

BUILDING INSTRUCTIONS



INTRODUCTION





Thank you for purchasing the Tekno RC NB48.4 1/8th Scale 4WD Competition Nitro Buggy Kit. We are always working on new projects, so please check our website at www.teknorc.com or our Facebook page at www.facebook.com/teknorc for the latest news, parts, and kits.

Take your time! When you work your way through these building instructions, keep an eye out for the following important indicators below:

• **RED TEXT** - This indicates important areas of the build process that should be observed.



Thread Lock icons

Thread lock is always used when a screw is inserted into any metal part. (Included with kit)



Grease icons

Grease Grease is usually used on any areas with movement and for sealing. (Included with kit)

• YOUTUBE - We also have many useful build videos on Youtube, so be sure to check these out! https://www.youtube.com/c/teknorc

Additional equipment and parts needed:

- Paint for body
- .21 nitro engine, tuned pipe, manifold and glow plug
- High torque steering & brake servos (at least 300 oz/in)
- RX battery, switch and harness
- 1/8th scale tires, wheels & CA glue (or premounts)
- Fuel bottle, fuel, 1/8th buggy starter box and glow ignitor

Tools needed:

- Hex drivers 1.5mm (TKR1104), 2.0mm (TKR1105), 2.5mm (TKR1106)
- Nut drivers 5.0mm (TKR1107, 5.5mm (TKR1108), 7.0mm (TKR1109)
- Hobby knife
- Needle-nose pliers
- Shock tool (TKR1115) OR adjustable (Crescent) wrench (for shock assembly)
- 17mm Wheel Wrench (TKR1116)
- 4mm turnbuckle wrench (TKR1103) 5.5/7.0 two sided wrench (TKR1119)
- 4mm arm reamer (or #19 drill bit)

Disclaimer: Tekno RC is not responsible or liable for any property or personal damage, loss, or injury incurred as a result of using this product. This kit is meant for use by persons 14 years of age or older and in the strict confines of a legally permitted RC track or facility.

Warnings: Always double-check that your radio gear is working properly before operating vehicle. Never operate the vehicle indoors (unless the RC track is an indoor facility). Use caution while operating vehicle so as not to collide with people who may be turn marshalling or who might otherwise not be aware that a fast moving RC vehicle is in the vicinity.

Warranty: We warrant that the parts included in this kit are free from defects. If you find a defective part in your kit, please contact us @ info@teknorc.com and we will help you to resolve the issue. We do not warranty parts that may be broken during operation of the vehicle or otherwise. Refer to the end of this instruction manual for a listing of spare/replacement and option parts. All spare parts and other info are available on our website (www.teknorc.com) and through our network of domestic and international dealers and distributors.







Note Step C-2: To properly shim the diff, start by test fitting the diff with no shims and check for side to side play. If no (or very little) play is present, then continue on to the next step. If you feel excessive side to side play, then start by adding one shim on the gear side of the diff assembly. This will move the mesh tighter and remove any play. If the mesh is too tight at this point, move the shim to the other side. In some rare cases, two shims may be necessary.





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BAG N FRONT SHOCK ASSEMBLY

STEP N-4 STEP N-1 STEP N-2 STEP N-3 <u>TKR1200</u> **Refer to filling** 100 instructions on TKR6165 *TKR6160 *TKR6162 page 20 during this step. *TKR6163 (OPTION) TKR8702 *TKR6003 *TKR6003B (Option) TKR6017 TKR6017T (OPTION) Note: <u>TKR6015</u> Shaft guide orientation Note: Use green slime or oil on Use #550wt oil shock shaft <u>TKR6146B</u> FRONT threads AND <u>TKR6009</u> O-rings to TKR8763 *TKR8762 *TKR8764 *TKR8765 prevent tearing and leaking. S *TKR8766 *TKR8767 TKR6016 (OPTION) TKR6144 Note: Shock boots г must be installed **BEFORE** attaching rod end. <u>TKR61408</u> TKR1605 TKR5049A <u>TKR6140B</u> TKR6013 (O) ×2 TKR 1 200 M2.5 LOCK NUT ZINC ____ STEP N-5 хZ <u>TKR1211</u> TKR1202 TKR8027 <u>TKR6007</u> TKR1202 M4 LOCK NUT BLACK * Thread Lock хZ TKR1211 Note: Slot in spring M3 LOCK NUT FLANGE BLACK perch should face outside of vehicle TKR1240] xz Note: Black screw is RH threaded TKR1240 and goes on M3x18MM SHOCK MNT SCREW driver side. Silver screw is LH and goes X2 on passenger side. TKR1248 M2x4MM EMULSION SCREW Stock shock position is inside hole on the arm and 2nd from x2 inside hole on the tower TKR1605 18 • Stock front ride height is 27mm M3x10MM SET SCREW Shock length (droop) is 120mm

BAG D REAR SHOCK ASSEMBLY



SHOCK FILLING INSTRUCTIONS

FOR BOTH FRONT AND REAR SHOCKS

We've found it's easiest to complete steps 1 & 2 on each shock before moving on to step 3. By the time you've finished step 2 on the last shock, the first one will be ready for step 3.

Step 1. Insert all four larger o-rings into the emulsion caps and set aside. Install the small o-rings onto the small emulsion screws by placing the o-rings on a pit mat or towel and pressing the screws into the o-rings.

Step 2. Fill shock with oil all the way to the top and pump the shock shaft up and down 3-5 times.

Step 3. Screw on the cap all the way tight (shock tool TKR1115 is helpful in tightening completely).

Step 4. With the shock at about a 45° angle, push and hold the shock shaft to the top and insert the prepared emulsion screw/seal. Oil will leak out during this process. Tighten the screw until snug (do not overtighten).

Step 5. Pump the shock shaft up and down about 30 times vigorously. This emulsifies the oil.

Step 6. With the shock shaft fully extended, remove the emulsion screw from the cap to do the final bleed.

Step 7. With the shock at about a 45° angle, push and hold the shock shaft to the top and insert the prepared emulsion screw/seal again. Oil will leak out during this process. Tighten the screw until snug (do not overtighten).





MUD GUARD INSTALLATION

BAG P





Note: Do not overtighten mud guard screws.



















Note: Offset servo arm so it is parallel with the connecting arm at neutral or zero servo position.





*Align the fuel tank posts to the cutouts in the chassis

X2 TKR 1 22 1 M3XBMM WASHER



TKR1323 M3x10mm Flat Head Screw

TKR1401

M3x6mm Button Head Screw

TKR1524 M3x12mm Cap Head Screw

Sтер Т-4

Note: Fuel tubing wraps around the tank 1 1/2 times from the pick up nipple (yellow line). Pressure line is shown in blue.





TKR8300 - NB48.4 1/8th Competition Nitro Buggy Kit

Parts List TKR4213 - Clutch Bell (13t) TKR5012 – Gearbox (front) TKR5016B – Gearbox (rear, angled) TKR5020 – Hinge Pins (inner, front/rear) TKR5049A – Pivot Balls (6.8mm, no flng, sway bar, shck ends, almnm, 4pcs) TKR5050 – Turnbuckle (camber link, front/rear, 2pcs) TKR5053A – Pivot Balls (6.8mm, flanged, outside camber, aluminum, 4pcs) TKR5056 – Rod Ends (5.8mm, brake/steering/sway bar linkage, 8pcs) TKR5058A – Pivot Balls (5.8mm, no flange, brake/steering link, aluminum, 4pcs) TKR5071 – Wheel Hubs (17mm, aluminum, gun metal ano, w/pins, 2pcs) TKR5075 – Diff Coupler (f/r, hardened steel) TKR5079A – Stabilizer Balls (6.8mm, sway bars, aluminum, 4pcs) TKR5081 – Sway Bar (2.3mm, front) TKR5086 – Sway Bar Mounts TKR101X - Servo Saver Spring (HD, EB48, SCT410, NB48) TKR5102A – Steering Posts (aluminum) TKR5103 – Servo Saver Post (aluminum, gun metal ano) TKR5116 - Wheel Nuts (17mm, serrated, gun metal ano, M12x1.0, 4pcs) TKR5122 – Steering Rack Bushings (aluminum, gun metal ano, 2pcs) TKR5123 – Turnbuckle (steering links, 2pcs) TKR5126 – Antenna tube (universal, w/ caps, 5pcs) TKR5165 - V2 Hinge Pin Inserts, Wheelbase Shims (EB/NB/ET/NT/SCT) TKR5166 - Front Bumper (revised, EB/NB/ET/NT48) TKR5174 - Rear Arm Mud Guards (for TKR5184, EB/NB) TKR5181 - Low Profile Wing Mount and Body Mounts (EB/NB48/EB48SL) TKR5187 - Rod Ends (straight, 6.8mm, EB/NB/ET/NT48, 8pcs) TKR5213A – Brake Posts (aluminum, 4pcs) TKR5215B – Brake Cams (10 deg, steel, 2pcs) TKR521 – Servo Saver Nut and Spring TKR526 – Shock Tower (front, 7075 CNC, gun metal ano, EB/NB48.3) TKR5269 – Shock Tower (rear, 7075 CNC, gun metal ano, EB/NB48.3) TKR5292W – Wing (high downforce, hole guides, white) TKR5310 – Center Differential Mount (NB48, NT48) TKR53148 - Brake Pad Set (2pcs, NB/NT) TKR5316 - Rear GearBox (offset, rear, NB48, NT48) TKR5317 - Radio Tray and Mud Guard Set (left/right side, NB48, NT48) TKR5319 – Radio Tray Covers (NB48, NT48) TKR5320 - Servo Horns (steering, throttle, NB48, NT48) TKR5321 - Exhaust Wire Mount Set (CNC, NB48, NT48) TKR5323 - Engine Mounts (CNC, NB48, NT48) TKR5324 - Air Filter Set (hose, filter, housing, NB48, NT48) TKR5331 - Throttle Pivot Ball Assembly (CNC, NB48, NT48) TKR5336B – Throttle, Brake Linkage (NB/NT, revised) TKR5340C - Fuel Tank (w/ clunk, NB48, IFMAR legal) TKR5341 - Fuel Tank Post and Air Filter Hanger Set (NB48, NT48) TKR5345B - Brake Disc (steel, NB/NT, revised, 1pc) TKR5350 - Flywheel (4-shoe) TKR5351 - Clutch Shoes (7075, 4pcs, NB48, NT48) TKR5353 - Clutch Springs and Hardware Set (NB48, NT48) TKR5362 - Chassis Brace Set (NB48, NT48) TKR5363 - Air Filter Foams (inner, outer, pre-oiled, 3pcs each, NB48, NT48) TKR5368 - Brake Post Spring (NB/NT, 4pcs) TKR5376 - Driveshaft (center, rear, steel, NB48) TKR5377 - Driveshaft (center, front, steel, NB48, NT48) TKR5491 - Sway Bar (2.4mm, rear) TKR5550 – Turnbuckle (camber link, front, 2pcs) TKR6252 - Turnbuckle (M3 thread, 40mm length, 2pcs) TKR8027 – Shock Standoffs (fits TKR8702, TKR6018, TKR6003, 2pcs) TKR8034 – Hinge Pins (outer, f/r, EB/NB48.4) TKR8040A – Rear Hubs (L/R, 0 RC offset, EB/NB48.4) TKR8041 – Spindles (L/R, EB/NB48.4) TKR8042 – Kingpin Shoulder Screws (EB/NB48.4, 4pcs) TKR8042 – Pivot Balls (6.8mm, camber, str links, almnm, centered, 4pcs) TKR8087 – Universal Driveshaft Set (f/r, 96.5mm, EB/NB.4, 2 pcs) TKR8100 – Ackerman Plate (7075, EB/NB48.4) TKR8104 – Bell Cranks and Top Plates (ALL, requires TKR8100) TKR8161 – Hinge Pin Brace (CNC, 7075, EB/NB48.4, A Block) TKR8162 – Hinge Pin Brace (CNC, 7075, EB/NB48.4, B Block) TKR8163 – Hinge Pin Brace (CNC, 7075, EB/NB48.4, B Block) TKR8164 – Hinge Pin Brace (CNC, 7075, EB/NB48.4, D Block) TKR8184 – Suspension Arms (rear, EB/NB48.4) TKR8194A – Spindle Carriers (L/R, 15 degree, 0 RC offset, EB/NB.4) TKR828A – Suspension Arms (front, EB/NB48.4) TKR8303 – Chassis (7075, 4mm, hard anodized, lightened, NB48.4) TKR8320 – Rear Chassis Brace Set (NB48.4) TKR8345 – Body (.040 lexan, NB48/48.3/48.4, w/ window mask) TKR8346 – Decal Sheet (NB48.4)

Bearings List

TKRBB050825 – Ball Bearing (5x8x2.5mm, 4pcs) TKRBB05104 – Ball Bearing (5x10x4, 4pcs) TKRBB05114 – Ball Bearing (5x11x4, 4pcs) TKRBB05134 – Ball Bearing (5x13x4, 4pcs) TKRBB05103 – Ball Bearing (6x10x3, 4pcs) TKRBB08165 – Ball Bearing (8x16x5, 4pcs) TKRBB13194 – Ball Bearing (13x19x4, 4pcs)

Shocks List

TKR6007 – Shock Cap Bushings (4pcs, EB/NB/ET/NT/SCT)
TKR6009 – Shock O-Ring and Bladder Set (for 2 shocks)
TKR6013 – Shock Adjustment Nuts (aluminum, gun metal ano, 2pcs)
TKR6015 – Shock Adjustment Q (rear, aluminum, gun metal ano, 2pcs)
TKR6016 – Shock Body (rear, aluminum, hard ano, 2pcs)
TKR6017 – Shock Shafts (rear, steel, 2pcs)
TKR6060 – Shock Body (rear, x-long, aluminum, hard ano, 2pcs)
TKR6016 – Shock Body (rear, x-long, steel, 2pcs)
TKR6140B – Locking Shock Rod End and Spring Perch Set (revised, EB/NB/ET/NT/SCT)
TKR6144 – Shock Boots (long length, EB/NB, 2pcs)
TKR61455 – Shock Cartridge Set (revised, CNC, Delrin, EB/NB/ET/NT/SCT)
TKR61545 – Shock Cartridge Set (reusid, CNC, Delrin, EB/NB/ET/NT/SCT)
TKR6155 – Shock Caps (7075, emulsion/vented/standard, black ano, 2pcs)
TKR822 – Emulsion O-ring Set (4x cap seals, 8x emulsion o-rings, for 16mm shocks)

TKR8763 – Shock Spring Set (rear, 1.6x11.6, 3.58lb/in, 75mm, black) TKR8773 – Shock Spring Set (rear, 1.6x14.5, 2.75lb/in, 85mm, orange)

Differential List TKR5112X – Differential Outdrives (center, lightened) TKR5113 – Differential Case (f/c/r) TKR5114XB – Differential Outdrives (f/r, lightened, revised) TKR5143 – Differential Seals (3pcs) TKR5144 – Differential O-Rings (6pcs) TKR5145B – Differential Shims (revised, 6x17mm, 6pcs) TKR5149 – Differential Cross Pins (steel, 6pcs) TKR5150 – Differential Gear Set (internal gears only) TKR5150 – Spur Gear (48t, steel, CNC, revised) TKR8151B – Differential Ring Gear (CNC, 39t, use with TKR8152B) TKR8152B - Diff Pinion (12t, CNC, use with TKR8151B) Hardware List TKR1200 – M2.5 Locknuts (zinc finish, 10pcs) TKR1201 – M3 Locknuts (black, 10pcs) TKR1202 - M4 Locknuts (black, 10pcs) TKR1211 – M3 Locknuts (flanged, black, 10pcs) TKR1220 – M3 Countersunk Washers (aluminum, natural, 10pcs) TKR1221 – M3x8mm Washer (black, 10pcs) TKR1222 – 13x16x.1mm Diff Shims (10pcs) TKR1226 - 5x7x.2mm shims (10pcs) TKR1228 - M4 Countersunk Washer (black, 10pcs) TKR1235 – Body Clips (10pcs) TKR1238 - Droop Adjustment Screws (M4x10mm, 8pcs) TKR1240 - Lower Shock Mount Screws (2 CW thread, 2 CCW thread, EB/NB/SCT) TKR1248 – M2x4mm Cap Head Screws (black, 10pcs) TKR1250 – Steering Link Screws (black, steel, 2pcs) TKR1322 – M3x8mm Flat Head Screws (black, 10pcs) TKR1323 – M3x10mm Flat Head Screws (black, 10pcs) TKR1325 - M3x14mm Flat Head Screws (black, 10pcs) TKR1341 – M4x6mm Flat Head Screws (black, 10pcs) TKR1343 - M4x10mm Flat Head Screws (black, 10pcs) TKR1344 - M4x12mm Flat Head Screws (black, 10pcs) TKR1401 - M3x6mm Button Head Screws (black, 10pcs) TKR1402 - M3x8mm Button Head Screws (black, 10pcs) TKR1403 – M3x10mm Button Head Screws (black, 10pcs) TKR1407 - M3x16mm Button Head Screws (black, 10pcs) TKR1443 - M4x10mm Button Head Screws (black, 10pcs) TKR1522 - M3x8mm Cap Head Screws (black, 10pcs) TKR1524 - M3x12mm Cap Head Screws (black, 10pcs) TKR1525 - M3x14mm Cap Head Screws (black, 10pcs) TKR1529 - M3x20mm Cap Head Screws (black, 10pcs) TKR1533 – M3x40mm Cap Head Screws (black, 10pcs) TKR1534 – M3x22mm Cap Head Screws (black, 10pcs) TKR1601 - M3x4mm Set Screws (black, 10pcs) TKR1603 - M5x4mm Set Screws (black, 10pcs) TKR1605 - M3x10mm Set Screws (black, 10pcs) TKR1609 - M3x3mm Set Screws (black, 10pcs) TKR8042 - Kingpin Shoulder Screws (EB/NB48.4, 4pcs) **Option Parts** TKR1103 – Turnbuckle Wrench (4mm, 5mm, hardened steel) TKR1104 – XT Hex Wrench (1.5mm, adjustable length, 4mm shank) TKR1105 – XT Hex Wrench (2.0mm, adjustable length, 4mm shank) TKR1106 – XT Hex Wrench (2.5mm, adjustable length, 4mm shank) TKR1107 – XT Nut Driver (5.0mm, adjustable length, 4mm shank) TKR1108 – XT Nut Driver (5.5mm , adjustable length, 4mm shank) TKR1115 – Pivot Ball and Shock Multi-tool (aluminum) TKR1116 – 17mm Wheel Wrench, Shock Cap Tool TKR1119 – 5.5mm / 7.0mm Wrench (hardened steel) TKR5071B - Wheel Hubs (17mm, alum, ltnd, gun metal ano, 1mm off, w/pins, 2pcs) TKR5071C – Wheel Hubs (17mm, alum, ltnd, gun metal ano, 2mm off, w/pins, 2pcs) TKR5071X – Wheel Hubs (aluminum, lightened, gun metal ano, w/pins, 2pcs) TKR5080 – Sway Bar (front, 2.2mm) TKR5082 – Sway Bar (front, 2.4mm) TKR5083 – Sway Bar (front, 2.5mm) TKR5084 – Sway Bar (front, 2.6mm) TKR5085 – Sway Bar (front, 2.8mm) TKR5087 – Sway Bar (front, 3.0mm) TKR5092 – Sway Bar (front, 2.0mm, EB.3/NB.3/SL/SCT.3) TKR5093 – Sway Bar (front, 2.1mm, EB.3/NB.3/SL/SCT.3) TKR5094 – Sway Bar (front, 2.7mm, EB.3/NB.3/SL/SCT.3) TKR5095 – Sway Bar (front, 2.9mm, EB.3/NB.3/SL/SCT.3) TKR5149A – Diff Cross Pins (aluminum, 6pcs, requires TKR5150) TKR5251B - Aluminum Servo Horn (23t spline, M3 clamp, double hole arm) TKR5252B – Aluminum Servo Horn (24t spline, M3 clamp, double hole arm) TKR5253B – Aluminum Servo Horn (25t spline, M3 clamp, double hole arm) TKR52924 – Wing (high down force, hole guides, ROAR/IFMAR legal, black) TKR5292Y – Wing (high down force, hole guides, ROAR/IFMAR legal, black) TKR5292Y – Wing (high down force, hole guides, ROAR/IFMAR legal, yellow) TKR5295 - Universal Driveshaft (center, rear, 111mm, NB48/48.3) TKR5296 - Universal Driveshaft (center, front, 90.5mm, NB/NT48.3) TKR5376A - Driveshaft (center, rear, aluminum, NB48) TKR5377A - Driveshaft (center, front, alminum, NB48, NT48) TKR5490 – Sway Bar (rear, 2.3mm) TKR5492 – Sway Bar (rear, 2.5mm) TKR5493 – Sway Bar (rear, 2.6mm) TKR5494 – Sway Bar (rear, 2.8mm) TKR5495 – Sway Bar (rear, 3.0mm) TKR5496 – Sway Bar (rear, 2.1mm, EB.3/NB.3/SL/SCT.3, ET48, NT48) TKR5497 – Sway Bar (rear, 2.2mm, EB.3/NB.3/SL/SCT.3, ET48, NT48) TKR5498 – Sway Bar (rear, 2.7mm, EB.3/NB.3/SL/SCT.3, ET48, NT48) TKR5499 – Sway Bar (rear, 2.9mm, EB.3/NB.3/SL/SCT.3, ET48, NT48) TKR6003 – Shock Caps (aluminum, gun metal ano, 2pcs, EB48) TKR6003 – Shock Caps (aluminum, gun mear and, 2023) TKR6003B – Shock Caps (aluminum, non-vented top, 2025) TKR6009B – Shock O-Ring Set (16pcs) TKR6017T – Shock Shafts w/ TiNi coating (rear, steel, 2pcs) TKR6061T – Shock Shafts w/ TiNi coating (rear, x-long, steel, 2pcs) TKR6152 – Full Option Shock Kit (122mm, no springs, no pistons) TKR6153 – Full Option Shock Kit (137mm, no springs, no pistons) TKR6159 – Shock Pistons (CNC, flat/tapered, 4x1.8mm) TKR6160 – Shock Piston Blanks (CNC, flat/tapered, 16 dimples) TKR6162 – Shock Pistons (CNC, flat/tapered, 3×2.1, 10.4mm2, 4pcs) TKR6163 – Shock Piston Blanks (CNC, flat/flat, 16 dimples)

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