

SERPENT *ninesixty* **960**

1/8TH SCALE 4WD COMPETITION CAR



REFERENCE GUIDE

SERPENT 960

INTRODUCTION

PARTS LIST & EXPLODED VIEWS

The parts list and the exploded views for the Serpent 960 are separate from the Instruction Manual. The exploded views show all the parts for a particular assembly step, together with the Serpent part number. In the parts list at the back of this Reference Guide you will find the part number and the name of the part. In addition to all the Serpent 960 parts used in this car kit, you will also find lists of option parts for the Serpent 960, as well as a general items (such as fasteners) and promotional items.

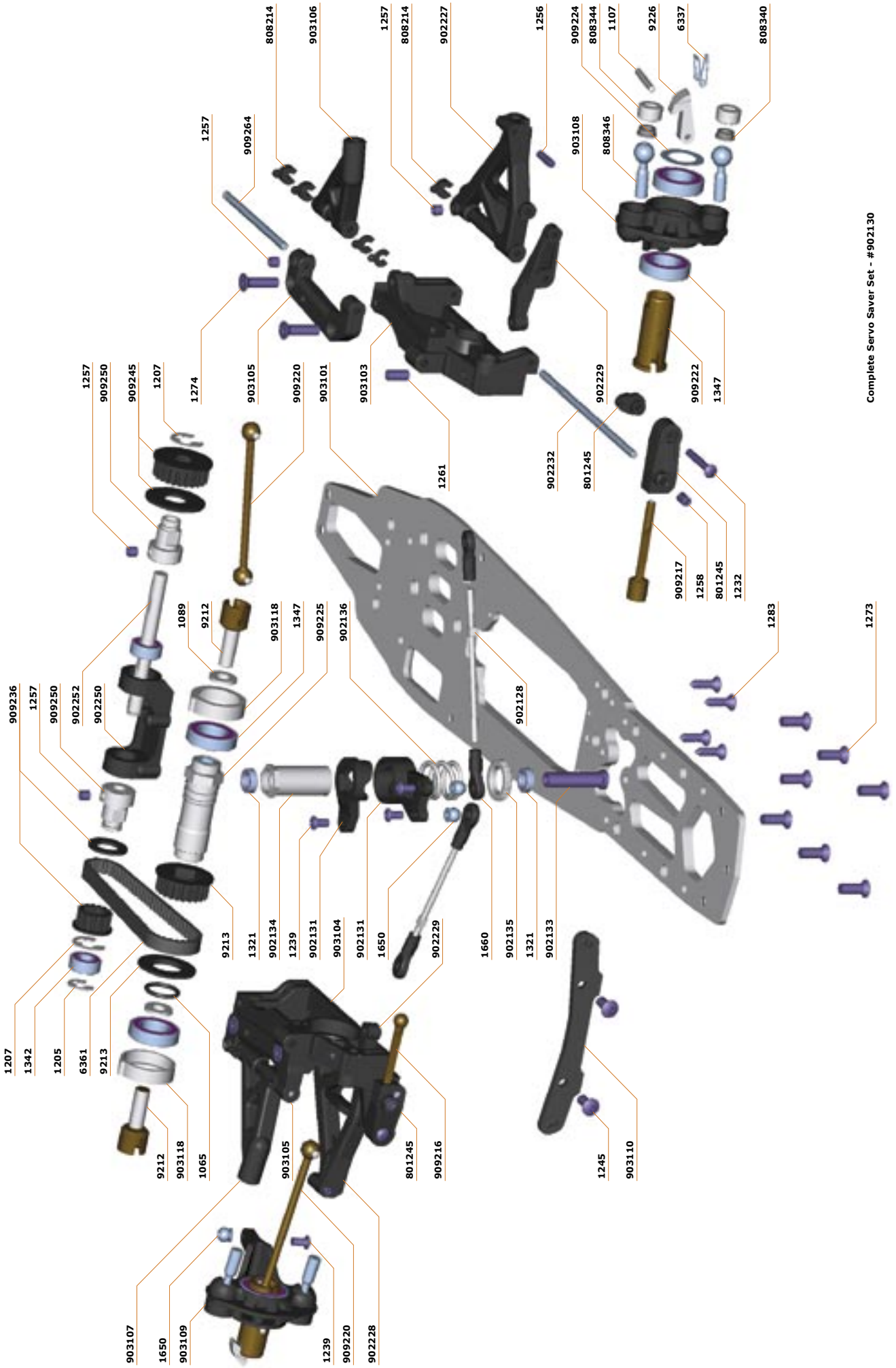
Serpent will regularly update the Serpent 960 parts list and will make it available on the Serpent 960 product page at Serpent.com. Be sure to check the Serpent 960 product page at Serpent.com frequently. All information about the 960 can be found here: publications, news items, set-ups, FAQ's, images, downloads, videos, and interesting forums in several languages. Serpent.com provides you with an enormous amount of interesting and often valuable information about the Serpent 960; information is provided by Serpent, its factory and team drivers, and experienced

racers from around the world. Often this information is even available in several languages! If you're not a member of Serpent.com yet, sign up today and experience why Serpent excels not only on the track, but also on the Internet.

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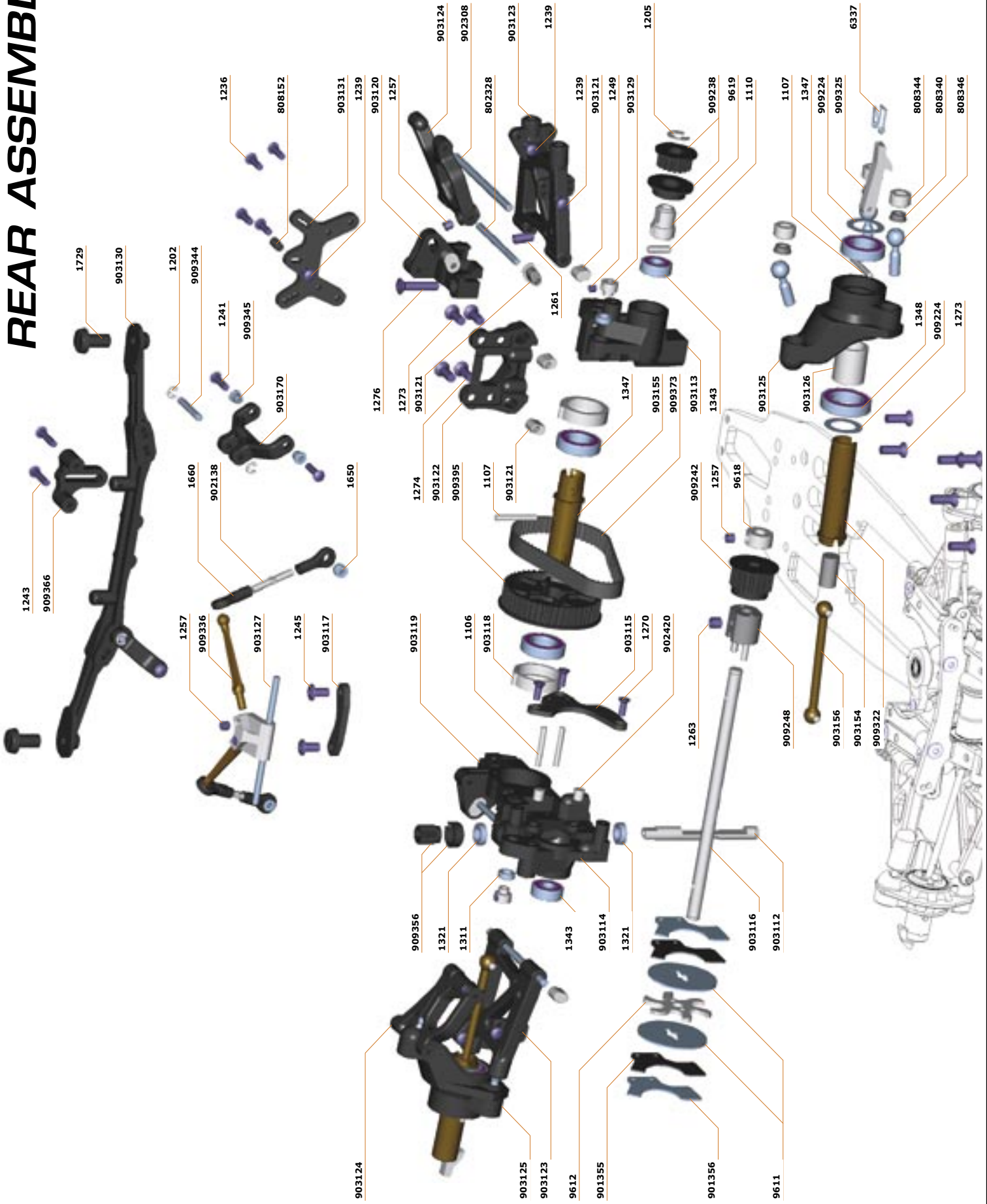
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FRONT ASSEMBLY

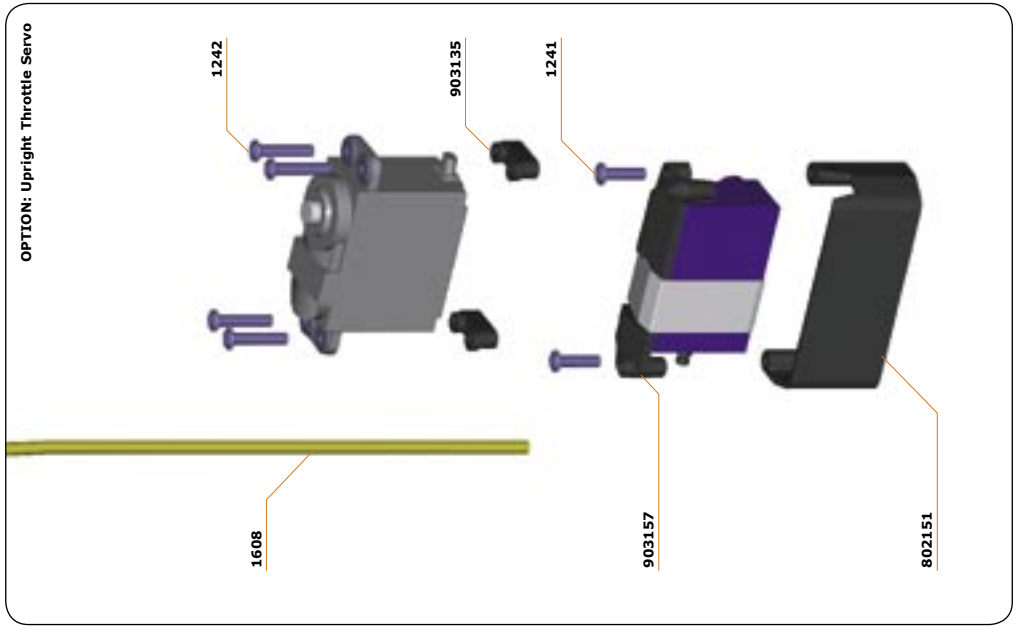
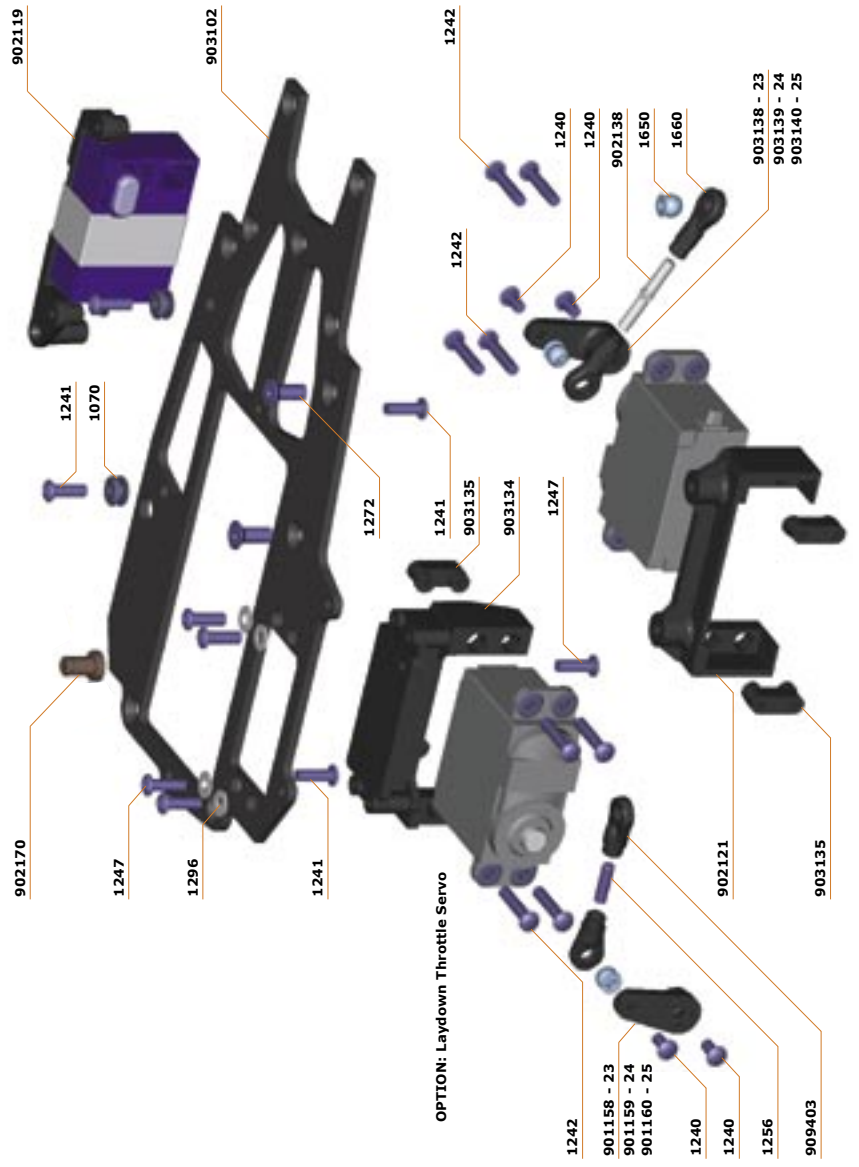
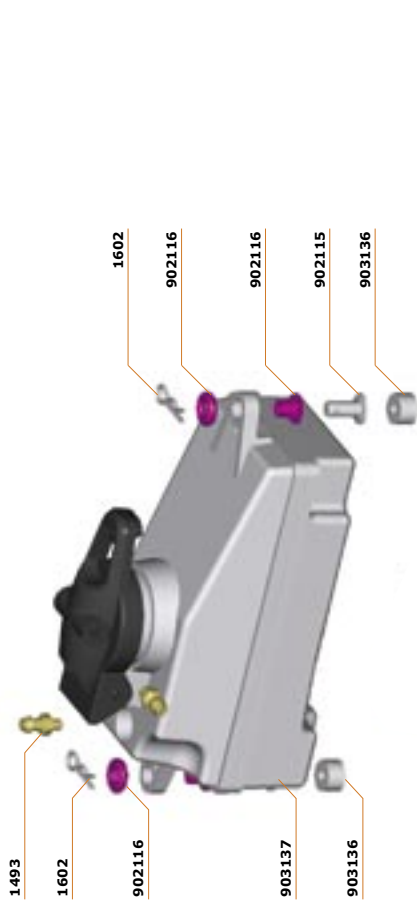


Complete Servo Saver Set - #902130

REAR ASSEMBLY

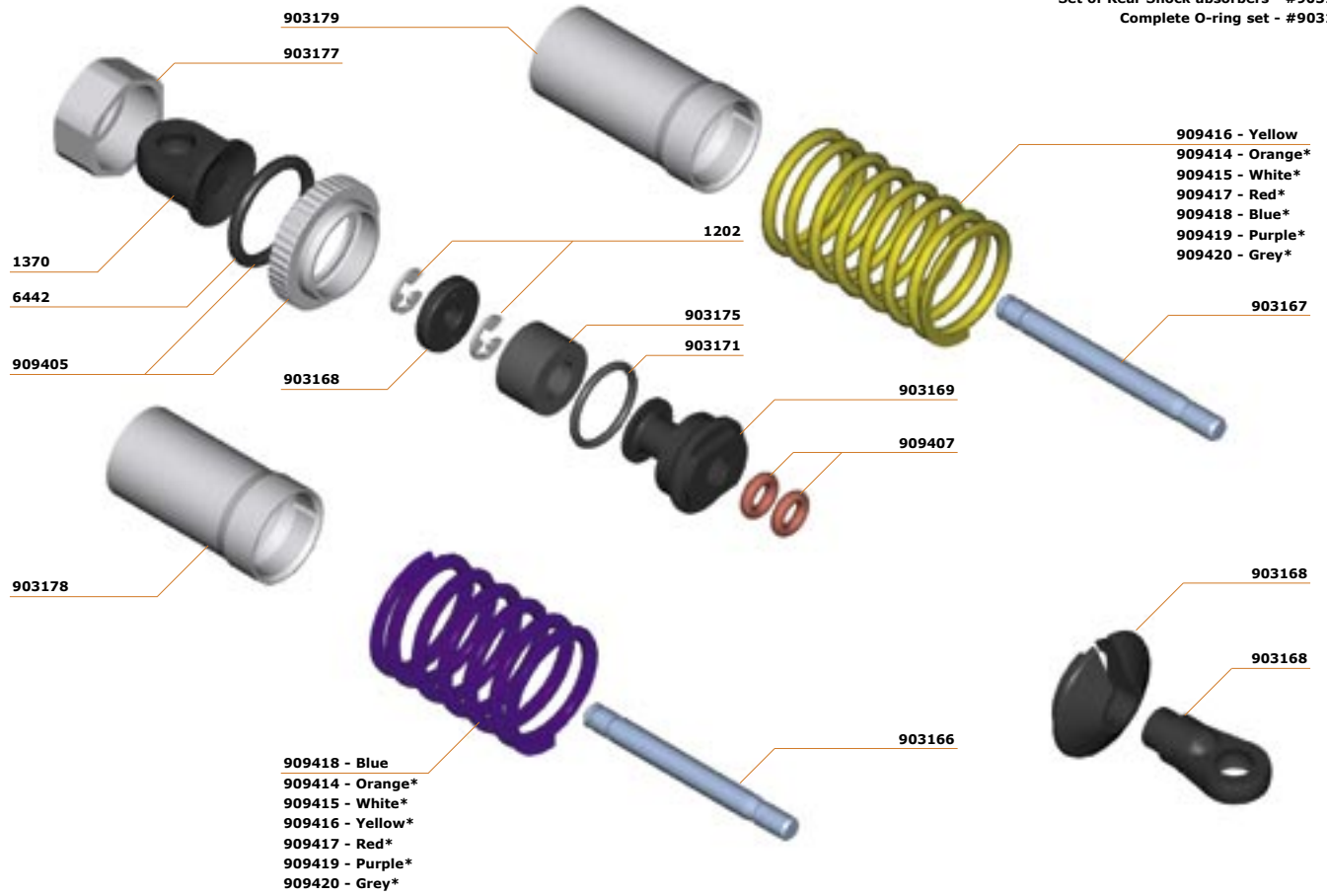


RADIO PLATE ASSEMBLY



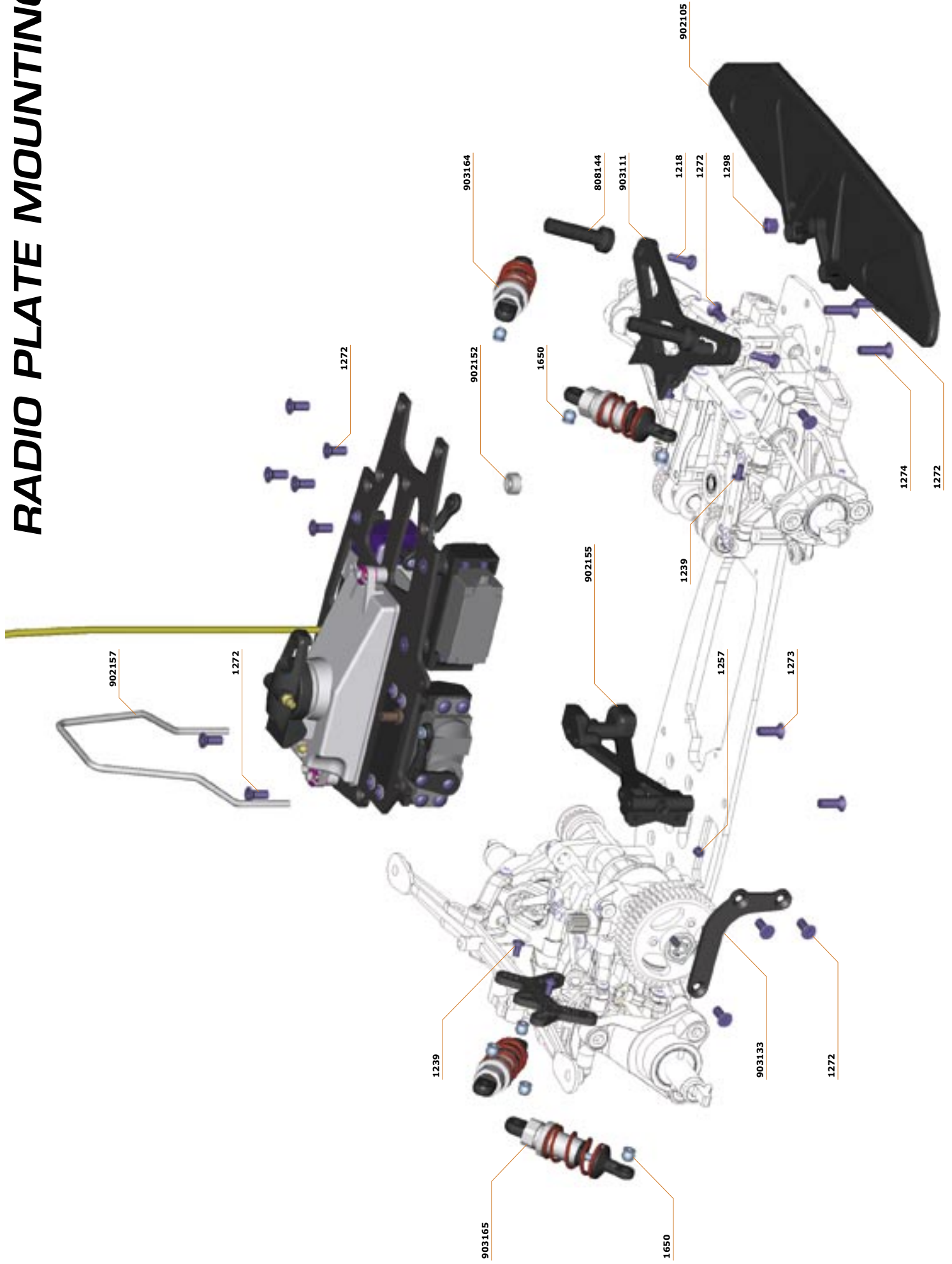
SHOCK ASSEMBLY

Set of Front Shock absorbers - #903164
 Set of Rear Shock absorbers - #903165
 Complete O-ring set - #903170



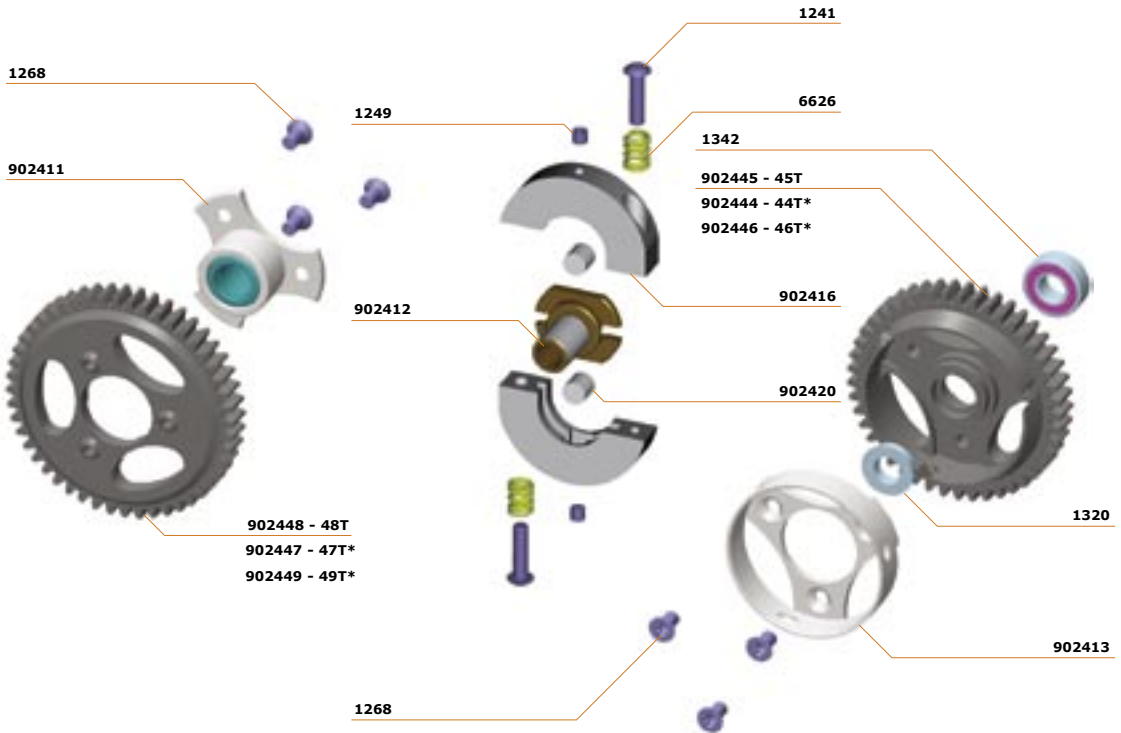
* Optional

RADIO PLATE MOUNTING



GEARBOX ASSEMBLY

2 Speed gearbox LC (no shaft incl.) - #902410
 2 Speed shaft 960 - #903116

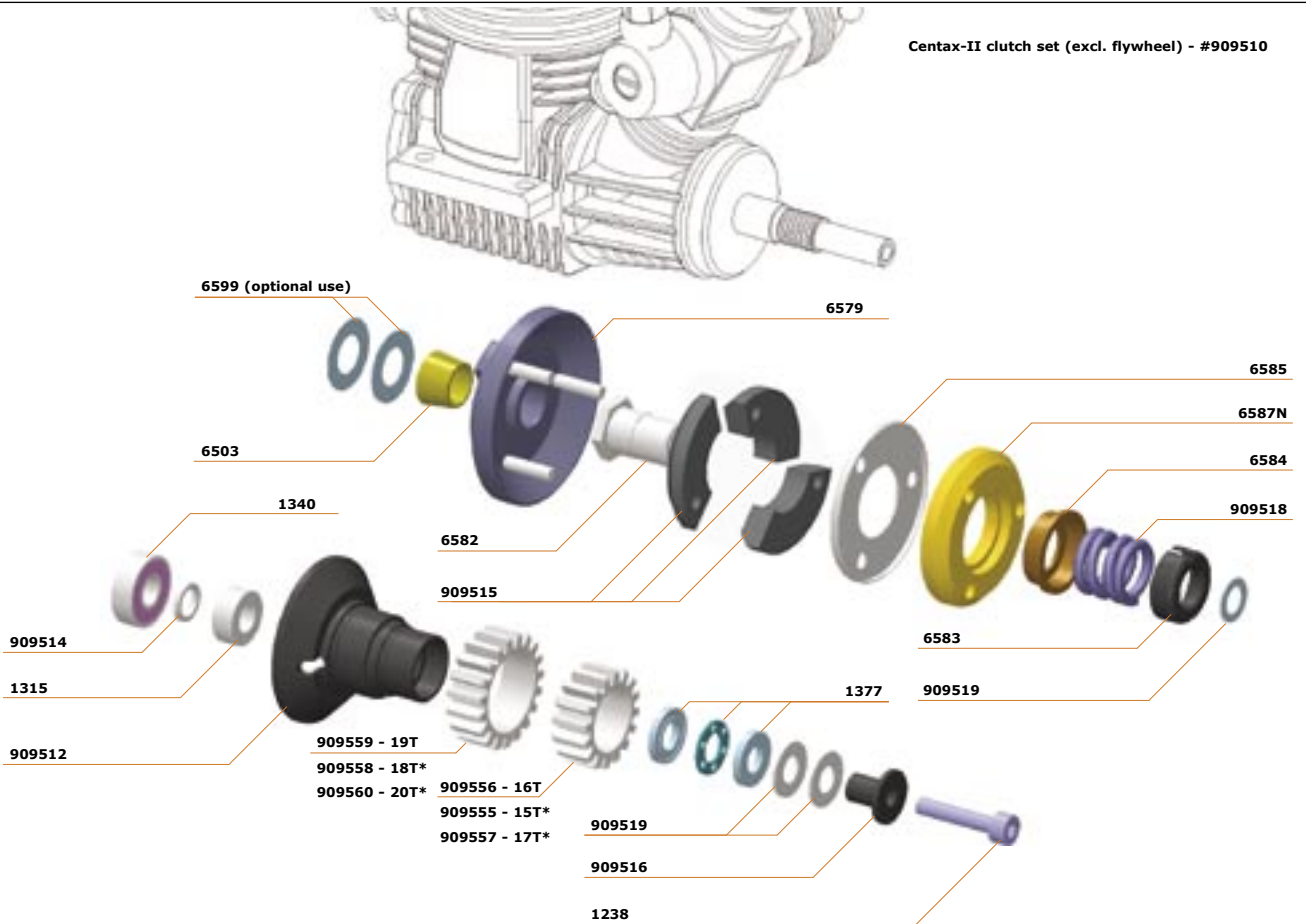


Mounting fasteners
 #1111 - Pin NRA 3x13.8 P13
 #1205 - E-clip 5.0 R5
 #1253 - Grubscrew M3x8 H11

* - Optional

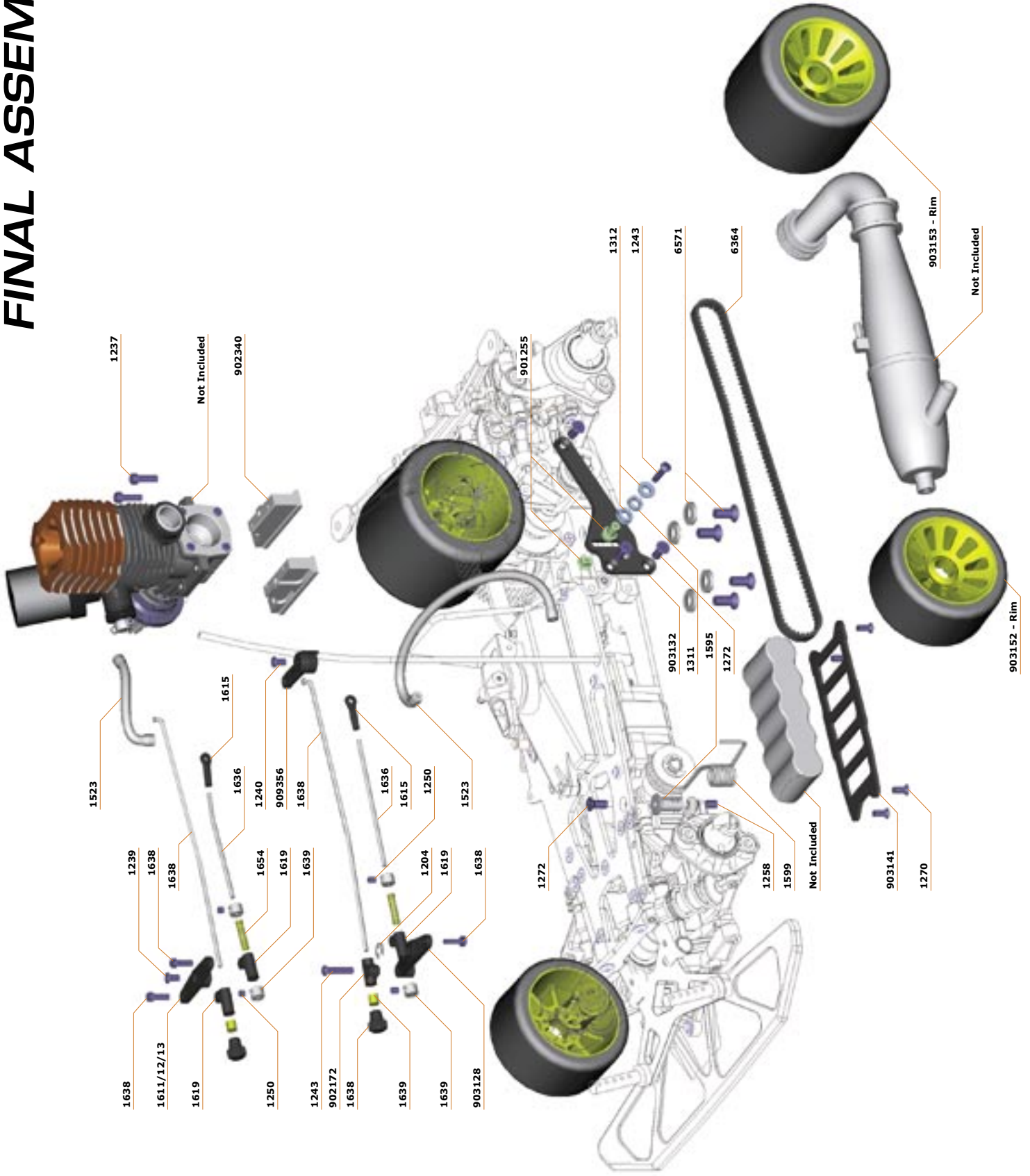
CENTAX ASSEMBLY

Centax-II clutch set (excl. flywheel) - #909510



* - Optional

FINAL ASSEMBLY



PARTS LIST SERPENT 960

ART No. DESCRIPTION

903000 SERPENT 960 1/8 4WD KIT

MANUAL, DECALS

903147 Manual S960
903148 Ref guide S960
903149 Setup book S960
903150 Decal S960 A4 + A5
903151 Decal S960 A5

RADIO INSTALLATION / BATTERY

1070 Grommet rubber soft (4)
1296 Washer nylon M3x7x0.5 (4)
1604 Antenna rods pink (2)
1611 Servo lever 23T, double arm (2)
1612 Servo lever 25T, double arm (2)
1613 Servo lever 24T, double arm (2)
1615 Ball-joints 4mm (4)
1619 Wire-guide nylon
1636 Throttle linkage set
1638 Brake-linkage set
1639 Collar alu 2.1 + setscrew (4)
1650 Balls 6mm/setscrews hex (4)
1654 Spring small (4)
1660 Ball-joints 6mm (20)
802151 Receiver cover
901158 Servo lever 23T, single arm
901159 Servo lever 24T, single arm
901160 Servo lever 25T, single arm
902119 Receiver bracket 960
902121 Mounting bracket steering servo
902138 Rod threaded L + R (2)
902170 Shaft, throttle lever
902172 Throttle slide part
903128 Throttle lever
903134 Bracket throttle-brake servo
903135 Mount-supports servo
903138 Servo lever 23T, single arm
903139 Servo lever 24T, single arm
903140 Servo lever 25T, single arm
903141 Battery-support plate S960
903157 Receiver bracket 710 / 960

SERVO SAVER AND STEERING

902128 Track-rod set (2)
902130 Servo-saver set 950
902131 Servo-saver nylon parts
902133 Servo-saver shaft inner
902134 Servo-saver shaft outer
902135 Servo-saver pre-tension nut
902136 Servo-saver spring

FUEL TANK AND PARTS

1431 Rubber tank seals (4)
1493 Pressure nipple
1494 Silicone tubing 50cm white
1602 Tank-clips small (10)
902115 Mounting-pin tank + rubber cap (2)
902116 Cap rubber for mounting pin tank (2)
903136 Shim 3.1x8x5 nylon
903137 Fueltank 125cc

BALL-BEARINGS

1311 Ball-bearing 5x8
1312 Ball-bearing 5x8 flanged
1315 Ball-bearing 5x10
1320 Ball-bearing 6x10 flanged
1321 Ball-bearing 6x10x3 (2)
1340 Ball-bearing 5x13 HS (2)
1342 Ball-bearing 6x13 HS (2)
1343 Ball-bearing 6x15 HS (2)
1346 Ball-bearing 12x18 HS (2)
1347 Ball-bearing 12x21 HS (2)
1348 Ball-bearing 15x24 HS (2)
1377 Thrustbearing 5x10

SHOCK ABSORBERS

903164 Shock-set front (2)
903165 Shock-set rear (2)
903166 Piston rod FR (2)
903167 Piston rod RR (2)
903168 Nylon parts frame shocks
903169 Insert shock (2)
903170 O-ring + clip set
903171 O-ring 10x1 (4)
903172 O-ring 3.8x1.5 (4)
903173 O-ring 12x1.6 (4)
903174 E-clip 2.3mm (4)
903175 Foam insert (4)
903176 Nut adj alu + o-ring (4)
903177 Nut shock alu (4)
903178 Body alu shock FR (2)
903179 Body alu shock RR (2)

909414 Spring-set D=1.4 L=27-22.7 orange (4)
909415 Spring-set D=1.5 L=27-22.7 white (4)
909416 Spring-set D=1.6 L=27-22.7 yellow (4)
909417 Spring-set D=1.7 L=27-22.7 red (4)
909418 Spring-set D=1.8 L=27-22.7 blue (4)
909419 Spring-set D=1.9 L=27-22.7 purple (4)
909420 Spring-set D=2.0 L=27-22.7 grey (4)

SERPENT SPECIAL SHOCK ABSORBER OIL

1670 Silicone shock-oil 20W 100cst
1674 Silicone shock-oil 25W 180cst
1671 Silicone shock-oil 30W 350cst
1675 Silicone shock-oil 35W 600cst
1672 Silicone shock-oil 40W 1000cst
1676 Silicone shock-oil 45W 1400cst
1673 Silicone shock-oil 50W 2000cst

CHASSIS / RADIO PLATE

902152 Spacer Radio plate (3)
902155 Radio plate bracket
902157 Roll-bar chrome
903101 Chassis S960
903102 Radio plate S960
903132 Side plate L carbon
903133 Side plate R carbon

BODYMOUNTS FR and RR

1601 Body clips (10)
808144 Body mount universal
808152 Centering bushing threaded
903111 Body plate FR
903130 Bodymount RR
909342 Nylon arms short (2)
909344 Pivot pins body mount upper (2)
909345 Pivot bushings rear body mount (4)
909366 T-bracket rear body support

FRONT SECTION

1065 O-ring for alu front axle (10)
1089 Shim nylon adaptor FR 6.1x11x1 (4)
1107 Pin NRA 2.5x21.8 (4)
6337 Spring quick change system
6361 Belt short 6mm
801245 Anti-roll bar levers + eccentric
808214 Caster spacer set (2)
808340 Nylon cup 8.5mm
808344 Adj. nut alu M10 (4)
808346 Pivot balls steel 8.5mm (2)
902105 Bumper
902227 Wishbone front lower left
902228 Wishbone front lower right
902229 Downstop lever L + R
902232 Pivot pins front lower (2)
903103 Bearingblock FR L
903104 Bearingblock FR R
903105 Suspension bracket FR upper (2)
903106 Wishbone FR upper L
903107 Wishbone FR upper R

903108 Steering block L
903109 Steering block R
903110 Shocktower carbon FR
903118 Eccentric nylon (2)
903145 Suspension-set FR S960
909216 Anti-roll bar blade male
909217 Anti-roll bar blade female
909220 Driveshafts front (2)
909222 Wheel-axles steel front (2)
909224 Shim 12x18x0.3mm (2)
909225 Front axle alu. with OWBs
909264 Pivot pins front upper (2)
9213 Pulley / flange 24T
9212 Inner driveshaft adaptors (2)
9226 Lever alu quick-change (2)

MIDDLE SECTION

6364 Drive-belt long 6mm
901255 Belt-tensioner shaft and nut
902250 Middle shaft bracket
902252 Middle shaft steel
909236 Pulley / flange 16T
909238 Pulley / flange 18T
909242 Pulley / flange 22T
909245 Pulley / flange 25T
909248 Brake-pulley adaptor alu.
909250 Pulley adaptor alu. (2)

REAR SECTION

1107 Pin NRA 2.5x21.8 (4)
802328 Pivot pin rear upper (2)
808340 Ball-cups set nylon (12)
808344 Alu. adjusting nuts M10 (4)
808346 Pivot-balls 8.5mm (2)
902308 Pivot pin rear lower 3.5mm (2)
903117 Stiffener RR upper carbon
903119 Susp bracket RR L
903120 Susp bracket RR R
903121 Pivot insert nylon (4+4+4)
903113 Bearing block RR L
903114 Bearing block RR R
903118 Eccentric Nylon (2)
903122 Rear plate
903123 Wishbone RR lower
903124 Wishbone RR upper
903125 Upright RR
903126 Spacer upright alu (2)
903127 Anti-roll bar rear adjustable
903129 Spacer anti-roll bar RR
903131 Shock tower RR carbon
903146 Suspension-set RR S960
903154 Nylon inserts wheel-axles (2)
903156 Driveshaft rear 62mm (2)
909224 Shim 12x18x0.3mm (2)
909322 Wheel-axles steel rear (2)
909325 Quick-change levers alu rear (2)
909336 Rear anti-roll bar ball-rod
9619 Pulley adapter alu 19T
9620

BRAKE SYSTEM

1106 Pin NRA 2.5x19.8 (4)
901355 Brake pads black (4)
901356 Brake-plates steel (3)
903112 Brake cam alu
903115 Brake support plate carbon
909356 Brake-cam / spring-set
9612 Ventilated brake-disk
9611 Steel brake disks (2)
9618 Alu. collar brake pulley

TRANSMISSION

903155 Axle solid rear
909373 Kevlar drive-belt 8mm
909395 Pulley solid axle 51T

2-SPEED GEARBOX

1111	Pin NRA 3x13.8 (4)
1115	Pin NRA 5x5 (4)
6626	Springs / screws 2-speed
902410	2-speed gearbox LC (no shaft incl)
902411	Drive-flange alu with OWB LC
902412	Adaptor 2-speed LC
902413	Clutch bell alu LC
902416	2-speed clutch shoes set LC
902444	2-speed gear 44T (2nd) LC
902445	2-speed gear 45T (2nd) LC
902446	2-speed gear 46T (2nd) LC
902447	2-speed gear 47T (1st) LC
902448	2-speed gear 48T (1st) LC
902449	2-speed gear 49T (1st) LC
903116	Shaft 2-speed

CLUTCH SYSTEM

1377	Centax II thrust-bearing 5x10
6503	Flywheel cone (3)
6579	Centax flywheel 38mm
6582	Centax clutch-nut
6583	Centax pre-load adjusting nut
6584	Centax spring cup
6585	Centax thrust washer
6587N	Centax clutch shoe
6599	Centax shim-set 7x13 (10)
909510	Centax II clutch-set (excl. Flywheel)
909514	Centax II bearing spacer 5x7
909515	Centax II centrifugal shoes (3)
909516	Centax II spacer thrustbearing
909518	Centax II coil-spring 1.8
909519	Centax 5x10 shim-set 0.1 (2) 0.3 (1)
909512	Centax II clutch-housing universal
909555	Centax gear-pinion alu. 15T
909556	Centax gear-pinion alu. 16T
909557	Centax gear-pinion alu. 17T
909558	Centax gear-pinion alu. 18T
909559	Centax gear-pinion alu. 19T
909560	Centax gear-pinion alu. 20T

ENGINE MOUNTS

1595	Mount alu exhaust wire
1599	Exhaust mounting wire
6571	Engine mounting screws/washers
902340	Engine mounts M21

WHEELS

903152	Rim front 1/8 yellow (2)
903153	Rim rear 1/8 yellow (2)
909851	Tire savers 1/8 (10)

OPTION PARTS

1015	Engine mount screws Torx / washers (4)
1017	Engine mount screws hex-flanged (4)
1018	Screw-flanged M4x14 hex (4)
1265	Screw CSH M4x10 aluminum (10)
1360	Ball-bearing 6x13 PHQ (2)
1362	Ball-bearing 12x21 PHW (2)
1388	Thrust-bearing 5x10 ceramic
1391	Bearing-set ceramic S960 (19)
1461	Tool front anti-roll bar
1462	Tool pressure nipple / Centax nut
6123A	Body post alu short (2)
6587	Centax clutch shoe black
6587XP	Centax clutch shoe black XP
808251	Middle shaft bracket alu
9606	Brake disk steel ventilated (2)
9607	Racing brake-pad set L + R
9623	Collar brake-pulley alu light
902129	Turnbuckle 65mm titanium (2)
902137	Servo saver spring 2.0 gold
902139	Servo saver spring 2.2 black
902156	Radio plate bracket alu
902240	Belt-set pro S950 (3) (2 rear, 1 side)
902242	Drive-belt 432x6mm side pro
902243	Drive-belt 210x8mm rear pro
902253	Middle shaft alu coated
902270	Wheel-axles front QC-fixed set
902271	Springs quick-change short (4)
902272	Wheel-nut alu + O-ring (4)
902280	Wheel-axles front CV set
902281	Driveshaft-set front CV
902282	Insert alu CV (2)
902284	Spacer alu steering block (2)
902341	Engine mount mono-block S950R
902370	Wheel-axles rear QC-fixed set

903121	Pivot insert nylon pos 2
903143	Roll center spacer 1mm
903158	Lever FR quick-change alu light (2)
903159	Lever RR quick-change alu light (2)
903160	Eccentric bearing alu (2)
903161	Susp bracket alu FR upper L + R
903162	Rear plate S960 alu grey
903163	Rear plate S960 alu orange
903180	Shock piston set 1H machined (4)
903181	Shock piston set 2H machined (4)
903182	Shock piston set 3H machined (4)
903183	Shock piston set 4H machined (4)
903185	Shim 4x9x1 black RCS (12)
909218	Anti-roll bar levers alu front (2)
909223	Wheel axle front WOS + alu spacer (2)
909224	Shim 12x18x0.3mm (2)
909228	Wheel-axle washers conical (4)
909244	Pulley / flange 24T
909251	Pulley-adaptor alu light (2)
909253	Pulley 16T alu hard-anodised
909254	Pulley 18T alu hard-anodised
909255	Pulley 24T alu hard-anodised
909256	Pulley 25T alu hard-anodised
909257	Pulley 22T brake alu hard-anodised
909323	Wheel-axle set rear light / WOS (2)
909351	Brake bracket alu
909372	Pulley 50T
909513	Centax II clutch-housing universal light
909575	Centax gear-pinion steel 15T
909576	Centax gear-pinion steel 16T
909577	Centax gear-pinion steel 17T
909578	Centax gear-pinion steel 18T
909579	Centax gear-pinion steel 19T
909580	Centax gear-pinion steel 20T

BODIES AND WINGS

1601	Body clips (10)
1722	Trim-strip + nylon mounts
1723	Body washers silicone (5)
1724	Body-stiffener Lexan (2)
1725	Side-wing support foam (2)
1727	Body inserts Lexan - set
1729	Screw-nut M6 black nylon (2)
1751	Body McLaren GT1 MS
1753	Body Porsche GT1 MS
1754	Body Porsche 962 MS EV2
1757	Body Lola VDS MS EV3

TOOLS

1016	Torx wrench
1460	Camber gauge
1461	Tool front anti-roll bar
1462	Tool pressure nipple / Centax nut
909590	Gear pinion wrench
909593	Clutch housing gripper
909597	Centax gap-tool alu

ACCESSORIES

1395	Glow-plug starter 1300 mAh /w. Cable
1400G	Powerstart compact starter box grey
1494	Silicone tubing 50cm white
1521	Silicone tubing 50cm purple
1522	Silicone tubing 50cm smoke
1523	Silicone tubing 50cm orange
1605	Antenna rods green (2)
1606	Antenna rods black (2)
1607	Antenna rods blue (2)
1608	Antenna rods orange (2)
1609	Antenna rods purple (2)
1680	One-way lube 25ml
1682	Bearing oil 25ml
1690	Cleaning putty 200g
903142	Powerstart pos supp. S960

MERCHANDISING

1980	Bag Serpent black large
1981	Bag Serpent black small

FASTENING MATERIALS

1101	Pin NRA 2.5x11.8 (4)
1102	Pin NRB 2.5x11.8 (4)
1103	Pin NRA 2.5x13.8 (4)
1104	Pin NRB 2.5x15.8 (4)
1105	Pin NRA 2.5x17.8 (4)
1106	Pin NRA 2.5x19.8 (4)
1107	Pin NRA 2.5x21.8 (4)

1108	Pin NRA 2x13.8 (4)
1109	Pin NRA 2x9.8 (4)
1110	Pin NRA 3x11.8 (4)
1111	Pin NRA 3x13.8 (4)
1112	Pin NRA 3x19.8 (4)
1113	Pin NRA 3x9.8 (4)
1114	Pin NRA 3x15.8 (4)
1115	Pin NRA 5x5 (4)
1201	E-clip 1.9 (10) R1
1202	E-clip 2.3 (10) R2
1203	E-clip 3.2 (10) R3
1204	E-clip 4.0 (10) R4
1205	E-clip 5.0 (10) R5
1207	E-clip 7.0 (10) R7
1208	C-clip 10x1 (10) T10
1209	G-clip 14x1 (10) S14
1212	Screw rh ph 2.9x9.5 (10) A5
1213	Screw rh ph 2.9x13 (10) A6
1214	Screw rh ph 2.9x16 (10) A7
1215	Screw rh ph 2.9x19 (10) A8
1216	Screw rh ph 2.9x25 (10) A10
1217	Screw rh ph 3.5x9.5 (10) A12
1218	Screw rh ph 3.5x13 (10) A13
1219	Screw rh ph 3.5x16 (10) A14
1220	Screw rh ph 3.5x19 (10) A15
1225	Screw rh M2x6 (10) C2
1226	Screw rh M2x6 (10) C5
1227	Screw rh ph M3x8 (10) D11
1228	Screw rh ph M3x12 (10) D13
1232	Screw rh Allen M3x18 (10)
1235	Screw ch Allen M3x6 (10) F10
1236	Screw ch Allen M3x10 (10) F12
1237	Screw ch Allen M3x12 (10) F13
1238	Screw ch Allen M3x16 (10) F14
1239	Screw rh Allen M3x6 (10) E10
1240	Screw rh Allen M3x8 (10) E11
1247	Screw rh Allen M3x10 (10) E12
1241	Screw rh Allen M3x12 (10) E13
1243	Screw rh Allen M3x16 (10) E14
1234	Screw rh Allen M3x20 (10) E15
1244	Screw rh Allen M4x6 (10) E17
1245	Screw rh Allen M4x8 (10) E18
1246	Screw rh Allen M4x16 (10) E21
1249	Grubscrew M3x3 (10) J8
1250	Grubscrew M3x4 (10) J9
1251	Grubscrew M3x6 (10) J10
1252	Grubscrew M4x10 (10) J19
1253	Grubscrew M3x8 (10) H11
1255	Grubscrew M3x10 (10) H12
1256	Grubscrew M3x12 (10) H13
1257	Grubscrew M4x4 (10) H16
1258	Grubscrew M4x6 (10) H17
1259	Grubscrew M5x5 (10) H24
1260	Grubscrew M5x6 (10) H25
1262	Grubscrew M3x20 (10) H15
1261	Grubscrew M4x10 (10) H17
1263	Grubscrew M5x4 (10) H22
1268	Screw csh ph M3x6 (10) G10
1269	Screw csh ph M3x16 (10) G14
1270	Screw csh ph M3x8 (10) G11
1271	Screw csh ph M4x8 (10) G18
1272	Screw csh ph M4x10 (10) G19
1273	Screw csh ph M4x12 (10) G20
1274	Screw csh ph M4x16 (10) G21
1275	Screw csh ph M5x12 (10) G27
1278	Screw csh Allen M4x20 (10)
1279	Screw csh Allen M4x25 (10)
1280	Screw csh ph 2.2x6.5 (10) B2
1281	Screw csh ph 2.9x9.5 (10) B5
1282	Screw csh ph 3.5x9.5 (10) B12
1283	Screw csh ph 3.5x13 (10) B13
1284	Screw csh ph 3.5x16 (10) B14
1285	Screw csh ph 4.2x13 (10) B20
1290	Washer 3.2x7 (10) N3
1291	Washer 2.5x6 (10) N4
1292	Spring washer 6.2x14x0.9
1293	Spring washer 7.2x14x0.8
1295	Lock washer 3.2x8 (10) O3
1297	Nut nylock M3 (10) L3
1298	Nut nylock M4 (10) L4
1646	Steel balls 6mm M3 (4)
1647	Steel balls 6mm (4)
1650	Balls 6mm/setscrews hex (4)
1660	Ball-joints 6mm (20)
901185	Screw set alu M4x10 (25)

This list is subject to changes without prior notice.

For up-to-date information on Serpent, go to our Internet site:

www.serpent.com

SERPENT *ninesixty*
960

SERPENT
MOTORSPORT

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