# Section L Ford **Pipe Repair** Products



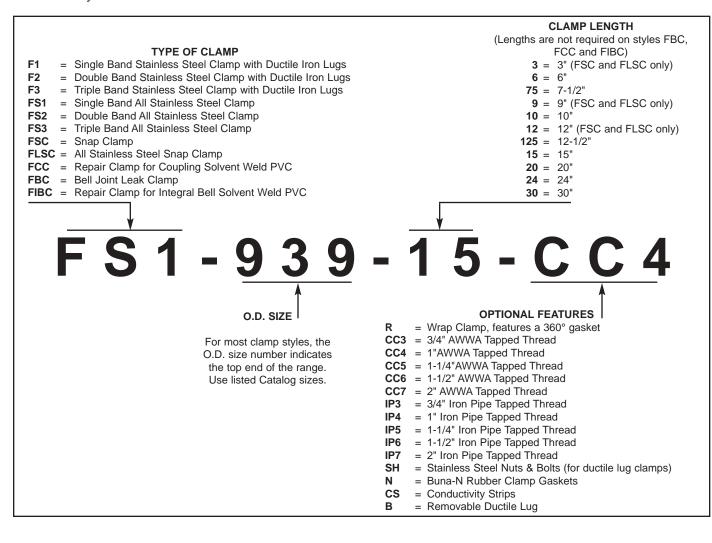


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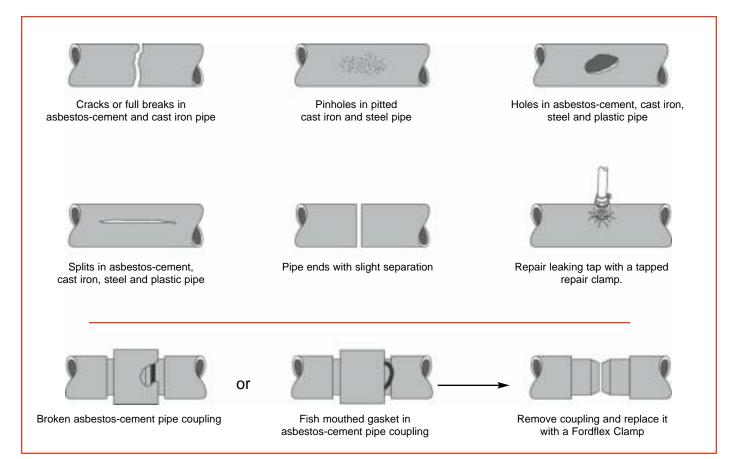
The Ford Meter Box Co., Inc. 775 Manchester Avenue, P.O. Box 443, Wabash, Indiana, USA 46992-0443 Telephone: 260/563-3171 FAX: 1-800-826-3487 Overseas FAX: 260/563-0167 http://www.fordmeterbox.com

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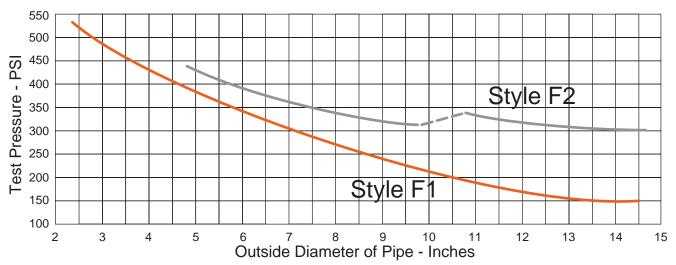
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### Typical Problems Solved With Ford Repair Clamps



### Hydrostatic Test Pressures – Average



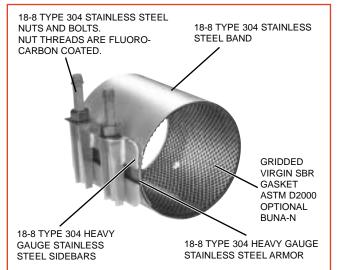
#### **Conditions of Test**

- Test Pipe: asbestos-cement, cast iron or steel
- Two pieces of test pipe with average space of 1/8" between ends, coupled together with 7-1/2" wide Fordflex Clamp
- 5/8" bolts (clamps up through 4.73" O.D.) tightened to a torque of 30-35 Ft. Lbs., 5/8" bolts (clamps over 4.73 O.D.) to 70-80 Ft. Lbs., and 3/4" bolts to 90-100 Ft. Lbs.

### **Ford Quality Circle Repair Clamps**

The Ford Styles FS1, FS2 and FS3 All Stainless Steel Repair Clamp combines the corrosion-resistant characteristics of stainless steel and the sealing capabilities of rubber to provide a strong, dependable and versatile repair clamp.

The All Stainless design is lightweight and easy to handle under adverse conditions associated with almost every main break. The fixed bolt position provides uniform bolt control and fewer parts to fall into the trench. The sliding lifter bar is retained on the bolts by the heavy hex nuts and facilitates the installation by serving as a handle to hold while installing the clamp.

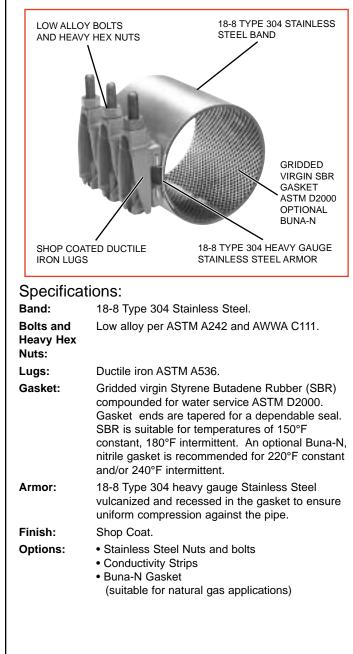


#### Specifications:

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Band:	18-8 Type 304 Stainless Steel.
Bolts and Heavy Hex Nuts:	18-8 Type 304 Stainless Steel. Nut threads are fluorocarbon coated to prevent galling. Bolts are permanently attached to the clamp sidebar by means of a Metal Inert Gas (MIG) weld.
Lugs:	18-8 Type 304 heavy gauge Stainless Steel, MIG welded to clamp sidebar.
Sidebars:	18-8 Type 304 heavy gauge Stainless Steel Tungsten Inert Gas (TIG) welded to form a strong, permanent fusion with the repair clamp band.
Lifter Bar:	18-8 Type 304 heavy gauge Stainless Steel. Lip curve holds bolts in position while tightening and serves as a bearing surface for nuts and Nylatron GS <sup>™</sup> self lubricating washers.
Gasket:	Gridded virgin Styrene Butadene Rubber (SBR) compounded for water service, ASTM D2000. Gasket ends are tapered for a dependable seal. SBR is suitable for temperatures of 150°F constant, 180°F intermittent. An optional Buna-N, nitrile gasket is recommended for 220°F constant and/or 240°F intermittent.
Armor:	18-8 Type 304 heavy gauge Stainless Steel vulcanized and recessed into the gasket to ensure uniform compression against the pipe.
Passivated:	All welds are fully passivated by means of a chemical technique which restores the corrosion resistant characteristics of the stainless steel.
Options:	<ul> <li>Conductivity Strips</li> <li>Buna-N Gasket (suitable for natural gas applications)</li> </ul>

Ford Styles F1, F2 and F3 Repair Clamps provide a simple and economical method of repairing holes or breaks in water mains, particularly where corrosion is not a factor. Ford clamps offer heavy-duty lug construction for maximum strength and a drop-in bolt design that does not require bolt removal when installing the clamp. There are never any loose parts to lose in the ditch.

Ford Repair Clamps come in a wide variety of styles and cover a wide range of pipe diameters; other fine features of Ford Repair Clamps are shown below.



### **Installation Guide**

### Ford Style F1 Quality Circle Repair Clamps and Ford Style FS1 All Stainless Steel Quality Circle Repair Clamps

The successful application of a repair clamp rests heavily on the installer. We suggest the following guidelines as routine practice.

- 1. CHECK DIAMETER OF PIPE TO MAKE CERTAIN YOU ARE USING THE CORRECT SIZE CLAMP.
- 2. Scrape pipe to remove as much dirt and corrosion as possible so surface is smooth.
- 3. Make certain the gasket is free of foreign material and that nothing becomes lodged between the gasket and the pipe. Lubricate the pipe and/or gasket with soapy water to achieve maximum results.
- 4. Avoid loose fitting wrenches too short to achieve proper torque of nuts. A torque wrench is recommended.
- 5. Although threads are Fluorocarbon coated to prevent galling between bolt and nut, keep threads free

Installing an F1 Repair Clamp

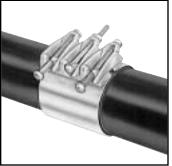
- of foreign material to facilitate tightening.
- 6. ALWAYS RECHECK TORQUE AND PRESSURE TEST FOR LEAKS BEFORE BACKFILLING.
- 7. Backfill and compact carefully around clamp according to pipe manufacturer's instructions.

Caution: Repair clamps are not designed to restrain axial pipe movement. Make sure proper restraint is applied when necessary.

Back off nuts to end of bolts, but DO NOT remove them. Separate clamp and position on the pipe with the bolt lug section on top.



Hook the middle bolt into the receiver lug and tighten the nut until the bolt is secure.



ROTATE THE CLAMP in the direction of the arrow.



Squeeze the two lug sections together. Tighten the bolts evenly with incremental torque settings, up to the recommended torque.

REC	OMMENDED TOR	QUE
Clamp Top Range	Bolt Diameter	Approx. Torque
Thru 4.73"	5/8"	30 / 35 ft. lbs.
5.14" & Above	5/8"	75 ft. lbs.
	3/4"	95 ft. lbs.

### Installing an FS1 All Stainless Steel Repair Clamp



Back off nuts to end of bolts, but DO NOT remove them. Separate clamp and wrap it around the pipe by holding the lifter bar and bolts above the pipe and sliding the receiver section under the pipe.



Bring the lifter bar and receiver section together at a convenient position on top of the pipe.



Slide the lifter bar up the receiver lugs and snap into place. Spin one of the nuts hand tight.



Tighten all nuts evenly with a balanced torque of 75 ft lbs or as tight as possible with a 12 inch wrench.

For a proper installation Ford recommends that bolts be tightened to the following torque values; for 1/2" bolts - 50-60 Ft. Lbs., 5/8" bolts (clamps up through 4.73" O.D.) - 30-35 Ft. Lbs., 5/8" bolts (clamps over 4.73" O.D.) - 70-80 Ft. Lbs., and 3/4" bolts - 90-100 Ft. Lbs.

## Ford All Stainless Steel Quality Circle Repair Clamps

### Style FS1 (single section) Operating Range .40"

To order: Specify Catalog Number x Length of clamp desired.

**Example:** FS1-724 x 12.5 would be a one-section clamp for pipe with an O.D. of between 6.84 and 7.24, and the length of the clamp would be 12.5".

Options Include: Buna-N Gasket - add "-N" to Catalog Number Conductivity Strips - add "-CS" to Catalog Number

**Note:** Sizes and lengths not listed (including metric) are available upon request. Contact the Ford Meter Box Customer Service Department for information.



NOM. PIPE	PIPE O.D.	CATALOG			LENGTH A	ND APPROXIM	MATE SHIPPIN	NG WEIGHT L	BS.	
SIZE	RANGE	NUMBER	6"	7.5"	10"	12.5"	15"	20"	24"	30"
2"	2.03-2.25	FS1-225xLength	4 Lbs.	4 Lbs.	5 Lbs.	5 Lbs.	N/A	N/A	N/A	N/A
2	2.35-2.63	FS1-263xLength	4 LD3.	4 LD3.	5 LD3.	5 Lb3.	11/7	11/7	11/7	
2-1/4"x2-1/2"	2.70-3.00	FS1-300xLength	4	5	5	6	8	N/A	N/A	N/A
	2.97-3.25	FS1-325xLength								
3"	3.46-3.70	FS1-370xLength	4	5	5	6	9	N/A	N/A	N/A
	3.73-4.00	FS1-400xLength								
3"-4"	3.96-4.25	FS1-425xLength	5	5	6	7	9	N/A	N/A	N/A
3 -4	4.45-4.73	FS1-473xLength	5	5	0	1	9	IN/A	IN/A	IN/A
	4.74-5.14	FS1-514xLength								
4"	4.95-5.35	FS1-535xLength	5	6	7	8	10	14	16	21
	5.22-5.62	FS1-562xLength								
	5.95-6.35	FS1-635xLength								
	6.56-6.96	FS1-696xLength						17		
6"	6.84-7.24	FS1-724xLength	N/A	7	9	10	14		21	27
	7.05-7.45	FS1-745xLength								
	7.45-7.85	7.45-7.85 FS1-785xLength								
	7.95-8.35	FS1-835xLength							24	
0"	8.54-8.94	FS1-894xLength	N/A	8	10	11	15	19		30
0	8.99-9.39	FS1-939xLength	IN/A							30
8"	9.27-9.67	FS1-967xLength								
	9.70-10.10	FS1-1010xLength								
	10.64-11.04	FS1-1104xLength								
10"	11.04-11.44	FS1-1144xLength	N/A	11	14	16	24	28	32	42
	11.34-11.74	FS1-1174xLength								
	11.75-12.15	FS1-1215xLength								
	12.00-12.40	FS1-1240xLength								
	12.62-13.02	FS1-1302xLength								
4.0"	13.10-13.50	FS1-1350xLength	<b>N</b> 1/A	10	40	10	07			40
12"	13.40-13.80	FS1-1380xLength	N/A	13	16	18	27	30	36	48
	13.70-14.10	FS1-1410xLength								
	14.00-14.40	FS1-1440xLength								
NUMBER OF BOLT			2	2	3	3-4*	4	6	7	9

\*12.5" long clamps in the 10" and 12" Nominal Pipe Size have 4 bolts.

### Tapped Repair Clamps



#### **Tapping Codes**

С	C (AWWA	) THREAD		IP T	IREAD								
SIZE	CODE	MIN. CLAMP SIZE		SIZE	CODE	MIN. CLA	MP SIZE						
SIZE	NUMBER	FS1	FS2	SIZE	NUMBER	FS1	FS2						
3/4"	CC3	2.63	5.24	3/4"	IP3	2.63	5.24						
1"	CC4	2.63	5.24	1"	IP4	2.63	5.24						
1-1/4"	CC5	3.70	5.24	1-1/4"	IP5	3.70	5.24						
1-1/2"	CC6	4.25	5.24	1-1/2"	IP6	3.70	5.24						
2"	CC7	4.73	5.57	2"	IP7	4.25	5.57						

OUTLET TAPS for corporation stops are available on ALL Ford Stainless Steel Clamps. The Minimum Clamp Size for each tap type and size is listed in the Tapping Code table above. The tapped outlet is 18-8 stainless steel and is "fused" to the clamp band by a fully passivated TIG weld. To Order: 1. Select the proper code from table to match desired size and type of thread.

Add code to catalog number of repair clamp.

Example: The number for an FS1-724-12.5 with a 3/4" CC tap is FS1-724-12.5-CC3. **Note**: Tapped Repair Clamps are non-returnable.

### Ford All Stainless Steel Quality Circle Repair Clamps



#### Style FS2 (double section) Operating Range .80"

To order: Specify Catalog Number x Length of clamp desired.

**Example:** FS2-764 x 10 would be a two-section clamp for pipe with an O.D. of between 6.84 and 7.64, and the length of the clamp would be  $10^{\circ}$ .

Options Include: Buna-N Gasket - add "-N" to Catalog Number Conductivity Strips (FS2-979 and larger) add "-CS" to Catalog Number

**Note:** Sizes and lengths not listed (including metric) are available upon request. Contact the Ford Meter Box Customer Service Department for information.

NOM. PIPE	PIPE O.D.	CATALOG		Lengt	H AND APPROX	IMATE SHIPPING	WEIGHT LBS.		
SIZE	RANGE	NUMBER	7.5"	10"	12.5"	15"	20"	24"	30"
4"	4.44-5.24	FS2-524xLength	11 Lbs.	14 Lbs.	18 Lbs.	26 Lbs.	32 Lbs.	38 Lbs.	N/A
4	4.74-5.57	FS2-557xLength	TT LDS.	14 LDS.	10 LDS.	20 203.	52 LD3.		IN/A
6"	6.62-7.42	FS2-742xLength	12	15	19	28	35	42	45
0	6.84-7.64	FS2-764xLength	12	15	19	20		42	40
8"	8.62-9.42	FS2-942xLength	13	17	21	30	38	46	51
	8.99-9.79	FS2-979xLength	15	17	21				51
	10.70-11.50	FS2-1150xLength	N/A	18	23	32	41	50	54
10"	11.04-11.84	FS2-1184xLength							
	11.60-12.40	FS2-1240xLength							
	12.70-13.50	FS2-1350xLength							
12"	13.14-13.94	FS2-1394xLength	N/A	19	25	34	44	54	57
	13.65-14.45	FS2-1445xLength							
14"	15.07-15.82	FS2-1582xLength	N/A	20	27	36	47	58	63
16"	17.15-17.90	FS2-1790xLength	N/A	22	29	38	50	62	66
NUMBER OF BC	DLTS		4	6	6-8*	8	12	14	18

\* 12.5" long clamps in the 10" thru 16" Nominal Pipe Size have 8 bolts.

### Style FS3 (triple section) Operating Range 1.20"

To order: Specify Catalog Number x Length of clamp desired.

**Example:** FS3-1920 x 24 would be a three-section clamp for pipe with an O.D. between 18.00 and 19.20, and the length of the clamp would be 24".

Options Include: Buna-N Gasket - add "-N" to Catalog Number Conductivity Strips - add "-CS" to Catalog Number

**Note:** Sizes and lengths not listed (including metric) are available upon request. Contact the Ford Meter Box Customer Service Department for information



NOM. PIPE	PIPE O.D.	CATALOG		LENGTH AND	APPROXIMATE S	HIPPING WEIGHT	Lbs.
SIZE	RANGE	NUMBER	12.5"	15"	20"	24"	30"
16"	17.10-18.30	FS3-1830xLength	31 Lbs.	40 Lbs.	52 Lbs.	64 Lbs.	77 Lbs.
18"	18.00-19.20	FS3-1920xLength	35	44	56	68	84
10	19.50-20.70	FS3-2070xLength		44	50		04
20"	21.60-22.80	FS3-2280xLength	41	48	60	73	89
24"	25.80-27.00	FS3-2700xLength	46	53	65	79	102
NUMBER OF BOL	TS		12	12	18	21	27

### **Ford Quality Circle Repair Clamps**

### Style F1 (single section) Operating Range .40"

To order: Specify Catalog Number x Length of clamp desired.

**Example:** F1-724 x 12.5 would be a one-section clamp for pipe with an O.D. of between 6.84 and 7.24, and the length of the clamp would be 12.5".

Options Include: Buna-N Gasket - add "-N" to Catalog Number Conductivity Strips - add "-CS" to Catalog Number Type 304 Stainless Steel Bolts & Nuts - add "-SH" to Catalog Number

**Note:** Sizes and lengths not listed (including metric) are available upon request. Contact the Ford Meter Box Customer Service Department for information.



NOM. PIPE	PIPE O.D.	CATALOG		LENGTH AND	APPROXIMATE	SHIPPING WEI	GHT LBS.	
SIZE	RANGE	NUMBER	7.5"	10"	12.5"	15"	20"	30"
2"	2.35-2.63	F1-263xLength	7 Lbs.	9 Lbs.	12 Lbs.	14 Lbs.	N/A	N/A
2-1/4"-2-1/2"	2.70-3.00	F1-300xLength	7	10	12	14	N/A	N/A
	2.97-3.25	F1-325xLength						
3"	3.46-3.70	F1-370xLength	8	10	12	14	N/A	N/A
	3.73-4.00	F1-400xLength						
3"-4"	3.96-4.25	F1-425xLength	8	11	13	15	20" N/A N/A	N/A
3 -4	4.45-4.73	F1-473xLength	0	''	13	15		IN/A
	4.74-5.14	F1-514xLength						
4"	4.95-5.35	F1-535xLength	11	15	18	22	29	44
	5.22-5.62	F1-562xLength						
	5.95-6.35	F1-635xLength	12	16	20	24	22	48
	6.56-6.96	F1-696xLength	12	10	20	24	32	40
6"	6.84-7.24	F1-724xLength						
0	7.05-7.45	F1-745xLength	13	17	21	25	34	51
	7.45-7.85	F1-785xLength						
	7.95-8.35	F1-835xLength						
	8.54-8.94	F1-894xLength	14	19	23	28	37	55
8"	8.99-9.39	F1-939xLength						
	9.27-9.67	F1-967xLength	15	20	25	29	20	58
	9.70-10.10	F1-1010xLength	15	20	25	29	N/A N/A 29 32 34 37 38 41 44 44	50
	10.64-11.04	F1-1104xLength					29 32 34 37 38 41 44 46	
10"	11.04-11.44	F1-1144xLength	16	21	26	31	11	62
10	11.34-11.74	F1-1174xLength	10	21	20	31	41	62
	11.75-12.15	F1-1215xLength					38	
	12.00-12.40	F1-1240xLength						
	12.62-13.02	F1-1302xLength	17	22	28	33	44	67
12"	13.10-13.50	F1-1350xLength						
1Z	13.40-13.80	F1-1380xLength						
	13.70-14.10	F1-1410xLength	18	23	29	35	46	70
	14.00-14.40	F1-1440xLength						
JMBER OF BOLTS	3		3	4	5	6	8	12

#### **Tapped Repair Clamps**



#### **Tapping Codes**

		CC (AWW	A) THREA	D	IP THREAD					
	SIZE	CODE	MIN. CL	amp Size	SIZE	CODE	MIN. CLAMP SIZE			
	SIZE	NUMBER	FS1	FS2	SIZE	NUMBER	FS1	FS2		
	3/4"	CC3	2.63	5.24	3/4"	IP3	2.63	5.24		
	1"	CC4	2.63	5.24	1"	IP4	2.63	5.24		
_	1-1/4"	CC5	3.70	5.24	1-1/4"	IP5	3.70	5.24		
	1-1/2"	CC6	4.25	5.24	1-1/2"	IP6	3.70	5.24		
_	2"	CC7	4.73	5.57	2"	IP7	4.25	5.57		

OUTLET TAPS for corporation stops are available on ALL Ford Stainless Steel Clamps. The Minimum Clamp Size for each tap type and size is listed in the Tapping Code table above. The tapped outlet is 18-8 stainless steel and is "fused" to the clamp band by a fully passivated TIG weld. To Order: 1. Select the proper code from table to match desired size and type of thread.

2. Add code to catalog number of repair clamp.

Example: The number for an F1-724-12.5 with a 3/4" CC tap is F1-724-12.5-CC3. **Note**: Tapped Repair Clamps are non-returnable.

### **Ford Quality Circle Repair Clamps**



#### Style F2 (double section) / Operating Range .80"

**To Order:** Specify Catalog Number x Length of clamp desired.

**Example:** F2-1445 x 20 would be a two-section clamp for pipe with an O.D. of between 13.65 and 14.45, and the length of the clamp would be 20".

**Options Include:** Buna-N Gasket - add "-N" to Catalog Number

Conductivity Strips (F2-979 and larger) - add "-CS" to Catalog Number Type 304 Stainless Steel Bolts & Nuts - add "-SH" to Catalog Number

**Note:** Sizes and lengths not listed (including metric) are available upon request. Contact the Ford Meter Box Customer Service Department for information.

NOM. PIPE	PIPE O.D.	CATALOG		LENGTH AND APPROXIMATE SHIPPING WEIGHT LBS.							
SIZE	RANGE	NUMBER	7.5"	10"	12.5"	15"	20"	30"			
4"	4.44-5.24	F2-524xLength	20 Lbs.	27 Lbs.	32 Lbs.	40 Lbs.	50 L h a	00164			
4	4.74-5.57	F2-557xLength	20 LDS.	Z7 LDS.	32 LDS.	40 Lbs.	53 LDS.	80 Lbs.			
6"	6.62-7.42	F2-742xLength	22	29	36	43	57	86			
0	6.84-7.64	F2-764xLength	22	23	50	43	20"           53 Lbs.           57           61           69           95           70           98           71           72           72           73           73           74           75           76           76	00			
8"	8.62-9.42	F2-942xLength	23	29	38	46	61	92			
0	8.99-9.79	F2-979xLength	23	29	50	40	20"           53 Lbs.           57           61           69           95           70           98           71           72           72           73           73           74           75           76	92			
	10.70-11.50	F2-1150xLength									
10"	11.04-11.84	F2-1184xLength	24	30	42	46	69	98			
	11.60-12.40	F2-1240xLength									
10"	11.04-12.24	F2-1224xLength	N/A	48	N/A	71	95	144			
Special			IN/A	40	IN/A	71	95	144			
	12.70-13.50	F2-1350xLength									
13.	13.14-13.94	F2-1394xLength	27	30	44	47	70	100			
	13.65-14.45	F2-1445xLength									
12"	13.14-14.34	F2-1434xLength	N/A	50	N/A	75	08	155			
Special		8									
	14.38-15.13	F2-1513xLength	N/A	31	N/A	48	20"           53 Lbs.           57           61           69           95           70           98           71           72           72           73           73           74           75           76	101			
	15.07-15.82	F2-1582xLength	N/A	31	N/A	49		101			
	15.92-16.67	F2-1667xLength	N/A	32	N/A	49		102			
	16.56-17.31	F2-1731xLength	N/A	32	N/A	50		103			
	17.15-17.90	F2-1790xLength	N/A	32	N/A	50		104			
	17.82-18.57	F2-1857xLength	N/A	33	N/A	52	73	104			
Range	18.46-19.21	F2-1921xLength	N/A	33	N/A	53	73	104			
	19.23-19.98	F2-1998xLength	N/A	34	N/A	53	74	105			
	19.90-20.65	F2-2065xLength	N/A	34	N/A	53	74	105			
	20.70-21.45	F2-2145xLength	N/A	35	N/A	54	75	106			
	21.52-22.27	F2-2227xLength	N/A	35	N/A	54	75	106			
	22.12-22.87	F2-2287xLength	N/A	36	N/A	55	76	110			
	22.90-23.65	F2-2365xLength	N/A	36	N/A	55	76	110			
MBER OF BOL	TS		6	8	10	12	16	24			



### Style F3 (triple section) / Operating Range 1.20"

**To order:** Specify Catalog Number x Length of clamp desired.

**Example:** F3-2680 x 30 would be a three-section clamp for pipe with an O.D. of between 25.60 and 26.80, and the length of the clamp would be 30".

**Options Include:** Buna-N Gasket - add "-N" to Catalog Number

Conductivity Strips - add "-CS" to Catalog Number

Type 304 Stainless Steel Bolts & Nuts - add "-SH" to Catalog Number

**Note:** Sizes and lengths not listed (including metric) are available upon request. Contact the Ford Meter Box Customer Service Department for information.

NOM. PIPE	PIPE O.D.	CATALOG	LENGTH	AND APPROXIMA	TE SHIPPING WE	EIGHT LBS.
SIZE	RANGE	NUMBER	10"	15"	20"	30"
	23.18-24.38	F3-2438xLength	102 Lbs.	148 Lbs.	185 Lbs.	268 Lbs.
	24.28-25.48	F3-2548xLength	104	151	188	272
	25.60-26.80	F3-2680xLength	106	152	190	275
Range	26.38-27.58	F3-2758xLength	107	155	193	278
	27.55-28.75	F3-2875xLength	109	158	197	283
	28.63-29.83	F3-2983xLength	111	160	202	287
	29.52-30.72	F3-3072xLength	113	163	204	290
NUMBER OF BOLT	'S		12	18	24	36

### **Ford Snap Clamps**

Style FSC

### For Economical Repair of Water Pipe Leaks.

Ford Snap Clamps offer a handy and economical way to repair pinholes and other small leaks that do not require a full gasket seal. A heavy gridded gasket design and "cushion lugs" make them ideal for older pitted pipe that has worn thin over the years.

- **To order:** Specify Catalog Number by Length of desired clamp. For example, a FSC-190x6 would be a 6" long clamp for 1-1/2" Standard Steel pipe.
- Shell: 18-8 Type 304 Stainless Steel.
- Lugs: Ductile Iron per ASTM A536.

Finish: Zinc plated.

Gaskets: Buna-N with heavy grid design extended lug to lug.

Bolts: AISI C1018 steel, 3/8" and/or 7/16" electrogalvanized with Di-chromate seal.

NOM. PIPE	PIPE	CATALOG			LENGTH AN		IATE SHIPPI	NG WEIGHT L	.BS.	
SIZE	0.D.	NUMBER	3"	CTN. QTY.	6"	CTN. QTY.	9"	CTN. QTY.	12"	CTN. QTY.
1/2"	0.84	FSC-084xLength	.54 Lbs.	25	1.08 Lbs.	12	N/A	-	N/A	-
3/4"	1.05	FSC-105xLength	.55	25	1.10	12	1.7	-	N/A	-
1"	1.32	FSC-132xLength	.56	20	1.12	10	1.7	-	N/A	-
1-1/4"	1.66	FSC-166xLength	.58	18	1.16	12	1.8	-	N/A	-
1-1/2"	1.90	FSC-190xLength	.60	12	1.20	12	1.8	2	2.4	2
2"	2.38	FSC-238xLength	1.00	10	2.00	12	3.0	2	4.0	2
2-1/2"	2.88	FSC-288xLength	1.05	10	2.10	12	3.2	2	4.2	2
3"	3.50	FSC-350xLength	1.30	10	2.60	6	3.9	1	5.2	1
3-1/2"	4.00	FSC-400xLength	1.35	10	2.70	6	4.0	1	5.4	1
4"	4.50	FSC-450xLength	1.40	10	2.80	6	4.2	1	5.6	1
5"	5.56	FSC-556xLength	1.60	6	3.20	3	4.8	1	6.4	1
6"	6.00	FSC-600xLength	1.72	6	3.45	2	5.2	1	6.9	1
U	6.63	FSC-663xLength	1.85	6	3.70	2	5.6	1	7.4	1
8"	8.00	FSC-800xLength	2.00	3	4.00	2	6.0	1	8.0	1
0	8.63	FSC-863xLength	2.20	3	4.40	2	6.6	1	8.8	1

### **Ford Wrap Clamps**

#### Special Style FSC Clamp with Full-Wrap Gasket

Ford Wrap Clamps offer the same Leak Repair features of the Snap Clamp with the extra assurance of 360° gasket coverage. Specific sizes are available for I.P.S. steel or copper.

- **To order:** Specify Catalog Number. Example: an FSC-190-6R would be a 6" long clamp for 1-1/2" Standard Steel pipe.
- Shell: 18-8 Type 304 Stainless Steel.
- Lugs: Ductile Iron per ASTM A536.

Finish: Zinc plated.

**Gasket:** Buna-N rubber with smooth face armored gasket for 360° coverage.

Bolts: AISI C1018 steel, 3/8" and/or 7/16" electrogalvanized with di-chromate seal.



NOM. PIPE	PIPE	3" Lo	NG CLAMP (1 BOLT)		6" LONG CLAMP (2 BOLTS)			
SIZE	O.D.	CATALOG NUMBER	APPROX. WT. LBS.	CTN. QTY.	CATALOG NUMBER	APPROX. WT. LBS.	CTN. QTY.	
1/2"	0.625	FSC-063-3R	.62	25	N/A	-	-	
1/2	0.84	FSC-084-3R	.02	25	FSC-084-6R	-	_	
3/4"	0.875	FSC-088-3R	.68	25	FSC-088-6R	1.34	12	
3/4	1.05	FSC-105-3R	.00	25	FSC-105-6R	1.34	12	
1"	1.125	FSC-113-3R	.75	20	FSC-113-6R	1.51	10	
	1.32	FSC-132-3R	./5		FSC-132-6R	1.51	10	
1-1/4"	1.375	FSC-138-3R	.83	18	FSC-138-6R	1.65	12	
1-1/4	1.66	FSC-166-3R	.03		FSC-166-6R	1.00	١Z	
1-1/2"	1.625	FSC-163-3R	.90	12	FSC-163-6R	1.85	12	
1-1/2	1.90	FSC-190-3R	.90	12	FSC-190-6R	1.00	12	
2"	2.125	FSC-213-3R	1.50	10	FSC-213-6R	3.00	12	
2	2.38	FSC-238-3R	1.50	10	FSC-238-6R	3.00	12	



To order: Specify Catalog Number. Example: an FSC190-6R would be a 6" long clamp for 1-1/2" Standard Steel pipe.

### Ford All Stainless Steel Snap Clamps

#### Style FLSC



Ford All Stainless Steel Snap Clamps offer a handy way to repair pinholes and other small leaks that do not require a full gasket seal. A heavy gridded gasket design and "cushion lugs" make them ideal for older pitted pipe that has worn thin over the years. The All Stainless Steel Snap Clamp offers the same conveniences and performance of the traditional Snap Clamp with the added security of stainless steel lugs and bolts.

**To order:** Specify Catalog Number by Length of desired clamp. For example, a FLSC-190x6 would be a 6" long clamp for 1-1/2" Standard Steel pipe.

- Shell: 18-8 Type 304 Stainless Steel.
- Lugs: 18-8 Type 304 Stainless Steel.

Gaskets: Buna-N with heavy grid design extended lug to lug.

Bolts: Stainless Steel.

NOM. PIPE	PIPE	CATALOG	LENGTH AND APPROXIMATE SHIPPING WEIGHT LBS.					s.		
SIZE	0.D.	NUMBER	3"	CTN. QTY.	6"	CTN. QTY.	9"	CTN. QTY.	12"	CTN. QTY.
1/2"	0.84	FLSC-084xLength	.54 Lbs.	25	1.08 Lbs.	12	N/A	-	N/A	-
3/4"	1.05	FLSC-105xLength	.55	25	1.10	12	1.7	-	N/A	-
1"	1.32	FLSC-132xLength	.56	20	1.12	10	1.7	-	N/A	-
1-1/4"	1.66	FLSC-166xLength	.58	18	1.16	12	1.8	-	N/A	-
1-1/2"	1.90	FLSC-190xLength	.60	12	1.20	12	1.8	2	2.4	2
2"	2.38	FLSC-238xLength	1.00	10	2.00	12	3.0	2	4.0	2
2-1/2"	2.88	FLSC-288xLength	1.05	10	2.10	12	3.2	2	4.2	2
3"	3.50	FLSC-350xLength	1.30	10	2.60	6	3.9	1	5.2	1
3-1/2"	4.00	FLSC-400xLength	1.35	10	2.70	6	4.0	1	5.4	1
4"	4.50	FLSC-450xLength	1.40	10	2.80	6	4.2	1	5.6	1
5"	5.56	FLSC-556xLength	1.60	6	3.20	3	4.8	1	6.4	1
6"	6.00	FLSC-600xLength	1.72	6	3.45	2	5.2	1	6.9	1
ю	6.63	FLSC-663xLength	1.85	6	3.70	2	5.6	1	7.4	1
8"	8.00	FLSC-800xLength	2.00	3	4.00	2	6.0	1	8.0	1
o	8.63	FLSC-863xLength	2.20	3	4.40	2	6.6	1	8.8	1

### **Ford All Stainless Steel Wrap Clamps**

Special All Stainless Steel Style FLSC Clamp with Full-Wrap Gasket



Ford Wrap Clamps offer the same Leak Repair features of the Snap Clamp with the extra assurance of 360° gasket coverage. Specific sizes are available for I.P.S. steel or copper. The All Stainless Steel Wrap Clamp offers the same conveniences and performance of the traditional Wrap Clamp with the added security of stainless steel lugs and bolts.

- **To order:** Specify Catalog Number. Example: an FLSC-190-6R would be a 6" long clamp for 1-1/2" Standard Steel pipe.
- Shell: 18-8 Type 304 Stainless Steel.
- Lugs: 18-8 Type 304 Stainless Steel.

Gasket: Buna-N rubber with smooth face armored gasket for 360° coverage.

Bolts: Stainless Steel.

NOM. PIPE	PIPE	3" Lo	NG CLAMP (1 BOLT)		6" LONG CLAMP (2 BOLTS)			
SIZE	O.D.	CATALOG NUMBER	APPROX. WT. LBS.	CTN. QTY.	CATALOG NUMBER	APPROX. WT. LBS.	CTN. QTY.	
1/2"	0.625	FLSC-063-3R	.62	25	N/A	-	-	
1/2	0.84	FLSC-084-3R	.02	25	FLSC-084-6R	-	-	
3/4"	0.875	FLSC-088-3R	.68	25	FLSC-088-6R	1.34	12	
3/4	1.05	FLSC-105-3R	.00	25	FLSC-105-6R	1.34	12	
1"	1.125	FLSC-113-3R	.75	20	FLSC-113-6R	1.51	10	
1	1.32	FLSC-132-3R	.75		FLSC-132-6R	1.51	10	
1-1/4"	1.375	FLSC-138-3R	.83	18	FLSC-138-6R	1.65	12	
1-1/4	1.66	FLSC-166-3R	.05		FLSC-166-6R	1.05	12	
1-1/2"	1.625	FLSC-163-3R	.90	10	FLSC-163-6R	1.85	12	
1-1/2	1.90	FLSC-190-3R	.90	12	FLSC-190-6R	1.00	12	
2"	2.125	FLSC-213-3R	1.50	10	FLSC-213-6R	3.00	12	
2	2.38	FLSC-238-3R	1.50	10	FLSC-238-6R	3.00	12	

To order: Specify Catalog Number. Example: an FLSC190-6R would be a 6" long clamp for 1-1/2" Standard Steel pipe.

### Ford PVC Coupling Leak Clamps

### Style FCC For PVC Pipe Joined with Schedule 40 Solvent Weld Couplings

Leaking solvent weld joints on PVC pipe can be repaired by shutting down the water main and splicing in a new piece of pipe. This is time consuming, expensive, and requires making additional joints in your water system. Eliminate these problems by using the Ford Coupling Leak Clamp to repair leaking solvent welds on PVC pipe.

The Ford Style FCC Leak Clamp features 2 bolts and a step gasket with a butt sealing design that stops the leak between the coupling and the PVC pipe.

#### **Specifications:**

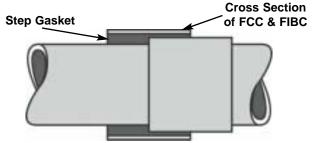
Band:5 inch wide 18-8 Type 304 Stainless Steel.

- Lugs: Ductile Iron per ASTM A536.
- Gasket: SBR as per ASTM D2000.

Bolts and

Heavy Hex Nuts: Low alloy per ASTM A242. Optional: 18-8 Type 304 Stainless Steel.





Nom. Pipe Size	PIPE O.D.	CATALOG NUMBER	Length	Approx. Wt. Lbs.
2"	2.38	FCC-238	5"	4
2-1/2"	2.88	FCC-288	5"	5
3"	3.50	FCC-350	5"	5
3-1/2"	4.00	FCC-400	5"	8
4"	4.50	FCC-450	5"	9
5"	5.56	FCC-556	5"	10
6"	6.63	FCC-663	5"	11
8"	8.63	FCC-863	5"	12

### Style FIBC For Class 160 and 200 Integral Bell Pipe Joined by Solvent Weld

The Ford Style FIBC Leak Clamp features 3 bolts and a step gasket with a tapered, overlapping seal that stops the leak between the integral bell and the PVC pipe.

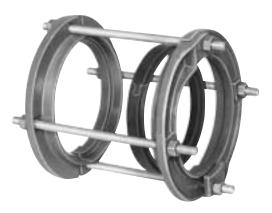
#### **Specifications:**

- Band: 7.5 inch wide 18-8 Type 304 Stainless Steel.
- Lugs: Ductile Iron per ASTM A536.
- Gasket: SBR as per ASTM D2000.
- Bolts and

Heavy Hex Nuts: Low alloy per ASTM A242. Optional: 18-8 Type 304 Stainless Steel.



Nom. Pipe Size	PIPE O.D.	CATALOG NUMBER	Length	Approx. Wt. Lbs.
2"	2.38	FIBC-238	7.5"	4
2-1/2"	2.88	FIBC-288	7.5"	5
3"	3.50	FIBC-350	7.5"	5
3-1/2"	4.00	FIBC-400	7.5"	8
4"	4.50	FIBC-450	7.5"	9
5"	5.56	FIBC-556	7.5"	10
6"	6.63	FIBC-663	7.5"	11
8"	8.63	FIBC-863	7.5"	12

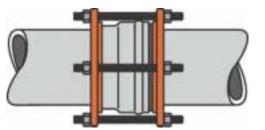


### **Ford Bell Joint Leak Clamps**

### Style FBC For Standard Steel Size PVC, Iron Pipe or \*C900 PVC

Ford Bell Joint Leak Clamps provide an easy and economical way of repairing leaking bell joints on PVC or iron pipe without recaulking or cutting out the joint. Two different listings of clamps are shown below, one for standard steel size PVC and the other for iron pipe or \*C900 PVC.

Ford Bell Joint Leak Clamps are easy to install. The clamp for cast iron pipe features an adjustable Buna-N gasket, field adaptable to fit either the older style pit cast iron or the new style spun cast iron. This versatile gasket contains a removable "keyed" insert that eliminates cutting or gluing to fit the new style spun cast iron.



#### **Specifications:**

Body:	Ductile Iron ASTM A536.
Gasket:	SBR rubber or Buna-N rubber per ASTM D2000.
Bolts and Nuts:	Low alloy ASTM A242 and AWWA C111. or A307 Steel with Di-Chromate Seal

#### Ford Bell Joint Leak Clamps for Ductile Iron and Cast Iron Pipe (Buna-N Gasket)

NOM. PIPE	O.D.	CATALOG	APPROX.	No. of	CAT. No. For
SIZE	RANGE	NUMBER	WT. LBS.	BOLTS	GASKET ONLY
4"	4.80-5.00	FBC-500	16	4	GBC-500
6"	6.90-7.10	FBC-710	19	4	GBC-710
8"	9.05-9.30	FBC-930	21	4	GBC-930
10"	11.10-11.40	FBC-1140	27	6	GBC-1140
12"	13.20-13.50	FBC-1350	31	6	GBC-1350

\*For use on C900 PVC, add "-C900" to the end of the catalog number. Example: FBC-500-C900. This option will include longer bolts to accommodate a C900 PVC pipe bell. Note that the bolt thread length with this option is too short to accommodate an iron pipe bell.

### For PVC, Standard Steel Size (SBR Gasket)

Nom. Pipe Size	O.D. Range	CATALOG NUMBER	Approx. Wt. Lbs.	NO. OF BOLTS	CAT. NO. FOR GASKET ONLY
2"	2.38	FBC-238	5	2	-
2-1/2"	2.88	FBC-288	5	2	-
3"	3.50	FBC-350	5	2	-
4"	4.50	FBC-450	13	4	GBC-450
6"	6.63	FBC-663	14	4	GBC-663
8"	8.63	FBC-863	18	4	GBC-863
10"	10.75	FBC-1075	24	6	GBC-1075
12"	12.75	FBC-1275	28	6	GBC-1275

### Ford Bolt Extension Kit

The Ford Bell Joint Leak Clamp requires extra long bolts to repair Certainteed PVC pipe. Bolt Extension Kits are available and may be ordered from the table at right.

Kit Catalog Number	Size	Quantity Per Kit	For Use On
			FBC-450
BEK-1-4	1/2"	4	FBC-663
			FBC-863
BEK-1-6	1/2"	6	FBC-1075
DEK-1-0	1/2	0	FBC-1275
BEK-2-4	5/8"	4	FBC-930
BEK-2-6	5/8"	6	FBC-1140
DEN-2-0	0/6	o	FBC-1350

### **O.D.** Chart

	PVC (Steel Size)	CAST IRON			AS	SBESTOS-C	CEMENT	STEEL		COPPER
Pipe Size	O.D.	Cla Pit	sses Spun	O.D.	Class	M.E. O.D.	R.B. O.D. Min. Max.	Туре	O.D.	O.D.
1/2"	.84							STD.	.84	.625
3/4"	1.05							STD.	1.05	.875
1"	1.32							STD.	1.32	1.125
1 1/4"	1.66							STD.	1.66	1.375
1 1/2"	1.90							STD.	1.90	1.625
2"	2.38			2.50				STD.	2.38	2.125
2 1/2"	2.88							STD.	2.88	2.625
3"	3.50	A B,C,D	50-350	3.80 3.96	100 150 200	3.74 3.84 3.84	4.00 4.10 4.29	O.D. STD.	3.00 3.50	3.125
3 1/2"								STD.	4.00	3.625
4"	4.50	A B,C,D	50-350	4.80 5.00	100 150 200	4.64 4.81 4.81	4.79-5.14 4.97-5.27 5.22-5.57	O.D. STD.	4.00 4.50	4.125
4 1/2"								STD.	5.00	
5"								STD.	5.56	5.125
6"	6.63	A B,C,D E,F	50-350	6.90 7.10 7.22	100 150 200	6.91 6.91 6.91	7.05-7.40 7.07-7.37 7.26-7.56	O.D. STD.	6.00 6.63	6.125
7"		∟,1		1.22	200	0.91	7.20-7.30	STD.	7.63	0.125
1		A,B	50-300	9.05	100	9.11	9.22-9.57	0.D.	8.00	
8"	8.63	C,D E,F	350	9.30 9.42	150 200	9.11 9.11	9.27-9.57 9.39-9.74	STD.	8.63	
9"		<u> </u>		3.42	200	3.11	3.33-3.14	STD.	9.63	
10"	10.75	A,B C,D E,F	50-200 250-350	11.10 11.40 11.60	100 150 200	11.24 11.66 11.66	11.42-11.77 11.82-12.12 11.77-12.12	O.D. STD.	10.00	
12"	12.75	A,B C,D E,F	50-200 250-350	13.20 13.50 13.76	100 150 200	13.44 13.92 13.92	13.69-14.04 14.08-14.38 14.03-14.38	0.D. STD.	12.00	
14"		A,B C,D E,F	50-100 150-300	15.30 15.65 15.98	100 150 200	15.07 16.22 16.22	15.40-15.80 16.38-16.73 16.48-16.88	0.D.	14.00	
16"		A,B C,D E,F	50-100 150-300	17.40 17.80 18.16	100 150 200	17.14 18.46 18.46	17.54-17.94 18.62-18.97 18.79-19.19	O.D.	16.00	
18"		A,B C,D	50-100 150-250	19.50 19.92	100 150	19.90 20.94	20.44 21.20	STD.	18.00	
20"		A,B C,D	50-100 150-250	21.60 22.06	100 150	22.12 23.28	22.50 23.54	STD.	20.00	
22"								STD.	22.00	
24"		A,B C,D	50-100 150-250	25.80 26.32	100 150	26.48 27.96	27.17 28.22	STD.	24.00	

Note: Due to variations in outside diameters and specifications, dimensions listed above are approximate. For this reason, determine the pipe O.D. before ordering Ford Pipe Repair Products.

## Section L Ford Pipe Repair Products

### Warranty

All merchandise is warranted to be free from defects in material and factory workmanship. We will provide, free of charge, new products in equal quantities for any that prove defective within one year from date of shipment from our factory. Manufacturer shall not be liable for any loss, damage, or injury, direct or consequential, arising out of the use of or the inability to use the product. Before using, user shall determine the suitability of the product for his intended use and user assumes all risk and liability whatever in connection therewith. No claims for labor or consequential damage will be allowed. The foregoing may not be changed except by agreement signed by an officer of the manufacturer.

#### Please Note:

The Ford Meter Box Company considers the information in this catalog to be correct at the time of publication. Items and option availability, including specifications, are subject to change without notice. Please verify that your product information is current.



The Ford Meter Box Co., Inc. 775 Manchester Avenue, P.O. Box 443, Wabash, Indiana, USA 46992-0443Telephone: 260/563-3171FAX: 1-800-826-3487Overseas FAX: 260/563-0167http://www.fordmeterbox.com