Doing It the Right Way, the First Time

Get the facts on choosing the right PowerSports lift table to fit your needs.

by Redline Engineering

So you’ve decided it’s time to quit wrestling with your power sports vehicle on the ground and want to buy a lifting table.

Getting your vehicle off of the ground is a game changer. For a shop it’s a no brainer. For the enthusiast at home, it means riding more and getting your maintenance done right, the first time!

There are so many choices. Where to start. No problem; let’s break it down.

1. What capacity do you need.
2. Which power unit is best:
   a. Air Operated
   b. Air Over Hydraulic
   c. Electric Over Hydraulic
   d. Electric Over Mechanical

Thankfully your needs and shop conditions are going to make these decisions easy, leaving you with only the preference of which brand to buy.

Nearly all lifting tables on the market are either one thousand or fifteen hundred pound capacity tables, with one thousand pounds being the most common.

Thousand pound tables are generally air operated, though there are electrically and hydraulically operated models available. They tend to lift and lower much more quickly than fifteen hundred pound tables. One thousand pound tables are excellent for working on motorcycles, quads, and non-industrial riding mowers.

Fifteen hundred pound capacity lifting tables are generally air over hydraulic, meaning that an air compressor drives a hydraulic pump which in turn lifts the table by way of hydraulic cylinder.

Vehicle Weights

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012 Honda Gold Wing</td>
<td>904 pounds</td>
</tr>
<tr>
<td>2012 GRIZLY 550</td>
<td>648 pounds</td>
</tr>
<tr>
<td>2012 Arctic Cat F1100</td>
<td>511 pounds</td>
</tr>
<tr>
<td>2012 Harley Road King</td>
<td>775 pounds</td>
</tr>
<tr>
<td>2012 John Deere 100s</td>
<td>462 pounds</td>
</tr>
</tbody>
</table>

Source: Redline Engineering 2012

These larger tables are much slower, heavier, and more expensive; however, they are mandatory for lifting motorcycle trikes, industrial zero-turn mowers, and snowmobiles (due to the weight of these machines nearly always exceeding one thousand pounds).
Selecting the capacity you need is easy. If your machine weighs over one thousand pounds, spend the extra money and get a larger lift. A one thousand pound (Figure 2) and fifteen hundred pound (Figure 1) table are shown in this article.

Lifting tables are available in four different power driven options: air operated, air over hydraulic, electric over hydraulic, and electric over mechanical.

The most common type, air/pneumatic, simply drives an air-filled cylinder by way of an air compressor.

The second most common type, air over hydraulic, utilizes a hydraulic pump which is operated by way of compressed air via compressor. One should note that air over hydraulic lifts often feature a built-in secondary foot pump that can be used to lift the table in the event that no air compressor is available. Though this is common on these types of pumps it is not always incorporated into the machine.

Electric over hydraulically driven tables are less common as they are more expensive because they feature an electric motor which drives a hydraulic pump. These tables are considered desirable for their extremely smooth operation yet they are also by far the slowest operating tables on the market.

Your last option is electric over mechanical, which is the least common type found for sale today. These tables feature an electric motor that supplies power to a worm gear mechanism. They are expensive, smooth operating, and quiet.

Selecting the power driven options for your table is mostly a matter of preference; just be sure, that if you select air powered, your compressor is at least ten gallons in size and capable of producing a maximum of 120 psi of pressure.

One of the most important decisions to make when purchasing a lift table is whether or not to buy a model with side extensions. Side extensions are generally only perceived as making lift tables wide enough to accommodate atv’s, though there are hidden “pros” to owning a set.

First, many users prefer their table to have side extensions installed for riding a motorcycle up onto the lift.

Having sides installed will allow the rider a spot to place his feet upon coming to a stop, thus protecting the rider from falling over and off the lift.

Many mechanics also prefer to install their side extensions upside down so that the sides of the table then become large trays for tools, nuts, bolts, and parts.

There is a large financial savings to be gained by purchasing your side extensions with the lift versus without. Many lift manufacturers charge more for their side extensions kits when not purchased with their lift.

### Types of Tables

<table>
<thead>
<tr>
<th>Type</th>
<th>Action</th>
<th>Speed</th>
<th>Noise</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Operated</td>
<td>Less Smooth</td>
<td>Fast</td>
<td>Louder</td>
<td>Lowest</td>
</tr>
<tr>
<td>Air Over Hydraulic</td>
<td>Less Smooth</td>
<td>Medium</td>
<td>Louder</td>
<td>Low</td>
</tr>
<tr>
<td>Electric Over Hydraulic</td>
<td>Smooth</td>
<td>Slow</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>Electric Over Mechanical</td>
<td>Smooth</td>
<td>Fast</td>
<td>Quiet</td>
<td>High</td>
</tr>
</tbody>
</table>

### Getting Your Vehicle Off of the Ground is a Game Changer

Figure 2: 1,000 Pound Lift
and shipping side extensions by themselves will incur a second avoidable shipping charge.

Generally speaking, the cost difference between buying your side extension kit without your lift results in the side extensions costing double the financial burden. Thus, if you choose to purchase your lift without its optional side extensions you should be certain that you never intend to buy them later. A photo of average one foot wide side extensions is shown.

Selecting the right lifting table is as simple as deciding on capacity, power type, and side extensions. However, pay close attention to each table you investigate as some are offered with options such as a wheel vise, front extension panel, rear support poles, additional ramps, dollies and/or casters, and drop out panel.

The industry’s most professional lift table manufacturers include, but are not limited to, Redline Engineering, Titan, Handy Industries, and K&L Supply. Take your time selecting the table that is right for you and you’ll enjoy owning a motorcycle lift table for years to come.

Redline Engineering was started in June of 2002 by Ian Gilmore, a mechanical engineering graduate of Christian Brothers University in Memphis, Tn. Mr. Gilmore built his first set of sportbike stands for his 2001 Yamaha R6 because at the time no quality/affordable stands existed on the market. Soon after fabricating the first set, Ian made a second set and placed them for sale on Ebay. Within only a few months Ian began making stands full time and Redline Engineering was born. Over the next seven years Redline Engineering grew into the manufacture and retail of many new products. Today Redline stocks thousands of sportbike stands and employs people all over the globe.

Redline Engineering LLC
1849 Yellow Dog Rd
Senatobia, MS 38668
901-351-4764
www.redlinestands.com
sales@redlinestands.com