



# Instruction Manual

## *Electric High Lift Truck*

Part Number: 272937 & 272939



**Note: Operator MUST read and understand these operating instructions before using this Truck.**

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## **1. GENERAL INFORMATION**

### **1.1 DESCRIPTION**

Thank you for purchasing a Wesco Electric High Lift Truck. This pallet truck is designed for transporting and horizontal lifting. The electric high lift trucks feature a one year pump warranty and a battery powered hydraulic lift system that is operated with fingertip controls. It can greatly reduce labor and increase working efficiency and is an efficient tool for various work environments. It has various uses such as a work table, a loading and unloading table, and a tool transporter.

### **1.2 SPECIFICATIONS**

Model	<b>272937</b>	<b>272939</b>
Capacity	3,000 lbs	3,000 lbs
Weight	344 lbs	347 lbs
Fork Lowered Height	3.3"	3.3"
Fork Raised Height	31"	31"
Single Fork Width	6.5"	6.5"
Fork Length	45"	45"
Overall Width	21"	27"
Overall Length	60"	60"
Overall Height	48.5"	48.5"
Steering & Load Wheels	Polyurethane	Polyurethane

*Materials and specifications are subject to change without notice.*

## **2. ASSEMBLY & ADJUSTMENT**

- 1) Remove all packing materials carefully.
- 2) Insert handle (102X) into the socket of cylinder (160) then lock it with pin (108) and two snap rings (109). Swing handle up and down verify it moves freely. Finally put on spring (105).
- 3) Open the electrical control case by removing the cover (255). Insert switch wire and plug (184) hanging down from handle (102) into socket (221) in the case. Insert two fuses of 5 Amp (277) into two sockets F<sub>1</sub>/F<sub>2</sub>.
- 4) Check the electrical device and elements in the case to make sure there are no loose, dropped down or broken items.
- 5) Check oil pipes in the hydraulic system to see if they are screwed on tightly. Open cover (217) to see if oil is sufficient.
- 6) Observe the electrical device and elements in the case while pushing the Up-Button (197X) |^| on top of handle (102X) intermittently to lift the fork. If there are no abnormal effects, continue to push the Up-Button to lift the fork to its highest position. Then push the Down-Button (197X) |^| to release the fork to its lowest position steadily.  
**NOTE:** Repeat Step 6 3-4 times to it full travel in order to release possible air in the hydraulic system and verify the unit is working properly.
- 7) Close the case with the cover (255) and screw it tightly with screw (256).

### **3. OPERATION**

- 1) Units are designed for working on the flat and even ground.
- 2) Handle (102X) is used for pulling and steering.
- 3) When the fork is lifted to its highest position, the unit should not be moved.
- 4) Push Up-button, the fork goes up. Stop pushing, the fork can stop at any position and won't slide down.
- 5) Push Down-Button, the fork goes down. Stop pushing, the fork can stop at any position and won't slide down.
- 6) As a safety valve is set in the pump station, when DGB series lifts a load of 1000kgs (its full capacity), only mid-cylinder (413) can extend out fully, while the piston rod (406) cannot extract out to prevent overload.
- 7) Recharge Battery (254) when the lifting speed is remarkably slow. There only three red (LBD) lighting in the electric volume gauge (283). To plug recharger (271) into a power socket. Make sure your local power matches the recharger. Then connect the recharger to Socket (225) in the electrical control case. The battery will be automatically recharged. In the meantime the yellow (LBD) lights. Recharging usually takes 4 to 5 hours.

### **4. SAFETY INFORMATION**

- 1) Operator should read all warning labels and instructions before using this truck.
- 2) Lifting the fork to its full range 1-2 times before use to release any air in the hydraulic system.
- 3) Do not use on sloped surfaces.
- 4) Do not put your hand or foot under the fork or on the moving surface of piston rod (406) and mid-cylinder (413).
- 5) Do not lift or transport people on the pallet truck.
- 6) Do not load goods like fig. 3/B. Center loads on the pallet truck.
- 7) The safety valve in the pump station will be automatically open when it is overloaded. Under such circumstance, don't push up-button. Otherwise that will reduce the lifetime of the pump station.
- 8) To replace or fill hydraulic oil, the forks should be lowed to the lowest position. The oil to be used should be clean. The oil condensation point should be  $\leq -20^{\circ}\text{C}$ . The motion viscosity: 20-30 cst (centistokes).

**Note:** On this product the battery is fastened/tightened down with a bracket. This product should not tip over if the load or skid is properly or equally positioned on the forks. If the load/skid is half way on the forks, damage can occur to the scissors or truck. The safety feature with this truck is as a load is being lifted the scissors feet will become firm with the floor. The truck cannot move forward or reverse.

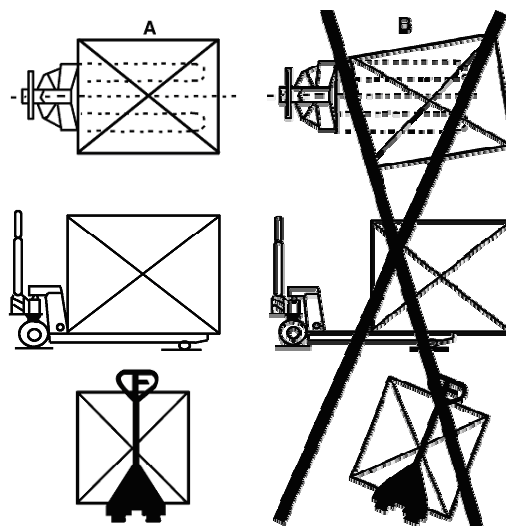


Figure 3

ATTENTION: TO INSURE SAFE AND EASY USE OF YOUR WESCO HIGH LIFT TRUCK, READ THESE INSTRUCTIONS ENTIRELY BEFORE USING.

## **5. TROUBLE SHOOTING**

<b>No</b>	<b>Problem</b>	<b>Causes</b>	<b>Solutions</b>
<b>1</b>	Forks do not lift when pushing up-button	<ol style="list-style-type: none"> <li>1. Switch is out of order</li> <li>2. Fuse is broken</li> <li>3. Magnetic switch is out of order</li> <li>4. Not enough oil</li> </ol>	<ol style="list-style-type: none"> <li>1. Check switch (197X)</li> <li>2. Replace fuse (277)</li> <li>3. Check magnetic switch (224)</li> <li>4. Fill oil</li> </ol>
<b>2</b>	Forks do not descend when pushing down-button	<ol style="list-style-type: none"> <li>1. Switch is out of order</li> <li>2. Fuse is broken</li> <li>3. Magnetic switch is out of order</li> <li>4. Object blocking</li> </ol>	<ol style="list-style-type: none"> <li>1. Check switch (197X)</li> <li>2. Replace fuse (277)</li> <li>3. Check magnetic switch (224)</li> <li>4. Check and remove the object</li> </ol>
<b>3</b>	Forks do not lift to highest position	<ol style="list-style-type: none"> <li>1. Not enough oil</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill Oil</li> </ol>
<b>4</b>	Motor does not work	<ol style="list-style-type: none"> <li>1. Motor broken</li> <li>2. Terminals and inserters are loose</li> <li>3. Battery worn out</li> </ol>	<ol style="list-style-type: none"> <li>1. Check motor brush</li> <li>2. Check terminals and inserters</li> <li>3. Recharge immediately</li> </ol>
<b>5</b>	Battery does not have enough power	<ol style="list-style-type: none"> <li>1. Not recharged long enough</li> <li>2. Battery is out of order</li> </ol>	<ol style="list-style-type: none"> <li>1. Recharge for a longer time</li> <li>2. Fill battery liquid or replace battery</li> </ol>
<b>6</b>	Oil leakage from Piston Rod & Mid-cylinder	<ol style="list-style-type: none"> <li>1. Oil seals broken</li> </ol>	<ol style="list-style-type: none"> <li>2. Replace oil seals</li> </ol>
<b>7</b>	Unsteady when unit is at highest position	<ol style="list-style-type: none"> <li>1. The ground is not flat or even</li> <li>2.. Centrifugal axle is off the ground</li> </ol>	<ol style="list-style-type: none"> <li>1. Operate on flat and even surfaces</li> <li>2. Adjusting centrifugal axle (7) to touch ground</li> </ol>

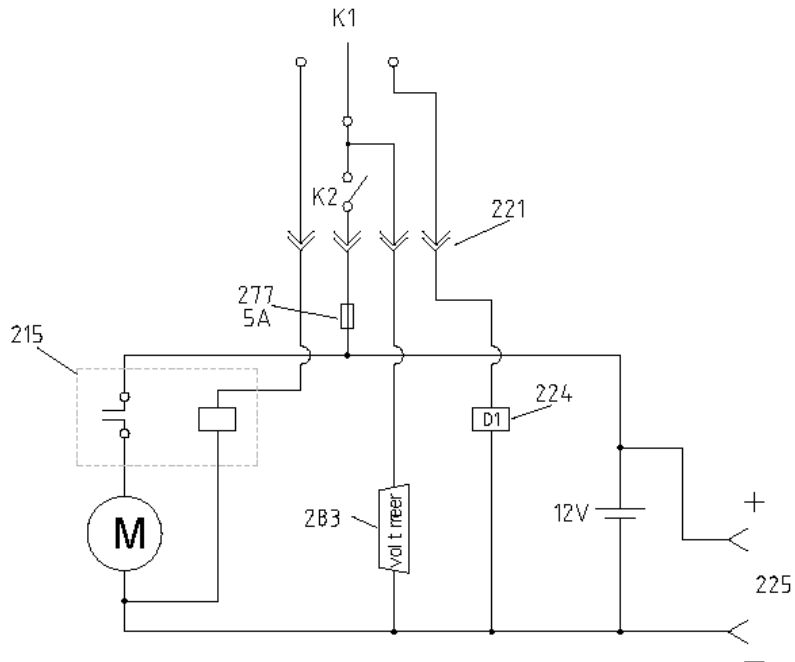
**NOTE: DO NOT ATTEMPT TO REPAIR THE PALLET TRUCK UNLESS YOU ARE TRAINED AND AUTHORIZED TO DO SO.**

ATTENTION: TO INSURE SAFE AND EASY USE OF YOUR WESCO HIGH LIFT TRUCK, READ THESE INSTRUCTIONS ENTIRELY BEFORE USING.

**6. HYDRAULIC CIRCUIT / ELECTRIC WIRING DIAGRAM**

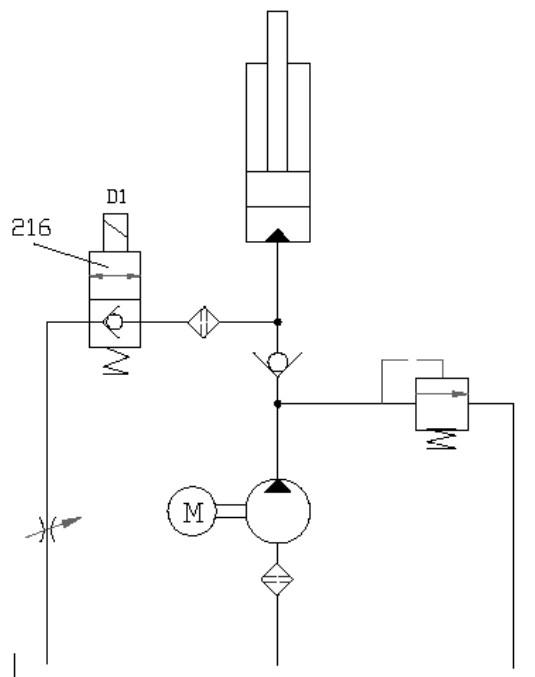
*Numbers Reference Items Listed in Part Information (Pages 6-7)*

**6.1 HYDRAULIC CIRCUIT DIAGRAM**



**Figure 4**

**6.2 ELECTRIC WIRING DIAGRAM**

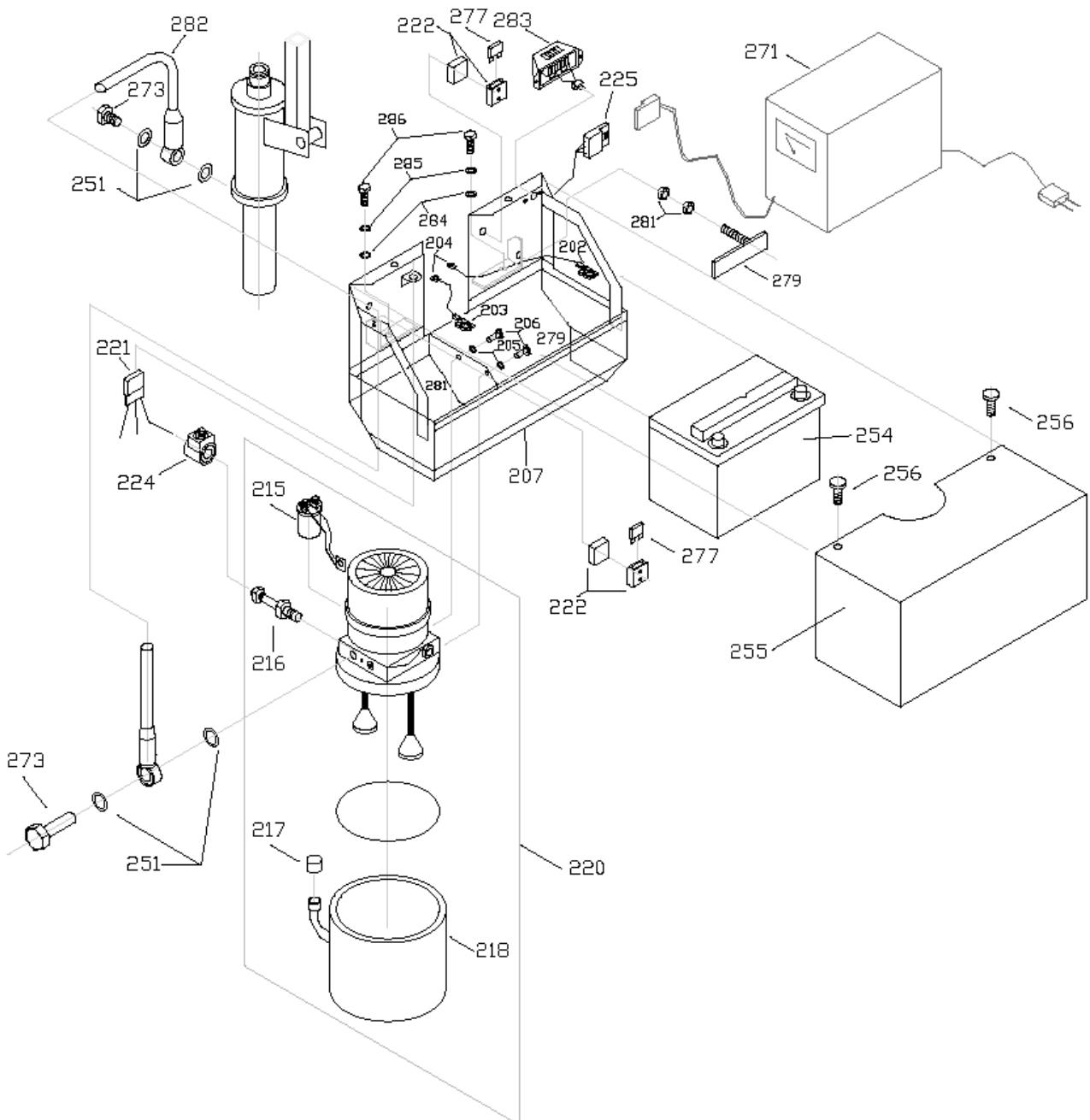


**Figure 5**

ATTENTION: TO INSURE SAFE AND EASY USE OF YOUR WESCO HIGH LIFT TRUCK, READ THESE INSTRUCTIONS ENTIRELY BEFORE USING.

**7. ELECTRIC CONTROL ASSEMBLY INFORMATION**

**7.1 ELECTRIC CONTROL ASSEMBLY DIAGRAM**



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## 7. ELECTRIC CONTROL ASSEMBLY INFORMATION

### 7.2 ELECTRIC CONTROL ASSEMBLY PARTS LIST

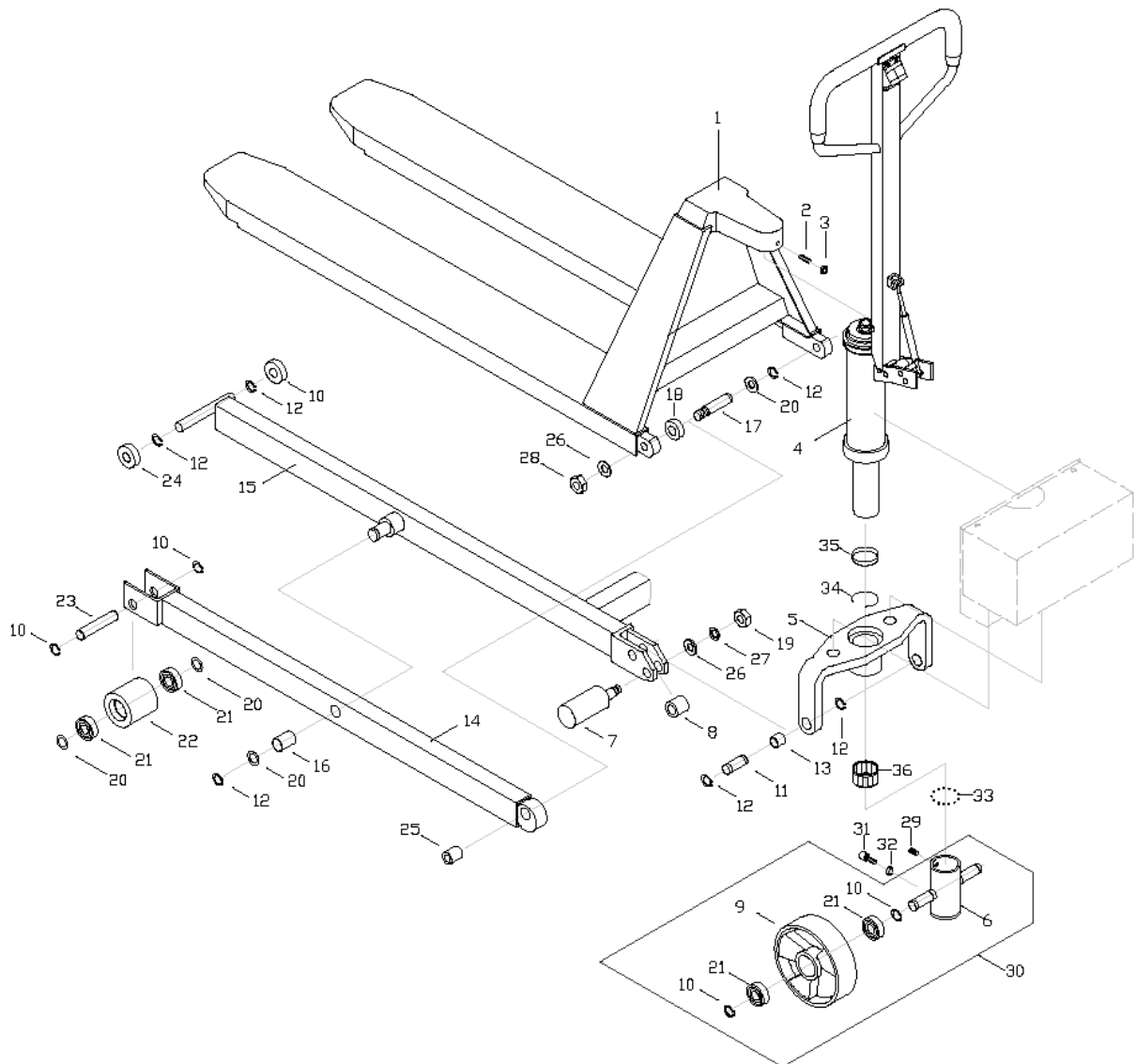
No.	WESCO Replacement P/N	Description	Qty.
202	270619	Battery Terminal (+)	1
203	270624	Battery Terminal (-)	1
204	270625	Terminal	2
205	270626	Washer	2
206	270627	Screw	2
207	270628	Electric Control Case	1
215	270666	Relay	1
216		Control Valve	1
217		Cap	1
218		Oil Tank	1
*220	270634	Pump Station Assembly (Includes Starred Items: 215, 216, 217 and 218) <b>(For units manufactured before August 2010)</b>	1
	270667	Pump Station Assembly (Includes Starred Items: 215, 216, 217 and 218) <b>(For units manufactured after August 2010)</b>	
221	270635	Switch Socket	1
222	270636	Fuse Box	2
224	270671	Magnet	1
*225	270637	Recharger Socket, Gray <b>(For units manufactured before August 2010)</b>	1
	270699	Recharger Socket, Red <b>(For units manufactured after August 2010)</b>	
251	270638	Washer	4
*254	172200	Battery <b>(For units manufactured before August 2010)</b>	1
	172190	Battery <b>(For units manufactured after August 2010)</b>	
255	270142	Cover	1
256	270639	Screw	2
*271	270645	Recharger, 12V/10A <b>(For units manufactured before August 2010)</b>	1
	270680	Recharger, 12V/10A <b>(For units manufactured after August 2010)</b>	
273	270646	Screw	2
277	270221	Fuse, 5A	2
279	270647	Battery Fixing Screw	2
281	270648	Nut	2
282	270649	High Pressure Oil Pipe	1
283	270650	Voltage Meter	1
284	270672	Washer	2
285	270673	Washer	2
286	270674	Screw	2

\*Units manufactured before August 2010 (Nobelift DGB Models) use P/N's 270634, 270637, 172200 & 270645. Units manufactured after August 2010 use P/N's 270667, 270699, 172200 & 270680.

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**8. FORK FRAME INFORMATION**

**8.1 FORK FRAME DIAGRAM**





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## **8. FORK FRAME INFORMATION**

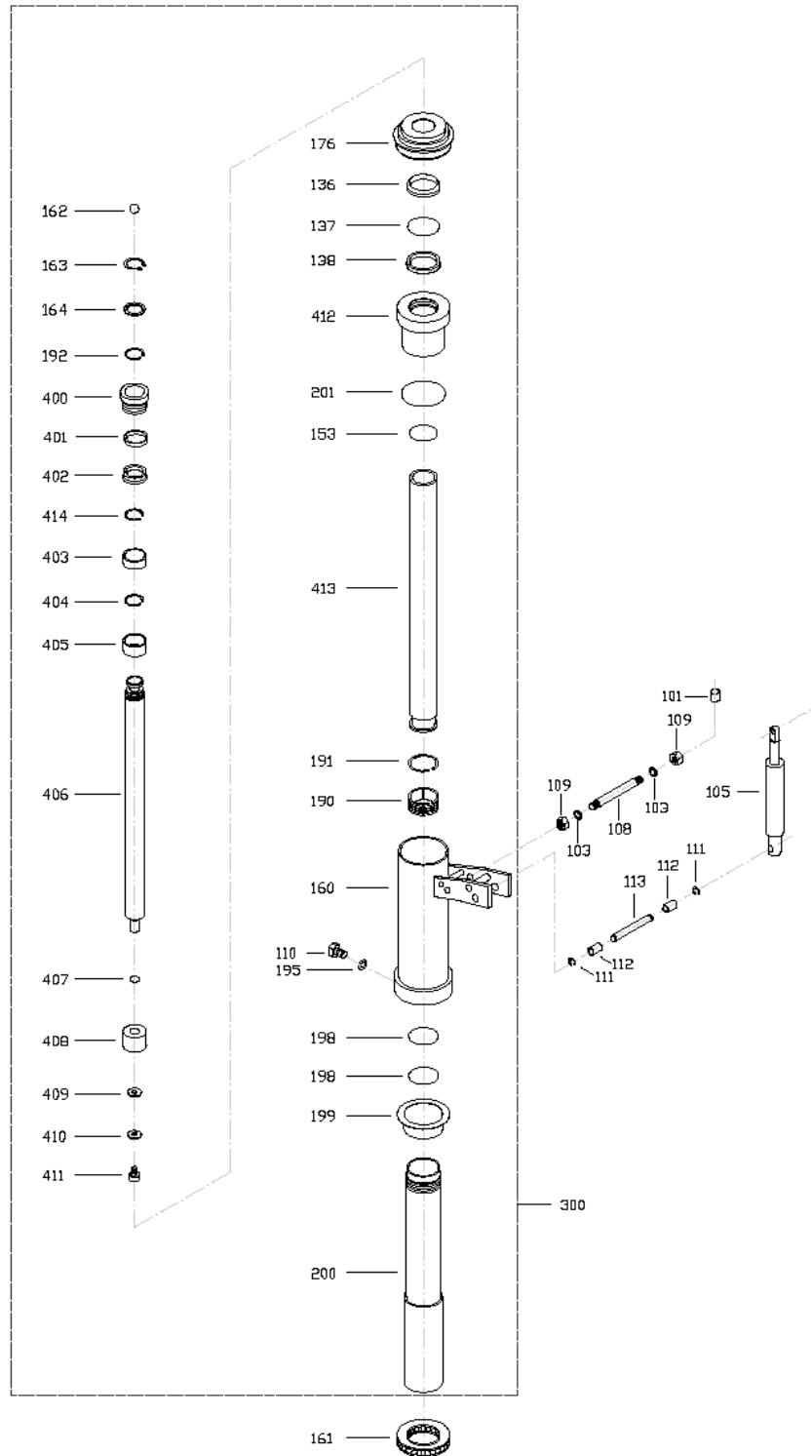
### **8.2 FORK FRAME PARTS LIST**

<b>No.</b>	<b>WESCO Replacement P/N</b>	<b>Description</b>	<b>Quantity</b>
1	270064	27"X48" Fork Frame	1
1	270599	21"X48" Fork Frame	1
2	270066	Screw	1
3	270067	Nut	1
4	270070	Hydraulic Pump	1
5	270071	Hold Yoke	1
6	270072	Wheel Yoke	1
7	270147	Centrifugal Axle	2
8	270074	Spacer	2
9	270078	Steering Wheel	2
10	270079	Snap Ring	8
11	270080	Pin	2
12	270081	Snap Ring	12
13	270082	Bush	2
14	270083	Leg	2
15	270085	Leg	1
16	270086	Bush	2
17	270088	Pin	2
18	270089	Washer	2
19	270090	Nut	2
20	270091	Washer	8
21	270092	Ball Bearing	8
22	270093	Front Wheel	2
23	270094	Wheel Axle	2
24	270095	Roller	4
25	270098	Bush	2
26	270099	Washer	4
27	270139	Spring Washer	2
28	270282	Lock Nut	2
29	270592	Screw	1
30		Steering Wheel Assembly	1
31	270593	Screw	1
32	270594	Nut	1
33	270595	Balls	43
34	270596	Snap Ring	1
35	270597	Bushing	1
36	270598	Needle Bearing	1
36AA	270140	Tension Spring	1

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**9. CYLINDER ASSEMBLY INFORMATION**

**9.1 CYLINDER ASSEMBLY (UNITS MANUFACTURED BEFORE 12/2010) DIAGRAM**



ATTENTION: TO INSURE SAFE AND EASY USE OF YOUR WESCO HIGH LIFT TRUCK, READ THESE INSTRUCTIONS ENTIRELY BEFORE USING.

## 9. CYLINDER ASSEMBLY INFORMATION

### 9.2 CYLINDER ASSEMBLY (UNITS MANUFACTURED BEFORE 12/2010) PARTS LIST

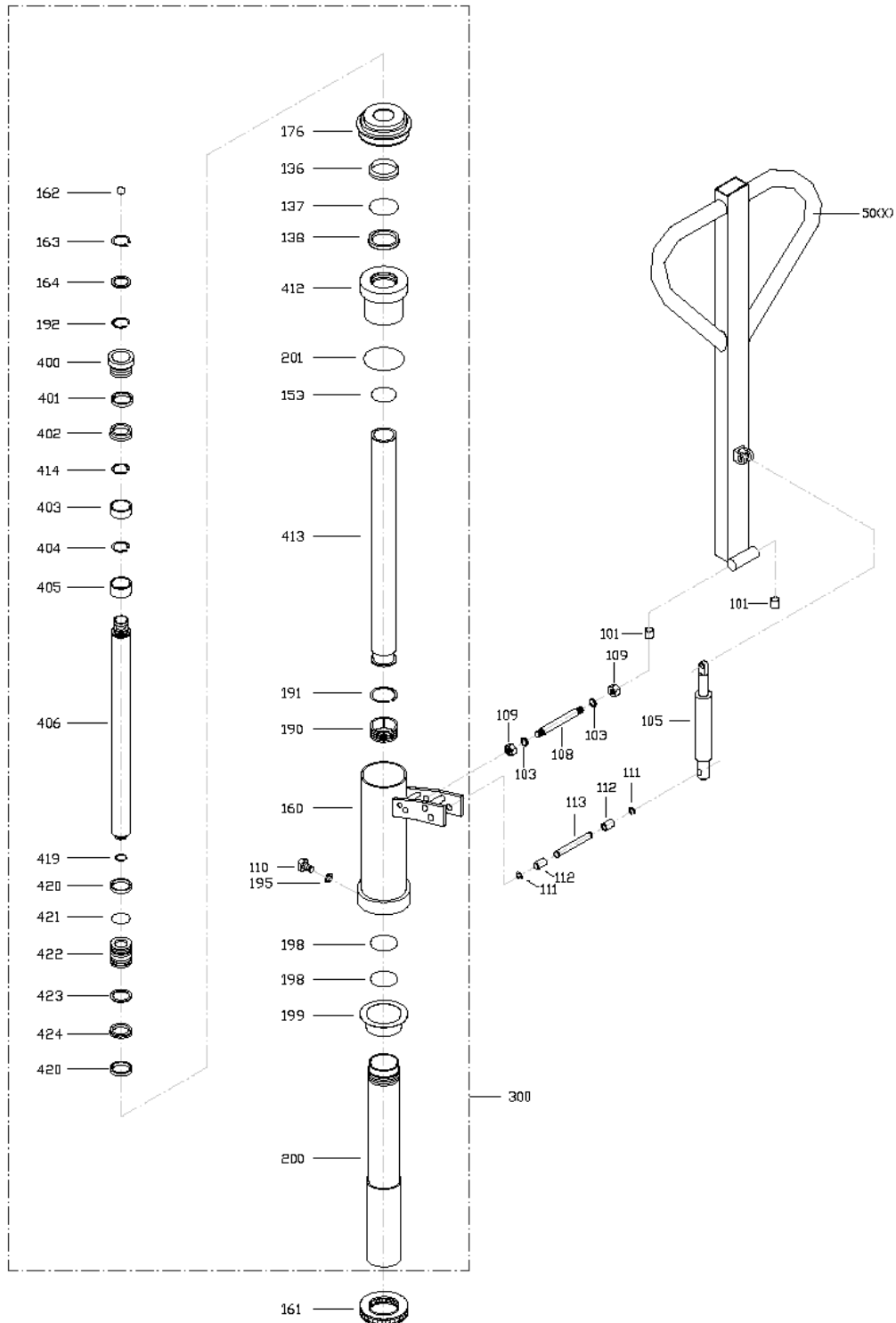
No.	WESCO Replacement P/N	Description	Qty.	No.	WESCO Replacement P/N	Description	Qty.
101	270684	Spacer	2	172	270329	Screw	1
103	270685	Washer	2	176	270323	Rubber Sleeve	1
105	270140	Tension Spring	1	190	270332	Copper Piston	1
108	270286	Pin	1	191	270333	Snap Ring	1
109	270686	Nut	2	192	270334	Snap Ring	1
110	270302	Adjusting Screw	1	195	270336	Washer	1
111	270304	Snap Ring	2	198	270588	O-Ring	2
112	270305	Sleeve	2	199	270589	Bushing	1
113	270306	Pin	1	200	270617	Cylinder	1
136		Scraper Ring	1	201	270618	Back-Up Ring	1
137	270308	O-Ring	1	201	270618	Back-Up Ring	1
138	270309	Y-Ring	1	400		Bronze Bushing	1
153	270310	O-Ring	1	401		Back-Up Ring	1
154	270311	Cylinder Head	1	402		Y-Ring	1
155	270315	Bushing	1	403		Bushing	1
156	270316	Cylinder	1	404		Snap Ring	1
157	270317	Plate	1	405		Bushing	2
160	270318	Pump Housing	1	406	270892	Piston Rod	1
161	270319	Thrust Bearing	1	407	270664	Piston Rod	1
162	270320	Ball	1	408	270852	Piston	1
163	270321	Snap Ring	1	409	270853	Washer	1
164	270322	Washer	1	410	270854	Washer	1
165	270323	Bronze Bushing	1	411		Screw	1
166	270659	Piston Rod	1	412		Cylinder Head	1
167	270325	O-Ring	1	413		Cylinder	1
169	270326	Y-Ring	1	414		Snap Ring	1
170	270327	Washer	1	300	270654	Cylinder Unit	1
171	270328	Piston	1				
SEAL KIT	270217	Seal Kit (Includes items 136, 137, 138, 153, 198 [2], 201, 401, 402, 420 [2], 407)	1				

**NOTE:** Items within kits specify quantity included per kit

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**9. CYLINDER ASSEMBLY INFORMATION**

**9.3 CYLINDER ASSEMBLY (UNITS MANUFACTURED AFTER 12/2010) DIAGRAM**



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## 9. CYLINDER ASSEMBLY INFORMATION

### 9.4 CYLINDER ASSEMBLY (UNITS MANUFACTURED AFTER 12/2010) PARTS LIST

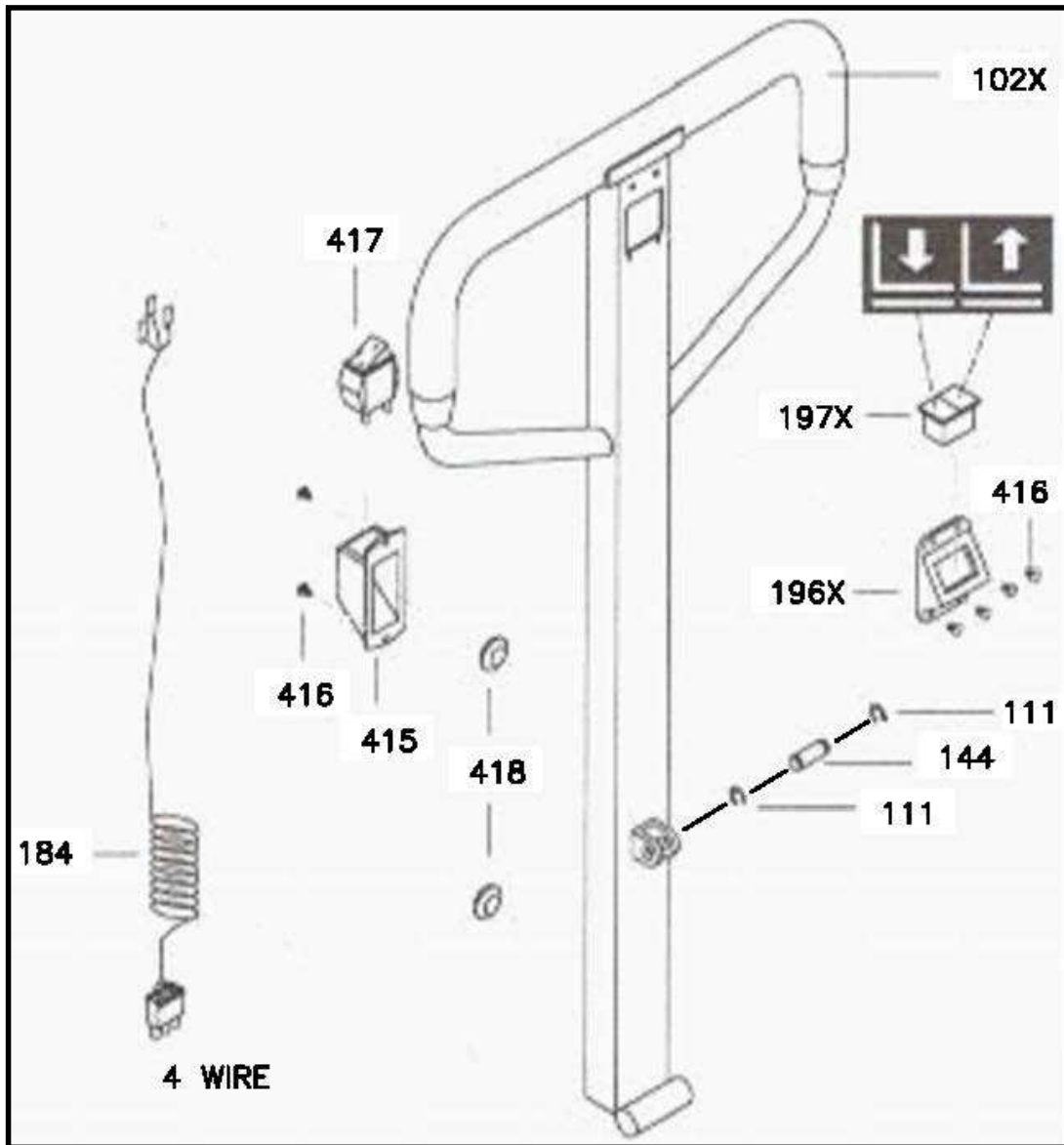
No.	WESCO Replacement P/N	Description	Qty.	No.	WESCO Replacement P/N	Description	Qty.
101	270684	Spacer	2	172	270329	Screw	1
103	270685	Washer	2	176	270323	Rubber Sleeve	1
105	270140	Tension Spring	1	190	270332	Copper Piston	1
108	270286	Pin	1	191	270333	Snap Ring	1
109	270686	Nut	2	192	270334	Snap Ring	1
110	270302	Adjusting Screw	1	195	270336	Washer	1
111	270304	Snap Ring	2	198	270588	O-Ring	2
112	270305	Sleeve	2	199	270589	Bushing	1
113	270306	Pin	1	200	270617	Cylinder	1
136		Scraper Ring	1	201	270618	Back-Up Ring	1
137	270308	O-Ring	1	201	270618	Back-Up Ring	1
138	270309	Y-Ring	1	400		Bronze Bushing	1
153	270310	O-Ring	1	401		Back-Up Ring	1
154	270311	Cylinder Head	1	402		Y-Ring	1
155	270315	Bushing	1	403		Bushing	1
156	270316	Cylinder	1	404		Snap Ring	1
157	270317	Plate	1	405		Bushing	2
160	270318	Pump Housing	1	406	270892	Piston Rod	1
161	270319	Thrust Bearing	1	412		Cylinder Head	1
162	270320	Ball	1	413		Cylinder	1
163	270321	Snap Ring	1	414		Snap Ring	1
164	270322	Washer	1	419		Snap Ring	1
165	270323	Bronze Bushing	1	420		Bushing	2
166	270659	Piston Rod	1	424		O-Ring	1
167	270325	O-Ring	1	422		Piston	1
169	270326	Y-Ring	1	423		Back-Up Ring	1
170	270327	Washer	1	424		Y-Ring	1
171	270328	Piston	1	300	270654	Cylinder Unit	1
SEAL KIT	270477	Seal Kit (Includes items 136, 137, 138, 153, 198 [2], 201, 401, 402, 420 [2], 421, 423, 424)	1				

**NOTE:** Items within kits specify quantity included per kit

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**10. NEW STYLE HANDLE INFORMATION**

**10.1 NEW STYLE HANDLE DIAGRAM**



ATTENTION: TO INSURE SAFE AND EASY USE OF YOUR WESCO HIGH LIFT TRUCK, READ THESE INSTRUCTIONS ENTIRELY BEFORE USING.

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## **10. NEW STYLE HANDLE INFORMATION**

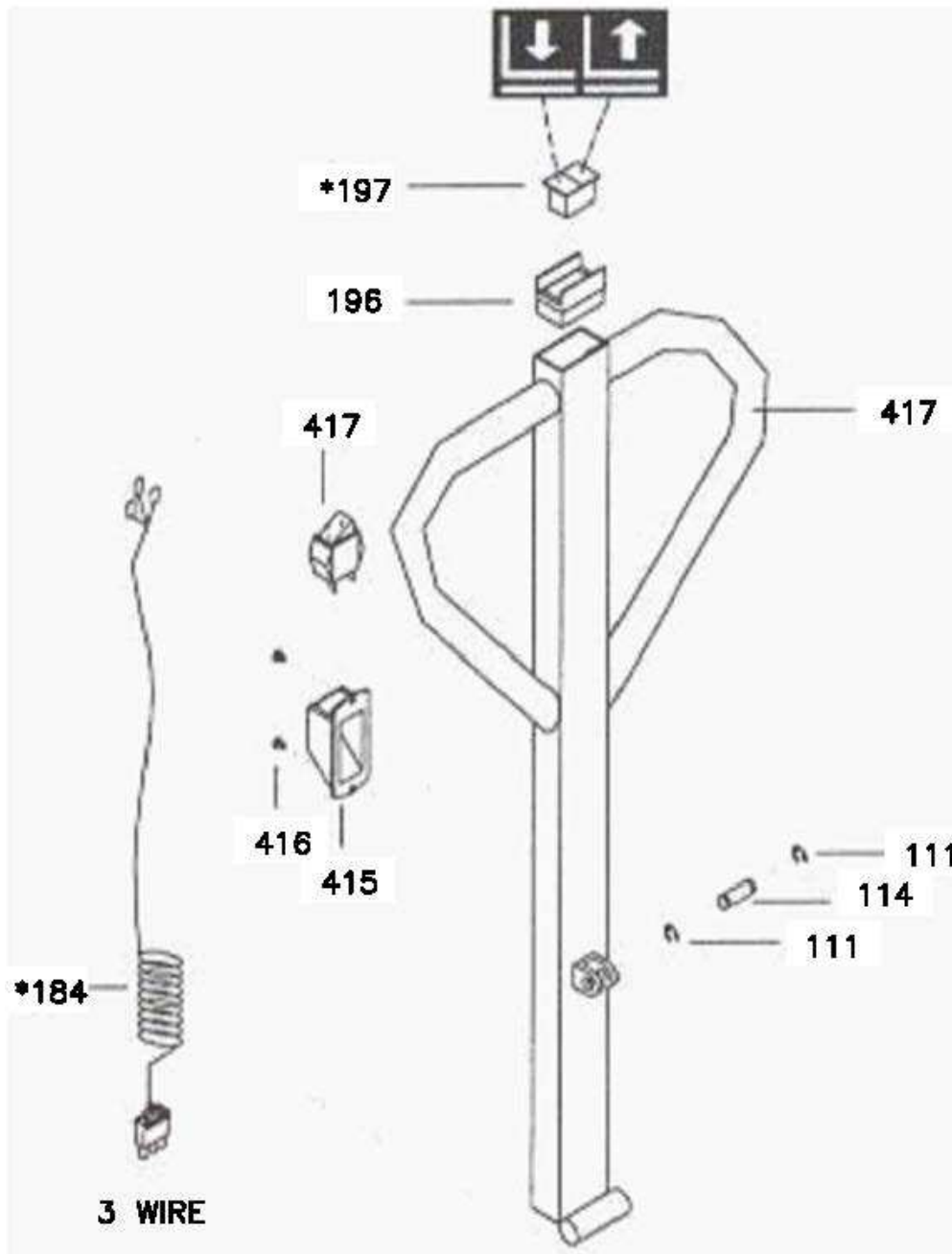
### **10.2 NEW STYLE HANDLE PARTS LIST**

<b>No.</b>	<b>WESCO Replacement P/N</b>	<b>Description</b>	<b>Quantity</b>
50	270651	Handle Assembly	1
102X	270342	Handle	1
111	270304	Snap Ring	2
114	270307	Pin	1
*	270396	(Items 184 & 197X )	1
184	*	Switch Wire & Plug – 4 Wire	1
196X	270476	Up/Down Switch Housing	1
197X	*	Up/ Down Switch	1
415	270668	On/Off Switch Housing	1
416	270669	Screw	6
417	270665	On/Off Switch	1
418	270670	Insulated Washer	2

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**11. OLD STYLE HANDLE INFORMATION**

**11.1 OLD STYLE HANDLE DIAGRAM**





ATTENTION: TO INSURE SAFE AND EASY USE OF YOUR WESCO HIGH LIFT TRUCK, READ THESE INSTRUCTIONS ENTIRELY BEFORE USING.

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## **11. OLD STYLE HANDLE INFORMATION**

### **11.2 OLD STYLE HANDLE PARTS LIST**

<b>No.</b>	<b>WESCO Replacement P/N</b>	<b>Description</b>	<b>Quantity</b>
102	270283	Handle	1
111	270304	Snap Ring	2
114	270307	Pin	1
*	270331	Kit: Items 184 & *197	1
184	*	Switch Wire & Plug-3 Wire	1
196	270337	Switch Housing	1
*197	*	Up/Down Switch	1
415	270668	Switch Housing	1
416	270669	Screw	2
417	270665	Switch	1