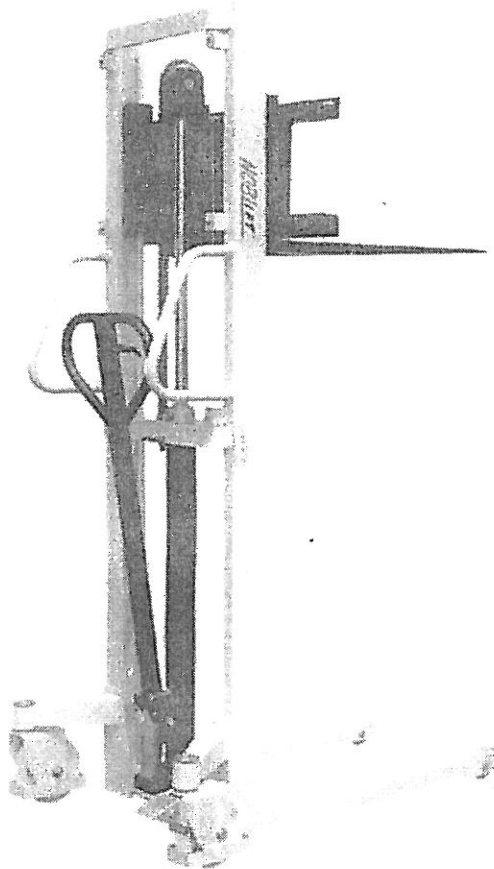


**Operating Instructions
Parts List**



**FS Series
Hand Hydraulic Stacker**

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

Welcome to use our hand stacker FS series. Your stacker is made of high quality steel and was designed to give a durable, reliable and easy to use product. For your safety and correct operation, please carefully read this instruction book and warnings on the stacker before using it.

NOTE: All of the information reported herein is based on data available at the moment of printing. The factory reserves the right to modify its own products at any moment without notice and incurring in any sanction. So, it is suggested to always verify possible updates.

1. STRUCTURAL DATA FORM

Model		FS10	FS10G
Capacity	Kg	1000	1000
Lift Height	mm	1600	1600
Fork Length	mm	900	1150
Width overall Forks	mm	270~800	550
Overall Height	mm	1980	1980
Min. Fork Height	mm	80	85

2. Installation & Adjustment

*To prevent oil-leaking from oil tank during transportation. Air Screw(part No.FS236) is replaced with oil-sealing screw in the factory but it has to be replaced back when you put this stacker in use.

*How to change: screw out oil-sealing Screw, then screw in Air Screw which is in the spare parts bag, thus keep oil tank always connecting with atmosphere.

3. SAFETY GUIDANCE

- 3.1 Operator should read all warning signs and instructions here and on the stacker before using it.
- 3.2 Do not operate a hand stacker unless you are familiar with it and have been trained or authorized to do so.
- 3.3 Do not operate a hand stacker unless you have checked its condition. Give special attention to the wheels, the handle, the guide frame, the pilot wheel, the doorframe, etc.
- 3.4 Do not use on a slopping ground.
- 3.5 Do not take up any people on the forks.
- 3.6 The operator had better take on gloves for labor protecting.
- 3.7 When the goods have been transported or lifted, all people should be away from the forks for 600mm.
- 3.8 Do not load over maximum capacity.
- 3.9 The weight of goods should be distributed on the two forks, do not use only one fork. The center of gravity of goods should be in the center of two forks.
- 3.10 People forbid standing under the forks.
- 3.11 Do not move the hand stacker when the goods are lifted to the height more than 300mm.
- 3.12 At other special condition or place, the operator should be carefully to operate the

hand stacker.

4. MAINTENANCE

4.1 Hydraulic oil

Please check the oil level every six months. The oil can be hydraulic oil: **ISO VG32**, its viscosity should be 32cSt at 40°C, total volume is about 2.0lt.

4.2 Daily check and maintenance

It is necessary to check the hand stacker daily. Special attention should be paid to the wheels, the axles, as thread, rags, etc., it may block the wheels, the fork and the mast should be checked, too. The forks should be unloaded and lowered in the lowest position when the job is over.

4.3 Lubrication

Use motor oil or grease to lubricate all movable parts.

4.4 Remove the air

The air maybe enter the hydraulic pump during the transportation after the customer buys it. It will cause the piston rod to fail to keep up the raised height. The air can be removed in the following way: pull the control handle(FS107) up and move handle(FS110) up and down for several times.

5. TO ADJUST RELEASE DEVICE

On the draw-bar of this hand stacker, you can find the control handle (FS107) which can be regulated in three positions: **LOWER** = to lower the forks; **NEUTRAL** = to move the load, and **LIFT** = to raise the fork. These three positions have been pre-positied at the factory. If however they have been changed, you can adjust according to following step:

4.1 If the forks elevate while pumping in the **NEUTRAL** position, turn the adjusting nut (FS116) on the adjusting bolt (FS115) clockwise or turn the adjusting screw (FS223) clockwise until pumping action does not raise the forks and the **NEUTRAL** position functions properly.

4.2 If the forks descend while pumping in the **NEUTRAL** position, turn the nut (FS116) or the screw (FS223) counter-clockwise until the forks do not lower.

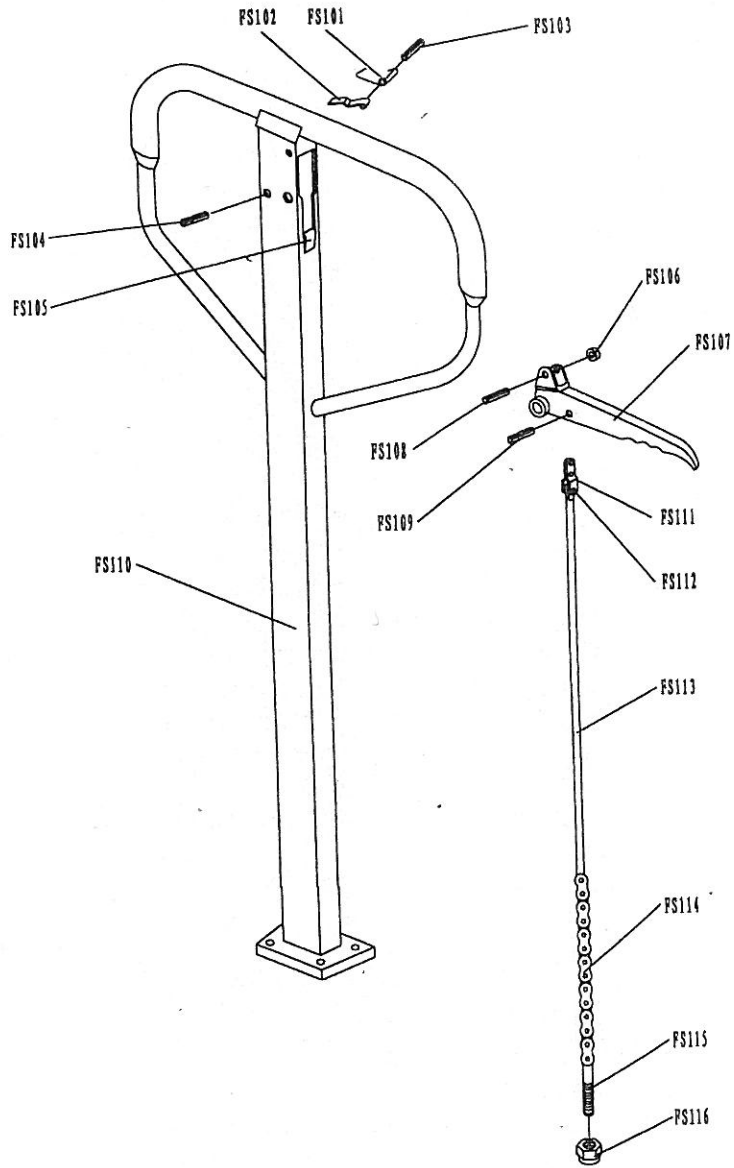
4.3 If the forks do not descent when the control handle (FS107) is in the **LOWER** position, turn the nut (FS116) or the screw (FS223) clockwise until raising the control handle (FS107) lowers the forks. Then check the **NEUTRAL** position according to item 4.1 and 4.2 to be sure the nut (FS116) and the screw (FS223) is in the proper position.

4.4 If the forks do not elevate while pumping in the **LIFT** position, turn the nut (FS116) or the screw (FS223) counter-clockwise until the forks elevate while pumping in the **LIFT** position. Then check the **LOWER** and **NEUTRAL** position according to item 4.1, 4.2 and 4.3.

6. TROUBLES SHOOTING

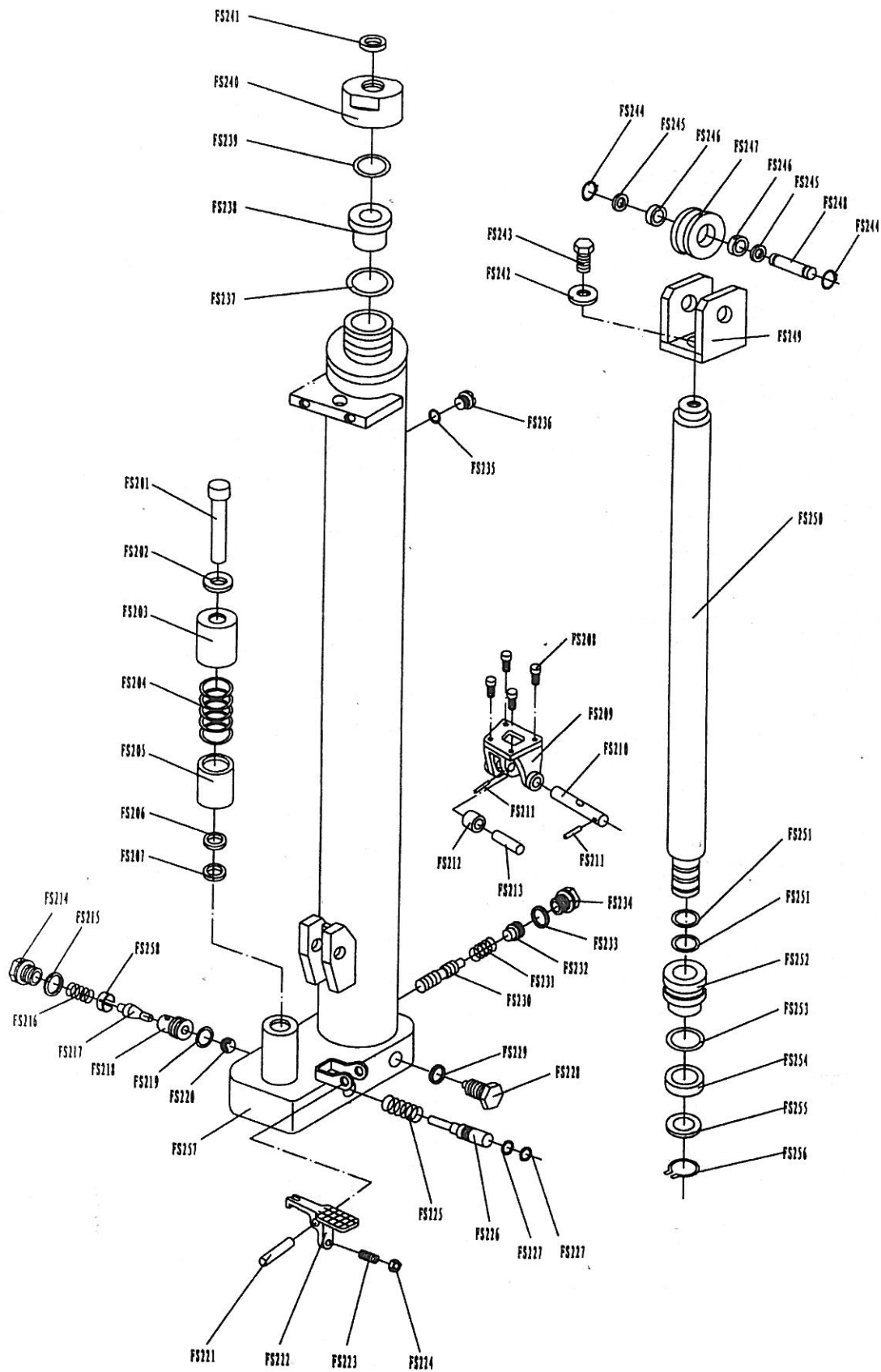
No	Trouble	Clause	Fixing Methods
1	The forks can not be up the max. height.	- The hydraulic oil is not enough.	- Pour in the oil.
2	The forks can not be lifted up.	- Without hydraulic oil. - The oil has impurities. - The nut (FS116) is too high or the screw (FS223) is too close, keep the pumping valve open. - Air come into the hydraulic oil.	- Fill in the oil. - Change the oil. - Adjust the nut (FS116) or the screw (FS223) .(see item 4.4) - Banish the air.(see item 3.4)
3	The forks can not be descended.	- The piston rod(FS250) or pump body(FS257) or the mast (FS301 or FS301G) is deformed resulting from 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 (FS116) or the screw (FS223) is not in the correct position. - The rollers (FS339) are not lubricated.	- Replace it. - Keeping the fork in the lowest position if not using, and pay more attention to lubricate the rod. - Adjust the nut(FS116) or the screw (FS223). (see item 4.3) - Lubricate its.
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 fork descends without the release valve worked.	- 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 come into the oil. - Sealing parts worn or damaged. - The adjusting nut (FS116) or the screw (FS223) is not in the correct position.	- Replace with new oil. - Inspect and replace the waste parts. -Banish the air. (See item 3.4) - Replace with the new one. - Adjusting the nut (FS116) or the screw (FS223). (See item 4.2)

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



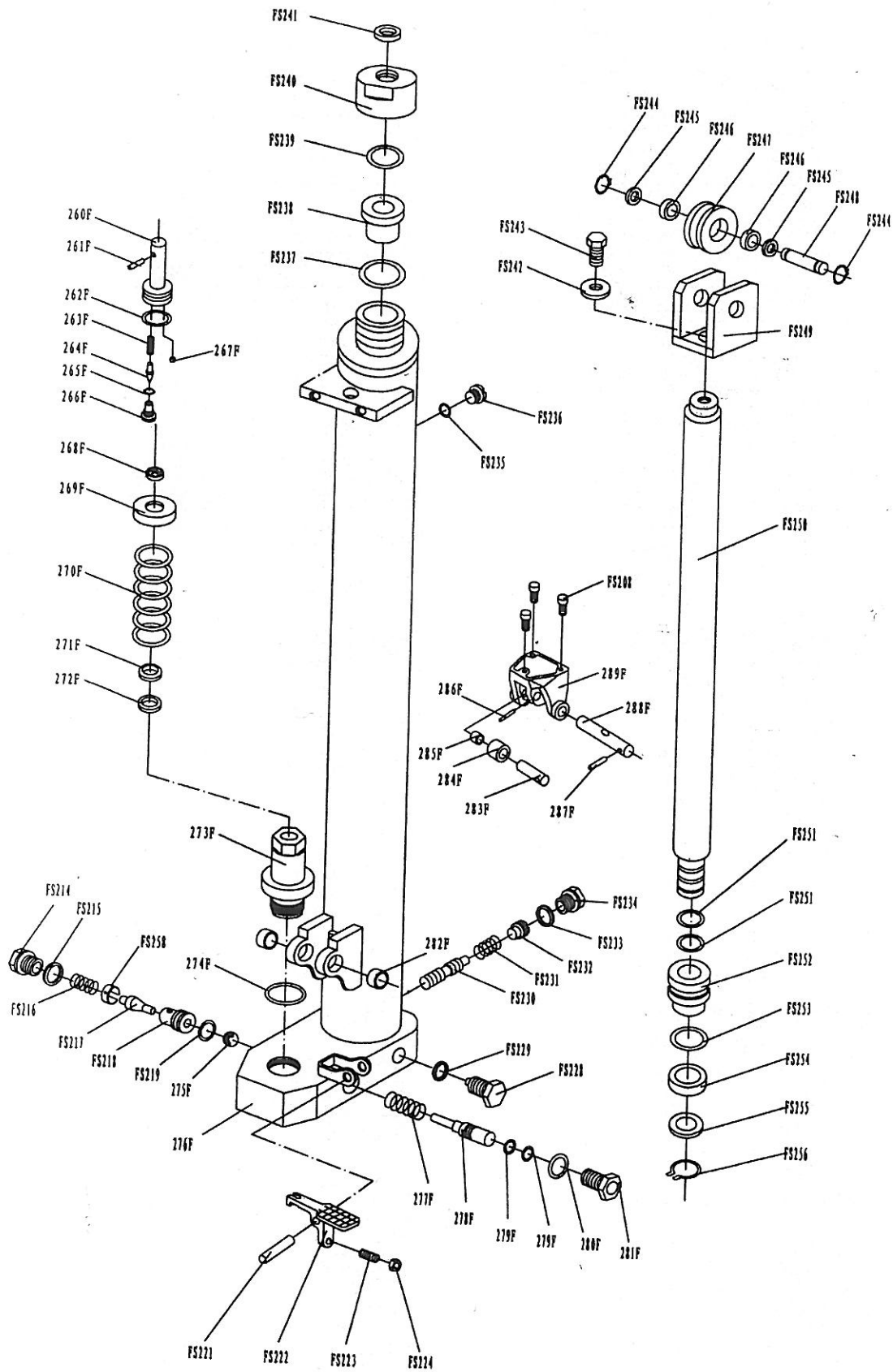
Handle Part List

No.	Description	Qty.	No.	Description	Qty.
FS101	Spring	1	FS109	Elastic Pin	1
FS102	Blade Spring	1	E110	Handle	1
FS103	Elastic Pin	1	FS111	Pull Board	1
FS104	Elastic Pin	1	FS112	Pin	1
FS105	Rubber Washer	1	E113	Release Rod	1
FS106	Roller	1	FS114	Chain	1
FS107	Control Handle	1	FS115	Adjusting Bolt	1
FS108	Elastic Pin	1	FS116	Adjusting Nut	1



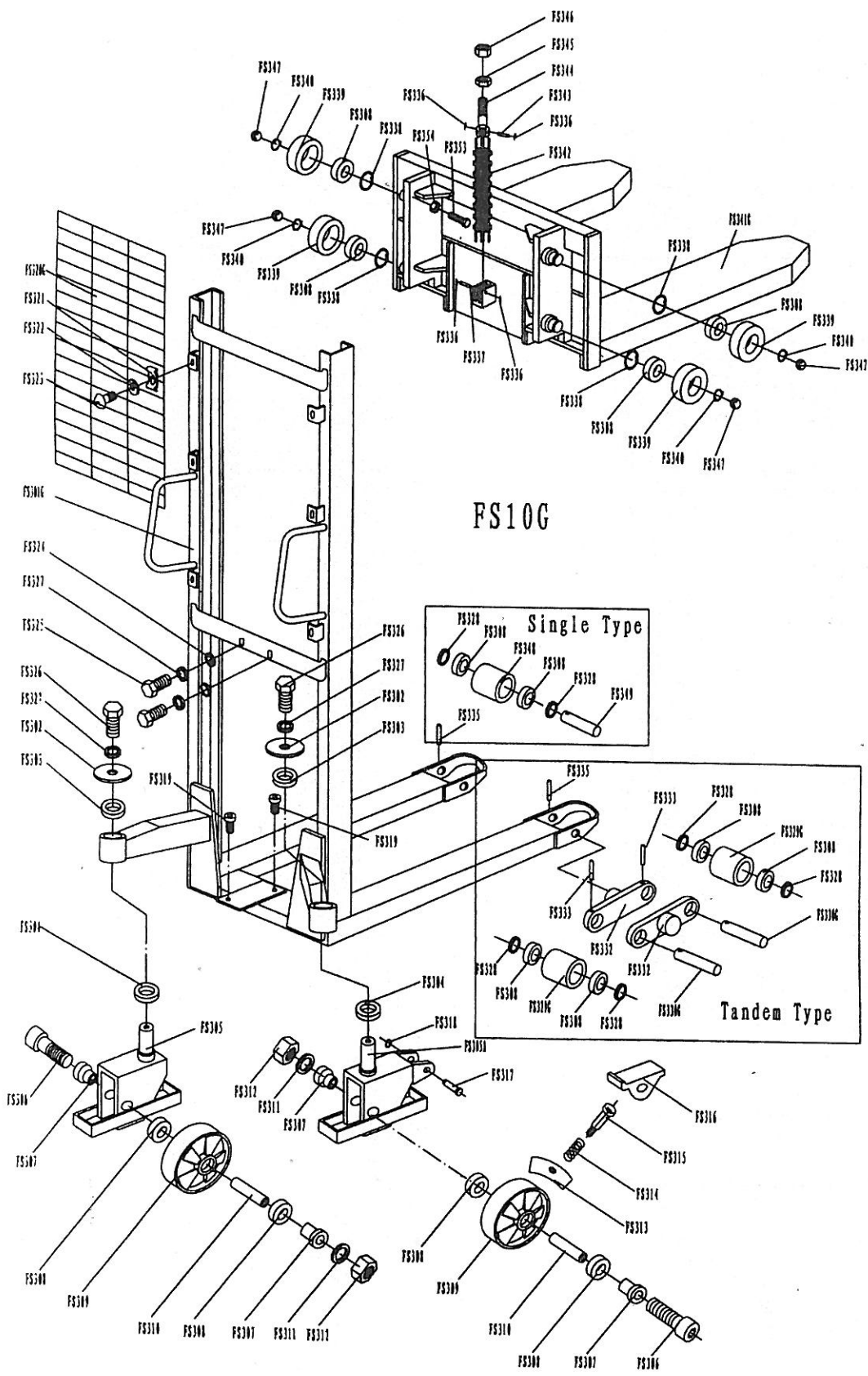
Pump Part List

No.	Description	Qty.	No.	Description	Qty.
FS201	Pumping Piston Rod	1	FS230	Valve Spindle for Adjusting Speed	1
FS202	Washer	1	FS231	Spring	1
FS203	Upper Cap of Spring	1	FS232	Adjusting Bolt	1
FS204	Spring	1	FS233	Seal Washer	1
FS205	Lower Cap of Spring	1	FS234	Screw	1
FS206	Dust Ring	1	FS235	Seal Washer	1
FS207	Y - Ring	1	FS236	Air Screw	1
FS208	Screw	4	FS237	Seal Washer	1
FS209	Bracket	1	FS238	Conduit	1
FS210	Shaft with Hole	1	FS239	O - Ring	1
FS211	Elastic Pin	1	FS240	Cover	1
FS212	Pressure Roller	1	FS241	Dust Ring	1
FS213	Shaft for Roller	1	FS242	Washer	1
FS214	Screw	1	FS243	Screw	1
FS215	Seal Washer	1	FS244	Locking Ring	2
FS216	Spring	1	FS245	Washer	2
FS217	Valve Spindle of Pump	1	FS246	Bearing	2
FS218	O - Ring	1	FS247	Roller for Chain	1
FS219	Seat of Pump Valve	1	FS248	Shaft	1
FS220	Steel Ball	1	FS249	Joint Head	1
FS221	Elastic Pin	1	FS250	Piston Rod	1
FS222	Lever Plate	1	FS251	O - Ring	2
FS223	Adjusting Screw	1	FS252	Piston	1
FS224	Nut	1	FS253	O - Ring	2
FS225	Spring	1	FS254	Y - Ring	1
FS226	Strike Pin	1	FS255	Washer	1
FS227	O - Ring	2	FS256	Locking Ring	1
FS228	Screw	1	FS257	Pump Body	1
FS229	Seal Washer	1	FS258	Sleeve for Adjusting Speed	1
			FS236A	Oil - sealing Screw	1



Pump Part List for Fast Lifting

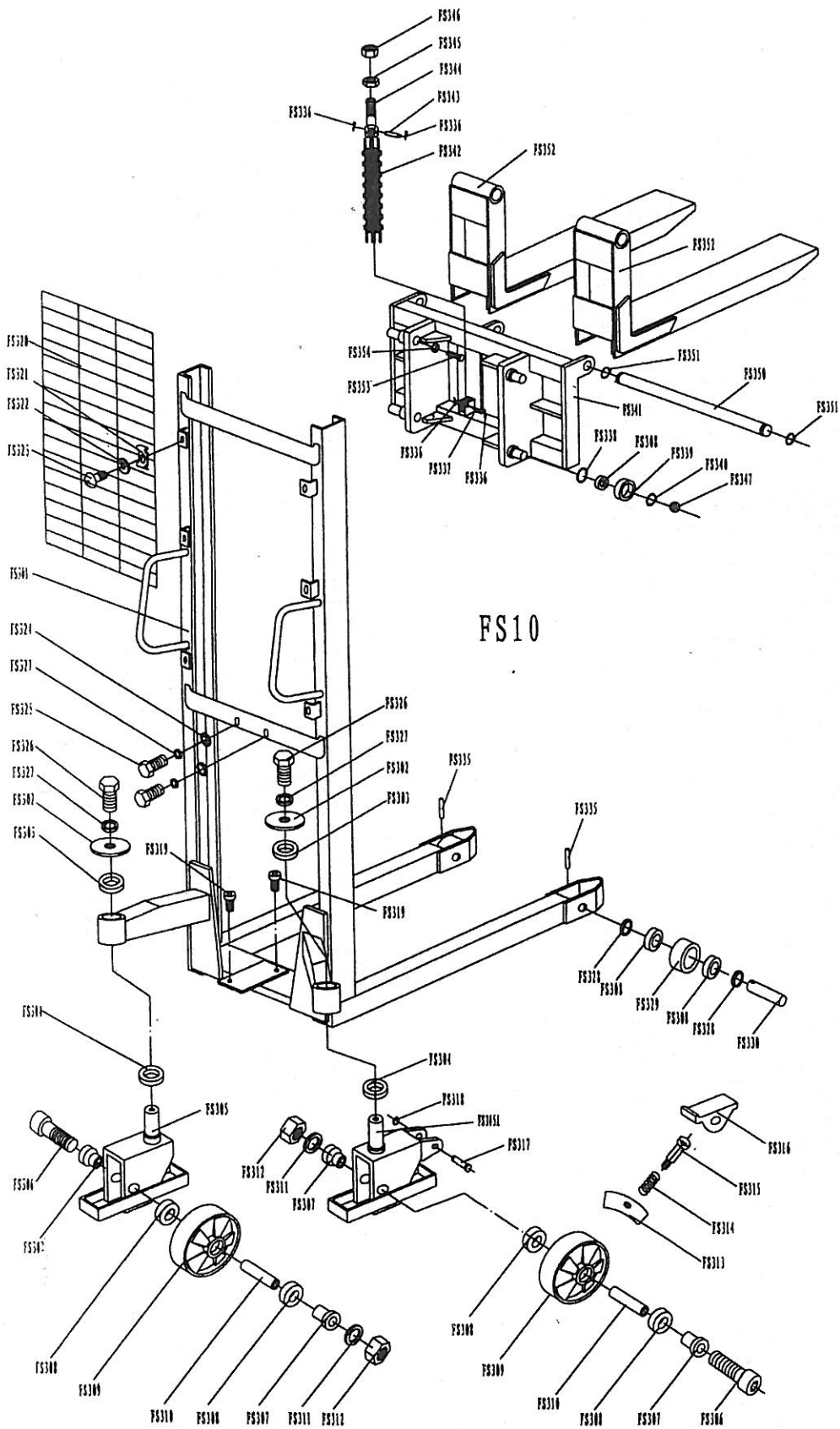
No.	Description	Qty.	No.	Description	Qty.
FS208	Screw	3	FS253	O - Ring	2
FS214	Screw	1	FS254	Y - Ring	1
FS215	Seal Washer	1	FS255	Washer	1
FS216	Spring	1	FS256	Locking Ring	1
FS217	Valve Spindle of Pump	1	FS258	Sleeve for Adjusting Speed	1
FS218	O - Ring	1	260F	Pumping Piston Rod	1
FS219	Seat of Pump Valve	1	261F	Elastic Pin	1
FS221	Elastic Pin	1	262F	O - Ring	1
FS222	Lever Plate	1	263F	Spring	1
FS223	Adjusting Screw	1	264F	Spindle Pin	1
FS224	Nut	1	265F	O - Ring	1
FS228	Screw	1	266F	Screw	1
FS229	Seal Washer	1	267F	Steel Ball	1
FS230	Valve Spindle for Adjusting Speed	1	268F	Outer Cap	1
FS231	Spring	1	269F	Cap of Spring	1
FS232	Adjusting Bolt	1	270F	Spring	1
FS233	Seal Washer	1	271F	Dust Ring	1
FS234	Screw	1	272F	Y - Ring	1
FS235	Seal Washer	1	273F	Pumping Cylinder	1
FS236	Air Screw	1	274F	O - Ring	1
FS237	Seal Washer	1	275F	Steel Ball	1
FS238	Conduit	1	276F	Pump Body	1
FS239	O - Ring	1	277F	Spring	1
FS240	Cover	1	278F	Strike Pin	1
FS241	Dust Ring	1	279F	O - Ring	2
FS242	Washer	1	280F	O - Ring	1
FS243	Screw	1	281F	Sleeve of Strike Pin	1
FS244	Locking Ring	2	282F	Bushing	2
FS245	Washer	2	283F	Shaft for Roller	1
FS246	Bearing	2	284F	Pressure Roller	1
FS247	Roller for Chain	1	285F	Bushing	1
FS248	Shaft	1	286F	Elastic Pin	1
FS249	Joint Head	1	287F	Elastic Pin	1
FS250	Piston Rod	1	288F	Shaft with Hole	1
FS251	O - Ring	2	289F	Bracket	1
FS252	Piston	1	FS236A	Oil - sealing Screw	1



FS10G

Mast Part List for FS10G

No.	Description	Qty.	No.	Description	Qty.
FS301G	Mast	1	FS325	Screw	2
FS302	Cover	2	FS326	Screw	2
FS303	Bearing	2	FS327	Elastic Washer	4
FS304	Bearing	2	FS328	Washer	4/8
FS305	Frame of Wheel	1	FS329G	Loading Roller (for tandem type)	4
FS305A	Frame of Wheel with Brake	1	FS330G	Shaft of Roller (for tandem type)	4
FS306	Screw	2	FS332G	Linking Plate (for tandem type)	4
FS307	Washer	4	FS333	Elastic Pin	4
FS308	Bearing	8/12	FS335	Elastic Pin	2
FS309	Wheel	2	FS336	Cotter Pin	4
FS310	Sleeve	2	FS337	Pin with Hole	1
FS311	Elastic Washer	2	FS338	Locking Ring	4
FS312	Nut	2	FS339	Roller	4
FS313	Brake	1	FS340	Locking Ring	4
FS314	Spring	1	FS341G	Fork	1
FS315	Pushing Bolt	1	FS342	Chain	1
FS316	Pedal	1	FS343	Pin with Hole	1
FS317	Shaft	1	FS344	Screw	1
FS318	Locking Ring	1	FS345	Nut	1
FS319	Screw	2	FS346	Nut	1
FS320G	Reticulation	1	FS347	Steel Ball	4
FS321	Washer	6	FS348	Loading Roller (for single type)	2
FS322	Washer	6	FS349	Shaft of Roller (for single type)	2
FS323	Screw	6	FS353	Bolt	4
FS324	Washer	2	FS354	Nut	4



Mast Part List for FS10

No.	Description	Qty.	No.	Description	Qty.
FS301	Mast	1	FS325	Screw	2
FS302	Cover	2	FS326	Screw	2
FS303	Bearing	2	FS327	Elastic Washer	4
FS304	Bearing	2	FS328	Washer	4
FS305	Frame of Wheel	1	FS329	Loading Roller	2
FS305A	Frame of Wheel with Brake	1	FS330	Shaft for Roller	2
FS306	Screw	2	FS333		
FS307	Washer	4	FS335	Elastic Pin	2
FS308	Bearing	12	FS336	Cotter Pin	4
FS309	Wheel	2	FS337	Pin with Hole	1
FS310	Sleeve	2	FS338	Locking Ring	4
FS311	Elastic Washer	2	FS339	Roller	4
FS312	Nut	2	FS340	Locking Ring	4
FS313	Brake	1	FS341	Stock	1
FS314	Spring	1	FS342	Chain	1
FS315	Pushing Bolt	1	FS343	Pin with Hole	1
FS316	Pedal	1	FS344	Screw	1
FS317	Shaft	1	FS345	Nut	1
FS318	Locking Ring	1	FS346	Nut	1
FS319	Screw	2	FS347	Steel Ball	4
FS320	Reticulation	1	FS350	Long Shaft	1
FS321	Washer	6	FS351	Locking Ring	2
FS322	Washer	6	FS352	Fork	2
FS323	Screw	6	FS353	Bolt	4
FS324	Washer	2	FS354	Nut	4