

maintenance management order

SUBJECT: PM Guidelines for Towveyor (Spur),
Type C (ACCO)

DATE: December 10, 1998

NO: MMO-158-98

TO: Bulk Mail Centers

FILE CODE: Y

dewa:M98067AA

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) supersedes MMO-145-98, dated November 20, 1998 due to recalculation of the roll up times. All other information remains the same.

This Maintenance Management Order (MMO) provides Preventive Maintenance (PM) guidelines for Towveyor (Spur), Type C (ACCO) and supersedes Maintenance Checklist BO69.

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 (Spur), Type C (ACCO) Master Checklist

ATTACHMENT 1**-SUMMARY-****REVISED WORKLOAD ESTIMATE****FOR****TOWVEYOR (SPUR LINE), TYPE C (ACCO)**

Routine Servicing (hrs/yr)	Repair* (hrs/yr)	Total Servicing & Repair Time (hrs/yr)	Nonproductive Time ** (hrs/yr)	Total Servicing Per Machine (hrs/yr)
14.19	4.26	18.45	1.85	20.30

* Repair estimates based on 30% of servicing.

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

TIME TOTALS

<u>Monthly Time Total:</u>	0.30 Hrs. ***
<u>Quarterly Time Total:</u>	2.45 Hrs. ***
<u>Semi-Annual Time Total:</u>	0.18 Hrs. ***
<u>Annual Time Total:</u>	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 require 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 (SPUR), TYPE C MASTER CHECKLIST**

03-TOWVE-SA-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.

U.S. Postal Service Maintenance Checklist		IDENTIFICATION											
		Work Code		Equipment Acronym				Class Code		Number		Type	
		0	3	T	O	W	V	E	S	A	0	0	3
Equipment Nomenclature TOWVEYOR (SPUR), TYPE C		Equipment Model ACCO				Bulletin Filename M98067AA				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 All
min

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 2.5 47
min

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

WARNING

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

CH-1 3. **CLEAN CHAIN.** - Clean chain with steam or high 1 47
TOWPIN pressure cleaner/washer device. Run chain at least one min
CHAIN (1) complete cycle. Remove foreign material by blowing per
Frequency Code: or vacuuming. 10. ft.

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

U.S. Postal Service Maintenance Checklist	IDENTIFICATION												
	Work Code		Equipment Acronym				Class Code		Number		Type		
	0	3	T	O	W	V	E	S	A	0	0	3	M
Equipment Nomenclature TOWVEYOR (SPUR),TYPE C		Equipment Model ACCO				Bulletin Filename M98067AA				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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CH-1 TOWPIN CHAIN (Cont.) Frequency Code: -M-Q-S-A-	4.	LUBRICATE CHAIN. - Pour oil slowly over return strand of chain for two (2) complete turns.	.22 min/ 10ft.	<u>47</u>	
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DA-3 DRIVE ASSEMBLY Frequency Code: ----Q-S-A-	5.	CHECK BRAKE. - Check for proper brake action. Listen for noise and feel for vibration.	5 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: ----Q-S-A-	6.	CHECK CHAIN. - With equipment operating, check slack of chain by looking for pulsating at drive sprocket output side. Adjust if needed.	4 min	<u>47</u>	
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SYSTEM Frequency Code: ----Q-S-A-	7.	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>	
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Frequency Code: ----Q-S-A-	8.	REMOVE COVER PLATES. - Remove cover plates. Erect barricades around open pits.	10 min	<u>47</u>	
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WARNING

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code		Number		Type	
	0	3	T	O	W	V	E	S	A	0	0	3
Equipment Nomenclature TOWVEYOR (SPUR), TYPE C	Equipment Model ACCO				Bulletin Filename M98067AA				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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Eye protection (goggles or face shield) must be worn when using compressed air for cleaning.

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| CH-1
TOWPIN
CHAIN
(Cont.)
Frequency
Code:
----Q-S-A- | 9. | CHECK CHAIN. - Check chain for bent, cracked, or excessively worn links. | 1 min per 10 ft. | 47 |
| DA-3 DRIVE
ASSEMBLY

Frequency
Code:
----Q-S-A- | 10. | CLEAN MOTOR AND REDUCER. - With disconnect locked out, clean motor and reducer by wiping. Clean vent holes and cooling fins as applicable. | 10 min | 47 |
| Frequency
Code:
----Q-S-A- | 11. | CHECK MOTOR AND REDUCER HOUSING. - Check motor and reducer housing for evidence of lubrication leakage. | 5 min | 47 |
| DA-3 DRIVE
ASSY (Cont.)

Frequency
Code:
----Q-S-A- | 12. | CHECK GREASE LEVEL AND BEARINGS. - Check grease level and bearings as follows: <div style="margin-left: 20px;"> 1. Check grease level of reducer. Add as required.
 2. Check bearings replace as necessary. </div> | 20 min | 47 |
| Frequency
Code:
-----A- | 13. | LUBRICATE MOTOR. - Lubricate motor as follows: <div style="margin-left: 20px;"> 1. Remove grease relief plug.
 2. For motors 1/2 HP and over, apply 2 pumps of GR-2. </div> | 4 min | 47 |

WARNING

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

U.S. Postal Service Maintenance Checklist	IDENTIFICATION											
	Work Code		Equipment Acronym				Class Code	Number		Type		
	0	3	T	O	W	V	E	S	A	0	0	3
Equipment Nomenclature TOWVEYOR (SPUR),TYPE C		Equipment Model ACCO				Bulletin Filename M98067AA		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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SYSTEM 14. **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.

Frequency Code: -----A- 3 min All

DA-3 DRIVE ASSY 15. **RUN MOTOR.** - Run motor for one minute 1 min 47

Frequency Code: -----A-

SYSTEM 16. **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.

Frequency Code: -----A- 1 min 47

DA-3 DRIVE ASSY 17. **REPLACE GREASE RELIEF PLUG.** - Replace motor grease relief plug. 1 min 47

Frequency Code: -----A-

18. **CHECK V-BELTS AND SHEAVES.** - Check V-belts and sheaves as follows: 2 min 47

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

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

2. Check sheave set screws and belt tension.

DA-3 DRIVE ASSY (Cont.) 19. **CLEAN V-BELTS AND SHEAVES.** - Clean foreign material from belts and sheaves by wiping with clean rags. 4 min 47

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

U.S. Postal Service Maintenance Checklist		IDENTIFICATION											
		Work Code		Equipment Acronym				Class Code		Number		Type	
		0	3	T	O	W	V	E	S	A	0	0	3
Equipment Nomenclature TOWVEYOR (SPUR), TYPE C		Equipment Model ACCO				Bulletin Filename M98067AA				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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Frequency Code: ----Q-S-A-	20.	CHECK CRITICAL SPEED SWITCH. - Check critical speed switch.	2 min	<u>47</u>
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Frequency Code: ----Q-S-A-	21.	CHECK FLEXIBLE COUPLING. - Check flexible coupling and set screws for wear and damage. Wipe clean.	5 min	<u>47</u>
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WARNING

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

Frequency Code: ----Q-S-A-	22.	CHECK AND CLEAN SPROCKET. - Check and clean sprocket as follows:	5 min	<u>47</u>
		1. Check sprocket for wear and alignment.		
		2. Wrench test set screws.		
		3. Clean sprocket with solvent and rags.		

BROKEN CHAIN SWITCH	23.	CHECK AND LUBRICATE BROKEN-CHAIN SWITCH. - Check and lubricate broken chain switch as follows:	5 min	<u>47</u>
Frequency Code: ----Q-S-A-		1. Check broken-chain switch mounting and alignment.		
		2. Lubricate necessary points.		
		3. Check for binding.		

BROKEN CHAIN SWITCH (Cont.)	24.	CLEAN DRIVE PIT. - With disconnect locked out, clean drive pit.	15 min	<u>47</u>
Frequency Code: ----Q-S-A-				

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		0	3	T	O	W	V	E	S	A	0	0	3
Equipment Nomenclature TOWVEYOR (SPUR),TYPE C		Equipment Model ACCO				Bulletin Filename M98067AA				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.

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| DS-1
DIVERTERS | 25. | CLEAN AND CHECK TRACK SWITCH PITS AND SWITCH HOUSING. - Clean and check track switch pits and switch housing as follows: | 10 min | <u>47</u> | |
| Frequency Code:
----Q-S-A- | | 1. Remove dirt and accumulated debris from track switch pits.

2. Clean switch housing using solvent and rags.

3. Check operation by unlatching switching blade. | | | |
| | | | | | |
| Frequency Code:
----Q-S-A- | 26. | CLEAN AND CHECK SOLENOID HOUSING, PLUNGER ROD, AND LINKAGE. - Clean and check solenoid housing, plunger rod, and linkage as follows: | 5 min | <u>47</u> | |
| | | 1. Using rags and solvent, clean solenoid housing, plunger rod, and linkage.

2. Check plunger rod for free movement.

3. Check solenoid mounting and switch blade. | | | |
| | | | | | |
| Frequency Code:
----Q-S-A- | 27. | LUBRICATE LINKAGE. - Lightly lubricate all linkage and pivot points on solenoid and brake assembly with HY-1. | 5 min | <u>47</u> | |
| | | | | | |
| PD-1
DETECTORS
Frequency Code:
----Q-S-A- | 28. | CLEAN AND LUBRICATE PITS, SWITCH HOUSING, ACTUATOR ARM, AND PIVOT POINTS. - Clean and lubricate pits, switch housing, actuator arm, and pivot points as follows: | 8 min | <u>47</u> | |
| | | 1. Clean pits.

2. Clean switch housing, actuator arms, and pivot points. | | | |

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	0	3	T	O	W	V	E	S	A	0	0	3	M
Equipment Nomenclature TOWVEYOR (SPUR), TYPE C		Equipment Model ACCO				Bulletin Filename M98067AA				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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3. Check freedom of movement.

4. Lube necessary points.

	IB-1 IDLER BOX	29.	CLEAN IDLER BOX. - Clean idler box as follows:	15 min	47
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Frequency Code:
----Q-S-A-

1. Remove all foreign material from Idler Box.

2. Wipe up excess lubricant.

	TU-1 TAKE-UP ASSY	30.	CHECK AND LUBRICATE TAKE-UP ASSEMBLY. - Check take-up assembly. Lubricate necessary parts.	10 min	47
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Frequency Code:
-----S-A-

	AT-1 TRACK	31.	CHECK TRACK - Check entire length of track for loose wear bars.	1 min/ 50 ft.	47
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Frequency Code:
-M-Q-S-A

	ZZ-1 ROUTE COMPLETION	32.	REPLACE COVER PLATES. - Replace all cover plates	10 min	47
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Frequency Code:
----Q-S-A-

	CLEAN-UP	33.	CLEAN- UP. -Ensure all tools, lubricants, rags, etc., are removed from the work area. Report all deficiencies to your supervisor.	3 min	All
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Frequency Code:
-M-Q-S-A-

WARNING

Be cautious when working around or on

U.S. Postal Service Maintenance Checklist		IDENTIFICATION											
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		0	3	T	O	W	V	E	S	A	0	0	3
Equipment Nomenclature TOWVEYOR (SPUR),TYPE C		Equipment Model ACCO				Bulletin Filename M98067AA				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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equipment when power has been applied.

SYSTEM	34.	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	35.	START-UP. - Perform normal start-up procedures as follows:	5 min	All
Frequency Code: -M-Q-S-A-		<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. 		