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

# maintenance management order UNITED STATES POSTAL SERVICETM



**SUBJECT:** PM Guidelines for Towveyor (Takeaway),

Type G (ACCO)

NO: MMO-166-98

DATE:

TO: Bulk Mail Centers FILE CODE: Y

dewa:M94156AC

December 16,1998

	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)
11.49	3.46	14.95	1.50	16.47

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

#### **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.

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

<sup>\*\*\*</sup> 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

CODE	FREQUENCY	DESCRIPTION
A B C D	ANNUAL BI-WEEKLY BI-MONTHLY DAILY DAILY	Once every 13 APs. Once every 2 weeks Once every 2 APs. Once a day; 7 days a week. 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.
P	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.
X	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 Acronyr						Class Code		Number		Туре
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Equipment Nomenclature	Equ	iipme	nt Mc	del		Bull	etin F	ilena	me	Free	Frequency		
TOWVEYOR (TAKEAWAY), TYPE G		Α	CC	0		M	941	56 <i>A</i>	\C	ALL			

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

#### SAFETY STATEMENT

Frequency Code: -M-Q-S-A- COMPLY WITH ALL SAFETY PRECAUTIONS. 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 2.5 performing activities.

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 4<u>7</u> min/

Frequency Code:

 Clean chain with steam or high pressure cleaner/washer device Run chain at least one (1) complete cycle.

chain

10ft.

3

min

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47

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 4<u>7</u> min/ 10ft.

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TOWVEYOR (TAKEAWAY), TYPE G		ACCO					M94156AC			ALL			

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

DA-3 DRIVE 5. CHECK BRAKE ACTION. - Check brake action as 3 <u>47</u> ASSY follows: min Frequency 1. Check for proper brake action. Code: ----Q-S-A-2. Listen for noise and feel for vibration. SYSTEM 6. POWER DOWN AND LOCKOUT POWER. - Power 1 <u>47</u> down the equipment and lockout its electrical power as prescribed by the procedures contained in, or locally Frequency Code: developed in accordance with, the current Maintenance ----Q-S-A-Management Order (MMO) providing lockout/restore procedures. 7. **REMOVE COVER PLATE. -** Remove cover plates. Erect Frequency 10 47 Code: barricades around open pits. min ----Q-S-A-

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Part or	Item	Task Statement and Instruction	Est.	Min
Component	No.	(Comply with all current safety precautions)	Time	Skill
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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	8.	CLEAN	CHAIN Clean chain as follows:	1 min	4 <u>7</u>
CHAIN		1.	With disconnect locked out, clean towpin chain with solvent by brushing.	per 10 ft.	
Frequency Code: Q-S-A-		2.	Remove foreign material by blowing or wiping clean. Jog chain if necessary.		
Frequency Code: Q-S-A-	9.		CHAIN Check chain for bent, cracked, or rely worn links.	1 min per 10 ft.	4 <u>7</u>
CS-1 CONTAINER SENSOR SWITCHES	10.		PIT, SWITCH HOUSING, AND ACTUATOR Clean pit, switch housing, and actuator arm as	10 min	4 <u>7</u>
Гиалианан		1.	Clean dirt and accumulated material from pit.		
Frequency Code: Q-S-A-		2.	Clean switch housing and actuator arm with solvent.		

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Equipment Nomenclature	Equipment Model					Bulletin Filename				Frequency			
TOWVEYOR (TAKEAWAY), TYPE G								ALL					

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

CS-1 CONTAINER SENSOR	11.	CHECK AND LUBRICATE SWITCH MOUNTING. Check and lubricate switch mounting as follows:	- 2 min	4 <u>7</u>	
SWITCHES (Cont.)		1. Check switch mounting for security.			
Frequency		<ol><li>Check freedom of movement in direction of travel.</li></ol>	f		
Code: Q-S-A-		3. Lube necessary points.			
DA-3 DRIVE ASSY	12.	<b>CLEAN MOTOR AND REDUCER.</b> - Clean motor and reducer as follows:	d 10 min	4 <u>7</u>	
Frequency Code:		1. Clean motor and reducer by wiping.			
Q-S-A-		2. Clean vent holes and cooling fins as applicable.			
Frequency Code: Q-S-A-	13.	<b>CHECK MOTOR</b> Check motor and reducer housing for evidence of lubrication leakage.	r 5 min	4 <u>7</u>	
Frequency Code: Q-S-A-	14.	CHECK GREASE LEVEL AND BEARINGS Check grease level and bearings as follows:	c 20 min	4 <u>7</u>	
Q O / t		1. Check grease level of reducer. Add as required			
		2. Check bearings replace as necessary.			
DA-3 DRIVE ASSY	15.	LUBRICATE MOTOR Lubricate motor as follows:	4 min	4 <u>7</u>	
Frequency		Remove grease relief plug.			
Code:		<ol><li>For motors 1/2 HP and over, apply 2 pumps of GR-2.</li></ol>	f		

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

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

SYSTEM Frequency Code:A-	16.	<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
DA-3 DRIVE ASSY Frequency Code: A-	17.	RUN MOTOR - Run motor for one minute	1 min	4 <u>7</u>
SYSTEM Frequency Code:A-	18.	<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	4 <u>7</u>
DA-3 DRIVE ASSY Frequency Code: A-	19.	REPLACE GREASE RELIEF PLUG Replace motor grease relief plug.	1 min	4 <u>7</u>
Frequency Code: Q-S-A-	20.	<b>CHECK V-BELTS AND SHEAVES</b> Check V-belts and sheaves for wear and alignment.	2 min	4 <u>7</u>

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

DA-3 DRIVE ASSY (Cont.) 21. **CLEAN AND CHECK V-BELT AND SHEAVES. -** Clean and check V-belt and sheaves as follows:

4 4<u>7</u>

47

min

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.** - 10 47 Check and clean critical speed switch as follows: min

- 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

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

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Equipment Nomenclature	Equipment Model					Bulletin Filename				Frequency			
TOWVEYOR (TAKEAWAY), TYPE G								ALL					

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

## 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 15 Check and clean sprocket and idler box as follows: min	4 <u>7</u>
Frequency Code:		Check sprocket for wear and alignment.	
Q-S-A-		<ol><li>Wrench test set screws to determine tightness of sprocket or shaft.</li></ol>	
		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	4 <u>7</u>
Frequency Code: S-A-			
AT-1 TRACK	26.		4 <u>7</u>
Frequency Code: -M-Q-S-A		wear bars. min/ 50 ft.	

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

ZZ-1 ROUTE **COMPLETION**  27. **REPLACE PLATES. -** Replace all cover plates. 10 47

min

Frequency Code:

----Q-S-A-

**CLEAN-UP** 

Code: -M-Q-S-A-

Frequency

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

3 min

3

5

min

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WARNING

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

SYSTEM

Frequency Code:

-M-Q-S-A-

START-UP

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

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.

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

Start or preset equipment.

2. Check for proper operation.

Report all deficiencies to your supervisor in order to initiate any necessary work orders to make necessary repairs, or to remove excessive debris.