



OPERATION MANUAL

CREATIVE LIFT® - CERAMIC LIFT MAGNET

MAG-MATE™

TOLL FREE: 888.582.0822

CONFORMS TO ASME B30.20 STANDARDS

Introduction

READ AND UNDERSTAND THIS MANUAL BEFORE INSTALLATION AND OPERATION OF YOUR CREATIVE LIFT® PRODUCT.

If used unsafely or improperly, there is a possibility that property damage or personal injury can result. The responsibility for safe operation ultimately rests with you, the operator.

HOLDING VALUES:

Your Creative Lift® Magnets carry a "useable" holding or lifting value, which you will find stated on the magnet. This value is obtained by pulling a new magnet in a perpendicular motion off of a newly machined, thick piece of steel. This type of test is conducted under what we term "ideal conditions". The pounds of pull it takes to break the magnet away from the steel surface is the "maximum" holding value. De-rated values are then determined by taking this maximum holding value and cutting it in half (50%). De-rated values are what we refer to as the "useable" value of the magnet.

This "useable" holding value is stated for the benefit and safety of the user, due to the fact that ideal conditions rarely exist in the field. The steel that you are holding or lifting

may have scale, rust, dirt, or coatings on its surface; or the surface of the magnet itself may be worn. Any of these condition will cause lower holding values for your Creative Lift® Magnet.

LOSS OF MAGNETISM:

Under normal use conditions, a permanent magnet can experience a decrease in its original holding value. The most common factors which can cause a loss of strength include:

- Everyday wear and tear on the magnet face such as: fine metal buildup on or between the magnet's poles, nicks or gouges in the magnet's poles, rust buildup, etc.
- Exposure to Extreme Temperatures - *OPERATING TEMPERATURES No lower than -76°F (-60°C) and no higher than 300°F (148°C).*
- Severe blow or shock to the magnet
- Exposure to electrical current

General Instructions

Installation and start-up are very simple and safe provided that the load limits and the application standards of the Creative Lift are observed for handling suspended loads.

1. Remove lift from packaging. This operation is to be done with a bridge or other crane of appropriate capacity by hooking the lift by the lift lug the top of the Creative Lift®.
2. With a crane and hook of appropriate size, lift the Creative Lift® and position the magnet in the center of the load to be moved. Be careful to make sure that the load to be lifted is within the prescribed range of the lifters holding capabilities. See the poundage on the lifter label or the performance sheet to check if your load is within this range. Make sure the Creative Lift's magnetic poles are in full and perfect contact with the load.
3. Make sure the cam release device is properly located on the load to be lifted. The cam release is the mechanical device that breaks the magnet free from the load. Improper placement of the cam release on the load to be lifted can make releasing the load difficult.
4. Proceed to move the load observing applicable standards for handling any suspended load.

NO ONE SHOULD BE IN THE OPERATING AREA. NEVER STAND UNDER A LOAD BEING LIFTED OR LIFT OVER ANY PEOPLE. ALWAYS USE EXTRA CAUTION. ONLY USE ON MATERIAL THAT DOES NOT FLEX OR BEND.

5. Set the load on the floor or support before releasing it, being careful that the load is perfectly settled on the floor or support and that the support is adequate for the load.
6. To release the load, manually move the cam release handle down (away from lift hook) to break the back corners of the lift free from the load. If the cam release device was accidentally positioned off the edge of the load to be lifted use the jack screw to break the lift free from the load. The Jack Screw is a backup release device.

Helpful Hint: If exact positioning of the magnet is required, lower the jack screw so it extends lower than the magnetic poles and keep the cam release device down. Once the magnet is in the desired position, swing the cam release up into the lifting position and then raise the jack screw until the lift is sitting flat on the load with only the poles touching the load to be lifted.

Safety Measures

DO NOT hoist a load weighing more than the lift's holding capacity.

DO NOT hoist a load if it is unbalanced.

DO NOT hoist a load before ensuring perfect magnetic contact. First make a test lift of 2" or 3" (10 cm).

DO NOT disengage the lift before setting down the load on the floor or support & making sure the load is steadied.

DO NOT weld in close proximity to the magnet

DO NOT use the magnet as a part of the ground circuit during a welding operation

DO NOT place the magnet directly onto a grounded floor. Use a non-conductive spacer

DO NOT lift people or loads with people on them

DO NOT leave suspended loads unattended

DO NOT operate lift magnet with missing parts, damaged or malfunction lift magnet

DO NOT remove or obscure product labeling

DO NOT lift loads high than necessary

DO NOT position center of lift on work load by pounding on the sides of the lift with a hammer.

ALWAYS use the entire lift pole surface.

ALWAYS keep contact pole areas perfectly flat and parallel on the surface of the load.

Safety Precautions

Even though a magnet works through non-magnetic bodies such as dirt and non-ferrous materials in general the best efficiency of any magnetic lift is achieved when the poles* make complete contact with the load. It is therefore recommended to:

1. Never stand under load being lifted or lift over any people. Always use extra caution. Only use on thick material that does not flex or bend.
2. Clear any foreign material from the load as much as possible before setting the magnetic lift on it. Avoid as much as possible setting down the lifter in places on the load that are very dirty or deformed.
3. Occasionally check the mechanical condition of the magnetic poles to make sure they are flat and not damaged by mechanical accidents during its time in use.

4. Thin or large sheets that sag may cause the sheet to peel off the face of the magnet. (See chart below)
5. Keep the surface of the Creative Lift and materials clean and free of chips, oil, slag, welding-beads, dirt, etc. This can be done by wiping the surface of the magnet off frequently with a wire brush, or shop rag.
6. After a period of time the pole faces may become somewhat rounded, reducing the magnets effectiveness. We recommend the whole surface be machined or ground (.010" to .015").
7. Do not weld on, hammer, throw or drop the magnet.

*Poles- the areas or surfaces of the magnetic lift which make contact with the load.

Holding Value & **Maximum Sheet Length Due To Sag For Material Thickness For Single Magnet Use

Model No.	3/16" (6' Length)	1/4" (6' Length)	3/8" (8' Length)	1/2" (8' Length)	3/4" (8' Length)	1" (10' Length)
CL0400	400 lbs	400 lbs	400 lbs	400 lbs	400 lbs	400 lbs
CL1000	600 lbs	900 lbs	1000 lbs	1000 lbs	1000 lbs	1000 lbs
CL1500	800 lbs	1000 lbs	1500 lbs	1500 lbs	1500 lbs	1500 lbs
CL2200	800 lbs	1064 lbs	1725 lbs	2000 lbs	2200 lbs	2200 lbs
CL3000	800 lbs	1100 lbs	1800 lbs	2700 lbs	3000 lbs	3000 lbs

NOTE: Never stand under load being lifted. Always use extra caution. Only use magnetic lifts on material that does not flex or bend. The surface of the lift and the load need to be clean & free of chips, oil, slag, dirt, etc. Lifts must be centered on the load. Not recommended for painted or finish coated surfaces. We recommend when lifting sheets over 8' long that you use 2 or more lifts. **Maximum sheet lengths are selected due to the sag characteristics of the specified sheet.

Handle Assembly Parts & Instructions

Step 1: Place the *Bushing* (6) on one of the *Bolts* (5).

Step 2: Push the *Bolt* with the *Bushing* through the *Roller Bearing* (7) and then thread the Bolt into *Hole "A"* on the *Handle* (2).

Step 3: Set the Creative Lift® Magnet, *Jack Screw* end DOWN, on a non-magnetic surface with the *Handle Tab* end UP in a vertical position.

Step 4: Place the second *Bolt* through the *Handle Tab* and then place the *Washer* (8) over the exposed end of the *Bolt* on the opposite side of the *Handle Tab*.

Step 5: Thread the *Bolt* with the *Washer* into *Hole "B"* on the *Handle* (2).

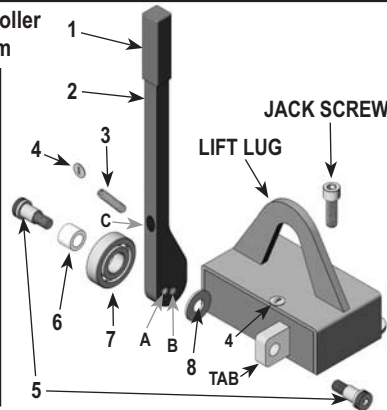
Step 6: Secure the *Spring Retainer* (4) on one end of the *Spring* (3) and pass the other end of the *Spring* through *Hole "C"* in the *Handle* (2) and attach it to *Spring Retainer* (4) welded on the Creative Lift® magnet body.

Step 7: Testing the Handle. Pull the handle down and release it. The handle should return into an upright position. If the handle doesn't return to the upright position check for proper installation.

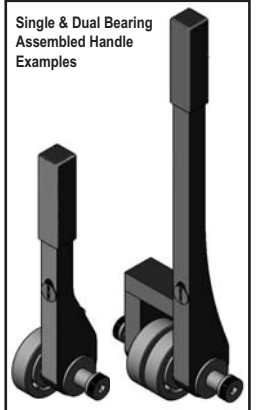
Creative Lift® Single Roller Cam Assembly Diagram

1. GRIP
2. HANDLE
3. SPRING
4. SPRING RETAINER
5. SHOULDER BOLT (2)
6. NYLON BUSHING*
7. BALL BEARING*
8. WASHER*

*Dual Bearing handle assemblies contain 2 of each of these parts as well as an additional Bronze Bushing that is inserted into the two Bearings and Nylon Bushings.



Single & Dual Bearing Assembled Handle Examples



Annual Calibration

To ensure that your Creative Lift® Ceramic Lift Magnet is performing to its optimal level, an annual calibration check at our facility is recommended. Under an "Ideal Conditions" environment, our state of the art equipment will perform a series of tests to determine the current "de-rated" holding value of your magnet. This holding value must meet or exceed the value stated on your Creative Lift® Ceramic Lift Magnet.

If the stated holding value is met, and you do not require any additional maintenance, we will return the magnet to you along with written documentation of the test results.

If the stated holding value is not met, we will contact you with the results of the test and our recommendations for returning the magnet to its original condition. Options may include; the resurfacing of the magnet's poles, the repair of any broken or chipped epoxy or the repair of any broken components.

INSTRUCTIONS:

Note: Customer is responsible for shipping to and from Industrial Magnetics, Inc., and any authorized repairs to the Creative Lift® Ceramic Lift Magnet.

Please contact our customer service department at (888) 582-0822 to obtain your Customer Supplied Material (CSM) number.

At this time, you will be required to supply a P.O.# for the test procedure described under "Annual Calibration". Current fees for this procedure can be obtained by contacting the number listed above. Please include your contact information and shipping address with your Creative Lift® Ceramic Lift Magnet and send to:

Industrial Magnetics, Inc.
 1385 M-75 South
 Boyne City, MI 49712
 CSM# _____, Attn: Quality Assurance, Calibration

Comments or Concerns?

We believe Industrial Magnetics, Inc. offers the finest line of Lift Magnets available today. Great pride has gone into the design and manufacture of this unit. Any comments or concerns should be directed to our Customer Service Department at 1-888-582-0822. **We appreciate the opportunity to serve you!**

INDUSTRIAL MAGNETICS, INC.

02/10

1385 M-75 South • Boyne City, Michigan 49712 • Phone: (800) 662-4638

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TRAMP METAL

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