

# 7.8 METRE ELECTRIC WINCH-UP MAST – OPERATING MANUAL

**DO NOT** use this equipment unless you have been instructed in its safe use and operation and have been given permission.



Never operate equipment during storm activity. There is no safe location outdoors during a storm event. If you can hear thunder you are in danger of being struck.

Look up and live. You may be killed if the equipment comes in contact with powerlines. Always think ahead and plan your task in advance.

## PERSONAL PROTECTIVE EQUIPMENT



Gloves required when handling steel wires.



Sturdy, enclosed footwear to be worn at all times.

## GENERAL SAFETY REQUIREMENTS

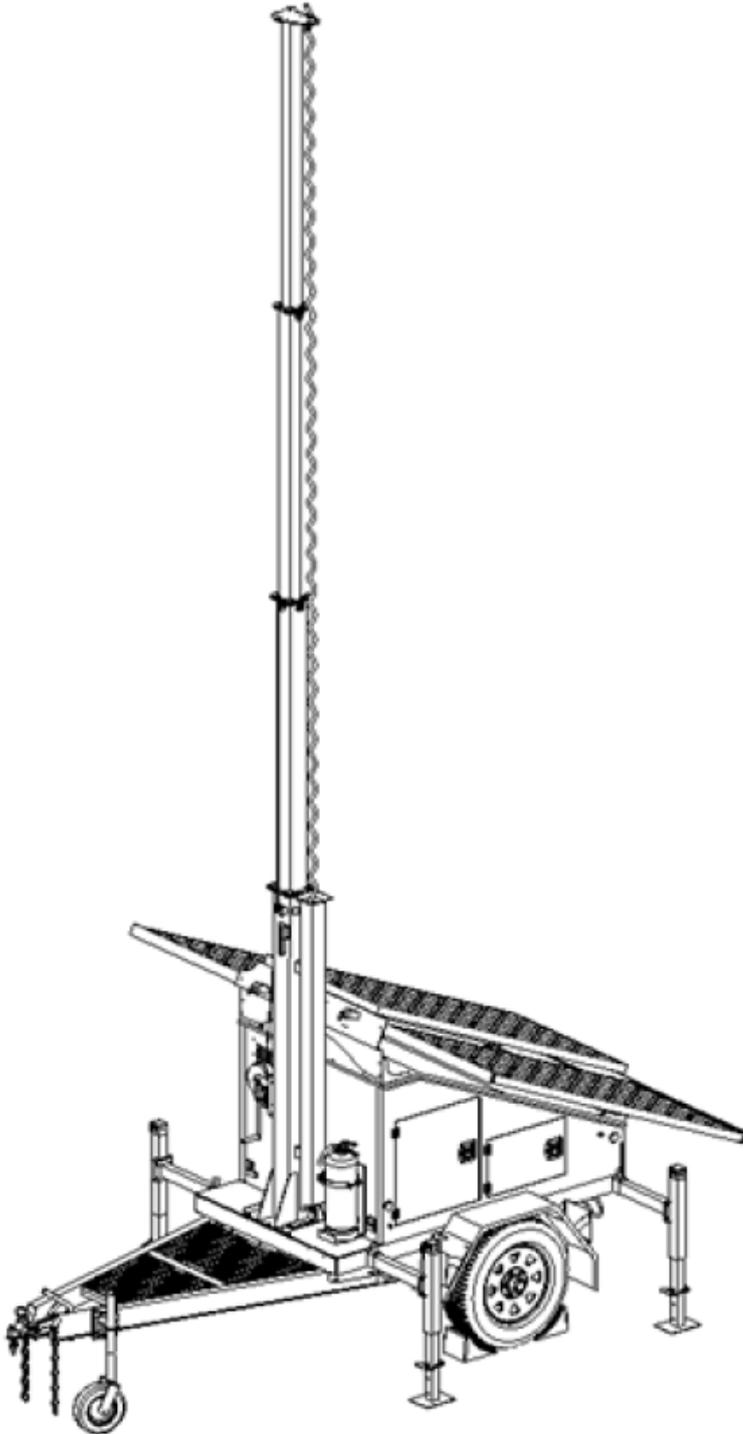
### DO

-  Check workspaces and surrounding area to ensure no slip/trip hazards are present.
-  Check area above mast for obstructions and electrical cables.
-  Ensure ground is firm. If in doubt have an engineer inspect.
-  Visually inspect wires and bolts for tampering/vandalism.
-  Ensure correct ballast weight.

### DON'T

-  Do not operate near powerlines.
-  Do not operate during a storm event.

## MAST ILLUSTRATION



*Figure 1 - Mast fully raised (installed on trailer)*

## RAISING THE MAST

1. Set up and level the base platform. The base platform may consist of a trailer or skid, depending on system supplied.

### WARNING

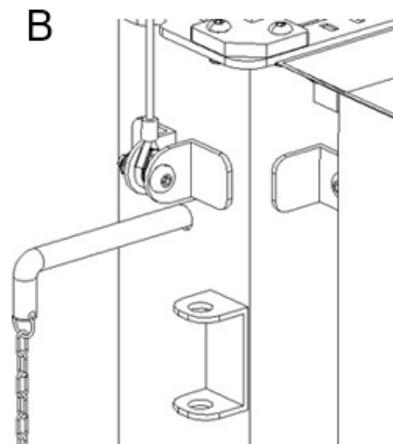
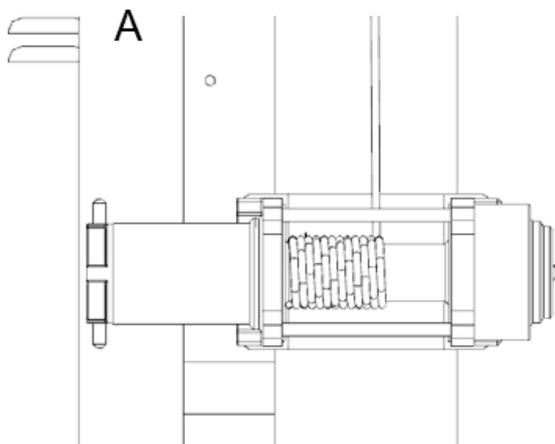
**The base system must be levelled with any outriggers extended before raising the mast. The outriggers must remain extended while the mast is up. Failure to level the trailer or extend the outriggers will severely reduce the stability of the unit and could allow the tower to tip and fall.**

2. Install any top-mount devices (radios, antennas, rotators, etc.). Ensure any additional cables are appropriately routed to prevent snagging during raising.
3. Check mast wires for excessive wear or damage. Make sure each wire is properly centered in each pulley.
4. Check the mast electrical cables for damage.

### CAUTION

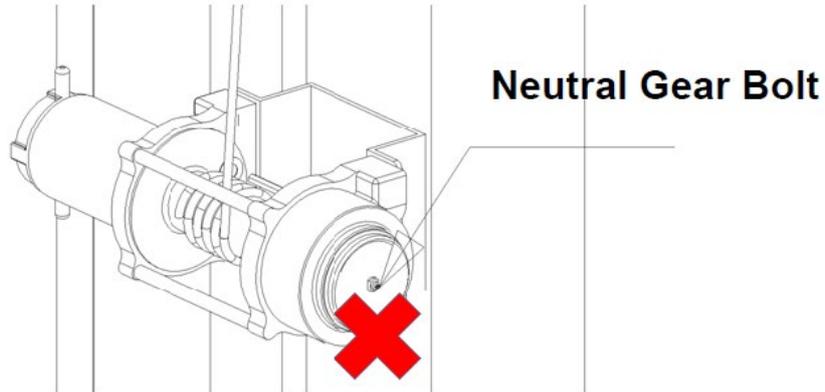
**Do not extend the mast beyond the coloured mark on top of the lower mast section. While on electric-winch masts a limit switch will engage to prevent over-extension of the mast, attention must be paid to ensure correct operation.**

5. Before raising the mast, ensure winch wire is spooled orderly and tightened per diagram [A]. Slack in the line can lead to wear and even breakage.
6. Press the extend button (up arrow) on the controller and raise mast to maximum height. When the mast reaches maximum extension, the limit switch will cut the power off automatically.
7. Insert locking pin per diagram [B] to secure mast into position.



**! WARNING**

**When the mast is extended, do not operate the neutral gear bolt on the electric winch. Failure to observe this warning will lead to sudden collapsing of the mast, which may lead to equipment damage and/or personal injury/death.**



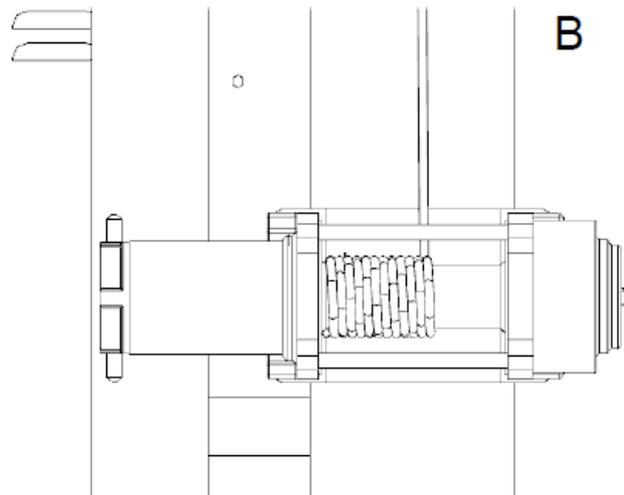
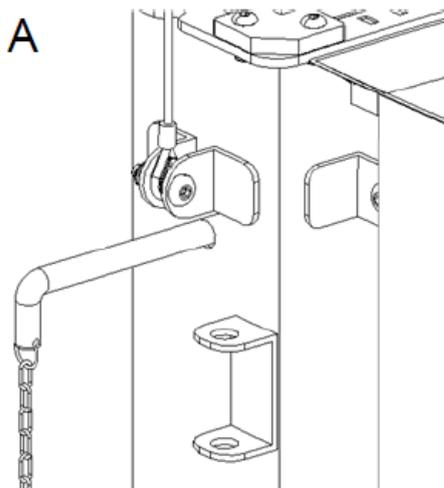
## LOWERING THE MAST

1. Check mast wires for excessive wear or damage. Make sure each wire is properly centered in each pulley.
2. Check the mast electrical cables for damage.

### WARNING

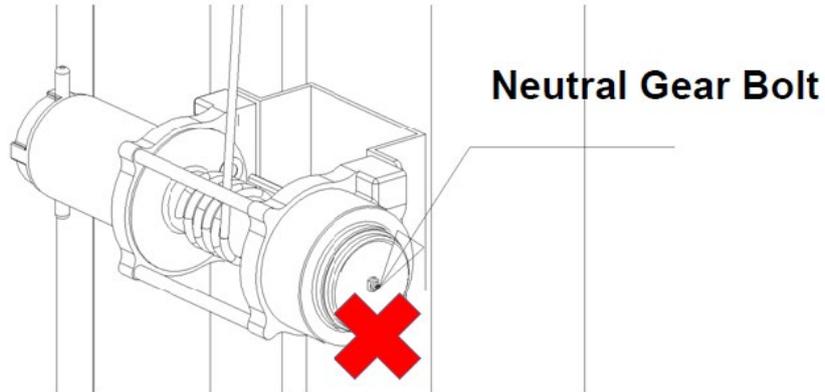
**Do not operate the unit if insulation on the electrical cord is cut or worn through. Bare wires in contact with the mast or frame may energise the platform/chassis and cause electrocution. Repair or replace cord if damage is identified.**

3. Pull the locking out per diagram [A].
4. Press the lower button (down arrow) on the electric winch controller, lower the mast to its original static height and make sure the steel rope is orderly per diagram [B].



**! WARNING**

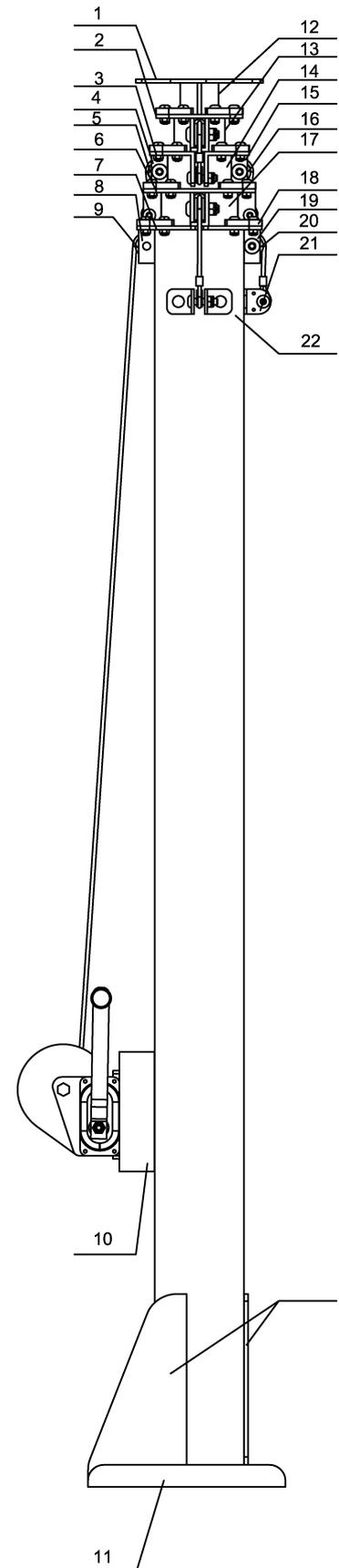
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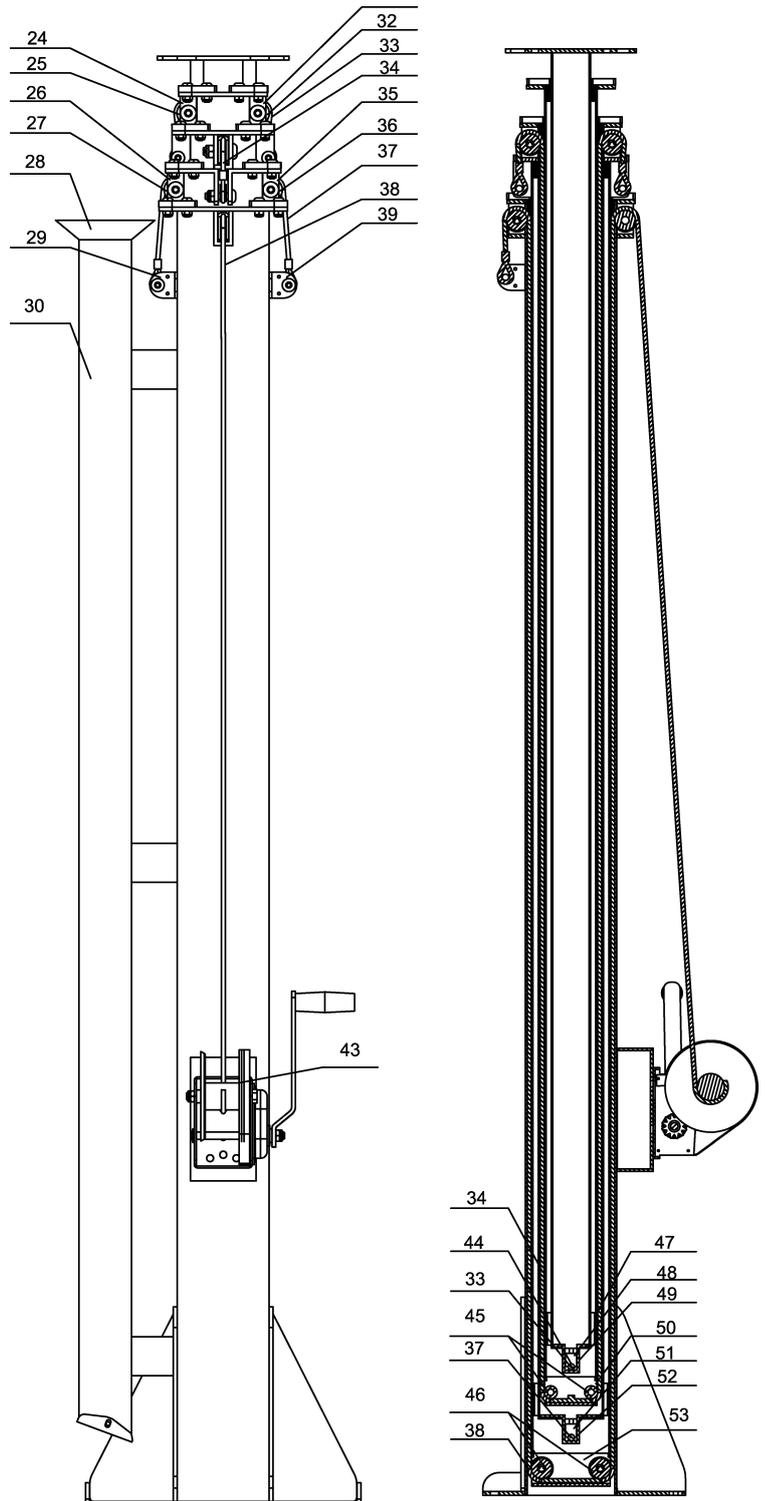
## MAST COMPONENTS

1. Mounting plate for top tube
2. Top flange of second tube
3. Top flange of third tube
4. Left pulley mounting seat for third tube
5. Left pulley of third tube
6. Top flange of fourth tube
7. Top flange of base tube
8. Left pulley mounting seat for base tube
9. Left pulley of base tube
10. Mounting seat for manual winch
11. Bottom mounting plate
12. Top tube
13. Second tube
14. Third tube
15. Right pulley mounting seat for third tube
16. Right pulley of third tube
17. Fourth tube
18. Nylon block
19. Right pulley mounting seat for base tube
20. Right pulley of base tube
21. Fixture for steel cable
22. Base tube
23. Strengthening gussets

\*Note: manual-winch shown.



- 24. Left pulley mounting seat for second tube
- 25. Left pulley of second tube
- 26. Left pulley mounting seat for fourth tube
- 27. Left pulley of fourth tube
- 28. Cable tube mouth
- 29. Left fixture for steel cable
- 30. Cable tube
- 31. Right pulley mounting seat for second tube
- 32. Right pulley of second tube
- 33. Steel cable
- 34. Steel cable
- 35. Right pulley mounting seat for fourth tube
- 36. Right pulley of fourth tube
- 37. Steel cable
- 38. Steel cable
- 39. Right fixture for steel cable
- 43. Manual winch or electric winch (optional)
- 44. Buckle for steel cable
- 45. Inside pulley of second tube
- 46. Inside pulley of fourth tube
- 47. Limit block
- 48. Inside pulley of top tube
- 49. Bottom flange of top tube
- 50. Bottom flange of second tube
- 51. Inside pulley of third tube
- 52. Bottom flange of third tube
- 53. Bottom flange of fourth tube



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