



PETROL & ELECTRIC WINCHES

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A. 9HP PETROL WINCH 1TON RATING

B.4HP SINGLE PH ELECTRIC WINCH

C.4HP PETROL WINCH ½ TON RATING

- A. 9hp Honda Petrol Engine rated 9hp at 3000RPM. Reduction gearbox and dual capstan drums in a range of sizes. This winch is ideal for hauling power or data\comms cables. With engine accelerator a wide range of pulling speeds are available. Nominal pull load 1000kg
Dimensions L:1200mm W: 750mm D: 550mm Weight: 150kg
- B. 4HP Single phase 230volt 50Hz Electric Winch. Suitable for indoor\tunnel work where fumes and noise are unacceptable. Single speed winch is controlled by a foot pedal.
Dimensions L: 1125mm W: 730mm D: 560mm Weight: 120kg
- C. 4HP Honda Petrol Engine Winch. Similar to item A. Nominal pull load 500kg.
Dimensions L: 1010mm W: 640mm D: 400mm Weight: 90kg

We also offer a Three phase 400volt 50Hz Electric Winch. Suitable for indoor\tunnel work. Single speed with forward and reverse option. Winch is controlled by a foot pedal.

None of the above winches are rated or approved for hoisting work they are only to be used for hauling.

All winches are supplied with an A Frame Anchor for anchoring the winch before it is used.

All winches come with an emergency stop switch which is located close to the capstans so allow for quick and easy stopping of the winch if required.

We can also supply a Crane Scale with these winch that allows the user to see what weight is being put on the cable at the time of use. The Crane Scale must be placed between the anchor point and the winch. (See Operating Instructions for the winch to see how to attach the Crane Scale)



**OPERATING INSTRUCTIONS
APPLICABLE FOR BOTH
4HP & 9HP RANGE OF
WINCHES.**

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Important

As soon as engine runs open the choke slowly (Do not leave the choke closed or the engine will stall and refuse to start) If this happens turn choke off and pull start 2 – 3 times, engine should start up again.

Check oil screw plug on side of engine.

Only use 91 unleaded fuel.

Emergency stop on lifting eye twist & release.

On\Off switch on right hand side of engine under fuel tank to ON position.

Petrol to ON position (see arrow)

Accelerator move forward just off idle.

Choke to ON position (see arrow)

Pull cord on engine, usually 1-2 pulls. The cords length is approx 800mm long.



Emergency Stop Switch

Push the red button down to stop winch. Twist to release the lock. Note – Fold stop switch & hiab hook eye over when not in use to protect the stop switch from damage.



Operate winch on reasonably level ground. Fix 'A-Frame' to rear of winch by inserting pin.
Note: A Frame must line up with capstan you intend to use.

Small Capstan – slow but max pull.

Large Capstan – Faster but lower pull.

Put 'A-Frame' on tow ball of vehicle (ensure that the vehicles hand brake is on and that the vehicle is in gear) or Dyno-bolt to the floor.



Insert Crane Scale if tension is required. Will hold peak pull. Note Crane Scale is a fragile unit so take care when using. (See Crane Scale instructions for more information.)



Rope lengths to 100m usually in plastic drum, over 100m usually on a wooden drum with lifting jacks.

The rope is run out from the winch position into an open trench or through a duct with a draw rope.

Note: When pulling through a duct, the duct must be clean, use 2 ropes and a brush or squeegee to clean the duct.



Attach swivel to end of rope with slot head shackles (do not use boat or marine shackles as they catch on obstructions in trench or duct.)

Attach sock to swivel with slot head shackles (Do not use boat or marine shackles as they catch on obstructions in trench or duct.)

Sock is selected by cable diameter e.g. 25mm dia cable need 25mm dia sock. Size is stamped on sock eye for reference.



Turn rope on capstan, usually 2-3 turns sufficient (see pulling tension chart on winch). Operator holds and applies hand load to tail end of rope. To stop hauling either use emergency stop switch to stop the winch or release grip on rope.

DO NOT uncoil rope off capstan whilst capstan is still turning.



Front rollers are to guide the rope up from trench or down from ladder racking.

If front anchor is ever necessary remove front wheels and insert bar through tube and load with sand bags or dyno-bolt to the floor.

The 4hp will stall at about 800kg and 9hp at 1800kg load. If a total jam occurs and operator does not switch off capstan, friction will very quickly heat rope, which will cause the rope to melt and release the load (Do not touch melted rope).

Transport – Do not unload by dropping off the truck, it is recommended that a forkhoist or hiab be used to lift a winch off the truck. If no hiab or hoist available to unload the winch we would recommend 3 people to lift a 4hp Winch and 5 people to lift a 9hp Winch off the truck. Alternatively if it is safe to do so wheel the winch down on some planks.

Weather – Do not leave out in rain as spark plug will get wet and it will become difficult to start.

Maintenance – Check fuel and lube oil in engine before use. Oil wheel shaft and roller shafts. Pump up tyres.

- 1 CHECK FUEL (**PETROL 91 UNLEADED**) CHECK OIL (**10W 40**)
- 2 LOCATE WINCH DRUM IN LINE WITH HAUL ROPE
- 3 FIT "A" FRAME AND FASTEN TO TRUCK TOW BALL OR POST.
- 4 APPLY CHOKE AND PULL START ROPE TWICE. REDUCE TO ½ CHOKE AND PULL START ROPE. ENGINE WILL START
- 5 ADJUST ACCELERATOR TO REQUIRED SPEED. OPEN CHOKE
- 6 WRAP HAUL ROPE AROUND ROTATING DRUM AND MAINTAIN PRESSURE ON LOOSE END.
- 7 TO **STOP PULLING**, FLICK LOOSE END OF ROPE OFF CAPSTAN DRUM.
- 8 TO **STOP ENGINE** USE **STOP SWITCH OR OFF BUTTON**.
- 9 TO **STOP WINCH TIPPING OVER** INSERT PIPE OR BAR THROUGH BOTH SECTIONS IN BASE OF "A" FRAME.
- 10 TO **PULL FAST** USE **LARGE DRUM** WITH **LIGHT PULL**.
- 11 TO **PULL SLOW** USE **SMALL DRUM** WITH **HEAVY PULL**.
- 12 SEE SEPARATE SHEET FOR PULLING TENSIONS AND DRUM DIAMETER.
- 13 **NOT RATED OR APPROVED FOR LIFTING PEOPLE, OR ANYTHING. HAULING ONLY!**

4HP ENGINE HAULING DATA								
HAUL ROPE 12MM POLY PROP					4HP ENGINE			
Turns on Drum	1	1	2	2	3	3	4	
Tension in KG	#		#		#			
Speed - MTRS\MIN		#		#		#	#	
Capstan RPM 26 OD - Core								
ENGINE IDLE								
190 - 70	75	5.7	300/S	5.7	450/S	5.7	5.7	
190 - 110	150	8.9	300/S	8.9	450/S	8.9	8.9	
300 - 170	150	13.87	300/S	13.87		13.87	13.87	
400 - 290	200/S	23		23		23	23	
HAUL ROPE 12MM POLY PROP					4HP ENGINE			
Turns on Drum	1	1	2	2	3	3	4	
Tension in KG	#		#		#			
Speed - MTRS\MIN		#		#		#	#	
Capstan RPM 26 OD - Core								
190 - 70	125	7.6	450	7.6	500/S	7.6	7.6	
190 - 110	150	12	500/S	12		12	12	
300 - 170	25	18.6	450	18.6		18.6	18.6	
400 - 290	225/2	31.6		31.6		31.6	31.6	
ENGINE FULL SPEED			HAUL ROPE 12MM POLY PROP			4HP ENGINE		
Turns on Drum	1	1	2	2	3	3	4	
Tension in KG	#		#		#			
Speed - MTRS\MIN		#		#		#	#	
Capstan RPM 26 OD - Core								
190 - 70	125	10.9	500	10.9	400/S	10.9	10.9	
190 - 110	175	17.2	500/S	17.2		17.2	17.2	
300 - 170	200	26.6	500/S	26.6		26.6	26.6	
400 - 290	250/S	45.5		45.5		45.5	45.5	
NOTE:								
SYMBOL .../S (eg600/S)								
REPRESENTS ENGINE STALL								
RECOMMENDED ROPES FOR PULLING NOT LIFTING :-			12MM POLY PROP 600KG AT 3 - 1 RATING					
			16MM POLY PROP 1000KG AT 3 - 1 RATING					
			20MM POLY PROP 1500KG AT 3 - 1 RATING					

OPERATING INSTRUCTIONS - 9HP PETROL CAPSTAN WINCH

- 1 CHECK FUEL (**PETROL 91 UNLEADED**) CHECK OIL (**10W 40**)
- 2 LOCATE WINCH DRUM IN LINE WITH HAUL ROPE
- 3 FIT "A" FRAME AND FASTEN TO TRUCK TOW BALL OR POST.
- 4 APPLY CHOKE AND PULL START ROPE TWICE. REDUCE TO ½ CHOKE AND PULL START ROPE. ENGINE WILL START
- 5 ADJUST ACCELERATOR TO REQUIRED SPEED. OPEN CHOKE
- 6 WRAP HAUL ROPE AROUND ROTATING DRUM AND MAINTAIN PRESSURE ON LOOSE END.
- 7 TO **STOP PULLING**, FLICK LOOSE END OF ROPE OFF CAPSTAN DRUM.
- 8 TO **STOP ENGINE** USE **STOP SWITCH OR OFF BUTTON**.
- 9 TO **STOP WINCH TIPPING OVER** INSERT PIPE OR BAR THROUGH BOTH SECTIONS IN BASE OF "A" FRAME.
- 10 TO **PULL FAST** USE **LARGE DRUM** WITH **LIGHT PULL**.
- 11 TO **PULL SLOW** USE **SMALL DRUM** WITH **HEAVY PULL**.
- 12 SEE SEPARATE SHEET FOR PULLING TENSIONS AND DRUM DIAMETER.
- 13 **NOT RATED OR APPROVED FOR LIFTING PEOPLE, OR ANYTHING. HAULING ONLY!**

9HP ENGINE HAULING DATA								
TURNS ON DRUM		1	1	2	2	3	3	4
TENSION IN KG		#		#		#		
SPEED - MTRS/MIN			#		#		#	#
CAPSTAN RPM 26 OD - CORE								
ENGINE IDLE		HAUL ROPE 16MM POLY PROP					9HP ENGINE	
190 - 70		150	5.7	600/S	5.7	900/S	5.7	5.7
190 - 110		300	8.9	600	8.9	900/S	8.9	8.9
300 - 170		300	13.87	600/S	13.87		13.87	13.87
400 - 290		400/S	23		23		23	23
ENGINE HALF SPEED		HAUL ROPE 16MM POLY PROP					9HP ENGINE	
TURNS ON DRUM		1	1	2	2	3	3	4
TENSION IN KG		#		#		#		
SPEED - MTRS/MIN			#		#		#	#
CAPSTAN RPM 26 OD - CORE								
190 - 70		250	7.6	900	7.6	1600/S	7.6	7.6
190 - 110		300	12	1000/S	12		12	12
300 - 170		450	18.6	900	18.6		18.6	18.6
400 - 290		450/S	31.6		31.6		31.6	31.6
ENGINE FULL SPEED		HAUL ROPE 16MM POLY PROP					9HP ENGINE	
TURNS ON DRUM		1	1	2	2	3	3	4
TENSION IN KG		#		#		#		
SPEED - MTRS/MIN			#		#		#	#
CAPSTAN RPM 26 OD - CORE								
190 - 70		250	10.9	1000	10.9	1800/S	10.9	10.9
190 - 110		350	17.2	1000/S	17.2		17.2	17.2
300 - 170		400	26.6	1000/S	26.6		26.6	26.6
400 - 290		500/S	45.5		45.5		45.5	45.5
NOTE:								
SYMBOL .../S (eg600/S)								
REPRESENTS ENGINE STALL								
RECOMMENDED ROPES FOR PULLING NOT LIFTING :-				12MM POLY PROP 600KG AT 3 - 1 RATING				
				16MM POLY PROP 1000KG AT 3 - 1 RATING				
				20MM POLY PROP 1500KG AT 3 - 1 RATING				

