



# GM Throttle Body Adapter Harness User Manual 30-3809-01

**THIS PRODUCT IS LEGAL IN CALIFORNIA FOR RACING VEHICLES ONLY  
AND SHOULD NEVER BE USED ON PUBLIC HIGHWAYS.**

**WARNING:**



**WARNING:**  
This installation is not for the tuning novice! Use this system with **EXTREME** caution! If you are not well versed in engine dynamics and the tuning of engine management systems **DO NOT** attempt the installation. Refer the installation to an AEM trained tuning shop. A list of AEM trained tuning shops is available at [www.aemelectronics.com/dealer\\_locator.php](http://www.aemelectronics.com/dealer_locator.php) or by calling 800-423-0046.

**NOTE:** All supplied AEM calibrations, Wizards and other tuning information are offered as potential starting points only. **IT IS THE RESPONSIBILITY OF THE ENGINE TUNER TO ULTIMATELY CONFIRM THE CALIBRATION IS SAFE FOR ITS INTENDED USE.** AEM holds no responsibility for any engine damage that results from the misuse or mistuning of this product!

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## Introduction

Some harness user manuals contain active hyperlinks that point to specific sections or even launch additional documents such as wiring diagrams. Recommend viewing this document electronically to take advantage of all features.

Several universal wiring harness options are available for Infinity products. They range in complexity from simple plug and pin kits to complete engine harness assemblies that include power distribution centers. Custom wiring harness projects should only be undertaken by experienced harness builders. If in doubt, please contact AEM for recommendations.

### **30-3805 Universal V8 harness system for Infinity-8/10 systems**

The Infinity Universal V8 Harness system consists of a universal core harness and optional application specific extensions. It was designed with flexibility in mind. The harness system includes many features and it can be used in many different applications.

### **30-3809 Universal V8 harness system for Infinity-6/8h systems**

The Infinity Universal V8 Harness system consists of a universal core harness and optional application specific extensions. It was designed with flexibility in mind. It includes throttle body and pedal interfaces for DBW applications. The harness system includes many features and it can be used in many different applications.

### **30-3705 Universal Mini Harness for Infinity-6/8h systems**

This harness is intended to be used as a starting point by experienced harness builders. It saves time by including basic power distribution features that can be expanded to suit many application requirements. It allows the harness builder to populate the ECU connector with only the features needed by the application.

### **30-3702 Infinity-8/10/12 Mini-harness**

This harness is intended to be used as a starting point by experienced harness builders. It saves time by including basic power distribution features that can be expanded to suit many application requirements. It allows the harness builder to populate the ECU connector with only the features needed by the application. Includes 100 96" pre-terminated leads.

### **30-3703 Infinity-8/10/12 Mini-harness**

This harness is intended to be used as a starting point by experienced harness builders. It saves time by including basic power distribution features that can be expanded to suit many application requirements. It allows the harness builder to populate the ECU connector with only the features needed by the application.

### **30-3701 Infinity-8/10/12 Plug & Pin Kit**

Bare necessities to begin a custom wire harness design. Includes 73 and 56 pin Molex MX123 harness connectors, terminals and sealing plugs, main relay and relay socket.

### **30-3704 Infinity-6/8h Plug & Pin Kit**

Bare necessities to begin a custom wire harness design. Includes 80 pin Molex MX123 harness connector, terminals and sealing plugs, main relay and relay socket.

This manual is focused primarily on the universal V8 harness system components but it can be used as a reference for any custom harness build based on the Infinity ECU.

***Please read the entire User Manual prior to beginning any installation.***

## Optional Extension Harnesses for Modular Harness System

Extension harnesses compatible with the 3805 and 3809 V8 harness system are available.

### **30-3805-00 GM Injector Adapter Harness**

Adapter harness that mates EV1 style injectors in standard GM cylinder order (odd cylinders on one bank, even cylinders on other) to Core Harnesses.

### **30-3805-01 Ford Injector Adapter Harness**

Adapter harness that mates EV1 style injectors in standard Ford cylinder order (cylinders 1-4 on one bank, cylinders 5-8 on other) to Core Harnesses.

### **30-3805-02 Single Channel Ignition Adapter Harness**

Adapter harness that mates AEM Single Channel Coil Driver (30-2841) to 30-3805 Core Harness. Coil driver takes 5v falling edge ignition trigger signal from Infinity and outputs a 12v rising edge signal. 12v rising edge signal can either be used to trigger an inductive coil directly or trigger a single channel CDI box (MSD 6A, etc).

### **30-3805-03 VR Crank & VR Cam Adapter Harness**

Adapter harness that mates variable reluctance (VR) crank and cam sensors to Core Harnesses. Legs to each sensor are 48" long.

### **30-3805-04 VR Crank & Hall Cam Adapter Harness**

Adapter harness that mates variable reluctance (VR) crank sensor and Hall Effect cam sensor to Core Harnesses. Legs to each sensor are 48" long.

### **30-3805-05 Hall Crank & VR Cam Adapter Harness**

Adapter harness that mates Hall Effect crank sensor and variable reluctance (VR) cam sensor to Core Harnesses. Legs to each sensor are 48" long.

### **30-3805-06 Hall Crank & Hall Cam Adapter Harness**

Adapter harness that mates Hall Effect crank and cam sensors to Core Harnesses. Legs to each sensor are 48" long.

### **30-3805-07 GM Stepper Idle Control Adapter Harness**

Adapter harness that mates GM stepper idle control valve to Core Harnesses. IAC connector is flat and meant for use with later model style control valves.

### **30-3805-08 Universal PWM Idle Control Adapter Harness (For use with 30-3805 only. Not compatible with 30-3809 Core Harness)**

Flying lead to mate universal PWM idle control valve to 3805 core harnesses. Connector to connect to control valve must be provided by end user.

### **30-3805-10 GM Injector Adapter - EV6**

Adapter harness that mates EV6 style injectors in standard GM cylinder order (odd cylinders on one bank, even cylinders on other) to Core Harnesses.

### **30-3805-11 Ford Injector Adapter - EV6**

Adapter harness that mates EV6 style injectors in standard Ford cylinder order (cylinders 1-4 on one bank, cylinders 5-8 on other) to Core Harnesses.

### **30-3809-01 GM Throttle Body Adapter (For use with 30-3809 only. Not compatible with 30-3805 Core Harness)**

For DBW use only. Adapter harness that mates GM DBW throttle body PNs 12570790, 12580760 (or

equivalent) to 3809 core harness.

**30-3809-00 GM Pedal Adapter (For use with 30-3809 only. Not compatible with 30-3805 Core Harness)**

For DBW use only. Adapter harness that mates GM DBW Pedal PN 10379038 (or equivalent) to 3809 core harness.

**30-3600 O2 Sensor Extension Harness**

Extension harness to connect AEM UEGO Wideband O2 sensor to 6 pin Deutsch DTM in Infinity Mini Harnesses (30-3702/3703) and V8 core harnesses 30-3805 and 30-3809.

**30-3601 IP67 Comms Cable**

USB Mini-B comms cable; 39" long with right angled connector and bayonet style lock.

**30-3602 IP67 Logging Cable**

USB A-to-A extension cable: 39" long with right angled connector and bayonet style lock.

## 3809-01 Kit Contents

- GM Throttle Body Adapter Harness
- User Instructions



## 3809-01 GM Throttle Body Adapter Pinout

Branch labels are identified by BOLD TEXT in this column

### 36-3809-01 GM TB Adapter

C1				DTM Plug 8 Way
Pin	Wire Color	Gauge	Destination	
			1	
1	DK BLU	20	C2-D	
2	GRY	20	C2-E	
3	BLK/WHT	20	C2-C	
4	RED/GRN	20	C2-F	
5				
6	BRN	20	C2-A	
7	YEL	20	C2-B	
8				

C2				6-Way F GT 150 Series, Sealed (BK)
Pin	Wire Color	Gauge	Destination	Throttle Body - mates to GM PNs 12570790, 12580760, or equivalent
			1	
A	BRN	20	C1-6	
B	YEL	20	C1-7	
C	BLK/WHT	20	C1-3	
D	DK BLU	20	C1-1	
E	GRY	20	C1-2	
F	RED/GRN	20	C1-4	

## 12 Month Limited 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.