

# OPERATING INSTRUCTIONS

## Parts List



## *Hand Pallet Truck*

**Note:** Owner and operator MUST read and understand this operating instructions before use this pallet truck.

Thank you for choosing our pallet truck. For your safety and correct operation, please carefully read the manual before use.

**NOTE:** All of the information reported herein is based on data available at the time of printing. The factory reserves the right to modify its own products at any time without notice or incurring in any sanction. Please verify with the factory for possible updates.

### 1. GENERAL SPECIFICATIONS

|                              |   |      |      |      |      |      |
|------------------------------|---|------|------|------|------|------|
| Capacity (kg)                | 2000  | 2000 | 2500 | 2500 | 3000 | 3000 |
| Max. Fork Height (mm)        | 200(or190)                                  |      |      |      |      |      |
| Min. Fork Height (mm)        | 85(or75)                                    |      |      |      |      |      |
| Fork Length (mm)             | 1150  | 1220 | 1150 | 1220 | 1150 | 1220 |
| Width Overall Forks (mm)     | 450 / 520 / 550 / 685                       |      |      |      |      |      |
| Individual Fork Width (mm)   | 160   |      |      |      |      |      |
| Load Wheel Diameter (mm)     | Ø 80x70(or Ø 74x70) Nylon, Polyurethane     |      |      |      |      |      |
| Steering Wheel Diameter (mm) | Ø 200(or Ø 180) Nylon, Polyurethane, Rubber |      |      |      |      |      |

Special fork length are available 800, 900, 950, 1000, 1500, 2000mm.  
 Materials and specification are subject to change without notice.

### 2. TO ATTACH HANDLE TO PUMP UNIT

- 2.1 Remove 3 bolts (D611) from the handle bracket (D151).
- 2.2 Set handle (D610A, D610B or D610AS) on the bracket (D151), notice to allow the chain (D612) and the adjusting bolts (D614) assembly to pass through the hole in the center of the bracket (D151) and shaft (D153).
- 2.3 Insert the 3 bolts (D611) through the handle into the bracket (D151), then tighten them securely.
- 2.4 Raise the lever plat (D132) and insert the adjusting bolt (D614) into the front slot, keeping the adjusting nut (D615) on the under side of the lever plat (D132).

### 3. TO ADJUST RELEASE DEVICE

On the draw-bar of this pallet truck, you can find the control handle (D608 or D608S) which can be regulated in three positions :

- Raise - handle down
- Drive position - handle in center position
- Lower - handle up, the lever moves back the drive position when released.

If however they have been changed, you can adjust according to following step:

- 3.1 If the forks elevate while pumping in the **DRIVE** position, turn the adjusting nut (D615) on the adjusting bolt (D614) or adjusting screw (D133) clockwise until pumping action does not raise the forks and the **DRIVE** position functions properly.
- 3.2 If the forks descend while pumping in the **DRIVE** position, turn the nut (D615) or adjusting screw (D133) counter-clockwise until the forks do not lower.
- 3.3 If the forks do not descent when the control handle (D608 or D608S) is in the **LOWER** position, turn the nut (D615) or adjusting screw(D133) clockwise until raising the control handle(D608 or D608S) lowers the forks. Then check the **DRIVE** position according to item 3.1 and 3.2 to be sure

the nut (D615) or adjusting screw (D133) is in the proper position.

3.4 If the forks do not elevate while pumping in the **RAISE** position, turn the nut (D615) or adjusting screw (D133) counter-clockwise until the forks elevate while pumping in the **RAISE** position. Then check the **LOWER** and **DRIVE** position according to item 3.1, 3.2 and 3.3.

## 4. MAINTENANCE

Your pallet truck is largely maintenance-free.

### 4.1 OIL

Please check the oil level every six months. The oil capacity is about 0.3lt. Use the hydraulic type oil according to temperature scale below.

| Temperature | Oil                  |
|-------------|----------------------|
| -20 ~+40    | L-HV46 Hydraulic oil |

### 4.2 HOW TO EXPEL AIR FROM THE PUMP UNIT

The air may come into the hydraulic oil because of transportation or pump in upset position. It can cause that the forks do not elevate while pumping in the **RAISE** position. The air can be banished in the following way: let the control handle (D608 or D608S) on the **LOWER** position, then move the handle (D610A, D610B or D610AS) up and down for several times.

### 4.3 DAILY CHECK AND MAINTENANCE

Daily check of the pallet truck can limit wear as much as possible. Special attention should be paid to the wheels, the axles, as thread, rags, etc. It may block the wheels. The forks should be unloaded and lowered in the lowest position when the job is over.

### 4.4 LUBRICATION

Use motor oil or grease to lubricate all moveable parts.

## 5. GUIDE TO SAFETY OPERATION

**For safe operation of the Hand Pallet Truck, please read all warning signs and instructions here and on the pallet truck prior to use.**

5.1 Do not operate the pallet truck unless you are familiar with it and have been trained or authorised to do so.

5.2 Do not operate the truck unless you have been trained and authorised. Give special attention to the wheels, the handle assembly, the forks, and the lower control.

5.3 Do not use the truck on sloping ground.

5.4 Never place any part of your body in the lifting mechanism or under the forks or load. Do not carry passengers.

5.5 We advise that operators should wear gloves and safety shoes.

5.6 Do not handle unstable or loosely stacked loads.

5.7 Do not overload the truck.

5.8 Always place loads centrally across the forks and not at the end of the forks (See Fig. 2).

5.9 The capacity of the truck assumes an evenly distributed load with the centre of the load being

at the halfway point of the length of the forks.

5.10 Make sure that length of the forks matches the length of the pallet.

5.11 Lower the forks to lowest height when the truck is not being used.

5.12 In other specific conditions the operators should take extra care in operating the truck.

## 6. TROUBLES SHOOTING

| No | Trouble   | CAUSE   | ACTION   |
|----|---|---|--|
| 1  | The forks can not be up the max. height.            | - The hydraulic oil is not enough.  | - Pour in the oil.   |
| 2  | The forks can not be lifted up.                     | - Without hydraulic oil.<br>- The oil has impurities.<br>- The nut (D615) is too high or the screw (D133) is too close, keep the pumping valve open.<br>- Air come into the hydraulic oil.  | - Fill in the oil.<br>- Change the oil.<br>- Adjust the nut (D615) or the screw (D133) .(see item 3.4)<br>- Banish the air.(see item 4.2)  |
| 3  | The forks can not be descended.                     | - The piston rod (D147) or pump body is deformed resulting from partial loading slanting to one side or over-loading.<br>- The fork was kept in the high position for long time with piston rod bared to arise in rusting and jamming of the rod.<br>- The adjusting nut (D615) or the screw (D133) is not in the correct position. | - Replace the piston rod (D147) or pump body.<br>- Keeping the fork in the lowest position if not using, and pay more attention to lubricate the rod.<br>- Adjust the nut (D615) or the screw (D133). (see item 3.3) |
| 4  | Leaks   | - Sealing parts worn or damaged.<br>- Some part cracked or worn into small.   | - Replace with the new one.<br>- Replace with the new one.   |
| 5  | The fork descends without the release valve worked. | - The impurities in the oil cause the release valve to be unable to close tight.<br>- Some parts of hydraulic system is cracked or bored.<br>- Air come into the oil.<br>- Sealing parts worn or damaged.<br>- The adjusting nut (D615) or the screw (D133) is not in the correct position.   | - Replace with new oil.<br>- Inspect and replace the waste parts.<br>- Banish the air. (See item 4.2)<br>- Replace with the new one.<br>- Adjusting the nut (D615) or the screw (D133). (See item 3.2)               |

**\*NOTE: DO NOT ATTEMPT TO REPAIR THE PALLET TRUCK UNLESS YOU ARE TRAINED AND AUTHORIZED TO DO SO.**

Fig.1

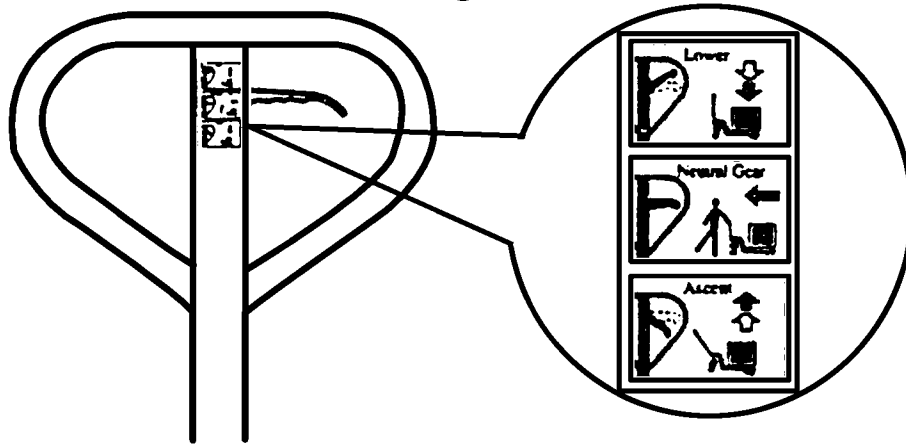
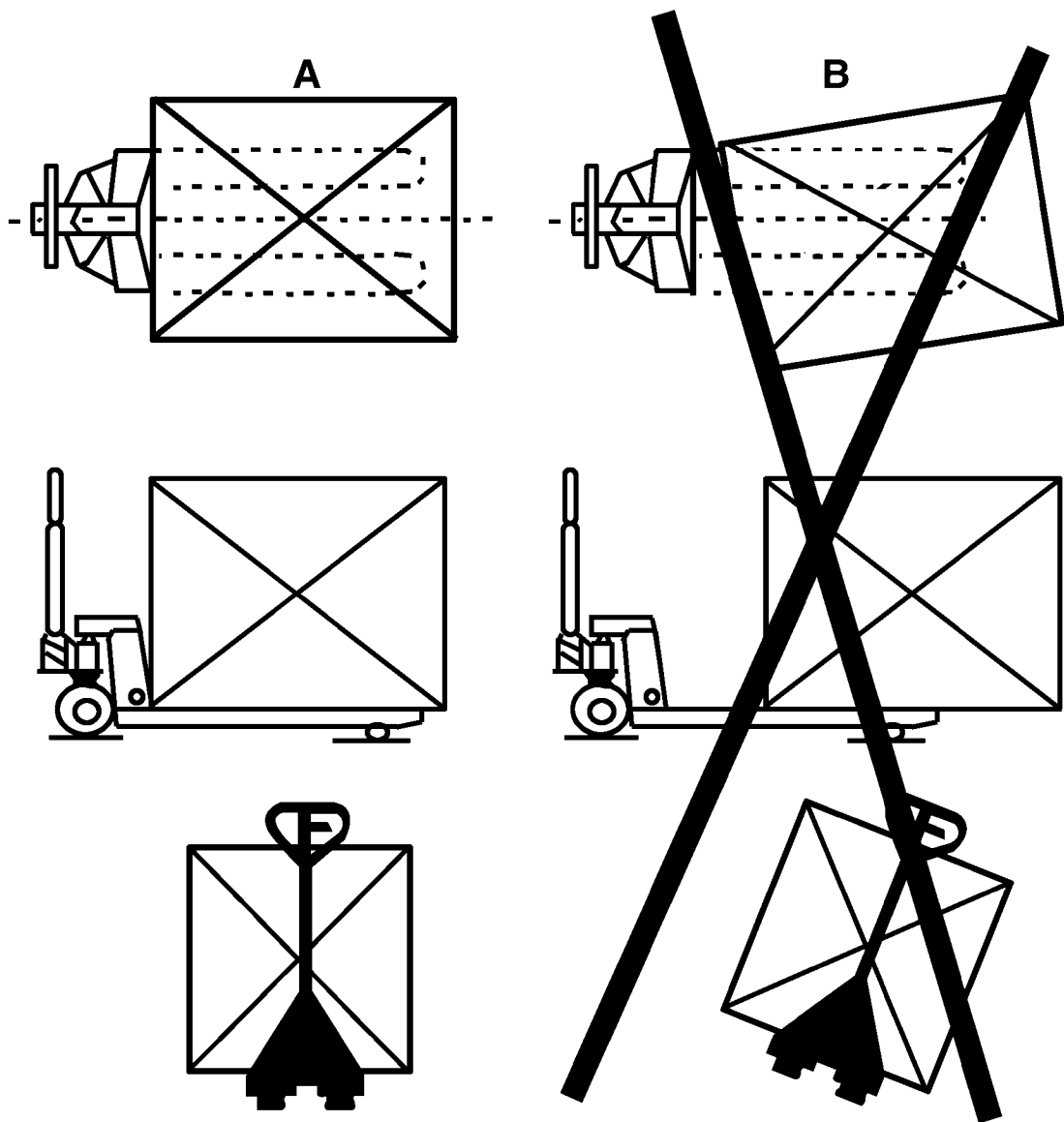
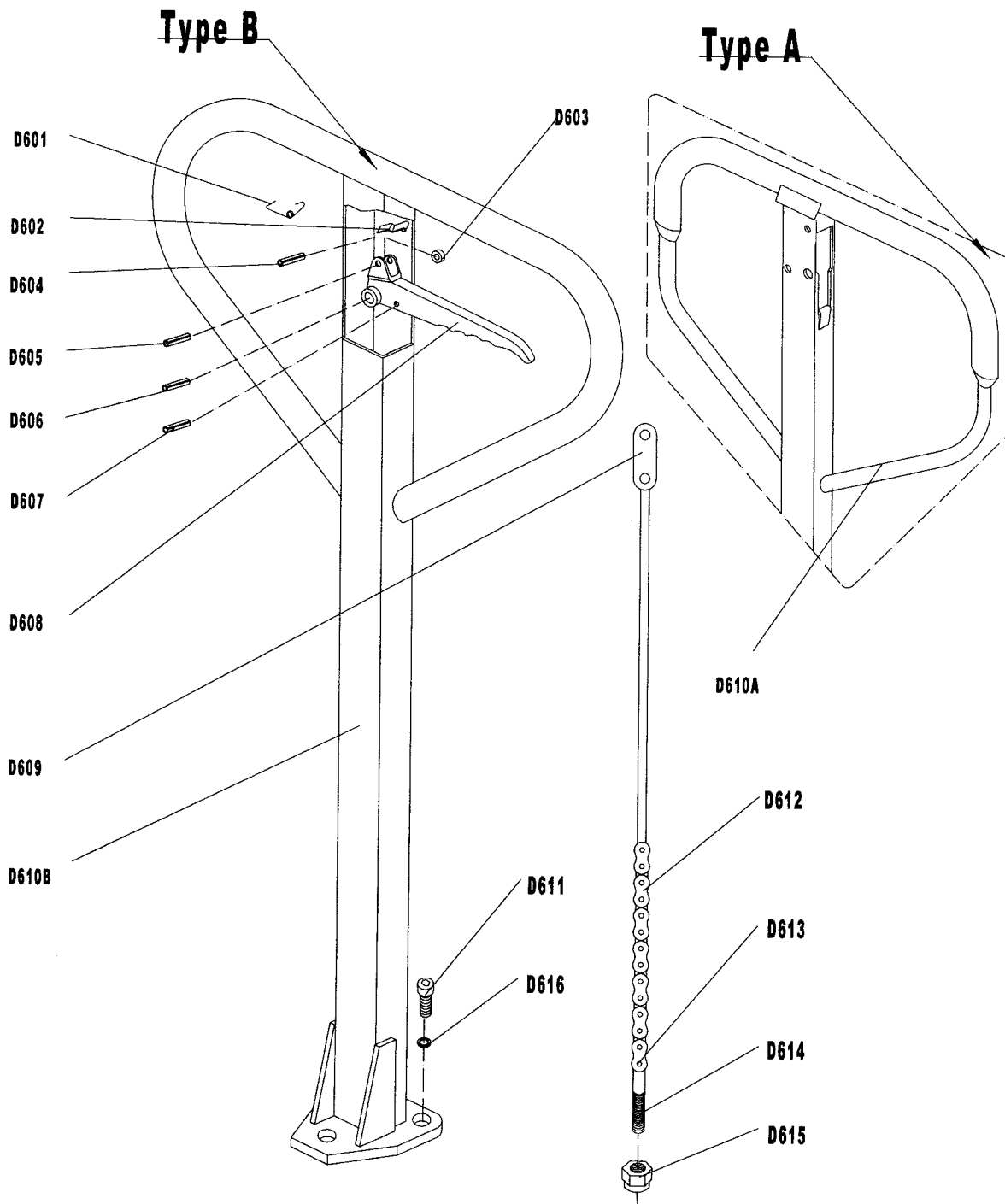


Fig.2

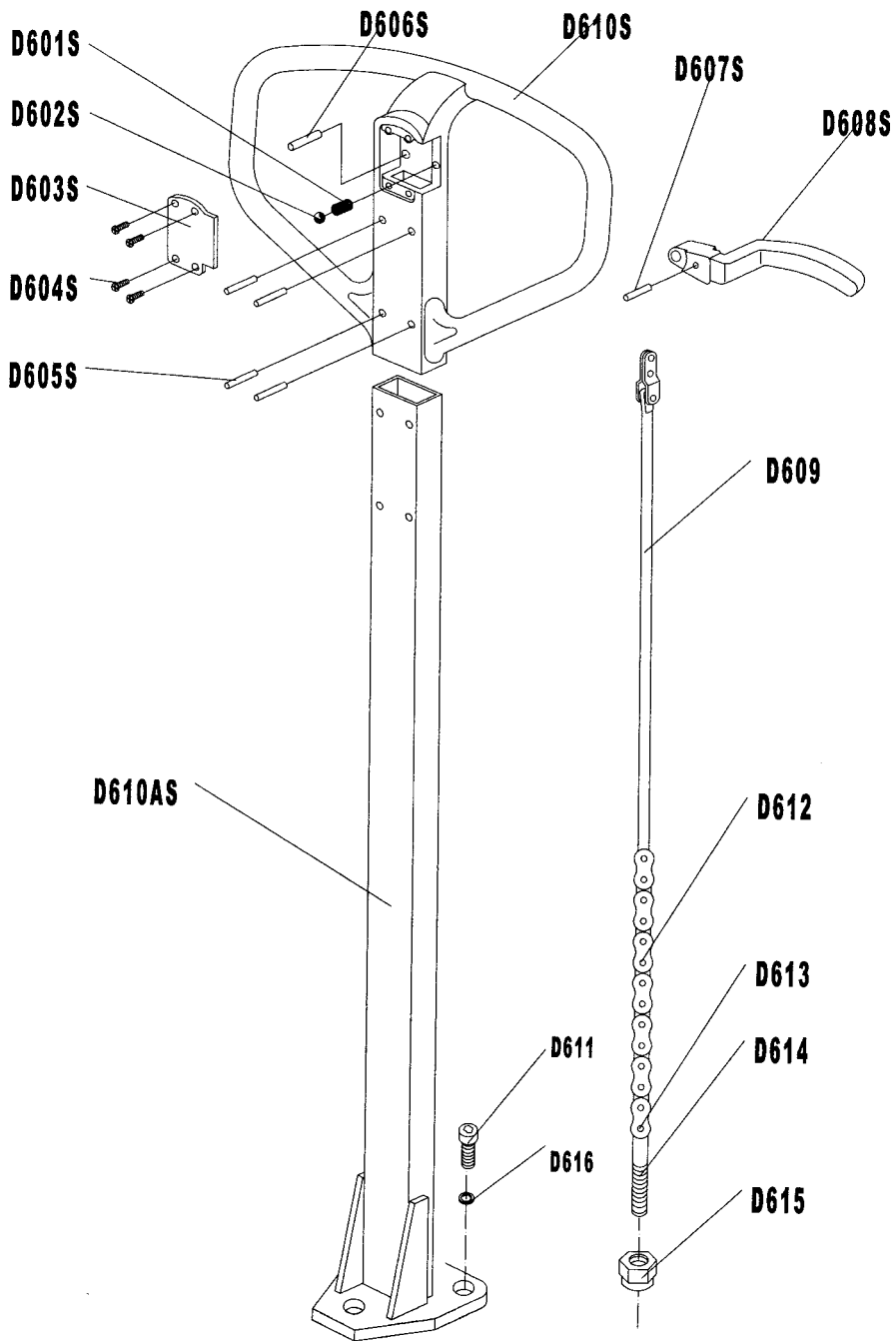




### List of Handle

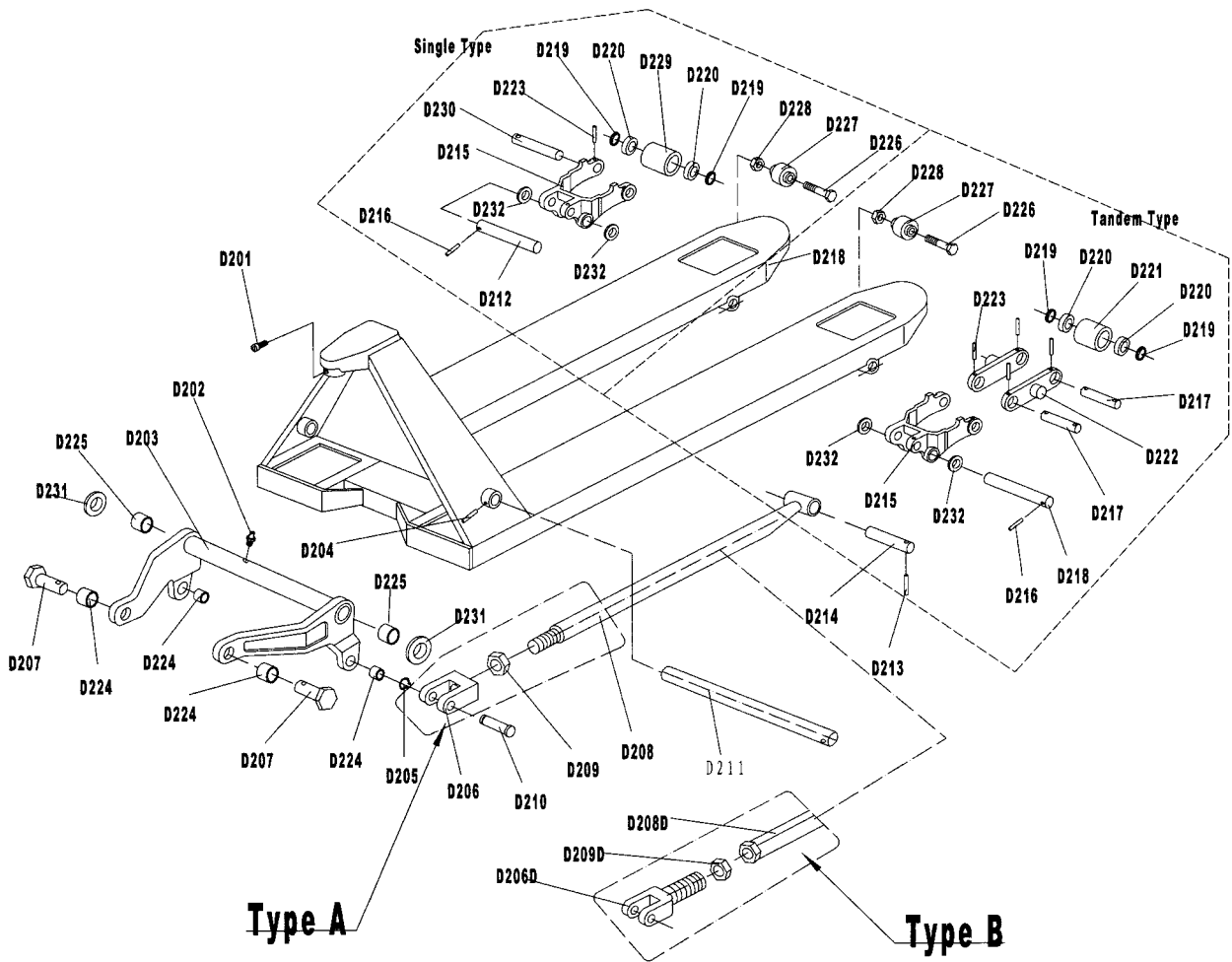
| No.  | Description    | Qty. | Remark | No.   | Description    | Qty. | Remark     |
|------|----------------|------|--------|-------|----------------|------|------------|
| D601 | Spring         | 1    |        | D610B | Handle         | 1    | For Type A |
| D602 | Blade Spring   | 1    |        | D610A | Handle         | 1    | For Type B |
| D603 | Roller         | 1    |        | D611  | Screw          | 3    |            |
| D604 | Elastic Pin    | 1    |        | D612  | Chain          | 1    |            |
| D605 | Elastic Pin    | 1    |        | D613  | Pin            | 1    |            |
| D606 | Elastic Pin    | 1    |        | D614  | Adjusting Bolt | 1    |            |
| D607 | Elastic Pin    | 1    |        | D615  | Adjusting Nut  | 1    |            |
| D608 | Control Handle | 1    |        | D616  | Elastic Washer | 3    |            |
| D609 | Pull Board     | 1    |        |       |                |      |            |

# Type D



**List of Handle**

| No.   | Description    | Qty. | Remark          | No.    | Description    | Qty. | Remark          |
|-------|----------------|------|-----------------|--------|----------------|------|-----------------|
| D601S | Spring         | 1    | Only for Type D | D610S  | Handle         | 1    | Only for Type D |
| D602S | Steel Ball     | 1    |                 | D610AS | Draw - bar     | 1    |                 |
| D603S | Cover          | 1    |                 | D611   | Screw          | 3    |                 |
| D604S | Screw          | 4    |                 | D612   | Chain          | 1    |                 |
| D605S | Pin            | 4    |                 | D613   | Pin            | 1    |                 |
| D606S | Pin            | 1    |                 | D614   | Adjusting Bolt | 1    |                 |
| D607S | Elastic Pin    | 1    |                 | D615   | Adjusting Nut  | 1    |                 |
| D608S | Control Handle | 1    |                 | D616   | Elastic Washer | 3    |                 |
| D609S | Pull Board     | 1    |                 |        |                |      |                 |



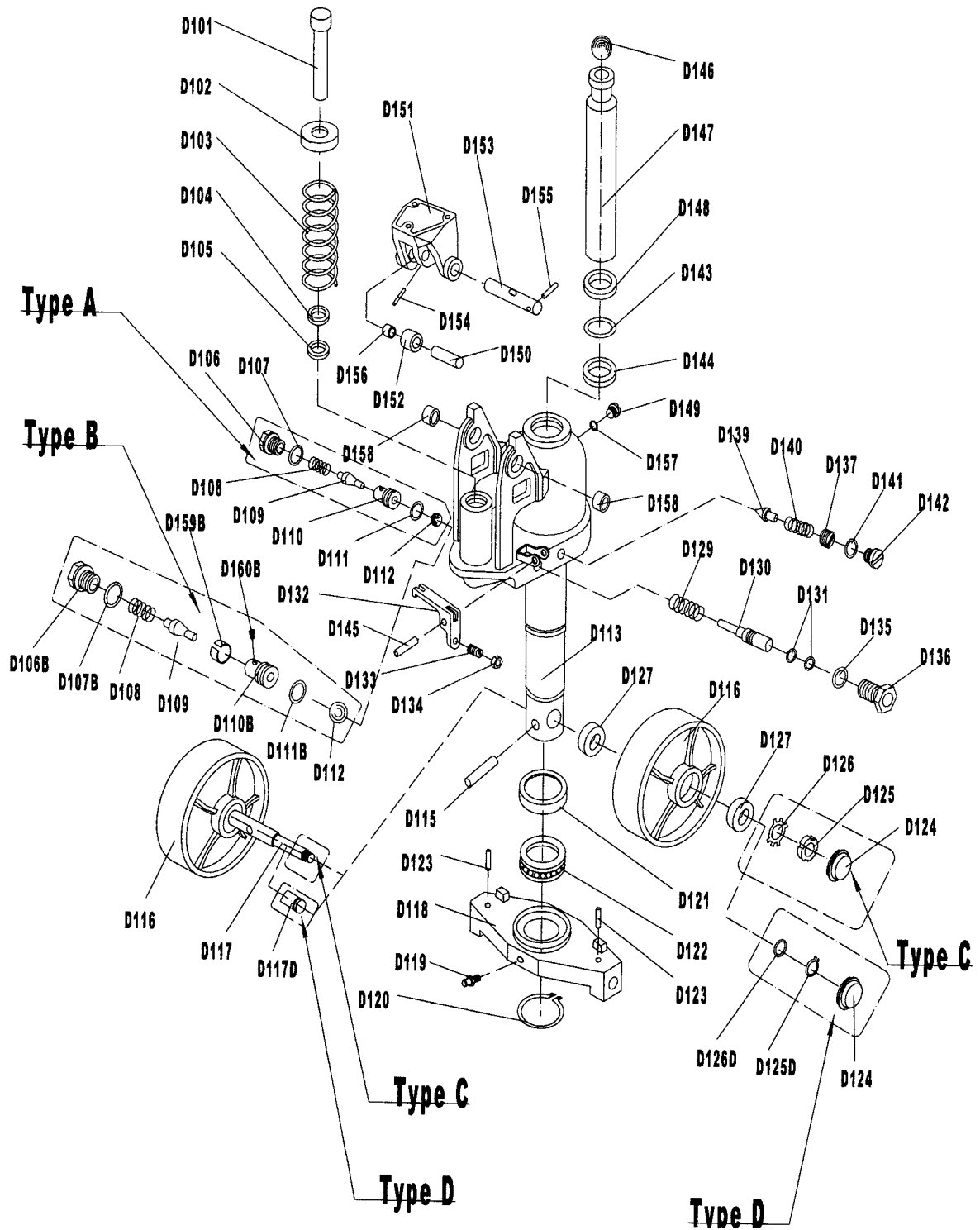
### List of Fork Frame

| No.   | Description     | Qty. | Remark                 | No.   | Description      | Qty.   | Remark |
|-------|-----------------|------|------------------------|-------|------------------|--------|--------|
| D201  | Screw           | 1    |                        | D216  | Elastic Pin      | 2      |        |
| D202  | Oil - holder    | 1    |                        | D217# | Shaft for Roller | 4      |        |
| D203  | Rock – arm      | 1    |                        | D218  | Fork Frame       | 1      |        |
| D204  | Elastic Pin     | 1    |                        | D219  | Washer           | 8 or 4 |        |
| D205  | Retaining Ring  | 2    |                        | D220  | Bearing          | 8 or 4 |        |
| D207  | Shaft           | 2    | <b>ONLY for Type A</b> | D221# | Loading Roller   | 4      |        |
| D206  | Joint           | 2    |                        | D222# | Linking Plate    | 4      |        |
| D208  | Pushing Rod     | 2    |                        | D223  | Elastic Pin      | 8 or 2 |        |
| D209  | Nut             | 2    | <b>ONLY for Type B</b> | D224  | Bushing          | 4      |        |
| D206D | Joint           | 2    |                        | D225  | Bushing          | 2      |        |
| D208D | Pushing Rod     | 2    |                        | D226  | Bolt             | 2      |        |
| D209D | Nut             | 2    |                        | D227  | Enter Roller     | 2      |        |
| D210  | Pin             | 2    |                        | D228  | Nut              | 2      |        |
| D211  | Shaft           | 1    |                        | D229* | Loading Roller   | 2      |        |
| D212  | Shaft           | 2    |                        | D230* | Shaft for Roller | 2      |        |
| D213  | Elastic Pin     | 2    |                        | D231  | Washer           | 2      |        |
| D214  | Shaft           | 2    |                        | D232  | Washer           | 4      |        |
| D215  | Frame of Roller | 2    |                        |       |                  |        |        |

(Note # --For Tandem wheel, \* --For single wheel)

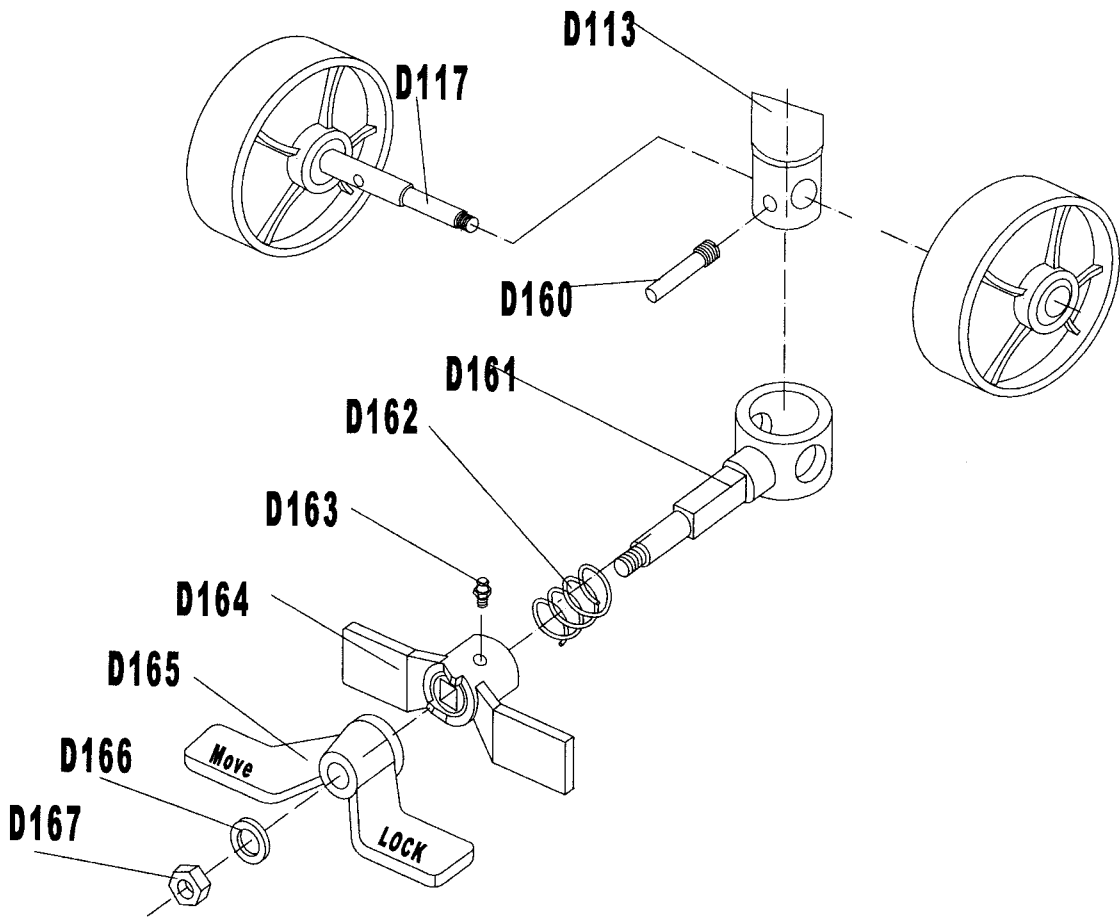


# PUMP



### List of Pump Unit

| No.   | Description              | Qty. | Remark                 |
|-------|--------------------------|------|------------------------|
| D101  | Pump Piston Rod          | 1    |                        |
| D102  | Washer                   | 1    |                        |
| D103  | Spring                   | 1    |                        |
| D104  | Dust Ring                | 1    |                        |
| D105  | Y – Seal                 | 1    |                        |
| D108  | Spring                   | 1    |                        |
| D109  | Spindle of Pumping Valve | 1    |                        |
| D112  | Steel Ball               | 1    |                        |
| D106  | Screw                    | 1    | <b>Only for TYPE A</b> |
| D107  | O – Ring                 | 1    |                        |
| D110  | Seat of Pumping Valve    | 1    |                        |
| D111  | O – Ring                 | 1    |                        |
| D106B | Screw                    | 1    |                        |
| D107B | O – Ring                 | 1    | <b>Only for TYPE B</b> |
| D110B | Seat of Pumping Valve    | 1    |                        |
| D111B | O – Ring                 | 1    |                        |
| D159B | Sleeve                   | 1    |                        |
| D160B | Screw                    | 1    |                        |
| D113  | Base of Pump             | 1    |                        |
| D115  | Elastic Pin              | 1    |                        |
| D116  | Steering Wheel           | 2    |                        |
| D118  | Thrust Plate             | 1    |                        |
| D119  | Oil – holder             | 1    |                        |
| D120  | Retaining Ring           | 1    |                        |
| D121  | Cover of Bearing         | 1    |                        |
| D122  | Bearing                  | 1    |                        |
| D123  | Elastic Pin              | 2    |                        |
| D124  | Dust Cover               | 2    |                        |
| D117  | Shaft of Steering Wheel  | 1    | <b>Only for TYPE C</b> |
| D125  | Round Nut                | 2    |                        |
| D126  | Tab Washer               | 2    |                        |
| D117  | Shaft of Steering Wheel  | 1    | <b>Only for TYPE D</b> |
| D125  | Round Nut                | 2    |                        |
| D126  | Tab Washer               | 2    |                        |
| D127  | Bearing                  | 4    |                        |
| D129  | Spring                   | 1    |                        |
| D130  | Strike Pin               | 1    |                        |
| D131  | O – Ring                 | 2    |                        |
| D132  | Lever Plat               | 1    |                        |
| D133  | Adjusting Screw          | 1    |                        |
| D134  | Nut                      | 1    |                        |
| D135  | O – Ring                 | 1    |                        |
| D136  | Axle Sleeve              | 1    |                        |
| D137  | Adjusting Bolt           | 1    |                        |
| D139  | Spindle of Safety Valve  | 1    |                        |
| D140  | Spring                   | 1    |                        |
| D141  | O – Ring                 | 1    |                        |
| D142  | Screw                    | 1    |                        |
| D143  | O – Ring                 | 1    |                        |
| D144  | Y – Seal                 | 1    |                        |
| D145  | Elastic Pin              | 1    |                        |
| D146  | Steel Ball               | 1    |                        |
| D147  | Piston Rod               | 1    |                        |
| D148  | Dust Ring                | 1    |                        |
| D149  | Screw                    | 1    |                        |
| D150  | Shaft                    | 1    |                        |
| D151  | Bracket                  | 1    |                        |
| D152  | Pressure Roller          | 1    |                        |
| D153  | Shaft                    | 1    |                        |
| D154  | Elastic Pin              | 1    |                        |
| D155  | Elastic Pin              | 1    |                        |
| D156  | Bushing                  | 1    |                        |
| D157  | Seal Washer              | 1    |                        |
| D158  | Bushing                  | 2    |                        |



| No.  | Description             | Qty. | No.  | Description  | Qty. |
|------|-------------------------|------|------|--------------|------|
| D117 | Shaft of Steering Wheel | 1    | D163 | Oil - Holder | 1    |
| D113 | Pump Body               | 1    | D164 | Brake Plate  | 1    |
| D160 | Pin                     | 1    | D165 | Pedal        | 1    |
| D161 | Holding Sleeve          | 1    | D166 | Washer       | 1    |
| D162 | Spring                  | 1    | D167 | Nut          | 1    |

**NOTE: The foot brake is a additional part, it may not fixed to your pallet truck. If you need it. you should extra order it.**