

### Direct-Lift

2950 S. E. Loop 820

Fort Worth, Tx 76140

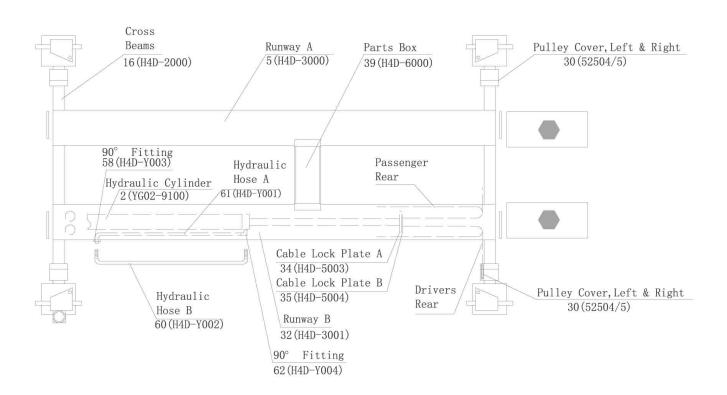
#### WARRANTY REGISTR ATION

Model:
Serial Number:
Name of Distributor:
Date of Installation:
Installed at:
(Address)
Phone & Fax #

Important: Warranty Card must be mailed within 2 weeks of install date.

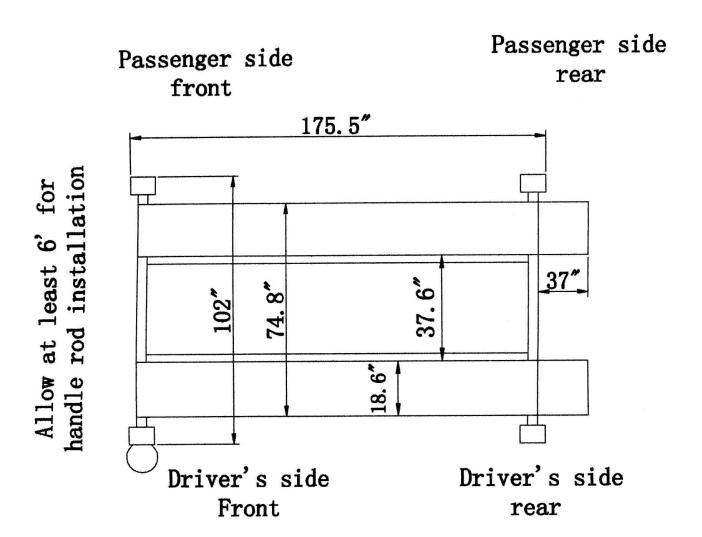
DP-7 Four Post Service, Parking Lift



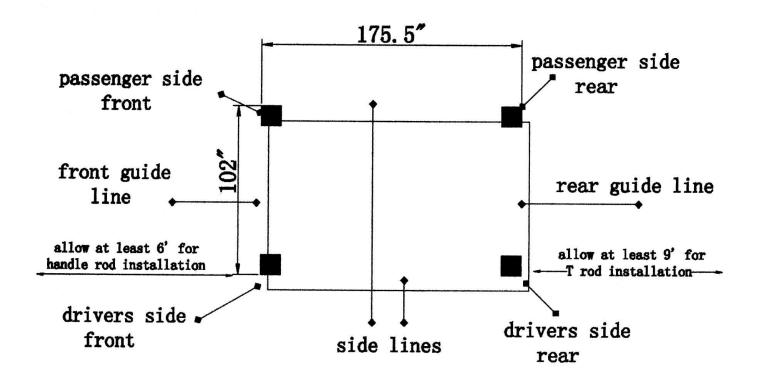


### Specifications

Maximum Capacity	7000Lbs
Overall length (with 37" ramps)	207.5"
Overall width	102"
Height of columns	-82"
Maximun wheel base	165.5"
Power pack 110V	,220V
Runway width	-18.6"
Rate of lift to full height 70	Seconds
Maximum clearance between posts	92.7"
Maximum clearance under runways	- 71"
Shipping weight	1500Lbs



Floor plan



#### Direct-Lift

#### PRO-PARK 7

#### Important Notes

- 1. Always inspect the lift for damage and make note of any damage on the bill of lading.
- In case of freight damage, call the truck line immediately and report the damage as a freight claim.
- Make sure you have extra help or heavy duty lifting equipment when unloading and assembling the Pro-Park 7.
- Please read the safety procedures and operating instructions in this manual before operating lift. Keep this manual near lift at all times. Make sure all operators read this manual.
- 5. The lift should be located on a relatively level floor (less than 3 degrees) with a minimum 4", 3000 PSI concrete. If slope is questionable, consider a survey of the site and/or the possibility of pouring a new level concrete slab.
- 6. Make sure you have enough room to install the lock rods. You will need at least 9' of clearance from the opposite end of the power unit end of the lift (See floor plan on page 4). The power unit may be installed on the driver's front or the passenger rear corner.
- 7. Never raise a car until you have double checked all bolts, nuts and hose fittings.
- Always lock the lift before going under the vehicle or storing another vehicle underneath lift. Never allow anyone to go under the lift when raising or lowering.

This is a vehicle lift installation/operation manual and no attempt is made or implied herein to instruct the user in lifting methods particular to an individual application. Rather, the contents of this manual are intended as a basis for operation and maintenance of the unit as it stands alone or as it is intended and anticipated to be used in conjunction with other equipment.

Proper application of the equipment described herein is limited to the parameters detailed in the specifications and the uses set forth in the descriptive passages. Any other proposed application of this equipment should be documented and submitted in writing to the factory for examination. The user assumes full responsibility for any equipment damage, personal injury, or alteration of the equipment described in this manual or any subsequent damages.

#### Tools Required

- · Set of metric wrenches or sockets
- Crescent wrench
- Vise grips
- · Box cutter or knife
- 3 gallons of R & O or ISO32 hydraulic oil
- 25' Tape measure

#### Lift Assembly

- 1. Remove plastic wrap from top runway and remove all hardware, safety lock rods, hoses and cables. You should also find this manual in the top runway.
- Find the end of the hose that is already mounted to the cylinder and tighten the elbow that attaches the hose to the side of the runway using the jam nut. Also, check the fitting at the cylinder end and make sure it is tight.
- 3. Extend cylinder rod out of the cylinder to about 18" from end of runway. This can be done by pulling or pushing on the ½" plate on the end of the cylinder. Make sure that the ½" plate is threaded tight against the cylinder rod. Also, be sure the ¼" plate is on the rod and hand tighten the lock nut on the end of the cylinder.
- 4. Unbolt the top runway from the shipping plates at each end of the package. Be sure to secure runway with a hoist to prevent runway from falling. Runway will need to be turned over so it is no longer upside down. Place this runway in your bay with the hydraulic fitting facing toward the outside (see Page 1).
- Next, unbolt the four columns from the package and place the column with the power unit mounting bracket at the end of the previously unpacked runway nearest to the hydraulic fitting. Stand these columns on their base plates with the locking ladders facing to the outside (front or rear) and the pulleys to ward the inside (see Fig. 1).
- 6. Unpack the bottom runway. Lay the approach ramps near the approach end of the lift and set out the remaining parts away from the lift. Place the two cross rails at each end of the lift with the locks toward the outside (front or rear) of the lift (see Fig 1). Remove the shipping brackets from the bottom runway and turn over placing the runway in the bay next to the other runway with the "L" shaped side facing the "L" shaped side of the

- 7. If you have a means for securely lifting cross rails high enough to lower them into the top of the columns, then remove the top plates from the top of the columns while columns are standing. If you don't have a means for securely lifting them up, then you will need to lay the columns down and remove the top plates to allow the cross rails to be slid into the columns.
- 8. Slide each cross rail into the front or rear two columns by holding the lock lever down, to allow the rail to slide past the locking positions. Leave the cross rail locked in the lowest position on the column. Repeat this step for the other cross rail (See Fig. 1).
- 9. Position the front cross rail columns at 170.5" from the rear cross rail columns by measuring from the outsides of the columns. Square the lift by measuring diagonally between the right, front column to the same position on the left rear column. Compare your measurement between the left front column and the right rear column. This should be within ½" to allow some forgiveness to bolt on runways.
- 10. Lift the runways onto the cross rails and bolt them in place using the <sup>3</sup>/<sub>4</sub>" holes towards the outside of the cross rails. The four drop-in ramp plates will be used with the spacer side facing the lift and through-bolted from the outside of the cross rail, through the runway using bolts provided with washers, lock washers and nuts (See Fig. 2).
- After runways are bolted on, install the column top plates back to their original columns and tighten.
- CABLE INSTALLATION Lay out all cables and measure from end to end to determine correct cable positions (See Fig. 3).
- 13. Since the nub end of the cable is easier to feed through the pulley, start with the pulley at the end of the cross bar and work your way back to the cylinder (See Fig. 3).
- 14. Install cable nubs onto appropriate slots in ½" plate and secure with slots on ¼" plate. Tighten the nubs so the nylock nut is fully threaded onto the head of the cylinder. The cable bracket should still be able to move freely on the cylinder head.
- 15. Run the threaded cable ends into the hole in the top caps and secure with washer and nylock nut. Hand tighten only, final adjustment will be made later. Do tighten the nylock nut on the end of the cylinder at this time.
- HYDRAULIC ASSEMBLY Be sure wiring is in compliance with your local electrical codes.

- 17. Find the four 5/16" bolts, nuts and lock washers and attach the power unit to the mounting bracket on the column.
- 18. Remove dust cover from the port on the side of the power unit and attach the "O" ring elbow. Do not over tighten. The backing nut and "O" ring will complete the seal to the power unit.
- 19. Install the 3/8" hose to the fitting on the side of the runway and connect opposite end to the fitting on the power unit. Tighten JIC fittings carefully, do not over tighten.
- 20. LOCK LINKAGE ASSEMBLY The single point safety lock is a system of connecting rods and linkage that disengage the four lock latches that secure the lift to each column. Locate the six rods:
  - a. 2 long rods
  - b. 2 short rods
  - c. 1 handle rod
  - d. 1 T rod

#### Also locate hardware:

- a. 1 rod coupling with 2 jam nuts
- b. 8 heim ends with connecting nuts and bolts
- c. 2 spacers
- Slip spacer over threaded end of handle rod and insert rod into hole on cross bar near power column.
- 22. Slip spacer over threaded end of T-rod and insert end into hole located on opposite cross rail, taking care to run rod through rod guide located under ramp.
- 23. Thread jam nuts onto ends of handle rod and T-rod. Attach the handle rod to the T-rod using the rod coupling. Adjust coupling to take the slack out of the rods. The rods should remain free enough to move with no slack. Do not tighten coupler or lock nuts at this time.
- 24. Locate the two long rods and remove one end from each rod and slide off the eye bolt. Attach eye bolts to center of cross rails by threading ½ of the way in and tighten jam nut.

- 25. Attach short rod on the T side lock and to the bottom of the T and hand tighten. Slide long rod through the eye bolt and attach one end to the top side of T. Attach the other end of the long rod to the lock on the other side. Repeat this process for the other end of the lift. The locking rods should be in perfect alignment since the lift is still sitting in the locked position. Tighten all jam nuts, making sure the linkage does not bind.
- 26. Go back to the coupler that attaches the T rod to the handle rod and tighten the jam nuts. Do not adjust coupler, only tighten the jam nuts.
- FINAL ADJUSTMENTS Fill the tank with three gallons of R & O, ISO32
   Hydraulic Oil (Available at any auto supply store). Dexron III Transmission Fluid can
   also be used.
- 28. Check over cables and make sure they are all in their pulleys. Press the up switch on the power unit and the fluid will start to pump into the cylinder. The lift will eventually rise after the cylinder fills up. Once the lift is raised off of the locks, release the up switch and pull the lock lever to disengage the locks and lower the lift with the lowering lever on the power unit. Hold lever after lift reaches the very bottom until you hear all of the air escape.
- 29. Raise the lift up to the point where the square block above the lock aligns with the second column lock, and stop. Look at each column lock to determine the highest point. Adjust the cable on the highest point column until three threads pass through the nylock nut. Now adjust the other three cables to match this height.

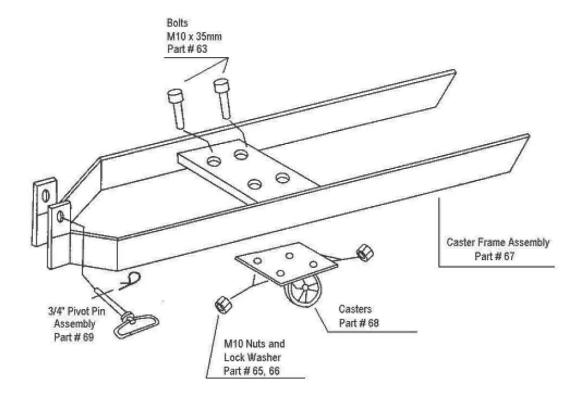
**NOTE:** There will be some initial stretching of the cables in the beginning. It will be necessary to readjust the cables a week after first use, then every six months thereafter. Run the lift up and down a few times to insure that the locks are engaging uniformly and that the safety release mechanisms are functioning properly. Readjust if necessary.

#### DANGER!

When lowering the lift *PAY CAREFUL ATTENTION. ALWAYS* make sure that all four locks are disengaged. If one of the locks inadvertently locks on descent the lift and/or vehicle may disrupt causing personal injury or death. Install the approach ramps on the entry side of the lift. Drive a vehicle onto the lift runways, and install the front and rear wheel chocks. ALWAYS CHOCK WHEELS AND SET PARKING BRAKES BEFORE

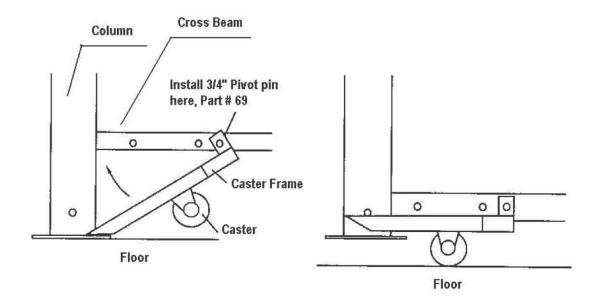
# Caster Kit PRO PARK 7

- 1. Install the casters onto the frames as shown below.
- 2. Secure the casters to the frames with supplied bolts and nuts shown below.



#### TO INSTALL THE CASTER KIT TO THE LIFT

- 1. Raise lift 3' to 4' from the floor.
- 2. Install the Caster Frame (with caster attached) onto the cross beam.
- 3. Install <sup>3</sup>/<sub>4</sub>" pivot pins to secure the Caster Frames.
- 4. Lower the lift and check to see that the frames engage the column pins and that the column rises.



#### Lift Operation

#### To Raise Lift:

- Position vehicle tires in the center of each ramp.
- Set parking brake or use a wheel chock to hold vehicle in position.
- Before raising vehicle, be sure all personnel are clear of the lift. Pay careful attention to the overhead so as not to raise the vehicle into an obstruction.
- Raise vehicle to the desired working height.
- Lower lift onto nearest safety ladder and lock to support load.
- Do not permit the cables to slack.

#### To Lower Lift:

- Raise the lift to clear the safety lock.
- First, release the safety lock by pushing the safety lock handle and hold.
- Push the lowering valve handle and hold both handles until the lift has descended completely.
- Safety locks will reengage once lift is raised again or if the safety lock handle is released at desired height.

#### START-UP MAINTENANCE

- \* Lubricate all inside corners of the lift columns where the carriages run up and down with a thin layer of grease.
- \* Lubricate all the pulleys with a light oil such as WD-40 or similar product. Reapply on a quarterly basis.

#### MAINTENANCE SCHEDULE

The following periodic maintenance is the suggested minimum requirements and minimum intervals; accumulated hours or monthly period, which ever comes sooner. If you hear a noise or see any indication of impending failure - <u>cease</u> <u>operation immediately</u> - inspect, correct and/or replace parts as required.

WARNING OSHA AND ANSI REQUIRE USERS TO INSPECT LIFTING EQUIPMENT AT THE START OF EVERY SHIFT. THESE AND OTHER PERIODIC INSPECTIONS ARE THE RESPONSIBILITY OF THE USER.

#### **DAILY PRE-OPERATION CHECK (8 HOURS)**

The user should perform daily check. <u>ATTENTION! LOOK OUT!</u> Daily check of safety latch system is very important - the discovery of device failure before needed could save you from expensive property damage, lost production time, serious personal injury and even death.

- Check safety lock audibly and visually while in operation
- Check safety latches for free movement and full engagement with rack.
- Check hydraulic connections, and hoses for leakage.
- Check cables connections- bends, cracks-and looseness.
- Check for frayed cables in both raised and lowered position.
- Check snap rings at all rollers and sheaves.
- Check bolts, nuts, and screws and tighten.
- Check wiring & switches for damage.
- Keep base plate free of dirt, grease or any other corrosive substances.
- Check floor for stress cracks.

#### **WEEKLY MAINTENANCE (40 HOURS)**

- Check hydraulic oil level.
- Check and tighten bolts and nuts, and screws.
- Check cylinder nylock nut and cable attachment plate assembly for secure connection or excessive wear on parts.
  - Check cable pulleys for free movement and excessive wear.

#### YEARLY MAINTENANCE

- Grease rub blocks and column surface contacting rub blocks
- Change the hydraulic fluid good maintenance procedure makes it
  mandatory to keep hydraulic fluid clean. No hard fast rules can be
  established; operating temperature, type of service, contamination
  levels, filtration, and chemical composition of fluid should be
  considered. If operating in dusty environment shorter interval may be
  required.

## The following items should only be performed by a capable maintenance expert.

- Replace hydraulic hoses.
- Replace cables and sheaves.
- Replace or rebuild air and hydraulic cylinders as required.
- Replace or rebuild pumps / motors as required.
- Check hydraulic and air cylinder rod and rod end (threads) for deformation or damage.

Check cylinder mount for looseness and damage.

Relocating or changing components may cause problems. Each component in the system must be compatible; an undersized or restricted line will cause a drop in pressure. All valve, pump, and hose connections should be sealed and/or capped until just prior to use. Air hoses can be used to clean fittings and other components. However, the air supply must be filtered and dry to prevent contamination. Most important- cleanliness - contamination is the most frequent cause of malfunction or failure of hydraulic equipment.

#### TROUBLE SHOOTING

#### 1. Motor does not run:

- Breaker or fuse blown.
- B. Motor thermal overload tripped. Wait for overload to cool.
- C. Faulty wiring connections call electrician.
- D. Defective up button call electrician for checking.

#### 2. Motor runs but will not raise:

- A. A piece of trash is under check valve. Push handle down and push the up button at the same time. Hold for 10-15 seconds. This should flush the system.
- B. Check the clearance between the plunger valve of the lowering handle. There should be 1/16".
- C. Remove the check valve cover and clean ball and seat.
- D. Oil level to low. Oil level should be just under the vent cap port when the lift is d o w n!!!

#### 3. Oil blows out breather of power unit:

- A. Oil reservoir overfilled.
- B. Lift lowered too guickly while under a heavy load.

#### 4. Motor hums and will not run:

- A. Impeller fan cover is dented. Take off and straighten.
- B. Faulty wiring......call electrician
- C. Bad capacitor.....call electrician
- D. Low voltage.....call electrician
- E. Lift overloaded...

#### 5. Lift jerks going up and down:

Air in hydraulic system. Raise lift all the way to top and return to floor. Repeat 4-6 times.

Do not let this overheat power unit.

#### 6. Oil leaks

- A. Power unit: if the power unit leaks hydraulic oil around the tank-mounting flange; check the oil level in the tank. The level should be two inches below the flange of the tank. Check with a screwdriver.
- B. Rod end of the cylinder: the rod seal of the cylinder is out. Rebuild or replace the cylinder.
- C. Breather end of the cylinder: the piston seal of the cylinder is out. Rebuild or replace the cylinder.

#### 7. Lift makes excessive noise.

- A. Leg of the lift is dry and requires grease.
- B. Cylinder assembly or cable pulley assembly is not moving freely.
- C. May have excessive wear on pins or pulleys.

### Direct-Lift Limited Warranty

All Direct-Lifts are warranted to the original owner for two (2) years from invoice date. Direct-Lift shall replace for the first 2 years those parts returned to the factory which prove upon inspection by Direct-Lift to be defective. **All warranty issues MUST be preapproved by Direct-Lift.** For Direct-Lift models Pro-Park 7, Pro-9A, Pro-9F and Pro-10 the warranty shall be five (5) years on parts and tw(2) years on the power unit.

This warranty shall not apply unless the product is installed, operated, used and maintained in accordance with Direct-Lift specifications as set forth in Direct-Lift's installation, operation and maintenance instructions.

This warranty does not cover normal maintenance or adjustments, damage or malfunction caused by improper handling, installation abuse, misuse, negligence, carelessness of operation, or normal wear and tear. Normal wear and tear items such as rubber pads are not covered. In addition, this warranty does not cover equipment when unauthorized repairs or alterations have been attempted or made to the product.

This warranty is exclusive and all other expressed or implied warranties including merchantability or fitness for a particular purpose are hereby expressly excluded.

The remedies described are exclusive and in no event shall Direct-Lift be liable for any special, consequential or incidental damages of any kind including damages for breach or delay in performance of the warranty.

This warranty shall be governed under the laws of the state of Texas, and shall be subject to the exclusive jurisdiction of the Court in the state of Texas in the county of Tarrant.

# Warranty card must be completed and returned within 2 weeks of install date.

Fig. 1

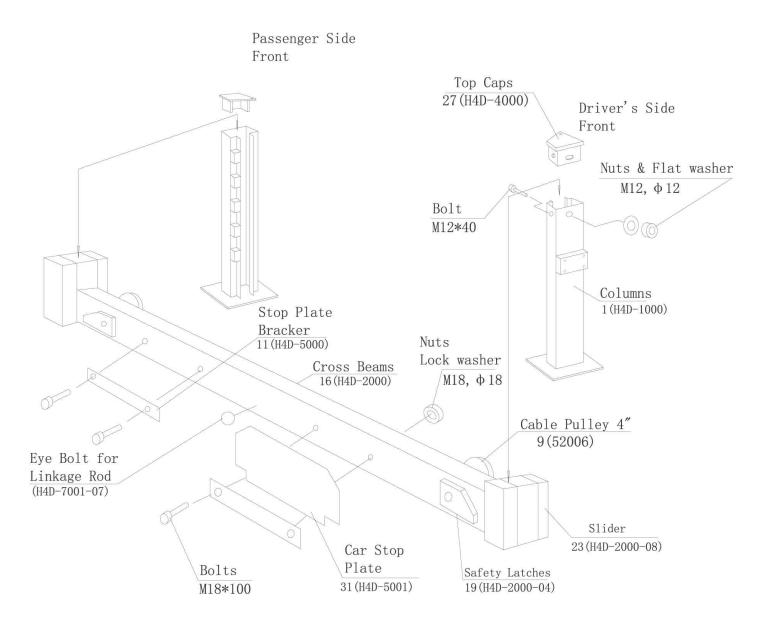


Fig. 2

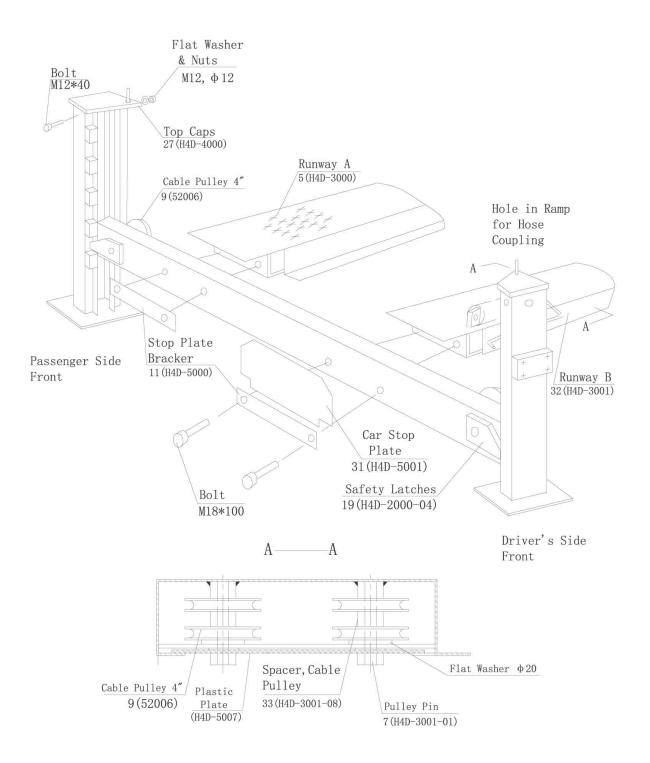
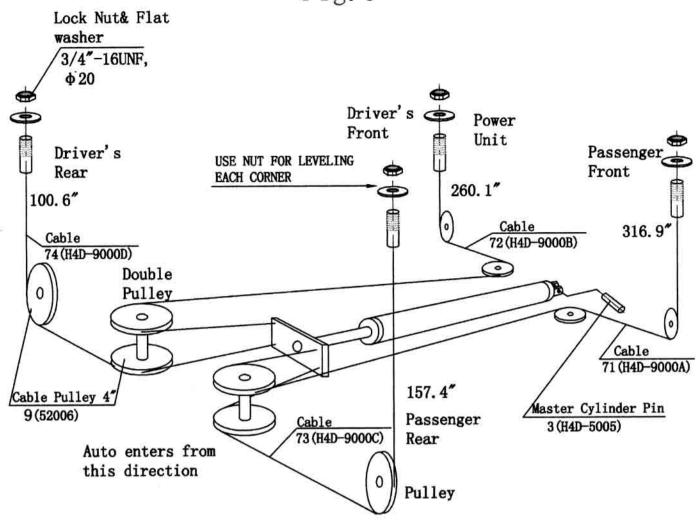


Fig. 3



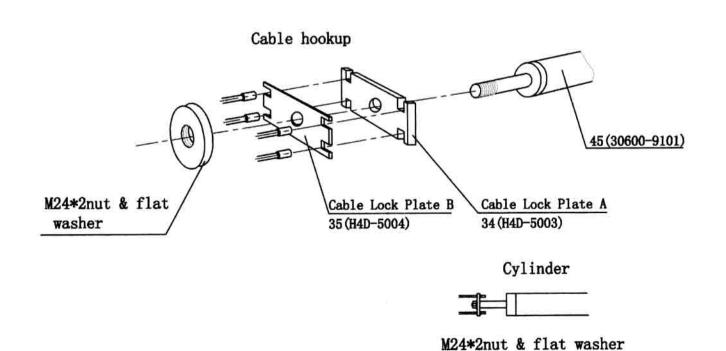
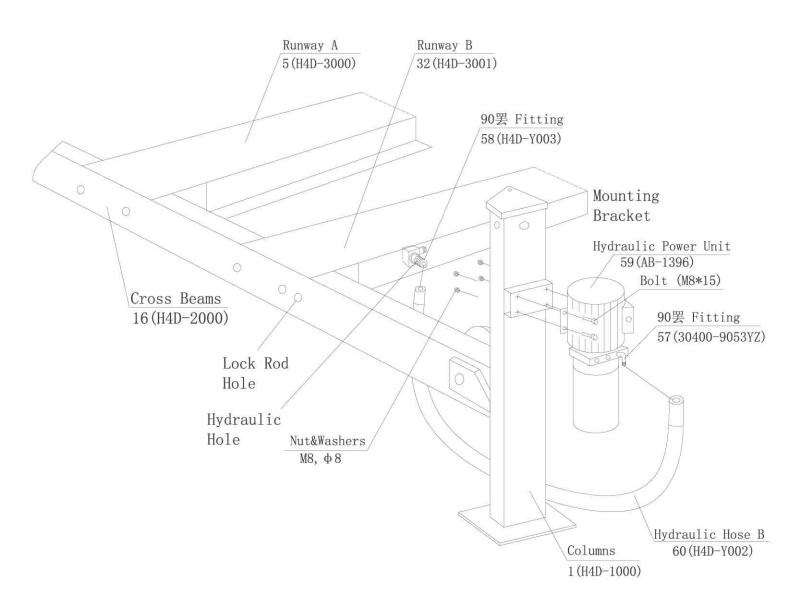
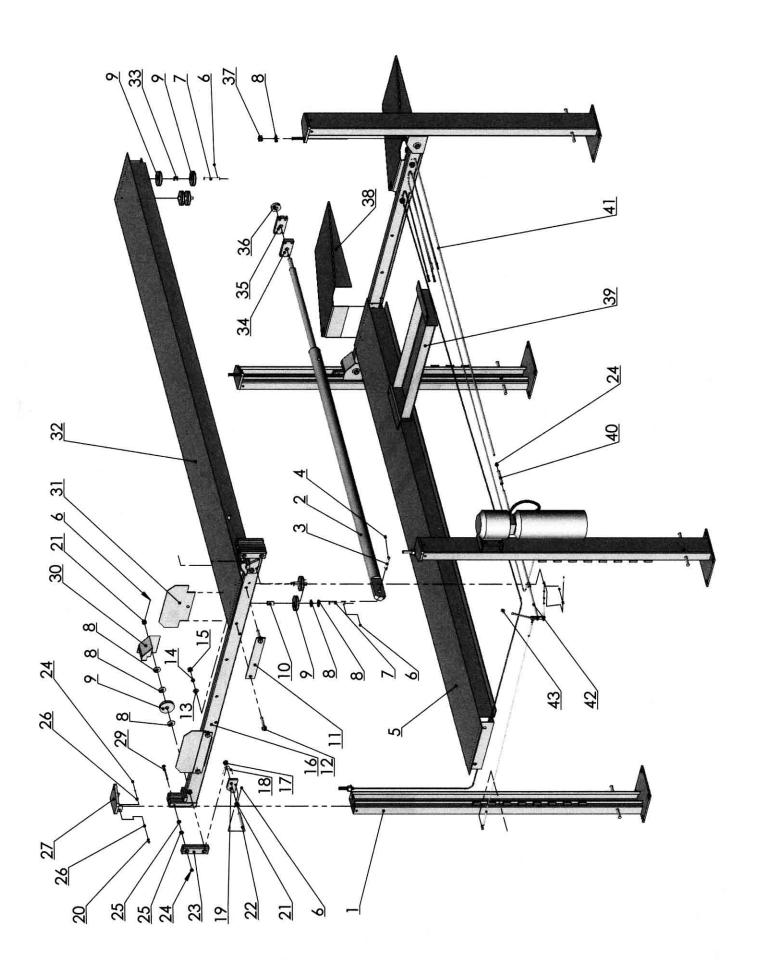
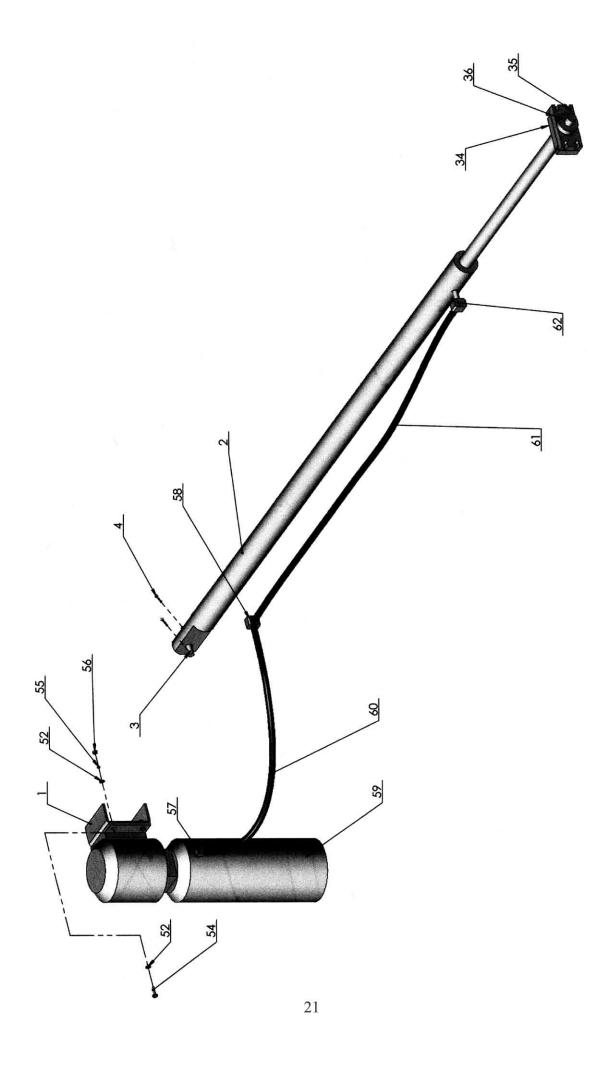
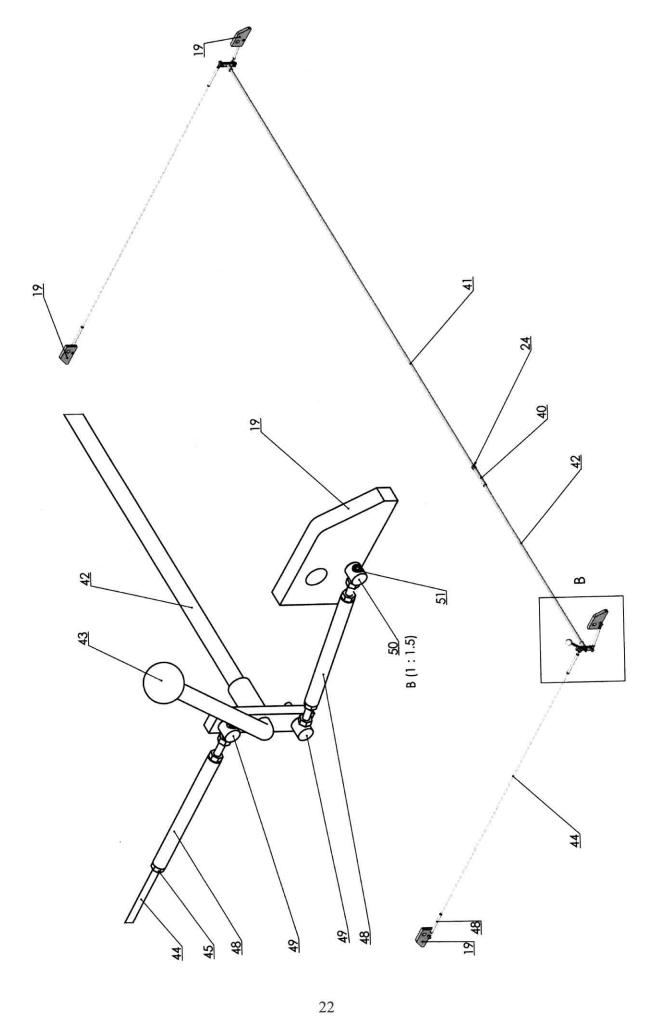


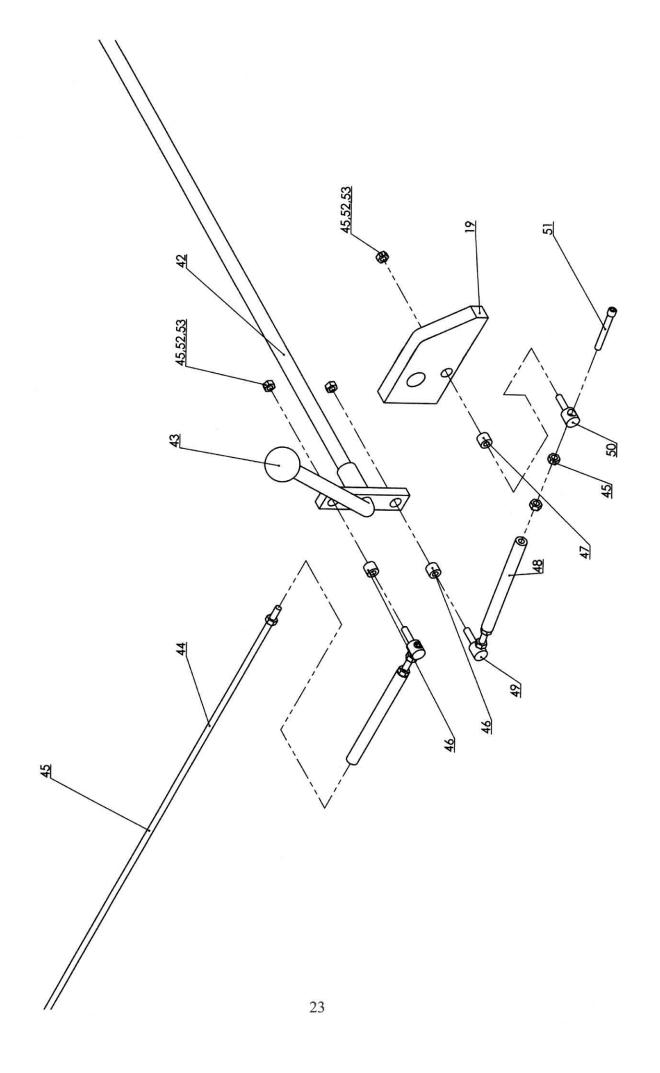
Fig. 4

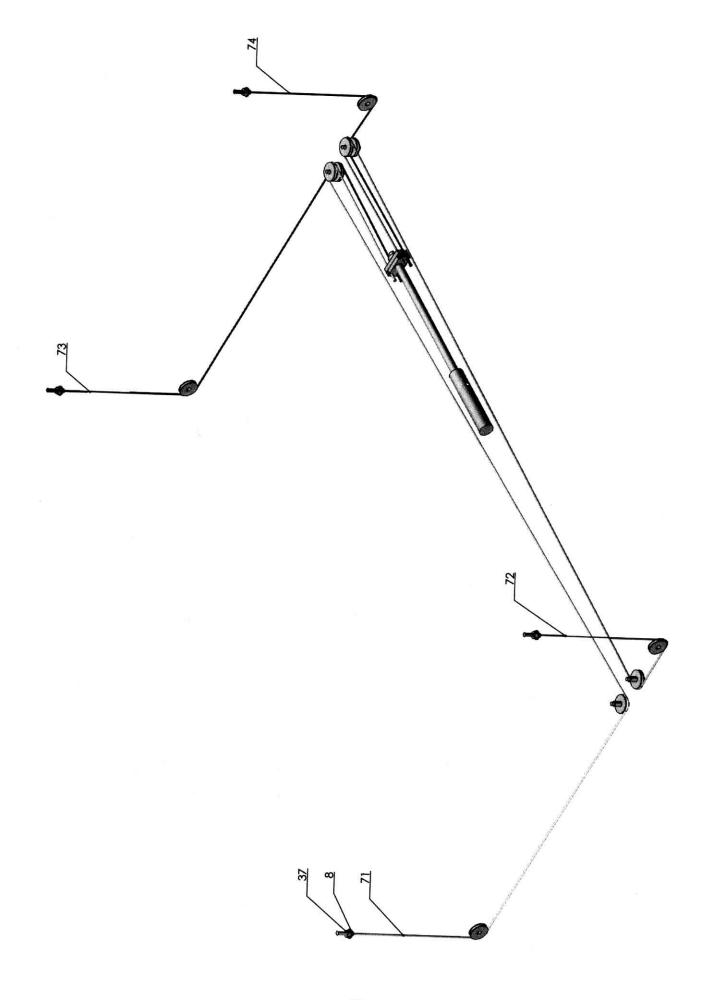


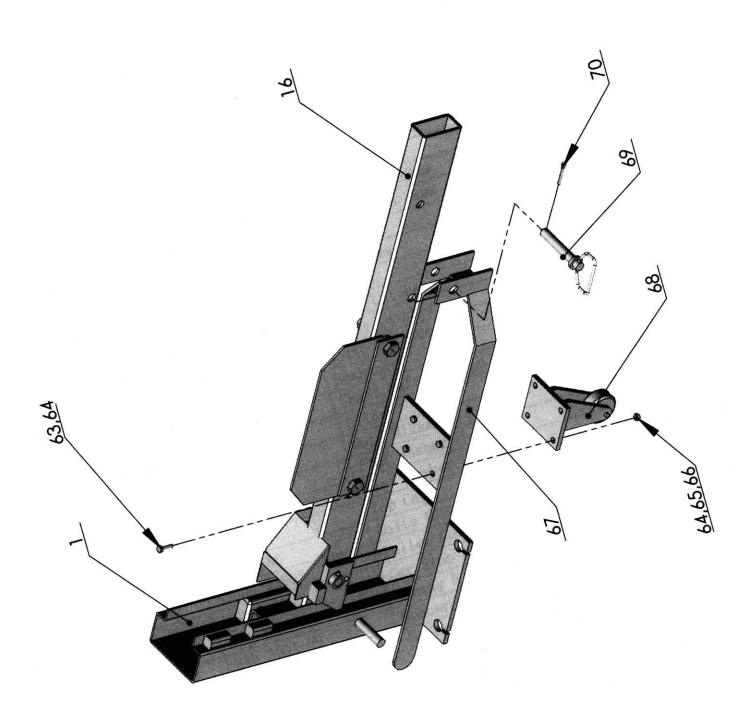












# Driect-Lift Parts List for PRO-PARK 7

Items	Parts/Prints#	Description	QTY
1	H4D-1000	Columns	4
2	YG02-9100	Hydraulic Cylinder	1
3	H4D-5005	Master Cylinder Pin	1
4	GB91-86	Cotter Pin Φ5*60mm	2
5	H4D-3000	Runway A	1
6	GB78-85	Bolts M6*10mm	16
7	H4D-3001-01	Pulley Pin	4
8	GB95-85	Flat Washer Φ20mm	24
9	52006	Cable Pulley 4"	10
10	H4D-3001-10	Spacers	2
11	H4D-5000	Stop Plate Bracker	4
12	GB5782-86	Bolts M18*100mm	8
13	GB95-85	Flat Washer Φ18mm	8
14	GB93-87	Lock Washer Φ18mm	8
15	GB6170-86	Nuts M18mm	8
16	H4D-2000	Cross Beams	2
17	H4D-2000-09	Bushings	4
18	H4D-2000-05	Safety Latches	4
19	H4D-2000-04	Safety Latches	4
20	GB5783-86	Bolts M12*40mm	12
21	H4D-2000-06	Bushings	8
22	H4D-2000-07	Shaft, Safety Latch	4
23	H4D-2000-08	Slider	8
24	GB6170-86	Nuts M12mm	22
25	H4D-2000-10	Flat Washer	48
26	GB95-85	Flat Washer Φ12mm	32
27	H4D-4000	Tob Caps	4
29	GB5782-86	Bolts M12*120mm	8
30	52504/52505	Pulley Cover, Left & Right	2Ech
31	H4D-5001	Car Stop Plates	4
32	H4D-3001	Runway B	1
33	H4D-3001-08	Spacer, cable Pulley	2
34	H4D-5003	Cable Lock Plate A	11:
35	H4D-5004	Cable Lock Plate B	1
36	GB/T889-1986	Lock Nut M24*2mm	1
37		Lock Nuts 3/4" -16	4
38	H4D-5002	Approach Ramps	2
39	H4D-6000	Parts Box	1
40	H4D-7000-03	Coupler, Lock Release Rod	1

# Parts List for PRO-PARK 7

Driect-Lift

Items	Parts/Prints#	Description	QTY
41	H4D-7000A	Lock Release Rod A	1
42	H4D-7000B	Lock Release Rod	1
43		Plastic Knod for Handle	1
44	H4D-7001-04	Link Rod, Safety Release	2
45	GB6170-86	Nuts M6	28
46	H4D-7001-06	Bushing B	4
47	H4D-7001-05	bushing A	4
48	H4D-7001-02	Coupler	6
49	H4D-7001-03	Pivot Link B	4
50	H4D-7001-01	Pivot Link A	4
51	GB70-85	Bolts M6*35mm	8
52	GB95-85	Flat Washer Φ8mm	12
53	GB93-87	Lock Washer Φ6mm	8
54	GB5783-86	Bolts M8*25mm	4
55	G93 -87	Lock Washer Φ8mm	4
56	GB6170-86	Nuts M8	6
57	30400-9053YZ	90 Degree Fitting	1
58	H4D-Y003	90 Degree Fitting	1
59	AB-1396	Hydraulic Power Unit	1
60	H4D-Y002	Hydraulic Hose B	1
61	H4D-Y001	Hydraulic Hose A	1
62	H4D-Y004	90 Degree Fitting	1
63	GB5783-86	Bolts M10*35mm	16
64	GB95-85	Flat Washer Φ10mm	32
65	GB93-87	Lock Washer Φ10mm	16
66	GB6170-86	Nuts M10mm	16
67	H4D-2100	Caster Frame	4
68	Casters	Casters 6" x2" PV	4
69	H4D-5006	Pin Assembly, Caster Frame	4
70	H4D-5006-03	Cotter Pin	4
71	H4D-9000A	Cable	1
72	H4D-9000B	Cable	1
73	H4D-9000C	Cable	1
74	H4D-9000D	Cable	1