

INSTRUCTIONS FOR PLASTIC PIPE AND FITTING PULLER

A. ADJUST "PULLER-CLAMP TO DESIRED PIPE DIAMETER

STEP# 1.

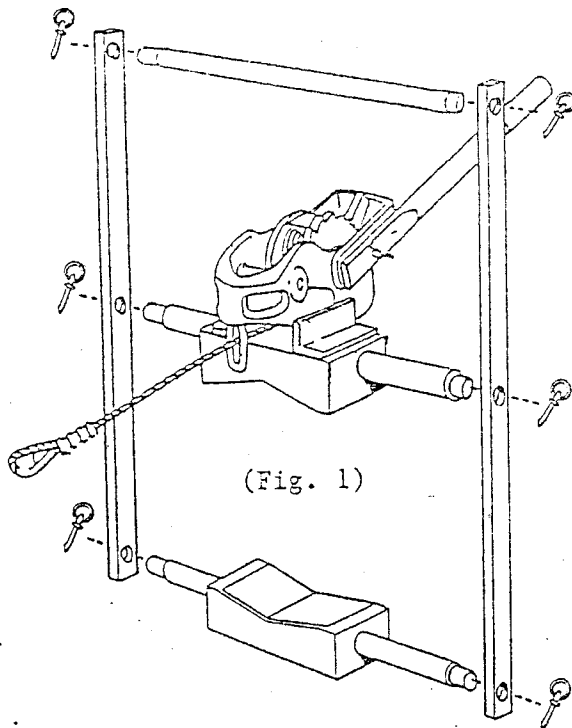
Remove detent pins located on the winch-block and top handle.

STEP# 2.

Spread both side rails and move winch-block to the desired diameter hole. The pipe diameter is stamped above the correct hole. Place top handle rod into its original position. (Fig. 1)

STEP# 3.

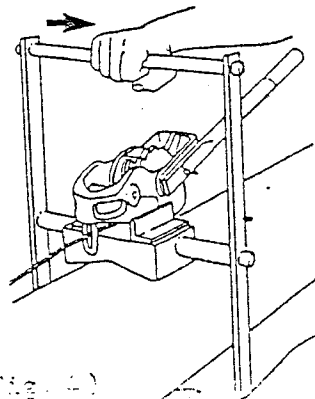
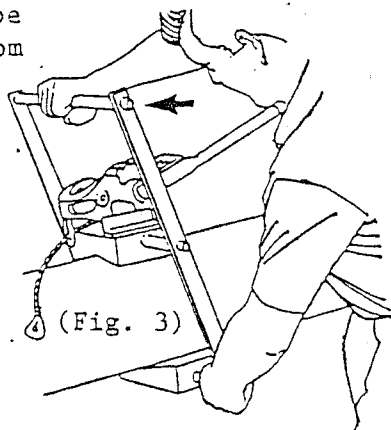
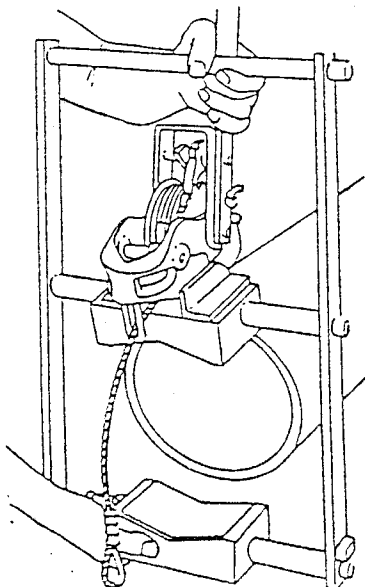
Close the side rails over the block axles and the handle rod. Replace all of the detent pins. The puller is now ready to use.



B. POSITIONING THE PULLER ON THE PIPE

STEP# 1.

Hold the puller by the top handle and slide it over the pipe to a distance approx. 3 feet from the end. The type of fitting being pulled and the allowable working space will also determine the distance required. The puller will slide freely along the pipe if the top and bottom blocks are kept parallel with each other. (Fig. 2)

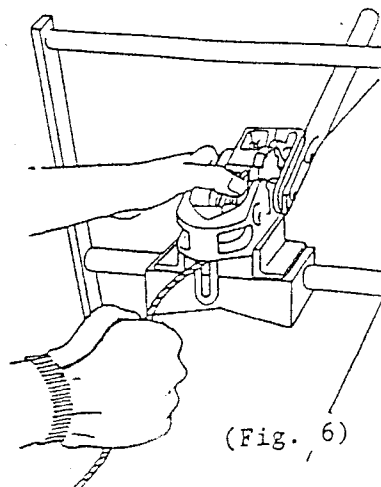
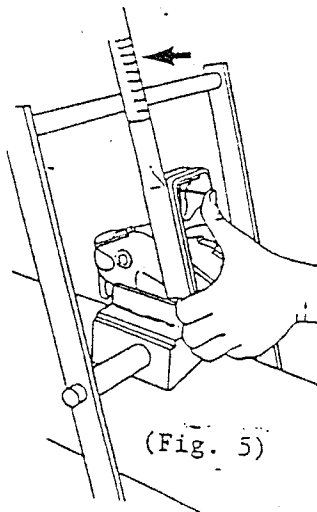


STEP# 2.

To lock puller, hold the bottom block against the pipe and jerk the top handle forward towards the end of the pipe. (Fig. 3) The puller should bind against the pipe and not slide. To unlock the puller, jerk the handle in the opposite direction. (Fig. 4)

STEP# 3.

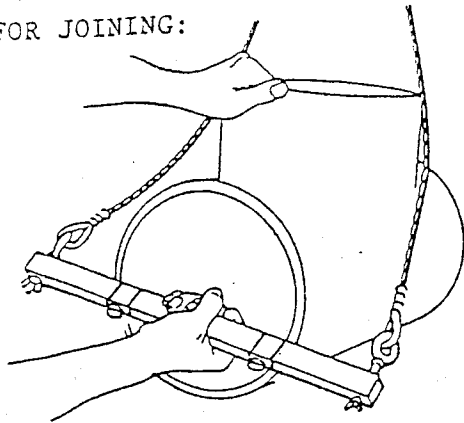
To unwind cable from the winch, read instructions printed on the winch handle. (Fig. 5) When the winch drum is free to rotate, pull out the cable to the end of the pipe. (Fig. 6)



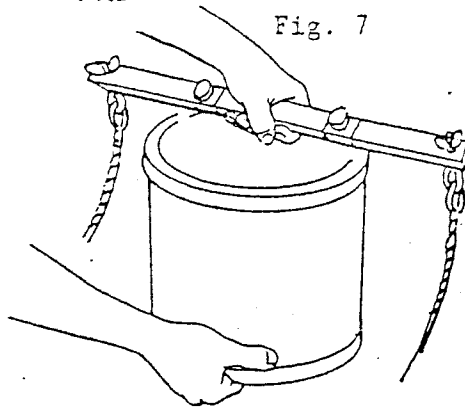
C. SELECT THE PROPER FITTING ATTACHMENT

There are three basic attachments for joining plastic pipe fittings. Each one is designed for pulling a specific type of fitting. The following guide will help you choose the correct attachment.

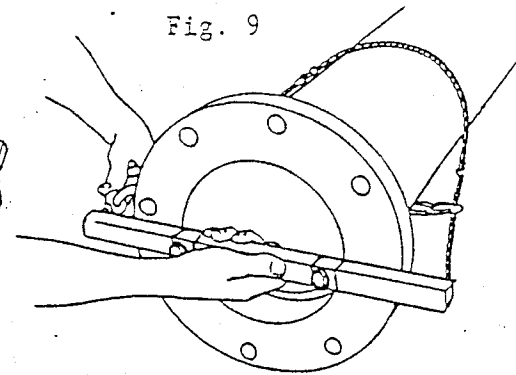
ATTACHMENT #1. THE "SOCKET-ALIGNMENT BAR" FOR JOINING:



STRAIGHT TEES

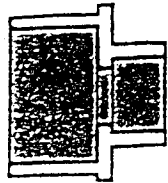


COUPLINGS

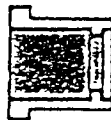


FLANGES
(1-piece & Van Stone)

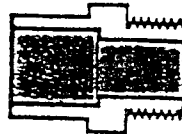
Other In-Line fittings



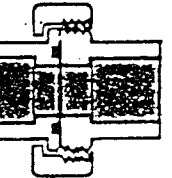
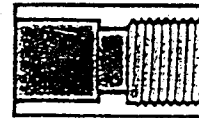
Reducer
Couplings



Reducer
Bushings



Male & female Adapters



Unions

HOW TO USE THE "SOCKET-ALIGNMENT BAR"

STEP# 1

Place the bar against the fitting socket so that it spans the center of the entrance. (See Fig. 7)

STEP# 2

Loosen the locking knobs and move each slide in an opposite direction towards the diameter markings on the bar. Continue sliding each one until they touch the inside socket walls.

STEP# 3

Tighten each locking knob to secure the slides while they are still touching the socket walls. This will keep the bar located in the center of the fitting and will keep it aligned and even during the pulling operation. (Fig. 8)

NOTE:

The same steps are used for FLANGES except that the bar is placed against the flange sealing-surface and the slides are adjusted to touch the edges of the water-way opening. The opening will be slightly smaller in diameter than for a socket. Move the slides accordingly. (See Fig. 9)

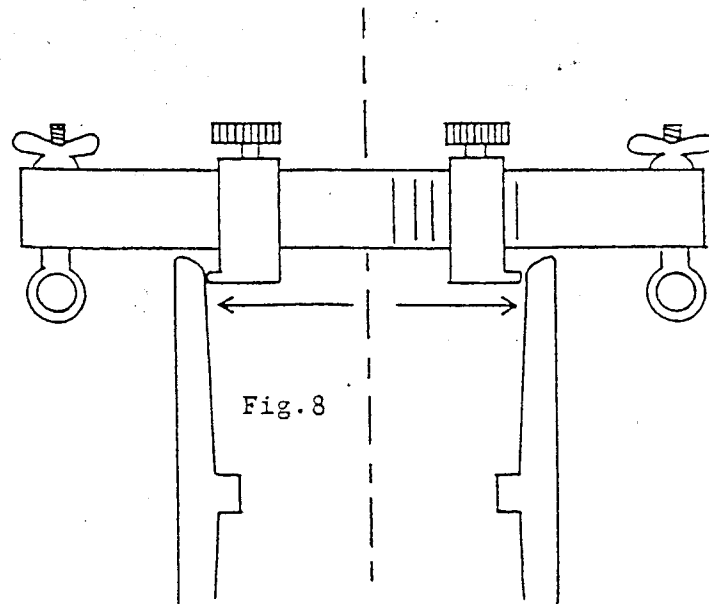
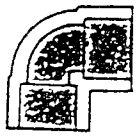


Fig. 8

ATTACHMENT #2. THE "ELBOW-BLOCK"

FOR JOINING:

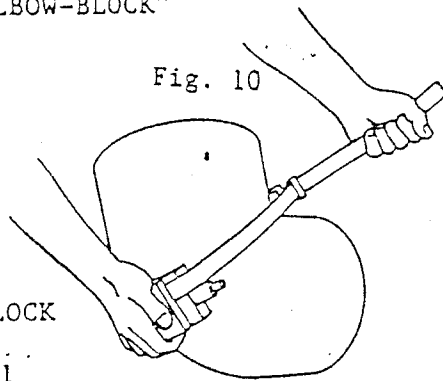


90° ELBOWS



45° ELBOWS

Fig. 10



HOW TO USE THE ELBOW-BLOCK

STEP# 1

Place the rubber padded side of the block against the heel of the elbow. Position the block so that the two, extended pins are located at approximately the center-line of the elbow. (See Fig. 10)

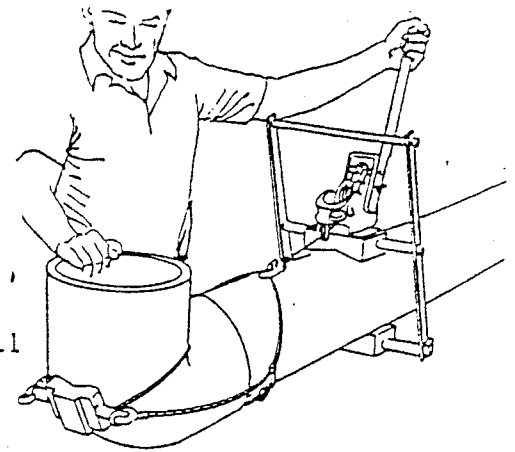


Fig. 11

STEP# 2

The nylon strap must be tightened around the crotch of the elbow. It should be snug enough to keep the block from slipping in either direction. (See Fig. 11)

ATTACHMENT #3. PIPE-TO-PIPE CLAMP

If the piping installation requires many long lengths of pipe to be joined by couplings, then an additional clamp should be used on the un-joined length of pipe.

This clamp will look like the winch clamp, only without the winch attached. It is adjusted and fastened to the pipe in the very same manner as was explained in section A.

Place the clamp somewhat closet to the end of the pipe, but not so close that it will interfere with the socket depth needed for the coupling already joined to the opposite length of pipe.

Measure the socket depth in advance and mark the pipe.

STEP# 2

Find the anchor eye-plates attached to the sides of the top block. Snap the cable hooks from the puller into the hole in each plate. The clamp will automatically stay locked as force is applied during the pulling process.

D. ATTACHING THE CENTER-LINE CHAIN DEVICE

STEP# 1

Each pipe diameter being joined will require a separate chain length. The proper diameter will be marked on the attached, brass tag on each chain. Use only one length for a specific diameter of pipe and fitting. (See Fig. 12)

STEP# 2

Select the correct chain length for the pipe diameter you are joining. Locate the snap-hooks held in middle of each cable by copper sleeves.

Snap each end of the chain length onto these hooks. The chain should hang freely suspended across the wire cables.

The chain will ride against the under-side of the pipe and will keep the cables centered on the pipe during the pulling

The purpose of the chain device feature is to allow for the straight and even pull of a fitting onto the pipe. It will prevent the fitting from becoming cocked sideways on the pipe.

If solvent cemented joints are being made, a crooked insertion can cause gaps in the joint and a possible leak.

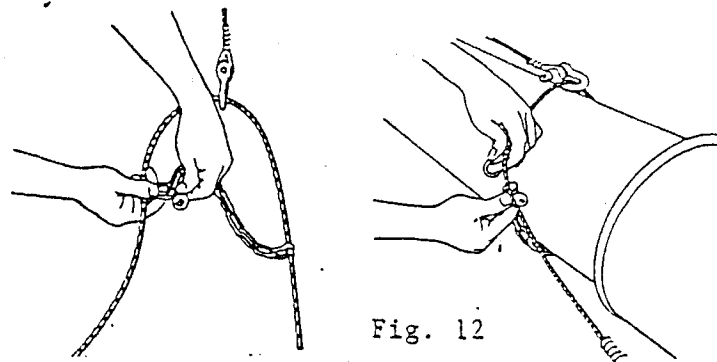


Fig. 12

E. PULLING THE JOINT TOGETHER AND COMPLETION

Make sure that the PULLER-CLAMP is securely fastened onto the pipe. The chain should be suspended under the pipe between the two cables.

STEP# 1

Snap the cable hooks into the eyebolts (each end of BAR attachment) or into the eye-plates located on the sides of the ELBOW-BLOCK and PIPE-TO-PIPE attachments.

STEP# 2

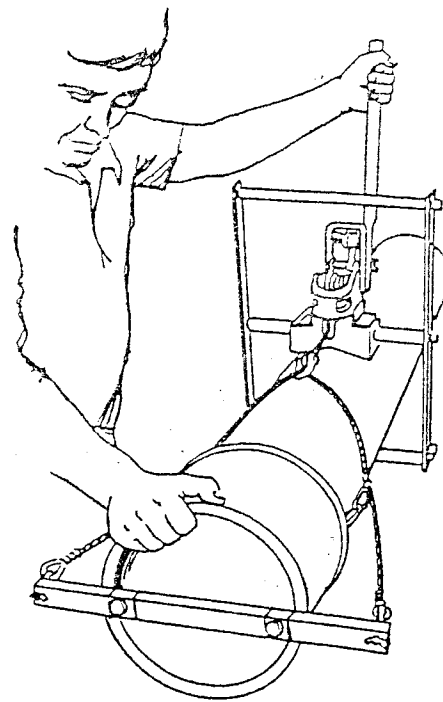
Apply primer and solvent cement to the pipe and fitting. If elastomeric gasket joints are being made, apply an approved lubricant as needed. ALWAYS follow the joining recommendations of the pipe and fitting manufacturer.

STEP# 3

Immediately after applying the solvent cement, push the fitting onto the pipe as far by hand as possible. If pipe is being fitted into a socket, then the pipe is pushed by hand until the winch is needed.

STEP# 4

Working quickly, apply force to the winch handle using a series of short strokes. This will take up the cable slack and pull the center-line device tightly against the pipe. Make sure that the chain can move freely along the bottom of the pipe during this step.



STEP# 5

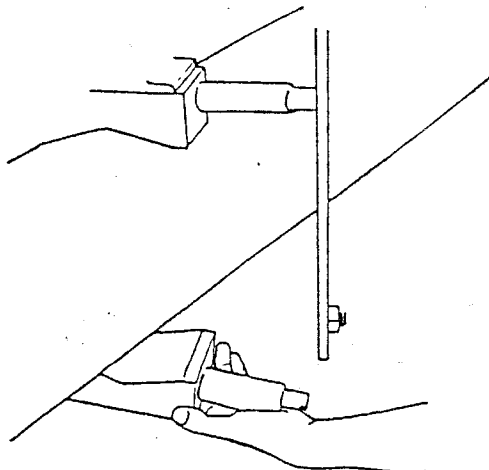
Continue operating the winch until the pipe reaches the bottom of the fitting. A depth of entry mark should be made on the pipe before applying the primer and cement in step# 2.

STEP# 6

When the pipe and fitting have been bottomed-out, leave the joint locked up for at least three minutes to allow the solvent cement to take a "set." This is necessary because fittings have a tapered socket that can cause the pipe to back-out slightly. If this happens, the cement bond will be defective and the joint may leak or separate under hydrostatic pressure. Check with the cement manufacturer if you have any questions concerning the curing time.

FINAL STEP

To remove the puller-clamp from the pipe, release the tension from the winch and unlock the clamp as explained in Section B, Step# 2. (See Fig. 4). Remove the bottom block from the side rail. The entire unit can now be removed from the pipe.



SAFETY PRECAUTIONS

- Never use the puller and winch to support human cargo in any manner.
- Never load the puller winch and attachments beyond their rated capacity.
- Never use the puller for any application other than joining plastic pipe and fittings.
- Do not use the puller if the winch, wire ropes, or any of the attachments are severely worn or damaged.
- Do not make any part substitutions or use any attachments not included in the kit.

PIPE TEC

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