H-3500 POWERLIFT WINCH INSTRUCTIONS

This type of winch has been tested in compliance with the requirements of following standards: VBG 8, VBG 8 DA and E DIE EN 13157)

READ THESE INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THE WINCH. FAILURE TO COMPLY WITH INSTRUCTIONS MIGHT RESULT IN SERIOUS FATAL INJURY. RETAIN THE INSTRUTIONS FOR FUTURE REFERENCE.

TECHNICAL SPECIFICATIONS

Rated Load (the first layer of cable on the hub) (the last layer of cable on the hub)

Ratio

Hub Diameter

Hub Capacity (cable dia. x length)

Overall Dimension (length x width x height)

Net Weight

1588 kg (3500 lbs.) 1189 kg (2621 lbs.) 41 : 1 Ø 92 mm Ø 6.35 mm x 15 m (1/4" x 50 ft) 330 mm x 220 mm x 216 mm 16.5 kg

90

95

3.Cable Keeper



294

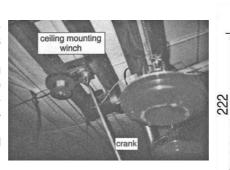
4-M10

Fig. 2

Fig. 3

WINCH MOUNTING

- Mounting structure must be capable of withstanding 4 times rated load of the winch.
- This winch is intended for ceiling mounting (see Fig. 1). Install the winch at least 2m height with 4 (four) x M10 bolts, nuts, washers and lock washers (see Fig. 2). making sure the drive shaft end extended out free.



CABLE SELECTION & ATTACHMENT

- 1. The safely factor of the adopted cable based on the minimum-breaking load shall not be less than 5.
- 2. Cable should comply with IS04308-1 (cranes and lifting appliances; selection of wire cable).
- 3. Wrap cable around the anchorage on the top of the drum with cable clamp and tighten the setscrew (see Fig. 3). In case of hook application, attach the other end of cable to suitable hook having safety catch, clamp the cable with suitable clip. The breaking strength of the hook must be at least 1.5 times of the breaking strength of the cable.
- 4. Cable should be directed straight off winch --- not at an angle. This will prevent cable from rubbing against winch to avoid cable damage.

OPERATING

- 1. All nuts must be securely tightened before operation.
- 2. Re-lubricate the drive shaft bushings before first use.
- 3. Before loading, it is highly recommended to arrange trial-run without load for 10 minutes for complete engagement of all moving parts.
- 4. A static test with 1.5 times rated load must be conducted for ten minutes before the first use of winch, for sure of smooth operation.
- 5. Driving with winch handle (see Fig. 1) (not supplied) clockwise or counter-clockwise as the yellow sign shows could winch up and down. Load will remain locked in any position whenever handle is released.

1. Winch Drum 2. Cable

WARNING

- Never exceed the rated load of winch. The capacity rating is based on the first layer of cable on the drum. Pulling load should be reduced with more layers built up on the drum. The load for the last layer of cable must be lower than 1189kg.
- 2. Keep at least three full turns of cable on the drum when the carrying device is at its lowest position. Never fully extend cable when under load.

INSPECTION & MAINTENANCE

- After continuous running of every two months, check the input shaft assembly by adjusting or changing worn out parts when necessary. Also check to ensure the the angle between the pins is in proper position (see Fig. 4) for clutching on and off.
- 2. Bushings should be lubricated periodically for extended life.
- 3. After long time storage, relubrication is recommended before use.
- Brake disks should be replaced if the thickness is less than 1.5mm, cracked or broken.
- 5. Worn out bushings might lead to bad engagement of gears. Periodically check and parts replacement could keep winches always in good condition.
- 6. Moving parts including gears, ratchets and shafts must be kept clean and lubricated to ensure proper and safe operation.
- In case of lifting slip, check the applied load if overloaded or replace the brake washers and other worn out parts with new ones, such as spring pin, bushings, etc.
- 8. Timely lubricating and changing worn parts would help keep noise lower. There is only very limited noise under normal conditions.



- 1. During continuous long periods of running, the temperature of driving clutch will get very hot and should be controlled below 150°C. **Don't touch the clutch under such conditions.**
- 2. Do not operate winch when cable is knotted, kinked or shows any signs of unsafe connection.
- 3. Inspection and maintenance should be conducted only after winch is unloaded.
- 4. Care must be taken during reassembling of the input shaft assembly (clutch), making sure that all parts are in the right position.
- 5. Components can be affected by chemicals, salts and rust and should be examined for safe operation before use.

WARNING!

- 1. Forbidden to lift, support and transport people or to load over working areas where people could be present.
- 2. Forbidden to lubricate brake disks.
- 3. Overloading could cause damage of equipment or injury of people.
- 4. Never put your fingers, clothes or body into engaging area or fitting surface related to cable, gears, clutch.
- 5. Never exceed the hub capacity of cable.
- 6. Never tie a knot on cable.
- 7. Never allow children or anyone who is not familiar with the operation of winch, to use it.
- 8. Always apply load properly and evenly.
- 9. Always keep winch in good working condition. Winch accident could result in personal injury or property damage. **DO NOT USE A DAMAGED WINCH!**

