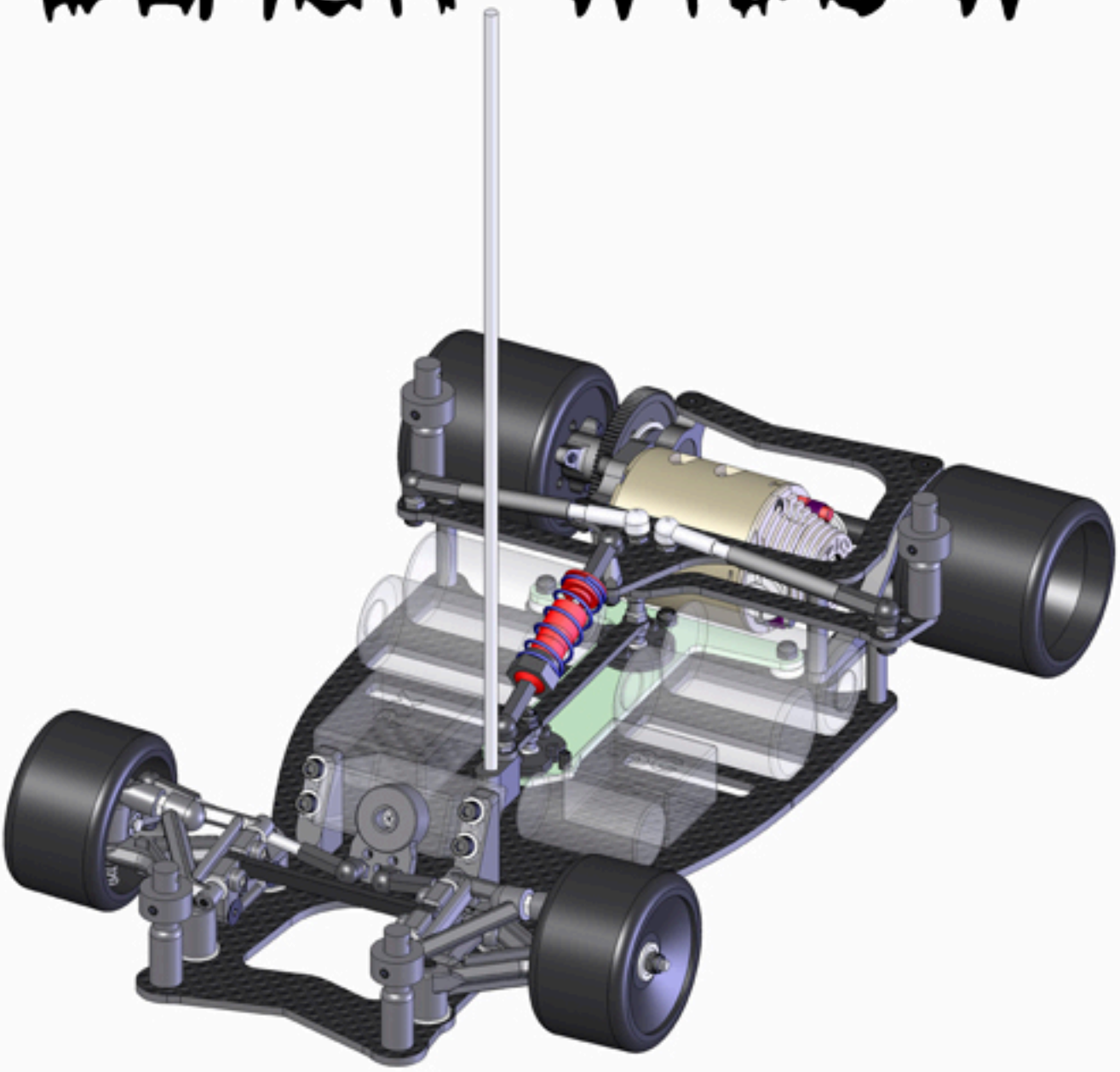
BLACK WIDOW



TRI90503 INSTRUCTION MANUAL

TRINITY

BEFORE YOU BEGIN!

Format of the Instruction Manual

Each step includes a parts identification column which includes all of the new components that are required for the completion of that step. Directly below each component is the corresponding replacement part number. Use this part number whenever you need to order replacement parts. To more easily find the correct kit bag in which each part is located, the letter of the bag is listed directly after the part number.

All hardware (screws, nuts, washers, etc.) in the parts identification column is actual size (labeled 1:1) so that if you are unsure of what a particular part might be, you can match it up to the drawing. (Larger, easy to identify components are not drawn to scale).

Assembly Tips

1- Before you begin, look over the instructions carefully to familiarize yourself with the assembly process. This will help you better understand what you are working towards in each individual step.

2- It is strongly recommended that you work over a towel to prevent any parts from rolling away and getting lost.

3- Only open the parts bags when they are called for in the instructions to eliminate any possible confusion.

4- When you do need to open a bag, it may be helpful to empty the bag out entirely into a small bowl to keep any small pieces from getting lost.

5- Make sure not to over tighten any screws that are threaded into plastic, since plastic threads can easily be stripped. Tighten them only until they are snug. The same goes for all aluminum screws, which can also be easily stripped out if care is not taken while threading them in. DO NOT use an electric screwdriver on any screws!

6- Molded nylon parts will often have some flashing on them. This can easily be removed with a hobby (X-acto) knife.

7- When a step in the instructions refers to the right or left side of the car, it is from the driver's perspective no matter what direction the car may be shown from in the instructions.

Tools and Supplies Needed for Assembly:

2 Phillips (medium size) screwdriver
Needle nose pliers
Hobby (X-acto) knife
0.050", 0.062", & 0.093" Allen wrenches
3/16" nut driver (recommended)
Small to medium size file (recommended)
Bead Lok instant glue, TK3700 (recommended)
Servo tape, RC6001 (recommended)

Recommended Components for Operating Your Black Widow:

- Two channel radio system
- Servo (Airtronics 94145 or Futaba S9602 size)
- Kimbrough servo saver
- Electronic speed control (ESC)
- Trinity 4-cell 3700 or 3800 Ni-MH VIS-Matched battery pack
- Trinity CO27 Stock or EPIC Shock modified motor
- Pinion gear (64 pitch)
- Trinity Reference *Bentley EXP Speed 9* body (TRI39702)
- TRC tires

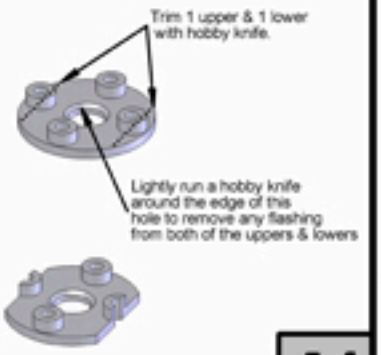
Pre-assembly Preparation

Use a small to medium size file to remove all of the sharp edges from the graphite chassis components. It is especially important to round the sharp edges where your battery tape will be placed. This will help prevent your tape from being cut by the edge of the chassis (causing your batteries to fly out) in the event of a collision. After all of the sharp edges have been removed from the chassis, we recommend applying a thin layer of cyanoacrylate adhesive (CA or super glue) around the perimeter of the chassis. This will help prevent the edges of the chassis from delaminating if you should get in a severe accident.

STEP A:

x2
Pivot Socket, upper
TRI90620, Bag A

x2
Pivot Socket, lower
TRI90620, Bag A

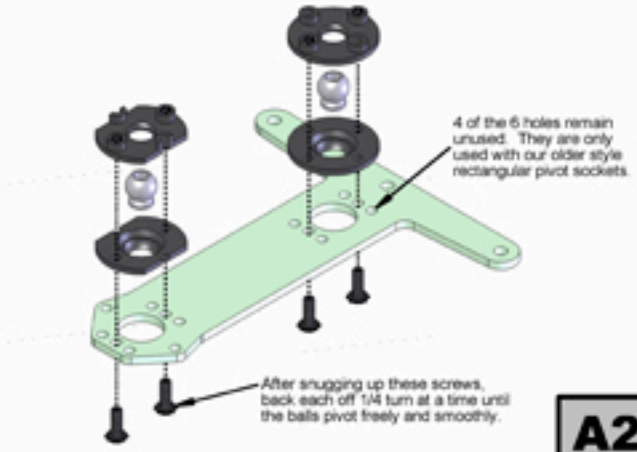


A1

x2
T-Bar Pivot Ball
RE1014L, Bag A

x1
T-Bar (.063")
SB9637, Bag A

x4
2-56 x 1/4" B.H.
EV0071, Bag A



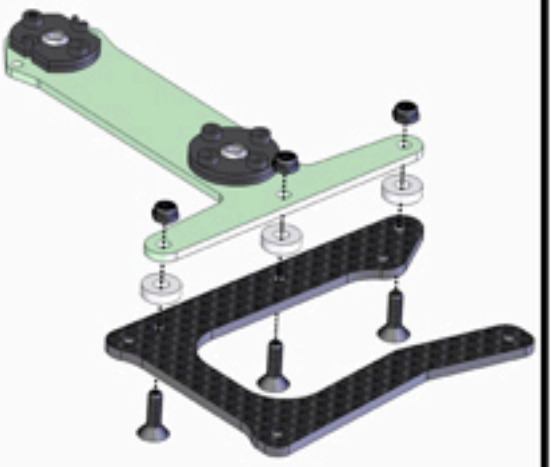
A2

x1
Bottom Pod Plate
TRI90591, Bag A

x3
4-40 x 3/8" F.H.
EV0064, Bag A

x3
T-Bar Spacer, .090"
TRI90624, Bag A

x3
4-40 Locknut
TRI90622, Bag A



A3

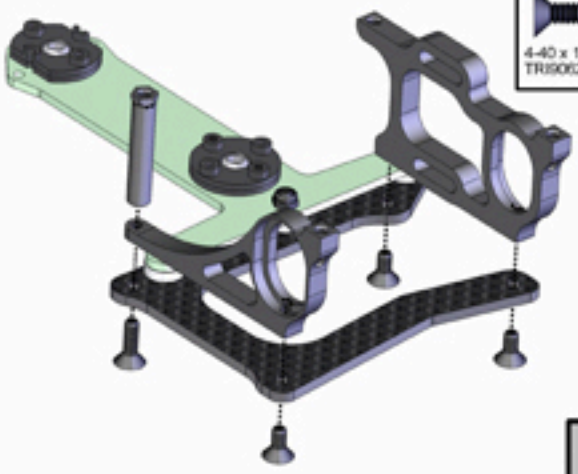
x1
Motor Plate
TRI90589, Bag A

x1
Left Bulkhead
TRI90595, Bag A

x1
Rear Pod Standoff
TRI90585, Bag A

x1
4-40 x 3/8" F.H.
EV0064, Bag A

x3
4-40 x 1/4" F.H.
TRI90623, Bag A



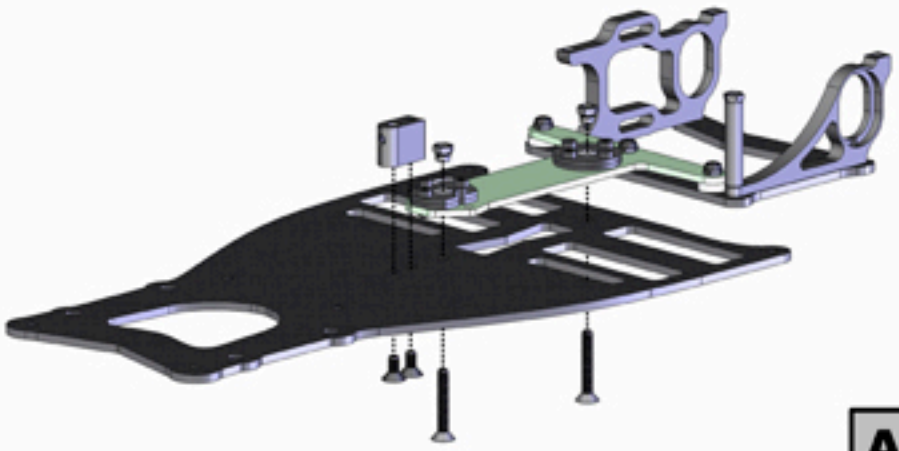
A4

x1
Shock/Antenna Mnt.
TRI90584, Bag A

x2
T-Bar Nut
TRI90585, Bag A

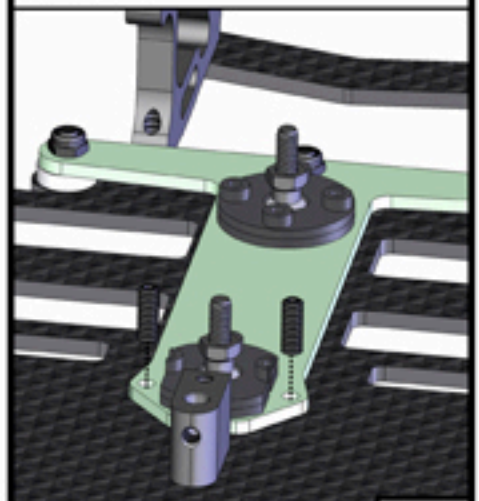
x2
4-40 x 3/4" F.H.
TRI90598, Bag A

x2
4-40 x 1/4" F.H.
TRI90623, Bag A



A5

x2
4-40 x 5/16" Set Screw
TRI90597, Bag A



A6

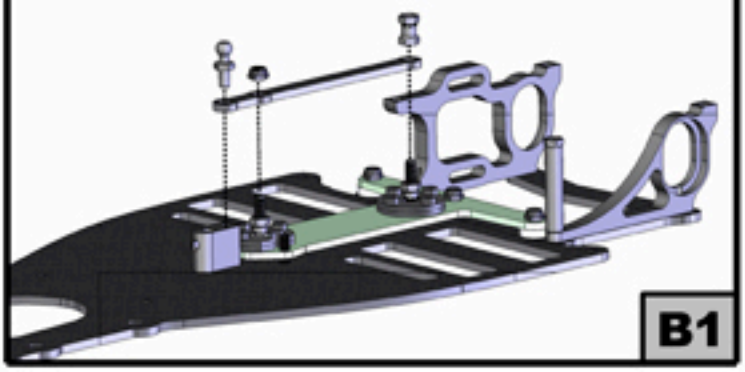
STEP B:

x1
T-Bar Brace
TRI90594, Bag B

x1
4-40 Ball Stud
TRI90630, Bag B

x1
4-40 Locknut
TRI90622, Bag A

x1
T-Bar Standoff
TRI90587, Bag B



B1

x2
4-40 Locknut
TRI90622, Bag A

x2
4-40 x 1/4" B.H.
RC6054, Bag B

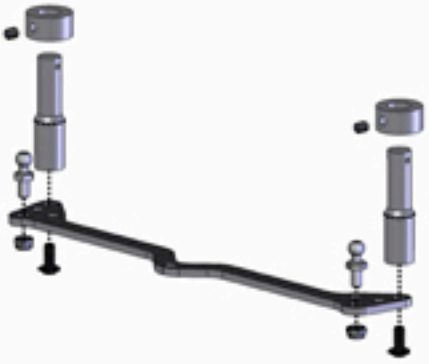
x2
4-40 Set Screw
RC0111, Bag B

x1
Rear Cross Brace
TRI90593, Bag B

x2
4-40 Ball Stud
TRI90630, Bag B

x2
Body Post Collar
EVO086, Bag B

x2
2" Body Post
EVO085, Bag B

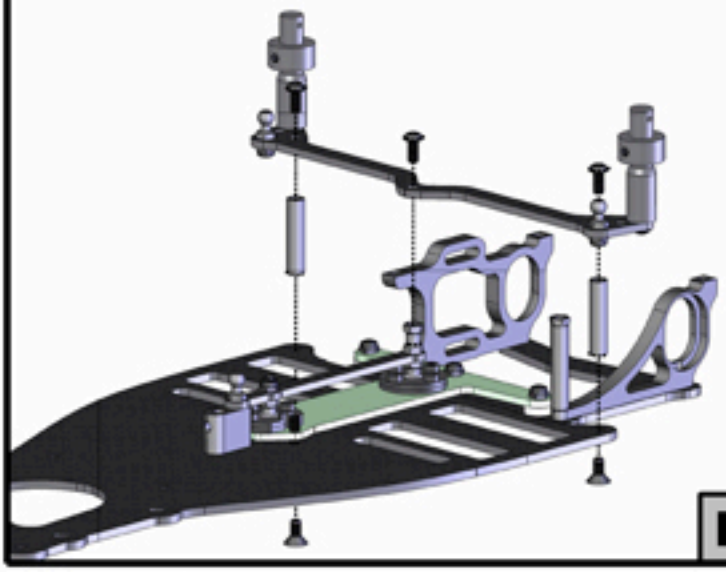


B2

x3
4-40 x 1/4" B.H.
RC6054, Bag B

x2
Rear Brace Standoff
TRI90588, Bag B

x2
4-40 x 1/4" F.H.
TRI90623, Bag A



B3

x1
4-40 Ball Stud - Long
TRI90631, Bag B

x1
4-40 Locknut
TRI90622, Bag A

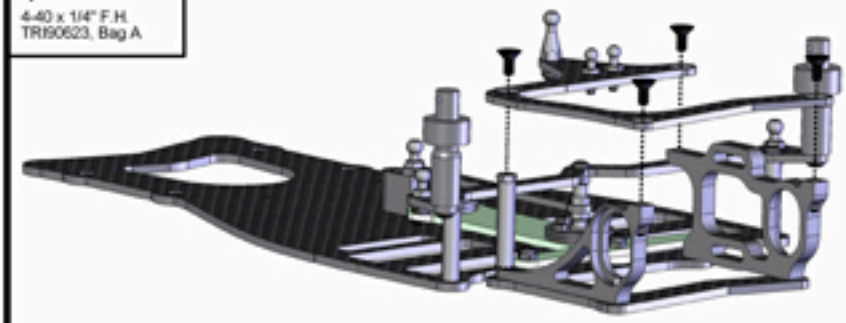
x2
2-56 Ball Stud
TRI90621, Bag B

x2
2-56 Locknut
TRI90626, Bag B



B4

x4
4-40 x 1/4" F.H.
TRI90623, Bag A



B5

x2
4-40 x 1/2" Set Scr.
RE1042, Bag B

x2
4-40 Ball Cup
EVO030, Bag B

x2
Damper Tube
SB9624, Bag B

Repeat for other side.



B6

STEP B:

Repeat for other side.

x2
2-56 x 1/2" Set Scr.
TRI90629, Bag B

x2
2-56 Ball Cup
TRI90633, Bag B

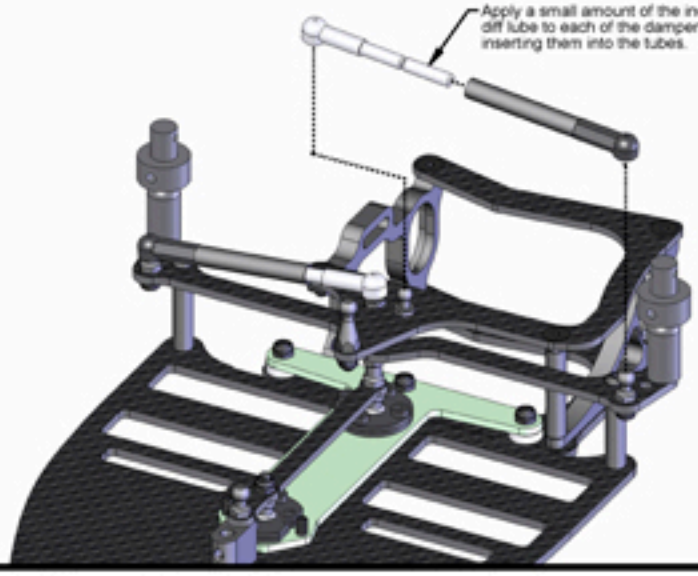
x2
Damper Tube Stick
SB9624A, Bag B





B7

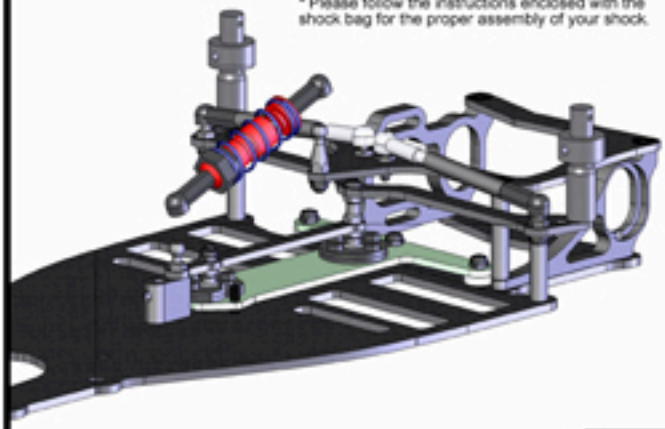
Apply a small amount of the included silicone diff lube to each of the damper sticks before inserting them into the tubes.



B8

x1
VCS Shock Kit, Red
TRI90628, Bag B

* Please follow the instructions enclosed with the shock bag for the proper assembly of your shock.



B9

STEP C:

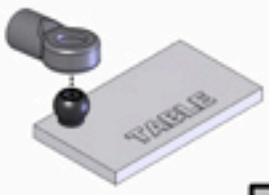
x2 (L&R)
Lower Susp. Arm
TRI90599, Bag C

x2
Upper Arm Eyelet
TRI90599, Bag C

x4
Pivot Ball
TRI90599, Bag C

Repeat for other side.





C1

x2 (L&R)
Upper Arm Mount
TRI90599, Bag C

x4
4-40 x 1/2" F.H.
EV0074, Bag C

Repeat for other side.

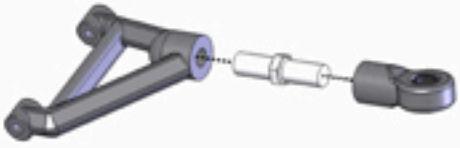


C2

x2
Upper Susp. Arm
TRI90599, Bag C

x2
Turnbuckle
TRI90599, Bag C

Repeat for other side.



C3

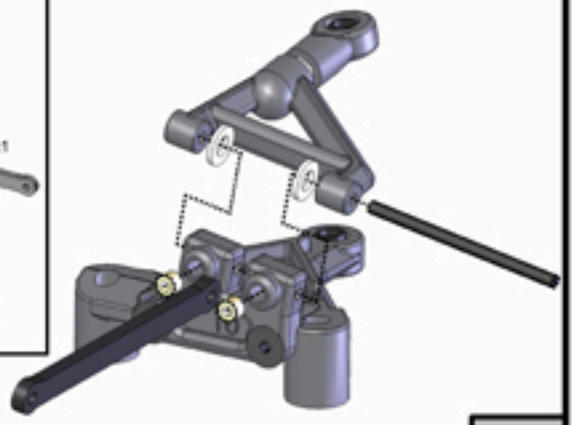
x2
Upper Arm Hinge Pin
TRI90599, Bag C

x4
Upper Arm Spacer
TRI90599, Bag C

x1
Graphite Cross Brace
TRI90599, Bag C

x4
Hinge Pin Set Screw
TRI90599, Bag C

Repeat for other side.



C4

x2 (L&R)
Steering Block
TRI90599, Bag C

x2
Front Stub Axle
SB5029, Bag C

x2
E-Clip
TRI90599, Bag C

x2
4-40 Ball Stud
TRI90630, Bag B

x2
4-40 Locknut
TRI90622, Bag A

Repeat for other side.





C5

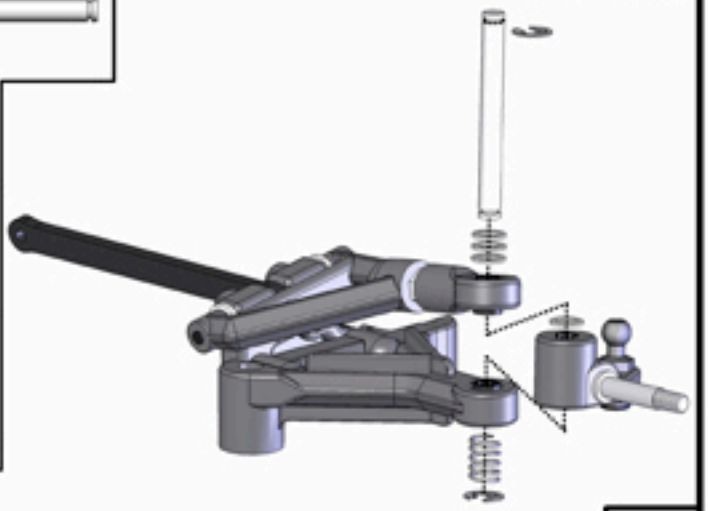
x2
Kingpin
TRI90599, Bag C

x8
Kingpin Spacer
TRI90599, Bag C

x2
Front Spring
TRI90599, Bag C

x4
E-Clip
TRI90599, Bag C

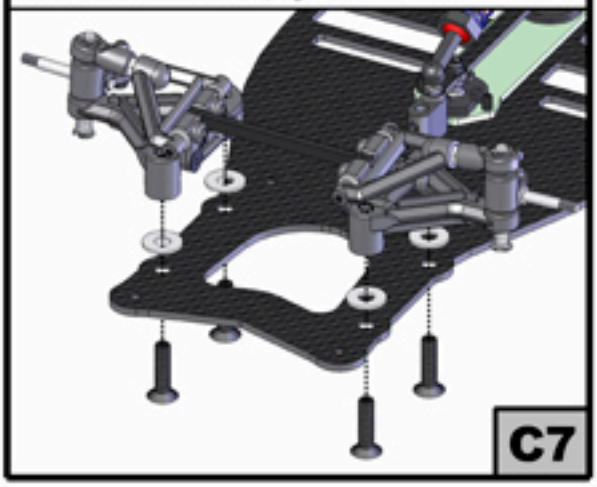
Repeat for other side.



C6

x4
8-32 x 5/8" F.H.
TRI90625, Bag C

x4
Ride Ht. Shim
TRI90627, Bag C



C7

STEP D:

x1
Graphite Rear Axle
TRI90564, Bag D

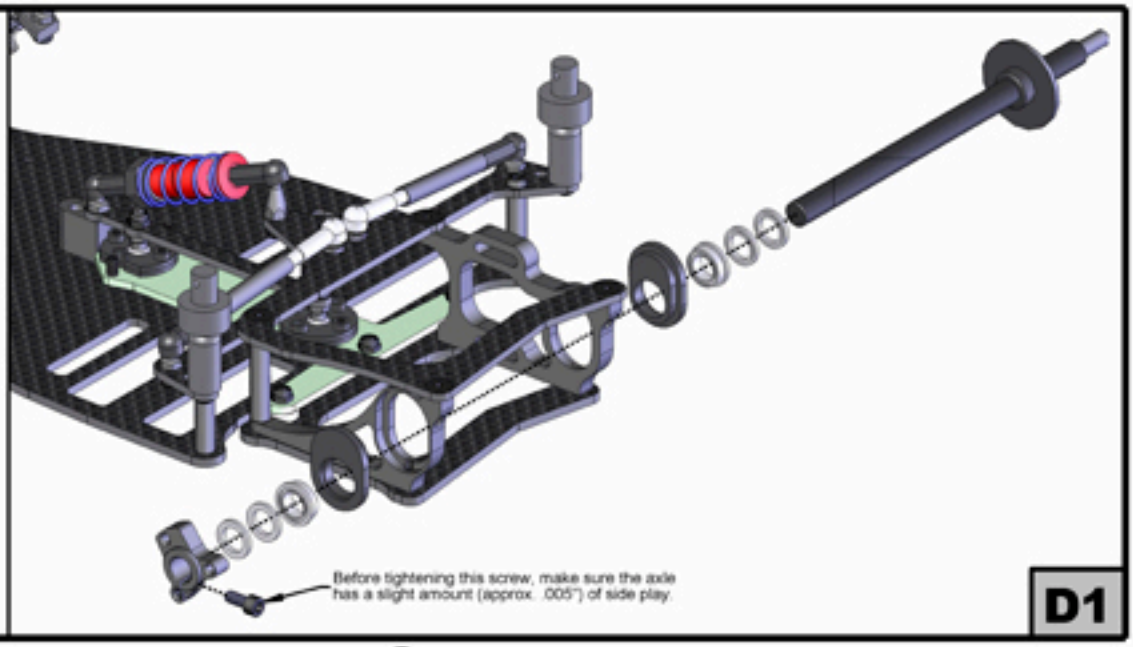
x2
Ride Ht. Adjuster
TRI90569, Bag D

x1
Left Clamping Hub
TRI90596, Bag D

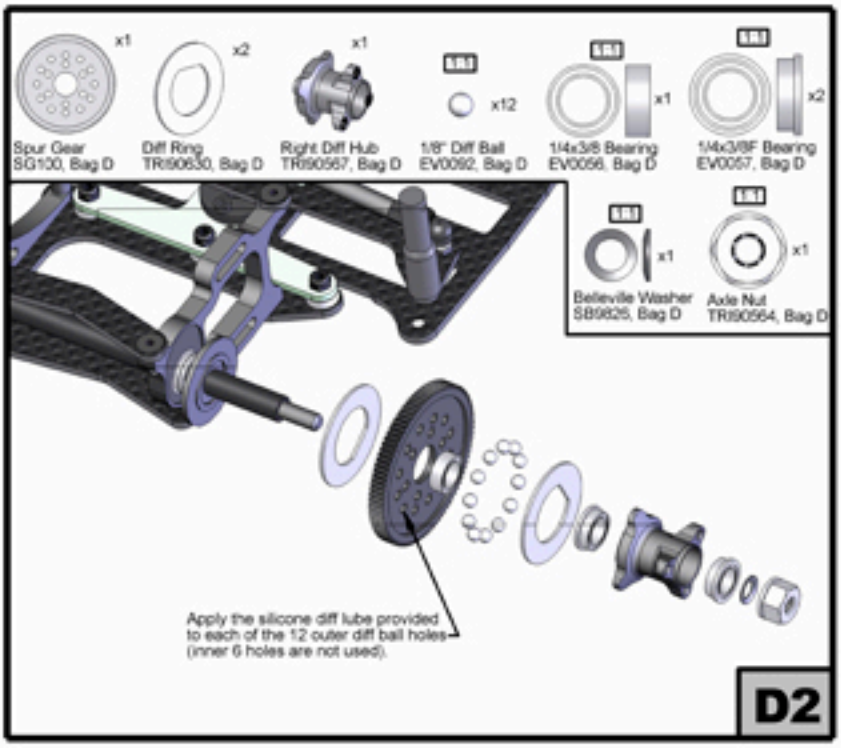
x1
4-40 x 1/4" S.H.
TRI90632, Bag D

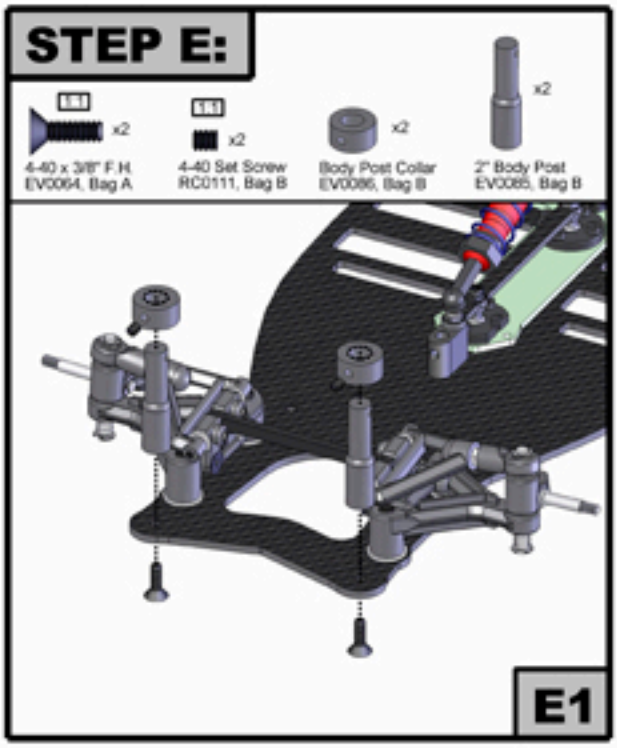
x2
1/4x3/8F Bearing
EVO057, Bag D

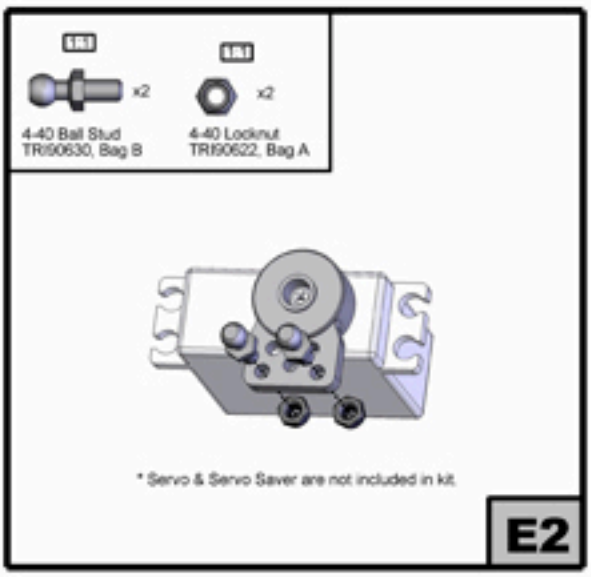
x4
.050" Axle Spacer
SB5085, Bag D

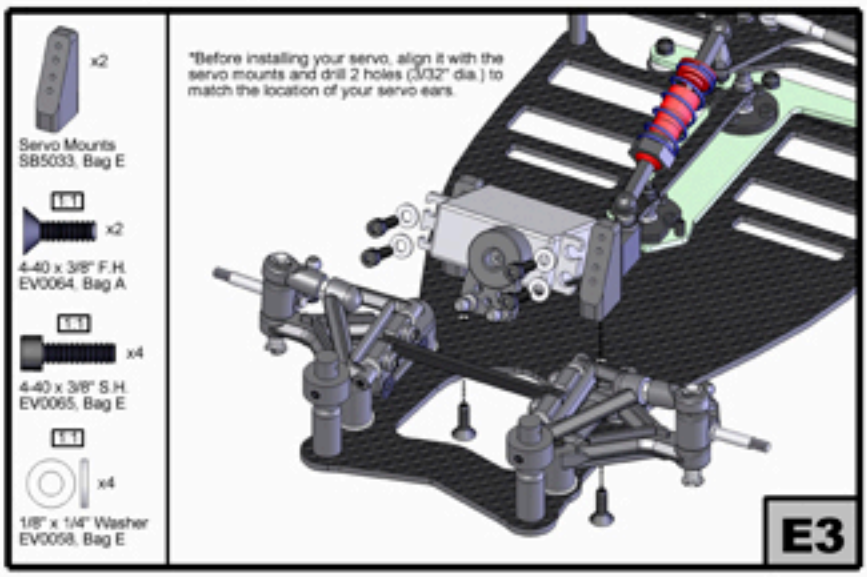


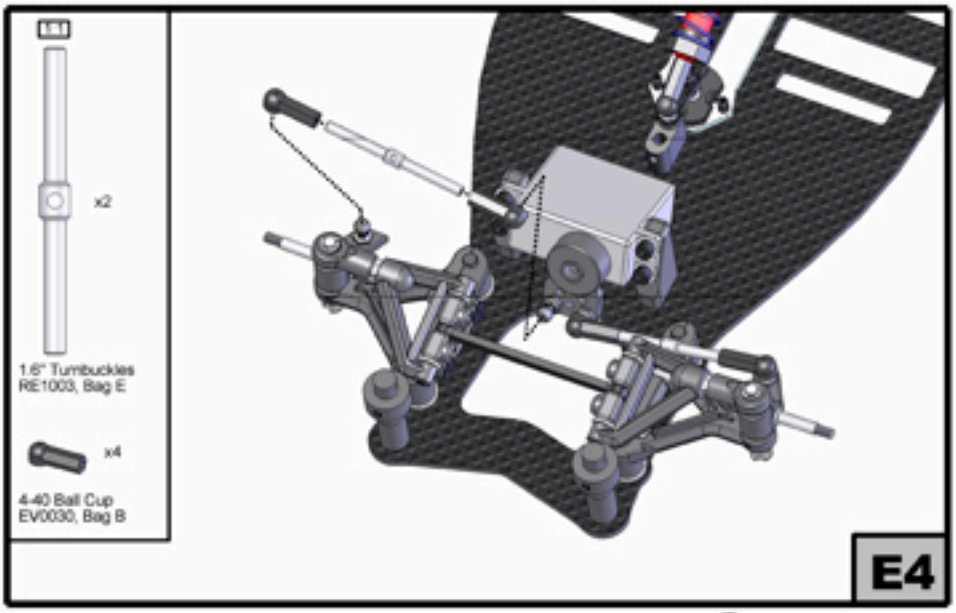
D1

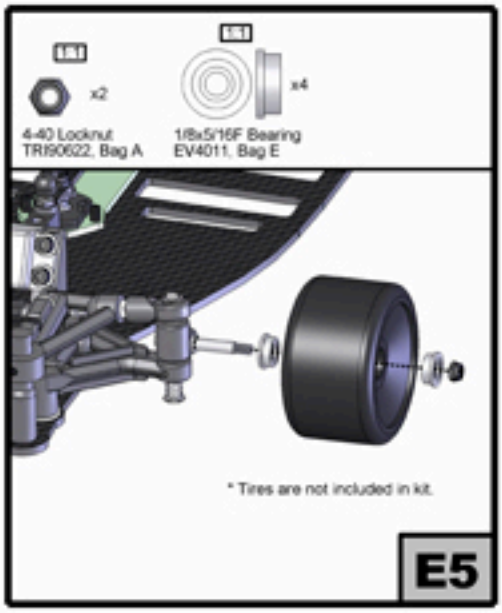

x1
Spur Gear
SG100, Bag D
x2
Diff Ring
TRI90630, Bag D
x1
Right Diff Hub
TRI90567, Bag D
x12
1/8" Diff Ball
EV0092, Bag D
x1
1/4x3/8 Bearing
EV0056, Bag D
x2
1/4x3/8F Bearing
EV0057, Bag D
x1
Belleville Washer
SB9825, Bag D
x1
Axle Nut
TRI90564, Bag D
Apply the silicone diff lube provided to each of the 12 outer diff ball holes (inner 6 holes are not used).
D2

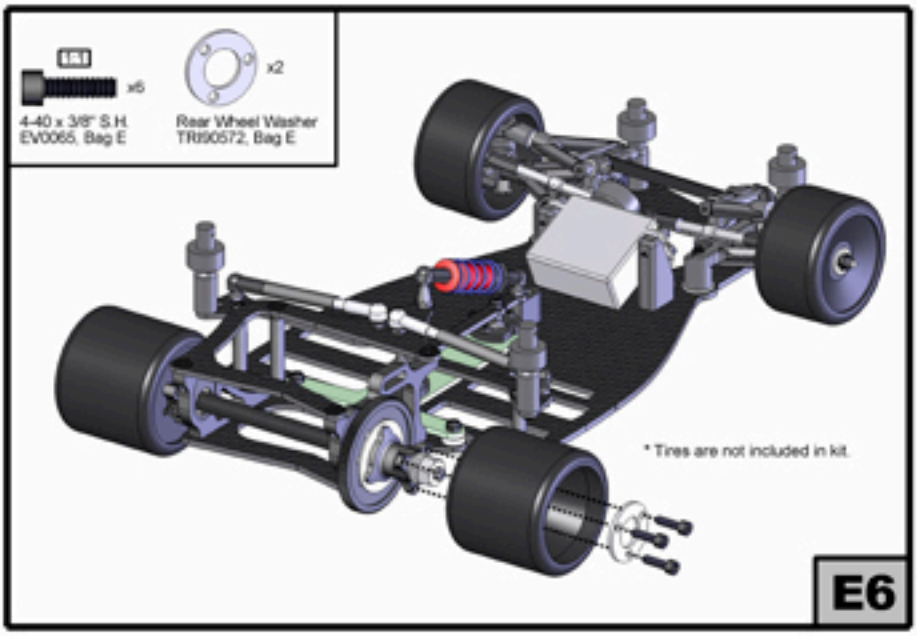

STEP E:
x2
4-40 x 3/8" F.H.
EV0064, Bag A
x2
4-40 Set Screw
RC0111, Bag B
x2
Body Post Collar
EV0086, Bag B
x2
2" Body Post
EV0085, Bag B
E1

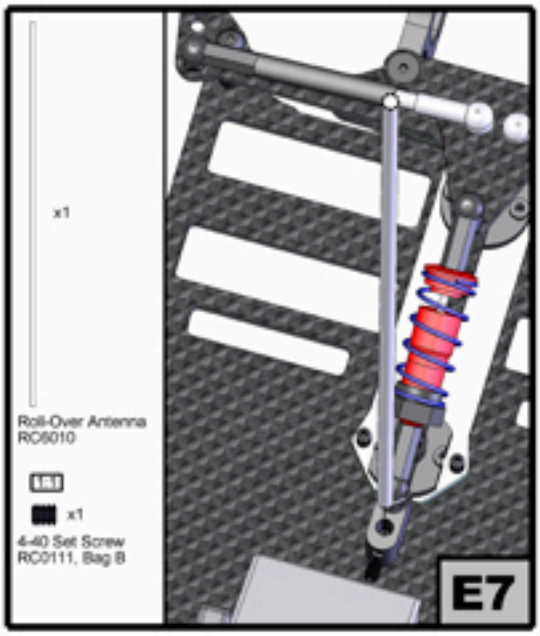

x2
4-40 Ball Stud
TRI90630, Bag B
x2
4-40 Locknut
TRI90622, Bag A
* Servo & Servo Saver are not included in kit.
E2


x2
Servo Mounts
SB5033, Bag E
x2
4-40 x 3/8" F.H.
EV0064, Bag A
x4
4-40 x 3/8" S.H.
EV0065, Bag E
x4
1/8" x 1/4" Washer
EV0058, Bag E
*Before installing your servo, align it with the servo mounts and drill 2 holes (3/32" dia.) to match the location of your servo ears.
E3


x2
1.6" Turnbuckles
RE1003, Bag E
x4
4-40 Ball Cup
EV0030, Bag B
E4


x2
4-40 Locknut
TRI90622, Bag A
x4
1/8x5/16F Bearing
EV4011, Bag E
* Tires are not included in kit.
E5

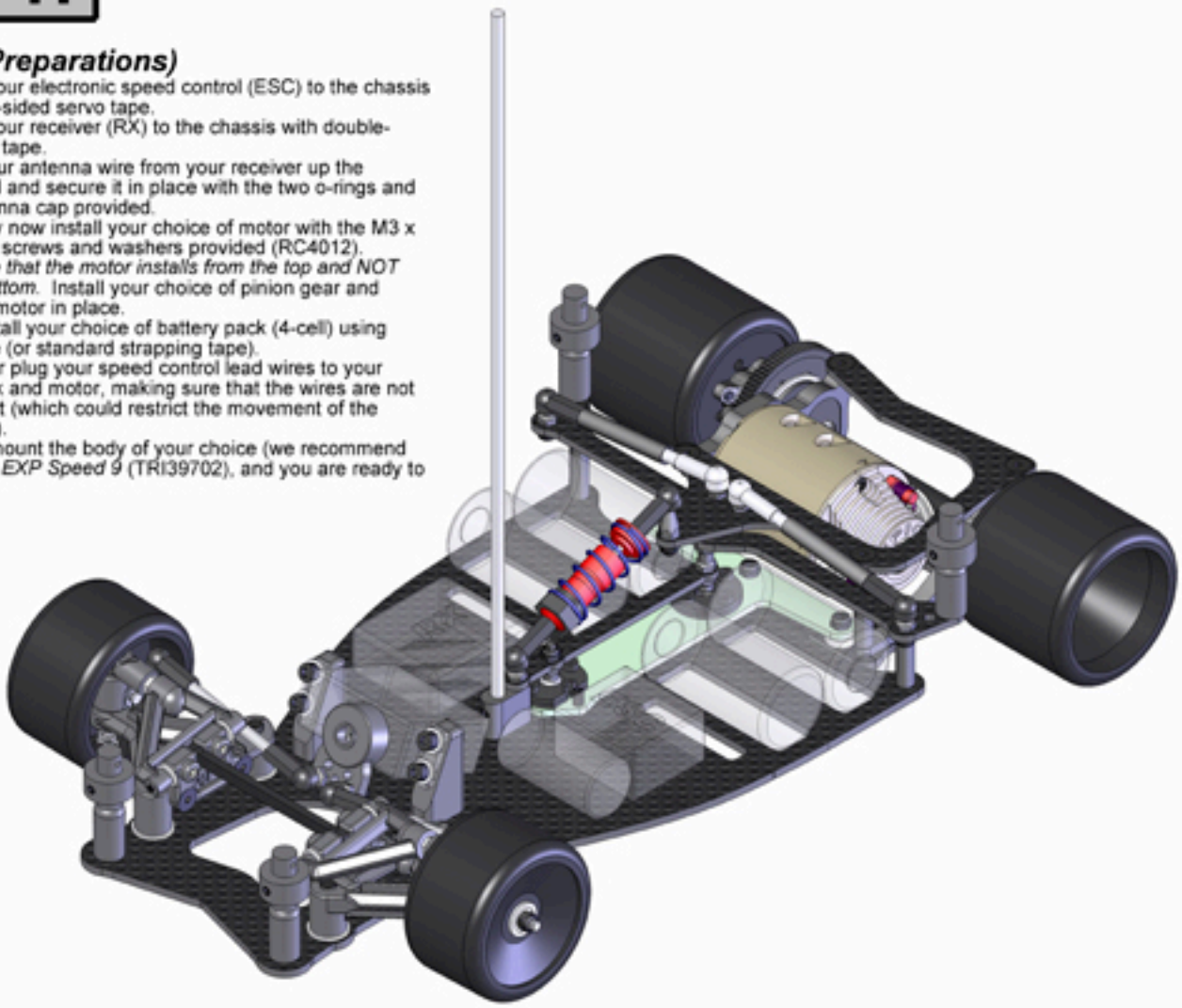




STEP F:

(Final Preparations)

1) Mount your electronic speed control (ESC) to the chassis with double-sided servo tape.
2) Mount your receiver (RX) to the chassis with double-sided servo tape.
3) Wind your antenna wire from your receiver up the antenna rod and secure it in place with the two o-rings and rubber antenna cap provided.
4) You may now install your choice of motor with the M3 x 8mm motor screws and washers provided (RC4012). *Please note that the motor installs from the top and NOT from the bottom.* Install your choice of pinion gear and secure the motor in place.
5) Now install your choice of battery pack (4-cell) using battery tape (or standard strapping tape).
6) Solder or plug your speed control lead wires to your battery pack and motor, making sure that the wires are not cut too short (which could restrict the movement of the suspension).
7) Finally mount the body of your choice (we recommend our *Bentley EXP Speed 9* (TRI39702), and you are ready to go racing!



BLACK WIDOW 12

1/12 On-Road Car Kit – TRI90503

Parts List

* Please Note: Replacement parts are available under the part numbers listed below. For your reference, the corresponding kit bag number is listed where each of these components can be found in the TRI90503 car kit.

BAG A:

EV0064	4-40 X 3/8" Flathead Screw	8	PCS
EV0071	2-56 X 1/4" Button Head Screw	4	PCS
RE1014L	T-Bar Pivot Ball	2	PCS
SB9837	T-Bar (.063")	1	PCS
TRI90584	Shock/Antenna Mount	1	PCS
TRI90585	Rear Pod Standoff	1	PCS
TRI90586	T-Bar Nut	2	PCS
TRI90589	Right Side Motor Plate	1	PCS
TRI90591	Bottom Pod Plate	1	PCS
TRI90595	Left Side Bulkhead	1	PCS
TRI90597	4-40 X 5/16" Set Screw	2	PCS
TRI90598	4-40 X 3/4" Flathead Screw	2	PCS
TRI90620	T-Bar Pivot Socket Set	2	PCS
TRI90622	4-40 X 3/16" Locknut	13	PCS
TRI90623	4-40 X 1/4" Flathead Screw	11	PCS
TRI90624	T-Bar Spacer - .090"	3	PCS

BAG B:

0111	4-40 X 1/8" Set Screw	5	PCS
6054	4-40 X 1/4" Button Head Screw	5	PCS
6094	Blue Bent-Up Body Clips	4	PCS
TRI90633	2-56 Ball Cup	2	PCS
EV0030	4-40 Ball Cup	7	PCS
EV0085	2" Nylon Body Post	4	PCS
EV0086	Body Post Collar	4	PCS
RE1042	4-40 X 1/2 Set Screw	2	PCS
SB9824A	Damper Tube Stick	2	PCS
SB9824B	Damper Tube	2	PCS
TRI90587	Upper Rear T-Bar Standoff	1	PCS
TRI90588	Rear Brace Standoff	2	PCS
TRI90592	Top Pod Plate	1	PCS
TRI90593	Rear Cross Brace	1	PCS
TRI90594	T-Bar Brace	1	PCS
TRI90621	2-56 Ball Stud	2	PCS
TRI90626	2-56 X 5/32 Locknut	2	PCS
TRI90628	VCS Shock Kit, Red	1	PCS
TRI90629	2-56 Set Screw	2	PCS
TRI90634	4-40 Ball Stud - Std.	7	PCS
TRI90631	4-40 Ball Stud - Long	1	PCS

BAG C:

EV0074	4-40 X 1/2" Flathead Screw	4	PCS
SB5029	Front Stub Axle	2	PCS
TRI90599	12L4 Front Suspension (#4402)	1	PCS
TRI90625	8-32 X 5/8" Flathead Screw	4	PCS
TRI90627	Frt. Ride Ht. Shim (.030")	8	PCS

BAG D:

EV0056	1/4" X 3/8" Unflanged Bearing	1	PCS
EV0057	1/4" X 3/8" Flanged Bearing	4	PCS
EV0092	1/8" Diff Ball	12	PCS
SB5085	Axle Spacer - .050"	4	PCS
SB9826	Belleville Washer	1	PCS
SG100	Spur Gear	1	PCS
TRI90564	Graphite Rear Axle	1	PCS
	Axle Nut (included with Axle)	1	PCS
TRI90567	Right Side Diff Hub	1	PCS
TRI90569	Ride Height Adjuster Set	2	PCS
TRI90596	Left Clamping Hub	1	PCS
TRI90630	Diff Ring - "Large D"	2	PCS
TRI90632	4-40 X 1/4" Cap Head Screw	1	PCS

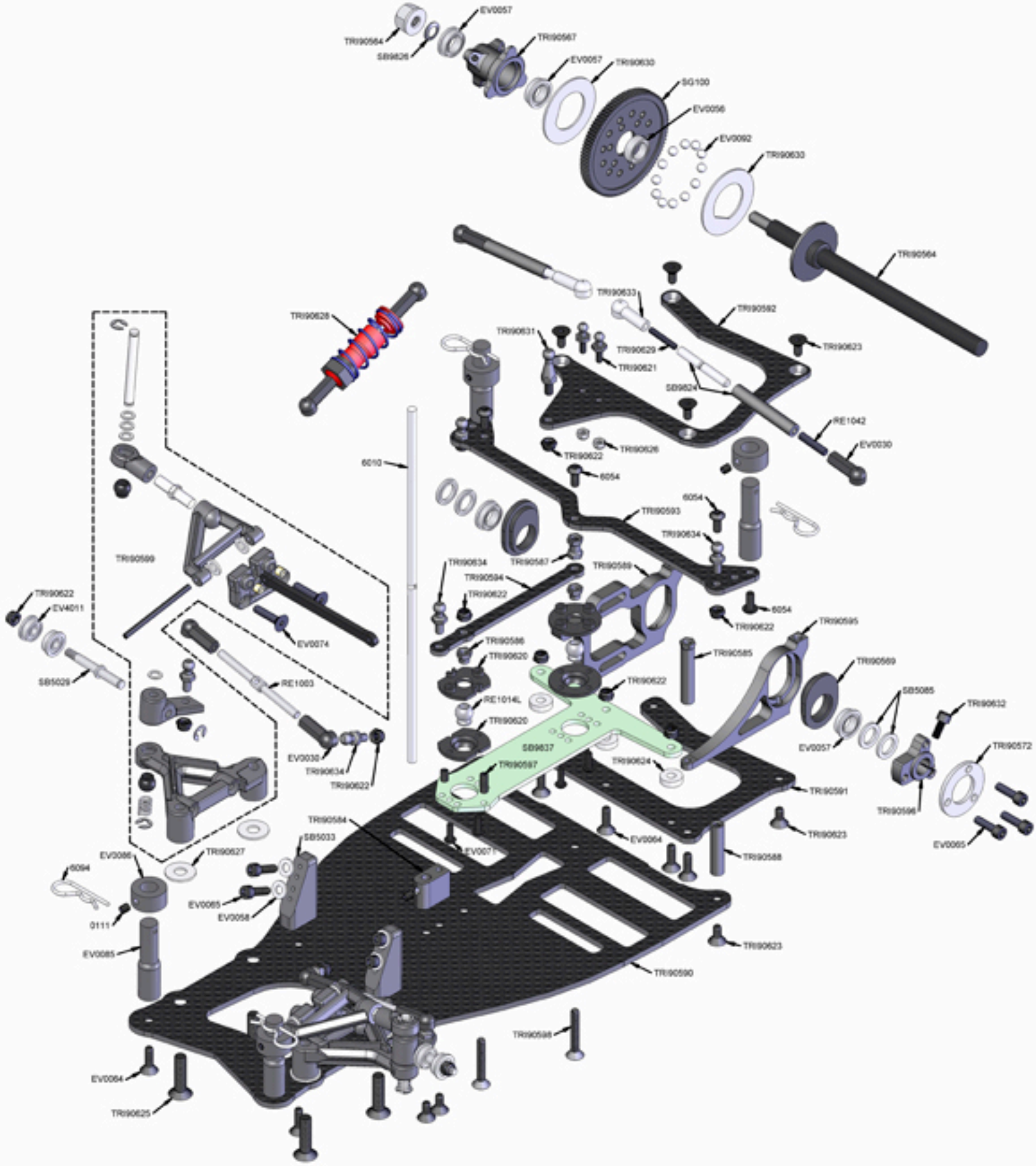
BAG E:

4012	M3 X 8 Motor Screw	2	PCS
4012	Motor Screw Washer	2	PCS
EV0058	1/8" X 1/4" Washer	4	PCS
EV0065	4-40 X 3/8" Cap Head Screw	10	PCS
EV4011	1/8" X 5/16" Flanged Bearing	4	PCS
RE1003	1.6" Steel Turnbuckles	2	PCS
SB5033	Servo Mounts - Nylon	2	PCS
TRI90572	Rear Wheel Washers	2	PCS

Also Included Inside The Box:

TRI90590	Chassis (.090")	1	PCS
6010	Roll-Over Antenna Rod	1	PCS
0292	Silicone Diff Lube	1	PCS
7020	20wt. Shock Oil	1	PCS
EV0100-1	0.050" Allen Wrench	1	PCS
EV0100-2	0.062" Allen Wrench	1	PCS
EV0100-3	0.093" Allen Wrench	1	PCS

BLACK WIDOW 12



TRINITY