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## **IMPORTANT SAFETY INSTRUCTIONS**

Please read this manual carefully and follow its instructions. Improper use or failure to follow these instructions could result in serious injury, death or property damage. Operators should be instructed in the safe and proper use and maintenance of this product. Keep this manual for future reference.

The following safety precautions call attention to potentially dangerous conditions.



**DANGER:** Immediate hazards which **WILL** result in severe personal injury or death.



**WARNING:** Hazards or unsafe practices which **COULD** result in *severe* personal injury or death.



**CAUTION:** Hazards or unsafe practices which **MAY** result in *minor* personal injury or product or property damage.

**NOTE:** Instruct operators in the safe, proper use and maintenance. Keep this manual for future reference.

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## **INSTALLATION**



**WARNING:** Failure to read, understand or follow these instructions could lead to hazards or unsafe practices **COULD** result in *severe* personal injury or death.



**CAUTION:** Instruct operators in the safe, proper use and maintenance of this product. Hazards or unsafe practices **MAY** result in *minor* personal injury or product or property damage.

### **MOUNTING**

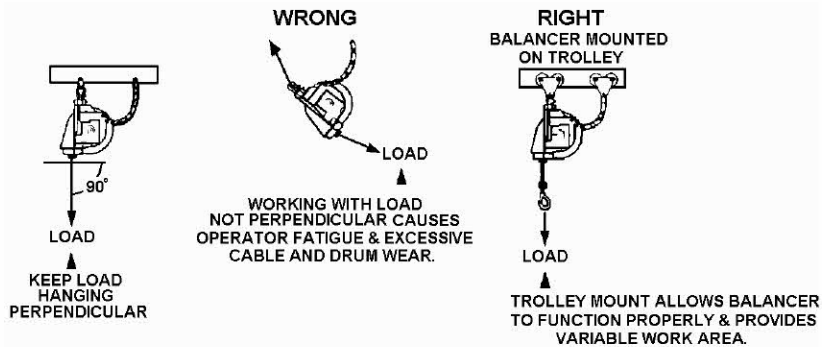
Hang balancer in the desired location by the shackle provided at the top. The balancer should be suspended directly over work area using an eyebolt or similar device with a break strength exceeding 6 times the combined weight of the balancer and the load it is supporting. Balancer should be mounted in such a manner as to minimize cable contact with the cable guide. If shackle is removed to make the connections, be sure that the nut and cotter pin are properly replaced on the shackle pin.

### **SECONDARY SUPPORT CHAIN**



**DANGER:** A secondary safety cable or chain is to be attached to all balancers mounted overhead to prevent balancer from falling. Immediate hazards **WILL** result in severe personal injury or death.

A hole has been provided at the side of the housing to permit installation of a secondary support chain. All balancers mounted over head should have a secondary support chain to protect personnel in case of structure or mounting component failure. Attach one end of secondary support chain or cable to secondary support point (shackle) on balancer. Attach the other end of secondary support chain or cable to a support component other than that which supports the balancer. The chain or cable should be as short as possible allowing the balancer to drop no more than 6 to 12 inches if the primary connection is released. (See Illustration on Page 2) A secondary support is offered as an accessory item.



## OPERATION

### TOOL ATTACHMENT

**WARNING:** Never pull cable to device to be retracted. Always lift object to hook. If the hook is accidentally released when it is extended, it will snap back. Hazards or unsafe practices which **COULD** result in *severe* personal injury or death.

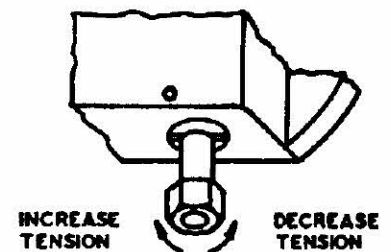
When attaching tool to lower hook, the tool should be lifted to hook rather than pulled to the empty hook against the reel tension. The drum lock can be engaged to prevent cable from retracting (see illustration in "Tool Replacement"). The retaining latch on lower hook **MUST** be snapped back in the closed position after tool is attached.

### SPRING TENSION ADJUSTMENT

**CAUTION:** Only use adjusting nut to set tension. Hazards or unsafe practices **MAY** result in *minor* personal injury or product or property damage.

**NOTE:** Items 24-25 on parts list (last page) are factory set and should not be adjusted. Only use adjusting nut to set tension.

The complete tool including all attachments and connections must be in place before adjusting spring tension. If load exceeds spring tension, tool will move downward. If tension exceeds load, tool will move upward. Spring tension can be adjusted by turning the adjustment nut clockwise to increase tension or counterclockwise to decrease tension.



### AUTOMATIC LOCK

**NOTE:** If tension is removed well below rated range of the balancer during spring adjustment, lock will engage. It will be necessary to apply more tension to release the lock.

If a spring should break or lose tension for any reason, an automatic lock will engage to prevent drum from turning. Lock will disengage when tension is applied to a new spring.

### CABLE STOP ADJUSTMENT

Adjusting cable stop is not recommended due to reduction in active travel distance, and difficulty. If additional cable extension is required, extension cable assemblies are offered as an accessory item. In addition, special cables are available if needed.

