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Safety

The following signs may be used in this manual. To avoid serious injury and/or possible damage to equipment, pay attention to these messages. Hazards or unsafe practices could result in severe personal injury or death.



Indicates a hazardous situation that, if not avoided, will result in death or serious injury.



Indicates a hazardous situation that, if not avoided, could result in death or serious injury.



Indicates a hazardous situation that, if not avoided, could result in minor or moderate injury. May also be used to alert against an unsafe operating or maintenance practice.

Use only replacement parts and devices recommended by the manufacturer to maintain the integrity of the equipment. Make sure the parts are properly matched to the series, model, serial number, and revision level of the equipment.

Safety labels are placed on equipment where appropriate. Do not remove any labeling from any piece of equipment. Replace any label that is missing.

DO NOT modify any Dixon® product. Non-factory modifications could create hazardous conditions and void all warranties. DO NOT attempt to use a Dixon product in any application that exceeds the product rating.

General Guidelines

- The owner must comply with these operating instructions and the authorized use of this piece of equipment. Should problems arise that cannot be solved using these operating instructions, please contact Dixon Sanitary. We will be happy to provide further assistance.
- If any modification work is performed on the product by the owner, Dixon shall no longer be considered the manufacturer of the device. In such cases, all components must be subjected to a new certification process for any applicable certifications that the equipment holds. Unless agreed to in writing by Dixon, liability, warranties, and guarantees shall immediately be deemed null and void as soon as you:
 - Perform modifications/conversion work on the product.
 - Use the product for unauthorized purposes.
 - Remove or disable safety elements.
 - Process products whose material, form, and size do not correspond exactly to the description provided.
 - Make alterations to the original state of the device.
- The operating instructions are regarded as part of the valve.
- The operating instructions shall be valid for the entirety of the device's lifespan.
- The operating and maintenance personnel must always be able to access the operating instructions.
- The safety instructions provided in the operating instructions must be observed.
- The operating instructions must be maintained and updated as necessary.
- The operating instructions must be passed on to any subsequent owners or operators of the device.

Safety

Owner Must Ensure...

- The product is used only as authorized.
- The product is used only when it is in fault-free, fully functional condition and the safety equipment is regularly checked to ensure that it is fully functional.
- The product is operated, maintained, and repaired only by personnel with the appropriate qualifications and authorization.
- Checks are made before the product is put into operation to ensure that only the authorized person is in the work area and no one is in danger of being injured if the product is in operation.
- The product is checked for visual damage prior to commissioning to ensure that it is operated only when free of faults.
- Any defects are reported immediately to the appropriate supervisor.
- All safety and warning notices attached to the equipment are legible, and none are removed.
- The operating instructions are always kept close to the product operation site, in a legible and complete state.
- Personnel are regularly instructed on all occupational safety and environmental protection issues and are familiar with and observe the operating instructions, especially the safety instructions contained herein.
- Personnel are trained and supervised to ensure that they follow safety measures, including the obligatory use of personal protective equipment.
- The product is only connected to pipelines that are depressurized at the time of connection.
- There is no tensile or compressive stress acting on the product connections.
- There is no residual risk at any point where pressure could occur. Pressure can cause sudden failure in or damage to the lines and connections.
- Warning notices in the documentation for supplier modules are observed and integrated into the risk assessments in the workplace.

Care of Stainless Steel

The stainless steel components in Dixon® Sanitary equipment are machined, welded, and assembled by skilled craftsmen using manufacturing methods that preserve the corrosion-resistant quality of the stainless steel. Retention of corrosion-resistant qualities under processing conditions requires regular attention to the precautions listed below. Examples of corrosion that can result from improper care are included below.

- Regularly check all electrical devices connected to the equipment for stray currents caused by improper grounding, damaged insulation, or other defects. Corrosion: Pitting often occurs when stray currents encounter moist stainless steel.
- Never leave rubber mats, fittings, wrenches, or other tools in contact with stainless steel. Corrosion: pitting or galvanic action. Objects retard complete drying, preventing air from reforming the protective oxide film. Galvanic corrosion occurs when two dissimilar metals touch when wet.
- Immediately rinse equipment after use with warm water until the rinse water is clear. Clean the equipment (COP or CIP) as soon as possible after rinsing. Corrosion: discoloration, deposits, and pitting. Product deposits often cause pitting beneath the particles.
- Use only recommended cleaning compounds. Purchase chemicals from reputable and responsible chemical manufacturers familiar with stainless steel processing equipment. Ensure they continuously check the effects of their products on stainless steel.
- Use cleaning chemicals exactly as specified by the manufacturer. Do not use excessive concentrations, temperatures, or exposure times. Corrosion: pitting, discoloration, or stress cracks. Permanent damage often occurs from excessive chemical concentrations, temperatures, or exposure times.
- For manual cleaning, use only soft non-metallic brushes, sponges, or pads. Brush with the grain on polished surfaces to avoid scratching the surface. Corrosion: pitting, scratches. Metal brushes or sponges will scratch the surface and promote corrosion over a period of time. Metal particles allowed to remain on a stainless steel surface will cause pitting.
- Use chemical bactericides exactly as prescribed by the chemical manufacturer in concurrence with the local health authority. Use the lowest permissible concentration, temperature, and exposure time possible. Flush immediately after bacterial treatment. In no case should the solution be in contact with stainless steel for more than 20 minutes. Corrosion: protective film destroyed. Chlorine and other halogen bactericides can destroy the protective film. A few degrees increase in temperature greatly increases chemical activity and accelerates corrosion.
- Regularly inspect the joints in pipelines. Be sure all connections are tight fitting without binding. Corrosion: crevice corrosion. Small crevices caused by improperly seated gaskets will promote crevice corrosion. Stainless steel under stress will develop stress cracking, especially in the presence of bactericides containing chlorine.
- Regularly inspect equipment for surface corrosion (i.e. pitting deposits, stress cracks, etc.). If deposit or color corrosion is detected, remove it immediately using mild scouring powder and detergents. Rinse thoroughly and allow to air dry. Review production and cleaning procedures to determine the cause. NOTE: If corrosion is not removed, the protective film cannot be restored, and corrosion will continue at an accelerated rate.



Technical Specifications

Materials of Construction

- Product contact metal components: AISI 304 (1.4301)
- Non-product contact components: refer to BOM for individual component material
- Product contact elastomers: FKM / nitrile rubber (FDA 21CFR177.2600 and 3A Class I)

Holding Pressure Technical Data

- Maximum product pressure: **75 PSI (5.17 bar)**

Product Temperature Technical Data

- Maximum operating temperature: **212°F (100°C)** – for higher temperatures, consult factory
- Minimum operating temperature: **-20°F (-28.9C)** – for higher temperatures, consult factory

Surface Finish Technical Data

- Product contact components: Ra ≤ 32
- Optional finishes: upon request
- Non-product contact components: Ra ≤ 63

Size and Connections

- 3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat
- 6" x 3" with 6" triclamp flange-to-trailer x male threaded bevel seat
- Other options and combinations available upon request

Cleaning Method

- 3A certified for clean-in-place (CIP) or clean-out-of-place (COP): 3A standard 53-07

Product Weight Chart

Valve Part #	Description	Weight
DX603010A1GB1R	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, nitrile rubber seals, freeze rod plunger, aluminum dust cover (lanyard style, no post)	28.0 lbs
DX603010A1GV1R	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, FKM seals, freeze rod plunger, aluminum dust cover (lanyard style, no post)	28.0 lbs
DX603010A1GB1	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, nitrile rubber seals, standard plunger, aluminum dust cover (lanyard style, no post)	27.0 lbs
DX603010A1GV1	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, FKM seals, standard plunger, aluminum dust cover (lanyard style, no post)	27.0 lbs
DX603010A1GB3R	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, nitrile rubber seals, freeze rod plunger, aluminum dust cover (5/8" UNC threaded post and nut)	30.5 lbs
DX603010A1GV3R	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, FKM seals, freeze rod plunger, aluminum dust cover (5/8" UNC threaded post and nut)	30.5 lbs
DX603010A1GB3	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, nitrile rubber seals, standard plunger, aluminum dust cover (5/8" UNC threaded post and nut)	29.4 lbs
DX603010A1GV3	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, FKM seals, standard plunger, aluminum dust cover (5/8" UNC threaded post and nut)	29.4 lbs
DX603010A1GV2R	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, FKM seals, freeze rod plunger, no dust cover (for cabinet installation)	26.4 lbs
DX603010A2GB2R	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, nitrile rubber seals, freeze rod plunger, no dust cover (for cabinet installation)	26.4 lbs
DX603010A1GB2	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, nitrile rubber seals, standard plunger, no dust cover (for cabinet installation)	25.4 lbs
DX603010A1GV2	3" x 3" with 4-bolt flange-to-trailer x male threaded bevel seat, FKM seals, standard plunger, no dust cover (for cabinet installation)	25.4 lbs
DX6063N10A1GV2	6" x 3" with 6" triclamp-to-trailer x male threaded bevel seat, FKM seals, standard plunger, no dust cover (for cabinet installation)	25.4 lbs
DX6063N10A1GB2	6" x 3" with 6" triclamp-to-trailer x male threaded bevel seat, nitrile rubber seals, standard plunger, no dust cover (for cabinet installation)	19.9 lbs
DX606010A3GV2	6" x 6" with triclamp-to-trailer x 90° 6" triclamp, FKM seals, standard plunger (for cabinet installation)	30.0 lbs
DX606010A3GV2X	6" x 6" with 6" triclamp-to-trailer x 90° 6" triclamp, FKM seals, standard plunger, body clamp with hex nut (for cabinet installation)	30.0 lbs

Installation and Start-Up

The following should be performed upon receiving the product and prior to installation and use of product. It is important that all the following processes and procedures are carefully followed and adhered to. Dixon® is not responsible for any damage that occurs during the unpacking or installation process.

Unpacking

Carefully unpack the valve and inspect each part for any damage that may have occurred during shipment. The valve may be shipped with aluminum dust cover attached (depending on the model ordered), so be sure to inspect the cover for any signs of damage as well as the valve itself. Report any damages to the carrier immediately. The valve is shipped with all necessary certificates, manuals, and operational stickers. Please add this paperwork to the plant maintenance files for future use and reference. All operational stickers should be placed on the trailer near the valve. Additional information for the valve can be found at dixonvalve.com.

Tools Needed

The following tools will be required for any maintenance on the product:

- 5/16" allen key wrench
- 7/16" box wrench
- O-ring pick tool
- Grease type (under lubrication section)
- Thread locker



Function Testing

Scan QR code below for operational video



Valves Purchased
Prior to 2024

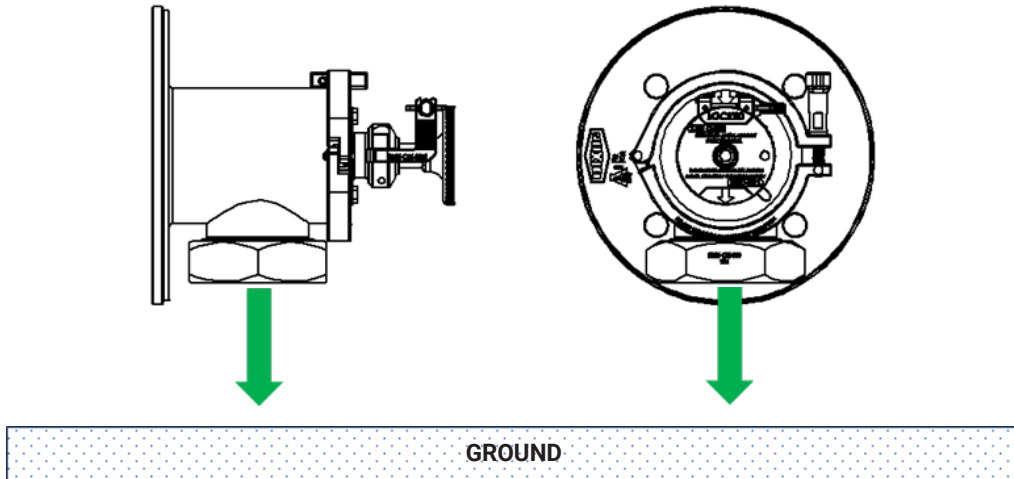


Latest Revision

- Check visually to ensure that equipment is not leaking
- Any defective seal that could have been damaged during disassembly or assembly must be replaced
- Check all equipment components for any signs of damage and replace damaged components
- Ensure that all clamps and fasteners are secure
- Confirm all pipes and fittings connected to the equipment permitted for use are in the intended pressure range
- Check that the maximum pressure indicated on the equipment or in the specification section of this manual have been complied with

Installation Orientation

Equipment must be installed in the proper orientation to ensure proper functionality and cleanability. Please refer to the following diagrams below for proper installation.



The valve must be installed with the outlet facing downward if the valve is going to be cleaned-in-place (CIP'd). If the valve is installed with the outlet port in any other orientation other than what is depicted above, after the CIP cycle, the valve body clamp and the plunger-bonnet assembly must be removed to allow complete draining before reinstalling.

Operation and Safety Labels

English Sticker

Instructions For Valve Operation			
To Open Valve 1. Loosen the wing nut (A1) on the eyebolt and disengage eyebolt from opposing cam arm while opening arms (A2) as shown. (See Fig. A) 2. Align handle arrow with bonnet arrow (B1) and pull on the handle to open plunger (B2). NOTE: You must keep arrows aligned as you pull open until plunger stops. (See Fig. B.) 3. Making sure you followed step 2 exactly, rotate handle 1/2 turn (B3) to engage the internal plunger lock which secures the plunger in the open position for loading and unloading. (See Fig. B) 4. Push in on the handle to verify that the plunger is locked open. If lock did not engage, repeat steps 2 and 3 again.		To Close Valve 1. Rotate handle 1/2 turn to disengage internal plunger lock by aligning handle arrow with bonnet arrow. 2. Push in on handle to close the plunger completely. If plunger won't move, ensure arrows are aligned and rotate handle back and forth very slightly while pushing until it unlocks. 3. Pull cam arms up to the closed position and press in on the arms to engage. (See Fig. C) Press firmly. 4. Swing eyebolt over to engage in the open slot of the opposite cam arm. Hand tighten wing nut to lock cam arms in position. (See Fig. D)	
Fig. A	Fig. B	Fig. C	Fig. D

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Spanish Sticker

Instrucciones Para El Operación De La Válvula			
Para abrir la válvula 1. Afloje la tuerca de mariposa (A1) en el cáncamo y desenganche el cáncamo del brazo de leva opuesto mientras abre los brazos (A2) como se muestra. (Fig. A) 2. Alinee la flecha del mango con la flecha del capó (B1) y jale el mango para abrir el émbolo (B2). NOTA: Debe mantener las flechas alineadas mientras abriendo hasta que el émbolo se detenga. (Fig. B) 3. Asegurándose de haber seguido exactamente el paso 2, gire el mango 1/2 vuelta (B3) para enganchar el bloqueo interno del émbolo que asegura el émbolo en la posición abierta para carga y descarga. (Fig. B) 4. Empuje el mango para verificar que el émbolo esté bloqueado abierto. Si el bloqueo no se enganchó, repita los pasos 2 y 3 de nuevo.		Para cerrar la válvula 1. Gire el mango 1/2 vuelta para desenganchar el bloqueo interno del émbolo alineando la flecha de la manija con la flecha del capó. 2. Empuje el mango para cerrar el émbolo por completo. Si el émbolo no se mueve, asegúrese de que las flechas estén alineadas y gire el mango hacia adelante y hacia atrás ligeramente mientras empujándose el mango hasta que se desbloquee. 3. Jale los brazos de leva hasta la posición cerrada y presione los brazos para engancharlos. (Fig. C). Presione firmemente. 4. Gire el cáncamo para engancharlo en la ranura abierta del brazo de leva opuesto. Apriete a mano la tuerca de mariposa para bloquear los brazos de leva en su posición. (Fig. D)	
Fig. A	Fig. B	Fig. C	Fig. D

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Sticker Technical Specifications

Total thickness	0.0073" ±10%
Adhesive type	solvent acrylic
Minimum application temperature	45°F (7°C)
Service temperature range	-40°F to 300°F (-40°C to 148°C)
Typical service life	5 years
Peel adhesion (stainless)	4.2 lbs



Each valve is supplied with operation instructions in the form of a 5" x 7" weatherproof sticker that must be installed on the back of the trailer so that the sticker can be clearly seen while operating the valve. This sticker is provided in both English and Spanish. The sticker could be placed below or to the side of the valve, but it MUST be visible. Should the sticker degrade over time to the point that it is no longer readable, replace the sticker immediately. Instructional sticker part number is DX60-LBL-2 and will be supplied as a set for both English and Spanish instructions.

Cleaning

IMPORTANT: Before operating the equipment during formal production, please follow the guidelines listed below to ensure that your equipment is clean and ready for service.

- Ensure that the equipment is installed in a proper orientation to allow the equipment to be cleaned and drained properly. Reference the installation and startup section of this manual for orientation guidelines.
- Flush the equipment with an appropriate cleaning agent to remove any residue that may be on the equipment from shipping. DO NOT use cleaning agents that will attack stainless steel or the elastomers that were supplied with the valve. If you are unsure what elastomer is used in the valve, reference the part number key in this manual to make the determination. Follow any MSDS instructions for proper use or handling of cleaning agents.
- Flush the equipment sufficiently to remove any soiling from the product contact components. Depending on the process, there may be varying amounts of soiling. Cleaning times and cleaning agent concentrations will vary depending on the product being processed. It is the responsibility of the operator to determine and adjust these cleaning specifications as necessary.
- The equipment should not be allowed to sit with product present in it for extended periods of time.
- Equipment should be cleaned immediately after processing is complete.

General Maintenance

To ensure proper operation of your Dixon® equipment, proper maintenance must be performed at regular intervals. To prevent damage, check all fitting connections and screw connections for any loosening of the connections during equipment operation. Maintain adequate spare parts stock for all replacement components on the piece of equipment. Please refer to the repair kits section of the manual for component part numbers and kit part numbers.

Maintenance and Servicing Intervals

Recommended intervals for one shift operation would be 3 months. However, only the user/owner can determine the appropriate service intervals as the length between service intervals is dependent upon the following parameters:

- Duration of use per day – number of cycles
- Type of product
- Product temperature
- Product viscosity
- Cleaning agent
- Cleaning process (CIP/COP)

Lubrication

Please use the following chart below for proper grease type for varying component materials. DO NOT use mineral or animal-product-based greases. Check all visible seals for any signs of damage and replace as necessary. If a different grease is used other than what is specified in this manual, there is risk of damaging the seal. Lubrication is only required when the equipment is being reassembled after servicing.

Seal Material	Grease Type
EPDM	MOLYKOTE® 111 seal lubricant
FKM	
Hydrogenated nitrile rubber	
PTFE	do not grease

Inspection

Inspection of the components listed below should be done during regular servicing intervals. Before removing the valve from the trailer, please be sure to do the following:

- Clean the trailer completely to remove any product that may be harmful if contacting a person
- Drain the trailer completely that connects to the valve being secured
- Make sure the valve is completely free of any product before removing from the trailer
- Once the valve has been removed from the trailer, cover the outlet of the trailer with a clean cotton rag to prevent any foreign material from entering the trailer

Components to be inspected: (refer to BOM exploded view for item numbers)

- Lip seal (item 6b)
- Plunger seal (item 5a)
- Bonnet seal (item 6a)
- Plunger (item 5)
- Bonnet (item 6)
- Valve housing (item 1)

Any components that show signs of severe wear or damage should be replaced during the scheduled maintenance time for the equipment. Please refer to the assembly and disassembly section of this manual for proper instructions on removing and replacing any worn or damaged components. Replacement components and repair kits can be found in the BOM or repair kits section of this manual.

Cleaning Out of Place (COP)

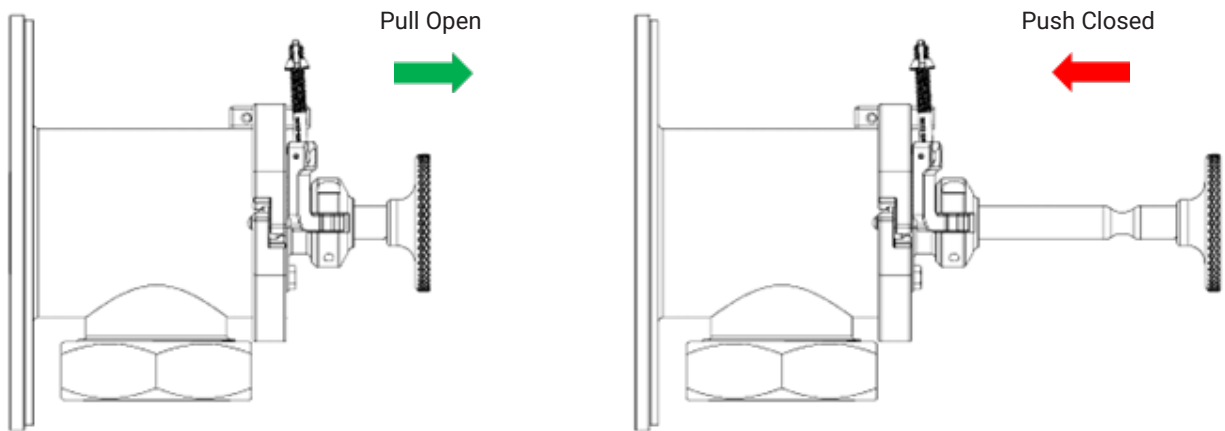
1. Refer to the disassembly section of the manual and follow instructions to remove all product contact components.
2. Inspect the product contact components of the equipment for any signs of possible damage. Replace components as necessary (See equipment BOM in this manual for replacement component part numbers).
3. Clean all surfaces of the product contact components by manually brushing in a bath of cleaning solution (acid detergents or simple alkaline soda type detergents).
4. After cleaning, rinse all components thoroughly with water.
5. Refer to the assembly section of the manual and follow instructions to properly reassemble the equipment.

Cleaning in Place (CIP)

NOTE: Not all models or sizes may be certified for CIP. Please check the specifications section of the manual to determine what cleaning method is suitable.

1. Refer to the disassembly section of the manual and follow instructions to remove all product contact components.
2. Regularly flush the valve with a suitable medium to preserve seals and integrity of the product contact surfaces, such as when there is a product changeover or downtime. These intervals shall be determined by the end user.
3. IMPORTANT: Only use cleaning agents which will not harm the seals and stainless steel.
4. Follow any MSDS instructions for proper use or handling of cleaning agents.
5. The necessary cleaning times, temperatures, and cleaning agents will depend on the degree of contamination and must be adapted accordingly.
6. Cleaning flow velocities of 5-6 ft/s should be maintained for proper cleaning of the equipment.
7. Cycle the plunger between the "open" and "closed" positions during CIP cleaning processes a minimum of twice to ensure that all product contact surfaces are properly exposed to the cleaning fluid (see diagram on the following page).
8. After cleaning, rinse the equipment thoroughly with water and allow the valve to drain.

Plunger Cycling During CIP (Diagram)



IMPORTANT: Cycle the plunger between the "open" and "closed" positions during the CIP cleaning process a minimum of two times to ensure that all product contact surfaces are properly exposed to the cleaning fluid.

Assembly and Disassembly

To ensure quality operation of your Dixon® equipment, the equipment must be disassembled and assembled properly to prevent equipment damage during operation. Please follow the instructions contained in this manual carefully and be sure to follow any safety warnings contained herein. If any questions should arise during the assembly or disassembly process that are not addressed in this manual, please contact Dixon Sanitary at 800.789.1718. Please refer to the BOM for part names and part number references.

Assembly

1. Lubricate the plunger seal O-ring (DX60-PS-_-_) with grease and install the plunger seal O-ring onto the plunger (DX60-PL-_0) by pressing the O-ring firmly into the O-ring groove of the plunger. Press evenly around the diameter of the O-ring to ensure that the O-ring is sitting firmly in the groove.



2. Lubricate the bonnet lip seal (DX60-LS-_-_) liberally with grease. Install the lip seal into the gland in the bonnet and press firmly into place. Pinching the lip seal will help to fit the seal into the gland groove. Ensure the seal is sitting securely in the bonnet and that there are no gaps between the lip seal and the bonnet face. Lubricate the bonnet seal O-ring (DX60-BS-_-_) and the lip seal (DX60-LS-_-_) with grease.



Assembly

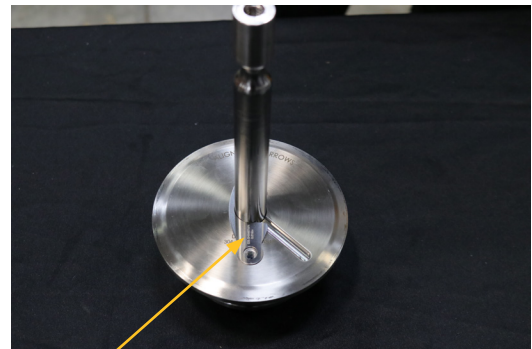
3. Install the bonnet seal O-ring (DX60-BS-_-_) on the bonnet by pressing the O-ring firmly into the O-ring groove of the bonnet being careful not to roll the O-ring. If removing the O-ring, use the O-ring pick tool carefully as to not mark the bonnet flange.



4. Insert the plunger (DX60-PL-_0) carefully through the lip seal and bonnet. Check the lip seal to ensure that it was not damaged in any way.



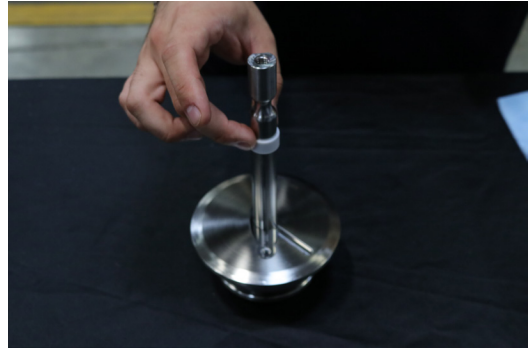
5. Place the bonnet hub flange shim(s) (valve shimmed from factory) onto the valve bonnet and align the holes of the shim(s) with the bolt holes for the bonnet hub flange bolts.



Shim(s)

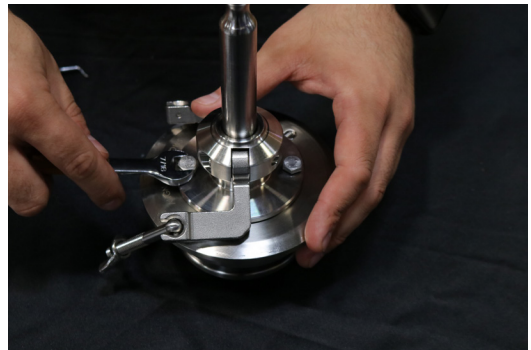
Assembly

6. Install stem bushing (DX60-SB-30) into the bore of the bonnet hub flange (DX60-BF-30) and cam arm assembly so that the chamfered end is inserted into the hub. Alternatively, the stem bushing can be placed onto the plunger stem.



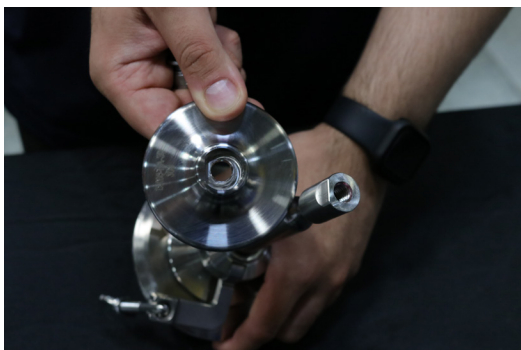
7. Install bonnet hub assembly (DX60-BFA-30) (DX60-BF-30 and cam arm assembly) by sliding it onto the plunger stem and pressing down completely. Cam arms must be pointed up towards the bonnet flange engraving. Align the clearance holes in the bonnet hub flange with the threaded holes in the bonnet. Insert the bonnet hub flange bolts (DX60-BFHB-30) through the clearance holes and tighten the bolts to 75 in-lbs.

NOTE: Apply thread locker to bolts – bolts must have thread locker applied and be torqued during every assembly.



8. Install the handle (DX60-HA-30) onto the plunger stem being sure to line up the machined flat on the handle with the machined flat on the plunger stem. See photo below. Apply thread locker to the plunger handle bolt (DX60-HAB-30) and install bolt and lock washer using 5/16" allen tool to tighten the handle bolt.

NOTE: Apply thread locker to the bolts – bolts must have thread locker applied and be torqued during every assembly.



Assembly

9. Insert the plunger/bonnet/handle assembly into the valve housing making sure to align the bonnet locating device (pin on 3" valves / machined flat on 6" valves) with the notch or flat in the valve housing. Install the body clamp (DX60-CLMP_0) and tighten the wing nut to 40 in-lbs.



10. Follow the operational instruction guidelines listed on the operational equipment stickers along with the function testing guidelines listed in this manual to ensure the equipment is functioning properly.

Disassembly

For disassembly of the DX60-series tanker valve, follow the assembly instructions in reverse order. As stated in the inspection section of this manual, replace any components that show signs of severe wear or damage. These should be replaced during the scheduled maintenance period for the equipment.

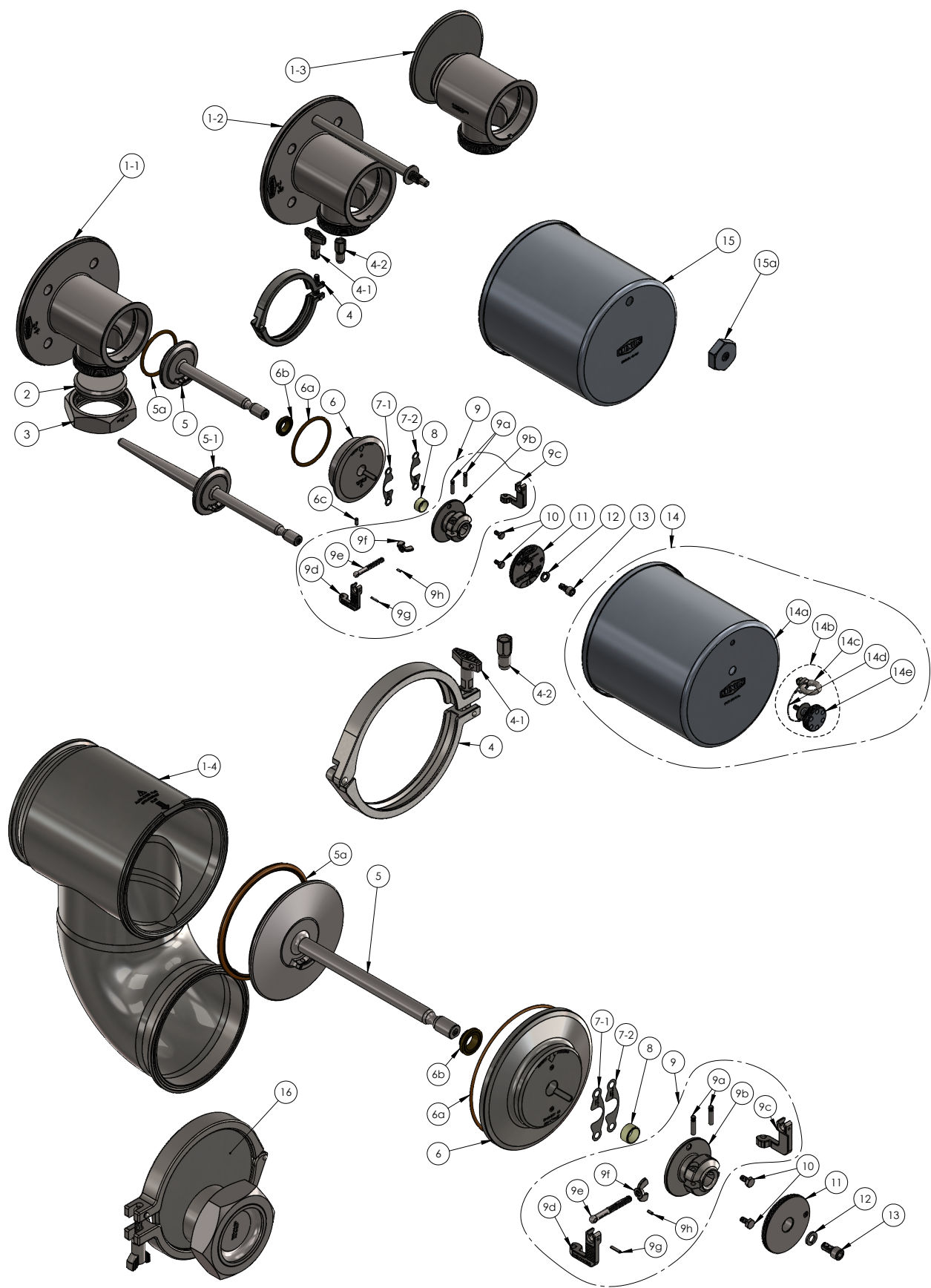
Repair Kits

To ensure proper operation of your Dixon equipment, proper maintenance must be performed at regular intervals. To prevent damage and improper operation, use only genuine replacement parts and kits offered by Dixon to maintain the integrity of the equipment. Make sure the parts are properly matched to the series, model, serial number, and revision level of the equipment. Please see the list of kits below offered for this piece of equipment.

Valve Size	Repair Kit Part #	Description	Included Items		
			Plunger Seal Part # (item 5a)	Bonnet Seal Part # (item 6a)	Lip Seal Part # (item 6b)
3" and 6" x 3"	DX60-30-SK1-V	DX60 FKM seal kit, plunger seal, and bonnet seal	DX60-PS-V-30	DX60-BS-V-30	-
	DX60-30-SK2-V	DX60 FKM seal kit, plunger seal, bonnet seal, and lip seal	DX60-PS-V-30	DX60-BS-V-30	DX60-LS-V-30
	DX60-30-SK1-B	DX60 nitrile rubber seal kit, plunger seal, and bonnet seal	DX60-PS-B-30	DX60-BS-B-30	-
	DX60-30-SK2-B	DX60 nitrile rubber seal kit, plunger seal, bonnet seal, and lip seal	DX60-PS-B-30	DX60-BS-B-30	DX60-LS-B-30
6" x 6"	DX60-60-SK1-V	DX60 FKM seal kit, plunger seal, and bonnet seal	DX60-PS-V-60	DX60-BS-V-60	-
	DX60-60-SK2-V	DX60 FKM seal kit, plunger seal, bonnet seal, and lip seal	DX60-PS-V-60	DX60-BS-V-60	DX60-LS-V-60

NOTE: Reference exploded view in the BOM for item number descriptions and visuals.

Bill of Materials



Bill of Materials

Part Type	Item #	Description	Part #		Material	Qty
			DX6030 DX6063N	DX6060		
Body housing	1-1	DX6030 body, 3" x 3" male bevel seat	DX60-BDY-30	-	304 (standard)	1
			DX60-BDY-30R	-	316L (optional)	1
	1-2	DX6030 body ^{COVER} , 3" flange x 3" male bevel seat with 5/8" UNC post for cover	DX60-BDY-30P	-	304 (standard)	1
			DX60-BDY-30PR	-	316L (optional)	1
	1-3	DX6063N body, 6" triclamp x 3" male bevel seat	DX60-BDY-60103N	-	304 (standard)	1
			DX60-BDY-60103NR	-	316L (optional)	1
	1-4	6" DX6060 body, 6" triclamp x 6" triclamp	-	DX60-BDY-60-E	304	1
						1
Bevel seat cap	2	DX60 3" bevel seat cap	DX60-16A-G30	-	304 (standard)	1
			DX60-16A-G30R	-	316L (optional)	-
Bevel seat nut	3	3" bevel seat nut	13H-G300	-	304	1
Clamp	4	DX60 body clamp	DX60-CLMP-30	13MHV600	304	1
Clamp wingnut	4-1	DX60 body clamp wingnut	DX60-13DWN	DX60-13DWN	304	1
Clamp wingnut	4-2	13WNH hex nut	13WNH	13WNH	304	1
Plunger (standard)	5	DX60 plunger	DX60-PL-30	DX60-PL-60	304 (standard)	1
			DX60-PL-30R	-	316L (optional)	1
Plunger with freeze rod (optional)	5-1	DX60 plunger with freeze rod	DX60-PL-30-R	-	304	1
Plunger O-ring	5a	FKM plunger seal	DX60-PS-V-30	DX60-PS-V-60	FKM	1
		nitrile rubber seal	DX60-PS-B-30	-	nitrile rubber	1
		white nitrile rubber seal	DX60-PS-BW-30	-	nitrile rubber	1
Bonnet	6	bonnet	DX60-BON-30	DX60-BON-60	304 (standard)	1
			DX60-BON-30R	-	316L (optional)	1
Bonnet O-ring	6a	FKM bonnet O-ring seal	DX60-BS-V-30	DX60-BS-V-60	FKM	1
		nitrile rubber bonnet O-ring seal	DX60-BS-B-30	-	nitrile rubber	1
		white nitrile rubber bonnet O-ring seal	DX60-BS-BW-30	-	nitrile rubber	1
Lip seal	6b	FKM bonnet lip seal	DX60-LS-V-30	DX60-LS-V-60	FKM	1
		nitrile rubber bonnet lip seal	DX60-LS-B-30	-	nitrile rubber	1
Bonnet pin	6c	bonnet locating pin	DX60-BLP-30	-	18-8	1
Shim	7-1	0.016" shim for bonnet and bonnet flange ^{CAM KIT}	DX-SHIM016N		304	1
	7-2	0.008" shim for bonnet and bonnet flange ^{CAM KIT}	DX-SHIM008N		304	1
Stem bushing	8	plunger stem bushing	DX60-SB-30		PTFE	1
Bonnet flange assembly	9	bonnet hub flange assembly	DX60-BFA-30		-	1
Pin	9a	cam arm pin ^{CAM KIT}	DX60-G100PSS		304	2
Hub	9b	bonnet hub flange	DX60-BF-30		304	1
Cam arm's	9c	handle cam arm right ^{CAM KIT}	DX60-CA-KIT		304	1
	9d	handle cam arm left ^{CAM KIT}			304	1
Eye bolt	9e	5/16"-18 machined eye bolt	13IB-DX60		304	1
Wingnut	9f	5/16"-18 right hand wing nut	DX-92001A330		18-8	1
Spring pin	9g	slotted spring pin, 1/8" x 5/8"	DX-92373A179		18-8	1
Spring pin	9h	slotted spring pin, 1/8" x 5/16"	DX-92373A174		18-8	1
Bolt	10	bonnet flange hex head bolt	DX60-BFHB-30		18-8	2
Handle	11	plunger handle	DX60-HA-30		304	1
Lock washer	12	3/8" lock washer	375LOCKW		304	1
Handle bolt	13	plunger handle bolt	DX60-HAB-30		304	1

Bill of Materials

Part Type	Item #	Description	Part #		Material	Qty
			DX6030 DX6063N	DX6060		
Dust cover kit	14	DX60 valve dust cover with lanyard/ nut kit	DX60-DC-30-ALRK	-	see notes	1
Dust cover for lanyard	14a	dust cover for lanyard/nut	DX60-DC-30-AL	-	AL	1
Cover nut assembly with lanyard	14b	nut assembly with lanyard kit	DX60-DCNA-30	-	AL	1
Cover eye bolt	14c	dust cover eye bolt	DX60-DCEB-30	-	304	1
Cover washer	14d	dust cover nut washer	DX60-DCNW-30	-	18-8	1
Cover nut	14e	dust cover nut	DX60-DCN-30	-	AL	1
Dust cover for post	15	dust cover for 5/8"-11 post style body	DX60-DC-30-ALP	-	AL	1
Cover stem nut	15a	5/8"-11 cover stem nut (use with DX60-DC-30-ALP)	DX60-DCSN-AL	-	AL	1
Outlet kit	16	6" DX6060 outlet kit ⁶³ , 6" triclamp x 3" male bevel seat	-	DX60-EC-63CT-VK	see notes	1
		6" DX60 outlet kit ⁶⁴ , 6" triclamp x 4" male bevel seat	-	DX60-EC-64CT-VK	see notes	1

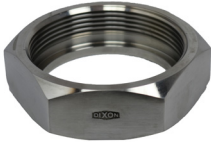
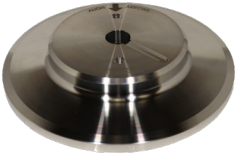
^{COVER} Available with valve dust cover codes 1 and 3

^{CAM KIT} Available in cam conversion kit (DX60-CA-KIT) (items 7-1, 7-2, 9a, 9d, and 9e)

⁶³Includes FKM gasket with 304 6" single pin clamp, 6" ferrule reduced to 3" male bevel seat with nut and end cap

⁶⁴Includes FKM gasket with 304 6" single pin clamp, 6" ferrule reduced to 4" male bevel seat with nut and end cap

Individual Components

1-1. DX60-BDY-30 Body Housing 	1-2. DX60-BDY-30P Body Housing 	1-3. DX60-BDY-60103N Body Housing 	1-4. DX60-BDY-60-E Body Housing 
2. DX60-16A-G30 Bevel Seat Cap 	3. 13H-G300 Bevel Seat Nut 	4. DX60-CLMP-30 Clamp 	4-1. DX60-13DWN Clamp Wingnut 
5. DX60-PL-30 3" Plunger (Standard) 	5. DX60-PL-60 6" Plunger (Standard) 	5-1. DX60-PL-30-R Plunger with Freeze Rod (Optional) 	5a. DX60-PS-V-30 Plunger O-ring - FKM 
5a. DX60-PS-B-30 Plunger O-ring - Nitrile Rubber 	5a. DX60-PS-BW-30 Plunger O-ring - White Nitrile Rubber 	5a. DX60-PS-V-60 6" Plunger O-ring - FKM 	6. DX60-BON-30 3" Bonnet 
6. DX60-BON-60 6" Bonnet 	6a. DX60-BS-V-30 Bonnet O-ring - FKM 	6a. DX60-BS-B-30 Bonnet O-ring - Nitrile Rubber 	6a. DX60-BS-BW-30 Bonnet O-ring - White Nitrile Rubber 

Individual Components

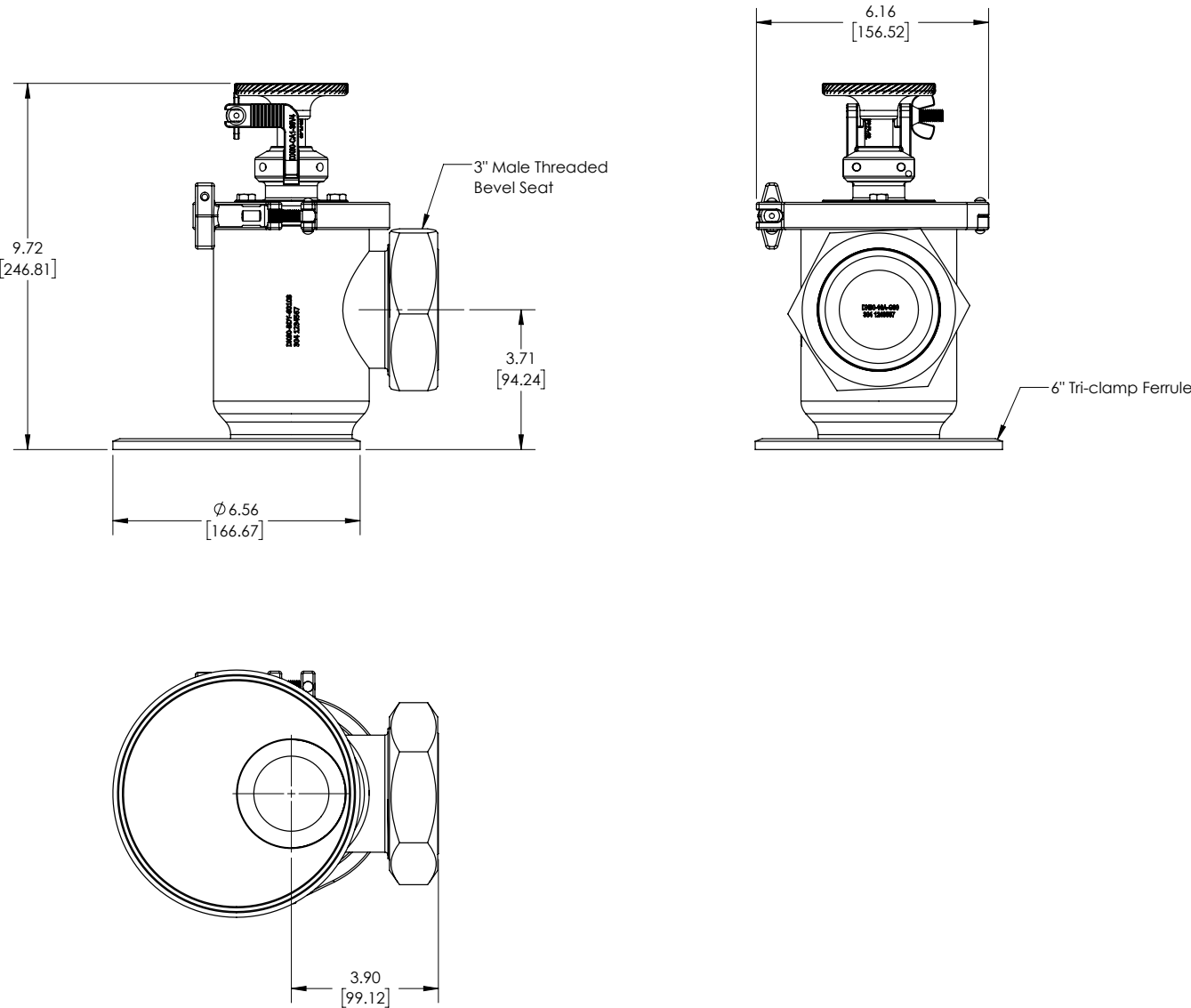
6a. DX60-BS-V-60 6" Bonnet O-ring - FKM 	6b. DS-LS-V-30 Lip Seal - FKM 	6b. DX60-LS-B-30 Lip Seal - Nitrile Rubber 	6c. DX60-BLP-30 Bonnet Pin 
7-1. DX-SHIM016N 0.016" Shim 	7-2. DX-SHIM008N 0.008" Shim 	8. DX60-SB-30 Stem Bushing 	9. DX60-BFA-30 Bonnet Flange Assembly 
9a. DX60-G100PSS Pin 	9b. DX60-BF-30 Hub 	9c & 9d. DX60-CA-KIT Cam Arm Kit 	9e. 13IB-DX60 Eye Bolt 
9f. DX-92001A330 Wingnut 	9g. DX-92373A179 Spring Pin (1/8" x 5/8") 	9h. DX-9237A174 Spring Pin (1/8" x 5/16") 	10. DX60-BFHB-30 Bolt 
11. DX60-HA-30 Plunger Handle 	12. 375LOCKW Lock Washer 	13. DX60-HAB-30 Handle Bolt 	14. DX60-DC-30-ALRK Dust Cover Kit 

Individual Components

14a. DX60-30-AL Dust Cover for Lanyard 	14b. DX60-DCNA-30 Cover Nut Assembly with Lanyard 	14c. DX60-DCEB-30 Cover Eye Bolt 	14d. DX60-DCNW-30 Cover Washer 
14e. DX60-DCN-30 Cover Nut 	15. DX60-DC-30-ALP Dust Cover for Post 	15a. DX60-DCSN-AL Cover Stem Nut 	
DX60-30-SK1-B Repair Kit - Nitrile Rubber 	DX60-30-SK1-BW Repair Kit - White Nitrile Rubber 	DX60-30-SK1-V Repair Kit - FKM 	
DX60-LBL-2 Instruction Sticker - English 	DX60-LBL-2 Instruction Sticker - Spanish 		

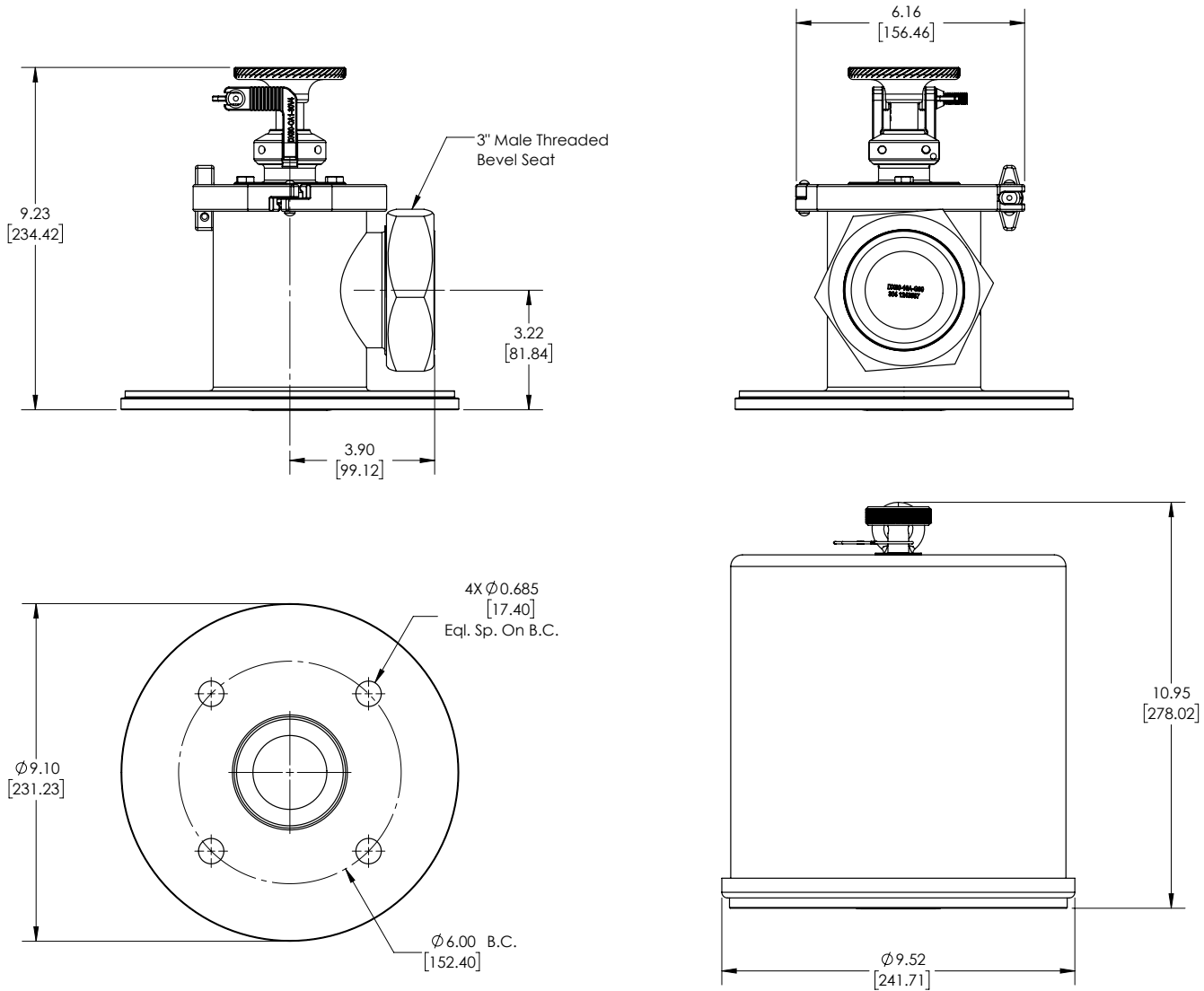
Dimensions

6" x 3"



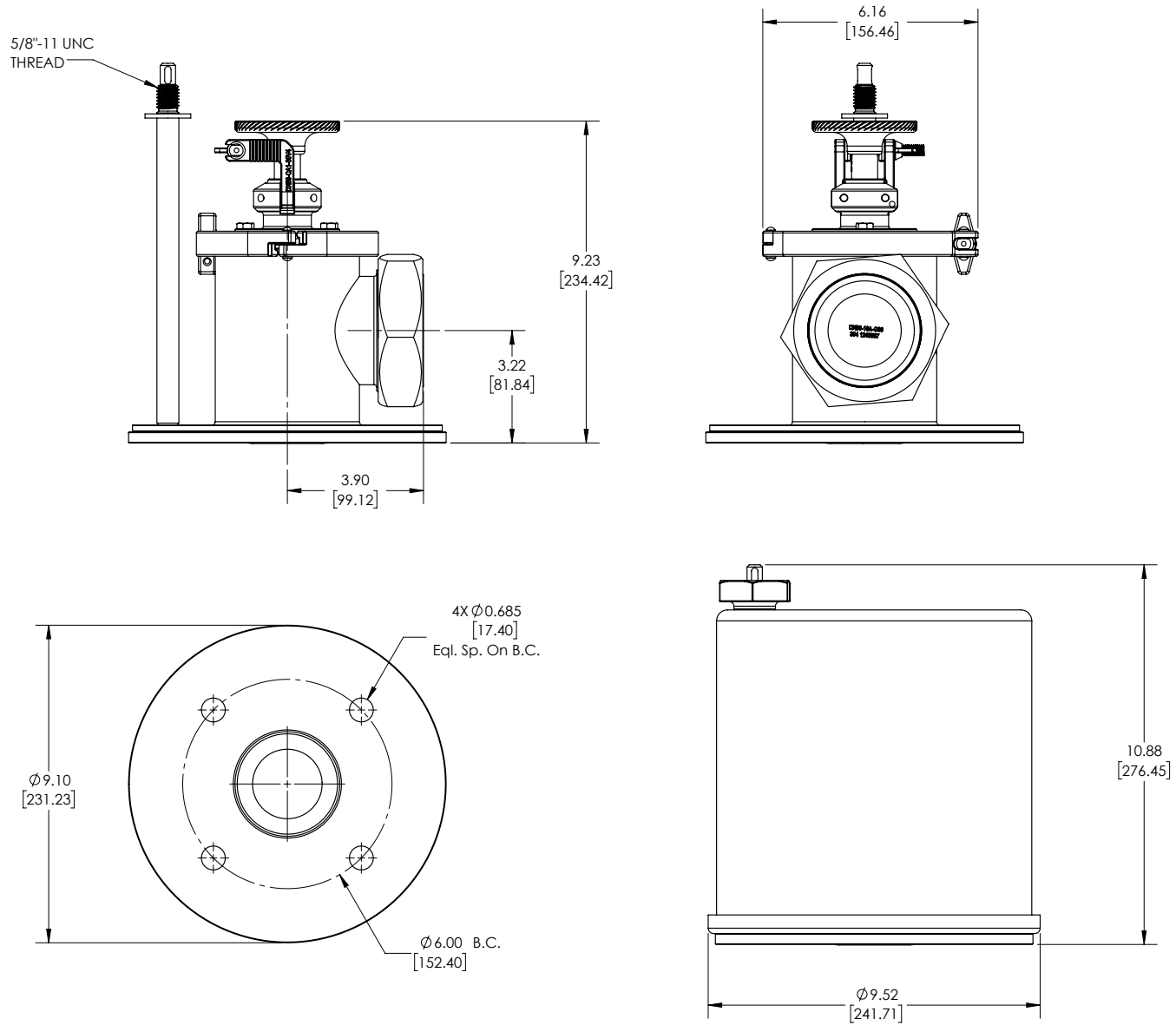
Dimensions

3" x 3" Valve 150# Flange



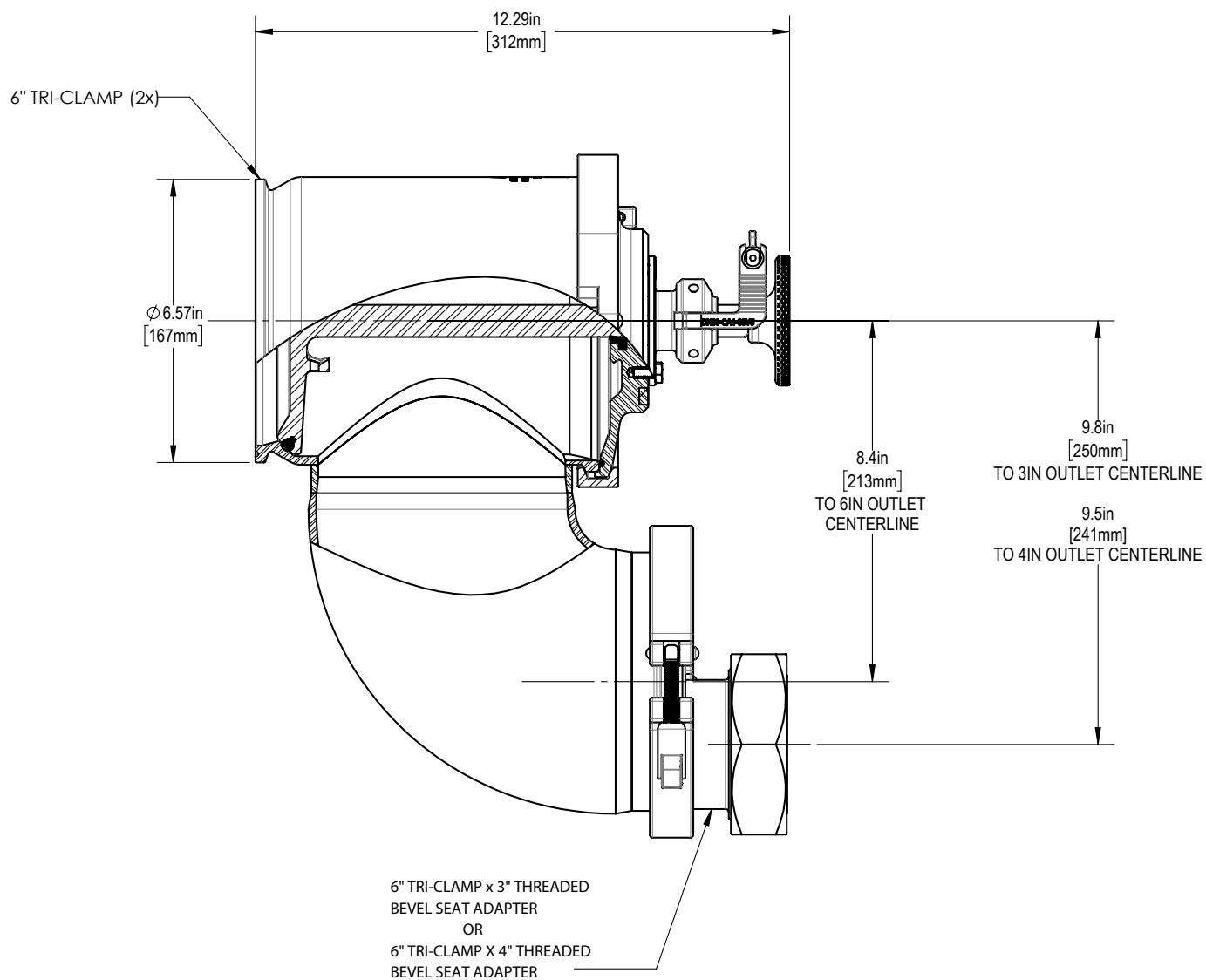
Dimensions

3" x 3" Valve 150# Flange Post Covers



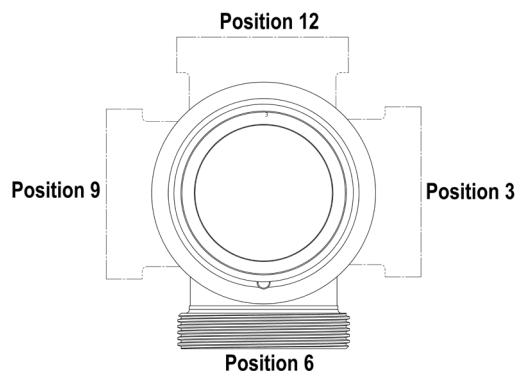
Dimensions

6" x 6" Valve with Optional Reducing End Cap



Part Number Key

DX60-Series Hygienic Tanker Valve Part Number Key Example: DX603010A1GV1_		Series	Valve Body				Material	Seat Material	Valve Cover	Options
		DX60	30	10	A	1	G	V	1	
Series	Code									
DX60	DX60									
Valve Size	Code									
3" x 3"	30									
3" x 3" (at position 6) with 2" (at position 3, 9, or 12)	32									
3" x 3" (at position 6) 2-1/2" (at position 3, 9, or 12)	35									
6" x 3" (at 3, 6, 9, or 12)	63N									
6" x 6" (90° outlet)	60									
Valve Body Style	Code									
L (2-port shut-off) position 6	10									
Multiport (3-port shut-off) positions 6 and 3	20									
Multiport (3-port shut-off) positions 6 and 9	30									
Multiport (3-port shut-off) positions 6 and 12	40									
Surface Finish	Code									
32 Ra (I.D. mechanical polish)	A									
Connections (Trailer x Outlet)	Code									
Flange x male threaded bevel ¹	1									
Plain bevel x male threaded bevel	2									
Ferrule x ferrule ²	3									
Wetted Parts Material	Code									
304 stainless steel	G									
316L stainless steel	R									
Seat Material	Code									
FKM	V									
Black nitrile rubber	B									
White nitrile rubber ³	W									
Valve Dust Cover	Code									
Aluminum with lanyard style cover nut	1									
No cover	2									
Aluminum with 5/8" UNC threaded post and nut	3									
Options	Code									
None	blank									
No bevel seat nut or cap	A									
Plunger with freeze rod	R									
Body clamp with 13WNH hex nut	X									
Body clamp with 13WNH hex nut and no bevel seat nut or cap	Y									
Body clamp with 13WNH hex nut, plunger with freeze rod, and no bevel seat nut or cap	Z									



¹Flange is a triclamp ferrule style connector when used with valve size code 63N

²Option is only available for valve size code 60

³Only the plunger and bonnet seals will be supplied with the white elastomer

NOTE: For other sizes and configurations not listed, please contact Dixon Sanitary by emailing sanitaryengineering@dixonvalve.com or give us a call at 800.789.1718.

Troubleshooting

Problem	Possible Cause	Suggested Action
Valve is leaking	Plunger seal, bonnet seal, or lip seal is damaged.	Check seals for any type of damage and replace as necessary.
	Body clamp is not tightened properly.	Tighten wing nut on body clamp.
	Handle cam arms are not engaged.	Push cam arms in tightly so they are completely secure.
Valve won't open	Plunger seal may be frozen to the valve housing.	Rotate handle to break free.
	Valve was not cleaned after running a sticky or tacking product.	Clean valve according to the cleaning instructions found in this manual.
Valve will not lock open	Check plunger lock arm or bonnet for damage.	Check plunger lock arm and bonnet for any signs of damage. Repair as necessary.
	Accumulated product on the plunger or bonnet from not cleaning properly.	Clean valve according to the cleaning instructions found in this manual.
Dust cover will not go on	Damaged dust cover.	Inspect valve housing for any signs of damage around where the cover meets the flange. Repair as necessary.
	Significant damage to the valve housing flange.	Inspect valve housing flange for any signs of damage around where the cover meets the flange. Repair as necessary.
Plunger alignment loose	Worn PTFE stem bushing.	Inspect bushing for signs of wear and replace as necessary.
	Bonnet flange bolts are loose.	Tighten bolts properly per the assembly instructions given in this manual.

Limited Warranty

DIXON VALVE AND COUPLING COMPANY, LLC (herein called "Dixon") warrants the products described herein and manufactured by Dixon to be free from defects in material and workmanship for a period of one (1) year from date of shipment by Dixon under normal use and service. Its sole obligation under this warranty being limited to repairing or replacing, as hereinafter provided, at its option any product found to Dixon's satisfaction to be defective upon examination by it, provided that such product shall be returned for inspection to Dixon's factory within three (3) months after discovery of the defect. The repair or replacement of defective products will be made without charge for parts or labor. This warranty shall not apply to: (a) parts or products not manufactured by Dixon, the warranty of such items being limited to the actual warranty extended to Dixon by its supplier; (b) any product that has been subject to abuse, negligence, accident, or misapplication; (c) any product altered or repaired by others than Dixon; and (d) to normal maintenance services and the replacement of service items (such as washers, gaskets, and lubricants) made in connection with such services. To the extent permitted by law, this limited warranty shall extend only to the buyer and any other person reasonably expected to use or consume the goods who is injured in person by any breach of the warranty. No action may be brought against Dixon for an alleged breach of warranty unless such action is instituted within one (1) year from the date the cause of action accrues. This limited warranty shall be construed and enforced to the fullest extent allowable by applicable law.

Other than the obligation of Dixon set forth herein, Dixon disclaims all warranties, express or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose, and any other obligation or liability. The foregoing constitutes Dixon's sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product.

Some products and sizes may be discontinued when stock is depleted or may require a minimum quantity for ordering.



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DX60 IOM_Rev D_0626

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