

# 8"-16" Come-Along Operating Instructions

## **EACH HYDRAULIC COME-ALONG KIT CONTAINS:**

- 4 Rubber-lined half collars for each size (8", 10", 12", 14", and 16")
- 2 Locking wedges with cylinders
- 2 Locking wedges with chain slots
- 2 Five-foot chains
- 1 Hydraulic pump with gauge and hose
- 1 Special 6-lb. dead blow hammer
- 1 Heavy duty band (strap) clamp
- 2 Ring belt straps

## **PROCEDURE FOR USE WITH PIPE TO PIPE JOINTS**

1. Align pipe horizontally and laterally using blocks of wood or other nonmetallic material to raise pipe off the ground. Make sure both bonding surfaces are clean; then, apply adhesive per NOV Fiber Glass Systems bonding instructions. Manually slide the spigot into the bell as far as possible. When inserting into couplings, ensure that the spigot does not insert more than halfway. (Divide the total length of the coupling by two and place a mark that distance away from the end of the spigot.) The spigot must not insert past the midway point of the coupling.

2. Place half collars around pipe with the ends of each collar aligned an equal distance from the joint. The collars should be as far from the joint as the chain will allow (approximately two feet). The wide ends of the wedge-shaped slides face toward the joint, and should be aligned along the axis of the pipe. Supporting the pipe with blocks of wood will ease the installation of the wedges.

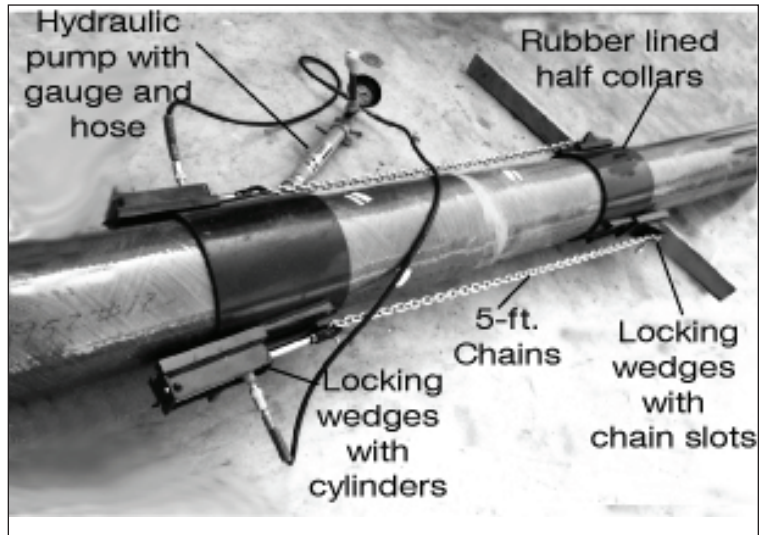
3. Place the locking wedges on the collar slides with the two cylinders on one set. Gently tap all wedges with the supplied hammer to snug collars on pipe for initial grip. Alternately tap on the red painted lugs to position the wedges uniformly along the slides.

4. Connect the hydraulic pump hose to the connectors provided on each piston. Tighten the connector until hand tight.

5. Pull each piston rod out to its maximum travel, and connect each chain; one end attaches through the eyelet on the piston rod; the other into the slot on the opposing wedge. Keep minimum slack in both chains, and align each chain along the axis of the pipe.

6. Using the hydraulic pump, slowly raise the pressure. For 8"-10" standard product, the recommended hydraulic gauge pressure range is 1,500-1,750 psig. For 12"-16" standard product the recommended pressure is 1,750-2,000 psig.

For 8"-10" Performance Plus product the recommended pressure is 1500-2000 psig. For 12"-16" Performance Plus product the recommended pressure is 2,000-2500 psig.



USE ONLY ENOUGH PRESSURE TO LOCK UP THE JOINT. DO NOT EXCEED THE RECOMMENDED PSIG VALUE. Do not insert the spigot past midway of the coupling. As the joint pulls together, tap on the bell of the joint with the supplied dead blow hammer. (Do not attempt to assemble pipe joint without the use of the dead blow hammer or a wooden block such as a 2 x 4.) Tap entirely around the joint. To ensure alignment and to prevent cocked joints, use sufficient force to vibrate the joint.

7. If lock-up cannot be obtained, check for the following:

That cylinders have not bottomed out. Rehook the chain for additional stroke if necessary.

Pipe alignment across the joint. Good alignment is essential.

Pull the joint apart and inspect for proper dimensional tolerance. A joint with the improper taper angle will not lock up. Feather edges (edge of spigot O.D.) that are too thin will allow spigots to insert too far and butt against each other when using couplings.

8. **CAUTION:** For long pipe runs (ditch piping), the joint section must be supported at all times until fully cured. Lifting near the center of the pipe with a backhoe or side boom tractor without support under the joint can damage joints that are not cured. Lifting near the center of the pipe with a backhoe or side boom tractor to help alignment is acceptable as long as the joint does not support the weight of the piping section. Blocks or skids must be used to support the entire joint section during the installation process until the joint is fully cured. Pipe should always be installed in a straight alignment. Do not install with pipe in a bind. The pipe must be resting on the blocks with good alignment before the come-along collars are removed. Do not attempt to remove the collars while pipe is still attached to the side boom cable or tractor bucket. This could result in damage to the pipe. If collars are resting on blocks after bonding, leave pressure on the come-along and pick up gently with the chains just enough to remove collars. Do not place excessive bending stress across the joint. It is recommended that the skids be moved from under the collars before the joint is put together.

9. After the joint is completed, release hydraulic pressure and remove collars by knocking off wedges with a hammer. **HAMMER ONLY ON RED PAINTED LUGS.** Do Not pick up with the elbows.

#### **PROCEDURE FOR USE WITH PIPE TO FITTING JOINTS**

The band (strap) clamp firmly grips the outside diameter of the fitting. The ring belt straps are used along with the hydraulic come-along to pull the joint together. This is especially helpful when joining large diameter fittings to pipe spigots, because slings have a tendency to slip, and hydraulic come-along collars do not fit the fitting O.D.'s.

1. Place two ring belt straps over one end of a band strap clamp and separate so that one is on each side of the fitting. Complete the step by continuing around the fitting with the strap and threading it through the clamping device. Pull out any slack.

2. With the clamp handle screwed all the way out and the position of the ring belt straps 180° apart, turn the clamp handle clockwise. This tightens the strap around the fitting and provides a secure "foothold" for attaching the hydraulic come-along.

3. Attach the half-collars and wedges with cylinders to the pipe.

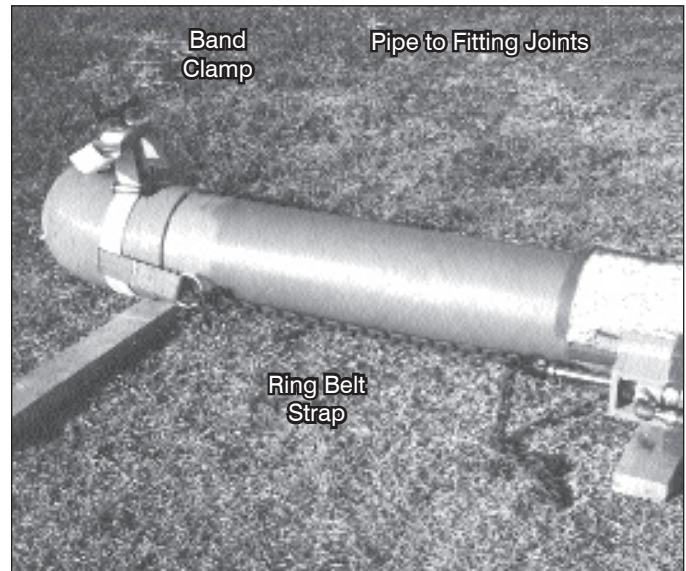
4. Hook the chains through the ring belts and pull the fitting onto the pipe as described above.

Contact NOV Fiber Glass Systems for additional information.

**WARNING: PRESSURES HIGHER THAN MAXIMUM GAUGE PRESSURES MAY CAUSE DAMAGE TO EQUIPMENT OR PIPE OR MAY RESULT IN PERSONAL INJURY TO USER.**

#### **PRECAUTIONS**

1. Be sure that the gauge has not be damaged and is working properly.
2. Keep slide surfaces greased and free from grit, dirt and rust.
3. Periodically check slides for nicks, burrs or other damage that may cause slide hang-up.
4. Each cylinder is rated to two tons. If chains are damaged or lost, contact NOV Fiber Glass Systems for replacement.



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