

INSTALLATION INSTRUCTIONS

COMPU-FIRE® HIGH PERFORMANCE VOLTAGE REGULATORS FOR HARLEY DAVIDSON® MOTORCYCLES

THIS INSTRUCTION COVERS THE FOLLOWING:

P/N		DESCRIPTION
Black Powder Coated	Chrome Plated	
55120	55130	1989 - 1999 Big Twin w/ 32 amp charging sys. & earlier Big Twins w/ 32 amp sys.
55121	55131	1981 - 1988 Big Twin w/ 22 amp charging sys.
55122	55132	1976 - 1980 Big Twin w/ 17.8 amp charging sys.
55123	55133	1970 - 1975 Big Twin w/ 15 amp charging sys.
55124	55134	1984 - 1990 Sportster w/ 19 amp charging sys.
55125	55135	1991 - 1999 Sportster w/ 22 amp charging sys.

READ THESE INSTRUCTIONS COMPLETELY BEFORE BEGINNING INSTALLATION

Check contents of kit:

- Compu-Fire Voltage Regulator
- # 10 Insulated ring terminal
- 1/4" Un-insulated ring terminal
- 3/8" Un-insulated ring terminal

CAUTION: MAKE SURE IGNITION SWITCH IS OFF AND THE BATTERY GROUND (-) CABLE IS REMOVED FROM THE BATTERY DURING ANY OF THE FOLLOWING PROCEDURES.

Refer to Fig. # 1 to verify correct wire harness plug for application.

1. Remove the original regulator.
2. Measure output lead on the original regulator.
Cut output lead on Compu-Fire regulator to same length.
Strip wire and crimp # 10 ring terminal to wire.
Note: Terminal must be properly crimped for proper operation of regulator.
3. Install Compu-Fire voltage regulator using the original hardware.
Note: The voltage regulator must be mounted in a location with good air flow.

VOLTAGE REGULATOR GROUND must be connected to a good engine ground for proper operation.







4. Locate a good engine ground. Crimp proper ring terminal to ground wire and attach.
5. Plug the connector to stator. **Be sure it is connected properly.**
6. Connect output lead to battery (+) positive.
This can be done at the battery cable terminal on the starter solenoid.
7. Reconnect the battery ground cable.

TROUBLE SHOOTING

1. **Do not use test procedure found in the factory shop manual.** The Compu-Fire voltage regulator uses high efficiency series circuitry. The electronic circuitry is completely different.
2. With the main switch OFF, measure the voltage from the regulator output terminal to ground. The reading should be 12 - 13 volts. If there is no voltage reading, the battery is disconnected.
3. Start the engine and bring the RPM to 1500. The voltage should rise 1/2 to 1 volt. This indicates that the voltage regulator is charging. This completes the test.

NOTE: TO INSURE OPTIMUM OPERATION OF ALL ELECTRICAL SYSTEMS ON THE BIKE ADD AN ADDITIONAL GROUND CABLE FROM THE BATTERY TO A STARTER FLANGE BOLT.

Wire Harness Figure 1

BIG TWIN	BIG TWIN	BIG TWIN	BIG TWIN	SPORTSTER	SPORTSTER
32 AMPS	22 AMPS	17,8 AMPS	15 AMPS	22 AMPS	22 AMPS
					
Part No. 55120	Part No. 55121	Part No. 55122	Part No. 55123	Part No. 55124	Part No. 55125
Part No. 55130	Part No. 55131	Part No. 55132	Part No. 55133	Part No. 55134	Part No. 55135
(1989-Present)	(1981-1988)	(1976-1980)	(1970-1975)	(1984-1990)	(1991-Present)