REEDY

Motors, batteries and accessories for the demanding racer

BRUSHLESS

The Reedy NEO-One has no brushes or springs to wear out, and no commutator to cut. Its completely sealed design reduces maintenance in any racing environment, on road or off road.

The NEO-One is Reedy's sensored brushless motor which works interactively and intelligently with the LRP Sphere Speed Control. When used in conjunction with the LRP speed control, the combo offers the same linear performance and braking feel that you've become used to with conventional brushed motors. The Reedy NEO also features direct U-solder tabs as well as a connecting socket on the backplate to enable you to use the NEO with other brands of brushless speed controls. It fits standard "540-size" motor mounting holes and uses all conventional size pinion gears.

#110 NEO-One 1 Star Brushless motor. 8.5 turns. Great for off road.
#112 NEO-One 2 Star Brushless motor. 7.5 turns. Great for off road. Faster than 1 Star.
#111 NEO-One 3 Star Brushless motor. 6.5 turns. Great for touring car.
#113 NEO-One 4 Star Brushless motor. 5.5 turns. Great for touring car. Faster than 3 Star.

HAND-WOUND MACHINE-WOUND SPEC MOTOR

MOTOR COMPARISON CHART

Motor	Brush	Comm	Can	Winds	Adjustable Timing	Rebuildable	Bearings / Bushings	Other
Hand-Wound Modified								
Pt Platinum	Standup #729 Quasar	7.5mm	All hand-wound modified motors feature bearings, single and double winds, 1.4mm vented can, adjustable timing, and are rebuildable.		Used by Mike Blackstock to TQ the Indoor Championships AND Snowbird Nationals in 1:12 scale modified!			Quad-mag FOURce-field - the latest C4 technology. Improved brush vibration damping system. Dual ball bearings. Heavy-duty solder tabs.
Ti Worlds Titanium	Laydown #766 Actron	9mm			Used by Neil Cragg and Ryan Maifield in their B4s and T4 at the Cactus Classic!			High-strength C4 magnets. High-torque armature design creates a more intense magnetic field for quicker spool-up. Improved brush vibration damping system. Dual ball bearings. Heavy-duty solder tabs.
Ti Titanium	Standup #729 Quasar	7.5mm			Used by Craig Drescher in his TC4 to win the Reedy International Touring Car Race of Champions!			High-strength C4 magnets. High-torque armature design creates a more intense magnetic field for quicker spool-up. Improved brush vibration damping system. Dual ball bearings. Heavy-duty solder tabs.
Kr Krypton	Laydown #766 Actron	9mm			Used by Neil Cragg to TQ and win the European Championships!			Quad-mag FOURce-field. Drill and epoxy balanced. 9mm commutator supplies more copper for better heat dissipation. Polarity-coded brush heatsinks.
Machine-Wound Modified								
Flash	Standup #729 Quasar	7.5mm	1.4mm vented	Double	yes	yes	Bearings	Quad-mag FOURce-field. Surface-mount capacitors. Bullet connectors on 15 and 17 turn versions - ready for RTRs! Improved brush vibration damping system. Dual ball bearings. Polarity-coded brush heatsinks. Heavy-duty solder tabs.
Spec								
Quad-Mag 19	Laydown #766 Actron	9mm	1.4mm vented	19 x 1	fixed 24º	yes	Bearings	19-turn motor with Quad-mag FOURce-field. Improved brush vibration damping system. Dual ball bearings. Polarity-coded brush heatsinks
Stock								
MVP	Laydown #766 Actron	7.5mm	1.4mm vented	27 x 1	fixed 24º	yes	Bushings	27-turn ROAR legal stock motor. Improved brush vibration damping system. Heavy-duty solder tabs.

HAND-WOUND MODIFIED MOTORS

Platinum

7.5mm comm
Standup #729 brushes

Bearings, 1.4mm vented can, adjustable timing, rebuildable.

Quad-mag FOURce-field: the latest C4 technology!
Improved brush vibration damping system.
Dual ball bearings.
Heavy-duty solder tabs.

200 12T single
201 10T single
202 12T single (Euro wind*)
210 13T double
212 11T double
213 10T double
214 9T double
215 8T double
216 7T double
217 12T double (Euro wind*)

Ti Worlds

9mm comm
Laydown #766 brushes

Bearings, 1.4mm vented can, adjustable timing, rebuildable. High-strength C4 magnets. High-torque armature design creates a more intense magnetic field for quicker spool-up. Improved brush vibration damping system.
Dual ball bearings.
Heavy-duty solder tabs.

220 14T double
221 13T double
222 12T double
223 11T double
224 10T double
225 9T double
226 8T double
227 7T double
229 10T double (ROAR Touring Wind)
230 12T single (Euro Wind*)

Titanium

7.5mm comm
Standup #729 brushes

Bearings, 1.4mm vented can, adjustable timing, rebuildable. High-strength C4 magnets. High-torque armature design creates a more intense magnetic field for quicker spool-up. Improved brush vibration damping system.
Dual ball bearings.
Heavy-duty solder tabs.

336 12T single (Euro Wind*)
338 12T double (Euro Wind*)
376 14T double
377 13T double
378 12T double
379 11T double
380 10T double
381 9T double
382 8T double
383 7T double
390 12T single
391 11T single
392 10T single
393 9T single
394 8T single
395 7T single

Krypton

9mm comm
Laydown #766 brushes

Bearings, 1.4mm vented can, adjustable timing, rebuildable.

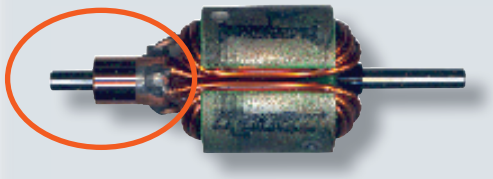
Quad-mag FOURce-field.
Drill and epoxy balanced.
9mm commutator supplies more copper for better heat dissipation.
Polarity-coded brush heatsinks.

560 12T single
561 10T single
562 8T single
563 7T single
575 14T double
576 12T double
577 11T double
578 10T double
579 9T double
580 8T double
581 7T double
582 12T double (Euro Wind*)

*Euro Wind, for large tracks

Choosing a Modified Motor

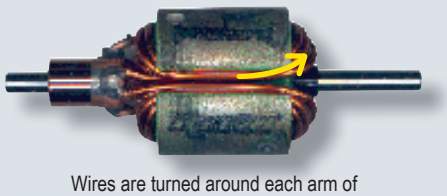
Modified motors can be divided into several categories. Generally, you'll first choose a modified motor based on whether you'll drive on road or off road. On road motors generally need more RPMs, while off road uses more torque. Motors with larger commutators generate higher torque. The smaller commutators create more RPMs (revolutions per minute). Despite these qualifications, racers are freely mixing motor types in their racing for good effect.



Here is the commutator portion of the motor armature.

Probably the most important determining factors will be the number of the turns and winds of wire around the armature. Also important will be your choice of pinion gear and speed control. Let's look at each in turn.

Choose Your Turns and Winds



Wires are turned around each arm of the armature.

Turns

All modifieds are labeled according to their turns, such as Reedy Kr 10T. The 10T refers to ten turns, which is the number of times the wire was wound, or turned, around each armature arm.

The fewer the turns, the higher the RPM, or top end (which is the highest speed attainable). So, if you wish the fastest motor, choose a motor with a fewer number of turns.

Speed isn't the only consideration, however. You need to consider the type of track. If it is small, or has many turns, you'll never get up to top speed. You'll always be scooting from one curve to the next, so for shorter tracks, get a motor with more turns.

Motors with fewer turns draw more power, reducing your run time. The fastest car on the track may seldom finish a race, simply because the batteries "dumped," or ran out of power, before the race finished.

By the way, the "19" of the Spec 19 motor refers to 19 turns. So it has greater top speed than stock motors, which are set at 27 turns.

FEWER TURNS	MORE TURNS
⟵	⟶
more top end faster battery drain	more acceleration slower battery drain

Winds

You'll find the modified motors identified as 12 turn single, or 8 turn triple. Winds of double, triple, or quad refer to the number of strands of wire wound around the armature, double being two strands, triple being three, quad being four, and quint being five. In general, winds with fewer wires give the impression of kick-starting your wheels, while winds with more wires will bring you up to top end speed more slowly.

So if you have a very slick track (poor surface traction, like loose dirt or dusty surfaces), then winds like single and double may cause your wheels to spin in place. Other winds, such as triple, quad, and quint, may give your car better traction and control.

Truth be told, it's nearly impossible for the inexperienced racer to detect the subtle differences between winds, so do not spend much time on this aspect.

Modified motors are more expensive than stock or spec class motors. That's because the wires are laborously wound by hand. For the budget-conscious, Reedy includes a machine-wound modified motor called the Flash. Though not as high in performance as hand-wound, it is still a notch above stock and spec motors.

For more about this subject, please see the article at http://www.rc10.com/reedy

OTHER MOTORS

MACHINE-WOUND MODIFIED MOTOR

Flash

7.5mm comm
Standup #729 brushes

Bearings, 1.4mm vented can, adjustable timing, rebuildable. Quad-mag FOURce-field. Surface-mount capacitors. Bullet connectors on 15 and 17-turn versions: ready for RTRs! Improved brush vibration damping system. Dual ball bearings. Polarity-coded brush heatsinks.

410 12T double
411 13T double
412 14T double
413 15T double (with soldered-on bullet connectors: ready for RTR!)
414 17T double (with soldered-on bullet connectors: ready for RTR!)

SPEC MOTOR

Spec 19

9mm comm
Laydown #766 brushes

Bearings, 1.4mm vented can, fixed 24 degrees timing, rebuildable.

19-turn motor with Quad-mag FOURce-field. Improved brush vibration damping system. Dual ball bearings. Polarity-coded brush heatsinks.

513 Spec-19 Quad-Mag motor.
514 19T Performance Motor. Dyno version of Spec-19 Quad-Mag motor.
516 Quad-Mag 19 Pro motor. Hand-wound, ball bearings, adjustable timing, laydown brushes.

STOCK MOTOR

MVP

7.5mm comm
Laydown #766 brushes

Bushings, 1.4mm vented can, fixed 24 degrees timing, rebuildable.

27-turn motor ROAR-legal stock motor. Improved brush vibration damping system. Heavy-duty solder tabs.

298 MVP 24 Stock Rebuildable.
299 MVP 24 Stock Plus Rebuildable (with dyno printout).

RTR MOTOR

Radon

7.5mm comm

Bushings, fixed endbell, non-rebuildable. Non-adjustable fixed timing.
17-turn motor. RPM range of 25,000-30,000. Included in B4 RS RTR, T4 RS RTR, TC4 RTR.

9626 Reedy Radon Motor

ARMATURES

Ti or Pt

337 12T single (Euro Wind*).
339 12T double (Euro Wind*).

Standard Comm Armatures:
385 12T double
386 11T double
387 10T double
388 8T double
389 7T double
396 12T single
397 11T single
398 10T single
399 9T single
400 8T single

Kr or Ti Worlds

560A 12T single
561A 10T single
562A 8T single
563A 7T single
564A 12T single (Euro Wind*)
575A 14T double
576A 12T double
577A 11T double
578A 10T double
579A 9T double
580A 8T double
581A 7T double
582A 12T double (Euro Wind*)

Hand Wound, Machine Wound

510 19T. Hand wound. Fits #513, 514, 516.
515 19T Mid-Comm. Machine wound. \
Fits #513, 514 (9mm commutators).

*Euro Wind, for large tracks

MOTOR SPRINGS

742 Kr/Stock Laydown Motor Spring. 9.5 oz. rate. 2WD Off Road, Truck

780 Motor Spring, medium. Olive, 9 oz. rate. 1:12

289 Mini-MOD Modified Spring. 1:18

781 Motor Spring, medium firm. Silver, 10 oz. rate. 2WD Off Road

782 Motor Spring, firm. Red. 11 oz. rate. Truck, Touring Car EFRA , Touring Car 10T ROAR

783 Motor Spring, extra firm. Black, 12 oz. rate. Open Motor Touring Car, 4WD

In brushed motors, brushes conduct power to the commutator. The brushes are held in place by springs. By changing the springs' tension to increase or decrease the pressure of the brushes against the commutator, you can adjust the revolutions of the motor. Simply put, harder spring pressure increases friction and slows down the commutator.

In general, the less tension placed on the brush, the more RPM (top speed). The more tension, the more torque (faster acceleration).

Spring tension is measured by ounce rate. The lower ounce rate generates less pressure than a higher ounce rate. Choose a lower ounce rate for slightly more RPM, and a higher rate for more torque. However, harder pressure will hasten brush wear.

The springs give only a slight range of adjustment. If you want greater changes to RPM, for instance, you will still switch to an armature of fewer turns.

LAYDOWN MOTOR BRUSHES

766 Actron Stock Laydown Brush. Laydown. Standard brush for Kr, MVP and Spec 19T. It has good power and requires less maintenance than #767 brush. Stock, modified

764 Actron Torque Cut Brush. Laydown. Torque cut Actron. Increases torque. Stock, modified

767 Serrated Brush. Laydown. More punch. Requires more frequent maintenance. Stock, modified

768 Serrated Brush. Laydown. With single vertical cut. More punch. Requires more frequent maintenance. Stock

769 Serrated Cavity Brush. Laydown. More punch. Requires more frequent maintenance. Stock

760X 1:10 Off Road. Laydown. Low resistance. Long comm life. Off road modified

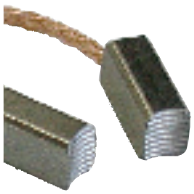
770 Actron Cavity Laydown Brush. Laydown. Best for stock and 19T. More Punch. Slight RPM increase. Stock, 19T

762X Sonic Competition Laydown Brush. Laydown. Stock, 19T

STANDUP MOTOR BRUSHES

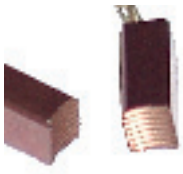
728 Reedy Serrated 4 Cell Brush. Standup. Ti (4 cell), Pt (4 cell)

729 Quasar Brush. Standup. Standard brush for Ti and Pt motors. Ti, Pt



777 Plutonium Motor Brush. Standup. Ti, Pt

737X 1:10 Off Road Brush. Standup. Ti , Pt



738X Serrated Silver Brush. Standup. Ti (4 cell), Pt (4 cell)

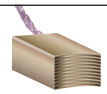
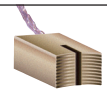
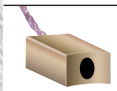
288 Mini-MOD Modified Brush. 1:18

SPRING COMPARISON CHART

	Spring	Rate/oz.	1:12	2WD Off Road	Open Motor Touring Car	Truck	4WD	Touring Car 12T EFRA	Touring Car 10T ROAR
	780	9	●						
	781	10		●					
	782	11				●		●	●
	783	12			●		●		
	740 Copper Head	8	●						
	742 Laydown	9.5		●		●			

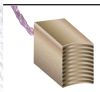
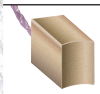
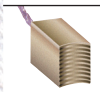
BRUSH COMPARISON CHART

Laydown Brushes

	Brush	Stock	Modified
	766 Actron[1]	●	●
	764 Full/Cut[2]	●	●
	767 Serrated[3]	●	●
	768 Serrated/Vert. cut[3]	●	
	769 Serrated Cavity[3]	●	
	760 Laydown off road (off road)		●
	770 Cavity[5]		●

[1] The #766 brush is standard brush for Kr, MVP and Spec 19T. It has good power and requires less maintenance than #767 brush.
[2] Torque cut Actron. Increases torque.
[3] More punch. Requires more frequent maintenance.
[4] Standard brush for Ti and Pt motors.
[5] More punch. Slight RPM increase.

Standup Brushes

	Brush	Ti	Pt	Ti (4 cell)	Pt (4 cell)
	729 Quasar[4]	●	●		
	738 Serrated			●	●
	728 Serrated			●	●
	737 Off road	●	●		
	777 Plutonium	●	●		

#777 Plutonium Brush

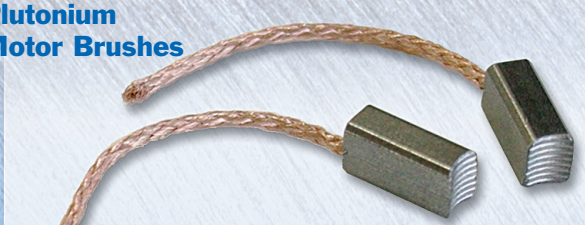
Ask any top-level racer about the between-rounds care of their motors ... it's all about the maintenance of the motor commutator and the constant replacement of the motor's brushes. In touring car racing, with the latest-generation high-voltage cells and low-wind motors, the heat and wear on the motor brushes is at an all-time high, frequently requiring replacement after every run.

With this in mind, Reedy introduces the new #777 "Plutonium" motor brushes. These high-tech brushes are made of an extraordinary new compound designed to stand up to the heat and stresses of top-level touring car racing. Reedy "Plutonium" brushes not only provide outstanding power, but they last several times longer than our standard competition brushes. In fact, top factory racers have reported running these brushes for over 30 runs* with no drop-off in performance!

By replacing your motor brushes much less often, you'll spend more time on the track, and less time on the bench ... and save money in the long run, too! Whether you're a serious racer who's looking for an edge in performance, or a hobbyist just looking to spend less time and money on motor maintenance, the Reedy "Plutonium" brush is for you!

*Your actual usage could vary due to track conditions and maintenance.

Plutonium Motor Brushes



POWER FOR 1:18 MINIS

617 Reedy VMX Concept R-14 6-cell racing pack

VMX Concept R-14

Higher voltage means more power—and that's just what you get with Reedy's new VMX Concept battery pack. Featuring much higher voltage than stock battery packs, the 1400 mAh VMX Concept pack has the power to make your micro car rip up the road. Comes factory assembled complete with connector and fits directly into the Team Associated 1:18 series models.

Mini-MOD Modified Motors

Put some big-time horsepower into your 1:18 scale with the new Reedy Mini-Mod modified motors. The Mini-Mod motors feature precision ball bearings with replaceable brushes and springs. The Mini-Mod motors are available in a torque-based version, the SP19, and now in RPM-based 17T and 19T versions.

These are High Performance motors, and require maintence to keep them running at their optimum performance. Designed for racing, but can be used in all types of environments. All the performance your 1:18 mini will ever need. Maintance would include: cleaning or cutting the commutators, lubricating the bearings and replacing the brushes and springs.

288 Mini-MOD Brushes

289 Mini-MOD Springs

291, 292 Mini-MOD Modified Motors

288 Mini-MOD Brushes (qty 2)
289 Mini-MOD Springs (qty 2)
290* Reedy SP19 Stump Puller Modified Motor. (Torque based.)
291* Mini-MOD 17T Motor (RPM based)
292* Mini-MOD 19T Motor (RPM based)
617 VMX Concept R-14 6-cell racing pack

290 SP19 Stump Puller Motor

* We do not recommend using Mini-MOD motors #291 or #292 on the 18MT or on vehicles that use monster truck-size tires. Due to the high RPM nature of these motors and the extra load of the large diameter tires, it is difficult to achieve the correct gearing, and damage to the motor will occur. We suggest the #290 SP19 Stump Puller motor, as it has more torque for this type of application.

REEDY BATTERIES

701 Reedy X-Rated SHV GP3700 stick pack

671 Reedy RealTime SHV Matched Cells

X-Rated SHV

(Super-High Voltage) matched sport pack batteries use the latest generation of high output GP3700 Ni-MH cells that have been given the same cycling, matching, and voltage treating as Reedy's championship-winning cells. The batteries are assembled in clear tubes so you can see the matching info right on the label of each cell. Don't settle for "mystery" cells in your sport packs. Get Reedy's X-Rated packs and see the power you've been missing!

Real Time SHV 3700

batteries give you the most accurate and useful information on how your batteries will perform during the race by giving you the cell's average voltage during the first five minutes of discharge, in addition to the standard measurements of discharge rate, total capacity, charge time, internal resistance, and the discharge cutoff point, 0.90 volt per cell. Matched using the latest generation Gold Peak cells.

614 Ni-MH Receiver Battery Pack, flat. Recommended for the NTC3 and similar applications.
615 Ni-MH Receiver Battery Pack, hump. Recommended for the GT, GT2 and similar applications.
671 Reedy RealTime SHV (Super-High Voltage) GP3700Ni-MH cells. Voltage-Matched for 5-minute racing.
692 Reedy Black Label SHV (Super-High Voltage) GP3700 stick pack
701 Reedy X-Rated SHV GP3700 Stick Pack. With Tamiya plug, matched and zapped.

692 Reedy Black Label SHV GP3700 stick pack

614 Ni-MH Receiver Battery Pack

615 Ni-MH Receiver Battery Pack

*Uses #2136 motor screws

MOTOR CANS AND ENDBELLS

441 Kr Quad-Mag Can, no endbell, with bearing

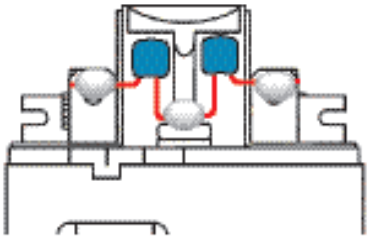
444 Ti Modified Motor Can, no endbell, with bearing

439 Kr End Bell. Laydown brush style, big comm, with bearing

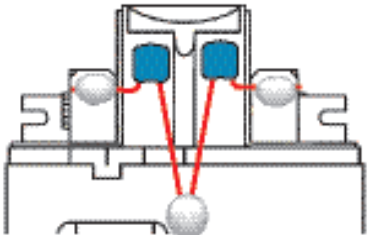
442 Modified Motor End Bell, Ti. For standard commutator. Standup brush style, with bearing.

Soldering Caps

Motor "noise" caused by the brush arcing within the motor can cause radio interference with some motor systems. Solder two #6520 noise suppressions capacitors to the motor head screw tab.



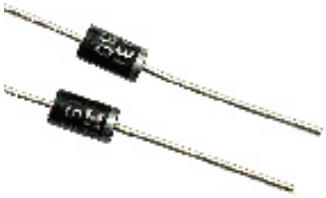
If there is no motor head screw tab, solder the capacitors to the motor can.



OTHER PRODUCTS

440 Motor Ball Bearings. Replacement modified motor ball bearings, 1/8" I.D. x 3/8" O.D. unflanged. (Not for 1:18 scale motors.)

446 Shim Kit. Precision shims for spacing armatures. Five each of .010", .005", & .003" sizes. Comes with instructions. Will also fit any 1/8" shaft or pin for removing excess end play. (Not for 1:18 scale motors.)



745 Schottky Diode, for motors & high frequency speed controls. Brakes run cooler and work more effectively. Improves battery regeneration.

6520 Capacitor, noise suppression, 0.10 uf.

717 Reedy
8.5" x 5.5" (color added for clarity)

651 Reedy Battery Bars, AG/CU silver treated.

SP412 Reedy Pit Towel. 43 3/4" x 23 1/4".