

PUMP HOIST BT-32B **Features**

- 6,000 lb. capacity single line.
- One person operation.
- Sets up or folds up in 1 minute.
- Hydraulic outriggers standard equipment.
- 80% of 8' truck box useable.
- 32 ft. derrick lay-back allows 10 ft. reach - no jib required.
- Telescoping derrick - no longer than truck when "road ready".
- Weight low and balanced when "road ready".
- Hydraulic draw works - no clutches.
- Brakes on sand line.
- Mounts on 3/4 ton pickup, larger truck (flat bed or utility body) or trailer.
- Automatic engine speed control standard equipment.
- Many safety features.
- Optional equipment to do almost any job.

PUMP HOIST BT-32B **Maintenance Instructions**

- Oil filter 10 micron. Change at 50 hrs. then every 1000 hrs. after.
- Hydraulic oil 32W. Change every 1000 hrs.
- Grease pulleys and main winch.
- Check-change gear box oil # 80-90.
- Main line 7/16" 6x19 x 175' long fibrecore cable (right lay).
- Sand line 400' standard of 1/4" fibrecore cable (right lay).
- 5 ton hook and safety latch.
- Hydraulic pump 16 GPM.



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1494 Bell Mill Road, P.O. Box 456,
Tillsonburg, ON, Canada, N4G 4J1
Phone: 519.688.0500
Toll Free: 800.387.9355
Fax: 519.688.0563
Online: www.wellmaster.ca

PUMP HOIST BT-32B

Operation Instructions



- Check for overhead powerlines.
- Move unit in position to service well.
- Engage power take off or start on deck engine.
- Release main winch cable at deadend and give slack to sandline.
- Unhook guy line chain at front of unit.
- Lower outriggers for stability on solid ground.
- Proceed to raise mast (bottom section) to vertical position.
- Guide cable hook in top section cable guides at bottom of top section.
- Using hydraulic main winch cable, raise top section to desired height.
Always use guy line before operation.
- Lean entire mast back far enough to work behind unit and align cable hook with center of well. Outriggers can also be used for slight sideways alignment.
- Use small drum on main winch for heavy pulling and large drum for light or speed pulling.
- Always use hook with safety latch.
- Use a suitable weight or rope to bring hook down.
- Upon completion of work servicing well, raise mast to vertical position to let top section down by guiding main cable with hook and rope attached to hook in bottom of top section cable cradle.
- Raise top section slightly to release dog with 1/8" cable by pulling on triangle.
- Lower top section slowly to bottom of slot for dog and leave main winch hook in top section cradle.
- Lower mast (bottom section) slowly by keeping both cables snug when mast is completely down.
- With mast completely down, wrap guy line around deadend and drop guy line chain in guy line deadend as far as possible then operate main winch cable and extend top section to snug up guy line cable. This method will prevent top section from sliding forward when making an abrupt stop in transit.
- You may also prevent top section from sliding out by adding a deadend to rear of unit.
- Raise outriggers full and install locks.
- Disengage power take off or stop on deck engine.

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BT-32B Mobile Winch Drive

This chart gives the max cable pull capacity and speeds based on the motor ratings of the motor manufacturer. Speeds may vary due to the rpm of the diesel engine.

The following chart does not allow for friction in pulley assemblies. Drive capability is rated as per the motor specification and at maximum rated pressure for each hydraulic motor and its effect on the cable pull etc.

The formulas used for cable pull are maximum torque divided by the effected radius. Pull in pounds.

The cable speed is calculated by using the effective circumference times the maximum rpm of the drum. The diameter varies with the number of wraps the wrap diameter is calculated as nested or at 45° in relation to the previous wrap.

The cable length is calculated as the maximum theoretical number of feet of cable that can be placed on the drum based on the width of the drum and the maximum number of wraps possible per layer.

Sandline winch						
Diameter	1st wrap	2nd wrap	3rd wrap	4th wrap		8th wrap
contact circumference	17.46 inches	18.56 inches	19.67 inches	20.78		25.18
centre of cable circumference	18.21 inches	19.38 inches	20,46	21.56		25.98
Cable pull at 1232 psi	1280 lbs.	1203 lbs	1139 lbs	1081 lbs.		897 lbs.
max. accumulated Cable length	113.49 feet	234.1 feet	361.9 feet	496 feet		1100 feet
Max. cable speed 15.8 gpm	232.8 ft./mn	247.46 ft/mn	262.2 ft/mn	277 ft/mn		335 ft/mn
max cable speed at 15 gpm.	221 ft/mn	234.78 ft/mn	248.9 ft/mn	263 ft/mn		316 ft/mn



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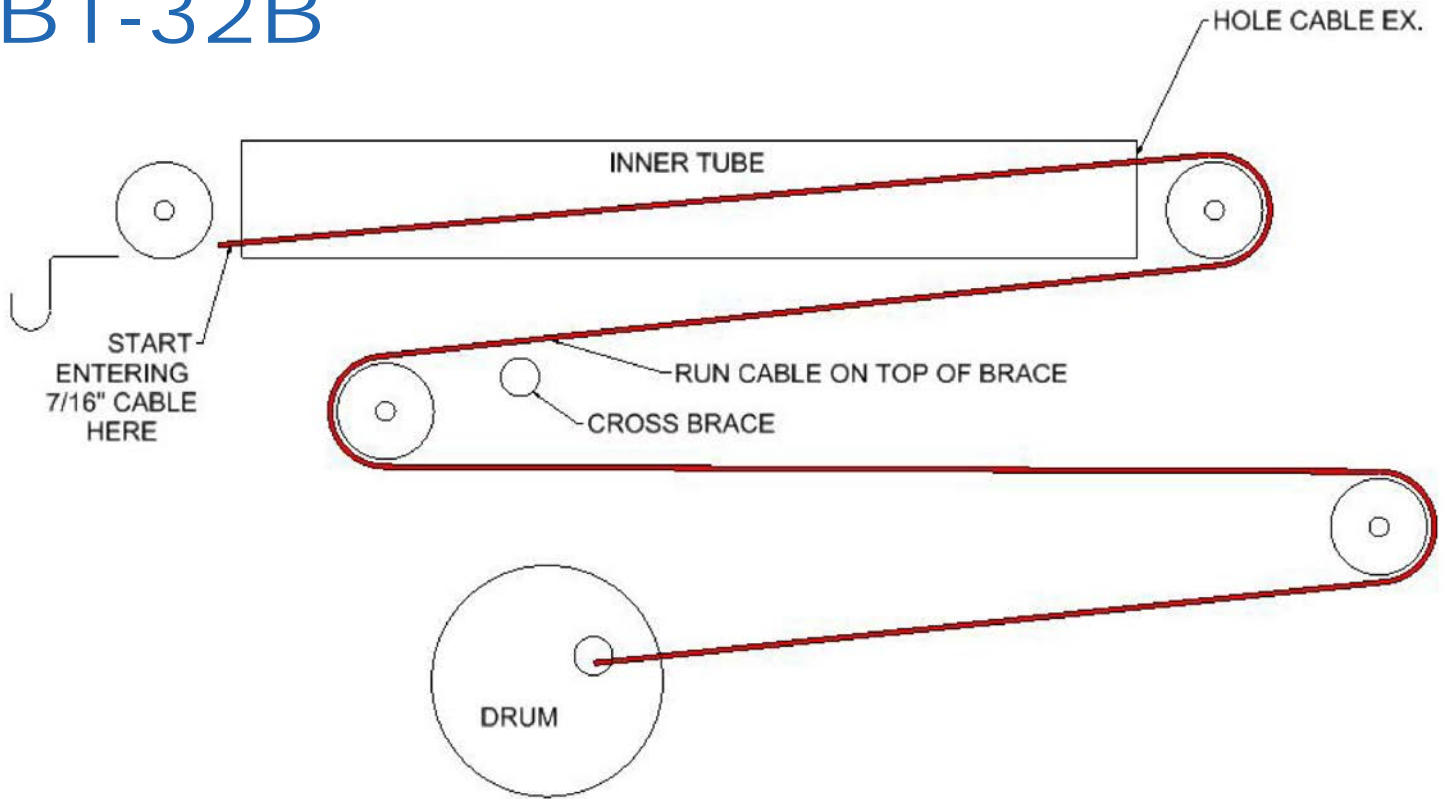
Main winch Drive	1st Wrap Diameter centerline of cable	2nd. Wrap nested Diameter	3rd. Wrap nested diameter	4th wrap nested Diameter
Small 5 inch diameter drum circumference	17.069 inches	17.709 inches contact area	18.96 inches at contact area	21.67 inches at contact area
Maximum cable speed at 11.8 gpm,	25 ft/min	25.9 ft/mn	30.8 ft/mn	33.6 ft/mn
theoretical Maximum Cable pull at 1812 psi.	12,512.8 lbs	11,194.8 lbs.	10,152 lbs.	9,267 lbs
Estimated length of cable on drum	23.5 feet	48.55 feet	76.4 feet	107 feet
16 in diameter drum circumference	50.4 inches contact area	52.24 inches at contact area		
16 in drum max cable speed	75.5 ft/mn	76.5 ft/mn		
16 in. drum max cable pull	4,138 lbs	3983 lbs.		
max length of cable	11 wraps max=46 feet	93.8 feet		



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