November 1, 2020 Lit. No. 30035, Rev. 00



Joystick Control Kit UTV Snowplows

PARTS LIST

	32900 Snowplow Control Kit, UTV								
Item	Part	Qty	Description	ltem	Part	Qty	Description		
1	79110-1	1	Joystick Control w/ Symbols	4		2	#8-18 x 5/8 Self-Tapping Screw		
2	7718	1	Bracket – Control Mount	5	30036	1	Harness, Control		
3	30000	1	Mount Kit						

INSTALLATION INSTRUCTIONS

A CAUTION

Read this document before installing the control kit.

Use standard methods and practices when attaching snowplow and installing accessories, including proper personal protective safety equipment.

A CAUTION

See your sales outlet/website for specific vehicle application recommendations before installation. The online selection system has specific vehicle and snowplow requirements.

FUSES

The snowplow electrical and hydraulic systems contain several blade-style fuses. If a problem should occur and fuse replacement is necessary, the replacement fuse must be of the same type and amperage rating as the original. Installing a fuse with a higher rating can damage the system and could start a fire. Fuse Replacement, including fuse ratings and locations, is located in the Maintenance section of the Owner's Manual.

NOTE: The control does not contain onboard fuses. Consult your snowplow Owner's Manual for fuse replacement. Fuses are located on the vehicle and control harnesses.

NOTE: Circuit board may be damaged by static electricity. Always touch ground before handling PC board.

CONTROL

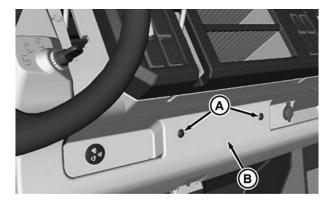
A WARNING

To prevent accidental movement of the blade, always unplug the control whenever the snowplow is not in use.

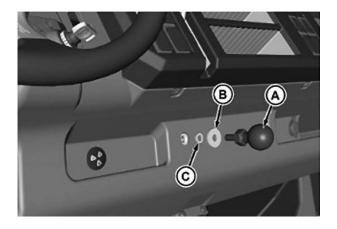
The control is electrically powered through the ignition (key) switch of your vehicle and protected by a replaceable in-line fuse.

Control Installation

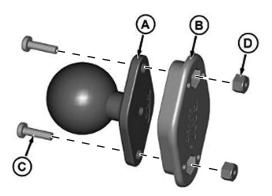
1. Choose one of the retainers (A) to remove from the dash panel (B).



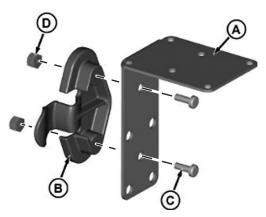
- 2. Thread the M10 x 20 self-tapping screw into the frame behind the dash.
- 3. Remove and retain the screw.
- Disassemble the mount kit and install the ball stud (A) and two washers (B) and (C) to the threaded hole in the dash panel created in Step 2.



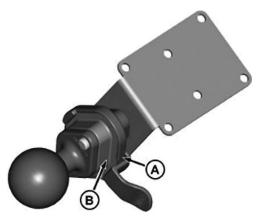
- 5. Tighten the ball stud.
- 6. Assemble the ball mount bracket (A) to the male quick-release (B) with two #8 x 5/8" screws (C) and two #8 nuts (D) as shown.



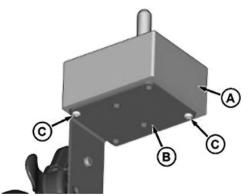
 Assemble the control mount bracket (A) to the female quick-release (B) with two #8 x 1/2" screws (C) and two #8 nuts (D).



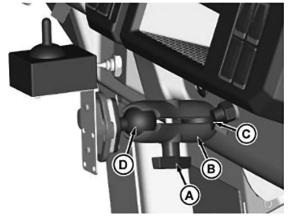
8. Snap the female quick-release (A) onto the male quick-release (B).



 Install the control (A) to the control mount bracket (B) with two #8 x 5/8" self-tapping screws (C).



10. Loosen the knob (A) on the double-socket arm (B).

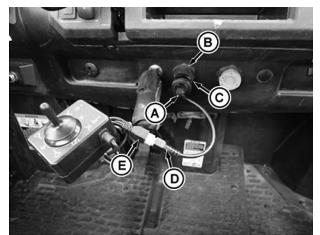


- 11. Install the arm to the ball stud on the dash (C).
- 12. Insert the ball (D) of the quick-release into the arm and tighten the knob until it is snug.
- 13. Move the arm and control to the desired position and fully tighten the knob.

Wiring Harness Installation

NOTE: The wiring harness is supplied with the hydraulic straight blade or V-plow frame components.

- 1. Remove cap from the dash port.
- Connect the wiring harness (A) to the dash port (B). Twist the connector ring (C) clockwise to secure the harness to the dash port.



3. Plug the connector (D) into the control (E).

JOYSTICK CONTROL

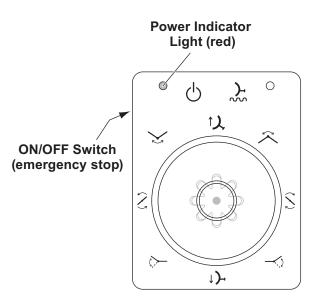
1. Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position.

A WARNING

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

 Move the ON/OFF switch on the side of the control to the "ON" position. 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 switch 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 a control function times out before the desired blade movement is complete, release the lever to the center position, then move it back into the desired function.

Automatic Shutdown

The control will automatically turn OFF after being idle for 20 minutes. To reactivate the control after a shutdown, move the ON/OFF switch to OFF, then back to ON.

Smooth Stop

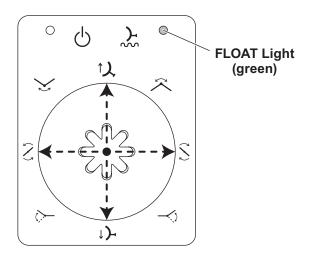
The control automatically allows the blade to coast to a stop when the lever returns to center position. This results in smoother operation, reduces the shock to the hydraulic system, and increases hose and valve life. See "Smooth Stop" later in this section for more information.

Control Lever Movement

From the center position, the control lever can be moved in one of eight directions to control various movements of the snowplow blade. To change from one movement of the blade to another, the control lever must be moved back to the center position before selecting the desired function. Whenever the lever is released, it should spring back into the center position to stop any blade movement.

Joystick Control Functions

Raise, Lower, Float, Angle



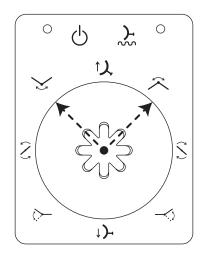
Moving the control lever straight up and down or from side to side on the control body will result in the blade movements described in the following tables.

Function	Description of Operation
RAISE	Move the control lever toward $\uparrow \lambda$ to raise the blade and cancel FLOAT mode. Function times out after 4.0 seconds.
LOWER	Move the control lever toward ↓ → to lower the snowplow. Release the lever to stop blade at desired height.
FLOAT	Move the control lever to \downarrow 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 rises. This function does not time out, but the control will shut down after 20 minutes of nonuse. Move the lever to the $\uparrow \lambda$ position momentarily to cancel FLOAT. Angling left or right will not interrupt (pause) the FLOAT function.

Function	Description of Operation
L (Angle Left)	With wings in a straight line, move the control lever to \leq to move both wings to the angle left position. The left wing retracts while the right wing extends. Function times out after 3.0 seconds.
R (Angle Right)	With wings in a straight line, move the control lever to $\stackrel{\frown}{>}$ to the right to move both wings to the angle right position. The right wing retracts while the left wing extends. Function times out after 3.0 seconds.

[†] FLOAT mode activates immediately when the one-touch FLOAT feature is enabled. See "One-Touch FLOAT" later in this section for more information.

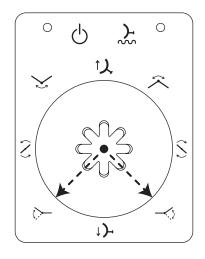
Scoop/Retract Blade Position: V-Plow Only



Moving the control lever from the center position toward \succeq or \precsim on the face of the control body will cause both wings to move at the same time into the following blade positions.

Function	Description of Operation
SCOOP	Move the control lever toward \succeq on the control face to extend both wings forward into the scoop position. Function times out after 5.0 seconds.
RETRACT	Move the control lever toward $\widehat{\frown}$ on the control face to draw both wings into the fully retracted/vee position. Function times out after 3.0 seconds.

Wing Positions: V-Plow Only



Moving the control lever from the center position toward the \sim or \sim on the control body will cause either wing to move independently of the other, as described in the following table.

Function	Description of Operation		
L WING	Move the control lever toward the \frown on the control face to move the left wing. The first time the lever is moved into the slot after the control is turned ON or another function is used, the wing will extend. Repeated use of the lever in the same slot without using another function results in movement in the opposite direction from the previous movement. Function times out after 3.0 seconds.		
R WING	Move the control lever toward the \prec to move the right wing. The first time the lever is moved into the slot after the control is turned ON or another function is used, the wing will extend. Repeated use of the lever in the same slot without using another function results in movement in the opposite direction from the previous movement. Function times out after 3.0 seconds.		

NOTE: If a control function times out before the desired blade movement is complete, release the lever to the center position, then move it back into the desired function.

ONE-TOUCH FLOAT

One-touch FLOAT immediately activates the FLOAT mode and releases the blade to the ground, without having to hold the button or lever in LOWER. 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 this feature DISABLED. To enable/disable this feature, perform the following steps. Performing the sequence multiple times will toggle the feature between enabled and disabled.

Enable/Disable Procedure

- 1. Turn the vehicle ignition switch to the "ON" or "ACCESSORY" position. (It is not necessary to start the vehicle.)
- Verify that the control power indicator is OFF. If the power indicator light is red, the control is ON. Move the ON/OFF switch to "OFF" or push the ON/OFF button to turn the control OFF.
- 3. Move and hold the control lever to the ↓ → position 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



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