



*Serving the Industry Since 1935*



## Loading Arm

# General Installation Procedures

With Maintenance and Safety Notes

---

596 Ridge Road • PO Box 226  
Monmouth Junction • New Jersey 08852 • USA  
Voice: 732.329.4666 • Fax: 732.329.9422  
sales@oilco-usa.com • www.oilco-usa.com

---

*The enclosed materials cover the general installation and precautions required when installing and maintaining an OILCO Liquid Handling Systems loading assembly. Take all due safety precautions when assembling and operating these units. Handle all components with care. And if there is something unique to your assembly that is not covered in this guide, please contact the factory. Please reference the following as a guide to assist installation contractors and operations personnel.*

## General Disclaimer

- All operators and maintenance personnel should be familiar with this guide and all associated materials.
- All warranties are in association with the OILCO Liquid Handling Systems Terms and Conditions (May1, 2009), but shall be waived should the unit be used in a process other than that intended, abused to the point of negligent damage, included in a system of different medium or operating pressure.
- Should the end user require a relocation or modification of the unit, an effort to contact the factory for consultation is recommended.
- All warnings and cautions must be noted by all personnel in order to maintain a safe working environment.



Warning: Always be sure to properly ground the loading assembly and any associated container or transport vehicle. Product flow causes static electricity. Any failure to ground may cause an explosion, damage, and / or bodily harm.



Warning: Keep all body parts and non-essential equipment away from the assembly during operations. This includes the inlet connection area and all pinch points. Failure to do so may cause unnecessary damage or bodily injury.



Caution: All operators and maintenance personnel should wear proper personal protective equipment at all times. Failure to wear any required or suggested protective equipment may result in injury.

- It should be noted that any improper handling or disregard for both onsite safety and operational procedures or factory recommendations could cause unnecessary damage to the loading assembly and either severe personal injury or death to those within the immediate vicinity.
- OILCO Liquid Handling Systems cannot accept liability for any direct or indirect damage caused by or related to this or any other material publication.

## General Description

- All loading assemblies are designed to transfer product from a source location into a receiving container (e.g. railcar, tanker truck).
- Each individual unit is manufactured for a specific set of operational parameters.
- It is recommended that only trained and skilled personnel install and operate the loading assembly, or conduct operations around said assemblies.

## Testing Procedures

- All loading assemblies are hydrostatically tested in accordance with factory established standards and procedures.
- Swivel joints are evaluated for rotation and function
- Tolerances for both torsion spring counterbalances and spring-matic counterbalance assemblies are examined and the units set into a neutral position.

## Installation & Assembly

- Review the technical drawing completely before proceeding with assembly.
- Verify all bolts, nuts, and gaskets are included with the shipment (OILCO Liquid Handling Systems does not supply inlet connection hardware as standard).
- Assembly and installation options; pre-assembly of the complete unit or assembly of the unit by component.
- All threads must be cleaned and free from foreign debris, then proper thread sealant applied in a liberal manner
- All flange faces must be cleaned and free from foreign debris before a gasket is seated
- Begin assembly at the riser swivel joint and proceed toward the outlet



Warning: If the unit is assembled complete prior to connection to the inlet flange, use a suitable lifting mechanism and secure the unit safely before it is raised to any elevation. Failure to do so may result in damage or severe injury.

- After loading assembly is completely assembled and secured to its source flange, raise the unit to connect the transmission link to the pivot arm.



Caution: Advise all personnel to remain at a safe distance while only trained individuals release the unit from its secured position, allowing it to come to rest under its own power and spring tension.

## Operations & Maintenance

- Always adhere to federal, state, and local policies and standards when operating the loading assembly.
- Visual inspection of the loading assembly should be conducted prior to each use to be sure that there is no immediate hazard.
- Final adjustment of the spring counterbalance will be necessary once the arm is installed and in its final position.



Note: Corresponding spring balance adjustment procedures are provided with all OILCO Liquid Handling Systems assemblies. This information should be retained with onsite records for maintenance and operations reference.

- OILCO Liquid Handling Systems recommends a programmed maintenance schedule for all loading assemblies; this includes visual inspections, physical manipulation, and proper lubrication.



Note: A lubrication instruction data sheet is provided with all OILCO Liquid Handling Systems equipment. This information should be retained with onsite records for maintenance and operations reference.

- While performing any maintenance, be sure to remove the assembly from service and drain all product.
- Should any replacement be required, follow all of the procedures outlined in the installation portion of these guidelines.

## Checklist

- OILCO Liquid Handling Systems offers a complete set of standard documentation with each order. Please be sure to verify this before assembly and installation begins.



Technical reference drawing for loading assembly



Torsion spring / spring-matic counterbalance adjustment procedures



Lubrication and maintenance instructions



Swivel joint seal replacement instructions