



Customer Bulletin

Commercial Products

October 08, 2020

Hybrid 48VDC Fuse Kit Introduction

Greensmaster® eTriFlex 3360/3370

Bulletin Type Information Only

Status Final Release

Affected Units

Model Number(s)	Serial Number(s)
04580	400000000 through 499999999
04590	400000000 through 499999999

Situation Important Information

The hybrid 48VDC system for the Greensmaster eTriFlex 3360 and 3370 utilizes several specialty fuses that are not readily available from automotive parts stores.

Corrective Action Read and Understand

A Hybrid 48VDC Fuse Kit (Part Number 139-8482) was created to have a variety of the fuses for the 48VDC system used on the Greensmaster eTriFlex 3360 and 3370 machines. While the majority of the 48VDC-system fuses are the same between models, there are some different ones used. This is a good kit to have on-hand.

Fuse Description Tables:

Attached to this bulletin are tables that contain details for the following:

- Fuses contained in the Hybrid 48VDC Fuse Kit, including information about fuse types, voltage, amperage, and circuits that they protect on the machine.
- Information about the 12VDC fuses for both eTriFlex machines.

The 12VDC system fuses are **not included** in the kit, as they are available from local automotive parts stores. All the 12VDC system fuses are the MINI / ATO automotive style fuse.

12VDC and 48VDC Fuse Differences:

The fuses for each circuit are not interchangeable. While some of the 12VDC and the 48VDC fuses may physically look the same, the way that they react in a circuit is not the same. The voltage rating on a fuse is how much voltage it will consistently withstand after blowing without sustaining an arc across the fuse. The voltage rating is the highest circuit voltage that the fuse will safely and definitely interrupt.

Refer to the traction unit *Service Manual* for fuse information and the location of each fuse on the eTriFlex machines.

Safety Awareness

Follow reasonable and customary safety precautions.

Parts

Currently available

Toro Part No.	Part Description
139-8482	Hybrid 48VDC Fuse Kit

References

Find the latest operator's manuals, service manuals, schematics, parts catalogs, and customer bulletins at www.Toro.com.

Resource	Search Term
<i>Service Manual</i>	19239SL

Fuse Description Tables

Hybrid 48VDC Fuse Kit

Part Number	Quantity in Kit	Amperage	Voltage (VDC)	Color	Model	Machine Circuit	Fuse Type
117-4720	1	3	80	Violet	04590	TEC 2401 Logic Power Circuit	FKS / ATO
117-4722	1	5	80	Tan	04580/04590	48VDC Logic Power Circuit	FKS / ATO
117-4724	5	10	80	Red	04580/04590	Lift/Lower Actuator Circuits	FKS / ATO
117-4728	1	30	80	Green	04580/04590	Steering Circuit	FKS / ATO
122-0255	3	35	58	Brown	04580/04590	eReel Motor Circuit, 3WD Motor	MAXI
137-7707	2	60	70	Yellow	04580/04590	Front Traction Motor Circuit	MIDI
137-7708	1	100	58	Blue	04580	Generator Circuit	MIDI
137-7722	1	150	70	Orange	04580	Hybrid System - Main Power	MEGA
139-8414	1	175	70	White	04590	Hybrid System - Main Power	MEGA

12VDC Circuit Fuses (Not included in the Hybrid 48VDC Fuse Kit)

Part Number	Amperage	Voltage (VDC)	Color	Model	Machine Circuit	Fuse Type
121-8861	2	32	Gray	04580/04590	TEC Controller Logic Power	Mini ATM
121-8861	2	32	Gray	04580/04590	Telematics Port	Mini ATM
121-8865	7.5	32	Brown	04580/04590	TEC 5004 Output Circuits	Mini ATM
121-8866	10	32	Red	04580/04590	Park Brake Actuator	Mini ATM
121-8867	15	32	Blue	04580	Charging System	Mini ATM
121-8867	15	32	Blue	04580/04590	12VDC System	Mini ATM