



# maintenance management order

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

**DATE:** July 28, 1998

**NO:** MMO-050-98

**TO:** Bulk Mail Centers

**FILE CODE:** Y

dewa:M94154AC

Online Change Record		
Change #	Date	Description of Change
2	4/21/2022	Attachment 2, corrected skill level 4, no longer in use, to 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 guidelines for Towveyor (Takeaway), Type F (ACCO) and supersedes Maintenance Checklist BO72.

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 F (ACCO) Master Checklist



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

Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Total Servicing & Repair Time (hrs/yr)	Nonproductive Time ** (hrs/yr)	Total Servicing Per Machine (hrs/yr)
25.78	7.74	33.51	3.35	36.87

\* Repair estimates based on 30% of servicing.

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

**TIME TOTALS**

<u>Monthly Time Total:</u>	1.23 Hrs. ***
<u>Quarterly Time Total:</u>	2.02 Hrs. ***
<u>Semi-Annual Time Total:</u>	0.60 Hrs. ***
<u>Annual Time Total:</u>	0.53 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 F MASTER CHECKLIST**

03-TOWVE-ZZ-006-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**

<b><u>CODE</u></b>	<b><u>FREQUENCY</u></b>	<b><u>DESCRIPTION</u></b>
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  <b>Maintenance Checklist</b>		IDENTIFICATION											
		Work Code		Equipment Acronym				Class Code		Number		Type	
		0	3	T	O	W	V	E	Z	Z	0	0	6
Equipment Nomenclature <b>TOWVEYOR (TAKEAWAY), TYPE F</b>		Equipment Model <b>ACCO</b>				Bulletin Filename <b>M94154AC</b>				Frequency <b>ALL</b>			

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 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.** - Manually turn on chain lubricator. 0.22 min/10ft. 47  
Make at least two (2) complete cycles before turning the automatic lubricator off.

U.S. Postal Service  <b>Maintenance Checklist</b>	IDENTIFICATION												
	Work Code		Equipment Acronym				Class Code		Number		Type		
	0	3	T	O	W	V	E	Z	Z	0	0	6	M
Equipment Nomenclature <b>TOWVEYOR (TAKEAWAY), TYPE F</b>		Equipment Model <b>ACCO</b>				Bulletin Filename <b>M94154AC</b>				Frequency <b>ALL</b>			

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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SYSTEM	5.	<b>POWER DOWN AND LOCKOUT POWER.</b> - 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: ---Q-S-A-					

CH-1 TOWPIN	6.	<b>CHECK CHAIN.</b> - Check chain for bent, cracked, or excessively worn links.	1 min/ 10ft. of chain	<u>47</u>	
Frequency Code: ---Q-S-A-					

Frequency Code: -M-Q-S-A-	7	<b>REMOVE COVER PLATE.</b> - Remove cover plates. Erect barricades around open pits.	10 min	<u>47</u>	
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**WARNING**

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

Frequency Code: -M-Q-S-A-	8.	<b>CHECK LUBRICATOR.</b> - Check condition of chain lubricator. Refill and clean reservoir as necessary.	6 min	<u>47</u>	
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CB-1 CLEANOUT BOX	9.	<b>CLEAN BOXES.</b> - Clean all foreign material from cleanout boxes.	15 min	<u>47</u>	
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Frequency Code:  
-M-Q-S-A-

U.S. Postal Service  <b>Maintenance Checklist</b>	IDENTIFICATION												
	Work Code		Equipment Acronym				Class Code		Number		Type		
	0	3	T	O	W	V	E	Z	Z	0	0	6	M
Equipment Nomenclature <b>TOWVEYOR (TAKEAWAY), TYPE F</b>		Equipment Model <b>ACCO</b>				Bulletin Filename <b>M94154AC</b>				Frequency <b>ALL</b>			

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.**

	RT-1 ROLLER TURN	10.	<b>CLEAN ROLLER TURNS.</b> - Clean roller turns as follows:	8 min	<u>47</u>
	Frequency Code: ----Q-S-A-		1. Clean dirt and foreign material from roller turns.  2. Clean with solvent, and blow dry.  3. Lubricate with GL-2.		
	Frequency Code: ----Q-S-A-	11.	<b>CHECK ROLLERS.</b> - Check rollers for wear, gouging, and wobble. Check mounting bolts.	2 min	<u>47</u>
	DA-1 DRIVE ASSEMBLY	12.	<b>CLEAN MOTOR AND REDUCER.</b> - Clean motor and reducer as follows:	10 min	<u>47</u>
	Frequency Code: ----Q-S-A-		1. Clean motor and reducer by wiping.  2. Clean vent hole and cooling fins as applicable.		
	Frequency Code: ----Q-S-A-	13.	<b>CHECK MOTOR AND HOUSING.</b> - Check motor and reducer housing for evidence of lubrication leakage.	5 min	<u>47</u>



U.S. Postal Service  <b>Maintenance Checklist</b>	IDENTIFICATION												
	Work Code		Equipment Acronym				Class Code		Number		Type		
	0	3	T	O	W	V	E	Z	Z	0	0	6	M
Equipment Nomenclature <b>TOWVEYOR (TAKEAWAY), TYPE F</b>		Equipment Model <b>ACCO</b>				Bulletin Filename <b>M94154AC</b>				Frequency <b>ALL</b>			

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-1 DRIVE ASSEMBLY (Cont.)

144. **CHECK GREASE LEVEL AND BEARINGS.** - Check grease level and bearings as follows: 20 min **47**

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

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

2. Bearings may be replaced as necessary.

Frequency Code:  
-----A-

15. **GREASE BEARINGS.** - Grease motor and reducer bearings as applicable. 2 min **47**

Frequency Code:  
-----A-

16. **Drain and Refill Reducer** - Disassemble reducer, clean out old lubricant and refill with GR-2. 30 min **47**

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

17. **CHECK AND CLEAN V-BELTS AND SHEAVES.** - Check and clean V-belts and sheaves as follows: 8 min **47**

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

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

3. Check sheave set screws and belt tension.

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

18. **CHECK AND CLEAN SPEED SWITCH.** - Check and clean 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.

U.S. Postal Service  <b>Maintenance Checklist</b>		IDENTIFICATION											
		Work Code		Equipment Acronym				Class Code		Number		Type	
		0	3	T	O	W	V	E	Z	Z	0	0	6
Equipment Nomenclature <b>TOWVEYOR (TAKEAWAY), TYPE F</b>		Equipment Model <b>ACCO</b>				Bulletin Filename <b>M94154AC</b>				Frequency <b>ALL</b>			

  

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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<b>WARNING</b>
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**Discard solvent soaked materials according to local procedures to prevent spontaneous combustion.**

DA-1 DRIVE ASSEMBLY (Cont.)

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

19. **CHECK AND CLEAN SPROCKET.** - Check and clean sprocket as follows: 5 min 4

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

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

20. **CHECK FLUID, SET SCREWS, AND KEYWAYS.** - Check fluid level, set screws, and keyways as follows: 10 min **47**

1. Check fluid level in coupling.
2. Check set screws and keyways for tightness.

U.S. Postal Service  <b>Maintenance Checklist</b>		IDENTIFICATION											
		Work Code		Equipment Acronym				Class Code		Number		Type	
		0	3	T	O	W	V	E	Z	Z	0	0	6
Equipment Nomenclature <b>TOWVEYOR (TAKEAWAY), TYPE F</b>		Equipment Model <b>ACCO</b>				Bulletin Filename <b>M94154AC</b>				Frequency <b>ALL</b>			

  

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.**

CATERPILLAR CHAIN	21.	<b>CLEAN AND LUBRICATE CHAIN.</b> - Clean and lubricate caterpillar chain as follows:	20 min	<u>47</u>	
Frequency Code: ----Q-S-A-		1. Clean caterpillar chain by brushing on solvent and blow or wipe dry.			
		2. Lubricate with GL-1.			
		3. Wipe up excess.			
Frequency Code: ----Q-S-A-	22.	<b>CHECK CHAIN TENSION.</b> - Check caterpillar drive chain for proper tension. Use take-up bar to adjust if required.	15 min	<u>47</u>	
Frequency Code: ----Q-S-A-	23.	<b>CHECK LUBRICATOR.</b> - Check condition of chain lubricator. Refill and clean reservoir as necessary.	6 min	<u>47</u>	

U.S. Postal Service  <b>Maintenance Checklist</b>	IDENTIFICATION												
	Work Code		Equipment Acronym				Class Code		Number		Type		
	0	3	T	O	W	V	E	Z	Z	0	0	6	M
Equipment Nomenclature <b>TOWVEYOR (TAKEAWAY), TYPE F</b>		Equipment Model <b>ACCO</b>				Bulletin Filename <b>M94154AC</b>				Frequency <b>ALL</b>			

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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CATERPILLAR CHAIN (Cont.) 24. **CLEAN BARS.** - Clean bars as follows: 30 min 47

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

1. Clean back-up and take-up bars by wiping.
2. Remove hardened deposits with solvent.
3. Lubricate by brushing with GL-2. Wipe up excess.

TW-1 TRACTION WHEEL 25. **CHECK AND LUBRICATE TRACTION WHEEL.** - Check and lubricate traction wheel as follows: 15 min 47

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

1. Check traction wheel for wobbly or sloppy rotation.
2. Grease fittings.
3. Clean Pit.

TU-1 TAKE-UP ASS'Y 26. **CHECK AND LUBRICATE TAKE-UP.** - Check Take-up assembly. Lubricate as necessary. 5 min 47

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

AT-1 TRACK 27. **CHECK TRACK** - Check entire length of track for loose wear bars. 1 min/50 ft. 47

Frequency  
Code:  
-M-Q-S-A

ZZ-1 ROUTE COMPLETION 28. **REPLACE PLATES.** - Replace all cover plates. 10 min 47

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

CLEAN-UP 29. **CLEAN- UP.** - Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to 3 min All

U.S. Postal Service  <b>Maintenance Checklist</b>		IDENTIFICATION									
		Work Code		Equipment Acronym				Class Code	Number		Type
		0	3	T	O	W	V	E	Z	Z	006M
Equipment Nomenclature <b>TOWVEYOR (TAKEAWAY), TYPE F</b>		Equipment Model <b>ACCO</b>				Bulletin Filename <b>M94154AC</b>			Frequency <b>ALL</b>		

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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Frequency your supervisor.

Code:

-M-Q-S-A-

**WARNING**

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

SYSTEM	30.	<b>RESTORE EQUIPMENT TO SERVICE.</b> - 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	31.	<b>START-UP.</b> - 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.		