

Bray Retaining Cable Kit for Hand Wheel Chain System Safety and Installation Instructions

Safety Information - Definition of Terms

**WARNING**

indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.

**CAUTION**

indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

used without the safety alert symbol indicates a potential situation which, if not avoided, may result in an undesirable result or state, including property damage.

Safety Instructions - Read and follow these instructions - Save these instructions



Warnings

- 1. Failure to read, to understand, and to follow warnings and instructions can result in serious injury or fatality.**
- 2. Bypassing this safety device may lead to serious injury or fatality.**
- 3. Wire rope needs proper care and maintenance for optimal safety and long service life.** For a better understanding of wire rope we highly recommend the Wire Rope Users Manual by the Wire Rope Technical Board.
- 4. Inspect wire rope regularly.** Use inspection instructions as guidelines only. Check the general condition of the wire rope. Also, look for localized damage and wear, especially at wire rope attachments. Inspect all parts that come in contact with the wire rope. Look for kinks, broken wires, abrasions, lack of lubrication, rust damage, crushing, and a reduction of diameter, stretch or other obvious damage. If **any** of these conditions exists or if there is any other apparent damage to the wire rope, dispose of the wire rope. For specific inspection procedures, refer to various OSHA and ANSI publications.
- 5. Attachments must have at least the same Working Load Limit as the wire rope used.** Clips, sleeves, shackles, etc. must match in size to provide adequate safety protection. **Proper installation of clips to wire, and wire to designated parts of valve is crucial for maximum efficiency and safety.**

When applying U-Bolt over dead end of wire rope – live end rests in saddle. Tighten nuts evenly, alternating from one nut to the other. **See Figure 2 on Page 3.**

When creating a loop around specified equipment, the loop must be secure enough so that it will not slip off.

When applying anchor shackle with cotter pin,

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Warnings (Continued)

make sure nut is securely fastened and cotter pin is installed so that the nut cannot come loose from the bolt. **See Figure 3.**

- 6. Avoid shock loads.** Avoid impacting or jerking of cable. Do not hang from wire rope. Keep out

of the line of force of any load. This device is a safety precaution; any unnecessary load placed on the wire rope may reduce its ability to function properly.

Hazard-free Use

This device left the factory in proper condition to be safely installed in a hazard-free manner. The notes and warnings in this document must be observed by the user if this safe condition is to be maintained and hazard-free operation of the device assured.

Take all necessary precautions to prevent damage to the retaining safety cable and parts due to rough handling, impact or improper use.

Installation For 8" & 12" Hand Wheel Chain System

Read through and understand all of the instructions before beginning

Each Kit Contains:

1. **One** 5' long 3/16" dia. galvanized wire rope with a stop sleeve on each end
2. **Four** 3/16" galvanized wire rope clips

1. Dismantle two wire rope clips.
2. Loop wire rope around bracket or neck of valve. **See Figure 1.**
3. Close the loop by applying a wire rope clip. Secure the loop with the second wire rope clip as tightly as possible. See **WARNING Note 5** and **Figures 1 & 2.**
4. Dismantle the two remaining wire rope clips.
5. Loop wire rope around one "arm" of the chain guide. **See Figure 1.**
6. Close the loop by applying a wire rope clip. Secure the loop with the second wire rope clip as tightly as possible. See **WARNING Note 5** and **Figure 2.**

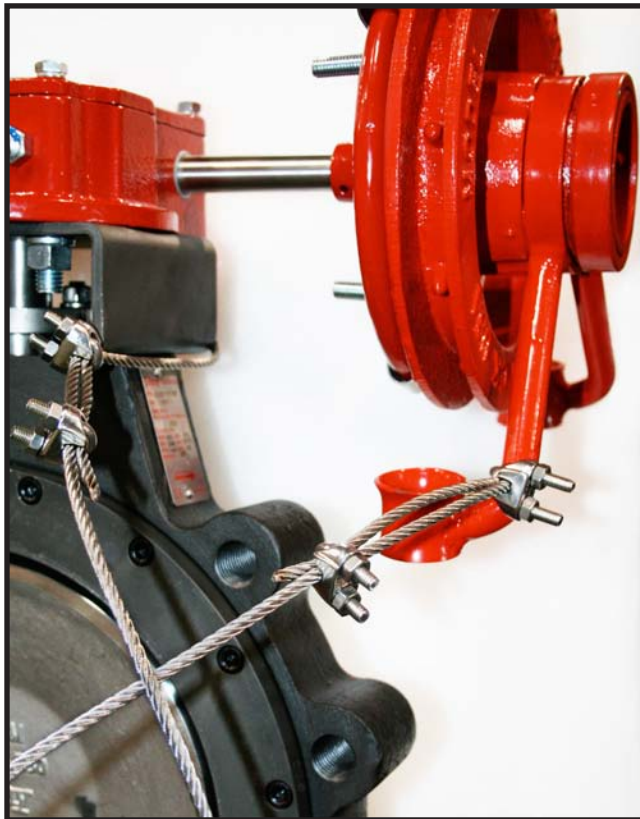


Figure 1: Wire rope secured around the bracket of valve and one "arm" of the chain guide.

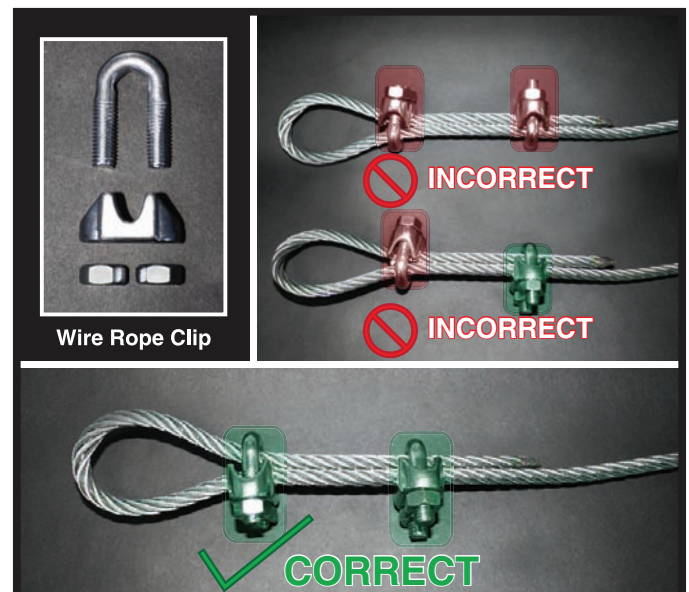


Figure 2: Correct assembly and use of wire rope clips.

Installation For 18" & 24" Hand Wheel Chain System

Read through and understand all of the instructions before beginning

Each Kit Contains:

1. **One** 5' long 1/4" dia. galvanized wire rope with a stop sleeve on one end and a loop at the other end
2. **Two** 1/4" galvanized wire rope clips
3. **One** 3/8"-bolt anchor shackle with cotter pin

1. Dismantle the anchor shackle by removing cotter pin, loosening and removing nut and bolt from the u-shaped body. **See Figure 3.**
2. Install the anchor shackle through the loop on the end of the wire rope and through the hole on top of the chain guide. Secure anchor shackle by fastening the nut and installing the cotter pin. **See WARNING Note 5 and Figures 3.**
3. Dismantle the two wire rope clips.
4. Loop wire rope around bracket or neck of valve. **See Figure 4.**
5. Close the loop by applying a wire rope clip. Secure the loop with the second wire rope clip as tightly as possible. **See WARNING Note 5 and Figures 2 & 4.**

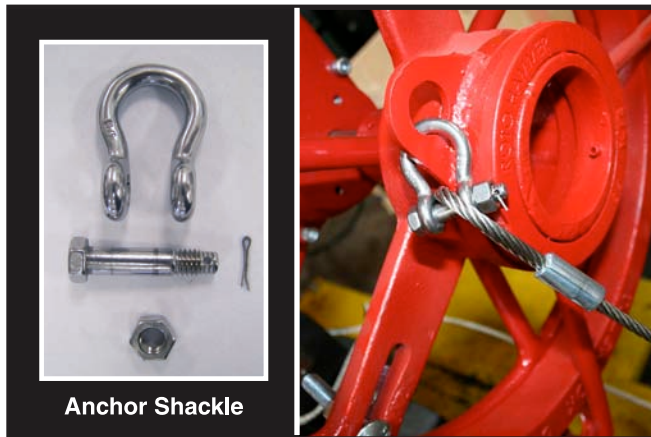


Figure 3: Anchor Shackle connected to the chain guide and Anchor Shackle Assembly.



Figure 4: Wire rope secured around the neck of the valve.