

Installation Procedure Supplement

Manual 26859 (Revision NEW, 5/2015) TG-13/-17 & TG611-13/-17 Governors



See manual 04042 for complete installation, operation, maintenance, and certification information. Publications can be found on our website at www.woodward.com/publications.

Important Definitions



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

- DANGER—Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
- WARNING—Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION—Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
- NOTICE—Indicates a hazard that could result in property damage only (including damage to the control).
- **IMPORTANT**—Designates an operating tip or maintenance suggestion.



The engine, turbine, or other type of prime mover should be equipped with an overspeed shutdown device to protect against runaway or damage to the prime mover with possible personal injury, loss of life, or property damage.

The overspeed shutdown device must be totally independent of the prime mover control system. An overtemperature or overpressure shutdown device may also be needed for safety, as appropriate.



Read this entire manual and all other publications pertaining to the work to be performed before installing, operating, or servicing this equipment. Practice all plant and safety instructions and precautions. Failure to follow instructions can cause personal injury and/or property damage.



This publication may have been revised or updated since this copy was produced. To verify that you have the latest revision, check manual 26455, Customer Publication Cross Reference and Revision Status & Distribution Restrictions, on the publications page of the Woodward website:

www.woodward.com/publications

The latest version of most publications is available on the *publications page*. If your publication is not there, please contact your customer service representative to get the latest copy.



Any unauthorized modifications to or use of this equipment outside its specified mechanical, electrical, or other operating limits may cause personal injury and/or property damage, including damage to the equipment. Any such unauthorized modifications: (i) constitute "misuse" and/or "negligence" within the meaning of the product warranty thereby excluding warranty coverage for any resulting damage, and (ii) invalidate product certifications or listings.

NOTICE

To prevent damage to a control system that uses an alternator or battery-charging device, make sure the charging device is turned off before disconnecting the battery from the system.

NOTICE

To prevent damage to electronic components caused by improper handling, read and observe the precautions in Woodward manual 82715, Guide for Handling and Protection of Electronic Controls, Printed Circuit Boards, and Modules.

Go to www.woodward.com/publications for complete instructions (manual 04042).

Replacement/Exchange: Replacement/Exchange is a premium program designed for the user who is in need of immediate service. It allows you to request and receive a like-new replacement unit in minimum time (usually within 24 hours of the request), providing a suitable unit is available at the time of the request, thereby minimizing costly downtime.

This option allows you to call your Full-Service Distributor in the event of an unexpected outage, or in advance of a scheduled outage, to request a replacement control unit. If the unit is available at the time of the call, it can usually be shipped out within 24 hours. You replace your field control unit with the like-new replacement and return the field unit to the Full-Service Distributor.

Flat Rate Repair: Flat Rate Repair is available for many of the standard mechanical products and some of the electronic products in the field. This program offers you repair service for your products with the advantage of knowing in advance what the cost will be.

Flat Rate Remanufacture: Flat Rate Remanufacture is very similar to the Flat Rate Repair option, with the exception that the unit will be returned to you in "like-new" condition. This option is applicable to mechanical products only.

Returning Equipment for Repair

If a control (or any part of an electronic control) is to be returned for repair, please contact your Full-Service Distributor in advance to obtain Return Authorization and shipping instructions.

When shipping the item(s), attach a tag with the following information:

- return number;
- name and phone number of contact person;
- description of the problem;

- name and location where the control is installed;
- complete Woodward part number(s) and serial number(s);
- instructions describing the desired type of repair.

Contacting Woodward's Support Organization

For the name of your nearest Woodward Full-Service Distributor or service facility, please consult our worldwide directory published at www.woodward.com/directory.

You can also contact the Woodward Customer Service Department at one of the following Woodward facilities to obtain the address and phone number of the nearest facility at which you can obtain information and service.

Products Used In Electrical Power Systems	Products Used In Engine Systems	Products Used In Industrial Turbomachinery Systems
FacilityPhone Number	FacilityPhone Number	FacilityPhone Number
Brazil+55 (19) 3708 4800	Brazil+55 (19) 3708 4800	Brazil+55 (19) 3708 4800
China+86 (512) 6762 6727	China +86 (512) 6762 6727	China +86 (512) 6762 6727
Germany:	Germany +49 (711) 78954-510	India+91 (129) 4097100
Kempen +49 (0) 21 52 14 51	India+91 (129) 4097100	Japan+81 (43) 213-2191
Stuttgart - +49 (711) 78954-510	Japan+81 (43) 213-2191	Korea+82 (51) 636-7080
India+91 (129) 4097100	Korea+82 (51) 636-7080	The Netherlands+31 (23) 5661111
Japan+81 (43) 213-2191	The Netherlands+31 (23) 5661111	Poland+48 12 295 13 00
Korea+82 (51) 636-7080	United States+1 (970) 482-5811	United States+1 (970) 482-5811
Poland+48 12 295 13 00		
United States+1 (970) 482-5811		

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Email and Website—www.woodward.com

Regulatory Compliance & Declarations

European Compliance for CE Marking:

(Applicable only to units bearing the CE marking.)

Potentially
Explosive
Atmospheres
Directive:

Declared to 94/9/EC COUNCIL DIRECTIVE of 23 March
1994 on the approximation of the laws of the Member
States concerning equipment and protective systems
intended for use in potentially explosive atmospheres as:
II 2 G c IIC TX. The TX reflects special conditions for safe use.

Other European Compliance

Compliance with the following European Directive does not qualify this product for the application of the CE Marking:

Machinery Compliant as partly completed machinery with Directive

Directive: 2006/42/EC of the European Parliament and the Council of 17 May 2006 on

machinery.

Pressure Compliant as "SEP" per Article 3.3 to Pressure **Equipment** Equipment Directive 97/23/EC of 29 May 1997 on the

Directive: approximation of the laws of the Member States concerning pressure equipment.

The TG-13/TG-17 and TG611-13/TG611-17 governors are suitable for use in European Zone 1, Group II environments per compliance with EN13463-5, Non-electrical equipment intended for use in potentially explosive atmospheres – Part 5; Protection by constructional safety 'c', with the following Special Conditions for Safe Use:

Special Conditions for Safe Use—Maximum Surface Temperature

The maximum surface temperature of the TG Governor is dependent upon three factors that are specific to the operating conditions of each individual application. These factors are as follows:

- Governor drive shaft speed
- Ambient temperature
- Hydraulic fluid selection (see Table 2-1)

The maximum surface temperature of the TG Governor must stay below the lowest ignition temperature of the surrounding explosive atmosphere and within allowable operating conditions for the hydraulic fluid selection. It is the user's responsibility to maintain a safe surface and fluid temperature. If normal operating conditions cause the surface temperature of the TG to rise close to ignition temperatures or near the maximum recommended hydraulic fluid temperature, a heat exchanger must be installed. Refer to the sections on "Heat Exchanger Installation" and "When is a Heat Exchanger Necessary?" for location and sizing of the ports for connection of a heat exchanger.

Compliance with the Machinery Directive 2006/42/EC noise measurement and mitigation requirements is the responsibility of the manufacturer of the machinery into which this product is incorporated.

This listing is limited only to those units bearing the CE Mark on the nameplate.



EXPLOSION HAZARD—Substitution of components may impair suitability for Zone 1 applications.



RISQUE D'EXPLOSION—La substitution de composants peut rendre ce matériel inacceptable pour les emplacements de Zone 1.

DECLARATION OF CONFORMITY

WOODWARD, INC Manufacturer's Name:

Building A, Ditiantai Industrial Park, Huaihedao, Beichen Manufacturer's Address:

High-Tech Industrial Park,

TG-13, TG-17, and TG611-13/-17 Governors with CE Marking Model Names/Numbers:

Conformance to Directive: 94/9/EC Council Directive of 23 March 1994 on the approximation of

the laws of the Member States concerning equipment and protective

systems intended for use in potentially explosive atmospheres

Marking(s): (ategory 2 Group II G, c IIC TX

EN13463-1:2009 - Non-electrical equipment for potentially explosive Applicable Standard(s):

atmospheres - Part 1: Basic method and requirements.

EN13463-5:2011 - Non-electrical equipment for use in potentially explosive atmospheres - Protection by constructional safety "c"

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

MANUFACTURER

Signature

Jason Cheung

Full Name

Quality Manager

Position

Woodward, Tianjin, China

Place

Date

Woodward Governor Company Industrial Controls Group Colorado, USA

ICG-1183 00334-04-EU-02-02

DECLARATION OF INCORPORATION Of Partly Completed Machinery 2006/42/EC

Manufacturer's Name: WOODWARD, INC

Manufacturer's Address: Building A, Ditiantai Industrial Park, Huaihedao, Beichen High-Tech

Industrial Park,

Model Names TG-13, TG-17 and TG-611 Governors

Model Numbers: 8516-174 to 8516-191, 8516-193 to 8516-205, 9904-800 to 9904-828

Serial Numbers: 17000000 to 18000000

This product complies with the following Essential Requirements of

Annex I: 1.1, 1.2, 1.3, 1.5, 1.6, 1.7

The relevant technical documentation is compiled in accordance with part B of Annex VII. Woodward shall transmit relevant information if required by a reasoned request by the national authorities. The method of transmittal shall be agreed upon by the applicable parties.

The person authorized to compile the technical documentation:

Name:

Ralf Friedrich, Group Director, Quality, EPS

Address:

Woodward GmbH, Handwerkstraße 29, 70565 Stuttgart, Germany

This product must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of this Directive, where appropriate.

The undersigned hereby declares, on behalf of Woodward (Tianjin) Controls Co.,Ltd that the above referenced product is in conformity with Directive 2006/42/EC as partly completed machinery:

MANUFACTURER

Signature

Jason Cheung

Full Name

Quality Manager

Position

Woodward, Tianjin, China

an. 08, 2013

Place

Date

5-09-1182 (REV. 10)

00334-04-EU-02-01