



VULCAN
HOIST - PALAN

USER MANUAL

NOVA RATCHET LEVER HOIST AND PULLER

1/4 to 6 Tonnes

NPU0.25T to NPU06T



Manuel en français de l'autre côté



KEEP THIS MANUAL



WARNING

DO NOT INSTALL, OPERATE, OR PERFORM MAINTENANCE ON THIS EQUIPMENT BEFORE READING AND UNDERSTANDING THIS MANUAL IN ITS ENTIRETY. FAILURE TO READ AND COMPLY WITH THE CONTENTS OF THIS MANUAL COULD RESULT IN SERIOUS BODILY INJURY OR DEATH AND / OR PROPERTY DAMAGE.

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Important Information, Warnings and Safety

This manual contains important safety, installation, operation, and maintenance information. Make this manual available to every person designated for the operation, installation, and maintenance of these products. Unless otherwise noted, tons in this manual are metric tonnes (1000kg, 2204 lbs, or 1.102 US short ton). Nova products are metric. Equivalent imperial (inches, pounds) measurements are provided for informational purposes only.

Danger, Warning, Caution and Notice

Throughout this manual, there are procedures which, if not followed, may result in injury, death, or substantial property damage.



DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury or property damage.

NOTICE

Indicates information or company policy which relates directly or indirectly to the safety of personnel or property.

Safety Framework and General Rules



WARNING

This manual cannot cover every possible installation, operation, maintenance, circumstance and situation. You, the owner or operator of the equipment covered in this manual, are responsible for the safe and proper installation, operation, inspection, and maintenance of this equipment in accordance with ASME B30.21 and all applicable laws, regulations and codes.

Anybody interacting with the ratchet puller must have read and understood the instructions laid out in this manual.

Vulcan Hoist will not be liable for any loss, damage, injury, death or compensation if caused, even if partially, by disregarding or misinterpreting an instruction from this manual.

Repairs must only be done with original equipment manufacturer parts by a qualified person. Any modification, including re-rating the ratchet puller, must be authorised by the original equipment manufacturer.



CAUTION

Every safety and identification label and plate that came with the ratchet puller, including the nameplate which displays the ratchet puller's serial number, capacity, and manufacturer, must be securely fastened and legible. If any safety or identification label or plate is missing or no longer legible, contact Vulcan Hoist for a replacement.

NOTICE

This manual covers a wide range of ratchet pullers with different capacities and options, and as such not all instructions in this manual apply to every ratchet puller. Disregard instructions that do not apply.



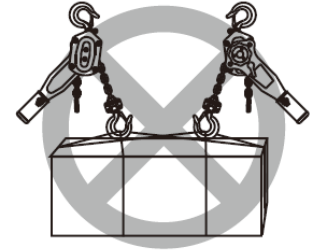
DANGER



NEVER use a puller for lifting, supporting or transporting people.



NEVER apply pressure on a puller.



NEVER use two or more pullers together to lift beyond a puller's rated capacity.



NEVER lift a load heavier than a puller's rated capacity.



NEVER lift or move a load over or near people.

NEVER use the 0.25 and 0.5 t models (NPU0.25T and NPU0.5T) for lifting. These two models are for pulling only.

Safety Rules Before Operation



WARNING

Do not ever extend the lever.

Do not use this ratchet puller if you notice deep nicks, gouges, bends or significant stretching in the hooks, load chain, or other load bearing parts.



CAUTION

Ensure that you have read and understood this manual in its entirety.

Ensure that the nameplate and safety warning labels and plates are present, securely fastened and legible.

Perform the daily inspection described in the Daily Inspection section of this manual if it is the ratchet puller's first use of the shift.

Be certain that the weight of the load to be lifted is lower or equal to the ratchet puller's rated capacity.

Estimate how much you plan to move the hook. Make sure that the chain is long enough to reach the furthest point without the ring in the last chain link entering the ratchet puller's body and distance Hmin (see section Technical Specifications) is short enough for the hook to reach the closest point.

Make sure that the planned lift or pull won't interfere with other operations going on and won't go over people.

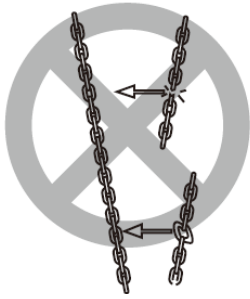
Make sure that the load's centre of gravity and attachment point are aligned with the ratchet puller.

Make sure that you have somewhere to safely lower the load before you lift it. Don't leave a raised load unattended.

Safety Rules During Operation



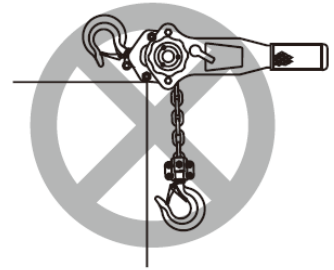
DANGER



NEVER use a twisted, kinked, damaged or stretched load chain.



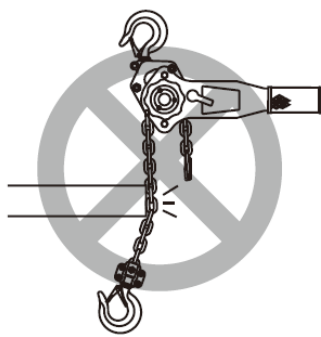
NEVER use the chain as a sling



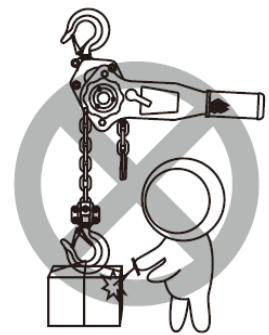
NEVER support or use the ratchet puller as a support



NEVER support a load on the tip of the hook



NEVER run the load chain over a sharp edge



NEVER weld or cut a load suspended by a ratchet puller

Make sure that the load's attachment point sits in the hook's bowl and that the latch is closed.

Start lifting or pulling the load. When the load chain is under tension, check that the lever is still turning smoothly and that the load does not fall or pull away on its own.

NEVER use a damaged ratchet puller or a ratchet puller that is not working properly or requires excessive force to work.

NEVER use a ratchet puller if it makes excessive or unusual noise.

NEVER use a ratchet puller with a chain that makes harsh, jerking moves.

NEVER swing a suspended load.

NEVER use the ratchet puller as a welding electrode.

NEVER move the hook so far that it collides with the ratchet puller or that the lifting ring at the free end of the chain pulls on the ratchet puller's body.

NEVER allow your attention to be diverted from operating the ratchet puller.

Safety Rules After Operation



CAUTION

Land the load and unload the chain slowly and safely.

NEVER suspend a load for an extended period of time.

Operation – 0.25 and 0.5 t Models



DANGER

0.25 and 0.5 t models are for pulling only. Do not use 0.25 and 0.5 t models for lifting applications or any application where the loss of braking may cause damage or injury.

Selector	Action	Result
N	Pull on either end of the unloaded chain	The chain will move quickly in the direction it is pulled
	Move the lever	The lever will move freely and the chain won't move
In	Pull on the dead end of the chain	The hook will move quickly towards the ratchet puller
	Turn the lever clockwise with no or little load on the hook	The hook may not move if it is not preloaded
	Turn the lever clockwise while the hook is loaded	The load will be pulled towards the ratchet puller
Out	Turn the lever counterclockwise with no or little load on the hook	The hook may not move if it is not preloaded
	Turn the lever counterclockwise while the hook is loaded*	The load will be pulled away from the ratchet puller



WARNING

*On 0.25 and 0.5 t models, do not move a loaded hook out if a sudden loss of braking may cause damage or injury.

Do not leave a loaded 0.25 or 0.5 t model unsupervised.

On 0.25 and 0.5 t models, pulling on the free end of the chain while the selector switch in the Out position will cause the lever to turn rapidly and may cause an injury.

Note: 0.25 t models do not have a handwheel.

Operation – 0.75 to 6 t Models

Selector	Action	Result
N	Pull on either end of the unloaded chain	The chain will move quickly in the direction it is pulled
	Turn the handwheel in either direction	The chain will move slowly in the same direction than the hand wheel
	Move the lever	The lever will move freely, and the chain won't move
In/Up	Pull on the dead end of the chain	The hook will move quickly towards the ratchet puller
	Turn the handwheel clockwise	The hook will move slowly towards the ratchet puller
	Turn the lever clockwise with no or little load on the hook	The hook may not move if it is not preloaded
	Turn the lever clockwise while the hook is loaded	The load will be pulled/hoisted towards the ratchet puller
Out/Down	Pull on the unloaded hook (not recommended)	The hook may move away from the ratchet puller but will be working against the disengaged brake
	Turn the handwheel counterclockwise	The hook will move slowly away from the ratchet puller
	Turn the lever counterclockwise with no or little load on the hook	The hook may not move if it is not preloaded
	Turn the lever counterclockwise while the hook is loaded	The load will be pulled/lowered away from the ratchet puller

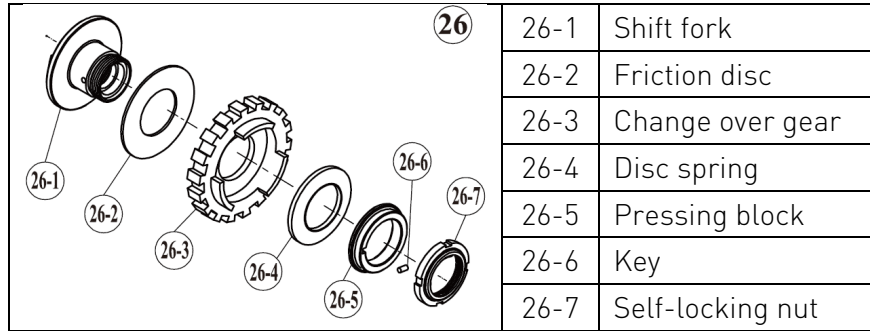
Flipping the selector switch while the hook is loaded will not cause any movement of the chain or the load to drop.

Overload Protection Devices

The overload protection device is an option. Check your ratchet puller's nameplate to see if it has this option. Overload protection devices have been adjusted in factory between 1.3 to 1.8 times the rated load. When lifting or pulling a load which triggers the overload protection device, the lever will turn if a considerable force exerted on it, but the hook will not move, and you won't hear the clicking of the ratcheting mechanism.

NOTICE

A load could be over the rated capacity even if the overload protection device does not trigger.



Inspection

WARNING

If a ratchet puller fails any one of the following inspection items, do not use it and remove it from service immediately. Do not put it back into service until every issue has been resolved.

Failure to inspect the ratchet puller as instructed may result in damage, injury, or death.


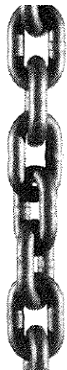

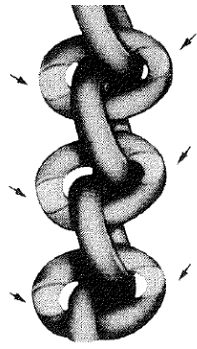
Contact Vulcan Hoist for spare parts. Do not use non-OEM parts.

These instructions are based on ASME B30.21. Also observe any other regulation that may apply.

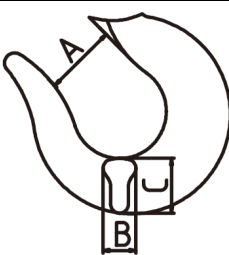
There are two types of inspection: daily and periodic. A daily inspection must be done by the ratchet puller's operator, or a person qualified to do so at the beginning of each working shift or the first time the ratchet puller is used in a shift. A periodic inspection must be done by a qualified person at intervals determined by the ratchet puller's service severity.

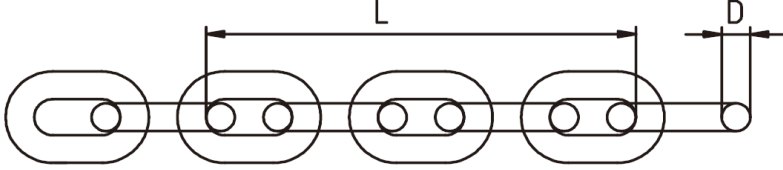
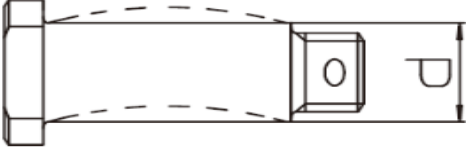

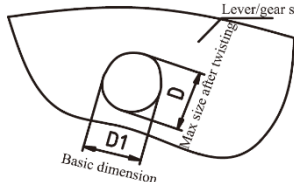
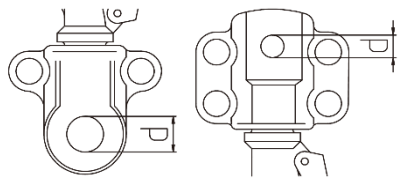
Service Severity and Periodic Inspection Frequency		
Service	Description	Periodic Inspection Frequency
Normal Service	Randomly distributed loads within the rated load limit, or uniform loads less than 65% of rated load for no more than 15% of the time	monthly to yearly
Heavy Service	Within the rated load limit but exceeds normal service	weekly to monthly
Severe Service	Normal or heavy service with abnormal operating conditions (high humidity, extreme temperatures, salty air, etc.)	daily to weekly


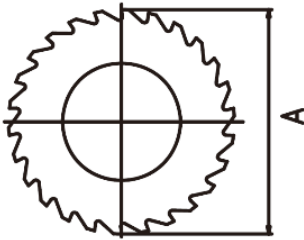
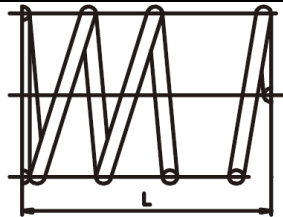
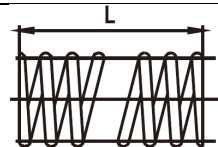
Daily Inspection

Part	Items to Inspect
Tags, labels, nameplate	-Warning labels and tags must be present, securely fastened and legible -The nameplate and the ratchet puller's capacity tags must be securely fastened and legible
Hook latches	Hook latches must be present on both hooks and close on their own
Load chain	<p>-The load chain must be lubricated. Apply oil if it appears dry -Especially for ratchet pullers with multiple chain falls (6 t), make sure that the load chain is not twisted. Make sure that it will enter the ratchet puller straight in both directions -Eliminate kinks and twists. Do not use the ratchet puller if they keep reoccurring -Look for excessive wear. Do not use the ratchet puller even if a single chain link appears worn</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Normal</p>  </div> <div style="text-align: center;"> <p>Twisted</p>  </div> <div style="text-align: center;"> <p>Kinked</p>  </div> <div style="text-align: center;"> <p>Worn out</p>  </div> </div>
Hooks and load chain	-The hooks and load chain must be free of deep nicks, gouges, bends, kinks or significant stretching
Hooks	Both hooks must swivel freely
Function	The handwheel (0.5 t and more models) and the lever must turn smoothly
Lever	-The lever must not be bent or damaged -The lever must not have been extended longer than its original length
Chain ring	-The chain ring or handle must be present in the last free chain link and in good condition
Overall	-There must not be any missing nut, bolt, or pin -There must not be any sign of major damage such as bumps or burns
Selector switch	Must move smoothly and hold still in each of the three positions (in, neutral, out)

Periodic Inspection

Item	Discard Criteria						
Hooks (lower and upper)							
Hook stretch and wear		Capacity (t)	A* mm [in]	B, mm [in]		C, mm [in]	
			Normal	Standard	Discard	Standard	Discard
		0.25	23.0 [0.91]*	10.0 [0.394]	≤9.5 [0.374]	16.6 [0.654]	≤15.7 [0.619]
		0.5	28.0 [1.10]*	13.0 [0.512]	≤12.3 [0.485]	19.2 [0.756]	≤18.2 [0.717]
		0.75	30.0 [1.81]*	13.0 [0.512]	≤12.4 [0.489]	21.5 [0.846]	≤20.3 [0.800]
		1.5	36.0 [1.42]*	17.0 [0.669]	≤16.2 [0.638]	28.8 [1.134]	≤27.3 [1.075]
		3	40.0 [1.58]*	25.0 [0.984]	≤23.8 [0.937]	43.8 [1.724]	≤41.6 [1.638]
		6	50.0 [1.97]*	32.0 [1.260]	≤30.4 [1.197]	52.5 [2.067]	≤49.9 [1.965]
	*These values are nominal. The A dimension must be measured when the hook is new. The hook must be discarded when the A dimension is 1.05 times greater than when new. Top and bottom hooks have the same dimensions.						
Flaws and wear	Must be free from significant rust, welds, weld splatter, deep nicks, and gouges						
Rotation	Must rotate freely without rough spots						
Hook yokes	Must not miss rivets or bolts. Must have no slack between yoke halves						
Latches	Latches must be present and stay closed when not forced open						

Item	Discard Criteria					
Load Chain						
Wear and stretch						
	Capacity (t)	L, mm [in]		D, mm [in]		
		Standard	Discard	Standard	Discard	
	0.25	60.0 [2.362]	≥61.2 [2.410]	4.0 [0.157]	≤3.6 [0.142]	
	0.5	75.0 [2.953]	≥76.5 [3.012]	5.0 [0.197]	≤4.5 [0.178]	
	0.75	90.0 [3.543]	≥92.5 [3.642]	6.0 [0.236]	≤5.4 [0.213]	
	1.5	120.0 [4.724]	≥123.3 [4.855]	8.0 [0.315]	≤7.2 [0.284]	
	3, 6	150.0 [5.906]	≥154.0 [6.063]	10.0 [0.394]	≤9.0 [0.355]	
Measure the pitch of 5 chain links at different places on the load chain						
Flaws	Must be free from welds, weld splatter, nicks and gouges					
Rust	Only surface rust is acceptable. No pitting from rust, rust flakes or rust bubbles					
Lubrication	Must be oiled					
Hook Pins						
Bottom hook pin wear and deformation		Capacity (t)	d, mm [in]			
			Standard	Discard		
		0.25	5.0 [0.197]	≤4.8 [0.189]		
		0.5	6.0 [0.236]	≤5.7 [0.225]		
		0.75	7.5 [0.295]	≤7.1 [0.280]		
		1.5	10.0 [0.394]	≤9.5 [0.374]		
		3, 6	14.5 [0.571]	≤13.8 [0.544]		
-Discard the hook pin if there is obvious bend or deformation -Screw thread must be in good condition						
Top hook pin wear and deformation		Capacity (t)	D Discard, mm [in]			
		0.25	≤6.5 [0.256]			
		0.5	≤8.5 [0.335]			
		0.75	≤9.5 [0.374]			
		1.5	≤12.4 [0.489]			
		3, 6	≤16.1 [0.634]			
Top hook pin holes in the side plates		Capacity (t)	D Discard, mm [in]			
		0.25	≥8.5 [0.334]			
		0.5	≥10.5 [0.413]			
		0.75	≥10.7 [0.421]			
		1.5	≥13.7 [0.539]			
		3, 6	≥17.7 [0.697]			
		Measure the holes' maximum diameter				
Top and bottom hook pin holes		Capacity (t)	Bottom Hook Pin Diameter, mm [in]		Top Hook Pin Diameter (mm)	
			Standard	Discard*	Standard	Discard*
		0.25	5.5 [0.216]	≥6.0 [0.236]	8.0 [0.315]	≥8.4 [0.330]
		0.5	6.5 [0.256]	≥7.0 [0.276]	10.5 [0.413]	≥11.0 [0.433]
		0.75	7.5 [0.295]	≥8.0 [0.315]	12.5 [0.492]	≥13.1 [0.516]
		1.5	10.5 [0.413]	≥11.0 [0.433]	14.5 [0.571]	≥15.2 [0.598]
		3, 6	15.0 [0.591]	≥15.7 [0.618]	18.0 [0.709]	≥18.9 [0.744]
		*Measure the holes' maximum diameter				
Braking System						
Rust	All parts should be rust-free					

Item	Discard Criteria																					
Pawls	 <ul style="list-style-type: none">-Pawls must have no surface wear-Pawl springs must push the pawl into the ratchet																					
Friction disc	<table><tr><th colspan="2">Friction Disc Thickness, mm [in]</th></tr><tr><th>Standard</th><th>Discard</th></tr><tr><td>3.0 [0.118]</td><td>≤2.5 [0.098]</td></tr></table>		Friction Disc Thickness, mm [in]		Standard	Discard	3.0 [0.118]	≤2.5 [0.098]	The friction disc must have the same thickness throughout. Its surfaces must be clean, flat and free from cracks and gouges.													
Friction Disc Thickness, mm [in]																						
Standard	Discard																					
3.0 [0.118]	≤2.5 [0.098]																					
Ratchet		<table><tr><th rowspan="2">Capacity (t)</th><th colspan="2">External Diameter A, mm [in]</th></tr><tr><th>Standard</th><th>Discard</th></tr><tr><td>0.25</td><td>42.0 [1.65]</td><td>≤40.0 [1.58]</td></tr><tr><td>0.5</td><td>55.0 [2.16]</td><td>≤53.0 [2.09]</td></tr><tr><td>0.75</td><td>74.5 [2.93]</td><td>≤71.5 [2.81]</td></tr><tr><td>1.5</td><td>85.0 [3.35]</td><td>≤83.0 [3.27]</td></tr><tr><td>3, 6</td><td>94.0 [3.70]</td><td>≤91.0 [3.58]</td></tr></table>	Capacity (t)	External Diameter A, mm [in]		Standard	Discard	0.25	42.0 [1.65]	≤40.0 [1.58]	0.5	55.0 [2.16]	≤53.0 [2.09]	0.75	74.5 [2.93]	≤71.5 [2.81]	1.5	85.0 [3.35]	≤83.0 [3.27]	3, 6	94.0 [3.70]	≤91.0 [3.58]
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3, 6	94.0 [3.70]	≤91.0 [3.58]																				
Free spring		<table><tr><th>Capacity (t)</th><th>Length L Discard, mm [in]</th></tr><tr><td>0.25</td><td>≤12.5 [0.50]</td></tr><tr><td>0.5</td><td>≤12 [0.48]</td></tr><tr><td>0.75</td><td>≤27 [1.07]</td></tr><tr><td>1.5</td><td>≤22.5 [0.89]</td></tr><tr><td>3, 6</td><td>≤27 [1.07]</td></tr></table>	Capacity (t)	Length L Discard, mm [in]	0.25	≤12.5 [0.50]	0.5	≤12 [0.48]	0.75	≤27 [1.07]	1.5	≤22.5 [0.89]	3, 6	≤27 [1.07]								
Capacity (t)	Length L Discard, mm [in]																					
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0.75	≤27 [1.07]																					
1.5	≤22.5 [0.89]																					
3, 6	≤27 [1.07]																					
Pulling System and Body																						
Load Chain Sprocket	Must not show significant wear or deformation																					
Gears	<ul style="list-style-type: none">-Must not show significant wear or deformation especially on teeth and bearing surface-Must be greased																					
Gearcase	Must not show deformation. Must not show significant wear on bearing surface																					
Side plates	Must be straight. See Hook Pins for the side plates' top hook pin hole dimensions																					
Lever Handle System																						
Ratchet spring		<table><tr><th>Capacity (t)</th><th>Length L Discard, mm [in]</th></tr><tr><td>0.25</td><td>≤12 [0.48]</td></tr><tr><td>0.5, 0.75</td><td>≤37 [1.46]</td></tr><tr><td>1.5 to 6</td><td>≤39 [1.54]</td></tr></table>	Capacity (t)	Length L Discard, mm [in]	0.25	≤12 [0.48]	0.5, 0.75	≤37 [1.46]	1.5 to 6	≤39 [1.54]												
Capacity (t)	Length L Discard, mm [in]																					
0.25	≤12 [0.48]																					
0.5, 0.75	≤37 [1.46]																					
1.5 to 6	≤39 [1.54]																					
Function																						
Pulling and slackening	No difficulty, abnormality, roughness in pulling and slackening with loads																					
Brake	No braking resistance when lifting or pulling. Loads must not slip down slowly when suspended. Loads must not slip after the lever is jerked suddenly in the lowering direction																					

Maintenance



WARNING

After performing maintenance, test the ratchet puller and perform a daily inspection.

NEVER perform maintenance while the ratchet puller is being used or supporting a load.

NEVER grease or oil the braking mechanism.

Failure to perform maintenance as instructed may result in damage, injury, or death.

It is recommended to perform maintenance at the same frequency as periodic inspections. Only qualified personnel must perform maintenance. Vulcan Hoist offers inspection, maintenance, and repair services.

1. Clean the ratchet puller and load chain without getting water inside the gearcase and the braking mechanism.

2. Open the gearcase. Wipe off excess worn grease. Apply new grease directly on gear teeth and bearing surfaces. Re-fasten the gearcase. NLGI No. 2 grease is recommended.
3. Oil the hook pins, hook shanks (for rotation), load chain and load chain sprockets. An ISO 68 oil is recommended.

Storing

Always store above freezing temperatures in a dry environment.

Do not use a ratchet puller in storage to hold or support a load.

Perform a periodic inspection before using a ratchet puller which is coming out of storage.

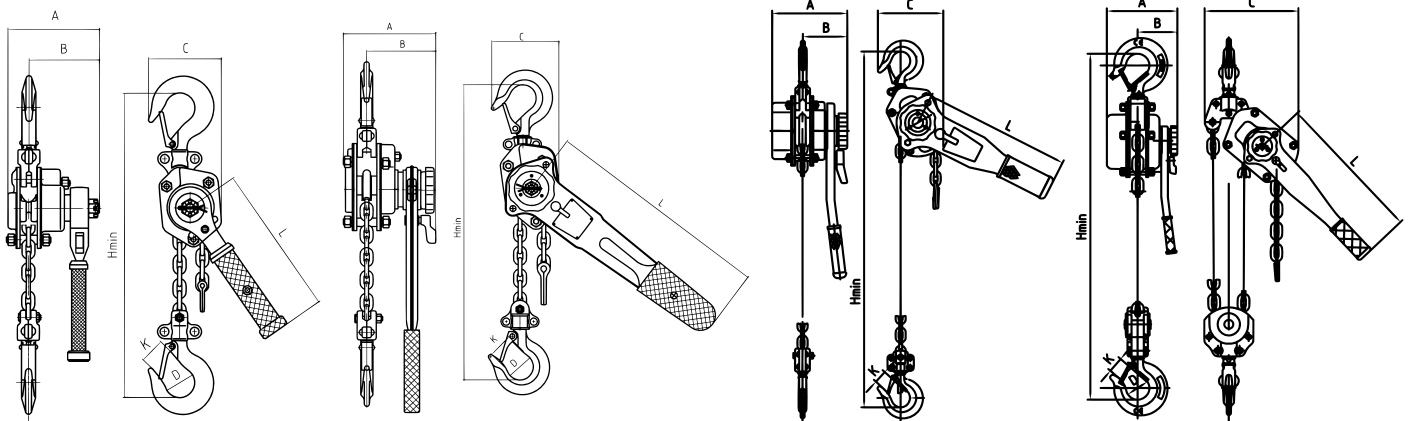
Allowable Operating Conditions

1. -10°C to 60°C
2. Can work in up to 100% relative humidity, but must not be used under water.

Outdoor Installations

1. Outdoor ratchet pullers should be sheltered from rain and snow or brought inside when not in use.
2. If the ratchet puller is exposed to salty air, extreme temperature, high humidity environments or exposure to rain or snow, increase the inspection and maintenance frequency.

Technical Specifications



0.25t

0.5t

0.75t; 1.5t; 3.0t

6.0t

Capacity, metric tonnes [lb]	Force to lift capacity, lb	Load chain Ø (mm) x nb. falls	Pull / lever rotation, mm [in]	Net weight* (lb)	Extra weight/ ft (lb)	Brake engagement min. load, lb	Dimensions, mm [in]				
							A	B	C	Hmin	L
0.25 [551]	56	4.0 x 1	75.0 [2.953]	4.0	0.27	6.6	92 [3.62]	72 [2.83]	85 [3.35]	250 [9.8]	160 [6.3]
0.5 [1102]	76	5.0 x 1	90.0 [3.543]	8.1	0.35	33	105 [4.13]	78 [3.07]	80 [3.15]	270 [10.6]	300 [11.8]
0.75 [1653]	31	6.0 x 1	19.8 [0.780]	16.9	0.5	66	148 [5.83]	88 [3.46]	135 [5.31]	320 [12.6]	290 [11.4]
1.5 [3306]	54	8.0 x 1	21.3 [0.839]	26.0	0.9	99	176 [6.93]	102 [4.02]	162 [6.38]	380 [15.0]	420 [16.5]
3.0 [6613]	72	10.0 x 1	16.8 [0.661]	46.2	1.4	132	195 [7.68]	109 [4.29]	211 [8.31]	480 [18.9]	420 [16.5]
6.0 [13227]	76	10.0 x 2	8.4 [0.331]	70.4	2.9	198	195 [7.68]	109 [4.29]	254 [10.00]	620 [24.4]	420 [16.5]

*For a ratchet puller with 10' of lift or pull distance.

Troubleshooting

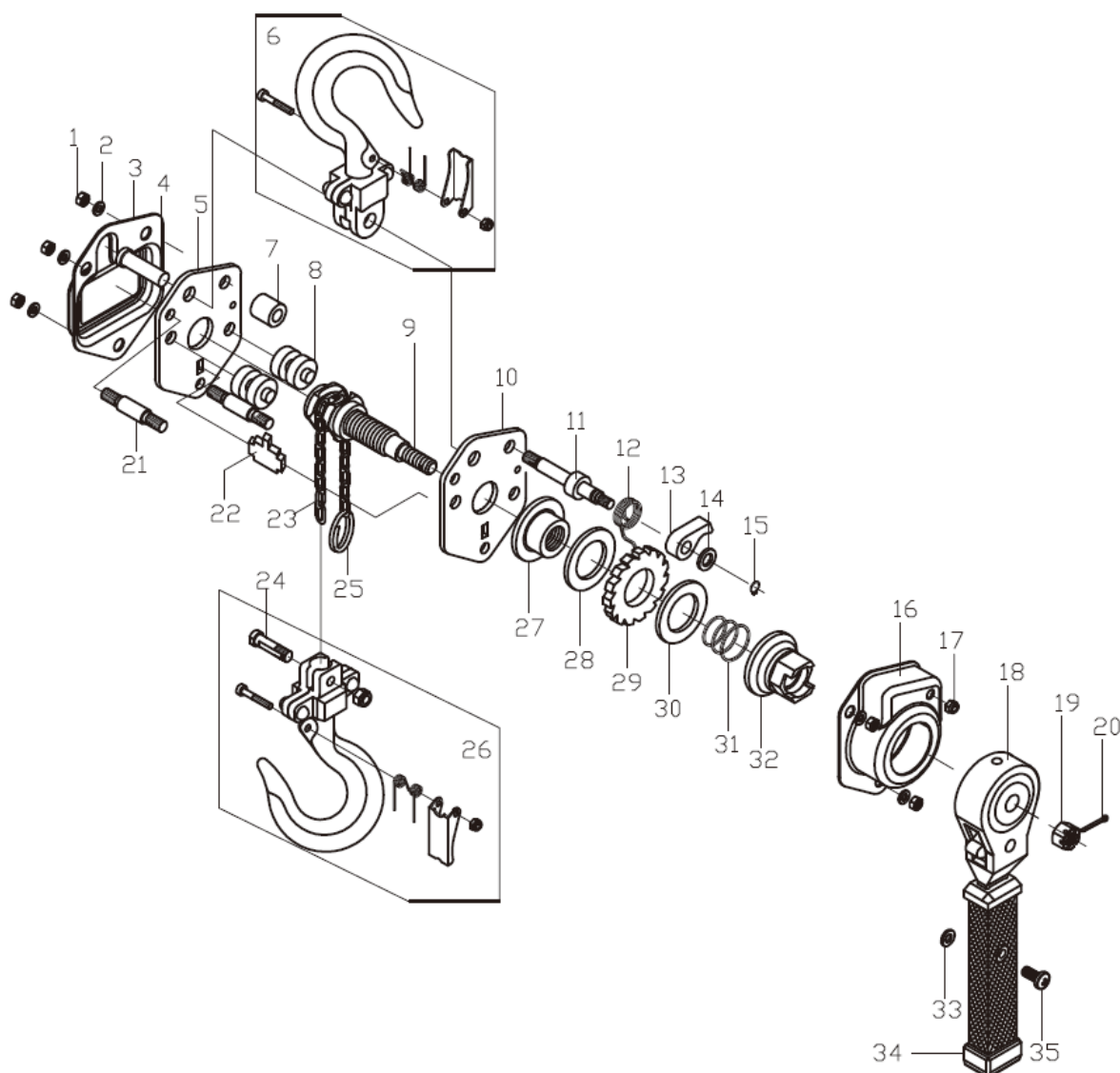
Symptom	Cause	Solution
The puller will not pull and the ratchet doesn't click	The pawl doesn't engage the ratchet due to foreign materials or corrosion	Clean foreign materials and corrosion. Lubricate the pawl's pivot
	The pawl spring is damaged or disengaged	Replace the pawl spring. Assemble it properly
	The ratchet spring is loose or damaged	Tighten or replace
	The overload protection mechanism is engaged	Pull or lift loads below the ratchet puller's capacity. If overload protection is engaged with loads within the capacity, it must be replaced or recalibrated by a qualified person.
	The load is too light	Start by tensioning the chain by using the handwheel
The load slips away from the ratchet puller	The brake is slipping due to lubricant	Replace the friction disc. Clean adjacent parts.
	Worn out friction disc due to overloading, misuse or long-term wear	Replace. See the Periodic Inspection section
	Foreign materials are disrupting the ratchet puller's mechanisms	Clean
The chain cannot be slackened under load	The brake is stuck closed, maybe due to being loaded too long, shock loaded, or extensively corroded	Place the selector in out/down and pull hard on the lever. If this does not reset the brake, unload the ratchet puller and replace the braking system.
The lever is tight when pulling, even without a load, may be squeaking	Worn gear teeth or worn bearing surfaces	Replace worn parts and grease regularly

Warranty

Your Nova Ratchet puller is guaranteed against defects in materials and workmanship **for 1 year** from the date of purchase if all the following conditions are met:

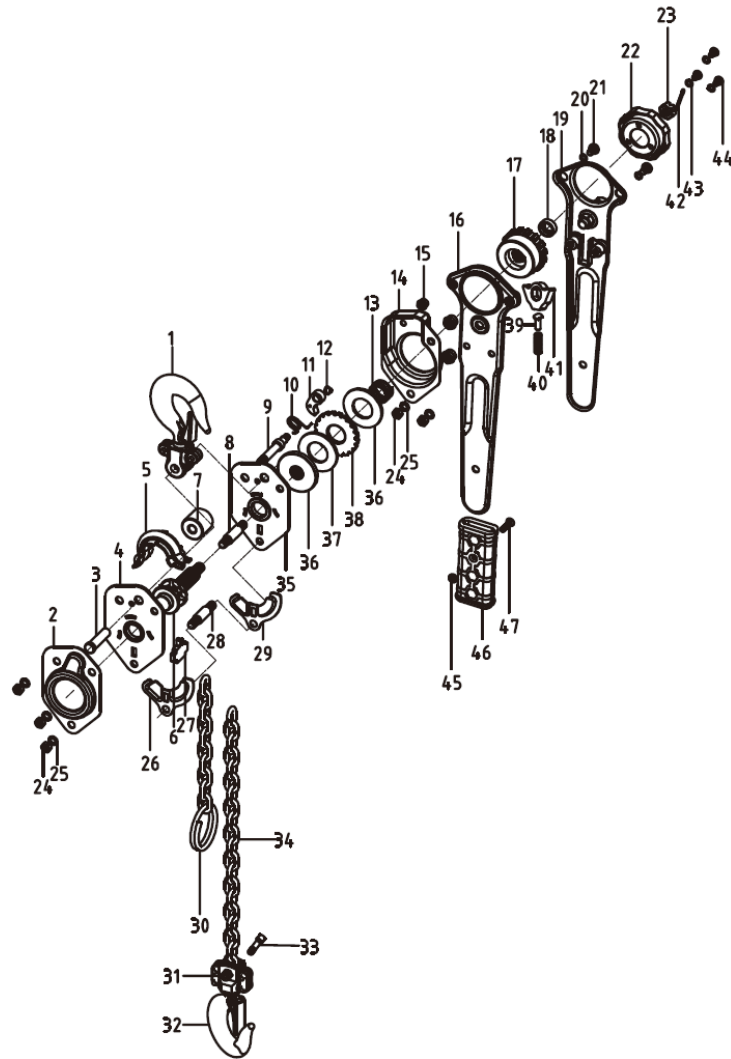
1. Any part replacement or modification of the Nova Ratchet puller **must** be approved in writing by Vulcan Hoist.
2. No credit will be issued for defective parts. Vulcan Hoist will ship only replacement parts, subject to warranty inspection.
3. For major problems, the Nova Ratchet puller must be returned prepaid to Vulcan Hoist for inspection and repair. If the repairs are under warranty, the Ratchet puller will be returned prepaid.

Pièces (modèles 0.25 t) – Parts (0.25 t Models)



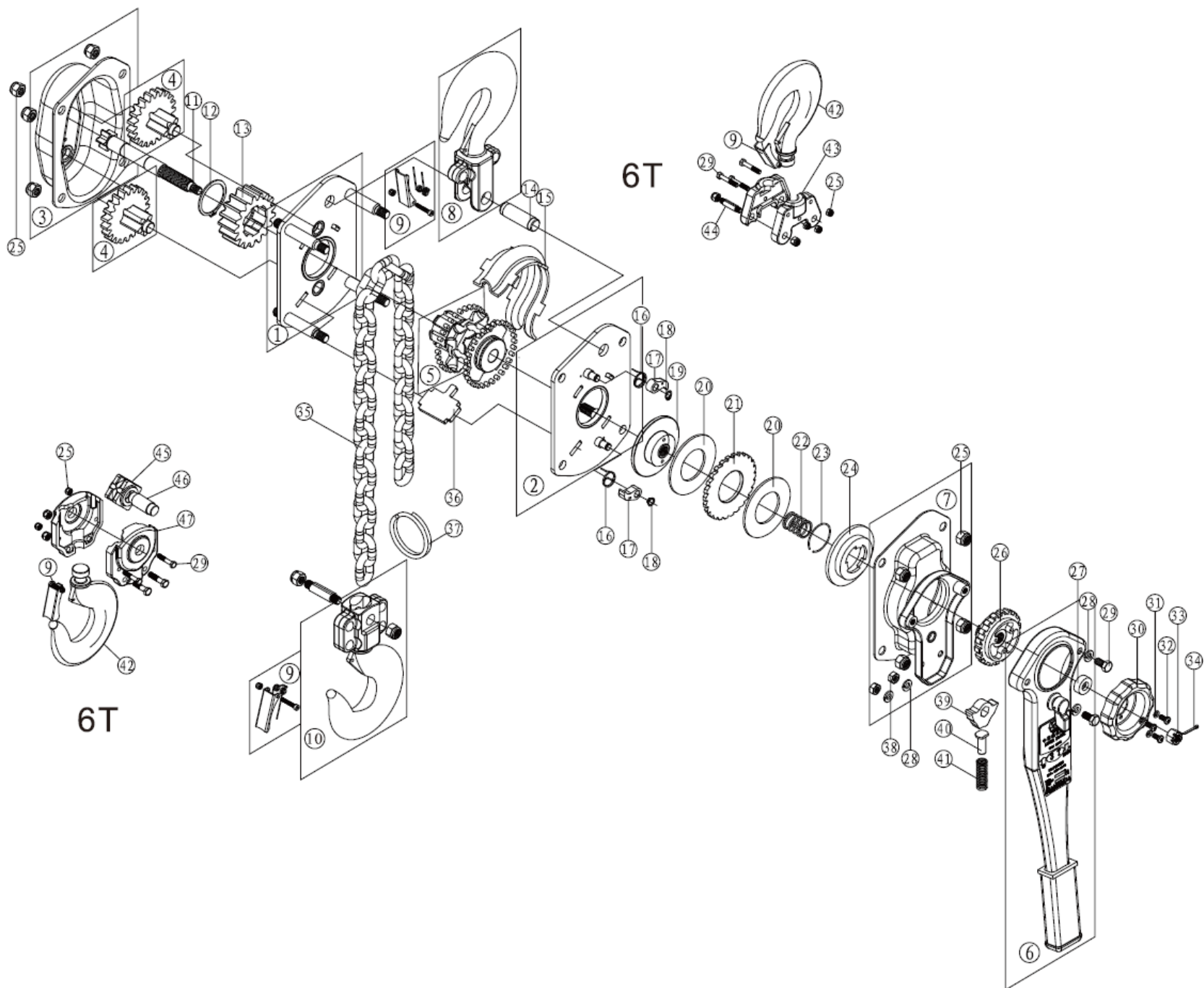
No.	Description française	English Description	No.	Description française	English Description
1	Écrou	Nut	19	Écrou à créneaux	Crown Nut
2	Rondelle autobloquante	Lock Washer	20	Goupille fendue	Cotter Pin
3	Couvert côté opposé	Opposite Side Cover	21	Colombage plaque latérales	Side Plates Stud
4	Goupille du crochet du haut	Top Hook Load Pin	22	Débourreur de chaîne	Chain Stripper
5	Plaque latérale opposée	Opposite Side Plate	23	Chaîne de chargement	Load Chain
6	Assemblage crochet du haut	Upper Hook Assembly	24	Goupille du crochet du bas	Lower Hook Pin
7	Entretoise	Spacer	25	Anneau du bout de chaîne	Chain End Ring
8	Guide chaîne	Chain Guide	26	Assemblage crochet du bas	Lower Hook Assembly
9	Barbotin/arbre entraînement	Sprocket and Drive Shaft	27	Selle du frein	Brake Seat
10	Plaque latérale côté rochet	Ratchet Side Plate	28	Disque de friction	Friction Disc
11	Arbre du cliquet	Pawl Shaft	29	Disque du rochet	Ratchet Disc
12	Ressort du cliquet	Pawl Spring	30	Disque de friction	Friction Disc
13	Cliquet	Pawl	31	Ressort libre	Free Spring
14	Rondelle	Washer	32	Écrou disque	Disc Nut
15	Circlip	Snap Ring	33	Écrou rond	Round Nut
16	Couvert côté rochet	Ratchet Side Cover	34	Poignée du levier	Lever Handle
17	Écrou	Nut	35	Vis de la poignée	Handle Screw
18	Levier du rochet	Ratchet Lever			

Pièces (modèles 0.5 t) – Parts (0.5 t Models)



No.	Description française	English Description	No.	Description française	English Description
1	Assemblage crochet du haut	Upper Hook Assembly	25	Rondelle autobloquante	Lock Washer
2	Couvert côté opposé	Opposite Side Cover	26	Plaque à chaîne gauche	Left Chain Plate
3	Goupille du crochet du haut	Top Hook Load Pin	27	Déboureur de chaîne	Chain Stripper
4	Plaque latérale opposée	Opposite Side Plate	28	Colombage plaque latérales	Side Plates Stud
5	Guide chaîne	Chain Guide	29	Plaque à chaîne droit	Right Chain Plate
6	Barbotin/arbre entraînement	Sprocket and Drive Shaft	30	Anneau du bout de chaîne	Chain End Ring
7	Entretoise	Spacer	31	Écrou	Nut
8	Colombage plaque latérales	Side Plates Stud	32	Assemblage crochet du bas	Lower Hook Assembly
9	Arbre du cliquet	Pawl Shaft	33	Goupille du crochet du bas	Lower Hook Pin
10	Ressort du cliquet	Pawl Spring	34	Chaîne de chargement	Load Chain
11	Cliquet	Pawl	35	Plaque latérale côté rochet	Ratchet Side Plate
12	Circlip	Snap Ring	36	Selle du frein	Brake Seat
13	Ressort libre	Free Spring	37	Disque de friction	Friction Disc
14	Couvert côté rochet	Ratchet Side Cover	38	Disque du rochet	Ratchet Disc
15	Écrou	Nut	39	Arbre sélecteur du rochet	Selector Shaft Spring
16	Levier du rochet	Ratchet Lever	40	Ressort sélecteur du rochet	Ratchet Selector Spring
17	Rochet de direction	Change Over Ratchet	41	Sélecteur	Selector
18	Bague	Bushing	42	Goupille fendue	Cotter Pin
19	Levier du rochet	Ratchet Lever	43	Rondelle autobloquante	Lock Washer
20	Rondelle autobloquante	Lock Washer	44	Vis	Screw
21	Vis	Screw	45	Écrou rond	Round Nut
22	Roue manuelle	Handwheel	46	Poignée du levier	Lever Handle
23	Écrou à créneaux	Crown Nut	47	Vis de la poignée	Handle Screw
24	Écrou	Nut			

Pièces (modèles 0.75 à 6 t) – Parts (0.75 to 6 t Models)



Pièces (modèles 0.75 à 6 t) – Parts (0.75 to 6 t Models)

No.	Description française	English Description	No.	Description française	English Description
1	Asm. plaque lat. engrenage	Gear Side Plate Assy.	24	Anneau du frein	Brake Ring
2	Asm. plaque latérale frein	Brake Side Plate Assy.	25	Rondelle autobloquante	Lock Washer
3	Asm. couvert d'engrenages	Gear Case Assembly	26	Rochet de direction	Change Over Ratchet
4	Engrenages	Gears	27	Bague	Bushing
5	Barbotin d'entraînement	Load Sheave	28	Rondelle autobloquante	Lock Washer
6	Poignée du levier	Lever Handle	29	Vis	Screw
7	Couvert du frein	Brake cover	30	Roue manuelle	Handwheel
8	Asm. du crochet du haut	Top Hook Assembly	31	Rondelle autobloquante	Lock Washer
9	Asm. du linguet de sécurité	Safety Latch Assembly	32	Vis	Screw
10	Asm. du crochet du bas	Lower Hook Assembly	33	Écrou à créneaux	Crown Nut
11	Arbre d'entraînement	Drive Shaft	34	Goupille fendue	Cotter Pin
12	Circlip	Snap Ring	35	Chaîne de chargement	Load Chain
13	Engrenage à cannelures	Splined Gear	36	Déboureur de chaîne	Chain Stripper
14	Goupille du crochet du haut	Top Hook Load Pin	37	Anneau du bout de chaîne	Chain End Ring
15	Guide chaîne	Chain Guide	38	Écrou	Nut
16	Ressort du cliquet	Pawl Spring	39	Sélecteur	Selector
17	Cliquet	Pawl	40	Arbre sélecteur du rochet	Selector Shaft Spring
18	Circlip	Snap Ring	41	Ressort sélecteur du rochet	Ratchet Selector Spring
19	Selle du frein	Brake Seat	42	6t Crochet	6t Hook
20	Disque de friction	Friction Disc	43	6t Moufles du crochet du haut	6t Top Hook Reeve Sides
21	Disque du rochet	Ratchet Disc	44	6t Goupille du moufle	6t Top Hook Reeve Pin
22	Ressort libre	Free Spring	45	6t Barbotin libre du crochet	6t Hook Free Sprocket
23	Circlip	Snap Ring	46	6t Arbre barbotin du crochet	6t Hook Sprocket Shaft
24	Anneau du frein	Brake Ring	47	6t Moufles du crochet du bas	6t Bot. Hook Reeve Sides

Numéros de pièces (modèles 0.75 à 6 t) – Part Numbers (0.75 to 6 t Models)

Remplacer xx par:

Replace xx by:

0.75 t	3/4
1.5 t	1.5
3 t	3
6 t	6

No.	No. de pièce – Part nb.	No.	No. de pièce – Part nb.	No.	No. de pièce – Part nb.
1	BLPNPUxx-E#005	18	BLPNPUxx-E#014	35	BLPNPUxx-E#028
2	BLPNPUxx-E#011	19	BLPNPUxx-E#015	36	BLPNPUxx-E#010
3	BLPNPUxx-E#001	20	BLPNPUxx-E#017	37	BLPNPUxx-E#029
4	BLPNPUxx-E#002	21	BLPNPUxx-E#018	38	BLPNPUxx-E#037
5	BLPNPUxx-E#006	22	BLPNPUxx-E#016	39	BLPNPUxx-E#023
6	BLPNPUxx-E#022	23	BLPNPUxx-E#045	40	BLPNPUxx-E#024
7	BLPNPUxx-E#020	24	BLPNPUxx-E#019	41	BLPNPUxx-E#025
8	BLPNPUxx-E#031	25	BLPNPUxx-E#035	42	BLPNPU6-E#033
9	BLPNPUxx-E#061	26	BLPNPUxx-E#021	43	BLPNPU6-E#031
10	BLPNPUxx-E#033	27	BLPNPUxx-E#026	44	BLPNPU6-E#034
11	BLPNPUxx-E#003	28	BLPNPUxx-E#026	45	BLPNPU6-E#055
12	BLPNPUxx-E#047	29		46	BLPNPU6-E#054
13	BLPNPUxx-E#004	30	BLPNPUxx-E#027	47	BLPNPU6-E#033
14	BLPNPUxx-E#032	31	BLPNPUxx-E#044	Plaque nominale: BLPNPUxx-E#030	
15	BLPNPUxx-E#007	32			
16	BLPNPUxx-E#012	33	BLPNPUxx-E#040	Nameplate: BLPNPUxx-E#030	
17	BLPNPUxx-E#013	34			

Pour la liste des numéros de pièces des modèles 0.25 et 0.5 t, consultez le site web de Vulcan Hoist-Palan.
For the part numbers list for 0.25 and 0.5t, consult Vulcan Hoist's website.