

# Newmar Corporation

PO Box 30  
Nappanee, IN 46550



WHEN YOU KNOW THE DIFFERENCE.

**TSB 603**

**June. 14, 2023**

# TECHNICAL SERVICE BULLETIN

## AFFECTED MODELS

2023 :: Dutch Star, Supreme Aire, New Aire, Mountain Aire, London Aire, Essex

## DESCRIPTION

This Solar issue only affects these models equipped with factory installed lithium batteries and factory installed Solar option 3L010 before 2023 eco 1211 (2/20/2023).

## ISSUE

It has been discovered in the field that the solar controller and remote do not interact well with the lithium package and errors out.

## UNITS AFFECTED

Please refer to the attached population list for affected units and VINs.

## CORRECTIVE ACTION

On affected units follow the attached work instructions to remove and replace the Solar controller and the solar remote panel.

## PARTS NEEDED

Item Description	Quantity	Newmar Part #
<b>MMPT solar controller</b>	1 ea.	166694
<b>MMPT Solar remote panel</b>	1 ea.	166695
<b>Adapter panel</b>	1 ea.	108200X
<b>Heat shrink 1/16"x4"</b>	2 ea.	036783A
<b>Fuse Maxi 30 amp</b>	1 ea.	036196
<b>Fuse holder Maxi</b>	1 ea.	026943
<b>Blue butt connector 6ga.</b>	1 ea.	37298
<b>Heat shrink 1/4"x4"</b>	2 ea.	036784A
<b>Pin Molex minifit</b>	8 ea.	036785

**FLAT RATE CODE:** TSB 603

**LABOR TIME:** 2.0 hrs.

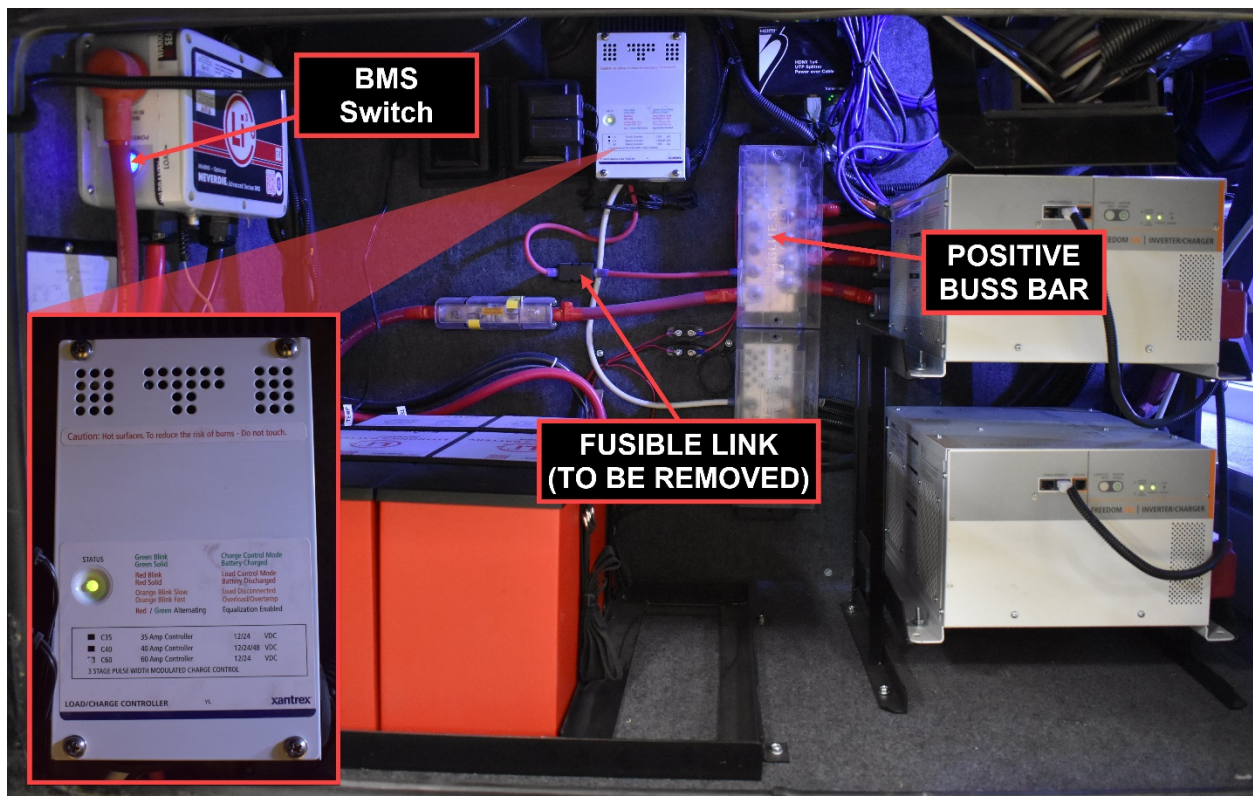
**IMPORTANT:** Please read this bulletin in its entirety prior to beginning any diagnosis or repairs.

**NOTICE:** Any technical information published in this bulletin is intended for use only by a qualified, Newmar-authorized service technician. Newmar is not responsible for the misuse of this information.

# Instructions to Remove a Xantrex C-60 Load/Charge Controller and C-40 Remote Panel and Replace with a Xantrex MPPT Charge Controller and Matching Solar Remote Panel

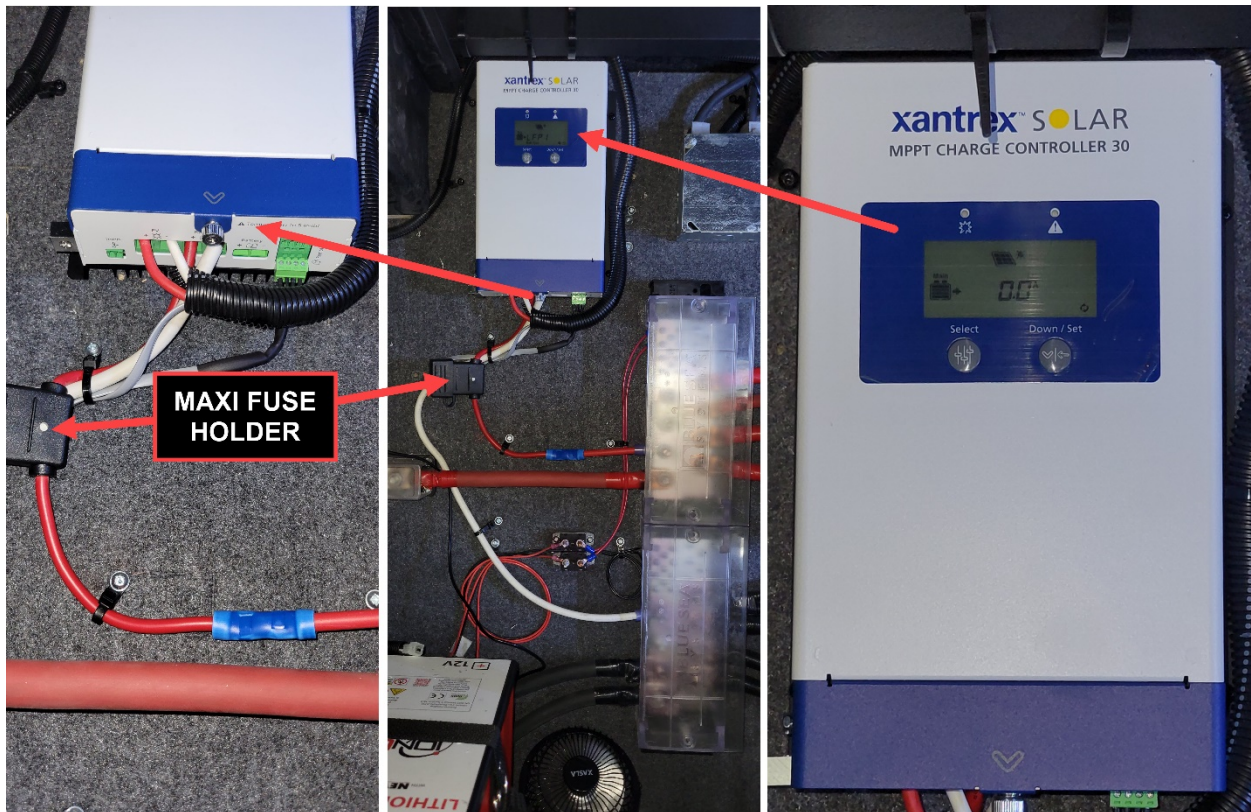
## Removing the Xantrex C-60 Load/Charge Controller

1. Unplug the unit and turn off the Battery Management System (BMS).
2. Cover the solar panels on the roof to prevent voltage from solar panels.
3. Remove the cover from the Load/Charge controller.
4. Remove the plastic cover from the positive buss bar.
5. Disconnect the red wire going to the solar controller from the buss bar.
6. Disconnect the battery ground and positive from the solar controller.
7. Remove the fusible link from the compartment backer and set it off to the side (you will need a piece of this wire later).
8. Disconnect the solar positive and negative wires, and tape them up to prevent arcing if the solar panel is receiving light.
9. Remove the remote wire from the old controller.
10. Remove the old solar load charge controller from the compartment backer.



## Installing the Xantrex MPPT Solar Charge Controller

- Install the new MPPT controller on the compartment backer in approximately the same location.
- Hook up the positive and negative solar wires to the new controller.
- Take the new fuse holder (provided with TSB parts) and cut the wire in half. Then hook up one end to the MPPT controller in the battery-positive connection and the other to the same terminal where the old red wire was removed. Make it longer by cutting off the wire from the old fusible link (use the piece of wire with the ring terminal), and use a large blue butt connector to extend the wire to hook up to the buss bar.
- Hook up the white 12-volt wire previously removed to the solar remote wire PV.
- Install the fuse in the red fuse holder.
- Reinstall the plastic cover over the positive buss bar.
- Uncover the solar panels.
- This completes the controller hook-up, except for the remote. Follow the steps below to remove the old remote panel and connect the new remote panel.

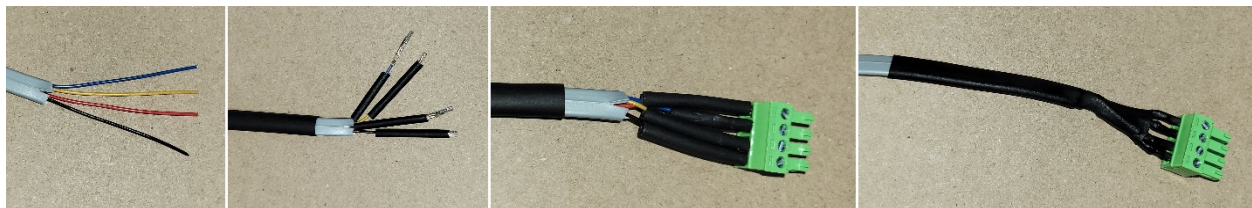


## Removing the Xantrex C-40 Remote Panel

- Go to the remote panel location (usually in the front overhead).
- Remove the screws mounting the panel, pull the panel out, and disconnect the communication wire.
- Cut both ends off the old communication wire (remote panel and controller).



- Strip back the insulation approximately 1.5 inches (1.5”).
- Separate the wires. Cut off the green and white wire, and leave the blue, yellow, red, and black wires at each end.
- Slip on a piece of the larger shrink tube.
- Cut the small shrink tube into four equal pieces, then slip a piece of the small shrink tube on each of the remaining wires.
- Take the terminal ends (provided with TSB parts), and crimp one onto each end of the remaining wires.
- Using the crimping tool, crimp the terminal end with no wire in it (to make the terminal smaller and flatter for a better fit into the terminal end).
- Take the new harness and remove the connector from the ends of the wire. Then put them on the old wiring, making sure the colors are in the correct location (just like the new harness) with terminal screws facing you and the terminal screws toward the bottom from left to right (red, blue, yellow, black), and repeat at both ends.
- Before plugging in, use heat to shrink the tubing over the small wires, and then slide the larger tubing up and shrink with heat.



## Installing the Xantrex MPPT Solar Remote Panel

- Slide the new remote panel into the filler panel (provided with TSB parts).
- Plug the terminal ends into the remote and the controller. The controller should be active.
- Center the new remote over the existing hole in the plastic panel, making sure it covers all old screw holes. While holding it in place, pre-drill one hole into the plastic panel with a 1/8" drill. Secure it with one screw, then drill the remaining holes, and install screws in panel.



This concludes the replacement procedure. Complete the following steps provided by Xantrex to properly program the settings for the temperature and battery type.










Source:

Document Name: Xantrex Solar MPPT Remote Panel (710-0010) Owner's Guide










Document Number: 975-1013-01-01 Rev 1

Document Date: Oct 2019

## To change the temperature unit setting:

1. Short press  to turn on the panel, if not already on.
2. Press  repeatedly until the BAT1  device screen is displayed.
3. Press  repeatedly until the temperature, the  icon, and the  icon are displayed.
4. Press and hold  for 5 seconds until the temperature value changes and flashes to *dE9C* (or *dE9F*).
5. Press  to browse the desired temperature unit (*dE9C* or *dE9F*), then press  to confirm your selection.

## To change the battery type setting:

1. Short press  to turn on the panel, if not already on.
2. Press  repeatedly until the BAT1  (or BAT2  ) device screen is displayed.
3. Press  repeatedly until the current battery type, the **Batt Type** icon, and the  icon are displayed.
4. Press and hold  for 5 seconds until the current battery type flashes.
5. Press  to browse the desired battery type (for more on battery types, see your charge controller's owner's guide), then press  to confirm your selection.

Prod#	VIN Number	Year	Brand	Type	Floor	Chassis	Date in	Date out
<b>USA UNITS</b>								
270189	3ALHC5DV3NDNH4006	2023	SA	CC	4530	FS	2/21/2022	3/3/2022
270190	1FVHC5DV0NHNH4023	2023	SA	CC	4065	FS	3/2/2022	3/10/2022
270194	1FVHC5DV8PHNL7728	2023	SA	CC	4530	FS	9/19/2022	9/27/2022
270195	1FVHC5DV0PHNW3952	2023	SA	CC	4530	FS	12/2/2022	12/19/2022
270198	1FVHC5DV1PHNW3944	2023	SA	CC	4051	FS	12/1/2022	12/16/2022
270202	1FVHC5DV8NHNH7709	2023	SA	CC	4530	FS	9/13/2022	9/22/2022
270203	1FVHC5DV6PHNL7730	2023	SA	CC	4575	FS	9/26/2022	10/5/2022
270205	1FVHC5DV5NHNH7716	2023	SA	CC	4051	FS	8/22/2022	8/30/2022
270207	1FVHC5DVXPHNL7729	2023	SA	CC	4530	FS	9/22/2022	10/3/2022
502008	4VZVU1R19PC091255	2023	LA	DP	4569	S	1/5/2022	1/18/2022
502019	4VZVU1R16PC091262	2023	LA	DP	4521	S	2/16/2022	2/28/2022
502026	4VZVU1R10PC093735	2023	LA	DP	4551	S	11/21/2022	12/1/2022
502027	4VZVU1R15PC093228	2023	LA	DP	4535	S	7/20/2022	7/29/2022
502028	4VZVU1R11PC094179	2023	LA	DP	4569	S	12/19/2022	1/12/2023
502029	4VZVU1R1XPC093533	2023	LA	DP	4521	S	10/4/2022	10/12/2022
502030	4VZVU1R19PC093457	2023	LA	DP	4569	S	9/12/2022	9/21/2022
502031	4VZVU1R13PC093700	2023	LA	DP	4569	S	11/15/2022	11/23/2022
502032	4VZVU1R14PC093737	2023	LA	DP	4535	S	12/14/2022	12/22/2022
502033	4VZVU1R10PC093881	2023	LA	DP	4535	S	12/19/2022	1/13/2023
502034	4VZVU1R11PC094263	2023	LA	DP	4551	S	1/24/2023	2/2/2023
502035	4VZVU1R10PC093900	2023	LA	DP	4551	S	12/13/2022	12/22/2022
502036	4VZVU1R15PC093553	2023	LA	DP	4551	S	10/4/2022	10/11/2022
502037	4VZVU1R16PC093643	2023	LA	DP	4551	S	10/25/2022	11/2/2022
502038	4VZVU1R17PC093229	2023	LA	DP	4551	S	7/19/2022	7/28/2022
502039	4VZVU1R12PC093428	2023	LA	DP	4551	S	8/31/2022	9/12/2022
502042	4VZVU1R15PC093701	2023	LA	DP	4551	S	11/17/2022	11/29/2022
502044	4VZVU1R17PC093554	2023	LA	DP	4551	S	10/6/2022	10/14/2022
502045	4VZVU1R13PC093289	2023	LA	DP	4569	S	7/25/2022	8/4/2022
502049	4VZVU1R1XPC093970	2023	LA	DP	4551	S	1/12/2023	1/20/2023
502054	4VZVU1R1XPC093290	2023	LA	DP	4579	S	8/9/2022	8/17/2022
502065	4VZVU1R10PC093640	2023	LA	DP	4569	S	10/13/2022	10/20/2022
502113	4VZVU1R16PC093853	2023	LA	DP	4551	S	12/14/2022	12/22/2022
610574	4VZAU1D98PC091260	2023	DS	DP	4325	S	1/20/2022	2/7/2022
610584	4UZFCHF7PCNW9001	2023	DS	DP	4071	FL	2/8/2022	2/16/2022
610594	4UZACHFE5PCNX0397	2023	DS	DP	3736	FL	2/15/2022	2/23/2022
610675	4VZAU1D1XPC093795	2023	DS	DP	4369	S	10/21/2022	10/31/2022
610684	4UZFCHF0PCUK2941	2023	DS	DP	4081	FL	9/2/2022	9/13/2022
610685	4UZFCHFEXPCUM0590	2023	DS	DP	4081	FL	10/20/2022	10/28/2022
610690	4UZFCHF7PCUH0416	2023	DS	DP	4369	FL	7/21/2022	8/2/2022
610696	4UZFCHF8PCUP6360	2023	DS	DP	4370	FL	1/20/2023	1/31/2023
610702	4VZAU1D15PC093297	2023	DS	DP	4369	S	7/26/2022	8/8/2022
610704	4UZFCHF2PCUJ6557	2023	DS	DP	4369	FL	9/7/2022	9/16/2022
610716	4UZFCHF1PCUM0588	2023	DS	DP	4071	FL	10/27/2022	11/15/2022
610719	4VZAU1D19PC093707	2023	DS	DP	4081	S	9/27/2022	10/6/2022
610720	4VZAU1D18PC093973	2023	DS	DP	4325	S	11/22/2022	12/1/2022



Prod#	VIN Number	Year	Brand	Type	Floor	Chassis	Date in	Date out
610723	4VZAU1D19PC093982	2023	DS	DP	4369	S	12/2/2022	12/19/2022
610724	4UZFCHFE7PCUN0848	2023	DS	DP	4370	FL	11/28/2022	12/13/2022
610725	4VZAU1D12PC093886	2023	DS	DP	4370	S	11/21/2022	12/1/2022
610727	4VZAU1D19PC094193	2023	DS	DP	4369	S	12/20/2022	1/13/2023
610728	4VZAU1D18PC093794	2023	DS	DP	4370	S	10/20/2022	10/28/2022
610760	4UZFCHFE7PCNX0388	2023	DS	DP	4370	FL	7/20/2022	7/29/2022
610765	4UZFCHFE2PCUH7662	2023	DS	DP	4369	FL	8/18/2022	8/25/2022
610771	4UZFCHFEXPCUH7666	2023	DS	DP	4081	FL	8/25/2022	9/2/2022
610783	4VZAU1D14PC093565	2023	DS	DP	4081	S	9/7/2022	9/16/2022
610785	4UZACHFE9PCUM9808	2023	DS	DP	3736	FL	10/6/2022	10/13/2022
610810	4VZAU1D1XPC093862	2023	DS	DP	4369	S	11/2/2022	11/21/2022
610811	4VZAU1D15PC093302	2023	DS	DP	4081	S	8/10/2022	8/18/2022
610845	4UZACHFE9PCUL1552	2023	DS	DP	3709	FL	9/8/2022	9/19/2022
610931	4VZAU1D17PC093544	2023	DS	DP	4081	S	9/13/2022	9/22/2022
610964	4VZAU1D12PC093743	2023	DS	DP	4326	S	10/17/2022	10/25/2022
711373	4VZAT1D97PC091253	2023	NA	DP	3545	S	1/17/2022	1/26/2022
711376	4UZACEFE2PCNS9028	2023	NA	DP	3547	FL	2/7/2022	2/14/2022
711378	4VZAT1D98NC091873	2023	NA	DP	3549	S	2/11/2022	2/21/2022
711395	4UZACEFEXPCUJ6556	2023	NA	DP	3543	FL	11/23/2022	12/2/2022
711396	4UZACEFE5PCUJ0941	2023	NA	DP	3547	FL	9/23/2022	10/4/2022
711397	4UZACEFEXPCUM0565	2023	NA	DP	3547	FL	12/12/2022	12/20/2022
711398	4VZAT1D19PC093208	2023	NA	DP	3547	S	8/5/2022	8/15/2022
711399	4VZAT1D19PC094343	2023	NA	DP	3549	S	2/27/2023	3/8/2023
711400	4VZAT1D1XPC093461	2023	NA	DP	3547	S	10/3/2022	10/11/2022
711401	4VZAT1D1XPC093556	2023	NA	DP	3543	S	10/10/2022	10/18/2022
711403	4UZACEFE6PCUK2936	2023	NA	DP	3547	FL	9/19/2022	9/27/2022
711404	4UZACEFE7PCUJ0939	2023	NA	DP	3547	FL	9/12/2022	9/21/2022
711405	4UZACEFE0PCUK5301	2023	NA	DP	3547	FL	10/24/2022	11/1/2022
711406	4UZACEFE9PCUH4945	2023	NA	DP	3547	FL	8/26/2022	9/6/2022
711407	4UZACEFE9PCUH2161	2023	NA	DP	3547	FL	8/2/2022	8/11/2022
711409	4UZACEFE7PCUH4944	2023	NA	DP	3543	FL	8/18/2022	8/26/2022
711410	4UZACEFE8PCUM0564	2023	NA	DP	3545	FL	1/11/2023	1/19/2023
711412	4VZAT1D13PC093558	2023	NA	DP	3543	S	10/14/2022	10/24/2022
711413	4UZACEFE0PCUH0413	2023	NA	DP	3549	FL	7/22/2022	8/3/2022
711418	4VZAT1D10PC093405	2023	NA	DP	3549	S	8/22/2022	8/30/2022
711419	4VZAT1D14PC093231	2023	NA	DP	3549	S	8/11/2022	8/19/2022
711421	4UZACEFE2PCUH0414	2023	NA	DP	3547	FL	8/17/2022	8/26/2022
711422	4UZACEFE4PCUK2935	2023	NA	DP	3543	FL	9/9/2022	9/20/2022
711434	4VZAT1D10PC093209	2023	NA	DP	3547	S	8/12/2022	8/22/2022
711454	4UZACEFE0PCUH2162	2023	NA	DP	3545	FL	8/15/2022	8/23/2022
711455	4VZAT1D18PC093460	2023	NA	DP	3545	S	9/13/2022	9/22/2022
711458	4VZAT1D16PC093537	2023	NA	DP	3543	S	10/6/2022	10/14/2022
711459	4VZAT1D18PC093538	2023	NA	DP	3543	S	10/5/2022	10/13/2022
711461	4VZAT1D11PC093493	2023	NA	DP	3543	S	9/28/2022	10/7/2022
711462	4VZAT1D15PC093884	2023	NA	DP	3547	S	11/2/2022	11/21/2022
711473	4VZAT1D1XPC093430	2023	NA	DP	3543	S	9/8/2022	9/19/2022

Prod#	VIN Number	Year	Brand	Type	Floor	Chassis	Date in	Date out
711474	4UZACEFE3PCUJ0940	2023	NA	DP	3547	FL	9/21/2022	9/29/2022
711480	4UZACEFE8PCUJ6555	2023	NA	DP	3543	FL	11/15/2022	11/23/2022
711488	4UZACEFE9PCUR3547	2023	NA	DP	3543	FL	1/31/2023	2/7/2023
711508	4UZACEFE2PCUN0409	2023	NA	DP	3543	FL	2/15/2023	2/27/2023
801523	4VZVU1R10PC091256	2023	EX	DP	4521	S	1/12/2022	1/25/2022
801524	4VZVU1E93PC091263	2023	EX	DP	4595	S	2/14/2022	2/23/2022
801528	4VZVU1R19PC094222	2023	EX	DP	4521	S	1/18/2023	1/26/2023
801530	4VZVU1R10PC093203	2023	EX	DP	4595	S	7/13/2022	7/20/2022
801531	4VZVU1R17PC093456	2023	EX	DP	4521	S	10/3/2022	10/11/2022
801532	4VZVU1R14PC093639	2023	EX	DP	4551	S	9/13/2022	9/22/2022
801535	4VZVU1R10PC093427	2023	EX	DP	4551	S	8/23/2022	8/31/2022
801536	4VZVU1R18PC094177	2023	EX	DP	4569	S	1/10/2023	1/18/2023
801540	4VZVU1R19PC093426	2023	EX	DP	4551	S	8/29/2022	9/7/2022
801541	4VZVU1R1XPC093967	2023	EX	DP	4551	S	11/22/2022	12/2/2022
801547	4VZVU1R13PC093552	2023	EX	DP	4521	S	9/7/2022	9/16/2022
801548	4VZVU1R16PC093402	2023	EX	DP	4521	S	8/16/2022	8/24/2022
801556	4VZVU1R18PC093790	2023	EX	DP	4551	S	10/19/2022	10/26/2022
905012	4VZVU1E92PC091254	2023	MA	DP	4591	S	11/22/2021	12/6/2021
905019	4VZVU1E91PC091259	2023	MA	DP	4118	S	1/27/2022	2/11/2022
905029	4VZVU1E15PC093459	2023	MA	DP	4118	S	9/2/2022	9/14/2022
905030	4VZVU1E10PC094180	2023	MA	DP	4118	S	12/2/2022	12/19/2022
905031	4VZVU1E12PC093404	2023	MA	DP	4118	S	8/17/2022	8/25/2022
905032	4VZVU1E19PC093738	2023	MA	DP	4118	S	10/10/2022	10/18/2022
905033	4VZVU1E1XPC093490	2023	MA	DP	4551	S	9/27/2022	10/5/2022
905034	4VZVU1E10PC093854	2023	MA	DP	4551	S	1/13/2023	1/23/2023
905035	4VZVU1E14PC093646	2023	MA	DP	4535	S	11/18/2022	11/30/2022
905036	4VZVU1E17PC093902	2023	MA	DP	4535	S	1/23/2023	2/1/2023
905037	4VZVU1E1XPC093702	2023	MA	DP	4591	S	12/12/2022	12/20/2022
905050	4VZVU1E11PC093555	2023	MA	DP	4118	S	9/14/2022	9/23/2022
905052	4VZVU1E10PC093644	2023	MA	DP	4551	S	10/24/2022	11/1/2022
905053	4VZVU1E16PC093230	2023	MA	DP	4521	S	8/4/2022	8/12/2022
905055	4VZVU1E17PC093205	2023	MA	DP	4551	S	8/5/2022	8/15/2022
905058	4VZVU1E16PC093535	2023	MA	DP	4118	S	9/8/2022	9/19/2022
905059	4VZVU1E18PC094265	2023	MA	DP	4118	S	12/15/2022	1/11/2023
905062	4VZVU1E14PC094456	2023	MA	DP	4118	S	2/15/2023	2/27/2023
905069	4VZVU1E10PC094342	2023	MA	DP	4118	S	1/25/2023	2/3/2023
905088	4VZVU1E16PC094524	2023	MA	DP	4118	S	2/28/2023	3/8/2023
<b>CANADIAN UNITS</b>								
711415	4VZAT1D12PC093292	2023	NA	DP	3543	S	8/4/2022	8/12/2022
711452	4VZAT1D14PC093357	2023	NA	DP	3545	S	8/16/2022	8/24/2022
711453	4VZAT1D14PC093293	2023	NA	DP	3543	S	8/19/2022	8/29/2022
801550	4VZVU1R11PC093968	2023	EX	DP	4551	S	12/16/2022	1/12/2023