

# Multi-Input Water/Methanol Injection Harness 30-3324

#### **WARNING:**



Improper installation and/or adjustment of this product can result in major engine/vehicle damage! Use of this injection system requires proper tuning! Use this system with <a href="EXTREME">EXTREME</a> caution! If you are uncomfortable with anything about this, please refer the installation to an AEM trained tuning shop or call 800-423-0046 for technical assistance. You should also visit the AEM Performance Electronics Forum at <a href="http://www.aemelectronics.com">http://www.aemelectronics.com</a>

NOTE: AEM holds no responsibility for any engine damage that results from the misuse of this product!

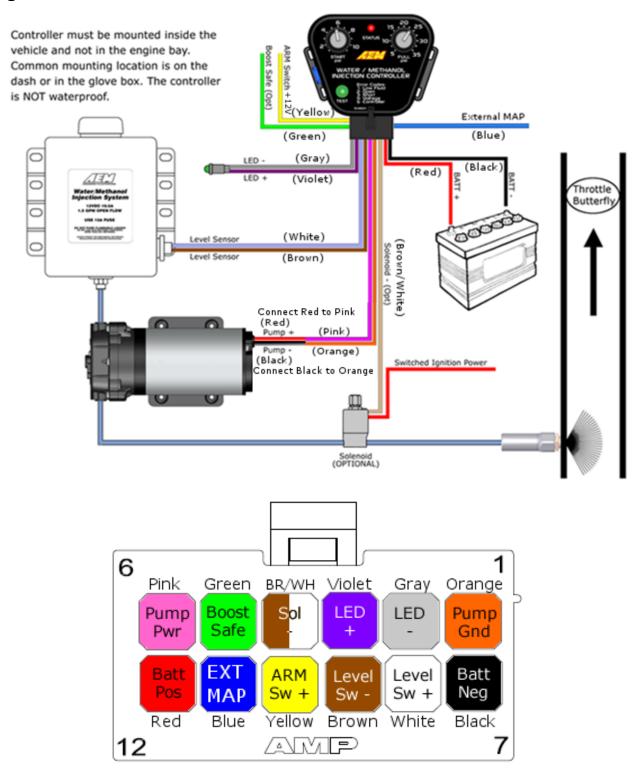
This product is legal in California for racing vehicles only and should never be used upon a highway. This product is legal solely for vehicles used in competition which may never be used upon a public road or highway.

#### ADVANCED ENGINE MANAGEMENT INC.

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# Installation

## Diagram



NOTE: THIS KIT INCLUDES NEW STYLE INJECTOR NOZZLES THAT HAVE INTERNAL CHECK VALVES. AN EXTERNAL CHECK IS NO LONGER NEEDED OR INCLUDED IN THIS KIT.

## Pin Installation

| Pin# | Description       | Wire**    | Color       | Connection  |
|------|-------------------|-----------|-------------|---|
| 1    | Pump Ground       | 16<br>AWG | Orange      | Connect to ground (black) wire of pump.                               |
| 2    | LED -             | 20<br>AWG | Gray        | Connect to ground (black) wire of external LED.                       |
| 3    | LED +             | 20<br>AWG | Violet      | Connect to positive (red) wire of external LED.                       |
| 4    | Solenoid -        | 20<br>AWG | Brown/White | 1.5A Low Side output. Connect to optional flow control solenoid.      |
| 5    | Boost Safe LS Out | 18<br>AWG | Green       | 1.7A Low Side output. Grounded when error condition exists.           |
| 6    | Pump Power        | 16<br>AWG | Pink        | Connect to the positive (red) wire of pump.                           |
| 7    | Ground            | 16<br>AWG | Black       | Main ground connection, connect directly to battery ground.           |
| 8    | Level Switch+     | 20<br>AWG | White       | Connect to the white wire of the fluid tank level sensor*             |
| 9    | Level Switch-     | 20<br>AWG | Brown       | Connect to the black wire of the fluid tank level sensor*             |
| 10   | Arm Switch +      | 20<br>AWG | Yellow      | Arms injection system. Connect to a switched 12V source.              |
| 11   | External Signal   | 18<br>AWG | Blue        | Connect to External Signal. (0-5V, injector duty, MAF frequency)      |
| 12   | Power 12V         | 16<br>AWG | Red         | Main Power Connection, connect directly to positive battery terminal. |

<sup>\*</sup>Note: If fluid tank is equipped with previous generation level sensor, identified by having two black wires, then pins 8 (white) and 9 (brown) may be connected to either of the two black sensor wires. The polarity is unimportant.

<sup>\*\*</sup>Note: If you need to extend the wires to mount the controller use at least 16 AWG wire for the pump *and* controller ground circuits and 18 AWG for the remainder.

# **Optional System Upgrades**

### Water/Methanol Injection FAILSAFE Device AEM P/N 30-3020/30-3020M



Actively monitors the entire flow curve independent of pressure, continuously collecting flow vs. injection rate data so that any deviation from your established flow curve will trigger an alarm output that can be used to reduce boost or timing, change maps, add fuel, trigger a two-step or perform practically any action you choose to save your engine. It is PC programmable (with USB connectivity) which eliminates the guesswork when setting min/max threshold parameters. **HIGHLY RECOMMENDED** for all water/methanol injection systems

### Water/Methanol Injection Flow Gauge – AEM P/N 30-5141/30-5142



Displays flow rate data on a smooth moving needle-type gauge that allows you to accurately monitor the status of your injection system in real time. Available in max flow rates of 500 cc/min or 1000 cc/min with a black or white face. The AEM water/methanol injection filter is **HIGHLY RECOMMENDED** when using this flow gauge.

## Water/Methanol Injection Filter – AEM P/N 30-3003



Inline filter that uses a micronic mesh screen to filter out particles as small as 40 microns. Allows a cleaner flow of water/methanol into the injection pump, lines, and nozzles increasing overall system longevity. Injection filter is **HIGHLY RECOMMENDED** when using the AEM water/methanol injection flow gauge.

#### Additional Nozzle Kit – AEM P/N 30-3012



Includes one nozzle body, two jet sizes, and the necessary hardware to run a second nozzle in your injection system.



#### 5 Gallon Tank - AEM P/N 30-3010



Upgrade to a 5 gallon tank to maximize your fluid holding capacity. Includes level sensor and mounting hardware.

## **AEM Electronics warranty**

Advanced Engine Management Inc. warrants to the consumer that all AEM High Performance products will be free from defects in material and workmanship for a period of twelve (12) months from date of the original purchase. Products that fail within this 12-month warranty period will be repaired or replaced at AEM's option, when determined by AEM that the product failed due to defects in material or workmanship. This warranty is limited to the repair or replacement of the AEM part. In no event shall this warranty exceed the original purchase price of the AEM part nor shall AEM be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product. Warranty claims to AEM must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is non-transferable. All implied warranties shall be limited in duration to the said 12-month warranty period. Improper use or installation, accident, abuse, unauthorized repairs or alterations voids this warranty. AEM disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by AEM. Warranty returns will only be accepted by AEM when accompanied by a valid Return Merchandise Authorization (RMA) number. Product must be received by AEM within 30 days of the date the RMA is issued.

Please note that before AEM can issue an RMA for any electronic product, it is first necessary for the installer or end user to contact the EMS tech line at 1-800-423-0046 to discuss the problem. Most issues can be resolved over the phone. Under no circumstances should a system be returned or a RMA requested before the above process transpires.

AEM will not be responsible for electronic products that are installed incorrectly, installed in a non-approved application, misused, or tampered with.

Any AEM electronics product can be returned for repair if it is out of the warranty period. There is a minimum charge of \$50.00 for inspection and diagnosis of AEM electronic parts. Parts used in the repair of AEM electronic components will be extra. AEM will provide an estimate of repairs and receive written or electronic authorization before repairs are made to the product.