



OPERATING INSTRUCTIONS & PARTS LIST ECO 1-55 STAINLESS

VERSION JULY 2014

MODEL ECO I-55 STAINLESS STEEL HAND PALLET TRUCK

APPLICABLE PRODUCTS ECO I-55 STAINLESS

NOTE: Owner and operator MUST read and understand the operating instructions before using the unit.

It is highly recomemended to the user of this stainelss steel hand pallet truck to clean at least once a day and mainly after finishing using it, the unit with clear, non-salted water in order to take away all possible corrosive residue.



Please carefully read the following instructions before use of Stainless Hand Pallet Truck.

- A. Please select different material of Stainless Hand Pallet Truck according to different surroundings:
 - 1. 304 Stainless Hand Pallet Truck works in the place of fresh water, vapor, weak corrosive environments such as medical instrument, supermarket, scientific research, hospital, etc.
 - 2. 316 Stainless Hand Pallet Truck works in stronger corrosion environment such as common chemical industries, printing and dyeing enterprises, paper manufacturer, food industries, transport enterprises and coastal indoor enterprises.

But it is not allowed to touch saline, salting, acid and alkali. Careless touching should promptly be rinsed by fresh water.

- 3. Stainless Hand Pallet Truck is not recommended to work in the following environments such as salt works, cold storage, seafood, food processor and strong corrosive chemicals, galvanize, chrome, nickel enterprises. Rinse with fresh water timely once use. Rust should be wiped clean immediately.
- B. Stainless Hand Pallet Trucks cannot touch seawater, saline solution, salt and other chlorine-containing media, acids and alkalis for long periods. If contact is made, rinse with fresh water immediately.

It's suggested to wash with fresh water after use each time to prevent rust.

- C. If a Stainless Hand Pallet Trucks surface breaks, it will rust by collision or cut. Rust must be wiped clean immediately to prevent the rust from spreading.
- D. Stainless Hand Pallet Truck surface can not touch with iron such as iron pallet, iron box etc.
- E. After use, lower the forks of Stainless Hand Pallet Truck to the lowest position to avoid piston rod rust, and put it indoors.

Thank you for using our pallet trucks. Your pallet truck is made of high quality steel and is designed for the horizontal lifting and transport of loads on a pallet or standardized containers on a level, fixed base. For your safety and correct operation, please carefully read this instruction before using it.

NOTE: All of the information reported herein is based on data available at the moment of printing. We reserve the right to modify our own products at any moment without notice and liability in any sanctions. So, it is suggested to always verify possible updates and changes.

1. GENERAL SPECIFICATIONS

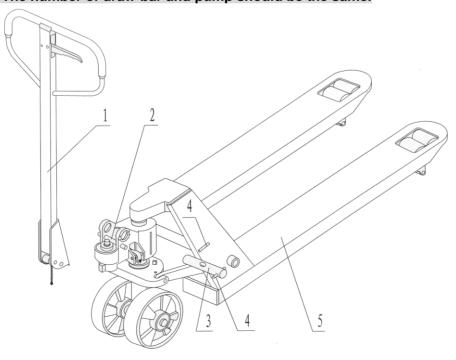
| Capacity | 2000kg / 4400lbs |
|-------------------------|----------------------------|
| Max Fork Height | 200mm / 7.9" |
| Min Fork Height | 75mm / 2.9" |
| Fork Length | 1220mm / 48" |
| Width Overall Fork | 520 or 685mm / 20.5 or 27" |
| Individual Fork Width | 160mm / 6.3" |
| Load Wheel Diameter | Ø 74x70mm / 2.9x2.7" Nylon |
| Steering Wheel Diameter | Ø 180mm / 7" Nylon |

Materials and specifications are subject to change without notice.

2. ATTACHING DRAW-BAR TO PUMP UNIT

If you have purchased a wooden box of pallet truck, some assembly is required. Certainly, you need some tools, a hammer, a pliers, a spanner, etc; and some parts, one axle with hole (105S), two elastic pins (106S) (**Note one is in the axle (105S))**, these parts are putted in a plastic bag, which is putted into the draw-bar.

NOTE: The number of draw-bar and pump should be the same.



1. Draw-bar 2. Pin 3. Axle with hole 4. Elastic pin 5. Fork frame

When attaching the handle, you had better squat just behind the pallet truck. Then you:

2.1 Insert the draw-bar onto the pump piston (303), then use a hammer to insert the axle with hole (105S) into the hydraulic pump and draw-bar from the right to left. (See fig. 2).



2.2 Let control handle(117S) to the 'LOWER' position, then pass the adjusting nut(104S), adjusting bolt(103S) and chain(102S) through the hole of axle(105S) with your hand (See fig. 3).

Fig. 2

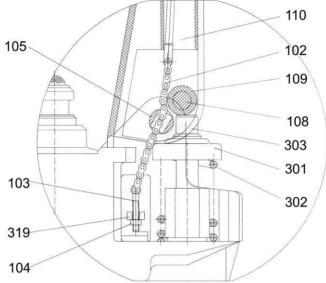


Fig. 3

- 2.3 Press the draw-bar (110S) down, take away the pin(#2) (See Fig. 1).
- 2.4 Let the control handle (117S) on 'RAISE' position, then raise the lever plate (319S) with the pin (#2) and insert the adjusting bolt(103S) into the front slot of lever plate (319S), note to keep the adjusting nut (104S) on the under side of the lever plate.
- 2.5 Use a hammer to tap another elastic pin (106S) into the axle with hole (105S). The draw-bar is now assembled to the pump.

3. ADJUSTING RELEASE DEVICE

On the draw-bar of this pallet truck, you can find the control handle (117S) which can be adjusted in three positions:

Raise -handle down

Drive -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 (104S) on the adjusting bolt (103S) or screw (318S) 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 (104S) or screw(318S) counter-clockwise until the forks do not lower.
- 3.3 If the forks do not descent when the control handle (117S) is in the LOWER position, turn the nut (104S) or screw (318S) clockwise until raising the control handle (117S) lowers the forks. Then check the DRIVE position according to item 3.1 and 3.2 to be sure the nut (104S) and screw (318S) is in the proper position.
- 3.4 If the forks do not elevate while pumping in the RAISE position, turn the nut (104S) or screw (318S) 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 item 3.3.

4. MAINTENANCE

The pallet truck is largely maintenance-free.

4.1 OIL

Please check the oil level every six months. The oil can be hydraulic oil: ISO VG32, its viscosity should be 30cSt at 40° C, total volume is about 0.4lt.

4.2 TO BANISH THE AIR

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 been removed in the following way: let the control handle (117S) on the **LOWER** position, then move the draw-bar 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

All bearings and shafts are provided with long-life grease at the factory. You only need provide with long-life grease at monthly intervals or after each time the truck is cleaned thoroughly to the lubrication points.

5 GUIDE TO SAFETY OPERATION

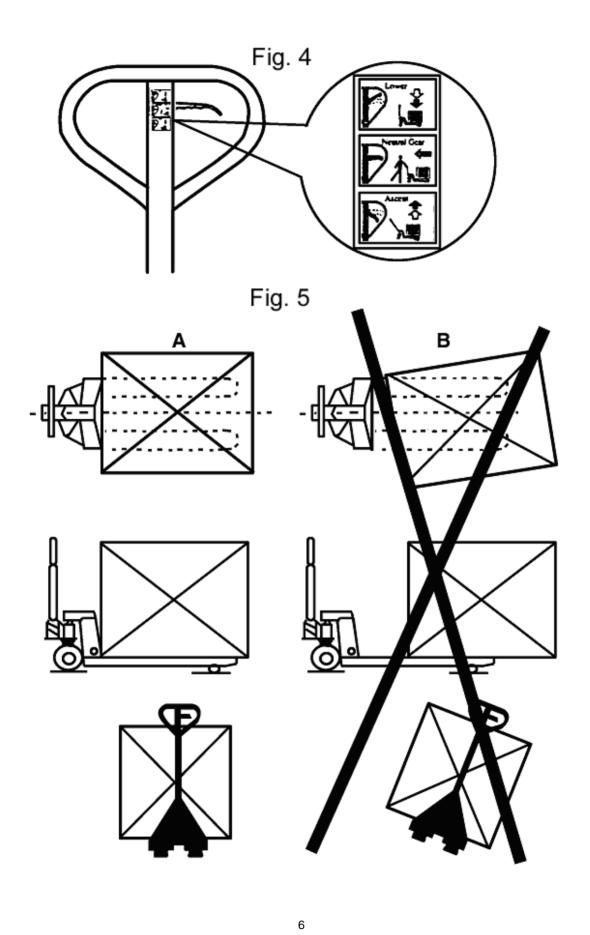
- 5.1 Operator should read all warning signs and instructions here and on the pallet truck before using this truck.
- 5.2 Do not use on a slopping ground.
- 5.3 Do not operate a pallet truck unless you are familiar with it and have been trained or authorized to do so.

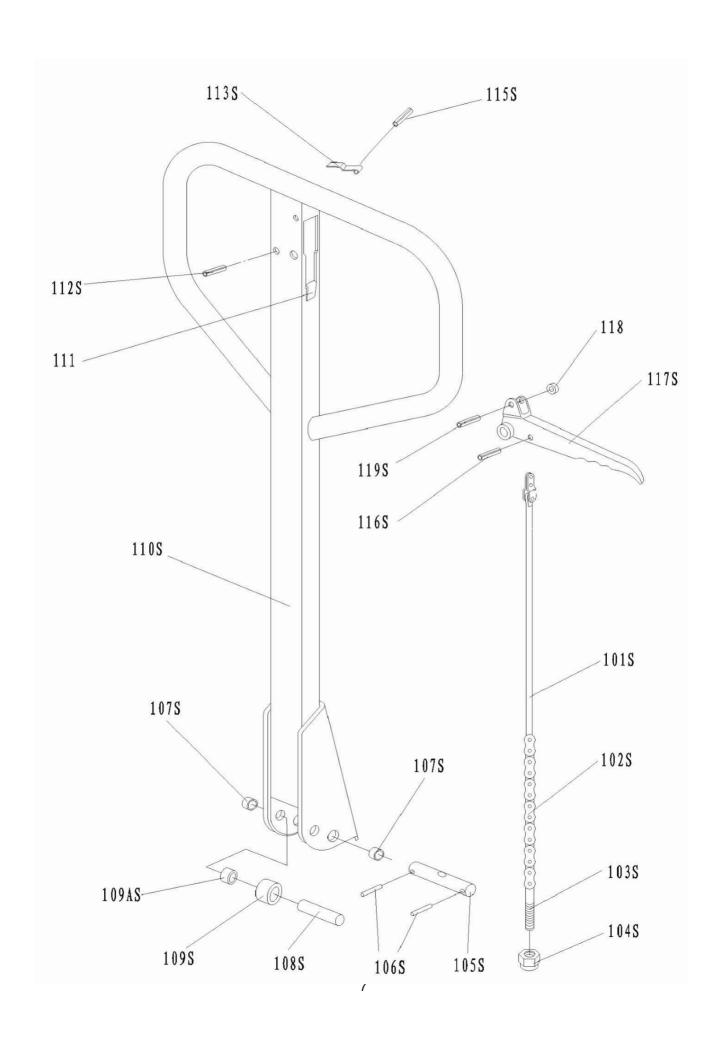
- 5.4 Do not operate a pallet truck unless you have checked its condition. Give special attention to the wheels or rollers, the draw-bar unit, the fork unit, the lever plate, etc.
- 5.5 To pull the truck, always move the control handle into the drive position. This makes the draw-bar easier to move and depressurizes the pump section of the hydraulics. This preserves the hydraulic seals and the valve components. A long service life can be expected.
- 5.6 Do not take up any people on the pallet truck.
- 5.7 The operator had better take on gloves for labor protecting.
- 5.8 When the goods have been transported, all people should be away from the forks for 600mm.
- 5.9 Do not load goods like fig. 5/B.
- 5.10 Do not load over maximum capacity.
- 5.11 At others special condition or place; the operator should be carefully to operate the pallet truck.

6. TROUBLES SHOOTING

| No | Trouble | Clause | Fixing Methods |
|----|---|--|--|
| 1 | The forks can not be lifted up the maximum height. | -The hydraulic oil is not enough. | -Pour in the oil. |
| 2 | The forks can not be lifted up. | Without hydraulic oil. The oil has impurities. The nut (104S) is too high, keep the pumping valve open. Air got into the hydraulic oil. | Fill in the oil. Change the oil. Adjust the nut(104S) or screw (318S) (see item 3.4) Banish the air.(see item 4.2) |
| 3 | The forks can not be lowered. | The piston rod (328) or pump (322S) is deformed resulting from partial loading slanting to one side or over-loading. The fork was kept in the high position for long time with piston rod bared to arise in rusting and jamming of the rod. The adjusting nut (104S) or screw (318S) is not in correct position. | Replace the piston rod (328) or pump (322S). Keeping the fork in the lowest position if not using, and pay more attention to lubricate the rod. Adjust the nut (104S) or screw (318S) (see item 3.3) |
| 4 | Leaks | Sealing parts worn or damaged. Some part cracked or worn into small. | Replace with the new one. Replace with the new one. |
| 5 | The forks lowered without the release valve working. | The impurities in the oil cause the release valve to be unable to close tight. Some parts of hydraulic system is cracked or bored. Air comes into the oil. Sealing parts worn or damaged. The adjusting nut (104S) or screw (318S) is not in the correct position. | Replace with new oil. Inspect and replace the waste parts. Banish the air. (See item 4.2) Replace with the new one. Adjusting the nut (104S) or screw (318S). (See item 3.2) |

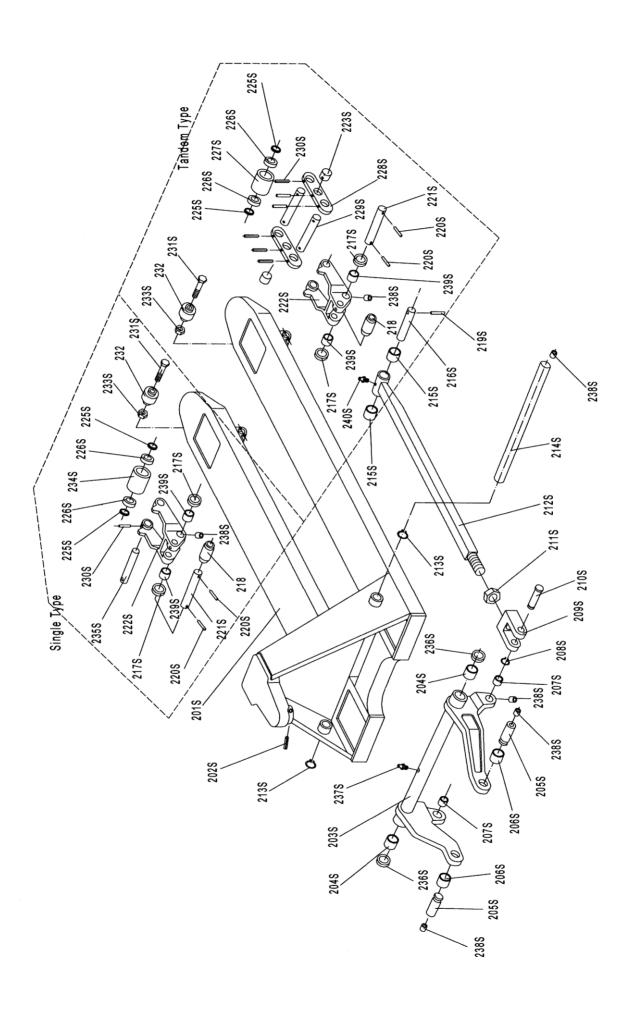
NOTE: DO NOT ATTEMP TO REPAIR THE PALLET TRUCK UNLESS YOU ARE TRAINED AND AUTHORIZED TO DO SO.





LIST of DRAW-BAR

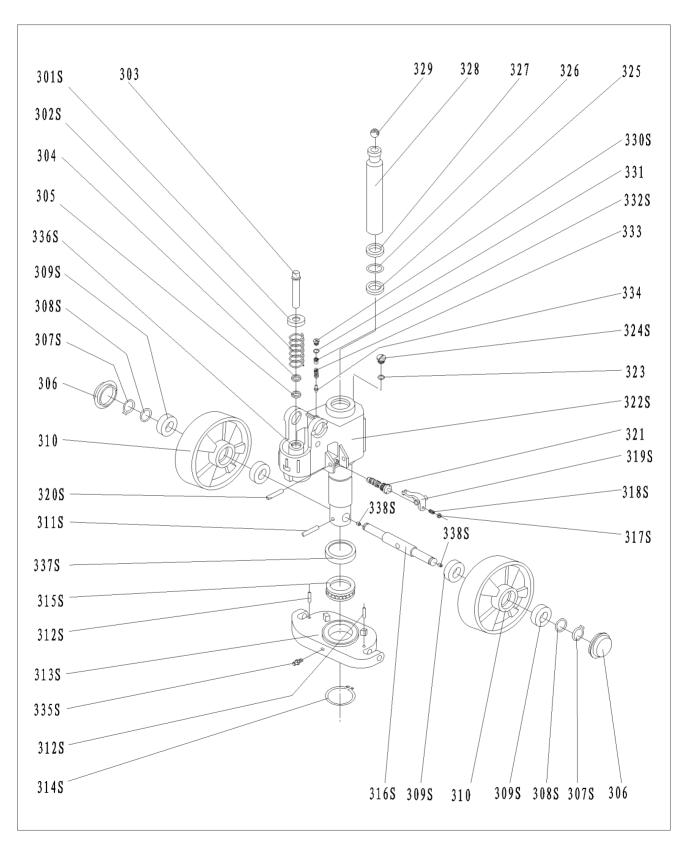
| No. | Mobile No. | Description | Qty. | Material Make-Up | |
|-------|------------|-----------------|------|------------------|----------|
| | | | | Type 304 | Type 316 |
| 101S | 18E101SS | Release Rod | 1 | 304 | 304 |
| 102S | 18E102SS | Chain | 1 | 304 | 304 |
| 103S | 18E103SS | Adjusting Bolt | 1 | 304 | 304 |
| 104S | 18E104SS | Adjusting Nut | 1 | 304 | 304 |
| 105S | 18E105SS | Axle with Hole | 1 | 304 | 316 |
| 106S | 18E106SS | Elastic Pin | 2 | 304 | 304 |
| 107S | 18E107SS | Bushing | 2 | Nylon | Nylon |
| 108S | 18E108SS | Roller Pin | 1 | 304 | 316 |
| 109S | 18E109SS | Pressure Roller | 1 | 304 | 316 |
| 109AS | 18E109ASS | Bushing | 1 | 304 | 304 |
| 110S | 18E110SS | Draw-bar | 1 | 304 | 316 |
| 111 | 18E111 | Stop Rubber | 1 | Rubber | Rubber |
| 112S | 18E112SS | Elastic Pin | 1 | 304 | 304 |
| 113S | 18E113SS | Blade Spring | 1 | 3Cr13 | 3Cr13 |
| 115S | 18E115SS | Elastic Pin | 1 | 304 | 304 |
| 116S | 18E116SS | Elastic Pin | 1 | 304 | 304 |
| 117S | 18E117SS | Control Handle | 1 | 304 | 304 |
| 118 | 18E118 | Roller | 1 | Plastic | Plastic |
| 119S | 18E119SS | Elastic Pin | 1 | 304 | 304 |



LIST of FORK FRAME

| No | Mobile No. | Description | Otre | Material Make-Up | |
|---------|------------|---------------------|---------|------------------|----------|
| No. | | | Qty. | Type 304 | Type 316 |
| 201S | 18E201SS | Fork Frame | 1 | 304 | 316 |
| 202S | 18E202SS | Elastic Pin | 1 | 304 | 304 |
| 203S | 18E203SS | Rock - Arm | 1 | 304 | 304 |
| 204S | 18E204SS | Bushing | 2 | 304 | Nylon |
| 205S | 18E205SS | Shaft | 2 | 304 | 316 |
| 206S | 18E206SS | Bushing | 2 | Nylon | Nylon |
| 207S | 18E207SS | Bushing | 2 | Nylon | Nylon |
| 208S | 18E208SS | Retaining Ring | 2 | 304 | 304 |
| 209S | 18E209SS | Joint | 2 | 304 | 304 |
| 210S | 18E210SS | Pin | 2 | 304 | 316 |
| 211S | 18E211SS | Nut | 2 | 304 | 304 |
| 212S | 18E212SS | Pushing Rod | 2 | 304 | 316 |
| 213S | 18E213SS | Retaining Ring | 2 | 304 | 304 |
| 214S | 18E214SS | Shaft (540) | 1 | 304 | 316 |
| 214S | 18E214SS | Shaft (685) | 1 | 304 | 316 |
| 215S | 18E215SS | Bushing | 4 | Nylon | Nylon |
| 216S | 18E216SS | Shaft | 2 | 304 | 316 |
| 217S | 18E217SS | Intermediate Roller | 4 | Plastic | Plastic |
| 218 | 18E218 | Extending Roller | 2 | Plastic | Plastic |
| 219S | 18E219SS | Elastic Pin | 2 | 304 | 304 |
| 220S | 18E220SS | Elastic Pin | 4 | 304 | 304 |
| 221S | 18E221SS | Shaft | 2 | 304 | 316 |
| 222S | 18E222SS | Frame of Roller | 2 | 304 | 304 |
| 223S* | 18E223SS | Shaft | 4 | 304 | 316 |
| 225S | 18E225SS | Washer | 8 or 4 | Nylon | Nylon |
| 226S | 18E226SS | Bearing | 8 or 4 | 304 | 304 |
| 227S* | 18E227NT-7 | Tandem Load Roller | 4 | Nylon | Nylon |
| 228S-N* | 18E228SS-N | Link plate | 4 | 304 | 304 |
| 229S-N* | 18E229SS-N | Shaft for roller | 4 | 304 | 316 |
| 230S | 18E230SS | Elastic Pin | 12 or 2 | 304 | 304 |
| 231S | 18E231SS | Bolt | 2 | 304 | 304 |
| 232 | 18E232 | Enter Roller | 2 | Plastic | Plastic |
| 233S | 18E233SS | Locking Nut | 2 | 304 | 304 |
| 234S# | 18E234N-7 | Load Roller | 2 | Nylon | Nylon |
| 235S# | 18E235SS | Shaft for Roller | 2 | 304 | 316 |
| 236S | 18E236SS | Washer | 2 | Nylon | Nylon |
| 237S | 18E237SS | Grease Cup | 1 | 304 | 304 |
| 238S | 18E238SS | Grease Cup | 8 | 304 | 304 |
| 239S | 18E239SS | Bushing | 4 | Nylon | Nylon |
| 240S | 18E240SS | Grease Cup | 2 | 304 | 304 |

NOTE: *-- For double wheel;#-- For single wheel



LIST of HYDRAULIC PUMP

| N.a. | Mobile No. | Description | Qty. | Material Make-Up | |
|------|------------|-------------------------|------|------------------|----------|
| No. | | | | Type 304 | Type 316 |
| 301S | 18E301SS | Spring Cap | 1 | 304 | 304 |
| 302S | 18E302SS | Spring | 1 | 304 | 304 |
| 303 | 18E303 | Pump Piston | 1 | Steel | 304 |
| 304 | 18E304 | Dust Ring | 1 | PU | PU |
| 305 | 18E305 | Seal | 1 | PU | PU |
| 306 | 18E306 | Dust Cover | 2 | Plastic | Plastic |
| 307S | 18E307SS | Locking Ring | 2 | 304 | 304 |
| 308S | 18E308SS | Washer | 2 | Nylon | Nylon |
| 309S | 18E309SS | Bearing | 4 | 304 | 304 |
| 310 | 18E310N-1 | Loading Wheel | 2 | Nylon | Nylon |
| 311S | 18E311SS | Elastic Pin | 1 | 304 | 304 |
| 312S | 18E312SS | Elastic Pin | 2 | 304 | 304 |
| 313S | 18E313SS | Thrust Plate | 1 | 304 | 304 |
| 314S | 18E314SS | Retaining Ring | 1 | 304 | 304 |
| 314S | 18E314SS | Bearing | 1 | 304 | 304 |
| 316S | 18E316SS | Shaft of loading Wheel | 1 | 304 | 316 |
| 317S | 18E317SS | Nut | 1 | 304 | 304 |
| 318S | 18E318SS | Screw | 1 | 304 | 304 |
| 319S | 18E319SS | Lever Plate | 1 | 304 | 304 |
| 320S | 18E320SS | Elastic Pin | 1 | 304 | 304 |
| 321 | 18E321 | Valve Cartridge | 1 | Kits | Kits |
| 322S | 18E322SS | Pump Body | 1 | 304 | 304 |
| 323 | 18E323Y | Seal Washer | 1 | Rubber | Rubber |
| 324S | 18E324SS | Screw Plug | 1 | 304 | 304 |
| 325 | 18E325 | Seal | 1 | PU | PU |
| 326 | 18E326 | O – Ring | 1 | Rubber | Rubber |
| 327 | 18E327 | Dust Ring | 1 | PU | PU |
| 328 | 18E328 | Piston Rod | 1 | Steel | 304 |
| 329 | 18E329 | Steel Ball | 1 | 304 | 304 |
| 330S | 18E330SSR | Screw Plug | 1 | 304 | 304 |
| 331 | 18E331Y | O - Ring | 1 | Rubber | Rubber |
| 332S | 18E332SS | Bolt | 1 | 304 | 304 |
| 333 | 18E333Y | Spring | 1 | Steel | Steel |
| 334 | 18E334Y | Spindle of Safety Valve | 1 | Steel | Steel |
| 335S | 18E335SS | Grease Cup | 1 | 304 | 304 |
| 336S | 18E336SS | Cylinder | 1 | 304 | 316 |
| 337S | 18E337SS | Cover of Bearing | 1 | 304 | 304 |
| 338S | 18E338SS | Grease Cup | 2 | 304 | 304 |



MOBILE INDUSTRIES, INC. 3750B Laird Rd - Unit 2 & 3 Mississauga ON, L5L OA6 Canada

Toll Free: 1 800 527 4612 • Local 905 279 5370

Email: info@mobilept.com

MOBILEPT.COM