



**Product Manual 45010**  
**(Revision G, 12/2023)**  
Original Instructions



**2057 Hydraulic Pump**

**Installation and Operation Manual**



### General Precautions

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.



### Revisions

This publication may have been revised or updated since this copy was produced. The latest version of most publications is available on the Woodward website.

<http://www.woodward.com>

If your publication is not there, please contact your customer service representative to get the latest copy.



### Proper Use

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.



### Translated Publications

If the cover of this publication states "Translation of the Original Instructions" please note:

The original source of this publication may have been updated since this translation was made. The latest version of most publications is available on the Woodward website.

[www.woodward.com/publications](http://www.woodward.com/publications)

Always compare with the original for technical specifications and for proper and safe installation and operation procedures.

If your publication is not on the Woodward website, please contact your customer service representative to get the latest copy.

**Revisions**—Changes in this publication since the last revision are indicated by a black line alongside the text.

Woodward reserves the right to update any portion of this publication at any time. Information provided by Woodward is believed to be correct and reliable. However, no responsibility is assumed by Woodward unless otherwise expressly undertaken.

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Pentium (Intel Corporation)

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## Warnings and Notices

### 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.

### **WARNING**

#### Overspeed / Overtemperature / Overpressure

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.

### **WARNING**

#### Personal Protective Equipment

The products described in this publication may present risks that could lead to personal injury, loss of life, or property damage. Always wear the appropriate personal protective equipment (PPE) for the job at hand. Equipment that should be considered includes but is not limited to:

- Eye Protection
- Hearing Protection
- Hard Hat
- Gloves
- Safety Boots
- Respirator

Always read the proper Material Safety Data Sheet (MSDS) for any working fluid(s) and comply with recommended safety equipment.

### **WARNING**

#### Start-up

Be prepared to make an emergency shutdown when starting the engine, turbine, or other type of prime mover, to protect against runaway or overspeed with possible personal injury, loss of life, or property damage.

### **NOTICE**

#### Battery Charging Device

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.

## Electrostatic Discharge Awareness

### NOTICE

#### Electrostatic Precautions

Electronic controls contain static-sensitive parts. Observe the following precautions to prevent damage to these parts:

- Discharge body static before handling the control (with power to the control turned off, contact a grounded surface and maintain contact while handling the control).
- Avoid all plastic, vinyl, and Styrofoam (except antistatic versions) around printed circuit boards.
- Do not touch the components or conductors on a printed circuit board with your hands or with conductive devices.

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*.

Follow these precautions when working with or near the control.

1. Avoid the build-up of static electricity on your body by not wearing clothing made of synthetic materials. Wear cotton or cotton-blend materials as much as possible since these do not store static electric charges as much as synthetics.
2. Do not remove the printed circuit board (PCB) from the control cabinet unless absolutely necessary. If you must remove the PCB from the control cabinet, follow these precautions:
  - Do not touch any part of the PCB except the edges.
  - Do not touch the electrical conductors, the connectors, or the components with conductive devices or with your hands.
  - When replacing a PCB, keep the new PCB in the plastic antistatic protective bag it comes in until you are ready to install it. After removing the old PCB from the control cabinet, immediately place it in the antistatic protective bag.

## Regulatory Compliance

### European Compliance for CE Marking

These listings are limited only to those units bearing the CE Marking.

#### ATEX Directive:

Directive 2014/34/EU on the harmonisation of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres.  
Zone 2: II 3 G Ex h IIC T4 Gc

#### Other European Compliance:

Compliance with the following European Directives or standards does not qualify this product for application of the CE Marking.

#### Machinery Directive:

Compliant as partly completed machinery with Directive 2006/42/EC of the European Parliament and the Council of 17 May 2006 on machinery.

#### Pressure Equipment Directive:

Compliant as "SEP" per Article 4.3 to Pressure Equipment Directive 2014/68/EU on the harmonisation of the laws of the Member States relating to the making available on the market of pressure equipment.

#### RoHS Directive:

Restriction of Hazardous Substances 2011/65/EU:  
Woodward Turbomachinery Systems products are intended exclusively for sale and use only as a part of Large Scale Fixed Installations per the meaning of Art.2.4(e) of directive 2011/65/EU. This fulfills the requirements stated in Art.2.4(c) and as such, the product is excluded from the scope of RoHS2.

### Special Conditions for Safe Use

For Hazardous Location installations of the 2057 Hydraulic Pump, the end user must ensure hydraulic fluid temperatures and pressures are maintained within the limits stated above.

# Chapter 1.

## General Information

### Introduction

The 2057 Hydraulic Pump is a positive-displacement gear pump used with industrial gas turbines. It provides pressurized oil for operating hydraulic components such as Woodward's electrohydraulic actuators.

The pump is mounted on the turbine's gearbox and is driven by the turbine through the pump's splined drive shaft.

### 2057 Pump Specifications

|                                |                                |
|--------------------------------|--------------------------------|
| Hydraulic Fluid                | US MIL-L-23699 or MIL-L-7808   |
| Filtration                     | 10 $\mu$ m                     |
| Inlet Pressure                 | 4 kPa (2 psig) minimum         |
| Discharge Pressure Above Inlet | 6000 kPa(d) (860 psid) maximum |

#### **IMPORTANT**

**Regulated pressure is set by the factory and varies by part number. This setting should not be changed.**

#### **Environmental Specifications:**

|                                    |  |
|------------------------------------|--|
| Normal Hydraulic Fluid Temperature | +4 to +71 °C (+40 to +160 °F)              |
| Ambient Temperature                | −40 to +121 °C (−40 to +250 °F)            |
| Dry Weight                         | 4.5 kg (10 lb) (approx.)                   |
| Drive Speed                        | 7000 rpm maximum                           |
| Drive Rotation                     | Counterclockwise (viewed from pump bottom) |



## Chapter 2.

# Installation, Calibration, and Maintenance

### Introduction

Figure 2-1 shows the overall dimensions of the control, and also the connections for the hydraulic lines.

The following are required for the installation of the 2057 pump:

- A 10  $\mu$ m absolute filter must be located in the hydraulic supply line.
- The internal bypass requires that the oil bypass line extend below the oil level in the oil sump.
- The oil supply line should not contain an excessive number of fittings or any undersize fittings. The number of bends and elbows should be kept to a minimum and should not restrict oil flow. This is especially important for this gravity-fed unit.
- Be careful when installing the 2057 pump on the turbine gearbox. With the pump seated squarely on its mounting pad, the splined drive shaft must engage the teeth of the turbine drive gear with a free slip fit. No tightness is permitted.

#### NOTICE

To prevent damage to the 2057 pump and to maintain proper function, do not drop or set the control on the splined drive shaft. The shaft must freely slip into the mating drive coupling of the turbine gearbox.



#### WARNING

External fire protection is not provided in the scope of this product. It is the responsibility of the user to satisfy any applicable requirements for their system.



#### CAUTION

Due to typical noise levels in turbine environments, hearing protection should be worn when working on or around the 2057 pump.



#### CAUTION

The surface of this product can become hot enough or cold enough to be a hazard. Use protective gear for product handling in these circumstances. Temperature ratings are included in the specification section of this manual.

### Positive Pressure Oil Supply

Woodward recommends that supplied oil be under positive pressure. This applies to all applications of the 2057 pump.

The 2057 pump has the inlet port placed in locations which vary according to design. Under all operating conditions, the inlet oil pressure requirements are as follows:

- Port located at top of unit—34 kPa (5 psi) minimum
- Port located on side of unit—14 kPa (2 psi) minimum



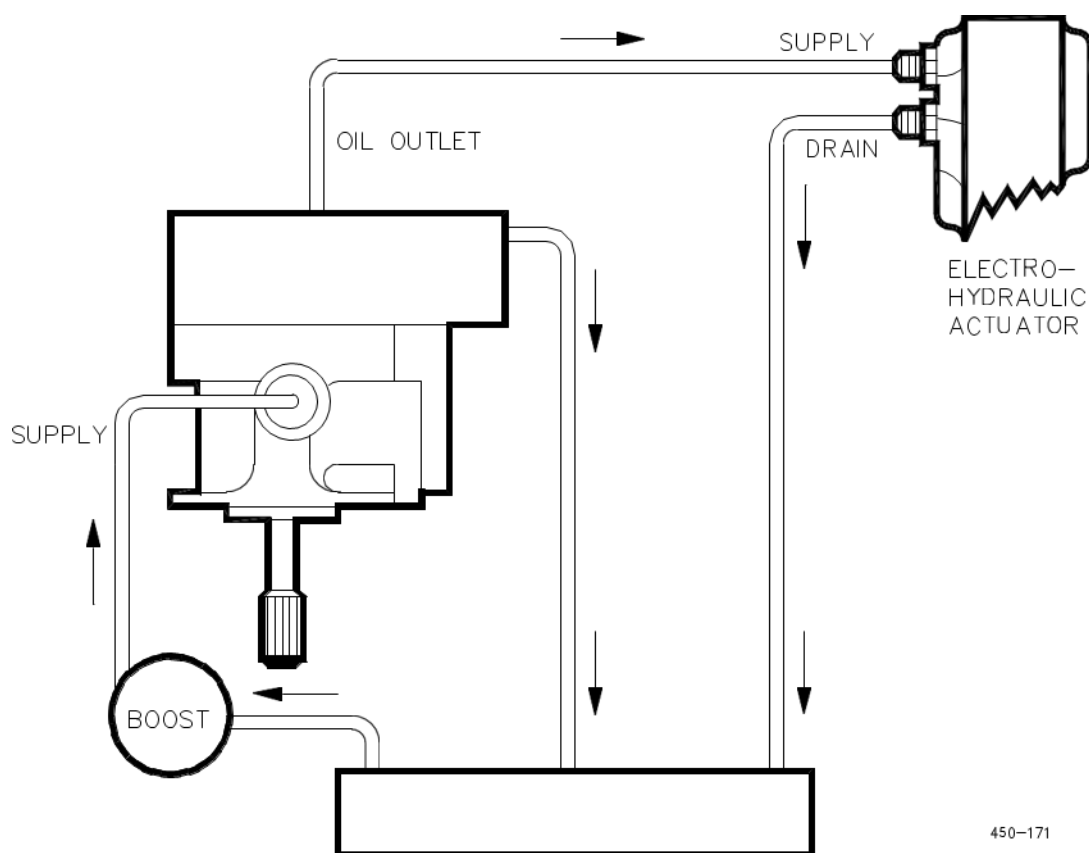
#### IMPORTANT

A small amount of oil will pass from the pump into the drive shaft cavity and into the turbine gearbox.

## Gravity Feed Oil Supply

The 2057 pump was designed to operate with positive oil supply pressure, and Woodward recommends use of a boost pump or other means of supplying positive oil pressure. However, there may be times when gravity feed operation is unavoidable. When operating in the gravity feed mode, take great care to ensure that the pump's oil supply is not restricted. In addition to general installation requirements, the following conditions must be met:

- Only pumps designated as side-inlet can be operated in this manner.
- Only pumps with the internal bypass option can be operated in this manner. These pumps will decrease inlet-oil-flow requirements when the pump is operating in steady-state conditions.
- The oil-supply tank should be several feet above the pump.
- Oil-supply pressure at the side inlet port must be at least 14 kPa (2 psi) during pump operation.
- Oversized supply lines are recommended (–16 or –20).
- Keep bends and fittings to the minimum number possible to provide a smooth, unrestricted path for oil flow.
- Keep lines as short as possible.



450-171

Figure 2-1. Typical Installation Diagram of the 2057 Pump

**WARNING**

Inlet oil must remain within supply specifications stated in this chapter. Failure to maintain inlet oil at these specifications could result in inadequate oil supply and may result in cavitation. This condition can cause internal damage to the pump.

**WARNING**

The total combined output of the pump (bypass and discharge ports) must be at least 7.6 L/min (2 US gal/min) at all times. This condition will provide a supply of fresh oil at the inlet port that is equal to the total amount discharged. This continuous supply of fresh oil is required to adequately cool the pump.

## Calibration

DO NOT attempt to adjust the 2057 pump. The pump is calibrated by Woodward to exact specifications provided by the turbine manufacturer. The pump cannot be repaired or calibrated in the field.

When requesting information or service help from Woodward, include in your communication the part number and serial number of your 2057 pump.

## Maintenance

The oil for lubrication of moving parts and for the hydraulic supply pressure is normally supplied from the turbine's lubricating oil tank. A dedicated sump may be used when needed. In either situation, follow the turbine manufacturer's requirements for scheduled oil checks and fluid replacement.

There are no other maintenance requirements for the 2057 pump.

## Storage

### Short Term Storage (less than 1 year)

Flush the unit with a corrosion-resistant oil (US MIL-C-6529, type 3, or equivalent).

Record the date the unit was prepared and identify the oil used on two identification tags. Attach one tag to the unit and one tag to the exterior of the storage container.

Place protective closures in open ports, wrap and seal the unit in barrier material (US MIL-B-121, Type 1, Grade A, Class 1, or equivalent). Cushion the unit and place in the container.

### Long Term Storage (more than 1 year)

Perform all steps outlined in the short-term storage instructions. In addition, place a proper amount of desiccant (US MIL-D-3464, Class 1, or equivalent) with the unit before wrapping it in the barrier material.

**IMPORTANT**

Once the unit has been properly prepared for storage, it does not require periodic flushing.

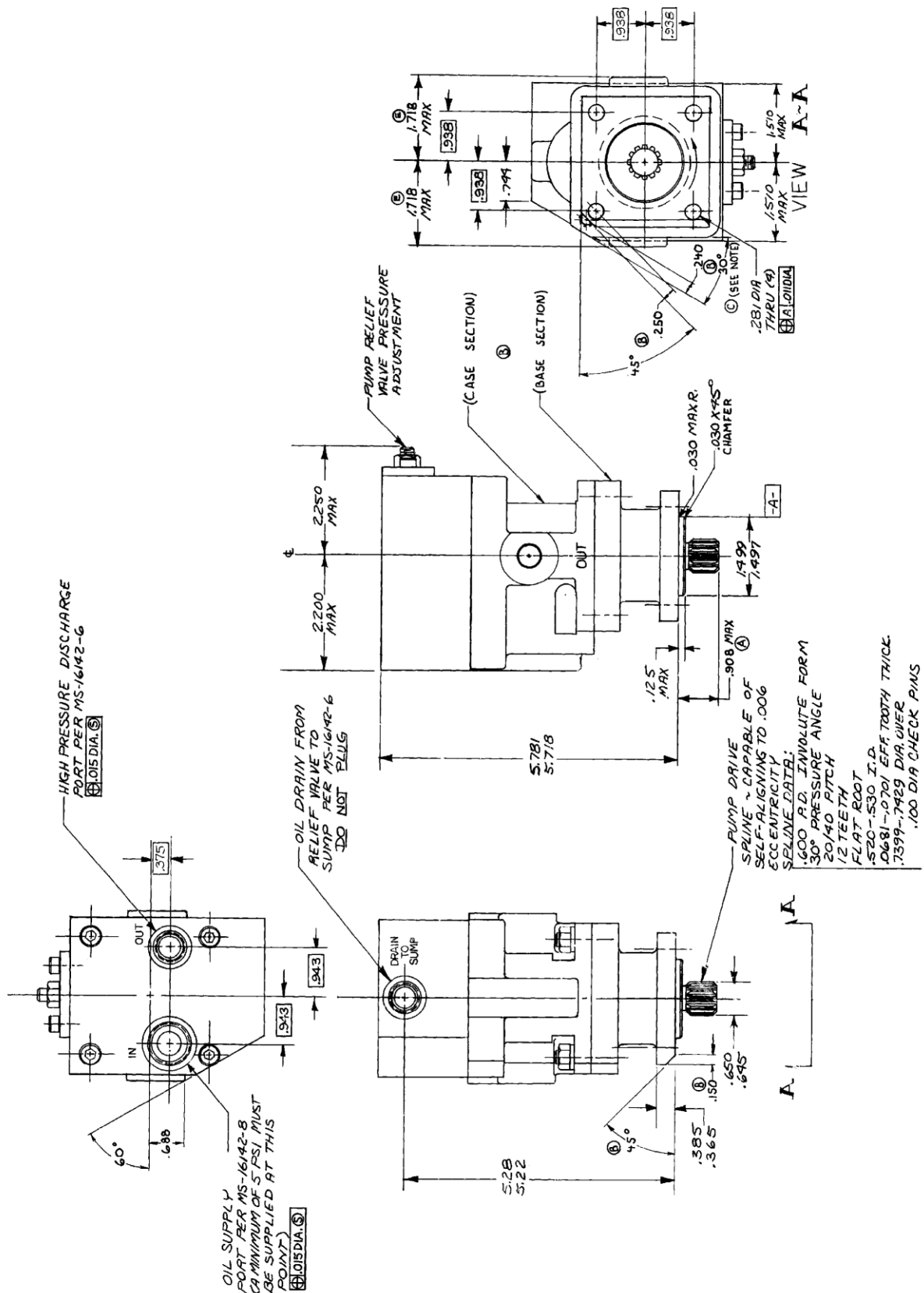


Figure 2-2a. Outline Drawing  
(8580-042, -053, -066)

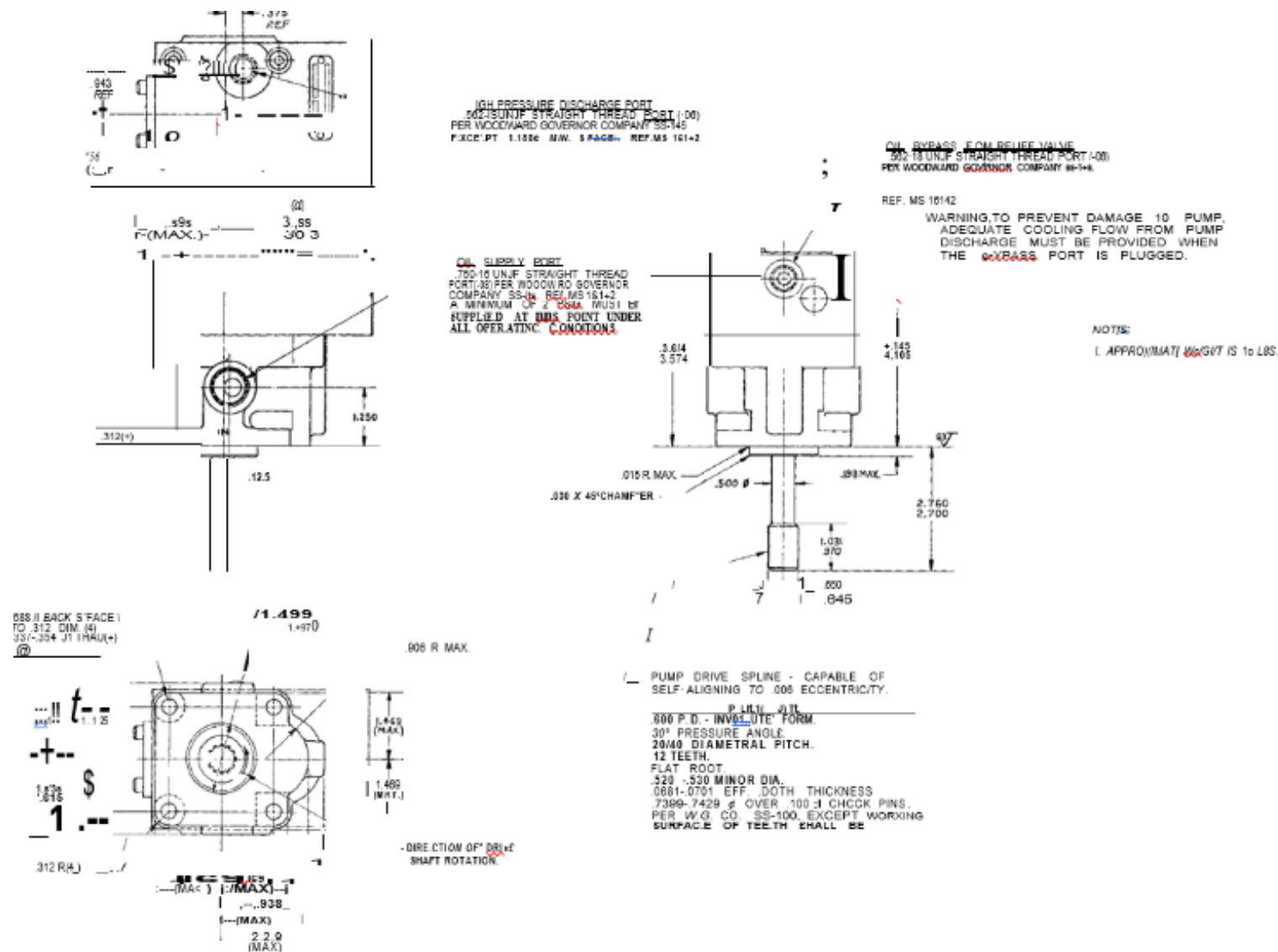


Figure 2-2b. Outline Drawing  
 (8580-065, -080, -083, -085, -086, 9902-072, -092)

## Chapter 3. Principles of Operation

The 2057 pump is a positive-displacement gear pump with an integral pressure-regulating valve to control pump discharge pressure. The pump configuration is shown in Figure 3-1. Figure 3-2 illustrates the operating principle of the pump.

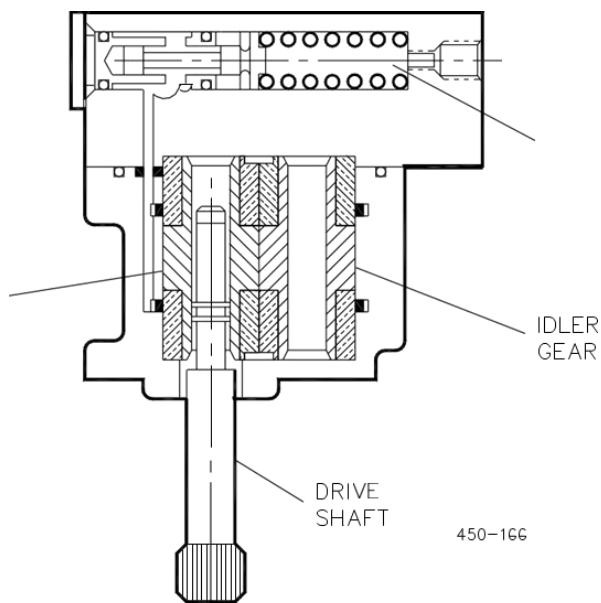


Figure 3-1. Typical 2057 Pump

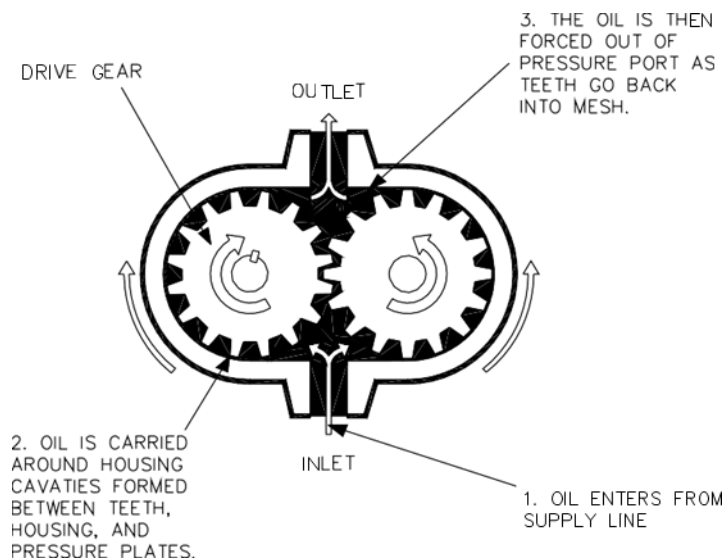


Figure 3-2. Typical Gear Pump

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A positive-displacement pump will provide a given amount of output flow for every revolution. Except for leakage loss, this output flow will remain proportional to speed and will be independent of output pressure.

When operating in the steady-state configuration, the pump's output flow capabilities will exceed output requirements. To compensate for this condition, the pressure-regulating valve will allow the excess oil to flow to the bypass port and return to the oil supply sump.

When hydraulic components are operating in a transient condition, they may demand all the pump's output capabilities. Under this condition there will be little or no oil discharge at the bypass port.

When the 2057 pump is maintaining an oil output pressure of 5170 kPa (750 psi) and an output flow of 26 L/min (7 US gal/min), the input power required to turn the pump's drive shaft will be approximately 2.6 kW (3.5 hp).

Rotation is clockwise when facing the top of the pump (end opposite mounting flange).

Figure 3-3 illustrates the speed versus flow curve of the 2057 pump.

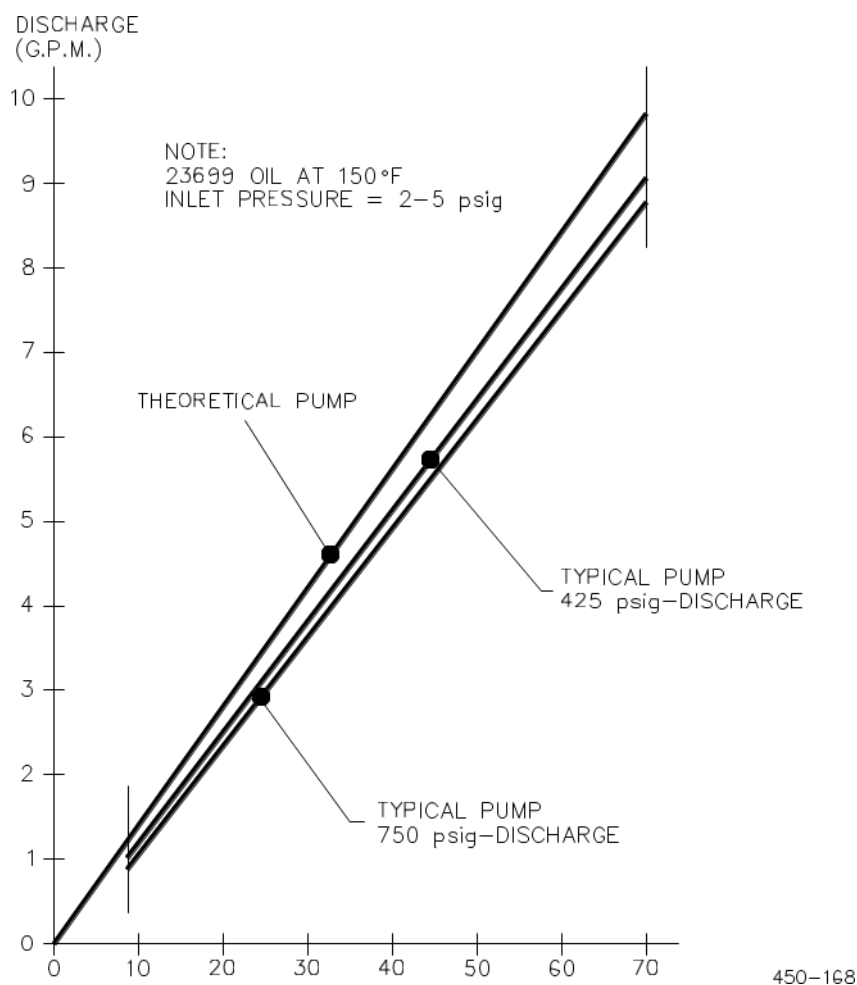


Figure 3-3. 2057 Pump Speed versus Flow Curve

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The 2057 pump is available in many variations. In addition to providing oil pressures to meet user specifications, the pump is available with top or side inlet ports, if required, as well as with different types of drive shafts and mounting patterns. If required, an internal channel can be provided on some models to direct part of the bypass flow from the pressure regulator to the pump inlet (see Figure 3-4).

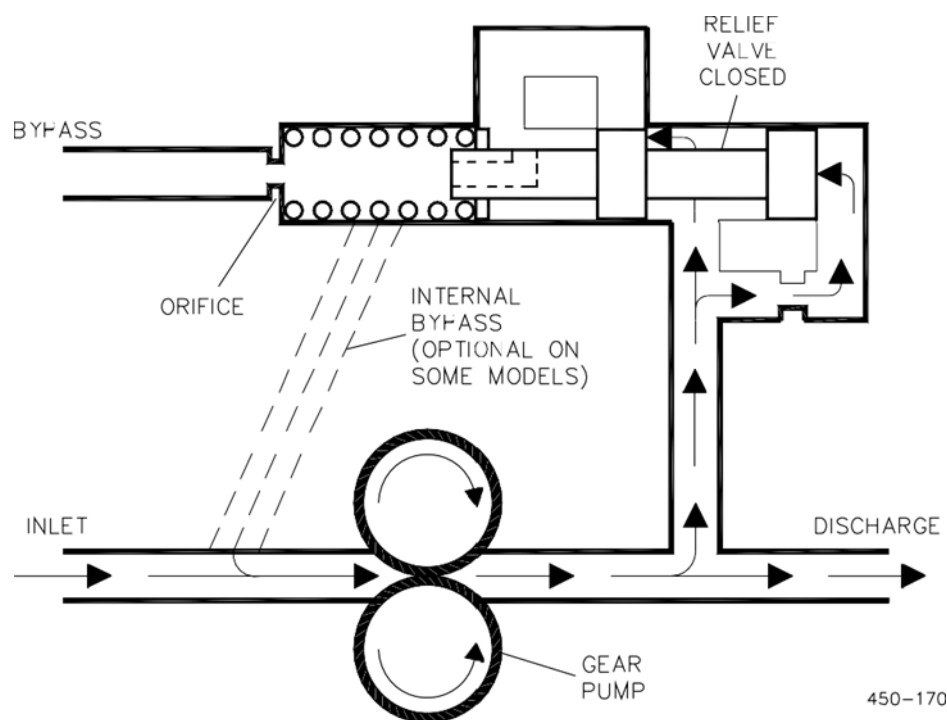
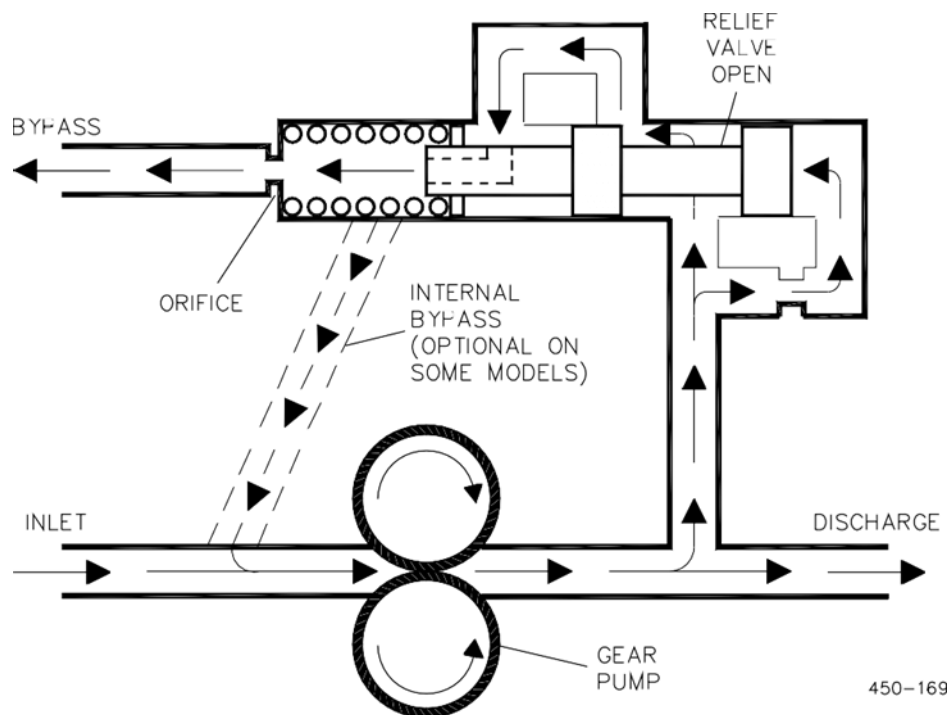


Figure 3-4. Typical 2057 Pump Schematic



## Chapter 4.

# Product Support and Service Options

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### Product Support Options

If you are experiencing problems with the installation, or unsatisfactory performance of a Woodward product, the following options are available:

- Consult the troubleshooting guide in the manual.
- Contact the manufacturer or packager of your system.
- Contact the Woodward Full Service Distributor serving your area.
- Contact Woodward technical assistance (see “How to Contact Woodward” later in this chapter) and discuss your problem. In many cases, your problem can be resolved over the phone. If not, you can select which course of action to pursue based on the available services listed in this chapter.

**OEM or Packager Support:** Many Woodward controls and control devices are installed into the equipment system and programmed by an Original Equipment Manufacturer (OEM) or Equipment Packager at their factory. In some cases, the programming is password-protected by the OEM or packager, and they are the best source for product service and support. Warranty service for Woodward products shipped with an equipment system should also be handled through the OEM or Packager. Please review your equipment system documentation for details.

**Woodward Business Partner Support:** Woodward works with and supports a global network of independent business partners whose mission is to serve the users of Woodward controls, as described here:

- A **Full Service Distributor** has the primary responsibility for sales, service, system integration solutions, technical desk support, and aftermarket marketing of standard Woodward products within a specific geographic area and market segment.
- An **Authorized Independent Service Facility (AISF)** provides authorized service that includes repairs, repair parts, and warranty service on Woodward's behalf. Service (not new unit sales) is an AISF's primary mission.

A current list of Woodward Business Partners is available at:

<https://www.woodward.com/en/support/industrial/service-and-spare-parts/find-a-local-partner>

### Product Service Options

The following factory options for servicing Woodward products are available through your local Full-Service Distributor or the OEM or Packager of the equipment system, based on the standard Woodward Product and Service Warranty (5-09-0690) that is in effect at the time the product is originally shipped from Woodward or a service is performed:

- Replacement/Exchange (24-hour service)
- Flat Rate Repair
- Flat Rate Remanufacture

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**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 is a flat-rate program and includes the full standard Woodward product warranty (Woodward Product and Service Warranty 5-09-0690).

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.

Charges for the Replacement/Exchange service are based on a flat rate plus shipping expenses. You are invoiced the flat rate replacement/exchange charge plus a core charge at the time the replacement unit is shipped. If the core (field unit) is returned within 60 days, a credit for the core charge will be issued.

**Flat Rate Repair:** Flat Rate Repair is available for the majority of standard 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. All repair work carries the standard Woodward service warranty (Woodward Product and Service Warranty 5-09-0690) on replaced parts and labor.

**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 and carry with it the full standard Woodward product warranty (Woodward Product and Service Warranty 5-09-0690). 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 authorization number
- Name and location where the control is installed
- Name and phone number of contact person
- Complete Woodward part number(s) and serial number(s)
- Description of the problem
- Instructions describing the desired type of repair

### Packing a Control

Use the following materials when returning a complete control:

- Protective caps on any connectors
- Antistatic protective bags on all electronic modules
- Packing materials that will not damage the surface of the unit
- At least 100 mm (4 inches) of tightly packed, industry-approved packing material
- A packing carton with double walls
- A strong tape around the outside of the carton for increased strength

### **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*.

## Replacement Parts

When ordering replacement parts for controls, include the following information:

- The part number(s) (XXXX-XXXX) that is on the enclosure nameplate
- The unit serial number, which is also on the nameplate

## Engineering Services

Woodward offers various Engineering Services for our products. For these services, you can contact us by telephone, by email, or through the Woodward website.

- Technical Support
- Product Training
- Field Service

**Technical Support** is available from your equipment system supplier, your local Full-Service Distributor, or from many of Woodward's worldwide locations, depending upon the product and application. This service can assist you with technical questions or problem solving during the normal business hours of the Woodward location you contact. Emergency assistance is also available during non-business hours by phoning Woodward and stating the urgency of your problem.

**Product Training** is available as standard classes at many of our worldwide locations. We also offer customized classes, which can be tailored to your needs and can be held at one of our locations or at your site. This training, conducted by experienced personnel, will assure that you will be able to maintain system reliability and availability.

**Field Service** engineering on-site support is available, depending on the product and location, from many of our worldwide locations or from one of our Full-Service Distributors. The field engineers are experienced both on Woodward products as well as on much of the non-Woodward equipment with which our products interface.

For information on these services, please contact one of the Full-Service Distributors listed at [www.woodward.com/local-partner](http://www.woodward.com/local-partner).

## Contacting Woodward's Support Organization

For the name of your nearest Woodward Full-Service Distributor or service facility, please consult our worldwide directory at <https://www.woodward.com/support>, which also contains the most current product support and contact information.

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<br>Electrical Power Systems |                     | Products Used in<br>Engine Systems |                     | Products Used in Industrial<br>Turbomachinery Systems |                     |
|--|---------------------|------------------------------------|---------------------|---|---------------------|
| Facility                                     | Phone Number        | Facility                           | Phone Number        | Facility  | Phone Number        |
| Brazil                                       | +55 (19) 3708 4800  | Brazil                             | +55 (19) 3708 4800  | Brazil  | +55 (19) 3708 4800  |
| China  | +86 (512) 8818 5515 | China                              | +86 (512) 8818 5515 | China   | +86 (512) 8818 5515 |
| Germany                                      | +49 (711) 78954-510 | Germany                            | +49 (711) 78954-510 | India   | +91 (124) 4399500   |
| India  | +91 (124) 4399500   | India                              | +91 (124) 4399500   | Japan   | +81 (43) 213-2191   |
| Japan  | +81 (43) 213-2191   | Japan                              | +81 (43) 213-2191   | Korea   | +82 (32) 422-5551   |
| Korea  | +82 (32) 422-5551   | Korea                              | +82 (32) 422-5551   | The Netherlands                                       | +31 (23) 5661111    |
| Poland                                       | +48 (12) 295 13 00  | The Netherlands                    | +31 (23) 5661111    | Poland  | +48 (12) 295 13 00  |
| United States                                | +1 (970) 482-5811   | United States                      | +1 (970) 482-5811   | United States   | +1 (970) 482-5811   |

## Technical Assistance

If you need to contact technical assistance, you will need to provide the following information. Please write it down here before contacting the Engine OEM, the Packager, a Woodward Business Partner, or the Woodward factory:

### General

Your Name \_\_\_\_\_

Site Location \_\_\_\_\_

Phone Number \_\_\_\_\_

Fax Number \_\_\_\_\_

---

### Prime Mover Information

Manufacturer \_\_\_\_\_

Turbine Model Number \_\_\_\_\_

Type of Fuel (gas, steam, etc.) \_\_\_\_\_

Power Output Rating \_\_\_\_\_

Application (power generation, marine,  
etc.) \_\_\_\_\_

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### Control/Governor Information

#### Control/Governor #1

Woodward Part Number & Rev. Letter \_\_\_\_\_

Control Description or Governor Type \_\_\_\_\_

Serial Number \_\_\_\_\_

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#### Control/Governor #2

Woodward Part Number & Rev. Letter \_\_\_\_\_

Control Description or Governor Type \_\_\_\_\_

Serial Number \_\_\_\_\_

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#### Control/Governor #3

Woodward Part Number & Rev. Letter \_\_\_\_\_

Control Description or Governor Type \_\_\_\_\_

Serial Number \_\_\_\_\_

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### Symptoms

Description \_\_\_\_\_

*If you have an electronic or programmable control, please have the adjustment setting positions or the menu settings written down and with you at the time of the call.*

## Revision History

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**Changes in Revision G—**

- Revised Regulatory Compliance section
- Updated Declarations

**Changes in Revision F—**

- Updated Regulatory Compliance information and Declarations

**Changes in Revision E—**

- Updated Regulatory Compliance information
- Added new Declaration of Incorporation

# Declarations

## EU DECLARATION OF CONFORMITY


EU DoC No.: 00325-04-EU-02-02  
 Manufacturer's Name: WOODWARD INC.

Manufacturer's Contact Address: 1041 Woodward Way  
 Fort Collins, CO 80524 USA

Model Name(s)/Number(s): 2057 Hydraulic Pump, P/Ns:

|          |          |          |          |          |
|----------|----------|----------|----------|----------|
| 8580-042 | 8580-053 | 8580-066 | 8580-080 | 8580-082 |
| 8580-083 | 8580-085 | 8580-086 | 9902-042 | 9902-072 |

The object of the declaration described above is in conformity with the following relevant Union harmonization legislation: Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014 on the harmonization of the laws of the Member States relating to equipment and protective systems intended for use in potentially explosive atmospheres

Markings in addition to CE marking:  II 3 G, Ex h IIC T4

**Applicable Standards:**

**ATEX:** EN ISO 80079-36:2016 – Explosive atmospheres – Part 36: Non-electrical equipment for explosive atmospheres – Basic method and requirements (ISO 80079-36:2016)  
 EN ISO 80079-37:2016 – Explosive atmospheres – Part 37: Non-electrical equipment for explosive atmospheres – Non-electrical type of protection constructional safety “c”, control of ignition sources “b”, liquid immersion “k” (ISO 80079-37:2016)

This declaration of conformity is issued under the sole responsibility of the manufacturer  
 We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

**MANUFACTURER**

Signature

*Annette Lynch*

Full Name

Annette Lynch

Position

Engineering Manager

Place

Woodward, Fort Collins, CO, USA

Date

14 November, 2023

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

**File name:** 00325-04-EU-02-01  
**Manufacturer's Name:** WOODWARD INC.  
**Manufacturer's Address:** 1041 Woodward Way  
Fort Collins, CO 80524 USA

**Model Names:** 2057 Hydraulic Pump

**This product complies, where  
applicable, with the following  
Essential Requirements of Annex I:** 1.1, 1.2, 1.3, 1.4, 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.

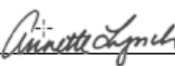
The person authorized to compile the technical documentation:

**Name:** Dominik Kania, Managing Director  
**Address:** Woodward Poland Sp. z o.o., ul. Skarbowa 32, 32-005 Niepolomice, Poland

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 Inc. of Loveland and Fort Collins, Colorado that the above referenced product is in conformity with Directive 2006/42/EC as partly completed machinery:

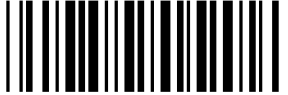
**MANUFACTURER**

|           |   |
|-----------|---|
| Signature |  |
| Full Name | Annette Lynch   |
| Position  | Engineering Manager   |
| Place     | Woodward Inc., Fort Collins, CO, USA  |
| Date      | April 20, 2022  |

We appreciate your comments about the content of our publications.

Send comments to: [industrial.support@woodward.com](mailto:industrial.support@woodward.com)

Please reference publication **45010**.



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Woodward has company-owned plants, subsidiaries, and branches, as well as authorized distributors and other authorized service and sales facilities throughout the world.

Complete address / phone / fax / email information for all locations is available on our website.