limits	Max Repairable Limits	Corrective Action
A.	Duct for cracks except in bushing (1, Figure 604).	None permitted.	Not repairable.	Replace duct.
B.	Casting, including mounting bosses, mating diameters and surfaces, for nicks, dents, and scratches (except in bushing (1)).	Any number, 0.031 inch (0.79 mm) deep, without high metal.	Same as usable limits, with high metal.	Remove high metal (GEK 9250, 70-42-00).
C.	Wear on:			

	(1) Diameter A.	4.175 inches (106.05 mm) maximum.	Not repairable.	Replace duct.
	(2) Diameter B.	6.575 inches (167.01 mm) maximum.	Not repairable.	Replace duct.
	(3) Diameter C.	1.762 inches (44.75 mm) maximum.	Not repairable.	Replace duct.
D.	Pin (2) for looseness.	Not permitted.	Not repairable.	Replace duct.
E.	Bushing (1) for:			
	(1) Cracks.	None permitted.	Not repairable.	Replace bushing. Press-fit by hand.
	(2) Looseness.	Not permitted.	Not repairable.	Replace bushing. Press-fit by hand.
	(3) Nicks, dents, and scratches.	Any number, 0.031 inch (0.79 mm) deep, in 25% of any surface area, without high metal.	Same as usable limits, with high metal.	Remove high metal (GEK 9250, 70-42-00).
F.	Studs (3).	Up to one damaged or missing thread, without crossed threads or loose material.	Not repairable.	Replace studs (GEK 9250, 70-48-16).
G.	Insert (4) for damaged threads.	Up to one damaged or missing thread, without crossed threads or loose material.	Not repairable.	Replace insert (GEK 9250, 70-48-11).
H.	Corrosion pits.	None permitted.	Any amount of corrosion pits that do not go through the entire wall thickness.	Repair. Refer to REPAIR 002.

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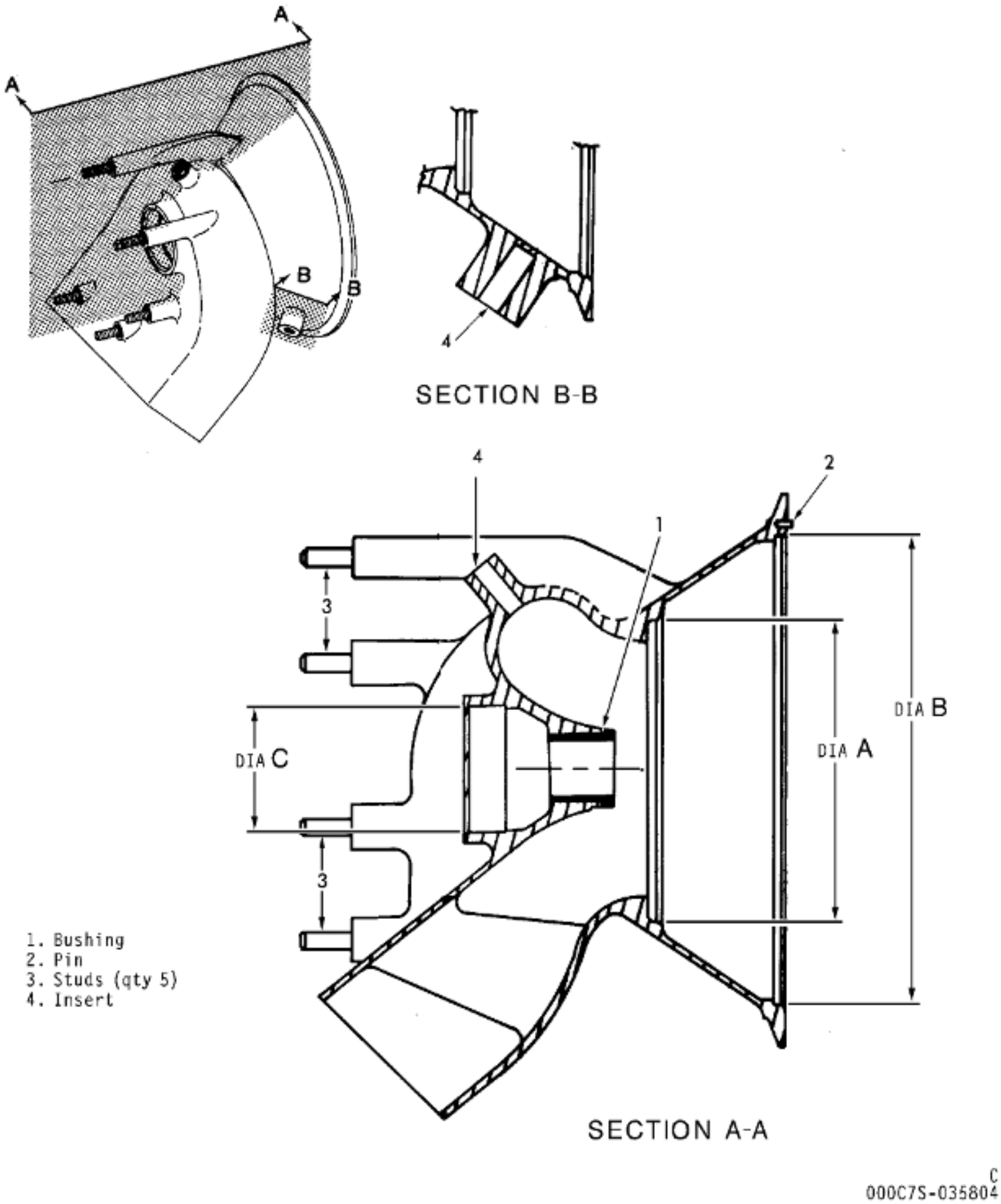

Figure 604 Particle Separator Inlet Duct - Inspection

5. Axis-G Cavity Seal Drain.
Go to Table 604.

TABLE 604. INSPECTION OF AXIS-G CAVITY SEAL DRAIN

Inspect	Usable Limits	Max Repairable Limits	Corrective Action
A. Boot (2, Figure 605) for:			
(1) Wear.	Up to 0.025 inch (0.64 mm) deep, over 30% of circumference.	Not repairable.	Replace seal drain.

(2)	Cracks.	None permitted.	Not repairable.	Replace seal drain.
(3)	Separation.	None permitted.	Not repairable.	Replace seal drain.
B.	Ring (3) for:			
(1)	Cracks.	None permitted.	Not repairable.	Replace seal drain.
(2)	Nicks, dents, and scratches.	Up to 0.005 inch (0.13 mm) deep, without high metal.	Same as usable limits, with high metal.	Remove high metal (GEK 9250, 70-42-00).
(3)	Clogged slots (1) and hole.	None permitted.	Any amount.	Replace seal drain.
(4)	Tube weld.	No cracks permitted.	Any amount.	Replace seal drain.
C.	Tube (5) for:			
(1)	Nicks, dents, and scratches.	Up to 0.005 inch (0.13 mm) deep, without high metal.	Same as usable limits, with high metal.	Remove high metal (GEK 9250, 70-42-00).
(2)	Deformation.	No visible deformation permitted.	Not repairable.	Replace seal drain.
(3)	Clogged end.	Not permitted.	Any amount.	Replace seal drain.
D.	Sleeve (4) for:			
(1)	Wear.	Through-wear not permitted.	Not repairable.	Replace sleeve.
(2)	Tears and cracks.	Up to 0.250 inch (6.35 mm) long, not to exceed 30% of surface area.	Not repairable.	Replace sleeve.

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1. Slots
2. Boot
3. Ring
4. Sleeve
5. Tube

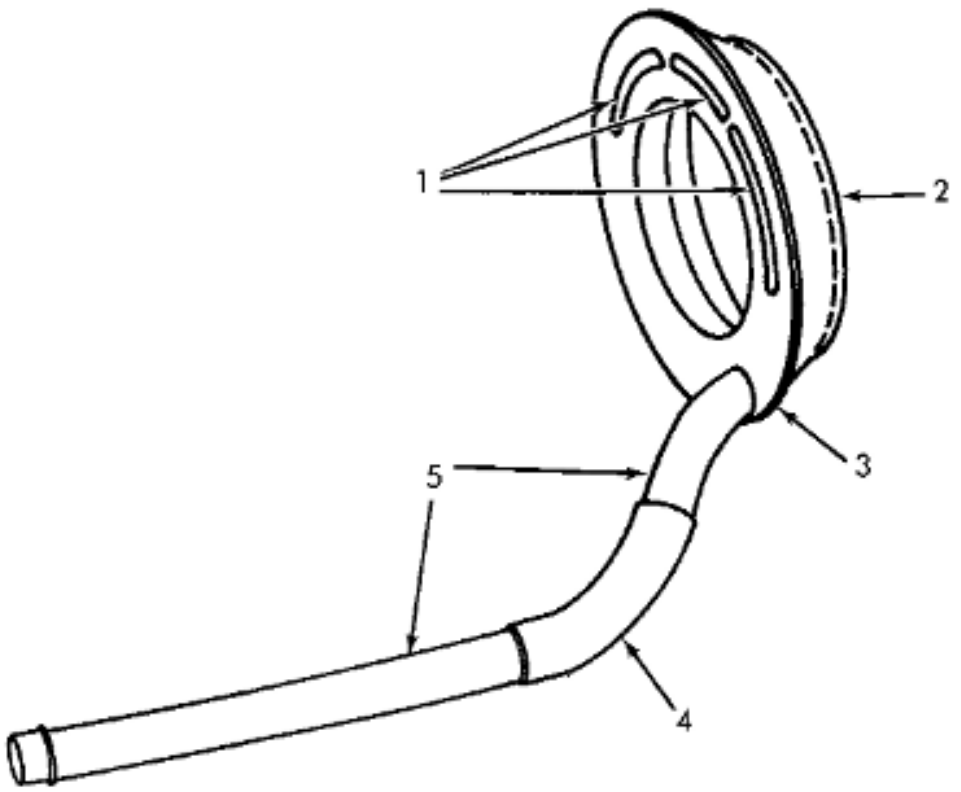

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Figure 605 Axis-G Cavity Seal Drain - Inspection