1.0 SHOCK ABSORBER ASSEMBLY

Step 1.1

**Bag A**

- N3 3x6x0.3mm
- R2 2.3mm
- R1 1.9mm

**Thread the piston onto the shock shaft until tight**

**Apply the c-clip to the groove at the end of the shock shaft.**

**Complete set: 909400**
Step 1.2

Hold the shock rod firm using plyers, grip on the end of the threaded part, do not damage the shock rod. Turn the ball-joint on to the shock rod.

Step 1.3

Fill the cylinder with shock oil, with the piston in the bottom position.

Bleeding sequence: Let the oil settle and allow the air to escape. Slowly move the piston up and down until no more bubbles appear.

Glue the membrane to the bottom of the shock head using a CA glue.

Step 1.4

Shock length adjustment: Check the length of the shocks, adjust with the ball-joint.

Shock Front: 67.5mm
Shock Rear: 76.5mm

In full extended, locked position.

Dampening adjustment: Pull the piston rod all the way down, turn slightly to lock the position of the cylinder. Then you can adjust the shocks by rotating the shaft in clockwise clicks from position 1-4.
Roughen the steel plates with rough sandpaper before gluing the brake pads to the steel brake plates.
Step 2.2

Flatten the brake discs using some sandpaper to remove high spots for more consistent braking.

Step 2.3

Refer to setup book, Step SU3 for correct settings.

Remove 1mm from the ball joint mounting point ends

Rear Downstop
Rear Upstop

Bag D,E,B13,U

<table>
<thead>
<tr>
<th>Part</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>R5</td>
<td>5mm</td>
</tr>
<tr>
<td>B13</td>
<td>3.5x13mm</td>
</tr>
<tr>
<td>J16</td>
<td>4x4mm</td>
</tr>
<tr>
<td>U6</td>
<td>6X13mm</td>
</tr>
<tr>
<td>P12</td>
<td>3x12mm</td>
</tr>
</tbody>
</table>

Bag F,G,B13

<table>
<thead>
<tr>
<th>Part</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>3x6x0.1mm</td>
</tr>
<tr>
<td>B13</td>
<td>3.5x13mm</td>
</tr>
<tr>
<td>J16</td>
<td>4x4mm</td>
</tr>
<tr>
<td>E11</td>
<td>3X8mm</td>
</tr>
<tr>
<td>D11</td>
<td>3X8mm</td>
</tr>
<tr>
<td>H19</td>
<td>4x10mm</td>
</tr>
</tbody>
</table>
Step 2.4

To make the steel pivot ball go easier into the wishbone, lightly coat with some thin oil.

Step 2.5

Press the steel pivot ball into the wishbone with a vice or pliers until it snaps into place.

Screw the pivot balls in equally

To make the steel pivot ball go easier into the wishbone, lightly coat with some thin oil. To lengthen the life of your driveshafts, use a graphite spray or grease on the driveshaft ends.

Step 2.6

Do not tighten screws completely. Allow rear anti-roll bar to swivel freely.

Bag K

NN4 3.2x9x0.5mm
A5 2.9x9.5mm

Bag H,I,U

U14 12x21mm
P10 2.5x22mm
3.0 FRONT ASSEMBLY

Step 3.1

Bag N, U, G20

- J16 4x4mm
- R7 7mm
- U6 6x13mm
- G20 4x12mm
Press the bushings into the steering pivot post until they stop.
Step 3.4

Refer to setup book, Step SU2 for correct settings.

Bag R,U,G19,G20

- U14 12x21mm
- Y12 10.3x1.8mm
- G20 4x12mm
- G19 4x10mm

Front Upstop

Step 3.5

Refer to setup book, Step SU2 for correct settings.

Bag S,G20

- H19 4x10mm
- H13 3x17mm
- J16 4x4mm
- G20 4x12mm

Front Downstop

Step 3.6

Refer to setup book, Step SU12 for correct settings.

Bag T,V

- J16 4x4mm
- J17 4x6mm
- H19 4x10mm
- D13 3x12mm
**Step 3.7**

Bag W,X,U

- U14 12x21mm
- P10 2.5x22mm

The left steering block can be distinguished by 4 dots.

**Step 3.8**

Bag Y

- E21 4X16mm
- E17 4X6mm
- E11 3x8mm

To lengthen the life of your driveshafts, use a graphite spray or grease on the driveshaft ends.

**Step 3.9**

- Bag W,X,U
- Bag Y
- U14 12x21mm
- P10 2.5x22mm
- E21 4X16mm
- E17 4X6mm
- E11 3x8mm

To lengthen the life of your driveshafts, use a graphite spray or grease on the driveshaft ends.
4.0 RADIOPlate ASSEMBLY

Step 4.1

The servo arms contain a number that corresponds to the amount of teeth:

- 23 - Sanwa / KO / JR
- 24 - Hitec
- 25 - Futaba

Note: To adjust the position of your servo in its mounting place, plastic shims have been supplied along with part # 901164
Step 4.2

**Bag AA,AB,G19**

- G19 4x10mm
- E13 3x12mm
- J16 4x4mm

Attach your receiver to its mount using some tape.

Step 4.3

**Bag AC,AD,G19**

- G19 4x10mm
- E13 3x12mm
- N3 3.2mm
- E14 3x16mm
- B5 2.9x9.5mm
- J17 4x6mm
- H9 3x4mm
- R4 4mm

Use 5mm long piece of fuel tubing

Note: To adjust the position of your servo in its mounting place, plastic shims have been supplied along with part # 901164
5.0 CENTAX CLUTCH ASSEMBLY

Step 5.1

Apply spacer shims to obtain correct clutch gap (see step 5.4)

Initial clutch gap measurement from end of crankshaft to top of flywheel nut

Note: When tightening the flywheel nut use a large pliers to stop the flywheel from rotating

Bag AE

M19 7x13x0.1mm
M20 7x13x0.3mm
M21 7x13x0.5mm

For ease of assembly, use the Gear Pinion Wrench (#909590)
Step 5.2

Insert the flanged ballbearing V3 into the end of the clutch housing. Do NOT insert the inner ballbearing 5x10 (U4) yet as this ballbearing is left out to adjust the Centax clutch gap. Place the clutch housing over the crankshaft and apply the thrust-bearing package. Thread screw F12 all the way in.

Note: It’s important to lubricate this bearing regularly with some light oil.

Mount without ballbearing U4

Step 5.3

Insert the flanged ballbearing V3 into the end of the clutch housing. Do NOT insert the inner ballbearing 5x10 (U4) yet as this ballbearing is left out to adjust the Centax clutch gap. Place the clutch housing over the crankshaft and apply the thrust-bearing package. Thread screw F12 all the way in.
Step 5.4

**Adjusting the Clutch Gap**

Pull the clutch shoe out and measure the distance between the outer edge of the clutch housing and the top of the socket head screw.

This is measurement A

Push the clutch housing towards the clutch shoe and measure the distance between the outer edge of the clutch housing and the top of the socket head screw again.

This is measurement B

Calculate the shim thickness as follows:

\[ \text{Shim thickness} = (A - B - 0.6) \]

For example: \( A = 1.2\,\text{mm} \) and \( B = 0.3\,\text{mm} \)

\[ \text{Shim thickness} = 1.2 - 0.3 - 0.6 = 0.3\,\text{mm} \]

Select shims to make up the correct shim thickness (in this example 1 of 0.1mm (M19) and 1 of 0.3mm (M20)).

Refer to Step 5.1 on how to insert spacer shims.

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Step 5.5

With the inside clutch housing bearing (U14) mounted, pull the clutch housing out and measure the distance between the edge of the clutch housing and the top of the socket head screw.

This is measurement C

Push the clutch housing in and measure the distance between the edge of the clutch and the top of the socket head screw.

This is measurement D

Calculate shim size:\n
\[ \text{Shim size} = (C - D - 0.1\,\text{mm}) \]

Remove the clutch housing. Apply shims (M11 - M12) with a total thickness as determined by the calculation. Re-mount the clutch housing.

Apply spacer shims to obtain correct end play.
6.0 GEARBOX ASSEMBLY

For ease of assembly, use the Gear Gripper (#909595) in conjunction with the Nutwrench (#909596)

Step 6.1

Bag AF

<table>
<thead>
<tr>
<th>Bag AF</th>
<th>E14 3x16mm</th>
<th>L3 3mm</th>
</tr>
</thead>
</table>

Note: Always screw the grub-screw and ball in evenly. When in place, screw in until the shoe touches the clutchbell and then bring back a 1/2 turn.

Step 6.2

<table>
<thead>
<tr>
<th>Gearbox</th>
<th>V5 6x10mm</th>
<th>R5 5mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutwrench</td>
<td>P12 3x12mm</td>
<td></td>
</tr>
</tbody>
</table>

Counter, clockwise thread, marked with little groove.

Clockwise thread

Final Adjustment of the Gearbox shifting point is made when at the track. Turning the E14 screws in will give a later shifting point, turning them out will give an earlier shifting point.
7.0 FINAL ASSEMBLY

Step 7.1

Bag AG

- G27 5x12mm
- F12 3x10mm

Not Included: 808144, 901206, 901210, 901165, 1637, 6571, 6364, 1599, 6568, 1611, 1612, 1613, 1619, 1636, 1638, 1660, 6364, 909356, 1599, 901315, A14, G19, C5, J9, D11, H19, 1611-23T, 1612-25T, 1613-25T, 1611-24T

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Step 7.2

Bag AH, AI, AK, G20

- G20 4x12mm
- D11 3x8mm
- A14 3.5x16mm
- P3 2x14mm

Step 7.3

Bag AL, G19, G20

- G20 4x12mm
- G19 4x10mm
- C5 2.5x8mm
- H9 3x4mm
Step 7.4

Congratulations you have finished constructing your car. Now refer to the setup booklet for further instructions on how to get the most from your Vector NT.

Step 7.5

Mount a 5-cell receiver battery pack to the mount with tape.

Step 7.6

Congratulations you have finished constructing your car. Now refer to the setup booklet for further instructions on how to get the most from your Vector NT.