

# KELLY AEROSPACE LYCOMING STARTERS

## KELLY AEROSPACE X-DRIVE STARTERS

The X-Drive starter is newest in the light weight, high torque starter lineup from Kelly Aerospace. Targeted toward users that want one of the industries lightest but most powerful starter on the market, the X-Drive delivers the same high torque, low current draw, and superior duty cycle that had previously been available only to E-Drive customers. X-drive uses No Bendix, the same powerful permanent magnet motor as the E-drive, and is the lightest starter available. The X-Drive starter is FAA/PMA'd and allows Kelly Aerospace to service virtually all OEM/aftermarket Lycoming applications. Spin Better, not faster!





Only 7.6 lbs.  
Lightest Starter Available

### Features:

- Weight: 7.6 lbs. – Lightest Starter Available
- No Bendix
- Lowest Inrush & Operating Current Draw in the industry
- FAA/PMA
- Maintenance Free
- Aviation Solenoid
- No Automotive parts used
- All metal gear train
- Silver plated contacts reduce electrical arcing damage during engagement.
- 33% Higher Torque
- Superior Duty Cycle
- Environmentally tested under the most extreme conditions
- Available in Left or Right Solenoid mounts.

### APPLICATION DATA GUIDE

 <p><b>FIGURE 1</b></p>	<b>Solenoid to the Left: (X-Drive series: see figure 1)</b>	
	SRZ-9021 (12 Volt - 149 tooth)	SRZ-9022 (12 Volt - 122 tooth)
 <p><b>FIGURE 2</b></p>	<b>Solenoid to the Right: (X-Drive series: see figure 2)</b>	
	SRZ-9031 (12 Volt - 149 tooth)	SRZ-9032 (12 Volt - 122 tooth)
	SRB-9031 (24 Volt - 149 tooth)	SRB-9032 (24 Volt - 122 tooth)
	<i>(12/14 pitch works on a 149 tooth ring gear &amp; 10/12 pitch works on a 122 tooth ring gear.)</i>	

Description	Part No	Price
Kelly X-Drive Starter SRB-9021	08-06271	.
Kelly X-Drive Starter SRB-9022	08-06272	.
Kelly X-Drive Starter SRB-9031	08-06273	.
Kelly X-Drive Starter SRB-9032	08-06274	.
Kelly X-Drive Starter SRZ-9021	08-06275	.
Kelly X-Drive Starter SRZ-9022	08-06276	.
Kelly X-Drive Starter SRZ-9031	08-06277	.
Kelly X-Drive Starter SRZ-9032	08-06278	.

### CROSS-REFERENCE CHART

Sky-Tec P/N	X-Drive P/N	Sky-Tec P/N	X-Drive P/N
122-12LS	SRZ-9022	149-12PM	SRZ-9031
122-12PM	SRZ-9032	149-24HT	SRB-9021
122-24LS	SRB-9022	149-24LS	SRB-9021
122-24PM	SRB-9032	149-24PM	SRB-9031
149-12LS	SRZ-9021		

EP

## KELLY AEROSPACE E-DRIVE STARTERS



Immune to Kick-Back Damage

There is no longer a need to replace overload devices (shear pins) after a kick-back event. The E-drive is unaffected by kick-backs saving hours of service time and replacement costs. The engine and starter are both protected by a proprietary torque limiting clutch drive design.

Solid-State Solenoid Control

The Printed Circuit Board (PCB) solenoid controller uses the latest in Surface Mount Technology (SMT) components. Each control is environmentally hardened and tested under the most extreme conditions. The field serviceable unit eliminates mechanical contacts for improved reliability and longer life. Monitoring the health status of the engine, starter, battery, and operational duty cycle will soon become a reality through enhancements to our proprietary solenoid control system.

Design & Source Control on All Components  
Kelly Aerospace believes in engineering products specifically for the aviation industry and has design and source control over all components. Absolutely no automotive aftermarket parts are used. Why trust a part supplied from the automotive market where design details frequently change?

**2 YEAR UNLIMITED WARRANTY - NO CORE CHARGE**



- High Performance Armature
- Increased commutator bar length
- Thin laminations
- High quality magnetic alloy
- 12 & 24 volt winding configuration
- Redesigned Brush Holder
- Metal construction for heat sinking
- Offset brush position for increased brush contact area
- Robust spring design
- High performance field housing
- Rare earth neodymium magnets
- Small package
- Stronger flux field
- Improved temperature stability
- 9.5 lbs.



- Starter system designed for maximum performance.
- Drive assembly integrates proprietary pinion gear, clutch, torque limiter, and actuator in one complete module.
- Available for coarse and fine pitch ring gears, clock-wise and counter-clock-wise rotation.
- No periodic service or recurring maintenance required.
- 9.5 lbs.

### APPLICATION CHART

**E-Drive Number - Approved Alternative for the following:**

ERB-8011	ERB-8012	ERZ-8011	ERZ-8012
MHB-4001	MHB-4015	MZ-4205	MZ-4204
MHB-4002	MHB-4002	MZ-4206	MZ-6204
MHB-4003	MHB-6001	MZ-4207	
MHB-4005		MZ-4217	
MHB-4007		MZ-4218	
MHB-4010		MZ-4219	
MHB-4012		MZ-4221	
MHB-4013		MZ-4224	
MHB-4014		MZ-4222	
MHB-4016		MZ-4223	
MHB-4017		MZ-4225	
MHB-4019		MZ-6222	
MHB-4020		MZ-6224	

MODEL	DESCRIPTION	PART NO.	PRICE
ERZ-8011	Clockwise rotation, 12 Volt, 149 tooth - 12/14 Pitch Gear	07-01102	.
ERZ-8012	Clockwise rotation, 12 Volt, 122 tooth - 10/12 Pitch Gear	07-01103	.
ERB-8011	Clockwise rotation, 24 Volt, 14 9 tooth - 12/14 Pitch Gear	07-01099	.
ERB-8012	Clockwise rotation, 24 Volt, 122 tooth-10/12 Pitch Gear	07-01101	.