



# Product Manual 26472 (Revision NEW, 5/2014) Original Instructions

# Voith to CPC-II Adapter Manifold

Part Number 8928-7240

Installation and Operation Manual



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.

ns Failure to follow instructions can cause personal injury and/or property damage.



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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.



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# Contents

WARNINGS AND NOTICES1		
VOITH TO CPC-II ADAPTER MANIFOLD	.2	
Description	2	
Installation	2	
How to Contact Woodward	7	
Technical Assistance	7	

# **Illustrations and Tables**

Figure 1-1. Isometric Front View of the CPC-II	2
Figure 2-1a. Hydraulic Manifold Block to Adapter Manifold Interface	
Figure 2-1b. Adapter Manifold to CPC-II Interface	
Figure 2-2. Voith to CPC-II Adapter Manifold, Exploded View	
Figure 2-3. Voith to CPC-II Adapter Manifold, Secured to CPC-II	

# 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.

AWARNING 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.



Manual 26472

# Voith to CPC-II Adapter Manifold

# Description

# IMPORTANT

This manual covers the installation and assembly process for the Voith to CPC-II Adapter Manifold, part number 8928-7240. Manual 26615 covers installation and operation of the CPC-II.

Follow all instructions and information provided in CPC-II manual 26615 when installing or working with the CPC-II.

Woodward adapter kit 8928-7240 is available to replace Voith Model E360 I/H converters with the CPC-II.



Figure 1-1. Isometric Front View of the CPC-II

## Installation

### **Receiving Instructions**

The Voith to CPC-II Adapter Manifold is carefully packaged by Woodward to protect it from damage during shipping; however, careless handling during shipment can result in damage. If any damage to the Voith to CPC-II Adapter Manifold is discovered, immediately notify both the shipping agent and Woodward.

### **Unpacking Instructions**

Carefully unpack the Voith to CPC-II Adapter Manifold and remove it from the shipping container. Do not remove the blanking cover on the CPC-II hydraulic interface until the manifold is ready to be installed on the CPC-II.

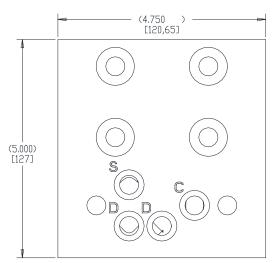


#### Manual 26472

#### **Hydraulic Connections**

The Supply pressure (S), Control pressure (C), and Tank/Drain (D) connections on the Voith to CPC-II Adapter Manifold are made via O-ring face seals. The connections are marked S, C, D on the adapter block as shown in Figures 2-1a and 2-1b.

Height x Width x Depth of Adapter Manifold Block: Àpprox. (127 x 121 x 60) mm / (5.0 x 4.8 x 2.4) inch



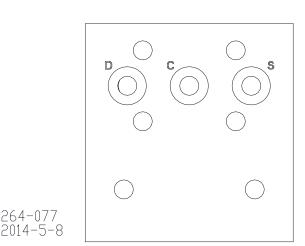


Figure 2-1a. Hydraulic Manifold Block to Adapter Manifold Interface

Figure 2-1b. Adapter Manifold to **CPC-II** Interface

#### Adapter Manifold Mounting Instructions

1. Verify that all components of adapter kit part number 8928-7240 are present per Figure 2-2.

264-077

- 2. Lubricate the 3 O-rings part number 182811 with hydraulic fluid or petroleum jelly.
- 3. Install one 182811 O-ring in each of the three counterbores of plate part number 4349-1040. Reference Figure 2-2 for proper orientation.
- 4. Place 4 washers part number 1010-5220 onto 4 screws part number 1031-1524.
- 5. Place the 1031-1524 screws, with the installed 1010-5220 washers, through the four respective holes of plate part number 4349-1040. Reference Figure 2-2 for proper orientation.
- 6. Place plate 4349-1010 against the CPC-II, and align the 1031-1524 screws with the respective mounting holes of the CPC-II. Reference Figures 2-1 and 2-2 for proper orientation.

Note: To ensure proper sealing, verify that the three 182811 O-rings remain seated within the counterbores of plate 4349-1040 during steps 6 and 7. Damage to the O-rings may result in hydraulic leakage.

#### Released

#### Manual 26472

#### Voith to CPC-II Adapter Manifold

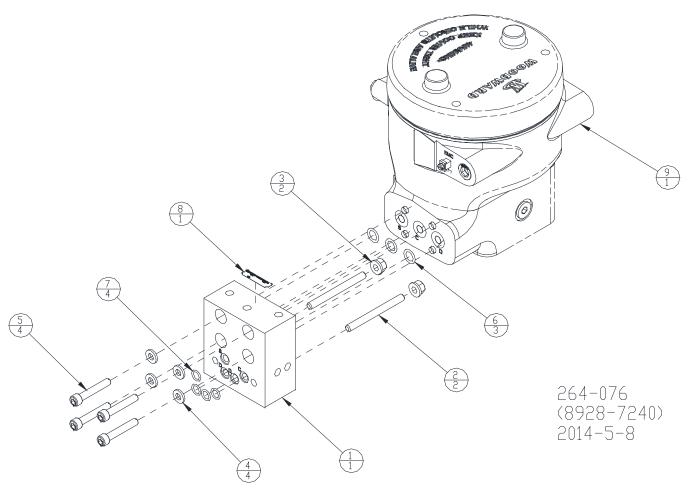
- 7. Torque the 1031-1524 screws to a level appropriate for the tensile load of the fastener (typically 60 to 80 N·m for M10 x 1.5, zinc plated alloy steel, Class 12.9 socket head cap screws). Tighten the screws in a diagonal torque pattern to secure the 4349-1040 plate to the CPC-II. The screws should engage the threads of the CPC-II for a minimum of 16 mm to ensure reliable and solid mounting.
- 8. Install 2 studs part number 1029-5042 into the hydraulic manifold block. The studs should engage the threads of the manifold block a minimum of 16 mm to ensure reliable and solid mounting.
- 9. Lubricate 4 O-rings part number 182737 with hydraulic fluid or petroleum jelly.
- 10. Install one 182737 O-ring in each of the four counterbores of plate part number 4349-1040. Reference Figure 2-2 for proper orientation.
- 11. Align the mating holes of plate part number 4349-1040 with the installed 1029-5042 studs, and slide the plate/CPC-II assembly over the studs until the 182737 O-rings are snug against the manifold block. Reference Figure 2-2 for proper mounting orientation.

Note: To ensure proper sealing, verify that the four 182737 O-rings remain seated within the counterbores of plate 4349-1040 during steps 11 and 12. Damage to the O-rings may result in hydraulic leakage.

12. Thread the two 1029-1009 nuts onto the two 1029-5042 studs, and torque the nuts to a level appropriate for the tensile load of the fastener (typically 55 to 70 N·m for M10 x 1.5, zinc plated alloy steel, Class 10.9 studs). The studs should fully engage the threads of the nuts to ensure reliable and solid mounting. Reference Figure 2-2 for proper mounting orientation.



# Voith to CPC-II Adapter Manifold



INDEX #	ITEM #	DESCRIPTION	QTY
1	4349-1040	PLATE (CPC GEN II, INTERFACE ADAPTER, VOITH, VERTICAL)	1
2	1029-5042	STUD (M10 X 1.5, 110 LG, STEEL, ZINC PLATED, CLASS 10.9)	2
3	1029-1009	NUT (FLANGE, M10 X 1.5, STEEL, ZINC PLATED, CLASS 10.9)	2
4	1010-5220	WASHER (.406 ID, .813 DD, .118 THICK, STEEL, ZINC PLATED, HARDENED)	4
5	1031-1524	SCREW (M10 X 1.5, 60MM LG, STEEL, ZINC PLATED, CLASS 12.9)	4
6	182811	D RING (VITDN,(T-078),2-115,.103 W,.674 ID)	3
7	182737	D RING (VITDN,(T-078),2-112,,103 W,.487 ID)	4
8	3061-475	LABEL (P/N AND S/N LABEL WITH COMMENT LINE FOR EXT DESC)	1
9	9907-1100	CONVERTER (CPC GEN II, 0-25 BAR, EXP PROOF)	1

Figure 2-2. Voith to CPC-II Adapter Manifold, Exploded View

Manual 26472



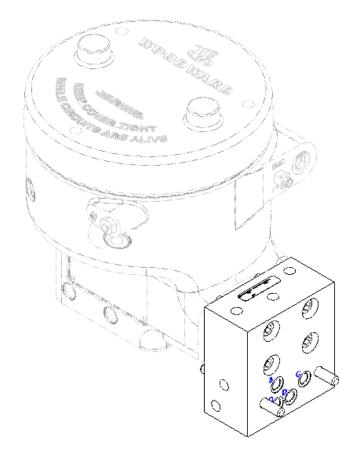


Figure 2-3. Voith to CPC-II Adapter Manifold, Secured to CPC-II



## How to Contact Woodward

For assistance, call one of the following Woodward facilities to obtain the address and phone number of the facility nearest your location where you will be able to get information and service.

Electrical Power Systems	Engine Systems	Turbine 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+49 (0) 21 52 14 51	Germany +49 (711) 78954-510	India+91 (129) 4097100
India+91 (129) 4097100	India+91 (129) 4097100	Japan +81 (43) 213-2191
Japan +81 (43) 213-2191	Japan +81 (43) 213-2191	Korea +82 (51) 636-7080
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You can also locate your nearest Woodward distributor or service facility on our website at:

www.woodward.com/directory

## **Technical Assistance**

If you need to telephone for technical assistance, you will need to provide the following information. Please write it down here before phoning:

Your Name	
Site Location	
Phone Number	
Fax Number	
Engine/Turbine Model Number	
Manufacturer	
Number of Cylinders (if applicable)	
Type of Fuel (gas, gaseous, steam, etc)	
Rating	
Application	
Control/Governor #1	
Woodward Part Number & Rev. Letter	
Control Description or Governor Type	
Serial Number	
Control/Governor #2	
Woodward Part Number & Rev. Letter	
Control Description or Governor Type	
Serial Number	
Control/Governor #3	
Woodward Part Number & Rev. Letter	
Control Description or Governor Type	
Serial Number	

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.



We appreciate your comments about the content of our publications. Send comments to: <u>icinfo@woodward.com</u>

Please reference publication 26472.





PO Box 1519, Fort Collins CO 80522-1519, USA 1000 East Drake Road, Fort Collins CO 80525, USA Phone +1 (970) 482-5811 • Fax +1 (970) 498-3058

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