



# OPERATING INSTRUCTIONS & PARTS BREAKDOWN ECO FIXED FORK STACKER

---

VERSION	N/A
MODEL	EMS22NFF -63/98/118 FOOT PUMP FIXED FORK MANUAL HYDRAULIC STACKER
APPLICABLE PRODUCTS	EMS22NFF-63, EMS22NFF-98, EMS22NFF-118

---

Please read and save these instructions. Read carefully before attempting to assemble, install, operate, or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

Welcome to use our hand stacker. 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

	TYPE I (Adjusted fork)	TYPE II (Fixed fork)
Capacity	1000 kg / 2200lbs	
Max. Fork Height	1600 mm / 63"	
Min. Fork Height		

## 4. TO ADJUST RELEASE DEVICE

On the draw-bar of this hand stacker, you can find the control handle (D608) 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-positated 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 (D615) on the adjusting bolt (D614) clockwise or turn the adjusting screw (234) 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 (D615) or the screw (234) counter-clockwise until the forks do not lower.
- 4.3 If the forks do not descent when the control handle (D608) is in the **LOWER** position, turn the nut (D615) or the screw (234) clockwise until raising the control handle (D608) lowers the forks. Then check the **NEUTRAL** position according to item 4.1 and 4.2 to be sure the nut (D615) and the screw (234) is in the proper position.
- 4.4 If the forks do not elevate while pumping in the **LIFT** position, turn the nut (D615) or the screw (234) 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.

## 5. TROUBLES SHOOTING

No	Trouble	Clause	Fixing Methods
1	The forks cannot 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 (D615) is too high or the screw (234) is too close, keep the pumping valve open. - Air come into the hydraulic oil.	- Fill in the oil. - Change the oil. - Adjust the nut (D615) or the screw (234) .(see item 4.4) - Banish the air.(see item 3.4)
3	The forks can not be descended.	- The piston rod(270) or pump body (261) or the mast (5) 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 (D615) or the screw (234) is not in the correct position. - The rollers (42) 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 (D615) or the screw (234). (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. - Adjusting the nut (D615) or the screw (234). (See item 4.2)	-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 (D615) or the screw(234) 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 (D615) or the screw (234). (See item 4.2)

**NOTE: DO NOT ATTEMPT TO REPAIR THIS STACKER UNLESS YOU ARE TRAINED AND AUTHORIZED TO DO SO.**

Fig. 4

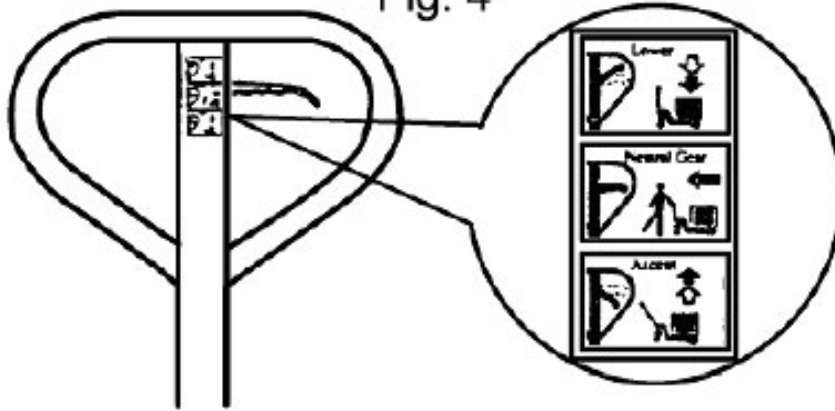
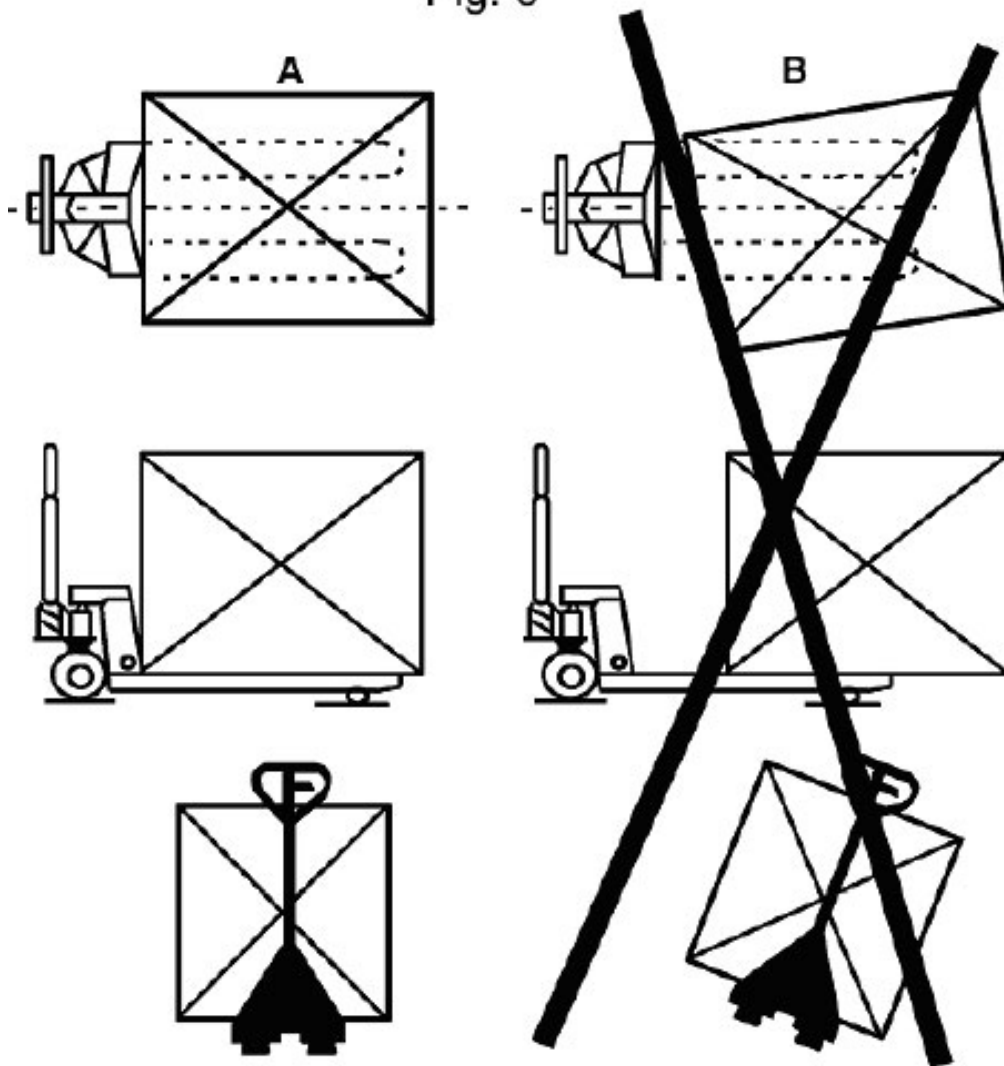
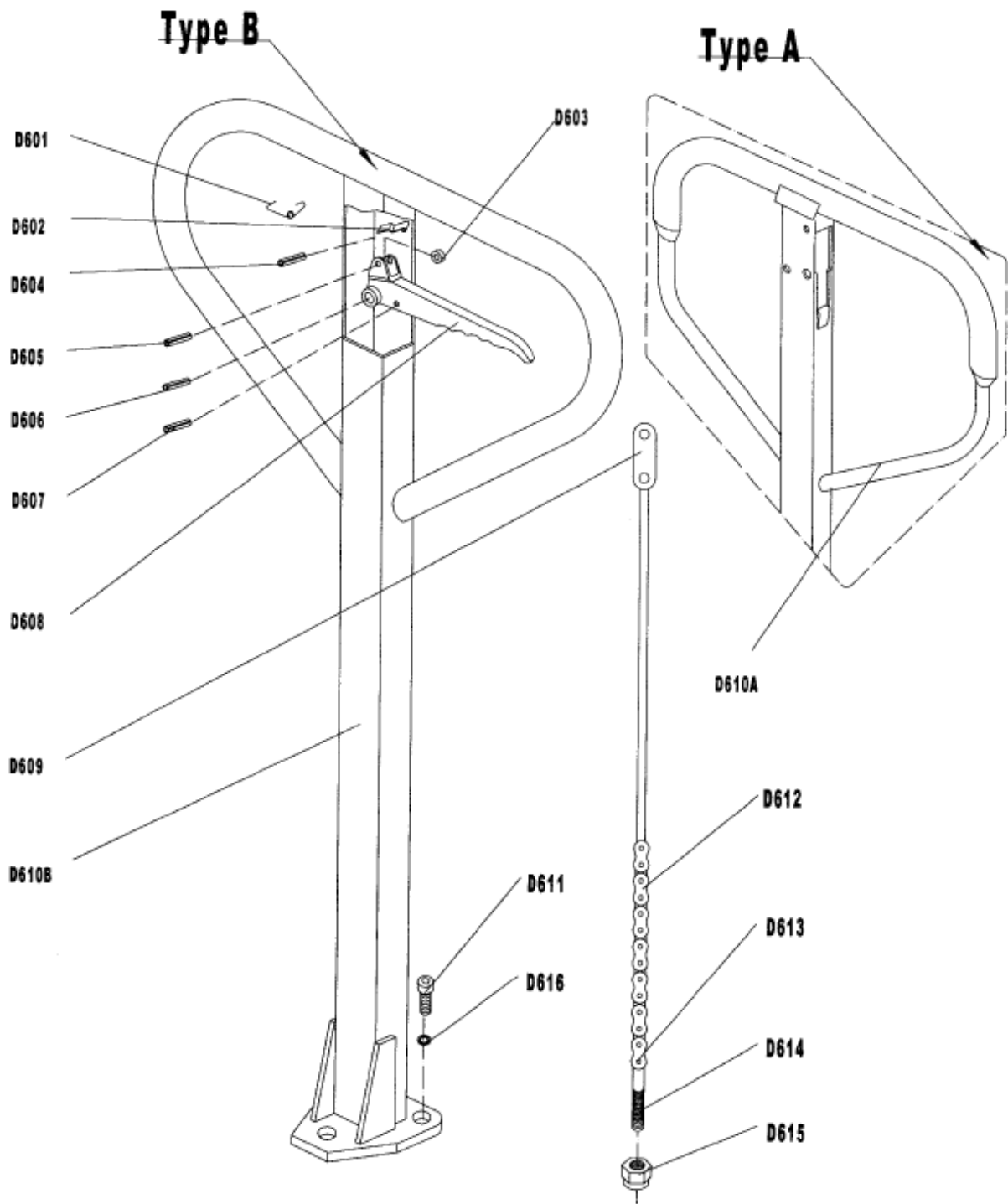


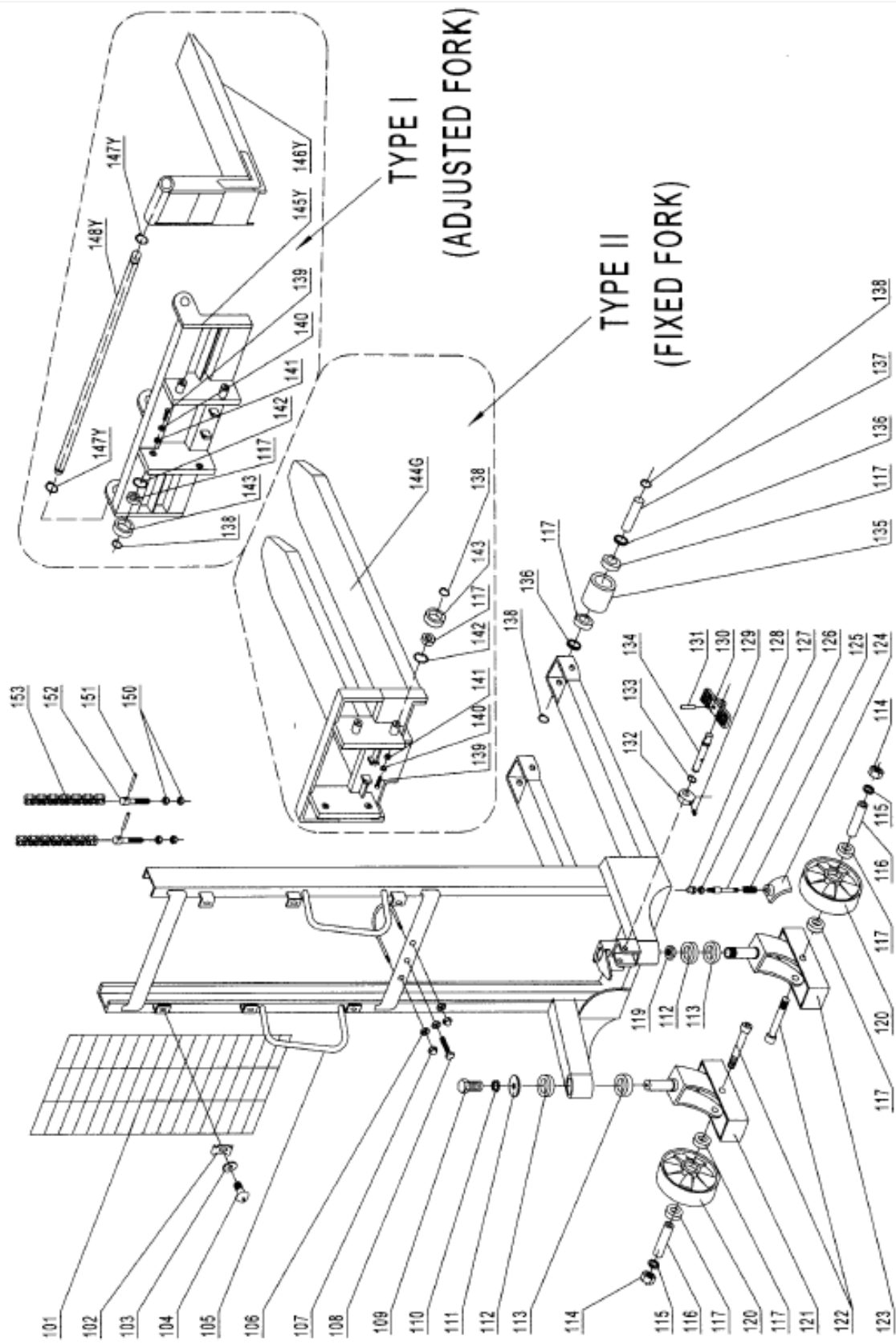
Fig. 5





## List of Handle

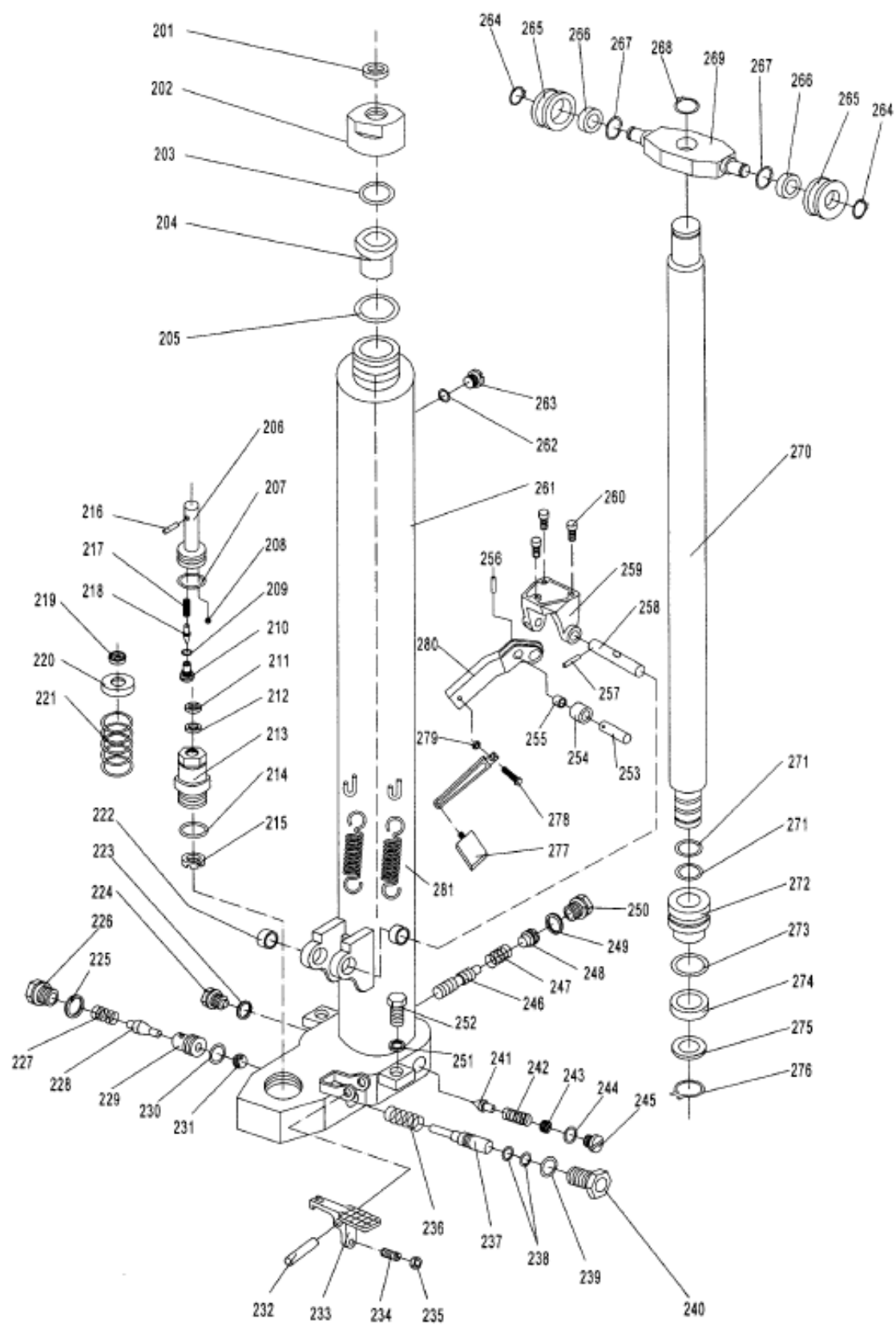
No.	Mobile Part #	Description	Qty.	Remark
D601	EMS22NFF-D601	Spring	1	
D602	EMS22NFF-D602	Blade Spring	1	
D603	EMS22NFF-D603	Roller	1	
D604	EMS22NFF-D604	Elastic Pin	1	
D605	EMS22NFF-D605	Elastic Pin	1	
D606	EMS22NFF-D606	Elastic Pin	1	
D607	EMS22NFF-D607	Elastic Pin	1	
D608	EMS22NFF-D608	Control Handle	1	
D609	EMS22NFF-D609	Pull Board	1	
D610B	EMS22NFF-D610B	Handle	1	For Type A
D610A	EMS22NFF-D610A	Handle	1	For Type B
D611	EMS22NFF-D611	Screw	3	
D612	EMS22NFF-D612	Chain	1	
D613	EMS22NFF-D613	Pin	1	
D614	EMS22NFF-D614	Adjusting Bolt	1	
D615	EMS22NFF-D615	Adjusting Nut	1	
D616	EMS22NFF-D616	Elastic Washer	3	



## LIST of MAST

No.	Mobile Part #	Description	Qty.	Remark
101	EMS22NFF-101	Reticulation	1	
102	EMS22NFF-102	Fixing Plate	6	
103	EMS22NFF-103	Washer	6	
104	EMS22NFF-104	Screw	6	
105Y	EMS22NFF-105Y	Mast	1	For TYPE I (Adjusted Fork)
105G	EMS22NFF-105G	Mast	1	For TYPE II (Fixed Fork)
106	EMS22NFF-106	Nut	3	
107	EMS22NFF-107	Nut	2	
108	EMS22NFF-108	Bolt	1	
109	EMS22NFF-109	Bolt	1	
110	EMS22NFF-110	Elastic Washer	1	
111	EMS22NFF-111	Washer	1	
112	EMS22NFF-112	Bearing	2	
113	EMS22NFF-113	Bearing	2	
114	EMS22NFF-114	Nut	2	
115	EMS22NFF-115	Washer	2	
116	EMS22NFF-116	Axle	2	
117	EMS22NFF-117	Bearing	12	
119	EMS22NFF-119	Nut	1	
120	EMS22NFF-120	Wheel	2	
121	EMS22NFF-121	Frame of Wheel	1	
122	EMS22NFF-122	Screw	2	
123	EMS22NFF-123	Frame of Wheel with Brake	1	
124	EMS22NFF-124	Brake Plate	1	
125	EMS22NFF-125	Spring	1	
126	EMS22NFF-126	Bolt	1	
127	EMS22NFF-127	Nut	1	
128	EMS22NFF-128	Nut	1	
129	EMS22NFF-129	Screw	1	
130	EMS22NFF-130	Pedal	1	
131	EMS22NFF-131	Elastic Pin	1	
132	EMS22NFF-132	Cam	1	
133	EMS22NFF-133	Locking Ring	1	
134	EMS22NFF-134	Shaft	1	
135	EMS22NFF-135	Roller	2	
136	EMS22NFF-136	Washer	4	
137	EMS22NFF-137	Shaft of Roller	2	
138	EMS22NFF-138	Locking Ring for Axle	8	
139	EMS22NFF-139	Bolt	4	
140	EMS22NFF-140	Nut	4	
141	EMS22NFF-141	Steel Ball	4	
142	EMS22NFF-142	Locking Ring for Hole	4	
143	EMS22NFF-143	Roller	4	
144G	EMS22NFF-144G	Fixed Fork	4	For TYPE II (Fixed Fork)
145Y	EMS22NFF-145Y	Frame of Fork	1	
146Y	EMS22NFF-146Y	Adjusting Fork	2	
147Y	EMS22NFF-147Y	Retaining Ring	2	
148Y	EMS22NFF-148Y	Long Axle	1	For TYPE I (Adjusted Fork)
150	EMS22NFF-150	Nut	4	
151	EMS22NFF-151	Pin	2	
152	EMS22NFF-152	Bolt	2	





## List of PUMP

No.	Mobile Part #	Description	Qty.	Remark
201	EMS22NFF-201	Dust Ring	1	
202	EMS22NFF-202	Cover with Screw	1	
203	EMS22NFF-203	O-Ring	1	
204	EMS22NFF-204	Sleeve	1	
205	EMS22NFF-205	Seal Washer	1	
206	EMS22NFF-206	Pump Piston Rod	1	
207	EMS22NFF-207	O-Ring	1	
208	EMS22NFF-208	Steel Ball	1	
209	EMS22NFF-209	O-Ring	1	
210	EMS22NFF-210	Shaft	1	
211	EMS22NFF-211	Dust Ring	1	
212	EMS22NFF-212	Seal	1	
213	EMS22NFF-213	Pumping Cylinder	1	
214	EMS22NFF-214	O-Ring	1	
215	EMS22NFF-215	Washer	1	
216	EMS22NFF-216	Pin	1	
217	EMS22NFF-217	Spring	1	
218	EMS22NFF-218	Valve Spindle	1	
219	EMS22NFF-219	Cap of Pin	1	
220	EMS22NFF-220	Spring Cap	1	
221	EMS22NFF-221	Spring	1	
222	EMS22NFF-222	Bushing	2	
223	EMS22NFF-223	Seal Washer	1	
224	EMS22NFF-224	Bolt	1	
225	EMS22NFF-225	Seal Washer	1	
226	EMS22NFF-226	Bolt	1	
227	EMS22NFF-227	Spring	1	
228	EMS22NFF-228	Valve Spindle of Pump	1	
229	EMS22NFF-229	Seat of Pump Valve	1	
230	EMS22NFF-230	O-Ring	1	
231	EMS22NFF-231	Steel Ball	1	
232	EMS22NFF-232	Elastic Pin	1	
233	EMS22NFF-233	Lever Plate	1	
234	EMS22NFF-234	Screw	1	
235	EMS22NFF-235	Nut	1	
236	EMS22NFF-236	Spring	1	
237	EMS22NFF-237	Release Valve Pin	1	
238	EMS22NFF-238	O-Ring	2	
239	EMS22NFF-239	O-Ring	1	
240	EMS22NFF-240	Bolt	1	
241	EMS22NFF-241	Safety Valve Spindle	1	
242	EMS22NFF-242	Spring	1	
243	EMS22NFF-243	Adjust Screw	1	
244	EMS22NFF-244	O-Ring	1	
245	EMS22NFF-245	Bolt	1	

<b>No.</b>	<b>Mobile Part #</b>	<b>Description</b>	<b>Qty.</b>	<b>Remark</b>
246	EMS22NFF-246	Pin to Adjust Velocity	1	
247	EMS22NFF-247	Spring	1	
248	EMS22NFF-248	Adjust Screw	1	
249	EMS22NFF-249	Seal Washer	1	
250	EMS22NFF-250	Bolt	1	
251	EMS22NFF-251	Elastic Washer	2	
252	EMS22NFF-252	Bolt	2	
253	EMS22NFF-253	Shaft	1	
254	EMS22NFF-254	Pressure Roller	1	
255	EMS22NFF-255	Bushing	1	
256	EMS22NFF-256	Elastic Pin	1	
257	EMS22NFF-257	Elastic Pin	1	
258	EMS22NFF-258	Axle with hole	1	
259	EMS22NFF-259	Bracket	1	
260	EMS22NFF-260	Bolt	3	
261	EMS22NFF-261	Body of Pump	1	
262	EMS22NFF-262	Seal Washer	1	
263	EMS22NFF-263	Bolt	1	
264	EMS22NFF-264	Locking Ring	2	
265	EMS22NFF-265	Roller for Chain	2	
266	EMS22NFF-266	Bearing	2	
267	EMS22NFF-267	Locking Ring	2	
268	EMS22NFF-268	Locking Ring	1	
269	EMS22NFF-269	Holding Plate	1	
270	EMS22NFF-270	Lifting Piston Rod	1	
271	EMS22NFF-271	O-Ring	2	
272	EMS22NFF-272	Piston	1	
273	EMS22NFF-273	O-Ring	1	
274	EMS22NFF-274	Seal	1	
275	EMS22NFF-275	Washer	1	
276	EMS22NFF-276	Locking Ring	1	
277	EMS22NFF-277	Pedal	1	
278	EMS22NFF-278	Bolt	1	
279	EMS22NFF-279	Nut	1	
280	EMS22NFF-280	Lever of Pedal	1	
281	EMS22NFF-281	Spring	2	



**MOBILE INDUSTRIES, INC.**  
3750B Laird Rd - Unit 2 & 3  
Mississauga ON, L5L 0R6  
Canada

Toll Free: 1 800 527 4612 • Local 905 279 5370  
Email: [info@mobilept.com](mailto:info@mobilept.com)

**MOBILEPT.COM**