



BUILDING INSTRUCTIONS

Introduction



Thank you for purchasing the Tekno RC MT48 2.0 1/8th Electric 4x4 Pro Monster Truck Kit. We are always working on new projects, so please check our website regularly at www.teknorc.com or visit us on Facebook at www.facebook.com/teknorc for all 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 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:

- 2+ channel radio transmitter and receiver
- Body
- Paint for body
- 1/8th scale ESC and motor system
- High torque steering servo (at least 300 oz/in)
- 4-6s (14.8-22.2v) LiPo battery (at least 5000mAh)
- 1/8th scale MT tires/wheels W/17mm Hex
- MOD1 Pinion 13 tooth 17 tooth (TKR4173 TKR4177)

Tools needed:

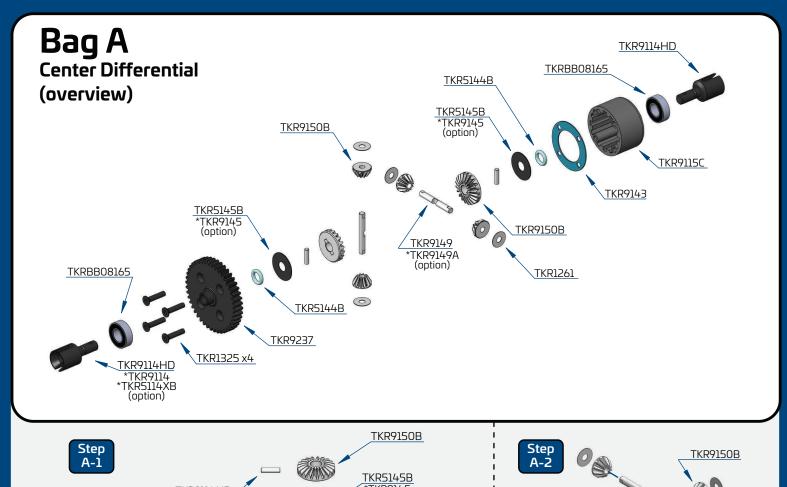
- Hex drivers 1.5mm, 2.0mm, 2.5mm
- Nut drivers 5.0mm (TKR1107), 5.5mm (TKR1108), 7.0mm (TKR1109), 8.0mm (TKR1110)
- Hobby knife
- Needle-nose pliers
- Shock tool (TKR1115) OR adjustable (Crescent) wrench (for shock assembly)
- 4mm turnbuckle wrench (TKR1103) 5.5/7.0 two sided wrench (TKR1119)
- 17mm wheel wrench (TKR1116/TKR1116B)

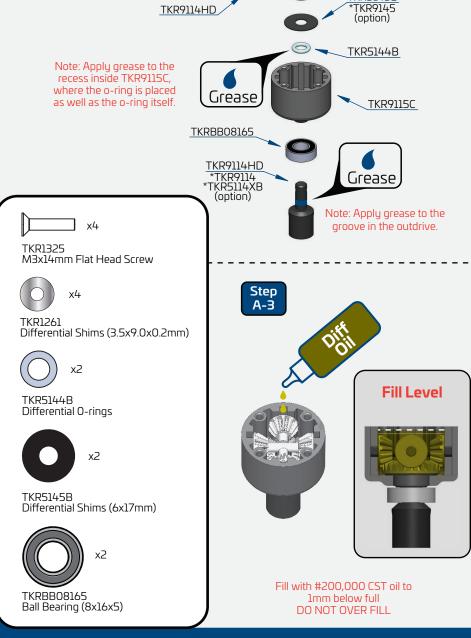
Disclaimer: Tekno RC is not responsible or liable for any property or personal damage, loss, or injury incurred as a result of using this product. This kit is meant for use by persons 14 years of age or older and in the strict confines of a legally permitted RC track or facility.

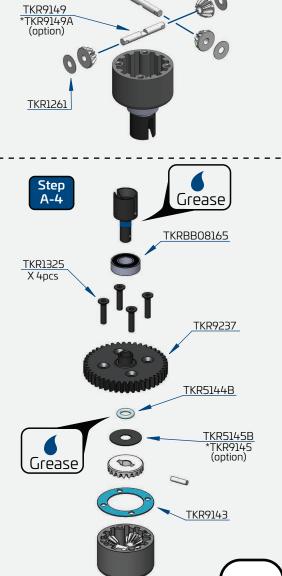
Warnings: Always double-check that your radio gear is working properly before operating vehicle. Never operate the vehicle indoors (unless the RC track is an indoor facility). Use caution while operating vehicle so as not to collide with people who may be turn marshalling or who might otherwise not be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

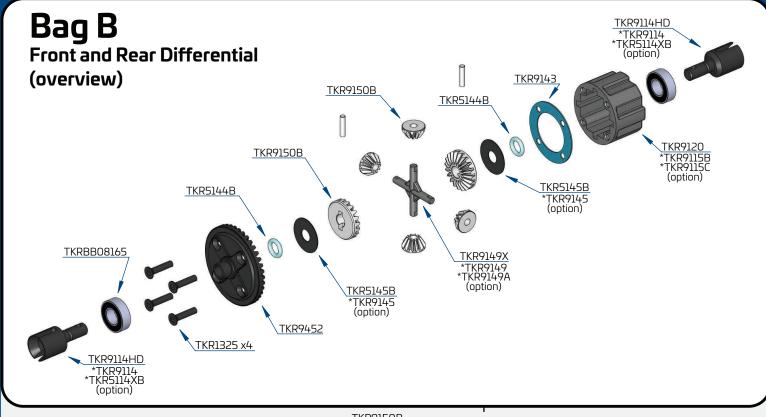
Warranty: We warrant that the parts included in this kit are free from defects. If you find a defective part in your kit, please contact us at **info@teknorc.com** and we will help to resolve the issue. If you modify any part prior to contacting us, the warranty claim will be void. We do not warranty 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.

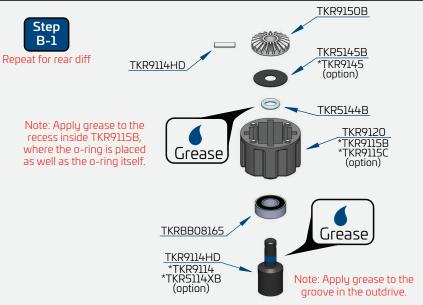
All spare parts and other info are available on our website (www.teknorc.com) and through our network of domestic and international dealers and distributors.

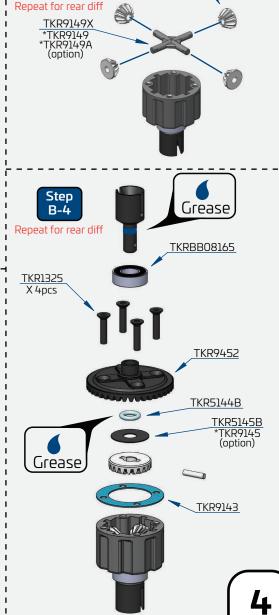












TKR9150B

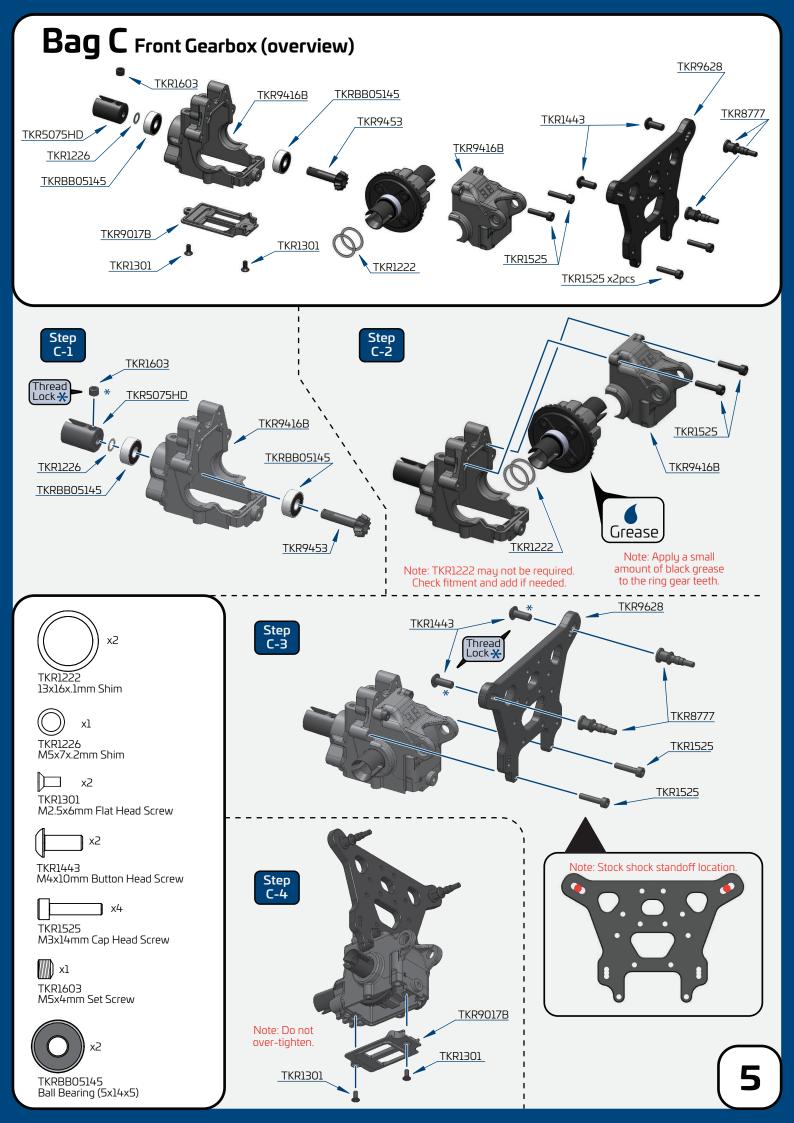
Step

B-2

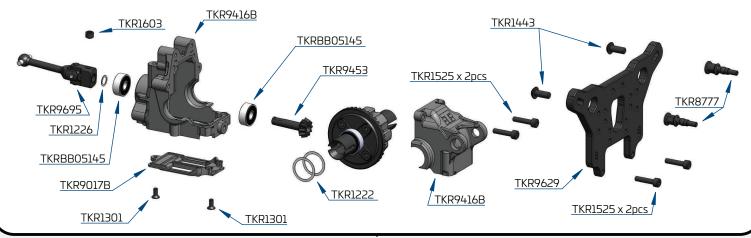


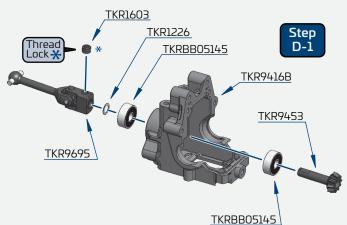


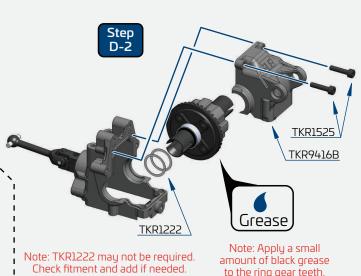
DO NOT OVER FILL



Bag D Rear Gearbox (overview)









TKR1222 13x16x.1mm Shim



χl

TKR1226 M5x7x.2mm Shim



-TKR1301 M2.5x6mm Flat Head Screw



х2

TKR1443 M4x10mm Button Head Screw



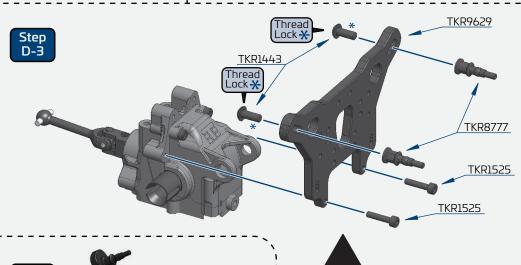
TKR1525 M3x14mm Cap Head Screw



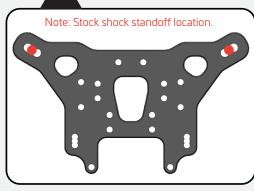
TKR1603 M5x4mm Set Screw



TKRBB05145 Ball Bearing (5x14x5)





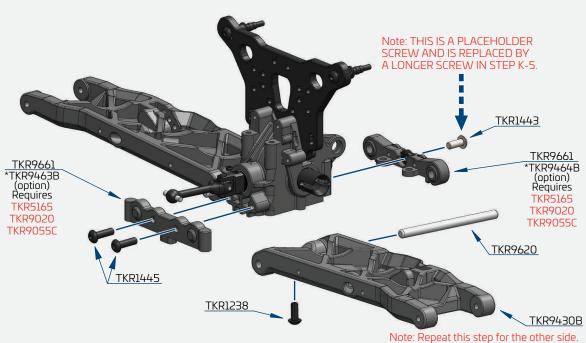


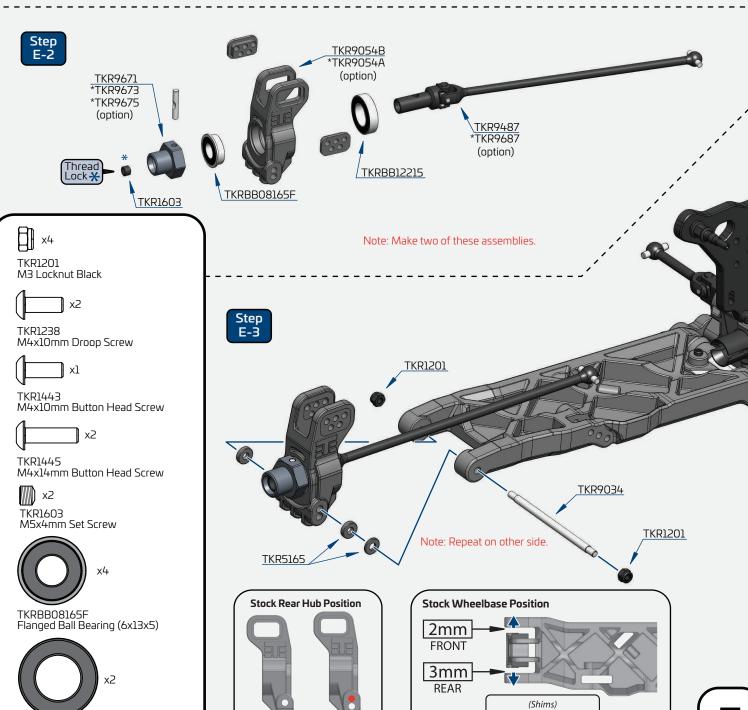
to the ring gear teeth.





TKRBB12215 Ball Bearing (12x21x5)

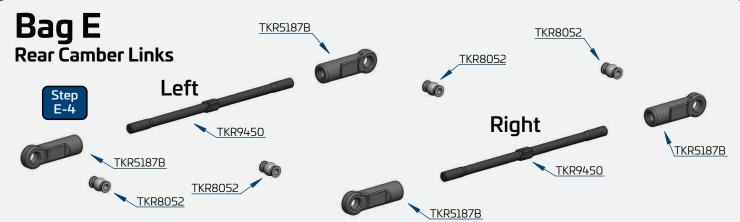




TKR9054A

TKR9054B

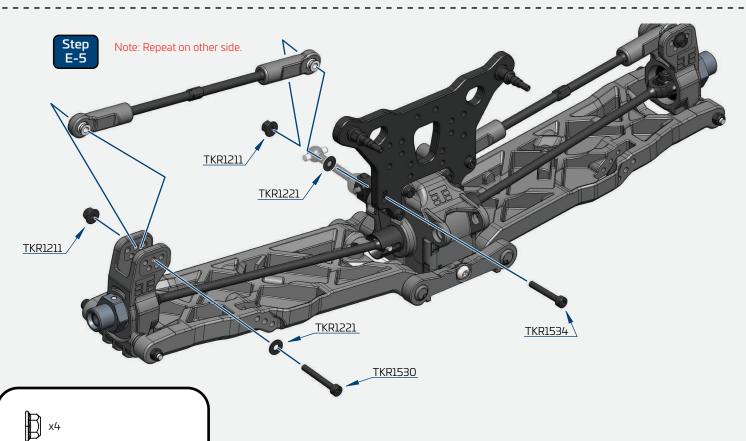
(Thick - 2mm) (Thin - 1mm)



Build Note: Hold the turnbuckle stationary with pliers and push the rod end hard onto the turnbuckle while turning at the same time. Keep in mind that one end of the turnbuckle has normal threads and the other has reverse threads. Start the rod end straight and it will thread on straight.

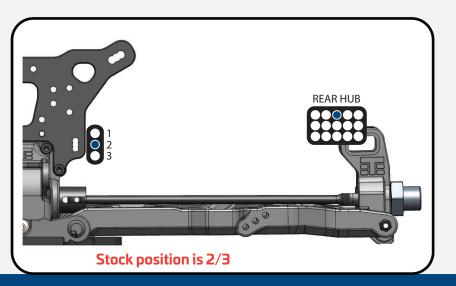


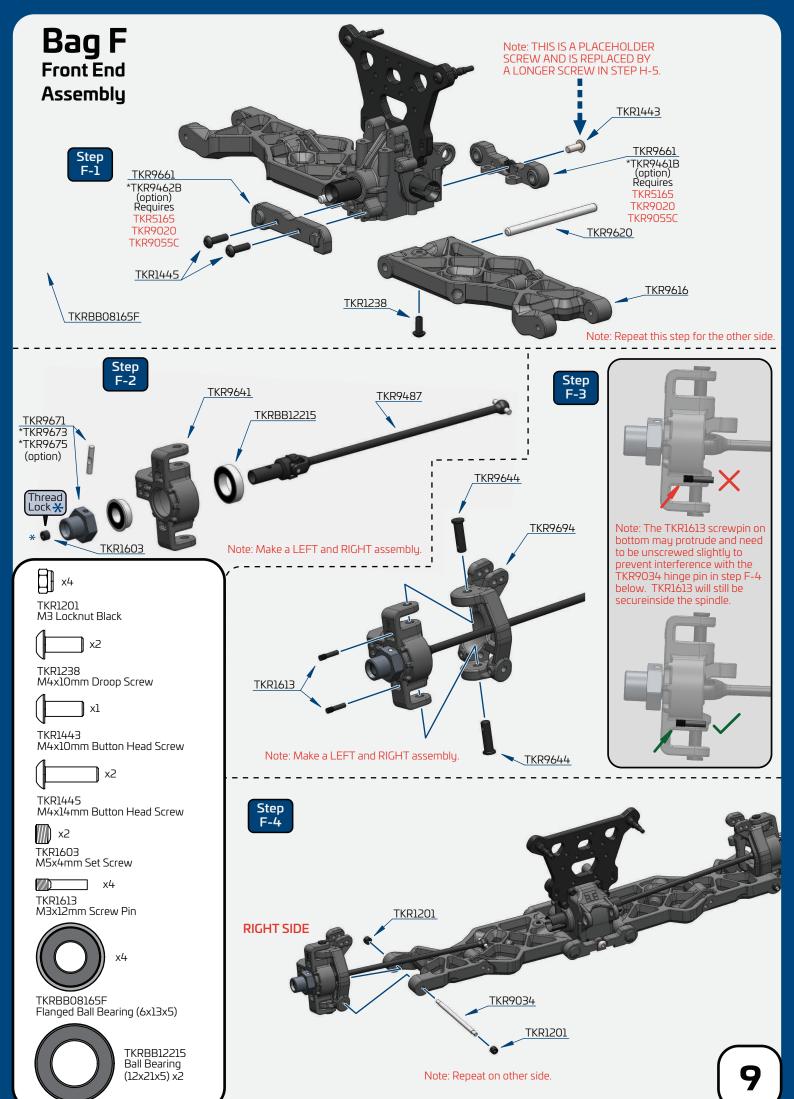
Build Tip: Use some grease or Chapstick on the threads to help prevent "pop-off" when adjustments are being made.

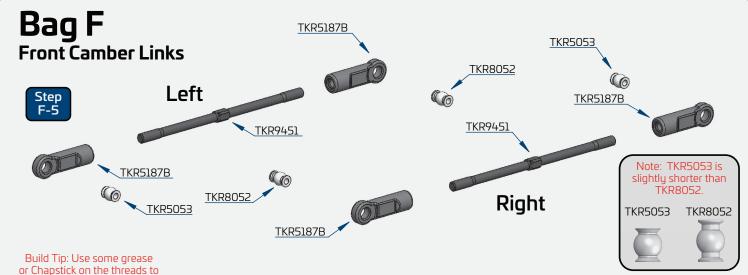




M3x22mm Cap Head Screw



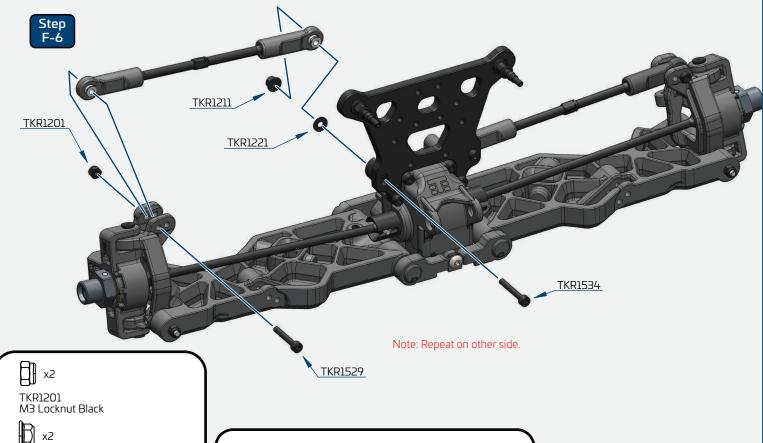


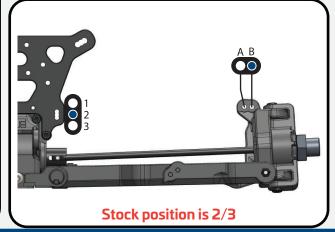


Build Tip: Use some grease or Chapstick on the threads to help prevent "pop-off" when adjustments are being made.

Build Note: Hold the turnbuckle stationary with pliers and push the rod end hard onto the turnbuckle while turning at the same time. Keep in mind that one end of the turnbuckle has normal threads and the other has reverse threads. Start the rod end straight and it will thread on straight.







10

TKR1534 M3x22mm Cap Head Screw

TKR1529 M3x20mm Cap Head Screw

TKR1211 M3 Lock Nut Flange Black

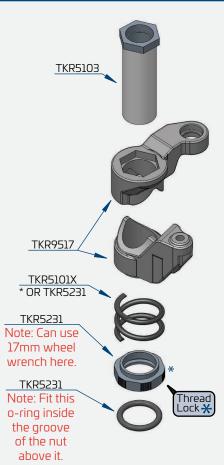
x2

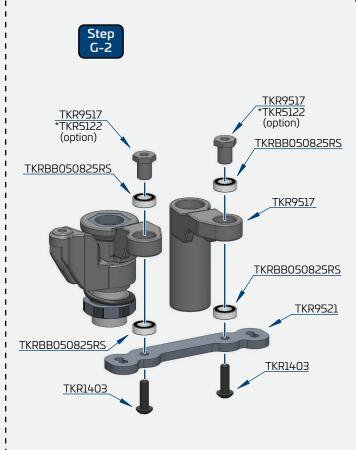
0

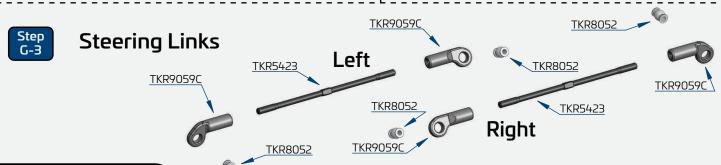
TKR1221 M3x8mm Washer

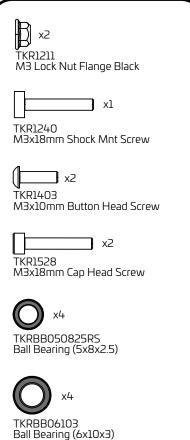


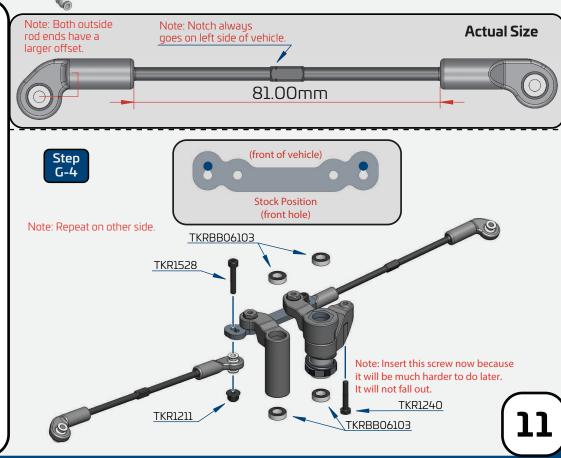


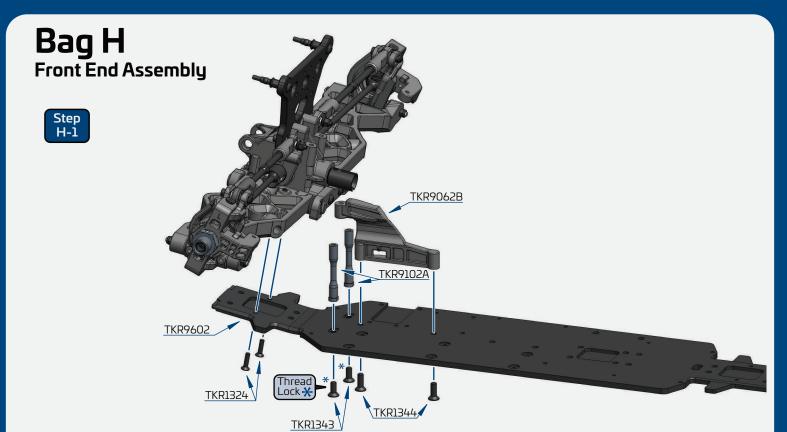
















x2 M4x10mm Flat Head Screw

x2

TKR1344 M4x12mm Flat Head Screw

x2

M4x10mm Button Head Screw

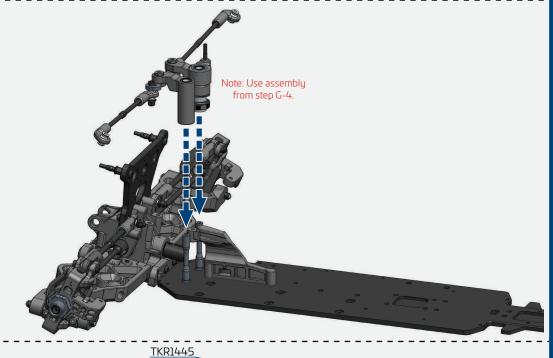
xl

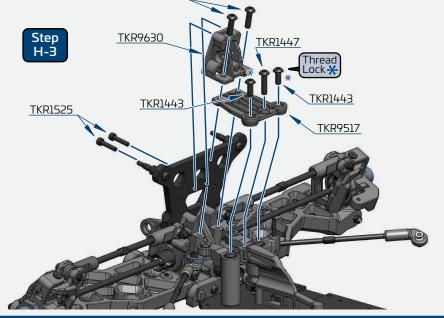
TKR1445 M4x14mm Button Head Screw

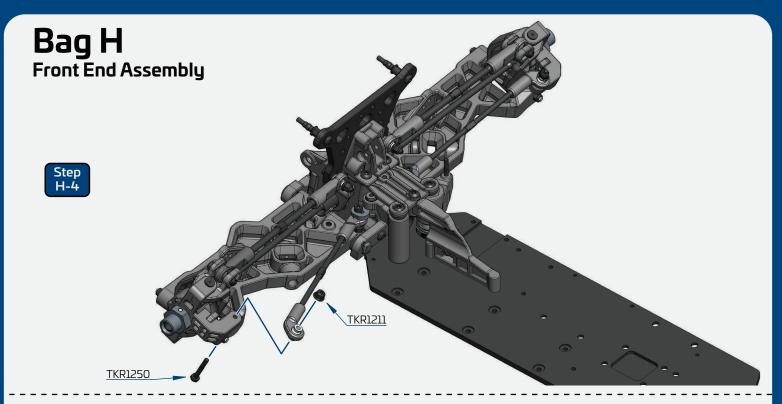
M4x16mm Button Head Screw



TKR1525 M3x14mm Cap Head Screw











X1 TKR1250

TKR1250 M3x21mm Steering Link Screw

x2

TKR1346 M4x15mm Flat Head Screw

x2

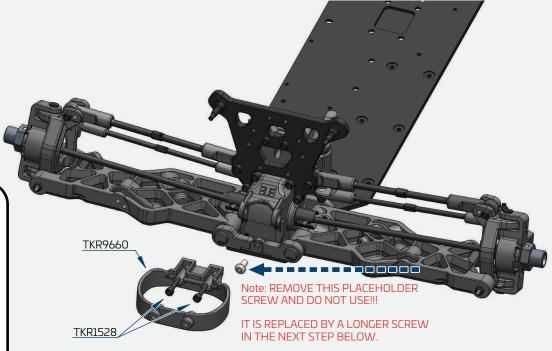
TKR1350 M4x25mm Flat Head Screw

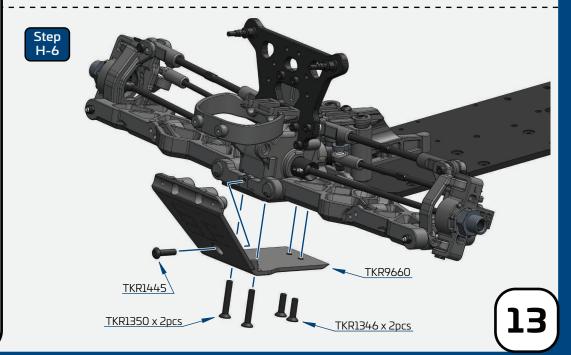
x1

TKR1445 M4x14mm Button Head Screw

_____ x2

TKR1528 M3x18mm Cap Head Screw





Bag I Motor/Servo 1 Piece Motor Mount Motor (not included) Step TKR1522 1-1 Thread Lock * Note: Laser etched numbers indicates what MOD 1 pinion is to be used with each set Thread Lock * of holes. Match the corresponding color TKR9612

TKR1522

MOD 1 Gearing Recommendations

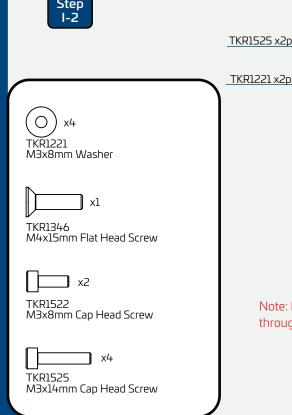
for the second hole.

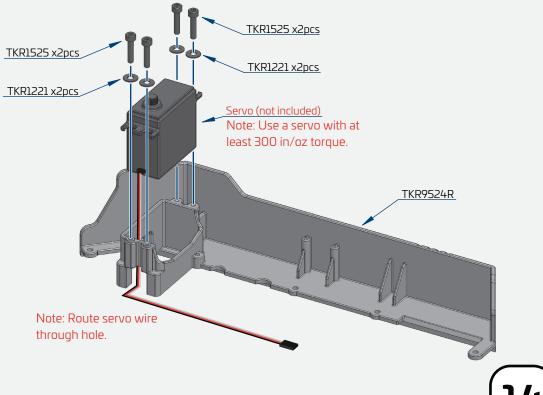
Note: These gearing recommendations are just starting points. Each user might have to adjust based on batteries used, individual preferences, and specific tracks.

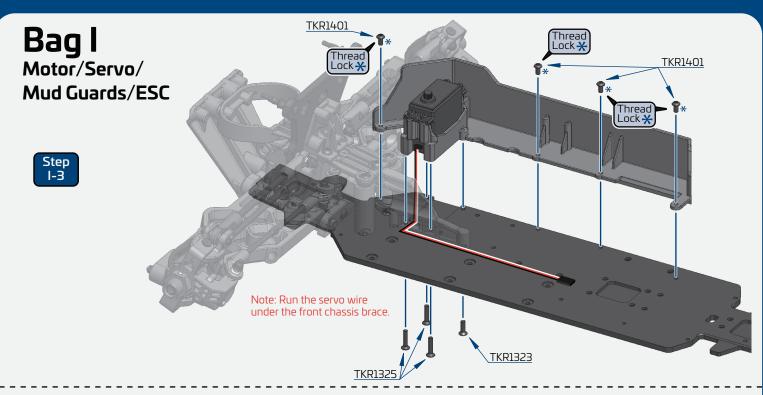
TKR9611

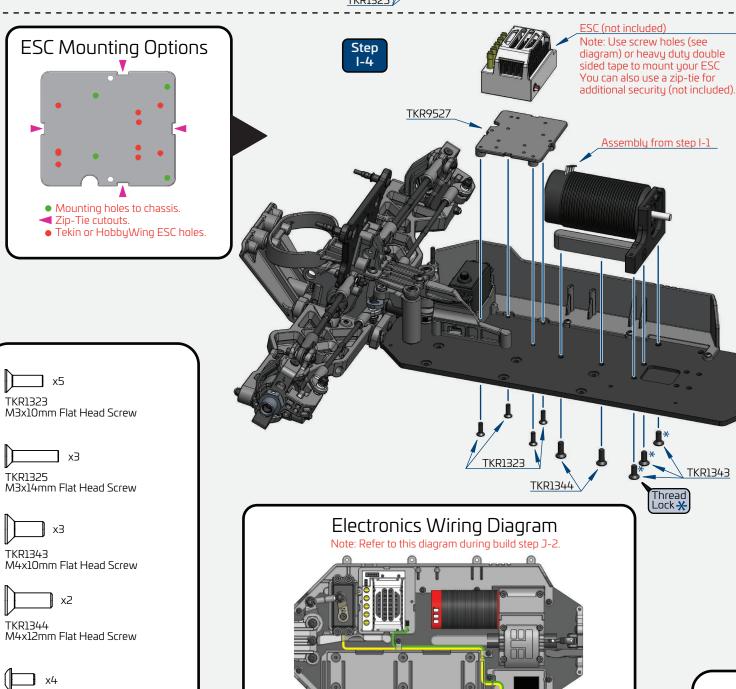
TKR1346

Motor 4268/4274 4-Pole	Battery	Pinion General Bashing (35-45mph)	Pinion High Speed (40-50mph)	Pinion Breaking Parts
1600kv	4 Cell	17 tooth	(not recommended)	(not recommended)
1800kv	4 Cell	16 tooth	17 tooth	(not recommended)
2000kv	4 Cell	15 tooth	16 tooth	(not recommended)
2200kv	4 Cell	14 tooth	15 tooth	17 tooth
1400kv	6 Cell	15 tooth	17 tooth	(not recommended)
1600kv	6 Cell	14 tooth	16 tooth	(not recommended)
1800kv	6 Cell	13 tooth	14 tooth	16 tooth
2000kv	6 Cell	(not recommended)	14 tooth	15 tooth
2200kv	6 Cell	(not recommended)	13 tooth	14 tooth

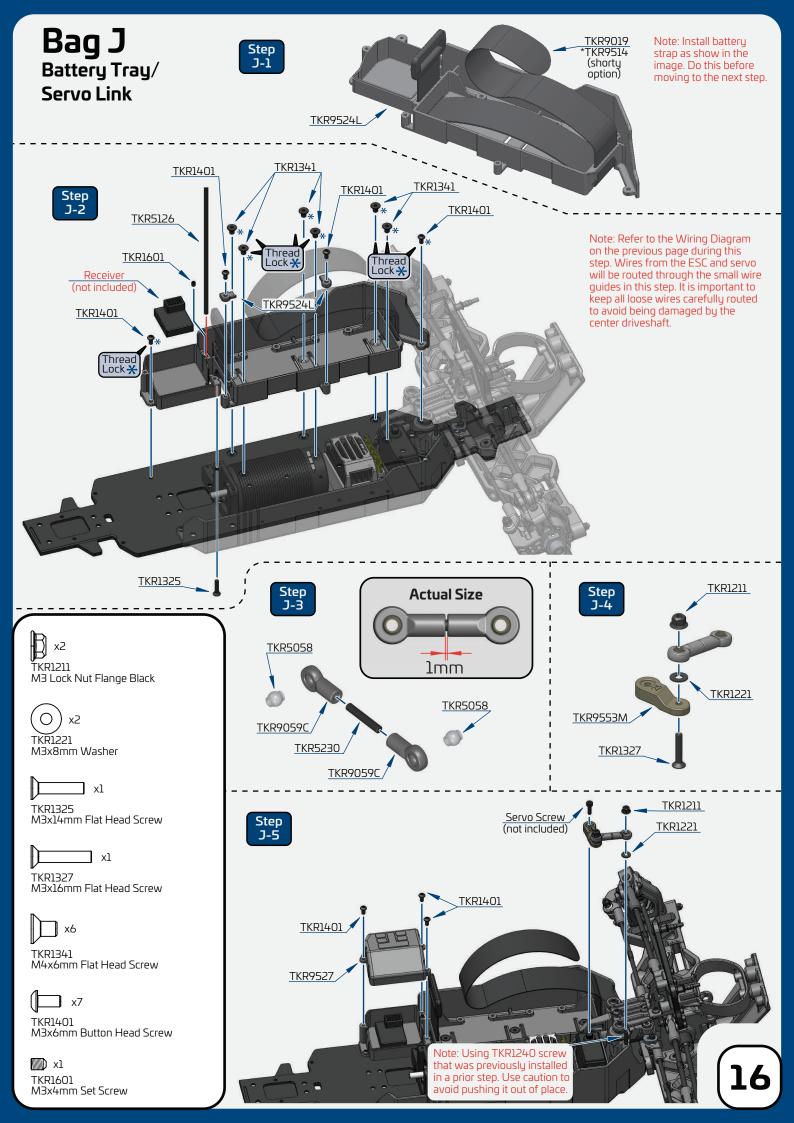


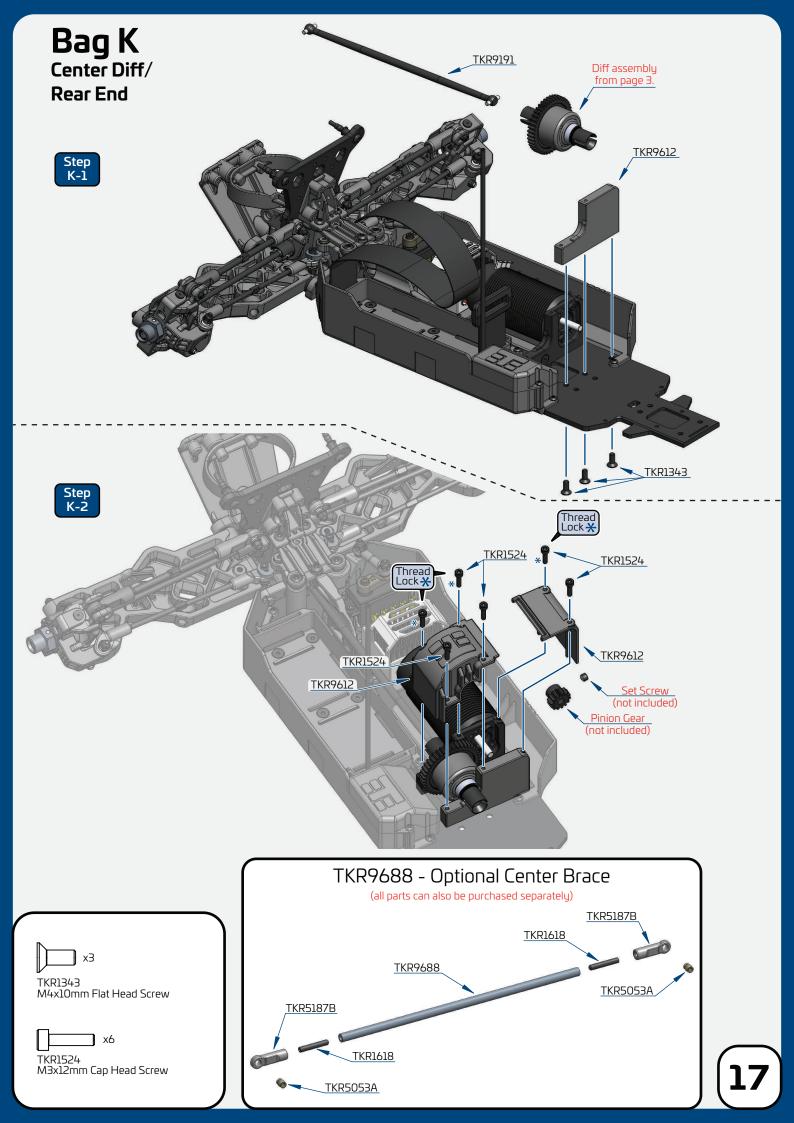


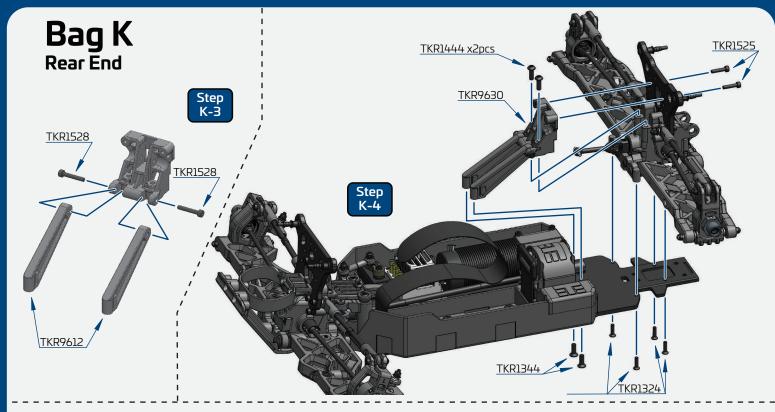




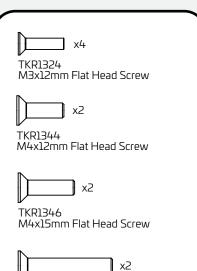
M3x6mm Button Head Screw

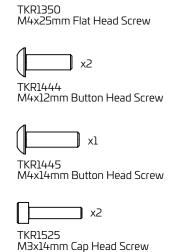






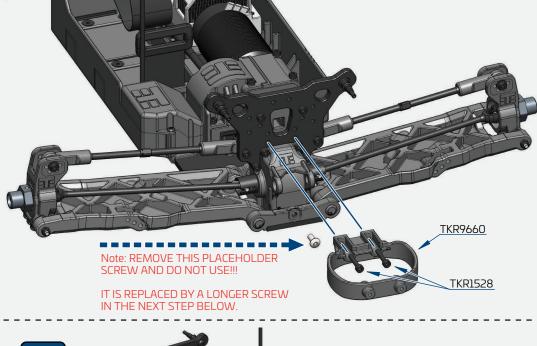


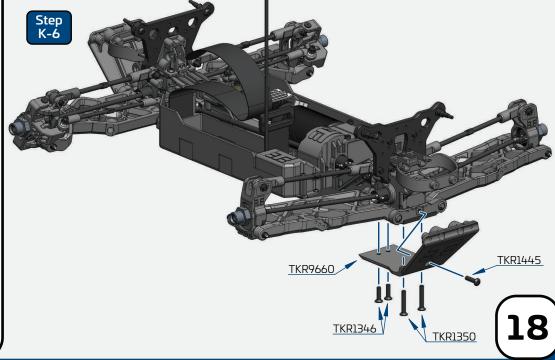




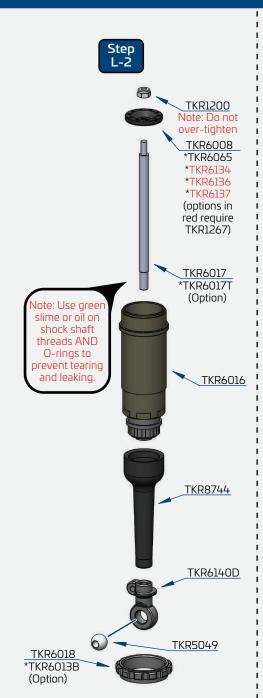
TKR1528

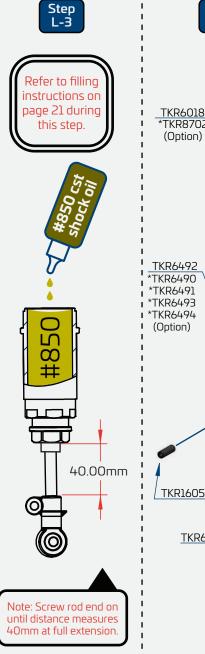
M3x18mm Cap Head Screw

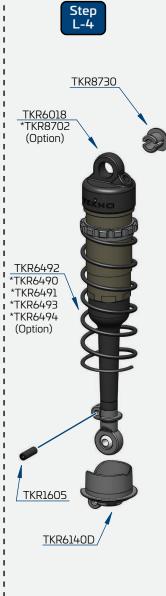


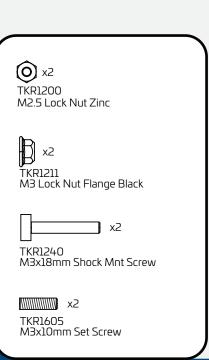


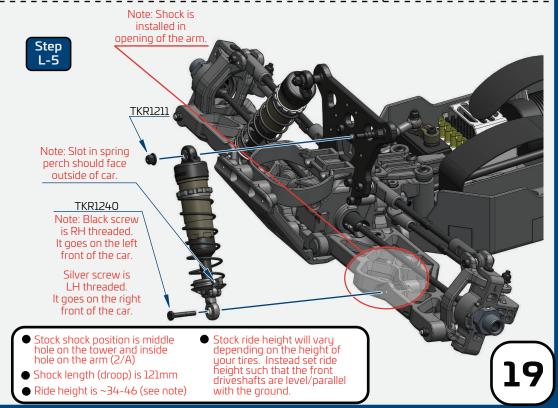


















TKR6008

TKR6008

*TKR6146

*TKR6195
(Option)

TKR6009

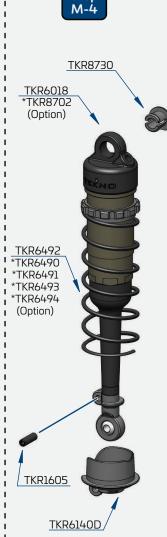
TKR6008 TKR6009

TKR6009

TKR6016







Step

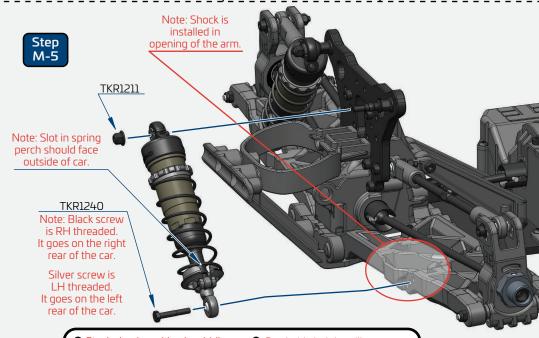




X2
TKR1240
M3x18mm Shock Mnt Screw

X2
TKR1248
M2x4mm Emulsion Screw

TKR1605 M3x10mm Set Screw



 Stock shock position is middle hole on the tower and middle hole on the arm (2/B)

• Shock length (droop) is 121mm

• Ride height is ~38-50 (see note)

 Stock ride height will vary depending on the height of your tires. Set REAR ride height such that the driveshafts are just below level/parallel with the ground.

(20)

Shock Filling Instructions (Bladder)

For both front and rear shocks

We've found it's easiest to complete steps 1-4 on each shock before moving on to step 5. By the time you've finished step 4 on the last shock, the first one will be ready for step 5.

Step 1. Drill a small bleeder hole on the side of all 4 shock caps with a 1-2mm or 1/16'' drill bit. There's a small dimple on the side of the shock caps over the logo to help guide the bit. Remove the flashing leftover from drilling, insert bladder and set aside.

Step 2. Extend the shock shaft all the way down. Fill the shock with oil until the body is approximately 95% full.

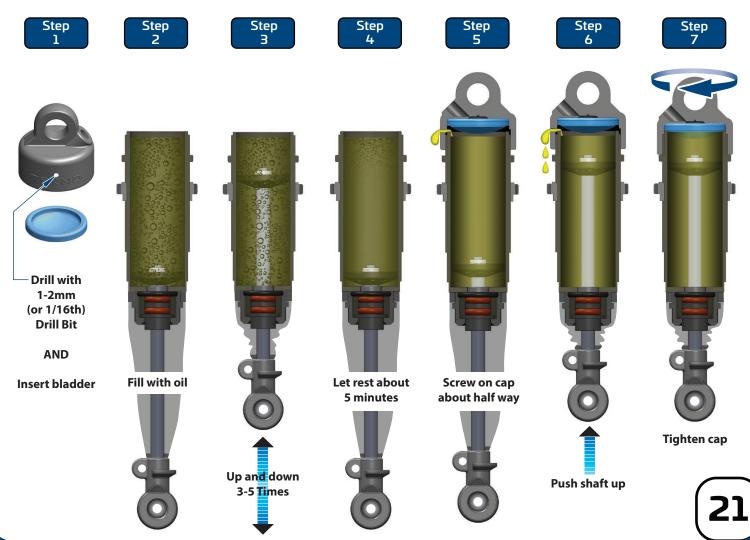
Step 3. SLOWLY pump the shock shaft up and down **3-5 times** to release air bubbles from underneath the piston.

Step 4. Let the shock rest vertically with the shock shaft fully extended for approximately five minutes or until all of the air bubbles have released from the oil.

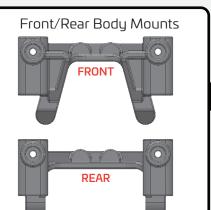
Step 5. Top off each shock with oil (about 1-2mm below the rim of the shock body). Add a few drops of oil on top of each bladder inside of the caps. Put a paper towel down to catch excess oil and have another ready to wipe the shock with. Place the cap on the shock and screw on about half way. Some oil will leak out.

Step 6. Push the shock shaft up to about 90% to set rebound. Some oil will leak out.

Step 7. While holding the shock shaft at 90%, fully tighten the shock cap (do not overtighten).



Bag N Body Mounts

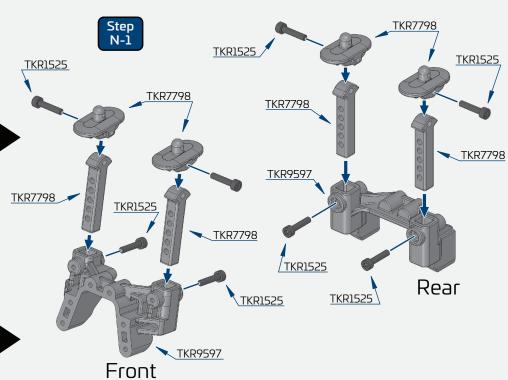


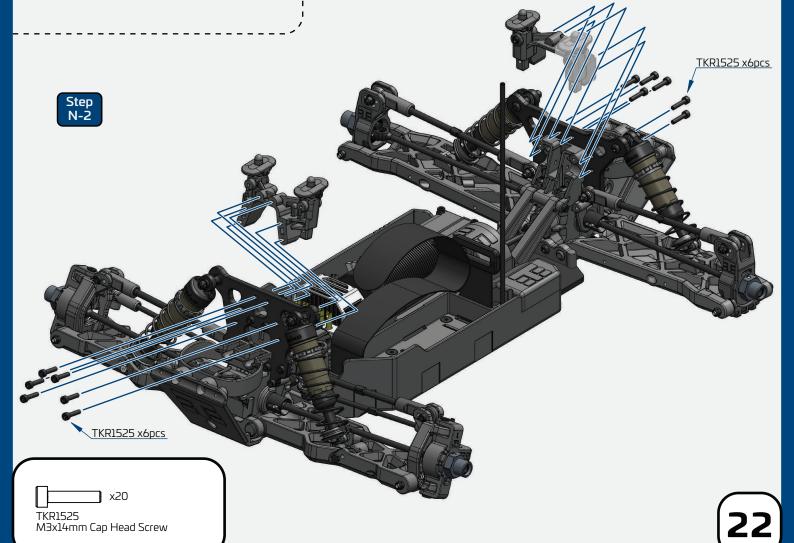
Front/Rear Body Posts

Note: You can use optional offset body mount posts, TKR5791 used in our SCT410.3 to adjust



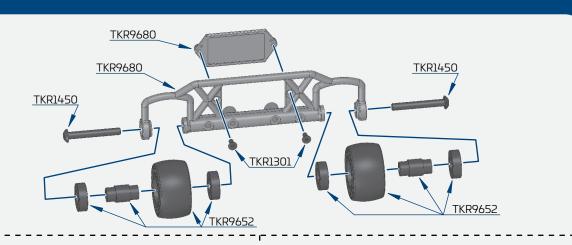
791 used in our SCT410.3 to adjust for various bodies and hole configurations. These will allow for more adjustment front to back, and may help with fitment to irregular body shapes. *These are sold separately.

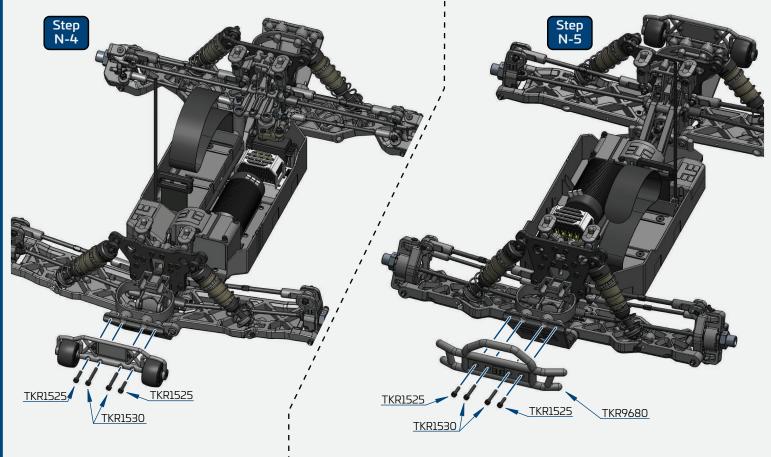


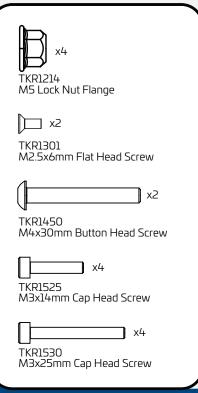


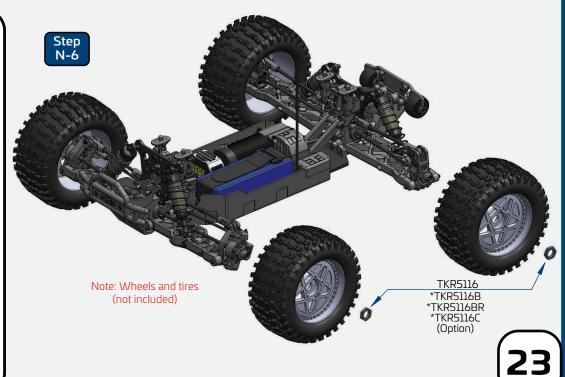
Bag N Final Assembly











OPTIONAL SWAY BAR MOUNTING

Front/Rear (NOT INCLUDED)

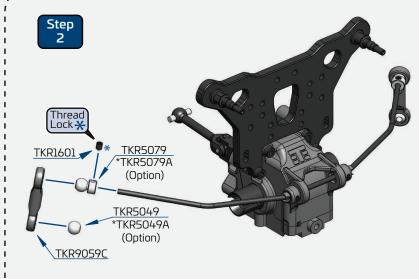
Optional FRONT Sway Bars (sold separately)

- *TKR9484 1.6mm
- *TKR9484 1.7mm
- *TKR9484 1.8mm
- *TKR9484 1.9mm
- *TKR9484 2.0mm
- *TKR9485 2.1mm
- *TKR9485 2.2mm
- *TKR9485 2.3mm
- *TKR9485 2.4mm
- *TKR9485 2.5mm
- *TKR9486 2.6mm
- *TKR9486 2.7mm
- *TKR9486 2.8mm
- *TKR9486 2.9mm *TKR9486 3.0mm



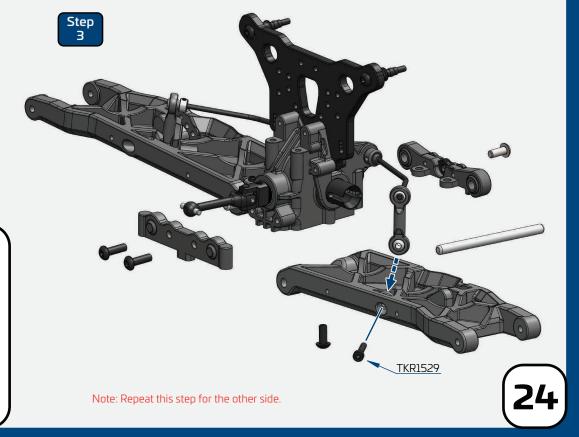
Optional REAR Sway Bars (sold separately)

- *TKR9494 1.6mm *TKR9494 1.7mm
- *TKR9494 1.8mm
- *TKR9494 1.9mm
- *TKR9494 2.0mm
- *TKR9495 2.1mm *TKR9495 2.2mm
- *TKR9495 2.3mm
- *TKR9495 2.4mm
- *TKR9495 2.5mm
- *TKR9496 2.6mm *TKR9496 2.7mm
- *TKR9496 2.8mm
- *TKR496 2.9mm *TKR9496 - 3.0mm
- Note: Repeat this step for the other side.









TKR9603 - MT48 2.0 1/8th Electric 4x4 Pro Monster Truck Kit

Parts List Hardware List TKR5049 - Pivot Balls (6.8mm, no flange, sway bars, shock ends, 4pcs) TKR1200 - M2.5 Locknuts (zinc finish, 10pcs) TKR1201 - M3 Locknuts (black, 10pcs) TKR5053 - Pivot Balls (6.8mm, flanged, outside camber, 4pcs) TKR5058 - Pivot Balls (5.8mm, no flange, brake/steering link, 4pcs) TKR1211 - M3 Locknuts (flanged, black, 10pcs) TKR5075HD - Diff Coupler (HD, hardened steel) TKR1221 - M3x8mm Washer (black, 10pcs) TKR5079 - Stabilizer Balls (6.8mm, sway bars, 4pcs) TKR1222 - 13x16x.1mm Diff Shims (10pcs) TKR5101X - Servo Saver Spring (HD, EB48, SCT410, NB48) TKR1226 - 5x7x.2mm shims (10pcs) TKR5103 - Servo Saver Post (aluminum, gun metal ano) TKR1235 - Body Clips (10pcs) TKR5116 - Wheel Nuts (17mm, serrated, gun metal ano, M12x1.0, 4pcs) TKR1238 - Droop Adjustment Screws (M4x10mm, 8pcs) TKR5126 - Antenna tube (universal, w/ caps, 5pcs) TKR1240 - Lower Shock Mount Screws TKR5165 - V2 Hinge Pin Inserts, Wheelbase Shims (EB/NB/ET/NT/SCT) TKR1250 - Steering Link Screws (black, steel, 2pcs) TKR5187B - Rod Ends (hard, 6.8mm, EB/NB/ET/NT48, 8pcs) TKR1301 - M2.5x6mm Flat Head Screws (black, 10pcs) TKR1323 - M3x10mm Flat Head Screws (black, 10pcs) TKR5230 - Steering Linkage (M3x18mm threaded rod, 10pcs) TKR5231 - Servo Saver Nut and Spring TKR1324 - M3x12mm Flat Head Screws (black, 10pcs) TKR5423 - Turnbuckle (steering links, 2pcs, ET48, NT48) TKR1325 - M3x14mm Flat Head Screws (black, 10pcs) TKR7798 - Body Post Set (swivel, 4pcs) TKR1327 - M3x16mm Flat Head Screws (black, 10pcs) TKR1341 - M4x6mm Flat Head Screws (black, 10pcs) TKR8052 - Pivot Balls (6.8mm, camber, str links, centered, 4pcs) TKR9017B - Sway Bar and Bulkhead Acc (for -2/-4mm bulkheads) TKR9019 - Battery Straps (1x center, 1x side, EB/ET48 2.0) TKR1343 - M4x10mm Flat Head Screws (black, 10pcs) TKR1344 - M4x12mm Flat Head Screws (black, 10pcs) TKR1346 - M4x15mm Flat Head Screws (black, 10pcs) TKR9034 - Hinge Pins (outer, rear, 2.0, 2pcs) TKR9054B - Rear Hubs and Bearing Spacers (-2mm, adjustable roll center, L/R) TKR1350 - M4x25mm Flat Head Screws (black, 10pcs) TKR9059C - Rod End Set (camber/sway bar, offset steering links, 2.x) TKR1401 - M3x6mm Button Head Screws (black, 10pcs) TKR9062B - Chassis Brace Set (revised, front/rear/center, EB/ET48 2.0) TKR1403 - M3x10mm Button Head Screws (black, 10pcs) TKR9102A - Steering Posts (aluminum, gun metal ano) TKR1443 - M4x10mm Button Head Screws (black, 10pcs) TKR9191 - Tapered Driveshaft (center, front, 7075, black ano, EB/ET48 2.0) TKR1444 - M4x12mm Button Head Screws (black, 10pcs) TKR9290 - Sway Bar Dead Band Bushing Set (2.4, 2.7, 3.0, 3.3mm, all 2.x vehicles) TKR1445 - M4x14mm Button Head Screws (black, 10pcs) TKR9416B - Gearbox (-2mm, F/R, EB/NB/ET/NT48 2.x) TKR1447 - M4x16mm Button Head Screws (black, 10pcs) TKR1450 - M4x30mm Button Head Screws (black, 10pcs) TKR9430B - Suspension Arms (rear, 2pcs, ET/NT48 2.2) TKR9450 - Turnbuckle (M5 thread, 108mm length, 5mm adjustment, 2pcs) TKR1523 - M3x10mm Cap Head Screws (black, 10pcs) TKR9451 - Turnbuckle (M5 thread, 95mm length, 5mm adjustment, 2pcs) TKR1524 - M3x12mm Cap Head Screws (black, 10pcs) TKR9487 - TKR9487 - Universal Driveshaft Set (f/r, 144mm, ET/NT 2.0, 2 pcs) TKR1525 - M3x14mm Cap Head Screws (black, 10pcs) TKR9517 - Bell Cranks and Top Plates (MT/SCT410 2.0) TKR1528 - M3x18mm Cap Head Screws (black, 10pcs) TKR9521 - Ackerman Plate (7075, MT/SCT410 2.0) TKR1529 - M3x20mm Cap Head Screws (black, 10pcs) TKR9524L - Mud Guard, Battery Tray, RX Box (left, MT410 2.0) TKR9524R - Mud Guard, Servo Mount (right, MT410 2.0) TKR9527 - ESC Tray, Radio Box Top (MT/SCT410 2.0) TKR9553M - Metal Servo Horn (25T spline) TKR9597 - Body Mount Base Set (MT410 2.0) TKR1530 - M3x25mm 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) TKR9602 - Chassis (4mm, 7075, black ano, MT48 2.0) TKR9611 - Motor Mount (CNC, 7075, MT48 2.0) TKR1613 - M3x12mm Screw Pins (black, 10pcs) TKR9612 - Center Differential Mount and Cover (MT48 2.0) Bearings List TKR9616 - Suspension Arms (front, 2pcs, MT48 2.0) TKRBB050825RS – Ball Bearing (5x8x2.5mm, rubber shielded, 4pcs) TKR9618 - Decal Sheet (MT48 2.0) TKRBB05145 - Ball Bearing (5x14x5, shielded, 4pcs) TKR9620 - Hinge Pins (MT46 2.0) TKR9620 - Hinge Pins (HD 5mm, inner, front/rear, 2pcs) TKR9628 - Shock Tower (front, 7075 CNC, GM ano, MT48 2.0) TKR9629 - Shock Tower (rear, 7075 CNC, GM ano, MT48 2.0) TKRBB06103 – Ball Bearing (6x10x3, 4pcs) TKRBB08165 – Ball Bearing (8x16x5, 4pcs) TKRBB08165F – Ball Bearing (8X16x5mm, flanged, shielded, 4pcs) TKR9630 - Tower Brace Set (F/R, MT/SCT410 2.0) TKR12215 - Ball Bearing (12x21x5, shielded, 4pcs) TKR9641 - Spindles (L/R, MT48 2.0) TKR9644 - Spindle Pin Set (MT48 2.0) TKR9652 - Wheelie Bar Wheel Set (MT410 2.0) TKR1103 - Turnbuckle Wrench (4mm, 5mm, hardened steel) TKR1107 - XT Nut Driver (5.0mm , adjustable length, 4mm shank) TKR9660 - Skid Plate and Bumper Cushion (F/R, MT/SCT410 2.0) TKR1108 - XT Nut Driver (5.5mm , adjustable length, 4mm shank) TKR1115 - Pivot Ball and Shock Multi-tool (aluminum) TKR9661 - Hinge Pin Brace Set (steel/composite, A/B/C/D, MT48 2.0) TKR9671 - Wheel Hubs (+2mm offset, 17mm, gun metal ano, w/pins, 2pcs) TKR9680 - Bumper Bar Set (F/R, MT/SCT410 2.0) TKR9694 - Spindle Carriers (L/R, 15 degree, MT48 2.0) TKR1116 - 17mm Wheel Wrench, Shock Cap Tool TKR1116B - 17mm Wheel Wrench and Shock Cap Tool (long shank, aluminum) TKR9695 - Universal Driveshaft (center, rear, 37.5mm, MT48 2.0) TKR1119 - 5.5mm / 7.0mm Wrench (hardened steel) TKR4173->TKR4178 - M5 Pinion Gear (12t-18t, MOD1, 5mm bore, M5 set screw) TKR5071C – Wheel Hubs (17mm, almnm, lghtnd, w/pins, +2mm, 2pcs) TKR5071D – Wheel Hubs (17mm, almnm, lghtnd, w/pins, +3mm, 2pcs) TKR5071E – Wheel Hubs (17mm, almnm, Ightnd, w/pins, +4mm, 2pcs) TKR6008 - Shock Shaft Guide and Piston Set (for 2 shocks) TKR6009 - Shock O-Ring and Bladder Set (for 2 shocks) TKR5114XB - Differential Outdrives (front/rear, revised, lightened) TKR5116B - Wheel Nuts (T Logo, 17mm, serrated, gun metal ano, M12x1.0, 4pcs) TKR6016 - Shock Body (rear, aluminum, hard ano, 2pcs) TKR6017 - Shock Shafts (rear, steel, 2pcs) TKR5122 - Steering Rack Bushings (aluminum, gun metal ano, 2pcs) TKR6018 - Shock Cap and Spring Adjuster Set (composite, for 2 shocks) TKR5253B - Aluminum Servo Horn (25t spline, M3 clamp, double hole arm) TKR6140D - Shock Rod End and Spring Perch Set (w/ assorted length rod ends) TKR6492 - Shock Spring Set (1.6 x 8.5T, 75mm, yellow) TKR6009B - Shock O-Ring Set (16pcs) TKR6017T – Shock Shafts w/ TiNi coating (rear, steel, 2pcs) TKR8730 - Shock Cap Bushings (requires TKR8727, fits TKR8702, TKR6003/B, 4pcs) TKR6146 - Shock Cartridge Set (CNC, Delrin, EB/NB/ET/NT/SCT) TKR8744 - Shock Boots (med length, 16mm shocks) TKR6146B - Shock Cartridge Set (CNC, Delrin, revised, all 16mm shocks) TKR6160 - Shock Piston Blanks (CNC, flat/tapered, 16 dimples) TKR8777 - Shock Standoffs (revised, +0mm, all 2.x, requires TKR1443, 2pcs.) TKR6163 – Shock Piston Blanks (CNC, flat/flat, 16 dimples) TKR6490->TKR6494 - Shock Spring Set (1.6 x nT, 75mm, varies) Differential List TKR1261 - 3.5x9x0.2mm Shims (12pcs) TKR9054A - Rear Hubs and Bearing Spacers (adjustable roll center, L/R, EB/NB48 TKR5144B - Differential O-Rings (6pcs) TKR9090A - Aluminum Sway Bar Collars (4pcs, EB/NB/ET/NT48 2.0) TKR5145B - Differential Shims (revised, 6x17mm, 6pcs) TKR9114 - Differential Outdrives (F/R NB/NT48 2.0, F/C/R EB/ET48 2.0, 2pcs) TKR9114HD - Differential Outdrives (HD, F/C/R, EB/ET48, MT/SCT410 2.0, 2pcs) TKR9117 - Spur Gear (44t, hardened steel, EB/ET48 2.0) TKR9145 - Differential Shims (keyed, 6x18mm, 6pcs) TKR9115C - Differential Case (F/C/R EB/NB/ET/NT48 2.x, req TKR1261) TKR9120 - Differential Case (f/c/r, composite, 3pcs) TKR9143 - Differential Seals (2.0, 3pcs) TKR9149A - Differential Cross Pins (Aluminum, 6pcs) TKR9433 - Rear Arm Mud Guards (lexan, ET/NT48 2.0) TKR9461B - Hinge Pin Brace (CNC, 7075, -1mm, ET/NT48 2.2, A Block) TKR9462B - Hinge Pin Brace (CNC, 7075, -1mm, ET/NT48 2.2, B Block) TKR9463B - Hinge Pin Brace (CNC, 7075, -1mm, ET/NT48 2.2, C Block) TKR9149 - Differential Cross Pins (2.0, 6pcs)

TKR9452 - Differential Ring Gear (40t, F/R, CNC, ET/NT48 2.0, use with TKR9453) TKR9453 - Diff Pinion (9t, F/R, CNC, ET/NT48 2.0, use with TKR9452)

TKR9149X - Differential Cross Pins (composite, for 2.0 diffs, 3pcs) TKR9150B - Differential Gear Set (internal gears only, all 2.x, 20/10T)

TKR9237 - Spur Gear (44T, composite, EB/ET48 2.0)

TKR9484 - Sway Bar Set (FRONT, 1.6, 1.7, 1.8, 1.9, 2.0, ET/NT48 2.0)
TKR9485 - Sway Bar Set (FRONT, 2.1, 2.2, 2.3, 2.4, 2.5, ET/NT48 2.0)
TKR9486 - Sway Bar Set (FRONT, 2.6, 2.7, 2.8, 2.9, 3.0, ET/NT48 2.0)
TKR9494 - Sway Bar Set (REAN, 1.6, 1.7, 1.8, 1.9, 2.0, ET/NT48 2.0) TKR9495 - Sway Bar Set (REAR, 2.1, 2.2, 2.3, 2.4, 2.5, ET/NT48 2.0) TKR9496 - Sway Bar Set (REAR, 2.6, 2.7, 2.8, 2.9, 3.0, ET/NT48 2.0

TKR9514 - Battery Strap (1x center, for standard 2s or shorty 4s packs, all 2.0)

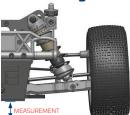
TKR9464B - Hinge Pin Brace (CNC, 7075, -1mm, ET/NT48 2.2, D Block)

Setup Information

The purpose of making adjustments is to make the car go faster around the track, or to make it more controllable, or both if possible. A car that's easier to drive should produce lower, more consistent lap times. It will also inspire more confidence in the driver, which is always good when nerves start getting the best of you.

Before you start thinking about changing your car's setup, consider these two things: First, is the car in perfect working order? Be sure that all of the suspension components operate freely without excessive play, and that the car isn't tweaked. Binding and worn out parts will result in poor performance and inconsistent handling. Second, always consider tires before making other adjustments. Time spent trying to get the vehicle to work with the wrong tires mounted will be wasted time. Without the right tires, even a great setup won't be a winning setup.

Ride Height



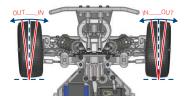
Ride height is the distance from the bottom of the chassis to the running surface. Ride height should only be checked and adjusted when your vehicle is ready to run (i.e. with battery installed/body on). Ride height is the first adjustment to be made and should be set with a ride height measurement tool. Measurements should be taken from the flat parts of the chassis, front and rear. Be sure to measure the front ride height at a point before the kick up in the chassis starts. To measure ride height, first make sure the suspension is completely free, then simultaneously compress the front and rear all the way down and let the vehicle settle. Take your measurement from that position. Use the shock spring adjustment collars to raise or lower the ride height to your desired setting. A good starting point is to make the rear drive-shafts level and then adjust the front so that the chassis is level to the ground.

Camber



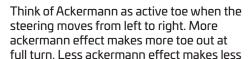
Static camber affects the car's side to side traction. More negative camber front and rear quickens rotation in corners. Less negative camber will make the vehicle easier to drive but you may give up some responsiveness (i.e. steering). To set your static camber have your vehicle at ride height (see above) and adjust the camber links until desired angle is achieved. Please note that a large adjustment of front camber will affect front toe and you may have to readjust the toe and then re-check front camber again. A good starting measurement for camber is 1-2 degrees in the front and 1.5-2.5 degrees in the rear.

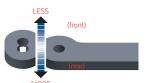
Front Toe



Front toe is used to describe the angle in which the front wheels point when looking down at them from the top of a vehicle. You will always use some amount of toe out. Toe-out will affect how your vehicle enters and exits corners. More toe out will result in more off-power steering and less on-power steering and less toe out will have the opposite results. To set your front toe, have your vehicle at ride height (see above) and adjust the steering links until desired angle is achieved. Please note that a large adjustment of front toe will affect front camber and you may have to readjust the camber and then re-check front toe again. A good starting point is approximately 0.5-1 degree of toe out per side.

Ackermann Effect





toe out at full turn. More Ackermann will be smoother and have less overall steering. Less Ackermann will feel more direct and have more overall steering.

A good starting point is forward on the ackermann plate.

Bumpsteer



Think of bump steer as active toe when the suspension compresses or rebounds. To adjust bump steer you have to change the angle of the steering link. This is accomplished by adding or removing washers under the ball stud on the steering spindles. Anytime you change camber link locations, front arm pills, front arm spacers, or Ackermann you will need to check and possibly adjust your bumpsteer. It's best to start with zero bumpsteer or slight bump out.

Droop



Droop is the measured amount of down travel in the suspension. It is measured from the shock mounting points while the vehicle is up on a stand allowing the arms to hang freely and is adjusted by turning the droop screw located in the suspension arms front/rear. This screw limits the suspension travel by providing a stopping point against the chassis. Left and right sides should always be equal, however the front and rear of the vehicle can have different values. Droop affects all aspects of chassis performance, including braking, acceleration, jumping, traction, and bump handling. A good starting droop measurement is 121mm front, and 121mm rear. Use less droop to keep the vehicle flatter during cornering, but be aware that jumping and bump handling will be worse with less droop.

C Block Screws



The C block now has the option to be screwed down to the chassis. This affects the torsional flex of the car as well as rear traction, both on and off power. With the screws in, there will be less torsional flex and more rear grip on power. With the screws out there will be more torsional flex and more rear grip off power. In almost all cases, running with the screws in provides better consistency and faster lap times.

Setup Information

(continued)

Differentials



Front: Changing front diff oil affects overall steering response. Thinner can increase off-power steering but the vehicle may be twitchy and harder to drive. Thicker can increase on power steering and stability. We recommend 200k in the front diff.

Center: Changing center diff oil affects the front-to-rear drive balance. Thicker will reduce off-power steering and on-power rear traction but increases on-power steering and acceleration if traction is available. Thinner will increase off-power steering and on-power rear traction but reduce on-power steering and acceleration. We recommend 200k in the center diff.

Rear: Thinner rear diff oil increases off-power steering and reduces traction into a corner. It also reduces on-power steering and increases traction out of a corner. Going too thin will make your vehicle inconsistent, however. Thicker rear oil will have opposite effects, and once again, going too thick will make the vehicle inconsistent. We recommend 100k in the rear diff.

In addition to altering oils, there are other ways to affect differential action. First is by using different gear shims. TKR5145B behaves like a normal shim and is included in the kit. It will have less resistance (compared to TKR9145C) to both initial and continuous rotation. It will have a similar feel to thinner oil. This is beneficial on lower grip tracks. TKR9145C is a static shim and will have more resistance to both initial and continuous rotation. It will have a similar feel to thicker oil. This is beneficial on higher grip tracks. This can also be good on tracks that are very rough and/or broken up and you want to maintain forward drive through bumpy sections. The second option is by using gears of a different pitch. TKR9150 is a finer pitch and TKR9150B is a coarser pitch gear. Finer pitch gears will have less resistance to continuous rotation. Being finer, the power delivery is smoother than the coarser pitch gears. The finer pitch will allow for a heavier weight oil to be used which will allow a thick but smooth low speed diff action without excessive differential action at high speeds and high loads. The coarser pitch will more resistance to continuous rotation. This means that it will resist "diffing out" or "diff unloading". Being coarser, the power delivery is not quite as smooth as the finer pitch gears. The coarser pitch will allow for a lighter weight oil to be used which will maintain low speed diff action without excessive differential action at high speeds and high loads. Third is by using different diff cases. TKR9115B will have similar characteristics of a static shim whereas TKR9115C will have the characteristics of the standard shim TKR5145B. In addition, TKR9115C has a slightly greater volume so it should provide improved consistency over a long run.

Rear Camber Links



You can alter both the length and the angle of the rear camber link. When altering the length, a longer camber link will have more roll, more traction and forward drive, and will react slower to direction changes. A shorter link will have less roll and feel stiffer, have less traction and forward drive, and will react more quickly to direction changes. Link length also affects camber change. Longer links will have less camber

change throughout the suspension travel whereas shorter links will have more. Because of this it is typical to run slightly more static camber with long links and slightly less with short links to keep the camber in the ideal range for the suspension travel. When altering the link angle (less angle by going up on the tower or more angle by going down), less angle will have more roll, more grip in the turns, and react slower to direction changes. More angle will have less roll, will lose grip more suddenly, and react more quickly to direction changes.

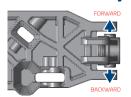
Front Camber Links



You can alter both the length and the angle of the camber link. When altering the length, a longer camber link will be more stable into turns, feel softer, have more overall traction and forward drive, and will react slower to direction changes. A shorter link feel stiffer, be more aggressive into turns, have more initial traction but less overall traction, and will react more quickly to direction changes. Unless you are on an extremely tight track the longer front link is recommended in all conditions. When altering the link angle (less angle by going up on the tower/down on the carrier or more angle by going down on the tower/up on the carrier), going to less angle will have more roll, more overall grip in the turns, and reacts slower to

direction changes. Going to more angle will have less roll, more initial grip, and react more quickly to direction changes. Link angle will also affect camber gain during compression. Less angled links will have less camber gain throughout the suspension travel whereas more angled links will have more. Because of this it is typical to run slightly more static camber with long links and slightly less with short links to keep the camber in the ideal range for the suspension travel.

Wheelbase Adjustments



ments Changes to wheelbase can affect the overall handling of your vehicle, since it adjusts the distribution of weight on the wheels

it adjusts the distribution of weight on the wheels as well as the angle of the driveshafts. Shortening the wheelbase at the rear will give you more steering into a turn and off power, less steering out of a turn and on power. Lengthening the wheelbase at the rear will yield the opposite results. In

general a longer wheelbase is better on open and/or bumpy tracks and a shorter wheelbase is better on tighter technical tracks.

Springs



Softer springs will increase traction through the turns by allowing more roll, slow down the responsiveness of the vehicle, and can be better in the bumps. Stiffer springs will increase corner speed if traction is available and will also tend to jump and land better. Once you find a set of springs you like you will typically only change them for tracks with dramatically different conditions.

Pistons



Pistons with smaller holes work well for smoother tracks with large jumps and pistons with larger holes work well for rougher tracks with less jumps. Smaller hole pistons will typically use thinner oil than larger hole pistons. Shock oil is also

affected by the ambient temperature so a change in viscosity might be necessary with a change of 5°C or ~10°F.



Sway bars are used to adjust a vehicle's lateral grip by resisting chassis roll. A thicker bar decreases roll more than a thinner bar will. More roll means more grip and less roll means less grip.

The front sway bar affects mainly off-power steering at corner entry. The rear sway bar affects mainly on-power steering and stability in mid-corner and at corner exit.

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Maintenance:

Performing regular maintenance will greatly improve your on track consistency and also extend the life of your vehicle. Going through critical areas of the vehicle regularly will also allow you to find possible issues before they become a problem that may cost you a race. Follow the guidelines below for maximum performance.

Bearing Maintenance:

Bearings should always be smooth and free in order to preform their function. We recommend inspecting and cleaning each bearing on a regular basis. It will be necessary to break down parts of the vehicle in order to inspect them properly. The procedures below should be done every couple of weeks or prior to an important race.

- 1. Inspect the outer seals for any visible damage and check the rolling resistance of each bearing.
- 2. If any bearing does not spin freely, then take the following steps to clean them.
- 3. Spray the bearing with motor spray and spin it again to remove any debris trapped inside. Repeat if necessary. If the bearing does not start to spin freely after cleaning, then they may need to be replaced.
- 4. Allow the clean bearing to dry or blow into the bearing with compressed air to speed up the drying process.
- 5. Oil each bearing with a proper bearing lubricant. One or two drops is enough.

Shock Maintenance:

When comparing the left and right shocks of the front end, they should feel identical. Same goes for the rears. The procedures below should be done every race day to make sure they are leak free and operating correctly.

- 1. After removing the shocks from the vehicle, remove the springs and inspect each shock for visible leaks (build up of debris at the bottom of the shock shaft or visible oil).
- 2. If the shock binds when pushing the shaft through its stroke, then the shaft may be bent and will need to be replaced.
- 3. If the shocks from left to right do not feel consistent when compared to each other, or have built up too much air inside (feel empty when pushing the shaft through its stroke), then you will need to rebuild them following the steps outlined on page 19 of this manual.

Hinge Point & Drive Line Maintenance:

Checking the hinge points while the shocks are removed from the vehicle is the best time to inspect these parts. The other items to inspect are the camber links, steering links and drive shafts. Follow the steps below every couple of weeks in order to keep the vehicle preforming at the maximum level.

- 1. With the shocks off the vehicle, check the movement of the arms, hubs, and spindle carriers. They should move freely. If there is a bind, then the inner or outer hinge pin may be bent and would need to be replaced. The arms should not have any play when twisted or moved in any direction against the hinge points. If there is excessive slop present, then the arms or hubs may be worn and will need to be replaced.
- 2. Remove the camber links, steering links and servo link from the vehicle. Check the movement of the spindles to see if they turn freely. If they don't, then check the kingpin shoulder screws to see if they are tightened down too far. Also, check for slop. If there is excessive slop present, then the spindle carriers may need to be replaced.
- 3. Check the steering rack to make sure it moves freely. If it binds, then the screws holding the Ackermann or the steering posts could be too tight. If they still bind, then check the bearings and follow the steps above to clean them.
- 4. After re-installing the camber links, steering links and servo link, check the movement of the rod ends on the ball studs. If they have excessive slop or are binding, then they may need to be replaced.
- 5. Check the drive shafts by rotating them. Look for any wobbles. If they are bent, replace them immediately.
- 6. With the drive shafts removed, check for slop in the CV area. If it is present, then reposition the CV pin to another fresh hole, re-lubricate and install back into the vehicle.

Differential Maintenance:

Properly maintained differentials are essential for a smooth operating vehicle. Check all three diffs regularly to make sure they are filled and operating as designed.

- 1. Remove each diff and verify the differential action is happening and is smooth. If there is any notchy feel to them, follow the steps below to rebuild them.
- 2. Open the diff and pour out the oil. Remove the gears and pins to release the outdrives, then remove the seals. Inspect everything to make sure there are no damaged parts. If the seals are old or show any signs of degradation, replace them immediately. Re-lubricate the seals and outdrives, then rebuild the diff following the steps on page 3 and 4.







	Setup Sheet	VI [4] @2.0"
Name: Box Stock Date:	Event:	Ambient Temp:
		ction: Low O MEDIUM O HIGH O
Surface: SMOOTH O BUMPY O RUTTED O		
Ackerman/Bumpsteer/Servo Sav	ver Condition: Du	STY O DRY O WET O MUDDY O
	WASHERS:	FULL TURNS
WASH	HERS: 0	1 FROM FULLY
		TIGHT
Front End:	Suspension:	Differentials:
STANDOFF	RIDE HEIGHT: Chassis Level CAMBER: -2°	OPTION FRONT CENTER REAR
0mm +2mm	CASTER BLOCK: 15° SWEEP: 0°	Diff 0il => 200k 200k 100l
HEX	KICK UP: 10° TOE: 2.0° out	(TKR5145B)
OFFSET 2mm	SWAY BAR: optional DROOP:121mm	(TKR9145) • O O O
3mm 4mm	Shocks:	
18 @ 84	OIL: 850 CST BRAND: Kit	(TKR9114HD) O O O (TKR9114HD)
	PISTON: TKR6008 SPRING: TKR6492	(TKR51114XB) O O O
	REBOUND: 0% BUILD: bladder	MANA MANAGEMENT OF THE PARTY OF
Rear End:	Communication	(TKR9150) O O
STANDOFF	Suspension:	(TKR9150B)
0mm UNI/CVD	RIDE HEIGHT: Bones Level CAMBER: -2°	(TKR9120)
+2mm U - TKR9687	ANTI-SQUAT: 3° TOE: 2.5° SWAY BAR: optional DROOP:121mm	(TKR9115B) O O O
REAR HUB HEX		(TKR9115C) O O O
OFFSET 2mm	Shocks:	(TKR9149X)
3 _{mm}	OIL: 850 CST BRAND: Kit	(TKR9149A) O O O (TKR9149) O O O
	PISTON: TKR6008 SPRING: TKR6492	Drivetrain:
-2mm	REBOUND: 0% BUILD: bladder	PINION/SPUR: / 44
O -2mm 0mm +2mm	Chassis Braces:	Equipment:
REAR HUB	TURNBUCKLE BRACE: FRONT BRACE:	ESC:
Wheelbase:	CENTER BRACE: REAR BRACE:	BATTERY:
FRONT (Shims)	Tires / Wheels:	MOTOR:
(Thick - 2mm)	BRAND / TREAD:	SERVO: 300 oz/in minimum
REAR (Thin - 1mm)	COMPOUND:	Notes:
Optional Hinge Pin Braces:	INSERT:	
"A" Block: "B" Block:	WHEEL:	
	NOTES:	
	Body/Body Mounts:	
TKR9461 (0mm) TKR9462 (0mm)	BODY MAKE:	
TKR9461 (0mm) TKR9461B (-1mm) TKR9462B (-1mm)		
"C" Block: "D" Block:		
	F R R	
	F R O R E O O O O O O O O O O O O O O O O	
TKR9463B (0mm) TKR9464B (-1mm)	š U 5 U	



O TKR9463B (0mm)

O TKR9464B (-1mm)



Name:	Date		vent:	Ambi		Z. ()	
Track: INDOOR O OUTD	Date: oor O Size: sM		_	Traction: Lov	ent Temp		
			LOAMY O HARD PAG				
	`			DUSTY O DRY	_	_	_
Ackerman/Bump	steer/Servo Sav	ver	Condition.	DUSTY O DRY	O WEI O	MODL) C
		UEDS O	WASHERS:			TUF	JLL RNS
	B WASH	HERS:				- ⊢ FU	OM ILLY GHT
Front Er	nd:	Cusp	ension:		Differentia		
STANDOFF	Id.	RIDE HEIGHT:	CAMBER:	OPTIO		T CENTER	REAR
Omm +2mm		CASTER BLOCK:	SWEEP:	Diff 0i	ightharpoons		
- 22	HEX	KICK UP:	TOE:	(TKR5145B)	0 0	0	0
	OFFSET O2mm	SWAY BAR:	DROOP:	(TKR9145)	• 0	0	0
. 6	3mm 4mm		ocks:	(TKR9114)		+ -	
9 9		OIL:	BRAND:	(TKR9114) (TKR9114HD)		00	00
		PISTON:	SPRING:	(TKR51114XB)	O		ŏ
		REBOUND:	BUILD:	(TKR9150)	O	0	0
Rear Er	nd:	Susp	ension:	(TI(D0150D)	O	i -	
STANDOFF UNI/		RIDE HEIGHT:	CAMBER:	(TKR9150B)		0	0
Omm +2mm	U - TKR9487 U - TKR9687	ANTI-SQUAT:	TOE:	(TKR9120) (TKR9115B)		00	00
	LIEV	SWAY BAR:	DROOP:	(TKR9115C)	0	O	ŏ
	REAR HUB HEX OFFSET	She	ocks:	(TKR9149X)	↓ 0	0	0
	2mm 3mm	OIL:	BRAND:	(TKR9149A)	0 +1	0	0
The contraction of the contracti	Y ^{4mm}	PISTON:	SPRING:	(TKR9149)	Drivetrair	0	<u> </u>
	O -2mm	REBOUND:	BUILD:	PINION/SPUR:	Diivetiali /	1.	
0	0mm +2mm	Chas	sis Braces:		Equipmer	nt:	
	REAR HUB	TURNBUCKLE BRACE:	FRONT BRACE:	ESC:			
Wheelbase:		CENTER BRACE:	REAR BRACE:	BATTERY:			
FRONT	(Shims)	Tires	/ Wheels:	MOTOR:			
	(Thick - 2mm)	BRAND / TREAD:		SERVO:	Notes:		
REAR	(Thin - 1mm)	COMPOUND:		_	Motes.		
Optional Hinge	Pin Braces:	INSERT:		_			
"A" Block:	"B" Block:	WHEEL:					
***	5 888		ody Mounts:				
		BODY MAKE:					
TKR9461 (0mm) TKR9461B (-1mm)	TKR9462 (0mm) TKR9462B (-1mm)						
"C" Block:	"D" Block:						
		F R	R E				
		ö Q					

General Warranty Information

Parts covered by our general warranty have a 50% MSRP replacement cost if bent, broken, or even worn out. See below for items covered by this warranty. Once the part(s) along with the completed warranty form is received and warranty eligibility is verified, we will send you a coupon code via e-mail that brings your price for the exact same replacement part to 50% of MSRP from our website (shipping not included).

Items covered by warranty:

Only individual vehicle parts are covered. For example, kits, engines, engine parts, tools, apparel, banners, and canopies are not covered by the general warranty. Also, discontinued parts, parts that are no longer in production or are not for sale on this website are not covered by the general warranty.

Conditions:

Signature:

- Shipping to Tekno RC or to you will not be included in the coupon. You will be responsible for shipping the part, along with the completed warranty form to the address listed below. You will also be responsible for the shipping cost of the replacement part.
- You MUST send the part(s) to the address listed below. Pictures of the part are not sufficient.
- A completed warranty form MUST be included with all parts sent.
- The discount cannot exceed 50% from MSRP. If you already receive a discount (Team/Military), you will receive a coupon that reduces your cost of the part to 50% of MSRP.
- Coupons are valid for 14 days from the date of creation. If you do not purchase a replacement within this time, the coupon offer and warranty are void.
- This offer is ONLY valid at www.teknorc.com.
- Please be sure all customs fees have been paid. Tekno RC will refuse receipt of a package with customs fees due.
- Terms and conditions may change at any time without notice. Warranty policy may change at any time without notice. All warranties are subject to review and may be refused or revoked at our sole discretion at any time without notice. If any conditions or instructions above are not met, the warranty will not be processed, and no notice is required from us that your warranty may not be processed.

Tekno RC 10755 Scripps Poway Pkwy #598 San Diego, CA 92131 U.S.A

Tekno RC Europe PO Box 67259 Melissia, Athens 15102 Greece

Full Name:			
Address:			
City:	State:	Zip:	
Country:	Email:	Phone:	
Part #(s) in qu	estion:		

Date:



Tekno RC 10755 Scripps Poway Pkwy #598 San Diego CA 92131 USA

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