

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

> [Quad Logic](#) /

> [Quad Logic Can-Am Maverick Renegade Outlander Commander Defender Starter Motor - 420684566 User Manual](#)

Quad Logic 410-52128

Quad Logic Can-Am Starter Motor User Manual

Model: 410-52128 | Replaces OEM Part Number: 420684566

INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your Quad Logic replacement starter motor. This component is designed to provide reliable starting performance for compatible Can-Am powersports vehicles, serving as a direct replacement for original equipment manufacturer (OEM) part number 420684566.

Please read these instructions thoroughly before attempting any installation or maintenance procedures to ensure proper function and safety.



Figure 1: Main view of the Quad Logic replacement starter motor. This image shows the cylindrical body, mounting points, and the drive gear (bendix) at one end.

COMPATIBILITY AND OEM CROSS-REFERENCE

This Quad Logic starter motor (Model: 410-52128) is engineered to be a direct replacement for the following Can-Am OEM part numbers:

- 420684566
- 420684562
- 420684560
- 420684568

It is compatible with a wide range of Can-Am models and years, including but not limited to:

- **Maverick:** 2013-2022 Maverick 1000, 2014-2022 Maverick MAX 1000, 2018-2021 Maverick TRAIL 800
- **Outlander:** 2012-2021 Outlander 1000, 2013-2021 Outlander MAX 1000, 2007-2015 Outlander 500, 2007-2015 Outlander MAX 500, 2016-2021 Outlander 570, 2016-2021 Outlander MAX 570, 2006-2021 Outlander 650, 2006-2021 Outlander MAX 650, 2006-2015 Outlander 800, 2006-2015 Outlander MAX 800, 2018 Outlander 850, 2018 Outlander MAX 850
- **Renegade:** 2012-2021 Renegade 1000, 2008-2015 Renegade 500, 2016-2018 Renegade 570, 2018-2021 Renegade 650, 2008-2015 Renegade 800, 2016-2018 Renegade 850
- **Commander:** 2011-2022 Commander 1000, 2014-2022 Commander MAX 1000, 2011-2019 Commander 800, 2017-2020 Commander MAX 800R
- **Defender:** 2016-2022 Defender HD10, 2017-2022 Defender MAX HD10, 2016-2018, 2021 Defender HD8, 2017-2018, 2021 Defender MAX HD8, 2022 Defender HD9
- **Traxter:** 2017-2022 Traxter HD10, 2016-2021 Traxter HD8, 2022 Traxter HD9

Always verify fitment with your specific vehicle's make, model, and year before installation.

SETUP AND INSTALLATION

Replacing a starter motor requires mechanical aptitude and basic tools. If you are unsure about any step, it is recommended to consult a qualified mechanic or refer to your vehicle's specific service manual.

Safety Precautions:

- Always disconnect the negative (-) battery terminal before beginning any electrical work to prevent accidental starting or electrical shock.
- Ensure the vehicle is on a stable, level surface and properly supported with jack stands if lifting is required.
- Wear appropriate personal protective equipment (PPE), such as safety glasses and gloves.
- Allow the engine to cool completely before working on it.

General Installation Steps:

1. **Access the Starter Motor:** Locate the starter motor on your Can-Am vehicle. This may require removing certain components (e.g., skid plates, exhaust pipes, or other engine covers) to gain access.
2. **Disconnect Wiring:** Carefully disconnect the main battery cable and the solenoid wire from the old starter motor. Note their positions for reinstallation.
3. **Remove Mounting Bolts:** Unbolt the old starter motor from its mounting points on the engine or transmission housing. Keep track of all hardware.
4. **Remove Old Starter:** Carefully extract the old starter motor from its position.
5. **Inspect Area:** Clean the mounting surface and inspect for any debris or damage.
6. **Install New Starter:** Position the new Quad Logic starter motor (Model 410-52128) into place. Ensure the drive gear aligns correctly with the flywheel.
7. **Secure Mounting Bolts:** Reinstall and tighten the mounting bolts to the manufacturer's specified torque.
8. **Reconnect Wiring:** Reattach the solenoid wire and the main battery cable to the new starter motor. Ensure connections are clean and secure.
9. **Reconnect Battery:** Reconnect the negative (-) battery terminal.

10. **Test Functionality:** Attempt to start the vehicle to confirm proper operation of the new starter motor. Listen for unusual noises.

11. **Reassemble:** Reinstall any components that were removed to access the starter motor.



Figure 2: Angled view highlighting the drive gear (bendix) of the starter motor, which engages with the engine's flywheel.



Figure 3: Side view of the starter motor, illustrating the electrical terminal where the main battery cable connects.

OPERATING PRINCIPLES

The starter motor is an electric motor that rotates the engine's flywheel to initiate the combustion process. When the ignition key is turned to the "start" position, electrical current flows from the battery to the starter solenoid, which then engages the starter motor. The starter motor's drive gear extends and meshes with the flywheel, turning the engine over. Once the engine starts, the drive gear retracts, disengaging from the flywheel to prevent damage to the starter motor.

MAINTENANCE

Starter motors are generally low-maintenance components. However, regular checks can prolong their lifespan and ensure reliable starting.

- **Battery Condition:** Ensure your vehicle's battery is in good condition and fully charged. A weak battery can strain the starter motor.
- **Electrical Connections:** Periodically inspect all electrical connections to the starter motor and battery for corrosion or looseness. Clean terminals as necessary.
- **Mounting Security:** Check that the starter motor's mounting bolts are secure and properly torqued.
- **Environmental Exposure:** If operating in harsh conditions (e.g., excessive dust, mud, water), consider more frequent inspections and cleaning of the starter motor's exterior to prevent debris buildup.

TROUBLESHOOTING

If you experience issues with your vehicle's starting system, consider the following common troubleshooting steps:

Symptom	Detail
Engine does not crank or cranks slowly.	Weak or dead battery, corroded battery terminals, faulty starter motor, faulty starter solenoid, loose wiring.
Clicking sound when attempting to start.	Low battery voltage, faulty starter solenoid, loose electrical connections.
Starter motor spins but engine does not crank.	Faulty starter drive (bendix) not engaging flywheel, damaged flywheel teeth.
Grinding noise during starting.	Misaligned starter motor, damaged starter drive gear, damaged flywheel teeth.

If troubleshooting does not resolve the issue, further diagnosis by a professional mechanic is recommended.

SPECIFICATIONS

Specification	Detail
Brand	Quad Logic
Model Number	410-52128
Manufacturer Part Number	500-1144

Specification	Detail
Replaces OEM Part Numbers	420684560, 420684562, 420684566, 420684568
Item Weight	4 pounds (1.81 kg)
Product Dimensions (L x W x H)	10 x 7 x 4 inches (25.4 x 17.78 x 10.16 cm)
Exterior Finish	Polished
Phase Type	Three Phase

WARRANTY INFORMATION

Quad Logic provides a **90-day warranty** on all electrical components, including this starter motor. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for any warranty claims.

For specific warranty terms and conditions, or to initiate a claim, please contact Quad Logic customer support.

ADDITIONAL RESOURCES

For more information about Quad Logic and their range of aftermarket powersports parts, you may find the following video helpful:

Your browser does not support the video tag.

Video: "NICHE Your Aftermarket Powersports Replacement Parts Brand". This video provides an overview of the Niche brand, which is associated with SureFit Parts, a seller of aftermarket powersports components. It showcases various powersports vehicles and environments, highlighting the brand's commitment to covering diverse needs.

CUSTOMER SUPPORT

If you have any questions regarding the installation, operation, or troubleshooting of your Quad Logic starter motor, please contact our customer support team. For the most efficient assistance, please have your product model number (410-52128) and purchase information ready.

You can also visit the official [Quad Logic Store on Amazon](#) for more products and information.