

ICT Billet 551587-LS01-3

ICT Billet Alternator Relocation Bracket Kit User Manual

Model: 551587-LS01-3

PRODUCT OVERVIEW

The ICT Billet Alternator Relocation Bracket Kit (Model 551587-LS01-3) is designed to relocate the alternator on various GM LS series engines. This kit is compatible with truck/SUV (or LS3/L99 Camaro) crank pulleys and 1998-2002 LS1 Camaro (or LS3) water pumps. It is manufactured from aerospace-grade USA billet aluminum, ensuring durability and precise fitment.

This kit includes the necessary alternator bracket components and mounting hardware for installation.

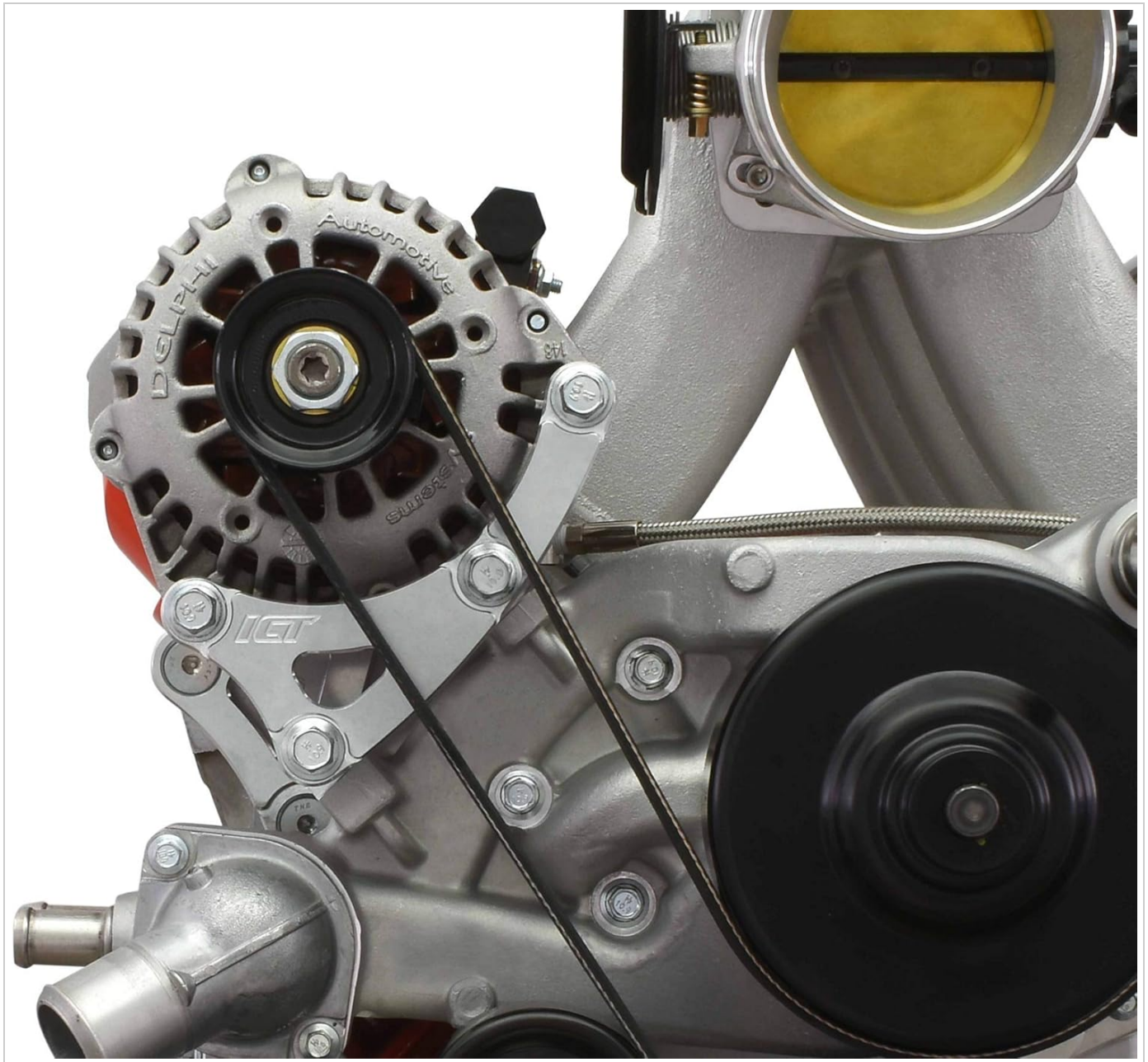


Figure 1: The ICT Billet Alternator Relocation Bracket Kit installed on an LS engine, showing the relocated alternator and belt routing.

Kit CONTENTS

Verify all components are present before beginning installation:

- Upper Alternator Bracket
- Lower Alternator Bracket
- Mounting Hardware (various bolts and spacers)

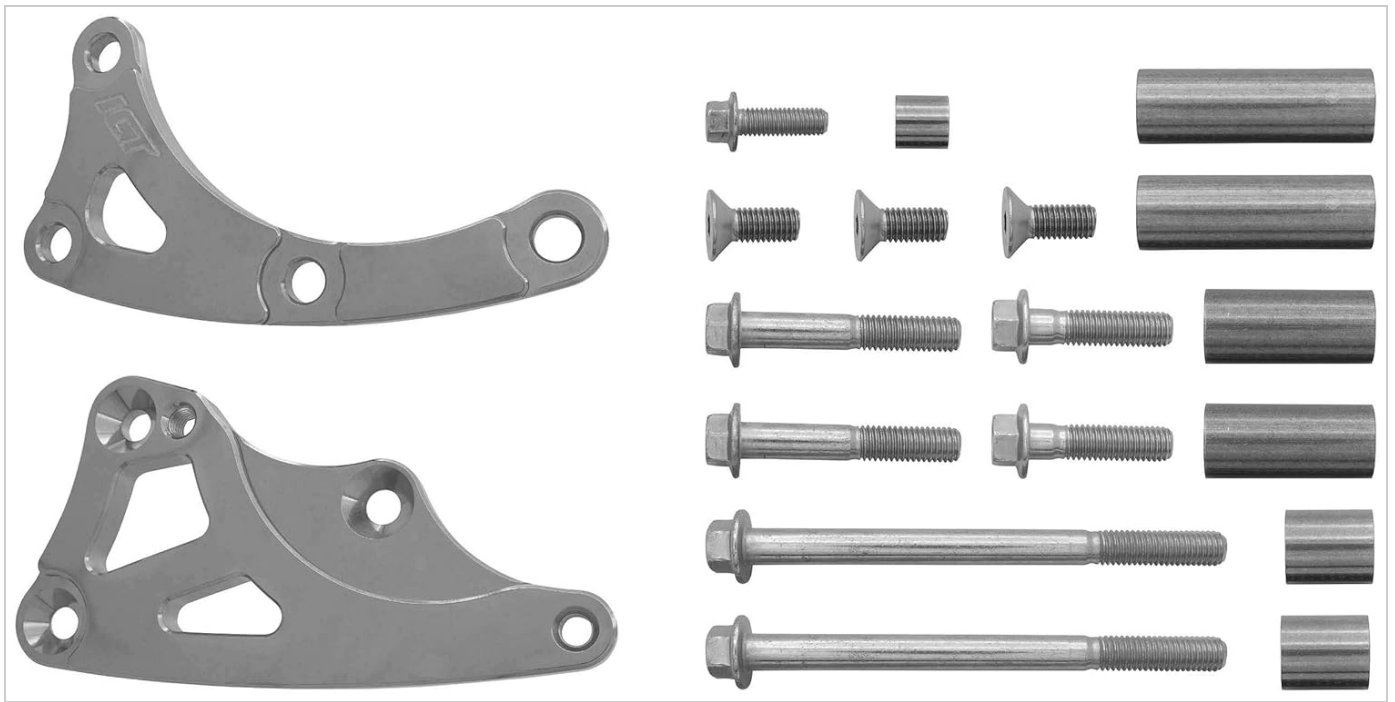


Figure 2: All components included in the ICT Billet Alternator Relocation Bracket Kit, showing the two main bracket pieces and various bolts and spacers.

COMPATIBILITY AND REQUIREMENTS

This bracket kit is designed for specific engine and accessory configurations:

- **Engine Compatibility:** All GM LS series engines.
- **Crank Pulley Compatibility:** Truck/SUV crank pulley or LS3/L99 Camaro crank pulley.
- **Water Pump Compatibility:** 1998-2002 LS1 Camaro water pump or LS3 water pump.

It is crucial to ensure your engine's crank pulley spacing matches the requirements for proper belt alignment and function. Refer to the LS Crank Spacing Guide for detailed measurements.

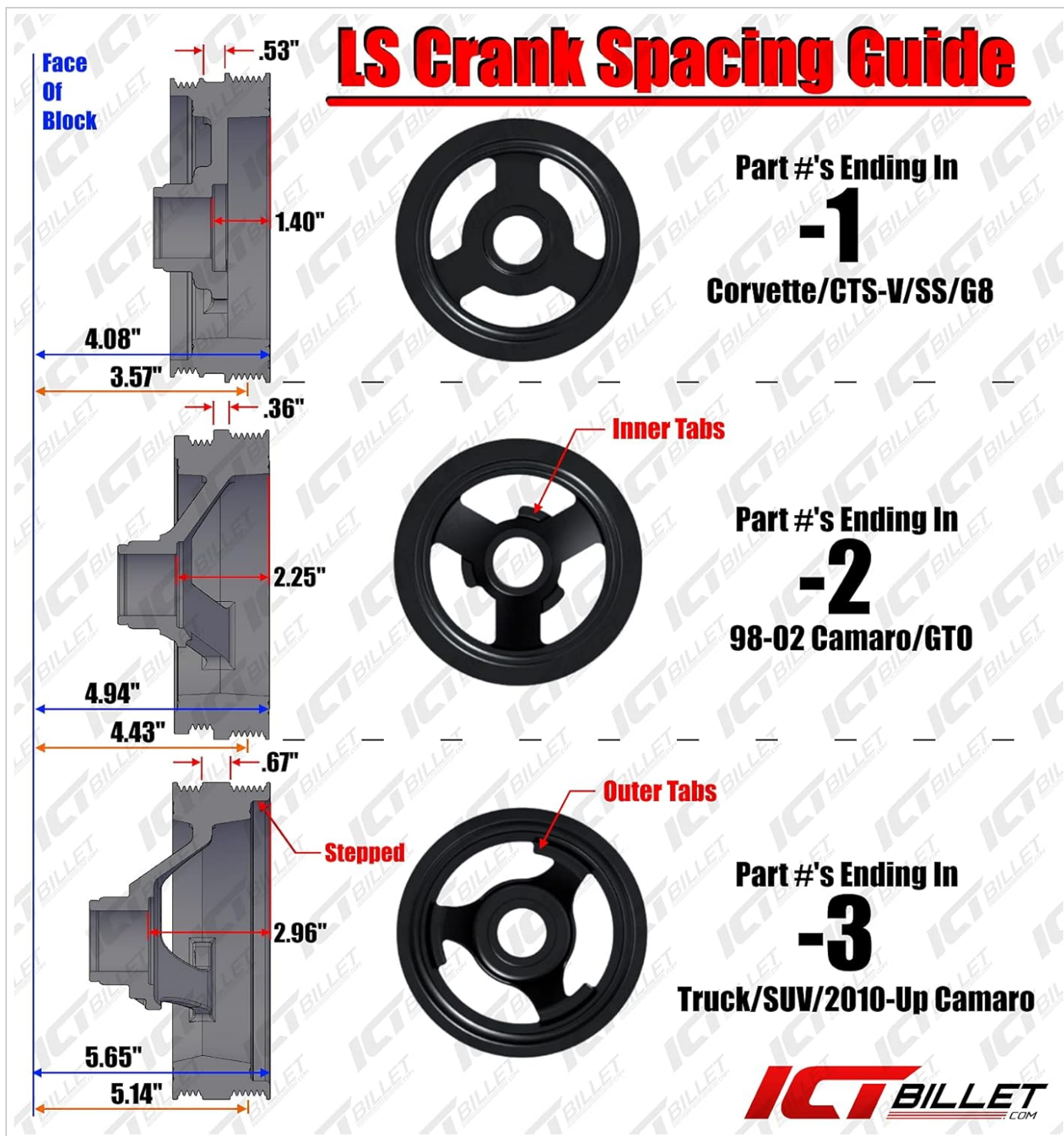


Figure 3: LS Crank Spacing Guide illustrating the three common crank pulley types (Corvette/CTS-V/SS/G8, 98-02 Camaro/GTO, and Truck/SUV/2010-Up Camaro) with their respective offset measurements from the face of the engine block.

INSTALLATION INSTRUCTIONS

Professional installation is recommended. Ensure the engine is cool and disconnected from the battery before beginning any work.

- 1. Preparation:** Disconnect the negative battery terminal. If applicable, remove the existing alternator and any brackets that will be replaced by this kit.
- 2. Bracket Mounting:** Attach the lower alternator bracket to the designated mounting points on the engine block. Use the provided hardware and ensure proper torque specifications are met (refer to a service manual for your specific engine).
- 3. Alternator Installation:** Mount the alternator onto the new brackets. Secure it using the provided bolts and spacers.

Ensure the alternator is seated correctly and can pivot freely if necessary for belt tensioning.

- 4. **Belt Routing:** Route the serpentine belt according to the engine's accessory drive system. Ensure the belt is properly seated on all pulleys, including the relocated alternator pulley.
- 5. **Tensioning:** Adjust the belt tensioner to achieve the correct belt tension. A properly tensioned belt should have minimal deflection.
- 6. **Final Checks:** Double-check all bolted connections for tightness. Reconnect the battery terminal. Start the engine and verify proper alternator function and belt alignment. Listen for any unusual noises.

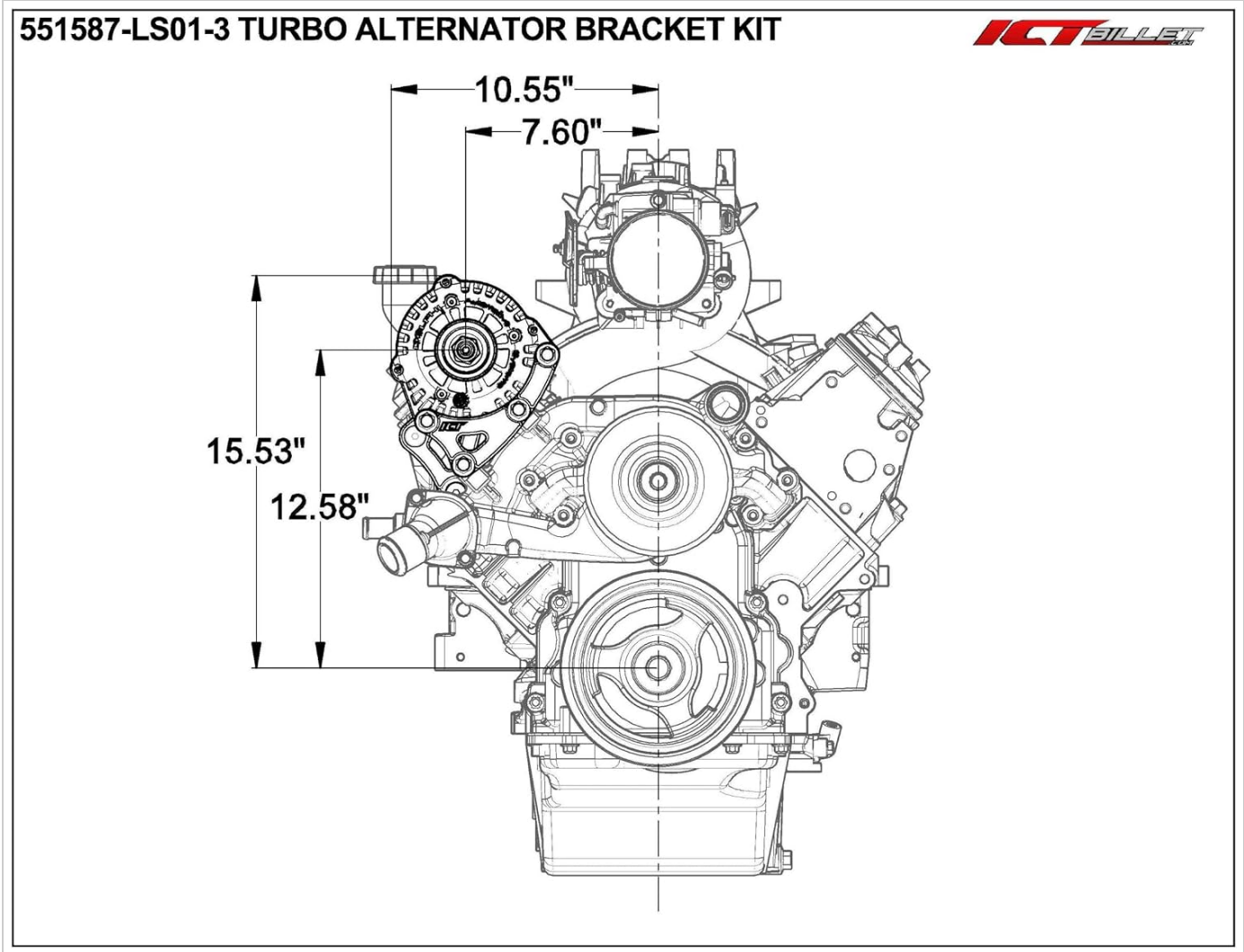


Figure 4: Technical drawing showing the installed bracket kit on an LS engine, including critical dimensions for clearance and fitment, such as the alternator's position relative to the engine block.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Belt Squeal/Noise	Incorrect belt tension, misaligned pulleys, worn belt.	Check and adjust belt tension. Verify all pulleys are aligned. Inspect belt for wear and replace if necessary. Ensure correct crank pulley spacing.
Alternator Not Charging	Loose electrical connections, faulty alternator, incorrect belt tension.	Inspect all electrical connections to the alternator. Test alternator output. Verify belt tension.

Problem	Possible Cause	Solution
Bracket Interference	Incorrect component selection (e.g., steam port kit), improper installation.	Verify all components (crank pulley, water pump, steam port kit) are compatible with this bracket. Re-check installation steps and clearances.

SPECIFICATIONS

- **Model Number:** 551587-LS01-3
- **Material:** Aerospace Grade USA Billet Aluminum
- **Item Weight:** 1.98 pounds
- **Package Dimensions:** 7.91 x 4.33 x 0.98 inches
- **Country of Origin:** USA
- **Compatibility:** GM LS series engines with Truck/SUV (or LS3/L99 Camaro) crank pulley and 1998-2002 LS1 Camaro (or LS3) water pump.

MAINTENANCE

This alternator relocation bracket kit requires minimal maintenance. Periodically inspect the following:

- **Fasteners:** Check all mounting bolts for tightness, especially after the first few hundred miles of operation. Re-torque if necessary.
- **Belt Condition:** Inspect the serpentine belt for cracks, fraying, or excessive wear. Replace the belt as part of routine engine maintenance if needed.
- **Bracket Condition:** Visually inspect the aluminum brackets for any signs of damage or corrosion. Clean with a mild automotive cleaner if desired.

WARRANTY AND SUPPORT

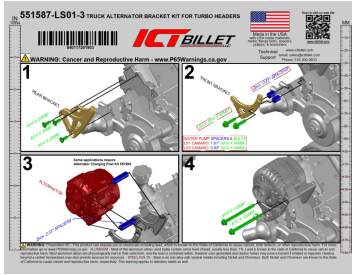
For warranty information or technical support, please contact ICT Billet directly. Refer to the official ICT Billet website or your purchase documentation for the most current contact details and warranty terms.

Manufacturer: ICT Billet LLC

Website: [Visit the ICT Billet Store on Amazon](#)

Installation Manual (PDF): A detailed PDF installation manual may be available for download. Please check the product page or manufacturer's website for availability: [Download PDF Manual](#)





[\[pdf\]](#) User Manual

Rev 3 Installation Manual ICT Billet 5 3L 6 0L Turbo LS Truck Alternator Relocation Bracket Kit

Compatible with LS3 L99 Camaro SS Water Pump 4 8L 2L LSX LM7 LR4 LQ4 L59 LQ9 LM4 L33 551587

LS01 Automotive 81fRDplvFUL m media amazon images I |||

551587-LS01-3 TRUCK ALTERNATOR BRACKET KIT FOR TURBO HEADERS IN

10ths weoutrestbisSivoicatn MM Made in the USA with USA made materials, 10 metric flange bolts, spacers, co.metwllwbcitwi. pulleys, tensioners 840117201903

www.ictbillet.com 20 Technical 1 WARNING: Cancer and Reproductive ...

lang:en score:29 filesize: 421.15 K page_count: 1 document date: 2021-01-29



[\[pdf\]](#) Accessories Catalog

LS Swap Kit and Parts ICT Billet ICTBillet Catalog Jan 2024 ictbillet pub |||

LS Swap Solutions FREE SHIPPING TO THE LOWER 48 STATES ON ORDERS OVER 50 sales ictbillet.com USA ... For LS1 water pump only includes water pump

spacers 551565LS0WP-3 241.99 Alternator kit only **551587-LS01-3** 115.99 LS1

power steering kit only 551581-3 60.99 Power steering kit only 551581-L...

lang:en score:28 filesize: 8.28 M page_count: 12 document date: 2023-12-11



[\[pdf\]](#) Accessories Catalog

Catalog December 2021 indd Laron LS Swap Kit and Parts ICT Billet catalog december NEW ictbillet pub

|||

LS Swap Solutions sales ictbillet.com USA MADE We use USA made pulleys, metric

flange bolts, belt ... For LS1 water pump only includes water pump spacers

551565LS0WP-3 219.99 Alternator kit only **551587-LS01-3** 104.99 LS1 power

steering kit only 551581-3 54.99 Power steering kit only 551581-L...

lang:en score:28 filesize: 7.29 M page_count: 12 document date: 2021-12-14



[\[pdf\]](#) User Manual Accessories Catalog

Click to Download Our Catalog on Jan 14 2024 — manual tensioner 551617X 2 \$72.99 Truck spacing 3 Part Number Price Billet aluminum brackets place the factory New Cover February ictbillet pub LS Swap Kit and Parts ICT ||| ||| LS Drive Brackets LS Truck Alternator Power Steering Replacement Kits LS Swap Solutions LS Heavy Duty Alternator Kits Heavy Duty Alternator Relocation Bracket Replaces the large cast factory truck accessory bracket and re-uses your factory LS Drive Brackets LS Truck Alternator Power Steering Replacement Kits LS Swap Solutions LS Heavy ... For LS1 water pump only includes water pump spacers 551565LS0WP-3 241.99 Alternator kit only **551587-LS01-3** 115.99 LS1 power steering kit only 551581-3 60.99 Power steering kit only 551581-L...

lang:en score:22 filesize: 11.91 M page_count: 16 document date: 2024-02-15