



OZ BUILDER'S HOIST WIRED OR WIRELESS

MODELS:

OBH500

OBHW500

OBH1000

OBHW1000

CE FC

 **CAUTION**

Read operator's manual carefully before operating this product. Keep this manual nearby for reference at all times while operating this product.



 **LIFTING
PRODUCTS**

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INTRODUCTION:

OZ Builder's Hoist is designed for use on commercial buildings sites and in various construction workplaces, warehouses, storage facilities and factories.

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NOTE: Ensure the hoist is mounted on a straight bar or one of OZ Lifting Products, LLC®'s mounting solutions, which only allows the hoist to swing backward and forward and not left to right or swing 360°. Failure to do this could result in uneven winding of rope onto the drum, rope jamming, and rope damage.

ONE YEAR WARRANTY

OZ Lifting Products, LLC® guarantees this product to be free of defects in materials and workmanship for one year from the date of shipment.

This warranty does not apply to products that show signs of misuse, overloading, alteration, improper maintenance or negligence. The normal wear and tear of moving parts is excluded from the warranty. Moving parts are defined as brake discs, wire rope and other wear components that are subject to use conditions. This warranty does not cover any costs related to removal of this product, lost time, or any other incidental or consequential damages/costs resulting from the claimed defects.

If this product fails during the first year of operating due to defective materials or workmanship, it will be repaired or replaced at the discretion of OZ Lifting Products, LLC®. Any product subject to a warranty claim must be returned, prepaid, to an authorized OZ Lifting Products, LLC® warranty depot along with proof of purchase. Upon repair, the product will be returned to the customer free of charge. If no defect is found, the customer will be responsible for return shipping costs. The

product's warranty will be effective for the remainder of the original warranty period (one year from shipment date).

OZ Lifting Products, LLC® will not be held liable for the following arising from the use of this product: injuries to persons or property, death, incidental, consequential, or contingent damages, whether negligent or deliberate. It is the sole responsibility of the owner to install and operate the product properly and safely.

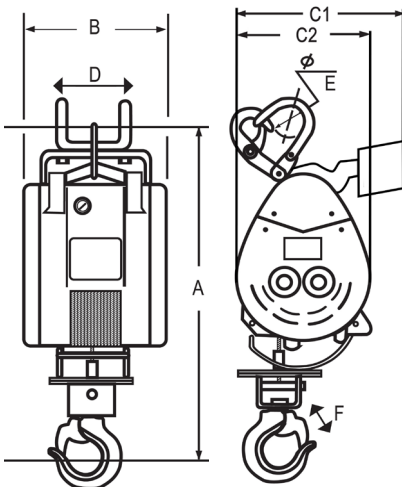
This is OZ Lifting Products, LLC®'s only written warranty. This warranty is in lieu of all other warranties implied by law such as merchantability and fitness. The sale of products from OZ Lifting Products, LLC® under any other warranty or guarantee, expressed or implied, is not authorized.

NOTE: OZ Lifting Products, LLC® has the right to alter the design of or discontinue the production of any product without prior notice.

SPECIFICATIONS:

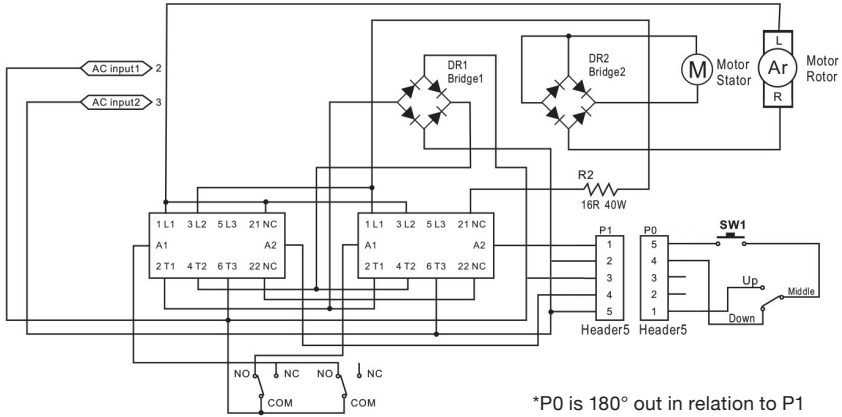
MODEL SPECIFICATION AND DIMENSIONS				
Model	OBH500	OBHW500	OBH1000	OBHW1000
Rated Load	500 lb	500 lb	1,000 lb	1,000 lb
Lifting Height	90 ft (30 m)	90 ft (30 m)	90 ft (30 m)	90 ft (30 m)
Wire Rope Diameter	3/16" (5mm)	3/16" (5mm)	1/4" (6mm)	1/4" (6mm)
Motor	1300W	1300W	1800W	1800W
Full Drum Lifting Speed	75 ft (23 m)/min	75 ft (23 m)/min	43 ft (13 m)/min	43 ft (13 m)/min
Pendant Length	65 ft (20 m)	65 ft (20 m)	65 ft (20 m)	65 ft (20 m)
Wireless Range	N/A	250 ft (76 m)	N/A	250 ft (76 m)
Power Supply	115V/1P/60HZ			
Duty Cycle	ED 25% Max. on time: 15 min/hr. Max. number of starts: 150/hr.			
International Protect	54			
Insulation Class	F			

*Dimensions are for reference only and subject to change without notice.



		OBH500	OBHW500	OBH1000	OBHW1000
A	Height	26.77"	26.77"	28.50"	28.50"
B	Width	9.50"	9.50"	10.50"	10.50"
C1	Depth	---	10.00"	---	12.00"
C2	Depth	7.88"	---	12.00"	---
D	Hanger Width	4.50"	4.50"	5.50"	5.50"
E	Hanger Opening	2"	2"	2"	2"
F	Hook Opening	1.62"	1.62"	1.50"	1.50"

WIRING DIAGRAM:



SAFETY PRECAUTIONS:

STORAGE AND TRANSPORTATION:

It is highly recommended that the electrical connections to the hoist be removed to prevent damage to the connectors for storage, transportation or shipping of hoist.

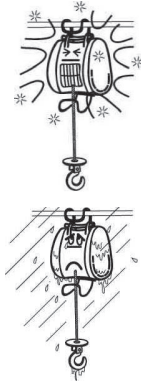
Removal of the wireless adapter, pendant and power connectors prior to any of the above listed will prevent expensive damage to the unit.

ENVIRONMENTAL PRECAUTIONS:



The following conditions may result in hoist failure or damage.

- Temperatures below 14°F or above 104°F or humidity above 90%
- Acidic or salty conditions
- Rain or snow



- Explosive fumes or sprays
- Heavy dust or flammable particles



DUTY CYCLE:

NOTE: Never exceed the duty cycle of the hoist. The duty cycle for OZ BUILDER'S HOIST is 15 continuous minutes or 150 starts per hour. Please follow these ratings.

The life of the hoist depends on attention to the load and to working frequency. Use the hoist only within its duty cycle.

With any electric motor, it is important to let the motor cool after reaching the duty cycle.

HANDLING PRECAUTIONS:



Failure to follow these handling precautions may result in personal injury or equipment damage.

- Never lift a load heavier than the rated capacity.



- Never hitch a ride on the hook, sling or load being moving.



- Don't work, walk or stand under an operating hoist.



- Do not lift or lower people.



- Always be aware of your surroundings. Think safety.

- Always remain in control. Never neglect the hoist while lifting a load.

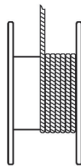
- Only lift a load vertically



- Confirm that all components of the hoist are in good working order prior to lifting.



- Ensure there is a minimum of five (5) wraps of rope around the drum.



- Check brake performance prior to lifting. If there is any malfunction, stop operation immediately.

ASSEMBLY:



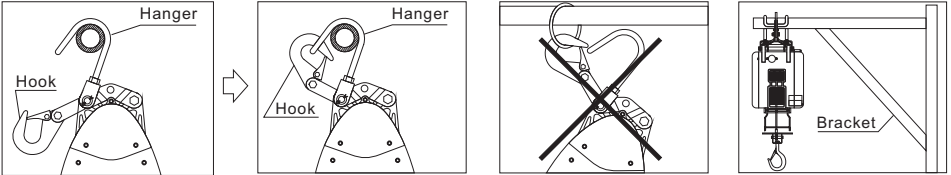
Very important when connecting the wire rope to the bottom hook the cable must run on the outside of the lower limit bar. If ran on the inside of the bar damage will happen to the wire rope and the hoist.



MOUNTING:

Ensure the hoist is mounted on a straight bar that allows only for front-to-back swinging, not left-to-right or rotational swinging. Failure to do so could result in uneven winding of rope onto the drum, rope jamming and rope damage. When hanging the hoist, ensure it is free from other obstructions. Always keep the hoist as level as possible to prevent uneven winding.

NOTE: Always lock the hanger before every lift.



FOR MODELS OBHW500 & OBHW1000:

- 1) Mount bracket to the receiver using included 10mm hex bolt. Do not over-tighten as it may damage the housing.
- 2) Remove the cotter pin and nut from the mounting bolt. Ensure that the bracket arms of the receiver are on the outside of the bracket on the hoist itself. Insert the mounting bolt, reinstall the nut and cotter pin.
- 3) Insert and tighten the 5-pin male connector of the receiver cord into the 5-pin female connector on hoist body. It is advised to tie-up the wiring with zip ties to reduce the possibility of damage.
- 4) Insert the 3-pin female power connector to the 3-pin male connector.
- 5) Carefully peel protective rubber sleeve back on the wireless remote, going over the top of the E-Stop. Remove the two (2) screws on the battery compartment and insert two (2) AA batteries, paying close attention to correct polarity. Replace battery compartment cover and screws. Gently work protective rubber sleeve back into position.

CONNECTING THE CORDS:

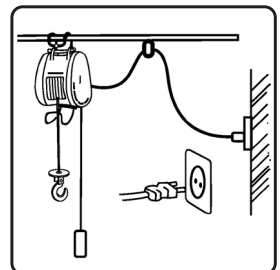
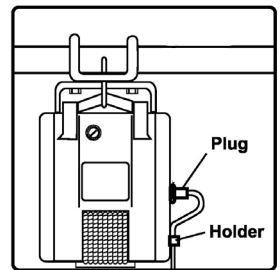
POWER/SWITCH CORD:

- 1) Align the cords with the matching socket on the power receptacle of the hoist. Tighten the locking ring clockwise.
- 2) Secure the cords with the strain relief clips. These clips are attached to the cords and secures to a ring on the hoist to reduce cable strain. Do not allow the cords to come into contact with the wire rope or drum.

POWER CORD RECOMMENDATIONS:

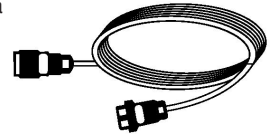
- 14 gage (AWG) - Cord length up to 50 ft. maximum
- 12 gage (AWG) - Cord length up to 100 ft. maximum

NOTE: Do not use multiple shorter length cords to achieve desired distance.



GROUNDING:

To prevent the risk of electric shock, the power plug must be plugged into a matching outlet in good condition.



NOTE: The power cord and control cord are different plug types and cannot be interchanged.

WORKING METHODS:

PREPARATION:

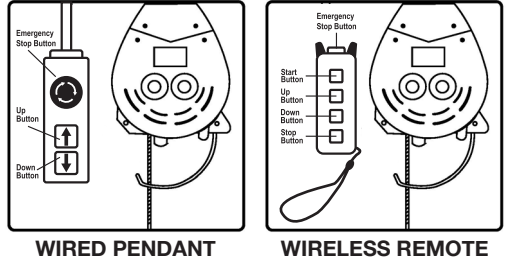
- Confirm a safe working environment prior to operation.
- Ensure a minimum of five (5) wraps of wire rope is wound around the drum.
- Discard wire rope that shows signs of excessive wear or broken wires. Look for corrosion or other defects.
- Connect the main power source. There will be a loss of power if input voltage falls out of rated voltage by +10%.
- Do not lift loads exceeding the rated load.

WIRED PENDANT/WIRELESS REMOTE OPERATION:

To activate, release E-STOP button. If using wireless remote, press START button.

Press UP button to raise load. Press DOWN button to lower load.

NOTE: Always let hoist come to a complete stop before changing directions. Failure to do this may cause electrical damage to the hoist.



STOP button on wireless remote will deactivate the UP/DOWN buttons. Press START button to resume operation.

WINCH PRINCIPLES:

PERCENTAGE DUTY CYCLE:

The life of the winch is depending on the conditions of the load and working frequency. In the long time operation, make sure to use the machine within its short time ratings. Short time ratings means the working duty cycle is subject to the rated voltage, rated frequency and a 63% of rated load. All mini winches are rated 25% percentage duty cycle.

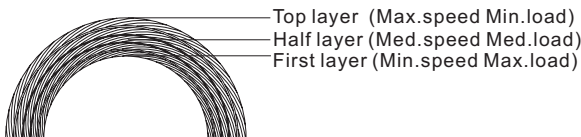
$$\text{percentage duty cycle} = \frac{\text{Operating hours}}{\text{Operating hours} + \text{stopping hours}} \%$$



WARNING

Never hoist over the rated percentage duty cycle.

LOAD RATED:

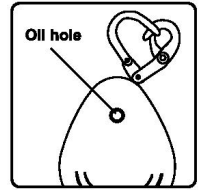


BRAKING:

- Braking device is composed of a mechanic brake and an electronic generated brake. The brake distance from the time of braking until stopping completely should be within 1.5% of rope length to the wound in during 1 minute.
- Owing to the rope speed on no load is 1.5 -1.8 times faster than that on rated load, the brake distance on no load will be longer, but still within 1.5% of rope length.
- It is highly recommended that any adjustments are carried out by a qualified technician at an authorized service center.

OIL LUBRICATION:

Hoists are pre-oiled at the factory and do not require initial lubrication. Re-lubrication interval depends upon service. Recommended oil replenishment quantity & intervals are as follows.



Oil Grade: HD680 or equivalent **Oil Amount:** 8.45 oz. **Intervals:** As needed

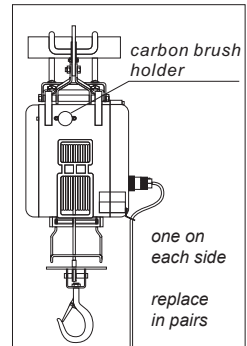
CARBON BRUSH REPLACEMENT:



WARNING

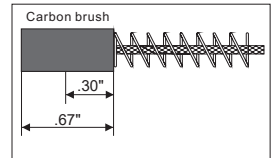
Clean the accumulated powder off carbon brushes periodically.

- It is essential to check the carbon brushes periodically.
- If the length is less than .30 in. replace carbon brushes immediately.
- While replacing, smoothly insert carbon brush into carbon holder.
- Before tightening the carbon brush holder, make sure to position the O ring.



ASME DUTY CLASSIFICATION:

ASME Duty Classes	Service Classification	Description
H1	Infrequent or Standby	Idle 1-6 months, use for installations and/or maintenance
H2	Light	Light maintenance, fabrication, capacity loads infrequently handled, randomly distributed loads, low running time
H3	Standard	General machining, randomly distributed loads, total running time $\leq 25\%$ of working period
H4	Heavy	High volume handling of heavy loads near rated capacity, steel warehousing, machining, foundries, total running time $\leq 50\%$ of working period
H5	Severe	Bulk material handling with attachments, approach continuous operation



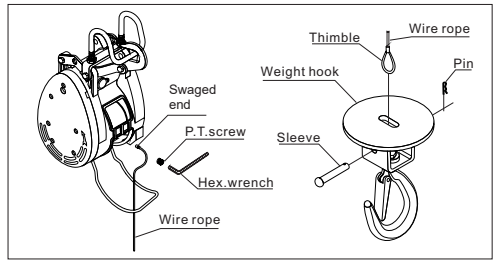
WIRE ROPE REPLACEMENT:

WEIGHT HOOK:

- Put a new wire rope through the hole of the round plate of weight hook.
- Insert a sleeve pin through the thimble of wire rope.
- Insert a pin through the sleeve and bend it by pliers.

DRUM:

- Insert new wire rope with swaged end through the limit lever and insert it into the hole of the drum.
- Put the P.T. screw into the hole of the drum and tighten it by a hexagon wrench.
- Press the UP button to rotate the drum in the lifting direction.
- An uneven winding of wire rope may cause the load to be swing, that will damage the rope and reducing its service life.



CHECKING REFERENCE:

- The specified person performs the checking of hoist.
- Divide the checking into daily checking and periodic checking.
- The checking items and checking method in daily and periodic checking shall be carried out and different according to the using frequency.

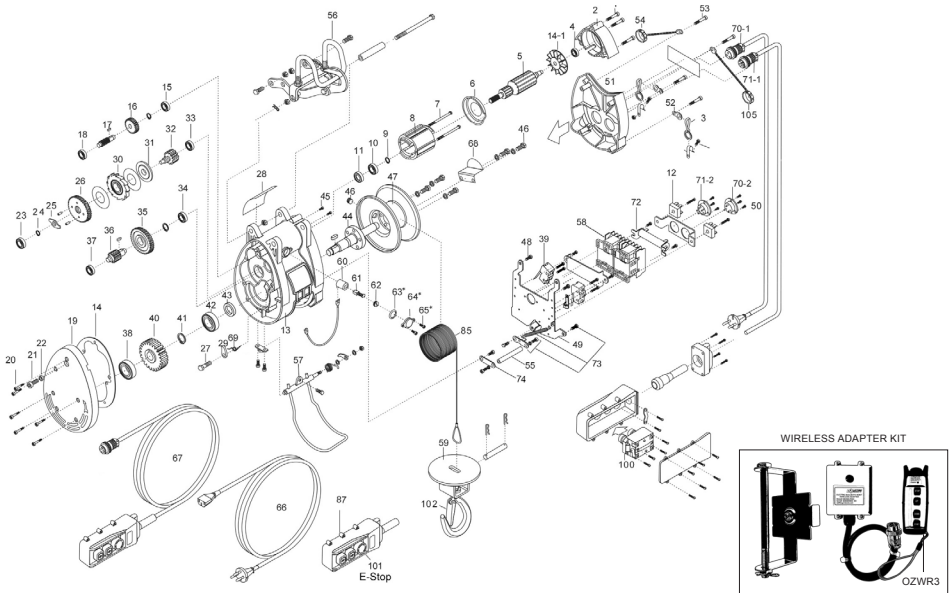
CHECKING ITEMS		CHECKING METHODS	CLASSIFICATION OF CHECKS			
			DAILY	PERIODICAL		
				3 MONTHS/ 20 HOURS	1 YEAR	YEARS OR 250 HOURS
Brake	Operational Holds load Excessive drift	Manual Manual Manual	■ ■ ■			
Carbon Brush	Wear	Measure (see page 8)		■		
Motor	Cover damage Carbon powder accumulation	Visual Decomposition check	■		■	
Wired Pendant	Operational Fully-seated and properly secured connectors Cord condition Housing condition	Manual Visual Visual Visual	■ ■ ■ ■			
Wireless Remote	Operational Housing condition	Manual Visual	■ ■			
Safety Device	Upper limit switch intact/move freely Lower limit switch intact/move freely Distortion of upper limit arm Wire rope wound correctly	Visual Visual Visual Visual	■ ■ ■ ■			
Wire Rope	Kinked Broken wire more than 10% Decreasing of diameter more than 7% Corrosion	Visual Visual Visual Visual	■ ■ ■ ■			
Weight Hook and Hanger	Distortion Damage Loosening Latch	Visual Visual Visual Visual	■ ■ ■ ■			
Drum	Condition	Visual	■	■		
Gear Trains	Operational Oil leaks Oil level	Manual Visual Measuring	■ ■		■	
Fastenings	Loosening	Manual	■		■	
Labels	Legible safety decals and ID tags	Visual	■			

TROUBLESHOOTING:

SYMPTOM	POSSIBLE CAUSE	REMEDY
No reaction	Compromised power source	Ensure power cord and pendant are fully connected to hoist Ensure E-STOP is released
	Line of sight interference with wireless remote	Ensure area is clear of obstructions and hoist is within 250 ft
	Wireless remote batteries are dead	Replace
	Open circuit on power cord or pendant cord	Check power cord or pendant cord for continuity
	Open bridge rectifier on power side	Replace the bridge rectifier, pay attention to the connections
	Malfunctioning armature and/or field coil	Replace armature and/or field coil
	Improperly installed/damaged/worn carbon brush(es) - brush length less than .300	Replace brushes as a set and ensure free movement of brushes in brush holder
Can lift but fails to lower	Lower limit arm stuck up	Ensure the lower limit arm moves freely
	Lower limit microswitch open	Replace the lower limit microswitch
	Open bridge rectifier motor side	Replace the bridge rectifier, pay attention to the connections
	Malfunctioning DOWN switch in pendant	Replace the UP/DOWN switch assembly
Can lower but fails to lift	Upper limit arm stuck in	Ensure the upper limit arm moves freely
	Loose/mis-adjusted upper limit arm stop nut & bolt	Tighten/adjust as required
	Upper limit microswitch out of adjustment	Adjust actuating arm of microswitch until switch clicks in both directions of upper limit arm
	Upper limit microswitch open	Replace the upper limit microswitch
	Open bridge rectifier motor side	Replace the bridge rectifier, pay attention to the connections
	Malfunctioning UP switch in pendant	Replace the UP/DOWN switch assembly
Short circuit	Incoming power interrupted when plugged in	Disconnect pendant from hoist and reattempt plugging into power source. If power source is interrupted again, replace power side bridge rectifier. If power source is not interrupted, investigate possible issue with UP/DOWN switch assembly or pendant wiring
	Incoming power interrupted when either UP or DOWN switch is pressed	Replace motor side bridge rectifier (pay attention to the connections)/field coil/armature as needed
Fail to lift load	Hoist overloaded	Reduce load
	Improperly installed/damaged/worn carbon brush(es) - brush length less than .300	Replace brushes as a set, ensure free movement of brushes in brush holder
Failure to hold load after stopping operation	Ratchet pawl worn, ratchet pawl sprig broken, or set bolt loose	Replace as required NOTE - These items are in the gear train. Additional items required for this repair is a gasket and oil.
	Overloaded/malfunctioning brake assembly/mis-adjusted	Field repair and/or adjusting not recommended
Braking distance too long with no load	Braking resistor out of tolerance or open	Replace braking resistor

PARTS BREAKDOWN:

OBH500, OBHW500, OBH1000, OBHW1000



No.	DESCRIPTION (QTY.)
1	Hex Screw (3)
2	Motor Cover (1)
3	Lanyard (2)
4	Bearing (1)
5	Armature (1)
6	Fan Cover (1)
7	Hex Screw (2)
8	Field Coil (1)
9	C Ring (1)
10	Bearing (1)
11	Oil Ring (1)
12	Rectifier (2)
13	Gear Box (1)
14	Gasket (1)
15	Bearing (1)
16	1st Gear (1)
17	2nd Shaft (1)
18	Bearing (1)
19	Gear Case Cover (1)
20	Hex Screw (7)
21	Hex Screw (1)
22	O Ring (1)
23	Bearing (1)
24	C Ring (1)
25	Brake Stop (1)
26	2nd Gear (1)
27	Set Bolt (1)

No.	DESCRIPTION (QTY.)
28	Id Tag (1)
29	Pawl (1)
30	Ratchet (1)
31	Brake Disk (1)
32	3rd Shaft (1)
33	Bearing (1)
34	Bearing (1)
35	3rd Gear (1)
36	4th Shaft (1)
37	Bearing (1)
38	Bearing (1)
39	Micro Switch (2)
40	4th Gear (1)
41	C Ring (1)
42	Bearing (1)
43	Oil Ring (1)
44	Output Shaft (1)
45	Hex Screw (6)
46	P.T Screw (1)
47	Drum (1)
48	Screw (4)
49	Plate Ass'y (1)
50	Screw
51	Housing Cover (1)
52	Ring (1)
53	Hex Screw (4)
54	Cover (2)

No.	DESCRIPTION (QTY.)
55	Limit Am Ass'y-Down (1)
56	Suspension Hook Ass'y (1)
57	Limit Arm Ass'y-Up (1)
58	Electromagnetic Contactor (2)
59	Swivel Hook (1)
60	Carbon Brush Holder (2)
61	Carbon Brush (2)
62	Brush Cap (2)
63*	O Ring (2)
64*	Brush Cover (2)
65*	Screw (4)
66	Power Cord Ass'y (1)
67	Pendant Ass'y (1)
68	Rope Stopper (1)
69	Pawl Spring
70-1	Power Connector (1)
70-2	Power Connect (On Body) (1)
71-1	Pendant Connector (Body) (1)
71-2	Pendant Connector On Body (1)
72	Resistor (1)
73	Right Lower Limit Actuating Arm
74	Left Lower Limit Actuating Arm
85	Wire Rope Ass'y (1)
87	Pendant Only (1)
100	Up/Down Switch (1)
101	E-Stop (1)
102	Latch
OZWR3**	Wireless Remote

* OBH500/OBHW500 only
 ** OBHW500/OBHW1000 only

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