

Tomark SD-4 Viper Attack Model Guide

The Tomark SD-4 Viper Attack is a single-engine piston light aircraft from Tomark of Prešov, Slovakia. The source flight manuals cover the Viper SD-4 RTC, approved under CS-LSA (EASA.A.606). It has a 100 hp Rotax 912-series engine, a three-blade ground-adjustable Neuform propeller and a 600 kg maximum takeoff weight. It is built for sporting and recreational flying, day VFR only.

KEY TAKEAWAYS

- Maximum takeoff weight is 600 kg. Baggage is capped at 15 kg total (7.5 kg per compartment), and minimum crew weight is 55 kg.
- Day VFR only: no IMC, icing, aerobatics or intentional spins. Never-exceed speed is 126 KIAS.
- Rotax 912 S/ULS-series engine, 100 hp takeoff power, 90 litres usable fuel. Approved fuels include MOGAS (min. RON 95) and AVGAS 100 LL.
- The two manual revisions give different maximum empty weights (410 kg and 405 kg). Check which revision matches the aircraft.

ENGINE, FUEL AND OIL

One BRP-Powertrain Rotax 912 S/ULS (later manual: 912 S2/ULS2): four cylinders, geared 2.43:1, 100 hp (73.5 kW) takeoff power and 90 hp maximum continuous. Engine speed above 5 500 RPM is limited to 5 minutes. Total fuel is 100 litres, 90 usable. Oil is 3.5 litres total, and AeroShell Sport Plus 4 is recommended.

WEIGHTS AND LOADING

Maximum takeoff and landing weight are both 600 kg. Typical empty weight is 369 kg in the earlier manual (maximum 410 kg) and 378.6 kg in the later one (maximum 405 kg). Each baggage compartment holds 7.5 kg and has a volume of 40 dm3. The CG range is 24 to 32 %MAC. Wing loading is 57.4 kg/m2.

WHAT TO CHECK BEFORE BUYING

Confirm the AFM revision and serial number match the aircraft. The later manual's cover shows S/N 30790, but its applicability page names S/N 29019. Check that the exhaust silencer, landing light and dual trim changes are documented. Confirm the ballistic parachute, Dynon SkyView avionics, transponder and ELT are installed and working. The registry also lists a Night-VFR variant, so confirm which variant you are buying.

SPECIFICATIONS

Engine Power Hp	100
Max Continuous Power Hp	90
Fuel Capacity Total Litres	100
Fuel Usable Litres	90
Oil Capacity Litres	3.5
Propeller Diameter M	1.65
Wing Loading Kg M2	57.4
Baggage Volume Dm3	40

PERFORMANCE

Max Crosswind Kts	15
Max Tailwind Kts	5
Max Positive G	4
Max Negative G	-2

V-SPEEDS

Vne Kts	126
Vc Kts	102
Va Kts	88
Vfe Kts	79
Vs Clean Kts	49
Stall Flaps Ii Kts	43

WEIGHT & BALANCE

Max Takeoff Weight Kg	600
Max Landing Weight Kg	600
Max Baggage Weight Kg	15
Min Crew Weight Kg	55
Cg Forward Pct Mac	24
Cg Aft Pct Mac	32

SAFETY NOTES

- Flap position III (40 deg) is for emergency and precautionary short-field landings only. Full trimmability is not possible at that setting.
- Starter use is limited to 10 seconds, followed by at least 2 minutes of cooling. Outside air temperature limits are +40 °C maximum and -15 °C minimum (at ground).
- Crosswind is demonstrated to 15 kts and tailwind to 5 kts for takeoff and landing. The ballistic parachute is rated for use up to 170 kts.