

68SB SERIES SWIVEL BREAKAWAY



IMPORTANT SAFEGUARDS

- For your protection, please read these safety instructions completely before installing and operating this equipment.
- Keep this manual on file for future reference.
- This manual contains material that may be required by authorities with inspection jurisdiction and is to be kept on site at all times.
- Always connect 68SB Breakaways to hoses compliant with EN1360 by direct connection or using a solid-metal adaptor.
- 68SB Breakaways are to be used in conjunction with EN13012 compliant nozzles.
- The dispensing systems must be specified to use breakaway valves as per EN13617-2 (800 N ≤ force separation ≤ 1500 N).
- Carefully observe all warnings, precautions and operating instructions for this equipment and adhere to them.
- Dispenser must be securely attached to the dispensing island.
- Reconnection/reassembly/maintenance shall only be performed by an authorized service technician according to these instructions.
- 68SB breakaways are for use with fuel flow rates of up to 200 LPM.



THIS MANUAL MUST BE LEFT WITH FACILITY MANAGEMENT

WARNINGS & INSTRUCTIONS Pages 2-3

INSTALLATION Page 2

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MAINTENANCE Page 3

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Note: The 68SB series ATEX approved swivel is marked with the following information:

Company name or logo: OPW

Designation: 68SB

Date: (mmyy) month and year of manufacture

Direction of Flow: Arrow on housing

Standard Number: EN13617-2 and EN13617-4

Swivel Breakaway Connection: TYPE 1/STYLE 1

Marking from Directive:  II 2G

Certificate Number: SIRA 14ATEX9131U

SITE NAME:	
ADDRESS:	

RESPONSIBILITIES

- Employees must enforce compliance with the safety warnings and all other instructions contained in this manual and all federal, state and local warnings/instructions.

GENERAL REQUIREMENTS

- Installation, service, maintenance and reassembly/reconnection shall only be performed by an authorized service technician.
- This breakaway is designed for use only at facilities dispensing motor fuels.

- High flow rates in excess of the regulatory allowable may result in splash-back or spillage. Damage and/or injury may result.
- Breakaways should be limited to applications consistent with NFPA 30A, APEA/IP "Design, construction, modification, maintenance and de-commissioning of filling stations", OSHA CFR1910.106, UFC Section 502, state, local and national fire codes, and other local regulations.
- OPW products should be used in compliance with applicable federal, state, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the materials to be handled. OPW makes no warranty of fitness for a particular use.

	WARNING
<p>Static electricity, fire hazard and chemical exposure hazard. Failure to comply to the following warning could result in property damage, injury or death.</p>	



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9



Figure 10

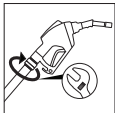


Figure 11

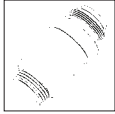


Figure 12

BEFORE AND DURING FUELING

- OPW recommends posting the following warnings in a visible location for the fueling public. Additional warnings may be required. Please contact authorities having local jurisdiction for requirements.
- Turn off your engine before refueling. Vehicle must remain off during the entire fueling procedure.
- Discharge your static electricity before refueling. Before using the dispenser, touch any grounded metal on the car or dispenser away from the nozzle and your vehicle's fuel pipe with bare hands. This will discharge static electricity on your body. Failure to discharge may ignite gasoline vapors.
- **DO NOT** re-enter your vehicle while refueling. This can re-charge your body with static electricity. If you must re-enter your vehicle, discharge static electricity again before touching the nozzle. (See Figure 1)
- **DO NOT** fill containers in or on the vehicle. Static electricity can ignite gasoline vapors and cause a fire. Fill approved portable containers on the ground. It is unlawful and dangerous to put gasoline into an unapproved container. (See Figure 2)
- Keep nozzle in contact with the container until finished filling to discharge any static generated during fueling.
- When filling an approved portable container, flow fuel at low flow rate to prevent static build-up. **DO NOT** put trigger in rack position; manually hold open.
- Turn off cell phones and other electronic devices to avoid distractions. (See Figure 3)
- **DO NOT** smoke or allow open flame/sparking devices near the product dispensers. (See Figure 4)
- Extinguish all pilot lights and open flames. For example, the pilot light in an R.V. must be extinguished.
- If a fire starts, **DO NOT REMOVE THE NOZZLE FROM THE FILL PIPE**. Back away immediately and tell the attendant. If no attendant is on site, use the emergency shut-off button to stop the pump.
- **DO NOT** start engine during refueling. Vehicle must remain off during the entire fueling procedure. (See Figure 5)
- **DO NOT** leave nozzle unattended. Nozzle performance and the automatic shut-off feature are influenced by many factors. If nozzle does not shut off during refueling, stop pump immediately. (See Figure 6)
- **DO NOT** use foreign objects to hold open automatic nozzles. Use of foreign objects could result in failure to shut off.
- Gasoline can be harmful or fatal if swallowed. Long-term exposure to vapors has caused cancer in laboratory animals. (See Figure 7)
- Avoid prolonged breathing of vapors.
- Keep away from eyes and skin.
- Failure to use caution may cause serious injury, illness or death.
- **DO NOT** allow children to pump gasoline. Only persons of license age (of legal driving age) should use dispenser.
- Keep children away from the dispenser area. (See Figure 8)

PREPARATION AND TEST, PRIOR TO INSTALLATION

Before installation of the breakaway, test and verify to ensure that the construction and mounting of the dispenser (pulled in all directions) and pull rating of hose is suitable for a pull force greater than the maximum separation force of this breakaway.

INSTALLATION INSTRUCTIONS

- Before beginning installation of the product, please carefully read all warnings. (See Figure 9)
- Follow all manufacturers' instructions.
- Use safety cones to mark-off work area. (See Figure 10)
 - API Recommended Practice 1646, Safe Work Practices For Contractors Working 47 Retail Petroleum/Convenience Facilities
 - APEA/IP "Design, construction, modification, maintenance and decommissioning of filling stations"
- Shut off power to the dispenser and close the emergency shut-off valves under the dispenser. Relieve system pressure before servicing or replacing dispensing products, such as nozzles, swivels, or breakaways.
- If breakaway replacement, remove old breakaway with a wrench. Carefully drain fuel from hose and nozzle into approved container. (See Figure 11)
- For a new facility installation, purge/flush hose point before installing breakaways. If breakaways are used to purge/flush system, this could result in foreign material in breakaway's main valve and cause the safety valve not to shut off properly.
- **DO NOT** use plastic or teflon tape.
- Verify that o-rings or gaskets are present in hose, swivel, breakaway, and nozzle and not torn or damaged. Lubricate seals for installation to prevent damage.
- Use wrench flats to attach breakaway to hose and nozzle. Install breakaway with FLOW arrow pointed toward nozzle. (See Figure 12)
- Engage and tighten the breakaway thread in the nozzle body
- Engage and tighten the hose nut to the breakaway per hose instructions.

DO NOT OVER TIGHTEN

	WARNING Failure to comply with the following warnings could result in property damage, injury or death.		WARNING Chemical Exposure Hazard Always wear appropriate safety equipment during installation or maintenance of equipment.		WARNING Fire Hazard Do not use power tools (Class I Division 1 or Zone 0, 1, and 2) during installation process and maintenance of equipment.		WARNING Fire Hazard Do not install an unlisted ad/billboard or other unlisted after-market device on any automatic nozzle. Doing so may change the sensitivity of the shut-off mechanism. Nozzle may not shut off, causing a fuel spill. Reference: sensitivity test per Underwriters Laboratories specification UL842.
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AFTER INSTALLATION OF BREAKAWAY

- Pressure test all connections before putting fuelling point into service to verify no leaks are present.
- Check electrical continuity from nozzle to dispenser earth ground. Test references: EN13617-1, EN13617-2, EN ISO 8031, PEI-RP-400

	WARNING Failure to comply with the following warnings could result in property damage, injury or death.		WARNING Fueling equipment is designed to operate to 3,5 bar (50 PSI) maximum pressure. Exceeding maximum pressure may result in property damage, injury or death.	 	WARNING Static electricity, fire hazard and chemical exposure hazard. Failure to comply to the following warning could result in property damage, injury or death.
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AFTER SEPARATION: RECONNECTION/REASSEMBLY

- **WARNING:** This work shall only be performed by an authorized service technician.
- Turn off dispenser immediately.
- Inspect entire dispensing system, including dispenser, shear valve, breakaway, hose, and the nozzle for damage and/or leaks.
- Inspect the dispenser anchoring, fixing bolts to the frame, frame and shear valve. **DO NOT** continue if there is any damage to the anchoring or fixing frame of the dispenser.
- Have a certified repair specialist replace any damaged components.
- Drain hose and nozzle into an approved container for fuels.
- Remove breakaway from hose and nozzle.
- Clean and inspect all parts of the breakaway for damage. Inspect for damage: 'out of round' condition from impact, deformations, broken components, or seal damage. If any such damage exists the breakaway must not be reused or reconnected. If only damaged o-rings exist, those seals can be replaced.
- Lightly lubricate any visible o-rings.
- Center the two breakaway halves together. Align the pin in the housing with any slot in the bearing. (See Figure 13)

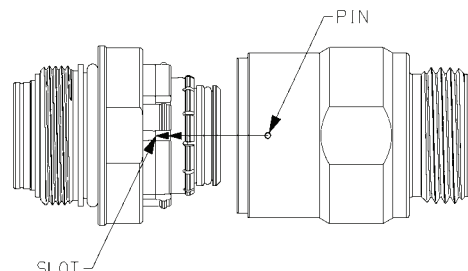


Figure 13

- Hold parts straight, axially centered, and aligned and press together in a vise. Ensure that parts remain straight and aligned during full reassembly. (See Figure 14)
- Press together until a 'CLICK' is heard. STOP - do not continue to press together after the 'CLICK' as this may result in temporarily binding the swivel. NOTE: If 'over-pressing' during reconnection does occur, the swivel binding will be relieved when the breakaway is reinstalled on the hose and nozzle and is pressurized.
- After reconnection, install and tighten the breakaway to nozzle and hose per the previously stated 'Installation Instructions' and test for leaks and proper performance of all components including nozzles and hoses.
- Perform any other tests as required by authorities having jurisdiction.

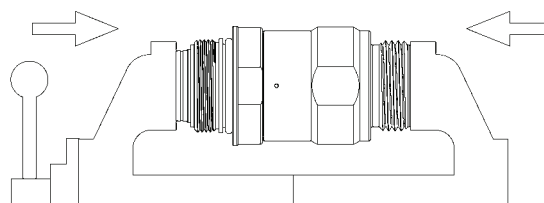


Figure 14

DAILY INSPECTION

- Visually inspect the dispensing equipment for excessively worn, abused, mistreated or leaking equipment. Replace equipment immediately
- Visually inspect hand insulators' and covers' warning labels. If illegible or excessively worn or abused, replace.

MONTHLY INSPECTION



Figure 15

- All maintenance and inspection activity on the nozzle and breakaway must be documented. (See Figure 15).
- This includes replacement parts, drive-off or other testing.

REPLACEMENT PARTS/MAINTENANCE

- **DO NOT** reuse o-rings or screws when replacing components.
- Only use authorized OPW replacement kits from the distributor. All other modifications may result in nozzle failure and create a hazardous condition, resulting in personal injury, property damage, or death, and will void the warranty.
- **DO NOT** take breakaway apart. Breakaway's that have been tampered with void all warranty and liability.
- See OPW's website at www.opwglobal.com or contact an OPW Distributor for troubleshooting guides and/or Instruction Manuals.

WARRANTY POLICY & RETURN PROCEDURE

OPW STANDARD PRODUCT WARRANTY / OPW TERMS & POLICIES

NOTICE: FlexWorks by OPW, Inc., VAPORSAVER™ and all other OPW products must be used in compliance with all applicable federal, state, provincial and local laws, rules and regulations. Product selection is the sole responsibility of the customer and/or its agents and must be based on physical specifications and limitations, compatibility with the environment and material to be handled. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Prices, materials and specifications are subject to change at any time, and models may be discontinued at any time, in either case, without notice or obligation.

Product	Warranty Period
FlexWorks Primary Pipe	10 years from date of manufacture
All Products and replacement parts installed in the State of California Certified to California CP-201 and/or CP-206 Standards*	1 year from date of installation (proof of purchase from certified contractors/technicians required) OPW warrants ongoing compliance with the standards and specifications for the duration of the warranty period required by the State of California; this limited warranty is under the condition the equipment was installed and maintained by trained and certified contractors/technicians unless noted in Installation Manual
All Other Products	1 year from date of manufacture
*Products certified to California CP-201 and/or CP-206 Standards have been factory tested and met all applicable performance standards and specifications and will have an OPW registration card enclosed/attached to the product	

OPW warrants solely to its customer (the initial purchaser and any subsequent purchasers within the warranty period) that the following products sold by OPW will be free from defects in materials and workmanship under normal use and conditions for the periods indicated.

OPW's exclusive obligation under this limited warranty is, at its option, to repair, replace or issue credit (in an amount not to exceed the list price for the product) for future orders for any product that may prove defective within the applicable warranty period (repairs or replacements are subject to prorated warranty coverage for remainder of the original warranty period). Complete and proper warranty claim documentation and proof of purchase required. All warranty claims must be made in writing and delivered during the applicable warranty period to OPW at OPW 9393 Princeton-Glendale Road Hamilton, Ohio, USA 45011, Attention: Customer Service Manager. No products may be returned to OPW without its prior written authority.

This limited warranty shall not apply to any FlexWorks or VAPORSAVER™ product unless it is installed by an OPW attested installer. This limited warranty also shall not apply to any FlexWorks, VAPORSAVER™ or other OPW product: unless all required site and warranty registration forms are completed and received by OPW within 60 days of installation; unless all piping connections are installed with a nationally-recognized or state-approved leak detection device in each tank and dispenser sump (which are not for storage and from which all discharge hydrocarbons must be removed, and the systems completely cleaned, within 24 hours); unless testable sumps utilize FlexWorks pipe and access fittings; unless a sump inspection log or an EPA recommended/required checklist is maintained and the results are furnished to OPW upon request; and unless OPW is notified within 24 hours of any known or suspected product failure and is provided with unrestricted access to the product and the site. This limited warranty also shall not apply to any product which has been altered in any way, which has been repaired by anyone other than a service representative authorized by OPW, or when failure or defect is due to: improper installation or maintenance (including, without limitation, failure to follow FlexWorks Quick Reference Manual Installation Guide and all product warning labels); abuse or misuse; violation of health or safety requirements; use of another manufacturer's, or otherwise unauthorized, substances or components; soil or other surface or subsurface conditions; or fire, flood, storm, lightning, earthquake, accident or any other conditions, events or circumstances beyond OPW's control.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND ALL OTHER WARRANTIES INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE HEREBY EXCLUDED.

OPW shall have no other liability whatsoever, whether based on breach of contract, negligence, gross negligence, strict liability or any other claim, including, without limitation, for special, incidental, consequential or exemplary damages or for the cost of labor, freight, excavation, clean-up, downtime, removal, reinstallation, loss of profit, or any other cost or charges. No person or entity is authorized to assume on behalf of OPW any liability beyond this limited warranty. This limited warranty is not assignable.

Please see OPW's website for instructions in other languages, troubleshooting guides, how to use the nozzle and the Do's and Don'ts At The Gas Pump video: www.opwglobal.com

9393 Princeton-Glendale Road
Hamilton, Ohio 45011-9707

North America Toll Free – Telephone: (800) 422-2525 ♦ Fax: (800) 421-3297
International – Telephone: (513) 870-3315 or (513) 870-3261 Fax: (513) 870-3157

Please visit OPW's website: www.opwglobal.com for further information, or contact OPW Customer Service at 1-800-422-2525 (US).