MAINTENANCE TECHNICAL SUPPORT CENTER / MAINTENANCE POLICIES & PROGRAMS **ENGINEERING / UNITED STATES POSTAL SERVICE**

maintenance management order UNITED STATES POSTAL SERVICE



SUBJECT: PM Guidelines for the Accusort Barcode Tunnel

Scanner on the Singulate Scan Induction Unit

(SSIU)

Bulk Mail Centers

TO:

FILE CODE: Υ

DATE:

NO:

Dfau:MM02052AD

July 07, 2004

MMO-040-04

| | | Online Change Record | | | | | | | |
|---|------------|---|--|--|--|--|--|--|--|
| Change # | Date | Description of Change | | | | | | | |
| 3 4/28/2022 Attachments 2 - 4, corrected skill level 4, no longer in use, to level 7. | | | | | | | | | |
| 2 | 10/20/2015 | Updated time roll-up. | | | | | | | |
| 1 | 3/12/2014 | Safety Warning added for working around moving conveyors. | | | | | | | |

This Maintenance Management Order (MMO) provides Preventive Maintenance (PM) guidelines for the Accusort Barcode Tunnel Scanner on the Singulator Scan Induction Unit (SSIU).

The minimum maintenance skill level to perform each task on the various checklists is included in the Minimum Skill Level column. This does not preclude higher level employees from performing any of this work.

The attached master checklist provides tasks to be performed at periodic intervals, the time required per task, and the minimum skill level for each task.

The workhours represented in this MMO reflect the maximum workhours required to maintain the equipment. Given local conditions, management may modify task frequencies.

WARNING

Various products requiring Safety Data Sheets (SDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current SDS for each product used is on file and available to all employees. When reordering such a product, it is suggested that current SDS be requested. Refer to SDS for appropriate personal protective equipment.

WARNING

The use of compressed or blown air is prohibited. When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used only on optical equipment when other cleaning methods cannot be used.

WARNING

Moving conveyors may expose employees to personal safety hazards. Do not climb, sit or walk on conveyors without first performing local Energy Control Procedure (ECP).

For questions or comments concerning this bulletin contact the MTSC HelpDesk, either online at MTSC>HELPDESK>Create/Update Tickets or call (800) 366-4123.

Robert Tschantz Manager (A) Maintenance Technical Support Center Maintenance Policies and Programs

- 1. Summary of Workload Estimate
- 2. Accusort Barcode Tunnel Scanner Master Checklist (Weekly)
- 3. Accusort Barcode Tunnel Scanner Master Checklist (Monthly)
- 4. Accusort Barcode Tunnel Scanner Master Checklist (Semi-annual)

SUMMARY

WORKLOAD ESTIMATE FOR

ACCUSORT BARCODE TUNNEL SCANNER

| Routine Servicing (hrs/yr) | Repair* (hrs/yr) | Total Servicing & Repair Time (hrs/yr) | Nonproductive Time ** (hrs/yr) | Total Servicing Per Machine (hrs/yr) |
|----------------------------------|---------------------|--|--------------------------------------|--|
| 146.75 | 44.03 | 190.78 | 19.08 | 209.86 |

^{*} Repair estimates based on 30% of servicing.

TIME TOTALS

| Weekly Time Total: | 114.83 | Hrs. **' | t |
|--------------------|--------|----------|---|
| | | | |

Monthly Time Total: 31.1 Hrs. ***

Semi-Annual Time Total .82 Hrs. ***

NOTE

The time shown does not allow for multiple assemblies on any equipment. Should multiple assemblies exist, the time must be modified at the local level to account for those occurrences. Other unique site conditions that require additional time are to be addressed at the local level.

^{**} Based on 10% of total servicing and repair.

^{***} These times are provided for data entry for the VMARS System.

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ACCUSORT BARCODE TUNNEL SCANNER MASTER CHECKLIST

03-SSIU-CA-001-M

WEEKLY

WEEKLY TIME TOTALS: 132.5 MINUTES

| U.S. Postal Service | | | | | | IDENTIF | ICAT | ION | | | | |
|---------------------------------|---|---------------|-------|------|----------------|------------|----------------|-----|--------|------|-----|------|
| Maintenance Checklist | | Work Code: | | | quipm crony | | Class Code: | | Number | | er | Туре |
| | 0 | 3 | S | S | I | U | С | Α | 0 | 0 | 1 | M |
| Equipment Nomenclature | | | nt Mo | odel | | Bulletin I | Filena | me | Fre | quen | су | |
| ACCUSORT BARCODE TUNNEL SCANNER | | | SSI | J | | MM02 | 2052 | 2AD | | WE | EEK | LY |

| · | | T 1000 0 0 0 | - · | |
|-------------------|-------------|---|--------------|---------------|
| Part or Component | Item No. | Task Statement and Instruction (Comply with all current safety precautions) | Est. Time | Min. Skill |
| Component | 140. | (Comprise with all current surery procedurers) | Req'd | Level |
| | | | | |
| SAFETY | 1. | COMPLY WITH ALL SAFETY PRECAUTIONS | 3 | All |
| STATEMENT | ٠. | Disconnect power and apply lockouts when required | min | / \" |
| OTATEMENT | | by this instruction. Refer to current local lockout | | |
| | | procedures to properly shutdown and lockout this | | |
| | | machine. Open equipment and inspect dust | | |
| | | • • • | | |
| | | conditions. Check for suspicious dust or unusual | | |
| | | debris. If any unusual substance is found notify | | |
| | | supervisor prior to proceeding with any further | | |
| | | action on the equipment. | | |
| | | THE USE OF COMPRESSED OR BLOWN AIR IS | | |
| | | PROHIBITED. | | |
| | | When cleaning is required, an alternative cleaning | | |
| | | method such as a HEPA filtered vacuum cleaner or a | | |
| | | damp rag must be used in place of compressed or | | |
| | | blown air. A lint-free cloth or brush may be used on | | |
| | | optical equipment only when other cleaning methods | | |
| | | cannot be used. Report safety deficiencies to your | | |
| | | supervisor immediately upon detection. | | |
| SYSTEM | 2. | CHECK FOR MAIL Look for loose mail while | 2.5 | 7 |
| STSTEIN | ۷. | | 2.5 min | ' |
| | | performing all activities. | 1111111 | |
| | 3. | POWER DOWN AND LOCKOUT POWER Power | 3 | All |
| | | down the equipment and lockout its electrical power as | min | |
| | | prescribed by the procedures contained in, or locally | | |
| | | developed in accordance with, the current Maintenance | | |
| | | Management Order (MMO) providing lockout/restore | | |
| | | procedures. | | |
| | | | | |
| | | WARNING | | |
| | | Discard solvent soaked materials | | |
| | | according to local procedures to prevent | | |
| | | spontaneous combustion. | | |
| | | · | | |
| CAMERA | 4. | CHECK AND CLEAN CAMERAS. – Clean camera lens. | 15 | 7 |
| ASSEMBLIES | | | min | |
| | | Recommended cleaning materials are Accu-Sort Optical | | |
| | | Surface Cleaner (See MSB-036-02 for mixing | | |
| | | instructions), Scott Pure Critical Task Wipes (#06192), | | |

| U.S. Postal Service | | | | | | IDE | NTIF | ICAT | ION | | | | |
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| Maintenance Checklist | Wo Co | | | | uipm crony | | | _ | ass ode: | Ν | lumb | er | Туре |
| | 0 | 3 | S | S | I | U | | С | Α | 0 | 0 | 1 | M |
| Equipment Nomenclature | Equ | ipme | nt Mo | del | | Bull | etin F | ilena | me | Fre | quen | су | |
| ACCUSORT BARCODE TUNNEL | SSIU | | | | | MM02052AD | | | | | WEEKLY | | |
| SCANNER | | | | | | | | | | | | | |

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|----------------------|-------------|--|--------------|---------------|
| Part or Component | Item No. | Task Statement and Instruction (Comply with all current safety precautions) | Est. Time | Min. Skill |
| | | (00.14) | Req'd | Level |
| | | | | |
| | | and Opto-Wipes Precision Cleaning Wipes (#LCW304). | | |
| CAMERA | 5. | CHECK AND CLEAN CAMERA MIRRORS. | 50 | 7 |
| MIRRORS | | Check mirrors for any damage. | min | |
| | | 2. Ensure they are securely mounted. | | |
| | | 3. Clear the mirrors and LED Illumination Array surfaces of excessive dust and clean. Recommended cleaning materials are Accu-Sort Optical Surface Cleaner (See MSB-036-02 for mixing instructions), Scott Pure Critical Task Wipes (#06192), and Opto-Wipes Precision Cleaning Wipes (#LCW304). | | |
| DM-3000 | 6. | CHECK AND CLEAN DM-3000 DIMENSIONING UNIT. | 3 | 7 |
| | | Clean exit window. Recommended cleaning materials are Accu-Sort Optical Surface Cleaner (See MSB-036-02 for mixing instructions), Scott Pure Critical Task Wipes (#06192), and Opto-Wipes Precision Cleaning Wipes (#LCW304). | min | |
| | | WARNING | | |
| | | Ensure the sodium lights are allowed to cool off before performing the cleaning of these assemblies. | | |
| ILLUMINATOR LIGHT | 7. | CHECK AND CLEAN ILLUMINATOR LIGHT ASSEMBLIES. | 50 min | 7 |
| ASSEMBLIES | | Ensure the sodium light assembly hardware is secure and there is no visible damage. | | |
| | | Check and clean filter as needed. | | |
| | | 3. Check and clean all associated LEDs. | | |
| | | 4. After unit has cooled, using vacuum and/or damp cloth, clean filter and exterior of light assembly. | | |
| | | 5. Clean glass cover on the light assembly. Recommended cleaning materials are Accu-Sort Optical Surface Cleaner (See MSB-036-02 for mixing | | |

| U.S. Postal Service | | | | | | IDENTIF | ICAT | ION | | | | |
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| Maintenance Checklist | | Work Code: | | | quipm crony | | Class Code: | | Number | | er | Туре |
| | 0 | 3 | S | S | I | U | С | Α | 0 | 0 | 1 | M |
| Equipment Nomenclature | | | nt Mo | odel | | Bulletin I | Filena | me | Fre | quen | су | |
| ACCUSORT BARCODE TUNNEL SCANNER | | | SSI | J | | MM02 | 2052 | 2AD | | WE | EEK | LY |

| Part or | Item | Task Statement and Instruction | Est. | Min. |
|-----------|------|---|----------|-------|
| Component | No. | (Comply with all current safety precautions) | Time | Skill |
| Component | 140. | (Comply with an outlone salety precautions) | Reg'd | Level |
| | • | | ' | |
| | | instructions), Scott Pure Critical Task Wipes | | |
| | | (#06192), and Opto-Wipes Precision Cleaning Wipes (#LCW304). | | |
| | | WARNING | | |
| | | Be cautious when working around or on equipment when power has been applied. | | |
| SYSTEM | 8. | RESTORE EQUIPMENT TO SERVICE. – Restore equipment to service as prescribed by the procedures contained in, or locally developed in accordance with, the current Maintenance Management Order (MMO) providing lockout/restore procedures. | 3 min | All |
| CLEAN-UP | 9. | CLEAN-UP. – Ensure all tools, lubricants, rags, etc., are removed from the work area. | 3 min | All |
| | | Report all deficiencies to your supervisor in order to initiate any necessary work orders to make necessary repairs, or to remove excessive debris. | | |

ACCUSORT BARCODE TUNNEL SCANNER MASTER CHECKLIST

03-SSIU-CA-002-M

MONTHLY

MONTHLY TIME TOTALS: 155.5 MINUTES

| U.S. Postal Service | | | | | | IDE | NTIF | ICAT | ION | | | | |
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| Maintenance Checklist | Code: Acronym | | | | /m | n Code: | | | N | lumb | er | Type | |
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| Equipment Nomenclature | Equ | iipme | nt Mo | del | | Bull | etin F | ilena | me | Fre | quen | су | |
| ACCUSORT BARCODE TUNNEL | | | SSI | J | | MI | M02 | 052 | AD | MONTH | | | HLY |
| SCANNER | | | | | | | | | | | | | |

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|----------------------|-------------|---|--------------|---------------|
| Part or Component | Item No. | Task Statement and Instruction (Comply with all current safety precautions) | Est. Time | Min. Skill |
| | | () | Req'd | Level |
| | | | | |
| SAFETY STATEMENT | 1. | COMPLY WITH ALL SAFETY PRECAUTIONS Disconnect power and apply lockouts when required by this instruction. Refer to current local lockout procedures to properly shutdown and lockout this machine. Open equipment and inspect dust conditions. Check for suspicious dust or unusual debris. If any unusual substance is found notify supervisor prior to proceeding with any further action on the equipment. | 3 min | All |
| | | THE USE OF COMPRESSED OR BLOWN AIR IS PROHIBITED. When cleaning is required, an alternative cleaning method such as a HEPA filtered vacuum cleaner or a damp rag must be used in place of compressed or blown air. A lint-free cloth or brush may be used on optical equipment only when other cleaning methods cannot be used. Report safety deficiencies to your supervisor immediately upon detection. | | |
| SYSTEM | 2. | CHECK FOR MAIL. – Look for loose mail while performing all activities. | 2.5 min | 7 |
| | 3. | BTS CONVEYOR. – Run BTS conveyor and check for bearing noise and other audible and visual problem signs. | 1 min | 7 |
| | 4. | POWER DOWN AND LOCKOUT POWER. – Power down the equipment and lockout its electrical power as prescribed by the procedures contained in, or locally developed in accordance with, the current Maintenance Management Order (MMO) providing lockout/restore procedures. | 3 min | All |
| DM-3000 | 5. | CHECK & CLEAN DM-3000 DIMENSIONING UNIT. – 1. Ensure the DM-3000 hardware is secure and there is no visible damage to the exit window. 2. Open unit. | 10 min | 7 |
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| Equipment Nomenclature | Equ | ipme | nt Mo | del | | Bull | etin F | ilena | me | Fre | quen | су | |
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| Part or Component | Item No. | Task Statement and Instruction (Comply with all current safety precautions) | Est. Time | Min. Skill |
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| | | | | |
| | | Vacuum clean interior of the DM-3000. | | |
| | | 4. Check for any loose connections. | | |
| | | 5. Vacuum and/or use damp cloth to clean exterior DM-3000 and associated filter. | | |
| | | 6. Close unit. | | |
| DECODER & MUX | 6. | CHECK & CLEAN DECODERS & MULTIPLEXER | 60 min | 7 |
| WOX | | 1. Open unit. | 111111 | |
| | | Vacuum clean interior of the decoders and multiplexer housing. | | |
| | | 3. Check for any loose connections. | | |
| | | 4. Vacuum the exterior of the unit and associated filter. | | |
| | | Use mild detergent and water to clean the exterior of the unit and associated filter. | | |
| | | 6. Close unit. | | |
| CAMERA | 7. | CHECK & CLEAN CAMERA HOUSINGS. – | 50 | 7 |
| ASSEMBLIES | | Ensure camera mounting hardware is secure. | min | |
| | | 2. Check for any loose connections. | | |
| | | 3. Vacuum the exterior of the unit and associated filter. | | |
| | | Use mild detergent and water to clean the exterior of the unit and associated filter. | | |
| TACHO- METERS | 8. | CHECK & CLEAN CAMERA & DM-3000 DIMENSIONING UNIT TACHOMETERS. – | 20 min | 7 |
| | | Ensure the tachometers are securely mounted. | | |
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| U.S. Postal Service | | | IDENTIFICATION | | | | | | | | | | | |
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| Maintenance Checklist | | ork | | Ed | quipm | ent | | _ | ass | | | | | |
| | | Code: | | Α | crony | /m | | Code: | | Number | | er | Type | |
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| Equipment Nomenclature | | | Equipment Model | | | Bulletin Filename | | | | Frequency | | | | |
| ACCUSORT BARCODE TUNNEL | | | SSIU | | | | | MM02052AD | | | | MONTHLY | | |
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| Part or | Itom | Task Statement and Instruction | Est. | Min. |
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| Component | Item No. | (Comply with all current safety precautions) | Time | skill |
| Component | INO. | (Comply with all current safety precautions) | Reg'd | Level |
| | | | ricqu | LCVCI |
| | 1 | | | |
| | | 2. Check for proper contact between tachometer wheel | | |
| | | and conveyor. | | |
| | | and conveyon | | |
| | | Obselvácy any visible deserve | | |
| | | 3. Check for any visible damage. | | |
| | | | | |
| | | 4. Clean the tachometer housings and wheels by | | |
| | | wiping with a damp cloth. | | |
| | | wiping with a damp doth. | | |
| | | | | |
| | | WARNING | | |
| | | | | |
| | | | | |
| | | Be cautious when working around or on | | |
| | | equipment when power has been applied. | | |
| | | | | |
| SYSTEM | 9. | RESTORE EQUIPMENT TO SERVICE Restore | 3 | All |
| OTOTEN | ٥. | | - | / \ |
| | | equipment to service as prescribed by the procedures | min | |
| | | contained in, or locally developed in accordance with, the | | |
| | | current Maintenance Management Order (MMO) | | |
| | | providing lockout/restore procedures. | | |
| | | providing lockodyrestore procedures. | | |
| 01 5 4 4 1 1 1 5 | 4.0 | OLEANUE E | | |
| CLEAN-UP | 10. | CLEAN-UP Ensure all tools, lubricants, rags, etc., are | 3 | All |
| | | removed from the work area. | min | |
| | | | | |
| | | Report all deficiencies to your supervisor in order to | | |
| | | , · | | |
| | | initiate any necessary work orders to make necessary | | |
| | | repairs, or to remove excessive debris. | | |
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ACCUSORT BARCODE TUNNEL SCANNER MASTER CHECKLIST

03-SSIU-CA-002-M

SEMI-ANNUAL

SEMI-ANNUAL TIME TOTALS: 24.5 MINUTES

| U.S. Postal Service | | | IDENTIFICATION | | | | | | | | | | | | |
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| Maintenance Checklist | | ork | | Ec | uipm | ent | | CI | ass | | | | | | |
| | | de: | | Α | crony | ym | | Code: | | Number | | er | Type | | |
| | 0 | 3 | S | S | - | U | | C | Α | 0 | 0 | 3 | M | | |
| Equipment Nomenclature | | | Equipment Model | | | | | Bulletin Filename | | | | Frequency | | | |
| ACCUSORT BARCODE TUNNEL | | | SSIU | | | | | MM02052AD | | | | SEMI-ANNUAL | | | |
| SCANNER | | | | | | | | | | | | | | | |

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| Part or | Item | Task Statement and Instruction | Est. Time | Min. Skill |
| Component | No. | (Comply with all current safety precautions) | Reg'd | Level |
| | | 1 | ๆ | |
| SAFETY | 1 | COMPLY WITH ALL SAFETY PRECAUTIONS | 3 | ΛII |
| | 1. | | - | All |
| STATEMENT | | Disconnect power and apply lockouts when required | min | |
| | | by this instruction. Refer to current local lockout | | |
| | | procedures to properly shutdown and lockout this | | |
| | | machine. Open equipment and inspect dust | | |
| | | conditions. Check for suspicious dust or unusual | | |
| | | debris. If any unusual substance is found notify | | |
| | | supervisor prior to proceeding with any further | | |
| | | action on the equipment. | | |
| | | action on the equipment. | | |
| | | THE USE OF COMPRESSED OR BLOWN AIR IS | | |
| | | PROHIBITED. | | |
| | | When cleaning is required, an alternative cleaning | | |
| | | method such as a HEPA filtered vacuum cleaner or a | | |
| | | | | |
| | | damp rag must be used in place of compressed or | | |
| | | blown air. A lint-free cloth or brush may be used on | | |
| | | optical equipment only when other cleaning methods | | |
| | | cannot be used. Report safety deficiencies to your | | |
| | | supervisor immediately upon detection. | | |
| | | | | |
| SYSTEM | 2. | CHECK FOR MAIL Look for loose mail while | 2.5 | 7 |
| | | performing all activities. | min | |
| | | | | |
| | | | | |
| | 3. | POWER DOWN AND LOCKOUT POWER Power | 3 | All |
| | | down the equipment and lockout its electrical power as | min | |
| | | prescribed by the procedures contained in, or locally | | |
| | | developed in accordance with, the current Maintenance | | |
| | | Management Order (MMO) providing lockout/restore | | |
| | | procedures. | | |
| | | F | | |
| | 4. | CHECK WIRING CABLES Check for loose or | 10 | 7 |
| | | damaged wiring cables between control cabinets and | min | |
| | | associated components. | | |
| | | | | |
| | | | | |
| | | | | |
| | | WARNING | | |
| | | TO ALL THE STATE OF THE STATE O | | |
| | | Re cautious when working around or an | | |
| | | Be cautious when working around or on | | |
| | | equipment when power has been applied. | | |

| U.S. Postal Service | | | IDENTIFICATION | | | | | | | | | | |
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| Maintenance Checklist | Work Code: | | Equipme Acronyr | | | | | Class Code: | | Number | | Туре | |
| | 0 | 3 | S | S | I | U | | С | Α | 0 | 0 | 3 | M |
| Equipment Nomenclature | Equipment Model | | | | | Bull | etin F | ilena | ame | Frequency | | | |
| ACCUSORT BARCODE TUNNEL | | SSIU | | | | MM02052AD | | | | SEMI-ANNUAL | | | |
| SCANNER | | | | | | | | | | | | | |

| Part or Component | Item No. | Task Statement and Instruction (Comply with all current safety precautions) | Est. Time Req'd | Min. Skill Level |
|----------------------|-------------|--|-----------------------|------------------------|
| SYSTEM | 5. | RESTORE EQUIPMENT TO SERVICE. – Restore | 3 | All |
| STSTEIN | 5. | equipment to service as prescribed by the procedures contained in, or locally developed in accordance with, the current Maintenance Management Order (MMO) providing lockout/restore procedures. | _ | All |
| | 6. | CLEAN-UP. – Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor in order to initiate any necessary work orders to make necessary repairs, or to remove excessive debris. | 3 min | All |