



maintenance management order

SUBJECT: PM Guidelines for Towveyor (Main Loop),
Type A (ACCO)

DATE: July 29, 1998

NO: MMO-045-98

TO: Bulk Mail Centers

FILE CODE: Y

dewa:M94140AC

Online Change Record		
Change #	Date	Description of Change
2	4/22/2022	Attachment 2, corrected skill level 4, no longer in use, to level 7.
1	5/15/2013	This bulletin has been updated to reflect changes to the Attachment 1 Summary. The times have been updated to reflect accurate rollup times using the standard two decimal place rounding.

This Maintenance Management Order (MMO) provides Preventive Maintenance (PM) guidelines for BMC Standard Towveyor (Main Loop), Type A (ACCO) and supersedes Maintenance Checklist BO67.

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. When reordering such a product, it is suggested that a current MSDS be requested.

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
 2. Towveyor (Main Loop), Type A (ACCO) Master Checklist

ATTACHMENT 1**-SUMMARY-****REVISED WORKLOAD ESTIMATE****FOR****TOWVEYOR (MAIN LOOP), TYPE A (ACCO)**

Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Total Servicing & Repair Time (hrs/yr)	Nonproductive Time ** (hrs/yr)	Total Servicing Per Machine (hrs/yr)
25.21	7.56	32.77	3.28	36.05

* Repair estimates based on 30% of servicing.

** Based on 10% of total servicing and repair.

TIME TOTALS

<u>Monthly Time Total:</u>	0.69 Hrs. ***
<u>Quarterly Time Total:</u>	3.88 Hrs. ***
<u>Semi-Annual Time Total:</u>	0.33 Hrs. ***
<u>Annual Time Total:</u>	0.08 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 requires additional time are to be addressed at the local level.

*** These times are provided for data entry for the MARS System.

THIS PAGE BLANK

ATTACHMENT 2**TOWVEYOR (MAIN LOOP), TYPE A (ACCO) MASTER CHECKLIST**

03-TOWVE-LA-003-M

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 NMICS superseding route structure. The possible frequencies and their codes are given in the table below:

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

<u>CODE</u>	<u>FREQUENCY</u>	<u>DESCRIPTION</u>
A	ANNUAL	Once every 13 APs.
B	BI-WEEKLY	Once every 2 weeks
C	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.
H	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.
P	QUINT-ANNUAL	Once every 5 years.
Q	QUARTERLY	4 times every 13 APs.
S	SEMI-ANNUAL	Twice every 13 AP.
T	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.
X	TOURLY	Twice a day; 6 days a week.
Y	TOURLY	3 times a day; 5 days a week.
Z	TOURLY	Twice a day; 5 days a week.

SAFETY 1. **COMPLY WITH ALL SAFETY PRECAUTIONS.** - 3 All

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	T	O	W	V	E	L	A	0	0	3
Equipment Nomenclature TOWVEYOR (MAIN LOOP), TYPE A		Equipment Model ACCO			Bulletin Filename M94140AC			Frequency ALL				

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

- | | | | | |
|--|----|---|---------|---|
| STATEMENT

Frequency Code:
-M-Q-S-A | | Disconnect power and activate lockouts as appropriate while working on this equipment. 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. | min | |
| Frequency Code:
-M-Q-S-A | 2. | CHECK FOR MAIL. - Look for loose mail while performing all activities. | 2.5 min | 7 |

WARNING

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

WARNING

Be cautious when working around or on equipment when power has been applied.

- | | | | | |
|--|--|--|--------|---|
| CH-1
TOWPIN
CHAIN

Frequency Code:
---Q-S-A | | 3. CLEAN AND CHECK CHAIN. - Clean and check chain as follows: <ol style="list-style-type: none"> 1. Clean chain by blowing with compressed air. Run at least one (1) complete cycle. 2. Using a brush, thoroughly clean with solvent. 3. Check for bent or cracked links. 4. Look for evidence of excessive wear at link ends or connecting pins. | 60 min | 7 |
|--|--|--|--------|---|

- | | | | | |
|-------------|--|---|------|---|
| CH-1 TOWPIN | | 4. CHAIN LUBRICATION. - Manually turn on chain | 0.22 | 7 |
|-------------|--|---|------|---|

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	T	O	W	V	E	L	A	0	0	3
Equipment Nomenclature TOWVEYOR (MAIN LOOP), TYPE A		Equipment Model ACCO				Bulletin Filename M94140AC		Frequency ALL				

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

(Cont.)

Frequency

Code:

----Q-S-A

DA-1 DRIVE ASSY	9.	CLEAN MOTOR AND REDUCER. - Clean motor and reducer as follows:	10 min/ Drive	7
--------------------	----	---	---------------------	---

Frequency

Code:

----Q-S-A

1. Clean motor and reducer by wiping.

2. Clean vent holes and cooling fins as applicable.

Frequency Code: ----Q-S-A	10.	CHECK MOTOR AND REDUCER. - Check motor and reducer housing for evidence of lubrication leakage.	5 min/ Drive	7
---------------------------------	-----	--	--------------------	---

Frequency

Code:

----Q-S-A

11.	CHECK REDUCER. - Check reducer as follows:	20 min/ Drive	7
-----	---	---------------------	---

1. Check grease level of reducer. Add as required.

2. Check bearings.

Frequency Code: -----A	12.	LUBRICATE MOTOR AND REDUCER. - Grease motor and reducer bearings as applicable.	2 min/ Drive	7
------------------------------	-----	--	--------------------	---

Frequency

Code:

----Q-S-A

13.	CLEAN AND CHECK V-BELTS AND SHEAVES. - Clean and check V-Belts and sheaves as follows:	8 min/ Drive	7
-----	---	--------------------	---

1. Clean foreign material from belts and sheaves by wiping with clean rags.

2. Check V-belts and sheaves for wear and alignment.

3. Clean sheave set screws and check belt tension.

DA-1 DRIVE ASSY. (cont.)	14.	CLEAN AND CHECK CRITICAL SPEED SWITCH. - Clean and check critical speed switch as follows:	10 min	7
--------------------------------	-----	---	-----------	---

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	T	O	W	V	E	L	A	0	0	3
Equipment Nomenclature TOWVEYOR (MAIN LOOP), TYPE A			Equipment Model ACCO			Bulletin Filename M94140AC			Frequency 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:
---Q-S-A | <ol style="list-style-type: none"> 1. Wipe clean. 2. Check critical speed switch. 3. Check flexible coupling and set screws for wear and damage. |
|-----------------------------|---|

WARNING

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

- | | | | |
|-----------------------------|---|----------|---|
| Frequency Code:
---Q-S-A | 15. CLEAN AND CHECK SPROCKET. - Clean and check sprocket as follows: | 5
min | 7 |
| | <ol style="list-style-type: none"> 1. Clean sprocket with solvent and rags. 2. Check sprocket for wear and alignment. 3. Wrench test set screws. | | |

- | | | | |
|-----------------------------|--|---------------------|---|
| Frequency Code:
---Q-S-A | 16. CHECK COUPLING. - Check coupling as follows: | 10
min/
Drive | 7 |
| | <ol style="list-style-type: none"> 1. Check coupling for leakage of charge. 2. Check set screws and keyways for tightness. | | |

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym			Class Code		Number		Type		
	0	3	T	O	W	V	E	L	A	0	0	3
Equipment Nomenclature TOWVEYOR (MAIN LOOP), TYPE A		Equipment Model ACCO			Bulletin Filename M94140AC			Frequency ALL				

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

WARNING

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

WARNING

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

DA-1 DRIVE ASSY. (cont.) Frequency Code: ----Q-S-A	17.	CLEAN AND LUBRICATE CATERPILLAR CHAIN. - Clean and lubricate caterpillar chain as follows: 1. Clean caterpillar chain by brushing on solvent and blow or wipe dry. 2. Relubricate with GL-1. 3. Wipe up excess.	20 min	7
Frequency Code: -----S-A	18.	CLEAN AND LUBRICATE BACKUP AND TAKE-UP BARS. - Clean and lubricate backup and take-up bars as follows: 1. Clean backup and take-up bars by wiping. 2. Remove hardened deposits with solvent. 3. Lubricate by brushing on GL-2. 4. Wipe up excess.	10 min	7
Frequency Code: ---Q-S-A	19.	CHECK AND ADJUST CATERPILLAR DRIVE CHAIN. - Check and adjust caterpillar drive chain as follows: 1. Check caterpillar drive chain for proper tension. 2. Use take-up bar to adjust if required.	5 min	7
DA-1	20.	CHECK AND LUBRICATE TAKE-UP. - Check take-up assembly. Lubricate necessary parts.	10	7

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	T	O	W	V	E	L	A	0	0	3
Equipment Nomenclature TOWVEYOR (MAIN LOOP), TYPE A			Equipment Model ACCO			Bulletin Filename M94140AC			Frequency ALL			

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

DRIVE ASSY. (cont.) min

Frequency Code:
-----S-A

Frequency Code: 21. **CLEAN, CHECK AND LUBRICATE BACKUP ROLLERS.** - Clean, check, and lubricate backup rollers as follows: 10 min 7
----Q-S-A

1. Remove dirt and foreign material from backup rollers.
2. Clean with solvent, blow dry, and relubricate with GR-2.
3. Check for wear, gouging and wobble.

Frequency Code: 22. **CHECK AND LUBRICATE CHAIN SWITCH.** - Check and lubricate chain switch as follows: 5 min 7
----Q-S-A

1. Check broken chain switch mounting and alignment.
2. Lube necessary points.
3. Check for binding.

CHAIN LUBRICATOR 23. **CHECK, CLEAN, AND REFILL CHAIN LUBRICATOR.** - Check condition of chain lubricator. Clean and Refill reservoir as necessary. 6 min 7

Frequency Code:
-M-Q-S-A

Frequency Code: 24. **CLEAN PIT.** - Clean drive pit. 15 min 7
----Q-S-A

AT-1 TRACK 25. **CHECK TRACK.** - Check entire length of track for loose wear bars. 1 min/50 ft. 7

Frequency Code:
-M-Q-S-A

ROUTE COMPLETE- 26. **REPLACE COVER PLATES.** - With disconnect locked out, replace all cover plates. 20 min 7

U.S. Postal Service Maintenance Checklist		IDENTIFICATION										
		Work Code		Equipment Acronym			Class Code	Number		Type		
		0	3	T	O	W	V	E	L	A	0	0
Equipment Nomenclature TOWVEYOR (MAIN LOOP), TYPE A		Equipment Model ACCO			Bulletin Filename M94140AC			Frequency ALL				

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

TION

Frequency Code:
----Q-S-A

CLEAN-UP Frequency Code: -M-Q-S-A	27. CLEAN- UP. -Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	3 min All
---	--	------------------

WARNING

Be cautious when working around or on equipment when power has been applied.

SYSTEM Frequency Code: -M-Q-S-A	28. 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
START-UP Frequency Code: -M-Q-S-A	29. START-UP. - Perform normal start-up procedures as follows: <ol style="list-style-type: none"> 1. Start or preset equipment. 2. Check for proper operation. 3. Report all deficiencies to your supervisor in order to initiate any necessary work orders to make necessary repairs, or to remove excessive debris. 	5 min All