INCREMENTAL CHANGE Release Notification Date: 09/01/2022

SPM 70-21-04 CLEANING METHOD NO. 4 - DRY ABRASIVE BLAST CLEANING

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.

GE Designated: -CONFIDENTIAL-

HIGHLIGHTS

HIGHLIGHT REFERENCE	DESCRIPTION OF CHANGE
tk70-21-04-120-001	Technical Change: Added Warning to the Cleaning Method No. 4. Also, changed the grits arrangement.

TASK 70-21-04-120-001

1. General.

A. Abrasive blast cleaning is a mechanical technique for removing scale, corrosion, oxidation and carbon deposits from all kinds of materials that could not be removed by chemical cleaning. It should only be used to supplement chemical cleaning, not as a replacement.

B. Abrasive blast cleaning is often employed for surface preparation of steels that have a breaking strength greater than 210000 psi (1448 MPa) and which cannot be cleaned by chemical processes.

NOTE: As an alternate method, TASK 70-21-05-120-002, Cleaning Method No. 5 - Wet Abrasive Blast Cleaning may be used in lieu of TASK 70-21-04-120-001, Cleaning Method No. 4 - Dry Abrasive Blast Cleaning.

WARNING: DIRECT PRESSURE EQUIPMENT IS MORE AGGRESSIVE THAN SUCTION TYPE EQUIPMENT AT SAME PRESSURE (PSI) LEVEL.

CAUTION: SUBSTITUTION OF A DIFFERENT METHOD FOR THE ONE RECOMMENDED IS DANGEROUS AND CAN DAMAGE PARTS.

CAUTION: AVOID EXCESSIVE BLASTING. OPERATE THE EQUIPMENT SO THAT THE ABRASIVE JET IS NOT LOCALIZED ON THE SAME SPOT. DO NOT DWELL FOR MORE THAN 2 SECONDS. BLASTING IS DONE BY SWEEPING OBLIQUELY OVER THE ENTIRE SURFACE AND NOT NORMAL TO IT.

C. The Engine/Shop Manual specifies the particular process to be used in each case. The choice depends upon:

(1) The standard of cleanliness desired.
(2) The nature of the part.
(3) Part shape and degree of fragility.
(4) Surface finish to be obtained.

D. Approved dry abrasive blast methods are:

(1) Method No. 4A - Aluminum Oxide 220 (Fine) Mesh or 120 (Medium) Mesh.
(2) Method No. 4B - Shells, Rice Hulls, or Wheat Starch.
(3) Method No. 4C - Aluminum Oxide 500 (Very Fine) Mesh.
(4) Method No. 4D - Fruit Stones.
(5) Method No. 4E - Plastic Media.
(6) Method No. 4F - Aluminum Oxide 320 (Very Fine) Mesh.

CAUTION: IF A SPECIFIC SURFACE FINISH IS REQUIRED FOR A SUBSEQUENT PROCESS, USING AN ALTERNATIVE MEDIA IS NOT ALLOWED. DAMAGE TO THE PART COULD RESULT.

E. Alternative Media Criteria.

Varying the media size, shape, and density (hardness) affect how aggressively the grit blasting will remove material from the parts being cleaned.

NOTE: Nozzle pressure, offset distance, offset angle, and media fracture mechanics also affect the rate of material removal.

If the purpose of the grit blasting operation is for cleaning the surface and not for generating a surface finish as a preliminary operation to painting or coating, a finer grit or less aggressive media may be used in place of a coarse grit or more aggressive media without damaging the part. A listing of the media recommended in this section follows from the least aggressive to most aggressive. An acceptable alternative media will appear above the media specified. For example, if 4D (fruit stones) is required for cleaning, 4E is equivalent and 4B or 4C would be acceptable alternatives.

LEAST AGGRESSIVE
4B Shells, Rice Hulls, or Wheat Starch
4D Fruit Stones and 4E Plastic Media (Note: these two media are equivalent alternatives)
4C Aluminum Oxide 500 (Very Fine) Mesh
4F Aluminum Oxide 320 (Very Fine) Mesh
4A Aluminum Oxide 220 (Fine) Mesh
4A Aluminum Oxide 120 (Medium) Mesh
MOST AGGRESSIVE

2. Equipment.

Subtask 70-21-04-120-011

A. The following equipment is required for dry abrasive blasting.

WARNING: THE DRY ABRASIVE EQUIPMENT USED FOR TITANIUM AND TITANIUM ALLOYS SHALL BE CLEANED REGULARLY TO PREVENT FIRE HAZARDS DUE TO THE ACCUMULATION OF METALLIC PARTICLES.

(1) Dry abrasive blasting operations must be performed using installations specifically designed for that purpose (blasting booths) complete with safety devices such as air-extraction systems, soundproofing, exhaust mufflers, etc. Such installations must also be equipped with devices guaranteeing good quality processing including dust removers, catch-and select units for broken particles, internal lighting, air pressure adjustments, etc.
(2) To prevent contamination of parts being processed, a blasting booth should be reserved, whenever possible, for use with a given material (alloyed steel, aluminum alloy, or titanium parts, as applicable). To minimize fire hazards which could result from an accumulation of very fine particles of titanium (or its alloys), the blasting booths used for dry abrasive blasting of titanium parts shall be carefully cleaned at frequent intervals.
(3) A dry blasting booth lined with anti-abrasive material.
(4) Operators must use safety gear, gloves, breathing masks, and protective clothes.

TASK 70-21-04-120-A01

1. General - Method No. 4A - Aluminum Oxide 220 (Fine) Mesh or 120 (Medium) Mesh.

NOTE: When you do this procedure (4A) you must also obey the instructions in TASK 70-21-04-120-001, Cleaning Method No. 4 - Dry Abrasive Blast Cleaning.

CAUTION: DRY ABRASIVE BLASTING MAY REDUCE THE FATIGUE STRENGTH ON TITANIUM OR TITANIUM ALLOYS. DO NOT USE ON TITANIUM OR TITANIUM ALLOYS WITHOUT SPECIFIC INSTRUCTIONS IN THE ENGINE/SHOP MANUAL. BLASTING MUST BE ACCOMPLISHED IN ACCORDANCE WITH SPECIFICATIONS AND IN INSTALLATIONS RESERVED SOLELY FOR THE PURPOSE.

CAUTION: THIS CLEANING METHOD SHOULD NOT BE USED PRIOR TO FLUORESCENT PENETRANT INSPECTION (FPI) AS IT CAN SMEAR AND HIDE SURFACE CRACKS. IF USED PRIOR TO FPI, A THERMAL OR CHEMICAL ETCH IS REQUIRED.

A. In most cases, using either medium or fine mesh ensures efficient cleaning. However, the surface finish achieved with the fine mesh is smoother than that obtained with the medium mesh.

2. Equipment.

Subtask 70-21-04-120-012

A. See Subtask 70-21-04-120-011, Equipment.

3. Materials.

Subtask 70-21-04-120-013

Consumable Product	No.
Aluminum Oxide 220 Mesh	C04-113
Aluminum Oxide 120 Mesh	C04-114

4. Procedure.

Subtask 70-21-04-120-014

A. Cover all ports, pockets, cavities, or tube ends to prevent entry of abrasive which may be difficult to detect and remove after cleaning. Mask all surfaces, if required, as indicated in

the Engine/Shop Manual. The part must be free of oil and grease to prevent the quality of the abrasive from deteriorating.

WARNING: DO NOT BREATHE THE PARTICLES FROM BLASTING OR LET THE PARTICLES TOUCH YOU. THE PARTICLES CAN CAUSE DAMAGE, INJURY, OR IRRITATION TO YOU. USE PERSONAL PROTECTION EQUIPMENT. USE LOCAL MECHANICAL EXHAUST VENTILATION OR AN APPROVED RESPIRATOR.

CAUTION: AVOID EXCESSIVE ABRASIVE BLASTING. OPERATE THE EQUIPMENT SO THAT THE ABRASIVE JET IS NOT LOCALIZED ON THE SAME SPOT. DO NOT DWELL FOR MORE THAN 2 SECONDS. BLASTING IS DONE BY SWEEPING OBLIQUELY OVER THE ENTIRE SURFACE AND NOT NORMAL TO IT.

B. Grit blast parts using one of the products listed in Subtask 70-21-04-120-013, Materials. Maintain air pressure at 25-30 psi (172-207 kPa) for direct pressure equipment or 50-60 psi (345-414 kPa) for suction-type equipment. Hold the nozzle at a distance of 3-5 inches (76-127 mm) from the part. The recommended angle to the surface being blasted is 45-65 degrees.

C. Remove masking if applied.

D. Blow out all residues from the abrasive cleaning operation with clean, dry air.

5. Quality Assurance.

Subtask 70-21-04-120-015

A. Visually check that the part has been evenly cleaned and no blasting residues have accumulated.

TASK 70-21-04-120-B01

1. General - Method No. 4B - Shells, Rice Hulls, or Wheat Starch.

NOTE: When you do this procedure (4B) you must also obey the instructions in TASK 70-21-04-120-001, Cleaning Method No. 4 - Dry Abrasive Blast Cleaning.

WARNING: THE DRY ABRASIVE EQUIPMENT USED FOR TITANIUM OR TITANIUM ALLOYS SHALL BE CLEANED REGULARLY TO PREVENT FIRE HAZARDS THROUGH ACCUMULATION OF METALLIC PARTICLES.

CAUTION: DRY ABRASIVE BLASTING CAN REDUCE THE FATIGUE STRENGTH OF TITANIUM OR TITANIUM ALLOYS. DO NOT USE ON TITANIUM OR TITANIUM ALLOYS WITHOUT SPECIFIC INSTRUCTIONS IN THE REPAIR MANUAL.

CAUTION: ORGANIC BLAST MEDIA DUST IS HYGROSCOPIC. IF LEFT ON THE PART, IT WILL ATTRACT WATER MOISTURE AND CAN INITIATE CORROSION AT THE SITE.

NOTE: Organic media is food for rodents. Always store organic media in appropriate containers.

A. This technique uses a mild abrasive (crushed shells, rice hulls, or wheat starch) and is an effective method of cleaning light scale or carbon deposits, corrosion, and rust from parts where retarded cutting action is required. It can be used, without any detriment to the part treated, on components of high precision or of low mechanical strength. Its cleaning efficiency is limited to rather loosely adhering contaminations.

2. Equipment.

Subtask 70-21-04-120-016

A. See Subtask 70-21-04-120-011, Equipment.

3. Materials.

Subtask 70-21-04-120-017

Consumable Product	No.
Walnut Shells	C04-115
Rice Hulls	C04-116
Wheat Starch	C04-116

4. Procedure.

Subtask 70-21-04-120-018

A. Cover all ports, pockets, cavities, or tube ends to prevent entry of abrasive which can be difficult to detect and remove after cleaning. Mask all surfaces, if required, as indicated in the Engine/Shop Manual. The part must be free of oil and grease to prevent the quality of the abrasive from deteriorating.

WARNING: DO NOT BREATHE THE PARTICLES FROM BLASTING OR LET THE PARTICLES TOUCH YOU. THE PARTICLES CAN CAUSE DAMAGE, INJURY, OR IRRITATION TO YOU. USE PERSONAL PROTECTION EQUIPMENT. USE LOCAL MECHANICAL EXHAUST VENTILATION OR AN APPROVED RESPIRATOR.

CAUTION: AVOID EXCESSIVE ABRASIVE BLASTING. OPERATE THE EQUIPMENT SO THAT THE ABRASIVE JET IS NOT LOCALIZED ON THE SAME SPOT. DO NOT DWELL FOR MORE THAN 2 SECONDS. BLASTING IS DONE BY SWEEPING OBLIQUELY OVER THE ENTIRE SURFACE AND NOT NORMAL TO IT.

B. Grit blast parts using the products listed in Subtask 70-21-04-120-017, Materials. Use a 50 percent by volume of each or 100 percent of C04-115 . Maintain air pressure at 30-40 psi (207-276 kPa) for direct pressure equipment or 60-80 psi (414-552 kPa) for suction-type equipment. Hold the nozzle at a distance of 3-4 inches (76-102 mm) from the part. The recommended angle to the surface being blasted is 45-65 degrees.

C. Remove masking if applied.

D. Blow out all residues from the abrasive cleaning operation with clean, dry air.

5. Quality Assurance.

Subtask 70-21-04-120-019

A. Visually check that the part has been evenly cleaned and no blasting residues have accumulated.

TASK 70-21-04-120-C01

1. General - Method No. 4C - Aluminum Oxide 500 (Very Fine) Mesh.

NOTE: When you do this procedure (4C) you must also obey the instructions in TASK 70-21-04-120-001, Cleaning Method No. 4 - Dry Abrasive Blast Cleaning.

CAUTION: DO NOT USE ON TITANIUM OR TITANIUM ALLOYS WITHOUT SPECIFIC INSTRUCTIONS IN THE ENGINE/SHOP MANUAL. BLASTING MUST BE ACCOMPLISHED IN ACCORDANCE WITH SPECIFICATIONS AND IN INSTALLATIONS RESERVED SOLELY FOR THE PURPOSE.

A. The surface finish achieved by this process is smoother than that obtained with the medium

process. In most cases, the method will ensure efficient cleaning.

2. Equipment.

Subtask 70-21-04-120-020

A. See Subtask 70-21-04-120-011, Equipment.

3. Materials.

Subtask 70-21-04-120-021

Consumable Product	No.
Aluminum Oxide 500 Mesh	C04-112

4. Procedure.

Subtask 70-21-04-120-022

A. Cover all ports, pockets, cavities, or tube ends to prevent entry of abrasive which may be difficult to detect and remove after cleaning. Mask all surfaces, if required, as indicated in the Engine/Shop Manual. The part must be free of oil and grease to prevent the quality of the abrasive from deteriorating.

WARNING: DO NOT BREATHE THE PARTICLES FROM BLASTING OR LET THE PARTICLES TOUCH YOU. THE PARTICLES CAN CAUSE DAMAGE, INJURY, OR IRRITATION TO YOU. USE PERSONAL PROTECTION EQUIPMENT. USE LOCAL MECHANICAL EXHAUST VENTILATION OR AN APPROVED RESPIRATOR.

CAUTION: AVOID EXCESSIVE ABRASIVE BLASTING. OPERATE THE EQUIPMENT SO THAT THE ABRASIVE JET IS NOT LOCALIZED ON THE SAME SPOT. DO NOT DWELL FOR MORE THAN 2 SECONDS. BLASTING IS DONE BY SWEEPING OBLIQUELY OVER THE ENTIRE SURFACE AND NOT NORMAL TO IT.

B. Grit blast parts using product listed in Subtask 70-21-04-120-021, Materials. Maintain air pressure at 25-30 psi (172-207 kPa) for direct pressure equipment or 50-60 psi (345-414 kPa) for suction-type equipment. Hold the nozzle at a distance of 2-4 inches (51-102 mm) from the part. The recommended angle to the surface being blasted is 45-65 degrees.

C. Remove masking if applied.

D. Blow out all residues from the abrasive cleaning operation with clean, dry air.

5. Quality Assurance.

Subtask 70-21-04-120-023

A. Visually check that the part has been evenly cleaned and no blasting residue have accumulated.

TASK 70-21-04-120-D01

1. General - Method No. 4D - Fruit Stones.

NOTE: When you do this procedure (4D) you must also obey the instructions in TASK 70-21-04-120-001, Cleaning Method No. 4 - Dry Abrasive Blast Cleaning.

WARNING: THE DRY ABRASIVE EQUIPMENT USED FOR TITANIUM OR TITANIUM ALLOYS SHALL BE CLEANED REGULARLY TO PREVENT FIRE HAZARDS THROUGH ACCUMULATION OF METALLIC PARTICLES.

CAUTION: DRY ABRASIVE BLASTING CAN REDUCE THE FATIGUE STRENGTH OF TITANIUM OR TITANIUM ALLOYS. DO NOT USE ON TITANIUM OR TITANIUM ALLOYS WITHOUT SPECIFIC INSTRUCTIONS IN THE REPAIR MANUAL.

A. This technique uses a mild abrasive (crushed fruit stones) and is an effective method of cleaning light scale or carbon deposits, corrosion, and rust from parts where retarded cutting action is required. It can be used, without any detriment to the part treated, on components of high precision or of low mechanical strength. Its cleaning efficiency is limited to rather loosely adhering contaminations.

2. Equipment.

Subtask 70-21-04-120-024

A. See Subtask 70-21-04-120-011, Equipment.

3. Materials.

Subtask 70-21-04-120-025

Consumable Product	No.
Fruit Stones (Pits)	C04-117

4. Procedure.

Subtask 70-21-04-120-026

A. Cover all ports, pockets, cavities, or tube ends to prevent entry of abrasive which can be difficult to detect and remove after cleaning. Mask all surfaces, if required, as indicated in the Engine/Shop Manual. The part must be free of oil and grease to prevent the quality of the abrasive from deteriorating.

WARNING: DO NOT BREATHE THE PARTICLES FROM BLASTING OR LET THE PARTICLES TOUCH YOU. THE PARTICLES CAN CAUSE DAMAGE, INJURY, OR IRRITATION TO YOU. USE PERSONAL PROTECTION EQUIPMENT. USE LOCAL MECHANICAL EXHAUST VENTILATION OR AN APPROVED RESPIRATOR.

CAUTION: AVOID EXCESSIVE ABRASIVE BLASTING. OPERATE THE EQUIPMENT SO THAT THE ABRASIVE JET IS NOT LOCALIZED ON THE SAME SPOT. DO NOT DWELL FOR MORE THAN 2 SECONDS. BLASTING IS DONE BY SWEEPING OBLIQUELY OVER THE ENTIRE SURFACE AND NOT NORMAL TO IT.

B. Grit blast parts using product listed in Subtask 70-21-04-120-025, Materials. Maintain air pressure at 30-40 psi (207-276 kPa) for direct pressure equipment or 60-80 psi (414-552 kPa) for suction-type equipment. Hold the nozzle at a distance of 3-4 inches (76-102 mm) from the part. The recommended angle to the surface being blasted is 45-65 degrees.

C. Remove masking if applied.

D. Blow out all residues from the abrasive cleaning operation with clean, dry air.

5. Quality Assurance.

Subtask 70-21-04-120-027

A. Visually check that the part has been evenly cleaned and no blasting residue have accumulated.

TASK 70-21-04-120-E01

1. General - Method No. 4E - Plastic Media.

NOTE: When you do this procedure (4E) you must also obey the instructions in TASK 70-21-04-120-001, Cleaning Method No. 4 - Dry Abrasive Blast Cleaning.

A. This technique uses a mild abrasive plastic media which is effective for parts cleaning as an alternate to chemical methods. Direct pressure or suction type machines can be used. Direct pressure machines are recommended to allow media flow rate control.

This process is capable of dirt and light scale removal. It can be also used to remove RTV materials, dry film lubricants (spray on or resin bonded), epoxy/polyurethane paint systems, and many other metal finish coatings.

2. Equipment.

Subtask 70-21-04-120-029

CAUTION: DO NOT USE PLASTIC MEDIA IN MACHINES USED FOR OTHER ABRASIVE MEDIA OPERATIONS. MACHINES USED FOR ALUMINA OR SILICA BLAST OPERATIONS ARE CONTAMINATED WITH DENSE PARTICLES THAT WILL COMPROMISE THE PLASTIC MEDIA AND ITS MINIMAL EFFECT TO THE SURFACE BEING BLASTED.

A. Refer to Subtask 70-21-04-120-011, Equipment. If plastic media is to be reused then the blasting equipment must have a suitable media filter and reclaim/reclassifier system to remove residues from the blast stream. Systems that reuse media with a functioning reclaimer/reclassifier must be checked frequently. Refer to Subtask 70-21-04-120-032, paragraph 27.B. to monitor the media condition.

B. Set up machine so that media flow rate is heavy. Back off media flow just slightly from a full choke condition.

3. Materials.

Subtask 70-21-04-120-030

Consumable Product	No.
Plastic Media	C04-153

4. Procedure.

Subtask 70-21-04-120-031

CAUTION: TAKE PRECAUTIONS TO ENSURE THAT ALL RESIDUES ARE MOVED FROM THE COMPONENT BEING BLASTED. NO MEDIA OR RESIDUES CAN BE ENTRAPPED.

CAUTION: LIMIT DWELL TIMES AT LOCATIONS WHERE EXCESSIVE METAL REMOVAL CAN OCCUR.

CAUTION: PROCESS PARTS WITH METAL THICKNESSES UNDER 0.035 INCH (0.89 MM) WITH REDUCED PRESSURES TO PREVENT DISTORTION OR OTHER DAMAGE TO SIGNIFICANT SURFACES.

CAUTION: GIVE ALUMINUM COMPONENTS EXTRA CARE. SHOTPEEN, IF REQUIRED, AFTER THE PLASTIC BLAST TO RESTORE THE SURFACE CONDITION.

CAUTION: CHECK ANODIZED ALUMINUM COMPONENTS TO INSURE THAT THE COATING HAS NOT BEEN DEGRADED OR REMOVED. PRE- AND POST-PROCESSING CONDUCTIVITY CHECKS SHOULD BE COMPARABLE.

A. Cover all ports, pockets, cavities, or tube ends to prevent entry of abrasive which can be difficult to detect and remove after cleaning. Mask all surfaces, if required, as indicated in the Engine/Shop Manual. The part must be free of oil and grease to prevent the quality of the abrasive from deteriorating.

B. Set machine parameters. Set the air pressure for direct pressure machines to 30-40 psi (207-276 kPa) and suction machines to 40-80 psi (276-552 kPa). Use minimum pressure setting required. Set nozzle at 3-4 inches (76-102 mm) at an angle to the surface of 45-65 degrees. The nozzle diameter must be 0.3-0.5 inch (8-13 mm).

WARNING: DO NOT BREATHE THE PARTICLES FROM BLASTING OR LET THE PARTICLES TOUCH YOU. THE PARTICLES CAN CAUSE DAMAGE, INJURY, OR IRRITATION TO YOU. USE PERSONAL PROTECTION EQUIPMENT. USE LOCAL MECHANICAL EXHAUST VENTILATION OR AN APPROVED RESPIRATOR.

CAUTION: AVOID EXCESSIVE BLASTING. OPERATE THE EQUIPMENT SO THAT THE ABRASIVE JET IS NOT LOCALIZED ON THE SAME SPOT. DO NOT DWELL FOR MORE THAN 2 SECONDS. BLASTING IS DONE BY SWEEPING OBLIQUELY OVER THE ENTIRE SURFACE AND NOT NORMAL TO IT.

C. Blast parts using the parameters above.

D. Remove any applied masking. Remove any residue or media using clean, dry air.

5. Quality Assurance.

Subtask 70-21-04-120-032

A. Visually check that the part(s) has been evenly cleaned and that all residues and residual media have been removed.

B. If media is reused, visually check media for wear at an interval that will prevent blasting with deteriorated media. Inspect using 10x to 20x magnification a media sample for rounded edges (loss of cutting edges) and under-size particles (broken-down media). Verify that residues removed from components are being removed by the reclaim/reclassifier system. The media should be replaced when approximately 50 percent of the sample is rounded and/or undersize. Use a sample of new media for visual comparison if necessary.

TASK 70-21-04-120-801

1. General - Method No. 4F - Aluminum Oxide 320 (Very Fine) Mesh.

NOTE: When you do this procedure (4F) you must also obey the instructions in TASK 70-21-04-120-001, Cleaning Method No. 4 - Dry Abrasive Blast Cleaning.

CAUTION: DRY ABRASIVE BLASTING MAY REDUCE THE FATIGUE STRENGTH ON TITANIUM OR TITANIUM ALLOYS. DO NOT USE ON TITANIUM OR TITANIUM ALLOYS WITHOUT SPECIFIC INSTRUCTIONS IN THE ENGINE/SHOP MANUAL. BLASTING MUST BE ACCOMPLISHED IN ACCORDANCE WITH SPECIFICATIONS AND IN INSTALLATIONS RESERVED SOLELY FOR THE PURPOSE.

CAUTION: THIS CLEANING METHOD SHOULD NOT BE USED PRIOR TO FLUORESCENT PENETRANT INSPECTION (FPI) AS IT CAN SMEAR AND HIDE SURFACE CRACKS. IF USED PRIOR TO FPI, A THERMAL OR CHEMICAL ETCH IS REQUIRED.

A. In most cases, using either medium or fine mesh ensures efficient cleaning. However, the surface finish achieved with the fine mesh is smoother than that obtained with the medium mesh.

2. Equipment.

Subtask 70-21-04-120-033

A. Refer to Subtask 70-21-04-120-011, Equipment.

3. Materials.

Subtask 70-21-04-120-034

Consumable Product	No.
Aluminum Oxide 320 Mesh	C04-220

4. Procedure.

Subtask 70-21-04-120-035

A. Cover all ports, pockets, cavities, or tube ends to prevent entry of abrasive which may be difficult to detect and remove after cleaning. Mask all surfaces, if required, as indicated in the Engine/Shop Manual. The part must be free of oil and grease to prevent the quality of the abrasive from deteriorating.

WARNING: DO NOT BREATHE THE PARTICLES FROM BLASTING OR LET THE PARTICLES TOUCH YOU. THE PARTICLES CAN CAUSE DAMAGE, INJURY, OR IRRITATION TO YOU. USE PERSONAL PROTECTION EQUIPMENT. USE LOCAL MECHANICAL EXHAUST VENTILATION OR AN APPROVED RESPIRATOR.

CAUTION: AVOID EXCESSIVE ABRASIVE BLASTING. OPERATE THE EQUIPMENT SO THAT THE ABRASIVE JET IS NOT LOCALIZED ON THE SAME SPOT. DO NOT DWELL FOR MORE THAN 2 SECONDS. BLASTING IS DONE BY SWEEPING OBLIQUELY OVER THE ENTIRE SURFACE AND NOT NORMAL TO IT.

B. Grit blast parts using one of the products listed in Subtask 70-21-04-120-034, Materials. Maintain air pressure at 25-30 psi (172-207 kPa) for direct pressure equipment or 50-60 psi (345-414 kPa) for suction-type equipment. Hold the nozzle at a distance of 3-5 inches (76-127 mm) from the part. The recommended angle to the surface being blasted is 45-65 degrees.

C. Remove masking if applied.

D. Blow out all residues from the abrasive cleaning operation with clean, dry air.

5. Quality Assurance.

Subtask 70-21-04-120-036

A. Visually check that the part has been evenly cleaned and no blasting residues have accumulated.