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HAND-HELD CONTROL

with SECURITY GUARD™ Snowplow Anti-Theft System Operating Instructions

A WARNING

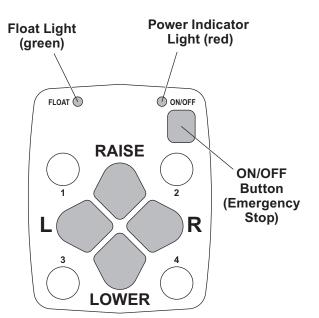
To prevent accidental movement of the blade, always push button to switch the control OFF whenever the snowplow is not in use. The control indicator light will turn off.

CONTROL OVERVIEW

The SECURITY GUARD feature was developed as an electrical anti-theft system for the half-ton series snowplows. The system provides a deterrent from theft and/or non-permitted use by allowing you to electronically lock the snowplow's hydraulic functions.

All half-ton series snowplow controls come equipped with the SECURITY GUARD system. To use this function, you must complete the "Activation" process.

Each control is equipped with an ON/OFF switch 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.



Before Activating the SECURITY GUARD System:

Intall the control as stated in the Hand-Held Control Kit Installation Instructions, and check all plow functions as described below.

OPERATING THE HAND-HELD CONTROL

- Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position.
- Press the ON/OFF button on the control. The
 power indicator light glows red, indicating the
 control is ON. The power 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.

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

Automatic Shutdown

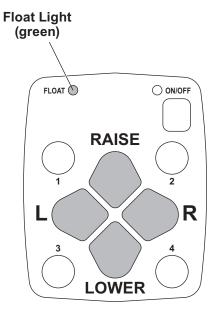
The control will automatically turn OFF after being idle for 20 minutes. To reactivate the control after a shutdown, press the ON/OFF button.

Smooth Stop

The control automatically allows the blade to coast to a stop when the button is released. This results in smoother operation, reduces the shock to the hydraulic system and increases hose and valve life.

Control Functions

Raise, Lower, Float, Angle



The four diamond-shaped buttons in the center of the control face, when pressed, will result in the blade movements described in the table.

Function	Description of Operation
RAISE	Press this button to raise the snowplow and cancel the FLOAT mode. Function times out after 4.8 seconds.
LOWER	Press this button to lower the snowplow. Release the button to stop blade at desired height.
FLOAT	Press the LOWER button and hold 3/4 second to activate this mode. The FLOAT indicator light in the upper left 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, but control will shut down after 20 minutes of nonuse. Press RAISE button momentarily to cancel FLOAT. Angling left or right will not interrupt (stop) the FLOAT function.
L (Angle Left)	Press this button to angle the blade to the left. Function times out after 9.6 seconds.
R (Angle Right)	Press this button to angle the blade to the left. Function times out after 9.6 seconds.
1 & 4	Used to access the SECURITY GUARD™ system activation mode.
2 & 3	Used to clear the entered SECURITY GUARD system code.

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

The SECURITY GUARD™ System

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.

- Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position. (It is not necessary to start the vehicle.)
- Verify the control power indicator is OFF. If the power indicator light is red, the control is ON. Press the ON/OFF button to turn the hand-held control OFF.
- 3. To activate the SECURITY GUARD mode, press the control #1 button four consecutive times, and then press the #4 button four consecutive times (sequence: 1, 1, 1, 1, 4, 4, 4, 4). The green FLOAT light will flash quickly and the red POWER light will turn ON indicating 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.

Once you have entered your 4-digit security code, the FLOAT light will stop flashing and the POWER light will turn OFF. This indicates that your 4-digit security code is entered and stored in the SECURITY GUARD system.

4. Once a 4-digit security code is established and the plow/vehicle electrical connection are lost/disconnected, the SECURITY GUARD system will recognize any half-ton series control that has been programmed with the same 4-digit security code. Any control not programmed with the correct 4-digit security code will require the user to enter the established security code before activating the snowplow (see the Manual Unlock procedure).

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

Manual Unlock

If the SECURITY GUARD system is activated and you are using a half-ton series control with a different 4-digit code than the established security code, you will be required to manually enter the 4-digit security code before operating a locked snowplow.

- 1. Turn the vehicle ignition to the "ON" or "ACCESSORY" position.
- 2. Turn the control to the "ON" position.
- 3. The POWER light will flash rapidly, indicating that the snowplow is locked.
- 4. Enter the 4-digit security code.
- After entering the correct security code, the POWER light will change from flashing rapidly to a solid light to indicate 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 half-ton series 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 light will be flashing at a fast rate), unlock the snowplow by following the Manual Unlock procedure.
- 3. Turn the control to the "OFF" position. Verify that the power indicator 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, 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.

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

Light Flash Indicators

POWER - Red	Function
Off	Control is OFF
Solid On	Control is ON and active
Slow Flash	No communication
Fast Flash	Plow 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 half-ton series 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.
- The SECURITY GUARD system is only fully functional with hand-held controls PN 49800 and PN 96900.
- 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.

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