



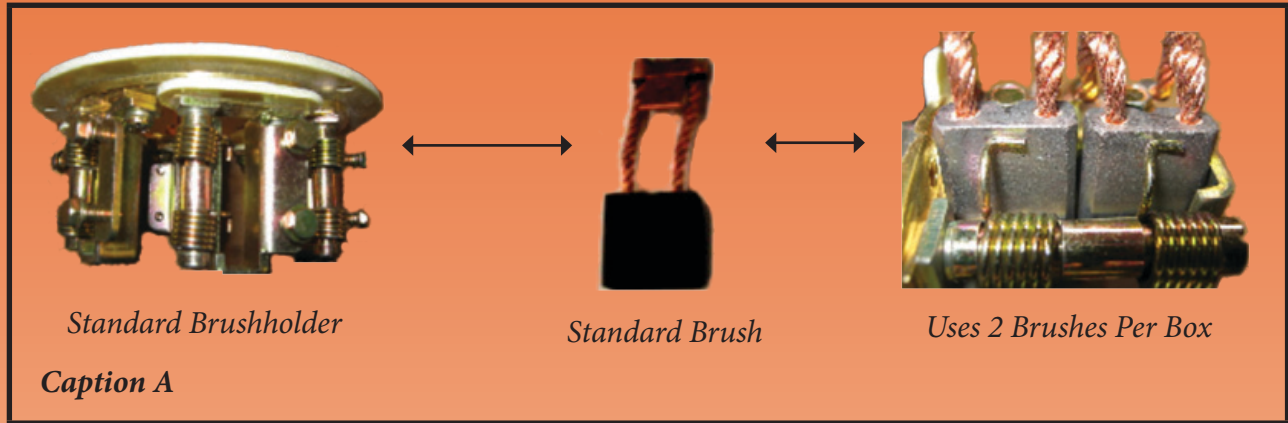
*Heavy Duty 32V & 64V Starter For
Automatic Start Stop Systems*

PowerRail P/N E1990333AESS - New

PowerRail P/N E1990333AESS-UX Unit Exchange

(Unit Exchange for AESS Upgrade)

The Problem: AESS (automatic start stop systems) decrease life on starter due to the drastic increase in duty cycles. Starters are lasting under 1 year due to the AESS application (as shown in Caption A).



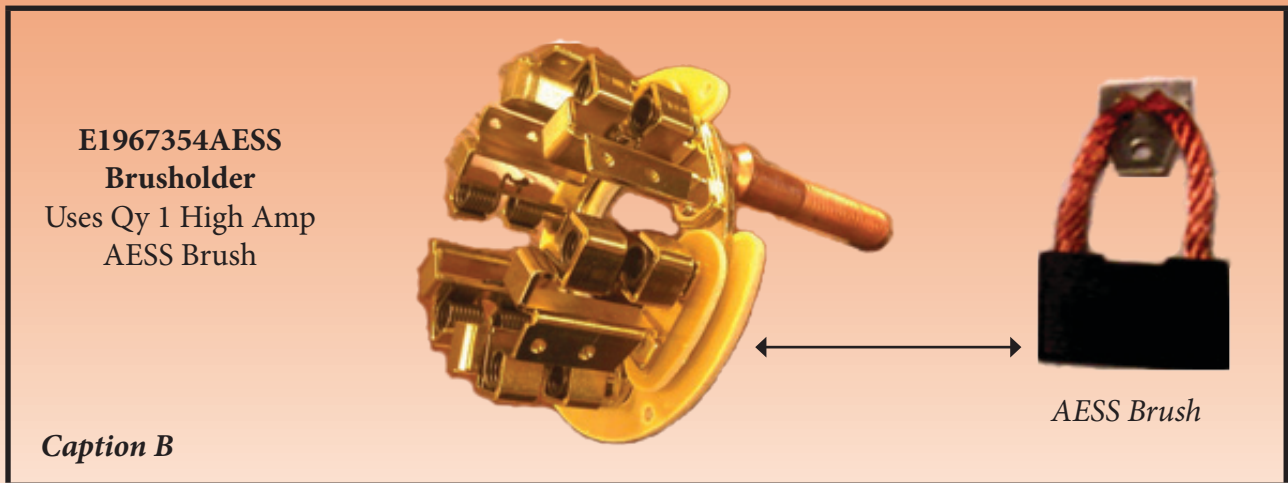
Standard Brushholder

Standard Brush

Uses 2 Brushes Per Box

Caption A

The Solution: PowerRail has developed the AESS Starter, P/N E1990333AESS, which will have a longer life than traditional starters (as shown in Caption B).



*E1967354AESS
Brushholder
Uses Qy 1 High Amp
AESS Brush*

AESS Brush

Caption B

www.ePowerRail.com™

www.ePowerRail.com™



AAR M-1003
Quality

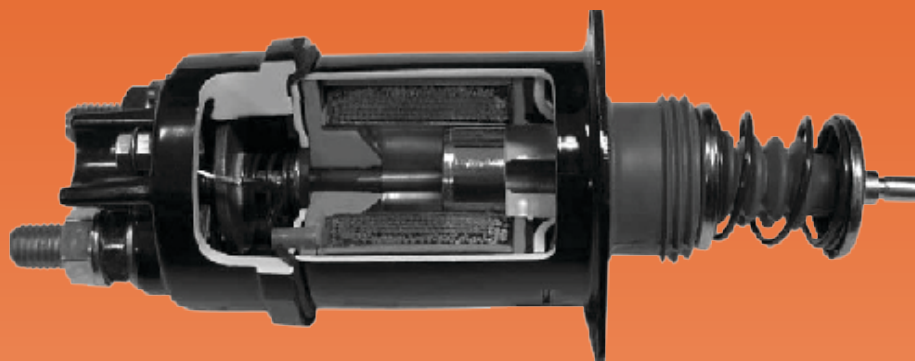
PowerRail Distribution Inc.
205 Clark Road Duryea, PA 18642
Phone 570-883-7005
Sales@EPowerRail.com



AAR M-1003
Quality



Modified Solenoid - Patented SSL Technology



New Solenoid – SSL (Semi Solid Link) Design provides
Higher Contact Weld Breaking Force

Reduced Stuck Contact Failures caused by Low System Voltage

Proven and Patented Design

Plunger impacts the link which produces the Slider Hammer Effect

OCP (Over Crank Protection) utilizes a temperature-sensitive switch that shuts off, or “opens” the cranking circuit when starter temperature reaches a predetermined limit. The OCP switch automatically resets once the starter has cooled to a safe operating temperature. This technology is of vital benefit during extended cranking cycles or situations where engine problems prevent easy starting and in cases of low battery voltage or high cranking circuit resistance.

In addition our patented Semi-Solid Link Solenoid, which helps eliminate solenoid contact welding — and the resulting no-crank or over-crank conditions — commonly associated with low electrical system voltage. The SSL design utilizes a “slide hammer” effect that disconnects the contact disk from the electrical terminals to eliminate costly “stuck contact” situations.

New SSL Solenoid



Old Solenoid

www.ePowerRail.com™

www.ePowerRail.com™



AAR M-1003
Quality

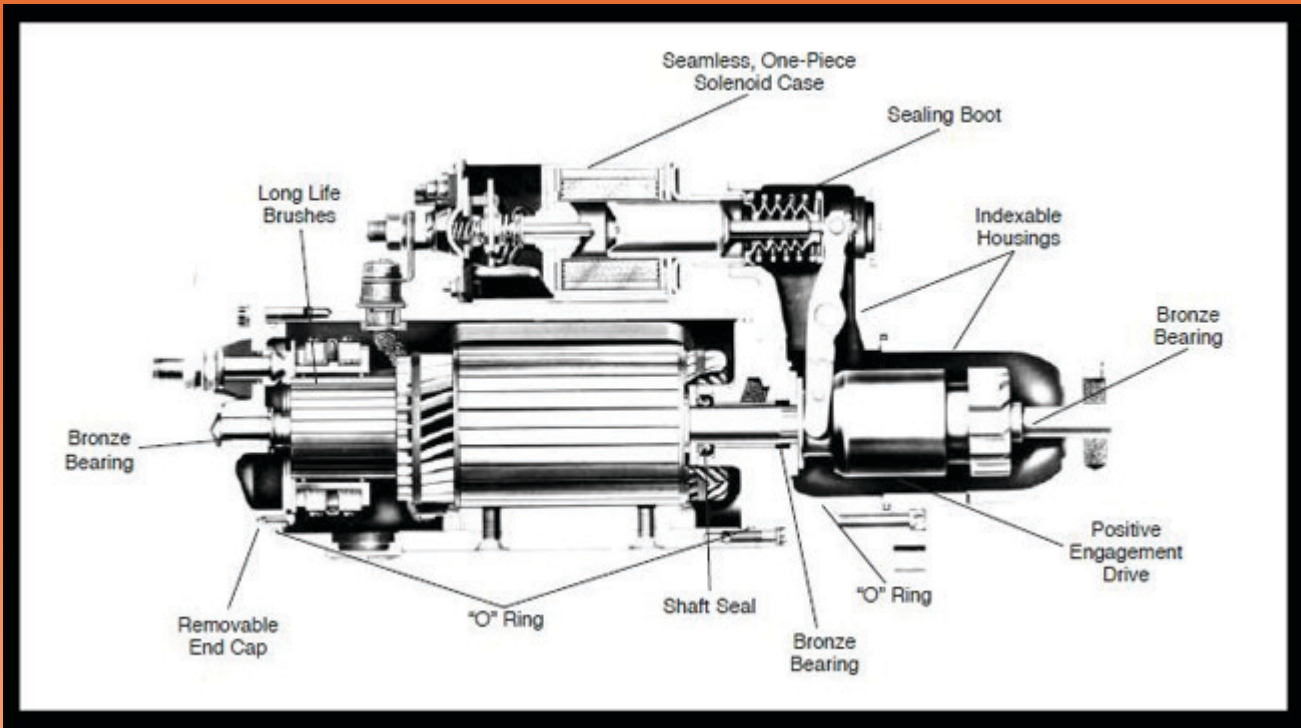
PowerRail Distribution Inc.
205 Clark Road Duryea, PA 18642
Phone 570-883-7005
Sales@EPowerRail.com



AAR M-1003
Quality



Modified Armature - Extra Copper For Higher Heat Transfer

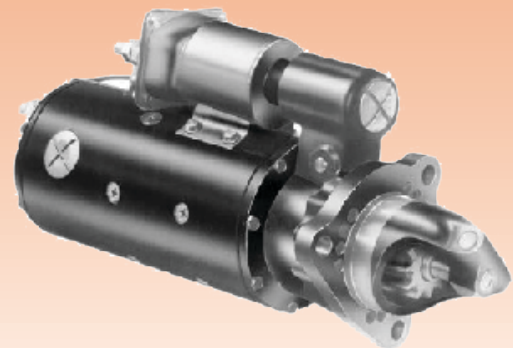


Replaces The Following OEM References

OEM Reference	Description
16184402/8384834/1990333/10478828	32 Volt Standard Series
10478827/40069492	32 Volt SD70 Series
1109988/1109999/1109280	32 Volt 710 Series
1109629/1993740/10478829/8428605	64 Volt Standard Series

PowerRail AESS Starter P/N E1990333AESS

- Single Brush Design Brushholder
- Single Brush more copper content
- SSL Solid Link Solenoid
- Armature Modification
- PowerRail True Blue Quality



www.ePowerRail.com™

www.ePowerRail.com™



PowerRail Distribution Inc.
205 Clark Road Duryea, PA 18642
Phone 570-883-7005
Sales@EPowerRail.com

