

# Newport AS-1568 Accessory Shelf

INSTRUCTION  
MANUAL

# **Newport AS-1568 Accessory Shelf Instruction Manual**

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## Warranty

Newport Corporation warrants this product to be free of defects in material and workmanship for a period of one year from the date of shipment. If found to be defective during the warranty period, the product will either be repaired or replaced at Newport's option.

To exercise this warranty, write or call your local Newport representative or contact Newport headquarters in Irvine, California. You will be given prompt assistance and return instructions.

Repaired or replaced products are warranted for the balance of the original warranty period or 90 days, whichever is longer.

This warranty does not apply to defects resulting from modifications or improper use of the system or its component parts.

This warranty is in lieu of all other warranties, expressed or implied, including any implied warranty of merchantability or fitness for a particular use. Newport Corporation shall not be liable for any indirect, special, or consequential damages.

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## Specifications

Load Capacity:	100 lbs. (45 Kgs)
Shelf Size:*	15.0 in × 68.0 in (38.1 × 172.7 cm)
Shelf Weight:	50 lbs. (22.7 Kgs)
Shelf Height:	14.0 in (35.5 cm)

\*For other sizes contact your Newport Representative



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# Section 1

## General Information

### 1.1 Introduction

The Newport Accessory Shelf provides a convenient under-the-table platform for mounting and storage of controllers, lasers, and other instruments when working with any of the Newport Vibration Control System.

The Newport AS-1568 Accessory Shelf is often used in conjunction with a AH Series Access Hole to direct the output from a laser, mounted on the Shelf, to the equipment mounted on the table.

The Shelf is a 2 inch thick rigid honeycomb panel with welded steel panels on all six sides.

### 1.2 Getting Started

Please read this instruction manual thoroughly before assembling the Newport AS-1568 Accessory Shelf.

### 1.3 Unpacking and Inspection

The components of the Newport AS-1568 Accessory Shelf are packed in a single box. Be sure the number of boxes you received is equal to the total number listed on the label (for example, if a box is labeled 1 of 4, there should be 4 boxes).

Use the diagram in Figure 1.1 to locate and identify each component as you remove it from the box. Carefully inspect all components for shipping damage. Report any shipping damage immediately to Newport and the shipping company.

### 1.4 Safety Considerations

The following terms are used in this manual that relate to your safety.

**Warning** is used to indicate dangers that could result in personal injury.

**Caution** is used to indicate situations that may result in damage to components of the Newport Vibration Control System.

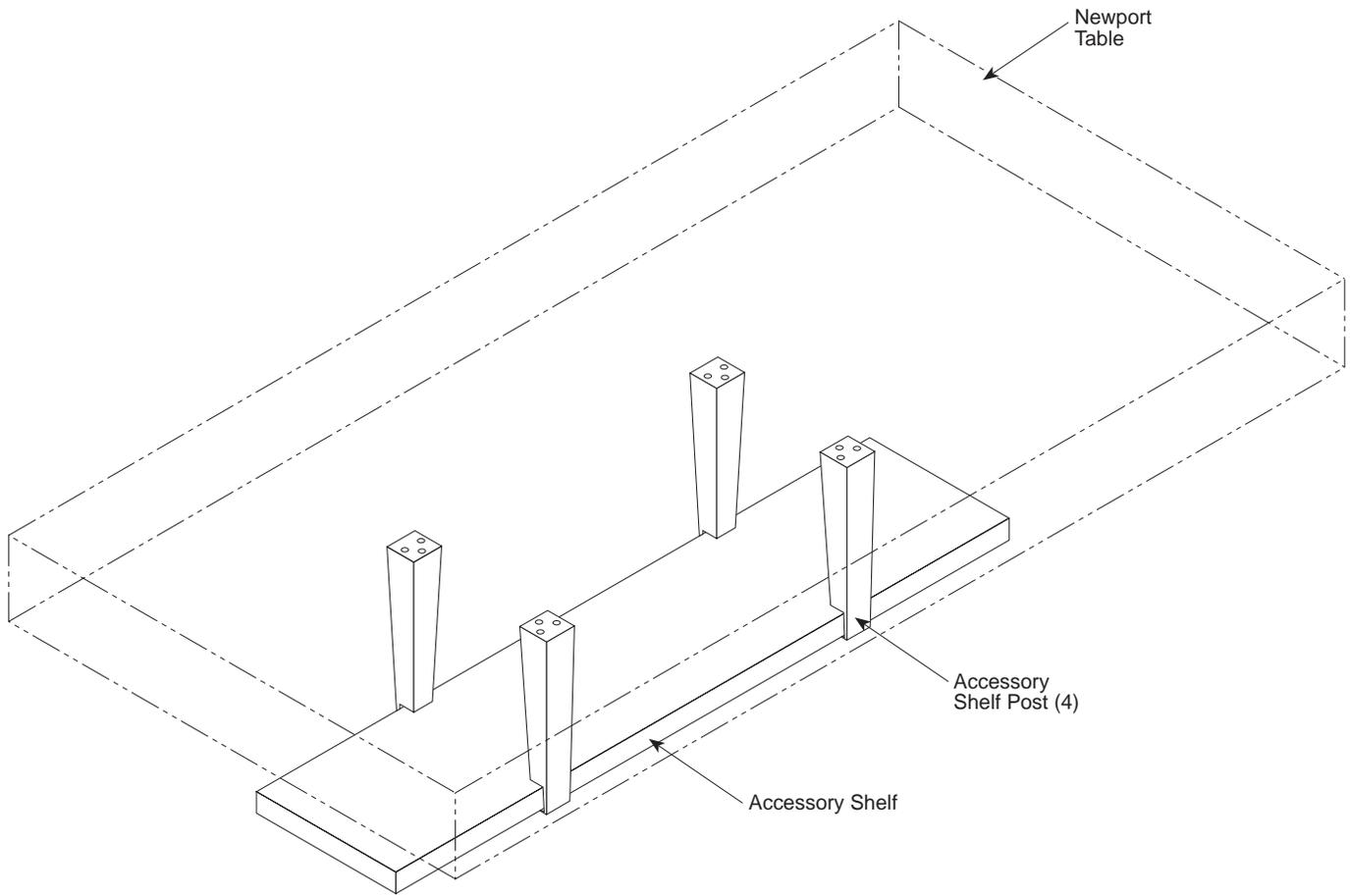


Figure 1.1 — Accessory Shelf Assembly

### Warning

**The AS-1568 Accessory Shelf is a metallic electrical conductor. To prevent the possibility of electrical shock, be sure that all equipment is properly insulated and grounded before placing it on the shelf system.**

## 1.5 Warranty Information

Warranty information may be found on the page preceding the Table of Contents in this manual. Should it become necessary to exercise the warranty, contact your Newport representative to determine the proper course of action. Newport Corporation maintains offices throughout the United States and other locations worldwide. Refer to the back cover of this manual for the addresses and telephone numbers of these offices.

## Section 2

# Assembly

### 2.1 Prepare For Assembly

The Newport AS-1568 Accessory Shelf is fastened to the underside of the Newport Vibration Control System. Before proceeding with the installation, be sure that the table top is stable and securely fastened to the support isolators.

### 2.2 Shelf Assembly

Use the following procedure to assemble your Newport AS-1568 Accessory Shelf.

- A. Remove the shelf from the packing carton and place it on the floor below the table.
- B. Refer to Figure 2.1 for correct placement, and mount the four shelf posts to the underside of the table using the  $\frac{1}{4}$ -20  $\times$   $\frac{3}{4}$ " bolts. Screw the bolts in approximately four turns so that the shelf posts hang loosely below the table.

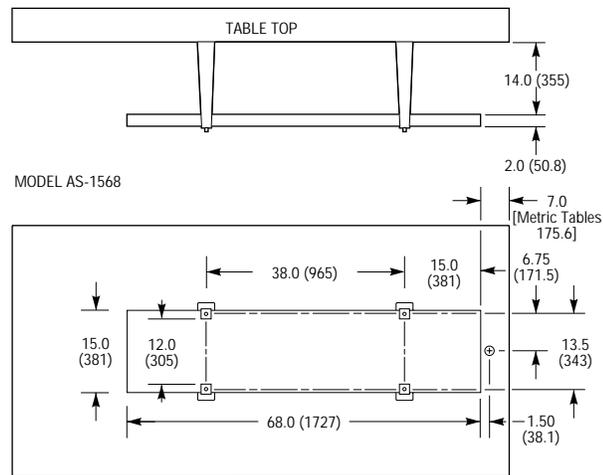
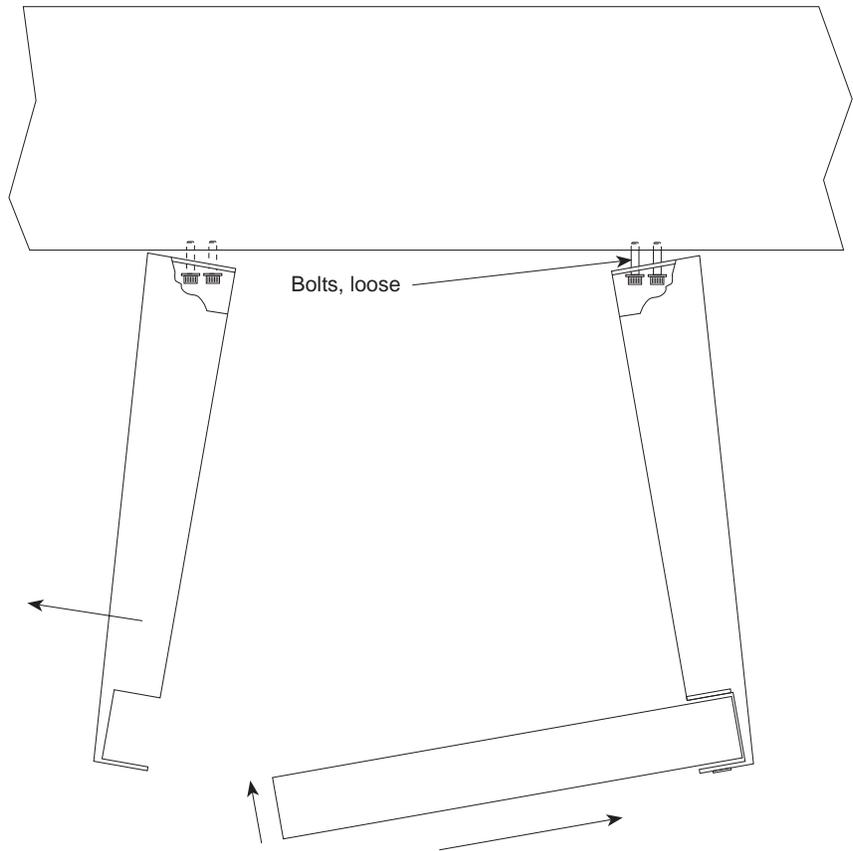


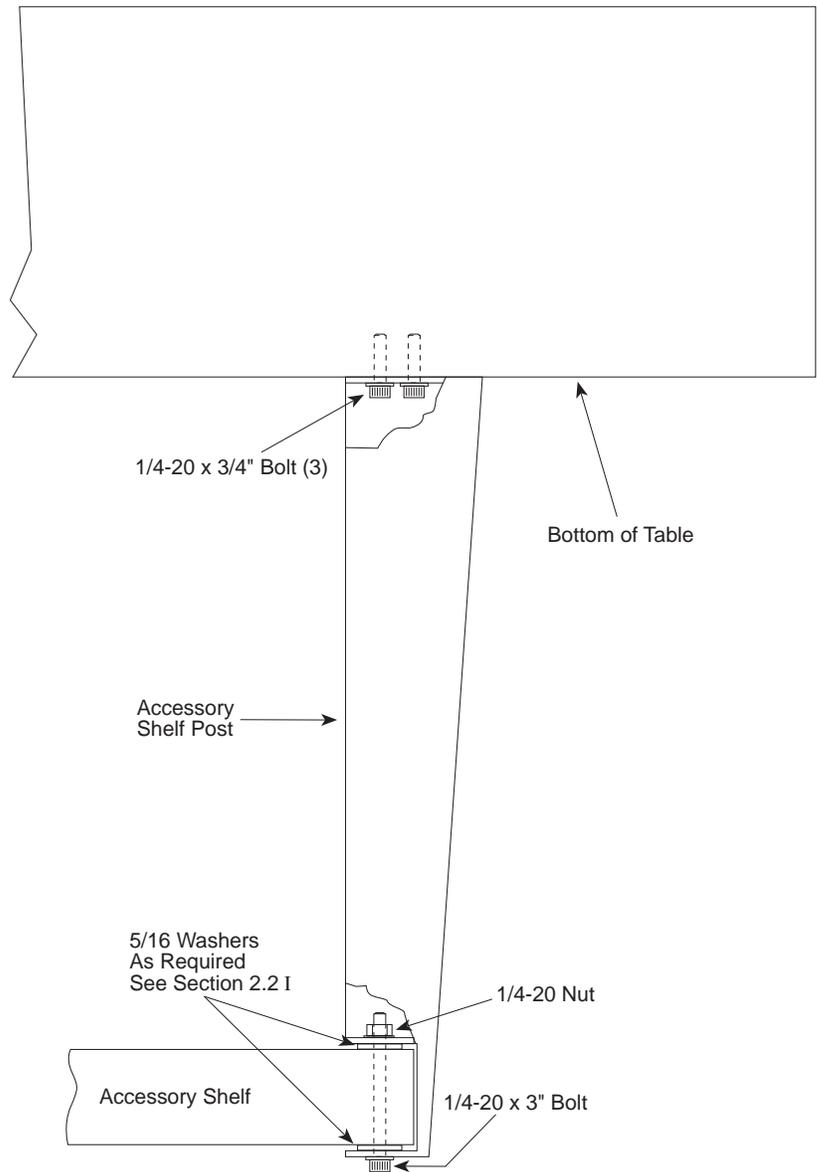
Figure 2.1 — Mounting Post Location

- C. Carefully lift one side of the shelf and insert it into the slots of the corresponding posts (Figure 2.2).
- D. Raise the opposite side of the shelf until the entire shelf is level. As required, pull each post away from the shelf so that it can hook under the shelf.



*Figure 2.2 — Shelf Installation*

- E. Align the holes in the shelf with the holes in the bottoms of the posts. Insert a  $\frac{1}{4}$ -20  $\times$  3" bolt from the bottom of each post up through the shelf.
- F. Secure each bolt with a  $\frac{1}{4}$ -20 nut and washer. Figure 2.3 details the assembly of one shelf post.



*Figure 2.3 — Shelf Support Assembly*

- G. Tighten the 12 bolts securing the shelf posts to the table bottom.
- H. Tighten the four bolts securing the shelf to the shelf posts.
- I. The  $\frac{5}{16}$ " (7.9 mm) washers provided with the shelf may be installed between the shelf and the posts as required to prevent the shelf from rocking. See Figure 2.3.

**2.3**

**Verify Assembly**

Before using your Newport AS-1568 Accessory Shelf, carefully check that all supports are perpendicular to the shelf and to the floor. Be sure all bolts are tight.

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## Section 3

# Operation

### 3.1 Principles of Operation

The Newport AS-1568 Accessory Shelf provides a convenient support and storage shelf for measurement equipment and lasers that should be mounted below the optical table.

### 3.2 Maintenance

Newport AS-1568 Accessory Shelves require little maintenance. No periodic maintenance is required.

#### 3.2.1 Cleaning

The Newport AS-1568 Accessory Shelf is made of painted steel. It may be cleaned by applying non-abrasive liquid household cleaner to a rag and wiping the surface dry. Avoid abrasive cleaners as they may scratch the painted surfaces.

#### 3.2.2 Spare Parts

Part Name	Part Number
Shelf (1) .....	2632
Support (4) .....	6846
Screw, ¼-20 × ¾" (12) .....	3674-AD-222
Washer, ¼" (20) .....	3941-GH-0774
Screw, ¼-20 × 3.0 (4) .....	3674-AD-236
Nut, ¼-20 (4) .....	3301-AD-024
Washer, ⅝" (12) .....	3941-GH-0877

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## Section 4

# Troubleshooting

### 4.1 Mechanical Stability

#### 4.1.1 System Shelf Bends From Load

The shelf has a maximum load capacity of 100 lbs (45 Kgs). If your load exceeds this value the shelf may bend enough to cause laser beam misalignment. Distributing the load over the entire surface of the shelf will reduce bending.

#### 4.1.2 Table Isolation Performance is Degraded

Table isolation performance may be degraded if electrical or coolant lines are connected to equipment on the shelf. Vibration conducted to the shelf from ground by cables or hoses can be minimized by providing generous service loops. Reducing coolant flow rates can reduce coolant generated vibration.

Cooling fans or other moving components in equipment mounted on the shelf may cause vibration of the table surface.

#### 4.1.3 Beam Alignment is Difficult to Maintain

Avoid installing large heat sources on the shelf. Temperature differences between the top and bottom table skins can cause the table to bow.

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## Section 5

### Factory Service

#### 5.1 Obtaining Service

To obtain information concerning factory service, contact Newport Corporation or your Newport representative. Please have the following information available.

1. Model number.
2. Purchase order number.
3. Complete description of the problem.

If components are to be returned to Newport Corporation, you will be given a Return Number, which you should reference in your shipping documents.

Please fill out the service form located on the next page, and have the information ready when contacting Newport Corporation. Include the completed service form with any parts or components that are returned.

**5.2 Service Form**

**Vibration Control Products**

**Newport Corporation**  
U.S.A. Office: 949/863-3144  
Fax: 949/253-1800

Name \_\_\_\_\_ RETURN AUTHORIZATION # \_\_\_\_\_

Company \_\_\_\_\_ (Please obtain prior to return of item)

Address \_\_\_\_\_

Country \_\_\_\_\_ Date \_\_\_\_\_

P.O. Number \_\_\_\_\_ Phone Number \_\_\_\_\_

**Item(s) Being Returned:**

Model # \_\_\_\_\_ Serial # \_\_\_\_\_

Description \_\_\_\_\_

Reason for return of goods (please list any specific problems) \_\_\_\_\_

\_\_\_\_\_

**Please Describe the Problem:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_ (Attach additional sheets as necessary)

**Where is the Equipment Installed ?**

(factory, controlled laboratory, out-of-doors, etc.) \_\_\_\_\_

Maximum Air Pressure available ? \_\_\_\_\_ Regulated ? \_\_\_\_\_

Any additional information. (If special modifications have been made by the user, please describe below).

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



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**Notes:**

**WORLDWIDE HEADQUARTERS  
NEWPORT CORPORATION**

1791 Deere Avenue  
Irvine, CA 92606

(In U.S.): 800-222-6440  
Tel: 949-863-3144  
Fax: 949-253-1680

**INTERNET**

sales@newport.com

**BELGIUM**

Tel: 016 402927  
Fax: 016 40 2227

**CANADA**

In Canada: 800-267-8999  
Tel: 905-567-0390  
Fax: 905-567-0392

**FRANCE**

Tel: 01 60916868  
Fax: 01 60916869

**GERMANY**

Tel: +49 (0)6151 3621-0  
Fax: +49 (0)6151 3621-52

**ITALY**

Tel: 02 924 5518  
Fax: 02 923 2448

**NETHERLANDS**

Tel: +31 (0)30 65 92111  
Fax: +31 (0)30 65 92120

**SWITZERLAND**

Tel: +41 (0)1- 744-50-70  
Fax: +41 (0)1- 744-50-77

**TAIWAN**

Tel: 886 (2) 27699796  
Fax: 886 (2) 27699638

**UNITED KINGDOM**

Tel: 01635 521757  
Fax: 01635 521348



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