

# INSTALLATION

Aggressive Fuels  
Service Kit  
P/N WU001636-0001  
For iMeters



**DANGER**

## **READ THIS MANUAL BEFORE YOU BEGIN**

Dispensers have both electricity and a hazardous, flammable and potentially explosive liquid. Failure to follow the below precautions and the Warning and Caution instructions in this manual may result in serious injury. Follow all rules, codes and laws that apply to your area and installation.

### **SAFETY PRECAUTIONS - INSTALLATION AND MAINTENANCE**

Always make sure ALL power to the dispenser is turned OFF before you open the dispenser cabinet for maintenance. Physically lock, restrict access to, or tag the circuit breakers you turn off when servicing the dispenser. Be sure to trip (close) the emergency valve(s) under the dispenser BEFORE beginning maintenance.

Make sure that you know how to turn OFF power to the dispenser and submersible pumps in an emergency. Have all leaks or defects repaired immediately.

### **EQUIPMENT PRECAUTIONS**

Be sure to bleed all air from product lines of remote dispensers and prime suction pumps before dispensing product, otherwise, damage to the equipment may occur. Always use the approved method for lifting the dispenser. Never lift by the nozzle boot, sheet metal, valance, etc., otherwise equipment damage or personal injury may occur.

### **HOW TO CONTACT WAYNE**

Problems with the installation of this kit should be referred to Wayne Technical Support (1-800-926-3737).

### **INDICATORS AND NOTATIONS**



**DANGER**

Danger indicates a hazard or unsafe practice which, if not avoided, will result in severe injury or possibly death.



**WARNING**

Warning indicates a hazard or unsafe practice which, if not avoided, may result in severe injury or possibly death.



**CAUTION**

Caution indicates a hazard or unsafe practice which, if not avoided, may result in minor injury.

**NOTE:**

Important information to consider, otherwise, improper installation and/or damage to components may occur.

# Aggressive Fuels Service Kit

# Installation



# 1 INTRODUCTION

This manual provides instructions for replacing the O-rings and end covers on the iMeter.

Address questions concerning installation of this kit to Wayne Technical Support at 1-800-926-3737.

## 1.1 Parts Required

The parts and quantities that are included in the kit are shown on the following pages.

## 1.2 Tools Required

Absorbent Pads	1 Pan to catch fuel	1 Pan to place meter in
Petroleum Jelly	Torque Wrench	5mm Allen Wrench
Open-End Wrenched	Small Pliers	Channel Locks

## 1.3 Safety Precautions

Before beginning the installation of this kit, block off the work area with safety cones.

NOTE: These retrofit kits may require installation of several wiring and hardware assemblies. Any installation or modification must comply with the requirements of the National Electrical Code (NFPA 70), and NFPA 30 and any other applicable codes.

NFPA 30A states that:

“When maintenance to Class 1 dispensing devices becomes necessary and such maintenance may allow the accidental release or ignition of liquid, the following precautions shall be taken before such maintenance is begun:

- Only persons knowledgeable in performing the required maintenance shall perform the work.
- All electrical power to the dispensing device and pump serving the dispenser shall be shut off at the main electrical disconnect panel.
- The emergency shut-off valve at the dispenser, if installed, shall be closed.
- All vehicle traffic and unauthorized persons shall be prevented from coming within 20 ft.(6 m) of the dispensing device. ”



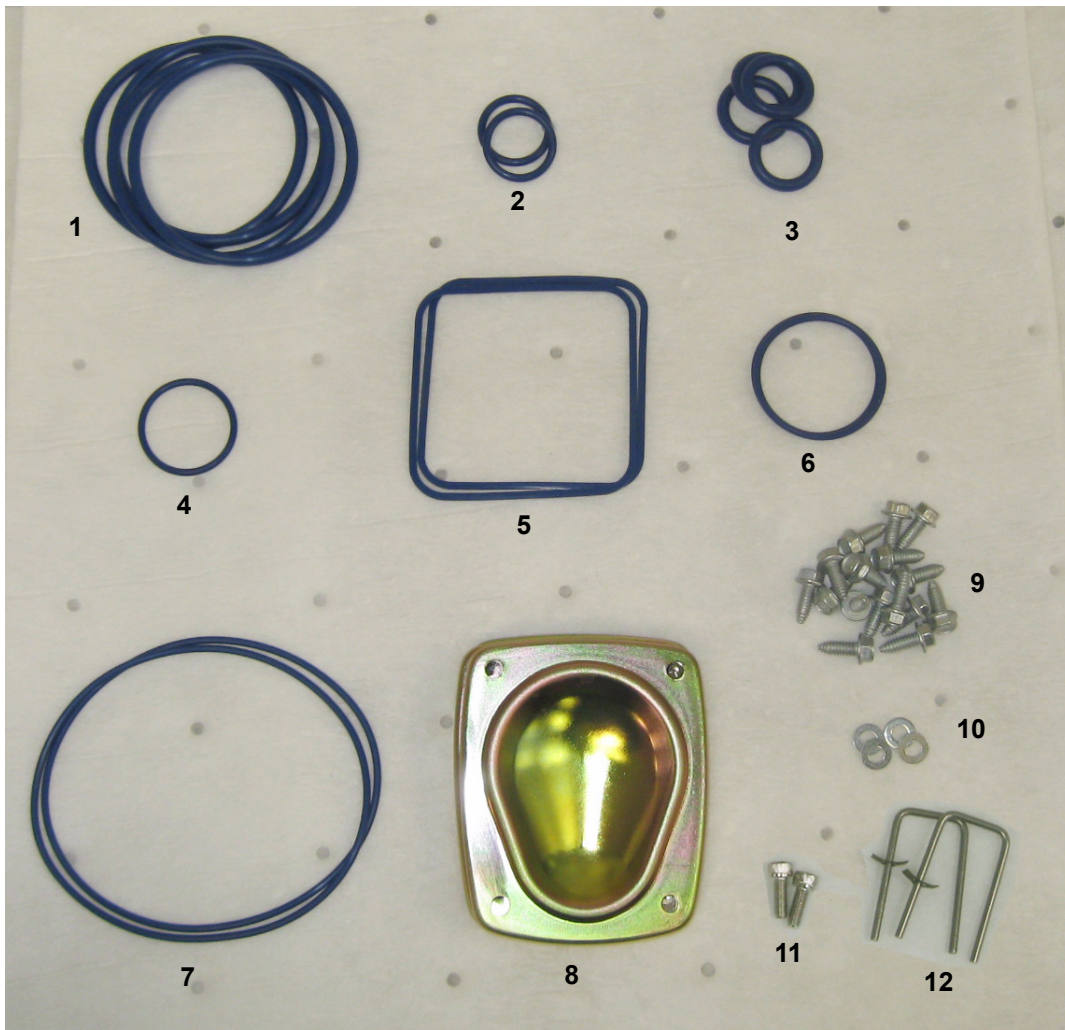
### WARNING

**Electric shock hazard! More than one disconnect switch may be required to de-energize the dispenser for maintenance and servicing. Use a voltmeter to make sure ALL circuits in the dispenser are de-energized. Failure to do so may result in serious injury.**

Lockout/Tagout requirements of the U. S. Dept. of Labor, Occupational Safety and Health Administration (OSHA) may also apply. Refer to Title 29, Part 1910 of the Code of Federal Regulations (29CFR1910), *Control of Hazardous Energy Source (Lockout/Tagout)*.

---

1. Reprinted with permission from NFPA 30A-90, *Automotive and Marine Service Station Codes*, Copyright ©1990, National Fire Protection Association, Quincy MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association on the referenced subject, which is represented only by the standard in its entirety.



**FIGURE 1 PARTS IN THE KIT**

Item	New Part Number	Dimensions	Description / Where Used	Qty/Kit
1	005-120406	3.380" I.D.	O-Ring, Cylinder Cover	4
2	005-905817	1" I.D.	O-Ring, Valve O-Ring	2
3	005-921130	.850 ID	O-Ring, Double Bump	4
4	888616-005	1.386 ID	O-Ring, Small Strainer O-Ring	1
5	WU001632-0001	D-Shape Custom	O-Ring, Large Strainer O-Ring	2
6	888614-005	1.929 ID	O-Ring, Check Valve	2
7	888615-005	4.717 ID	O-Ring, Dome	2
8	006-038765-		Cylinder Cover	4
9	WU001638-0001		1/4-20x5/8 TR Yellow	16
10	000-905245-		(Washer SHR 1/4 FWSTCD	4
11	001-921053-		SHCS M6X1X16mm (Spare Part)	2
12	890543-001		Lockpin and Retainer Kit	2
13	000-940027-		Instruction Manual	1

## 2 INSTALLATION

Before beginning the installation, adhere to the safety precautions listed in Section 1.3.

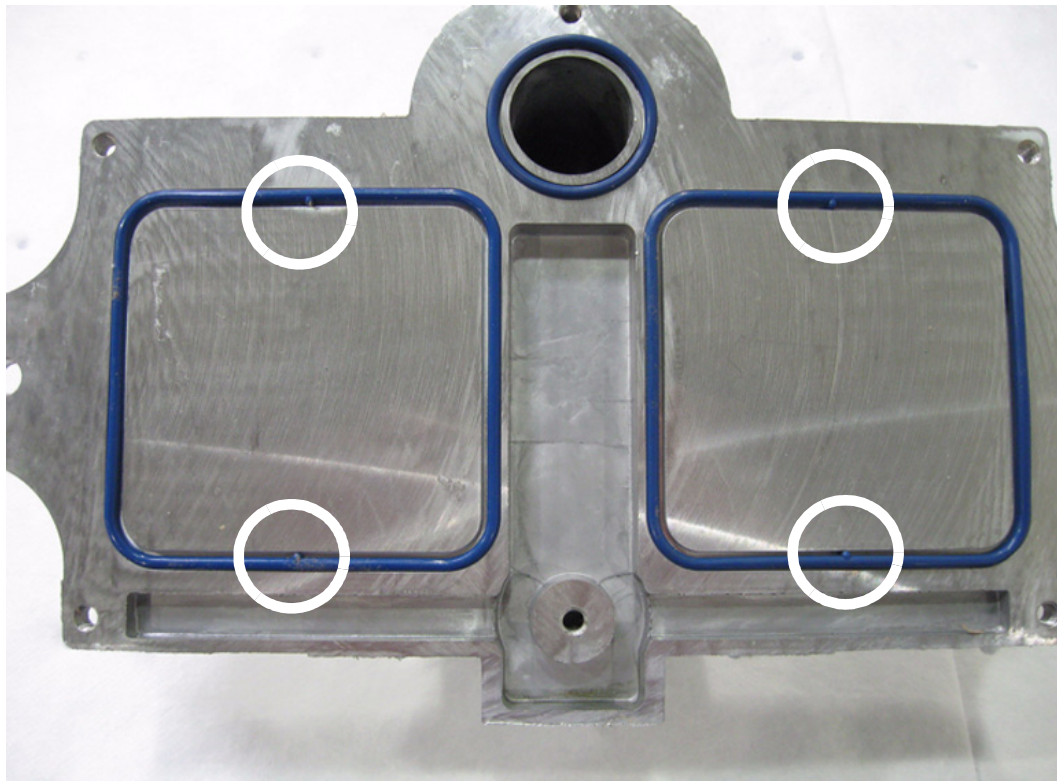
1. Turn off power to the dispenser.
2. Open top doors and remove lower doors.
3. Trip shear valve.
4. Install a pan under meter and valves to catch fuel. Place absorbent pads around the outside base of dispenser.
5. Remove pin securing tube to valve.
6. Using a 7/16" open/closed end wrench, remove screws and tube brackets under vapor barrier and remove product tube for both sides of meter.
7. Loosen valve conduit in head.
8. Remove nut (or clip if newer solenoid) and pull solenoid away from valve. Rotate valve up, remove 2 screws and retaining plate and remove valve.
9. Disconnect cables from WIP Pulser.
10. Use 5 mm Allen and remove 6 screws that secure the meter to the filter/strainer casting.
11. Remove meter and place meter into pan or tub to catch fuel.
12. Remove and discard the 3 O-rings from the strainer casting.
13. Clean and dry the casting as much as possible.
14. Install 2 large D-shape O-rings (item 5) and 1 small (item 4) strainer casting O-ring, then apply a small amount of Petroleum jelly to the O-rings. See Figure 3 for proper orientation of the large O-rings.
15. Use 5mm Allen and remove 6 screws (or 7 on newer meter) from dome and remove dome from meter.
16. Remove the 2 screws in each check valve cover and remove the covers.
17. Remove and discard check valve and dome O-rings. Install dome cover O-rings (item 7) and apply petroleum jelly to keep O-rings in place.

18. Reinstall dome on to meter and secure using 6 screws (or 7 if new meter) and tighten to 90 in-lb.
19. Install check valve O-rings (item 6) and apply a small amount of petroleum jelly and reinstall valve covers and tighten cover to 90 in-lb.
20. For the end covers on the side by the check valves (opposite side from the WIP):
  - A. Remove (8) 3/8" hex head screws from both end covers and remove and discard the O-rings, screws and covers.
  - B. Clean O-ring grooves.
  - C. Install end cover O-rings and apply petroleum jelly.
  - D. Install (2) (item 8) end covers using 4 (item 10) washers and 8 (item 9) screws. **(Note the location for the 4 washers in Figure 2).** Tighten to 110 in-lb.
21. Turn meter over and repeat above steps for end covers on opposite side near the WIP. **Note: Washers are not used on this side.**
22. Reinstall meter on to strainer casting aligning the 2 guide pins. Be sure the O-rings are not pinched. There should not be any space between the meter and the strainer casting.
23. Secure meter to casting, reusing the 6 screws and torque to 90 in-lb.
24. Remove proportional valve O-ring and install new (item 2) O-ring and lubricate with petroleum jelly.
25. Reinstall valve, rotate it upwards, reinstall retaining plate reusing the 2 screws then rotate valve down and attach coil. (Be careful not to pinch the O-ring.)
26. Remove product tube O-ring and install new (item 3) O-ring.
27. Reinstall product tube to valve and secure with retaining pin, secure nut on coil, secure top of tube, secure valve conduit in head.
28. Repeat the above steps for reinstalling valve, coil and product tube on opposite side.
29. Open shear valve and check for leaks.
30. Turn on power to dispenser, dispense fuel and check for leaks.
31. Verify meter accuracy and re-calibrate and seal as necessary.
32. Reinstall lower doors and close and lock upper doors.

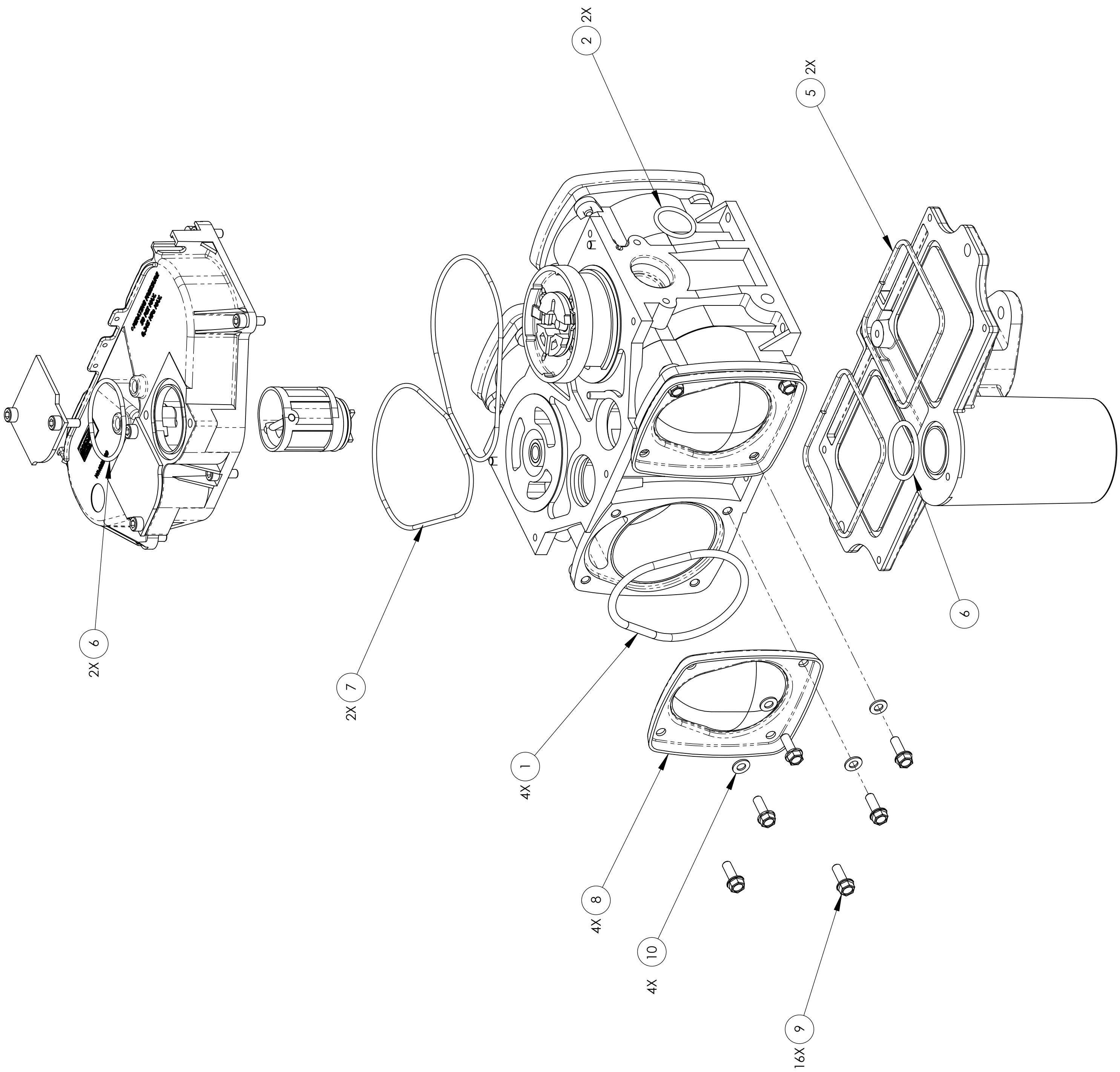




**FIGURE 2 INSTALL WASHERS ONLY ON THIS SIDE AND ONLY IN THE FOUR LOCATIONS CIRCLED ABOVE.**



**FIGURE 3 THE TWO NOTCHES IN THE ORINGS GO AT THE TOP AND BOTTOM AS SHOWN, NOT SIDE TO SIDE.**





# INSTALLATION MANUAL

## Aggressive Fuels Service Kit

Written by S. G. Martin

This manual was produced using Adobe® FrameMaker® and Photoshop®

Page design uses Arial Fonts

Copyright © 2009 Dresser, Inc.  
All rights reserved.  
Printed in the United States of America.

Adobe® FrameMaker® and Photoshop® are trademarks of Adobe Systems, Inc.

This manual and the software described within are furnished under license and may be used or copied only in accordance with the terms of such license.

No part of this publication may be electronically or mechanically reproduced, stored in a retrieval system, or transmitted, in any form or by any means, except as permitted by such license. Translation of this material to another language without express written permission of Dresser, Inc. is prohibited.

The information in this publication is for informational use only and is subject to change without notice. The contents should not be construed as a commitment by Dresser, Inc. who assumes no responsibility or liability for inaccuracies that may appear in this publication.

**Dresser Wayne, Dresser, Inc., is located at 3814 Jarrett Way, Austin TX 78728.  
Wayne's general telephone number is (512)-388-8311.**

NOTE: "This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense."

