

### **OPERATION, INSPECTION AND MAINTENANCE GUIDE**

### **DOUBLE PARKING VEHICLE STACKER MODEL DP003**

### PROJECT LOCATION:

### **BAY HOUSE CONDOMINIUMS**

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### **SUPPLIER:**

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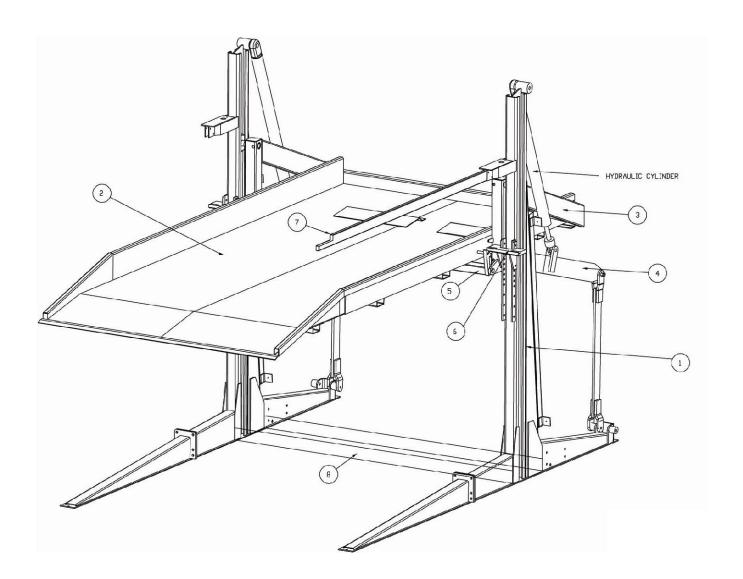
PARK PLUS, INC.

Project name: C5317\_PP6125\_Bay House Condominiums\_Metric Corporation

**Document Status: Proprietary and Confidential** 

Issue Date: 2013/11/01

### Park Plus Inc. Double Parking System, Model DP-003



### **Confidential Proprietary Information**

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### **Table of Contents**

Section 0: Copyright Disclaimer, Notes to Owner/Employer/Prop. Manager	4
Section 1: Scope, Purpose and Application	6
Section 2: Product Description	8
2.1 Structure:	8
2.2 Hydraulics:	8
2.3 Safety:	8
2.4 Location:	8
2.5 Fire Protecting:	9
2.6 Fire Sprinklers:	9
2.7 Zoning Requirements:	9
2.8 Stormwater Management:	10
2.9 Standard Plans:	10
2.10 Vehicle Clearance:	11
2.11 Hydraulic Power Pack:	11
2.12 General Specifications:	12
Section 3: Operator Qualifications and Responsibilities	13
3.1 Commercial Operator Qualifications:	
3.2 Residential or Private Operator Requirements:	
3.3 Operator Responsibilities:	
3.4 Owner, Owner's Representative, and Operator Responsibilities:	
3.5 Operator Reporting:	
3.6 Use of Accessories:	15
Section 4: Operating Instructions	17
Section 5: Equipment Inspection	21
5.1 Periodic Qualified Inspection:	21
5.2 Qualified Inspector:	21
5.3 Qualified Inspector Training:	21
5.4 Qualified Inspection Documentation:	21
5.5 Qualified Inspection Frequency:	21
5.6 Inspection Checklist:	21
Section 6: Equipment Maintenance	23
6.1 Preventative Maintenance:	<b>2</b> 3
6.2 Preventative Maintenance Documentation:	23
6.3 Repair Maintenance Procedure:	<b>2</b> 3
6.4 Repair Maintenance Personnel:	<b>2</b> 3
6.5 Repair Maintenance Documentation:	<b>2</b> 3
6.6 Repair Maintenance Frequency:	<b>2</b> 3
Section 7: Equipment Modifications	25



Section 8. Trouble Shooting	27
8.1 Trouble Shooting Matrix:	27
8.2 Manual Pump:	
For immediate 24/7 assistance call 1-800-966-5509	28
Section 9: Safety Devices, Notes, and Warning Lables	32
9.1 Safety Notes:	32
9.2 Equipment Safety Warning Labels:	
9.3 Safety Sensors:	34
Section 10: Operator Training Log – DP003	36
Section 11: Inspection / Maintenance Checklist – Park Plus DP003	38
Section 12: Periodic Preventative Maintenance Record Log	42
Section 13: Technical Specifications	45
13.1 Assembly Drawings:	
13.2 Hydraulic Power Pack:	55
Appendix A	60
Safety Sensors Specification:	60
Appendix B	61
Hydraulic Power Pack Specifications:	61
Appendix C	62
Acceptance Certificate:	62
Appendix D	63
Service Maintenance Contract	63





# Copyright Disclaimer, Notes to Owner/Employer/Property Manager



### Section 0: Copyright Disclaimer, Notes to Owner/Employer/Prop. Manager

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### Any owner, employer or property manager:

- Shall ensure that equipment operators are qualified and that they are trained in the safe use and operation of the equipment using the manufacturer's operating instructions.
- Shall establish procedures to periodically inspect the equipment in accordance with
  the equipment manufacturer's instructions and shall ensure that equipment
  inspectors are qualified and that they are adequately trained in the inspection of the
  equipment. Inspectors must tag and disconnect any car stacker considered to be
  unsafe for use or operation. For commercial installations inspections are required at
  quarterly intervals. For multi-family residential installations inspections are required
  at monthly intervals.
- Shall establish procedures to periodically maintain the equipment in accordance with the equipment manufacturer's instructions and ensure that equipment maintenance personnel are qualified and that they are adequately trained in the maintenance of the equipment. Maintenance personnel must be pre-approved by manufacturer.
- Shall maintain the periodic inspection and maintenance records recommended by the manufacturer.
- Shall display the equipment manufacturer's operating instructions in a conspicuous location in the area convenient to the operator.
- Shall supply each operator with a copy of this manual.
- Shall provide necessary lockout/ tag out means for energy sources before beginning any equipment repairs.
- Shall not modify the equipment in any manner without the prior written consent of the designer, manufacturer or supplier.
- Shall insure that all safety devices remain in proper working order.





# Section-1 Scope, Purpose, Application, and Product Description



### Section 1: Scope, Purpose and Application

### 1.1 Scope

This document is to be used as a guide to ensure safety requirements for the operation, inspection and maintenance of installed mechanical parking stackers.

### 1.2 Purpose

The purpose of this guide is to provide a basis for common understanding among owners, users, service personnel, the general public and the regulatory community as to the minimum requirements for operating, inspecting and maintaining mechanical parking stackers.

### 1.3 Application

The requirements of this guide covering the operation, inspection, and maintenance of mechanical parking stackers shall apply to those specified according to the type and model of installed equipment at a given location from the date of project hand-over.





### Section-2 Product Description



### **Section 2: Product Description**

The Park Plus SpaceMaker Double Parking Lift model DP003, is a two (2) level car stacker device for parking an automobile one above another on the ground. The device is so designed as to lift an automobile on a platform and lock the platform in place so that a second automobile can be parked in the space below the platform.

### 2.1 Structure:

The structural steel used in construction of the device is 4130 steel and the platform is composed of solid unperforated 9 gauge (.1495") checkered steel plate with integral bent curbs on each side. This steel plate is laterally reinforced at 3" intervals with 9 gauge inverted U-Bends bolted to the underside of the steel plate.

The entire assembly weighs 2600 lbs., comes prewelded and is assembled in the field with A307 bolts, except for certain critical bolts which are A325 (high tensile – 120,000psi).

### 2.2 Hydraulics:

The stacker is operated by hydraulics. The hydraulic cylinder rods are chrome plated to prevent rusting. The hydraulic system, which raises and lowers the platform consists of a pump and motor that are controlled by a 24-volt relay and valve combination. The hydraulic circuit maintains a constant rate of descent regardless of loading conditions. A manually operated emergency pump is provided in case of electrical failure to allow lowering of the platform without electrical power. A pressure compensated hydraulic overload prevention circuit precludes operation of the unit with a load greater than 6,000 lbs.

### 2.3 Safety:

The device is equipped with safety locking system. The "posi-lock" double suspension system holds the full weight of the automobile on the platform in the locked position regardless of hydraulic or electric operation.

Each lift can be equipped with an individual keyed controller for extra safety.

Self Attended applications require additional safety sensors to detect objects located under the platform or entering into the area below the platform. **See Section 9 and Appendix A.** 

### 2.4 Location:

The car stacker has been designed to be mounted on grade or to an engineered foundation or attachment system. It may be installed in a building provided the floor is certified to support the weight.

The car stacker can be installed in both attended and self-park application:

- Single Family Residential Buildings Self Attended
- Multi-Family Residential Buildings Valet and Self Attended
- Commercial Buildings Valet and Self Attended
- Indoor Installations Valet and Self Attended
- Outdoor Installations Valet and Self Attended
- Surface Lots Valet and Self Attended
- Low Rise Buildings Valet and Self Attended
- High Rise Buildings Valet and Self Attended
- Sprinklered Buildings- Valet and Self Attended

The stackers may be installed as a single unit or in an array with shared common legs. All Self Attended installations must use additional safety sensors and be keyed individually.



### 2.5 Fire Protecting:

With installations in over two-dozen metropolitan municipalities the car stackers have been reviewed as being similar to high piled storage and non-building structures. Fire rating of structural components is not required. Sprinklers shall be required per the following section.

Some municipalities have required the following: When a unit or array of units is located less than 3'-0" from the property line, provide a one hour separation wall between the property line and the unit.

### 2.6 Fire Sprinklers:

### Outdoor Use:

- 1. When a unit or array of units is installed at least 3'-0" from a property line or adjoining building, sprinklers are not required. Vehicles on platforms may over hang equipment and extend into the 3'-0" setback. When abutting a street or alley the required 3'-0" setback shall be measured from the center of the street or alley.
- 2. Equipment installed outdoors may need to conform to additional zoning regulations.

### Indoor Use:

- For indoor use, installation of a unit or array of units shall be in a sprinklered garage.
   When installed in a tandem array only units closest to the wall shall have sidewall
   sprinklers to protect the lower vehicles parked on the lifts. The sidewall sprinklers shall
   be protected from mechanical injury. The sprinkler pipe sizes shall be adequate to
   supply the additional sidewall sprinklers.
- 2. Plans shall be filed and approved by the local municipality for the alteration of the existing sprinkler system and tie-in of the additional sprinklers.
- 3. When the unit or any array of units is installed in a sprinklered area, the sprinkler system shall be modified to provide minimum coverage as required by NFPA 13 and Chapter 9, CBC.
- 4. Clear building height within existing structure must accommodate the height of the equipment plus additional requirements for adequate coverage of fire sprinklers.

### 2.7 Zoning Requirements:

Each municipality has its own set of zoning regulations and requirements.

### Yards and Setbacks:

When equipment is installed outdoors in a required yard or setback the equipment may be required to be installed in an accessory structure or may be required to provide architectural screening.



Above: Typical tandem installation with out set backs, architectural screening or fire sprinklers.

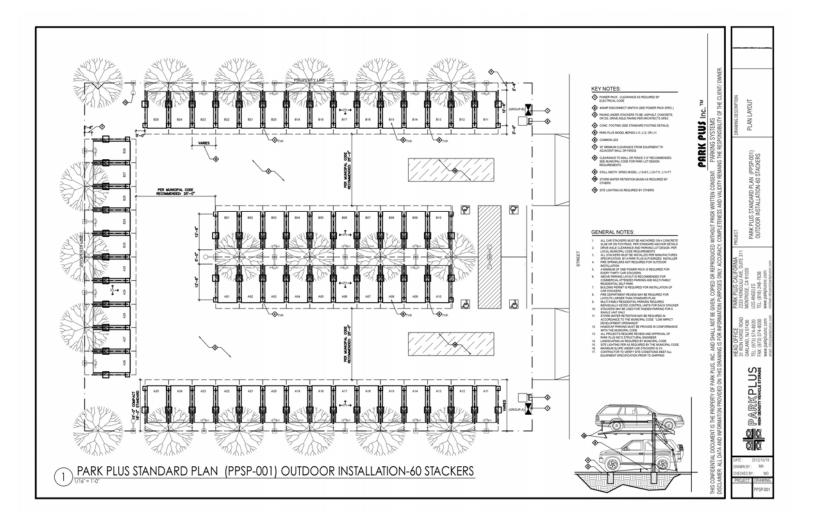


### 2.8 Stormwater Management:

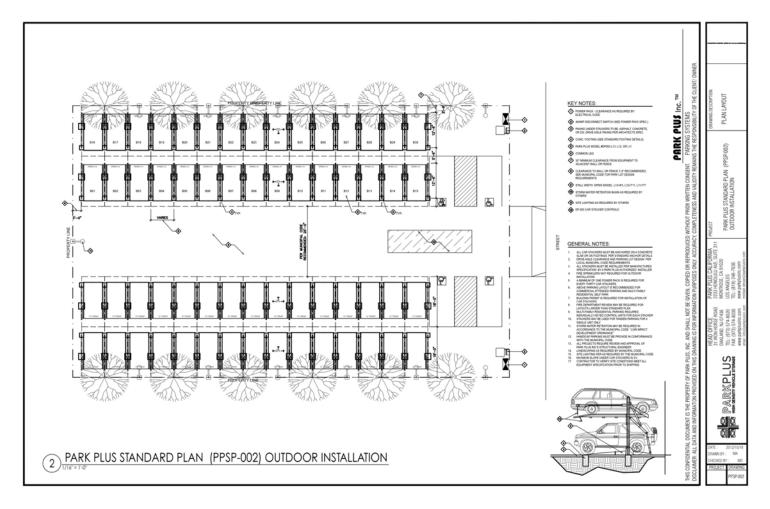
Low Impact Development consists of site design approaches and Best Management Practices (BMPs) that are designed to address stormwater runoff and pollutions at the source. Most municipalities are adopting BMPs including Infiltration, Capture and Use, and Filtration and Retention. The Car Stackers when installed outdoors are often installed in existing paved parking lots. BMP's must be designed by a Civil Engineer.

### 2.9 Standard Plans:

The car stackers can be designed in a single or tandem array configuration on either side of a drive aisle, plans attached. Adequate queuing space of at least 2 vehicles must be provided to allow the shuffling of cars. Queuing space may be in the drive aisle. For commercial projects during peak morning traffic all platforms will be lowered for quick filling of the car stackers. Surface's space must be provided for **Accessible Parking**.







### 2.10 Vehicle Clearance:

The Park Plus DP003 Car Stacker is designed to be installed both indoor and outdoor and the platform height is designed to be field adjustable. For indoor installations the indoor clearance from floor to ceiling is as follows:

Sedan over Sedan : 10'-6" Required
Sedan over SUV: 12'-6" Required
SUV over SUV: 14'-0" Required

Vehicle Clearance under platform varies between 5'-0" for Sedans and 6'-7" for SUV

For installations indoors in sprinkler buildings additional clearance will be required for fire sprinklers.

### 2.11 Hydraulic Power Pack:

The Park Plus DP003 Car Stacker has 5 power pack options available depending on the number of car stackers installed and type of power supplied: (See Section 13.2 and Appendix B)

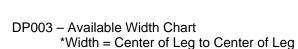
HPS1: For installation with a single unit. (208V / 1 PH / 60 HZ / 8 Amp)
 HPS15-1P: For installation of 1-15 units. (208V / 1 PH / 60 HZ / 28.4Amp)
 HPS30-1P: For installation of 1-15 units. (208V / 3 PH / 60 HZ / 17 Amp)
 HPS30-3P: For installation of 16-30 units. (208V / 3 PH / 60 HZ / 40 Amp)



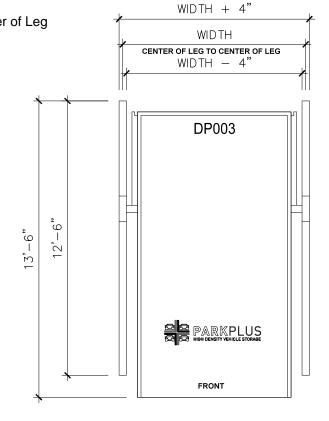
### 2.12 General Specifications:

The Park Plus Double Parking Stacker is available in 6 various sizes.

Lift Capacity: 6000 lbs.
Lift Weight: +/-2,860 lbs.
Model Width per table Below



MODEL	WIDTH*	
L11	7'-7"	
L12	7' - 11"	
L13	8' - 3"	
L14	10' - 2 1/2"	
L15	8' - 10 1/4"	
L16	8'-4" to 8'-6"	







## Section-3 Operator Qualifications and Responsibilities

**Section 3: Operator Qualifications and Responsibilities** 



### 3.1 Commercial Operator Qualifications:

A commercial mechanical parking operator shall have the following qualifications:

- 3.1.1 Ability in written and oral communications as demonstrated by one of, or a combination of, the following: high school diploma or certificate of equivalency, aptitude test or job experience;
- 3.1.2 ability to understand the mathematical, mechanical and electrical principles of mechanical parking stackers as demonstrated by one of, or a combination of, the following: aptitude test, training program, technical-vocational school, school of higher learning or job-experience:
- 3.1.3 demonstrate physical ability to carry out mechanical parking operator responsibilities in a safe manner; and
- 3.1.4 possess a personal current valid drivers license and obey all rules, regulations and laws that pertain to that license. Operation of any mechanical parking stackers or related equipment will be regarded as part of the responsibilities associated with driving.

### 3.2 Residential or Private Operator Requirements:

A residential or private mechanical parking operator shall be required to:

- 3.2.1 Ability in written and oral communications as demonstrated by one of, or a combination of, the following: high school diploma or certificate of equivalency, or aptitude test;
- 3.2.2 ability to understand the mathematical, mechanical and electrical principles of mechanical parking stackers as demonstrated by one of, or a combination of, the following: aptitude test or training program;
- 3.2.3 demonstrate physical ability to carry out mechanical parking operator responsibilities in a safe manner;
- 3.2.4 possess a personal current valid driver's license and obey all rules, regulations and laws that pertain to that license. Operation of any mechanical parking stackers or related equipment will be regarded as part of the responsibilities associated with driving.
- 3.2.5 Operate the stacker from an individually keyed control to ensure secure operation of a particular unit at any time.
- 3.2.6 Must be at least 18 years of age.

### 3.3 Operator Responsibilities:

- 3.3.1 The operator shall operate the mechanical parking stacker only after being properly instructed or trained in accordance with this guide and manufacturer supplied instructions.
- 3.3.2 The operator shall use all applicable safety features provided on the mechanical parking stacker, and operate the stacker in accordance with the instructions furnished by the manufacturer.
- 3.3.3 Equipment shall always be raised to the full up position and lowered on safety hooks.
- 3.3.4 The operator of the stacker shall be responsible for the maintaining the cleanliness and orderliness of the stacker and its surroundings in order that the stacker may be safely operated in accordance with the instructional and safety materials furnished by the manufacturer. Platforms are not to be used for storage.



### 3.40wner, Owner's Representative, and Operator Responsibilities:

The mechanical parking stacker owner, owner's representative, or operator shall take all appropriate steps to follow the recommended inspection procedures of the stacker manufacturer, but in no event shall the operator fail to inspect or take notice of the following features on a daily basis:

- 3.4.1 accessibility and readability of the operating procedures, safety tips and generic safety materials;
- 3.4.2 accessibility and readability of safety warning labels;
- 3.4.3 readability of the rated load capacity of the stacker;
- 3.4.4 proper operation of the lifting controls, restraints and locking devices;
- 3.4.5 deformation or excessive wear on any of the structural components;
- 3.4.6 deformation or excessive wear of other components such as hose, electrical wires, drive chains, cables or screws;
- 3.4.7 damage or excessive wear on any part of the stacker during lifting;
- 3.4.8 evidence of hydraulic leaks;
- 3.4.9 unusual noise, sudden movements, erratic operation or evidence of chips or filings during use; and
- 3.4.10 cracks or loose concrete around floor anchor bolts.

### 3.5 Operator Reporting:

If any of the conditions described above are observed before, during or after operation of the stacker, the operator shall stop using the stacker and report the condition to the owner or owner's representative. If any of the conditions listed above are observed, then the stacker shall not be used until the cause of the problem has been determined, and the appropriate repairs have been made by a qualified service provider.

### 3.6 Use of Accessories:

Accessories used on mechanical parking stackers shall be in accordance with the mechanical parking manufacturer's specifications applicable for use on the specific stacker. Such accessories may include an annunciator and alert beacon as may be required in some residential applications for self-operation:

- Annunciator: An annunciator is an audible alarm signaling device that is installed
  on the stacker or group of stackers that is activated when the stacker is in
  operation. The intention of this device is to create an audible awareness that the
  stacker is in operation and that people in the area are cautious during the
  procedure.
- Alert Beacon: An alert beacon is a flashing illuminating device that is installed on the stacker or group of stackers that is activated when the stacker is in operation.
   The intention of this device is to create a visual awareness that the stacker is in operation and that people in the area are cautious during the procedure.
- Safety Sensors: Safety sensor are sensing devices that will prevent the platform from lowering if a person or object is present or enters into the boundaries of the lift system.





### Section-4 Operating Instructions

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### **Section 4: Operating Instructions**

### **WARNING:**

To avoid death, personal injury and/ or property damage, permit only trained personnel to operate equipment and accessories outlined above.

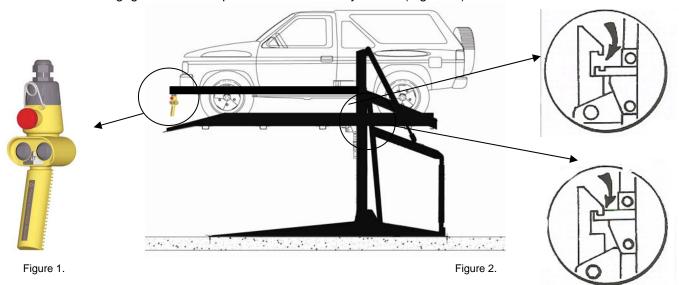
After reviewing these instructions, become familiar with all equipment controls by running the equipment through several cycles before loading a vehicle on the equipment.

### SAFETY:

- Observe and heed all CAUTION, SAFETY and WARNING labels on the lift. Keep clear of equipment while it is being raised or lowered.
  - The platform is designed to rest on the floor when fully lowered. Keep feet clear.
- Driver and passengers must exit before raising equipment.
- □ All vehicles must be properly centered on the platform before operator attempts to operate equipment, with transmission in "park" and parking brake engaged.
- **4.1 Loading**: Equipment platform must be fully lowered and area must be cleared of all peopleand/or obstruction while the vehicle is driven onto the equipment.
- 4.2 Center vehicle onto platform and make sure wheels are against wheel stops (be cautious of low profile vehicles where body may not adequately clear wheel stops. In this event park vehicle on equipment as far as possible before wheel stops). Shut off engine and engage vehicle parking gear and brake.SUV's must head in only.

### 4.3 To Raise Platform:

- Press the **UP** button until the platform reaches the top pre-set position. (Figure 1.). Observe that Safety Hooks are rotated into position above Bookshelf (Figure 2.)
- Then, push on the **DOWN** button until the platform comes to rest as the safety bar engages the correct position with the safety hooks. (Figure 2.)





### **IMPORTANT**:

Observe equipment, vehicle and overhead clearance as platform is rising.

### WARNING:

Clear area if vehicle or platform is in danger of falling.

### SAFETY:

Before working around elevated equipment, always make sure that it has been lowered onto the Safety Locks and that the locks are fully engaged.

### NOTE:

Locking the Safety Hook

When the platform is raised to its highest pre-set point, the safety hooks will be positioned approximately 3" above the safety hook shelf ("Bookshelf"- refer to attached technical specification drawings).

It is then necessary to lower the platform to engage the safety hooks in place.

Unlocking the Safety Hook: In order to lower the platform, the safety hooks need to be disengaged from the Bookshelf. This procedure requires the raising of the platform by approximately 3" as described below.

### 4.4 To Lower Platform:

- Perform complete safety check before operating the system.
- Push the **UP** button until the safety hooks disengage from the safety shelf. (Figure 3.)

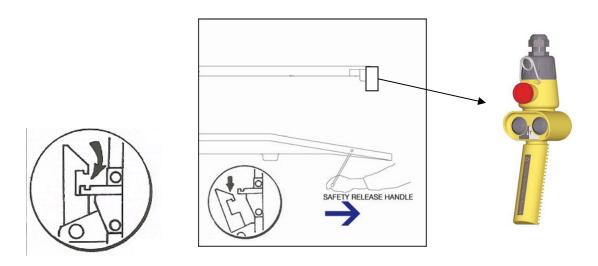


Figure 3. Figure 4.



- Pull the Safety Hook Release Handle and continue to hold in this position AND push the **DOWN** button until the safety hooks have passed the safety shelf. (Figure 4.)
- Continue to push the down button and stand clear of the moving platform as it lowers toward grade level until it has come to a complete stop.
- The cycle is now complete.

### IMPORTANT:

Observe equipment and vehicle to be sure that they are coming down level. If not, stop and raise the equipment until it becomes level again. Check all Safety Locks and whether these are releasing properly. – See Trouble Shooting

If the equipment is not operating properly, DO NOT USE until adjustments or repairs have been made by an authorized equipment-service professional.





### Section-5 Equipment Inspection



### **Section 5: Equipment Inspection**

### 5.1 Periodic Qualified Inspection:

### Qualified Inspection Procedure:

The owner or owner's representative shall establish a periodic inspection procedure in accordance with the recommendations of the manufacturer in order to ensure reliability and allow the continued safe operation of the stacker. Note that certain sections of U.S. Code of Federal Regulations, Title 29, Section 1929 and applicable subparts – Occupational Safety and Health Administration, General Industry Standards may pertain to the procedures anticipated by this section. Compliance with applicable regulations is the responsibility of the person(s) involved.

### 5.2 Qualified Inspector:

A mechanical parking stacker inspector shall have the following qualifications:

- 5.2.1 knowledge of personal safety practices necessary to perform routine and periodic inspections of existing equipment:
- 5.2.2 ability to read and understand equipment manuals, drawings and parts lists;
- 5.2.3 knowledge of the purpose and function of all components, devices and accessories commonly employed on mechanical parking stackers:
- 5.2.4 working knowledge of electrical and electronic circuit principles as applied to the operation of pumps, motors, valves and switches;
- 5.2.5 working knowledge of mechanical principles as applied to structures, machines, mechanisms and the effects of traction on ropes, chains and sheaves;
- 5.2.6 working knowledge of hydraulic principles as applied to the operation of valves, pumps, cylinders (plungers) and piping; and
- 5.2.7 knowledge of the many and varied types and styles of automotive lifts and mechanical parking stackers, their uses and any limitations or restricted applications pertaining thereto.

### 5.3 Qualified Inspector Training:

Training for personnel who are qualified to perform periodic inspections of mechanical parking stackers shall be achieved through experience in installation or field service work for users, manufacturers, distributors or service organizations for mechanical parking stackers or automotive lift products.

### **5.4 Qualified Inspection Documentation:**

A record of each periodic inspection per machine shall be prepared and maintained on site noting the observations and findings of all points of inspection recommended by the manufacturer as well as subsequent repairs or replacements accomplished.

### 5.5 Qualified Inspection Frequency:

Inspections by the owner or employer must occur in periods specified by the manufacturer. The owner must ensure the inspection frequency requirements are met.

**Commercial Installations**: Inspections are required at quarterly intervals by a qualified inspector

**Residential Installations**: Inspections are required at monthly intervals by a qualified inspector.

### 5.6 Inspection Checklist:

The qualified inspector should follow the recommended checklist as per the manufacturer's specifications, and obtain owner or owner's representative signature on completion of each inspection. See attached **Inspection / Maintenance Checklist** 





### Section-6 Equipment Maintenance



### **Section 6:Equipment Maintenance**

### 6.1 Preventative Maintenance:

The owner or employer shall establish a periodic preventative maintenance procedure in accordance with the recommendations of the manufacturer in order to ensure reliability and allow the continued safe operation of the stacker. Note that certain sections of U.S. Code of Federal Regulations, Title 29, Section 1910 and applicable subparts – Occupational Safety and Health Administration, General Industry Standards may pertain to the procedures anticipated by this section. Compliance with applicable regulations is the responsibility of the person(s) involved.

### **6.2 Preventative Maintenance Documentation:**

The owner or employer shall be responsible for maintaining a record of each preventative maintenance procedure, noting the specific checks made, parts replaced, adjustments made, results of measurements taken and any recommendations made. The frequency of this documentation shall follow the recommendations of the manufacturer. Maintenance records must be maintained on site. See attached checklist.

### 6.3 Repair Maintenance Procedure:

The owner or employer shall be responsible for the repair maintenance procedures as recommended by the operator, inspector or maintenance technician. Repair maintenance shall be performed according to recommendations of the manufacturer and carried out by qualified repair maintenance personnel. Note that certain sections of U.S. Code of Federal Regulations, Title 29, Section 1910 and applicable sub-parts - Occupational Safety and Health Administration, General Industry Standards may pertain to the procedures anticipated by this section. Compliance with applicable regulations is the responsibility of the person(s) involved.

Any electrical service maintenance shall be performed by or under the direct supervision of an electrician licensed in the applicable jurisdiction.

### 6.4 Repair Maintenance Personnel:

Personnel appointed to perform periodic repair maintenance must be qualified through experience in installation and field service work for manufacturers or distributors of mechanical parking stackers or automotive lift products. It is recommended that the services of a qualified service company be employed to carry out the necessary repairs by the manufacturer. Service providers must be approved by the manufacture.

### **6.5 Repair Maintenance Documentation:**

A thorough record of each repair maintenance procedure performed shall be prepared and maintained by the owner or employer and kept on site. See attached checklist.

### 6.6 Repair Maintenance Frequency:

Repair maintenance shall follow the recommendations of the mechanical parking stacker manufacturer and shall be accomplished in timely response to observations or recommendations made by the operator, inspector or technician.

### **IMPORTANT:**

If you are not completely familiar with automotive stacking equipment maintenance procedures, STOP. Contact the manufacturer or an authorized service professional.





### Section-7 Equipment Modifications



### **Section 7:Equipment Modifications**

There shall be no modifications or reconstructions made to any part of the mechanical parking stacker without the express written permission of the manufacturer.

Any disabling of safety features is against the law. Violators will be prosecuted under the full extent of the law.





### Section-8 Trouble Shooting



### **Section 8. Trouble Shooting**

### 8.1 Trouble Shooting Matrix:

MALFUNCTION	CAUSE	REMEDY
Motor does not run	Check fuse or circuit breaker	1.Replace blown fuse or reset
		circuit breaker*
	Check for correct voltage to motor	2. Supply correct voltage to motor.*
	3. Inspect all wiring connections	Repair and insulate all wiring connections*
	4 Ossitala lassent assit	
	4. Switch burnt out	4. Replace switch*
	5. Motor windings burned out	5. Replace Motor*
Motor runs but will not raise lift.	1.Open lowering valve.	Repair or replace lowering valve.*
	2. Pump sucking air	2. Tighten all suction line fittings.*
	3. Suction stub off pump	3. Replace suction stub.*
	4. Low fluid level.	4. Fill tank with approved oil
	5.Lift Valve not opening	5. Repair or replace lift valve*
Motor runs – raises unloaded lift but will not raise vehicle.	Motor running on low voltage	Supply correct voltage to motor*
	2. Dirt in lowering valve.	2. Clean lowering valve
	Improper relief valve adjustment.	3. Replace relief valve cartridge.*
	Overloading lift.	Check vehicle weight and/ or balance vehicle weight on lifts.*
Control handle or button does not	No electric power	Check main circuit for power
activate the machine	Defective hydraulic valve switch	Check valve switch for proper contact
	Defective electrical component in power supply	Check fuse and fuse box components
Power supply motor operating but platform does not move	Low hydraulic oil	Check power supply oil level indicator
platform doco not movo	Defective hydraulic pump	Check pressure gauge
Platform moves very slowly with heavy car	Low hydraulic pressure	Check pressure gauge and adjust pressure until platform performs at proper speed. Do not exceed 2,500 PSI*
Oil leaks	Check for loose hydraulic fittings, cracked hydraulic hoses or leaky cylinders	Tighten fitting. Replace defective hose. Replace cylinder"O" ring.*
Machine squeaks when in operation	Little or no grease in wheel channel.	Grease wheel channel.*
	Binding or rubbing parts due to vehicle accidentally hitting leg stanchion.	Check to see if leg stanchion is properly lined up and plumb.*

<sup>\*</sup>Remedy listed above may require qualified technician. Contact manufacturer.



### 8.2 Manual Pump:

Two people are required for this procedure.

In the event of an electrical failure, a manual hand pump is incorporated in the power pack and the platform may be lowered in the following manner: One person must be positioned at the machine to operate the controls (control operation is identical with or without power). The other person must be positioned at the power supply to operate the hand pump. Several movements of the manual pump will produce sufficient pressure to operate the machine. (Figure 5.)

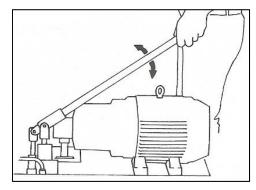


Figure 5.

### STOP if unsure or inexperienced with any procedures.

### For immediate 24/7 assistance call 1-800-966-5509

### PROCEDURE TO LOWER A PLATFORM IN THE EVENT OF A POWER FAILURE

NB: TWO PEOPLE ARE REQUIRED TO PERFORM THIS PROCEDURE. EXERCISE EXTREME CAUTION AT ALL TIMES, AS INJURY OR EVEN DEATH MAY OCCUR.

### Step 1

Proceed to the rear of the left hand leg of the platform to be lowered. A manifold block assembly is located on the base of the leg complete with a solenoid valve. Push and twist manual override button (red knob) on the solenoid spool to open the valve.





DP003 Manifold block assembly

### Step 2

One person should proceed to the Power Pack unit and open the cover. The second person should proceed to and stand in front of the platform to be lowered, ensuring that he/she is positioned away from the path of the platform to be lowered.



Power Pack manifold block assembly with hand pump



### Step 3

A manual hand pump is incorporated in the Power Pack (see picture above). The person at the Power Pack must pump the hand pump several times which will produce sufficient pressure to raise the platform. Ensure that the safety hooks are raised approximately 1" above the safety shelf (bookshelf bracket).

### Step 4

The person standing in front of the platform should now pull the release handle and continue to hold it in this position. At the same time ensuring that he/she is positioned away from the path of the platform to be lowered.

### Step 5

The person standing at the Power Pack should push and slowly twist the manual override button of the solenoid spool valve of the Power Pack manifold assembly. Exercise **CAUTION** whilst twisting the manual override button to control the lowering speed of the platform. Once the safety hooks have cleared the safety shelf the release handle can now be released.

### Step 6

Once the platform has reached the ground, release the manual override button of the solenoid spool valve in the Power Pack and close the cover.

### Step 7

Return to the manifold block assembly located on the base of the leg of the affected platform. Push and twist the manual override button (red knob) on the solenoid spool back to its original position to close the valve.





## Section-9 Safety Devices, Notes, and Warning Labels



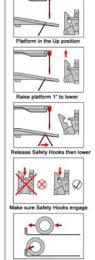
### Section 9: Safety Devices, Notes, and Warning Labels

### 9.1 Safety Notes:

- Policy should prohibit customers or non-authorized persons or bystanders from being in area while equipment is in use.
- Thoroughly train all operators of this equipment in the use and care of equipment and accessories.
- Be sure no one is standing in front or behind equipment while vehicle is being driven onto or backed off the equipment.
- DO NOT permit anyone on equipment when it is either being raised or lowered.
- Always stand clear of equipment when raising or lowering and observe "Pinch Points" Warnings.
- Never overload equipment. Capacity of equipment is 6000 lbs. CAPACITY SHOULD NEVER BE EXCEEDED!
- Always shut off engine and engage parking gear and brake before exiting vehicle.
- Always drive on/ off equipment with care
- Keep area around equipment clean of tools, debris, grease, oil, flammables, etc.
- Always keep equipment platform clean.
- Replace all caution, warning, or safety related decals on the equipment when unable to read or missing.
- Always engage safety hooks when vehicles are in raised position or are being stowed.

### 9.2 Equipment Safety Warning Labels:

Platform Warning Label: To be installed on platform near control arm.





Park Plus Inc. Model: DP003 Maixmum Load: 6000 lbs. Maximum. PSI: 2,500. Hydraulic Power Pack: 208V, 1 Phase, 60 Hertz, 22Amps Controls: 24 Volts DC Hourse Power: 10

### Danger - Risk of Injury or Death

- Lift to be used by <u>trained operator only</u>.
- Make sure transmission is in <u>PARK</u> and PARKING BRAKE is set.
- Driver and Passengers must exit vehicle before operating the lift.
- Crush Hazard, remain clear of lift when raising or lowering platform.
- Make sure vehicle is completely on platform before operating lift.
- Pull vehicle forward to wheel stops.
- Do Not Attemp to modify or re-adjust lift.
   In case of malfunction or damage to lift,
   DO NOT operate lift, Contact Manufacture.

- SUV's head in only.
- Children should not play on or near lift.
- Vandalizing or tampering with the lift is against the law, violators will be prosecuted under the full extent of the law.
- Keep clear of all moving components when lift is being operated.

