



**Accel Single/Dual Fire Ignition Module.** Fits all carbureted 1970-2000(except TC-88) and all 1971-up Sportster models, works in both single or dual fire applications and features 14 tuneable advance curves from stock to full performance, adjustable rev limiter, VOES input, tachometer output and front cylinder static time LED. Requires sensor cup for installation.

- VT No. Item**  
**32-0091** Accel S/D Fire Ignition Module  
**32-9087** Sensor Cup



32-8075



**Crane Cams Hi-Intensity Ignition System** converts early, points type 1970-79 BT to electronic ignition. On 1980 and later models it will replace stock electronic ignition, external module and rev limiter. Kit includes Hi module stand off screws and hardware. Order VT No. 32-7510 advance weight unit separately.

- VT No. Item**  
**32-8075** Single module/dual fire/single coil for a dual fire ignition system that replaces the stock point and condenser type ignition. Can be used with stock coil.  
**32-9291** Rotor for Above  
**32-8076** Dual module/Single Fire/ Single or Dual Coil when being used as single fire/single plug requires VT No. 32-9224 coil. When used as dual plug applications VT No. 32-9225 coil must be used.  
**32-9292** Rotor for above  
**32-7510** Advance Unit  
**32-9255** Tach Adapter for Above

# Ignition

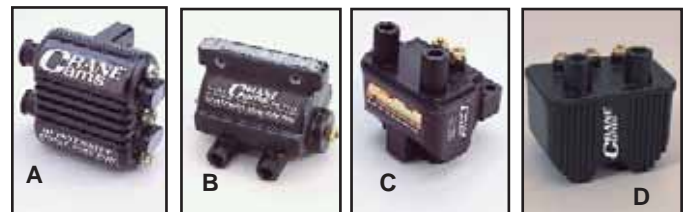


**Crane Hi-4** fits all 1970-98 carbureted models and requires sensor cup for 1982 and earlier applications. Order tach interface, sensor cup and screw separately if required. **Note: Order Coils Listed Below**

- VT No. Crane# Fits**  
**32-9217** 8-1100 Dual Fire Ignition fits Evo, Shovel and Sportster through 1997. It can be set for Street or Race-Electric start or Kick Start includes 4000 to 8000 adjustable RPM limiter. Includes adjustment for rate of advance. This unit is compatible with stock dual fire coils  
**32-9218** 8-2100 Single Fire Ignition fits Evo, Shovel and Sportster through 1997. It can be set for Street or Race-Electric or Kick Start includes rear cylinder timing adjustment for rate of advance. Compatible with single fire coils.  
**32-4100** 8-4100 Single Fire Ignition Kit fits As Above Includes coil and 8.5mm wires.  
**32-0588** 8.5 mm Wire Set  
**32-9255** Tach Adapter Interface  
**32-0559** Sensor Cup and Screw Set  
**32-9087** Sensor Cup, replaces 32402-83  
**32-9052** Cup Screw, replaces 2611C

**Note:** When using HI-4 Single Fire Ignition with "Dual Plug Cylinder Heads", two dual fire coils must be used (Crane Cams #8-3002 or 8-3006). Both the spark plug wires from one coil will go to the front cylinder, while both plug wire from the other coil will go to the rear cylinder.

**Single Fire:** Just the spark plug for the piston that is in its compression stroke will be fired. The other piston, being in its overlap position will not be ignited.  
**Dual Fire:** Both spark plugs are fired simultaneously at the time only one piston is in its compression stroke.  
 This is the way the stock motor works.  
**Single Plug:** One spark plug in each head. Total of 2 spark plugs in one engine.  
**Dual Plug:** Two spark plugs in each head. Total of 4 spark plugs in one engine.



**Crane Coils** are available in high intensity for single or dual fire, mounts to stock brackets.

- VT No. Crane No. # Type**  
**32-9224** 8-3001 A Single Fire  
**32-9241** 8-3005 D Single Fire  
**32-9225** 8-3002 B Dual Fire  
**32-3006** 8-3006 C Dual Fire



# Ignition

**CRANE Cams**



32-0806



32-4102

### Crane HI-4E Ignition Modules/Module-Coil Kits.

- Improved, Adjustable Spark Curve Produces Strong Torque/Power Increases!
- Multi-Spark Technology Delivers Cleaner Low-End, Idling, Crisper Throttle Response.
- Easy Plug-In Installation. No Harness Replacement required on 1991-up Bikes. (1980-94 requires VT No. 32-9014 (OEM 32408-90) Harness Kit)
- Selectable Single-Fire or Dual Fire.
- Adjustable Rev-Limit, 500 to 9,900 RPM in 100 RPM increments!
- Accurate, Easy Rear Cylinder Timing Offset.
- Billet Aluminum, External Mounted.
- Kits include module, coil and spark plug wires.

VT No.	Item	Description
32-0806	Module only	1980-94 with 7 Pin connector.
Note: 1980-90 requires harness kit VT No. 32-9014		
32-4101	Kit	As Above
32-0807	Module only	1995-up with 8 Pin Connector
32-4102	Kit	As Above



32-0733



32-0741



32-0672



32-0673



### Crane HI4TC Ignition for TC88 Carbureted Engine Models

offers multi-spark performance, variable advance curves and a digital rev limiter. It is a plug in replacement of the stock module and is compatible with the factory security system. A crankshaft position sensor is employed to establish accurate firing. Rear cylinder timing can be offset from -5° to +4°; the same for initial timing. Both are easily adjusted by means of rotary switch on the unit. An additional rotary switch is used to select the advance curve, with choice of ten families. This enables the ignition to optimize the performance potential of the Twin-Cam 88® in any stage, from stock to wildly modified. Rotary switches also control the built-in Sequential Rev Limiter, which is adjustable from 1,500 to 9,900 RPM, and won't cause "popping and banging" like conventional rev limiters.

Benefits of multiple spark system include easier starting (hot or cold), better low-speed driveability and off-idle response. It pulses up to nine sparks per cycle at idle and three sparks up to 6,000 RPM, which also stops spark plug fouling and lean-surge.

VT No.	Year
32-3160	1999-03
32-3180	2004-up



**Sensor Cup Kit** includes special screws to fit all "Sensor" type ignition kits.

VT No. 32-0559



**Controller by Comp Cams** is a programmable performance ignition computer featuring:

- High Energy output with accurate spark timing.
- Uses stock rotor and pickup in both single and dual fire operation.
- 14 factory programmed curves
- User friendly programming with switches.
- RPM switch for nitrous 2-stage rev limiter.
- Programmable rev limit.
- Bolt-on easy installation with style connectors.

Controller by Comp Cams				
VT No.	V-Thunder	Description	Year	Model
32-0672	VTI2000A	Ignition Controller	1995-earlier 1993-earlier	Softail, Dyna, FXR, FX w/ conv. Harness XL except 1994-up FLT & XL models
32-0673	VTI2000B	Ignition Controller	1996-up 1993-up	Softail, Dyna, FXR, FX w/ conv. Harness Softail, Dyna, FLT except F.I., XL
32-0733*	VTI2001A	Power Adapter 7-pin Connector	Fits all 32-0672 applications	
32-0734	VTI2001B	Power Adapter 8-pin Connector	Fits all 32-0673 applications	
32-0741	VTE2200	RPM Switch Harness	For use with VTI2000 A or B	

\*Note: For 1979 and earlier models use pickup VT No. 32-9020 OEM 32400-80A and rotor VT No. 32-9087 OEM 32402-83. For 1991 and earlier models use OE harness VT No. 32-9014 OEM 32408-90.





**TC-88 Performance Ignition Systems** for Carbureted only. Available with 6200 RPM limit for engines with slight modifications and stock compression

or 7000 RPM limit for engines with raised compression, Big Bore Cylinder & Performance Cams installed.

**6200 RPM**

VT No.	OEM	Models	Years
32-8204	31710-01	Dyna	1999-up
		FXST	2000-up
32-8205	32721-01	FLT	1999-2001

**7000 RPM**

32-8206	31713-01	Dyna	1999-up
32-8207	32724-01	FLT	1999-01



**Vacuum Switch Assembly**

VT No.	OEM	Fits
32-9079	26557-83	1984-90 All FXR
32-9080	26558-84	1984-90 FXST 1986-89 All FLT
32-9082	26555-91	1991-93 All FLT
32-9083	26566-91	1991-95 All FXST-FLST, Dyna & FXR
32-9084	26555-94	1994-98 All FLT
32-9156	26566-96	1996-99 FXST-FLST
32-9157	26569-96	1996-98 Dyna



32-0085



32-0086

**Ignition Module Adapters** allow use of seven pin module (1991-93) going to eight-pin Deutsch (1994-99) wiring harness or an eight pin module going to a seven pin harness. Can not be used on EFI models.

**VT No. Fits**

32-0085	7 Pin Adapter to 8 Pin Module
32-0086	8 Pin Adapter to 7 Pin Module



**Replacement Ignition Modules** bolt-on replacements. Harness 32-9014 required as noted.

VT No.	OEM	Fits
32-9016	32405-91A	1984-95 Evo BT, except 94-95 FLT
32-9322	32426-94	1994-95 FLT
32-9321	32449-95A	1996-99 All BT
32-0527	32568-00A	2000-up FXST
32-0528	32478-99A	2000-up FXD, FLT
32-9014	32408-90A	Harness for installing the above modules

**Performance Ignition Modules.** 6000 RPM.

VT No.	OEM	Fits	Note
32-9325	32596-96	1984-95 BT	1-2
32-9326	32630-96	1996-99 Evo BT	1

**Note 1:** Cannot be used on EFI models.

**Note 2:** Use 32-9014 harness to install ignition module on all pre-90 models.

# Ignition Modules



**Twin Tec External Ignition for 1999-up Carbureted Twin Cam Models.** Wide timing advance adjustment range accommodates stock to highly modified engines. Digitally set RPM Limit (100 RPM Steps). Selectable multi-spark mode for quick starting & smooth cruise. Coil outputs

protected against short circuits. Billet aluminum housing with black anodized finish. Easy plug-in installation supports all sensors including theft/security module.

**VT No. Years**

32-1008	1999-02
32-1014	2003-up

**Twin Tec External Plug In Ignition for 1990-99 Evolution Big Twins**

features 4 rotary switches used to set the operating modes such as single or dual fire, advance and select RPM limit. Two diagnostic LED's indicate status and start of the VOES switch. The status led is also used for static timing as it will flash when the engine reaches top dead center.

**VT No. Item**

32-1006	1990-94 with 7 pin Connector
32-1007	1995-99 with 8 pin Connector



**32-1013**



**S&S Spark Technology Ignition System** features an ECU module that will automatically adjust ignition timing. When detonation is detected by knock sensor, the ECU retards the ignition timing to prevent engine damage. When detonation is not present, ignition timing is advanced for maximum power and economy. Additional features include: Simple installation--plugs into stock harness, No timing adjustments, 7000 RPM rev limiter, single fire operation, automatic dwell adjust, short circuit and reverse polarity protected.

**VT No. Fits**

32-1013	Module
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**Installation Kit**

32-7805	2004-2006 carbureted TC-88 models
32-1012	1999-2003 carbureted TC-88 models
32-1049	1995-99 carbureted Big Twins



**Chrome Accel Rev Master** /is pre-set by the rider to a specific R.P.M. Limit. When engine speed reaches limit, the Rev Master interrupts coil triggering, preventing engine damage due to over-revving. Measures 4<sup>3</sup>/<sub>4</sub> x 2<sup>1</sup>/<sub>2</sub>.

Includes instructions. Fits all 1948-99 Big Twin.

**VT No. 32-0152**



# Ignition



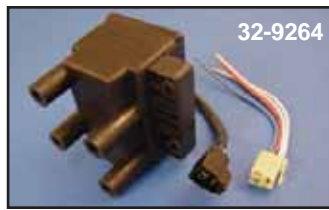
**V-Tech Ignition Systems** fit all 1970-98 carbureted models and requires sensor cup for 1982 and earlier applications. Order tach interface, sensor cup and screw separately if required. **Note: Order Coils As Required.**

### VT No. Fits

- 32-9501** Dual Fire Ignition fits Evo, Shovel and Sportster through 1997. It can be set for Street or Race-Electric start or Kick Start includes 4000 to 8000 adjustable RPM limiter. Includes adjustment for rate of advance. This unit is compatible with stock dual fire coils.
- 32-9500** Single Fire Ignition fits Evo, Shovel & Sportster through 1997. It can be set for Street or Race-Electric or Kick Start includes rear cylinder timing adjustment for rate of advance. Compatible with single fire coils.
- 32-9503** Single Fire Ignition Kit fits As Above Includes coil and 8.5mm wires.
- 32-0588** 8.5mm Wire Set
- 32-9255** Tach Adapter Interface
- 32-0559** Sensor Cup and Screw Set



**Sensor Cup and Screw Kit** fits 1982-up models with stock or performance electronic ignition systems.  
**VT No. 32-0559**



Dyna	Application
DC6-5	All FXR-FXST and Dyna models
DC6-4	Dual Spark Plug Head Application



**Dyna Twin Fire Ignition Coils** are designed to work with Dyna 2000 HD-I ignition modules. Twin fire coils are slightly larger than stock coils, fit the stock mounting bracket. Twin fire coils can be used with any electric advance ignition system that incorporates dwell control except Dyna DS6-2 or similar type ignitions.

### VT No. Dyna Ohms/Type

- 32-9285** DC6-5 3 (A) Twin Fire II Miniature Dual Output Towers, Replaces DC6-3
- 32-9264** DC6-4 3 (B) Four output towers Fits Dual Spark Plug



**Dyna 2000 Digital Ignition Systems.** Systems include Dyna 2000 HD-1 Ignition Module and a matched Dyna Twin Fire Coil for each application.

- | VT No.         | #     | Fits                             |
|----------------|-------|----------------------------------|
| <b>32-0802</b> | SFK-3 | 1995-up FXR, FLT, FXST, FXD      |
| <b>32-0804</b> | SFK-1 | Pre1995 FXR-FLT, FXST, FXD       |
| <b>32-9118</b> |       | Programming Software for 32-0802 |
| <b>32-9117</b> |       | Programming Software for 32-0804 |



**Dyna 2000 Ignition Modules Replacement** can be used with stock electronic ignition.

**Note:** The stock ignition consist of a sensor plate and rotating cup. The 2000 will work on all 1970-up models but requires the 1983-up type ignition cup and sensor plate. The 2000 Advance curves will not work properly if installed with the pre1983 ignition cup and sensor.

Dyna 2000 HD-1 can be used with both single fire (separate coils) or Dual fire (Single Coil) the Dyna 2000 HD-2 can be used as dual fire only. **Both units** feature programmable advance curves, rev limiter and L.E.D. diagnostic lamp for easy static timing, plugs into stock harness and bolts to stock module location. Also available with USB port that will allow mechanics or tuners move advanced programming but requires separate purchase of Dyna Programming kit.

**Note:** Can only be used with suppression spark plug wires. On 1984-90 models Dyna extension harness must also be used.

VT No.	#	Item/Plug	Years
<b>32-9112</b>	A	Dyna 2000 HD-1E 7 Pin With USB Port	1984-95
<b>32-9049</b>	A	Dyna 2000 HD-2E 7 Pin	1984-95
<b>32-9113</b>		As Above with USB Port	
<b>32-9318</b>	A	Dyna 2000 HD-1E8 8 Pin	1996-99
<b>32-9114</b>		As Above with USB Port	
<b>32-9317</b>	A	Dyna 2000 HD-2E8 8 Pin	1996-99
<b>32-9115</b>		As Above with USB Port	
<b>32-9116</b>	A	Dyna 2000 TC-88-1, 1999-2000 TC88 & Carb As Above with USB Port	
<b>32-9308</b>	A	Dyna 2000 TC-88-3, 2004-06 TC88 Carbureted Only with USB Port	
<b>32-9050</b>	B	Extension Cable	
<b>32-9085</b>	C	7-8 Pin Conversion Harness	
<b>32-0559</b>		Ignition Cup Kit	
<b>32-9087</b>		Ignition Cup Only	
<b>32-9020</b>		Sensor Assembly	
<b>32-9052</b>		Cup Screw, 10 pk	
<b>32-9117</b>		Programming Software for 32-9112, 32-9113	
<b>32-9118</b>		Programming Software for 32-9114, 32-9115	
<b>32-9119</b>		Programming Software for 32-9116	





# DYNA Ignition

BIG TWIN

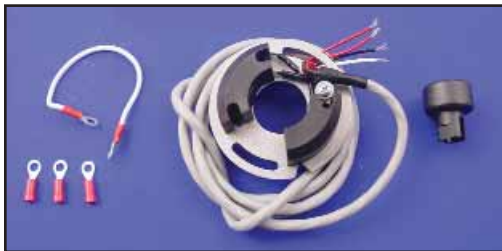


**Dyna 'S' Hi-Performance Ignition System** is self contained, fits behind ignition cover, uses magnetic rotor with the original spark advancer, so factory advance curve is maintained. Improves performance, extends spark plug

life, eliminates points and condensers.

**Note:** For dual plugged heads, on 1980-up use advance mechanism, VT No. 32-7510

**VT No. 32-7778** (DS6-1)



**Dyna 'S' Single Fire Ignition** has the features of the Dyna 'S', but fires front and rear cylinders independently of each

other which allows accurate timing of each cylinder. Stock ignition systems fire both cylinders at the same time which has the wasted sparks on the exhaust stroke. This eliminates this inherent problem. For use with either dual or single plug heads. On 1980-up models, use VT No. 32-7510 Advance assembly.

**VT No. 32-7777** (DS6-2)



**Dyna 2000i Digital Ignition** available as a module only or complete kits that include correct coil. Features include single or dual fire operation, 8 advance curves, built in tach driver, adjustable RPM limit from 6000 to 7500 and easy static timing with built in timing indicator. Fits all 1970-98 carbureted models and requires 1983-up sensor cup for 1982 and earlier applications. Advanced Programming Software allows the mechanic or tuner the ability to fine tune 2000i Ignition but requires adapter.

VT No.	Item	Plug	Fire	Coil
32-9151	Kit	Single	Single	DC3-1
32-9152	Kit	Dual	Single	DC1-1
32-9153	Kit	Dual	Dual	DC2-1
32-9155	Kit	Single	Single	DC6-5

Miniature coil

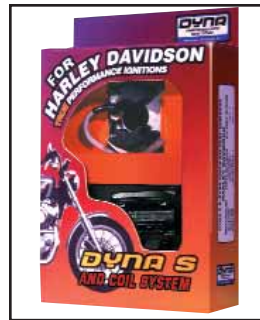
**32-9159** Module Only

**32-9087** Sensor Cup

**32-9052** Cup Screw, 10 pk

**32-9120** Advanced Programming Software for Above Ignitions

**32-9121** Software Adapter Harness



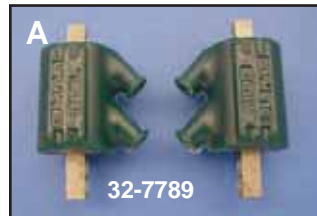
**Dyna S Performance Ignition Systems.** Available in dual or single fire for street applications only. Each kit includes sensor plate assembly and correct coil for each application. Single plug only. 1980-up applications require 32-7510 advance mechanism.

VT No.	#	Type
32-0800	DSK-6-2	Single Fire
32-0801	SDK-6-1	Dual Fire



**Replacement Rotor for Dyna Ignitions.**

VT No.	Fits
32-9300	DS-6-1
32-9301	DS-6-2



**Dyna Coils.** 35,000 volt! Works with all points ignitions, aftermarket or factory electronic ignitions. Note: 32-7792 is electronic, 32-7793 is for points ignition.

VT No.	#	Volt	Ohm	Dyna	Type	U/M
32-7789	A	12V	3	DC-1	Angle, Dual	Pair
32-7790	A	6V	1 1/2	DC-2	Angle, Dual	Pair
Use 2 for dual plug heads						
32-7792	C	12V	3	DC-6	Stock, Dual	Each
32-7793*	C	12V	5	DC-7	Stock, Dual	Each
32-8055	B	12V	3	DC-3	Angle, Single	Pair
32-8086	A	12V	5	DC-8	Angle, Dual	Pair
32-9035	B	12V	5	DC-10-1	Angle, Single	Pair

\*Note: Use 2 for single fire ignition.



**Dyna Ignition Booster** for single points systems only transforms inconsistent electrical surges into controlled bursts of energy to the coil power is not wasted.

**VT No. 32-7787**



**Dyna Electric Tach Adapter Kit** must be used with Dyna 'S' single fire ignition is installed on any twins with dual plugs when electric tach is used.

**VT No. 32-7799**

**K.V. Recommends the following coils for Dyna Ignitions:**  
**DS6-1 Ignition VT No. 32-7778**  
 Street, Single plugs use DC-7 or DC-8  
 Race, Single plugs use DC-1 or DC-6  
 Street/Race Dual plugs use 2 DC-2 or DC-5, wired in series  
**DS6-2 Ignition VT No. 32-7777**  
 Race, Single plugs use 2 DC-3  
 Street, Dual plugs use 2 DC-7 or DC-8  
 Race, Dual plugs use 2 DC-1 or 2 DC-6  
 Street, Single plug uses 2 DC10-1



# Fuel Injected Systems



**Twin Tec TCFI Fuel Injection Kit** for 2001-up TC-88 with Delphi Fuel Injection System. Includes plug in fuel injection controller, PC link, interface cable, Wego wide band exhaust gas oxygen sensor and weld nut for exhaust pipe. The TCFI solves tuning problems with highly modified engines. Fully programmable plug in replacement for Delphi Controller. Allows programming of advance curves, idle air control including idle RPM and cold start characteristics. The TCFI communicates diagnostic information by blinking codes on the check engine LED. The unit also has a built in data logging that stores data for the last 15 minutes of operation. Fits all 2001-up.

**\*Note** Oxygen sensor must be installed in rear exhaust pipe.

VT No.	Item
32-1004	TCFI2D-Kit
32-1016	TCFI3D-Kit
32-1017*	TCFI3D-Kit

**\*Note:** Same features as 32-1016 with the addition of extended data logging and diagnostics.



**Pro EFI Race Tuner.** This software package will make tuning the EFI models a professional endeavor. It is divided into two mode:

- Data (Real Time)
- Tuning Changes

The kit includes

- CD Software
- User's Manual

Requirements for use are Windows 98, a CD-ROM, serial port, 32MB RAM, 10MB hard drive and a highly skilled technician. Replaces 32107-01H. Order cable to connect tuner to PC separately.

VT No.	Item
32-0380	Tuner
32-0382	Cable



**Twin Tuner Fuel Injection Controller** for 2008-up FLT models. Features include increased horsepower, improved throttle response, easy plug-in installation and setup, can be used with Dyno Jet Power Commander Maps and is compatible with Twin Scan II service tool VT No. 16-0378. The Twin Tuner allows you to easily adjust your fuel injection to match the requirements of performance parts. You can add or subtract fuel by using the mode and up/down push button switches.

**VT No. 32-3038**

**272**



**Power Commander III USB Engine Management Systems** for Fuel Injected Models. Allows for both fuel and ignition adjustments. Each unit includes a specific map, designed to improve performance over stock. The Power Commander includes an IBM compatible link cable and software package which allows you to fully map the fuel ignition curves on an IBM compatible computers. If a computer is not available, the fuel curves can be adjusted by using three touch buttons on the face plate.

VT No.	Year	Model
32-3001	1997-98	Evo Big Twins
32-3007	1999-01	TC-88 Touring
32-3004	2002-06	TC-88 Touring
32-3003	2001-06	TC-88 Softail
32-3005	2002-06	V-Rod
32-3008	2004-05	TC-88 Dyna
32-3011*	2006	TC-88 Dyna
32-3012*	2007	FLT
32-3013*	2007-up	FXST
32-3014*	2007-up	Dyna
32-3037	2008-up	FLT

**\*Note:** Includes O<sub>2</sub> eliminators.



**Vance & Hines Fuel Pak.** A throttle position sensor based system that simplifies the process of fuel injection tuning. Enables you to fine tune the fuel mixture throughout the entire RPM range. No computer or software is required. Simply punch in the values supplied with the fuel pak. Requires use of high performance air cleaner.

VT No.	Fits
32-0293	2007-08 FXST/B/C SSE, 2007-08 FLSTF
32-0291	2004-up FXD, 2002-up V-Rod
32-0292	2002-07 FLHT, FLHR
32-0294	2008-up FLHT, FLHR
32-0290	2001-08 ST except 2007-08 FXST/B/C SSE, 2007-08 FLSTF



**Controller Mount Bracket,** zinc plated for 2000-up ST.

**VT No. 31-0963**