X-10 Solenoids ______ May 2010





! PLEASE READ THIS BEFORE FITTING YOUR X-10 PULSOIDS!

Thankyou for choosing the X-10 Billet Alloy Pulsoids, the only Nitrous solenoids designed specifically for pulsing.

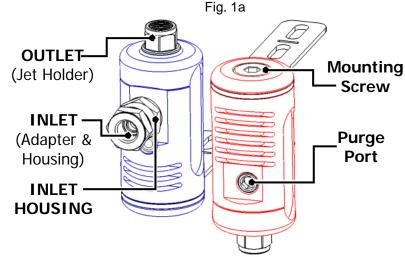
SPECIFICATIONS

Voltage: 12 - 24VDC

N2O Max Operating Pressure: 1050Psi N2O Max Handling Pressure: 1500Psi Fuel Max Operating Pressure: 100Psi Fuel Max Handling Pressure: 200Psi

Typical Parts Supplied:

- X-10 Billet Pulsoid(s)
- X-10 Mounting Bracket(s)
- X-10 Alloy End Cap(s)
- Countersunk Cap Screw(s)
- Bulkhead Mounting Stud(s)
- Stud Nut(s)
- M8 Washer(s)



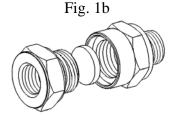
** The X-10 is available in a number of different configurations based on nitrous flow, fuel flow and their corresponding connections; as such the connections may vary to that shown.

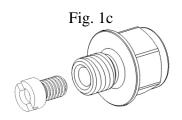
Inlet/Outlet (Jetting)

The inlet for the X-10 is situated in the side of the Pulsoid body and typically consists of an inlet adapter and inlet housing (on high flow applications this may not be present). On the X-10 nitrous Pulsoid a filter is fitted between these two fittings in the base of the inlet housing. See Fig. 1b

The outlet adapter of the X-10 is situated on the top of the Pulsoid and is also the typical location for the metering jets of the system. Note the metering jet is in the adapter and <u>NOT</u> the Pulsoid. See Fig. 1c.

WARNING: The internal factory adjustment screw is accessible when removing the outlet adapter. Beware that modification of this setting can seriously affect and possibly damage the internals of the X-10. Adjustment from the factory setting will void the warranty of the Pulsoid.





X-10 Mounting

The X-10 can be mounted in any orientation without affecting operation of the Pulsoid. Placement should be within 12" of the injector or distribution block and kept away from excessive heat sources.

There are two mounting methods provided for the X-10 both allowing 360° mounting. The mounting bracket provided should allow fitment to most vehicles using current bolts already on the vehicle. For bulkhead fitment or custom brackets a mounting stud is provided.

Tips:

- When mounting using the brackets it is advised to use two mounting points on each to avoid movement under vibration. If using a single mounting point suitable anti-vibration methods may be required.
- When using the mounting stud ensure that it is fully threaded to the bottom of the black retainer.
- It is advisable to use a retaining compound on all bolts and nuts including the mounting stud or countersunk bolt into the retainer to prevent loosening from vibration.
- DO NOT USE ANY OTHER MOUNTING STUD OR BOLT OTHER THAN THAT PROVIDED. (See: Important Notes)

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! Important Notes!

The X-10 design uses the steel mounting stud/countersunk bolt as part of the magnetic circuit for the internal coil. It is <u>Not</u> advisable to use the X-10 without either of these fasteners as the magnetic strength of the Pulsoid will be affected and loss of performance will result. The minimum requirement for operation is an M8 x 8mm steel stud, however for non standard applications please be aware that the following restrictions apply:-

- Do not use bolts in the mounting thread. Bolts cannot be assured to reach the bottom when fitted.
- <u>Do not</u> use stainless steel, brass or aluminium bolts or studs in the mounting thread. None of these materials
 are magnetic and will reduce the operational ability including pulsing, **Steel only**.
- Alternative **steel** mounting studs are acceptable providing they are threaded fully into the black retainer.

Purge Port

The purge port is provided for high flow applications where large bore hoses are used and purging is necessary. The purge port provided uses an 1/8th BSP connection providing flexible use for virtually any connection from compression fittings to braided hose. If the port is not required, a blank (if not already fitted) has to be installed. <u>DO NOT</u> pressurise the system without a blank installed.

Note: This port can also be used as a connection for pressure sensors in both fuel and nitrous. Please consult your local WON dealer for more information.

Flow

Each X-10 is supplied with a model number, this number does <u>NOT</u> relate directly to the flow rate. For detailed information on flow plus more information on all our products please refer to our technical sheets and installation manuals at <u>www.noswizard.com/installation-manuals.php</u> or contact your local authorised agent for more information.

Maintenance

The X-10's are designed so that minimal maintenance if any is required for the life of the pusloid. In order to keep your X-10's operating at optimum please consider the following tips:

- · Regularly check the Nitrous filter (If fitted) and replace if clogged.
- If the X-10 fuel Pulsoid is used in-frequently disconnect it from the pressurised system and drain. (This is especially important if used with race fuels and additives). (**)
- Regularly check that no debris has entered the fuel Pulsoid. (*)
- If using race fuels and additives, regularly check that the fuel Pulsoid still seals and opens when activated. To
 confirm the integrity of the internals have not been affected a simple un-jetted flow test can be done (See
 your local agent for more information). (*)(**)
- *. DO NOT ATTEMPT TO DISMANTLE. If a service is definitely required consult a local agent for more information on your local service representative. (Also see Warranty detail).
- **. The internal sealing materials used in the X-10 fuel Pulsoids are designed for use with current pump fuel at the time of release of the X-10. With the constant inclusion of new additives and the number of possible race additives this material cannot be guaranteed to be stable for prolonged use. Please follow the tips above if concerned. (Also see Warranty detail).

X-10 Limited Lifetime Warranty

All X-10 Pulsoids are covered by a limited lifetime warranty against any defects or failures not included under warranty limitations.

Limitations...

- Damage caused by modification, tampering or disassembly of the original product outside of an authorised representative.
- Any internal failures caused due to foreign bodies are not covered.
- Warranty does not cover damage from unrelated external influences such as incorrect wiring, failure of other electrical components, fire or abuse etc.
- The X-10 fuel plunger has limited warranty excluding cover from chemical damage due to the constant change in chemical composition
 of fuels and ability to use additives.
- Damage resulting from use outside of normal operation conditions, i.e. Nitrous pressure applied to a fuel solenoid.
- . This warranty is valid for the original purchaser only, Proof of purchase will be required for any warranty claim.