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

# maintenance management order UNITED STATES POSTAL SERVICETM



PM Guidelines for Postal Pak Unloader "B" SUBJECT:

(PPUB)

NO: MMO-088-99

Υ

DATE:

FILE CODE:

TO: **Bulk Mail Centers** 

dewa:M99057AB

December 5, 1999

		Online Change Record								
Change # Date Description of Change										
1	Attachment 2, corrected skill level 4, no longer in use, to level 7.									

This Maintenance Management Order (MMO) provides Preventive Maintenance (PM) guidelines for the Postal Pak Unloader "B". This MMO supersedes MMO-118-98.

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.

# **WARNING**

Various products which require Material Safety Data Sheets (MSDS) may be utilized during the performance of the procedures in this bulletin. Ensure the current MSDS for each product used is on file and available by all employees.

The attached master checklist provides tasks to be performed at periodic intervals (as noted in the frequency column), 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.

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

Rex M. Gallaher Manager Maintenance Technical Support Center Maintenance Policies and Programs

- Attachments: 1. Summary of Revised Workload Estimate
  - Postal Pak Unloader "B" Master Checklist

## **ATTACHMENT 1**

### -SUMMARY-

### **REVISED WORKLOAD ESTIMATE**

### **FOR**

### **POSTAL PAK UNLOADER "B"**

Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Total Servicing & Repair Time (hrs/yr)	Nonproductive Time ** (hrs/yr)	Total Servicing Per Machine (hrs/yr)
32.1	9.6	41.8	4.2	46.0

<sup>\*</sup> Repair estimates based on 30% of servicing.

# **TIME TOTALS**

Monthly Time Total:	136.5 min	2.3 Hrs. ***
Quarterly Time Total:	20 min	0.3 Hrs. ***
Semi-Annual Time Total:	20 min	0.3 Hrs. ***
Annual Time Total:	35 min	0.6 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 time modification are to be addressed at the local level.

<sup>\*\*</sup> Based on 10% of total servicing and repair.

<sup>\*\*\*</sup> These times are provided for data entry for the VMARS System.

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### **ATTACHMENT 2**

## POSTAL PAK UNLOADER "B" (PPUB) MASTER CHECKLIST

### 03-CONTU-EA-001-M

The number (03-CONTU-EA-001-M) shown above is a generic identification for Postal Pak Unloader "B" and must be adapted to meet the local equipment acronym numbering system.

The "Part or Component" column for each step on the Master Checklist provides a "Frequency Code" designation followed by a letter or series of letters. These letters correspond to the frequency codes as published in MS-63 and specify the frequency for which that instruction (step) must be performed. These frequency codes are in compliance with VMARS superseding route structure. The possible frequencies and their codes are given in the table below:

Table 2-1. MS-63 (VMARS) Frequency-Codes

CODE	FREQUENCY	DESCRIPTION
Α	ANNUAL	Once every 13 APs.
В	BI-WEEKLY	Once every 2 weeks
С	BI-MONTHLY	Once every 2 APs.
D	DAILY	Once a day; 7 days a week.
E	DAILY	Once a day; 6 days a week.
F	DAILY	Once a day; 5 days a week.
G	DAILY	Once a day; 4 days a week.
Н	DAILY	Once a day; 3 days a week.
J	SEMI-WEEKLY	2 days a week.
K	BI-ANNUAL	Once every 2 years.
L	TRI-ANNUAL	Once every 3 years.
M	MONTHLY	Once every AP.
N	QUAD-ANNUAL	Once every 4 years.
Р	QUINT-ANNUAL	Once every 5 years.
Q	QUARTERLY	4 times every 13 APs.
S	SEMI-ANNUAL	Twice every 13 AP.
Т	TOURLY	3 times a day; 7 days a week.
U	TOURLY	Twice a day; 7 days a week.
V	TOURLY	3 times a day; 6 days a week.
W	WEEKLY	Once a week.
Χ	TOURLY	Twice a day; 6 days a week.
Υ	TOURLY	3 times a day; 5 days a week.
Z	TOURLY	Twice a day; 5 days a week.

U.S. Postal Service	IDENTIFICATION												
Maintenance Checklist		Work Code		Equipme Acrony					ass ode	Number			Type
	0	3	С	0	N	Т	U	Е	Α	0	0	1	M
Equipment Nomenclature	Equipment Model					Bulle	etin F	ilena	me	Frequency			
POSTAL PAK UNLOADER "B"			В					57A	ιB	ALL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
SAFETY STATEMENT Frequency Code: M-QA	1.	COMPLY WITH ALL SAFETY PRECAUTIONS Disconnect power and apply lockouts when required by this instruction. Refer to the current local lockout procedures to properly shutdown and lockout this machine. Where air pressure is required for cleaning, use a low air pressure (30 psi or less) air source. Eye protection (goggles or face shield) must be used when utilizing compressed air for cleaning. Check to ensure all employees are clear of the machine. Report safety deficiencies to your supervisor immediately upon detection.	3 min	All
Frequency Code: M-QA	2.	CHECK FOR MAIL Look for loose mail while performing all activities.	2.5 min	7
Frequency Code: M-QA	3.	<b>POWER DOWN AND LOCKOUT POWER</b> Power down the equipment and lockout its electrical power as prescribed by current local lockout procedures	3 min	7
CG-1 UNLOADER ASSEMBLY Frequency Code: M-QA	4.	<ul> <li>CHECK FRAME AND WELDMENT Check frame weldment as follows:</li> <li>1. Check frame weldments for cracks, distortion, and other damage.</li> <li>2. Check forklift guards for broken weldments and loose anchor bolts.</li> </ul>	20 min	7
Frequency Code: M-QA	5.	CHECK SAFETY GATE (DROP DOWN BAR) Check safety gate (drop down bar) as follows:  1. Check safety gate for secure mounting.	2 min	7

2 Attachment 2

2. Ensure all pins are in place.

3. Check for proper operation.

U.S. Postal Service	IDENTIFICATION												
Maintenance Checklist	Wo Co	ork de	Equipment Acronym				-		Class Code		lumb	Туре	
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Equipment Nomenclature	Equipment Model			Bull	etin F	ilena	me	Frequency					
POSTAL PAK UNLOADER "B"			В					57 <i>A</i>	λB	ALL			

Part or	Item	Task Statement and Instruction	Est.	Min.
Component	No.	(Comply with all current safety precautions)	Time	Skill
•			Req'd	Level

### HYDRAULIC SYSTEM

6. **CHECK HOSES -** Check hydraulic system as follows:

25 7 min

Frequency

Code --M-Q---A 1. Check hoses for scuffs and other damage.

- 2. Ensure clamps are secure.
- 3. Check hose fittings for leaks and tightness.

# WARNING

Eye protection (goggles or face shield) must be worn when using compressed air for cleaning.

# WARNING

Discard solvent soaked materials according to local procedures to prevent pollution and spontaneous combustion.

### Frequency Code: --M-Q---A-

7. **SERVICE HYDRAULIC UNIT -** Service as follows:

15 min 7

- 1. Ensure that ventilation openings around Hydraulic Power Unit are clear of debris; remove as necessary.
- 2. Clean Hydraulic Power unit removing excessive grease and dirt.
- 3. Clean oil cooler area with vacuum/air to ensure proper cooling capability.
- 4. Grease Pump motor bearing fittings (2).

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U.S. Postal Service	IDENTIFICATION												
Maintenance Checklist	Work Code		Equipm Acrony					Class Code		Number			Туре
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Equipment Nomenclature	Equipment Model			Bulletin Filename				Frequency					
POSTAL PAK UNLOADER "B"		В					990	57A	λB				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
Frequency Code: M-QA-	8.	CHECK HYDRAULIC SYSTEM - Check hydraulic system as follows: Check fluid level. Fill as needed with Mobil DTE-26.	4 min	7
Frequency Code: A	9.	<ul> <li>CHANGE HYDRAULIC FLUID/FILTER - Service as follows:</li> <li>1. Drain fluid</li> <li>2. Remove and replace reservoir filter.</li> </ul>	35 min	7

3. Fill to proper level with Mobil DTE-26.

# WARNING

Eye protection (goggles or face shield) must be worn when using compressed air for cleaning.

# Frequency Code: -----A

- 10. CHECK AND CLEAN ELECTRICAL PANEL. Check 20 and clean electrical panel as follows: min
  - . Using vacuum/air, remove dirt and dust from exterior of panel. Check for any exterior damage.
  - 2. Using vacuum/air, vacuum or blow dirt and dust from interior of panel.
  - Look for burnt or damaged components, bare or burnt wiring, damaged insulation, and loose connections.
  - 4. Check motor starter contacts for wear, dirt, or signs of arcing.

U.S. Postal Service	IDENTIFICATION												
Maintenance Checklist	Work Code		Equipm Acrony					Class Code		Number			Туре
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Equipment Nomenclature	Equipment Model			Bull	etin F	ilena	me	Frequency					
POSTAL PAK UNLOADER "B"		В					990	57A	ιB	ALL			

		<u> </u>		
Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
BUCKET ASSEMBLY Frequency Code: M-QA	11.	<ul> <li>CHECK STAGE 1 and 2 HYDRAULIC CYLINDERS. – Check stage 1 and 2 hydraulic cylinders as follows:</li> <li>1. Visually check stage 1 and 2 cylinders for signs of abnormal wear and/or damage.</li> <li>2. Check cylinder-mounting bolts for tightness.</li> <li>3. Clean stage 1 and 2 clamp tracks of debris.</li> </ul>	10 min	7
BUCKET ASSEMBLY (Cont.) Frequency Code: M-QA	12.	<ul> <li>CHECK STAGE 3 HYDRAULIC CYLINDERS Check stage 3 hydraulic cylinders as follows:</li> <li>1. Visually check stage 3 cylinders for signs of abnormal wear and/or damage.</li> <li>2. Check cylinder-mounting bolts for tightness.</li> </ul>	5 min	7
Frequency Code: M-QA	13.	CHECK STAGE 4 and 5 HYDRAULIC CYLINDERS - Check stage 4 and 5 hydraulic cylinders as follows:  1. Visually check stage 4 and 5 cylinders for signs of	5 min	7

abnormal wear and/or damage.

2. Check cylinder-mounting bolts for tightness.

WARNING

Discard solvent soaked materials according to local procedures to prevent pollution and spontaneous combustion.

U.S. Postal Service			IDENTIFICATION										
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Equipment Nomenclature	Equipment Model					Bull	etin F	ilena	me	Frequency			
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Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
STAGE 1-4 Frequency Code:S	14.	<ul> <li>CLEAN AND LUBRICATE BEARINGS – Clean and lubricate bearings as follows:</li> <li>Clean and lubricate eight rod end bearings stages 1 through 4. Wipe off excess lubricant.</li> <li>Clean and lubricate two flange bearings on stage 4</li> </ul>	20 min	7
		<ol> <li>Clean and lubricate two flange bearings on stage 4 shaft. Wipe off excess lubricant.</li> <li>Clean and lubricate two flange bearings on stage 5 shaft. Wipe off excess lubricant.</li> </ol>		
		<ol> <li>Clean and lubricate four pillow block bearings on stage 3 bars. Wipe off excess lubricant.</li> </ol>		
EC-1 ELECTRICAL CONTROLS	15.	<ul> <li>5. Clean and lubricate two safety gate flange bearings. Wipe off excess lubricant.</li> <li>CHECK PHOTO SENSORS - Check photo sensors as follows:</li> <li>1. Check photo sensors for secure mounting.</li> </ul>	5 min	7
Frequency Code: M-QA		2. Clean photo sensor housing and lens.		
SYSTEM Frequency Code:M-QA	16.	RESTORE EQUIPMENT TO SERVICE Restore equipment to service as prescribed by current, local lockout procedures	3 min	All
SYSTEM Frequency Code:M-QA	17.	CHECK STAGE 1 and 2 HYDRAULIC CYLINDERS. – Utilizing the Maintenance Breakout Box or unloader controls, operate Unloader and visually check stage 1 and 2 hydraulic cylinders as follows:  Visually check stage 1 and 2 cylinders for any binding, bent rods and leakage.	4 min	7

U.S. Postal Service			IDENTIFICATION											
Maintenance Checklist	Work Code		Equipm Acrony					Class Code		Number		Туре		
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Equipment Nomenclature	Equipment Model					Bulletin Filename				Frequency				
POSTAL PAK UNLOADER "B"			В			M99057AB				ALL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
Frequency Code: M-QA	18.	CHECK STAGE 3 HYDRAULIC CYLINDERS Utilizing the Maintenance Breakout Box or unloader controls, operate Unloader and visually check stage 3 hydraulic cylinders as follows:  Visually check stage 3 cylinders for any binding, bent rods and leakage.	2 min	7
Frequency Code: M-QA	19.	<ul> <li>CHECK STAGE 4 and 5 HYDRAULIC CYLINDERS - Utilizing the Maintenance Breakout Box or unloader controls, operate Unloader and visually check stage 4 and 5 hydraulic cylinders as follows:</li> <li>1. Visually check stage 4 and 5 cylinders for any binding, bent rods and leakage.</li> <li>2. Check stage 4 support bumpers to ensure they are present and properly adjusted.</li> </ul>	4 min	7
HYDRAULIC UNIT Frequency Code: M-QA-	20.	CHECK PUMP AND MOTOR. – Utilizing the Maintenance Breakout Box or unloader controls, operate Unloader and check as follows:  Check pump and motor for excessive friction and/or vibration	2 min	7
SYSTEM (Cont.) Frequency Code: M-QA	21.	<ul> <li>CHECK PRESSURE GAUGES. – Utilizing the Maintenance Breakout Box or unloader controls, operate Unloader and check PPU pressure gauges for proper readings as follows:</li> <li>1. System/accumulator pressure 1600 +/-50 psi.</li> <li>2. Stage 1 extend pressure 500-700 psi.</li> <li>3. Stage 1 retract pressure 80-120 psi.</li> <li>4. Stage 2 extend pressure 800-1000 psi.</li> <li>5. Stage 2 retract pressure 80-120 psi</li> <li>6. Check Fluid Temperature. Ensure reading on gauge is in the proper operating range of 100 +/- 10.</li> </ul>	10 min	7

U.S. Postal Service			IDENTIFICATION											
Maintenance Checklist	Work Code		Equipm Acrony					Class Code		Number		Туре		
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Equipment Nomenclature	Equipment Model					Bulletin Filename				Frequency				
POSTAL PAK UNLOADER "B"			В			M99057AB				ALL				

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min. Skill Level
SYSTEM Frequency Code:M-QA	22.	<ol> <li>CHECK OPERATION OF PPU. – Check operation of PPU as follows:</li> <li>Place a tall empty container into bucket and run one complete cycle.</li> <li>Check status light assembly for proper operational sequence.</li> <li>Listen for any unusual noises such as binding sounds.</li> <li>Induce an "Unsafe Entry" fault to ensure unloader stops.</li> </ol>	6 min	7
CLEAN-UP Frequency Code:M-QA	23.	CLEAN-UP Ensure all tools, lubricants, rags, etc., are removed from the work area.	3 min	7
START-UP Frequency Code: M-QA	24.	<ul> <li>START-UP Perform normal start-up procedures as follows:</li> <li>1. Preset equipment.</li> <li>2. Report all deficiencies to your supervisor in order to initiate any necessary work orders to make necessary repairs.</li> </ul>	3 min	All