

# OWNER'S MANUAL, OPERATING INSTRUCTIONS MANUAL, and REPLACEMENT PARTS MANUAL

### **Altra Hand Pallet Truck**



This publication, 1314694/001C, applies to the Lift-Rite Hand Pallet Trucks, and to all subsequent releases of this product until
otherwise indicated in new editions. Changes occur periodically to the information in this publication.
To order additional copies of this manual, part number 1314694/001C, contact your local authorized Lift-Rite Sales and Service Center.
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# LIFFRITE:-

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### **DESCRIPTION OF THE PALLET TRUCK**

A truck with wheels supporting lifting fork arms for handling pallets, designed to be manually pushed, pulled, and steered, on a smooth, level, hard surface by a pedestrian operator using an articulated tiller. Pump the tiller to raise the load to a height sufficient for transporting.



#### **SAFETY SHOES**

Always wear safety shoes when working with hand pallet trucks.

#### **PROTECTIVE GLASSES**

When assembling or dismantling a hand pallet truck, protective glasses *must* be worn to avoid personal injury.

#### **OPERATOR'S RESPONSIBILITY**

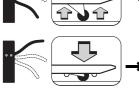
While operating a hand pallet truck, *always* wear safety equipment and operate in a responsible manner to ensure a safe work area.

### **DELIVERY INSPECTION**

Visually inspect hand pallet truck frame components and hydraulic unit for damage during shipment by carrier. If damage is evident, notify delivering carrier immediately and file necessary claims. Test the hand pallet truck pump for proper operation. If the hydraulic pump does not respond to movement of the handle, an air lock may have developed during shipping. To remedy this, go to the user friendly TROUBLESHOOTING guide in this manual.

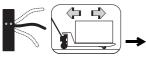
# **OPERATING INSTRUCTIONS**

(Read and understand prior to using this product)



To raise the load, push down on the fingertip control. Pump the handle to raise the load from the floor.

To lower the load, pull up on the fingertip control.



For free handle movement, place the fingertip control in the neutral position.

#### NOTE:

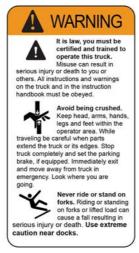
The neutral position disengages the pump from the lifting mechanism. This frees the handle, which makes pulling loads easier. In addition, the pump is not subject to shock pressures while the truck is in motion.



# **SAFETY PROCEDURES**

### (Read and understand prior to using this product)

 Read and obey all labels on this product. If you have any questions about these, ask your supervisor.



Located on the side of the bulkhead

- Do not operate this hand pallet truck unless you are authorized and trained to do so.
- Never overload your hand pallet truck. Stay within its rated capacity.
- Do not operate this truck if damaged or not in proper working order.
- Distribute the load evenly on the forks. Do not concentrate loads at one point or load one fork more than the other.
- When the load impairs visibility, the hand pallet lift truck should be pulled and not pushed.
- Always look where you are operating. Keep a clear view.
- Only handle loads on flat level surfaces. Do not use a loaded truck on inclines or declines.



Located on the tiller arm

- Never carry passengers.
- Never put your feet, hands, or any other body part under the frame assembly.
- Always yield right of way to pedestrians.
- Do not allow your hand pallet truck to drop from one level to another. Even a drop of 1 in. (25 mm) more than doubles the effective load momentarily and results in a loading that can bend or break components.
- Travel with the forks as low as possible for floor conditions.

### LIFFRITE:

- Always make sure that the load is stable before moving to eliminate the opportunity for load shift
- Use extreme care when rounding corners. Too fast a speed could cause a hand pallet lift truck to tip. If loaded, the load could shift and fall.
- When not in use, fully lower the forks.

# **DAILY INSPECTION**

At the start of your shift, check the items listed below. Report any malfunction or unsafe conditions to your supervisor. Do not use this product until it is repaired.

CHECK POINTS	Steering	Hydraulic System	Wheels	Chassis/Handle	Lifting/ Lowering	Labels
ACTION	Check full rotation	Check for excessive oil on exterior and check for function	Check for wear, damage, and remove debris	Check for damage and remove debris	Check for function	Check for readability

# **LIGHTING**

For the use of this lift truck, follow the OSHA requirements for lighting of the workplace.



### TO ATTACH HANDLE TO PUMP UNIT

- 1. Remove 3 bolts (D611) from the handle bracket (D151).
- 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).
- 3. Insert the 3 bolts (D611) through the handle into the bracket (D151), then tighten them securely.
- 4. Raise the lever plate (D132) and insert the adjusting bolt (D614) into the front slot, keeping the adjusting nut (D615) on the underside of the lever plate (D132).

### **TO ADJUST RELEASE DEVICE**

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

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

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

- 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.
- 2. If the forks lower while pumping in the **DRIVE** position, turn the nut (D615) or adjusting screw (D133) counter-clockwise until the forks do not lower.
- 3. If the forks do not lower 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 steps 1 and 2 to be sure the nut (D615) or adjusting screw (D133) is in the proper position.
- 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 steps 1, 2, and 3.



### **MAINTENANCE**

Your pallet truck is largely maintenance-free. Only qualified and authorized service technicians should maintain and inspect industrial lift trucks, including the replacement of wearable parts (wheels for example).

#### Oil

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

Temperature	Oil
-4° to +104°F (-20° to +40°C)	L-HV32 Hydraulic Oil

### **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 the forks to not elevate while pumping in the **RAISE** position. The air may escape in the following way: place the control handle (D608 or D608S) in the **LOWER** position, then move the handle (D610A, D610B, or D610AS) up and down several times.

#### Lubrication

Use motor oil or grease to lubricate all movable parts.

#### **Climatic Conditions**

The hand pallet truck is intended to be used for indoor applications with ambient temperatures between -4 $^{\circ}$  to +104 $^{\circ}$ F (-20 $^{\circ}$  to +40 $^{\circ}$ C).



# **TROUBLESHOOTING**

CONDITION	CAUSE	ACTION
The forks can not be lifted up to the maximum height.	The hydraulic oil is not enough.	Fill the oil.
	Without hydraulic oil.	Fill the oil.
	The oil has impurities.	Change the oil.
The forks can not be lifted up.	The nut (D615) is too high or the screw (D133) is too close, keeping the pump valve open.	Adjust the nut (D615) or the screw (D133). (See To Adjust Release Device).
	Air comes into the hydraulic oil.	Remove the air. (See How to Expel Air from the Pump Unit).
	The piston rod (D147) or pump body is deformed resulting from partial load slanting to one side or over-loading.	Replace the piston rod (D147) or pump body.
The forks can not be lowered.	The forks were kept in the high position for a long time with the piston rod bare causing rust and jamming of the rod.	Keep the forks in the lowest position, if not using, and lubricate the rod when necessary.
	The adjusting nut (D615) or the screw (D133) is not in the correct position.	Adjust the nut (D615) or the screw (D133). (See To Adjust Release Device).
Leaks	Sealing parts worn or damaged.	Replace worn or damaged sealing part.
	Some part cracked or worn.	Replace cracked or worn part.
	The impurities in the oil cause the release valve to be unable to close tight.	Replace with new oil.
	Some parts of hydraulic system are cracked or bored.	Inspect and replace the waste parts.
The forks lower without the release valve working.	Air comes into the oil.	Remove the air. (See How to Expel Air from the Pump Unit).
	Sealing parts worn or damaged.	Replace worn or damaged sealing part.
	The adjusting nut (D615) or the screw (D133) is not in the correct position.	Adjusting the nut (D615) or the screw (D133). (See To Adjust Release Device).



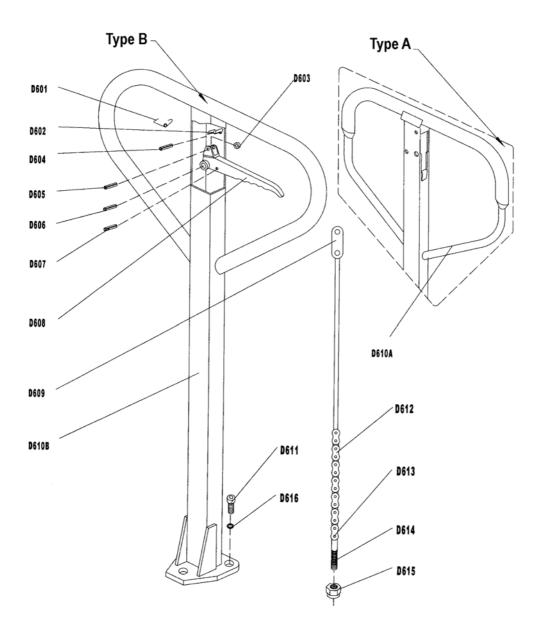
# **LIST OF ASSEMBLIES**

Use only Lift-Rite approved spare parts from the list below.

Parts No.	Description	List of Assemblies	Qty
DF20-01	Handle Assembly	D601, D602, D603, D605, D608, D609, D610B, D612, D613, D614, D615	1
DF20-02	Control Handle Kit	D603, D605, D608	1
DF20-03	Chain Assembly	D609, D612, D613, D614, D615	1
DF20-04	Load Roller Assembly (Single Type)	D220, D229	2
DF20-05	Load Roller Assembly (Tandem Type)	D220, D221	4
DF20-06	Steering Wheel Assembly	D116, D127	2
DF20-07	Pump Unit Seal Kit	D104, D105, D107B, D111B, D131, D135, D141, D143, D144, D148, D157	1
DF20-08	Bracket Assembly	D150, D151, D152, D154, D156	1
DF20-09	Pump Assembly	D101, D102, D103, D104, D105, D106B, D107B, D108, D109, D110B, D111B, D112, D113, D129, D130, D131, D132, D133, D134, D135, D136, D137, D139, D140, D141, D142, D143, D144, D145, D146, D147, D148, D149, D150, D151, D152, D153, D154, D155, D156, D157, D158, D159B, D160B	1



# HANDLE ASSEMBLY, TYPE A AND TYPE B



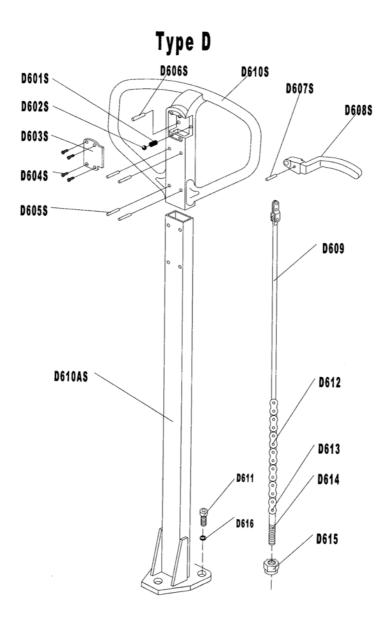


# HANDLE ASSEMBLY, TYPE A AND TYPE B (CONT'D)

No.	Description	Qty	Type(s)			
*D601	Spring	1				
*D602	Spring, Blade	1				
*D603	Roller	1				
D604	Pin, Elastic	1				
*D605	Pin, Elastic	1				
D606	Pin, Elastic	1				
D607	Pin, Elastic	1				
*D608	Handle, Control	1				
*D609	Board, Pull	1				
D610A	Handle	1	A			
*D610B	Handle	1	В			
D611	Screw	3				
*D612	Chain	1				
*D613	Pin	1				
*D614	Bolt, Adjusting	1				
*D615	Nut, Adjusting	1				
D616	Washer, Elastic	3				
*Asterisk =	*Asterisk = Available in Kit (See List of Assemblies Parts List)					



# **HANDLE ASSEMBLY, TYPE D**



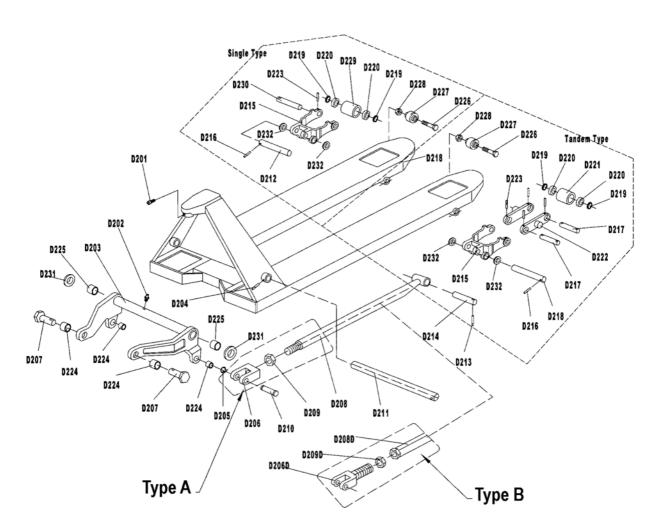


# **HANDLE ASSEMBLY, TYPE D (CONT'D)**

No.	Description	Qty	Type(s)
D601S	Spring	1	D
D602S	Ball, Steel	1	D
D603S	Cover	1	D
D604S	Screw	4	D
D605S	Pin	4	D
D606S	Pin	1	D
D607S	Pin, Elastic	1	D
D608S	Handle, Control	1	D
D609S	Board, Pull	1	D
D610S	Handle	1	D
D610AS	Bar, Draw	1	D
D611	Screw	3	
D612	Chain	1	
D613	Pin	1	
D614	Bolt, Adjusting	1	
D615	Nut, Adjusting	1	
D616	Washer, Elastic	3	



# **FORK FRAME ASSEMBLY**



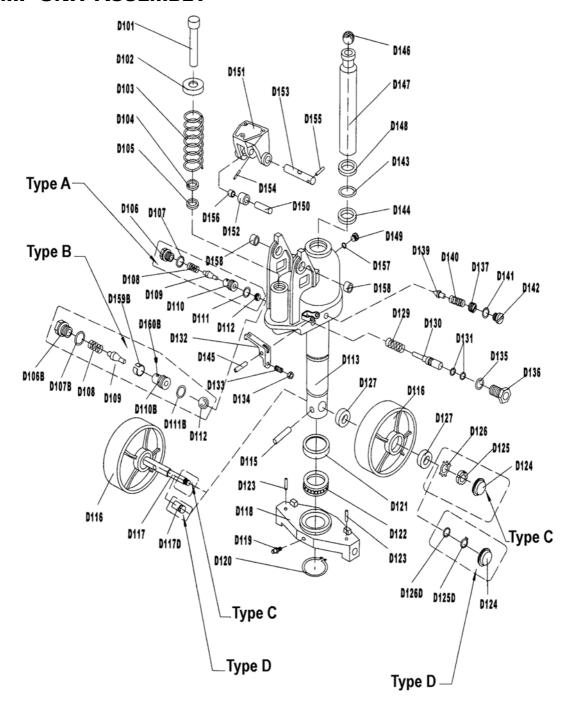


# FORK FRAME ASSEMBLY (CONT'D)

No.	Description	Qty	Type(s)			
D201	Screw	1				
D202	Holder, Oil	1				
D203	Arm, Rock	1				
D204	Pin, Elastic	1				
D205	Ring, Retaining	2				
D206	Joint	2	А			
D206D	Joint	2	В			
D207	Shaft	2				
D208	Rod, Pushing	2	A			
D208D	Rod, Pushing	2	В			
D209	Nut	2	А			
D209D	Nut	2	В			
D210	Pin	2				
D211	Shaft	1				
D212	Shaft	2				
D213	Pin, Elastic	2				
D214	Shaft	2				
D215	Roller, Frame	2				
D216	Pin, Elastic	2				
D217	Roller, Frame	4	Tandem Wheel			
D218	Frame, Fork	1				
D219	Washer	8 or 4				
*D220	Bearing	8 or 4				
*D221	Roller, Loading	4	Tandem Wheel			
D222	Plate, Linking	4	Tandem Wheel			
D223	Pin, Elastic	8 or 2				
D224	Bushing	4				
D225	Bushing	2				
D226	Bolt	2				
D227	Roller, Enter	2				
D228	Nut	2				
*D229	Roller, Loading	2	Single Wheel			
D230	Roller, Shaft	2	Single Wheel			
D231	Washer	2				
D232	Washer	4				
*Asterisk = Par	*Asterisk = Part of Assembly DF20-04 (See List of Assemblies Parts List)					



# **PUMP UNIT ASSEMBLY**





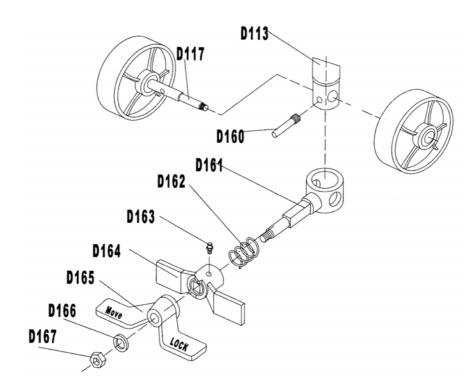
# **PUMP UNIT ASSEMBLY (CONT'D)**

No.	Description	Qty	Type(s)
*D101	Rod, Pump Piston	1	
*D102	Washer	1	
*D103	Spring	1	
*D104	Ring, Dust	1	
*D105	Seal, Y	1	
D106	Screw	1	А
*D106B	Screw	1	В
D107	O-Ring	1	А
*D107B	O-Ring	1	В
*D108	Spring	1	
*D109	Valve, Pumping Spindle	1	
D110	Valve, Pumping Seat	1	А
*D110B	Valve, Pumping Seat	1	В
D111	O-Ring	1	А
*D111B	O-Ring	1	В
*D112	Ball, Steel	1	
*D113	Pump, Base	1	
D115	Pin, Elastic	1	
*D116	Wheel, Steering	2	
D117	Wheel, Steering Shaft	1	C and D
D118	Plate, Thrust	1	
D119	Holder, Oil	1	
D120	Ring, Retaining	1	
D121	Bearing, Cover	1	
D122	Bearing	1	
D123	Pin, Elastic	2	
D124	Cover, Dust	2	
D125	Nut, Round	2	C and D
D126	Washer, Tab	2	C and D
*D127	Bearing	4	
*D129	Spring	1	
*D130	Pin, Strike	1	
*D131	O-Ring	2	
*D132	Plate, Lever	1	
*D133	Screw, Adjusting	1	



No.	Description	Qty	Type(s)
*D134	Nut	1	
*D135	O-Ring	1	
*D136	Sleeve, Axle	1	
*D137	Bolt, Adjusting	1	
*D139	Valve, Safety Spindle	1	
*D140	Spring	1	
*D141	O-Ring	1	
*D142	Screw	1	
*D143	O-Ring	1	
*D144	Seal, Y	1	
*D145	Pin, Elastic	1	
*D146	Ball, Steel	1	
*D147	Rod, Piston	1	
*D148	Ring, Dust	1	
*D149	Screw	1	
*D150	Shaft	1	
*D151	Bracket	1	
*D152	Roller, Pressure	1	
*D153	Shaft	1	
*D154	Pin, Elastic	1	
*D155	Pin, Elastic	1	
*D156	Bushing	1	
*D157	Washer, Seal	1	
*D158	Bushing	2	
*D159B	Sleeve	1	В
*D160B	Screw	1	В
*Asterisk =	= Available in Kit (See List of Assemblies Parts List)		

# **FOOT BRAKE (OPTIONAL)**



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



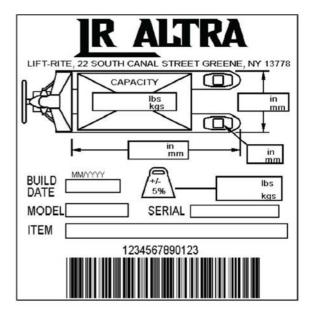
# **RECYCLING YOUR OLD LIFT-RITE PARTS**



Chassis	Steel
Roller suspension	Steel and cast iron
Bushings	Brass
Grease fittings	Steel
Rollers	Steel
Hydraulic body	Cast iron
Thrust plate	Cast iron
Handle	Steel
Wheel	Steel
Bushings	Brass
Hydraulic oil	Disposal in accordance with local regulations
Assembly parts	Steel, brass, nylon

### **PALLET TRUCK MEASUREMENTS**

Overall width: 27 in. (686 mm)
Usable fork length: 48 in. (1220 mm)
Weight: 140 +/- 5% lbs. (63 +/- 5% kg)



Located on the back of the bulkhead

# **MODIFICATIONS AND ADDITIONS**

Pursuant to Occupational Safety and Health Administration (OSHA) regulations, modifications and additions that affect capacity or safe operation shall not be performed by the customer or user without the prior written consent of Lift-Rite. Contact your local authorized Lift-Rite Sales and Service Center before making any alteration or modification to this lift truck.



### HAND PALLET TRUCK WARRANTY

The Altra Hand Pallet Truck, is warranted against defects in materials and workmanship for a period of twelve (12) months for hydraulics and chassis, and three (3) months for wearables from date of installation.

Components found to be defective by an authorized Lift-Rite Sales and Service Center during the warranty period will be replaced or repaired as indicated above. Replacement components installed during the defined period set forth above, are warranted for the balance of the applicable truck warranty period, or 90 days, whichever is longer. Additionally, freight charges for parts involved in the replacement or repair of a defective component will be paid by Lift-Rite, provided that the replacement or repair is made by an authorized Lift-Rite Sales and Service Center. Labor or miscellaneous costs involved in the replacement of any components determined to be defective are not covered. Local taxes, if any, are excluded.

This warranty is void in the event of defects or damage caused by misuse, abuse, or accident. Any truck used under adverse conditions, such as fish, meat, or poultry processing plants, tanneries, freezer applications, or any other application where the unit is operating in water or subjected to fluid or chemicals is NOT covered under any warranty.

This warranty does not cover oil leaks, adjustments, or loose hardware.

Lift-Rite reserves the right to make changes and improvements in design without making changes to previously manufactured vehicles.

Notwithstanding any other language contained herein, this warranty is expressly voided without any further notice if any modification is made to the Lift-Rite equipment, or if additional components or devices are added to the Lift-Rite equipment, without prior approval having been granted in writing by Lift-Rite.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED, IMPLIED, OR STATUTORY. THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. In no event shall Lift-Rite be liable for incidental, special, or consequential damages.

# **Part Kit Number**

1314823/001

