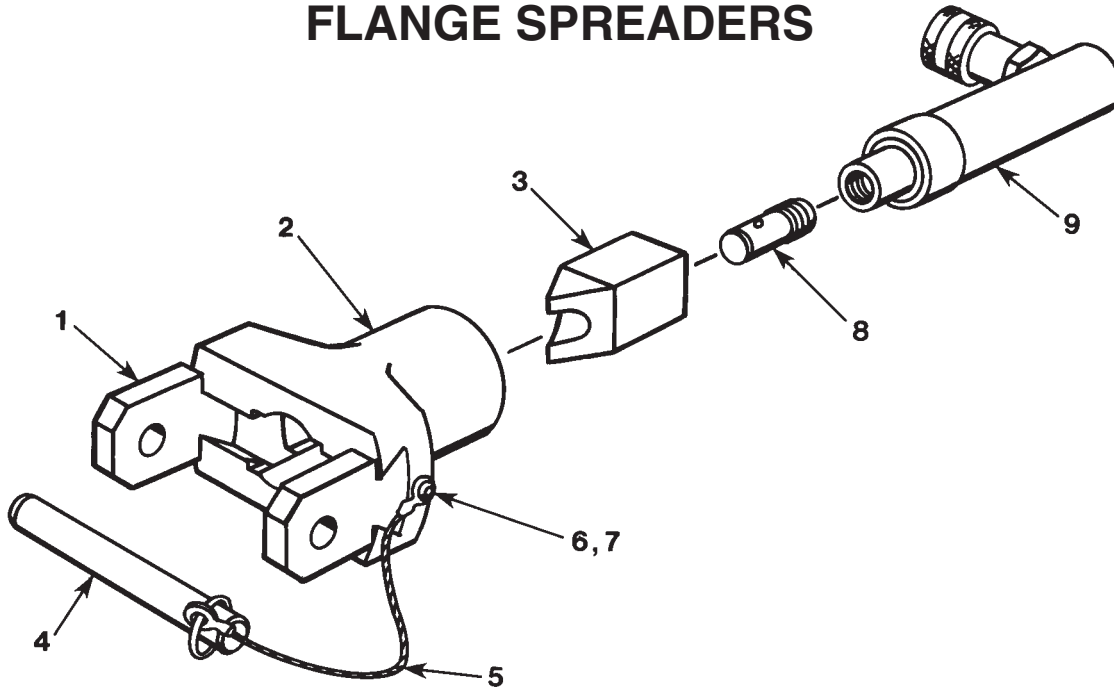


FLANGE SPREADERS



Item No.	Part No.	No. Req'd	Description
1	213086	2	Adjustable Jaw (For HFS3A)
	213091	2	Adjustable Jaw (For HFS6A)
2	213085	1	Body (For HFS3A)
	213090	1	Body (For HFS6A)
3	213076	1	Std. 60° Wedge (For HFS3A)
	213079	1	Std. 60° Wedge (For HFS6A)
4	213087	1	Pin with Ring (For HFS3A)
	213092	1	Pin With Ring (For HFS6A)
5	213088	1	Steel Wire (For HFS3A)
	213094	1	Steel Wire (For HFS6A)
6	213089	2	Retaining Screw
7	213093	2	Washer
8	213084	1	Ram to Wedge Adapter
9	C53C	1	Ram (See Form No. 100392)
	213083	1	Tube of Lubricant (Not Shown)
	307113	1	Small Flange Spreader (Consists of Items 1 thru 8)
	307114	1	Large Flange Spreader (Consists of Items 1 thru 8)

OPTIONAL CATALOG ACCESSORIES

213074	1	Blunt Wedge (For HFS3A)
213077	1	Blunt Wedge (For HFS6A)
213075	1	30° Wedge (For HFS3A)
213078	1	30° Wedge (For HFS6A)

SAFETY PRECAUTIONS

These instructions should be read and carefully followed before operating the Flange Spreader. Most problems are caused by improper operation or installation.

WARNING

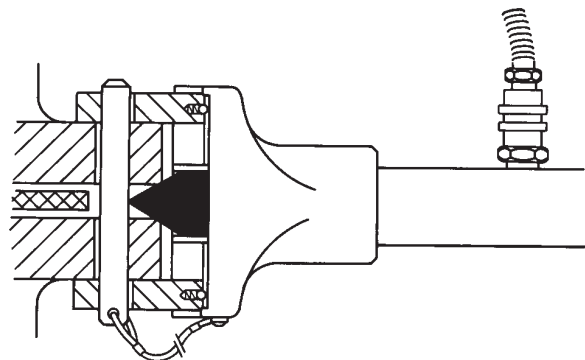
- The adjustable jaws must be up against the flanges to prevent bending the pin.
- Safety glasses must be worn at all times to help prevent eye injury.
- Relieve any pressure and drain the contents of the pipe before separating the flange. Failure to do so could cause personal injury.
- Do not exceed the rated capacity of the Flange Spreader. Using the Flange Spreader in an application beyond its capacity could cause tool damage and result in personal injury.
- A manually operated hydraulic pump must be used with the Flange Spreader to give the operator the greatest control over the spreading process.

OPERATING INSTRUCTIONS

1. Coat the adjustable jaws, pin, and angled surfaces of the wedge with the lubricant provided.
2. Couple the pump to the Flange Spreader. The wedge should be fully retracted at this time.

IMPORTANT:

- If using the HFS3A, do not spread flanges having a total thickness of more than 3-1/8".
 - If using the HFS6A, do not spread flanges having a total thickness of more than 6-1/4".
3. Position the adjustable jaws of the Flange Spreader against the flange face, and install the pin through the jaws and the flange holes.
 4. Slowly extend the cylinder while positioning the wedge into the opening in the flange.



NOTE: More than one Flange Spreader may be connected to one pumping unit if it is necessary to separate the flange equally.

OPTIONAL CATALOG ACCESSORIES

Wide Flange Openings: It is possible that the 60° wedge (provided) could come in contact with the pin assembly when attempting a wide flange opening. In this case, a blunt-faced 60° wedge (#213074 or #213077) is available.

Difficult Spreading Situations: The optional 30° wedge (#213075 or #213078) provides more than twice the spreading force of the 60° wedge when more force is needed to separate a flange.