VICTAULIC FLANGE ADAPTER NOTES FOR 12-INCH/323.9-MM AND SMALLER SIZES

Style 741 Vic-Flange Adapter
Style 744 FireLock Flange Adapter
Style 743 Vic-Flange Adapter

- The Victaulic Flange Adapter design incorporates small teeth on the ID of the key section to resist rotation. These teeth must be removed when the Victaulic Flange Adapter is used with grooved-end Victaulic Series 700 Butterfly Valves, Schedule 5 pipe, and plastic pipe.
- Victaulic Flange Adapters must be assembled so there is no interference with mating components.
- Because of the outside flange dimension, Victaulic Flange Adapters must not be used within 90° of one another on a standard fitting.
- Victaulic Flange Adapters cannot be used on FireLock fittings.
- When wafer or lug-type valves are used adjoining a Victaulic fitting, check disc dimensions to ensure proper clearance.
- Victaulic Flange Adapters shall not be used as anchor points for tie rods across non-restrained joints.
- Mating Victaulic Flange Adapters to rubber faced flanges, valves, etc. requires the use of a Victaulic Flange Washer. Refer to the "Victaulic Flange Washer Notes" section on the following page.
- The face of the mating flange must be free from gouges, undulations, and deformities of any type for proper sealing. Refer to the installation instructions for complete information.
- The lettering on the outside of the gasket must face the gasket pocket of the Victaulic Flange Adapter. When installed correctly, the lettering on the gasket will not be visible.
- The hinge points of Victaulic Flange Adapters must be oriented approximately 90° to each other when mated.
- Style 741 Vic-Flange Adapters can be used only on the side of Series 700 Butterfly Valves that will not interfere with handle operation.
- Style 741 Vic-Flange Adapters can be used on all sizes of Series 761 Vic-300 MasterSeal Butterfly Valves and Series 716/716H Vic-Check Valves.
- Series 761 Vic-300 MasterSeal Butterfly Valves cannot be connected directly to flanged components with Style 743 Vic-Flange Adapters. A No. 46 ANSI 300 groove-by-flange adapter is required for this application.
- Style 741 Vic-Flange Adapters can be used only on one side of 8-inch/219.1-mm and smaller Series 765, 705, 766, and 707C Butterfly Valves that will not interfere with mating components and handle operation.
- Style 741 Vic-Flange Adapters cannot be used on 10-inch/273.0-mm Series 765 and Series 705 Butterfly Valves.
- Style 741 and Style 743 Vic-Flange Adapters can be installed on either end of a Series 717, 717H, 717R, and 717HR FireLock Check Valve.
- Series 765, 705, 766, and 707C Butterfly Valves cannot be connected directly to flanged components with Style 743 Vic-Flange Adapters. A No. 46 ANSI 300 groove-by-flange adapter is required for this application.
- Series 763 Stainless Steel Butterfly Valves cannot be connected directly to flanged components with Style 743 Vic-Flange Adapters. A No. 46 ANSI 300 groove-by-flange adapter is required for this application.
- Style 743 Vic-Flange Adapters are designed to mate with raised-face flanges. For connections to flat-faced flanges, the raised projections on the outside face of the Style 743 Vic-Flange Adapter must be removed.
- Style 743 Vic-Flange Adapters in 2, 2½, and 3-inch/60.3, 73.0, and 88.9-mm sizes must be ordered as a factory assembly when connected to a Victaulic fitting or valve. Contact Victaulic for details.
- **STANDARD, FULL-SHANK DIAMETER ASSEMBLY BOLTS ARE REQUIRED FOR PROPER INSTALLATION OF VICTAULIC FLANGE ADAPTERS.**

VICTAULIC FLANGE WASHER NOTES FOR 12-INCH/323.9-MM AND SMALLER SIZES

Style 741 Vic-Flange Adapter
Style 744 FireLock Flange Adapter
Style 743 Vic-Flange Adapter

Victaulic Flange Adapters require a smooth, hard surface at the mating flange face for proper sealing. Some applications, for which the Victaulic Flange Adapter is otherwise well suited, do not provide an adequate mating surface. In such cases, a metal Victaulic Flange Washer (Type F phenolic when joining to copper systems) is recommended for insertion between the Victaulic Flange Adapter and the mating flange to provide the necessary sealing surface. To ensure the proper Victaulic Flange Washer is supplied, always specify the product style and size when ordering.

A. When mating a Victaulic Flange Adapter to a serrated flange – a flange gasket shall be used against the serrated flange. The Victaulic Flange Washer should then be inserted between the Victaulic Flange Adapter and the flange gasket.

B. When mating a Victaulic Flange Adapter to a wafer-type valve that is rubber-lined and partially rubber-faced (smooth or not) – the Victaulic Flange Washer shall be placed between the valve and the Victaulic Flange Adapter.

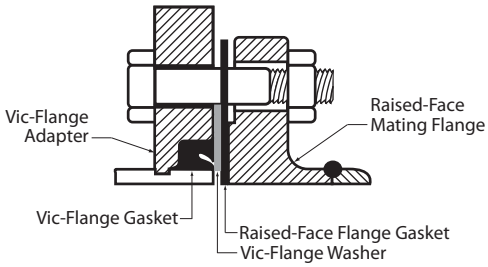
C. When mating a Victaulic Flange Adapter to a rubber-faced flange, valve, etc. – the Victaulic Flange Washer must be placed between the Victaulic Flange Adapter and the rubber-faced flange.

D. When mating a Victaulic Flange Adapter to components (valves, strainers, etc.) where the component flange face has an insert – follow the same arrangement as if the Victaulic Flange Adapter was being mated to a serrated flange. Refer to application "A" above.

E. When mating Victaulic AWWA Flange Adapters to Victaulic NPS Flange Adapters – the Victaulic Flange Washer must be placed between the two Victaulic Flange Adapters with the hinge points oriented 90° to each other. If one flange is not a Victaulic Flange Adapter (i.e. flanged valve), a flange gasket must be placed against the non-Victaulic Flange. The Victaulic Flange Washer must then be inserted between the flange gasket and the Victaulic Flange gasket.

F. STYLE 741 AND STYLE 744 VIC-FLANGE WASHERS ARE DIFFERENT DIMENSIONS THAN STYLE 743 VIC-FLANGE WASHERS. DIRECT SUBSTITUTION IS PROHIBITED.

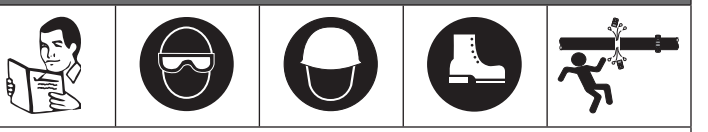
EXAMPLE:



Exaggerated for Clarity

Style 741 - Vic-Flange Adapter (12-inch/323.9-mm and Smaller Sizes) – ANSI 125, 150/DIN PN10 Class, or DIN PN16 Class
Style 743 - Vic-Flange Adapter – ANSI Class 300
Style 744 - FireLock Flange Adapter – ANSI Class 150

⚠ WARNING



- **Read and understand all instructions before attempting to install any Victaulic piping products.**
- **Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.**
- **Wear safety glasses, hardhat, and foot protection.**

Failure to follow these instructions could result in serious personal injury, improper product installation, and/or property damage.

NOTICE

- **The following installation steps feature photos of a Style 741 Vic-Flange Adapter. However, the same installation steps apply to Style 743 Vic-Flange Adapters and Style 744 FireLock Flange Adapters, except where noted.**
- **Make sure there is sufficient clearance behind the pipe groove to permit proper assembly of the Vic-Flange Adapter**

1. CHECK PIPE ENDS: The outside surface of the pipe, between the groove and the pipe end, must be smooth and free from indentations, projections (including weld seams), and roll marks to ensure a leak-tight seal. All oil, grease, loose paint, dirt, and cutting particles must be removed.

NOTICE

For FireLock Products Only:

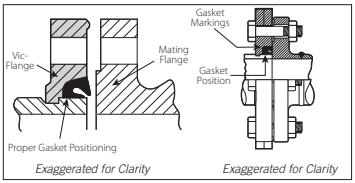
- **Some Victaulic FireLock products may be provided with the Vic-Plus™ gasket system. If the coupling is provided with the Vic-Plus gasket system, additional lubrication is not required for the initial installation of wet pipe systems that are installed at or continuously operating above 0°F/-18°C.**
- **Refer to the "Lubrication" section of this manual for complete information.**

2. CHECK GASKET AND LUBRICATE: Check the gasket supplied to make sure it is suitable for the intended service. The color code identifies the gasket grade. Apply a thin coat of Victaulic lubricant or silicone lubricant to the gasket lips and exterior. **NOTE:** This gasket is designed to provide the sole seal. However, reference should be made to the notes at the beginning of this section for special applications.

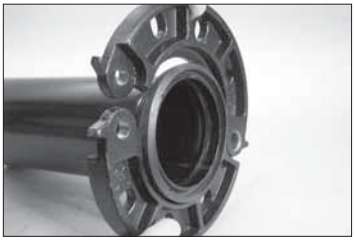
⚠ CAUTION

- **Always use a compatible lubricant to prevent the gasket from pinching/tearing during installation.**

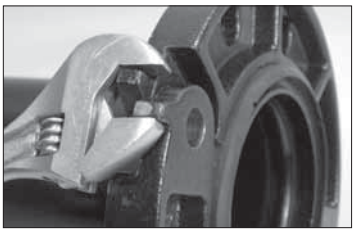
Failure to follow this instruction could result in joint leakage.



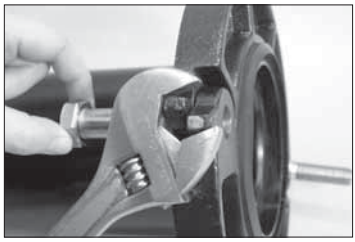
3. INSTALL GASKET: Install the gasket over the pipe end. Make sure the gasket is positioned properly, as shown above. **NOTE:** The lettering on the outside of the gasket must face the flange-adapter gasket pocket. When installed correctly, the lettering on the gasket will not be visible.



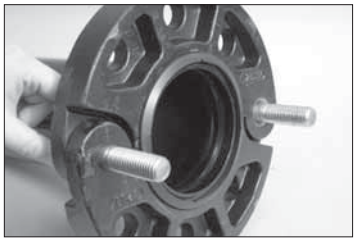
4. INSTALL FLANGE ADAPTER: Open the hinged flange adapter fully, and install the flange over the gasket. Make sure the flange key section engages the pipe groove properly.



4a. FOR STYLE 741 AND STYLE 744 FLANGE ADAPTERS ONLY: Closure lugs are provided for ease of installation. If necessary, use an adjustable wrench to bring the flange holes into alignment. This will ease insertion of the standard flange bolts into the mating holes.

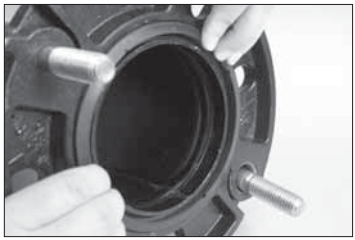


Style 741 and Style 744

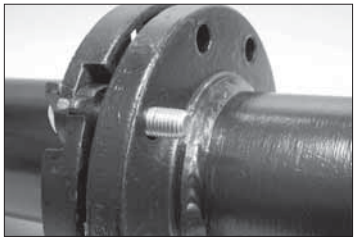


Style 743

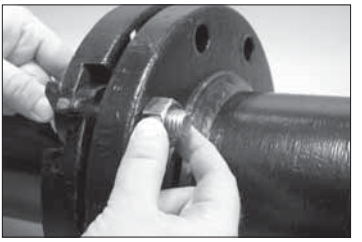
5. INSERT MATING BOLTS: Insert a standard, full-shank diameter assembly bolt through each of the two mating holes in the flange adapter. This will maintain the position of the flange in the pipe groove.



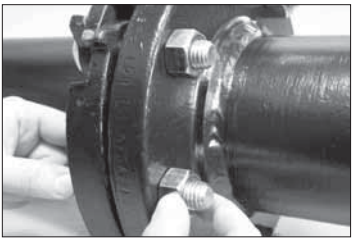
5a. Make sure the gasket is seated properly in the flange adapter.



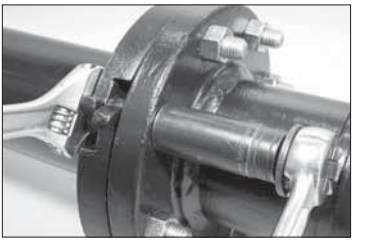
6. JOIN FLANGE ADAPTER AND MATING FLANGE: Join the flange adapter with the mating flange by aligning the bolt holes.



6a. Thread standard flange nuts finger-tight onto the two mating bolts.



7. INSTALL REMAINING BOLTS/ NUTS: Insert a standard, full-shank diameter assembly bolt through each remaining hole in the flange adapter/ mating flange. Thread standard flange nuts finger-tight onto all bolts.



8. TIGHTEN NUTS: Tighten the nuts evenly, as with a regular flange assembly. Continue tightening until the flange faces come into firm, metal-to-metal contact or the standard, flange-bolt torque requirement is achieved.

Style 741, 743, and 744 Helpful Information

Size		Number of Assembly Bolts/ Nuts Required †			Assembly Bolt/Nut Size x Length inches †			Required Mating Face Sealing Surface inches/mm	
Nominal Size inches or mm	Actual Pipe Outside Diameter inches/mm	Style 741	Style 743	Style 744	Style 741	Style 743	Style 744	"A" Maximum	"B" Minimum
2	2.375 60.3	4	8	4	⅝ x 2¾	⅝ x 3	⅝ x 2¾	2.38 61	3.41 87
2½	2.875 73.0	4	8	4	⅝ x 3	¾ x 3¼	⅝ x 3	2.88 73	3.91 99
3	3.500 88.9	4	8	4	⅝ x 3	¾ x 3½	⅝ x 3	3.50 89	4.53 115
4	4.500 114.3	8	8	8	⅝ x 3	¾ x 3¾	⅝ x 3	4.50 114	5.53 141
5	5.563 141.3	8	8	8	¾ x 3½	¾ x 4	¾ x 3½	5.56 141	6.71 170
6	6.625 168.3	8	12	8	¾ x 3½	¾ x 4½	¾ x 3½	6.63 168	7.78 198
165.1 mm ‡ *	6.500 165.1	8	—	—	¾ x 3½	—	—	6.50 165	7.66 195
8	8.625 219.1	8	12	8	¾ x 3½	⅞ x 4¾	¾ x 3½	8.63 219	9.94 253
10 *	10.750 273.0	12	16	—	⅞ x 4	1 x 5¼	—	10.75 273	12.31 313
12 *	12.750 323.9	12	16	—	⅞ x 4	1⅛ x 5¾	—	12.75 324	14.31 364

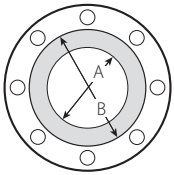
† Victaulic does not supply assembly bolts/nuts. Bolt/nut sizes are for conventional flange-to-flange connections. Longer bolts are required when Victaulic Flange Adapters are used with wafer-type valves. Full-shank diameter assembly bolts are required for proper installation of Victaulic Flange Adapters.

‡ Style 743 Vic-Flange Adapters are not available in the 165.1-mm size.

* Style 744 FireLock Flange Adapters are not available in the 165.1-mm; 10-inch/273.0-mm; and 12-inch/323.9-mm sizes.

NOTE: Style 741 and Style 743 Vic-Flange Adapters provide rigid joints when used on pipe that is standard cut or roll grooved to Victaulic specifications. Consequently, no linear or angular movement is allowed at the joint.

The shaded area of the mating face (shown to the right) must be free from gouges, undulations, and deformities of any type for proper sealing.



Style 741 Metric PN10 and PN16 Helpful Information

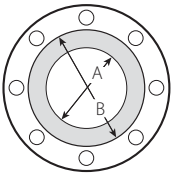
Size		PN10		PN16		Required Mating Face Sealing Surface mm/inches	
Nominal Size mm	Actual Pipe Outside Diameter mm/inches	Number of Assembly Bolts/Nuts Required †	Assembly Bolt/Nut Size metric †	Number of Assembly Bolts/Nuts Required †	Assembly Bolt/Nut Size metric †	"A" Maximum	"B" Minimum
50	60.3 2.375	4	M16	4	M16	60 2.38	87 3.41
65	73.0 2.875	4	M16	4	M16	76 3.00	103 4.05
76.1	76.1 3.000	4	M16	4	M16	76 3.00	103 4.05
80	88.9 3.500	8	M16	8	M16	89 3.50	115 4.53
100	114.3 4.500	8	M16	8	M16	114 4.50	141 5.55
108.0	108.0 4.250	8	M16	8	M16	108 4.25	133 5.24
133.0	133.0 5.250	8	M16	8	M16	133 5.24	160 6.30
139.7	139.7 5.500	8	M16	8	M16	140 5.51	168 6.61
150	168.3 6.625	8	M20	8	M20	168 6.63	198 7.78
159.0	159.0 6.250	8	M20	8	M20	159 6.25	187 7.36
165.1	165.1 6.500	8	M20	8	M20	165 6.50	195 7.68
200	219.1 8.625	8	M20	12	M20	219 8.63	252 9.94
250	273.0 10.750	12	M20	12	M24	273 10.75	313 12.31
300	323.9 12.750	12	M20	12	M24	324 12.75	365 14.31

† Victaulic does not supply assembly bolts/nuts. Bolt/nut sizes are for conventional flange-to-flange connections. Longer bolts are required when Victaulic Flange Adapters are used with wafer-type valves. Full-shank diameter assembly bolts are required for proper installation of Victaulic Flange Adapters.

NOTES: Style 741 Vic-Flange Adapters provide rigid joints when used on pipe that is standard cut or roll grooved to Victaulic specifications. Consequently, no linear or angular movement is allowed at the joint.

Contact Victaulic for information on AS2129 – Table E; ISO 2084 (PN10); DIN 2532 (PN10); and JIS B-2210 (10K) flanges.

The shaded area of the mating face (shown to the right) must be free from gouges, undulations, and deformities of any type for proper sealing.



Style 741 Metric JIS 10K Helpful Information

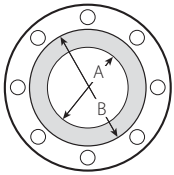
Size		JIS 10K		Required Mating Face Sealing Surface mm/inches	
Nominal Size mm	Actual Pipe Outside Diameter mm/inches	Number of Assembly Bolts/Nuts Required †	Assembly Bolt/Nut Size metric †	"A" Maximum	"B" Minimum
73	73.0 2.880	4	M16	73 2.88	99 3.91
65	76.1 3.000	4	M16	76 3.00	103 4.05
80	88.9 3.500	8	M16	89 3.50	115 4.53
100	114.3 4.500	8	M16	114 4.50	141 5.53
141.3	141.3 5.560	8	M20	141 5.56	171 6.71
165.1	165.1 6.500	8	M20	165 6.50	195 7.66
150	168.3 6.625	8	M20	168 6.63	198 7.78

† Victaulic does not supply assembly bolts/nuts. Bolt/nut sizes are for conventional flange-to-flange connections. Longer bolts are required when Victaulic Flange Adapters are used with wafer-type valves. Full-shank diameter assembly bolts are required for proper installation of Victaulic Flange Adapters.

NOTES: Style 741 Vic-Flange Adapters provide rigid joints when used on pipe that is standard cut or roll grooved to Victaulic specifications. Consequently, no linear or angular movement is allowed at the joint.

Contact Victaulic for information on AS2129 – Table E; ISO 2084 (PN10); DIN 2532 (PN10); and JIS B-2210 (10K) flanges.

The shaded area of the mating face (shown to the right) must be free from gouges, undulations, and deformities of any type for proper sealing.



VICTAULIC FLANGE ADAPTER NOTES FOR 14-INCH/355.6-MM AND LARGER SIZES (NON-AGS)

Style 741 Vic-Flange Adapter

- Victaulic Flange Adapters must be assembled so there is no interference with mating components.
- Because of the outside flange dimension, Victaulic Flange Adapters must not be used within 90° of one another on a standard fitting.
- When wafer or lug-type valves are used adjoining a Victaulic fitting, check disc dimensions to ensure proper clearance.
- Victaulic Flange Adapters shall not be used as anchor points for tie rods across non-restrained joints.
- Mating Victaulic Flange Adapters to rubber-faced flanges, valves, etc. requires the use of a Victaulic Flange Washer. Refer to the "Victaulic Flange Washer Notes" section on the following page.
- The face of the mating flange must be free from gouges, undulations, and deformities of any type for proper sealing. Refer to the installation instructions for complete information.
- The lettering on the outside of the gasket must face the gasket pocket of the Victaulic Flange Adapter. When installed correctly, the lettering on the gasket will not be visible.
- **STANDARD, FULL-SHANK DIAMETER ASSEMBLY BOLTS ARE REQUIRED FOR PROPER INSTALLATION OF VICTAULIC FLANGE ADAPTERS**.

VICTAULIC FLANGE WASHER NOTES FOR 14-INCH/355.6-MM AND LARGER SIZES (NON-AGS)

Style 741 Vic-Flange Adapter

Victaulic Flange Adapters require a smooth, hard surface at the mating flange face for proper sealing. Some applications, for which the Victaulic Flange Adapter is otherwise well suited, do not provide an adequate mating surface. In such cases, a metal Victaulic Flange Washer is recommended for insertion between the Victaulic Flange Adapter and the mating flange to provide the necessary sealing surface. To ensure the proper Victaulic Flange Washer is supplied, always specify the product style and size when ordering.

A. When mating a Victaulic Flange Adapter to a serrated flange – a flange gasket shall be used against the serrated flange. The Victaulic Flange Washer should then be inserted between the Victaulic Flange Adapter and the flange gasket.

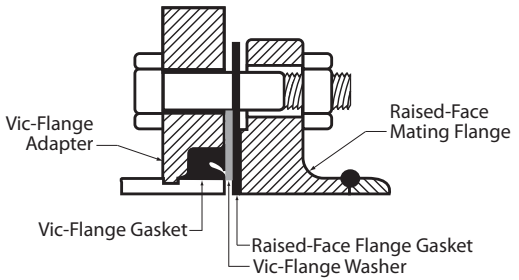
B. When mating a Victaulic Flange Adapter to a wafer-type valve that is rubber-lined and partially rubber-faced (smooth or not) – the Victaulic Flange Washer should be placed between the valve and the Victaulic Flange Adapter.

C. When mating a Victaulic Flange Adapter to a rubber-faced flange, valve, etc. – the Victaulic Flange Washer must be placed between the Victaulic Flange Adapter and the rubber-faced flange.

D. When mating a Victaulic Flange Adapter to components (valves, strainers, etc.) where the component flange face has an insert – follow the same arrangement as if the Victaulic Flange Adapter was being mated to a serrated flange. Refer to application "A" above.

E. When mating Victaulic AWWA Flange Adapters to Victaulic NPS Flange Adapters – the Victaulic Flange Transition Ring must be placed between the two Victaulic Flange Adapters with the draw bolt locations offset from each other. If one flange is not a Victaulic Flange Adapter (i.e. flanged valve), a flange gasket must be placed against the non-Victaulic flange. The Victaulic Flange Washer must then be inserted between the flange gasket and the Victaulic Flange gasket. **NOTE:** A Victaulilc Transition Ring, rather than a Victaulic Flange Washer, must be used when mating a Style 741 Vic-Flange Adapter to a Style 341 Vic-Flange Adapter in 14 – 24-inch/355.6 – 610-mm sizes.

EXAMPLE:



Exaggerated for Clarity

Style 741 (Non-AGS) - Vic-Flange Adapter (14-inch/355.6-mm and Larger Sizes) ANSI Class 150

⚠ WARNING

- **Read and understand all instructions before attempting to install any Victaulic piping products.**
- **Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.**
- **Wear safety glasses, hardhat, and foot protection.**

Failure to follow these instructions could result in serious personal injury, improper product installation, and/or property damage.

NOTICE

- **Make sure there is sufficient clearance behind the pipe groove to permit proper assembly of the Vic-Flange Adapter.**

1. CHECK PIPE ENDS: The outside surface of the pipe, between the groove and the pipe end, must be smooth and free from indentations, projections (including weld seams), and roll marks to ensure a leak-tight seal. All oil, grease, loose paint, dirt, and cutting particles must be removed.

2. ADD FIRST SEGMENT: Place the first segment onto the pipe, making sure that the key engages in the groove properly. **NOTE:** On vertical pipe, the segments must be held in place until all segments are fastened together. For horizontal pipe, the segments can be balanced on top of the pipe, as shown above.

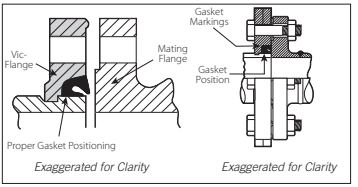
3. ADD ADDITIONAL SEGMENTS: Add each segment by inserting the draw bolts (provided) into the flange adapter with the nuts (provided) loosely and uniformly tightened. This will permit the flange adapter to be rotated for bolt hole alignment in later steps.

4. CHECK GASKET AND LUBRICATE: Check the gasket to make sure it is suitable for the intended service. Apply a thin coat of Victaulic Lubricant or silicone lubricant to the gasket lips and exterior. **NOTE:** This gasket is designed to provide the sole seal. However, reference should be made to the notes at the beginning of this section for special applications.

⚠ CAUTION

- **Always use a compatible lubricant to prevent the gasket from pinching/tearing during installation.**

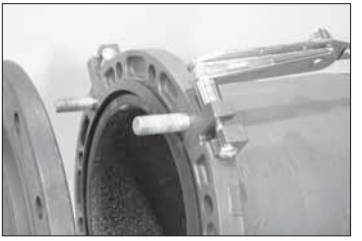
Failure to follow this instruction could result in joint leakage.



5. INSTALL GASKET: Install the gasket into the cavity between the pipe OD and the flange recess. Make sure the gasket is positioned properly, as shown above. **NOTE:** The lettering on the outside of the gasket must face the flange-adapter gasket pocket of the Style 741 Vic-Flange Adapter. When installed correctly, the lettering on the gasket will not be visible.

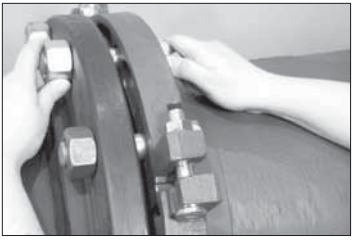
6. ALIGN VIC-FLANGE AND MATING FLANGE: Rotate the Vic-Flange on the pipe end, as required, to align the holes with the mating flange.

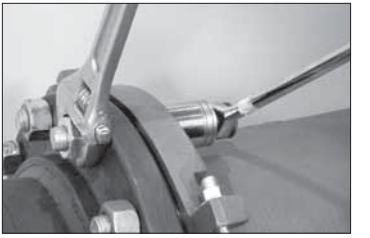
7. INSERT STANDARD FULL-SHANK DIAMETER ASSEMBLY BOLTS AT LAP JOINTS: Insert a standard, full-shank diameter assembly bolt into each of the four lap joint holes. **NOTE:** It may be necessary to tighten the draw bolts to line up the lap joint bolt holes for insertion of the bolts.



8. TIGHTEN DRAW BOLTS: After the four assembly bolts are inserted into the lap-joint bolt holes, torque the draw bolts to approximately 150 ft-lbs/203 N•m. **NOTE:** It is normal to have a small amount of shift as these bolts are being torqued.

9. JOIN VIC-FLANGE ADAPTER AND MATING FLANGE: Direct the four assembly bolts, installed in step 7, into the mating flange holes. Hand-tighten a nut onto each of the four assembly bolts to prevent the bolts from pulling out.





10. INSTALL REMAINING BOLTS/ NUTS: Insert a standard, full-shank diameter assembly bolt through each remaining hole in the Vic-Flange Adapter/ mating flange. Thread standard flange nuts finger-tight onto all bolts.

11. TORQUE ASSEMBLY BOLTS: Tighten all assembly bolts evenly until the required torque value is achieved. Refer to the "Style 741 Assembly Bolt Torque Requirements" table below for the torque requirement.

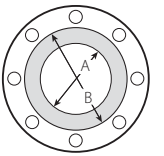
Style 741 Helpful Information

Size		Assembly Bolts/Nuts †		Draw Bolts/Nuts §			Required Mating Face Sealing Surface inches/mm	
Nominal Size inches	Actual Pipe Outside Diameter inches/mm	Number of Bolts/ Nuts Required	Bolt/Nut Size X Length inches	Number of Bolts/ Nuts Required	Bolt/Nut Size X Length inches	Socket Size inches	"A" Maximum	"B" Minimum
14	14.000 355.6	12	1 x 4 ½	4	⅝ x 3 ½	15⁄16	14.00 355.6	16.39 416.3
16	16.000 406.4	16	1 x 4 ½	4	⅝ x 3 ½	15⁄16	16.00 406.4	18.39 467.1
18	18.000 457	16	1 ⅛ x 4 ¾	4	¾ x 4 ¼	1⅛	18.00 457.2	20.00 208.0
20	20.000 508	20	1 ⅛ x 5 ¼	4	¾ x 4 ¼	1 ⅛	20.00 508.0	22.50 571.5
24	24.000 610	20	1 ¼ x 5 ¾	4	¾ x 4 ¼	1⅛	24.00 610.0	27.75 704.9

† Victaulic does not supply assembly bolts/nuts. Bolt/nut sizes are for conventional flange-to-flange connections. Longer bolts are required when Vic-Flange Adapters are used with wafer-type valves. Full-shank diameter assembly bolts are required for proper installation of Style 741 Vic-Flange Adapters.

§ Draw bolts/nuts are supplied with 14 – 24-inch/355.6 – 610-mm Style 741 Vic-Flange Adapters.

The shaded area of the mating face (shown to the right) must be free from gouges, undulations, and deformities of any type for proper sealing.



Style 741 Assembly Bolt Torque Requirements

Size		Torque Requirements
Nominal Size inches	Actual Pipe Outside Diameter inches/mm	ft-lbs N•m
14 – 16	14.000 – 16.000 355.6 – 406.4	200 – 300 271 – 407
18 – 20	18.000 – 20.000 457 – 508	300 – 400 407 – 542
24	24.000 610	400 – 500 542 – 678