

V1.2

Rotor Redesign — First Working Rotation

PURPOSE

- Rotor redesign
 - Testing new rotor geometry
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HOUSING

Print Quality: 7/10

Overall Width: 64mm

Overall Height: 48.7mm

Generating Radius R: 28mm

Eccentricity e: 4mm

K Ratio: 7 — RX-7 Proportion

Issues: Still fragile

Rating: 7/10

ROTOR

Print Quality: 6/10

Apex Radius: 28mm — center to tip

Apex-to-Apex Chord: 48.5mm

Apex Spacing: 120 degrees — 3 apices

Issues: Stringing on internal hole and gaps on apex

Rating: 7/10

MOTION TEST

Rotor Rotates: Yes

Full Orbit: Yes

Smoothness: 7/10

LESSONS LEARNED

- Rotor needs to be mathematically formulated from the housing

— Rotor does not stay lined up without gears

CHANGES FOR NEXT VERSION

— Add gears and eccentric shaft to keep rotor stable
