Find the right height for your application requirements

Ergonomic Height Adjustable Systems

Dyna-Lift®
ISO 9001: 2008 Registered
Made in USA

motion and progress

SHOP ONLINE at www.airlinehyd.com

800-999-7378
Innovation and High Performance

• In-house research and development with dedicated production facilities utilizing the latest technologies
• Expertise and competence in products and applications
• Optimized solutions for the customer
• High quality standards, reliability and service
We set the table for your requirements

Ergonomic, height-adjustable workbenches are quickly becoming the standard in the industry. As more people demand height-adjustability, Dyna-Lift® is the standard for delivering it.

Dyna-Lift ergonomic systems are available with lift capabilities ranging anywhere from a few hundred pounds to 1,500 pounds.

In addition to work tables, other common applications include office furniture, hospital beds, assembly line fixtures and rehabilitation tables. Less conventional applications have included casket lifts, massage table lifts and lectern/podium lifts.

We have developed Dyna-Lift® applications for many light and heavy industrial, office and medical applications, including a successful product to help Boeing make the production of airplane wings height-adjustable for workers.

Every customer has a special, unique need that they use Dyna-Lift® to satisfy. That is the reason why Bucher Hydraulics excels at a timely response, outstanding research of our clients’ needs, engineering of the right applications and ultimately the best solution for each situation.
Dyna-Lift®

Manual, Electric and Multi-Post Units

General Description
• Complete, ready-to-install, Height Adjustable System
• Choose from 1 - 6 Cylinders
• Manual or Electric Operation
• Custom Systems Available

Technical Information
• System Capacity:
  250 lbs. (113 kg) per Cylinder
  1000 lbs. (450 kg) max. capacity on all Base Dyna-Lift® Systems
  1500 lbs. (680 kg) maximum capacity on Heavy Duty Dyna-Lift® Systems
• Weight: Typical 2 Post Manual Unit with 16 Inch Stroke Cylinder:
  10 Pounds (4.54 kg)
  Typical 4 Post Manual Unit with 12 Inch Stroke Cylinder:
  27 Pounds (12.25 kg)
  Typical 6 Post Electric Unit with 12 Inch Stroke Cylinder:
  72 Pounds (32.69 kg)
• System Must Be Guided
• System Ships Fully Charged and Ready-to-Install
• Smooth, Quiet Operation
• Flexible Tubing: 1" Bend Radius
• Highly Refined White Hydraulic Fluid
• Units are Rechargeable and Fully Serviceable in the Field
• Powder Coated Housing Finish

• Manual Unit:
  • Five Revolutions Per Inch Travel
  • Retractable Handle (Standard)

• Electric Unit:
  • 87 RPM
  • Internal Limit Switches
  • Thermal Overload Protection
  • UL Recognized CSA Certified
  • 12 VDC Switch. 30mA in Operation

Typical 4 Post Manual Pump Assembly

<table>
<thead>
<tr>
<th>Stroke</th>
<th>“A” Dimension</th>
<th>“B” Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 (152)</td>
<td>11.12 (282 mm)</td>
<td>11.96 (304 mm)</td>
</tr>
<tr>
<td>8 (203)</td>
<td>13.15 (334 mm)</td>
<td>13.99 (355 mm)</td>
</tr>
<tr>
<td>10 (254)</td>
<td>15.18 (386 mm)</td>
<td>16.02 (407 mm)</td>
</tr>
<tr>
<td>12 (305)</td>
<td>17.21 (437 mm)</td>
<td>18.05 (458 mm)</td>
</tr>
<tr>
<td>16 (406)</td>
<td>21.28 (541 mm)</td>
<td>22.12 (562 mm)</td>
</tr>
</tbody>
</table>

Typical 4 Post Electric Pump Assembly on page 6.
2 Post System Schematic

4 Post System Schematic

6 Post System Schematic

2 Post Pump Housing

4 Post Pump Housing

6 Post Pump Housing

Typical Cylinder Configurations

Cylinder Type A1A

Cylinder Type B2D

Cylinder Type C1C

Cylinder Type D1A and 20" D1D

Bucher Hydraulics | 616.458.1306
### System Selection Guide

<table>
<thead>
<tr>
<th># of Cylinders</th>
<th>Actuator Type</th>
<th>Cylinder Body Type</th>
<th>Cylinder/Pump Fitting Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M = Manual Crank Drive</td>
<td>In Line Tubing Port/External Retaining Ring Mount (Cylinder Tube End)</td>
<td>1 = Straight / straight</td>
</tr>
<tr>
<td>2</td>
<td>N = No motor / handle</td>
<td>90° Tubing Port/External Retaining Ring Mount (Cylinder Tube End)</td>
<td>2 = 90° / straight</td>
</tr>
<tr>
<td>3</td>
<td>E = 115 V AC (60 Hertz)</td>
<td>90° Tubing Port/External Clevis Mount (Cylinder Tube End)</td>
<td>3 = Straight / 90°</td>
</tr>
<tr>
<td>4</td>
<td>2 = 220 V AC (50 Hertz)</td>
<td>90° Tubing Port/External Clevis Mount (Cylinder Tube End)</td>
<td>4 = 90° / 90°</td>
</tr>
<tr>
<td>5</td>
<td>3 = 12 V DC</td>
<td>115 V AC High speed</td>
<td>5 = 180° / straight</td>
</tr>
<tr>
<td>6</td>
<td>4 = 24 V DC</td>
<td>Programmable Switch</td>
<td>6 = 180° / 90°</td>
</tr>
<tr>
<td>S</td>
<td>5 = 115 V AC High speed</td>
<td>Programmable Switch</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>Programmable Switch</td>
<td>Programmable Switch</td>
<td></td>
</tr>
</tbody>
</table>

(AC motors include a rocker switch. DC motors do not.)

### Typical 4 Post Electric Pump Assembly

<table>
<thead>
<tr>
<th>Stroke</th>
<th>“A” Dimension</th>
<th>“B” Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>10.62 (270 mm)</td>
<td>23.18 (589 mm)</td>
</tr>
<tr>
<td>8</td>
<td>12.65 (321 mm)</td>
<td>25.21 (640 mm)</td>
</tr>
<tr>
<td>12</td>
<td>16.71 (424 mm)</td>
<td>29.27 (744 mm)</td>
</tr>
<tr>
<td>16</td>
<td>20.78 (528 mm)</td>
<td>33.34 (847 mm)</td>
</tr>
</tbody>
</table>

(see page 5 for typical cylinder configurations)

3 = Internal Mount for 3” x 3” Extrusion with 1” Support Sleeve, Foot Glide, Internal Bushing & End Cap

9 = Internal Mount for 90 mm x 90 mm Extrusion with 1” Support Sleeve, Foot Glide, Internal Bushing & End Cap

(see page 10 for internal mount cylinders)
<table>
<thead>
<tr>
<th>Live End Rod Type</th>
<th>Cylinder Adjustment Range</th>
<th>Standard or Custom</th>
<th>Tubing Lengths</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Guided “D” Rod End Options</strong></td>
<td>06 (156)</td>
<td>S = Standard</td>
<td>Custom Flexible Tubing Lengths Required From Pump Unit To Each Cylinder</td>
</tr>
<tr>
<td>A = 3/8” Adapter with 3/8” Foot Glide</td>
<td>08 (203)</td>
<td>H = Heavy Duty 1500 lb. capacity</td>
<td></td>
</tr>
<tr>
<td>B = 3/8” Adapter without Foot Glide</td>
<td>10 (254)</td>
<td>T = Telescopic Leg Assembly (T.L.A.)</td>
<td></td>
</tr>
<tr>
<td>C = 1/2” Adapter with 1/2” Caster</td>
<td>12 (305)</td>
<td>(With B1C leg cylinder only.)</td>
<td></td>
</tr>
<tr>
<td><strong>Guided “D” Rod End Options</strong></td>
<td>16 (406)</td>
<td><strong>Std. Units Only</strong></td>
<td></td>
</tr>
<tr>
<td>D = 1/2” Adapter with 1/2” Foot Glide</td>
<td><strong>4 Post HD Units Only</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E = 1/2” Adapter without Foot Glide</td>
<td></td>
<td><strong>4 Post HD Units Only</strong></td>
<td></td>
</tr>
<tr>
<td>F = 3/8” SS Adapter, 3/8” SS Foot Glide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with SS Piston Rod</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(for clean room and wash down environments)</td>
<td></td>
<td><strong>4 Post HD Units Only</strong></td>
<td></td>
</tr>
<tr>
<td>G = 1/2” SS Adapter, 1/2” SS Foot Glide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with SS Piston Rod</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(for clean room and wash down environments)</td>
<td></td>
<td><strong>4 Post HD Units Only</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Unguided Rod End Options</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A = Straight Rod End</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B = Retainer Ring Rod End</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C = Clevis Rod End</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D = Threaded Rod End</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Programmable Switch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Programmable Switch**
Working with you for the best hydraulic solution

Heavy Duty Dyna-Lift®
(1.500 lbs (680 kg) capacity)

Internal & External
Aluminum Extrusion Mount

Telescopic Leg Assembly (T.L.A.)
(250 lbs (115 kg) per column)

Electric or Manual
Height adjustability in minutes with an Easy-to-Install Heavy Duty Dyna-Lift® kit.

The New Heavy Duty Dyna-Lift® kit quickly converts a fixed height structure to one with a 0 - 20” range of height adjustment. Now the void is filled from the maximum 1,000 lbs. lift capacity of the “Base” Dyna-Lift® to the 1,500 lbs. capacity Heavy Duty. Dyna-Lift® is now available for both retrofit and OEM applications in either manual or electric actuation.

**Specifications**

<table>
<thead>
<tr>
<th>Description</th>
<th>Stroke</th>
<th>&quot;A&quot; Dimension mm</th>
<th>&quot;B&quot; Dimension mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Cylinder, Electric, 06&quot; Stroke</td>
<td>6</td>
<td>15.75 (400)</td>
<td>20.91 (511)</td>
</tr>
<tr>
<td>4 Cylinder, Electric, 08&quot; Stroke</td>
<td>8</td>
<td>15.74 (400)</td>
<td>20.91 (511)</td>
</tr>
<tr>
<td>4 Cylinder, Electric, 10&quot; Stroke</td>
<td>12</td>
<td>19.80 (503)</td>
<td>24.97 (634)</td>
</tr>
<tr>
<td>4 Cylinder, Electric, 12&quot; Stroke</td>
<td>20</td>
<td>27.92 (709)</td>
<td>33.09 (840)</td>
</tr>
<tr>
<td>4 Cylinder, Manual, 06&quot; Stroke</td>
<td>6</td>
<td>14.65 (372)</td>
<td>28.48 (723)</td>
</tr>
<tr>
<td>4 Cylinder, Manual, 08&quot; Stroke</td>
<td>8</td>
<td>14.65 (372)</td>
<td>28.48 (723)</td>
</tr>
<tr>
<td>4 Cylinder, Manual, 10&quot; Stroke</td>
<td>12</td>
<td>18.71 (475)</td>
<td>32.54 (827)</td>
</tr>
<tr>
<td>4 Cylinder, Manual, 12&quot; Stroke</td>
<td>20</td>
<td>26.85 (682)</td>
<td>40.35 (1025)</td>
</tr>
</tbody>
</table>

**Manual HD Pump Assembly**

**Electric HD Pump Assembly**

**Electric Specifications**

<table>
<thead>
<tr>
<th>Description</th>
<th>Stroke</th>
<th>&quot;A&quot; Dimension mm</th>
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<td>26.85 (682)</td>
<td>40.35 (1025)</td>
</tr>
</tbody>
</table>
Dyna-Lift® Internal
Aluminum Extrusion Mount

Raise or Lower your Structures with an Easy-to-Install Dyna-Lift® System

Internal Leg Assembly

Technical Information

• Adjustment ranges available in: 6", 8", 10", and 12" stroke.
• Lifting capacities up to 1,500 lbs. (with a Heavy Duty Dyna-Lift®).
• Single acting cylinders, power up and gravity down. Approximately 20 lbs. of weight per cylinder needed to retract properly.
• Manual (hand crank) or electric actuation available.

• Internal cylinder mount available for:
  • 3030 80/20 extrusions
  • 80mm Bosch extrusions
  • 8080 80/20 extrusions
  • 90mm Bosch extrusions

Advantages of Internal Leg Assembly

• Internally mounted cylinder neatly hides away unwanted outside obstructions – no external hardware
• Perfect application for OEM’s and custom machine builders
Dyna-Lift® External Aluminum Extrusion Mount

Technical Information
- Adjustment ranges available in: 6”, 8”, 10”, 12”, 16” and 20” stroke.
- Lifting capacities up to 1,500 lbs. (with a Heavy Duty Dyna-Lift®).
- Single acting cylinders, power up and gravity down. Approximately 20 lbs. of weight per cylinder needed to retract properly.
- Manual (hand crank) or electric actuation available.

Advantages of External Leg Assembly
- Universally fits many different sizes of extruded aluminum structures via T-Slot.
- Easy installation as an OEM design or as an add-on retrofit to a pre-existing structure.

External Mount Features
- Retrofit the “D” style cylinder to many different size extrusions via the Dyna-Lift “L” Bracket.
- Dyna-Lift “L” Bracket universally fits different sizes of extrusion via the T-Slot.
- Simply tighten down Bracket to T-Slot with an allen wrench.
Telescopic Leg Assembly (T.L.A.)

Specifically designed to provide optimum form and function for industry specific ergonomic height adjustable needs. The two piece anodized aluminum extrusions were designed to work in tandem with each other to provide smooth, quiet, rigid height adjustability regardless of off-center or cantilever loads. The T.L.A. System allows Original Equipment Manufacturers to easily integrate the columns into custom applications. Simply bolt on your top and bottom frame with cross member, then add your table top. The T.L.A. System offers the perfect height adjustable solution for your ergonomic OEM design.

Technical Information
- Materials: extruded aluminum with clear matte anodized finish
- Adjustment range: 12" (305mm)
  24" (610mm) fully retracted
  36" (914mm) fully extended
- Capacity:
  250 lbs. per column
  500 lbs. per set of 2 columns
- Multiple columns available
- Designed to be used with B1C cylinders
- Manual (hand crank) or electric actuation
**Manual**

- Two Cylinder, Manual, 12” Stroke
  - Model: 305 2M-B1C-12-T

**Electric**

- Two Cylinder, Electric, 12” Stroke
  - Model: 305 2E-B1C-12-T

*Items above with an asterisk are not included with the T.L.A. Assembly*
Dyna-Lift® Quick Ship Units
Available to ship within 1-5 business days.

Every customer has a special, unique reason why they choose Dyna-Lift for their application. We understand that every customer may have different timely demands depending on that application. That is why we have created our Dyna-Lift Quick Ship Program. We keep our standard units on the shelf, ready-to-ship when expediting is needed.

We offer our manual and electric units conveniently ready-to-ship within 1-5 business days. Units come fully charged, system complete; available in manual (hand crank) or electric (115 V AC motor). Stroke lengths available are 6", 8", 10", 12" and 16" with straight fittings and standard hose lengths of 96"-96"-60"-60".

Installation is simple: Once you receive your Dyna-Lift Quick Ship unit, the next step is to bolt the unit to your existing structure, which takes just minutes. Easy-to-follow instructions are included in every shipment, giving you height adjustability and complete satisfaction in no time.

How to order:
Our customer service representatives are just a phone call away. In order to get your order placed for a Dyna-Lift Quick Ship Unit, consult your customer service representative. You will see firsthand the simplicity of a Quick Ship order. Call today, 616-458-1306.

<table>
<thead>
<tr>
<th>Description / Model #</th>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Cylinder, Manual, 06&quot; Stroke 4M-DIA-06-S</td>
<td>27x9x7</td>
<td>20 lbs.</td>
</tr>
<tr>
<td>4 Cylinder, Manual, 08&quot; Stroke 4M-DIA-08-S</td>
<td>27x9x7</td>
<td>23 lbs.</td>
</tr>
<tr>
<td>4 Cylinder, Manual, 10&quot; Stroke 4M-DIA-10-S</td>
<td>37x9x8</td>
<td>27 lbs.</td>
</tr>
<tr>
<td>4 Cylinder, Manual, 12&quot; Stroke 4M-DIA-12-S</td>
<td>37x9x8</td>
<td>30 lbs.</td>
</tr>
<tr>
<td>4 Cylinder, Manual, 16&quot; Stroke 4M-DIA-16-S</td>
<td>37x9x8</td>
<td>35 lbs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description / Model #</th>
<th>Size</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 Cylinder, Electric, 06&quot; Stroke 4E-DIA-06-S</td>
<td>37x9x8</td>
<td>35 lbs.</td>
</tr>
<tr>
<td>4 Cylinder, Electric, 08&quot; Stroke 4E-DIA-08-S</td>
<td>37x9x8</td>
<td>37 lbs.</td>
</tr>
<tr>
<td>4 Cylinder, Electric, 10&quot; Stroke 4E-DIA-10-S</td>
<td>37x9x8</td>
<td>40 lbs.</td>
</tr>
<tr>
<td>4 Cylinder, Electric, 12&quot; Stroke 4E-DIA-12-S</td>
<td>37x9x8</td>
<td>42 lbs.</td>
</tr>
<tr>
<td>4 Cylinder, Electric, 16&quot; Stroke 4E-DIA-16-S</td>
<td>44x9x8</td>
<td>48 lbs.</td>
</tr>
</tbody>
</table>
Dyna-Lift® Parts and Accessories

The following components can be ordered separately should modifications be needed in the field. Please consult our factory for any specific requirements you may have prior to shipment.

**Electric Motor**

**Motor Mounting Bracket**

**Locking Caster Option**

**Rocker Switch Housing (Standard with Electric Unit)**

**Retractable Folding Handle For Manual Unit**

**Foot Glide For 4 Post System**

**Footpedal (option w/electric unit)**

---

**DL Gear Motor 115 V**
DH-07000
500220207000

**HD DL Motor 220 V**
DH-07001
500220207001

**T.L.A. Column**
DC-14100-12
50026011410012

**Recharge Kit**
DH-16000
500220216000

---

**SHOP ONLINE at www.airlinehyd.com**
Dyna-Lift® Parts and Accessories

- **Velocity Fuse**
  - DH-04105
  - 500220204105

- **Velocity Fuse HD**
  - DH-04107
  - 500220204107

- **Base Caster**
  - DH-17203
  - 500220217203

- **Base Caster HD**
  - DH-17204
  - 500220217204

- **3/8” Footglide**
  - DH-06900
  - 500220206900

- **1/2” Footglide**
  - DH-06904
  - 500220206904

- **SS 3/8” Footglide**
  - DH-06906
  - 500220206906

- **SS 1/2” Footglide**
  - DH-06908
  - 500220206908

- **3/8” Adapter**
  - DC-03000
  - 500220103000

- **1/2” Adapter**
  - DC-03004
  - 500220103004

- **SS 3/8” Adapter**
  - DC-03002
  - 500220103002

- **SS 1/2” Adapter**
  - DC-03012
  - 500220103012
Dyna-Lift® Parts and Accessories

- **Straight Fitting**
  - DH-04100
  - 500220204100

- **90° Fitting**
  - DH-04200
  - 500220204200

- **180° Fitting**
  - DH-04110
  - 500220204110

- **180° Fitting HD**
  - DH-04112
  - 500220204112

- **L Bracket**
  - DH-08000
  - 500220208000

- **T Handle**
  - DH-06503
  - 500220206503

- **Base DL Handle**
  - DH-17100
  - 500260217100

- **Programmable Switch**
  - DH-08414
  - 500220208414

- **Foot Pedal**
  - DH-08405
  - 500220208405

- **Rocker Switch**
  - DH-08400
  - 500220208400
Industries Served:

- Workstations
- Office Furniture
- Hospital Beds
- Assembly Line Fixtures
- Rehabilitation Tables
- Casket Lifts
- Massage Table Lifts
- Lectern/Podium Lifts
Bucher Hydraulics is an international leading provider of innovative hydraulic drive and control technologies for mobile and industrial applications, such as the Dyna-Lift ergonomic tables.

Contributing high levels of technical expertise, we support our clients’ product development activities from the initial project phase to the finished machine. We can provide valuable help in creating very advanced machinery that features stringent technical demands and exacting quality standards.

**Combined forces:** Privately owned Monarch Hydraulics, proud of its more than 150-year history as a successful family run company, has been a leading and renowned producer of hydraulic power units with a well established customer base throughout North America. By acquiring Monarch Hydraulics, Bucher Hydraulics has established a strong engineering and manufacturing base with a powerful sales and service network in the USA.

Bucher Hydraulics, Europe’s leading supplier of custom hydraulic and control solutions now has an excellent customer focus here in North America coupled with organizational, engineering and production expertise as well as an established sales force. This provides a professional platform to expand Bucher Hydraulics business with North American customers operating both locally and globally.