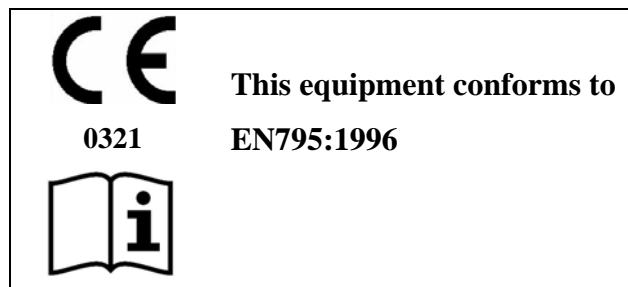


WINSAFE CORP.



GM 200A – TIE-OFF MAST OPERATING INSTRUCTIONS AND MAINTENANCE



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WARNING

It shall be the responsibility of all employers and users to read and comply with the following common sense guidelines which are designed to promote safety in the use of the GM 200A - Tie-Off Mast. These guidelines are not all-inclusive nor do they supplant or replace other additional safety and precautionary measures to cover the usual or unusual conditions. If these guidelines conflict in any way with any state, local or federal statute or government regulation, said statute or regulation shall supersede these guidelines and it shall be the responsibility of each employer and user to comply therewith and also to be knowledgeable and understand the pertaining state, local or federal statutes of governmental regulations.

If GM 200A - Tie-Off Mast is resold outside the country of destination the reseller shall provide instructions for use, for maintenance, for periodic examination and for repair in the language of the country in which the product is to be sold.

General

- Do not make any alternations or additions to this equipment without the prior written consent of Winsafe Corp. Any repair shall be carried out in accordance with Winsafe Corp. procedures.
- Serious injury or death can result from improper use of this equipment. Understand all instructions before using them. If in doubt regarding safe use of this equipment consult Winsafe Corp.

- Before using the Tie-Off Mast, the worker must be trained in the use and application limits of the equipment, proper hookup, anchoring and tie-off techniques, methods of use and proper methods of inspection and storage.
- Do not abuse, misuse or use the equipment for purposes or in ways for which it was not intended. The Tie-Off Mast is designed for use with Winsafe Corp. – Anchor Bases & Boom Kits (Appendix A). Inspect the structure for integrity before each use.
- Tie-Off Mast subjected to impact loading or fall arrest must be immediately withdrawn from service and sent to Winsafe Corp. for inspection and service.
- The Tie-Off Mast and its accessories must be inspected before each use. Any defective components shall be removed from service. Never use any equipment that is damaged or displays excessive wear.
- Check whether the product markings on the Tie-Off Mast are legible.
- Maintain a Record Card for each Tie-Off Mast (See Page 8).
- For replacement parts contact Winsafe Corp.

Fall Arrest System:- Harness & SRL

- The worker must be secured to the Tie-Off Mast at all times by a proper Fall Arrest System consisting of a full body harness and a light weight web SRL (self retracting lanyard) with a built in shock absorber.
- The SRL must limit the fall arresting force (M.A.F) to 900 lbs (4 KN) or less.
- Length of the SRL must be carefully selected so that the falling worker cannot contact any lower level structure, floor etc. in the event of a fall.
- The connectors of the Harness, SRL must be selected to prevent accidental disengagement from each other and the Tie-Off Mast.
- When in doubt regarding the selection of Harness / SRL; consult Winsafe Corp.

Operation & Use

- Always follow the operating instructions and procedures recommended by the manufacturers of all associated equipment i.e. Harness and SRL.
- Before each use of the Tie-Off Mast, carefully inspect it according to the Check List (Section 4).
- Maximum 3 workers can be secured to the Tie-Off Mast.
- Do not use this equipment when in doubt of your fitness to safely absorb shocks from fall arrest. Age and fitness seriously affect the worker ability to withstand falls. Pregnant women or minors must not use the Tie-Off Mast.

- Anchorage: The Tie-Off Mast must be properly secured to the structure by means of an Anchor Base. The Anchor Base and the structure must be free from any damage and must be capable of supporting a moment load of at least 3,600 in-lbs.
- Avoid movement which may entangle the Life Line onto the Tie-Off Mast or the worker. Do not allow the Life Line to pass under arms or between legs.
- Swing Falls occur when the Anchorage is not directly above the point where the fall occurs. The total vertical fall distance in a Swing Fall is greater than a direct free fall. Select the length of the SRL so that the falling worker cannot contact any lower level structure, floor etc. in the event of a fall.
- The Employer must have a rescue plan and the ability to rescue the worker in the event of a fall.

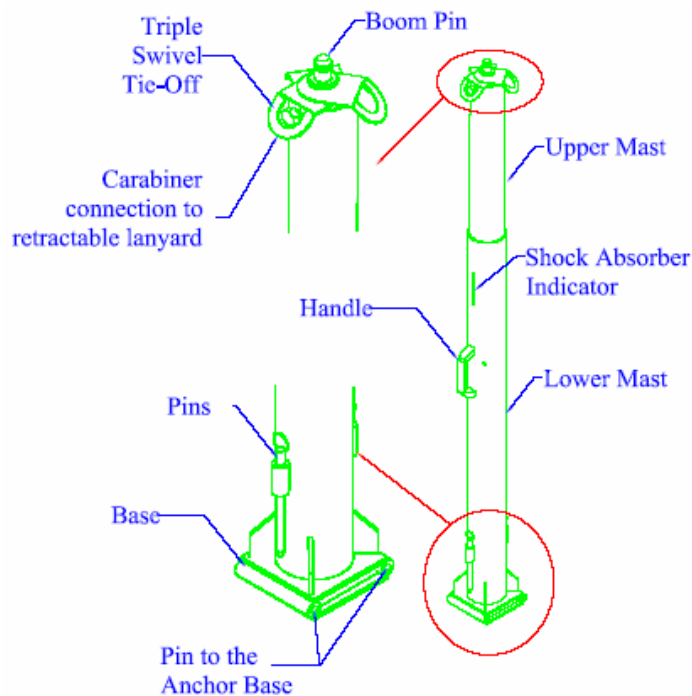
Periodic Examination & Maintenance

- The safety of the users depends upon the continued efficiency and durability of the Tie-Off Mast.
- Due to the complexity and safety critical knowledge required in the dismantling, reassembly or assessment of the Tie-Off Mast after a fall; periodic examination shall be only conducted by Winsafe Corp. or by a competent person authorized by Winsafe Corp. strictly in accordance with Winsafe Corp. periodic examination procedures.
- Establish a periodic examination schedule conforming to the legislation, frequency of use, and environmental conditions. It is recommended that the periodic examination frequency be at least every 6 months.

1. GENERAL SPECIFICATIONS

- 3 Person Tie-Off Plate: Rotates 360 degrees
- Weight: 26 lbs.(11.7 kg)
- Tie-Off height is 75 inches (1.9 M) from the walking surface
- Locks onto Winsafe Corp. Anchor Bases with 2 locking pins
- Maximum working load : 350 lbs (158 kg) per person
- Maximum M.A.F. rating of retractable SRL used is 900 lbs. (4 kn).
- General Construction: Aluminum (6061-T6); Hardware: Stainless Steel; Tie-Off: Zinc Plated
- Finish: Powder safety coated yellow or Natural aluminum
- Conforms to EN795:1996

2. DESCRIPTION



The Upper Mast Section rests on a Neoprene Bumper (Shock Absorber) installed on the inner side of the Lower Mast Section. The Upper Mast Section is pinned to slide along the slots provided on the Lower Mast Section. The Lower Mast Section is pinned on to the Winsafe Anchor Base.



A Triple Swivel Tie-Off on the Upper Mast Section provides a means for securing a retractable lanyard which is connected to the worker's safety harness. Anchorage relies on the engagement of the Swivel Tie-Off with the Boom Pin & Upper Mast Section. This engagement is designed to arrest motion withstanding resultant pull out force as well as torsional and angular loads. During a fall, the vertical load on the Upper Mast Section is absorbed by the Neoprene Bumper resulting in shock absorption and the downward travel of the Upper Mast Section along the slots on the Lower Mast Section.

3. OPERATING INSTRUCTIONS

- Depending on the work place conditions, select and install the Anchor Base and Accessories.
- Pin the Lower Mast Section of the Tie-Off Mast onto the Anchor Base.
- Make sure that the Triple Swivel Tie-Off is secured properly onto the Upper Mast Section.
- The worker shall wear a full body harness and have an approved self retracting web lanyard. The SRL shall be connected at the back D ring of the harness and the web double lock snap shall be connected to the Swivel Tie-Off Plate.
- There are 3 x Tie-Off Plates. Only one worker may be secured to a Tie-Off Plate.

4. CHECKLIST

It is the responsibility of the user / operator of this equipment to inspect all components of the Tie-Off Mast before each use. Never use the Tie-Off Mast if it's damaged or displays excessive wear. Any questions regarding operation, maintenance or loading conditions contact Winsafe Corp.

Before Each Use

- ✓ Proper Fall Arrest System components are required using a full body harness and shock absorbing web SRL (self retracting lanyard) with a maximum arrest force (M.A.F) of 900 lbs or lower.
- ✓ Check whether the pin connecting the Upper Mast Section & Lower Mast Section is at the top of the slot. Press the Upper Mast Section and check whether the Neoprene Bumper compresses. If any of the checks fail, the equipment must be immediately withdrawn from service and sent to Winsafe Corp. for inspection and servicing
- ✓ Inspect all welds on the Tie-Off Mast for cracks.
- ✓ Check whether all fasteners are secured properly.
- ✓ Check the Triple Swivel Tie-Offs for damage / wear.
- ✓ Check whether the Tie-Off Mast is secured properly onto the Anchor Base
- ✓ Check whether the Anchor Base is secured properly onto the Structure. Inspect the structure for structural defects prior to each use

5. CLEANING & LUBRICATION

- ✓ The Tie-Off Mast will function better and last longer if its kept clean and well lubricated
- ✓ Wash down the Tie-Off Mast with fresh water every month. When dry, spray WD40 lubricant or equivalent at all joints.
- ✓ Do not force dry with heat.

RECORD CARD

PRODUCT **GM 200 A – TIE-OFF MAST**
MANUFACTURER WINSAFE CORP
 ONE VALLEYWOOD DR. UNIT #1
 MARKHAM, ON, CANADA

SERIAL / BATCH # :

YEAR OF MANUFACTURE :

DATE OF PURCHASE :

DATE FIRST PUT INTO SERVICE :

PERIODIC EXAMINATION AND REPAIR HISTORY

Date	Reason for Entry (Examination or repair)	Defects noted, Repair carried out	Signature of competent person	Next due date for Periodic Examination

APPENDIX A – ANCHOR BASES & GM 200 A – ACCESSORIES***ANCHOR BASES*****GM135**

For use on transformers. Double pin style plate that is welded to top surface of transformer for permanent mounting.

**GM1019A**

For use on switch structures. Clamp on deck with base receiver. Capable of clamping to beam sizes 6" to 12" high x 16" wide. Easy to install. No tools required.

**GM138**

For use on Transformers. Double pin style plate that is bolted to top surface of transformers.

**GM135CP**

For use on transformers. Double pin style plate that fits Waukesha Power transformers. Bolted down to existing 1"(2.5cm) studs & may be removed after use.



GM135SC

For use on circuit breakers. Double pin style adjustable weld on plate with pipe style base for mounting on domed surfaces. The pipe style base is welded to the dome surface & then the double pin plate is adjusted to level and welded for permanent mounting.

**GM135CA**

For use on transformers. Double pin style that pins to GM136 Uni-Hoist style (UH4000-2) weld-on plate & may be removed after use.

**GM158**

For use on transformers. Double pin style that bolts onto the round peg adapter found on Ferranti-Packard transformers. May be removed after use.



GM137A USED WITH GM187 SPREADER BAR KIT

For use on transformers. Portable base that attaches to three bolts on a manway cover. Used where there are no permanent mounting plates on the face of the transformer. Comes c/w 5/8" (15.8mm) and 3/4" (19mm) male and female mounting hardware. Folds up for ease of transporting. If the manway cover is held on with 1/2" (12.7mm) bolts, a GM187 spreader bar kit will be required in addition to the above mounting hardware.

**ACCESSORIES****GM200ACB** Carrying bag for **GM200A****GM137ACB** Carrying bag for **GM137A**

GM1599 Carry bag for base adapters, winches and/or hardware required for **GM137A** portable base



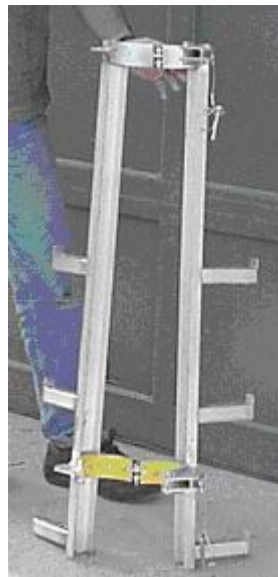
APPENDIX B- APPLICATIONS OF GM 200 A

SWITCH STRUCTURE APPLICATIONS

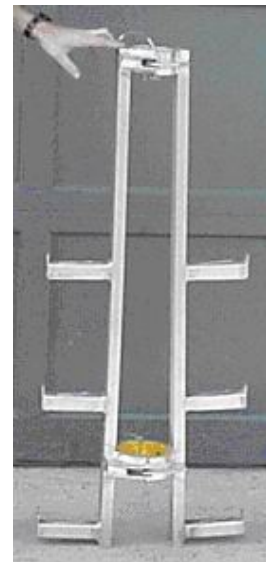
GM200A Anchorage
Connector mounted in
GM1019A clamp on deck
and c/w a **GM199** 3 ft. pole
step accessory.



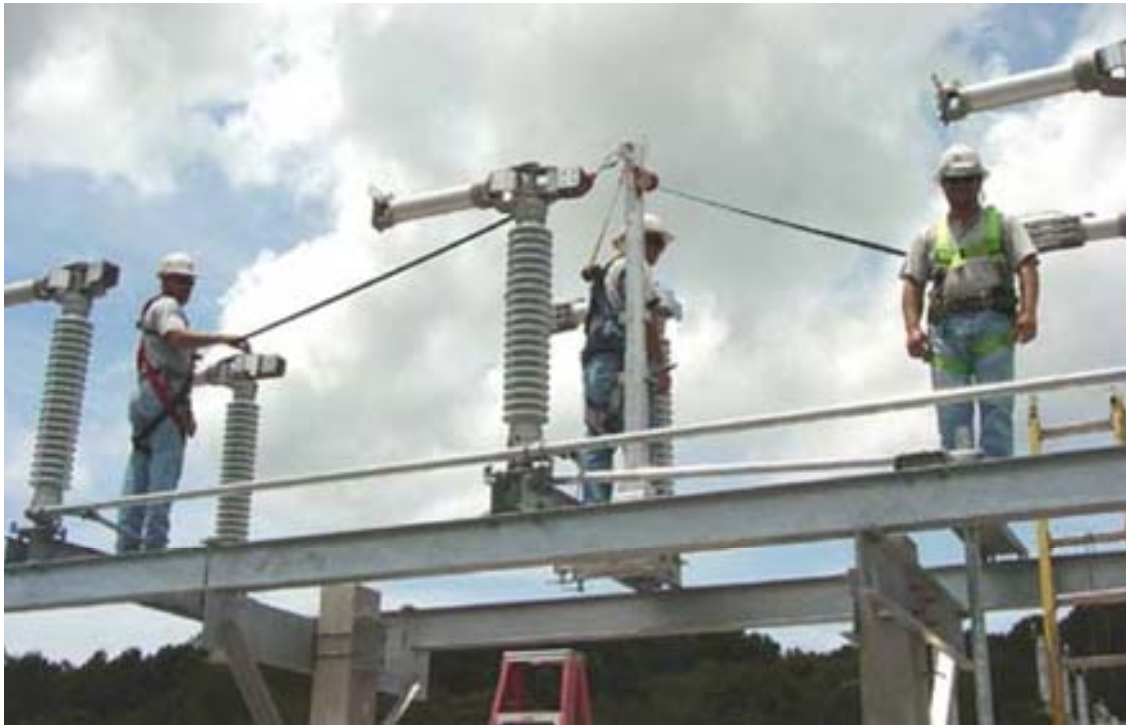
GM199 Pole Step Assembly



GM199 Pole steps open position



GM199 Pole steps closed position

3 Person Tie Off : GM200A Vertical Post Mounted to GM1019A Clamp on Deck***RETRIEVAL AND / OR RESCUE APPLICATIONS***

GM200A Anchorage Connector with **GM193** adjustable boom kit and **GM907FT** winch for retrieval & rescue.



GM193 Description	General Specifications	Application Restrictions
<ul style="list-style-type: none"> • 4 variable offset positions 16” (408mm), 20” (510mm), 25” (637mm), 30” (765mm). • 2nd fixed connection points a minimum of 70” (1.78m) from walking surface. • 1 fixed bracket connection for connection of RSRL or winch. • 2 RSRL/winch mount available with the use of a GM 198 Boom Kit. • capable of 360 degree rotation around the vertical anchor post. • Quick and easy to install . 	<ul style="list-style-type: none"> • Maximum working load of 350 lbs. (157 kg) per person. • Rated for fall arrest load of 2 users – maximum M.A.F. rating of retractables or tear-out Shock absorbers 900 lbs. (4kN) per person. • Weight 18lbs. (8.1 kg). • Constructed of 6061-T6 aluminum. • Tie off plates: zinc plated steel • Finish:natural aluminum or powder coated safety yellow. 	<ul style="list-style-type: none"> • To be used with approved applicable retrieval winch or SRL. • Personnel must use a full body harness.



GM193 Boom Kit with single winch mount



GM193 & 198 Boom Kit with double winch mount



GM907DFT Mini Winch c/w 50' (14.9m) of **GM907DFT** Mini Winch Adjustable Handle Synthetic Cable

GM907DFT DESCRIPTION	GENERAL SPECIFICATONS	APPLICATION RESTRICTIONS
<ul style="list-style-type: none"> • Continuous brake holds load in place when raising & lowering therefore preventing free wheeling of drum when crank handle is released. • Double braking system. • Double pawl primary brake on drive shaft. • Centrifugal secondary brake on drum which activates only on failure of primary brake & free-wheeling of drum. • Secondary braking system is c/w shock absorbing mechanism. • Double pulley cable guide allows correct placement of cable on drum. 	<ul style="list-style-type: none"> • Cable: dia. Inch – 3/16 (4.8mm). • Tech 12 synthetic cable. • Cable length: GM907DFT – 50' (14.9m). • Working load: 350 lbs. (150 kg). • Retrieval speed: 20 ft./min (6m/min). • Mechanical advantage: 80. • Brake system friction disks , double pawl. • Weight lbs: 22 (9.9kg). 	<ul style="list-style-type: none"> • Read & understand operating instructions. • Minimum operating load: 50 lbs. (22.6 kg). • Inspect winch for structural defects prior to use. • Maximum personnel rating of 350 lbs. (160kg). • Maximum equipment rating of 600 lbs. (272 kg).