



V-Plate



Operator's Manual

**Model Numbers: VP-180SC-24HVC
VP-180SC-30HVC**

Revision: B

© Copyright 2023 by DEMTECH Services, Inc.

All Rights Reserved

Scope of Manual:

This manual contains procedures for safety, general unpacking, set-up, and operation of your DEMTECH Services, Inc. Vac-Plate.

The text of this publication, or any part thereof, may not be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, storage in an information retrieval system, or otherwise, without prior written permission of DEMTECH Services, Inc.

Notice

Patents have been granted and/or patent applications are pending or are in the process of preparation on all DEMTECH Services, Inc. developments.

The material in the manual is for informational purposes only and is subject to change without notice.

DEMTECH Services, Inc. assumes no responsibility for any errors that may appear in this manual.

Printed in the USA

Manual Number: **VP-OPERATORS MANUAL, Revision: B**

DEMTECH Services, Inc.

6414 Capitol Avenue Diamond Springs, CA 95619 U.S.A.

Telephone: (530) 621-3200

Toll Free: (888) 324-9353

Fax: (530) 621-0150

Web Site: www.demtech.com

Table of Contents

1	SAFETY PRECAUTIONS.....	PAGE 1
2	GENERAL SAFETY & MAINTENANCE INFORMATION.....	PAGE 2
	2.1 Intended Use.....	Page 2
	2.2 Maintenance.....	Page 2
3	GENERAL PRODUCT DATA.....	PAGE 3
4	SITE PREPARATION.....	PAGE 3
5	TESTING USING THE V-PLATE.....	PAGE 4
	5.1 V-Plate Position.....	Page 4
	5.2 Test Results.....	Page 5
6	MAINTENANCE & REPAIR.....	PAGE 5
7	FACTORY SERVICING.....	PAGE 6

1 Safety Precautions

Safety precautions for operating personnel and equipment:

WARNING 1: Operating personnel should perform only the procedures described and recommended in this manual.

WARNING 2: To avoid serious injury ensure the applied surface is free of any debris and/or aggressive substances.

WARNING 3: The locations of potentially dangerous voltages and other hazards are identified and labeled on the equipment. Be careful to observe these warnings when installing, operating, maintaining or servicing the equipment. Observe all warnings in this manual.

WARNING 4: Make sure to disconnect all input power prior to performing any maintenance or repairs.

WARNING 5: This product is intended for operator attended operation only. This product should never be left unattended at any time while the Vacuum is on. Incorrect use of the product will cause damage to the Vacuum and/or the operator.

WARNING 6: Wear proper eye protection, in case of an implosion of the Vacuum Plate.

CAUTION 1: Observe the precautions given on the equipment and within this manual to prevent damage to the equipment.

CAUTION 2: Unauthorized personnel should not remove from the equipment those panels or covers that are provided for protection and/or require a tool to remove.

CAUTION 3: Prior to use ensure there are no cracks or defects on the V-Plate surface, failure to do so may cause damage to the Vacuum and/or injury to the user.

2 General Safety & Maintenance Information

The DEMTECH Services, Inc. Vac-Plate Testing system, hereinafter referred to as the V-Plate is a high voltage piece of equipment. Always disconnect the power before performing any service and/or maintenance procedures on the V-Plate. At all times while operating the Vacuum keep hands, fingers, and other body parts well clear of the V-Plate intake.

2.1 Intended Use

The V-Plate is intended as professional use equipment and is not intended for sale to the general public.

The V-Plate has been manufactured utilizing the latest technology and current safety standards and regulations. However, improper use or abuse may lead to hazardous conditions for the user or other personnel or cause damage to the V-Plate. The V-Plate has been designed to incorporate a separate motor, allowing for quick and easy swapping of worn plates.

Always keep this manual with the V-Plate at or near the location where the V-Plate is being used so that it can be referred to quickly and easily.

The technician assigned to operate this V-Plate must have read through and become familiar with this manual, particularly all safety information, before operating the V-Plate.

No changes and/or modifications shall be made to the V-Plate especially as it relates to safety.

2.2 Maintenance

Maintenance, inspection and adjustment of the V-Plate shall only be carried out by qualified personnel. Before removing or installing spare parts or performing other repair operations to the V-Plate, consult DEMTECH Services, Inc. or your authorized DEMTECH service center for advice on proper procedures. This will help insure a safe and successful outcome. Always make sure all screw connections are tight before attempting to operate the V-Plate after maintenance and/or repair procedures. Also make sure all covers, guards, and other safety devices have been fully reinstalled before use.

3 General Product Data

The DEMTECH Services, Inc. Vacuum-Plate, hereinafter referred to as the V-Plate, is a durable easy to use non-destructive on-site Vacuum Tester. This design allows for easy high-volume testing of seams throughout the largest of jobsites. ***The V-Plate Vacuum Tester is a high power 110v Wet/Dry Vacuum designed to pull up to 5.2 inHg.*** A flexible transparent plate alongside a 1-1/4" thick gasket allows for complete suction on non-level surfaces. You can be assured the V-Plate has been built using the highest quality materials available which include Billet Aluminum and ground and hardened steel. DEMTECH Services, Inc. strives to make our systems easy to use and built to last.

4 Site Preparation

Before proceeding with the unpacking and installation instructions in the following section(s) make sure the work site is prepared and ready to use the V-Plate. The V-Plate has been designed to handle the roughest jobsite conditions, prior to placing the Plate onto the testing area ensure there are no rocks or debris. Failure to do so may cause damage to the machine and/or injure the operator.

Carefully follow the detailed unpacking and installation instructions provided in this manual.

5 Testing Using the V-Plate

5.1 V-Plate Position

- a. Prior to testing lightly spray a mixture of soap and water onto the section of interest.
- b. Place the V-Plate flat on the section of interest ensuring that the seam is running horizontally down the center of the Plate.
- c. Turn switch to the 'ON' position.
- d. To gain proper suction, the V-Plate needs to be pressed onto the liner using both provided handles (*Items 1 & 3, Figure 5.1*).
- e. The negative pressure being applied to the seam can be read on the provided Manometer (*Item 2, Figure 5.1*).
- f. After specified time has elapsed turn the power switch to the 'OFF' position', allow time for suction to subside and move the V-Plate to the next test position.



Figure 5.1

5.2 Test Results

A weld is considered passing when the negative pressure read on the Vacuum Gauge (*Item 2, Figure 5.1*) builds quickly and holds throughout the test. If the seam fails to hold vacuum and shows bubbles, the seam appears to be bad.

6 Maintenance & Repair

In case of a Vacuum failure or Plate failure, the entire motor can be removed using just 3 screws using a 4mm hex drive (Item 1, Figure 6.1).



Figure 6.1

7 Factory Servicing

In the event your V-Plate Vacuum Motor should require factory service, the motor can be detached and sent in for service. Refer to the following step for preparing the V-Plate for return. Unless previous arrangements are made, shipping charges and insurance are the responsibility of the customer. Ship the packaged V-Plate to DEMTECH Services, Inc. at:

DemTech Services, Inc
Ship to address: 6414 Capitol Avenue
Diamond Springs, CA 95619
U.S.A.

Warranty

DEMTECH Services, Inc. warrants all equipment of its manufacture to be free from defects in materials, workmanship, mechanical parts, and labor for a period of one year from the date of shipment to the original buyer and ninety days for electrical. This warranty excludes normal wear items such as gears, bearings and chains. The liability under this warranty is limited to replacement parts and labor on equipment when the equipment is returned prepaid to the factory or its authorized service center with prior authorization from DEMTECH Services, Inc., and upon examination by DEMTECH Services, Inc., is determined to be defective. At DEMTECH Services, Inc.'s option, a service representative may be dispatched to the equipment location.

As an additional protection, DEMTECH Services, Inc. warrants that for a period of 90 days from the date of shipment to the original buyer, pending prior authorization from DEMTECH Services, Inc., there will be no charge for service related shipping of parts and/or equipment or for authorized travel of a service representative to the equipment location. After 90 days, all costs incurred for shipping the equipment or parts thereof or for travel are the responsibility of the buyer. Our warranty for this equipment is rendered void if the unit has been repaired, taken apart or modified, or attempted to be, unless such actions have been taken in accordance with written instructions received from DEMTECH Services, Inc. The warranty is also void if the equipment has been subjected to abuse, accident or other abnormal conditions.

IF ANY FAULT DEVELOPS, THE FOLLOWING STEPS SHOULD BE TAKEN:

1. Notify DEMTECH Services, Inc. by calling 1-888-324-9353. Overseas customers should contact the local DEMTECH authorized service center. Please be prepared with the model number, serial number and full details of the difficulty. Upon receipt of this information, service data or shipping instructions will be provided by DEMTECH Services, Inc. Do not return the unit for repair without first contacting the factory or its representative for instructions.
2. After the initial 90 day period, on receipt of shipping instructions, forward the equipment prepaid to the factory or its authorized service center as instructed. If requested, an estimate of the charges will be made before work begins, especially with those cases where the DEMTECH Services, Inc. product is not covered by the warranty.
3. If the original carton and packing are not available, the product should be packed in a container with a strong exterior and surrounded by a protective layer of shock-absorbing material. DEMTECH Services, Inc. advises returning the equipment at full value to the carrier.

DEMTECH Services, Inc. reserves the right to make changes in design at any time without incurring any obligation to install the same changes on units previously purchased.

This warranty states the essence of the obligations or liabilities on the part of DEMTECH Services, Inc. THE FORMAL, COMPLETE AND EXCLUSIVE STATEMENT OF DEMTECH SERVICES, INC.'S WARRANTY IS CONTAINED IN ITS QUOTATIONS, ACKNOWLEDGEMENTS AND INVOICES. DEMTECH Services, Inc. neither assumes, nor authorizes any person to assume for it, any liability in connection with the sale of its equipment other than those set forth herein