



Carrier

A United Technologies Company

REPLACEMENT COMPONENTS DIVISION

SERVICE BULLETIN

SUBJECT: 17/19DM Sandwich Diffuser Wall

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SUPERSEDES:

DATE:

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MODELS AFFECTED: 17/19DM Compr's with a 3 Digit Code

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PURPOSE:

To inform of the procedure to take if rivets are found missing in the new style DM sandwich diffuser wall.

BACKGROUND:

17/19 DM compressors which contain a three digit compressor code and were built between September of 1985 and September of 1990 have a sandwich diffuser wall that is held together with brass pop rivets. The wall consists of a layer of Teflon sandwiched between two pieces of steel. Excessive stress and fatigue is placed on the wall if the compressor is allowed to surge and may cause the rivets to break. The diffuser walls on DM compressors built after September of 1990 have steel pop rivets.

PROCEDURE:

Carefully inspect the diffuser wall during all major compressor inspections. If the wall is found to be missing rivets the diffuser wall and vane assembly should be repaired. If it is not repaired, the wall may lose additional rivets and then break apart. This can cause serious damage to the compressor. Provided below is a table that indicates the diffuser wall and vane assembly part number according to compressor code and the number of vanes in the wall.

Diffuser Wall & Vane Assy	Compressor Code	Number of Vanes
19DM 232 484	204, 224, 254, 284	19
19DM 232 494	205, 206, 225, 226, 225, 256, 285, 286, 305, 306	20
19DM 332 484	314, 354, 404, 454	19
19DM 332 494	315, 316, 355, 356, 405, 406, 455, 456, 505, 506	20

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NOTE: Take care when handling the wall and vane assembly to prevent the vanes and backing ring from slipping out of the back of the sandwich wall. The vanes must be individually inserted from the front side.

It is possible to replace the rivets but care must be taken to ensure that the wall is not cracked. Use a dye penetrant. Sets of 25 rivets are stocked as follows:

19DM 2 frame (19DM 680 003)

19DM 3 frame (19DM 680 004)

Be certain to eliminate the cause of surging before operating the compressor further.