DANIEL SIMPLEX® ORIFICE PLATE HOLDER

2" - 8" CLASS 150-2500 LBS

FOR API 14.3 SERVICE APPLICATIONS
PARTS LIST AND OPERATION INSTRUCTIONS

DANIEL MEASUREMENT AND CONTROL, INC.
AN EMERSON PROCESS MANAGEMENT COMPANY
HOUSTON, TEXAS

Part Number 3-9008-004
Revision A

SEPTEMBER 2002

DANIEL®

EMERSON™
Process Management

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IMPORTANT INSTRUCTIONS

Daniel Measurement and Control, Inc. (Daniel) designs, manufactures and tests its products to meet many national and international standards. Because these instruments are sophisticated technical products, you must properly install, use and maintain them to ensure they continue to operate within their normal specifications. The following instructions must be adhered to and integrated into your safety program when installing, using and maintaining Daniel products.

- **Read all instructions prior to installing, operating and servicing the product.** If this instruction manual is not the correct manual, call 1-713-827-6314 and the requested manual will be provided. Save this instruction manual for future reference.

- If you do not understand any of the instructions, contact your Daniel representative for clarification.

- Follow all warnings, cautions and instructions marked on and supplied with the product.

- Inform and educate your personnel in the proper installation, operation and maintenance of the product.

- Install your equipment as specified in the installation instructions of the appropriate instruction manual and per applicable local and national codes. Connect all products to the proper electrical and pressure sources.

- To ensure proper performance, use qualified personnel to install, operate, update, program and maintain the product.

- When replacement parts are required, ensure that qualified people use replacement parts specified by the manufacturer. Unauthorized parts and procedures can affect the product's performance and place the safe operation of your process at risk. Look-alike substitutions may result in fire, electrical hazards or improper operation.

- Ensure that all equipment doors are closed and protective covers are in place, except when maintenance is being performed by qualified persons, to prevent personal injury.

- **ALWAYS READ AN FOLLOW THE DANIEL SIMPLEX ORIFICE PLATE HOLDER MANUAL AND ALL PRODUCT WARNINGS AND INSTRUCTIONS**

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NOTICE

DANIEL MEASUREMENT AND CONTROL, INC. ("DANIEL") SHALL NOT BE LIABLE FOR TECHNICAL OR EDITORIAL ERRORS IN THIS MANUAL OR OMISSIONS FROM THIS MANUAL. **DANIEL MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS MANUAL AND, IN NO EVENT, SHALL DANIEL BE LIABLE FOR ANY SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, LOSS OF PRODUCTION, LOSS OF PROFITS, ETC.**

PRODUCT NAMES USED HEREIN ARE FOR MANUFACTURER OR SUPPLIER IDENTIFICATION ONLY AND MAY BE TRADEMARKS/REGISTERED TRADEMARKS OF THESE COMPANIES.

THE CONTENTS OF THIS PUBLICATION ARE PRESENTED FOR INFORMATIONAL PURPOSES ONLY, AND WHILE EVERY EFFORT HAS BEEN MADE TO ENSURE THEIR ACCURACY, THEY ARE NOT TO BE CONSTRUED AS WARRANTIES OR GUARANTEES, EXPRESSED OR IMPLIED, REGARDING THE PRODUCTS OR SERVICES DESCRIBED HEREIN OR THEIR USE OR APPLICABILITY. WE RESERVE THE RIGHT TO MODIFY OR IMPROVE THE DESIGNS OR SPECIFICATIONS OF SUCH PRODUCTS AT ANY TIME.

DANIEL DOES NOT ASSUME RESPONSIBILITY FOR THE SELECTION, USE OR MAINTENANCE OF ANY PRODUCT. RESPONSIBILITY FOR PROPER SELECTION, USE AND MAINTENANCE OF ANY DANIEL PRODUCT REMAINS SOLELY WITH THE PURCHASER AND END-USER.

DANIEL AND THE DANIEL LOGO ARE REGISTERED TRADEMARKS OF DANIEL INDUSTRIES, INC. THE EMERSON LOGO IS A TRADEMARK AND SERVICE MARK OF EMERSON ELECTRIC CO.

WARRANTY

1. LIMITED WARRANTY: Subject to the limitations contained in Section 2 herein and except as otherwise expressly provided herein, Daniel Measurement and Control, Inc. ("Daniel") warrants that the firmware will execute the programming instructions provided by Daniel, and that the Goods manufactured or Services provided by Daniel will be free from defects in materials or workmanship under normal use and care until the expiration of the applicable warranty period. Goods are warranted for twelve (12) months from the date of initial installation or eighteen (18) months from the date of shipment by Daniel, whichever period expires first. Consumables and Services are warranted for a period of 90 days from the date of shipment or completion of the Services. Products purchased by Daniel from a third party for resale to Buyer ("Resale Products") shall carry only the warranty extended by the original manufacturer. Buyer agrees that Daniel has no liability for Resale Products beyond making a reasonable commercial effort to arrange for procurement and shipping of the Resale Products. If Buyer discovers any warranty defects and notifies Daniel thereof in writing during the applicable warranty period, Daniel shall, at its option, promptly correct any errors that are found by Daniel in the firmware or Services, or repair or replace F.O.B. point of manufacture that portion of the Goods or firmware found by Daniel to be defective, or refund the purchase price of the defective portion of the Goods/Services. All replacements or repairs necessitated by inadequate maintenance, normal wear and usage, unsuitable power sources, unsuitable environmental conditions, accident, misuse, improper installation, modification, repair, storage or handling, or any other cause not the fault of Daniel are not covered by this limited warranty, and shall be at Buyer's expense. Daniel shall not be obligated to pay any costs or charges incurred by Buyer or any other party except as may be agreed upon in writing in advance by an authorized Daniel representative. All costs of dismantling, reinstallation and freight and the time and expenses of Daniel's personnel for site travel and diagnosis under this warranty clause shall be borne by Buyer unless accepted in writing by Daniel. Goods repaired and parts replaced during the warranty period shall be in warranty for the remainder of the original warranty period or ninety (90) days, whichever is longer. This limited warranty is the only warranty made by Daniel and can be amended only in a writing signed by an authorized representative of Daniel. Except as otherwise expressly provided in the Agreement, THERE ARE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, AS TO MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, OR ANY OTHER MATTER WITH RESPECT TO ANY OF THE GOODS OR SERVICES. **It is understood that corrosion or erosion of materials is not covered by our guarantee**.

2. LIMITATION OF REMEDY AND LIABILITY: DANIEL SHALL NOT BE LIABLE FOR DAMAGES CAUSED BY DELAY IN PERFORMANCE. THE SOLE AND EXCLUSIVE REMEDY FOR BREACH OF WARRANTY HEREUNDER SHALL BE LIMITED TO REPAIR, CORRECTION, REPLACEMENT OR REFUND OF PURCHASE PRICE UNDER THE LIMITED WARRANTY CLAUSE IN SECTION 1 HEREIN. IN NO EVENT, REGARDLESS OF THE FORM OF THE CLAIM OR CAUSE OF ACTION (WHETHER BASED IN CONTRACT, INFRINGEMENT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE), SHALL DANIEL'S LIABILITY TO BUYER AND/OR ITS CUSTOMERS EXCEED THE PRICE TO BUYER OF THE SPECIFIC GOODS MANUFACTURED OR SERVICES PROVIDED BY DANIEL GIVING RISE TO THE CLAIM OR CAUSE OF ACTION. BUYER AGREES THAT IN NO EVENT SHALL DANIEL'S LIABILITY TO BUYER AND/OR ITS CUSTOMERS EXTEND TO INCLUDE INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES. THE TERM "CONSEQUENTIAL DAMAGES" SHALL INCLUDE, BUT NOT BE LIMITED TO, LOSS OF ANTICIPATED PROFITS, LOSS OF USE, LOSS OF REVENUE AND COST OF CAPITAL.

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1.0 INTRODUCTION

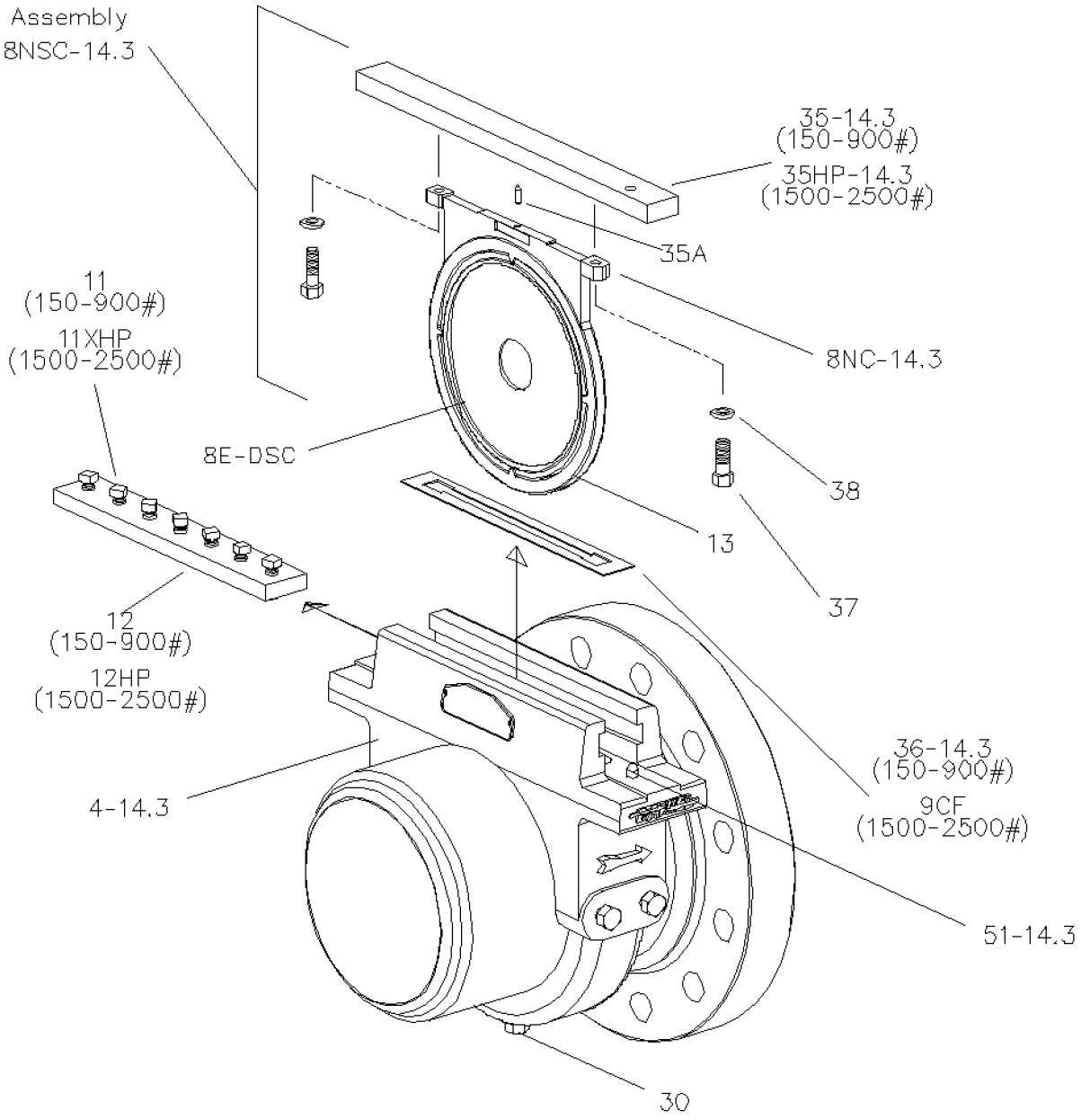
1.1 Principle of Operation

The Daniel Simplex Orifice Plate Holder is a device that houses, and accurately positions, an orifice plate for measuring flow within a pipe or tube. When placed in the Daniel Simplex Orifice Plate Holder, an orifice plate will produce a differential pressure by abruptly constricting the medium flowing through it. The differential pressure is measured across the plate through two taps located on the Daniel Simplex Orifice Plate Holder in the vicinity of the constriction.

The Daniel Simplex Orifice Plate Holder's single chamber design allows for the inspection and the replacement of orifice plates without removing the Simplex from the flow line. Use of the Daniel Simplex Orifice Plate Holder eliminates the effort required to remove and inspect an orifice plate housed in conventional orifice flange installations.

Daniel designs and manufactures all Simplex units to A.G.A. 2000 recommendations. The Daniel Simplex Orifice Plate Holder is designed and manufactured in strict accordance with all applicable ANSI, ASME, ASTM and ISO 5167 specifications.

Products bearing the “CE” mark are designed and manufactured in compliance with the European Union Pressure Equipment Directive (PED) 97/23/EC.


Assembly
8NSC-14.3
35-14.3
(150-900#)
35HP-14.3
(1500-2500#)
35A
11
(150-900#)
11XHP
(1500-2500#)
8NC-14.3
8E-DSC
38
13
37
12
(150-900#)
12HP
(1500-2500#)
36-14.3
(150-900#)
9CF
(1500-2500#)
4-14.3
51-14.3
30

1.2 Parts and Materials List

PART NO.	DESCRIPTION	MATERIAL	REQUIRED
4-14.3	Body	Cast Carbon Steel-A216 WCB (Class 150-2500)	1
8NC-14.3	Orifice Plate Carrier	Type 316 Stainless Steel	1
8E-DSC-14.3 8TSC-14.3 8MSC-14.3	Orifice Plate Sealing Units	Synthetic Rubber (Class 150-600) Teflon (Class 900-2500) Type 316 Stainless Steel (Optional)	1
8NSC-14.3	Sealing Bar/Orifice Plate Carrier Assembly		1
11 11XHP	Clamping Bar Screws	Heat Treated Alloy Steel (Class 150-900) Heat Treated Alloy Steel (Class 1500-2500)	See Chart Below
12 12HP	Clamping Bar	C.R.S (Chemically Treated)(Class 150-900) C.R.S (Chemically Treated)(Class 1500-2500)	1 1
13	Orifice Plate	Type 304 or 316 Stainless Steel	1
30*	Drain Valve Plug	C.R.S	1
31*	1/2" N.P.T. Plugs for Meter Pressure Tap Holes	C.R.S	2
35-14.3 35HP-14.3	Sealing Bar	C.R.S (Chemically Treated)(Class 150-900) C.R.S (Chemically Treated)(Class 1500-2500)	1 1
35A	Sealing Bar/ Plate Carrier Index Pin	C.R.S	1
36-14.3 9CF	Sealing Bar Gasket	Composite (Class 150-900) Synthetic Composition (Class 1500-2500)	1 1
37*	Plate Carrier Cap Screws	Stainless Steel	2
38*	Plate Carrier Cap Screw Lock Washers	Stainless Steel	2
51-14.3	Sealing Bar and Body Dowel Pin	Type 316 Stainless Steel	1

*Indicates parts interchangeable C.R.S. - cold rolled steel

1.3 Clamping Bar Set Screws (11, 11XHP) Number Required

LINE	A.N.S.I. CLASS			
SIZE	150,300,600	900	1500	2500
2"	4	4	8	8
3"	4	4	10	10
4"	5	6	12	12
6"	6	6	14	14
8"	8	8	14	26

2.0 INSTALLATION

2.1 Preliminary Steps

On installations which are required to comply with the European Union Pressure Equipment Directive (PED) 97/23/EC, it is the responsibility of the end user to ensure that all Essential Safety Requirements of this directive are met.

Before installing the fitting into the line, clean piping of all foreign material such as welding chips, scale, oil, grease, and dirt.

Remove all foreign matter such as scale, oil, grease, and dirt from the fitting line connections and internal cavities of the fitting that may have collected during the time of final factory inspection and line installation.

If the installation personnel expect the Daniel Simplex Orifice Plate Holder to encounter severe conditions (conditions where there is likely to be an accumulation of sediment for any cause), installation personnel should install a blow down valve in place of the pipe plug (30) at the bottom of the fitting. (See Section 3.0, Maintenance section for instructions concerning severe service conditions)

Record the fitting's plate data for future reference. Always provide the serial number and model number of the fitting when ordering spare parts.

It is the responsibility of the end user to install the fitting in a well designed piping system taking due regard of the following.

- Internal/external pressure
- Ambient and operational temperatures
- Static pressure and mass of contents in operating and test conditions
- Traffic, wind and earth loading
- Reaction forces and moments which result from supports, attachments, piping, etc.
- Corrosion, erosion, fatigue, etc.
- Decomposition of unstable fluids
- Possible damage from external fire

2.2 Simplex Orifice Plate Holder Installation

⚠ DANGER

SERIOUS PERSONAL INJURY OR DEATH

The Daniel Simplex Orifice Plate Holder is a device that contains fluid at elevated pressure.

Failure to follow the instructions in this manual can result in serious injury or death.

1. The Daniel Simplex Orifice Plate Holder is an important part of an orifice metering system. To complete the unit, a meter tube must be attached. If the Simplex Orifice Plate Holder is received without a meter tube, see the appropriate Code (AGA-3, etc.) for details.

2. Before installing the meter tube containing the Simplex Orifice Plate Holder, clean the meter tube interior as well as the piping sections where the Simplex meter tube will be installed. Remove all foreign materials such as welding debris, scale, oil, grease or dirt.

3. If end flanges are used, select and install the proper gaskets and tighten all bolting to the required tightness. If welded connections are used, use proper procedures for the materials being joined.

4. After the meter tube is in place and all connections are made and any holes plugged, the meter tube containing the Simplex Orifice Plate Holder should be pressure tested.

5. Tighten Simplex clamping bar screws (11, 11XHP) securely to the torque values provided in Section 5.2 of this manual.

6. Pressure test the line containing the meter tube with Simplex Orifice Plate Holder using an appropriate test procedure. Note that no orifice plate should be in the Simplex during testing.

7. Check for leaks at the sealing bar gasket (36-14.3, 9CF) and all threaded connections on the Simplex Orifice Plate Holder.

⚠ DANGER

SERIOUS PERSONAL INJURY OR DEATH

The correct positioning and installation of the gasket seal (9CF, 36-14.3), sealing bar (35-14.3, 35HP-14.3), and clamping bar (12, 12HP) are essential to provide a pressure barrier between the line pressure and atmospheric pressure.

Failure to install the gasket seal (9CF, 36-14.3), sealing bar (35-14.3, 35HP-14.3), and clamping bar (12, 12HP) can result in serious injury or death.

2.3 Fitting Leak Test

⚠ DANGER

SERIOUS PERSONAL INJURY OR DEATH

The Daniel Simplex Orifice Plate Holder is a device that contains fluid at elevated pressure.

Failure to follow the instructions in this manual can result in serious injury or death.

Once personnel install the Daniel Simplex Orifice Plate Holder, and secure the clamping bar (12, 12HP), they are to perform a leak test.

1. Install a pressure gauge calibrated to a recognized standard, on the line system in a location where the gauge will detect the pressure inside the Daniel Simplex Orifice Plate Holder. The calibrated gauge must be rated to operate slightly above the maximum operating pressure of the system (the Daniel Simplex Orifice Plate Holder and the adjacent piping).

2. Slowly pressurize the Daniel Simplex Orifice Plate Holder at a rate of 1 psig per second (0.15 bars per second) until the pressure inside the plate holder reaches 20 psig (1.4 bar) then stop and hold that pressure for five minutes. During the five-minute hold, apply a leak detection solution to all joint and connector areas of the plate holder and line connections. No leakage should be visibly or audibly detectable during the hold period.

3. If a leak is detected, mark the leak area with a marker and reduce the pressure inside the Daniel Simplex Orifice Plate Holder to 0 psig (0 bar). Tighten any fastener or connector adjacent to leak area and repeat the leak test again.

4. If several attempts to stop the leak fail, call Daniel for assistance.

⚠ DANGER

SERIOUS PERSONAL INJURY OR DEATH

Correct all leaks prior to operation.

Failure to stop any size leak may lead to serious injury or death.

5. Once the 20 psig (1.4 bar) leak test is complete, and no leaks are detected, slowly raise the pressure inside the Daniel Simplex Orifice Plate Holder at a rate of 10 psig per second to the maximum operating pressure of the system (the Daniel Simplex Orifice Plate Holder and the adjacent piping) or the line operating pressure. Hold the maximum operating pressure inside the fitting for a period of 10 minutes.

   On installations which are required to comply with the European Union Pressure Equipment Directive (PED) 97/23/EC, the installation must be tested to at least 1.43 times the MAOP of the lowest rated component in the system.

6. During the ten-minute hold period, apply a leak detection solution to all joint and connector areas of the plate holder and line connections. No leakage should be visibly or audibly detectable during the hold period.

7. If a leak is detected, mark the leak area with a marker and reduce the pressure inside the plate holder to 0 psig (0 bar). Tighten any fastener or connector adjacent to leak area and repeat the leak test again.

8. If several attempts to stop the leak fail, call Daniel for assistance.

9. Slowly release the pressure from the plate holder until the gauge reads zero (0) psig.

10. The Daniel Simplex Orifice Plate Holder is now ready for orifice plate installation, final pressurization and operation.

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3.0 MAINTENANCE

⚠ DANGER

SERIOUS PERSONAL INJURY OR DEATH

The Daniel Simplex Orifice Plate Holder is a device that contains fluid at elevated pressure.

Failure to follow the instructions in this manual can result in serious injury or death.

3.1 Normal Conditions

Under normal measurement conditions, the Daniel Simplex Orifice Plate Holder will require no maintenance. However, maintenance personnel should inspect the Daniel Simplex Orifice Plate Holder periodically at an interval established by the measurement supervisor.

The inspection is to include a visual assessment of the plate holder for vandalism, or other inadvertent damage and well as fastener and connector components for tightness.

It is the responsibility of the end user to make checks at such intervals as deemed appropriate during the life of the system to ensure that the corrosion/erosion tolerance dimensions of the fitting have not been exceeded.

3.2 Severe Conditions

Follow the steps described above along with the following:

Under severe conditions where there is likely to be an accumulation of sediment for any cause, installation personnel should install a blow down valve in place of the pipe plug (30) at the bottom of the fitting.

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4.0 OPERATING INSTRUCTIONS

The Daniel Simplex Orifice Plate Holder design allows an operator to install or remove the orifice plate (13) with a minimum amount of line shut down time.

Within the Daniel Simplex Orifice Plate Holder is an assembly that includes the sealing bar (35-14.3, 35HP-14.3) and orifice plate carrier (8N-14.3, 8NC-14.3). This sealing bar/orifice plate carrier assembly (8NS, 8NSC) allows maintenance personnel to remove the sealing bar (35-24.3, 35HP-14.3) orifice plate (8E-14.3, 8TSC-14.3, 8MSC-14.3), and plate seal (8E-14.3, 8TSC-14.3, 8MSC-14.3) at one time.

The design of the Daniel Simplex Orifice Plate Holder prevents spillage in liquid service applications.

4.1 Plate Removal

Conditions:

- Daniel Simplex Orifice Plate Holder operating at working pressure.
- The orifice plate (13) located in flow stream and in the Daniel Simplex Orifice Plate Holder.

Procedure:

1. Depressurize or shut in the line supporting the Daniel Simplex Orifice Plate Holder.

⚠ DANGER

SERIOUS PERSONAL INJURY OR DEATH

The Daniel Simplex Orifice Plate Holder is a device that contains fluid at elevated pressure.

Failure to follow the instructions in this manual can result in serious injury or death.

2. Once pressure in the plate holder is reduced to ambient pressure, the operator may then extract the sealing bar/orifice plate carrier assembly (8NS-14.3, 8NSC-14.3), containing the orifice plate (13).

3. Loosen the fasteners (11, 11XHP) on the clamping bar (12, 12HP) two turns.

4. Lightly tap the sealing bar (35-14.3, 35HP-14.3) to break the gasket seal.

5. Slide out the clamping bar (12, 12HP).

6. Lift out the sealing bar/orifice plate carrier (8NSC-14.3) from the Daniel Simplex Orifice Plate Holder body (4-14.3).

7. Remove the sealing bar gasket (36-14.3, 9CF).

8. Remove the orifice plate (13) and orifice plate seal (8E-14.3, 8TSC-14.3, 8MSC-14.3) from the sealing bar/orifice plate carrier (8N-14.3, 8NSC-14.3).

9. Remove the orifice plate seal (8E-14.3, 8TSC-14.3, 8MSC-14.3) from the orifice plate (13).

4.2 Plate Insertion

⚠ DANGER

SERIOUS PERSONAL INJURY OR DEATH

The Daniel Simplex Orifice Plate Holder is a device that contains fluid at elevated pressure.

Failure to follow the instructions in this manual can result in serious injury or death.

Conditions:

- Daniel Simplex Orifice Plate Holder in line, and the sealing bar (35-14.3, 35HP-14.3) and clamping bar (12, 12HP) removed from the body (4-14.3).

Procedure:

1. Install a new sealing bar gasket (9CF, 36-14.3) onto the Daniel Simplex Orifice Plate Holder body (4-14.3).

2. Install a new orifice seal (8E-14.3, 8TSC-14.3, 8MSC-14.3) onto the orifice plate (13).

3. Install the orifice plate (13) and seal assembly (8E-14.3, 8TSC-14.3, 8MSC-14.3) into the plate carrier (8NC-14.3) taking into account the flow direction of the line. This can be done using the dowel pin (51-14.3) located in the sealing bar (35-14.3, 35HP-14.3) as a reference.

CAUTION

Failure to install the orifice plate (13) and orifice gasket assembly (8E-14.3, 8TSC-14.3, 8MSC-14.3) in a direction properly oriented with the direction of flow will result in measurement error and a possible loss of revenue**.**

4. Lower the plate carrier assembly (8NS-14.3, 8NSC-14.3) into the Daniel Simplex Orifice Plate Holder, while aligning the dowel pin hole with the dowel pin (51-14.3), until the sealing bar/plate holder (35-14.3, 35HP-14.3) comes in full contact with the sealing bar gasket (35-14.3, 9CF).

5. Install the clamping bar (12, 12HP).

6. Tighten each of the clamping bar fasteners (11, 11XHP) to the torque recommended in Section 5.2 of this manual.

7. The Simplex Orifice Plate Holder is now ready for final pressurization and operation.

5.0 SUPPLEMENTAL INFORMATION

5.1 Recommended Spare Parts for One-Year Operation

DESCRIPTION	QUANTITY	PART NO.
Orifice plate sealing unit	5	8E-14.3
Orifice plate sealing unit	1	8TSC-14.3
Orifice plate sealing unit	1	8MSC-14.3
Seal bar gasket	5	36-14.3
Seal bar gasket	5	9CF or 36-14.3
Screw	2	37
Lock washer	2	38

5.2 Clamping Bar Screw Torque Table

SIMPLEX CLAMPING BAR SCREW TORQUE FT-LBS

SIZE	RATING	NO. OF SCREWS	SCREW SIZE	TORQUE
2"	150	4	1/2"-13	40
	300	4	1/2"-13	45
	600	4	1/2"-13	50
	900	4	1/2"-13	70
	1500	8	5/8"-11	80
	2500	10	5/8"-11	135
3"	150	4	1/2"-13	50
	300	4	1/2"-13	55
	600	4	1/2"-13	65
	900	4	1/2"-13	75
	1500	10	5/8"-11	80
	2500	10	5/8"-11	135
4"	150	5	1/2"-13	45
	300	5	1/2"-13	50
	600	5	1/2"-13	55
	900	5	1/2"-13	70
	1500	12	5/8"-11	80
	2500	12	5/8"-11	130
6"	150	6	1/2"-13	40
	300	6	1/2"-13	45
	600	6	1/2"-13	60
	900	6	1/2"-13	75
	1500	14	5/8"-11	85
	2500	14	5/8"-11	140
8"	150	7	1/2"-13	40
	300	7	1/2"-13	50
	600	7	1/2"-13	60
	900	7	1/2"-13	80
	1500	16	5/8"-11	90

NOTES

NOTES

DANIEL MEASUREMENT AND CONTROL, INC.
INSTRUMENT DECONTAMINATION STATEMENT

RMA Number _____
Item Being Returned _____

List all chemicals, process fluids, and gases that have come in contact with the equipment, including cleaning agents. Attach additional pages if necessary. A Material Safety Data Sheet (MSDS) is required if non-food grade products have been used with the item being returned.

Information Required	Product 1	Product 2
Gas or chemical name		
Health and safety hazards		
Precautions, first aid		

I hereby certify the equipment being returned has been cleaned and decontaminated in accordance with good industrial practices and in compliance with OSHA and DOT regulations. This equipment poses no health or safety risk due to contamination.

Signature _____
Name (Please Print) _____
Title _____
Company Name _____
Phone Number _____
Fax or TLX Number _____
Reason for Return _____
_____
_____
_____
_____
_____
_____
_____
_____

Reminder

All items being returned must be packaged separately. This decontamination statement and the MSDS sheet must be placed on the outside of the shipping container.

WARRANTY CLAIM PROCEDURES

To make a warranty claim, you, the Purchaser, must:

1. Provide Daniel with proof of the Date of Purchase and proof of the Date of Shipment of the product in question.

2. Return the product to Daniel within twelve (12) months of the date of original shipment of the product, or within eighteen (18) months of the date of original shipment of the product to destinations outside of the United States. The Purchaser must prepay any shipping charges. In addition, the Purchaser is responsible for insuring any product shipped for return, and assumes the risk of loss of the product during shipment.

3. To obtain Warranty service or to locate the nearest Daniel office, sales, or service center call (713) 827-6314, Fax (713) 827-6312, or contact:

   Daniel Measurement Services
   9753 Pine Lake Drive
   Houston, Texas 77024

4. When contacting Daniel for product service, the purchaser is asked to provide information as indicated on the following page entitled "Customer Problem Report".

5. For product returns from locations outside the United States, it will be necessary for you to obtain the import consignment address so that Daniel's customs broker can handle the importation with the U.S. Customs Service.

6. Daniel Measurement Services offers both on call and contract maintenance service designed to afford single source responsibility for all its products.

7. Daniel reserves the right to make changes at any time to any product to improve its design and to insure the best available product.

DANIEL MEASUREMENT AND CONTROL, INC.
CUSTOMER PROBLEM REPORT

FOR FASTEST SERVICE, COMPLETE THIS FORM, AND RETURN IT ALONG WITH THE AFFECTED EQUIPMENT TO CUSTOMER SERVICE AT THE ADDRESS INDICATED BELOW.

COMPANY NAME:_____

TECHNICAL CONTACT:_____ PHONE: _____

REPAIR P. O. #:_____ IF WARRANTY, UNIT S/N: _____

INVOICE ADDRESS:_____

_____

_____

SHIPPING ADDRESS:_____

_____

_____

RETURN SHIPPING METHOD:_____

EQUIPMENT MODEL #:_____ S/N:_____FAILURE DATE: _____

DESCRIPTION OF PROBLEM:_____

_____

_____

WHAT WAS HAPPENING AT TIME OF FAILURE? _____

_____

_____

ADDITIONAL COMMENTS: _____

_____

_____

REPORT PREPARED BY:_____ TITLE:_____

IF YOU REQUIRE TECHNICAL ASSISTANCE, PLEASE FAX OR WRITE THE CUSTOMER SERVICE DEPARTMENT AT:

DANIEL MEASUREMENT SERVICES
ATTN: CUSTOMER SERVICE
9753 PINE LAKE DRIVE
HOUSTON, TEXAS 77024

PHONE: (713) 827-6314
FAX: (713) 827-6312

The sales and service offices of Daniel Measurement and Control are located throughout the United States and in major countries overseas.
Please contact Daniel Measurement Services at
9753 Pine Lake Drive, Houston, Texas 77024, or phone (713) 827-6314
for the location of the sales or service office nearest you.
Daniel Measurement Services offers both on-call and contract maintenance service designed to provide single-source responsibility for all Daniel products.

DANIEL®

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Process Management