

Overdrive / Under drive For Serpent 705

Formula

$$OD = \frac{P6 + P2}{P5 + P1} \times \frac{P4}{P3} = \frac{\text{Diameter Front Tyre}}{\text{Diameter Rear Tyre}}$$

Standard

$$\frac{46 + 16}{23 + 24} \times \frac{18}{24} = \text{Under drive } \mathbf{0.990}$$

(almost 50/50)

Variation 1

$$\frac{46 + 16}{23 + 24} \times \frac{19}{23} = \text{Overdrive } \mathbf{1.09}$$

With Front Tyre 2mm Smaller	1.05
With Front Tyre 2mm Smaller	1.03
With Front Tyre 4mm Smaller	1.02

Variation 2

$$\frac{47 + 16}{22 + 24} \times \frac{18}{24} = \text{Overdrive } \mathbf{1.03}$$

With Front Tyre 2mm Smaller	0.995
With Front Tyre 3mm Smaller	0.978

Variation 3

$$\frac{47 + 16}{22 + 24} \times \frac{19}{23} = \text{Overdrive } \mathbf{1.13}$$

With Front Tyre 2mm smaller	1.09
With Front Tyre 3mm smaller	1.07
With Front Tyre 4mm smaller	1.06

Courtesy – Walt Bailey / Elite RC Racing