

PATENT PENDING ISO STANDARD 9001:2015 CERTIFIED

# **OPERATION**

# **OPERATING TIPS**

The following information does not include all conditions that may be encountered in standard operations, but is intended to supplement any operational and safety training. Contact your Vacuworx representative for additional training information.

## ATTACHING TO SKID STEER

1. Connect the host machine to the mounting assembly (Fig. 1-1). Make sure the lock levers are fully engaged.



#### Fig. 1-1

2. Connect the three hydraulic hoses to the host machine using the supplied quick connects (Fig. 1-2).



#### Fig. 1-2

- 3. Position the hydraulic hoses using the attached magnets so they do not interfere with the operation of the host machine.
- 4. Route the vacuum control hoses up to the cab of host machine. Use attached magnets to secure hoses so they do not interfere with host machine function.
- 5. Connect hoses to control box.
- 6. Mount controller to metal surface inside cab with attached magnets (Fig. 1-3).



### VACUUM GAUGES

Always position lifter so that the operator can see the lifter gauge.

The lifter gauge should always read in the green range (Fig. 1-4, 1) when operating. If the gauge is in the yellow range (Fig. 1-4, 2), lower the load and rebuild vacuum. We recommend you do not use the lifter below -18 inHg (-61 kPa) of vacuum. If the gauge drops into the red range (Fig. 1-4, 3), immediately stop, determine what the cause is, and correct it before continuing.





## **AUXILIARY HYDRAULICS**

- 1. Activate auxiliary hydraulics to build vacuum in reservoir.
- 2. Repeat to build vacuum as necessary during operation (refer to host machine owners manual).

### MANUAL CONTROL OPERATION

1. Start in the OFF position (Fig. 1-5).



#### Fig. 1-5

2. Turn the lever so the arrow points to LIFT (Fig. 1-6) to create vacuum on the pad. Once the gauge reaches 22 it is safe to lift the load.

Fig. 1-3



#### Fig. 1-6

- 3. To release the load, turn the lever so that the arrow points to RELEASE.
- 4. Once the gauge reaches zero the pad can be removed from the object it was lifting.
- 5. Turn the switch back to the OFF position.

# WIRELESS REMOTE TRANSMITTER OPERATION (PRODUCTION)

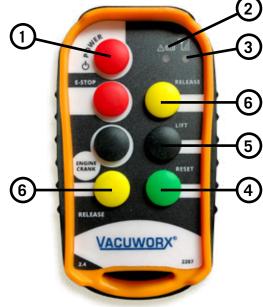


Fig. 1-7

#### **GETTING STARTED**

- 1. To turn on the remote, hold the top red button (Fig. 1-7, 1) for 3-6 seconds or until the red battery light comes on (Fig. 1-7, 2).
- 2. The green light on the remote (Fig. 1-7, 3) and receiver will start flashing continuously, indicating they are connected.

NOTE: If the remote and receiver are not connected, make sure the remote and receiver are turned on. Make sure the remote is close enough to find a connection to the receiver (30 ft.) and hold the green button on the remote (Fig. 1-7, 4) for 3-6 seconds or until the green light starts flashing on the remote (Fig. 1-7, 3).

#### **OPERATION**

- 1. The transmitter is configured for two-handed operation.
- 2. To lift load, hold the right black button (Fig. 1-7, 5) for 3-5 seconds to create vacuum on the pad.
- 3. Once the vacuum gauge is in the green range, it is safe to lift the load.
- 4. To release load, lower the load to the ground and hold both yellow buttons (Fig. 1-7, 6) simultaneously for 3-5 seconds to start releasing vacuum.
- 5. When gauge reaches zero, it is safe to remove pad from the load.

NOTE: For safety purposes, there will be approximately a 3 second delay on the release function.

# WIRELESS REMOTE TRANSMITTER OPERATION (2017-2019)



#### Fig. 1-8

#### **GETTING STARTED**

1. Press any button to begin operation. This will activate the transmitter and receiver on the matched equipment at the same time.

### **SL SERIES**

## **1 OPERATION**

- 2. The green LED light (Fig. 1-8, 1) on the transmitter will blink 2 times per second when the transmitter and receiver are communicating. It will blink 1 time per second if there is no communication (i.e. no power to the CM 3/SL 2).
- 3. The red LED light (Fig. 1-8, 2) on the transmitter will blink if the battery is low and should be replaced.

#### **OPERATION**

- 1. The transmitter is configured for two-handed operation.
- 2. To create vacuum on the pad to lift the load, lower the pad onto the material and hold blue button and press top red button (Fig. 1-8, 3) for 1-2 seconds. The CM 3/SL 2 will continue to build vacuum after you release the buttons.
- 3. Once the vacuum gauge is in the green range, it is safe to lift the load.
- 4. To release vacuum, lower the load to the ground, hold blue button and press top green button (Fig. 1-8, 4) for 1-2 seconds. The CM 3/SL 2 will continue to release the vacuum from the pad after you release the buttons.
- 5. Once the gauge reaches zero the pad can be removed from the object it was lifting.

#### TURNING OFF THE TRANSMITTER

Transmitter will automatically turn off after 3 seconds of inactivity.

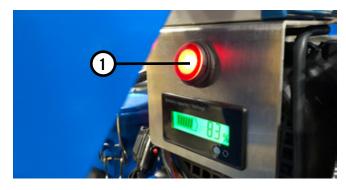
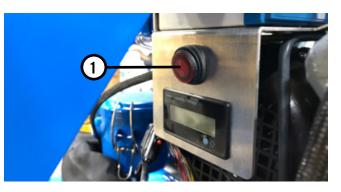


Fig. 1-9

#### TURNING ON THE RECEIVER

- 1. To turn on the wireless remote receiver, flip up the red circle switch located under the right arm of the machine. A red light will illuminate the red circle switch (Fig. 1-9, 1) indicating that the receiver is on.
- 2. Below the switch is the battery percentage.

NOTE: When the battery reaches 20%, it should be switched out and recharged.





#### TURNING OFF THE RECEIVER

 To turn off the wireless remote receiver, flip down the red circle switch located under the right arm of the machine. A red light on the switch will go out (Fig. 1-10, 1) indicating that the receiver is off.

#### **PROPERLY POSITION THE VACUUM PAD**

Do not operate until the vacuum pad is properly positioned on the material. Lift the material as close to the center as possible to keep the load balanced.

#### LIFT, LOWER AND MOVE SLOWLY

Always lift the load slowly. Make sure the area is clear when moving the material. All bystanders must be kept at a safe distance. Move the host machine slowly, and carefully lower the load into position.

Never release the vacuum while the load is being lifted. Make sure the material is properly supported before releasing the vacuum.

#### **KEEP LOADS LOW**

Do not lift loads higher than necessary. Always keep loads close to the ground when possible. Never leave a suspended load unattended. Always lower the load to the ground when not in use.

#### STORING THE LIFTER

- 1. Rest lifter on a dry, clean surface.
- 2. Disconnect the controller and hydraulic quick connects.
- 3. Wrap hoses around body of lifter.
- 4. Attach control unit to adapter plate.
- 5. Disconnect adapter plate from host machine.

# MAINTENANCE

# **BATTERY MAINTENANCE**

#### SWITCHING OUT THE BATTERY

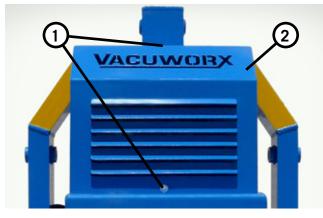


Fig. 2-1

1. Unscrew the two Dzus pins (Fig. 2-1, 1) and remove the front aluminum door (Fig. 2-1, 2).

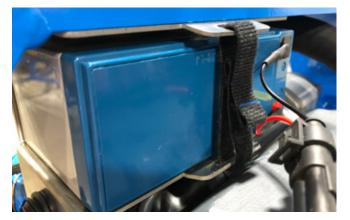


Fig. 2-2



Fig. 2-3

2. Locate the receiver battery (Fig. 2-2) and remove the Velcro strip (Fig. 2-3).



Fig. 2-4

3. Disconnect the cable connecting the battery to the receiver (Fig. 2-4)





- 4. Remove the battery (Fig. 2-5).
- 5. Replace with fully charged battery by doing the same steps in reverse.

#### CHARGING THE RECEIVER BATTERY



Fig. 2-6

### 2 MAINTENANCE



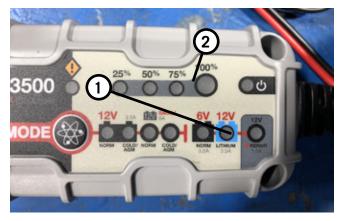
Fig. 2-7

1. Locate and remove the battery charger (Fig. 2-6) and remove it from its case (Fig. 2-7).





2. Plug the electrical cable into an electrical wall outlet and the other end into the cable (Fig. 2-8) connected to the battery.





3. When charging, make sure the mode is always set to 12V LITHIUM (Fig. 2-9, 1). A light will illuminate (Fig. 2-9, 2) indicating the percentage of charge.

### **SL SERIES**

# **MODULAR PAD SYSTEM**

# CHANGING PAD

1. Remove the pins connecting the pad to the lifter (Fig. 3-1).



Fig. 3-1

2. Carefully lift the SL 2 away from the pad (Fig. 3-2).



Fig. 3-2

- 3. Slide the pad out of the way and put the other one in its place (gauge facing machine).
- 4. Slowly lower the SL 2 onto the pad, making sure the connection holes are lined up (Fig. 3-3). Or, with the SL 2 positioned at a comfortable working height, lift the pad into place (Fig. 3-4).





Fig. 3-4

5. Reinsert the pins to connect the pad to the lifter and install lynch pins to secure (Fig. 3-5).





6. Connect vacuum hose from pad to SL 2 (Fig. 3-6).



Fig. 3-6

Fig. 3-3



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