



Uni-Flange® Assembly Instructions Series 200, 400 and 420 Adapter Flanges

Refer to the Ford® website (www.fordmeterbox.com) for additional and most recent installation instructions and product information.

1. Pipe end should be cut square for most installations. (See Ford® product catalog section U for exceptions.) Remove any burrs and bevels. Scrape and clean the plain end of the pipe to ensure a bare metal surface for set screw engagement and gasket seal. Thoroughly lubricate the pipe and gasket with a soap based pipe lubricant. Slide the flange onto the pipe with the gasket cavity facing the end of the pipe. Slide the lubricated gasket over the pipe end, with the tapered end facing the recess between the Uni-Flange® flange and pipe. (No other gasket is necessary or should be used to seal the flange faces.)
2. Slide the flange forward until the gasket is evenly seated in the flange cavity, and the Uni-Flange® face is flush with the end of the pipe. (The end of the pipe should butt against the facing flange, it cannot be more than 1/4" from the facing flange.) Hand tighten the set screws against the pipe surface.
3. Using conventional flange bolts, mate the Uni-Flange® to the standard flange. Be sure to tighten the bolts alternately and evenly on opposite sides. (Use the star method like tightening the lug nuts/bolts on a car wheel.) Do not over-tighten the flange bolts. It is not necessary to bring the Uni-Flange Adapter to a face-to-face contact with the standard flange. A gap of approximately 1/8" between the flanges is normal.
4. Advance all set screws evenly to the pipe surface before applying torque. Tighten in an alternating manner (star method) to the torque values shown in the chart to the right. Use of a torque wrench is highly recommended and required to verify proper torque. (It is best practice in vibration applications to apply a suitable thread lock and wire the set screws in position to prevent loosening.)

Note: In installations where rapid or excessive surges may occur, or extreme thrusts encountered (e.g. near pumps or 90° bends), Uni-Flange® engineers recommend the use of tie rods for additional thrust restraint.

FLANGE SIZE	SET SCREW	RECOMMENDED SET SCREW TORQUE VALUES (FT. LBS.)												
		DUCTILE IRON PIPE (THICKNESS CLASS)				STEEL PIPE (SCHEDULE)				DUCTILE IRON PIPE (PRESSURE CLASS)				
		50	51	52	53+	10	20	30	40+	150	200	250	300	350
2"	1/2" x 1"	-	-	70	70	30	-	-	35	-	-	-	-	-
2-1/2"	1/2" X 1"	-	-	-	-	30	-	-	35	-	-	-	-	-
3"	1/2" X 1"	-	50	70	70	30	-	-	70	-	-	-	-	50
3-1/2"	1/2" X 1"	-	-	-	-	30	-	-	70	-	-	-	-	50
4"	1/2" x 1"	-	50	70	70	30	-	-	70	-	-	-	-	50
5"	5/8" x 1-1/4"	-	-	-	-	30	-	-	70	-	-	-	-	50
**6"	1/2" x 1"	50	60	70	70	30	-	-	70	-	-	-	-	50
**6"	5/8" x 1-1/4"	50	60	90	90	30	-	-	90	-	-	-	-	50
8"	5/8" x 1-1/4"	50	60	90	90	30	50	90	90	-	-	-	-	50
10"	5/8" x 1-1/4"	50	60	90	90	40	50	90	90	-	-	-	-	50
12"	5/8" x 1-1/4"	50	60	90	90	40	50	90	90	-	-	-	-	50
14"	5/8" x 1-1/4"	60	70	90	90		60	90	90	-	-	50	50	60
16"	5/8" x 1-1/4"	60	70	90	90		60	90	90	-	-	50	60	60
18"	3/4" x 2"	70	80	115	115		60	100	115	-	-	60	70	70
20"	3/4" x 2"	70	80	115	115		70	100	115	-	-	70	70	70
24"	3/4" x 2"	70	80	115	115		70	100	125	-	70	70	70	80
30"	1" x 2-1/4"	90	110	125	125		-	-	125	70	80	90	110	125
36"	1" x 2-1/4"	90	110	125	125		-	-	125	80	90	90	110	125
42"	1" x 2-1/4"	90	110	125	125		-	-	125	90	90	90	110	125
48"	1" x 2-1/4"	90	110	125	125		-	-	-	90	90	110	110	125

* refers to Series 200

** refers to Series 400/420

Adapter flanges are not suitable for use on spiral butt-welded steel pipe.

Uni-Torque Set Screws have preset torque values
 1/2" x 1" = 70 Ft. Lbs ± 5
 5/8" x 1-1/4" = 85 Ft. Lbs. ± 5
 Uni-Torque Set Screws are only recommended on Class 52
 thru 56 Ductile Iron Pipe and Schedule 40 steel.



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FLANGE ADAPTER



SERIES 200
 2" THROUGH 12"
 SERIES 400
 2" THROUGH 8"

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