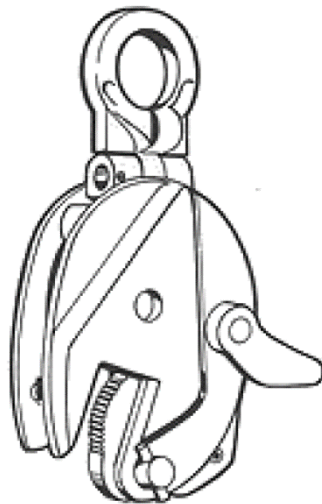




PCD Universal Plate Clamp

Operation manual



The use of any clamp presents some risk of personal injury or property damage. All persons involved in such installation, operation, and maintenance should be thoroughly familiar with the contents of this manual and follow the recommendations and instructions to avoid injury or property damage

All plate clamps are proof-tested at 1.5 times the rated load.

Do not use the clamp in areas containing flammable vapors, liquids, gasses or combustible dust or fibers. Do not use the clamp in highly corrosive, abrasive, wet environments or in applications involving exposure to temperatures below -40°C or above 80°C

Safety and Warnings

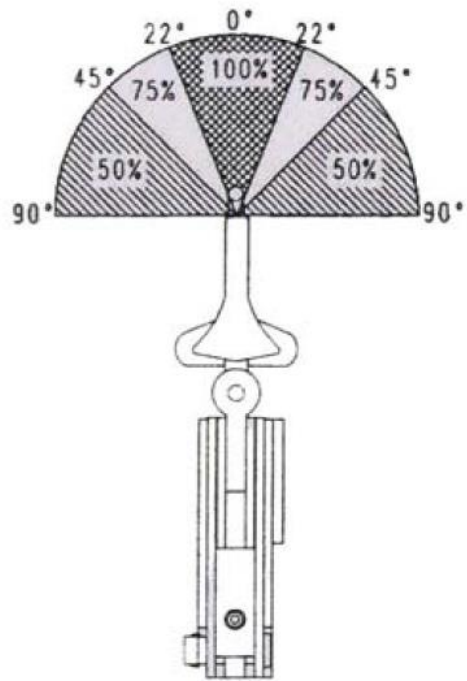
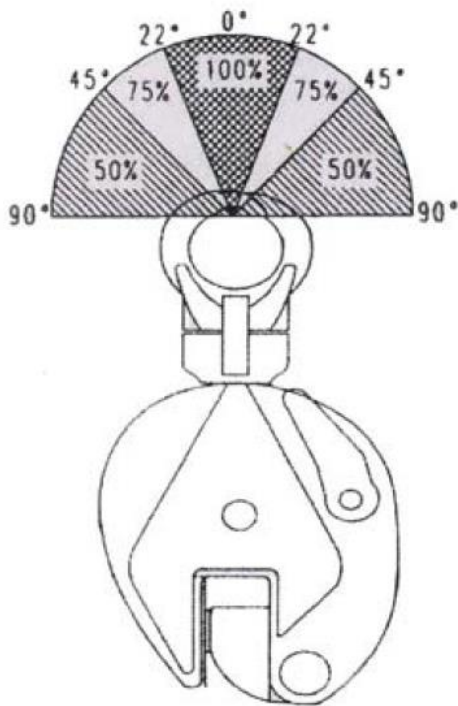
- Do NOT use any lifting equipment before reading the Owner's Manual
- Do NOT let an unqualified person use the equipment
- Do NOT lift more than the rated load
- Do NOT operate damaged or malfunctioning device
- Do NOT lift people or pass loads over people
- Do NOT lift a plate that is not fully engaged with the clamping jaws
- Do NOT lift unbalanced loads
- Do NOT leave load supported by the clamp unattended
- Do NOT lift under 20% of rated load capacity
- Do NOT lift plates of surface hardness below HRC 30 / Brinell 300
- Do NOT remove or obscure labels

Use only Vulcan authorized replacement parts in the service and maintenance of Vulcan equipment.

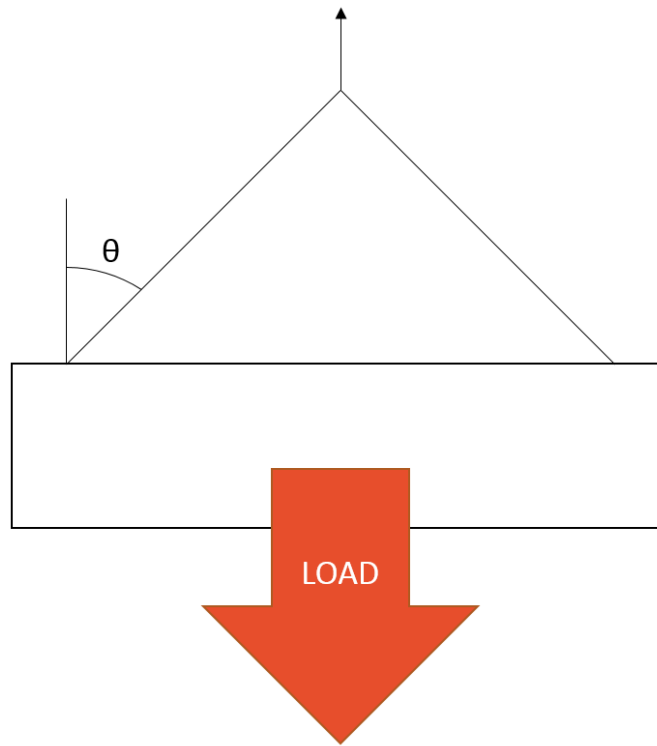
Failure to comply with any of limitations may result in bodily injury or death.

Installation and Operation Instructions

1. Make sure the surface hardness of the material is below HRC 30 / Brinell 300 and the plate weighs at least 20% of the clamp rated load. Otherwise, the clamp may not grip properly
2. Turn the function lever clockwise to disengage the jaws and insert plate to the end of the clamp mouth. Move the function lever counter-clockwise to grip and lock the plate
3. When lifting at an angle the capacity of the clamp is reduced. Make sure to respect the capacities described in the diagram below:



4. When lifting a plate with TWO plate clamps as seen in the diagram below:



Use the formula: $Plate\ Weight = WLL_C * L_a$ to calculate the maximum allowable plate weight. WLL_C is the working load limit of the clamp at angle θ and L_a is the load correcting factor selected from the table below:

θ	L_a
0°-15°	2
15°-30°	1.7
30°-45°	1.4
45°-60°	1

DO NOT USE WHEN $\theta \geq 60^\circ$

Example calculation: it is know that $\theta = 30^\circ$ and the working load limit of the clamp is 2200 lbf, therefore

$WLL_C = 75\%$ of 2200 = 1650 lbf (from diagram on previous page)

$L_a = 1.7$

$Plate\ Weight = WLL_C * L_a = 1650 * 1.7 = 2800\ lbf$

Inspection

Visual Inspection

The lifting equipment must be visually inspected by the operator on a daily basis during operation. Deficiencies to look for include, but are not limited to:

- Cracks or distortion in the structural frame, welds, mechanical operating parts, attached slings, clevises or hooks
- Malfunctions during the operation of the equipment
- Loose or missing fasteners or stops
- Debris on the plate surface before and after lifting
- Nameplates or other markings

Contact Vulcan Hoist for further instructions. The lifter must remain “out of service” until repairs are completed in compliance with Vulcan’s instructions.

In Service Inspection - Periodic

The lifting equipment must be inspected periodically by a qualified person. Inspection items include, but are not limited to:

- Evidence of loose fasteners (bolts, nuts, rivets, etc.)
- Cracks or distortion in the structural frame or welds
- Evidence of excessive wear of components
- Nameplate integrity and legibility

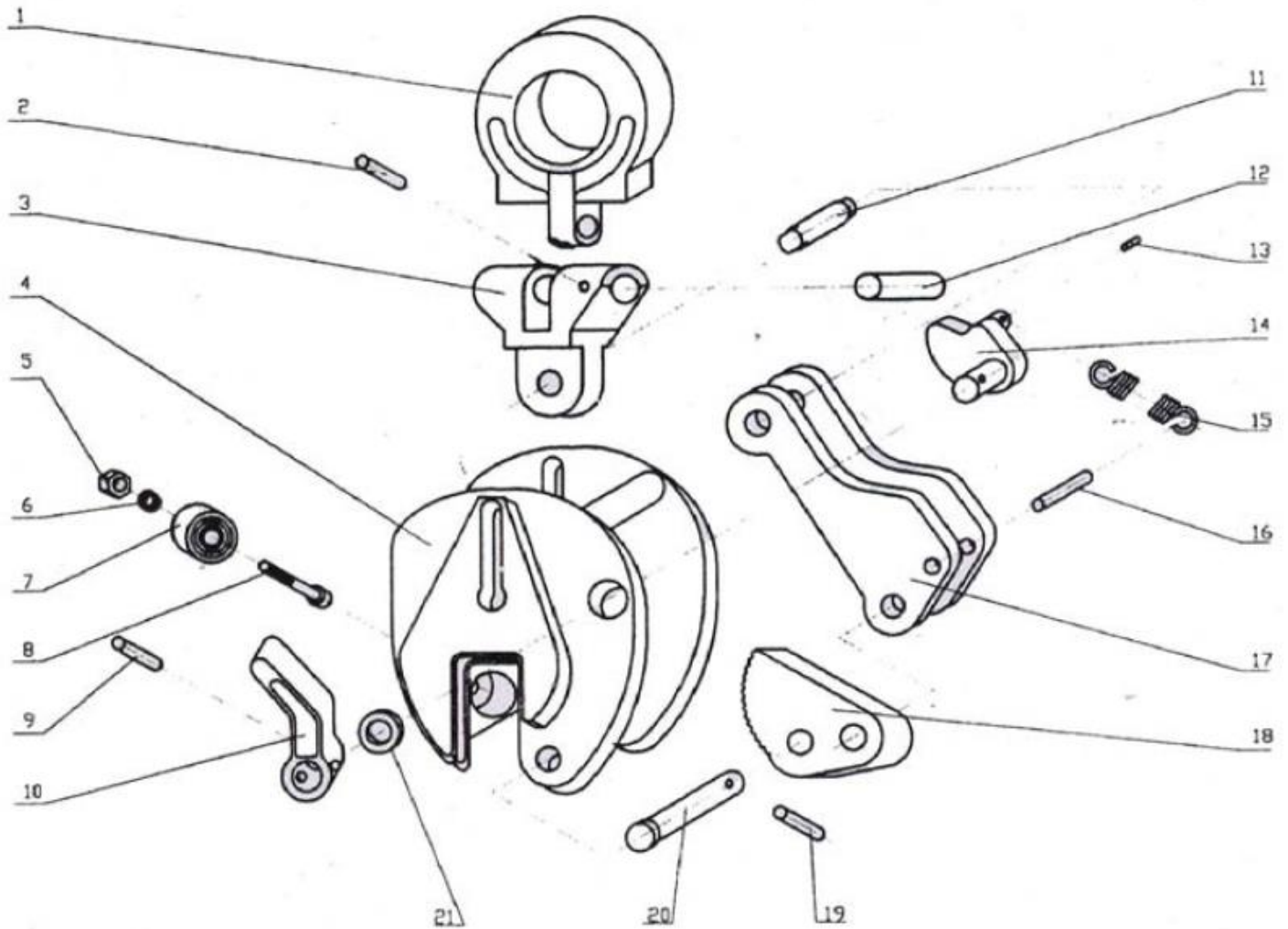
The frequency of periodic inspection is dependent on the type of service:

- Normal service - monthly
(operating within the working load limits with an average load of 65% of the working load limit or less)
- Heavy service - weekly to monthly
(operating within the working load limits with an average load of over 65% of the working load limit)
- Severe service - daily to weekly
(normal or heavy service with abnormal operating conditions)

If any deficiencies are found during an inspection, the equipment must be tagged immediately as “out of service”.

Contact Vulcan Hoist for further instructions. The equipment must remain “out of service” until repairs are completed in compliance with Vulcan’s instructions.

Dated records of all inspection and maintenance procedures are to be maintained by an appointed person as a permanent record as means of continuously monitoring the equipment.



Item	Description	Qty
1	Pivoting Shackle	1
2	Roll Pin	1
3	Connecting Block	1
4	Body	1
5	Lock Nut	1
6	Lock Washer	1
7	Round Jaw	1

Item	Description	Qty
8	Screw	1
9	Roll Pin	1
10	Function Lever	1
11	Connecting Block Pin	1
12	Pivoting Shackle Pin	1
13	Roll Pin	1
14	Function Block	1

Item	Description	Qty
15	Pulling Spring	1
16	Roll Pin	1
17	Connecting Plate	1
18	Clamping Jaw	1
19	Rolling Pin	1
20	Jaw Pin	1
21	Shim Washer	1

BEAM CLAMP

Beam Clamp (NBC)

1T to 10T



NOVA LIFTING CLAMPS

CDE Vertical Clamp (NVC)

0.8T to 5T



Lifting Clamp (NLC)

1T to 5T



Universal Clamp (NUC)

0.8T to 5T



Horizontal Plate Clamp (NHJ)

1T to 2T



Horizontal Plate Clamp (NHP)

0.75T to 2T



Drum Lifter (NDL)

1T



* Nova lifting clamps and beam clamp have a 1-year warranty.

SUPER LIFTING CLAMPS

Screw Cam Clamp (SCC)

0.5T to 3T



Screw Cam Clamp Double Eye (SDC-S)

0.5T to 5T



Srew Cam Clamp with Universal Shackle (SUC)

0,5T à 3T



Lateral Lifting Clamp (HLC-H)

1T to 6T



Vertical Lifting Clamp (SVC-H)

0.5T to 5T



Vertical Lifting Clamp with Universal Shackle (SVC-E)

0.5T to 2T



Vertical Lifting Clamp with Remote Control (SVC-L)

0.5T to 3T



Vertical Lifting Clamp with stopper (SVC)

1T to 5T



* Super lifting clamps have a 2-year warranty.

SERVICES



RENTAL



TESTING AND CERTIFICATION



MAINTENANCE AND REPAIR



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