

# Water/ Methanol Injection Kit Stage 1+ NA

innovations





### Benefits

- Reduces intake manifold air temperature.
- Prevents piston damage by lowering exhaust gas temperatures (EGT).
- Increases effective octane rating, reducing engine knock.
- Improves dynamic compression.
- Enhances combustion efficiency.
- Reduces harmful emissions: CO, CO<sub>2</sub>, NOx, and HC.

#### Features

- LED indicator activates when the pump starts; activation level is adjustable.
- Latest-generation digital electronic controller.
- Electronically controlled high-pressure diaphragm pump.
- All components manufactured from methanol-resistant materials.
- Simple installation with plug-and-play style connectors.
- Optional low-pressure transfer pump available.
- Optional horizontal float switch for added safety.

# Stage 1+ NA Kit (Naturally Aspirated Gasoline Engines with WOT Switch)

- Operation: Injection begins at wide-open throttle (WOT) and delivers a fixed amount of fluid through the injector-style nozzle until the switch disengages.
- The new integrated solenoid valve and nozzle assembly provide 100% safety for installations with:
  - Rear-mounted reservoirs,
  - o Injection points under vacuum, or
  - o Installations where the nozzle is positioned lower than the reservoir.
- The solenoid is mounted between the pump and injection point, preventing unwanted fluid flow when not in use.
- Fast-reacting solenoid design ensures injector-style precision.
- All metal components are corrosion-resistant: nickel-plated brass, brass, and EPDM-grade plastic.

#### Warranty

All products are covered by a 2-year warranty against manufacturing defects from the date of delivery.

## **†** Electrical Connections

Color	Function	Section (mm²)	Length
Yellow	+12V Battery	0.75	1 m
Pink	+12V Ignition Switch	0.25	1 m
Black	Ground (0V)	0.75	1 m
Blue	Pump (+) RED	0.50	4.5 m
Brown	Pump (-) BLACK	0.50	4.5 m
Red	Solenoid +	0.34	2.5 m
Black	Solenoid -	0.34	2.5 m
Green	WOT Switch	0.25	1 m
Purple	WOT Switch	0.25	1 m
Red	LED +	0.25	1 m
White	LED -	0.25	1 m

## Box Contents

- 1. High-Pressure Diaphragm Pump
- 2. 2 × Pump Fittings
- 3. Nozzle
- 4. Nozzle Mounting Bung
- 5. 40-Micron Stainless Steel Filter
- 6. Filter Nut
- 7. Solenoid Valve
- 8. 1/8" NPT → ¼" Compression Female Fitting
- 9. 1/8" NPT → 1/4" Compression Fitting
- 10. 1/8" Nut
- 11. Plastic Tank
- 12. Tank Cap
- 13. 20 ft (6 m) 1/4" OD Injection Hose
- 14. Wide Open Throttle Switch
- 15. Controller with Wiring Loom
- 16. 2 × fully insulated female cable connectors
- 17. 2 × Fully Insulated Butt Cable Connectors
- 18. Fully Insulated Ground Cable Connector
- 19. LED Holder
- 20. 5 × Zip Ties
- 21. 3 × Screws & Washers for Tank
- 22. 4 × Screws & Washers for Pump
- 23. 3D Sticker
- 24. Product Stickers
- 25. Installation Manual

# Installation Requirements

- Flathead screwdriver
- Side cutters
- Wrenches

#### Installation Guide

- Route the water/methanol hose to the engine bay, avoiding sharp edges and hot surfaces.
- Without a transfer pump → mount the injection pump below the tank (in luggage compartment).
- With a transfer pump → pump may be mounted in the engine bay.
- Weld the nozzle bung onto the intake pipe at a 90° angle, minimum 10 cm before the throttle body.
- Mount the ON/OFF switch and LED indicator inside the cabin, easily accessible to the driver.

# Nozzle Sizing Guide

- 100% Water: 10–15% Water/Fuel ratio → 0.5–1 cc per HP
- 50/50 Water-Methanol: 15–20% ratio → 1–1.5 cc per HP
- 100% Methanol: 20–25% Methanol/Fuel ratio → 1.5–2 cc per HP

## 📌 Example:

- 400 HP engine using only water → ~200 cc/min nozzle.
- 400 HP engine using 50/50 mix  $\rightarrow$  ~400 cc/min nozzle.

(If unspecified, kit includes a 252 ml/min (4GPH) nozzle by default.)

## Operation & Settings

- When the pump activates, the cockpit LED glows red.
- To disable the system, turn off the ON/OFF switch.

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