

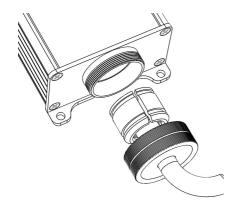


Features

- Simple replacement for M601 OEM ignition units
- Fully solid-state solution no points or discharge gaps
- No checking or adjustment of internals every 300 hours
- 50% larger capacitor provides more energy per spark
- Five sparks per second at typical operating voltages
- · About four times more efficient than OEM units
- Protection against reverse polarity connection

Easy Replacement

The TEX-1 is an aftermarket replacement of the OEM LUN 2201.03-8 ignition exciter units that Walter M601 engines originally came out with. The TEX-1 lets you use your existing ignition lead (connecting cable) and your spark plug (the original N25F-3 or alternative Champion CH34630 igniter). Though, instead of screwing into the LUN 2201.03-08, it now screws directly into the TEX-1.

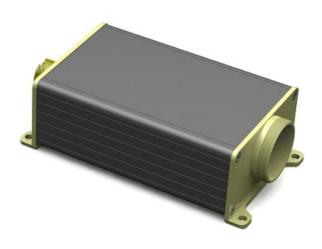


New Design

The TEX-1, similar to the OEM unit, repeatedly charges an internal capacitor to 2.2 ± 0.1 KV before discharging this energy via the ignition lead to the spark plug (igniter).

However, instead of employing a mechanical contact breaker (points), an iron-core high-voltage transformer, and a glass bulb discharge gap for the task, the TEX-1 uses the latest semiconductor switchgear and a ferrite-core high-voltage transformer.

This design offers a fully solid-state solution that is more reliable and efficient than the OEM version but also more lightweight and compact.



Less Maintenance

Whereas the OEM unit requires regular inspection and adjustment of its contact breaker (points) and glass bulb discharge gap every 300 hours, the TEX-1 has no such or similar requirement. Further, you don't need access to the special equipment and expertise required to perform the inspection and adjustment of these components.

More Spark

The TEX-1 employs a 0.75 uF capacitor, whereas the OEM unit uses a 0.5 uF one. Since both get charged to the same nominal 2.2 ± 0.1 KV before discharge, this allows for 50% more Joules of spark at the igniter.

Stable Spark Rate

At typical input voltages (above 20 volts), the TEX-1 provides a stable spark rate not exceeding 5 sparks per second. Below 20 volts the rate stays consistent but drops steadily as input voltage is reduced. At 10 volts the TEX-1 produces its minimum spark rate of 2 to 3 per second.

Improved Efficiency

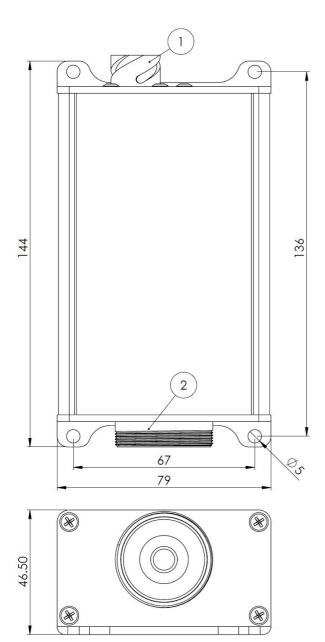
The TEX-1 is typically four times more efficient at generating sparks than the OEM unit. It draws four times less current than the OEM unit at the same input voltage throughout the operational range.



General Specifications

1	Absolute Maximum Input Voltage	± 40 VDC
2	Operational Voltage Range	10 30 VDC
3	Operating Temperature Range	-50 +105 °C
4	Maximum Operational Altitude	55,000 feet
5	Typical Power Consumption	15 Watt
6	Typical Spark Rate	5 per second
7	Typical Weight	460 grams

Unit Dimensions



1. The TEX-1 uses a MIL spec circular connector with bayonet coupling. The part numbers of the connector and cable clamp that plugs into the TEX-1 are listed below. We can supply these parts or you can buy them yourself from online part stores such as mouser or digikey.

	PART NUMBER
CONNECTOR	97B-3106A10SL-4S
CABLE CLAMP	97-3057-1004-1

PIN OUT		
PIN A	POSITIVE (POWER)	
PIN B	NEGATIVE (GROUND)	

- 2. The TEX-1 mates to the same connector used by the LUN 2201.03-08 ignition source.
- 3. Mounting the TEX-1 is done via four 5mm holes in the unit as depicted. AN-3 bolts can be used to fix the unit to the proper engine bracket.

July 2023 Revision C. Visit <u>www.vravionics.com</u>