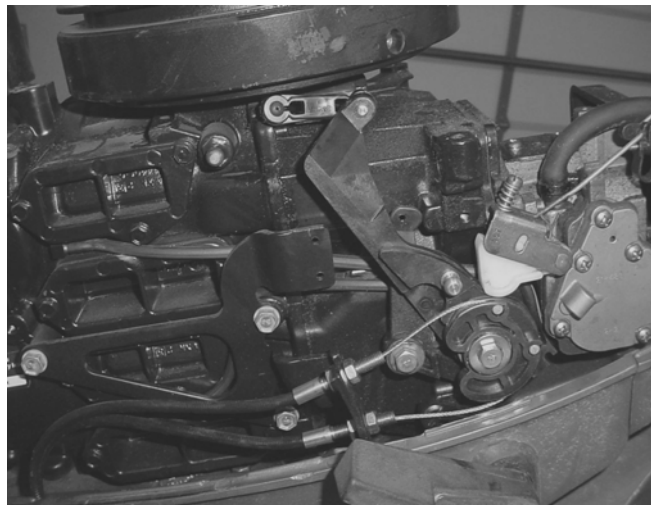
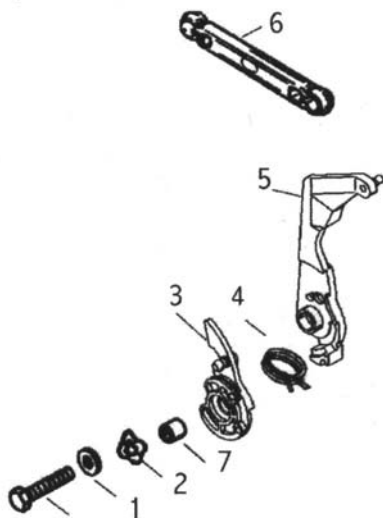


CDI ELECTRONICS INSTALLATION/TROUBLESHOOTING GUIDE

CDI P/N: 114-4952K1

This kit will replace the 18495A30 Switch Box with one that has throttle-adjusted timing. Warning! This product is designed for installation by a professional marine mechanic. CDI cannot be held liable for injury or damage resulting from improper installation, abuse, neglect or misuse of this product.

1. **Disconnect and remove the old switch box.**
2. **Cut off the 3 pin connector from the old switch box and strip approximately 3/16" of insulation from the ends.**
3. **Install the terminals and sleeves supplied to the 3 pin connector as follows:**
 - a. Red Female bullet connector and sleeve
 - b. Blue Male bullet connector and sleeve
 - c. Black Female bullet connector and sleeve
4. **Connect the Red and Blue wires to the new switch box.**
5. **Connect the Black wire to engine ground.**
6. **Install the new switch box, connecting all matching wires together.**
7. **Install the new parts supplied according to the attached pictures. The items that have to be changed/installed are:**
 - 1 – P/N 12-65567 Washer
 - 2 – P/N 13-99611 Wave Spring
 - 3 – P/N 831978-1 Cam Throttle
 - 4 – P/N 24-42164 Spring
 - 5 – P/N 831977 Spark Arm
 - 6 – P/N 832747-1 Timing Link
 - 7 – P/N 23-823806 Bushing
8. **8. Reset the wide open throttle timing for either a 1993 or 1996 engine (Should be less than 25° BTDC). MAKE SURE THE TIMING DOES NOT EXCEED 25 DEGREES WHEN AT WIDE OPEN THROTTLE!!!**



TROUBLESHOOTING THE SWITCH BOX

- 1) **Unit will not fire:** Disconnect the kill wire *AT THE PACK*. Check for broken or bare wires on the unit, stator and trigger. Check the DVA voltage of the stator, (Read from the red to eng ground and blue to eng ground with everything connected. The readings should be approximately 180 volts or more on the blue wire, and 30 volts or more on the red wire.
- 2) **Engine will not kill:** Check kill circuit in the pack by using a jumper wire connected to the black/yellow wire coming out of the pack and shorting it to ground. If this kills the engine, the kill circuit in the harness or on the boat is bad, possibly the ignition switch.
- 3) **High speed miss:** Check DVA voltage between the red and engine ground at high speed. . **NOTICE:** Use caution when doing this and do not exceed the rated voltage range of your meter. The reading should show a smooth climb in voltage. If there is a sudden or fast drop in voltage right before the miss becomes apparent, the stator is usually at fault. A sudden rise in voltage usually indicates a problem in the switch box. If there is no indication of the problem, it could be mechanical problem.
- 4) **Coils fire with spark plugs out but not in:** Check for dragging starter or low battery causing slow cranking speed. DVA test the stator and trigger.
- 5) **Both cylinders fire but the engine will not crank and run:** Index the flywheel and check timing on both cylinders. If the timing varies, replace the pack.
- 6) **Only fires on one cylinder:** Check the flywheel magnets to see if one has slipped out of place. Swap the primary wires to the ignition coils and see if the problem moves – if not, replace the ignition coil. If it does move, swap the trigger wires and retest, if the problem moves again, replace the trigger.