



Training Solutions, Delivered!

POWERLIFT:
*Lifting Techniques
for a Healthy Back*
(Concise)

**Leader's Guide, Fact Sheet
& Quiz**

Item Number: 4916
© AP Safety Training

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.

PREPARING FOR THE MEETING

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

CONDUCTING THE PRESENTATION

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

4916 POWERLIFT: *Lifting Techniques for a Healthy Back (Concise)* FACT SHEET

LENGTH: 10 MINUTES

PRODUCTION YEAR: 2017

PROGRAM SYNOPSIS:

Most workers have been instructed to lift objects safely by using the “old way” of lifting; unfortunately, this method contains many flaws that result in unnecessary and very harmful stress on our backs. Lifting while balancing on the balls of our feet, too much bending of the knees, leverage that places excessive force on the lower back and overextending the spine beyond its base of support are all problems associated with this approach. To eliminate the harmful effects of the old way of lifting, Dr. Mike Schaefer, a licensed orthopedic and chiropractic doctor, has developed the PowerLift technique. This program demonstrates how to combine various lifts and postures associated with Dr. Schaefer’s PowerLift technique to overcome the real world challenges presented by many material handling situations.

Topics include flaws of traditional lifting techniques, advantages of a wider stance, creating a basic PowerLift, the “tip the load” technique, the bridging technique, the tripod lift, the golfer’s bend and the lean bar technique.

PROGRAM OBJECTIVES:

After watching the program, the participant should be able to explain the following:

- Why traditional lifting techniques are flawed;
- What the advantages of taking a wider stance when lifting are;
- How to create a basic PowerLift;
- How to perform the basic PowerLift, the “tip the load” PowerLift, the tripod PowerLift, the golfer’s bend and the lean bar lift.

PROGRAM OUTLINE:

FIVE POWERLIFT LIFTING TECHNIQUES

- PowerLift is not just a new way of lifting; it’s a new way to think about lifting, where every lift is a safe lift.
- From the basic PowerLift position, five different lifting techniques have been derived that can be used in a variety of lifting situations: the basic PowerLift, the “tip the load” PowerLift, the tripod PowerLift, the golfer’s bend and the lean bar lift.

FLAWS OF TRADITIONAL LIFTING TECHNIQUES

- Those trained in PowerLift like to call traditional lifting techniques the “old way” of lifting.
- The old way of lifting instructs us to “approach the load and place your feet shoulder width apart. Then, bend your knees and grasp the load.” This is where the problems start. In this position, we find that we must rock onto the balls of our feet.
- Lifting anything while balancing on the balls of your feet is an awkward, weak and unstable position.
- When we attempt to rise with the load, while awkwardly balanced on the balls of our feet, we inevitably must push the load away from us as we rise in order to clear our knees.
- Lifting a load like this, which we call “back lifting”, is very harmful because the spine is overextended beyond its base of support, much like a large construction crane. However, unlike a crane, the spine is not reinforced to support loads in this orientation, the result being large and harmful forces placed on the delicate discs, vertebrae and other spinal structures.

ADVANTAGES OF A WIDER STANCE

- This is the exact thought process that led Dr. Mike Schaefer, a licensed orthopedic and chiropractic doctor, to develop the PowerLift lifting technique. The PowerLift technique eliminates the harmful effects of the old way of lifting, just like weightlifters do.
- Dr. Schaefer discovered that taking a stance wider than shoulder width allows us to get closer to the load, since our knees are no longer in the way.
- In this position, our feet can remain flat on the floor, creating a more stable base of support.
- A wider stance automatically places us lower and closer to the load, reducing knee bend to around 100 degrees.
- Being closer to the load allows us to raise and lower a load vertically with our legs, similar to the lifting motion of an elevator, rather than damaging our spine using a back lift, which is overleveraged similar to a construction crane.
- Lifting with our legs like an elevator, while also keeping our chest and head up, directs most of the force down our spine vertically.
- This allows the vertebra and discs to stay stacked in proper alignment and transfers the weight of the load to our sturdier hip and leg structures.

CREATING A BASIC POWERLIFT

- To create a basic PowerLift, get close to the load by approaching the load at a corner while spreading your feet wider than shoulder width apart.
- Approaching a load at a corner will better fit the contour of your body and allows you to get over the load, making the lift much easier and safer.
- Remember this catch phrase, “last step, wide stance.” When you approach a load, always use your last step to create a wide stance.
- After creating a wide stance with your last step, bend your knees while you lift your head and chest.
- In addition to keeping your spine in its natural strong alignment, lifting the head and chest helps to rotate your hips forward into optimal lifting position.
- Use your knees to lower yourself down to the load. You may wish to support yourself by placing the palm of your hand on your upper thigh as you lower.
- Take a firm grip on the load and then lift straight up with your legs like an elevator instead of using your back like a crane.
- It takes a little practice to make lifting this way a habit. When you practice just remember, “last step, wide stance.” Then just lift with your legs like an elevator and do not use your back like a crane.

THE ‘TIP THE LOAD’ TECHNIQUE

- One important part of a safe and stable lift is having a good grip on the load. Many loads have handles which help facilitate a good firm grip.
- There are also many loads that don’t have handles, which can make gripping and lifting much more difficult.
- Using PowerLift techniques will overcome this problem because Dr. Schaefer discovered that simply tipping a load makes the corners into handles that make lifting much easier. Dr. Schaefer refers to this technique as “tip the load” and learning it is an important part of understanding the PowerLift technique.
- As with the basic PowerLift on a load with handles, get close to the load by approaching its corner and on your last step make a wide stance.
- As you lower yourself to the load by bending your knees into the power stroke position, tip the load towards you, which creates handles which allow for a firm grip.
- Boxes, buckets and practically any type of load can be tipped to create handles as part of performing a safer lift.
- Having an understanding of the tip the load PowerLift concept allows you to modify it slightly to fit challenging lifting situations.

THE BRIDGING TECHNIQUE

- As you move in and out of various lifting postures, supporting the weight of your upper body by the use of your hands or other objects will greatly reduce the strain on your back.
- Using this technique to reduce the force on your back is called “bridging” and is an important part of all PowerLift techniques.

THE TRIPOD LIFT

- Lifting safely when a load is low and hard to reach can be a challenge.
- Perhaps the most common example is simply accessing a box on a low shelf. All too often people use a bending back lift and twisting motion as they attempt to access a load like this. This bending back lift and twisting motion is awful on your back.
- Using the tripod lift overcomes these harmful motions. To create a tripod lift, go down on one knee, creating three points of contact with the floor. As you go down, support the weight of your upper body by bridging one hand to a solid object and the other hand to the opposite knee.
- Once in this strong position, place the load on your opposite thigh and then rise from there using a tripod lift. When using this method, let your thigh support the weight of the load as you rise.
- In fact, you can even push down on the load as you rise. Pushing down on the load helps to push you up.
- Even when rising without a load from the tripod stance, push down on your opposite knee to help you rise. This is a great back saver anytime you must rise after kneeling down.

THE GOLFER’S BEND

- The golfer’s bend is the method most golfers use to lift their ball from the cup or from the ground. Golfers tend to do this naturally because it takes strain off their backs as they bend low to reach the ball.
- This technique is a great way for anybody to do a one-handed lift.
- This seemingly simple method is a great reliever of back strain because the motion is a pivoting of the hip rather than a bending of the back.
- To enjoy the benefit of this lift, it must be done properly, which means you must be “supported” and “crossed over.”
- Supported means that you must support your body weight by bridging to a solid object.
- Crossed-over means that you’re opposite foot, the foot across from the supporting bridge, must stay on the floor.

- Being crossed over like this allows your free foot and hip to pivot out of the way while reaching for the load.
- Common uses for a golfer's bend are to remove items from storage bins, to pick up small objects on the floor or to remove clothes from top load washers.
- When two hands are needed to grasp the load, you can often brace against a solid object to perform modified golfer's bend.

THE LEAN BAR TECHNIQUE

- There are many lifting applications when something solid comes between us and the load, blocking our ability to lift using a basic PowerLift stance. For example, when we must reach across an assembly line or workstation or remove items from the back of a vehicle.
- When confronted with a situation like this, many people resort to an unsafe, overleveraged back lift, not knowing what else to do, but let's learn a better method. It's called the lean-bar technique because it involves leaning against a horizontal solid object or bar to help reduce the load placed on your back while lifting.
- The solid object must be below hip socket level to allow your hips to assume a proper lifting posture. The key to the lean bar technique is to take a wide stance and lean your thighs hard enough into the solid object so that it supports all of your body weight.
- In other words, you are bridging to the solid object with your thighs, keeping both hands free to grasp the load. Using your thighs to support your body weight will take your back out of the lift and allow your legs to do the work.

POWERLIFT:
Lifting Techniques for a Healthy Back (Concise)

ANSWERS TO THE REVIEW QUIZ

1. a

2. c

3. b

4. a

5. a

6. c

7. a

8. b

POWERLIFT:
Lifting Techniques for a Healthy Back (Concise)
REVIEW QUIZ

The following questions are provided to determine how well you understand the information presented in this program.

Name _____ Date _____

1. Lifting anything while balancing on the balls of your feet is an awkward, weak and unstable position.
 - a. True
 - b. False

2. Taking a wider stance to get lower and closer to a load reduces knee bend to around _____.
 - a. 45 degrees
 - b. 65 degrees
 - c. 100 degrees

3. When approaching a load, you should always use your first step to create a wide stance.
 - a. True
 - b. False

4. Lifting your head and chest while performing a basic PowerLift helps to rotate your hips forward into optimal lifting position.
 - a. True
 - b. False

5. Boxes, buckets and practically any type of load can be tipped toward you to create handles as part of performing a safer lift.
 - a. True
 - b. False

6. When performing a lift, supporting the weight of your upper body by the use of your hands or other objects is called _____.
 - a. Bracing
 - b. Blocking
 - c. Bridging

7. Pushing down on a load while performing a tripod lift helps to push your body up.
 - a. True
 - b. False

8. When performing the lean bar technique, you must use one hand to support the weight of your upper body.
 - a. True
 - b. False