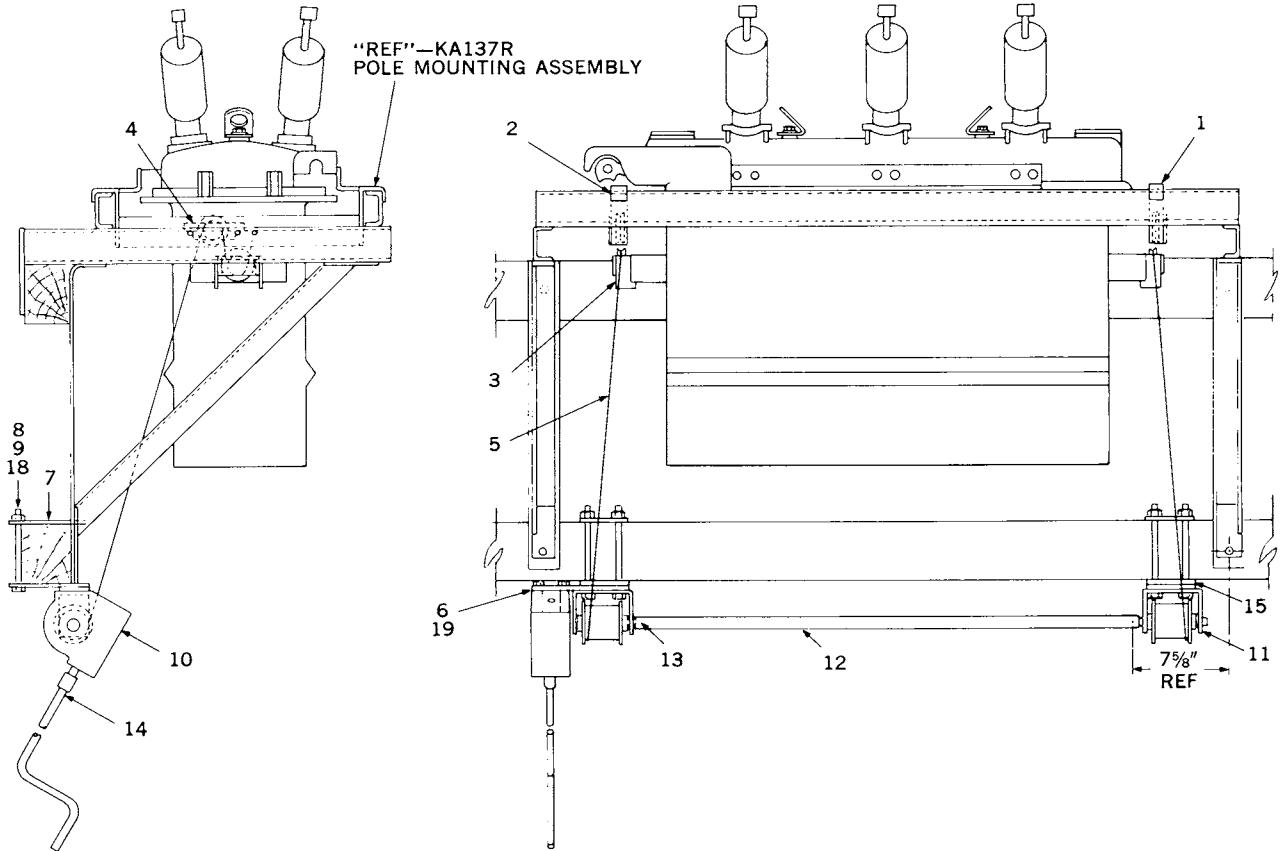


KA662R tank-lifting windlass assembly and installation instructions



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Safety for life



Eaton meets or exceeds all applicable industry standards relating to product safety in its Cooper Power™ series products. We actively promote safe practices in the use and maintenance of our products through our service literature, instructional training programs, and the continuous efforts of all Eaton employees involved in product design, manufacture, marketing, and service.

We strongly urge that you always follow all locally approved safety procedures and safety instructions when working around high voltage lines and equipment, and support our “Safety For Life” mission.

Safety information

The instructions in this manual are not intended as a substitute for proper training or adequate experience in the safe operation of the equipment described. Only competent technicians who are familiar with this equipment should install, operate, and service it.

A competent technician has these qualifications:

- Is thoroughly familiar with these instructions.
- Is trained in industry-accepted high and low-voltage safe operating practices and procedures.
- Is trained and authorized to energize, de-energize, clear, and ground power distribution equipment.
- Is trained in the care and use of protective equipment such as arc flash clothing, safety glasses, face shield, hard hat, rubber gloves, clampstick, hotstick, etc.

Following is important safety information. For safe installation and operation of this equipment, be sure to read and understand all cautions and warnings.

Hazard Statement Definitions

This manual may contain four types of hazard statements:

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

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.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in equipment damage only.

Safety instructions

Following are general caution and warning statements that apply to this equipment. Additional statements, related to specific tasks and procedures, are located throughout the manual.

DANGER

Hazardous voltage. Contact with hazardous voltage will cause death or severe personal injury. Follow all locally approved safety procedures when working around high- and low-voltage lines and equipment.

G103.3

WARNING

Before installing, operating, maintaining, or testing this equipment, carefully read and understand the contents of this manual. Improper operation, handling or maintenance can result in death, severe personal injury, and equipment damage.

G101.0

WARNING

This equipment is not intended to protect human life. Follow all locally approved procedures and safety practices when installing or operating this equipment. Failure to comply can result in death, severe personal injury and equipment damage.

G102.1

WARNING

Power distribution and transmission equipment must be properly selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures. Failure to properly select, install or maintain power distribution and transmission equipment can result in death, severe personal injury, and equipment damage.

G122.3

KA662R Tank-lifting windlass assembly and installation instructions

For Types R, RE, RV, RVE, W, WE, WV, & WVE Reclosers in KA136R, KA137R, KA33W, or KA51W Mountings

General

WARNING

Power distribution and transmission equipment must be properly selected for the intended application. It must be installed and serviced by competent personnel who have been trained and understand proper safety procedures. These instructions are written for such personnel and are not a substitute for adequate training and experience in safety procedures. Failure to properly select, install, or maintain power distribution and transmission equipment can result in death, severe personal injury, and equipment damage.

G122.3

Easy access for internal inspection of pole-top mounted reclosers in the R and W series is possible with the installation of a KA662R tank-hoisting mechanism. This assembly can be used with crossarm mounting frames KA136R, KA137R, the two-pole mounting frame KA33W, and the KA51W frame which utilizes steel crossarm channels. The windlass assembly simplifies lowering of the

recloser tank but cannot be used for lowering the entire recloser. To lower the tank, detach the 10 cover-to-tank cap screws and crank windlass.

For shipping and storing convenience, the complete windlass is shipped dismantled and must be assembled to the recloser and its mounting frame. All bearings, bushings and the gear box, however, have been lubricated at the factory with wheel-bearing grease, so no further servicing is required. Parts furnished are shown in Figure 1 as attached to a KA136R or KA137R mounting frame. The same parts listing is used for the KA33W and the KA51W except that these frames include mounting pads for this tank hoisting mechanism. Standard cable assemblies are about 19 feet long so that they can lower the tank about 6 feet, if necessary.

Assembly

1. Attach the mounting strap (6) to the gear box and spool assembly (10) with the two 1 1/2-inch long cap screws (19).
2. Attach the mounting plate (15) to the separate spool assembly (11). Use the 7-inch long captive screws furnished with the spool assembly.

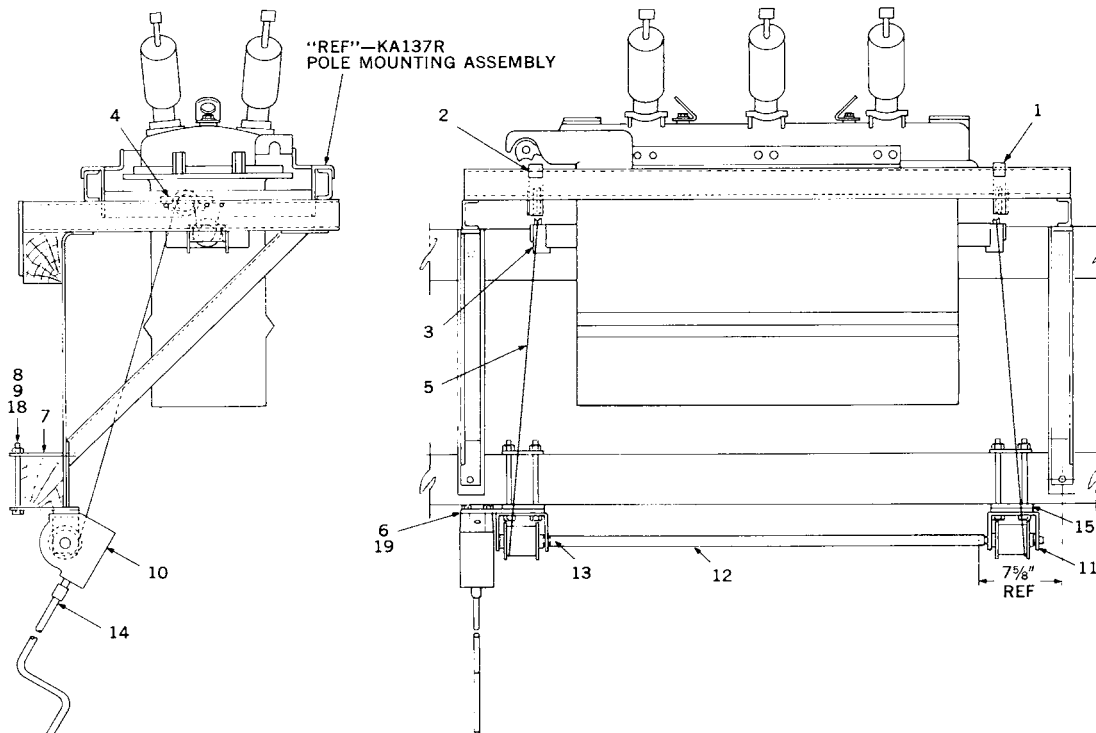


Figure 1. Furnished parts (listing on page 2)

KA662R Tank-lifting windlass assembly and installation instructions

3. Interconnect the two spool assemblies with pipe (12) and roll pins (13).
4. Attach this partial assembly (6, 10, 11, 12, 15) to the lower crossarm (or on the cross brace pad when assembling to a steel KA51W frame) with the 7-inch spool captive capscrews mounting plate (7) and the loose 6 1/2-inch capscrews (8) and fasteners (9, 18).
5. Lay sheave support brackets (1, 2) across the top of the frame and attach the upper sheaves (4) to these brackets and the lower sheaves (3) to the tank.
6. Remove the hex nuts from stud ends of cables (5). Thread stud ends of cables through the tank sheaves, up through the upper sheaves and into the holes on the windlass spools. Fasten the stud terminal ends of the cables at the spools with the previously removed hex nuts. Suspend the looped end of the cable at the round head pin inside the upper sheave brackets (1, 2).
7. Take up slack in cables by operating the windlass crank (14) while directing both cables in an even wind. Both spools should contain the same amount of cable so the tank will be level when lowered.

Note: Two extra 1-inch cotter pins (16) are furnished with this assembly as spare gear box shearpins. These should be left tied to the windlass pipe until required.

Table 1. KA662R Assembly parts list.

| Item no. | Description | Catalog number | Qty. per assy. |
|----------|--|----------------|----------------|
| 1 | Bracket, sheave support, R.H. | KA300R | 1 |
| 2 | Bracket, sheave support, L.H. | KA301R | 1 |
| 3 | Lower sheave | KA121R | 2 |
| 4 | Upper sheave | KA123R | 2 |
| 5 | Cable assembly | KA592R | 2 |
| 6 | Mounting strap, gear box and spool | KP1633R1 | 1 |
| 7 | Mounting plate, crossarm | KP1711R | 4 |
| 8 | Capscrew, 1/2–13 x 1 UNC-2A, hex stl., galv. | K730115150700A | 8 |
| 9 | Nut, 1/2–13 UNC-2B, hex stl., galv. | K880215113050A | 4 |
| 10 | Gear box and spool assembly | KA663R | 1 |

| Item no. | Description | Catalog number | Qty. per assy. |
|----------|---|----------------|----------------|
| 11 | Spool assembly | KA15CE2 | |
| 12 | Pipe, spool inter-connection | KKP1054CE7 | 1 |
| 13 | Roll pin, 7/32 x 1-1/4, pipe | K970801218125C | 2 |
| 14 | Crank handle | KP1031R | 1 |
| 15 | Mounting plate, spool | KP1712R | 1 |
| 16 | Cotter Pin, 1/4 x 1, brass, spare gear box shear pins | K970525125100A | 2 |
| 17 | Copper wire, for tying spare shear pins | — | 1 |
| 18 | Lockwasher, 1/2 med. stl. zn. plt., Iridite #3 | K900815050000A | 4 |
| 19 | Capscrew, 1/2–13 x 1-1/2 UNC-2A, hex stl., galv. | K730115150150A | 2 |

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