



Competition **X**
A WEB SITE FOR THE SERIOUS RACER

1:10 Scale R/C Rock Crawler

Thank you for purchasing the Venom Creeper™. This revolutionary Rock Crawler was designed with die hard crawlers, enthusiasts and beginning R/C Hobbyists in mind. Hardcore Crawlers will love the revolutionary design features of the chassis. Enthusiasts will enjoy it's scale realism, and beginning and novice hobbyists will enjoy how easy the Creeper™ is to drive. We hope you have as much fun with your Creeper as we did creating it. Not only did you purchase the best R/C Rock Crawler but you have also joined the Venom Team and it's world class product line and customer service.

TOOLS & EQUIPMENT NEEDED



VEN-8178

Radio
2-6ch Radio (surface use)
Wheel and Trigger Type, or
Stick Type.



VEN-1339

ESC
Any brushed/brushless speed
controller with forward/reverse and a
minimum drive current of 300 amps.



Charger VEN-0657
The Venom Pro Charger
will charge 1 to 6 cell LiPO
and LiION/LiFE Battery
Packs, as well as NiCD and
NiMH battery packs.



VEN-1590

Requires
8 AA Batteries
for Radio



VEN-1555T

VEN-1544T

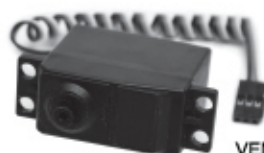
Battery Pack
Standard 6-cell Stick Pack
6-7cell NiMH side-by-side
2-cell Li-Poly Stick Pack



VEN-1336

VEN-1334

540 Sized Motor
50T, 55T, 60T Brushed
or similar Brushless Motor
Recommended



VEN-1825

Servo
1x standard size servo for steering.
2x needed for Fr /Rr steer:
Suggested torque rating based on vehicle weight:
Stock (no additional weight): 75-100 oz-in
+2lb wheel weights: 100-150 oz-in
+4lb wheel weights: 150+ oz-in

Double Sided Tape



Hobby Knife #11 Blade



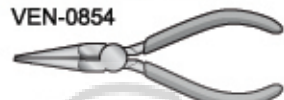
Nut Driver



5.5mm 7mm

Needle Nose Pliers

VEN-0854



Side Cutters

VEN-0853



Hex Driver



0.05in 1.5mm 2.0mm 2.5mm

Pliers



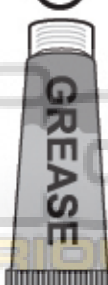
Curved Scissors



Thread Lock
VEN-0865



Shock Oil
25wt
(Included)



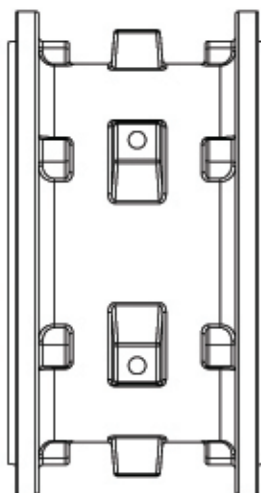
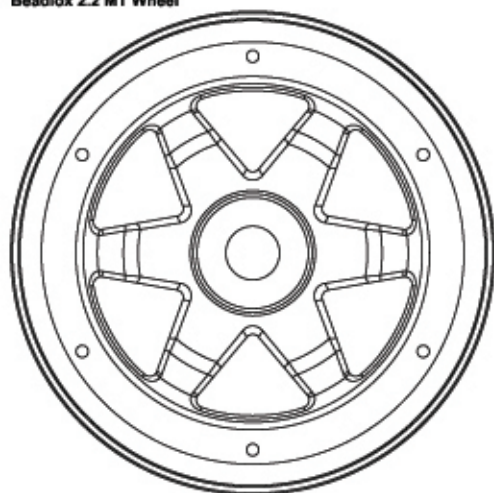
Heavy Duty Grease
(Included)



Paint for
Polycarbonate Plastic.

One-to-One Parts Reference

VEN-1215a
Beadlox 2.2 MT Wheel



VEN-1465
15T 48P Motor Pinion



VEN-8302
10 x 15 x 4mm Bearing
x8



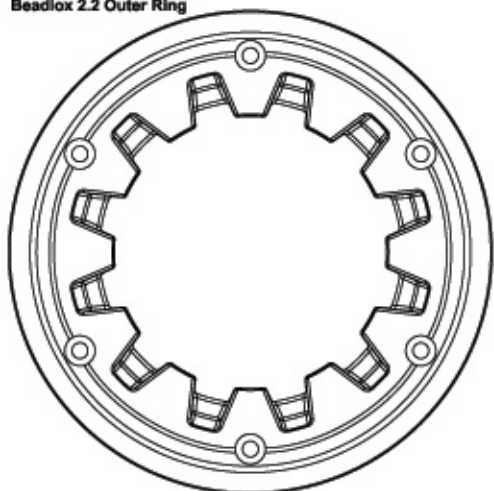
VEN-8303
5 x 10 x 4mm Bearing
x20



VEN-8304
5 x 11 x 4mm Bearing
x2



VEN-1215b
Beadlox 2.2 Outer Ring



VEN-8306
M3 Nylon Lock Nut
x25



VEN-8307
4mm Flanged Locknut
x4



VEN-8308
3mm E-Ring
x8



VEN-8309
M3 X 20mm Stud
x24



VEN-8310
M3 Washer
x7



VEN-8311
M2.5 Washer
x4



VEN-8312
M2 x 10mm SH Cap Screw
x16



VEN-8313
M2 x 6mm CH Screw
x3



VEN-8314
M2 x 6mm SH Cap Screw
x2



VEN-8315
M2 x 8mm SH Cap Screw
x50



VEN-8316
M2.5 x 10mm SH Cap Screw
x4



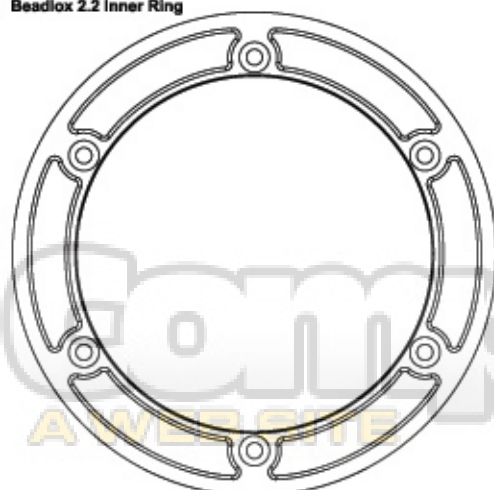
VEN-8317
M2.5 x 12mm CH Screw
x4



VEN-8318
M2.5 x 2.5mm Set Screw
x10



VEN-1215c
Beadlox 2.2 Inner Ring



VEN-8319
M2.5 x 6mm Skt C.S. Cap Screw
x10

VEN-8320
M2.5 x 6mm SH Cap Screw
x2

VEN-8321
M2.5 x 8mm Skt C.S. Cap Screw
x4

VEN-8322
M2.5 x 8mm SH Cap Screw
x8

VEN-8323
M3 x 10mm Skt C.S. Cap Screw
x2

VEN-8324
M3 x 10mm SH Cap Screw
x15

VEN-8325
M3 x 12mm Skt C.S. Cap Screw
x2

VEN-8326
M3 x 12mm SH Cap Screw
x18

VEN-8327
M3 x 14mm SH Cap Screw
x4

VEN-8328
M3 x 16mm Skt C.S. Cap Screw
x5

VEN-8329
M3 x 16mm SH Cap Screw
x1

VEN-8330
M3 x 18mm SH Cap Screw
x11

VEN-8331
M3 x 20mm Skt C.S. Cap Screw
x2

VEN-8332
M3 x 20mm SH Cap Screw
x4

VEN-8333
M3 x 25mm SH Cap Screw
x3

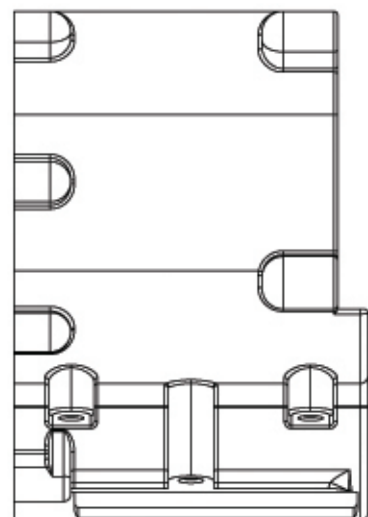
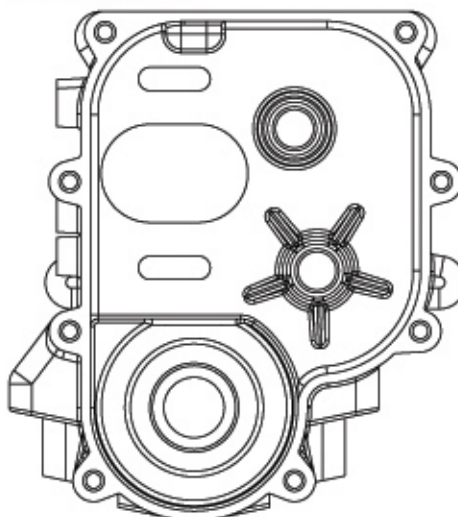
VEN-8334
M3 x 3mm Set Screw
x8

VEN-8335
M3 x 6mm Skt C.S. Cap Screw
x8

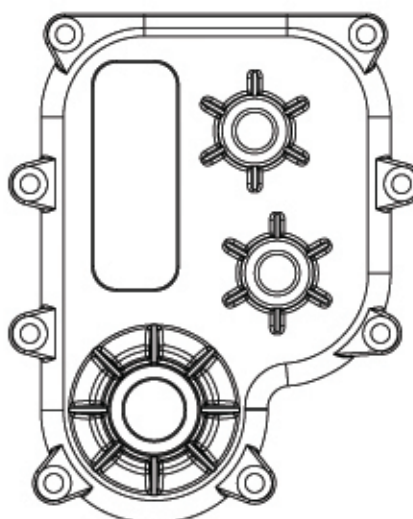
VEN-8336
M3 x 8mm Skt C.S. Cap Screw
x3

VEN-8337
M3 x 8mm SH Cap Screw
x2

VEN-8338a
Transmission Housing



VEN-8338b
Transmission Cover



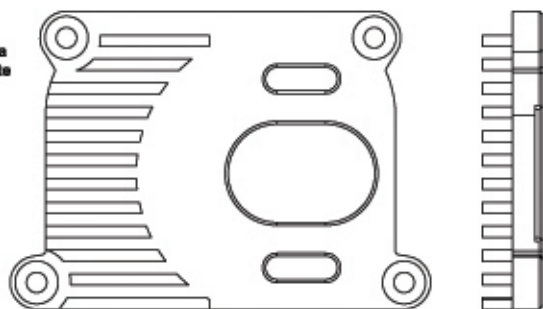
VEN-8338c
Transmission Dust Shield



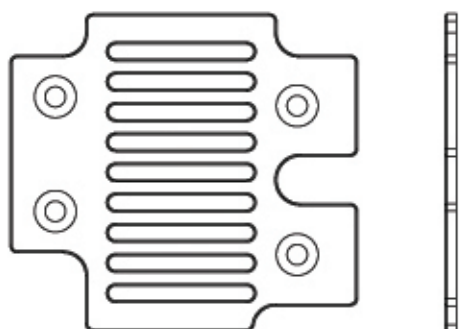
VEN-8339
Transmission Plug



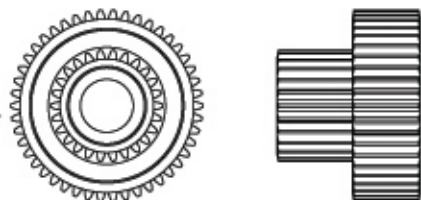
VEN-8340a
Motor Plate



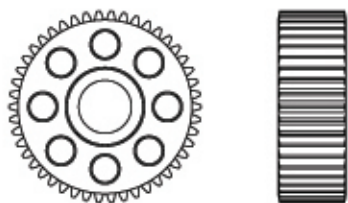
VEN-8340b
ESC Mount Plate



VEN-8341a
46T Reduction Gear



VEN-8341b
Idler Gear



VEN-8341c
46T Drive Gear



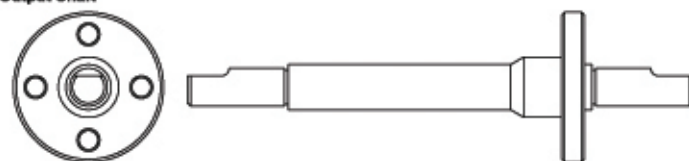
VEN-8342a
Gear Shaft



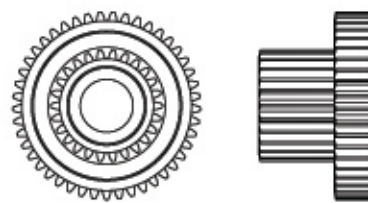
VEN-8342b
Gear Spacer



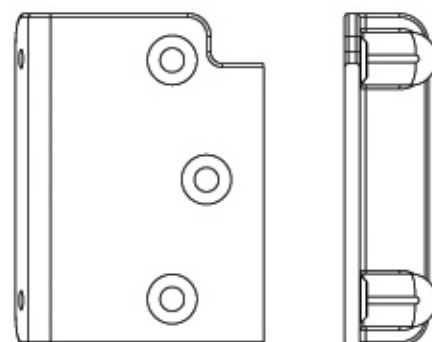
VEN-8342c
Output Shaft



VEN-8343
45T Spur Gear

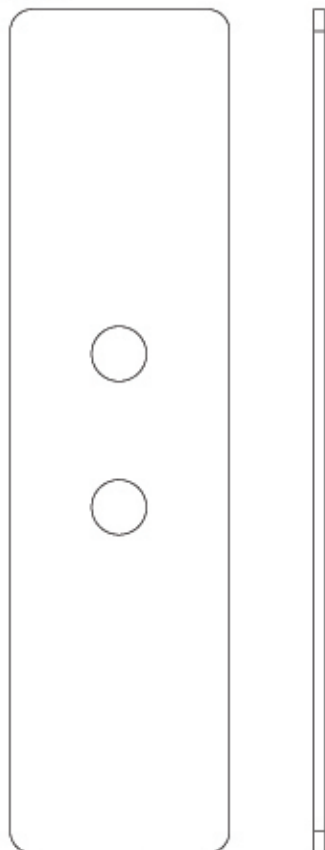


VEN-8348a
Transmission Skid Right

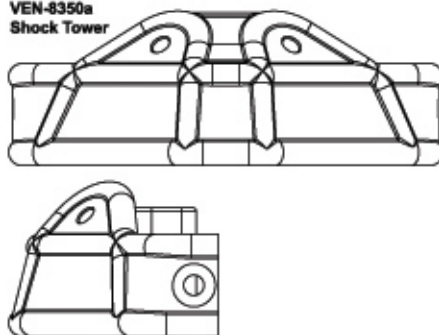


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VEN-8349b
Foam Battery Pad
(Not to Scale)



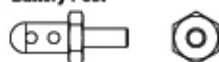
VEN-8350a
Shock Tower



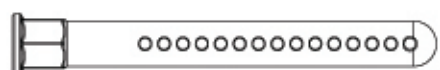
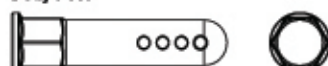
VEN-8350b
6mm Spacer



VEN-8351
Battery Post



VEN-8353a
Body Post



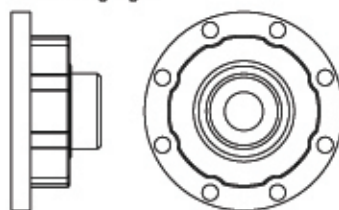
VEN-8353b
Body Post Pivot Mount



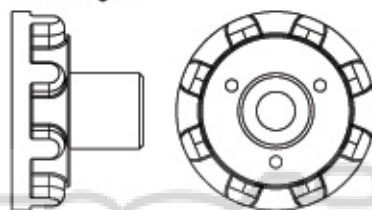
VEN-8354
Antenna Mount



VEN-8355a
Diff Housing Right



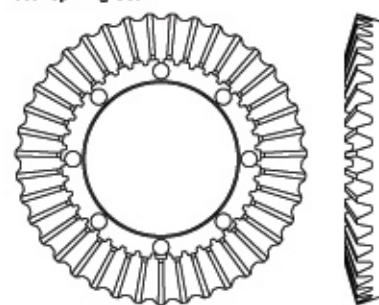
VEN-8355b
Diff Housing Left



VEN-8355c
Diff-Lock Ring Bushing



VEN-8356a
39t 26p Ring Gear



VEN-8356b
39t 26p Drive Pinion



VEN-8357a
30t 48p Drive Gear



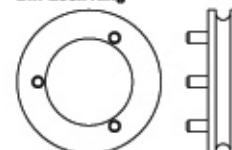
VEN-8357b
15t 48p Spider Gear



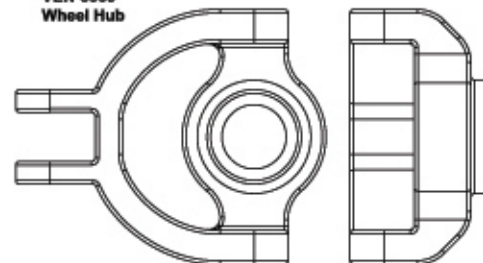
VEN-8357c
Spider Gear Shaft



VEN-8358
Diff-Lock Ring



VEN-8359
Wheel Hub



VEN-8360
Wheel Hub Bushing



VEN-8361a
Steering Drag Link



VEN-8361c
Crossover Link



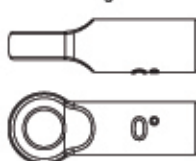
VEN-8349d
Battery Cover
(Not to Scale)



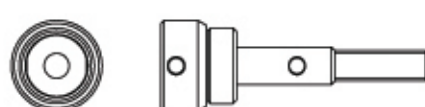
VEN-8361d
Ball Joint 45-Deg



VEN-8361b
Ball Joint 0-Deg



VEN-8367
VCD Shaft



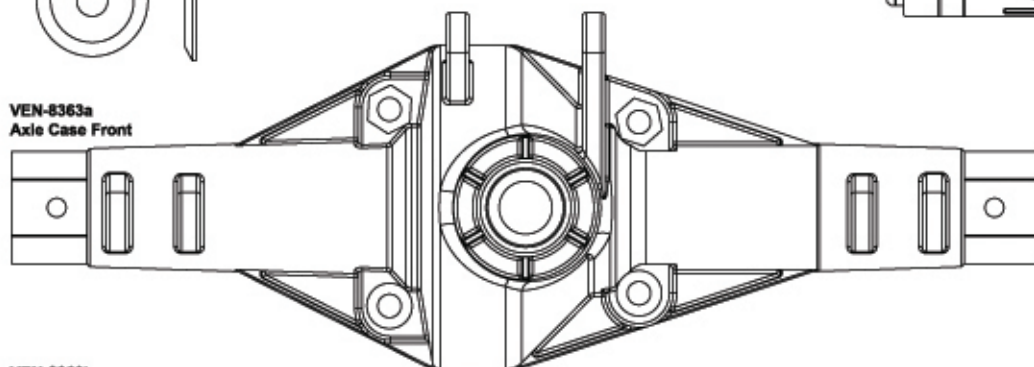
VEN-8362
Wheel Washer



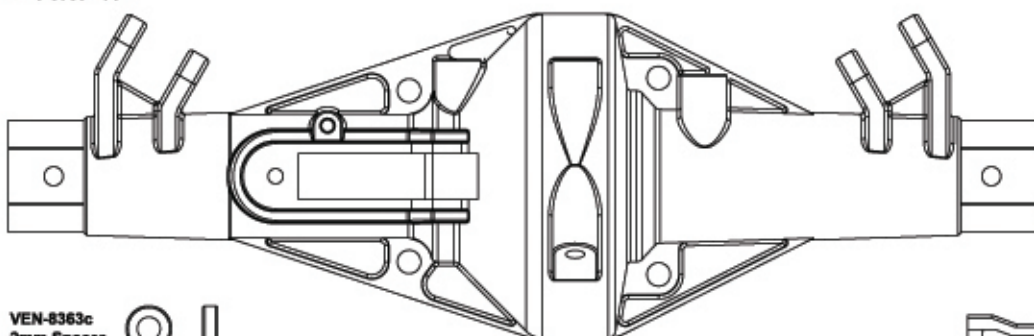
VEN-8368a
Diff-Lock Switch Cover



VEN-8363a
Axle Case Front



VEN-8363b
Axle Case Back



VEN-8363c
2mm Spacer



VEN-8364a
VCD Axle Short



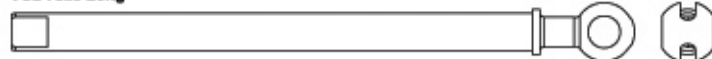
VEN-8364b
VCD Yoke



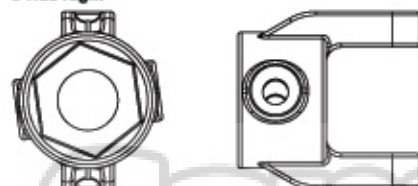
VEN-8364c
VCD Yoke Pin 12mm



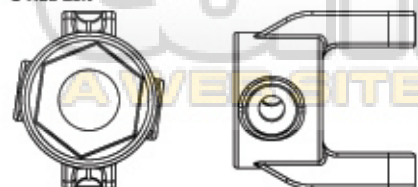
VEN-8365a
VCD Axle Long



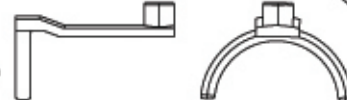
VEN-8366a
C-Hub Right



VEN-8366b
C-Hub Left



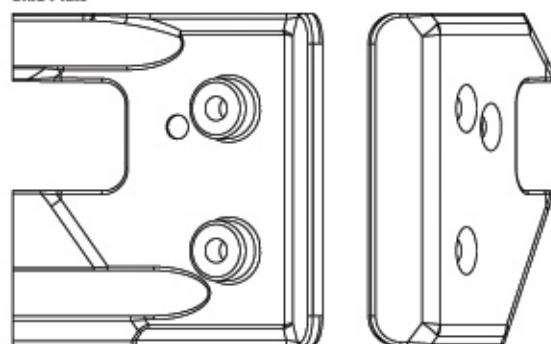
VEN-8368b
Diff-Lock Switch



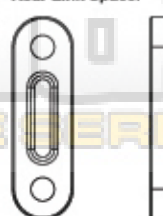
VEN-8368c
Diff-Lock Switch Dust Cover



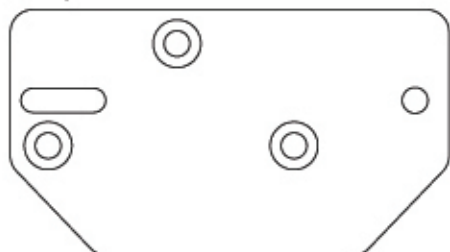
VEN-8370a
Skid Plate



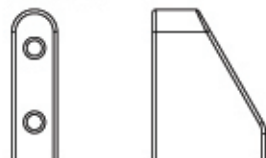
VEN-8370b
Rear Link Spacer



VEN-8371a
Steering Servo Plate



VEN-8371b
Servo Mount



VEN-8373a
Axle Hex Adapter



VEN-8373b
Hex Adapter Pin



VEN-8374a
Upper Link



VEN-8374b
Ball Joint 20-Deg



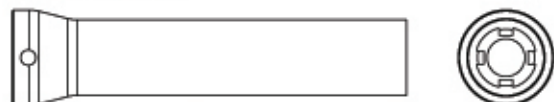
VEN-8377a
Lower Link



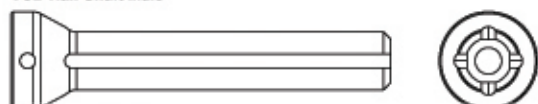
VEN-8377b
Ball Joint 12-Deg



VEN-8380a
VCD Half Shaft Female



VEN-8380b
VCD Half Shaft Male



VEN-8380c
VCD Coupler



VEN-8380e
VCD Yoke Pin 13mm



VEN-8383
Pivot Ball 6mm



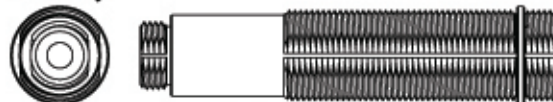
VEN-8384a
Body Clip Small



VEN-8384b
Body Clip Large



VEN-8385a
Shock Body



VEN-8385b
Upper Pivot



VEN-8385c
Upper Pivot



VEN-8385d
Shock Shaft



VEN-8385e
Shock Spring



VEN-8385f
Shock Lower Cap Seal



VEN-8385g
Shock Spring Perch



VEN-8385h
Shock Lower Cap



VEN-8385i
Shock Upper Cap



VEN-8385j
Shock Collar



VEN-8385k
Shock Collar O-Ring



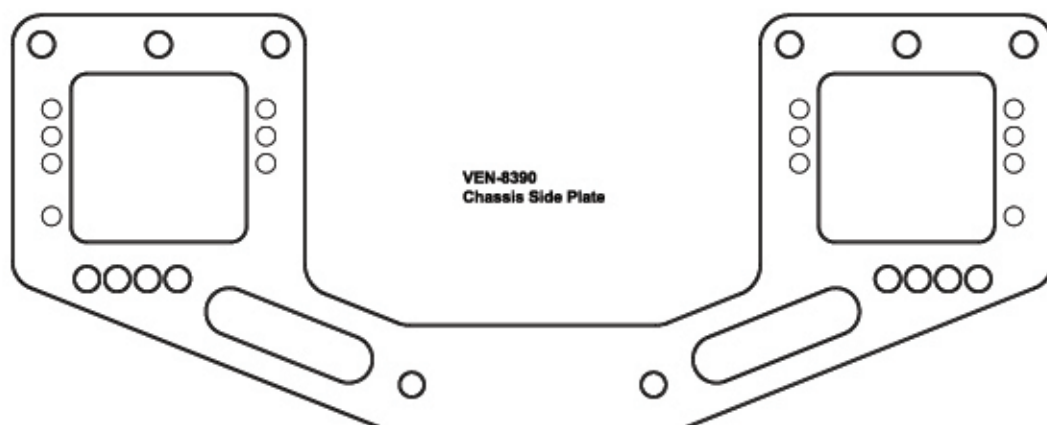
VEN-8385m
Shock O-Ring



VEN-8385n
Shock Bladder



VEN-8385p
2 Hole Shock Piston



VEN-8390
Chassis Side Plate

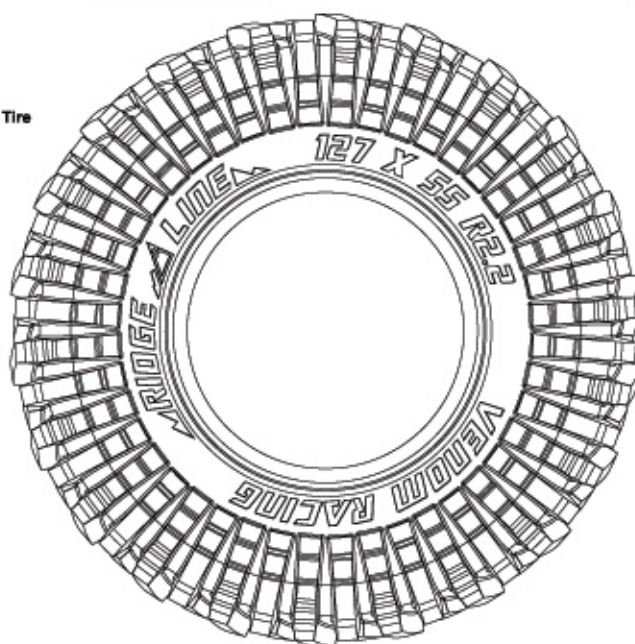


VEN-8394a
Internal Shock Spring

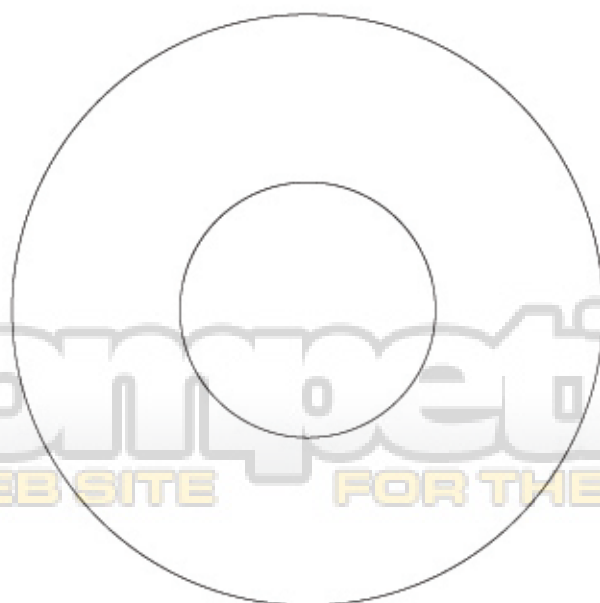


VEN-8394b
Internal Spring Washer

VEN-1265a
Beadlox Ridge-Line 2.2 Tire
NOT TO SCALE



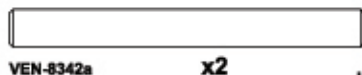
VEN-1265b
Tire Insert
NOT TO SCALE



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OPEN BAG

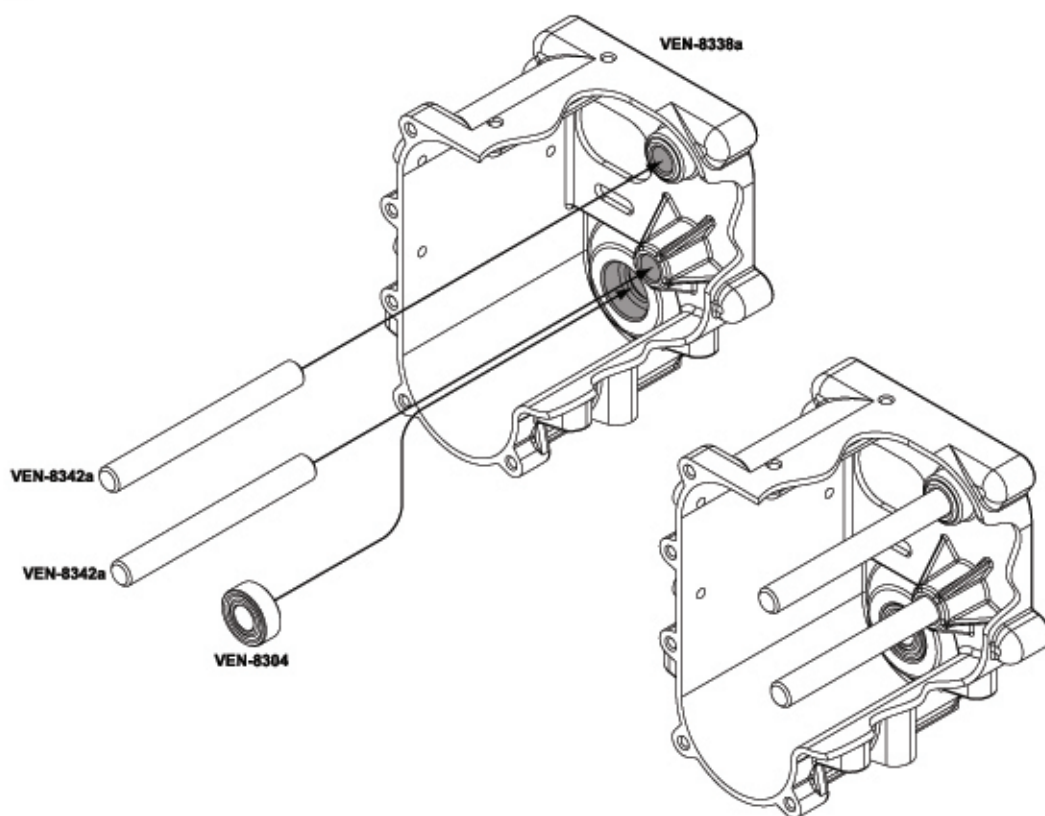
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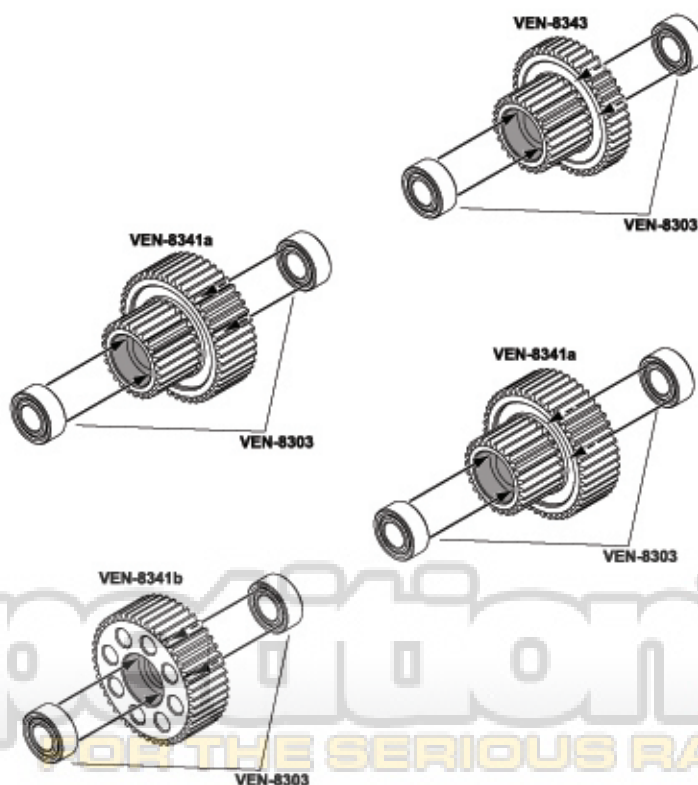
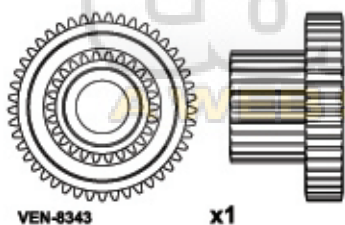
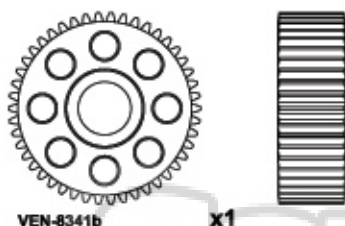
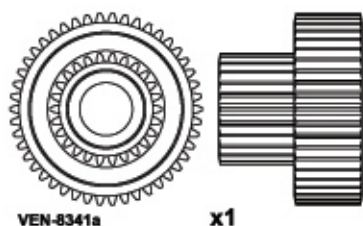
OPTION PART

VEN-8344, 8845, 8846
Spur Gears 46T/ 47T/ 48T

1

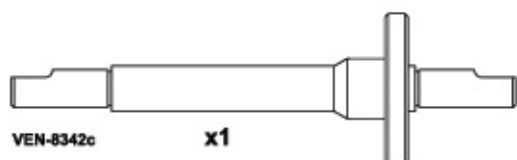
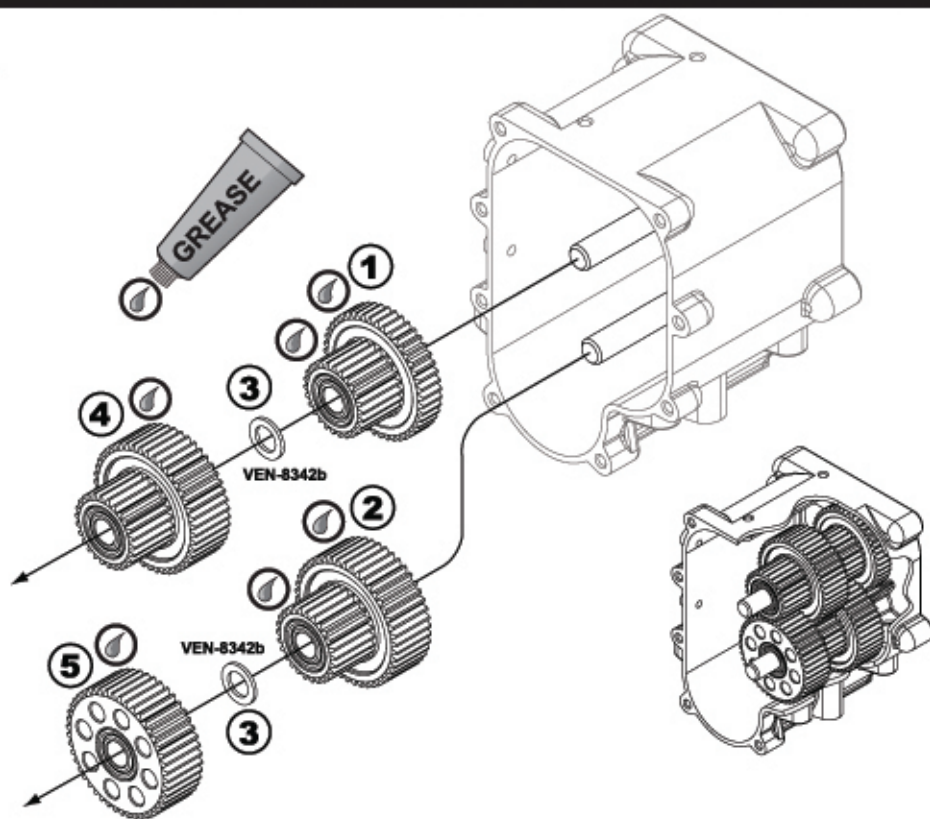


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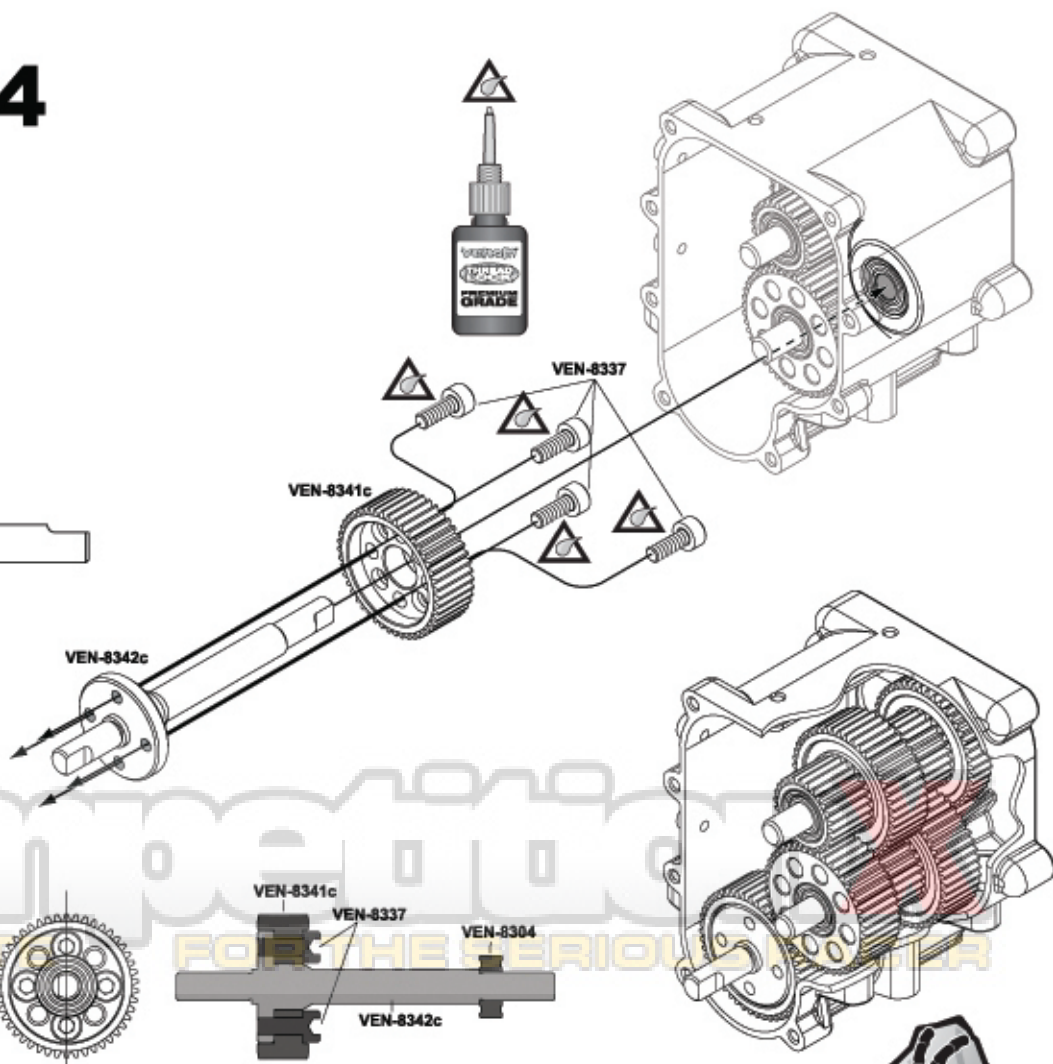




3



4



Complete
A WEB SITE FOR THE SERIOUS HIKER



x1

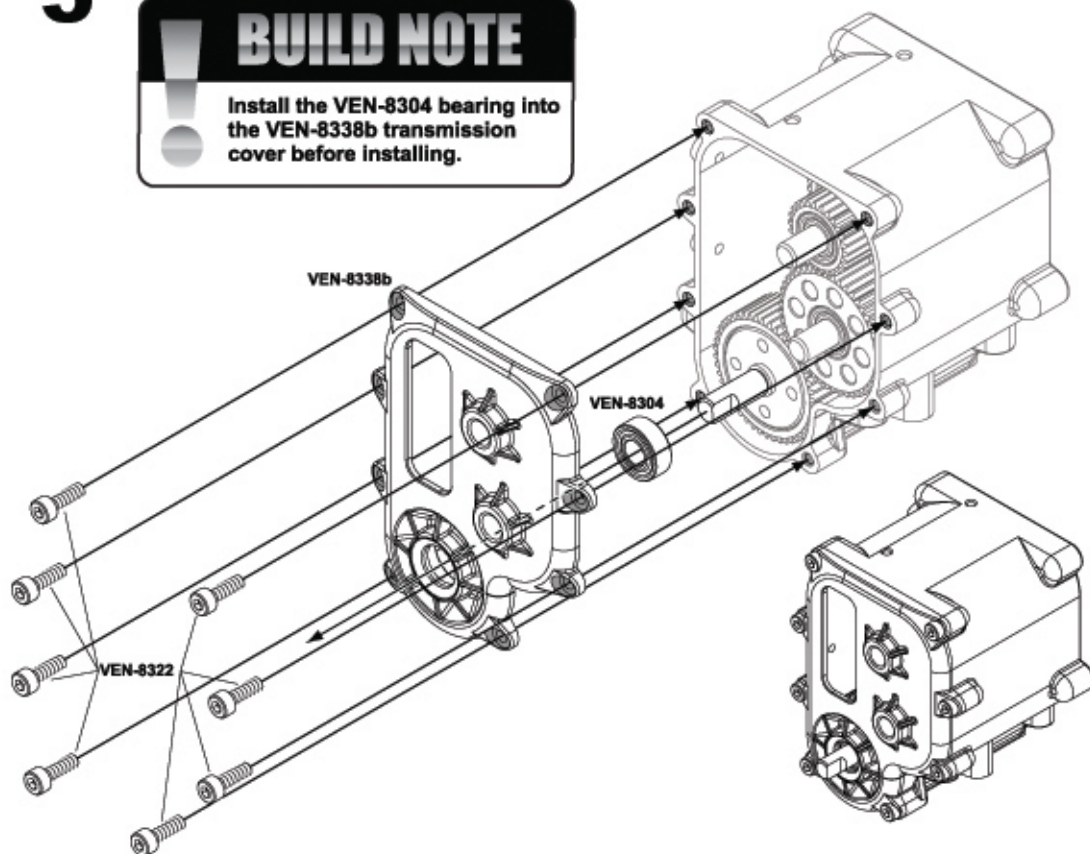


x8

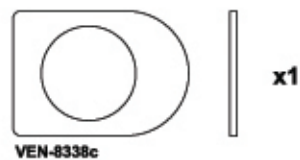
5

BUILD NOTE

Install the VEN-8304 bearing into the VEN-8338b transmission cover before installing.

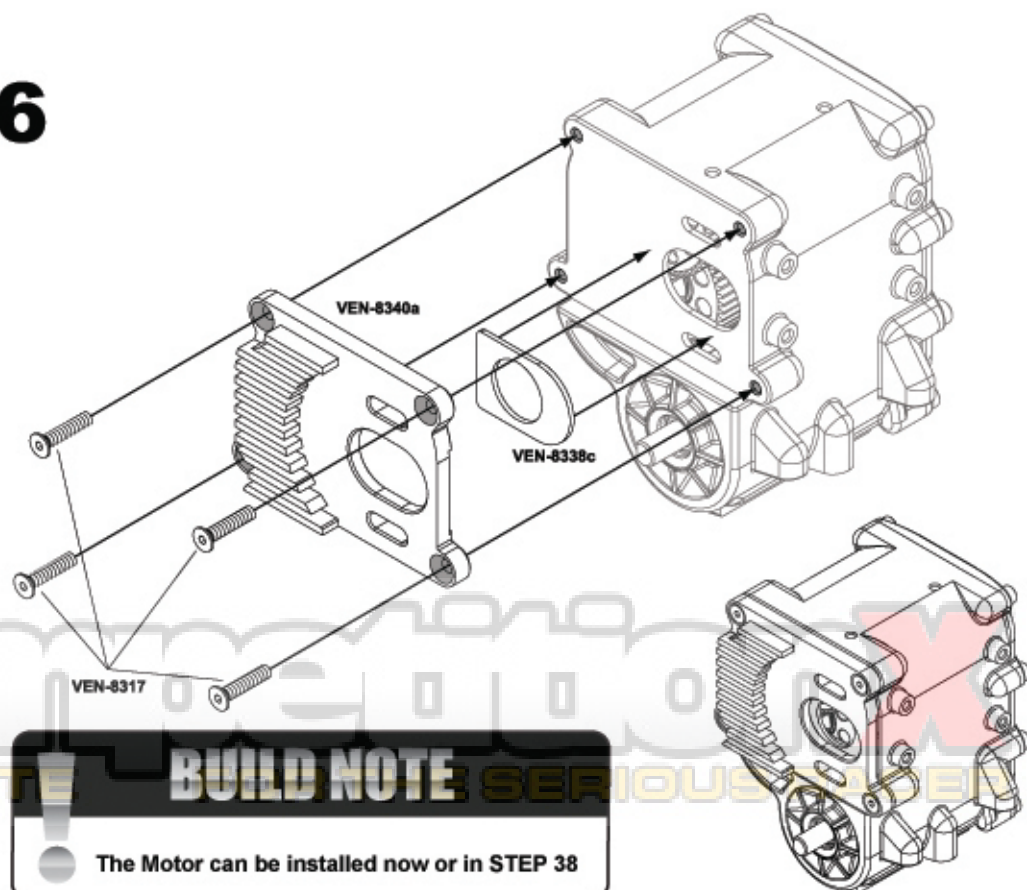


x4



x1


6

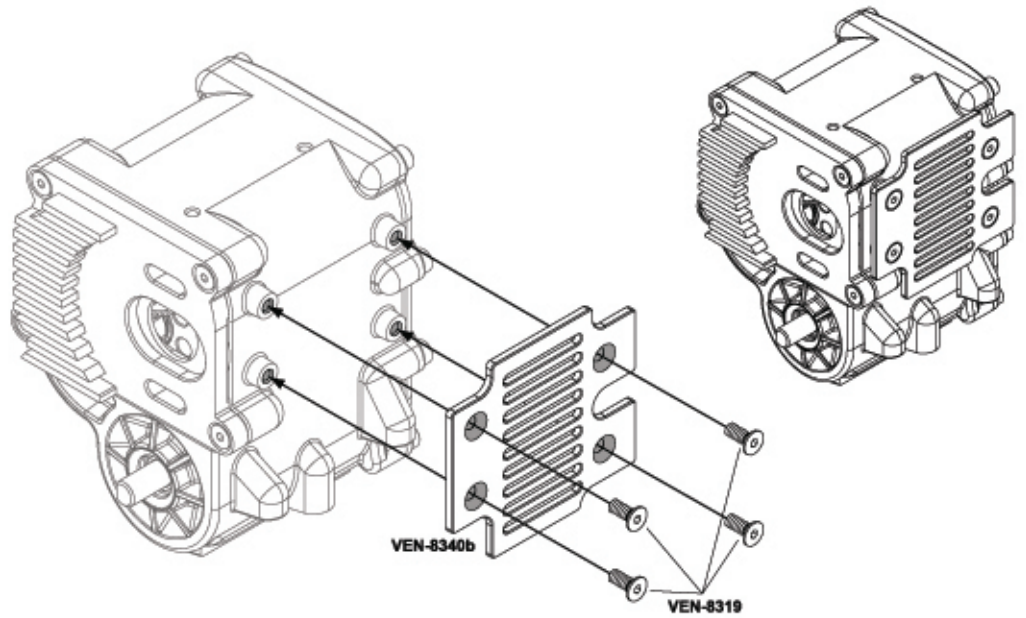


BUILD NOTE

The Motor can be installed now or in STEP 38

7


 **x4**
VEN-8319 M2.5 x 6mm




8

LOWER LINK ASSEMBLY


OPEN BAG
B

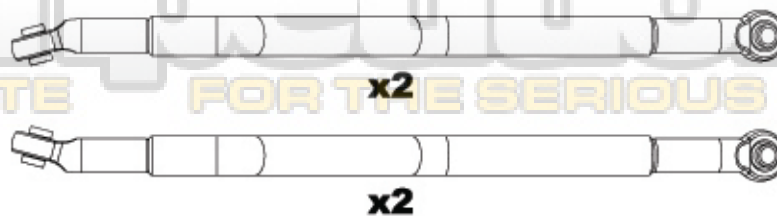
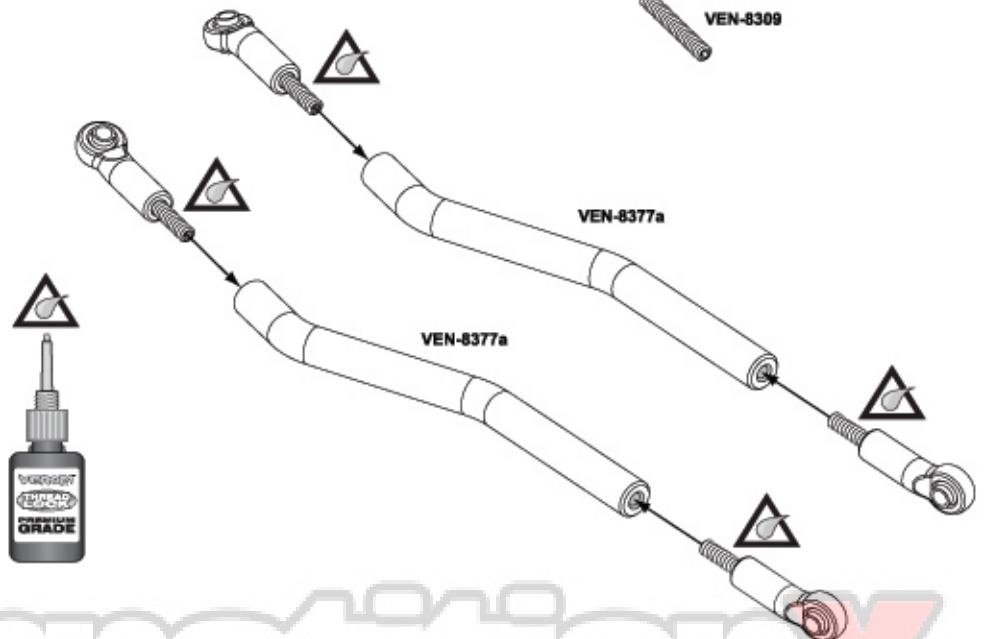
 **x8**
VEN-8309 3 x 20mm

 **12°**
VEN-8377b **x8**

 **x8**
VEN-8383

BUILD NOTE
Note: Tighten the links until the parts are aligned. Do not allow the links to be loose.

 **x8**
VEN-8377b
VEN-8309



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9

 x2
VEN-8323 M3 x 10mm

 x4
VEN-8328 M3 x 16mm

VEN-8323
VEN-8328
VEN-8348a
RIGHT

VEN-8323
VEN-8328
VEN-8348b
LEFT


**Front of
Chassis**


SIDE VIEW

BOTTOM VIEW

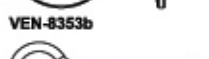
OPEN BAG

C

 x2
VEN-8326 M3 x 12mm

 x2
VEN-8353a

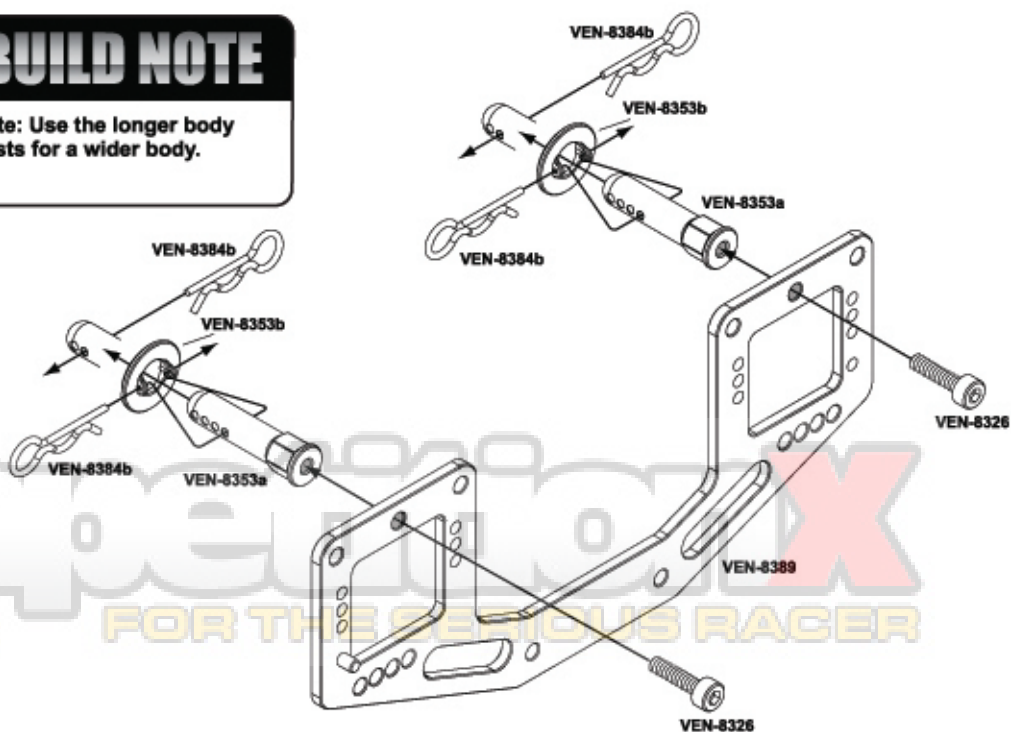
 x2
VEN-8353b



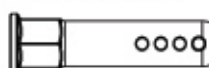



 x4
VEN-8384b

10

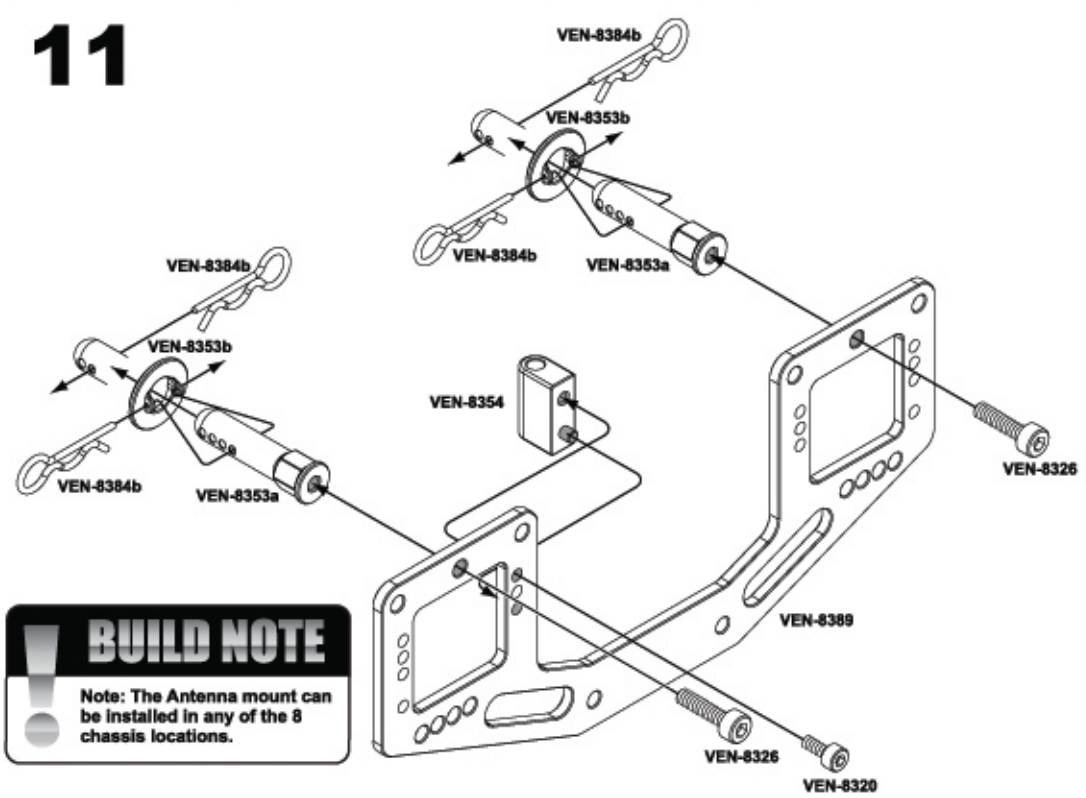
BUILD NOTE

Note: Use the longer body posts for a wider body.



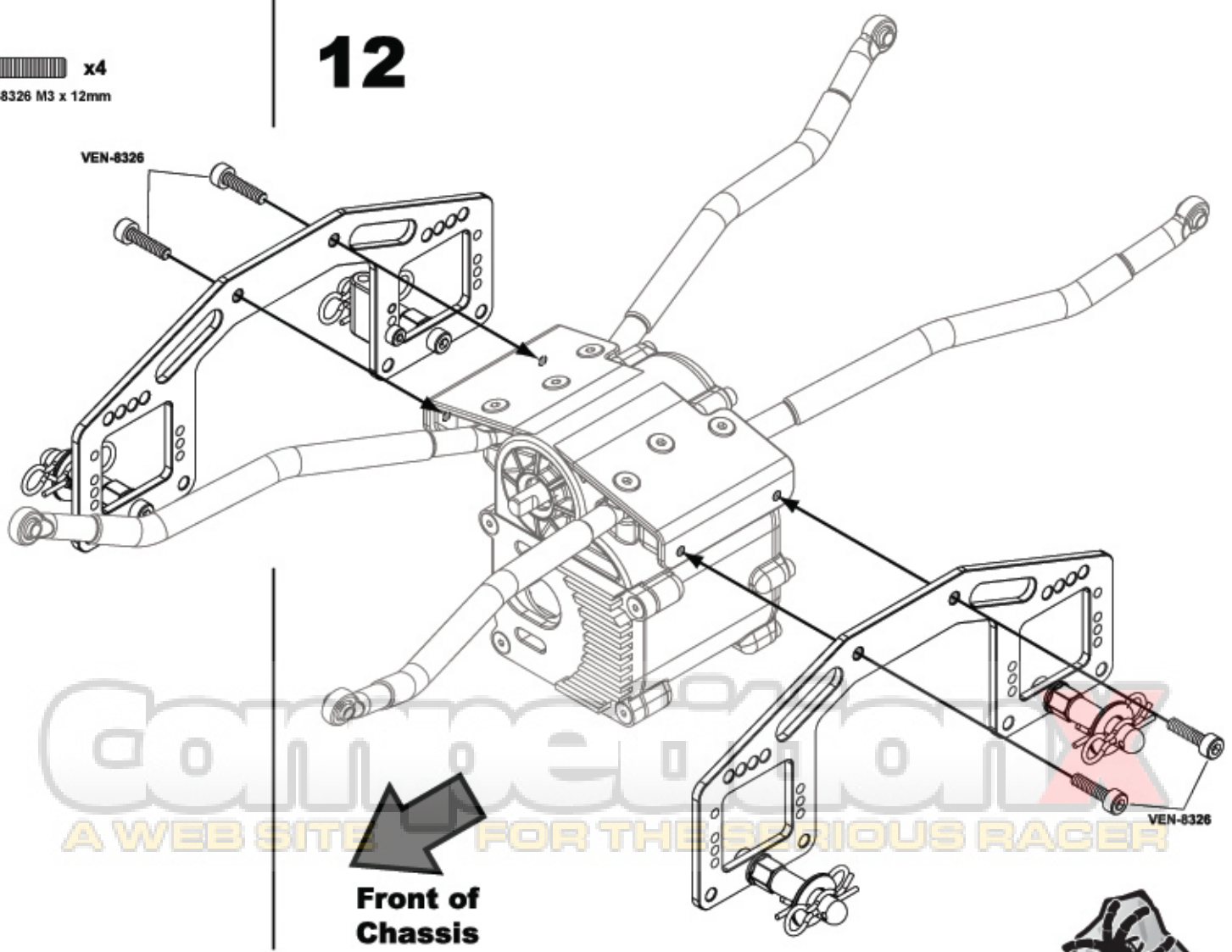
-  x1
VEN-8320 M2.5 x 6mm
-  x2
VEN-8326 M3 x 12mm
-  x2
VEN-8353a
-  x2
VEN-8353b
-  x1
VEN-8354
-  x4
VEN-8384b

11





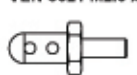
-  x4
VEN-8326 M3 x 12mm

12

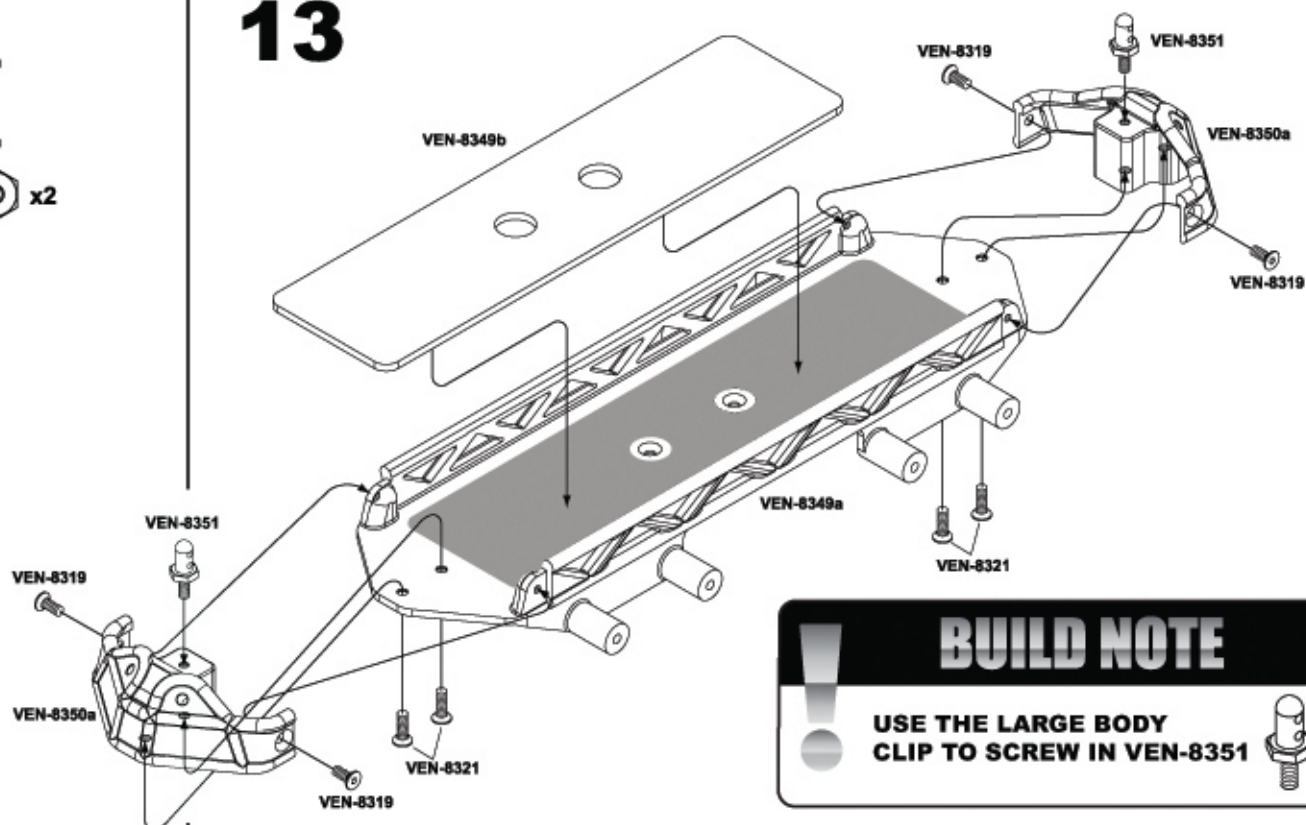




Go to www.venen.com FOR THE SERIOUS RACER



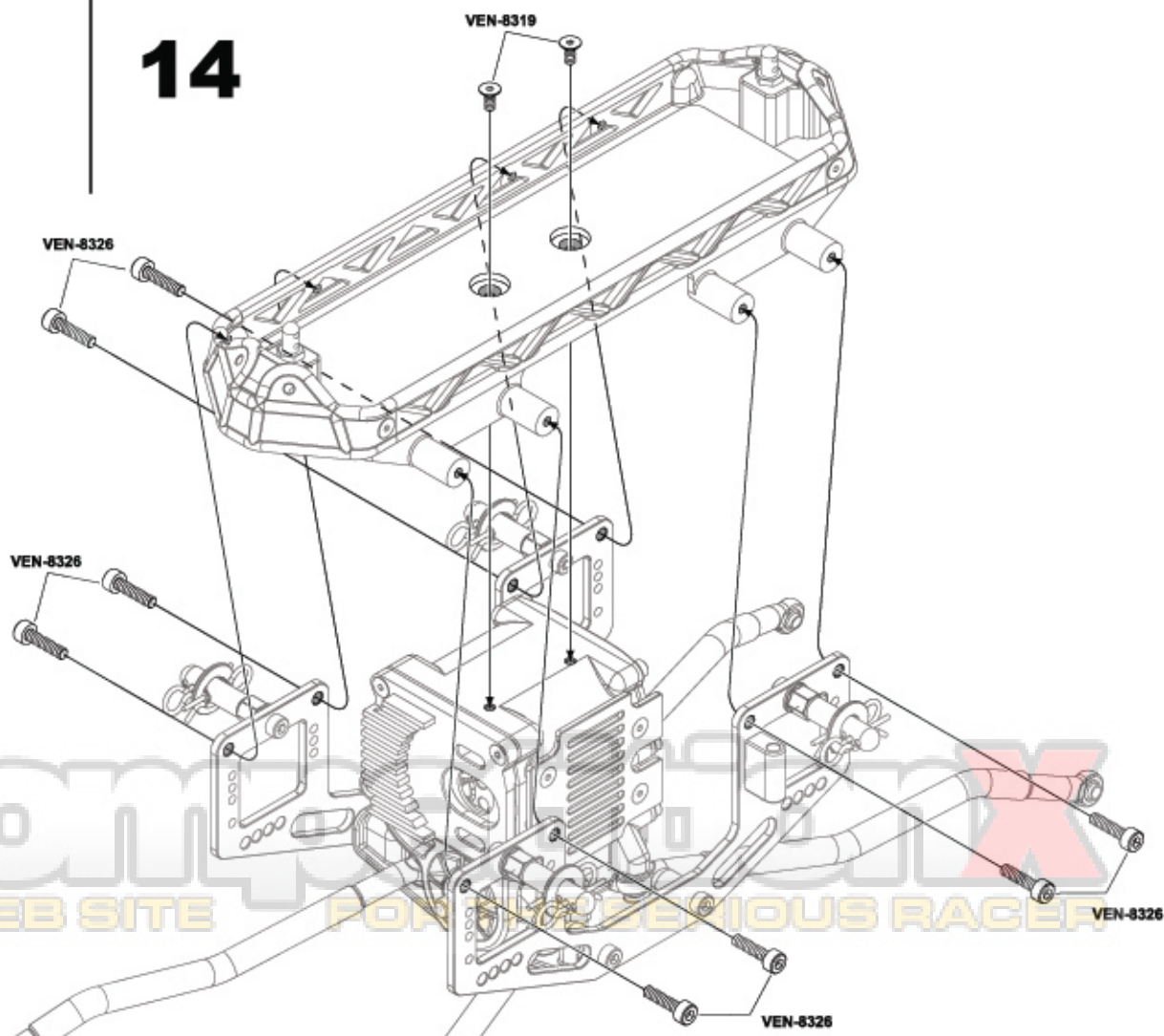
-  **x4**
VEN-8319 M2.5 x 6mm
-  **x2**
VEN-8321 M2.5 x 8mm
-  **x2**
VEN-8351

13



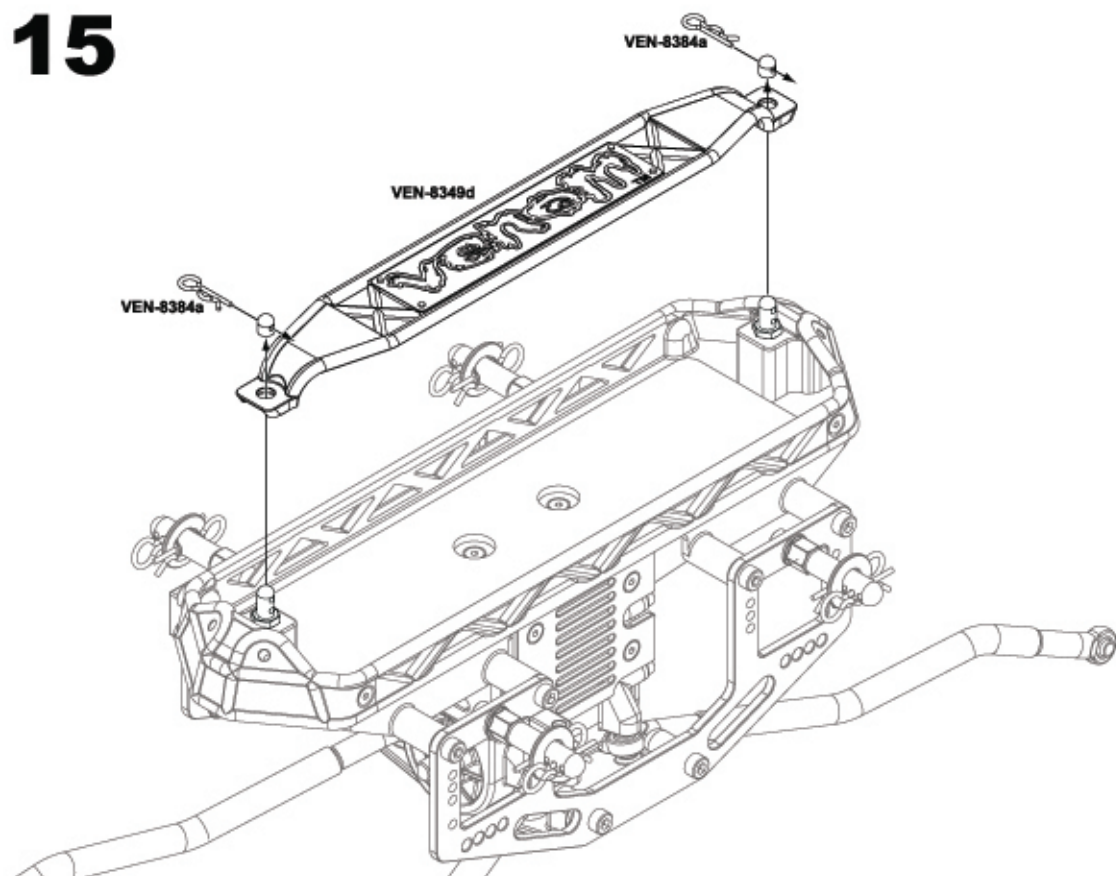
-  **x2**
VEN-8319 M2.5 x 6mm
-  **x8**
VEN-8326 M3 x 12mm

14





15

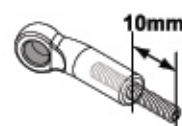
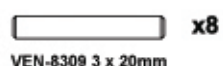


16

UPPER LINK ASSEMBLY

BUILD NOTE

Note: Tighten the links until the parts are aligned. Do not allow the links to be loose.

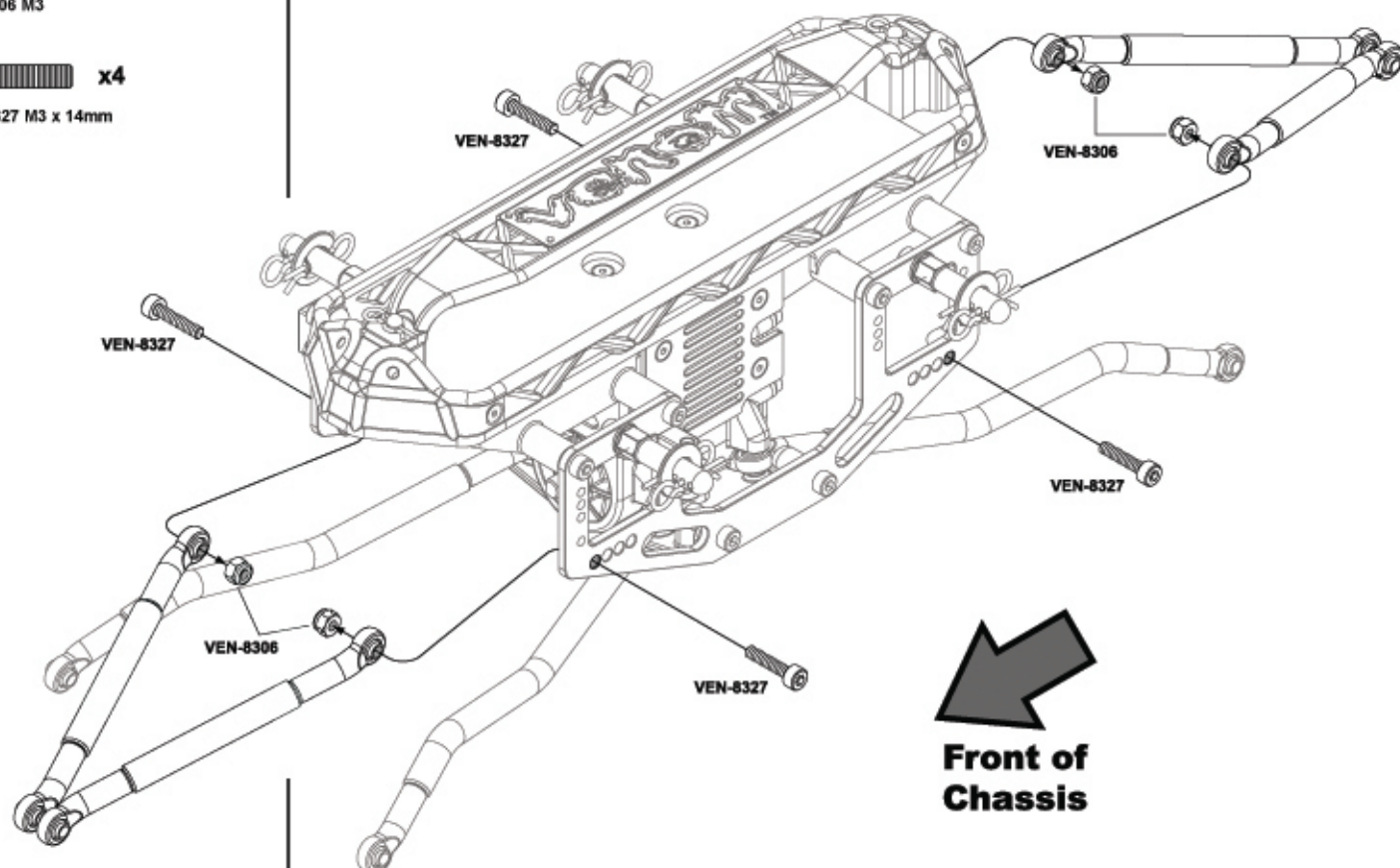


A WEB SITE FOR THE SERIOUS RACER

17

 **x4**
VEN-8306 M3

 **x4**
VEN-8327 M3 x 14mm




OPEN BAG

D

 **x4**
VEN-8318

 **x4**
VEN-8364b

 **x4**

 **x4**
VEN-8380e 13mm



VEN-8380a **x2**



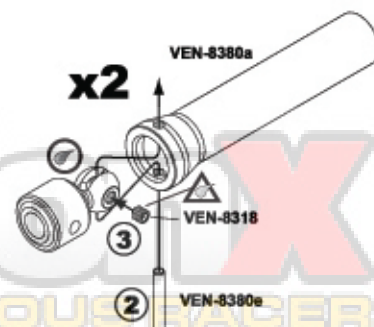
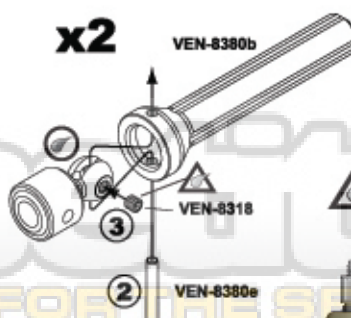
VEN-8380b **x2**

18



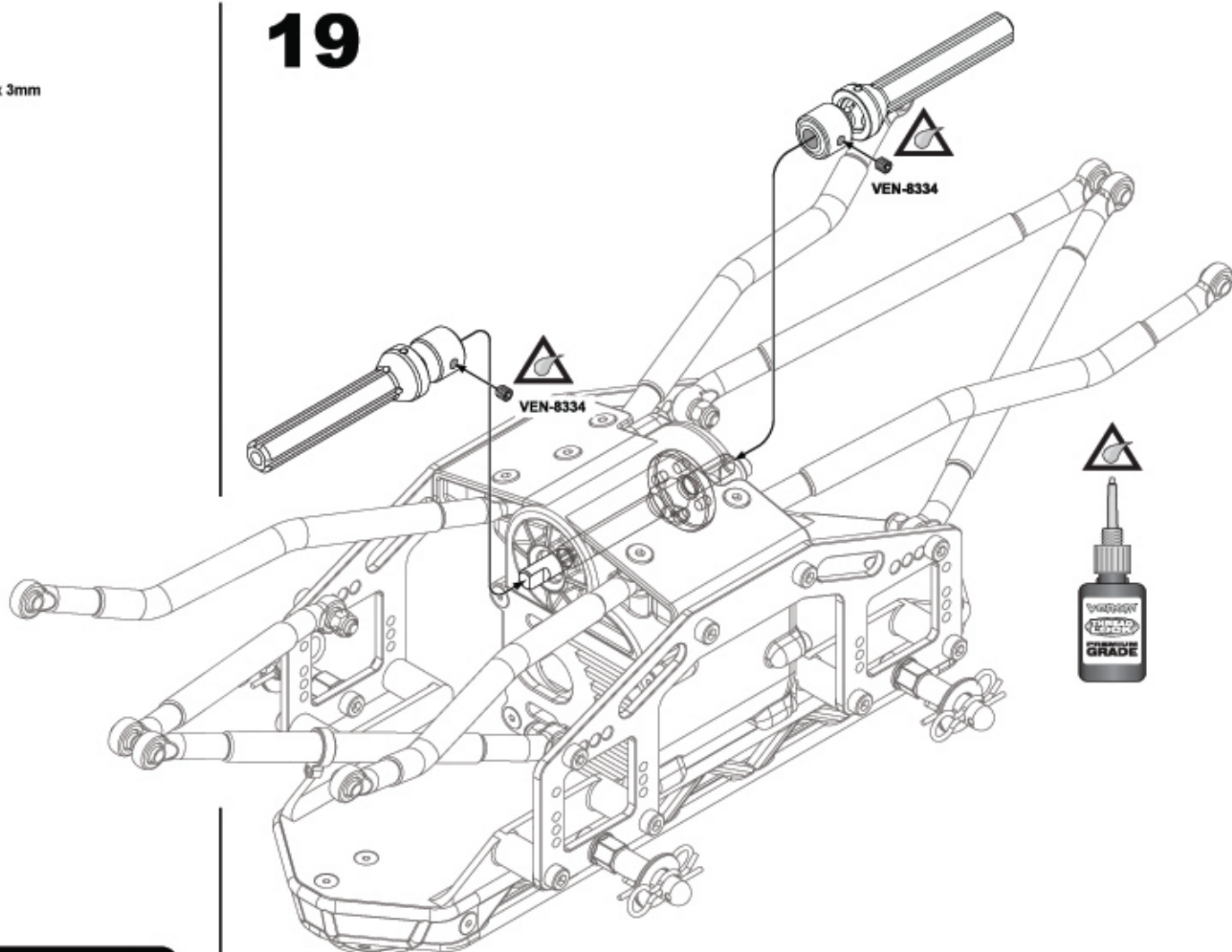
BUILD NOTE

 **Note:** Use thread lock on VEN-8318 before applying grease.



19


 x2
VEN-8334 M3 x 3mm



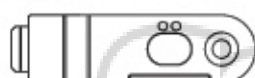
OPEN BAG
E

20


 x4
VEN-8303

 x2
VEN-8313 M2 x 6mm

 x2
VEN-8356b

 x2
VEN-8368a

 x2
VEN-8368b

 x2
VEN-8368b

x2

VEN-8356b

VEN-8303

VEN-8363a

VEN-8303



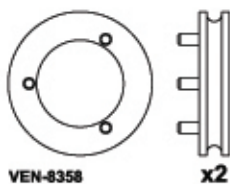
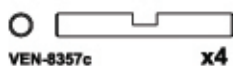
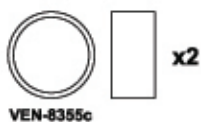
 x2
VEN-8368b

VEN-8363b

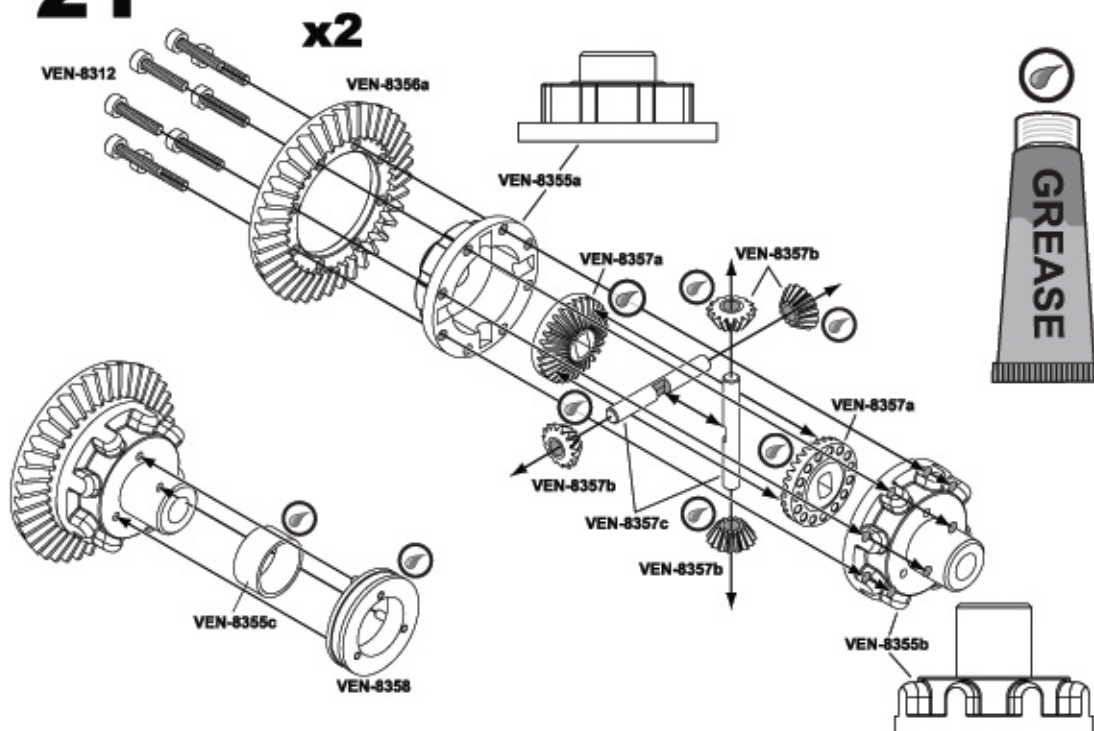
VEN-8368a

VEN-8313

x16
VEN-8312 M2 x 10mm

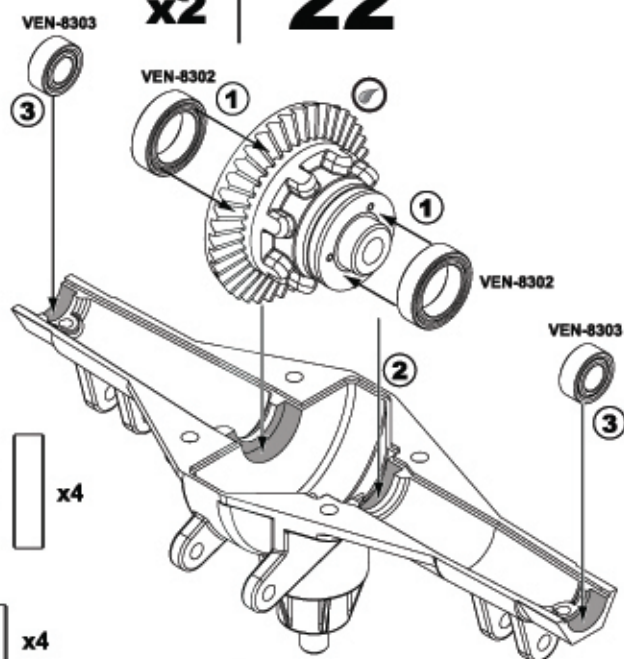


21

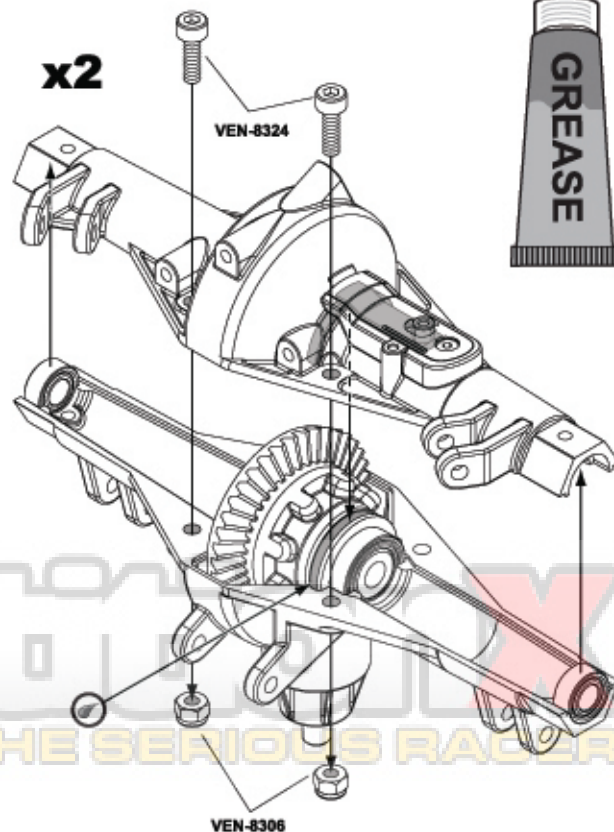


x2

22




x2

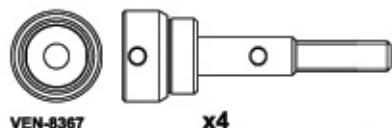
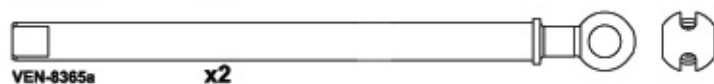
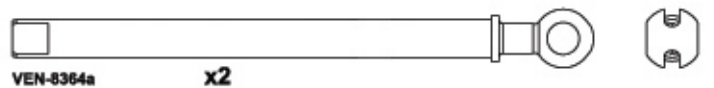
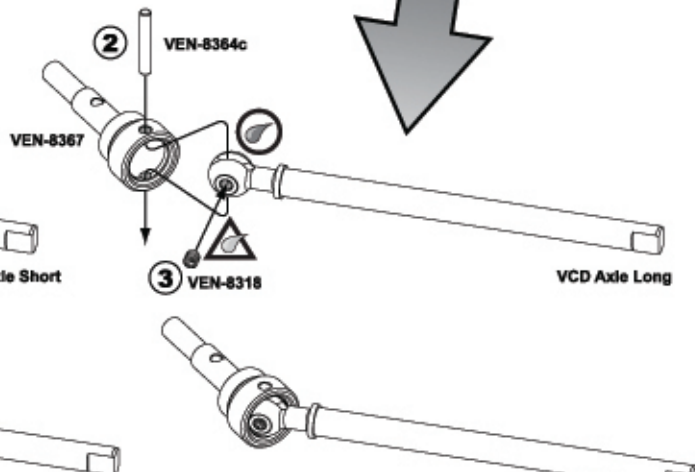
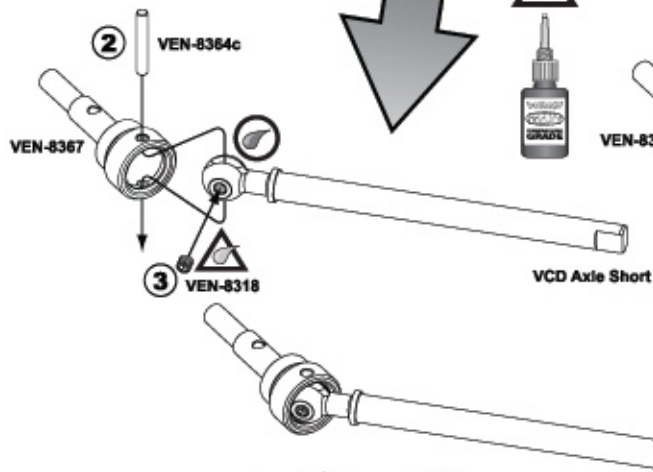


23

 x4
VEN-8318 M2.5 x 2.5mm

  x4
VEN-8364b

 x4
VEN-8364c 12mm

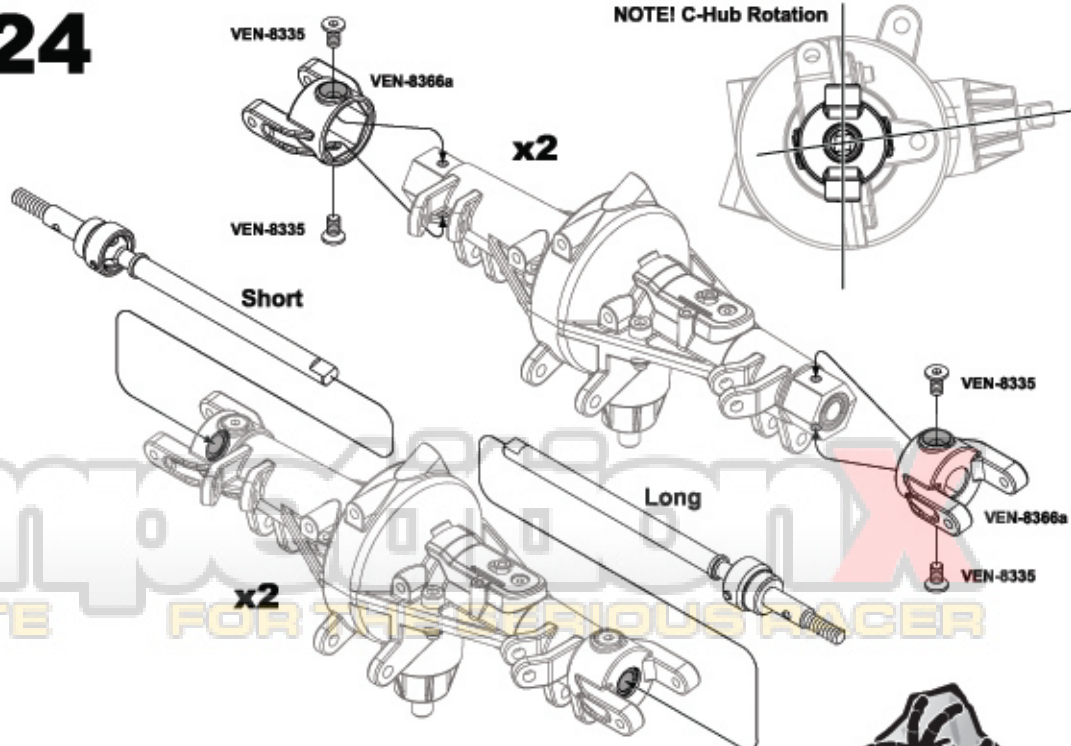
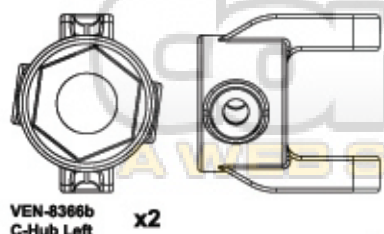
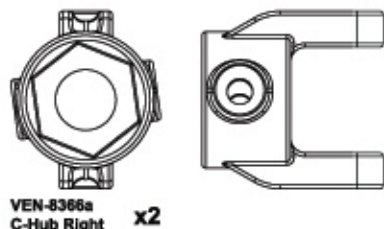


BUILD NOTE

Note: Use thread lock before applying grease.

24

 x8
VEN-8335 M3 x 6mm



27

Rear Axle



x4

VEN-8306 M3



x1

VEN-8313 M2 x 6mm



x2

VEN-8330 M3 x 18mm



x2

VEN-8331 M3 x 20mm



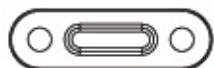
x2

VEN-8334 M3 x 3mm



x1

VEN-8368c



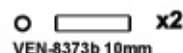
x1

VEN-8370b



x2

VEN-8373a



x2

VEN-8373b 10mm

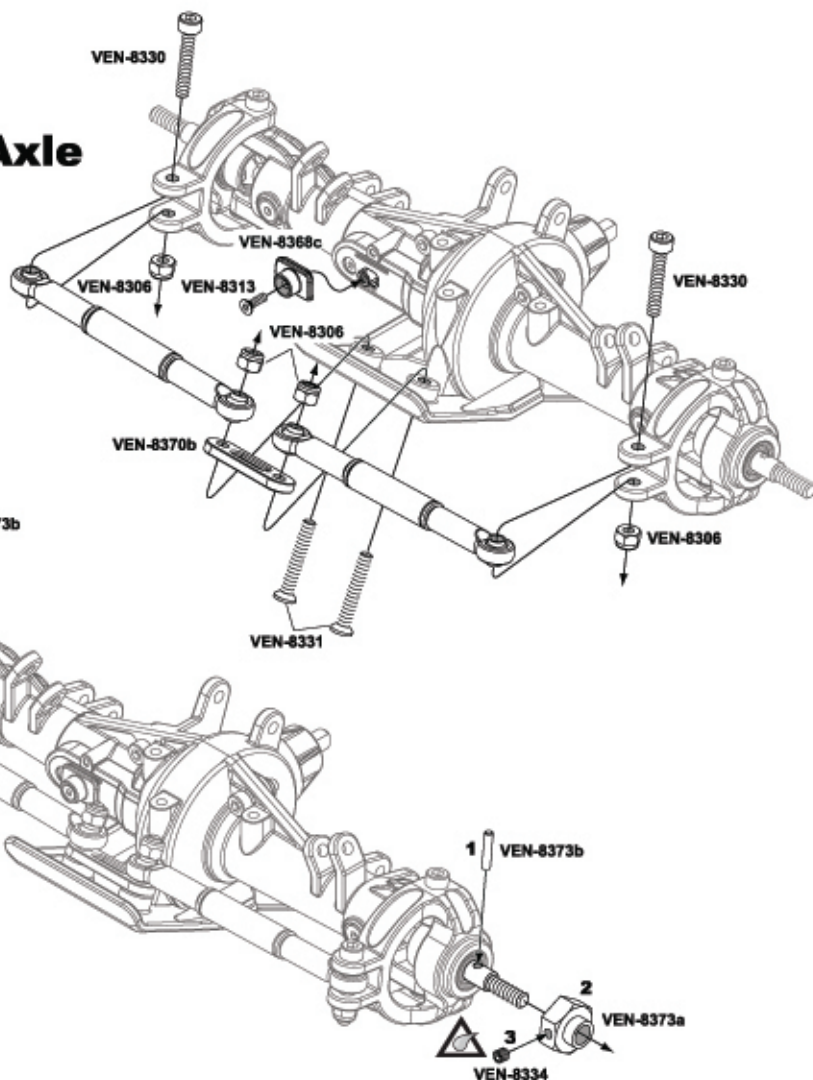
OPTION PART

VEN-8347
Remote Diff Lock



x1

VEN-8334 M3 x 3mm

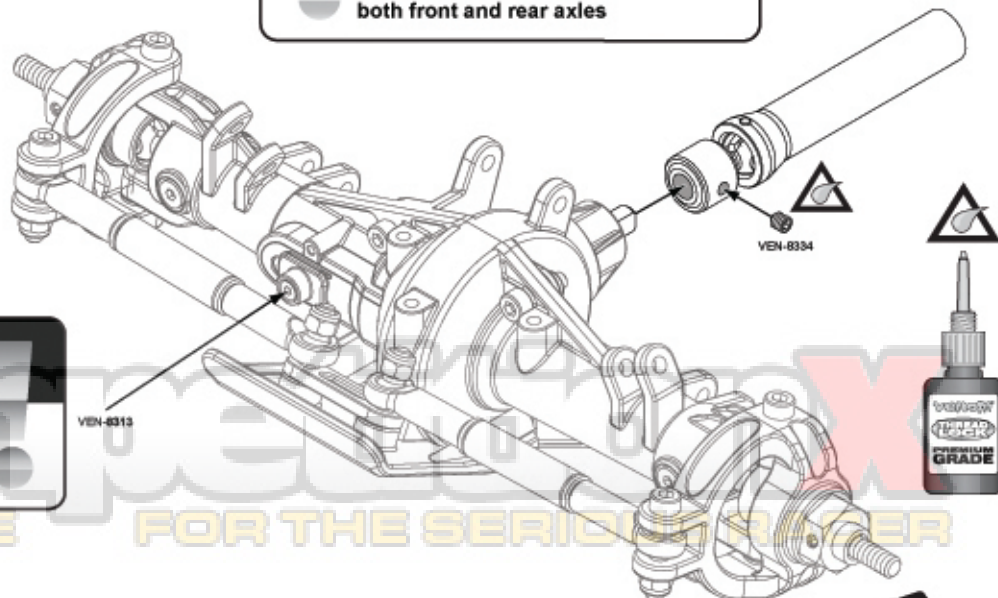


28

Rear Axle


BUILD NOTE

NOTE: Set the difflock selector switch tension with this screw (VEN-8313) on both front and rear axles



29


Front Axle

 **x1**
VEN-8313 M2 x 6mm

 **x2**
VEN-8314 M2 x 6mm

 **x2**
VEN-8325 M3 x 12mm

 **x1**
VEN-8328 M3 x 16mm

 **x1**
VEN-8336 M3 x 8mm

 **x1**
VEN-8337 M3 x 8mm

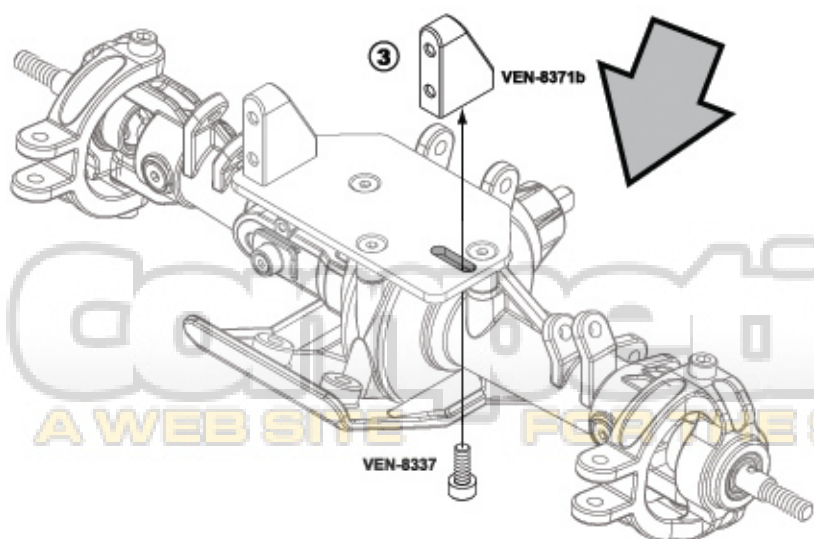
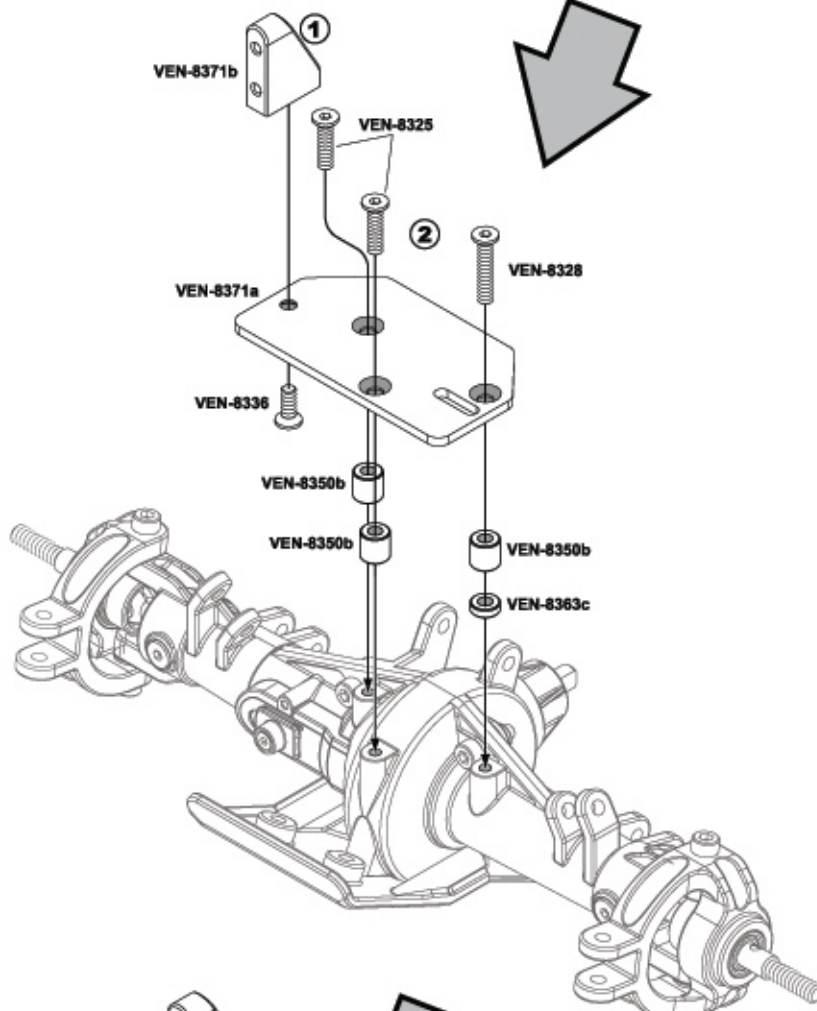
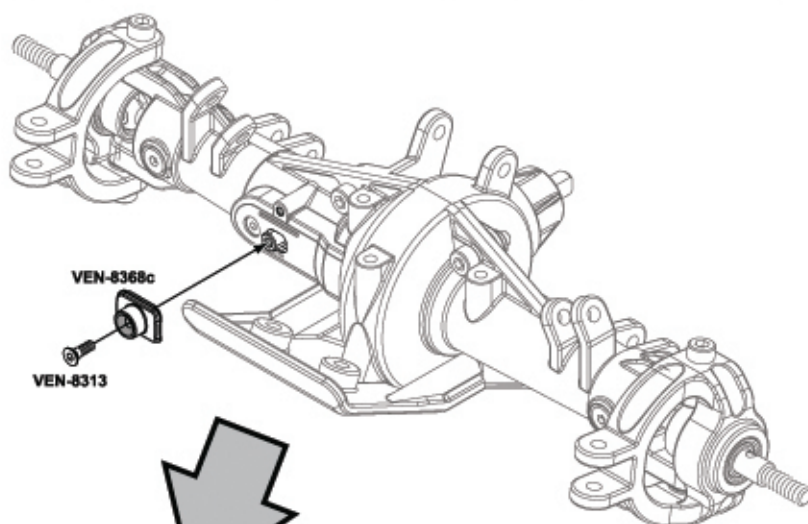
 **x3**
VEN-8350b 6mm Spacer

 **x1**
VEN-8363c 2mm Spacer

 **x1**
VEN-8368c

OPTION PART

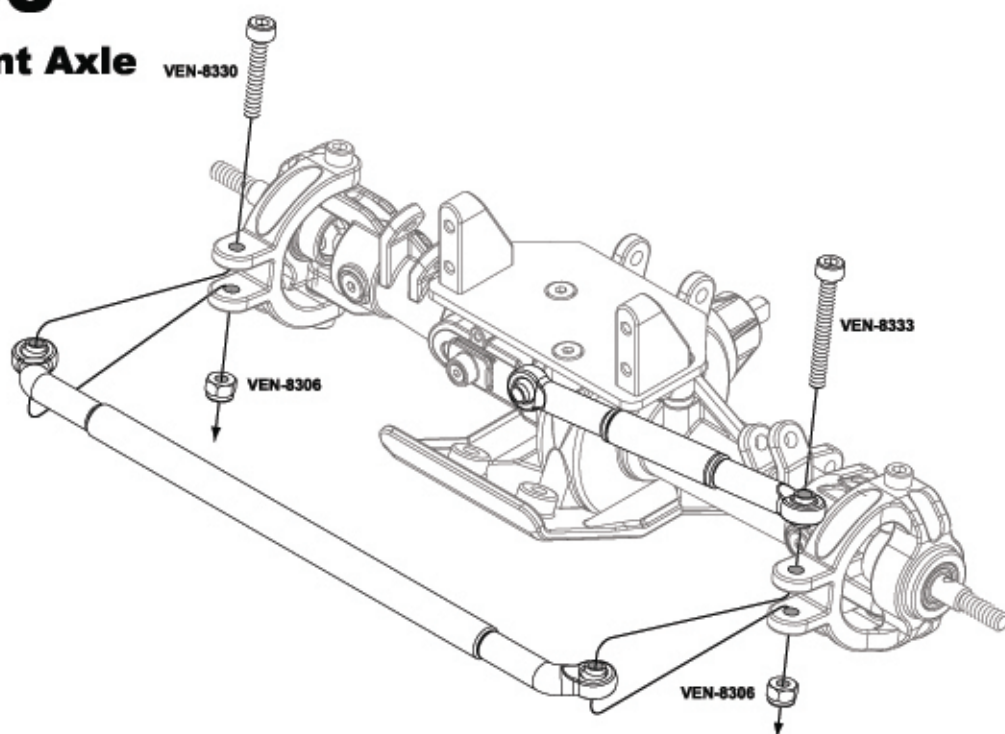
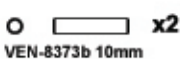
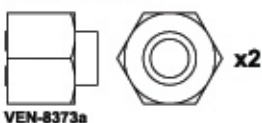
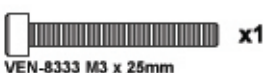
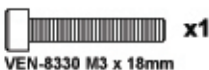
VEN-8347
Remote Diff Lock



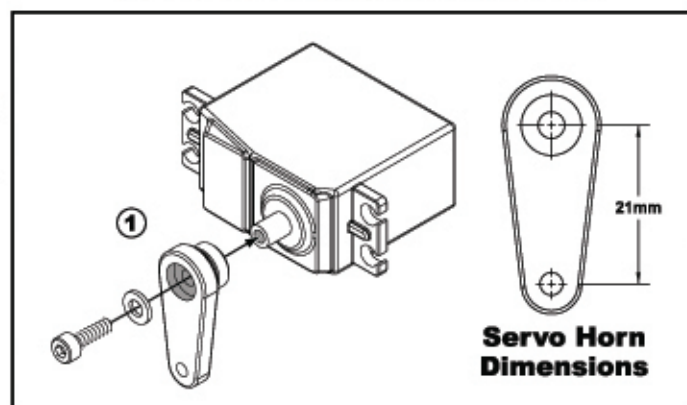
Get it at ActionX
A WEB SITE FOR THE SERIOUS RACER

30

Front Axle

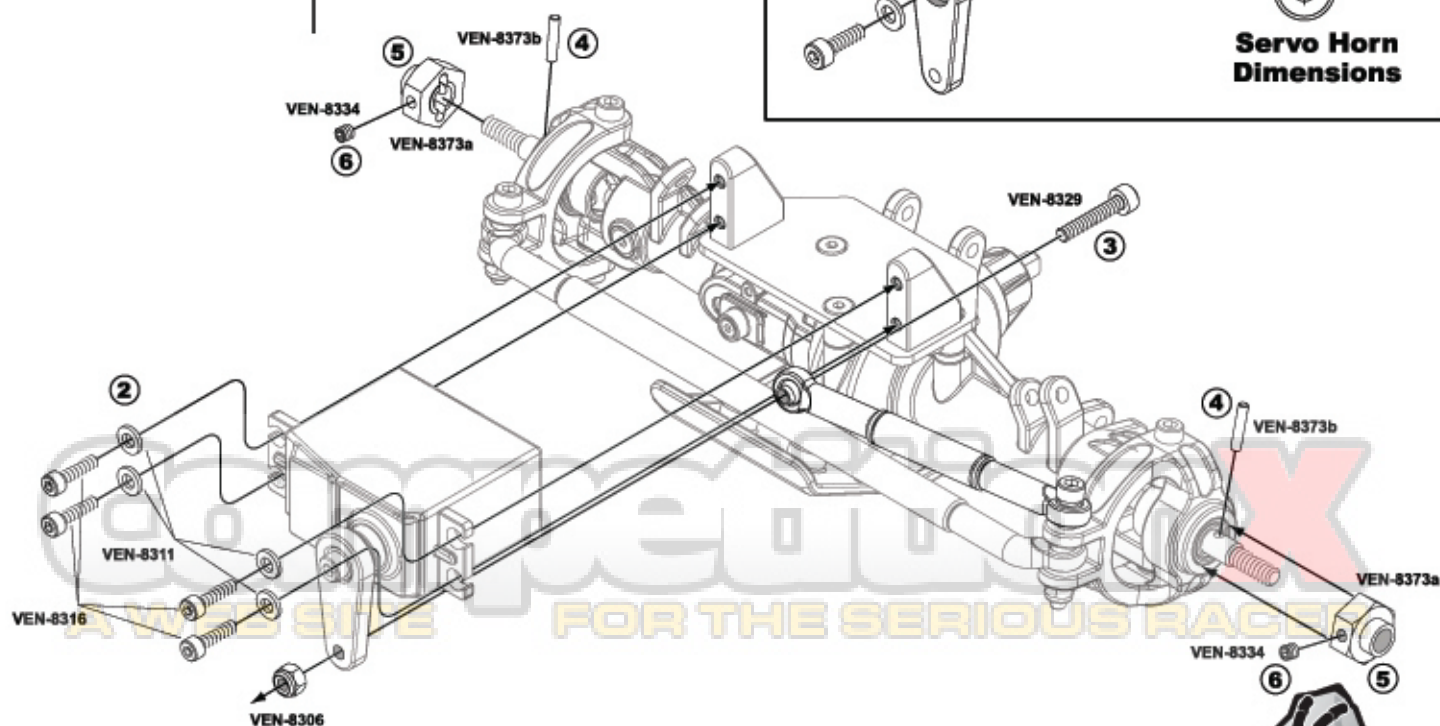


Generic Standard Servo



BUILD NOTE

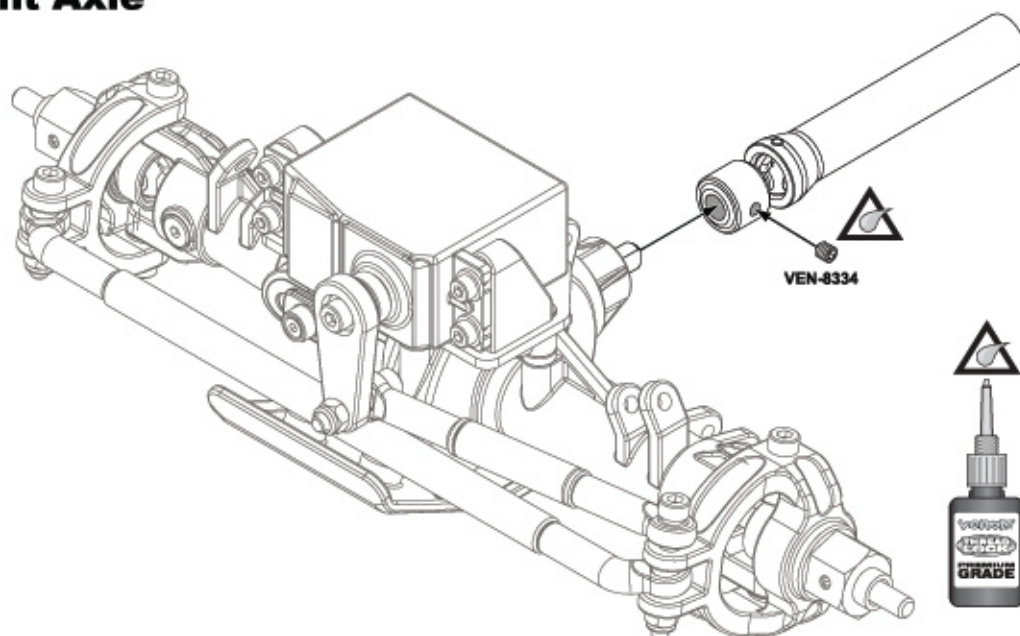
Note: Use a High Quality High-Torque Servo and Heavy-Duty Servo Horn.



31



Front Axle


 x1
VEN-8334 M3 x 3mm





32

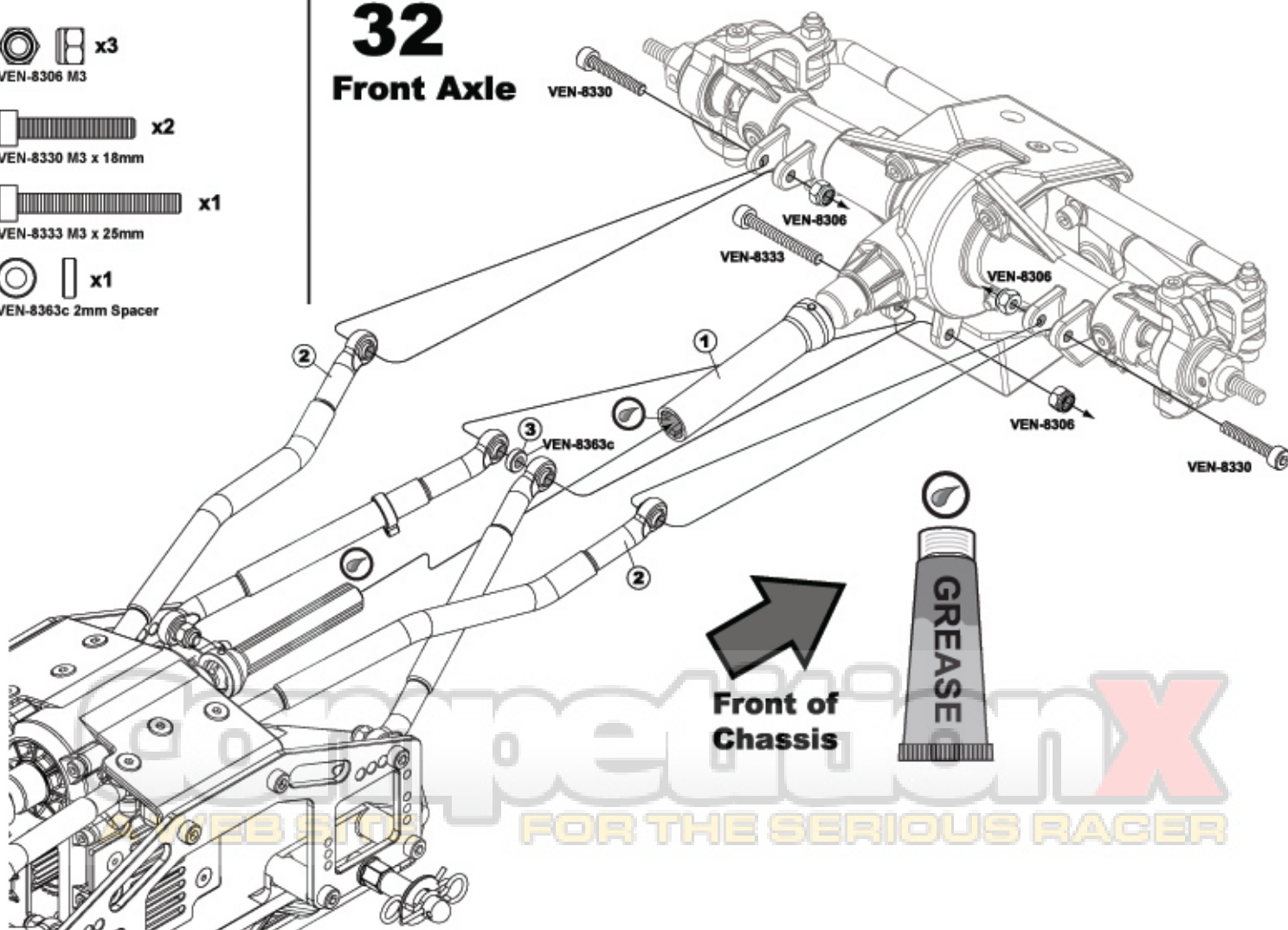
Front Axle

  x3
VEN-8306 M3

 x2
VEN-8330 M3 x 18mm

 x1
VEN-8333 M3 x 25mm

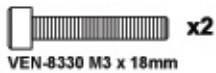
 x1
VEN-8363c 2mm Spacer



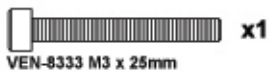
Rear Axle



VEN-8306 M3



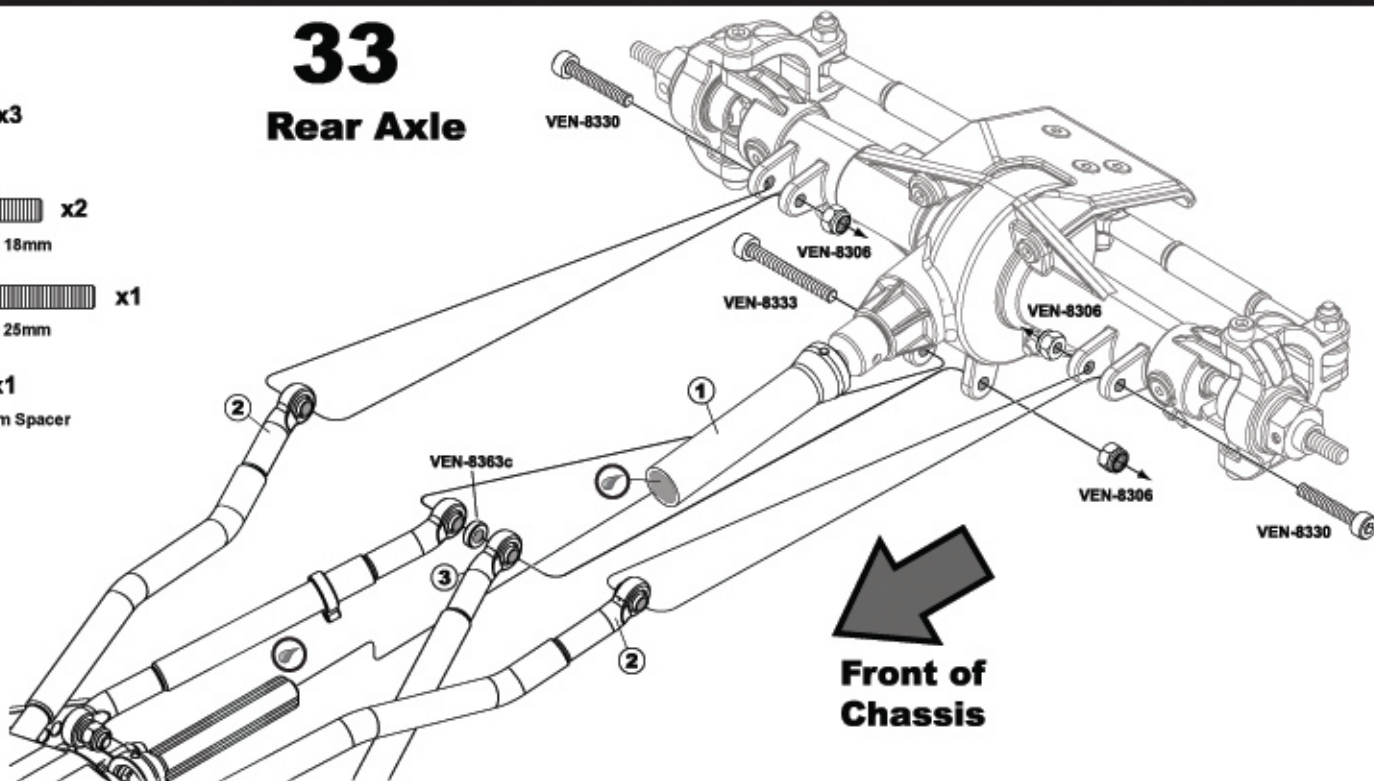
VEN-8330 M3 x 18mm



VEN-8333 M3 x 25mm



VEN-8363c 2mm Spacer



Front of Chassis

OPEN BAG

F

VEN-8308

VEN-8308



VEN-8385k x4



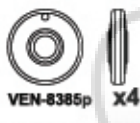
VEN-8385f x4



VEN-8385m x8



VEN-8385n x4



VEN-8385p X4

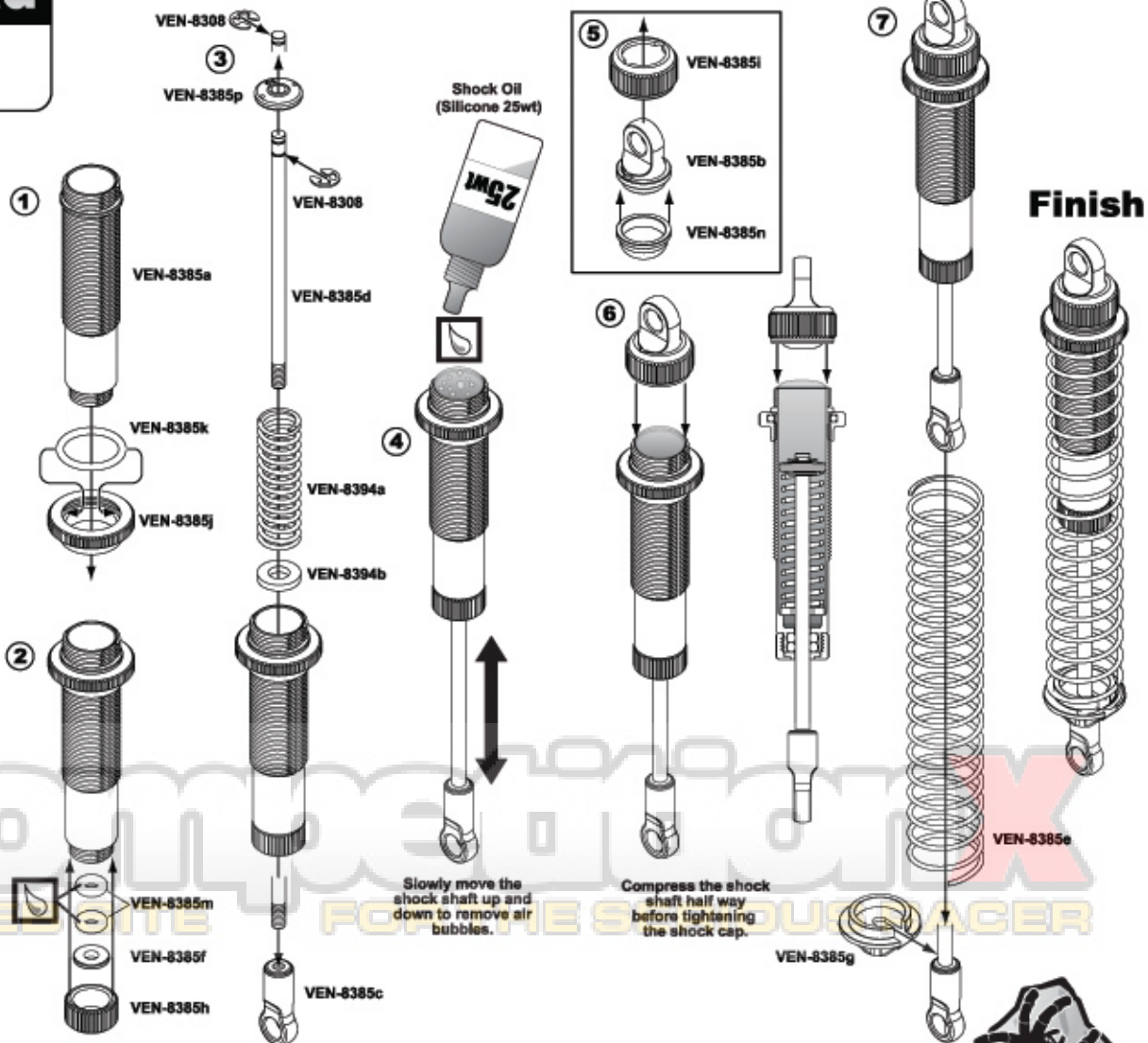


VEN-8394a x4



VEN-8394b x4

34 Build Four Shocks



Finish



35

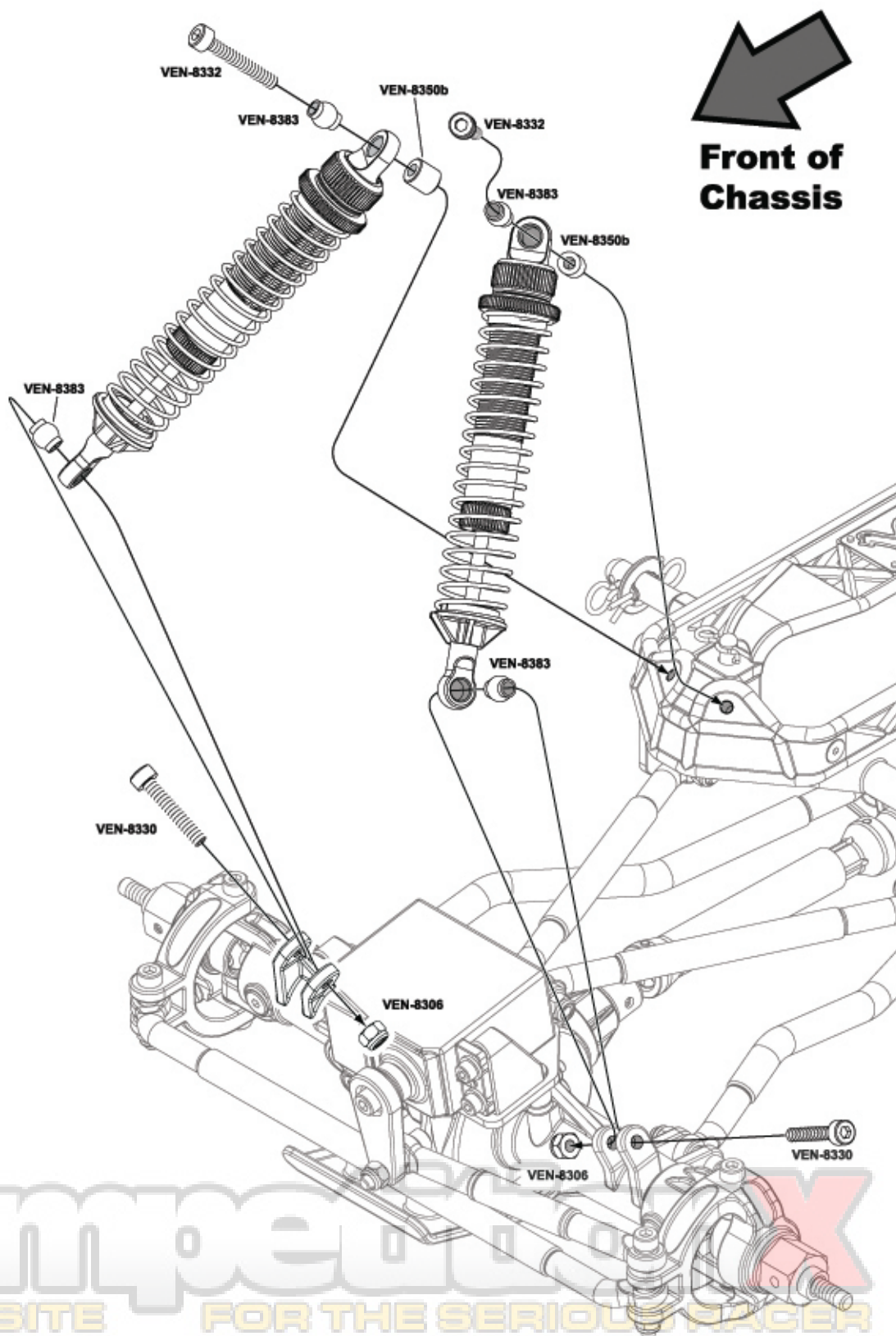
 x2
VEN-8306 M3

 x2
VEN-8330 M3 x 18mm

 x2
VEN-8332 M3 x 20mm

 x2
VEN-8350b 6mm Spacer

 x4
VEN-8383





COMPETITION
A WEB SITE FOR THE SERIOUS RACER

36

Rear Shock Assembly

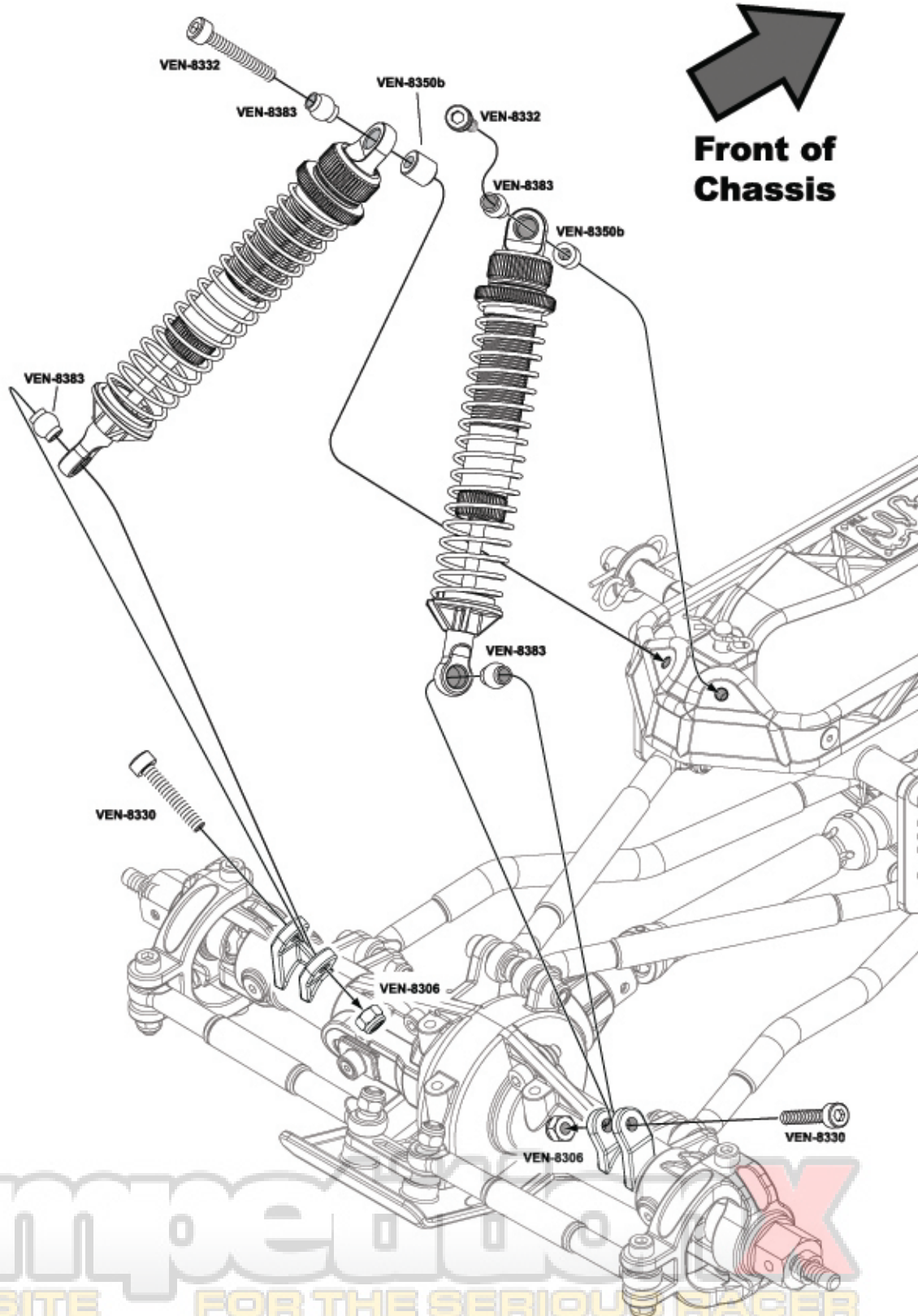
 x2
VEN-8306 M3

 x2
VEN-8330 M3 x 18mm

 x2
VEN-8332 M3 x 20mm

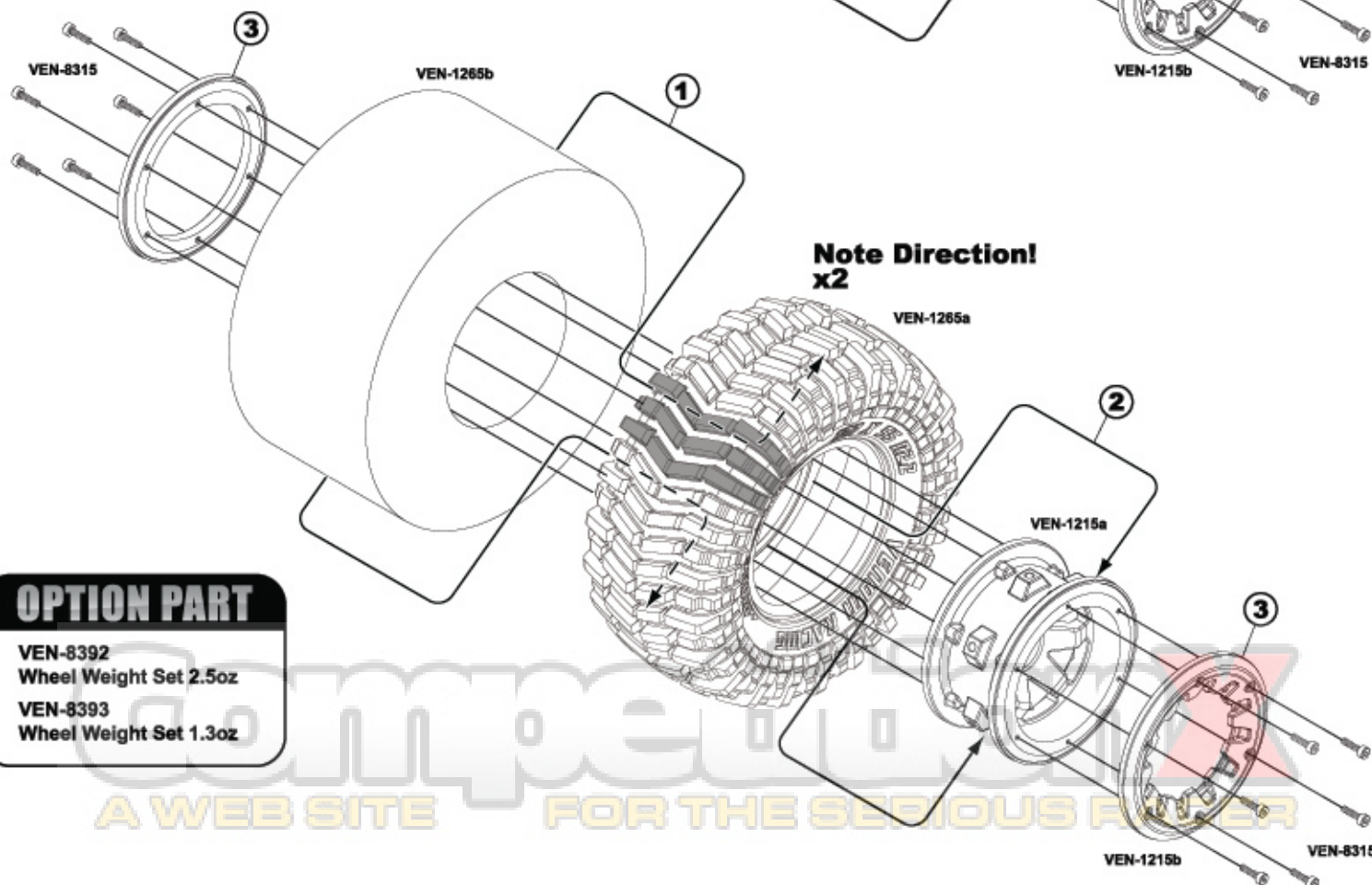
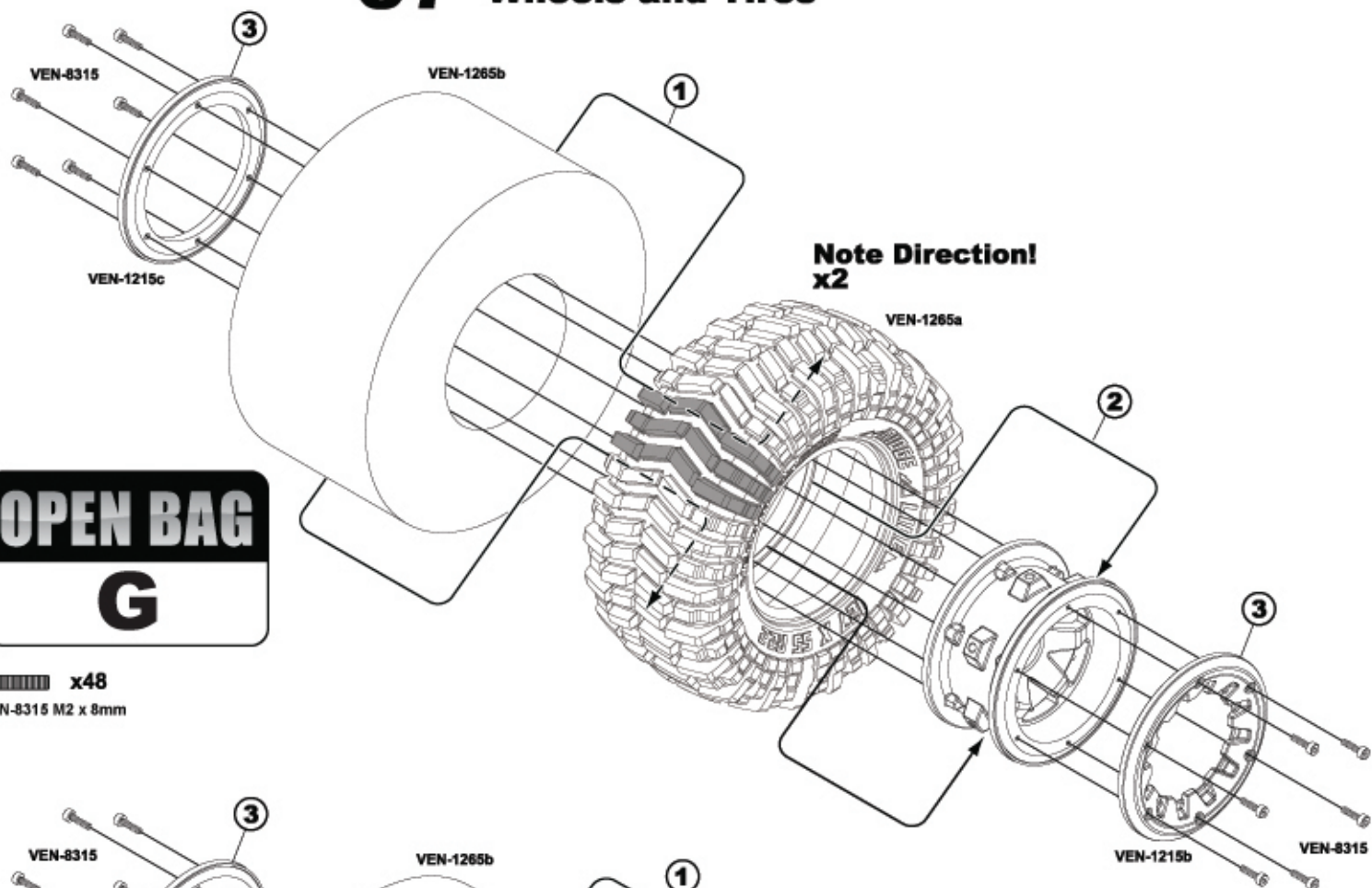
 x2
VEN-8350b 6mm Spacer

 x4
VEN-8383

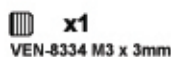


COMPETITOR
A WEB SITE FOR THE SERIOUS RACER

37 Wheels and Tires

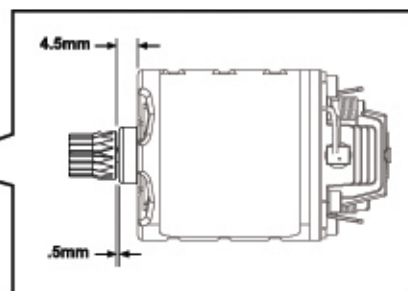


38 Install the Motor



VEN-8334

VEN-1465



BUILD NOTE

Rotate the dust shield when using larger spur and pinion gears.

VEN-8339

VEN-8337

VEN-8337

OPTION PART

VEN-1335
Rock Crawler Fireball Modified 50t
VEN-1336
Rock Crawler Fireball Modified 55t
VEN-1337
Rock Crawler Fireball Modified 60t
VEN-1334
V540 Brushless Motor 18.5T 2700KV

BUILD NOTE

Proper Gear Mesh

When the gear mesh is set properly, there should be a small amount of free movement. If the mesh is too tight the gears will wear rapidly and the increased drag will cause a decrease in performance. If it is too loose, the gears will strip easily.



Too Tight

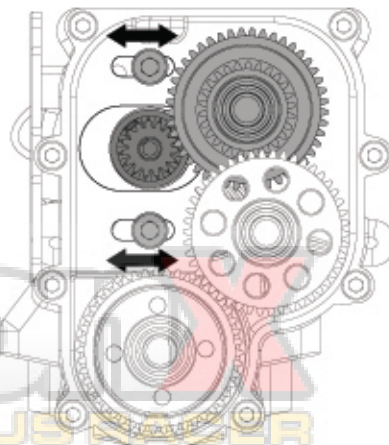


Perfect Mesh

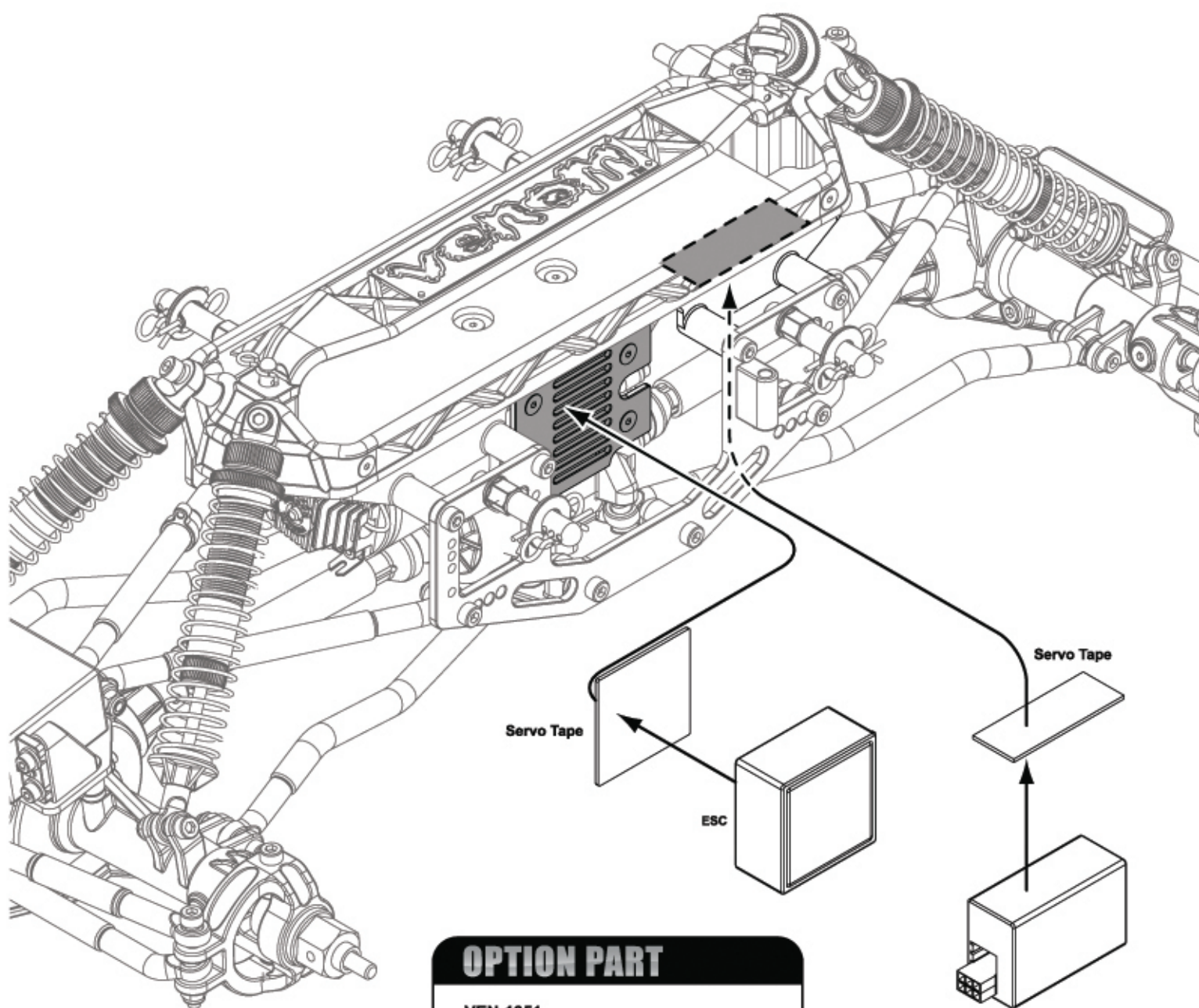


Too Loose

Gear Mesh



39 Install Electronics

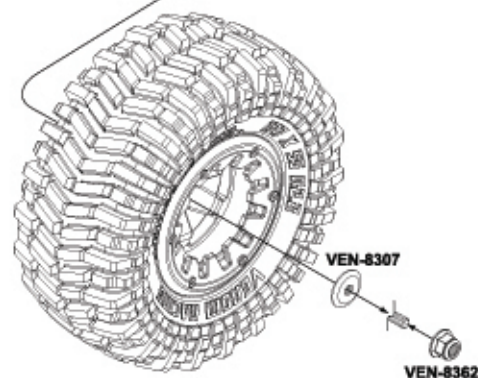
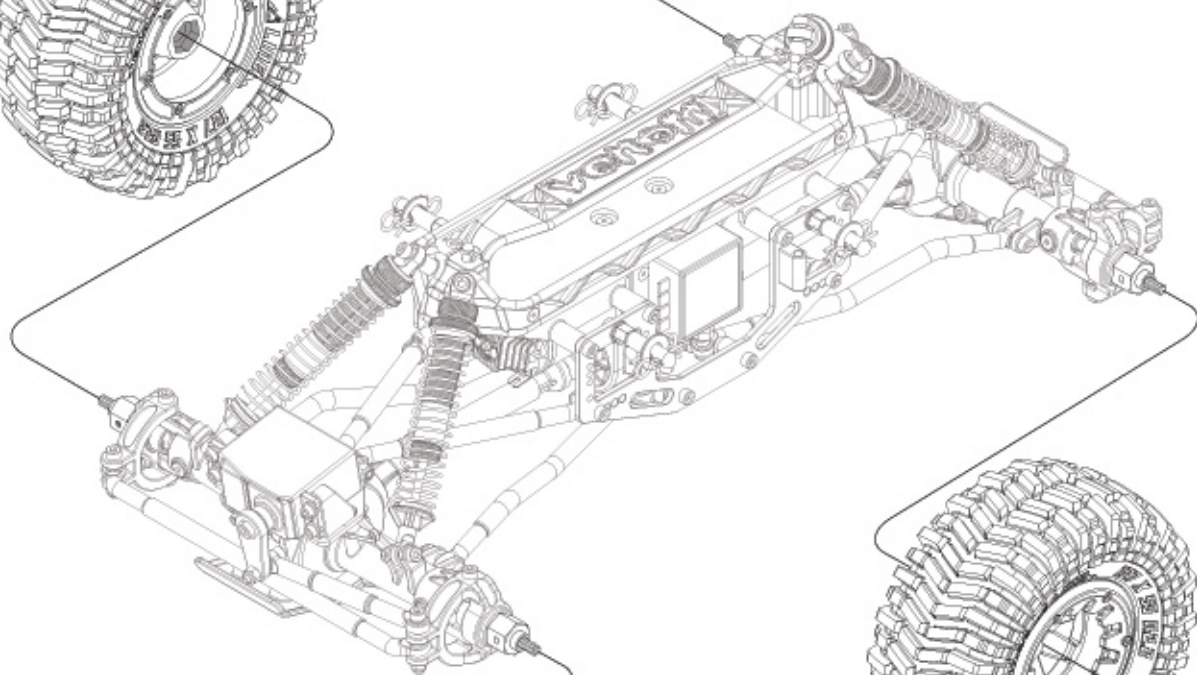
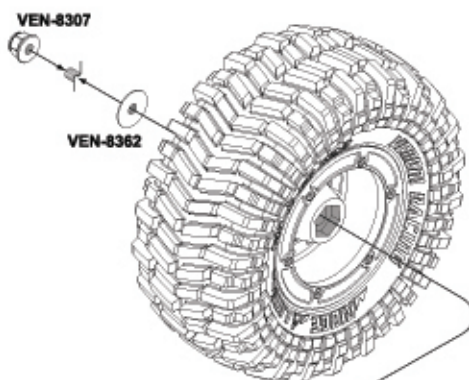
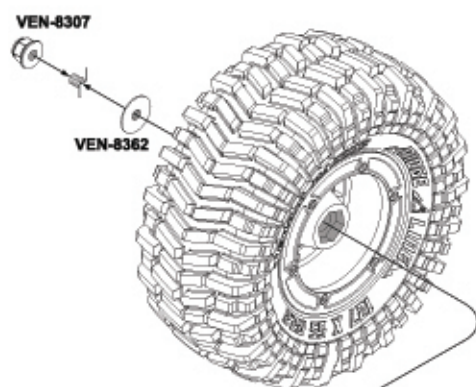


OPTION PART

VEN-1351
Venom Pro ESC 120A w/
V540 18.5T 2700KV Brushless Motor

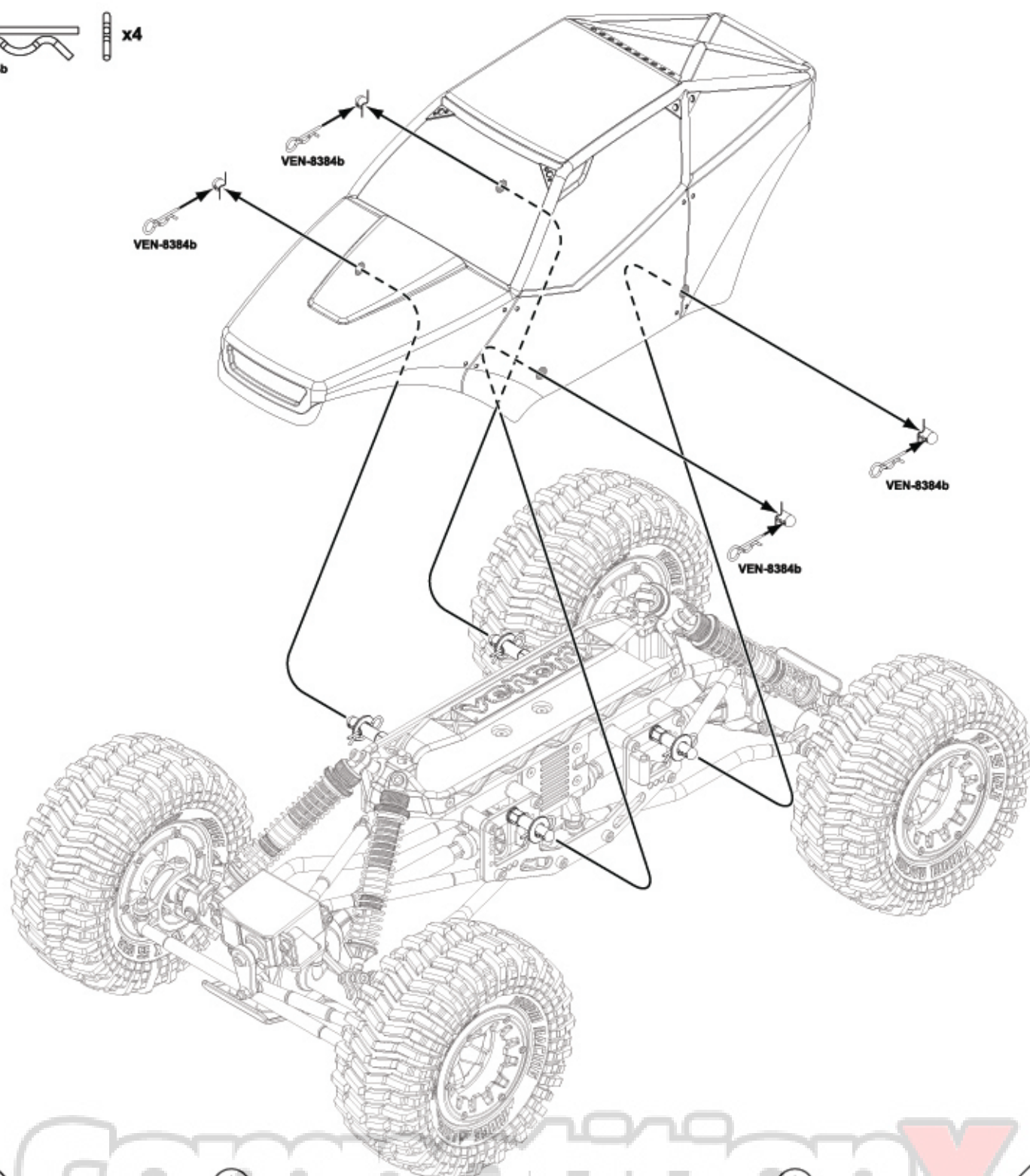
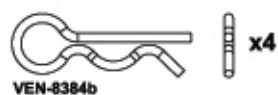
CompetitionX
A WEB SITE FOR THE SERIOUS RACER

40 Install Wheels



CorruptionX
A WEB SITE FOR THE SERIOUS RACER

41 Install Body



15mm

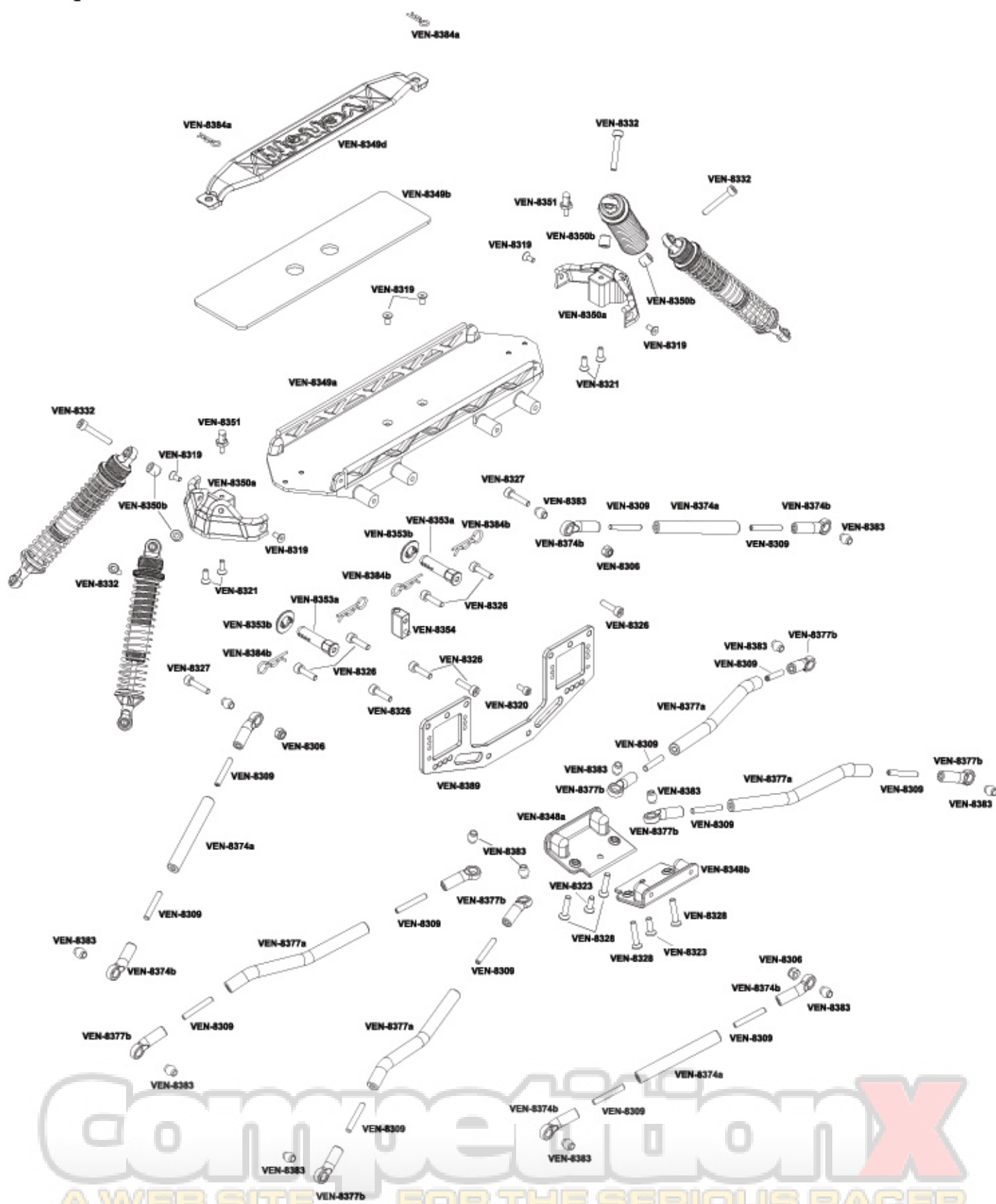
100mm



15mm

USE FOR BODY HOLE TEMPLATE

Exploded View



CompetitionX
A WEB SITE FOR THE SERIOUS RACER



Exploded View



CompetitorX
A WEB SITE FOR THE SERIOUS RACER

VEN-8335
VEN-8318
VEN-8360
VEN-8367
VEN-8302
VEN-8324
VEN-8359
VEN-8303
VEN-8334
VEN-8373a
VEN-8324



VENOM CREEPER TUNING GUIDE

Shock Tuning

The Creeper Chassis has long travel shocks. The shocks can be tuned to allow the Creeper to twist more or reduce twist and even change the ride height. Here are some basic tuning selections you can try with the shocks.

Shock Oil

Heavier oil allows the axles move from side to side slower when climbing.

Lighter oil allows the axles to move faster but can also make the chassis bounce from side to side.

Anti-roll Springs

The internal Anti-roll Spring will help reduce the torque effect of the motor. This will help the Creeper stay more stable for climbing obstacles. Use all 4 springs and spacers to keep the chassis level to the ground.

Gear Ratios

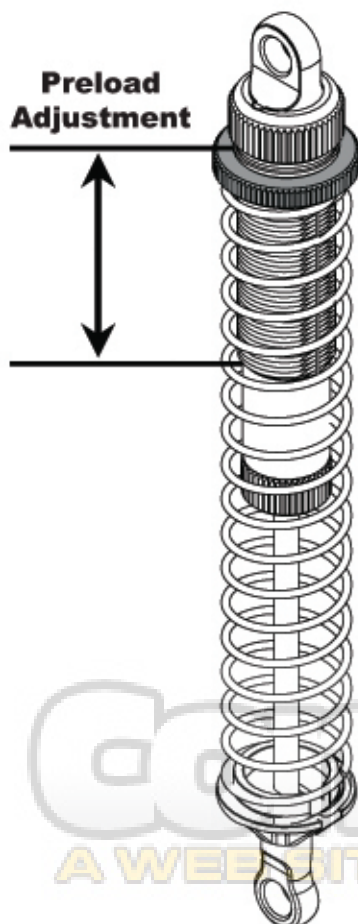
The Creeper transmission has the ability to accept a wide range of gear ratios. Change the gear ratio as needed for more power or speed.

Follow the Gear Ratio Chart to select the best ratio for your needs.

Preload

Tightening the spring collar will raise the chassis and make the shock stiffer.

Loosening the spring collar will lower the chassis and make the shock softer.



48 PITCH
PINION/SPUR

SLOWER
MORE
TORQUE



FASTER
LESS
TORQUE



■ =NOT POSSIBLE
■ =STOCK RATIO

| | | FASTER ← SPUR GEAR → SLOWER | | | |
|-------------|----|-----------------------------|--------------|--------------|--------------|
| | | SPUR GEAR | | | |
| | | 45 | 46 | 47 | 48 |
| PINION GEAR | 12 | 3.75 / 62.30 | 3.83 / 63.69 | 3.92 / 65.07 | 4.00 / 66.46 |
| | 13 | 3.46 / 57.51 | 3.54 / 58.79 | 3.62 / 60.07 | 3.69 / 61.34 |
| | 14 | 3.21 / 53.40 | 3.29 / 54.59 | 3.36 / 55.78 | 3.43 / 56.98 |
| | 15 | 3.00 / 49.84 | 3.07 / 50.95 | 3.13 / 52.06 | 3.20 / 53.16 |
| | 16 | 2.81 / 46.73 | 2.88 / 47.77 | 2.94 / 48.80 | 3.00 / 49.84 |
| | 17 | 2.65 / 43.98 | 2.71 / 44.96 | 2.76 / 45.93 | 2.82 / 46.91 |
| | 18 | 2.50 / 41.54 | 2.56 / 42.46 | 2.61 / 43.38 | 2.67 / 44.30 |
| | 19 | 2.37 / 39.35 | 2.42 / 40.22 | 2.47 / 41.10 | 2.53 / 41.97 |
| | 20 | 2.25 / 37.38 | 2.30 / 38.21 | 2.35 / 39.04 | 2.40 / 39.87 |
| | 21 | 2.14 / 35.60 | 2.19 / 36.39 | 2.24 / 37.18 | 2.29 / 37.97 |
| | 22 | 2.05 / 33.98 | 2.09 / 34.74 | 2.14 / 35.49 | 2.18 / 36.25 |
| | 23 | 1.96 / 32.51 | 2.00 / 33.23 | 2.04 / 33.95 | 2.09 / 34.67 |
| PINION GEAR | 24 | 1.88 / 31.15 | 1.92 / 31.84 | 1.96 / 32.54 | 2.00 / 33.23 |
| | 25 | 1.80 / 29.91 | 1.84 / 30.57 | 1.88 / 31.23 | 1.92 / 31.90 |
| | 26 | 1.73 / 28.76 | 1.77 / 29.39 | 1.81 / 30.03 | 1.85 / 30.67 |
| | 27 | 1.67 / 27.69 | 1.70 / 28.31 | 1.74 / 28.92 | 1.78 / 29.58 |
| | 28 | 1.61 / 26.70 | 1.64 / 27.29 | 1.68 / 27.89 | 1.72 / 28.49 |
| | 29 | 1.55 / 25.78 | 1.58 / 26.37 | 1.62 / 26.97 | 1.66 / 27.57 |
| | 30 | 1.50 / 24.90 | 1.53 / 25.47 | 1.57 / 26.07 | 1.61 / 26.67 |



Speed

With the following formulas you can estimate the speed of your Creeper.

Formulas to Calculate Estimated Speed (use in sequence):

Find these values first:

Tire Roll Out = One Tire Revolution



KV x Voltage = RPM (No Load RPM)

Final Drive Ratio = FDR (See Gear Chart)

Follow this sequence:

$RPM \div FDR = \text{Wheel RPM (WRPM)}$

$WRPM \times \text{Rear Tire Roll Out} = \text{mm/min}$

$\text{mm/min} \div 1000 = \text{Meters per min (m/min)}$

$\text{m/min} \times 60 \text{ minutes} = \text{Meters/hour (m/hr)}$

$\text{m/hr} \div 1000 = \text{Kilometers per hour (k/h)}$

$\text{k/h} \times 0.621 = \text{Miles Per Hour (mph)}$

Subtract 20% from the estimated speed for a more realistic speed prediction.

Tire Inserts

Tire inserts can be considered the same as air pressure in a normal tire.

Soft Foam - allows the tire to be flatter and softer, helps the tire conform to irregular surfaces

Harder Foam - helps the tire keep its shape, good for heavier crawlers with added weight

Star Pattern Foam Insert - allows the tire to deform more than a plain round insert does.

Acts like a softer foam insert.

Memory Foam Insert - reduces the bounce of the rubber tire and is usually very soft. Best choice for most applications.

Locking Differential

The Creeper features a unique locking differential which helps make turning in tight spaces easier. Lock and unlock the front or rear as needed while on the trails. Use a heavy gear grease to tune the differential for climbing while unlocked. This helps keep the unloaded wheel from spinning as much.

Locked Differential - Best for climbing / Less turning radius

Unlocked Differential - less effective for climbing / tighter turning radius

Center of Gravity

The Creeper Chassis was designed with the lowest Center of Gravity (CG) possible in mind. Do not use a heavy battery pack. This will raise the CG and reduce the climbing performance of the chassis. Try to use the lightest and or smallest capacity battery pack so you can get the best performance from your Creeper. Using a Lithium Polymer (LiPO) pack is the best choice because they are about 30% lighter than NiMH battery packs. The Creeper is very efficient and will operate for long periods on even the smallest capacity battery pack.

Recommended Battery Packs

| | |
|----------|--------------|
| VEN-1530 | 1800mah NiCD |
| VEN-1532 | 3000mah NiMH |
| VEN-1540 | 3300mah NiMH |
| VEN-1544 | 3600mah NiMH |
| VEN-1553 | 3200mah LiPO |
| VEN-1554 | 4000mah LiPO |
| VEN-1555 | 5000mah LiPO |

OperationX
FOR THE SERIOUS RACER

Parts List

| PART # | QTY | DESCRIPTION | PART # | QTY | DESCRIPTION |
|------------|-----|--------------------------|----------|-----|---------------------------------|
| VEN-8300RE | | Creeper Kit (Red) | VEN-8351 | | Battery Cover Post |
| VEN-8300GR | | Creeper Kit (Green) | | 2 | Body Clip Small |
| VEN-8302 | 8 | 10x15x4mm Bearing | | 2 | Battery Post |
| VEN-8303 | 10 | 5x10x4mm Bearing | VEN-8352 | | Creeper Body Set |
| VEN-8304 | 2 | 5x11x4mm Bearing | | 1 | Creeper Body |
| VEN-8305 | 3 | M2 Lock Nut | | 1 | Decal Sheet |
| VEN-8306 | 5 | M3 Lock Nut | VEN-8353 | | Body Post Set |
| VEN-8307 | 4 | M4 Wheel Lock Nut | | 4 | Body Post |
| VEN-8308 | 8 | 3mm E-ring | | 4 | Body Post Pivot Mount |
| VEN-8309 | 12 | M3x20mm Stud | | 8 | Body Clip Large |
| VEN-8310 | 4 | M3 Narrow Washer | VEN-8354 | 1 | Antenna Mount |
| VEN-8311 | 4 | M2.5 Narrow Washer | VEN-8355 | | Diff Housing |
| VEN-8312 | 8 | M2x10mm Sh Cap Screw | | 1 | Diff Housing Right |
| VEN-8313 | 3 | M2x6mm Ch Screw | | 1 | Diff Housing Left |
| VEN-8314 | 2 | M2x6mm Sh Cap Screw | | 1 | Diff-lock Ring Bushing |
| VEN-8315 | 10 | M2x8mm Sh Cap Screw | VEN-8356 | | Diff Ring/Pinion |
| VEN-8316 | 4 | M2.5x10mm Sh Cap Screw | | 1 | 39t 26p Ring Gear |
| VEN-8317 | 4 | M2.5x12mm Ch Screw | | 1 | 13t 26p Drive Pinion |
| VEN-8318 | 5 | M2.5x2.5mm Set Screw | VEN-8357 | | Diff Gear Set |
| VEN-8319 | 5 | M2.5x6mm Ch Screw | | 2 | 30t 48p Drive Gear |
| VEN-8320 | 2 | M2.5x6mm Sh Cap Screw | | 4 | 15t 48p Spider Gear |
| VEN-8321 | 4 | M2.5x8mm Ch Screw | | 2 | Spider Gear Shaft |
| VEN-8322 | 4 | M2.5x8mm Sh Cap Screw | VEN-8358 | | Diff-Lock Ring |
| VEN-8323 | 2 | M3x10mm Sch Screw | | 1 | Diff-Lock Ring |
| VEN-8324 | 6 | M3x10mm Sh Cap Screw | VEN-8359 | 2 | Wheel Hub |
| VEN-8325 | 2 | M3x12mm Sch Screw | VEN-8360 | 4 | Wheel Hub Bushing |
| VEN-8326 | 6 | M3x12mm Sh Cap Screw | VEN-8361 | | Steering Linkage Set |
| VEN-8327 | 4 | M3x14mm Sh Cap Screw | | 1 | 25mm Steering Drag Link |
| VEN-8328 | 3 | M3x16mm Sch Screw | | 2 | Ball Joint 0-eg |
| VEN-8329 | 2 | M3x16mm Sh Cap Screw | | 1 | 108mm Crossover Link |
| VEN-8330 | 5 | M3x18mm Sh Cap Screw | | 2 | Ball Joint 45-deg |
| VEN-8331 | 2 | M3x20mm Sch Screw | | 4 | M3x20mm Stud |
| VEN-8332 | 4 | M3x20mm Sh Cap Screw | | 4 | M3 Narrow Washer |
| VEN-8333 | 2 | M3x25mm Sh Cap Screw | | 2 | 2mm Spacer |
| VEN-8334 | 5 | M3x3mm Set Screw | VEN-1215 | | Beadlox 2.2 RC Wheel |
| VEN-8335 | 5 | M3x6mm Sch Screw | | 2 | Beadlox 2.2 MT Wheel |
| VEN-8336 | 2 | M3x8mm Sch Screw | | 2 | Beadlox 2.2 Outer Ring |
| VEN-8337 | 4 | M3x8mm Sh Cap Screw | | 2 | Beadlox 2.2 Inner Ring |
| VEN-8338 | | Transmission Housing | | 24 | M2x8mm Sh Cap Screw |
| | 1 | Transmission Housing | VEN-1265 | | Beadlox Ridge-Line 2.2 Tire |
| | 1 | Transmission Cover | | 2 | Beadlox Ridge-Line 2.2 Tire |
| | 1 | Transmission Dust Shield | | 2 | Tire Insert |
| | 1 | Transmission Plug | VEN-8362 | 4 | Wheel Washer |
| VEN-8339 | 1 | Transmission Plug | VEN-8363 | | Axle Case Set |
| VEN-8340 | 1 | Motor Plate | | 1 | Axle Case Front |
| | 1 | Motor Plate | | 1 | Axle Case Back |
| | 1 | ESC Mount Plate | | 2 | 2mm Spacer |
| VEN-8341 | 1 | Transmission Gear Set | VEN-8364 | | VCD Axle Set Short |
| | 1 | 45t Spur Gear | | 1 | VCD Axle Short |
| | 1 | 46t Reduction Gear | | 1 | VCD Yoke |
| | 1 | Idler Gear | | 1 | VCD Yoke Pin 12mm |
| | 1 | 46t Drive Gear | | 1 | VCD Shaft |
| VEN-8342 | | Transmission Shaft Set | | 1 | M2.5x2.5mm Set Screw |
| | 2 | Gear Shaft | VEN-8365 | | VCD Axle Set Long |
| | 2 | Gear Spacer | | 1 | VCD Axle Long |
| | 1 | Output Shaft | | 1 | VCD Yoke |
| VEN-8343 | 1 | 45t Spur Gear | | 1 | VCD Yoke Pin 12mm |
| VEN-8348 | 1 | Chassis Skid Plate | | 1 | VCD Shaft |
| | 1 | Transmission Skid Right | | 1 | M2.5x2.5mm Set Screw |
| | 1 | Transmission Skid Left | VEN-8366 | | C-Hub L/R |
| VEN-8349 | | Upper Chassis Set | | 1 | C-Hub Right |
| | 1 | Upper Chassis | | 1 | C-Hub Left |
| | 1 | Foam Pad | VEN-8367 | 1 | VCD Shaft |
| | 2 | Battery Post | VEN-8368 | | Diff Lock Switch |
| | 1 | Battery Cover | | 1 | Diff-Lock Switch Cover |
| VEN-8350 | | Shock Tower | | 1 | Diff-Lock Switch |
| | 2 | Shock Tower | | | Diff-Lock Switch Dust Cover RTR |
| | 4 | 6mm Spacer | | | |



Parts List

| PART # | QTY | DESCRIPTION |
|----------|-----|-------------------------|
| VEN-8370 | 1 | Skid Plate |
| | 1 | Rear Link Spacer |
| VEN-8371 | 1 | Skid Plate |
| | 2 | Servo Mount |
| | 1 | Servo Mount |
| | 1 | Steering Servo Plate |
| | 1 | 2mm Spacer |
| | 3 | 6mm Spacer |
| VEN-8372 | 1 | Servo Arm (Venom) |
| VEN-8373 | 1 | Hex Drive |
| | 4 | Axle Hex Adapter |
| | 4 | Hex Adapter Pin |
| | 4 | M3x3mm Set Screw |
| VEN-8374 | 1 | Upper Link Set |
| | 2 | Upper Link |
| | 4 | Ball Joint 20-deg |
| | 4 | M3x20mm Stud |
| VEN-8377 | 1 | Lower Link Set |
| | 2 | Lower Link |
| | 4 | Ball Joint 12-deg |
| | 4 | M3x20mm Stud |
| VEN-8380 | 1 | VCD Center Driveline |
| | 1 | VCD Half Shaft Female |
| | 1 | VCD Half Shaft Male |
| | 1 | VCD Coupler |
| | 1 | M2.5x2.5mm Set Screw |
| | 1 | VCD Yoke |
| | 1 | VCD Yoke Pin 13mm |
| VEN-8383 | 6 | Pivot Ball 6mm |
| VEN-8384 | 2 | Body Clips |
| | 4 | Body Clip Small |
| | 4 | Body Clip Large |
| VEN-8385 | 1 | Crawler Shocks (1 Pair) |
| | 2 | Shock Body |
| | 2 | Shock Upper Pivot |
| | 2 | Shock Lower Pivot |
| | 2 | Shock Shaft |
| | 2 | Shock Spring |
| | 2 | Shock Lower Cap Seal |
| | 2 | Shock Spring Perch |
| | 2 | Shock Lower Cap |
| | 2 | Shock Upper Cap |
| | 2 | Shock Collar |
| | 2 | Shock Collar Oring |
| | 2 | 2 Hole Shock Piston |
| | 4 | Shock O-Ring Seal |
| | 2 | Shock Bladder |
| VEN-8387 | 1 | Shock O-Ring/Bladder |
| | 4 | Shock O-Ring Seal |
| | 2 | Shock Bladder |
| VEN-8388 | 1 | Shock Piston/Seal |
| | 2 | 2 Hole Shock Piston |
| | 2 | Shock Lower Cap Seal |
| VEN-0337 | 1 | Antenna Tube |
| VEN-1465 | 1 | 15t 48p Motor Pinion |

| PART # | QTY | DESCRIPTION |
|----------|-----|------------------------|
| VEN-8394 | 1 | Anti-Roll Springs Set |
| | 1 | Internal Shock Spring |
| | 1 | Internal Spring Spacer |

Option Parts

| | | |
|----------|----|------------------------------------|
| VEN-1336 | 1 | Fireball 55t Crawler Brushed Motor |
| VEN-1351 | 1 | V540 Brushless Motor 18.5T 2700Kv |
| VEN-8344 | 1 | 46t Spur Gear |
| VEN-8345 | 1 | 47t Spur Gear |
| VEN-8346 | 1 | 48t Spur Gear |
| VEN-8347 | 1 | Remote Diff Lock Kit |
| | 1 | Diff-lock Servo Cable Stay |
| | 1 | Diff-lock Cable Adjustment |
| | 1 | Servo Arm Clevis |
| | 1 | Servo Spacer |
| | 1 | M2.5X2.5mm Set Screw |
| | 1 | M2 Lock Nut |
| | 1 | Diff Lock Tube |
| | 1 | Diff Lock Cable |
| | 1 | Cable Stay |
| | 1 | Option Diff-lock Switch Dust Cover |
| | 1 | Option Diff-lock Lever |
| | 1 | Small Cable Stay |
| | 1 | 6mm Spacer |
| | 1 | Diff-lock Cable Support |
| VEN-8390 | 1 | Carbon Chassis Plate Set |
| | 2 | Chassis Plate |
| VEN-8392 | 12 | Wheel Weight Set 2.5oz |
| | 12 | M3x8mm Skt B.H. Screw |
| | 12 | 2.5oz Weight |
| VEN-8393 | 12 | Wheel Weight Set 1.3oz |
| | 12 | M3x8mm Skt B.H. Screw |
| | 12 | 1.3oz Weight |
| VEN-8395 | 1 | Alloy Diff Case Set |
| | 1 | Diff Housing Left |
| | 1 | Diff Housing Right |
| | 4 | M2x8mm Sh Cap Screw |

| | | |
|----------|---|-------------------|
| VEN-8389 | 1 | Chassis Plate Set |
| | 2 | Chassis Plate |
| VEN-8391 | 1 | Rear Link Set |
| | 6 | 2mm Spacer |
| | 2 | Steering Link |
| | 4 | M3x20mm Stud |
| | 1 | Ball Joint 0-deg |

A WEB SITE

FOR THE SERIOUS RACER

WARRANTY, SERVICE AND SUPPORT

Thank you for purchasing the Venom Creeper™. We want to assure you that your model is backed by first-class customer service and support. If you have questions or concerns about your Venom Creeper™, simply call us at 800.705.0620, Monday – Friday, 9:00am to 4:00pm Pacific Standard Time. You can also e-mail us at customerservice@venom-group.com. For hands on service and faster access to replacement parts, please visit your local hobby shop.

Venom Group™ Limited Warranty

Venom Group™ warrants this product to be free of material and workmanship defects when new. If a component is found to be defective or was not correctly made, Venom™ will, at its sole discretion, repair or replace it free of charge within 90 days from date of purchase. If you believe a defect became evident only after operation, please contact us to discuss the situation.

The Venom Creeper™ is a hobby-class model™ and not a "toy". Because this product is intended to be used over a wide range of operating conditions and situations, Venom Group™ does not offer any warranty, express or implied, that covers damage caused by normal use or wear, or cover or imply how long any component of the Venom Creeper™ will last before requiring replacement due to wear or breakage.

Any and all warranty coverage does not cover replacement of parts and components damaged by water, neglect, improper use, chemical damage, crash damage, unauthorized modification or the use of any non Venom™ product in association with the Venom Creeper™.

A dated & itemized sales receipt must accompany any product returned for warranty work.

Warning

Venom Group™ and its affiliates, partners and subsidiaries cannot control the use, application or installation of this product and shall not be held liable for any property damage or personal injury resulting from the improper use of this product or failure to follow the supplied instructions.

By the act of using this product, the user accepts all resulting liability. In no case will Venom Group™ liability be greater than the actual purchase price of the product.



Repair

For all non-warranty repairs, Venom Group™ charges \$20/hr plus the cost of the replacement parts and \$10 for return shipping to US/Canada or \$30 International.

When sending in a product for warranty and/or repair, please follow these steps:

- 1) Call Venom Group™ Customer Service at 800-705-0620 to receive a Return Merchandise Authorization Number (RMA #).
- 2) Include a short summary of the problem.
- 3) Include your return address, ***We can NOT return ship to PO Boxes***.
- 4) Include a daytime telephone number and/or e-mail address.
- 5) When preparing the Venom Creeper™ for shipment, please use the following guidelines to assist us in expediting your repair and keeping any repair costs for you to a minimum:
 - Remove all batteries from the Venom Creeper™.
 - Remove any non Venom™ after-market parts.
 - Package all items in original box as arranged upon purchase.
 - If you are sending loose items, please seal them in a bag to avoid loss. Make sure to secure all parts to prevent further damage.
 - Ship your package "Insured" and ask for "Delivery Confirmation" with a tracking number. Venom Group™ will not be responsible for lost or damaged packages in transit to us.

Contact

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North America
600 West Buckles Road
Hayden, ID 83835

Australia
P.O. Box 7325
Alexandria NSW 2015 Australia

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