



#55-3557-1 Rev.C
Printed 4-2014

PRECAUTIONS

- **WATER & ELECTRONICS DON'T MIX** Never allow water, moisture, or other foreign materials to get inside motor, or on PCBs.
- **CHECK MOTOR SCREWS** Remember to check all motor screws for loosening after a few runs of the motor.
- **INSULATE WIRES** Always insulate exposed wiring with heat shrink tubing to prevent short circuits.
- **NO SOLVENTS** Do NOT expose the motor to any type of solvents.
- **MOTOR CAPACITORS** Brush motors generate electrical noise. Use all 3 capacitors on the motor to help prevent radio interference.
- **NO SCHOTTKY DIODES WITH REVERSIBLE ESCs** NEVER use Schottky diodes on the motor with reversible ESCs--ESC damage will occur.
- **SET GEAR MESH PROPERLY** Too tight of a gear mesh can result in motor pinion shaft breakage--be sure to adjust mesh properly.

MOTOR MAINTENANCE

- **CHECK MOTOR SCREWS**
Check all motor screws for loosening at regular intervals, just like other hardware on your vehicle.
- **CHECK MOTOR BEARING & BRUSH WEAR**
After extensive use, your motor's bearings or commutation brushes may need replacement. A small drop of light oil on the bearings periodically can help extend bearing life--*however, too much oil will attract dirt and will cause problems, so apply sparingly & wipe clean.*
- **CLEAN INSIDE MOTOR**
Periodically remove the end bell of your motor, remove the rotor, and blow out the inside of the motor with compressed air. *Be sure not to lose any small shim washers that may be on the shaft ends & keep them in the correct location.*

ACCESSORIES

- 5512 12GA Super-Flex Wire--Black, Red, & Blue--3 ft each color, silicone.
5514 14GA Super-Flex Wire--Black, Red, & Blue--3 ft each color, silicone.
5516 16GA Super-Flex Wire--Black, Red, & Blue--3 ft each color, silicone.
5626 Glitch Buster Capacitor--Stores battery power for receiver to eliminate radio cut-out.
5647 Black Cooling Fan--25x25x10mm--All purpose cooling fan with 2-pin JST connector.
5651 Black Cooling Fan--25x25x10mm--Cooling fan 2-Pack with 2-pin JST connector.
5731 Power Connectors--3.5mm--5 pair--Gold-plated low-loss connectors. Includes heat shrink.
5741 Power Connectors--4mm--5 pair--Gold-plated low-loss connectors. Includes heat shrink.
5831 Lead-Free 3% Silver Solder--6gr--Low-resistance, high-conductivity solder.
5832 Lead-Free 3% Silver Solder--15 gr Tube--Low-resistance, high-conductivity solder.
5836 Heavy Duty Lead-Free 3% Silver Solder--25gr Tube--Thicker 1.5mm solder.
5840 Double-Sided Mounting Tape--10pcs--1"x1" high-performance clear mounting tape.
5842 Double-Sided Mounting Tape--25pcs--1"x1" high-performance clear mounting tape.
5841 Double-Sided Mounting Tape--100pcs--1"x1" high-performance clear mounting tape.
5850 Heat Shrink Tubing Assortment--6pcs--6" pieces in 6 sizes from 1/16-3/8"--Black.
5851 Heat Shrink Tubing Assortment--24pcs--6" pieces in 6 sizes from 1/16-3/8"--Black.
5852 Heat Shrink Tubing Pre-Cut--40pcs--1" pieces in 1/4" size--20 each of Red & Black.
5853 Heat Shrink Tubing Box Set--160pcs--4" pieces in 6 sizes from 1/16-3/8"--Black.
5861 Pro Solder Flux--10ml--Liquid rosin flux for easy soldering of lead-free solders--Dropper bottle.

INSTALLATION INSTRUCTIONS

1. **CHECK MOTOR SCREW LENGTH & INSTALL MOTOR**
 - Insert the M3 motor mounting screws that came with your vehicle through the motor mounting plate. *You need no more than 1/8" of screw extending past the vehicle's mounting plate (2-4mm)*--Too little can strip the motor's threads, too much may cause internal motor damage & will void warranty.
 - Attach motor to vehicle's motor mount using one of the sets of threaded mounting holes--*select a mounting position that keeps the wire tabs clear of conductive surfaces like aluminum or graphite.*
2. **INSTALL PINION GEAR**
Install pinion on motor and align pinion and spur gears. Tighten pinion's set screw on the flat of motor shaft.
3. **ADJUST MOTOR FOR PROPER GEAR MESH**
 - Adjust the motor position for proper amount of free play. **You NEED a small amount of play between the pinion gear and the spur gear** (about the thickness of piece of paper)--**check the free play at several positions around the spur gear to ensure a proper mesh** (just in case the gears are out of round).

MAKE SURE THE PINION/SPUR GEAR MESH IS NOT TOO TIGHT!
If gear mesh is too tight, motor shaft breakage can occur.

- Tighten motor mounting screws--Avoid using excessive force that could break screws or strip the threaded holes in motor.
4. **SOLDER MOTOR POWER WIRES**
 - Determine the best routing in vehicle for power wires. **Prepare ends of motor power wires** by stripping 1/8-1/4" of insulation from end of wire. Tin wire ends with solder.
 - *Lay tinned end of the wire flat on the solder tab and solder wires to proper tabs of the motor.* Apply heat with soldering iron to the power wire and solder tab--begin adding solder to tip of iron and to wire--**Add just enough solder to form a clean & continuous joint from the solder tab up onto the wire.**

PRODUCT WARRANTY

Novak products are guaranteed to be free from defects in materials or workmanship for a period of 120 days from the original date of purchase (verified by dated, itemized sales receipt). Warranty does not cover incorrect installation, components worn by use, cross-connection of battery/motor power wires, overheating solder tabs, damage resulting from overload, wear or damage from improper gear mesh, damage from disassembling motor or incorrect re-assembly of motor, tampering with motor, allowing water, moisture, or any other foreign material to enter motor, allowing exposed wiring or solder tabs to short-circuit, or any damage caused by a crash, flooding, or act of God. In no case shall our liability exceed the product's original cost. We reserve the right to modify warranty provisions without notice.

Because Novak R/C, Inc. has no control over the connection & use of motor or other related electronics, no liability may be assumed nor will be accepted for damage resulting from the use of this product. Every motor is tested before leaving our facility and is, therefore, considered operational.

By the act of connecting the motor to speed control or operating motor, the user accepts all resulting liability.

Novak R/C, Inc. 19 Rancho Circle Lake Forest, CA 92630

(949) 916-6044 • Monday-Thursday

e-mail: cs@teammovak.com web: www.teammovak.com

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Rock Star

The Rock Star motors from Novak are Expert Level high-torque motors with precision ball bearings for ultra-smooth operation, high-strength Ferrite magnets, and are completely rebuildable for long service life. These powerful Sagami-built motors are the perfect choice for Rock Crawling and all other applications demanding massive amounts of low-end torque, precision control, reliability, & extended run times.

#3537 Rock Star--35T
Expert Crawling Brush Motor


6 07209 03537 8


Novak R/C, Inc. guarantees the Rock Star motor to be free from defects in materials & workmanship for a period of 120 days from original date of purchase. Complete warranty details inside.

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LEAD FREE


RoHS



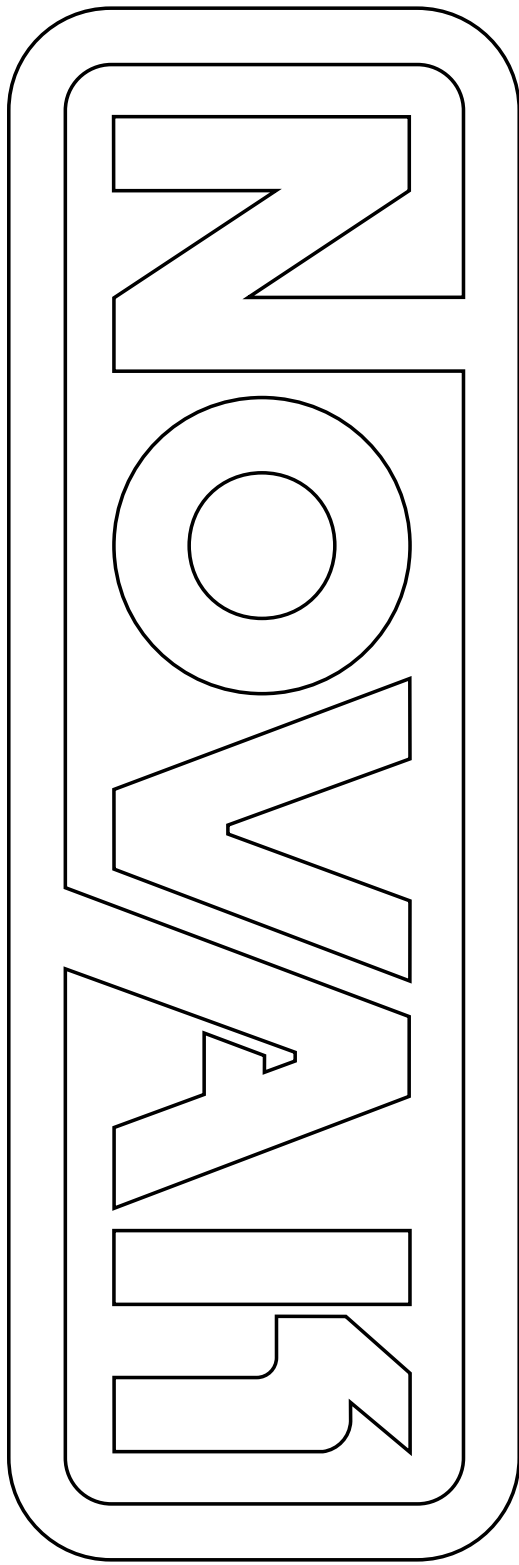


WARNING
This product contains chemicals which are known to the state of California to cause cancer, birth defects, or other reproductive harm.

Expert Series
Crawling Motor
Rock Star



www.teamnovak.com



Rock Star

The Rock Star motors from Novak are Expert Level ultra-smooth operation, high-strength Ferrite magnets, and are completely rebuildable for long service life. These powerful Sagami-built motors are the perfect choice for Rock Crawling and all other applications demanding massive amounts of low-end torque, precision control, reliability, & extended run times.

#3537 Rock Star--35T
Expert Crawling Brush Motor


6 07209 03537 8


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LEAD FREE


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Rock Star



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