



**Fisher Engineering**

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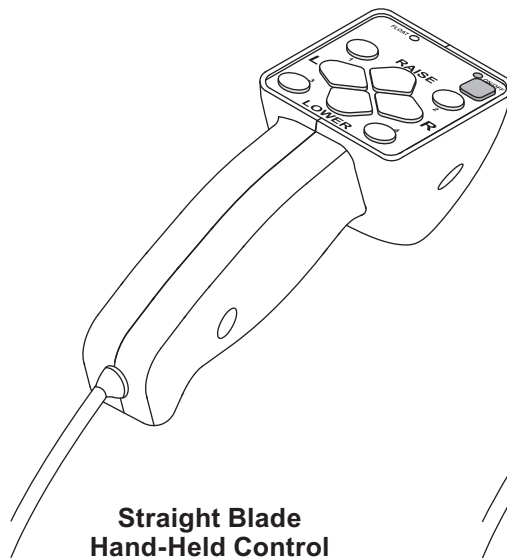
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**FLEETFLEX**  
ELECTRICAL SYSTEM

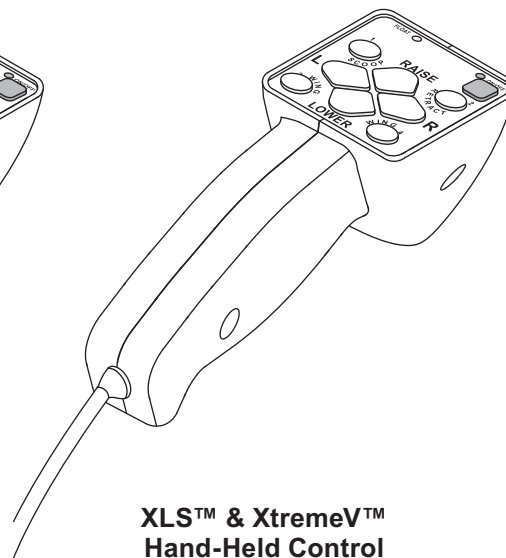


# Fish-Stik<sup>®</sup> Hand-Held Control For the FLEET FLEX Electrical System

## Operating Instructions



**Straight Blade  
Hand-Held Control**



**XLS™ & XtremeV™  
Hand-Held Control**

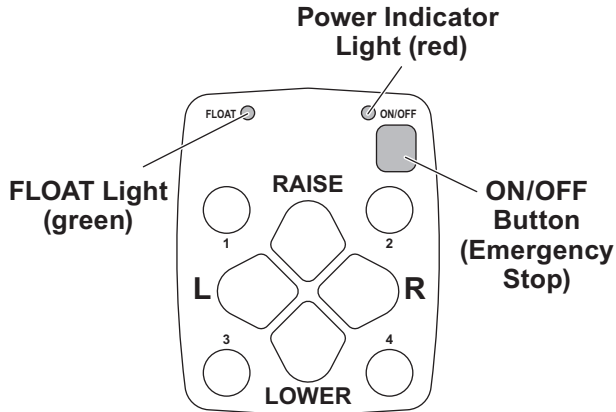
### **⚠ WARNING**

To prevent accidental movement of the blade, always push the ON/OFF button to switch the control OFF whenever the snowplow is not in use. The power indicator light will turn OFF.

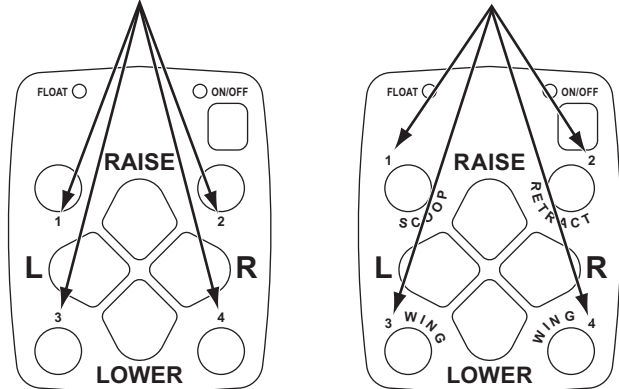
**CONTROL OVERVIEW**

Each control is equipped with an ON/OFF button and an indicator light to show when the control is powered ON or OFF. The controls are powered by the vehicle's battery, so your vehicle ignition (key) switch must be ON to use the controls.

**Straight-Blade Control**

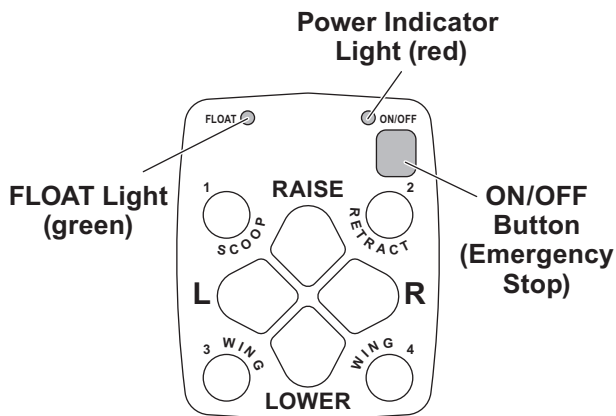


**SECURITY GUARD™ System enabled controls have numbers 1 through 4 on the faceplate.**



Install the control as stated in the Hand-Held Control Kit Installation Instructions, and check all snowplow functions described in the following pages.

**XLS™ and XtremeV™ Control**



## OPERATING THE HAND-HELD CONTROL

### **⚠ WARNING**

The driver shall keep bystanders clear of the blade when it is being raised, lowered or angled. Do not stand between the vehicle and the blade or within 8 feet of a moving blade. A moving or falling blade could cause personal injury.

1. Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position.
2. Press the ON/OFF button on the control to turn the control ON. The power indicator light glows red, indicating that the control is ON. The indicator light glows red whenever the control and the vehicle ignition switch are both ON and the electrical connections to the snowplow are completed.

The ON/OFF button operates as an emergency stop, if required.

### Function Time-Outs

All control functions, except LOWER/FLOAT, time out (stop) automatically after a period of time. This is to limit the amount of electrical energy required from the vehicle.

While the control operations are the same for the XLS and XtremeV, the time-outs vary.

**NOTE: If a control function times out before desired blade movement is complete, release the button and press it again.**

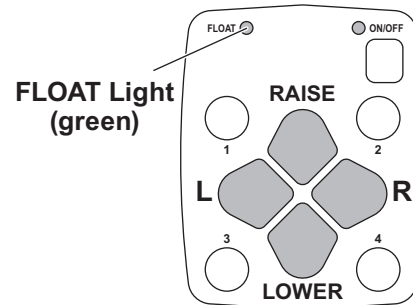
### Automatic Shutdown

The control will automatically turn OFF after being idle for 20 minutes. To reactivate the control after a shutdown, press the ON/OFF button.

### Smooth Stop/Soft Stop

The control automatically allows the blade to coast to a stop when a control button is released. This results in smoother operation, reduces the shock to the hydraulic system and increases hose and valve life. See the FLEET FLEX Electrical System section for more information about this feature.

## Control Functions – Straight Blade Snowplows



Pressing the four diamond-shaped buttons in the center of the control face will result in the blade movements described in the following table.

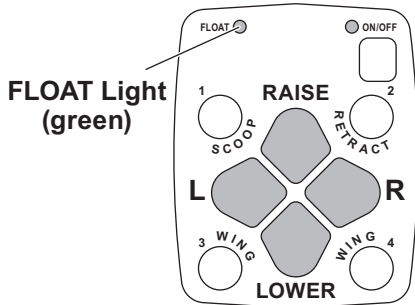
Function	Description of Operation
<b>RAISE</b>	Press this button to raise the blade and cancel the FLOAT mode. Function times out after 3.0 seconds.
<b>LOWER</b>	Press this button to lower the blade. Release the button to stop the blade at desired height.
<b>FLOAT*</b>	Press the <b>LOWER</b> button and hold 3/4 second to activate this mode. The FLOAT indicator light in the upper right corner of the control face will illuminate. The blade will lower to the ground surface and follow the contour of the surface as it dips or rises. Function does not time out; however, the control will shut down after 20 minutes of nonuse. Press the <b>RAISE</b> button momentarily to cancel FLOAT. Angling left or right will interrupt (pause) the FLOAT function, but the FLOAT light will stay illuminated and FLOAT will resume when angling is complete.
<b>L</b> (Angle Left)	Press this button to angle the blade left. Function times out after 5.5 seconds.
<b>R</b> (Angle Right)	Press this button to angle the blade right. Function times out after 5.5 seconds.

\* FLOAT mode activates immediately when the One-Touch FLOAT feature is enabled. See the One-Touch FLOAT section for more information.

**NOTE: If a control function times out before desired blade movement is complete, release the button and press it again.**

**Control Functions – XtremeV™ and XLS™**

**Raise, Lower, FLOAT, Angle**



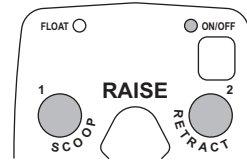
Pressing the four diamond-shaped buttons in the center of the control face will result in the blade movements described in the following table.

Function	Description of Operation
<b>RAISE</b>	Press this button to raise the blade and cancel the FLOAT mode. Function times out after 4.0 (XtremeV) or 3.5 (XLS) seconds.
<b>LOWER</b>	Press this button to lower the blade. Release the button to stop the blade at the desired height.
<b>FLOAT*</b>	Press the <b>LOWER</b> button and hold 3/4 second to activate this mode. The FLOAT light in the upper right corner of the control face will illuminate. The blade will lower to the ground surface and follow the contour of the surface as it dips or raises. Function does not time out; however, control will shut down after 20 minutes of nonuse.  Press the <b>RAISE</b> button momentarily to cancel FLOAT. Angling left or right will not interrupt (pause) the FLOAT function.
<b>L</b> (Angle Left)	With wings in a straight line, press the <b>L</b> button to move both wings to the angle left position. The left wing retracts while the right wing extends (XtremeV). Function times out after 3.0 (XtremeV) or 3.25 (XLS) seconds.
<b>R</b> (Angle Right)	With wings in a straight line, press the <b>R</b> button to move both wings to the angle right position. The right wing retracts while the left wing extends (XtremeV). Function times out after 3.0 (XtremeV) or 3.25 (XLS) seconds.

\* FLOAT mode activates immediately when the One-Touch FLOAT feature is enabled. See the One-Touch FLOAT section for more information.

**NOTE: If a control function times out before desired blade movement is complete, release the button and press it again.**

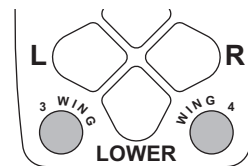
**Scoop/Retract Blade Positions**



The two round buttons located to the left and right of the RAISE button move both wings at the same time, into the following blade positions.

Function	Description of Operation
<b>SCOOP</b>	Press this button to extend both wings forward into the scoop position. Function times out after 5.0 (XtremeV) or 5.5 (XLS) seconds.
<b>RETRACT</b>	Press this button to draw both wings into the fully retracted/vee position. Function times out after 3.0 (XtremeV) or 4.5 (XLS) seconds.

**Wing Positions**



The two round buttons located to the left and right of the LOWER button move either wing independently of the other, as described below.

Function	Description of Operation
<b>L WING</b>	Press this button on the left side of the control to move the left wing. The first time the button is pressed after the control is turned ON or another function is used, the wing will extend. Repeated use of the same button, without using another function, results in movement in the opposite direction from the previous movement. Function times out after 3.0 (XtremeV), 3.75 (XLS – OUT) or 3.25 (XLS – IN) seconds.
<b>R WING</b>	Press this button on the right side of the control to move the right wing. The first time the button is pressed after the control is turned ON or another function is used, the wing will extend. Repeated use of the same button, without using another function, results in movement in the opposite direction from the previous movement. Function times out after 3.0 (XtremeV), 3.75 (XLS – OUT) or 3.25 (XLS – IN) seconds.

## FLEET FLEX ELECTRICAL SYSTEM

Minute Mount® 2 system snowplows come standard with user-controlled programmable features. These include:

- SECURITY GUARD™ electrical anti-theft system
- Smooth Stop
- One-Touch FLOAT

### SECURITY GUARD System

The SECURITY GUARD electrical anti-theft system provides a deterrent against theft or non-permitted use by electronically locking the snowplow's hydraulic functions.

To activate this function, set up a 4-digit security code as described below.

#### Activation & Establishing a 4-Digit Security Code

**NOTE: The snowplow must be attached to the vehicle, and all the electrical connections must be connected prior to activating the security code function.**

1. Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position. (It is not necessary to start the vehicle.)
2. Verify that the control is OFF. If the power indicator light is red, the control is ON. Press the ON/OFF button to turn the control OFF.
3. Activate the SECURITY GUARD mode by pressing the #1 button four consecutive times, then pressing the #4 button four consecutive times (sequence: 1, 1, 1, 1, 4, 4, 4, 4). The green FLOAT light will flash rapidly and the red power indicator light will turn ON, indicating that the system is ready to accept your 4-digit security code.

Enter your 4-digit security code by pressing any of the eight following buttons in any sequence: UP, DOWN, LEFT, RIGHT, 1, 2, 3 or 4.

The FLOAT light will stop flashing and the power indicatorlight will turn OFF, indicating that the 4-digit security code is now entered and stored in the SECURITY GUARD system.

4. Once a 4-digit security code has been established, the SECURITY GUARD system will recognize any control that has been programmed with the same 4-digit security code. If a control not programmed with the correct 4-digit security code is connected to the system, the established security code will have to be entered manually before the snowplow can be activated (see the manual unlock procedure instructions below).

**NOTE: If the control is turned ON prior to completing the programming procedure, your 4-digit security code will be cancelled.**

#### Manual Unlock

The manual unlock procedure allows a control programmed with a different 4-digit security code to unlock a locked snowplow.

1. Turn the vehicle ignition to the "ON" or "ACCESSORY" position.
2. Press the ON/OFF button to turn the control ON.
3. The power indicator light will flash rapidly, indicating that the snowplow is locked.
4. Enter the established 4-digit security code.
5. After the correct security code is entered, the power indicator light will change from flashing rapidly to a solid light to indicate that the snowplow has been successfully unlocked.

**NOTE: If the plow/vehicle electrical connection is lost or disconnected, the SECURITY GUARD system will reset, requiring any control that is not programmed with the established 4-digit security code to manually re-enter the security code to activate the snowplow.**

## Clearing an Established 4-Digit Security Code

1. Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position.
2. If the snowplow is locked (the control power indicator light will be flashing rapidly), unlock it by following the Manual Unlock procedure.
3. Press the ON/OFF button to turn the control OFF. Verify that the power indicator light is OFF.
4. With the control OFF, press the #2 button four consecutive times, and then press the #3 button four consecutive times. This sequence (2, 2, 2, 2, 3, 3, 3, 3) will clear the 4-digit security code from the SECURITY GUARD™ system. The FLOAT light will flash to indicate that the 4-digit security code was cleared.

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**NOTE: To enter a new 4-digit security code, see "Activation & Establishing a 4-Digit Security Code."**

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## Light Flash Indicators

POWER – Red	Function
OFF	Control is OFF
Solid ON	Control is ON and active
Slow flash	No communication
Fast flash	Snowplow is locked – enter 4-digit security code to unlock

FLOAT – Green	Function
Solid ON	FLOAT function is active
Fast flash	Security code activation in progress

## Additional Notes

- The SECURITY GUARD system requires any control other than the one with the assigned 4-digit security code to enter the security code before the snowplow can be activated. Once the security code is established, the SECURITY GUARD system recognizes that a control with the same security code is attached, and does not require a manual unlock to activate the snowplow. The system will recognize the control as "safe" and will automatically unlock.
- In the event that a snowplow is locked and cannot be manually unlocked or reset, contact your Authorized Distributor.
- REMINDER: Record your security code for future reference.

## Smooth Stop/Soft Stop

Smooth Stop, or "soft" stop, allows the blade to coast to a stop when a control button is released. The result is smoother operation, reduced shock to the hydraulic system and increased hose and valve life.

While there are advantages to having this feature, there are also advantages to temporarily disabling it. For example, disabling Smooth Stop allows for more precise movements of the blade when operating close to buildings and other obstacles.

All controls come standard with Smooth Stop ENABLED. To enable/disable this feature, perform the following steps.

### Enable/Disable Procedure

1. Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position. (It is not necessary to start the vehicle.)
2. Verify that the control is OFF. If the power indicator light is red, the control is ON. Press the ON/OFF button to turn the control OFF.
3. Hold down the R button while turning the control ON. The power indicator light will turn ON and the FLOAT light will flash, indicating the status of the feature.

### Light Flash Indicators

Light	Description
POWER – red	Solid ON = control is ON
FLOAT – green	1 flash = Smooth Stop enabled 2 flashes = Smooth Stop disabled

Performing the sequence multiple times will toggle the Smooth Stop feature between enabled and disabled.

## One-Touch FLOAT

One-Touch FLOAT immediately activates the FLOAT mode and releases the blade to the ground without having to hold down the LOWER button. This can improve transition time when backing up to plow forward again, eliminating the time spent holding the control and waiting for the blade to fully drop.

All controls come standard with One-Touch FLOAT DISABLED. To enable/disable this feature, perform the following steps.

### Enable/Disable Procedure

1. Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position. (It is not necessary to start the vehicle.)
2. Verify that the control is OFF. If the power indicator light is red, the control is ON. Press the ON/OFF button to turn the control OFF.
3. Hold down the LOWER button while turning the control ON. The power indicator light will turn ON and the FLOAT light will flash, indicating the status of the feature.

### Light Flash Indicators

Light	Description
POWER – red	Solid ON = control is ON
FLOAT – green	1 flash = One-Touch FLOAT disabled 2 flashes = One-Touch FLOAT enabled

Performing the sequence multiple times will toggle the One-Touch FLOAT feature between enabled and disabled

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