V-Twin MFG.
VT No. 32-0072 Single Fire Electronic Ignition Distributor

This is a custom application and rider safety depends on proper installation. This product should only be installed by a knowledgeable and trained motorcycle technician. V-Twin Mfg. accepts no responsibility for improper installation.
CAUTION: READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION.

INTRODUCTION
The Volt Tech Ignition system is intended for use with H-D motorcycles. The Volt Tech replaces the original points on early models. Each cylinder is fired independently and only on the compression stroke. Single fire operation increases engine power at high RPM, improves starting, and helps reduces backfiring at low RPM. The Volt Tech features an adjustable advance and rev limiter. A timing LED indicates static timing (top dead center) and gives diagnostic information. Two starting modes are provided: electric start and kick start. A tach output gives accurate tach readings even at the rev limit.

COIL AND SPARK PLUG CABLE CONSIDERATIONS
We recommend replacing the OEM coil. Coils used with the Volt Tech must have at least 2 ohms primary resistance. Coils with 4 ohms or higher may be used, but may not produce optimum output. We recommend the following coils for single and dual plug applications.

Volt Tech Ignition With Single Plug Heads. Use **VT No. 32-0467** coil. This is a "Siamese" coil with two independent sections and will fit in the stock mounting location on most H-D motorcycles. You can also use two dual spark tower coils and ground one of the towers on each coil to the engine case or frame. You will have to fabricate a bracket to mount the second coil.

Volt Tech Ignition With Dual Plug Heads. Use two **VT No. 32-0511** coils. You will have to fabricate a bracket to mount the second coil. Do not use solid copper spark plug cables; they may cause interference with your ignition system and accessories.

Volt Tech Installation
1. ROTATE ENGINE UNTIL TIMING MARK ON FLYWHEEL IS AT TDC ON FRONT CYLINDER.
2. INSTALL VOLT TECH SYSTEM IN PLACE OF OEM BREAKER .
3. ROUTE THE VOLT TECH HARNESS BEHIND THE PUSHROD TUBES AND ALONG THE FRAME TO THE COIL. MAKE SURE THAT HARNESS WILL NOT BE CHAFED OR BURNED BY EXHAUST HEAT. SECURE HARNESS W/ TIE WRAP.
4. REMOVE DISTRIBUTOR TOP.
5. REMOVE TWO SCREWS THAT HOLD THE IGNITION THE DISTRIBUTOR HOUSING.
6. PULL DISTRIBUTOR UP SLIGHTLY AND TURN DISTRIBUTOR DRIVE SHAFT SO THAT WINDOW IS CENTERED WITH TOP HOLD DOWN CLIP. SEE PHOTO A.

Volt Tech Hookup
Use the ring terminals for con hookup. Use male-female quick disconnects for connections to the tach. Tape up unused wires.

NOTE: Damage will result If the brown tach wire comes In contact with +12V.

1. Identify switched +12 volt wire and tach wire (f equipped) going to the coil. Refer to your service manual, or reconnect the battery and use a test light or voltmeter. The switched +12 volt wire will be hot when the ignition key is turned on.
2. Refer to Figure 5 or 6, depending on your application. Connect the Volt Tech red wire and switched +12 volt w re to Coil + (positive).
3. Connect the Volt Tech black wire to the Coil-terminal on the coil for the front cylinder.
4. Connect the Volt Tech white wire to the Coil-terminal on the coil for the rear cylinder.
5. Connect the Volt Tech green wire to the vacuum switch if used. Tape if unused.

NOTE: Most motorcycle coils do not have terminals marked!.Most single fire coils use the center terminal for +12V and the outer two terminals for front and rear cylinder Coil-. For dual fire coils use either terminal for Coil+ and tho other one for Coil-.

6. Connect the Volt Tech brown wire to the tach wire, if equipped with a tachometer. Tape up if unused.
7. The Volt Tech Is grounded via the timing housing; a separate ground connection is not required.
8. Reconnect battery ground cable. Verify proper ground connections to the frame and engine.

NOTE: Each trimpot can be adjusted over a range of just under one turn. At the ends of tho adjustment range, mechanical stops prevent further rotation of the trimpot. Do not attempt to tum the trimpots past their limits.