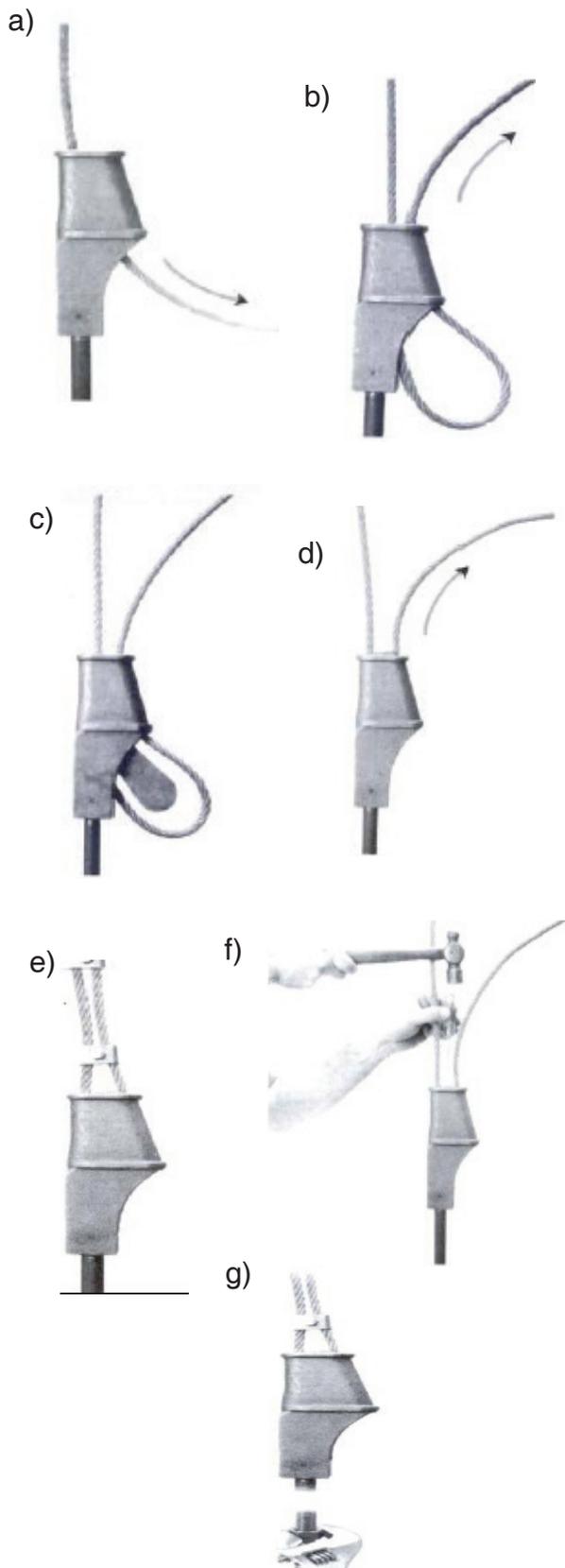


Wire Rope Socket

Wedge Shackle Installation



The wedge socket uses a special socket in which the rope is looped inside the socket and secured by a compatible wedge. The inside configuration of the socket and wedge are designed together. This results in a very secure fastening when load is applied to the finished connection. Care is required to ensure the wedge is placed in the proper orientation in the socket. The small end of the wedge must face the small end of the socket. When performed properly, the initial installation and reapplication for shortening are quick and easy.

- Insert the end of the wire rope down through the wedge socket body, taking up the slack in the rope.
- Thread the end of the rope back up the front side of the wedge socket body, leaving just enough loops to install the wedge socket. Insure the rope is placed into the body of the socket as shown in the pictures or it will not align properly.
- Place the wedge socket into the loop. Wedge inserts are marked for the rope diameter it is to be used with (i.e. 3/8 for 3/8" rope, 1/2 for 1/2" rope etc).
- While pulling down on the hoist rope with one hand to keep it taut, pull up on the loose end with a quick pull until the rope loop and the wedge insert are seated in the socket body.
- After all ropes are installed, let the weight of the car and counterweight rest on the ropes. The rope and wedge insert will rise about 1" to the final "set" under load. Cut the surplus rope off the tail end after binding, but be sure to leave approximately a 6" tail. Install a retaining clip as shown to prevent the rope wedge insert from slackening. Install a second retaining clip to retain the tail.
- Initial Equalization, Any rope ropes that are slack can be easily adjusted by tapping the wedge insert down. Use a hammer and drift pin and insert the drift pin into the top of the socket body between the rope and its tail end. Tap the insert until the rope slides and retighten. Repeat the procedure on any remaining ropes until all ropes have equal tension.
- Equalize the final rope tension on the ropes by adjusting the rod nuts while holding the wedge socket body to prevent rotation. Tie down the rope sockets to prevent rotation.

Note:

- The purpose of the retaining wire rope clips is to hold the dead end of the wire rope in place. The retaining clips bear no load.
- When installing wire rope retaining clips, do not apply more than 8 ft-lbs of torque on the bolt and nut. This will be adequate to hold the wedge insert and rope tail in place. **Caution:** 8 ft-lbs of torque will begin to deform the retaining clip assembly. Forces over 10 ft-lbs will cause the bolt to shear.
- After load is placed on the wedge socket, it may be necessary to loosen and readjust the retaining clips since movement of the wire rope under tension/load will misalign the clips.