The SLC100 electronic governor, DOD part number 98-19439, controls the generator's electrical load by adjusting engine speed, not speed. This variable speed operation results in low noise, significantly reduces fuel consumption and extends engine life.

The SLC100 governor is paired with GAC ADG150 actuator, DOD part number 98-1950, controlling a Yanmar L70, single cylinder, 0.296L compact, air cooled diesel engine. This 3 kW permanent magnet generator and variable speed technology has exceeded government requirements when subjected to rigorous qualification testing.

### INTRODUCTION

### PART NUMBER CROSS REFERENCE

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### DIMENSIONS
3 KW GOVERNING SYSTEM SET PROCEDURE

The governor controls generator voltage, not speed.

Determine the best operational input voltage of the inverter, approximately 225VAC (263 Hz)

Actuator GAC - ADG150 / DOD 98-19580:
1. Loosen the lock nut on the bottom of the actuator linkage rod, adjust the spherical nut so that one thread is exposed at the bottom of the spherical nut. Tighten the lock nut against the spherical nut.
2. Make sure the actuator lever reaches its stop just prior to the engine fuel lever reaching its stop. Adjust by turning the actuator linkage rod in or out of the ball joint at the top of the rod.

Engine speed is 3600 RPM (Mechanical Governor Setting is done at the factory)

Speed / Load Controller GAC - SLC100 / DOD 98-19539:
1. With the set running at no load adjust the speed potentiometer on the governor control to obtain a PMA voltage of approximately 176 VAC, or approximately 254 Hz (3050 RPM). Adjust the actuator linkage rod length so the gap between the magnet and the target is 5/16". Do not attempt to adjust the magnet, this is a factory setting.
2. Turn the stability and gain potentiometers on the governor control all the way counterclockwise.
3. Turn the stability potentiometer on the governor control clockwise until the engine becomes unstable, then counterclockwise until it stabilizes, then slightly more counterclockwise.
4. Turn the gain potentiometer on the governor control clockwise until the engine becomes unstable, then counterclockwise until it stabilizes, then slightly more counterclockwise.
5. Apply rated load and adjust the boost potentiometer on the governor control to obtain a PMA voltage of approximately 194 VAC, or approximately 288 Hz (3450 RPM).
6. Check the no load to rated load and rated load to no load transients by observing the actuator lever. If the magnet grabs the target during transients, reduce the gain.
7. When applying rated load the engine speed should slowly increase without a large initial droop.
8. When removing load, engine speed should decrease without a large initial surge.
9. At no load, lift the actuator lever and lock it in the manual start position. The PMA voltage should be approximately 219 VAC, or approximately 317 Hz (3800 RPM).

NOTE: All PMA voltage / frequency readings are taken from Governor Control Unit (A5) terminals A and B.