

# **PETOL™ Flange Lifter**

**FLA5000**

**Data Book**

## **Warning**

**Improper use of flange lifters may result in injury or death. Do Not Exceed Rated Load of 5000 Pounds. Follow safe practices listed in Data Book.**

**GEARENCH™**  
**P.O. Box 192**  
**4450 South Highway 6**  
**Clifton, Texas 76634**  
**Phone: (254) 675-8651**  
**Fax: (254) 675-6100**

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## **PETOL™ Flange Lifter Description**

The FLA5000 PETOL™ Flange Lifter hangs from a shackle or a hook, which is attached to a lifting mechanism such as a crane or a hoist. The lifting mechanism moves the Flange Lifter up and down to install and remove ANSI B16.5, ANSI B16.47 Series A, and ANSI B16.47 Series B blind and weld neck flanges. Load ratings for the lifting mechanism and shackle or hook components should be greater than or equal to the rated load of the Flange Lifter.

The Flange Lifter has a rated load of 5000 pounds.

The FLA5000 offers the following features:

- No lifting eye required.

- Removable spacers and lifting plates to quickly adjust for flange thickness.

- Alloy steel materials to provide long life.

- Load tested and magnetic particle inspected to ensure safety and quality.

- Designed to comply with ASME specifications B30.20 and BTH-1.

## **Warranty**

### **What Is Covered**

GEARENCH™ tools are expressly warranted to you, the purchaser, to be free of defects in material and workmanship.

### **How Long Coverage Lasts**

This express warranty lasts for the lifetime of the GEARENCH tool. Warranty coverage ends when the tool becomes unusable for reasons other than defects in workmanship or material.

### **How Can You Get Warranty Service**

To obtain the benefit of this warranty, contact a GEARENCH sales representative in Clifton, Texas.

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### **What Will We Do To Correct Problems**

Warranted products will be repaired or replaced, at GEARENCH's option, and returned at no charge to you, the original purchaser; or, if after three attempts at repair or replacement during the warranty period, the product defect in material or workmanship persists, you can elect to receive a full refund of your original purchase price for the product.

### **What Is Not Covered**

Defects, failures or conditions that are due to normal wear and tear, abuse or misuse, are not covered by this limited warranty. In addition, this limited warranty is in lieu of all other warranties, express or implied, verbal or written. To the maximum extent allowed by law GEARENCH disclaims all implied warranties, including implied warranties of merchantability and/or fitness for a particular purpose. GEARENCH also specifically denies any liability for any incidental damages and/or consequential damages, including but not limited to property damage to property other than the product itself, loss of sales profits, down time, costs or any other damages measurable in money, whether or not included in the foregoing enumeration.

Please be advised that some states do not allow the exclusion or limitation of incidental or consequential damages, so this limitation or exclusion may not apply to you. This warranty gives you specific rights, and you may also have other rights, which vary from state to state, province to province, or country to country.

### **Are Personal Injuries Covered**

In the event you, someone working for you, or any other person sustain a personal injury as a result of using the GEARENCH tool, GEARENCH limits its potential liability for such a

claim or injury to the fullest extent allowed by law, and disclaims and denies any liability for such personal injury.

Please be advised that some states do not allow the exclusion or limitation of liability for personal injuries, so the above limitation or exclusion may not apply to you, or the individual claiming injury.

**No Other Express Warranty Applies**

This GEARENCH LIMITED WARRANTY is the sole and exclusive warranty, express or implied for GEARENCH products. No employee, agent, dealer or other person is authorized to alter, modify, expand or reduce the terms of this warranty or to make any other warranty on behalf of GEARENCH.

**Law Applicable**

All matters related to the sale and/or use of the GEARENCH tool that is the subject of this limited warranty, along with the construction and enforcement of the terms of this limited warranty itself, shall be subject to the substantive and procedural laws of the state of Texas, not the conflicts of laws provisions of Texas, but rather the laws of Texas themselves.

**Forum Selection Clause**

Any dispute arising out of the sale and/or use of the GEARENCH tool that is the subject of this limited warranty shall be presented in the form of a claim or lawsuit to the offices of GEARENCH in Clifton, Bosque County, Texas. No claim or suit may be brought against GEARENCH, arising out of the sale and/or use of the tool, or arising out of the terms of this warranty, except in such forum. Purchase and/or use of the GEARENCH tool makes you subject to the benefits and limitations of this limited warranty. Accordingly, any writ, judgment or other enforcement, obtained from a jurisdiction, county, parish, state or federal court or other country, other than the forum identified above, shall be void and unenforceable against GEARENCH.

**Arbitration Clause**

In the event of dispute or claim arises out of the sale and/or use of the GEARENCH tool that is the subject of this limited warranty, or arises out of the interpretation or enforcement of the terms and conditions of this limited warranty, such dispute shall be submitted to binding arbitration pursuant to the rules of the American Arbitration Association. If required to accomplish the purpose of this Arbitration clause, the purchaser hereby expressly waives any right to demand trial by jury.

**Complete Agreement**

This express limited warranty contains the entire agreement regarding express or implied warranties related to the GEARENCH tool that is the subject of it. No writing or language contained in the purchase order or any other document of the purchaser, or invoice of GEARENCH or any intermediate seller, shall be construed as modifying, in any way, the rights and liabilities contained in this limited warranty. GEARENCH expressly disclaims

any obligations expressed in any customer purchase order or document that are contrary to the terms and limitations of this warranty.

**Severability**

If any term or limitation contained in this limited warranty is deemed unenforceable by law, then the term shall be severed from the remaining portions of the limited warranty which shall remain enforceable.

All communications to GEARENCH regarding the use of the tool and any aspect of the sale of the tool of this limited warranty should be addressed to GEARENCH.

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## Safe Practices and Procedures

### Responsibility

It is the responsibility of the employer to train the employee in the proper selection and use of flange lifters, and to ensure that they are selected and used in that manner. A part of the job instruction program should therefore be detailed training in the proper use of flange lifters.

"Employers are responsible for the safe condition of tools and equipment used by employees, including tools and equipment which may be furnished by employees." - (Source: OSHA 1910.242A)

### Safety

While we pride ourselves on the quality and dependability we build into GEARENCH™ tools and products, we caution users that it is only prudent to know and follow the simple rules of safety when using our products, or anyone else's.

Always follow safe practices and procedures in accordance with the recommendations of OSHA, The National Safety Council (NSC), The Hand Tools Institute (HTI), The National Association of Chain Manufacturers (NACM), The International Association of Drilling Contractors (IADC), Etc. All applicable Governmental rules, regulations or restrictions, now in effect or which may be promulgated, take precedence over the suggestions in this publication. The information in this publication is designed to supplement standard safe practices and procedures, not in lieu of, or replacement thereof.



# WARNING

**Improper use of flange lifters may result in injury or death. Follow safe practices listed below.**

### Potential hazards when installing and removing flanges:

<b>Hazard</b>	<b>Possible Solution</b>
Getting pinched fingers and hands from lifters, flanges, and connections	Keep all hands and fingers away from pinch points
Being struck by swinging flanges and flange lifters	Instruct workers to be alert when on the work site

<b>Hazard</b>	<b>Possible Solution</b>
Being struck by flanges or flange bolts should they slip	Ensure that workers are instructed in proper flange lifter procedure
Being struck by flanges or flange bolts not securely connected	Inspect the tools before use Inspect and maintain flange lifters

## **Periodic Maintenance and Inspection Schedule**

### **Daily**

1. Visually inspect flange lifter for signs of corrosion or damaged components.
2. Inspect for any visual evidence of external cracks. Visible cracks indicate potential failure points, and if they are discovered, the flange lifter should be immediately removed from service.
3. Examine the lower surfaces on the lifting plates for deformation. If the surfaces are excessively worn, the flange lifter needs repair. (See ‘Inspection Wear Limits’ for maximum allowable wear)
4. **Do not grind or remove metal from any surface of the flange lifter. Contact GEARENCH™ for all suspected damage and repair.**
5. After use, clean flange lifter. Remove all external dirt and grease.

### **Semi-annually**

1. Perform Daily Maintenance as required.
2. Inspect the following areas for wear and/or damage (See ‘Inspection Wear Limits’ for maximum allowable wear):
  - a. Lifting Pin
  - b. Lifting Plate Pin Hole
  - c. Lifting Link Pin Holes

## **Inspection Wear Limits**

### **Lifting Plate Lower Surfaces**

- Nominal Lower Thickness – 0.750” (from contact area to bottom of plate)
- Minimum Lower Thickness after wear – 0.700”

### **Lifting Pin**

- Diameter – 1.475 inches

### **Lifting Plate Pin Hole**

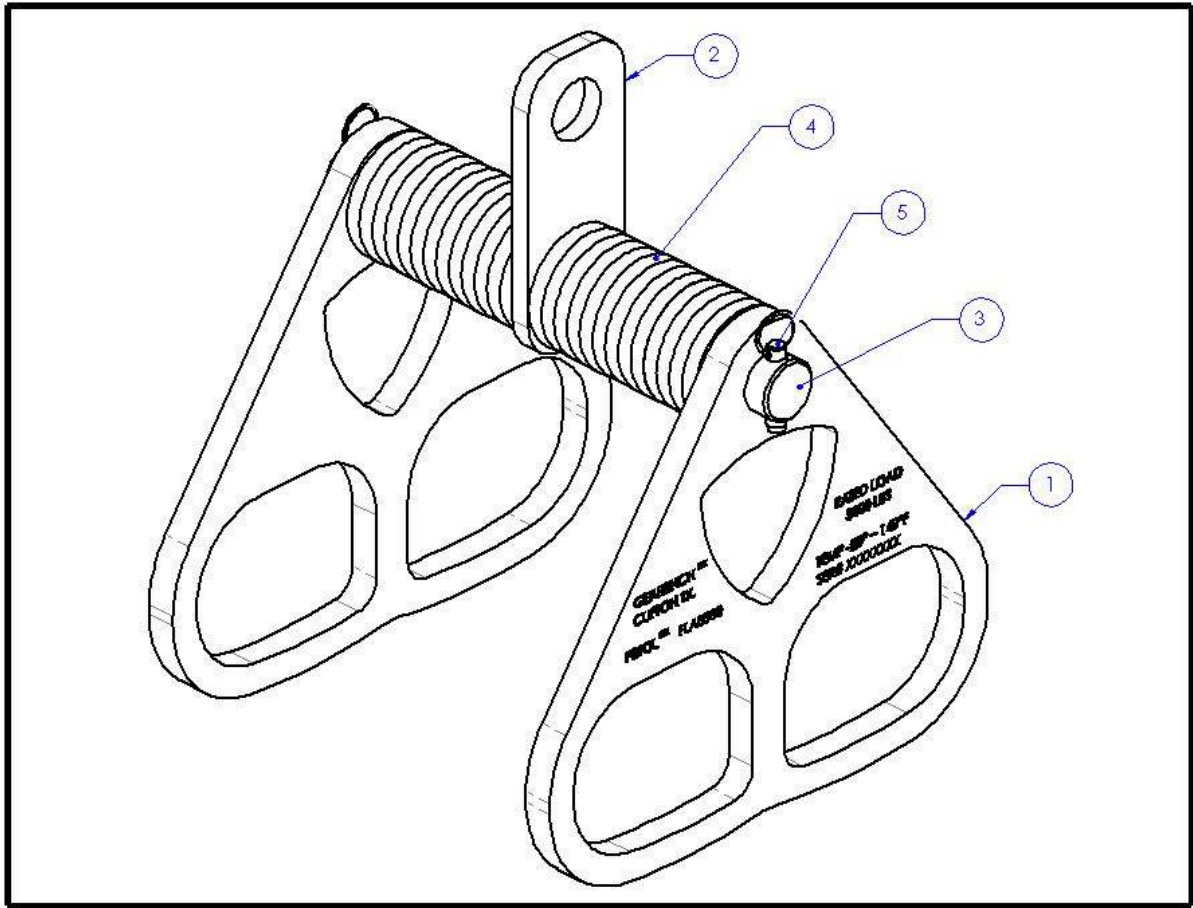
- Diameter – 1.535 inches

### **Lifting Link Pin Holes**

- Diameter – 1.535 inches



## Assembly Drawing



ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	FLP5000	LIFTING PLATE
2	1	FLL5000	LIFTING LINK
3	1	HP033	PIN
4	26	FLS112	SPACER
5	2	HXP016	LYNCH PIN

## Operation

As shown in Figure 1 on the next page, set the width of the Flange Lifter by removing the Lynch Pins and placing the Lifting Plates between the proper number of Spacers to allow for the space between the Lifting Plates to be just wider than the thickness of the flange. There should be just enough space between the Lifting Plates and the flange to keep the flange level and balanced in its working position. Keep the Lifting Link centered between the Lifting Plates, and use every Spacer.

As shown in Figure 2, insert two flange bolts through the Lifting Plate bolt openings and through the top two flange bolt holes. The Flange Lifter may be used to tip up a flange that's lying on the floor or on a pallet to its working position if the Lifting Plates are secured to the flange using the flange bolts with nuts on each side, hand tight. Adjust the Flange Lifter, so the flange is lifted without tilting.

As shown in Figure 3, for bolted connections, guide the working flange onto its connecting flange using the flange bolts and bolt holes. Secure the working flange to the connecting flange at four separate bolt locations. Then remove the top two flange bolts and the Flange Lifter, so it is no longer lifting between the flanges. Reinsert the top two flange bolts and lift them with the Flange Lifter on the outside of the working flange while completing the connection.

For welded connections, guide the leveled working flange into position for welding.

# **WARNING:**

**A falling load may cause SERIOUS INJURY or DEATH.**

**Under no circumstances should the rated load of 5000 Pounds be exceeded.**

**Read Operating Instructions prior to operation.**

**Before using, inspect the lifter daily to ensure it is in proper operating condition. Follow OSHA, NSC, and/or other standards, safe practices, and procedures.**

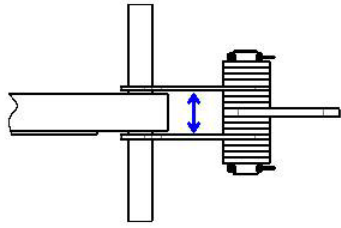


FIGURE 1

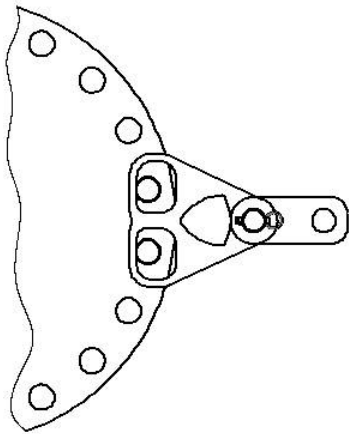


FIGURE 2

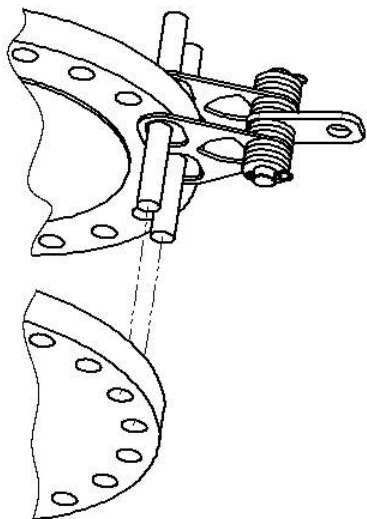


FIGURE 3

## **Replacement Parts**

Repairs should only be made by GEARENCH™ or a repair facility authorized by GEARENCH.

## **Responsibility of Distributors**

GEARENCH DISTRIBUTORS ARE RESPONSIBLE FOR FORWARDING THIS DATA BOOK AND OTHER GEARENCH PRODUCT INFORMATION RELATING TO THE INDIVIDUAL PRODUCT, THROUGH THE CHANNELS OF DISTRIBUTION, DOWN TO AND INCLUDING THE INDIVIDUAL USING THE PRODUCT.

### **NOTE:**

**In view of the fact that the actual use determines whether safety requirements have been met, the ultimate responsibility to comply rests with the end user.**

## **Certificates**