



maintenance management order

SUBJECT: PM Guidelines for Towveyor (Takeaway),
Type G (ACCO)

DATE: December 16, 1998

NO: MMO-166-98

TO: Bulk Mail Centers

FILE CODE: Y

dewa:M94156AC

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	5/16/2013	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 Towveyor (Takeaway), Type G (ACCO) and supersedes Maintenance Checklist BO73.

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 (Takeaway), Type G (ACCO) Master Checklist

ATTACHMENT 1**-SUMMARY-****REVISED WORKLOAD ESTIMATE****FOR****TOWVEYOR (TAKEAWAY), TYPE G (ACCO)**

Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Total Servicing & Repair Time (hrs/yr)	Nonproductive Time ** (hrs/yr)	Total Servicing Per Machine (hrs/yr)
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11.49	3.46	14.95	1.50	16.47
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* Repair estimates based on 30% of servicing.

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

TIME TOTALS

Monthly Time Total: 0.30 Hrs. ***

Quarterly Time Total: 1.82 Hrs. ***

Semi-Annual Time Total: 0.10 Hrs. ***

Annual Time Total: 0.17 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.

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ATTACHMENT 2**TOWVEYOR (TAKEAWAY), TYPE G MASTER CHECKLIST**

03-TOWVE-ZZ-007-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.

U.S. Postal Service Maintenance Checklist	IDENTIFICATION												
	Work Code		Equipment Acronym				Class Code		Number		Type		
	0	3	T	O	W	V	E	Z	Z	0	9	7	M
Equipment Nomenclature TOWVEYOR (TAKEAWAY), TYPE G		Equipment Model ACCO				Bulletin Filename M94156AC				Frequency ALL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min Skill Level
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SAFETY STATEMENT 1. **COMPLY WITH ALL SAFETY PRECAUTIONS. -** 3 min All

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.

AA-1 2. **CHECK FOR MAIL. -** Look for loose mail while performing activities. 2.5 min 47

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

WARNING

Eye protection (goggles or face shield) must be worn when using compressed air, steam, or a high pressure cleaner/washer device for cleaning.

CH-1 TOWPIN 3. **CLEAN CHAIN. -** Clean chain as follows: 1 min/10ft. 47

Frequency Code: -----S-A-
1. Clean chain with steam or high pressure cleaner/washer device Run chain at least one (1) complete cycle. of chain
2. Remove foreign material by blowing or vacuuming.

Frequency Code: -M-Q-S-A- 4. **LUBRICATE CHAIN. -** Pour oil slowly over return strand of chain for two (2) complete turns. 0.22 min/10ft. 47

U.S. Postal Service Maintenance Checklist		IDENTIFICATION											
		Work Code		Equipment Acronym				Class Code		Number		Type	
		0	3	T	O	W	V	E	Z	Z	0	9	7
Equipment Nomenclature TOWVEYOR (TAKEAWAY), TYPE G		Equipment Model ACCO				Bulletin Filename M94156AC				Frequency ALL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min Skill Level
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DA-3 DRIVE
ASSY

5. **CHECK BRAKE ACTION.** - Check brake action as follows: 3 min 47

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

1. Check for proper brake action.
2. Listen for noise and feel for vibration.

SYSTEM

6. **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. 1 min 47

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

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

7. **REMOVE COVER PLATE.** - Remove cover plates. Erect barricades around open pits. 10 min 47

U.S. Postal Service Maintenance Checklist		IDENTIFICATION											
		Work Code		Equipment Acronym				Class Code		Number		Type	
		0	3	T	O	W	V	E	Z	Z	0	9	7
Equipment Nomenclature TOWVEYOR (TAKEAWAY), TYPE G		Equipment Model ACCO				Bulletin Filename M94156AC				Frequency ALL			

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

	CH-1 TOWPIN CHAIN	8.	CLEAN CHAIN. - Clean chain as follows:	1 min per 10 ft.	<u>47</u>
	Frequency Code: ----Q-S-A-		1. With disconnect locked out, clean towpin chain with solvent by brushing.		
			2. Remove foreign material by blowing or wiping clean. Jog chain if necessary.		
	Frequency Code: ----Q-S-A-	9.	CHECK CHAIN. - Check chain for bent, cracked, or excessively worn links.	1 min per 10 ft.	<u>47</u>
	CS-1 CONTAINER SENSOR SWITCHES	10.	CLEAN PIT, SWITCH HOUSING, AND ACTUATOR ARM. - Clean pit, switch housing, and actuator arm as follow:	10 min	<u>47</u>
	Frequency Code: ----Q-S-A-		1. Clean dirt and accumulated material from pit.		
			2. Clean switch housing and actuator arm with solvent.		

U.S. Postal Service Maintenance Checklist	IDENTIFICATION												
	Work Code		Equipment Acronym				Class Code		Number		Type		
	0	3	T	O	W	V	E	Z	Z	0	9	7	M
Equipment Nomenclature TOWVEYOR (TAKEAWAY), TYPE G		Equipment Model ACCO				Bulletin Filename M94156AC				Frequency ALL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min Skill Level
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CS-1
CONTAINER
SENSOR
SWITCHES
(Cont.)

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

11. **CHECK AND LUBRICATE SWITCH MOUNTING.** - Check and lubricate switch mounting as follows:
1. Check switch mounting for security.
 2. Check freedom of movement in direction of travel.
 3. Lube necessary points.

2 min 47

DA-3
DRIVE ASSY

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

12. **CLEAN MOTOR AND REDUCER.** - Clean motor and reducer as follows:
1. Clean motor and reducer by wiping.
 2. Clean vent holes and cooling fins as applicable.

10 min 47

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

13. **CHECK MOTOR.** - Check motor and reducer housing for evidence of lubrication leakage.

5 min 47

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

14. **CHECK GREASE LEVEL AND BEARINGS.** - Check grease level and bearings as follows:
1. Check grease level of reducer. Add as required.
 2. Check bearings replace as necessary.

20 min 47

DA-3 DRIVE
ASSY

Frequency
Code:
-----A-

15. **LUBRICATE MOTOR.** - Lubricate motor as follows:
1. Remove grease relief plug.
 2. For motors 1/2 HP and over, apply 2 pumps of GR-2.

4 min 47

U.S. Postal Service Maintenance Checklist		IDENTIFICATION										
		Work Code		Equipment Acronym			Class Code		Number		Type	
		0	3	T	O	W	V	E	Z	Z	0	9
Equipment Nomenclature TOWVEYOR (TAKEAWAY), TYPE G		Equipment Model ACCO			Bulletin Filename M94156AC			Frequency ALL				

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

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

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|----------------------------|-----|--|-------|-----------|
| SYSTEM | 16. | 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 |
| Frequency Code: -----A- | | | | |
| DA-3 DRIVE ASSY | 17. | RUN MOTOR - Run motor for one minute | 1 min | <u>47</u> |
| Frequency Code: -----A- | | | | |
| SYSTEM | 18. | 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. | 1 min | <u>47</u> |
| Frequency Code: -----A- | | | | |
| DA-3 DRIVE ASSY | 19. | REPLACE GREASE RELIEF PLUG. - Replace motor grease relief plug. | 1 min | <u>47</u> |
| Frequency Code: -----A- | | | | |
| Frequency Code: ----Q-S-A- | 20. | CHECK V-BELTS AND SHEAVES. - Check V-belts and sheaves for wear and alignment. | 2 min | <u>47</u> |

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		0	3	T	O	W	V	E	Z	Z	0	9	7
Equipment Nomenclature TOWVEYOR (TAKEAWAY), TYPE G		Equipment Model ACCO				Bulletin Filename M94156AC				Frequency ALL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min Skill Level
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DA-3 DRIVE ASSY (Cont.) 21. **CLEAN AND CHECK V-BELT AND SHEAVES.** - Clean and check V-belt and sheaves as follows: 4 min 47

- Frequency Code: ----Q-S-A-
1. Clean foreign material from belts and sheaves by wiping with clean rags.
 2. Check sheave set screws and belt tension.

Frequency Code: ----Q-S-A- 22. **CHECK AND CLEAN CRITICAL SPEED SWITCH.** - Check and clean critical speed switch as follows: 10 min 47

1. Check critical speed switch.
2. Check flexible coupling and set screws for wear and damage.
3. Wipe clean.

WARNING

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

Frequency Code: ----Q-S-A- 23. **CHECK AND CLEAN SPROCKET.** - Check and clean sprocket as follows: 5 min 47

1. Check sprocket for wear and alignment.
2. Wrench test set screws.
3. Clean sprocket with solvent and rags.

U.S. Postal Service Maintenance Checklist		IDENTIFICATION										
		Work Code		Equipment Acronym			Class Code		Number		Type	
		0	3	T	O	W	V	E	Z	Z	0	9
Equipment Nomenclature TOWVEYOR (TAKEAWAY), TYPE G		Equipment Model ACCO			Bulletin Filename M94156AC			Frequency ALL				

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

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

IB-1 IDLER BOX	24.	CHECK AND CLEAN SPROCKET AND IDLER BOX. - Check and clean sprocket and idler box as follows:	15 min	47
Frequency Code: ----Q-S-A-		1. Check sprocket for wear and alignment. 2. Wrench test set screws to determine tightness of sprocket or shaft. 3. Clean sprocket using solvent and rags. 4. Grease fittings. 5. Wipe clean. 6. Clean idler box.		
TU-1 TAKE-UP ASSY	25.	CHECK TAKE-UP. - Check Take-up assembly. Lubricate as necessary.	5 min	47
Frequency Code: -----S-A-				
AT-1 TRACK	26.	CHECK TRACK - Check entire length of track for loose wear bars.	1 min/ 50 ft.	47
Frequency Code: -M-Q-S-A				

U.S. Postal Service Maintenance Checklist		IDENTIFICATION											
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		0	3	T	O	W	V	E	Z	Z	0	9	7
Equipment Nomenclature TOWVEYOR (TAKEAWAY), TYPE G		Equipment Model ACCO				Bulletin Filename M94156AC				Frequency ALL			

Part or Component	Item No.	Task Statement and Instruction (Comply with all current safety precautions)	Est. Time Req'd	Min Skill Level
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ZZ-1 ROUTE COMPLETION

27. **REPLACE PLATES.** - Replace all cover plates.

10 min

47

Frequency Code:

----Q-S-A-CLEAN-UP

28. **CLEAN- UP.** - Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.

3 min

All

Frequency Code:

-M-Q-S-A-

WARNING

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

SYSTEM

29. **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

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

START-UP

30. **START-UP.** - Perform normal start-up procedures as follows:

5 min

All

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

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.