

- **Access door with lift assist**

Patent number: 9303441

Abstract: The invention described herein relates to a utility vault door, or access door, position able between closed, partially opened, and fully opened orientations and including at least one compression spring lift-assist mechanism for countering the weight of the vault door when positioning between the various orientations. The door may be selectively locked in the partially opened orientation and opened sufficiently for the convenient ingress and egress of large equipment there through.

Type: Grant

Filed: February 14, 2014

Date of Patent: April 5, 2016

Inventors: Marvin Ernesto Lopez

- **Access Door with Lift Assist**

Publication number: 20150218773

Abstract: The invention described herein relates to a utility vault door, or access door, position able between closed, partially opened, and fully opened orientations and including at least one compression spring lift-assist mechanism for countering the weight of the vault door when positioning between the various orientations. The door may be selectively locked in the partially opened orientation and opened sufficiently for the convenient ingress and egress of large equipment there through.

Type: Application

Filed: February 14, 2014

Publication date: August 6, 2015

Inventors: Marvin Ernesto Lopez

- **Latching mechanism for access door**

Patent number: 8844202

Abstract: Disclosed is a latching mechanism for a access door. More specifically, the disclosure relates to an access door that can be pivoted between opened and closed orientations and secured in the open position with the aid of a hold open arm. A latching lever, in turn, pivotally engages the hold open arm to selectively secure the access door in an opened orientation. A grip upon the hold open arm can thereafter be used in conjunction with the latching lever to release the access door and permit it to be closed.

Type: Grant

Filed: June 29, 2012

Date of Patent: September 30, 2014

Inventors: Marvin Ernesto Lopez

- **Latching Mechanism for Access Door**

Publication number: 20130031840

Abstract: Disclosed is a latching mechanism for a access door. More specifically, the disclosure relates to an access door that can be pivoted between opened and closed orientations and secured in the open position with the aid of a hold open arm. A latching lever, in turn, pivotally engages the hold open arm to selectively secure the access door in an opened orientation. A grip upon the hold open arm can thereafter be used in conjunction with the latching lever to release the access door and permit it to be closed.

Type: Application

Filed: June 29, 2012

Publication date: February 7, 2013

Inventors: Marvin Ernesto Lopez

- **Multipositional vault door**

Patent number: 8166706

Abstract: The present invention relates to a vault door mechanism that assists a user in opening or closing the door. A hold-open arm and hinge plate pivotally interconnect the door to a surrounding frame and are fixed in place by an associated locking mechanism. The locking mechanism stops the door in the partially opened position prior to being fully opened or closed, thereby assisting the user in handling the door. The details of the present invention, and the manner in which they interrelate, will be described in greater detail hereinafter.

Type: Grant

Filed: June 8, 2009

Date of Patent: May 1, 2012

Inventors: Marvin Lopez