NUFACTURING • QUALITY • SERVICE • MANUFACTURING • QUALITY • SERVICE • MANUFACTURING • QUALITY • SERVICE • MAN

DIXON

The Right Connection®

Band Clamps and Accessories

dixonvalve.com • *Customer Service:* **877.963.4966**

Table of Contents

Band Clamps

F and FO series 4
K series 5
Smooth ID 6-7
Band and Buckle 8-9

Clamp Selection Guide 10

Preparing the Hose 11

Tools

Clamp Cutter 12
Mallet 12
51960 Screw-Action 12
C2 Jack-Type 14
F1 16
F100 18
F175 20
F38 22
F40 24

Safety

Dixon's couplings and retention devices are designed to work safely for their intended use. The selection of the proper hose, coupling and retention device, and the proper application of the coupling to the hose are of utmost importance.

Users must consider the size, temperature, application, media, pressure and hose and coupling manufacturer's recommendations when selecting the proper hose assembly components. Dixon recommends that all hose assemblies be tested in accordance with the Association for Rubber Products Manufacturer's (ARPM) recommendations and be inspected regularly (before each use) to ensure that they are not damaged or have become loose. Visit ARPMINC.com for more information.

Where safety devices are integral to the coupling, they must be working and utilized. The use of supplementary safety devices such as safety clips or safety cables are recommended.

If any problem is detected, couplings must be removed from service immediately.

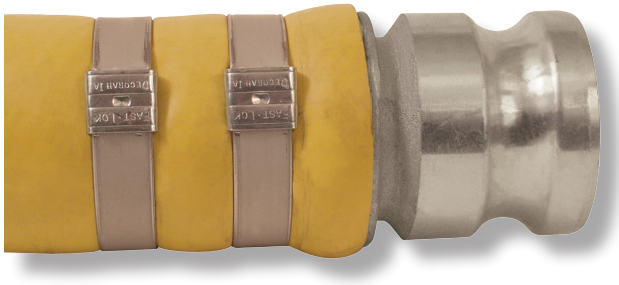
Dixon is available to consult, train and recommend the proper selection and application of all fittings we sell. We strongly recommend that distributors and end users make use of Dixon's Testing and Recommendation Services. Call 877.963.4966 or click dixonvalve.com to learn more.

Safety Recommendations

The use of band style clamps is a proven method of retaining hose couplings in industrial hose.

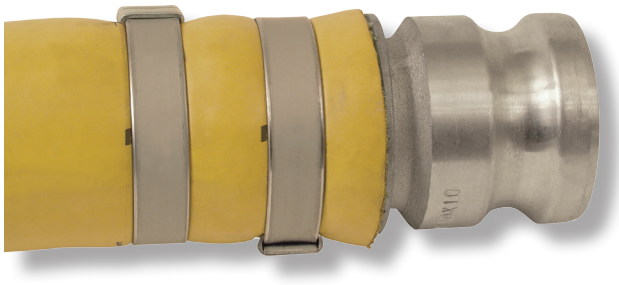
To achieve proper retention and sealing of the hose coupling in the hose, it is imperative that these clamps be installed correctly. Please follow the manufacturer's recommendations as to the proper selection and installation of band clamps.

When installing multiple clamps, the buckles must be offset around the hose, (reference page 8), eliminating the possibility of a straight line leak under the buckle area.



Improper installation of band clamps

Clamps installed with buckles in-line.



Proper installation of band clamps

Clamps installed with buckles equally rotated.

The first clamp should be installed just inside the mark on the hose furthermost from the hose end (reference page 11).

Leaving excess band material turned back over the buckle does not improve the performance of the clamp. In fact, a safety hazard develops from this practice by leaving sharp edged material exposed.

Band Clamps Procedure 2100-2199 PDF's

Procedure 2100: *Pre-Formed Band Clamp Using Pneumatic Roll-Over Tool*

Procedure 2101: *Pre-Formed Band Clamp Using Punch Style Tool*

Procedure 2102: *Pre-Formed Band Clamp Using Punch Style Tool with Roll-Over Tool Attachment*

Procedure 2103: *Pre-Formed Band Clamp Using Screw-Action Tool with Roll-Over Tool Attachment*

Procedure 2104: *"Clamp-It" Band and Buckle Installation Using Screw Action Tool*

Band Clamps Procedure 2100-2199 Video's

Procedure 2100: *Pre-Formed Band Clamp Using Pneumatic Roll-Over Tool*

Procedure 2101: *Pre-Formed Band Clamp Using Punch Style Tool*

Procedure 2102: *Pre-Formed Band Clamp Using Punch Style Tool with Roll-Over Tool Attachment*

Procedure 2103: *Pre-Formed Band Clamp Using Screw-Action Tool with Roll-Over Tool Attachment*

Procedure 2104: *"Clamp-It" Band and Buckle Installation Using Screw Action Tool*

Reference pages 10 and 11 for selection and preparation guidelines.

F and FO Series Clamps

Features:

- install with center punch tools F1, F38, F40 and F100, other manufacturer's punch style tools may also be used
- on stainless clamps, bands are 300 series stainless steel, buckles are 302 series stainless steel
- double-wrapped
- triple-punched
- holds permanently
- **sold in package quantities only**

The F series double-wrapped metal band clamp is formed to a given diameter with a tailpiece through the buckle.

style F
(pre-formed)

Band Width	ID	Band THK	*Stainless Steel* Part #	Pkg Qty	Band THK	*Galvanized Steel* Part #	Pkg Qty
3/8"	13/16"	.020	***FS3***	100	.025	***F3***	100
	1-3/8"	.020	***FS311***	100	.025	***F311***	100
5/8"	1"	.022	***FS4***	100	.025	***F4***	100
	1-1/4"	.022	***FS5***	100	.025	***F5***	100
	1-1/2"	.022	***FS6***	100	.031	***F6***	100
	1-3/4"	.022	***FS7***	100	.031	***F7***	100
	2"	.022	***FS8***	100	.031	***F8***	100
	2-1/4"	.022	***FS9***	100	.031	***F9***	100
	2-1/2"	.022	***FS10***	50	.031	***F10***	50
	2-3/4"	.022	***FS11***	50	.031	***F11***	50
	3"	.022	***FS12***	50	.031	***F12***	50
	3-1/2"	.022	***FS14***	50	.031	***F14***	50
	4"	.022	***FS16***	25	.031	***F16***	25
	4-1/2"	.022	***FS18***	25	.031	***F18***	25
	5"	.022	***FS20***	25	.031	***F20***	25
	6"	.022	***FS24***	25	.031	***F24***	25
	7"	.022	***FS28***	25	.031	***F28***	25
	8"	.022	***FS32***	25	.031	***F32***	25

The FO clamp is open-ended and may be applied easily without sliding the clamp over the hose end.

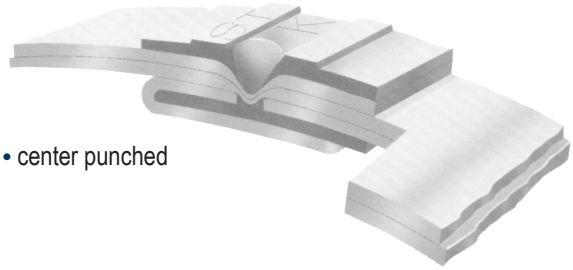
style FO
(open end)

Band Width	ID	Band THK	*Stainless Steel* Part #	Pkg Qty	Band THK	*Galvanized Steel* Part #	Pkg Qty
3/8"	13/16"	.020	***FOS3***	100	.025	***FO3***	100
	1-3/8"	.020	***FOS311***	100	.025	***FO311***	100
	2"	.020	***FOS316***	100	.025	***FO316***	100
	3-1/8"	.020	***FOS325***	100	.025	***FO325***	100
5/8"	2"	.022	***FOS8***	100	.025	***FO8***	100
	2-1/2"	.022	***FOS10***	50	.025	***FO10***	50
	3"	.022	***FOS12***	50	.031	***FO12***	50
	3-1/2"	.022	***FOS14***	50	.031	***FO14***	50
	4"	.022	***FOS16***	50	.031	***FO16***	50
	4-1/2"	.022	***FOS18***	50	.031	***FO18***	50
	5"	.022	***FOS20***	25	.031	***FO20***	25
	6"	.022	***FOS24***	25	.031	***FO24***	25
	7"	.022	***FOS28***	25	.031	***FO28***	25
	8"	.022	***FOS32***	25	.031	***FO32***	25
	9"	.022	**---**	25	.031	***FO36***	25
	10"	.022	**---**	25	.031	***FO40***	25
	12"	.022	**---**	25	.031	***FO48***	25
	14"	.022	**---**	10	.031	***FO56***	10

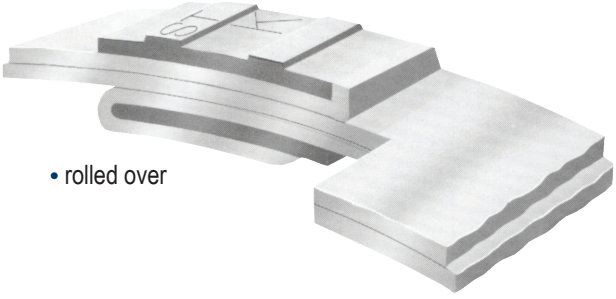
K Series Clamps

Features:

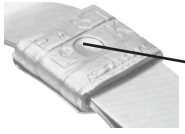
- on stainless clamps, bands are 300 series stainless steel, buckles are 302 series stainless steel
- designed to be slipped over the hose end before the fitting is inserted
- can be center punched or rolled over, install with the center punch or roll over tools
  - Fast-Lok™ tools: F1, F40, F100
  - Super Strap Tools: 51960 screw action with 51970 adapter
  - Bandit®: S100 air tool with S180 Jr. head, C-001 hand tool with J001 Jr. adapter, S350 air tool with S260 Jr. head, T-240 for ⅜" only or T-250 for ⅜" and ⅝", S-38 for ⅜" and ⅝", J-102 Pok-It™ for ⅜" only.
  - Punch-Lok® tools: P-1000 for ⅜" and ⅝", P-3000 for ⅜" only, P-38 for ⅜" and ⅝"
- **sold in package quantities only**



• center punched



• rolled over



punch indentation for ease of center punching

Band Width	ID	Band THK	*Stainless Steel* Part #	Pkg Qty	Band THK	*Galvanized Steel* Part #	Pkg Qty
⅜"	13/16"	.025	***KS3***	100	.025	***K3***	100
	1-3/8"	.025	***KS311***	100	.025	***K311***	100
⅝"	1"	.031	***KS4***	100	.030	***K4***	100
	1-1/4"	.031	***KS5***	100	.030	***K5***	100
	1-1/2"	.031	***KS6***	100	.030	***K6***	100
	1-3/4"	.031	***KS7***	100	.030	***K7***	100
	2"	.031	***KS8***	100	.030	***K8***	100
	2-1/4"	.031	***KS9***	100	.030	***K9***	100
	2-1/2"	.031	***KS10***	50	.030	***K10***	50
	2-3/4"	.031	***KS11***	50	.030	***K11***	50
	3"	.031	***KS12***	50	.030	***K12***	50
	3-1/2"	.031	***KS14***	50	.030	***K14***	50
	4"	.031	***KS16***	25	.030	***K16***	25
	4-1/2"	.031	***KS18***	25	.030	***K18***	25
	5"	.031	***KS20***	25	.030	***K20***	25
	6"	.031	***KS24***	25	.030	***K24***	25
	7"	.031	***KS28***	25	.030	***K28***	25
	8"	.031	***KS32***	25	.030	***K32***	25

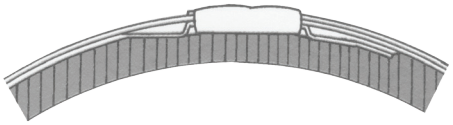
Band Width	ID	Band THK	*Stainless Steel* Part #	Pkg Qty
¾"	2"	.030	***KS87501***	100
	2-1/4"	.030	***KS97501***	100
	2-1/2"	.030	***KS107501***	50
	2-3/4"	.030	***KS117501***	50
	3"	.030	***KS127501***	50
	3-1/2"	.030	***KS147501***	50
	4"	.030	***KS167501***	25
	4-1/2"	.030	***KS187501***	25
	5"	.030	***KS207501***	25
	6"	.030	***KS247501***	25
	7"	.030	***KS287501***	25
	8"	.030	***KS327501***	25

Note: ¾" must be applied with the F175 hand tool found on pages 20-21.

Dixon Smooth ID Clamps

Application:
For use with industrial hose made of stiffer, thinner thermo-plastics.

Features:
- provide a uniform, gap-free inside diameter, and strong holding power
- Install with roll over type clamp tools and most common band clamp tools such as the 51960 and 51970 band tools
- **sold in package quantities only**



The smooth inside diameter produces a uniform clamping surface to prevent leak paths.

Band Width	ID	Band THK	*201 Stainless Steel* Part #	Pkg Qty	*Galvanized Steel* Part #	Pkg Qty
⅜"	13/16"	.025	***JS201***	100	***JS301***	100
	1"	.025	***JS243***	100	***JS343***	100
	1-3/8"	.025	***JS202***	100	**---**	---
	2"	.025	***JS245*** [1]	100	**---**	---
½"	1"	.030	***JS203***	100	***JS303***	100
	1-1/4"	.030	***JS204***	100	***JS304***	100
	2-3/4"	.030	***JS230***	100	***JS330*** [1]	100
⅝"	1-1/2"	.030	***JS205***	100	***JS305***	100
	1-3/4"	.030	***JS206***	100	***JS306***	100
	2"	.030	***JS207***	100	***JS307***	100
	2-1/4"	.030	***JS208***	100	***JS308***	100
	2-1/2"	.030	***JS209***	100	***JS309***	100
¾"	2-3/4"	.030	***JS210***	50	***JS310*** [1]	50
	3"	.030	***JS211***	50	***JS311***	50
	3-1/2"	.030	***JS212***	50	***JS312***	50
	4"	.030	***JS213***	25	***JS313***	25
	4-1/2"	.030	***JS214***	25	***JS314***	25
	5"	.030	***JS215***	25	***JS315***	25
	6"	.030	***JS216*** [1]	25	**---**	---
	7"	.030	***JS218*** [1]	**25**	**---**	---

[1] stock quantities only

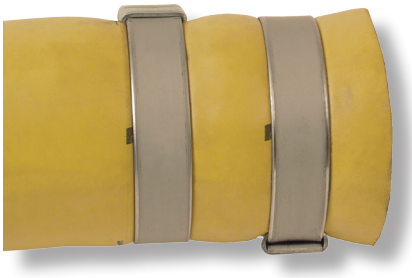
Dixon Smooth ID Center Punch Clamps

Application:
- Recommended for use in applications where conditions are highly corrosive.

Features:
- double wrapped and locked with the conical punch of the F100 tool
- unique dimple design offers excellent sealing strength while maintaining radial compression
- heavy buckle provides optimal holding power
- ideal for thin wall hose
- low profile
- **sold in package quantities only**

Band Width	ID	Band THK	*201 Stainless Steel* Part #	Pkg Qty
⅝"	1"	.025	***HBC4S***	100
	1¼"	.025	***HBC5S***	100
	1½"	.025	***HBC6S***	100
	1¾"	.025	***HBC7S***	100
	2"	.025	***HBC8S***	100
	2¼"	.025	***HBC9S***	100
	2½"	.025	***HBC10S***	50
	2¾"	.025	***HBC11S***	50
	3"	.025	***HBC12S***	50
	3½"	.025	***HBC14S***	50
	4"	.025	***HBC16S***	25
	4½"	.025	***HBC18S***	25
	5"	.025	***HBC20S***	25
	6"	.025	***HBC24S***	25
	7"	.025	***HBC28S***	25
	8"	.025	***HBC32S***	25

Band and Buckle



Features:

- install with C2 or 51960 band clamp tools
- economical method of securing fittings to large diameter rubber hose (2" and above)
- Do not use strapping and buckles made of different metals, e.g. stainless steel strapping must be used with stainless steel buckles.
- **sold in box quantities only**

strapping

Band Width	Band Thickness	Length	*201 Stainless Steel* Part #	*Galvanized Steel* Part #
⅜"	.025	100'	***SS375***	***SG375***
½"	.031	100'	***SS500***	***SG500***
⅝"	.031	100'	***SS625***	***SG625***
¾"	.031	100'	***SS750***	***SG750***

buckles

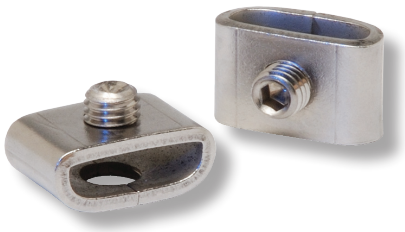
Band Width	*201 Stainless Steel* Part #	Pkg Qty	*Galvanized Steel* Part #	Pkg Qty
⅜"	***CS375***	100	***CG375***	100
½"	***CS500***	100	***CG500***	100
⅝"	***CS625***	100	***CG625***	100
¾"	***CS750***	100	***CG750***	50

⚠ Caution! Strapping edges can be extremely sharp! All necessary precautions should be taken to prevent installer's hands from being cut during the assembly process.

Set Screw Buckles

Applications:

- Used in applications when a temporary clamp is desired or space limitations do not allow for tool roll-over
- set screw locks band after tensioning.
- **sold in box quantities only**



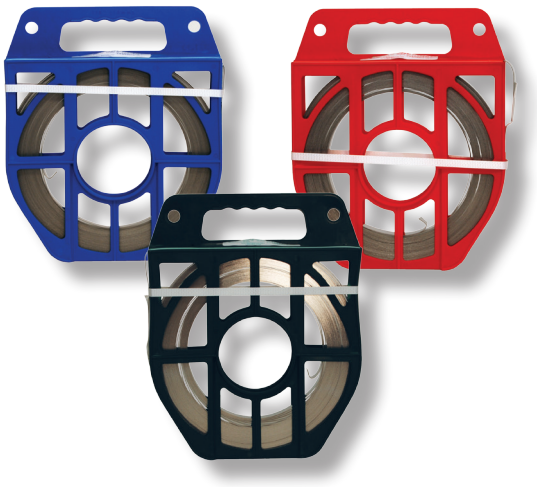
Band Width	*201 Stainless Steel* Part #	Pkg Qty
⅜"	***SSB375***	50
½"	***SSB500***	25
¾"	***SSB750*** [1]	25

[1] ¾" buckle may be used with ⅝" band

Stainless Steel Banding

Features:

- resistant to moisture
- built-in handle
- full view of available band
- easy to dispense and recoil



Band Width	Band Thickness	Length	Package Type	*201 Stainless Steel* Part #
½"	.030	100'	plastic blue tote	***ST204B***
⅝"	.030	100'	plastic green tote	***ST205G***
¾"	.030	100'	plastic red tote	***ST206R***

Clamp Selection

Pre-Formed Band Clamps

1. Measure the hose free OD (Outside Diameter) with a Dixon diameter tape. Free OD is measured before the stem is inserted.
2. Select the clamp having an Inside Diameter (ID) as close to the measured hose OD but not less than ¼". This is so that the clamps can be slid onto the hose before the couplings are inserted.

Example: Hose OD is 2-11/16" Use 3" ID clamp
Hose OD is 2-7/8" Use 3-1/2" ID clamp

Band and Buckle

Caution!
Strapping edges can be extremely sharp! All necessary precautions should be taken to prevent installer's hands from being cut during the assembly process. Do not use strapping and buckles made of different metals or of different widths together.

1. Measure the hose circumference with a standard tape measure.
2. Cut a piece of strapping that is 6" longer than two times the circumference

Example: Hose circumference	13
Multiplied by two	x 2
Equals	26
Plus six inches	+6
Total length of strap needed	32"

3. Slide one end of the strap through the buckle loop. Make certain the 'ears' of the buckle are pointing upand are closest to the end of the strap
4. Slide the buckle approximately 3" down the strap
5. Using pliers, create a strap loop by bending approximately ½" of strap material down and under.
6. Slide the buckle into the strap loop.
7. Using pliers, crimp the strap loop tightly to the buckle. Do not squeeze on the buckle loop.
8. Lap the free end of the strap around the hose and through the buckle loop.
9. Again, lap the free end of the strap around hose and through the buckle loop.
10. Using pliers, pull the free end of the strap as tight as possible.
11. Bend the strap free end up and slightly over the buckle. This will prevent the strap from sliding out from under the buckle.

Note: Do not use strapping and buckles made of different metals.
Example: Stainless steel strapping must be used with stainless steel buckles.

Notes:
1. Proper tension is achieved when the outside diameter of the band clamp is even with or slightly below the diameter of the hose. This is a rule of thumb measurement of proper clamp tension and can vary from one stem/hose combination to another. The installer's experience with a particular stem/hose combination will tell them when the clamp is properly tensioned.
2. Bend excessive clamp tail away from tool handles to avoid being cut by sharp edges.
3. When multiple clamps are used, clamp buckles must be offset to prevent a leak path.
   2 Clamps - Buckles at 180°. 3 Clamps - Buckles at 120°. 4 Clamps - Buckles at 90°.

Pre-Formed Band Clamp Selection Video

Clamp-It Band and Buckle Preparation Video

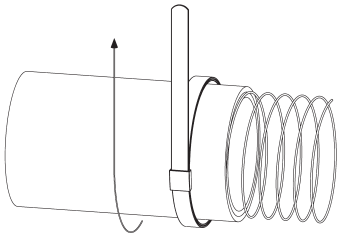
Preparing the Hose for Assembly

Cut Hose to Length

Cut Ends Square (Lack of a square cut on the hose end can reduce coupling retention.)

For hoses having a helical wire:

1. Determine the direction the helical wire is pointing in. This is necessary as proper installation of pre-formed band clamps and bands and buckles rely upon proper orientation of the clamp tail with the helical wire. See illustration below.



General Preparation Instructions Video

2. If helical wire is not used for static grounding, trim the wire back into the carcass of the hose. This is to prevent injury during use of the assembly.

Clean Hose ID

Mark the hose for proper clamp placement

All styles of band clamps (both pre-formed and bands & buckles) require proper placement to achieve maximum retention. Place marks on hose for proper clamp placement as follows:

1. Determine shank serration style
   a. Symmetrical (all serrations the same size), e.g. King combination nipples, suction couplings, etc.
   b. Pronounced (some serrations are higher than the other serrations), e.g. Cam and groove, King nipples, etc.
2. Symmetrical Shanks
   a. Determine number of clamps required. Reference Dixon's Pressure Chart for correct number of clamps to install based on coupling style and size.
   b. Place the shank next to the hose to simulate the shank being fully inserted.
   c. Place a mark on the hose that corresponds with the point of the last serration.
   d. When multiple clamps are required, place corresponding number of marks equally spaced from one another and the hose end.
   e. Do not place a clamp directly on the hose end. Leave ¼" to ⅜" space between the hose end and the last clamp installed.
3. Pronounce shanks
   a. Place the shank next to the hose to simulate the shank being fully inserted.
   b. Place a mark on the hose that corresponds with the point of each pronounced serration.
   c. The correct number of clamps to install will be equal to the number of marks placed on the hose.

Static Grounding

When required, proper static grounding is essential. Typically, this is accomplished by bending the built-in static wire or the helical wire (or wires) inside the hose ID so that it contacts the metal coupling. Caution should be taken to bend in no more wire than necessary. Usually ½" of wire bent in is sufficient. Other methods of static grounding are available and may be required due to hose type, hose manufacturer or style of coupling to be installed. Always contact the hose manufacturer for proper static grounding techniques for that particular hose. Improper static grounding can lead to fire, explosions, reduced assembly life, damage to property and injury or death to personnel.

Seal the Hose Ends

At each end of the hose, the reinforcement is exposed to the outside elements. This exposure can lead to premature assembly failure especially if the end of the assembly is laying in a puddle of water or puddle of product. If the assembly is to be subjected to these conditions, the hose ends must be sealed. Typically, rubber cement or shellac is used. Contact the hose manufacturer for recommendations. Wire reinforce hoses can corrode to the point of failure near the clamp. Textile or fabric reinforced hoses can wick water or product to anywhere in the length of the hose and exit the cover at the weakest spot.

Coupling Lubricant

The coupling shank and the hose ID are to be lubricated prior to coupling insertion. Dixon recommends using Dixon Coupling Lubricant (DCL10 1 liter, DCL80 4 liters). Do not use hand soap, oil, grease, WD40, silicone spray, or other substances that may attack the tube material and / or reduce coupling retention.

Installation Tools

Clamp Cutter

Features:
- malleable iron with rubber covered handles
- weight: 2.11 lbs.
- length: 14"

Part #
F550

Mallet

Features:
- ductile iron head, wooden handle
- weight: 2.65 lbs.
- length: 12"

Part #
F225

51960 Installation Tool

Features:
- screw-action type tool for installing band and buckles
- plated steel
- weight: 4.17 lbs.
- length: 12"

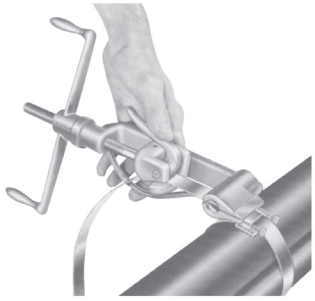
Part #
51960

51970 Rollover Attachment

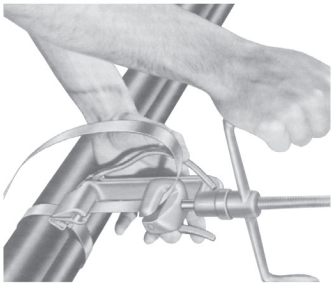
Features:
- adapter for 51960 for installing preformed clamps
- for vise applications *only*
- plated steel
- weight: 1.23 lbs.
- length: 10½"

Part #
51970

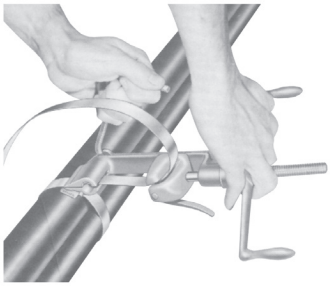
Operating Instructions for the 51960 Installation Tool



1
Hold the tool in the left hand so that the cutter bail is on the bottom and the pulling dog lever is on top. Slide the strap tail through the slot on the right side of the tool.



2
Press down on pulling-dog lever and rotate handle to begin tightening. Tighten strap to desired tension. Simultaneously relieve some tension while pushing the tool away as far as possible.

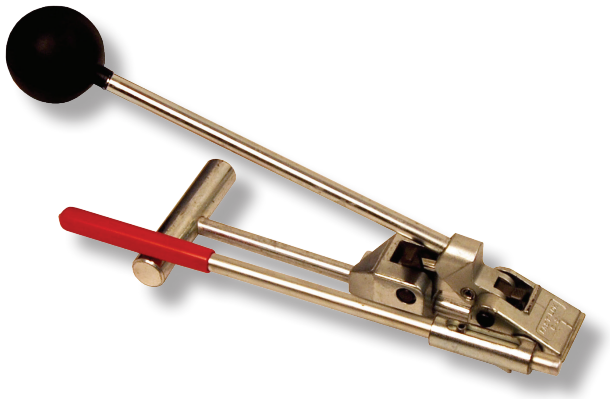


3
Pull the cutter bail to cut the strap tail. Tap the buckle ears down to hold the cut strap tail in place

Operating Instructions for the 51960 with 51970 Roll-Over Attachment

1. Slide the 51970 Roll - over attachment on to the head of the 51960 Screw - action tool.
2. With handle of 51970 facing installer, place 51960 in a vise and tighten.
3. Slide the clamp tail through the slot on the 51970.
4. Press down on pulling-dog lever and rotate handle to begin tightening.
5. Tighten clamp to desired tension.
6. Simultaneously relieve some tension while rolling hose towards cutter.
7. When clamp buckle engages cutter, pull handle.

Part Identification for the C2 Installation Tool

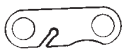


Features:

- lightweight, side and front entry
- jack-type clamping tool
- designed to provide easy installation of the band and buckle system
- for applying ⅜" and ⅝" band clamps
- tool adjusts tension and locks buckle in place
- steel
- weight: 3.09 lbs.
- length: 14"

Part #
C2

C-207


FX-211A

FX-211B

C-212

FX-214

FA-217

F-233

FA-220

CA-231

F-242

EXP-201

F-232

C-200

F-233

F-217

C-243

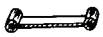
C-236

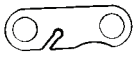
Illustrations are not in correct proportion to one another.

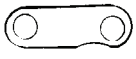
Qty Per Tool	Part Description	Part #
1	Holding dog	***C-207***
2	Puller links	***FX-211A***
2	Puller links	***FX-211B***
1	Puller link pin	***C-212***
1	Pulling dog	***FX-214***
1	Pulling dog spring	***FA-217***
1	Pulling dog pin	***F-233***
1	Ball handle assembly	***FA-220***
1	Pusher puller assembly	***CA-231***
3	Retaining rings	***F-242***
1	Cutter	***EXP-201***
1	Crescent ring	***F-232***
1	Cutter handle	***C-200***
1	Holding dog pin	***F-233***
1	Holding dog spring	***F-217***
1	1/8" x 3/8" roll pin	***C-243***
2	3/16" x 5/8" roll pin	***C-236***

Sliding Jack Replacement Kit

FX-214


FA-217


FX-211A


FX-211B

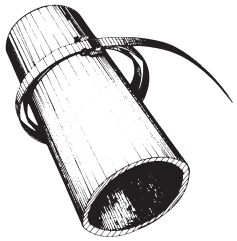
Feature:

- fits the F100, F175 and C2 tools

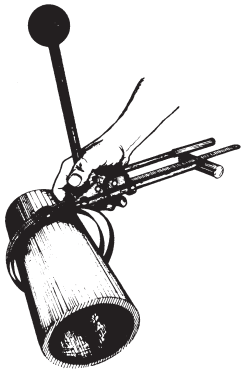
Part #
F205K

Operating Instructions for the C2 Installation Tool

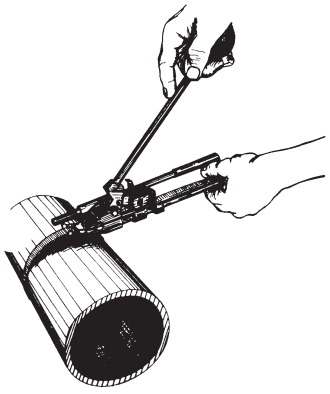
1
Pull strapping from carton and cut off. Slide clamp on strap and bend end under at ear side of clamp. Bring opposite end of strap around object twice, each time passing under clamp bridge.



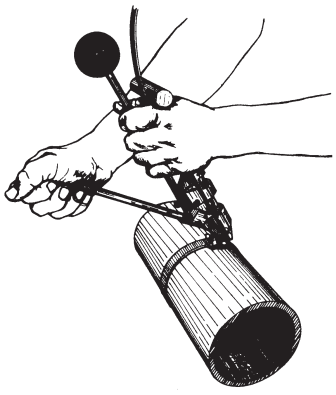
2
Raise ball handle to forward position and insert strapping. Slide tool forward.



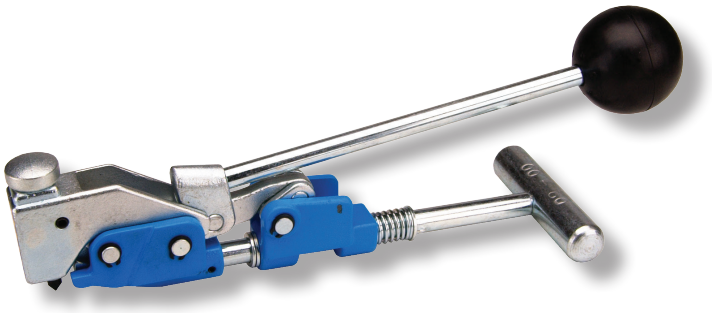
3
Slide cutter handle forward for alignment. Jack ball handle to reach desired tension.



4
Retract cutter handle and raise to 90-110°. To cut strapping, rotate cutter handle. Increase locking bend by rotating tool forward. Apply thumb pressure on tab as you remove tool. Bend ears with hammer.

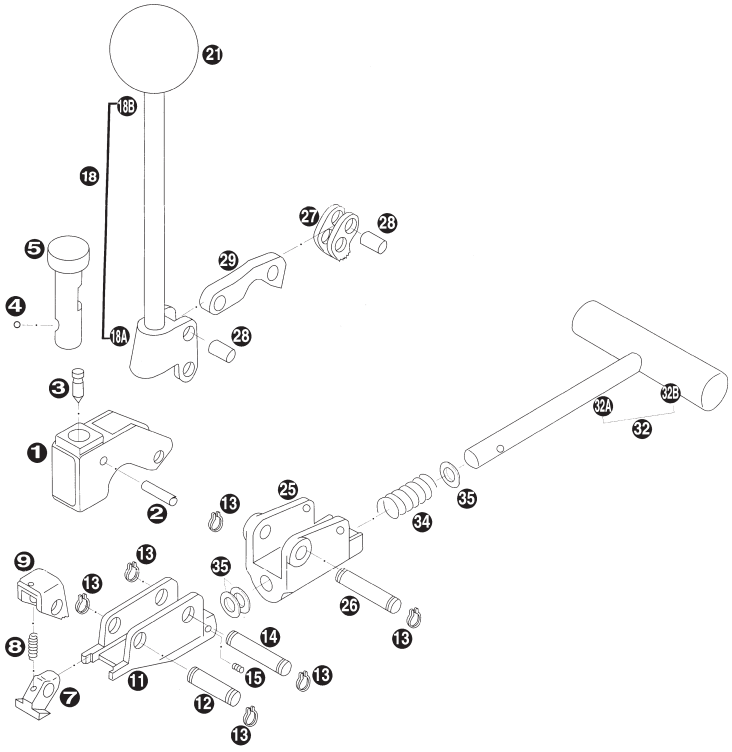


Part Identification for the F1 Installation Tool



Features:
- for applying ⅝" band clamps
- steel
- weight: 3.15 lbs.
- length: 12"

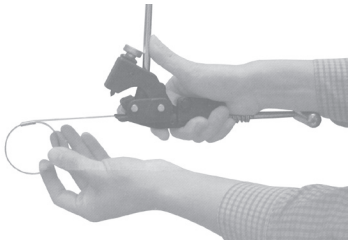
Part #
F1



Qty Per Tool	Part Description	Item #	Part #
1	Head	1	***FI201***
1	Spring pin	2	***FI203***
1	Punch	3	***FI202***
1	Retaining ball	4	***FI205***
1	Punch holder	5	***FI204***
1	Pusher nose	7	***FI206***
1	Spring	8	***F209***
1	Holding dog	9	***F207***
1	Nose	11	***FA231***
1	Holding dog pin	12	***F233***
6	Retaining ring	13	***F232***
1	Head pivot pin	14	***FI233***
1	Set screw	15	***FI250***
1	Tension handle assembly	18	***FA220I***
1	Tension handle shaft only	18B	***FA222***
1	Handle ball	21	***FA221***
1	Slide	25	***FA228***
1	Pulling dog pin	26	***F233***
1	Pulling dog	27	***FI214***
2	Dowel pin	28	***FI213***
1	Link	29	***F211***
1	Shaft	32A	***FA232***
1	Handle	32B	***FA233***
1	Compression spring	34	***FI245***
3	Washer	35	***F223***

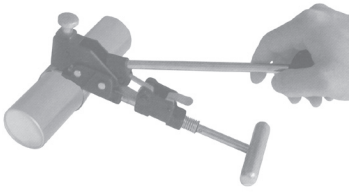
Operating Instructions for the F1 Installation Tool

1
Push tension handle all the way forward. Insert the clamp tail and push all the way into tool.

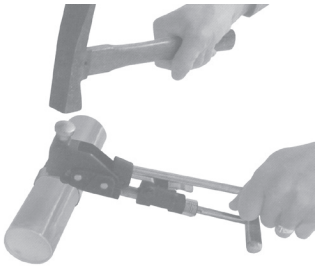


2
Tighten the clamp with short downward strokes. Tension handle should be in down position at completion of tightening clamp.

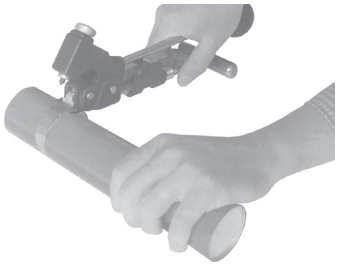
If clamp tension needs to be released before locking, move slide back against spring. This raises the pulling dog.



3
Holding tension handle down, lock clamp by hitting punch at least twice with mallet.



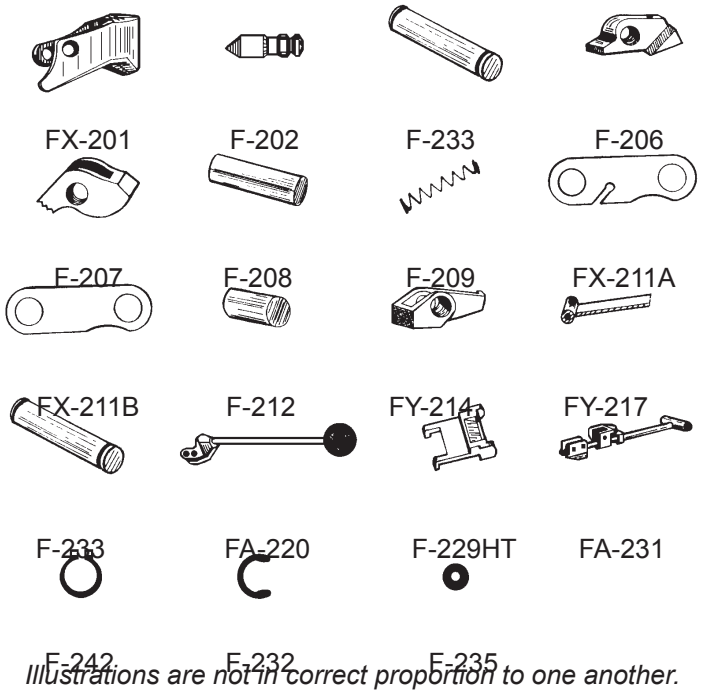
4
Hold hose and raise the tool back and forth to break off clamp tail. Remove from tool by operating tension handle. When tail has moved through holding dog, raise tension handle and pull tail free.



Part Identification for the F100 Installation Tool

Features:
- for applying ⅜" and ⅝" band clamps
- steel
- weight: 2.86 lbs.
- length: 13"

Part #
F100



Illustrations are not in correct proportion to one another.

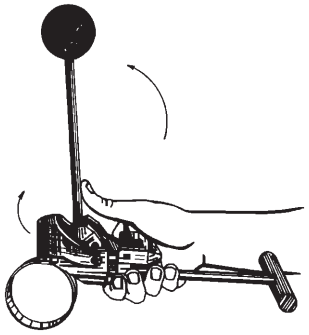
Qty Per Tool	Part Description	Part #
1	Punch head	***FX-201***
1	Punch	***F-202***
1	Punch head pin	***F-233***
1	Pusher nose	***F-206***
1	Holding dog	***F-207***
1	Pusher nose pin	***F-208***
1	Holding dog spring	***F-209***
2	Puller links	***FX-211A***
2	Puller links	***FX-211B***
1	Puller link pin	***F-212***
1	Pulling dog	***FY-214***
1	Pulling dog spring	***FY-217***
1	Pulling dog pin	***F-233***
1	Ball handle assembly	***FA-220***
1	⅜" clamp adapter	***F-229HT***
1	Pusher puller assembly	***FA-231***
3	Retaining rings	***F-242***
1	Crescent ring	***F-232***
1	Punch retainer ring	***F-235***

Sliding Jack Replacement Kit

Feature:
- fits the F100, F175 and C2 tools

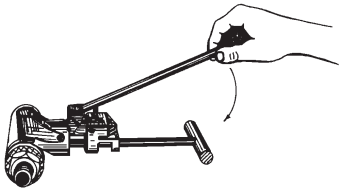
Part #
FY205K

Operating Instructions for the F100 Installation Tool



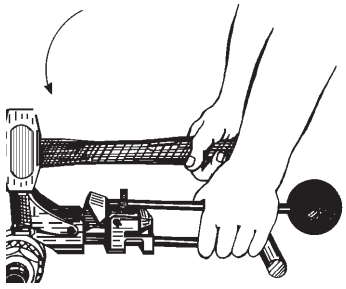
1

Hold tool as shown with ball handle all the way forward. Insert clamp and push the end entirely into the tool until the lock is held in pusher housing jaws.



2

Slip the hose with nipple inserted into the clamp and locate clamp directly over groove - (position of groove can be laid out on hose with chalk), tighten the clamp with downward strokes of ball handle, using short strokes after initial slack is out so that ball handle finishes in down position.



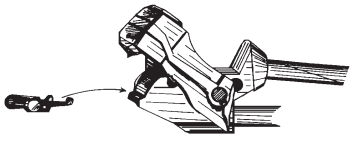
3

Hold the tool with clamp resting on Vee block, vise or other solid surface. Swing punch head down against lock and strike hard with mallet; this locks the clamp. Raise punch head to free punch. Hold hose to keep from turning and raise both handles of tool up together which will break off band at lock.
(optional) Peen corners of the lock down smooth. To remove cut off end from tool, operate ball handle to work it through holding dog. Then press release lever and pull strip out toward rear of tool.

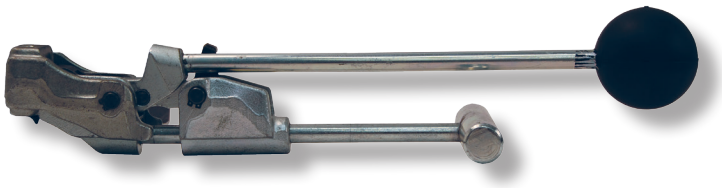
Instructions for using adapter to apply ⅜" width clamps

4

The F100 tool described above, as shipped, is ready for use in applying all sizes of ⅝" standard and heavy duty hose clamps. To apply the ⅜" wide clamps use the adapter (F-229).
To insert the adapter, hold the tool with the punch head
(FX-201) raised as shown and place the adapter under the pusher nose with the bent ends up and push back until the shoulder rests against the front of the pusher nose. The F-229 clamp adapter under the pusher nose (F-206) centers the narrower clamp in the tool.



Part Identification for the F175 Installation Tool

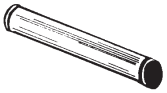


Features:
- for applying ¾" K series band clamps
- steel
- weight: 3.07 lbs.
- length: 13"

Part #
F175

F-201750

F-202

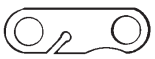

F-204

F-206

F-207

F-208

F-209


FX-211A

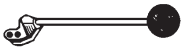
FX-211B

F-212

FX-214

FY-217

FA-233


FA220

FA-231750

F-242

F-232

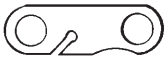
Illustrations are not in correct proportion to one another.

Qty Per Tool	Part Description	Part #
1	Punch head	***F-201750***
1	Punch	***F-202***
1	Punch head pin	***F-204***
1	Pusher nose	***F-206***
1	Holding dog	***F-207***
1	Pusher nose pin	***F-208***
1	Holding dog spring	***F-209***
2	Puller links	***FX-211A***
2	Puller links	***FX-211B***
1	Puller link pin	***F-212***
1	Pulling dog	***FX-214***
1	Pulling dog spring	***FY-217***
1	Pulling dog pin	***F-233***
1	Ball handle assembly	***FA-220***
1	Pusher puller assembly	***FA-231750***
4	Retaining rings	***F-242***
1	Wrench	***F-224***

Sliding Jack Replacement Kit

FX-214

FY-217


FX-211A

FX-211B

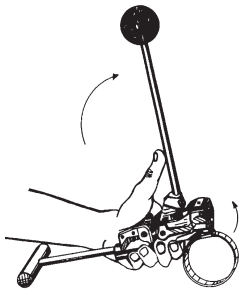
Feature:
- fits the F100, F175 and C2 tools

Part #
FY205K

Operating Instructions for the F175 Installation Tool

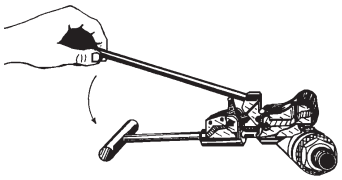
1

Hold tool as shown with ball handle all the way forward. Insert clamp and push the end entirely into the tool until the lock is held in pusher housing jaws.



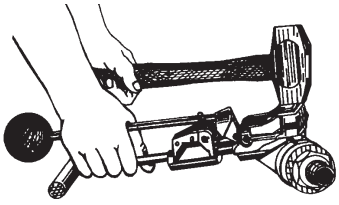
2

Slip the hose with nipple inserted into the clamp and locate clamp directly over groove - (position of groove can be laid out on hose with chalk), tighten the clamp with downward strokes of ball handle, using short strokes after initial slack is out so that ball handle finishes in down position.



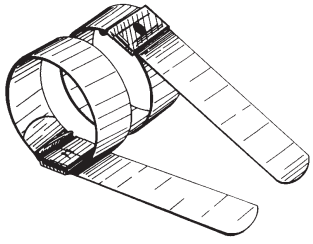
3

Hold the tool with clamp resting on Vee block, vise or other solid surface. Swing punch head down against lock and strike hard with mallet; this locks the clamp. Raise punch head to free punch. Hold hose to keep from turning and raise both handles of tool up together which will break off band at lock.
(optional) Peen corners of the lock down smooth. To remove cut off end from tool, operate ball handle to work it through holding dog. Then press release lever and pull strip out toward rear of tool.

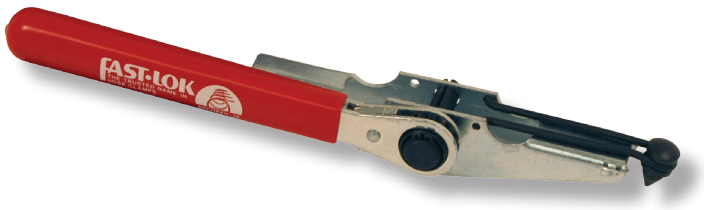


4

The F175 tool is to be used for applying ¾" wide preformed K clamps.



Part Identification for the F38 Installation Tool



Features:

- for applying ⅜" and ⅝" band clamps - F series
- small portable hand tool
- steel
- weight: 0.82 lbs.
- length: 10"

Part #
F38

FA-285

FA-289

FF-290

FB-298

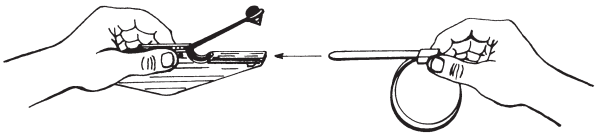
F-292

Illustrations are not in correct proportion to one another.

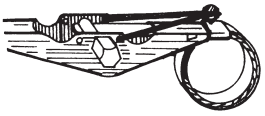
Qty Per Tool	Part Description	Part #
1	Frame	***FA-285***
1	Punch and holder	***FA-289***
1	Winder	***FF-290***
2	Retaining ring	***F-292***
1	Ratchet wrench	***FB-298***

Operating Instructions for the F38 Installation Tool

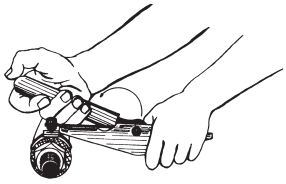
1
Push end of clamp completely into slotted end of clamp tool. For ⅜" width clamp use narrow slotted end.



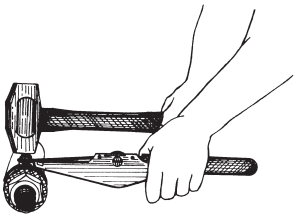
2
Push winder into frame with slot engaging clamp end. Ratchet wrench attached to winder.



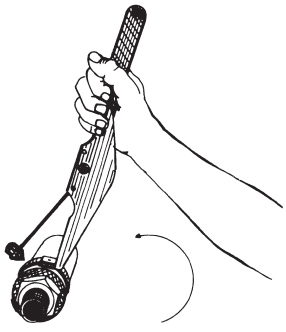
3
Push forward with sufficient strokes until desired tension is obtained.



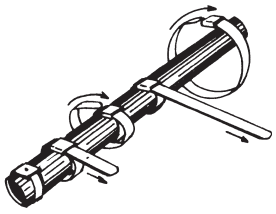
4
Push punch down on lock and while holding tension with wrench, strike firm blow with hammer, thus locking the clamp.



5
Raise punch and while holding tension with wrench, swing frame forward and up against edge of lock, breaking off tail piece.
(optional) Peen corners of the lock smooth. Twist up tail and when it is free, pull out of winder. To move punch from one end to other end, squeeze legs of punch holder and reengage in holes at opposite end.



6
To use open end clamps, wrap and lace the clamp twice around, threading each wrap through the lock, apply clamp-tool and use as above.
Note: On applications such as glass, radiator spud or objects where punching would be injurious, pull tension - raise clamp tool to bend strip at right angle - remove winder - clip off ¼" above the bend - fold end, close over lock.



Part Identification for the F40 Installation Tool

Features:

- for applying ⅜" and ⅝" band clamps - F series
- Intermediate size tool with anti-backlash ratchet.
- steel
- weight: 1.53 lbs.
- length: 11"

Part #
F40

F-240

FCA-289

FF-290

F-292

FB-298

E-293

FC-229

641104F1

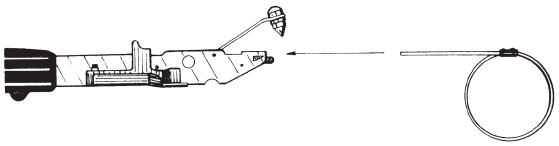
E295

Illustrations are not in correct proportion to one another.

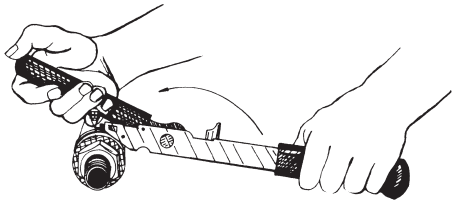
Qty Per Tool	Part Description	Part #
1	Frame	***F-240***
1	Punch and holder	***FCA-289***
1	Winder	***FF-290***
2	Retaining ring	***F-292***
1	Ratchet wrench	***FB-298***
1	Lever	***E-293***
1	⅜" clamp adapter	***FC-229***
1	Spring	***641104F1***
1	Ball	***E-295***

Operating Instructions for the F40 Installation Tool

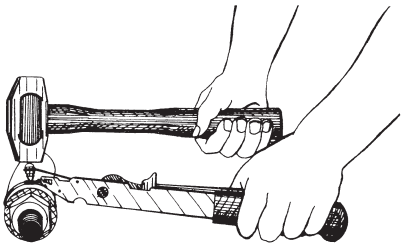
1
Push end of clamp into slotted end of clamp tool. Rotate ratchet wrench to engage clamp end in slot in winder.



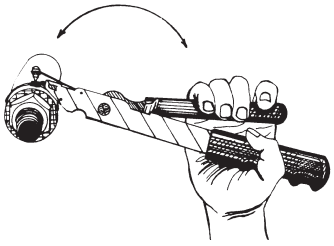
2
Push ratchet wrench forward with sufficient strokes until desired tension is obtained.



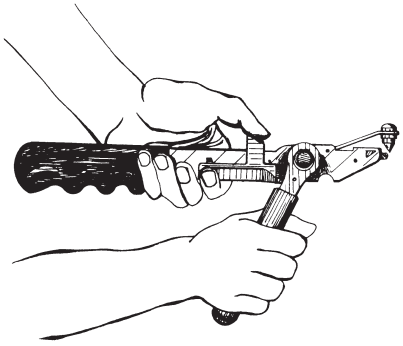
3
Grip ratchet wrench and tool together. Push punch down on lock and strike firm blow with hammer, thus locking the clamp tension.



4
Raise punch and while holding wrench and tool together, rotate tool forward and up against edge of the lock, breaking off tail piece.



5
To remove tail piece, rotate wrench until tail is free from slot in tool. With thumb, slide lever and remove winder and wrench from tool.



6
For application of ⅜" wide clamps, swing ⅜" adapter to forward position and follow steps 1 through 5.

Dixon, founded in 1916, is a premier manufacturer and supplier of hose couplings, valves, dry-disconnects, swivels, and other fluid transfer and control products. The company's global reach includes a wide range of products for numerous industries including petroleum exploration, refining, transportation, chemical processing, food & beverage, steel, fire protection, construction, mining and manufacturing. Dixon's strategic objective is to create solutions that make products safer, leak-free, longer lasting, and always available.

dixonvalve.com • *Customer Service:* **877.963.4966**

DIXON

The Right Connection®

Dixon Valve

800 High Street, Chestertown, MD 21620

fx 800.283.4966

YouTube

Dixon
Customer Service

© 2014 DVCC

BC1114WEB