

INTRODUCTION





Thank you for purchasing the Tekno RC EB48.2 1/8th Electric 4WD Competition Buggy. The EB48.2 represents the state-of-the-art in 1/8th Electric Buggy technology. We hope you have as much fun driving your new vehicle as we did developing it. We are always working on new projects, so please check our website (www.teknorc.com) regularly for the latest news, parts, and kits. Thanks again.

Additional equipment and parts needed:

2/3 channel radio transmitter and receiver 1/8th scale ESC and motor High torque steering servo, optional brake servo 4-6s LiPo battery 1/8th scale buggy tires, wheels & CA glue Paint for body MOD1 Pinion (TKR4171->TKR4190) Or Tekno RC Traktion Drive / Elektri-Clutch slipper system (TKR4301X)

Tools needed:

Hex drivers (1.5mm, 2.0mm, 2.5mm) Nut drivers (5.0mm, 5.5mm, 7.0mm) Hobby knife Needle-nose pliers Adjustable (Crescent) wrench (for shock assembly) 4mm turnbuckle wrench Lexan Body Scissors

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 mashalling 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.

This project is dedicated to Herb Lewis.









<u>TKR1529</u>

TKR1525

6

TKR1529 M3x20mm Cap Head Screw

D-3

X1 TKR1603

M5x4mm Set Screw

TKRBBD5134 BALL BEARING (5x13x4)









BAG G REAR CAMBER LINKS





BAG H FRONT SWAY BAR





BAG I FRONT CAMBER LINKS









SHOCK FILLING INSTRUCTIONS

FOR BOTH FRONT AND REAR SHOCKS

The following steps and information will provide you with the proper way to fill and bleed your Tekno RC EB48 shocks.

After thorough testing, we've found it's easiest to complete steps 1 through 3 on each shock before moving onto step 4. By the time you've finished step 3 on the last shock the first one should be ready for step 4.

- Step 1. Extend the shock shaft all the way down. Fill the shock with oil until the body is approximately 90% full.
- Step 2. Slowly pump the shock shaft up and down about 3-5 times to release air bubbles from underneath the piston.
- Step 3. Let the shock rest vertically with the shock shaft fully extended for five minutes or until all of the air bubbles have released.
- Step 4. Push the shaft in to the amount of rebound desired. For example, to achieve little or no rebound, push the shaft in all the way (in this case, about ¼" of shaft showing). For 50% rebound, push the shaft in half way. Make sure that you match the rebound amount between the left and right shocks. We've found that running the least amount of (0%) rebound in both the front and rear shocks gives the most consistent overall performance.
- Step 5. Next you will top off the shock with oil. The goal is not to fill the body completely, but only to fill it enough so that when the bladder is placed on top there will be no air underneath. If you do overfill the shock, it won't hurt performance, it will just spill out and make a little bit of a mess.
- Step 6. In this step you will be placing the bladder on top the shock body. While holding the shock shaft in the desired position from step 4, push the bladder down onto the shock body using your fingertip to fully seat the lip of the bladder onto the rim of the shock body. If done correctly a small amount of oil should bleed out. If no oil is released you may have some air trapped underneath the bladder and you will need to remove the bladder and repeat step 5. Once the bladder is seated onto the shock body, pull the shock shaft down about 20mm. This will "suck" the bladder down and hold it in place. Carefully wipe away the excess oil that was bled, being careful not to disrupt the seal of the bladder on the shock body.
- Step 7. While continuing to hold the shock vertically, screw the shock cap down onto the body and tighten fully. The cap will bottom out easily, but the bladder will be sealed tight. You can use an adjustable wrench to hold the bottom of the shock while tightening the shock cap down to be sure they are tight.

You can build the shocks in any manner you prefer, but we've found this way provides the best handling and more consistent shocks. They will also last longer between rebuilds.

Use part #'s TKR6008 (pistons and guides) and TKR6009/TKR6009B (o-ring pack) to rebuild your shocks regularly.













TKR5000 Spare Parts List TKR5000 - EB48 Electric 1/8th Scale 4WD Buggy Kit TKR5000F - Chassis (7075, hard anodized) TKR5010 - Battery Tray, Mud Guard (left side) TKR5011 – Radio Tray, Mud Guard (right side) TKR5012 – Gearbox (front) TKR5016B - Gearbox (rear) TKR5013 – Adjustable Hinge Pin Braces (rear, 7075 CNC, gun metal ano) TKR5013B - Adjustable Hinge Pin Brace (+1.5 deg, rear, 7075 CNC, gun metal ano) TKR5017 – Adjustable Hinge Pin Braces (front, 7075 CNC, gun metal ano) TKR5018 – Front Bumper TKR5020 - Hinge Pins (inner, front/rear) TKR5021 - Hinge Pin Inserts, Wheelbase Shims (complete set) TKR5026 - Wing Mount, Body Mount Set TKR5027 – Shock Standoffs (2pcs) TKR5028 - Shock Tower (front, 7075 NC, gun metal ano) TKR5029 – Shock Tower (rear, 7075 NC, gun metal ano) TKR5030XT - Suspension Arms (rear, 2pcs) TKR5033 - Rear Arm Mud Guards TKR5034 - Hinge Pins (outer, rear) TKR5036XT – Suspension Arms (front, 2pcs) TKR5037 - Wing (white) TKR5037B - Wing (black) TKR5037Y - Wing (yellow) TKR5040 - Rear Hubs (2pcs) TKR5041 – Spindles (left and right) TKR5042 - Spindle Carriers (left and right) TKR5049A - Pivot Balls (6.8mm, no flng, sway bar, shck ends, almnm, 4pcs) TKR5050 – Turnbuckle (camber link, front/rear, 2pcs) TKR5051 - Rod Ends (6.8mm, camber links, 8pcs) TKR5052A - Pivot Balls (6.8mm, inside camber, strng links, aluminum, 4pcs) TKR5053A – Pivot Balls (6.8mm, flanged, outside camber, aluminum, 4pcs) TKR5054A - Spindle Bushings (4pcs, aluminum, hard ano) TKR5055A - Arm Bushings (4pcs, aluminum, hard ano) TKR5056 - Rod Ends (5.8mm, brake/steering/sway bar linkage, 8pcs) TKR5058A - Pivot Balls (5.8mm, no flange, brake/strng link, aluminum, 4pcs) TKR5060 – Steering Servo Brace (aluminum, gun metal ano) TKR5060C - Steering Servo Brace (carbon fiber) TKR5062 - Chassis Brace Set (front/rear/center) TKR5065 - ESC Tray and Radio/Battery Tray Accessories TKR5070 - Stub Axles (hardened steel, 2pcs) TKR5071 - Wheel Hubs (17mm, aluminum, black ano, w/pins, 2pcs) TKR5071X – Wheel Hubs (17mm, aluminum, lightened, gun metal ano, w/pins, 2pcs) 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) TKR5072 - Driveshafts (f/r, hardened steel, 2pcs) TKR5073 - CV Rebuild kit (f/r, for 2 axles) TKR5075 - Diff Coupler (f/r, hardened steel) TKR5076 - Driveshaft (center, rear, hardened steel) TKR5077 – Driveshaft (center, front, 7075 aluminum, gun metal ano) TKR5079A - Stabilizer Balls (6.8mm, sway bars, aluminum, 4pcs) TKR5080 - Sway Bar (f/r, 2.2mm) TKR5081 – Sway Bar (f/r, 2.3mm) TKR5082 - Sway Bar (f/r, 2.4mm) TKR5083 - Sway Bar (f/r, 2.5mm) TKR5084 - Sway Bar (f/r, 2.6mm) TKR5085 - Sway Bar (f/r, 2.8mm) TKR5086 – Sway Bar Mounts TKR5087 - Sway Bar (f/r, 3.0mm) TKR5100 – Ackerman Plate (aluminum, gun metal ano) TKR101X - Servo Saver Spring (HD, EB48, SCT410, NB48) TKR5102A – Steering Posts (aluminum, gun metal ano) TKR5103 – Servo Saver Post (aluminum, gun metal ano) TKR5104 – Steering Bell Cranks TKR5107 – Steering Top Plate, Center Diff Top Plate, Center Diff Rear Support 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) TKR5125 - O-Ring (ESC tray, 3pcs) TKR5126 - Antenna tube (universal, w/ caps, 5pcs) TKR5210 - Center Diff Motor Mount (aluminum, gun metal ano) TKR5211 – Motor Mount Insert (aluminum, gun metal ano) TKR5217 - Center Diff Rear Support (aluminum, gun metal ano) TKR5220 - Servo Horns (steering, brakes) TKR5230 – Steering linkage (M3x18mm threaded rod, 10pcs) TKR5231 – Servo Saver Nut and Spring TKR5237 - Spur Gear (44t, composite) TKR5237K – Spur Gear (44t, composite, black) TKR5240 - Adjustable Hinge Pin Braces (front and rear, composite) TKR5245 - Body (.040 lexan, EB48) TKR5246 – Instruction Manual (EB48) TKR5247 – Decal Sheet (EB48) TKR5152 - Diff Pinion (10T, CNC, straight cut) TKR5151 – Differential Ring Gear (40t, straight cut) TKR5112X - Differential Outdrives (center, lightened) TKR5113 - Differential Case (f/c/r) TKR5114X - Differential Outdrives (f/r, lightened)

TKR5115 - Spur Gear (44t, hardened steel, lightened) TKR5150 - Differential Gear Set (internal gears only) TKR5149 - Differential Cross Pins (6pcs) TKR5143 - Differential Seals (3pcs) TKR5144 – Differential O-Rings (6pcs) TKR5145 - Differential Shims (6x17mm, 6pcs) TKR5147 – Complete Center Differential TKR5148 - Complete F/R Differential TKR5206 - Brake discs (fiberglass, 2pcs) TKR5208 - Brake Levers, Brake Cam Stays (w/ pins) TKR5213A - Brake Posts (aluminum, 4pcs) TKR5214 - Brake Pads (steel, 4pcs) TKR5215 - Brake Cams (steel, 2pcs) TKR5219 - Brake Linkage Ball Lever (steel) TKR5222 – Brake Linkage TKR5067 – Brake Servo Brace (aluminum, gun metal ano) TKR5067C - Brake Servo Brace (carbon fiber) TKR5057 - Turnbuckle (brake bias adjustment) TKR5206X - Brake Kit (complete) TKR6002 – Shock Body (front, aluminum, hard ano, 2pcs) TKR6003 - Shock Caps (aluminum, black ano, 2pcs) TKR6004 - Shock Shafts (front, steel, 2pcs) TKR6004T - Shock Shafts w/ TiNi coating (front, steel, 2pcs) TKR6005 - Shock Rod Ends and Spring Perches (6.8mm, shock ends, 4pcs) TKR6008 - Shock Shaft Guide, Piston, and Bushing Set (for 2 shocks) TKR6009 – Shock O-Ring and Bladder Set (for 2 shocks) TKR6013 - Shock Adjustment Nuts (aluminum, gun metal ano, 2pcs) TKR6015 – Shock Cartridge Caps (aluminum, gun metal ano, 2pcs) TKR6016 – Shock Body (rear, aluminum, hard ano, 2pcs) TKR6017 - Shock Shafts (rear, steel, 2pcs) TKR6017T - Shock Shafts w/ TiNi coating (rear, steel, 2pcs) TKR6018 - Shock Cap and Spring Adjuster Set (composite, for 2 shocks) TKR6021 – Shock Set (front, complete) TKR6022 - Shock Set (rear, complete) TKR6023 - Shock Boot Set (2 front, 2 rear) TKR6030 – Shock Spring Set (rear, 1.4 x 11.0T, 85mm) TKR6031 – Shock Spring Set (rear, 1.4 x 10.5T, 85mm) TKR6032 - Shock Spring Set (rear, 1.4 x 10.0T, 85mm) TKR6033 – Shock Spring Set (rear, 1.4 x 9.5T, 85mm) TKR6034 – Shock Spring Set (rear, 1.4 x 9.0T, 85mm) TKR6035 – Shock Spring Set (front, 1.5 x 9.0T, 70mm) TKR6036 – Shock Spring Set (front, 1.5 x 8.5T, 70mm) TKR6037 - Shock Spring Set (front, 1.5 x 8.0T, 70mm) TKR6038 - Shock Spring Set (front, 1.5 x 7.5T, 70mm) TKR6039 - Shock Spring Set (front, 1.5 x 7.0T, 70mm) TKR6050 - Shock Pistons (CNC, conical, 10x1.1mm) TKR6051 - Shock Pistons (CNC, conical, 8x1.3mm) TKR6052 - Shock Pistons (CNC, conical, 10x1.2mm) TKR6053 - Shock Pistons (CNC, conical, 8x1.4mm) TKR6054 - Shock Pistons (CNC, conical, 10x1.3mm) TKRBB050825 - Ball Bearing (5x8x2.5mm, 4pcs) TKRBB05114 - Ball Bearing (5x11x4, 4pcs) TKRBB05134 - Ball Bearing (5x13x4, 4pcs) TKRBB06103 – Ball Bearing (6x10x3, 4pcs) TKRBB08144 - Ball Bearing (8x14x4, 4pcs) TKRBB08165 - Ball Bearing (8x16x5, 4pcs) TKRBB13194 – Ball Bearing (13x19x4, 4pcs) TKR1200 - M2.5 Locknuts (zinc finish, 10pcs) TKR1201 - M3 Locknuts (black, 10pcs) TKR1202 - M4 Locknuts (black, 10pcs) TKR1211 – M3 Locknuts (flanged, black, 10pcs) TKR1221 – M3x8mm Washer (black, 10pcs) TKR1222 - 13x16x.1mm Diff Shims (10pcs) TKR1235 - Body Clips (10pcs) TKR1227 - M4x9mm Washer (zinc finish, 10pcs) TKR1322 - M3x8mm Flat Head Screws (black, 10pcs) TKR1323 - M3x10mm Flat Head Screws (black, 10pcs) TKR1325 - M3x14mm Flat Head Screws (black, 10pcs) TKR1327 - M3x16mm Flat Head Screws (black, 10pcs) TKR1328 - M3x18mm Flat Head Screws (black, 10pcs) TKR1333 - M3x40mm Flat Head Screws (black, 10pcs) TKR1341 - M4x6mm Flat Head Screws (black, 10pcs) TKR1343 - M4x10mm Flat Head Screws (black, 10pcs) TKR1346 - M4x15mm Flat Head Screws (black, 10pcs) TKR1401 - M3x6mm Button Head Screws (black, 10pcs) TKR1402 - M3x8mm Button Head Screws (black, 10pcs) TKR1407 - M3x16mm Button Head Screws (black, 10pcs) TKR1443 - M4x10mm Button Head Screws (black, 10pcs) TKR1445 - M4x14mm Button Head Screws (black, 10pcs) TKR1447 - M4x16mm Button Head Srews (black, 10pcs) TKR1448 - M4x18mm 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) TKR1601 - M3x4mm Set Screws (black, 10pcs) TKR1603 - M5x4mm Set Screws (black, 10pcs)

MECHANICAL BRAKES (OPTIONAL - TKR5206X) *NOT INCLUDED IN KIT

BAG R

A mechanical brake setup will allow you to adjust the front/rear brake bias as well as reduce the running temperature of your motor and ESC. Mechanical brakes can provide an advantage on tracks where traction is scarce, but it may suit your driving style in any case. These instructions assume that the center differential/motor mount is completed but not yet installed on your EB48 (Step L). If your vehicle is complete, you will need to remove the center differential/motor mount to complete the brake installation. Refer to Step L in the EB48 instruction manual if you need help.





Radio Setup:

•You need a separate servo for the brakes. A servo with at least 160oz/in torque @ .15sec or faster is recommended.

•To set up the brake servo action, you will need a radio transmitter that has the ability to perform 3rd/AUX mixing on the throttle channel.

•Adjust the mixing function so the brake servo only moves when activating the brakes (moving the trigger forward on your transmitter). If the servo is also moving when on throttle, you will damage the brake system or your servo and the car will not function properly.

•Set the ESC brakes to 0 (zero). Although, you can still use the ESC for partial brakes or drag brake if desired.

•Refer to your transmitter manual for mixing functions specific to your brand.



×1

TKR1327 M3x16mm Flat Head Screw

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _



TKR1525 M3x14mm Cap Head Screw

L) x2 TKR1601 M3x4mm Set Screw



TKR5058 Pivot Ball M3x5.8mm No Flange



TKR1201 M3 Locknut Black

Adjusting the Brakes and Brake Bias:

•The total braking force is set by your transmitter via servo travel (EPA for 3rd/AUX/Brake channel)

•When your servo is in the neutral position, there should be no contact with the brakes. Use the ESC settings to adjust drag brake.

•Adjust the brake linkage stops (TKR5222) and servo EPA to set the brakes to your liking. Some prefer the brakes to come on very quick, while others prefer them to be a little more progressive.

•The brakes bias is adjusted by lengthening or shortening the brake adjustment turnbuckle (TKR5057). A longer link will provide more rear braking bias, a shorter link will provide more front braking bias.

STEF

R-8

•We recommend leaving the servo horn loose while adjusting the brake bias. This way you can test the brake bias, take the servo horn off to adjust, test, repeat if necessary. When you have the brake bias where you want it, tighten down the servo horn.







