

UNAPPROVED PARTS NOTIFICATION



U.S. Department
of Transportation
**Federal Aviation
Administration**

SUSPECTED UNAPPROVED PARTS PROGRAM OFFICE, AVR-20
45005 AVIATION DRIVE, SUITE 214
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AFFECTED PARTS

Pratt & Whitney JT3D and JT8D Engine, High-Pressure Compressor Disks.

PURPOSE

The purpose of this notification is to advise all owners, operators, maintenance entities, and part suppliers/brokers of the possibility of unairworthy Pratt & Whitney (P&W) JT3D and JT8D high-pressure (HP) compressor disks affected by Airworthiness Directives (AD) 98-12-07 and 96-23-10.

BACKGROUND

A records review conducted by the Federal Aviation Administration (FAA) at several certificated repair stations has identified 179 JT8D and JT3D HP compressor disks with one of the two conditions given below. Part numbers and serial numbers of the suspect disks are identified in Table 1 of this notice. AD 98-12-07 and AD 96-23-10 mandate corrosion inspections of certain JT8D and JT3D HP compressor disks, respectively. Two improper overhaul conditions have been identified that relate to the unsafe condition identified in those AD's.

(a) Failure to perform a corrosion inspection after stripping a HP compressor disk, prior to shotpeening and replating the disk. Pratt & Whitney's Standard Practices Manual and the JT8D and JT3D engine manuals (EM's) instruct repair personnel to perform all required inspections prior to performing repairs. Shotpeening of the disk is considered a repair, and thus all required inspections should be accomplished prior to performing shotpeening. Failure to perform the corrosion inspection in accordance with the instructions in the EM and in the prescribed sequence constitutes a non-compliance with the engine manual and may be in violation of FAR Part 43. In addition, shotpeening prior to performing the corrosion inspection will mask the condition the AD's are intended to address.

(b) Failure to perform a fluorescent magnetic particle inspection (FMPI) on HP compressor disks after stripping the disks, prior to shotpeening and replating. The engine manual provides specific instructions for stripping and inspecting HP compressor disks. Those instructions require a FMPI after stripping the disk and prior to shotpeening the disk. Failure to follow the instructions in the prescribed sequence constitutes a non-compliance with the engine manual instructions and could mask the condition the AD's are intended to address.

At the request of the FAA, several repair stations have notified operators of the discrepancies. In addition to the repair stations that have notified operators regarding the discrepancies, the following repair stations may also have improperly approved compressor disks with the noted discrepancies for return to service.

| | |
|--------------------------------|-------------------------------|
| A's Engine Specialties, Inc. | (E21R), Miami, FL |
| Aviation Engine Services, Inc. | (ENVR), Miami, FL |
| Suntek Repair Center | (TCQR), Miami, FL, Terminated |

RECOMMENDATION

All owners, operators, maintenance entities, and part suppliers/brokers should review their inventories for any of the disks listed in Table 1 of this notice. Disks that are not currently installed in engines may not be eligible for installation due to discrepancies (the subjects of the AD's) which were masked by improper inspection and repair procedures if shotpeening had been performed on the disks prior to corrosion inspection.

The FAA is not aware of any non-destructive methods to inspect the disks that will reveal the presence of any discrepancies, thus bringing them into compliance with the AD's. Any repairs developed that attempt to bring the disks into compliance will be classified as a major repair and will require FAA approval. In addition, the operator may have to request an approval of the repair as an alternate method of compliance (AMOC) with the AD's in accordance with the instructions provided in the AD's.

For disks currently installed in engines, if it can be shown that alternative procedures used by the subject repair stations provide an acceptable level of safety, those procedures may be eligible for AMOC approval. An AMOC, if approved, may allow the subject disks to continue in service until the next accessibility of the HP compressor. Operators must either remove the subject disks from service or evaluate the maintenance records of the subject disks to determine if an acceptable level of safety has been maintained. If operators determine that an acceptable level of safety has been maintained, they may submit their AMOC request-- supported by the documented inspections and repairs-- through their FAA principal maintenance inspector to the FAA, Manager, Engine Certification Office (ANE-140), 12 New England Executive Park, Burlington, MA 01803, for approval. In support of AMOC requests, operators must submit the results of a maintenance records' search for each disk. The submittal must document the engine serial number, installation date, type of coating removed, type of coating reapplied, inspections performed, and sequence of those inspections in conjunction with other disk repairs.

FOR FURTHER INFORMATION CONTACT

Further information regarding this notice may be obtained from the FAA offices indicated below. The FAA would appreciate any information concerning the condition, status, and discovery of the above-referenced parts from any source, the means to identify the source, and actions taken to remove the parts from the aircraft and/or stock. This information should be forwarded to the FAA Flight Standards Service, Aircraft Evaluation Group, ANE-200, 12 New England Executive Park, Burlington, MA 01803, telephone number (781) 238-7887. This notice originated from the FAA Miami Flight Standards District Office and was published through the FAA Suspected Unapproved Parts Program Office, AVR-20 telephone (703) 661-0581, and fax (703) 661-0113.

TABLE 1. Suspect HP Compressor Disks

| Engine M/M | Part Name | Part Number | Serial Number |
|-------------------|------------------|--------------------|----------------------|
| JT3D | C-10 | 701810 | 1B0235 |
| JT3D | C-10 | 701810 | 9Y7403 |
| JT3D | C-10 | 710810 | H23440 |
| JT3D | C-11 | 701811 | A03725 |
| JT3D | C-11 | 701811 | G82342 |
| JT3D | C-12 | 701812 | 3A4123 |
| JT3D | C-12 | 701812 | 9A8443 |
| JT3D | C-13 | 701813 | 2B0724 |
| JT3D | C-13 | 701813 | H10753 |
| JT3D | C-14 | 735114 | 9A9860 |
| JT3D | C-14 | 750414 | R57174 |
| JT3D | C-14 | 750414 | R75007 |
| JT3D | C-15 | 657815 | 1B4938 |
| JT3D | C-15 | 750415 | G99096 |
| JT3D | C-15 | 750415 | S35588 |
| JT3D | C-16 | 739216 | R76254 |
| JT8D | C-07 | 774407 | BENCAK5126 |
| JT8D | C-07 | 774407 | P54434 |

| Engine M/M | Part Name | Part Number | Serial Number |
|-------------------|------------------|--------------------|----------------------|
| JT8D | C-07 | 774407 | P60380 |
| JT8D | C-07 | 774407 | P60465 |
| JT8D | C-07 | 774407 | R37505 |
| JT8D | C-07 | 774407 | S36672 |
| JT8D | C-08 | 748608 | 0B7325 |
| JT8D | C-08 | 748608 | B208AA0022 |
| JT8D | C-08 | 787208 | BENCAH3024 |
| JT8D | C-08 | 787208 | BENCAK8494 |
| JT8D | C-08 | 787208 | BENCAL2220 |
| JT8D | C-08 | 787208 | BENCAL8979 |
| JT8D | C-08 | 787208 | BENCAM1068 |
| JT8D | C-08 | 748608 | H72407 |
| JT8D | C-08 | 789608 | H91040 |
| JT8D | C-08 | 787008 | J76485 |
| JT8D | C-08 | 748608 | J94717 |
| JT8D | C-08 | 787008 | M76839 |
| JT8D | C-08 | 748608 | N84342 |
| JT8D | C-08 | 787008 | N89305 |
| JT8D | C-08 | 787008 | N90152 |
| JT8D | C-08 | 748608 | P26128 |
| JT8D | C-08 | 748608 | P28446 |
| JT8D | C-08 | 748608 | P28484 |
| JT8D | C-08 | 787208 | P43917 |
| JT8D | C-08 | 787208 | P44835 |
| JT8D | C-08 | 748608 | R18451 |
| JT8D | C-08 | 787208 | R91418 |
| JT8D | C-08 | 787208 | R91493 |
| JT8D | C-08 | 787208 | S39254 |
| JT8D | C-08 | 787208 | S39281 |
| JT8D | C-08 | 787208 | S39282 |
| JT8D | C-08 | 787208 | S39934 |
| JT8D | C-08 | 787208 | S40042 |
| JT8D | C-08 | 748608 | S50760 |
| JT8D | C-09 | 701509 | 4B4498 |
| JT8D | C-09 | 798509 | BENCAH2682 |
| JT8D | C-09 | 701509 | J87515 |
| JT8D | C-09 | 701509 | M40426 |
| JT8D | C-09 | 701509 | N02755 |
| JT8D | C-09 | 701509 | N02772 |
| JT8D | C-09 | 701509 | N209AA0304 |

| Engine M/M | Part Name | Part Number | Serial Number |
|-------------------|------------------|--------------------|----------------------|
| JT8D | C-09 | 701509 | N209AA0555 |
| JT8D | C-09 | 701509 | N21483 |
| JT8D | C-09 | 701509 | N22235 |
| JT8D | C-09 | 701509 | N57589 |
| JT8D | C-09 | 701509 | N57607 |
| JT8D | C-09 | 701509 | NENCAH0682 |
| JT8D | C-09 | 701509 | NENCAH1454 |
| JT8D | C-09 | 701509 | NENCAHO714 |
| JT8D | C-09 | 701509 | P52941 |
| JT8D | C-09 | 701509 | P77919 |
| JT8D | C-09 | 701509 | P78247 |
| JT8D | C-09 | 701509 | P97059 |
| JT8D | C-09 | 701509 | P97790 |
| JT8D | C-09 | 701509 | P98988 |
| JT8D | C-09 | 701509 | R17611 |
| JT8D | C-09 | 772509 | R17780 |
| JT8D | C-09 | 772509 | R17789 |
| JT8D | C-09 | 701509 | R17943 |
| JT8D | C-09 | 701509 | R45133 |
| JT8D | C-09 | 701509 | R45995 |
| JT8D | C-09 | 701509 | S00681 |
| JT8D | C-09 | 701509 | S00689 |
| JT8D | C-09 | 701509 | S00946 |
| JT8D | C-09 | 701509 | S18874 |
| JT8D | C-09 | 701509 | S50336 |
| JT8D | C-09 | 701509 | S50371 |
| JT8D | C-09 | 701509 | S50424 |
| JT8D | C10 | 772510 | H34783 |
| JT8D | C-10 | 772510 | B210AA0035 |
| JT8D | C-10 | 772510 | B210AA0525 |
| JT8D | C-10 | 772510 | B210AA0566 |
| JT8D | C-10 | 772510 | B210AA0920 |
| JT8D | C-10 | 772510 | BENCAH2979 |
| JT8D | C-10 | 772510 | BENCAJ9312 |
| JT8D | C-10 | 772510 | BENCAL3272 |
| JT8D | C-10 | 772510 | BENCAL8143 |
| JT8D | C-10 | 772510 | BENCANJ9760 |
| JT8D | C-10 | 772510 | J68609 |
| JT8D | C-10 | 772510 | J68651 |
| JT8D | C-10 | 772510 | M11139 |

| Engine M/M | Part Name | Part Number | Serial Number |
|-------------------|------------------|--------------------|----------------------|
| JT8D | C-10 | 772510 | N02231 |
| JT8D | C-10 | 772510 | N22831 |
| JT8D | C-10 | 772510 | N56257 |
| JT8D | C-10 | 772510 | N98099 |
| JT8D | C-10 | 772510 | P76675 |
| JT8D | C-10 | 772510 | P77666 |
| JT8D | C-10 | 772510 | P97852 |
| JT8D | C-10 | 772510 | R73043 |
| JT8D | C-10 | 772510 | S01573 |
| JT8D | C-10 | 772510 | S19239 |
| JT8D | C-10 | 772510 | S19296 |
| JT8D | C-10 | 772510 | S50981 |
| JT8D | C-10 | 772510 | S51086 |
| JT8D | C-10 | 772510 | S70156 |
| JT8D | C-11 | 701411 | 7Z0870 |
| JT8D | C-11 | 772511 | B211AA0059 |
| JT8D | C-11 | 772511 | B211AA0308 |
| JT8D | C-11 | 772511 | B211AA0368 |
| JT8D | C-11 | 772511 | B211AA0452 |
| JT8D | C-11 | 772511 | B211AA0683 |
| JT8D | C-11 | 772511 | B211AA0843 |
| JT8D | C-11 | 772511 | B211AA1309 |
| JT8D | C-11 | 772511 | BENCAJ8133 |
| JT8D | C-11 | 772511 | BENCAL2925 |
| JT8D | C-11 | 772511 | BENCAL6969 |
| JT8D | C-11 | 772511 | BENCAL7433 |
| JT8D | C-11 | 772511 | BENCAL9763 |
| JT8D | C-11 | 772511 | BENCAM7597 |
| JT8D | C-11 | 738311 | G62372 |
| JT8D | C-11 | 772511 | H34801 |
| JT8D | C-11 | 772511 | J00412 |
| JT8D | C-11 | 772511 | J37199 |
| JT8D | C-11 | 772511 | N21402 |
| JT8D | C-11 | 772511 | N56356 |
| JT8D | C-11 | 772511 | P03647 |
| JT8D | C-11 | 772511 | P78362 |
| JT8D | C-11 | 772511 | P78564 |
| JT8D | C-11 | 772511 | R05443 |
| JT8D | C-11 | 772511 | R30122 |
| JT8D | C-11 | 772511 | R30992 |

| Engine M/M | Part Name | Part Number | Serial Number |
|-------------------|------------------|--------------------|----------------------|
| JT8D | C-11 | 772511 | R45908 |
| JT8D | C-11 | 772511 | S03907 |
| JT8D | C-11 | 772511 | T22720 |
| JT8D | C-12 | 701412 | 7A8704 |
| JT8D | C-12 | 798512 | B212AA0723 |
| JT8D | C-12 | 798512 | B212AA0793 |
| JT8D | C-12 | 798512 | B212AA1011 |
| JT8D | C-12 | 798512 | BENCAH2689 |
| JT8D | C-12 | 798512 | BENCAJ9293 |
| JT8D | C-12 | 798512 | BENCAJ9637 |
| JT8D | C-12 | 798512 | BENCAJ9651 |
| JT8D | C-12 | 798512 | BENCAK9460 |
| JT8D | C-12 | 798512 | BENCAL4144 |
| JT8D | C-12 | 798512 | BENCAL6028 |
| JT8D | C-12 | 798512 | BENCAL8277 |
| JT8D | C-12 | 717312 | G42290 |
| JT8D | C-12 | 717312 | G63000 |
| JT8D | C-12 | 772512 | J59496 |
| JT8D | C-12 | 772512 | L56288 |
| JT8D | C-12 | 772512 | M11245 |
| JT8D | C-12 | 772512 | M11245 |
| JT8D | C-12 | 772512 | M39771 |
| JT8D | C-12 | 772512 | N02488 |
| JT8D | C-12 | 772512 | N56845 |
| JT8D | C-12 | 772512 | N81162 |
| JT8D | C-12 | 772512 | N98675 |
| JT8D | C-12 | 772512 | P11891 |
| JT8D | C-12 | 772512 | P53398 |
| JT8D | C-12 | 772512 | P76923 |
| JT8D | C-12 | 772512 | P77089 |
| JT8D | C-12 | 772512 | P77701 |
| JT8D | C-12 | 772512 | P97036 |
| JT8D | C-12 | 772512 | R17313 |
| JT8D | C-12 | 772512 | R17741 |
| JT8D | C-12 | 772512 | R18396 |
| JT8D | C-12 | 772512 | R18597 |
| JT8D | C-12 | 772512 | R72806 |
| JT8D | C-12 | 772512 | S01990 |
| JT8D | C-12 | 772512 | S19693 |
| JT8D | C-12 | 772512 | S51324 |
| JT8D | C-12 | 798512 | S94436 |

