Mechanical Field Service Procedure, Smart Power Supply

**USAGE:** To be performed when a loss of average laser power is detected. Perform Electronic Field Service Procedure first.

**PURPOSE:** To recover lost output power through mechanical mirror tuning.

**TOOLS:** Laser power meter, 1/8” allen driver, Small flat screwdriver

**STEP 1**

**Warm-up:**

CAUTION: THIS WILL CAUSE THE LASER TO EMIT HIGH POWER UV PULSES. TAKE APPROPRIATE SAFETY MEASURES (see User Manual for more information) WHEN WORKING AROUND HIGH POWER LASER EMISSIONS.

1. Place your power meter sensor in the beam path as close to the laser head (ahead of other optics) as practically possible.
2. Turn the key switch ON.
3. After the boot-up sequence, press the EMISSION ON button.
4. Allow the laser to warm up for at least 30 minutes.
5. Press the Q-SW ENABLE button.
6. Measure and make a note of your starting power.

**STEP 2**

**Locate Adjustment:** (see Figure 1)

Locate the small access cover (1/2 inch “button” cap) at the top of the laser head. Using a small flat screwdriver, pry the cap off to expose the internal adjustment.

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![Figure 1](image_url)
STEP 3
(see Figure 2)

Insert 1/8” allen driver at approximately a 45 degree angle to engage the internal adjustment screw just below the cover surface. Use caution not to insert the allen driver more than 1/2” in to the laser and do not apply pressure to any components inside the laser. This can cause permanent damage to the laser.

Figure 2

STEP 4
(see Figure 2)

Adjust mechanical adjustment by turning allen driver CW or CCW to achieve the highest power. This should normally be no more than a 1/4 turn.

STEP 5
(see Figure 1)

Remove allen driver and replace “button” cap.