MODEL: BACKDRAFT 3.5

BACKDRAFT 3.5

Redcat

MAN-BACKDRAFT35-2016.3.08
• To ensure that you are using the most recent version of this manual:
• To ensure that you have the most recent version of the Nitro Vehicles Manual:
  www.redcatracing.com/manuals/NITRO-MANUAL.pdf
AGE WARNING!
This radio controlled (RC) vehicle is not a toy! You must be 14 years of age or older to operate this vehicle. Adult supervision is required.

RISK OF RUNAWAY VEHICLE OR INJURY!
Never start the engine without first having the controller and receiver turned on, and having tested the controls to make sure everything is functioning properly.

RISK OF FIRE! / RISK OF EXPLOSION!
There is a risk of fire and explosion when dealing with fuel. Hobby fuels contain Nitromethane and Methyl alcohol which are highly flammable and combustable. Injury or death can occur if proper care is not followed. Follow all precautions that go along with handling nitro fuel and never allow fuel to be near open sparks or flames of any kind. Only use fuel rated containers. Nitro fuel ignites quickly and emits fumes into the air. The entire area around the fuel may have combustible fumes in the air. This means the air around the fuel can flash ignite causing an explosion. Only use outdoors in a well ventilated area.

POISONOUS!
Fuels containing Nitromethane and Methyl alcohol and are toxic. Injury or death can occur if swallowed. May irritate skin and cause injury if absorbed into the skin. Injury or death can occur from breathing the toxic fumes. The exhaust emitted from this Radio Control (RC) vehicle’s muffler is toxic and can cause injury or death if inhaled. KEEP AWAY FROM CHILDREN AND PETS! Never start the engine indoors, not even in a closed garage. Always follow the appropriate nitro fuel safe handling practices.

RISK OF BURNS!
The engine, exhaust pipe, and other areas of the vehicle get hot. Burns can occur if touched after vehicle operation. Allow adequate time to cool before handling.

RISK OF INJURY!
Hobby grade RC vehicles can cause serious injury or death if not operated correctly. Never use this vehicle in crowds. Never chase people or animals. Drive in safe open areas only. Keep body parts away from moving parts.

RISK OF DAMAGE!
Never operate RC vehicles on public roads. Damage of vehicle and property can occur. Injury or death may also occur. Only operate on wide open private property.

WARNING!
Do not mix old and new batteries. Do not mix alkaline, lithium, standard (carbon zinc), or rechargeable (nickel cadmium) batteries. Do not change or charge batteries in a hazardous location.

FCC Compliance Statement! The radio included with your vehicle complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operations. Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

WARNING: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

WARNING: While operating the Radio, a separation distance of at least 20 centimeters must be maintained between the radiating antenna and the body of the user or nearby persons in order to meet the FCC RF exposure guidelines.
FEATURES & SPECIFICATIONS

- Powerful 3.5cc .21 Nitro Engine
- Large 125cc Fuel Tank
- 4 Wheel Drive
- 2-Speed Transmission
- Aluminum Capped Oil Filled Big Bore Shocks
- Composite Disc Brake
- 3.0mm 6061 Aluminum Chassis
- 2.4GHz Radio System

- Scale: 1/8
- Length: 490mm
- Width: 305mm
- Height: 190mm
- Wheelbase: 325mm
- Ground Clearance: 30mm

VEHICLE OVERVIEW

A: Engine
B: Tuned Pipe
C: Pull Starter
D: Air Filter
E: Fuel Tank
F: Receiver Battery
G: 2.4GHz Receiver
H: On/Off Switch
I: Throttle Servo
J: Disc Brake
K: Steering Servo
L: Steering Linkage
M: Oil Filled Shocks
N: Carry Handle
**Steering Reverse Switch:** Top left switch. Used to change steering orientation. If the car turns right when you steer left, flip this switch.

**Throttle Reverse Switch:** Top right switch. Used to change throttle trigger orientation. If the car goes in reverse while you pull the throttle trigger, flip this switch.

**Power LED:** Left LED light. Lights up when the transmitter is turned on.

**Battery Level LED:** Right LED light. Lights up green when transmitter batteries are full. Flashes when transmitter batteries are low and need replacing.

**Bind Button:** Used to bind the transmitter to the receiver. See binding instructions.

**Steering Trim:** Left knob. Used to set the steering neutral point. If the vehicle veers in one direction while the steering wheel is centered, turn this knob in the opposite direction until the car drives straight.

**Throttle Trim:** Middle knob. Used to set the throttle neutral point. If the vehicle moves forward or reverse while the throttle trigger is centered, turn this knob until the vehicle remains still. For maximum setting, turn slowly until the vehicle creeps forward, then turn the knob the opposite direction until the car stops.

**Steering Dual Rate:** Right knob. Used to limit the amount of steering. 0= little/no steering & 6= maximum steering. Set the knob to the amount of steering you feel comfortable with. If the vehicle has a tendency to spin out, lower the steering rate.

**On/Off Switch:** Bottom switch. Turns transmitter On and Off.

**VCC:** Used to power the servos and receiver, through a receiver battery.

**BIND/CH3:** Used when binding to transmitter. Used for 3rd channel when needed.

**CH2:** Used for throttle servo.

**CH1:** Used for steering servo.

**Binding:**
1. Make sure the vehicle On/Off switch is turned OFF and plugged into the VCC port.
2. Insert the bind plug into the Bind/Ch3 port.
3. Plug a fresh set of receiver batteries into the On/Off switch and power the vehicle on.
4. Do NOT start the engine! The receiver light should now begin to blink red.
5. Press and hold the BIND button in the center of the transmitter’s Control Panel and turn on the radio.
6. Release the bind button when you see the green light on the radio flashing. At this point, your receiver’s LED should now be solid red. If so, turn off the power to your vehicle, as well as the radio.
7. Remove the BIND PLUG from the receiver and reinstall the servos as well as the receiver battery, according to the paragraph above.
8. Now turn your radio and vehicle on as normal. Your radio and receiver should be bound together and communicating with each other.
<table>
<thead>
<tr>
<th>Item No</th>
<th>Description</th>
<th>Item No</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BS903-081</td>
<td>Column Head Hex Screw (3*10mm) 6pcs</td>
<td>BS903-082</td>
<td>Diff. Outdrive W/ Set Screw</td>
</tr>
<tr>
<td>BS903-083</td>
<td>Diff. Outdrive C W/ Set Screw</td>
<td>BS903-084</td>
<td>Receiver Battery Pack 6V NIMH</td>
</tr>
<tr>
<td>BS903-086</td>
<td>Bal Bearing (5<em>10</em>4) 2pcs</td>
<td>BS903-087</td>
<td>Bal Bearing (12<em>18</em>4) 2pcs</td>
</tr>
<tr>
<td>BS903-088</td>
<td>E-Clip (4*0.6mm) 12pcs</td>
<td>BS903-089</td>
<td>Pin (2*10) 12pcs</td>
</tr>
<tr>
<td>BS903-089</td>
<td>Pin (2*12.5) 12pcs</td>
<td>BS903-090</td>
<td>Washer A (5.2<em>10</em>0.2) 12pcs</td>
</tr>
<tr>
<td>BS903-091</td>
<td>Washer B (4.2<em>8</em>0.2) 12pcs</td>
<td>BS903-092</td>
<td>Double Way Ball End 6pcs</td>
</tr>
<tr>
<td>BS903-093</td>
<td>Grub (Set) Screw M4*4 6pcs</td>
<td>BS903-095</td>
<td>Grub (Set) Screw M4*8 6pcs</td>
</tr>
<tr>
<td>BS903-096</td>
<td>Diff. Gearbox Bulkhead Upper/Lower</td>
<td>BS903-097</td>
<td>Gearbox Front/Rear</td>
</tr>
<tr>
<td>BS903-099</td>
<td>2-Speed Pinion Gear 18T/19T</td>
<td>BS903-100</td>
<td>2-Speed Pinion Gear 18T/19T</td>
</tr>
<tr>
<td>BS903-103</td>
<td>Brake Set for 2-Speed</td>
<td>BS903-104</td>
<td>2-Speed Gear Assembly 40T/37T</td>
</tr>
<tr>
<td>BS903-106</td>
<td>Servo Pin M3*9.5 12pcs</td>
<td>BS903-107</td>
<td>Antenna Mount 3pcs</td>
</tr>
<tr>
<td>BS903-108</td>
<td>Receiver Battery Charger (for NIMH RX pack)</td>
<td>BS904-007</td>
<td>Upper Deck Rear</td>
</tr>
<tr>
<td>BS904-009</td>
<td>Dogbone Front (3.5*98.3mm)</td>
<td>BS904-010</td>
<td>Dogbone Rear (3.5*108.3mm)</td>
</tr>
<tr>
<td>BS904-050</td>
<td>Body Clip (1.0) 12pcs</td>
<td>BS901-067</td>
<td>Antenna Pipe W/Cap For 2.4GHz 3pcs</td>
</tr>
<tr>
<td>BS903-004</td>
<td>Aluminum Shock 2pcs</td>
<td>BS902-051</td>
<td>B-Head Cross Screw (BT3*10) 12pcs</td>
</tr>
<tr>
<td>BS902-051</td>
<td>RCR-2CN 2.4GHz Transmitter</td>
<td>BS904-077</td>
<td>28479 2.4GHz 2ch Receiver Splashproof</td>
</tr>
<tr>
<td>BS904-078</td>
<td>3KG Servo</td>
<td>BS906-001</td>
<td>Tire/Wheel Set Black 2pcs</td>
</tr>
<tr>
<td>BS906-001</td>
<td>Wire/Wheel Set White 2pcs</td>
<td>BS906-002</td>
<td>17mm Wheel Nut</td>
</tr>
<tr>
<td>BS906-003</td>
<td>17mm Wheel Hub</td>
<td>BS906-004</td>
<td>Front/Rear Stub Axle</td>
</tr>
<tr>
<td>BS901-001</td>
<td>Chassis Alum. 1pcs</td>
<td>BS901-002</td>
<td>21 Nitro Engine</td>
</tr>
<tr>
<td>BS901-003</td>
<td>Engine Mount Plate W/Screws</td>
<td>BS901-004</td>
<td>Engine Crankshaft Nut W/E-Clip</td>
</tr>
<tr>
<td>BS901-005</td>
<td>Engine Mount L/R</td>
<td>BS901-006</td>
<td>Engine Flywheel W/Pin</td>
</tr>
<tr>
<td>BS901-007</td>
<td>Metal Exhaust Pipe</td>
<td>BS901-009</td>
<td>Alum. Exhaust Linkage</td>
</tr>
<tr>
<td>BS901-010</td>
<td>Air Filter W/Insert</td>
<td>BS901-011</td>
<td>ISO4*10 Flat Cross Screw W/Washer 4Set</td>
</tr>
<tr>
<td>BS901-012</td>
<td>Complete Gearbox Assembly</td>
<td>BS901-013</td>
<td>Slipper Clutch Assembly</td>
</tr>
<tr>
<td>BS901-014</td>
<td>Spur Gear 43T</td>
<td>BS901-015</td>
<td>Exhaust Manifold</td>
</tr>
<tr>
<td>BS901-016</td>
<td>Fuel Tank Unit</td>
<td>BS901-019</td>
<td>Air Filter Unit W/Insert</td>
</tr>
<tr>
<td>BS701-031</td>
<td>Tail Wing Mount</td>
<td>BS701-032</td>
<td>Rollcage Post Set</td>
</tr>
<tr>
<td>BS701-033</td>
<td>Body Post Front</td>
<td>BS701-034</td>
<td>Body Post Rear</td>
</tr>
</tbody>
</table>
# Parts Identification

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPO-11</td>
<td>Steering Linkage Aluminum</td>
</tr>
<tr>
<td>MPO-13</td>
<td>Slipper Clutch Discs Hard Anodized</td>
</tr>
<tr>
<td>MPO-02</td>
<td>Front Hub Carriers Machined Aluminum 4mm (Requires BS903-111 or MPO-03)</td>
</tr>
<tr>
<td>MPO-03</td>
<td>Front Steering Knuckle Set Machined Aluminum 4mm (Requires MPO-02)</td>
</tr>
<tr>
<td>MPO-04</td>
<td>Rear Hub Carriers Machined Aluminum</td>
</tr>
<tr>
<td>MPO-05</td>
<td>Shock Tower Machined Aluminum</td>
</tr>
<tr>
<td>MPO-06</td>
<td>Rear Suspension Mount For Front Gearbox</td>
</tr>
<tr>
<td>MPO-07</td>
<td>Rear Suspension Mount For Rear Gearbox</td>
</tr>
<tr>
<td>MPO-08</td>
<td>Steel Brake Disc (Required For MPO-09)</td>
</tr>
<tr>
<td>MPO-09</td>
<td>Special Brake Pads (Required For MPO-08)</td>
</tr>
<tr>
<td>MPO-10</td>
<td>Brake Post Lever Arm Aluminum</td>
</tr>
</tbody>
</table>