

# PRIME MOVER GOVERNOR SERVICES

Product specification  
08025

## PMGS GOVERNOR CALIBRATION STAND

3 hp Part No: PGCS - 005  
4 hp Part No: PGCS - 006

### Introduction

The PMGS has long standing experience in servicing of Governors of various types and make since 1993. The PMGS manufacture and supplies of governor calibration stands designed by it with **ultra** modern equipment.

PMGS will undertake installation and commissioning of the calibration stand at customers site and impart training programme to the technicians at an extra cost, at the request of the customers.

### A Glance

Prime Mover Governor Services manufactures two types of governor calibration stands with micro processor controlled electrical drive. One is 3 hp drive capacity, capable of testing governors up to 200 ft lbs torque. Another model is of 4 hp drive capacity, capable of testing governors up to 500 ft lbs torque.

### Basic feature

A glaring outstanding feature of PMGS basic governor calibration stand is it is designed to calibrate most of the various types and makes of governors, operating from 0 – 1800 RPM. It is well known that Woodward UG, PG and Regulator Europa 1100 governors are familiar among the customers and used in many Prime Movers. PMGS basic governor calibrating stand will be supplied with different base, drive adaptors and hose pipes to calibrate all the basic UG, PG and 1100 governors up to 200 ft lbs & 500 ft lbs. Governors having air/electric speed setting, fuel limiter and oil trip system can be calibrated through the basic governor calibration stand.

The PMGS basic governor calibration stand is provided with microprocessor controlled feed back closed loop system between governor output shaft, motor, universal potentiometer, control panel and digital RPM meters, to check the governor stability and sensitivity during normal operation, sudden increase and decrease of load, operating by means of control panel switches. Also, care has been taken in providing customized digital programmer to check the Prime Mover RPM / multiplayer RPM. This above system helps to stimulate the governor operation, as it is in the Prime Mover.

The closed hydraulic oil circuit system, provided with heater, PID controls, sensors and thermostat to heat the governor by heating hydraulic oil to specified value. The governor case temperature will be increased to 200 degrees F (93 degrees C) within 40 mints.

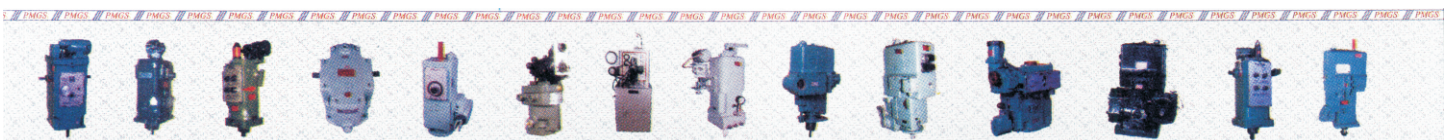
Two numbers of analog gauges, three numbers of digital gauges have been provided with regulators and accessories to check the governor oil pressure, main reservoir compressed air pressure, to set booster air pressure, speed control air pressure and lube oil shut down pressure during calibration of the governor.

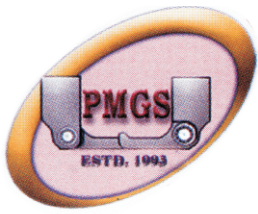
Hour-meter is built in the governor calibration stand to check the running hours of the stand for schedule maintenance of the components. In built stop watch is provided to check and record the timing of governor stability.

Variable DC and AC power supply kit additionally provided to test the solenoids and motors of different voltages.

Governor RPM range from 1500 to 7400 RPM also be tested in this basic calibration stand, with some optional equipments available at PMGS, at an extra cost.

All the major components and luminous electrical switches, oil and air hose pipes, quick adaptors, are manufactured by the leading companies to their relevant standard. PMGS will stand guarantee for better performance of its basic governor calibration stand.





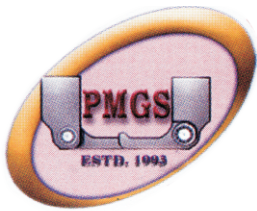
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## Specifications

Micro processor electric drive.....	Micro process controlled variable speed drive motor with closed loop feed back system with cooling fans and safety controls.
Tachometers.....	Digital tachometer driven by magnetic pick up on the motor shaft and additional customize programmable digital meter
Oil heater system.....	The oil heater system is provided with PID controls, 3 lits of oil tank, 1000W oil heater, thermostat and sensor. In addition to this 12 lits. Oil tank with pump is provided for filling of governor oil.
Governor oil pressure gauge kit.....	Analog pressure gauge 150mm dia, 0 to 500PSI / 0 to 37kgs dual readings with an accuracy of 0.25% F.S.D.
Reservoir air pressure gauge.....	Analog pressure gauge 150mm dia, 0 to 200PSI / 0 to 14 kgs dual readings with an accuracy of 0.5% F.S.D.
Governor booster / speed setting air pressure gauge.....	Digital air pressure gauge 75mm 0 to 3 kgs, with an accuracy of 0.05% F.S.D, with multiple engineering units.
Governor speed setting air pressure gauge .....	Digital air pressure gauge 75mm 0 to 10 kgs, with an accuracy of 0.05% F.S.D, with multiple engineering units.
Engine lube oil trip oil pressure gauge.....	Digital oil pressure gauge 75mm 0 to 10 kgs, with an accuracy of 0.05% F.S.D, with multiple engineering units
DC power supply.....	Variable linear DC power supply with digital indicators for volt and Amps. with adjustment.
AC power supply.....	Variable linear AC power supply with digital indicators for volt and Amps. with adjustment.
Structure details.....	Outer casing, heavy-gauge steel plate L 665mm X W 675mm X H 835mm. (app) Front and rear doors with lock. Control panel medium – gauge steel plate L 665mm X W 200 mm X H 710mm (app) door with lock. Governor base steel plate L 665mm X W 575mm X T 20mm Legs provided with vibration resistant adjustable pads. Front panel indications with photo printing, spray painting, cooling fans and spot lamp provided.
Time totalizer.....	Hour meter.
Stop watch.....	Accuracy of 0.01 seconds.
Power supply required .....	Power Supply 230 Vac 30 A, 50 / 60 Hz. single phase.
Air pressure required.....	External air pressure required 8 to 10 kgs.







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### Optional Equipments

All types of hydro-mechanical governors / actuators of different make, operating more than 2000 RPM, with external pressure oil supply, can also be tested and calibrated, by tailoring the basic governor calibration stand, with suitable attachments / kits supplied by PMGS on option, at additional cost.

#### Base and drive adaptors:-

Various base and drive adaptors for Woodward governors and other make governors above 100 ft lbs torque will be provided by PMGS at an extra cost on request from the customers.

#### Speed multiplayer (4X) kit :-

Used to increase the drive speed upto 7400 RPM for small governors of high speed turbines namely TG, KIKI governors etc.,

#### Oil pump with heater kit and oil drain housing

Used to calibrate the governors which requires external oil pressure and oil drain housing together with speed multiplayer kit, namely SG, PSG governors etc.,

#### Actuator test kit :-

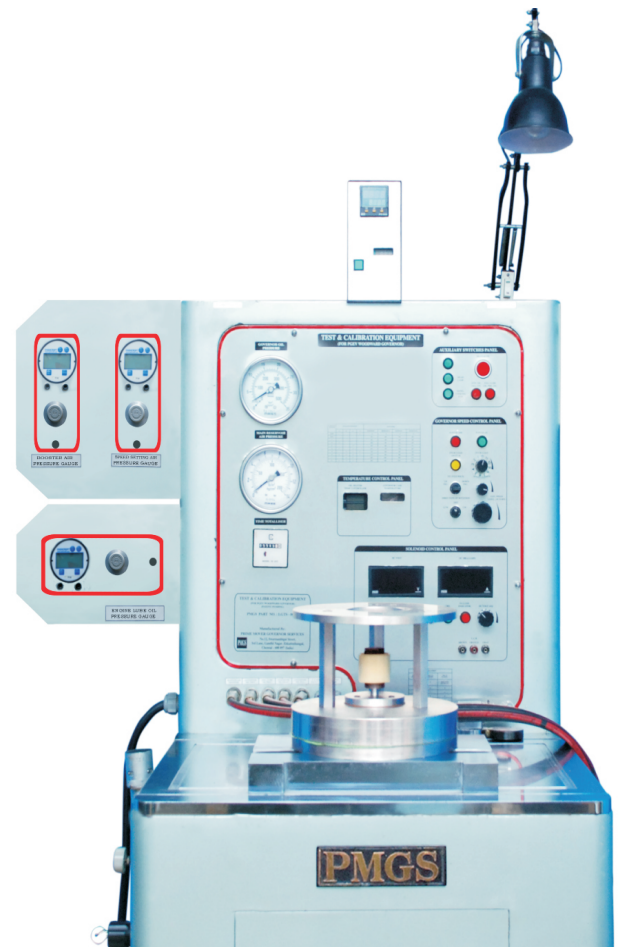
Provides mA input to permit calibration of EG actuators together with multiplayer kit 4X and oil pump with heater kit.

#### Protractor Kit :-

Used for governor terminal shaft angle measurement.

#### Load servo indicator, Speed setting electrical Box and vacuum kit :-

Used in some of the PGEV governors and rarely for marine governors.



We would like to inform our customers that there are many types of governors made by different governor manufacturers to suit for different Prime Mover applications. Hence, during ordering of governor calibration stand, these details will be discussed with customers to provide suitable test rig at the time of purchase.



## PRIME MOVER GOVERNOR SERVICES

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