

ZIEGLER CAT



GUIDE TO ATTACHMENT OPERATIONS

» USE YOUR EQUIPMENT SAFELY AND EFFICIENTLY

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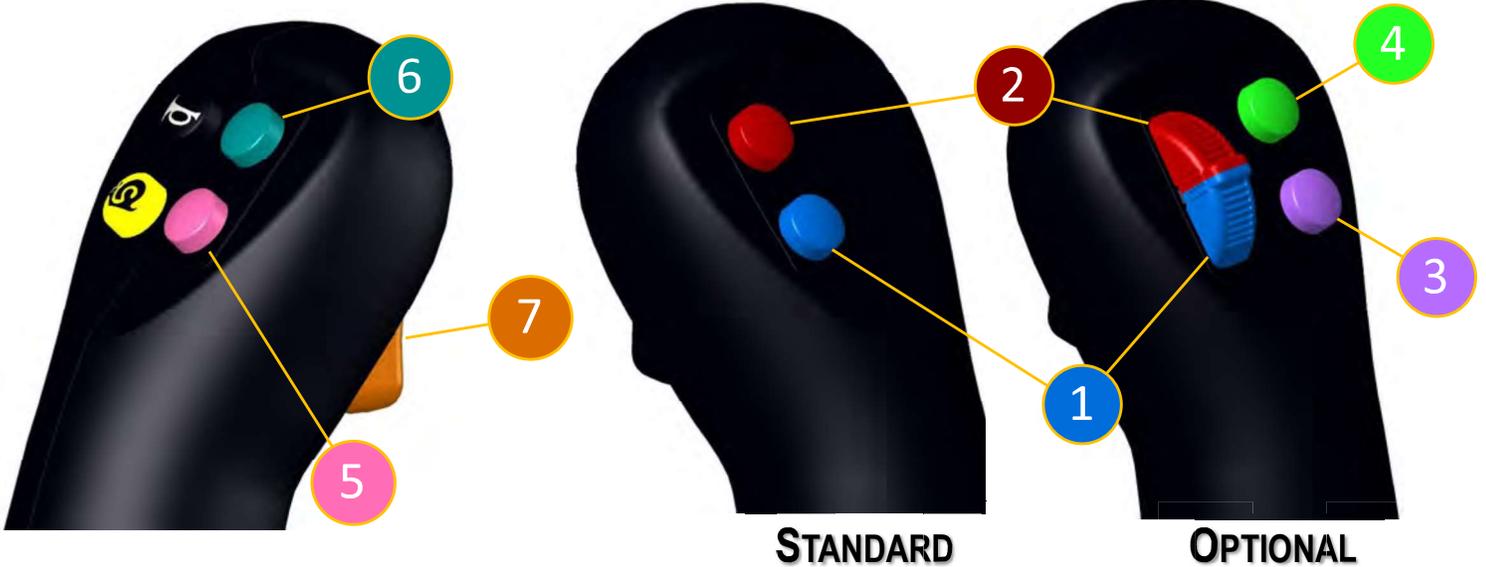
This operation guide is intended to provide an overview of joystick functionality for Cat® Skid Steer, Multi Terrain, and Compact Track Loaders in order to operate Cat attachments. The same information, along with more details on each attachment, is available in the attachment's Operation & Maintenance Manual (OMM). For more information, contact your local Cat dealer.

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ELECTRICAL WIRING



BUTTON	3	4	5	6	7
PIN	C	D	E	F	A

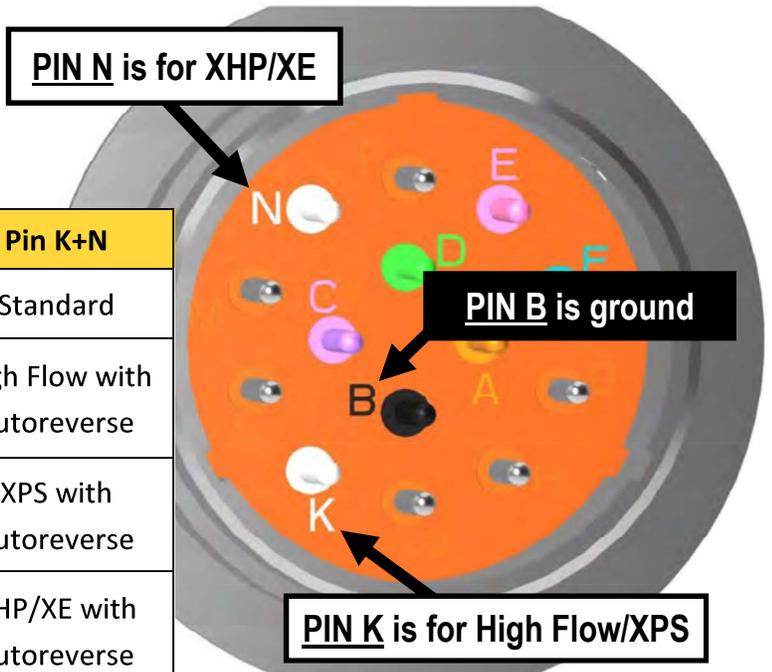


! Optional Joystick required for certain attachments. Refer to individual attachment operation pages to see required controls.

! The following table shows the flow given by connecting Pins K or N to Pin B depending on the flow capability of the machine. If neither Pin is connected, all machines give Standard Flow. All Attachments include harness/jumper plug if required for High Flow/XPS/XHP/XE.

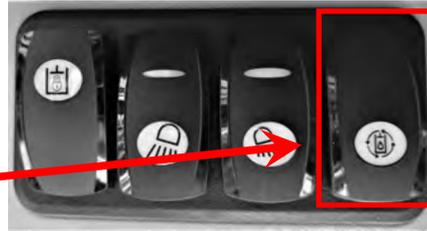
MACHINE ELECTRICAL CONNECTOR FOR ATTACHMENTS

Machine Type	Pin K	Pin N	Pin K+N
Standard Flow	Standard	Standard	Standard
High Flow	High Flow	Standard	High Flow with autoreverse
High Flow XPS	XPS	Standard	XPS with autoreverse
High Flow XHP/XE	XPS	XHP/XE with autoreverse	XHP/XE with autoreverse



CONTINUOUS FLOW

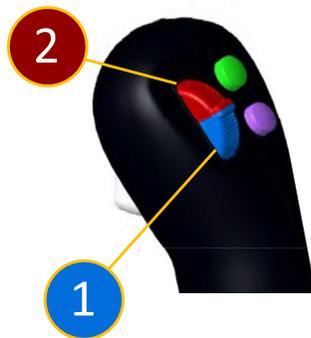
1. Press and release the Continuous Flow Switch, located on the upper right hand side switch panel.



2. Continuous Flow indicator will **FLASH** on the Advanced Machine Display.



3. Press and hold **2** on the right hand joystick for several seconds.



4. Continuous Flow indicator will appear **SOLID** on the Advanced Machine Display. Continuous flow is active, and button **2** can be released.

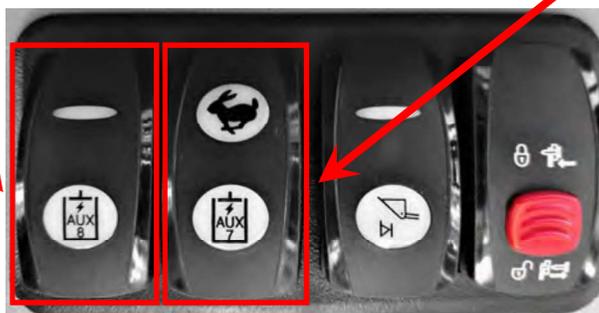
5. Press and release **2**, or the Continuous Flow Switch to deactivate continuous flow.

Aux Function 8

To turn on Aux 8, toggle the Aux 8 switch located on the upper left hand side switch panel. Used for certain attachments and available water kits, when equipped.

Aux Function 7

Press **DOWN** on the rocker switch, located on the left hand side switch panel, to select Aux Function 7. This enables the left hand joystick trigger to be used to control Attachments.

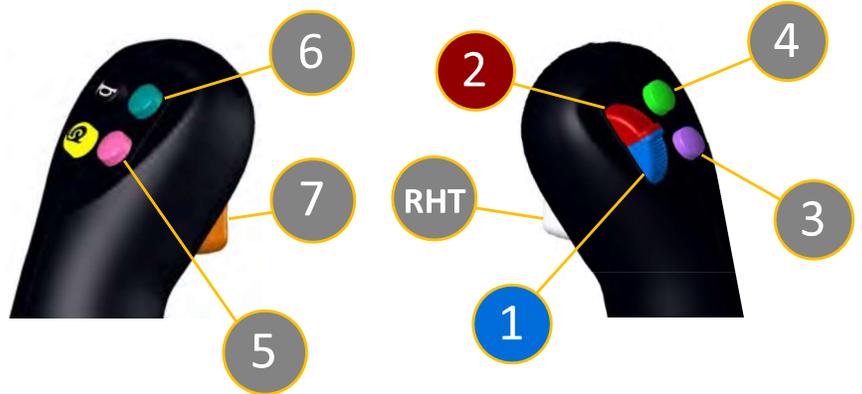


SMART DOZER BLADE

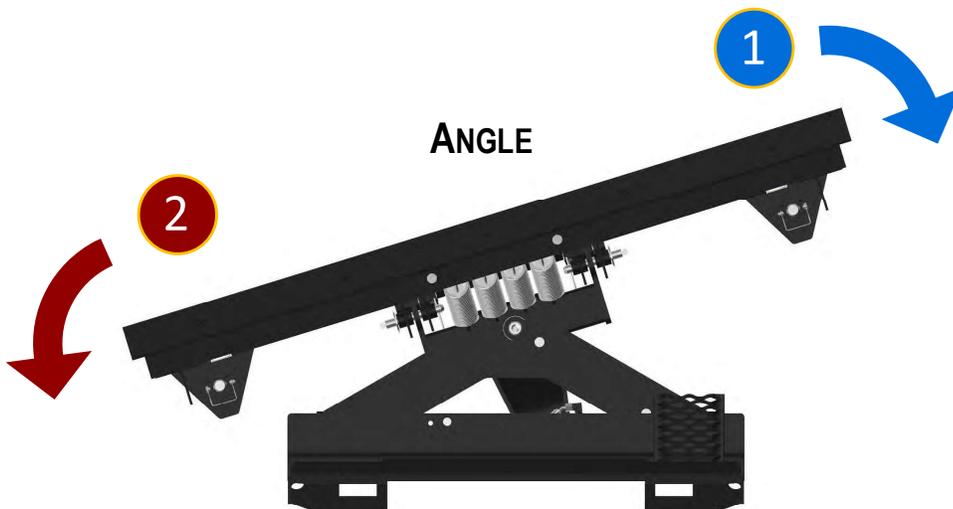
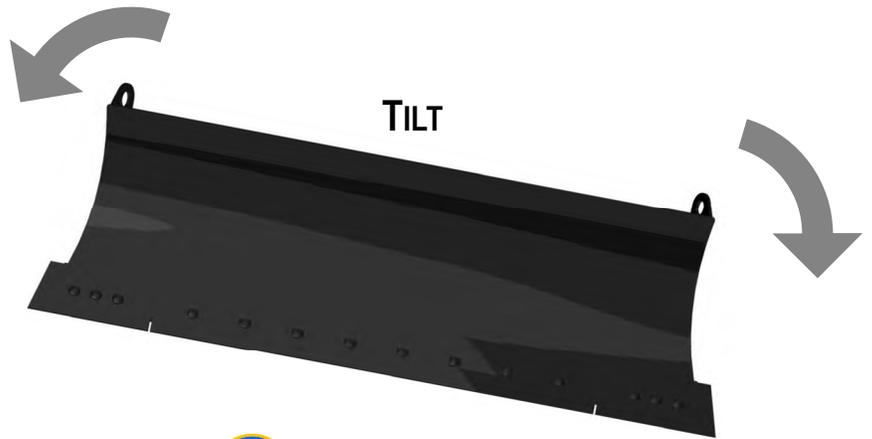


SMART DOZER BLADE

COMMAND	FUNCTION
1	Angle Right
2	Angle Left
Right Joystick— Right	Tilt Right
Right Joystick— Left	Tilt Left



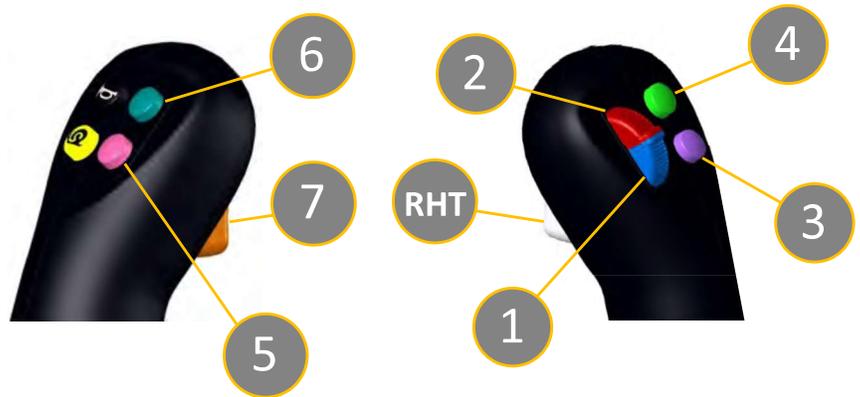
Only compatible with D3 series machines.



SMART DOZER BLADE



Only compatible with D3 series machines.



Many dozer blade functions are accessed through attachment control mode. To enter this mode:

1. Select the shovel icon on the machine display at start up to view the attachment control mode interface (1).
2. Select the shovel with cog icon to enter the attachment control mode settings.
3. On the top row of the settings, select either tilt or lift mode (see the following page for more information).
4. Press the button on the far right of the display to enter attachment control mode. Note that going in or out of this mode is only possible when the parking brake is active. The shovel icon will be green when in attachment



Select shovel with cog icon to enter Attachment Control Mode Settings.

(1) Attachment Control Mode Interface



(2) Home Screen—Green shovel icon indicates that attachment control mode is currently ON.



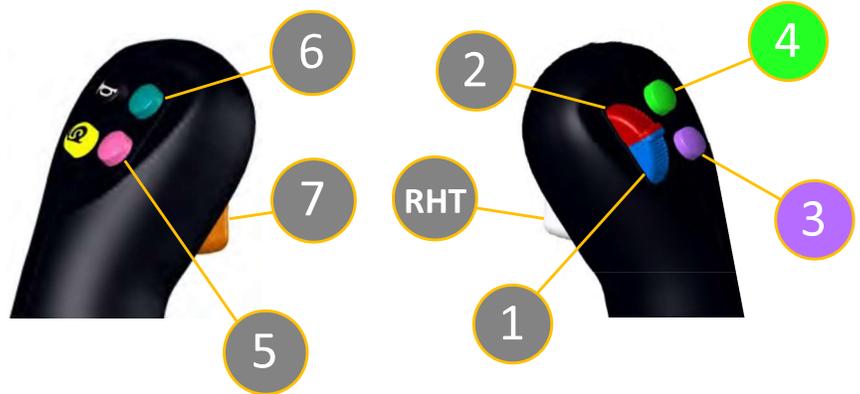
(3) Home Screen—White shovel icon indicates that attachment control mode is currently OFF.

SMART DOZER BLADE



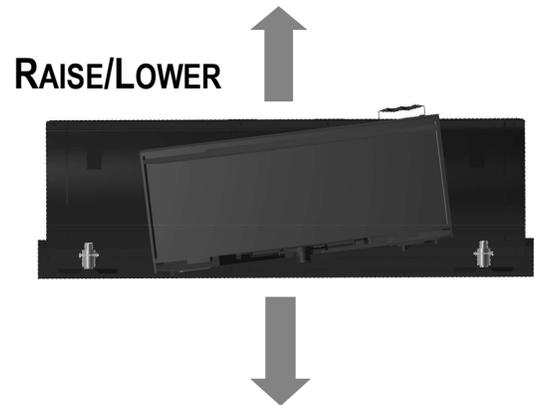
Only compatible with D3 series machines.

Note: The following machine functions are accessed through attachment control mode. See page 2 for instructions on how to enter this mode.



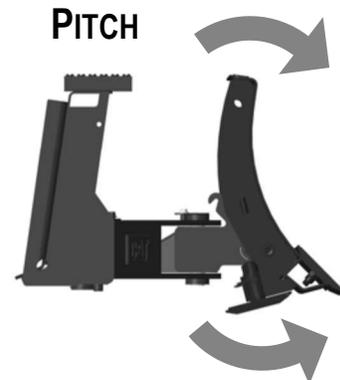
LIFT MODE

COMMAND	FUNCTION
Right Joystick—Forward	Lower Blade
Right Joystick—Back	Raise Blade
4	Pitch Forward
3	Pitch Back



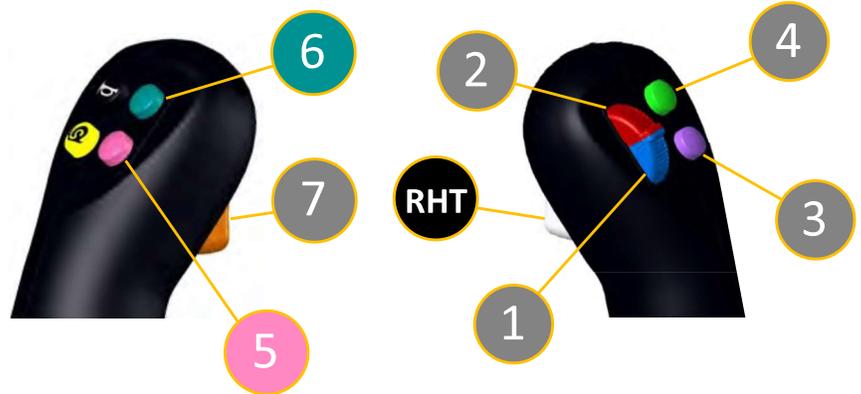
TILT MODE

COMMAND	FUNCTION
Right Joystick—Forward	Pitch Forward
Right Joystick—Back	Pitch Back
4	Lower Blade
3	Raise Blade



SMART DOZER BLADE

Note: The following machine functions are accessed through attachment control mode. See page 2 for instructions on how to enter this mode.



COMMAND	FUNCTION
RHT	Operator Assist
5	Memory/Recall/ Mirror
6	Return to Zero

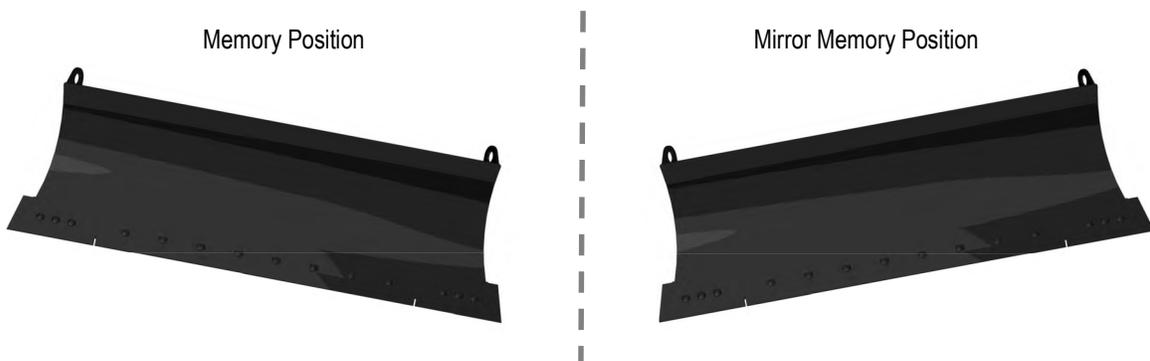


Only compatible with D3 series machines.

Operator Assist—While in attachment control mode, press the right hand trigger (RHT) to activate Operator Assist. The gray box(es) in the display will turn green, and the green LED light on the attachment, visible from the operator's station, will illuminate when Operator Assist is active. Operator Assist is used to maintain a steady blade mainfall and/or blade slope during machine operation.

Memory/Recall/Mirror—This function can be used to program and recall a set blade slope position. Press and hold the memory button for 1 or more seconds to program the new position. Afterwards, the button can be pressed and released to return to the set position. The button can be pressed twice quickly to mirror the blade slope of the memory position. Operator Assist must be active to use this feature.

Return to Zero—Press and release this button to return to a blade slope of zero. Operator Assist must be active to use this feature.

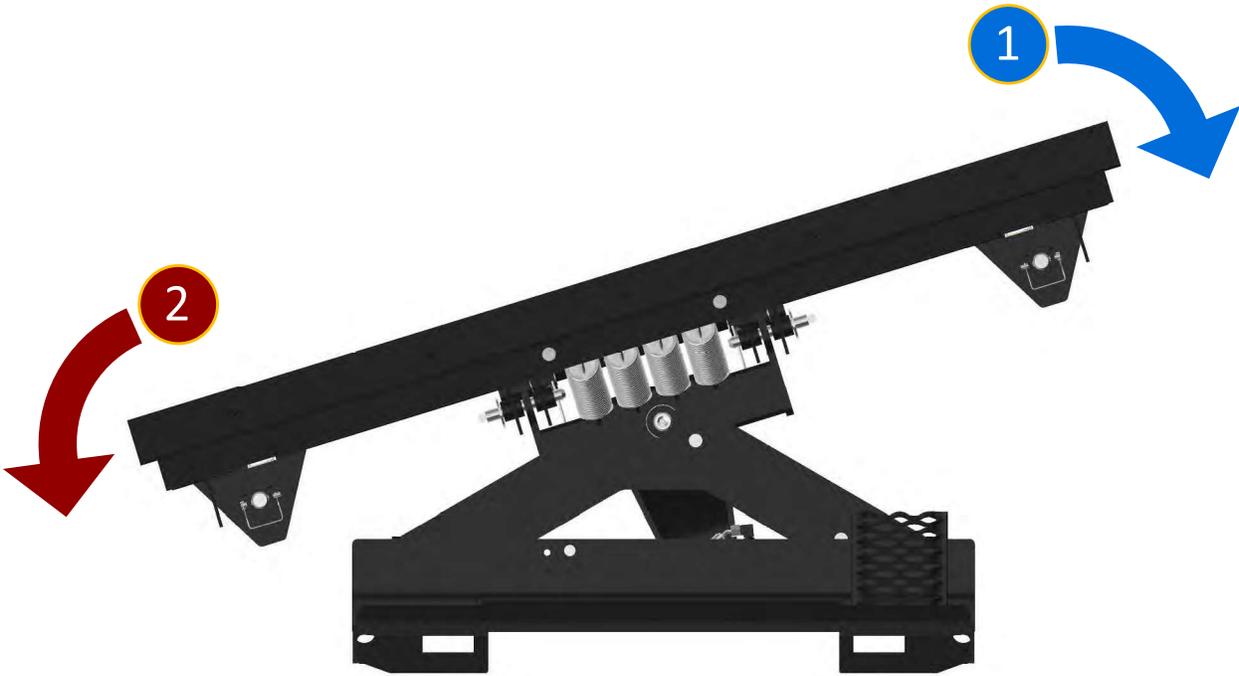
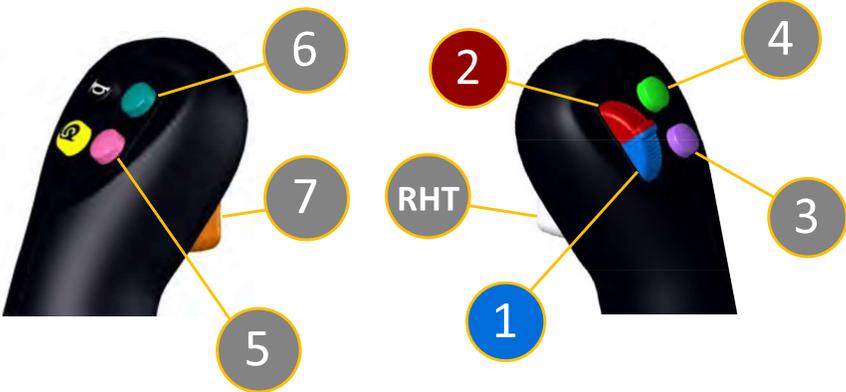


ANGLE & DOZER BLADES, SNOW PLOWS



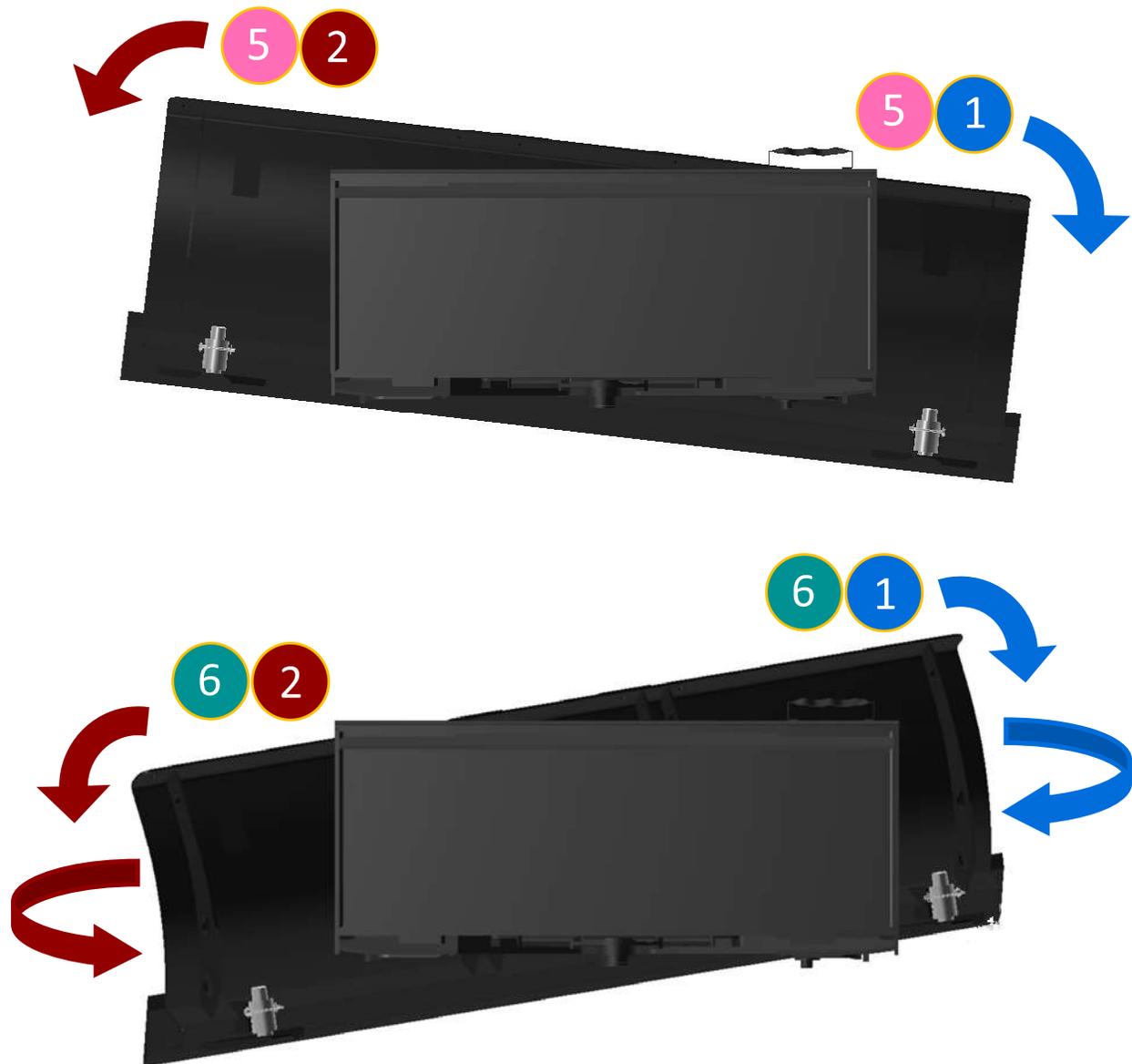
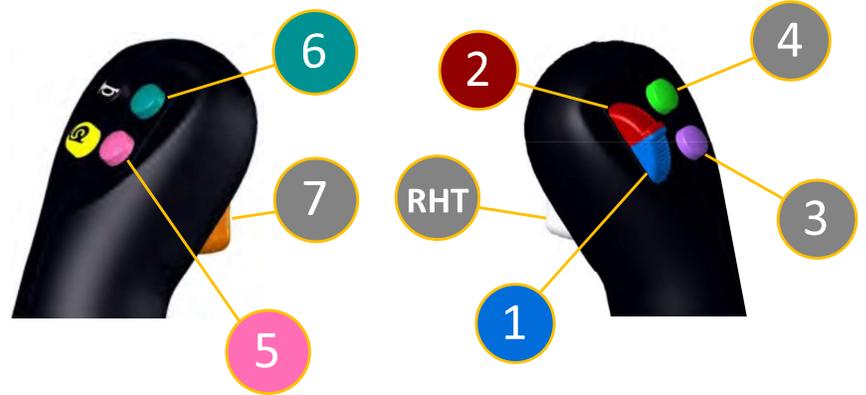
ALL MODELS

BUTTONS	FUNCTION
1	Angle Right
2	Angle Left



DOZER BLADES

BUTTONS	FUNCTION
5+1	Tilt Right
5+2	Tilt Left
6+1	Tilt + Angle Right
6+2	Tilt + Angle Left

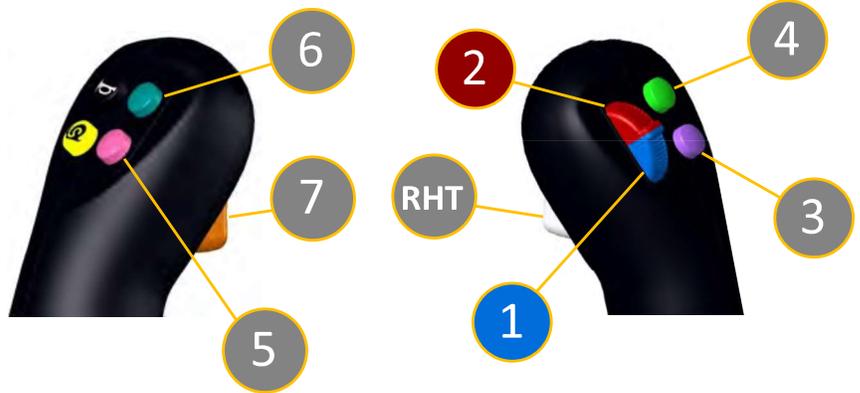


AUGERS



ALL MODELS

BUTTONS	FUNCTION
1	Counterclockwise
2	Clockwise

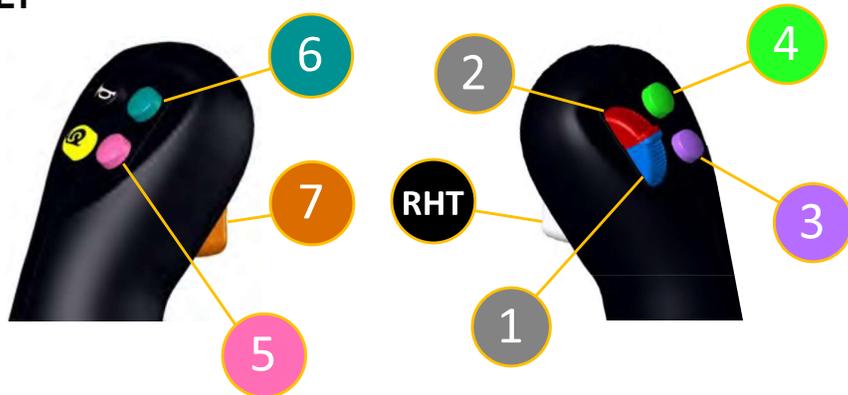


BACKHOES



BH130—WITH D3 SERIES ONLY

BUTTONS	FUNCTION
RH Trigger	Toggle Attachment Mode
3	Right Stab Down
4	Right Stab Up
5	Left Stab Down
6	Left Stab Up
7+3	Shift Right
7+4	Shift Left

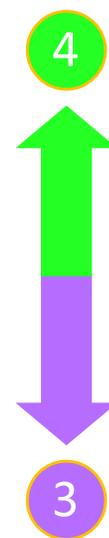
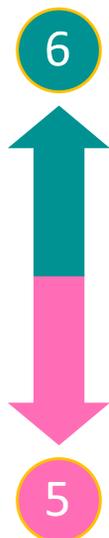
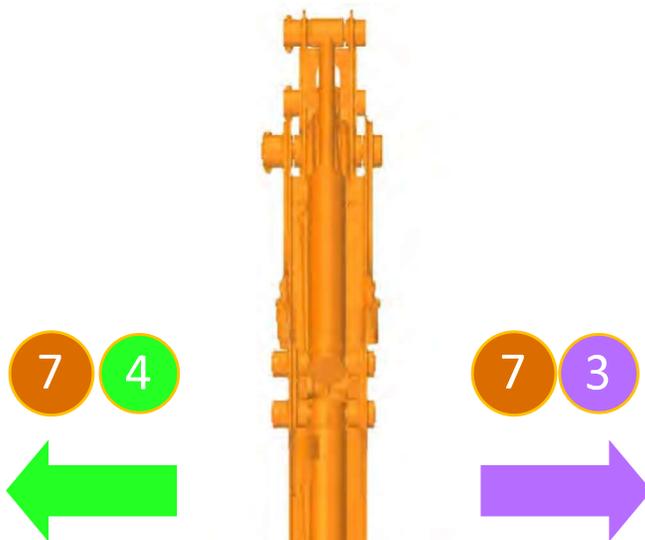


Must have Parking Brake **ON** and Hydraulic Lock **OFF** to enter Attachment Mode.



Pattern select for Backhoe/Excavator controls located in the advanced machine display.

Only compatible with D3 series machines.



BACKHOES (CONT.)



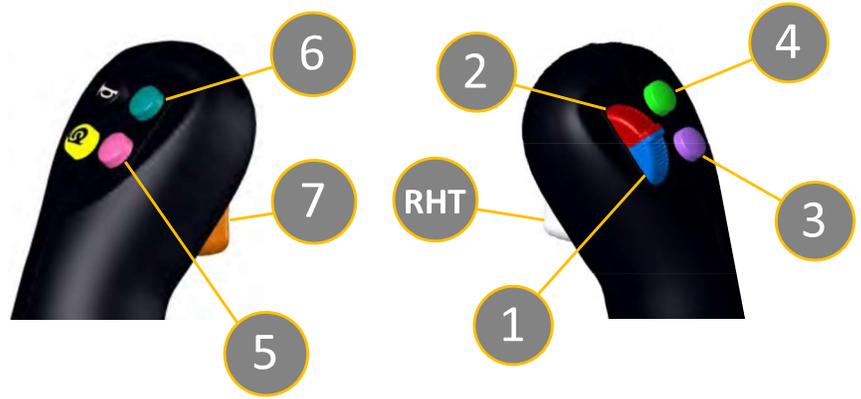
BH130—WITH D3 SERIES ONLY

Must have Parking Brake **ON**
and Hydraulic Lock **OFF** to enter
Attachment Mode.



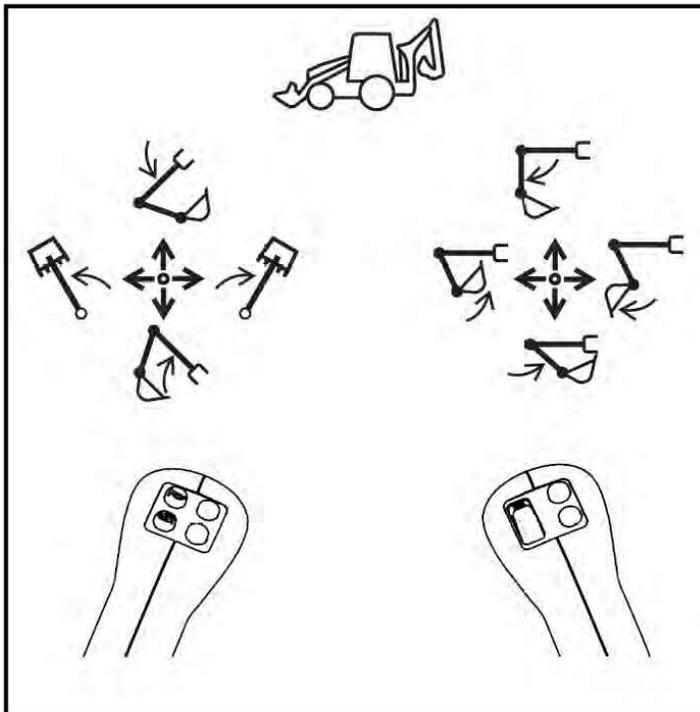
Pattern select for Backhoe/
Excavator controls located in the
advanced machine display.

Only compatible with D3 series
machines.

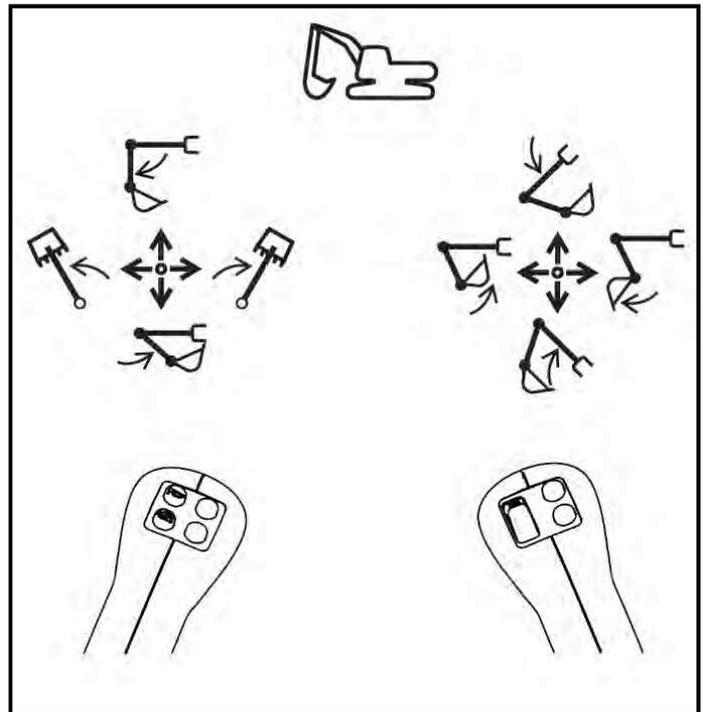


MAIN ATTACHMENT MODE FUNCTIONS

BACKHOE MODE



EXCAVATOR MODE

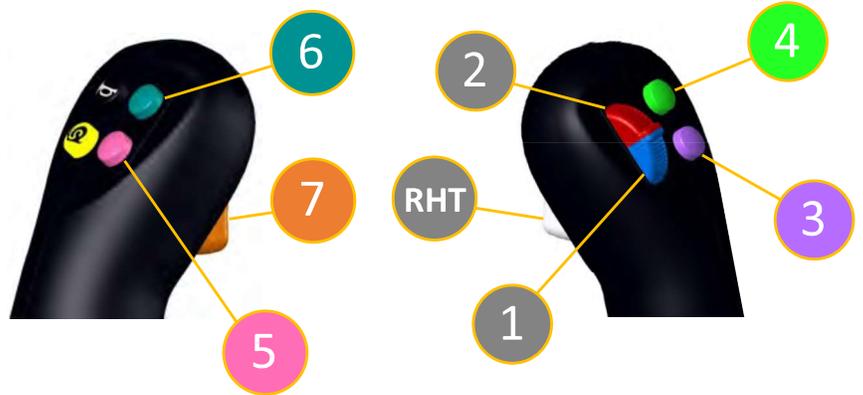


BOX BLADES



ALL MODELS—MANUAL MODE

BUTTONS	FUNCTION
3	Right Side Down
4	Right Side Up
5	Left Side Down
6	Left Side Up
7	Toggle Auto/ Manual

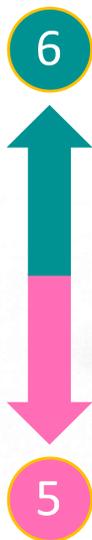


ALL MODELS—AUTO MODE

BUTTONS	FUNCTION
3	Decrement Right
4	Increment Right
5	Decrement Left
6	Increment Left
7	Toggle Auto/ Manual



- Must be in Continuous Flow.
- Must have Aux 7 enabled to allow toggle between auto and manual modes.
- Must have Aux 8 enabled to provide power to the box blade.



BROOMS, ANGLE

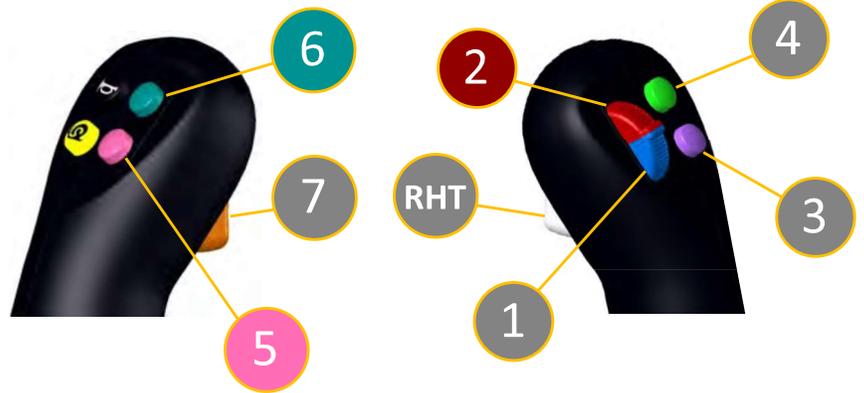


ALL MODELS

BUTTONS	FUNCTION
2	Broom Rotation

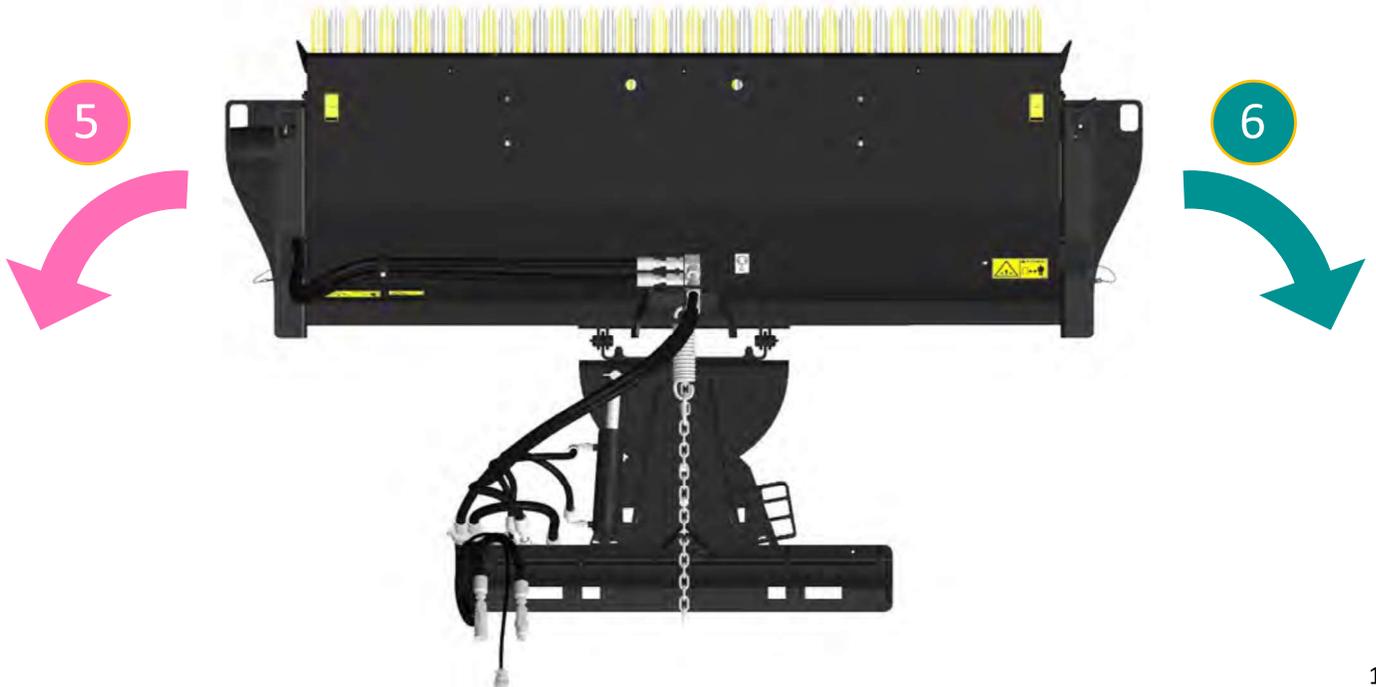
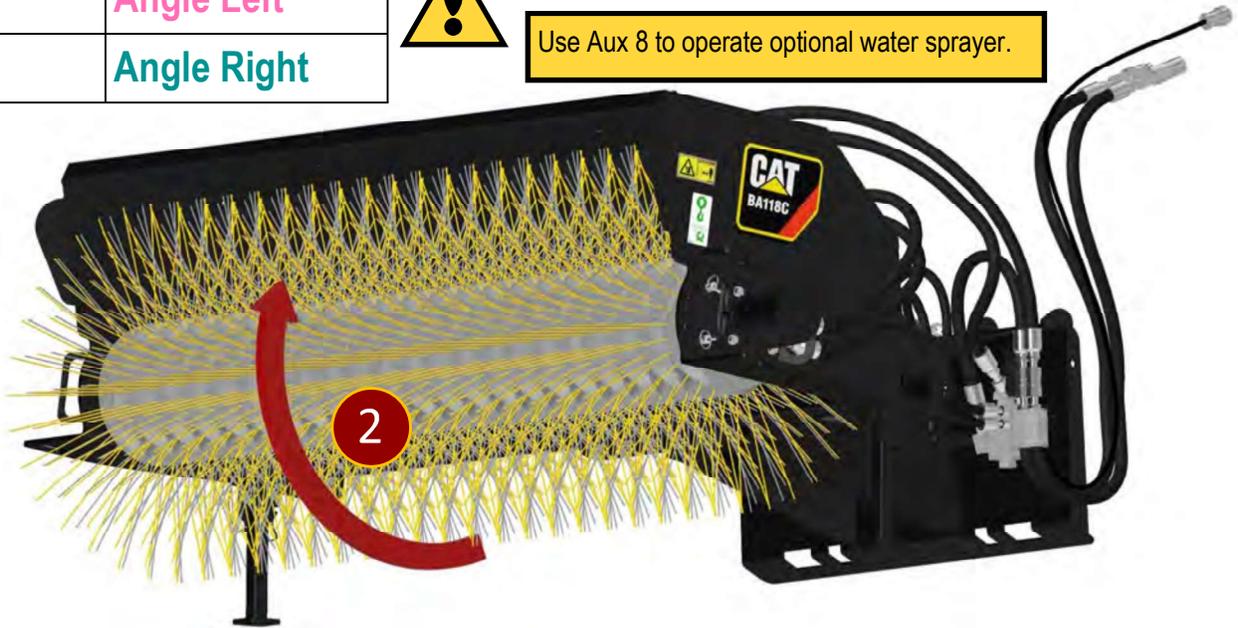
MODELS WITH HYDRAULIC ANGLE

BUTTONS	FUNCTION
5	Angle Left
6	Angle Right



Must be in Continuous Flow.

Use Aux 8 to operate optional water sprayer.

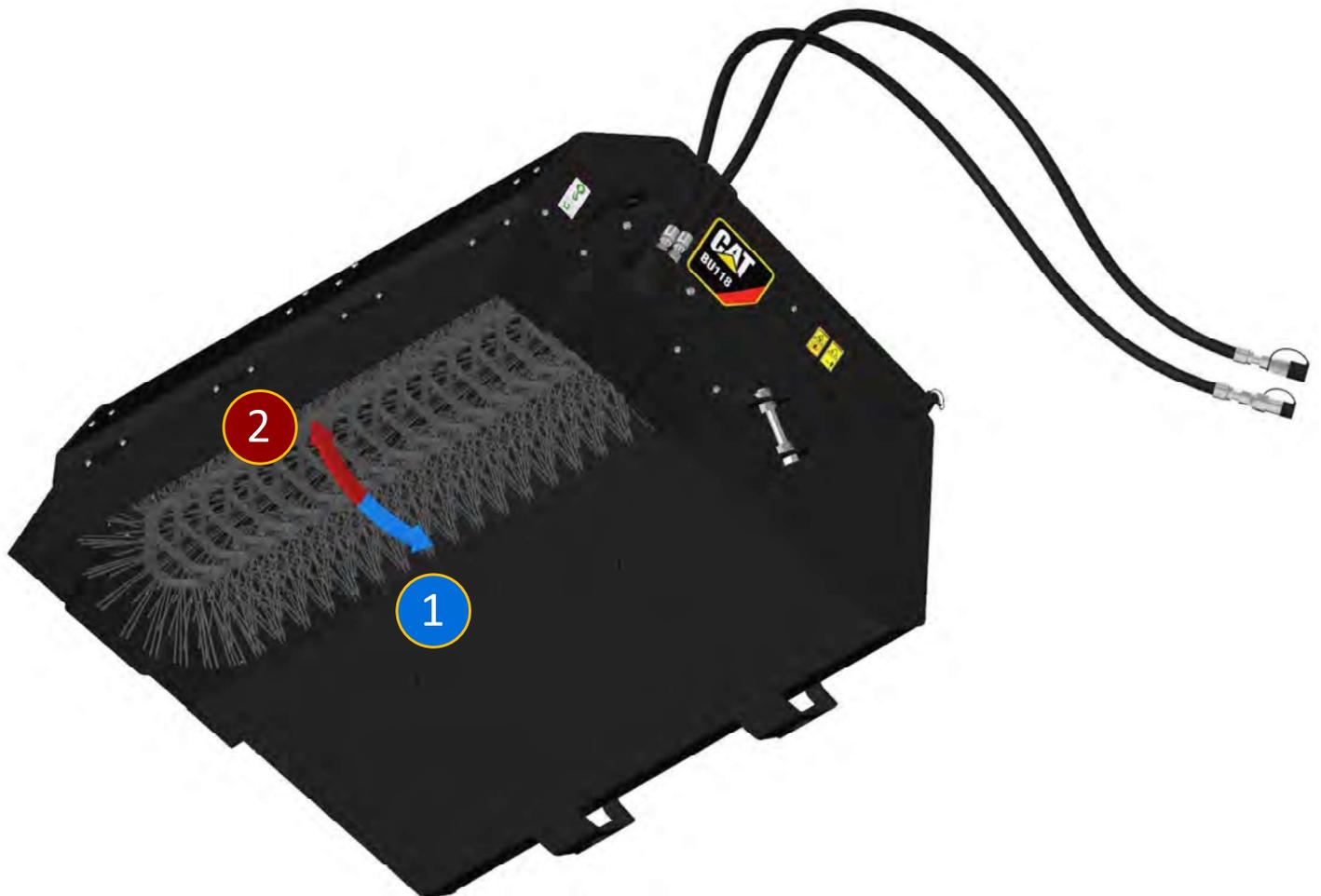
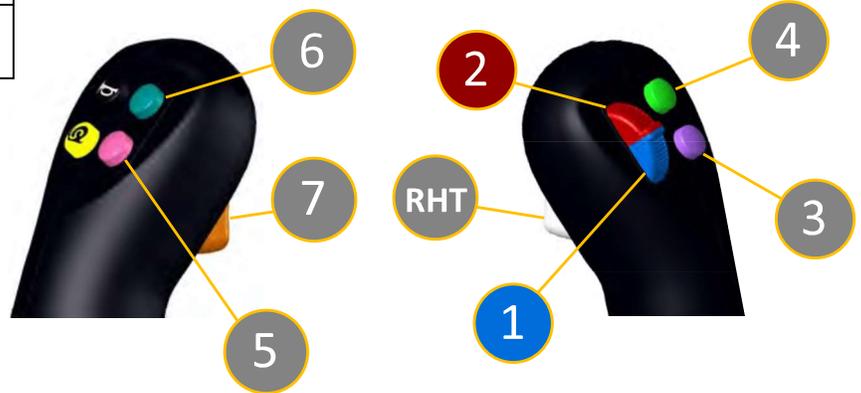


ALL MODELS

BUTTONS	FUNCTION
1	Dust Pan Rotation
2	Over Brush Rotation

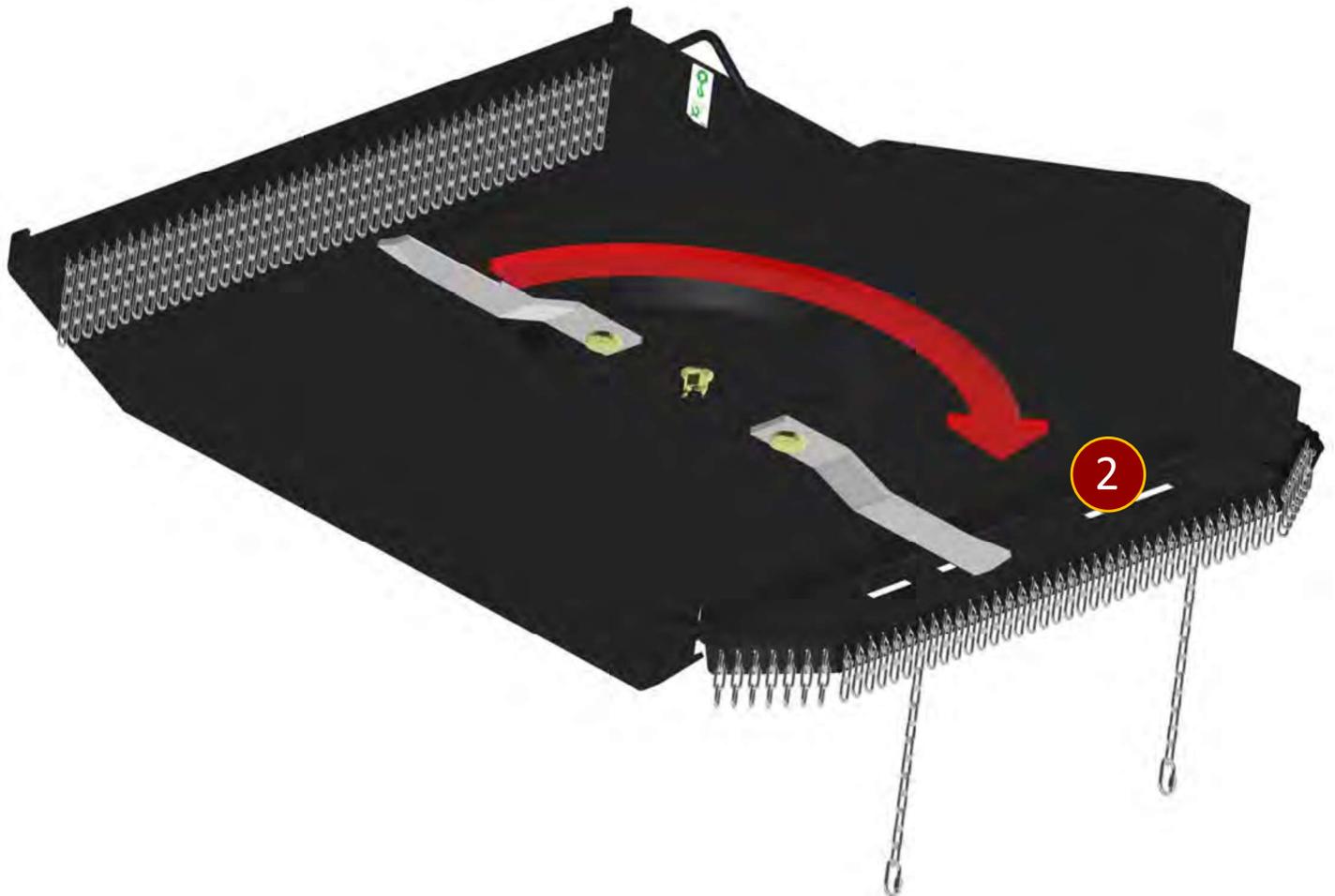
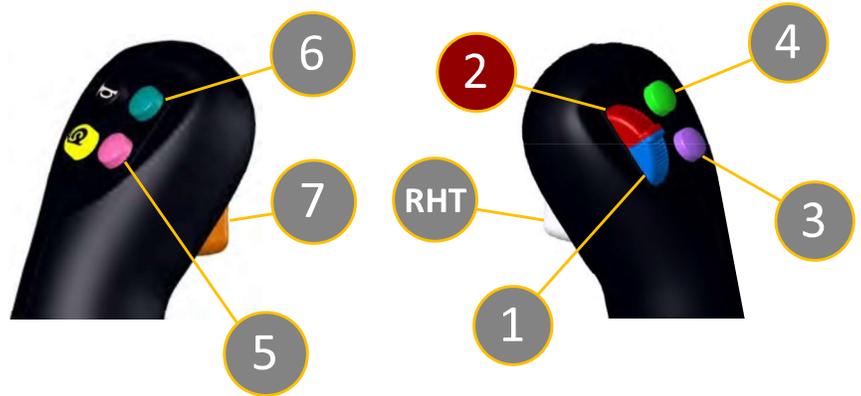


Use Aux 8 to operate optional water sprayer.



ALL MODELS

BUTTONS	FUNCTION
2	Forward



COLD PLANERS

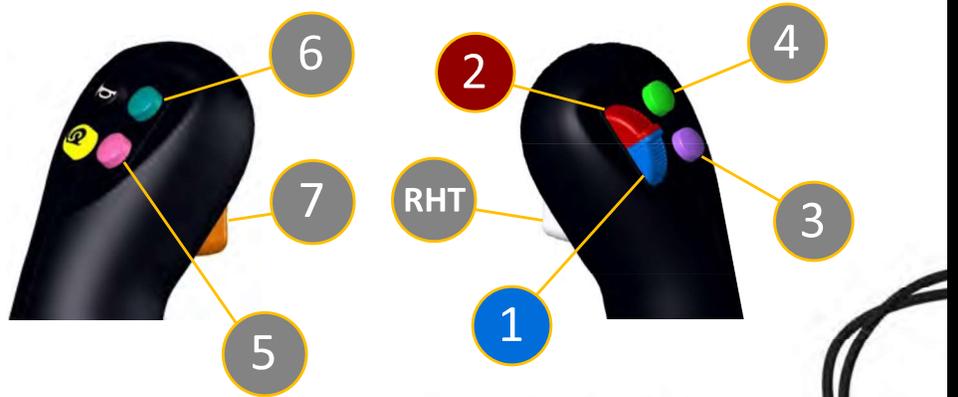


ALL MODELS

BUTTONS	FUNCTION
2	Drum Rotation

PC104B, PC205B

BUTTONS	FUNCTION
1	Shift Right
2	Shift Left



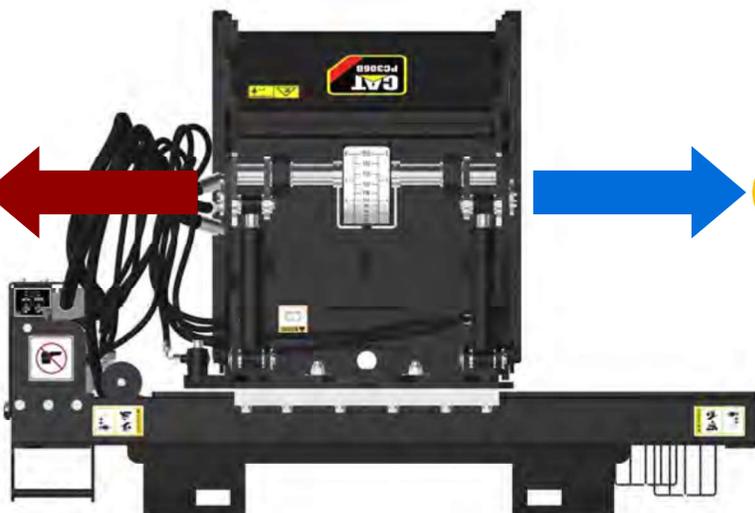
Use Aux 8 to operate optional water sprayer.



On PC104B and PC205B models, use this valve to switch to side shift function.



2



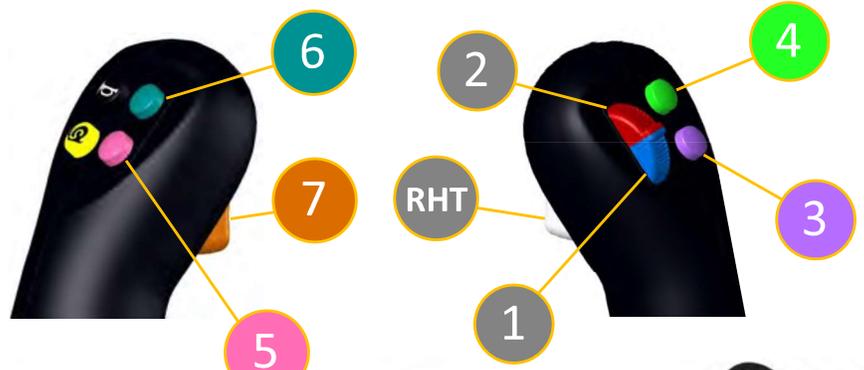
1

COLD PLANERS (CONT.)



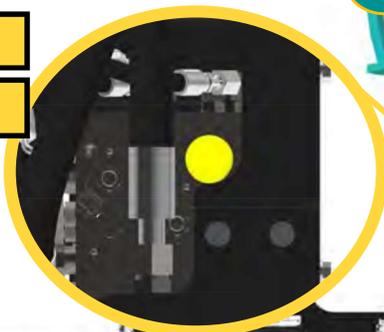
PC305B, PC306B, PC310B,
PC408B, PC412B

BUTTONS	FUNCTION
3	Shift Left
4	Shift Right
5+3	Left Skid Down
5+4	Left Skid Up
6+3	Right Skid Down
6+4	Right Skid Up
7+3	Tilt Drum Left
7+4	Tilt Drum Right

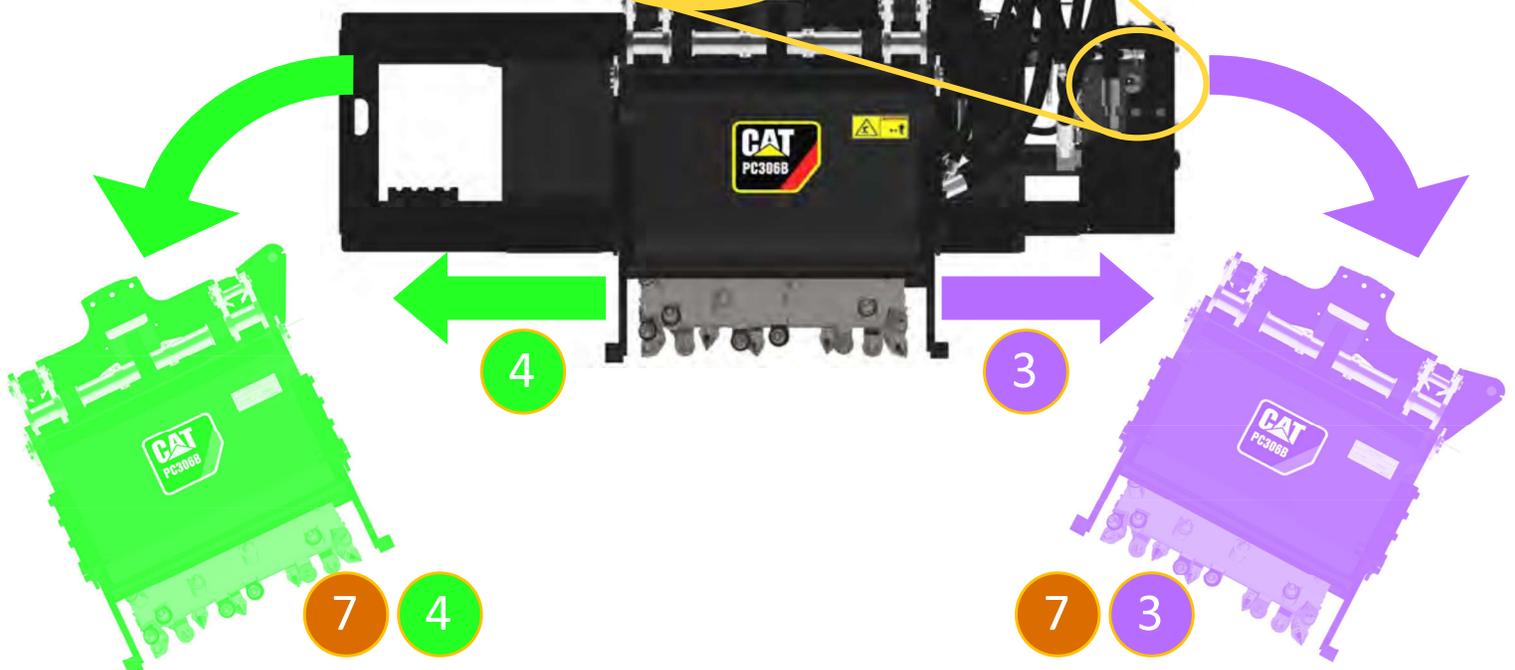


Must be in Continuous Flow.

Must have Aux 7 enabled.



Use this valve to switch between fixed and floating head tilt.



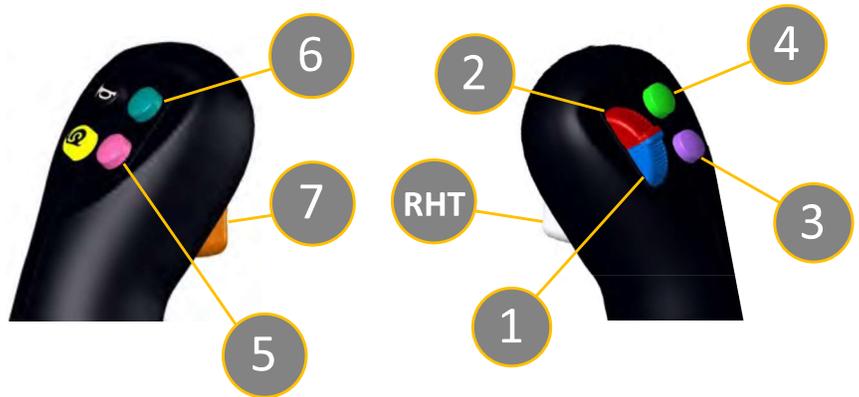
SMART GRADER BLADE



SMART GRADER BLADE



Only compatible with D3 series machines.



Many Grader blade functions are accessed through attachment control mode. To enter this mode:

1. Select the shovel icon on the machine display at start up to view the attachment control mode interface (1).
2. Press the button on the far right of the display to enter attachment control mode. Note that going in or out of this mode is only possible when the parking brake is active. The shovel icon will be green when in attachment control mode (2), and will be white when in normal skid steer mode (3).



Select shovel with cog icon to enter Attachment Control Mode Settings.

(1) Attachment Control Mode Interface



(2) Home Screen—Green shovel icon indicates that attachment control mode is currently ON.



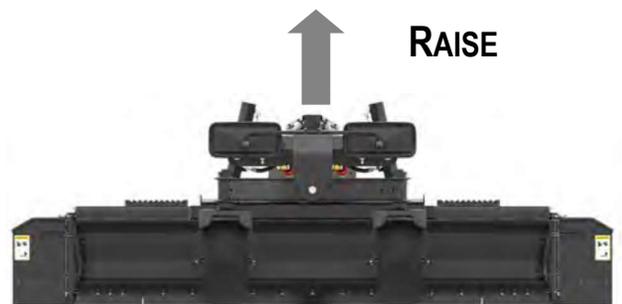
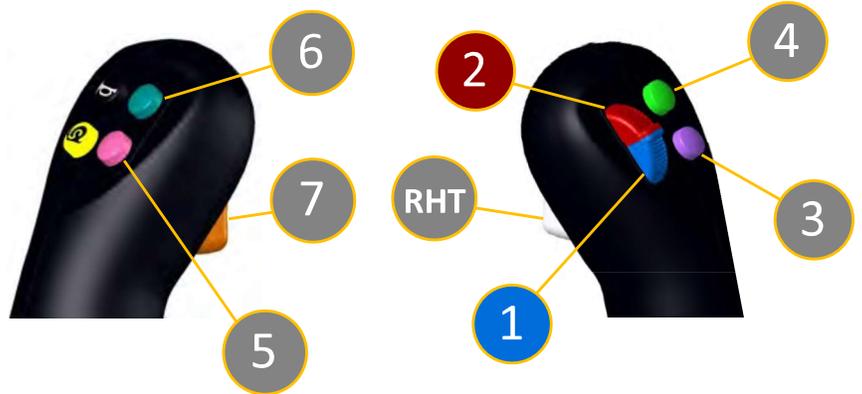
(3) Home Screen—White shovel icon indicates that attachment control mode is currently OFF.

SMART GRADER BLADE (CONTINUED)

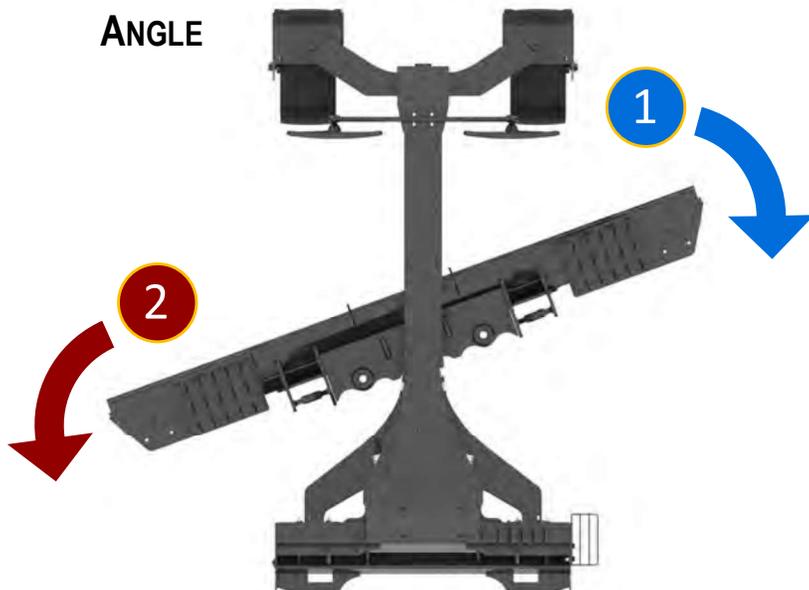


SMART GRADER BLADE

COMMAND	FUNCTION
1	Angle Right
2	Angle Left
Right Joystick— Right	Tilt Right
Right Joystick— Left	Tilt Left
Right Joystick— Forward	Lower Blade
Right Joystick— Back	Raise Blade

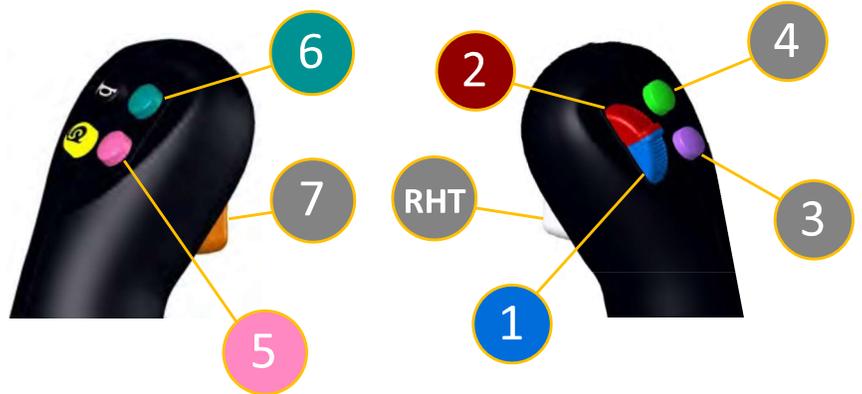


Only compatible with D3 series machines.



SMART GRADER BLADE

COMMAND	FUNCTION
6+1	Right Wing-Rotate Back
6+2	Right Wing-Rotate Forward
5+1	Left Wing-Rotate Back
5+2	Left Wing-Rotate Forward



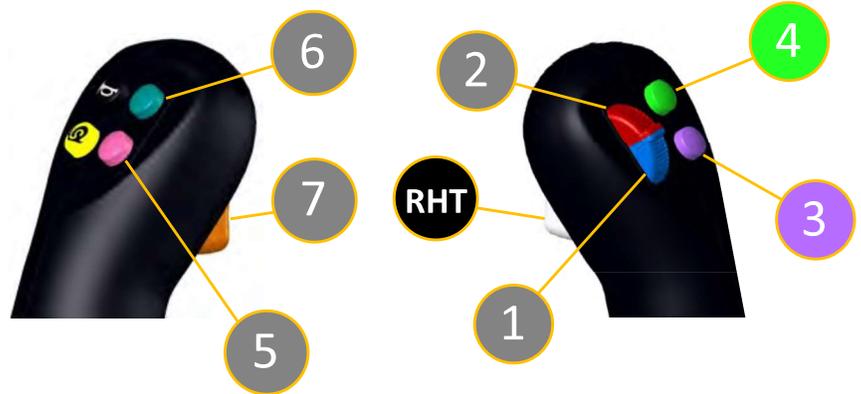
Only compatible with D3 series machines.

WING ROTATION



SMART GRADER BLADE

Note: The following machine functions are accessed through attachment control mode. See page 2 for instructions on how to enter this mode.



COMMAND	FUNCTION
3	Memory/Recall/ Mirror
4	Return to Zero



Only compatible with D3 series machines.

Memory/Recall/Mirror—This function can be used to program and recall a set blade slope position. Press and hold the memory button for 1 or more seconds to program the new position. Afterwards, the button can be pressed and released to return to the set position. The button can be pressed twice quickly to mirror the blade slope of the memory position. Operator Assist must be active to use this feature.

Return to Zero—Press and release this button to return to a blade slope of zero. Operator Assist must be active to use this feature.

Memory Position

Mirror Memory Position

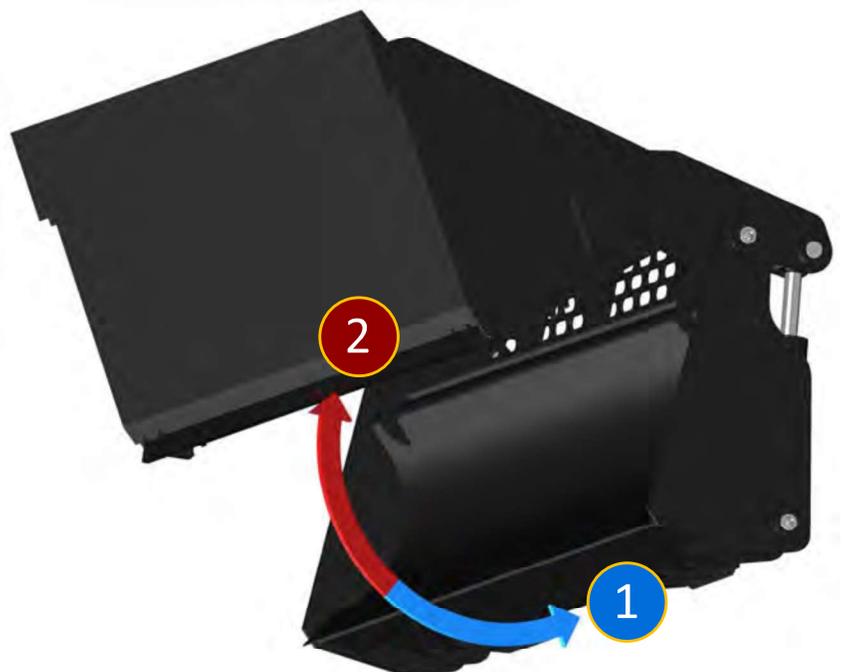
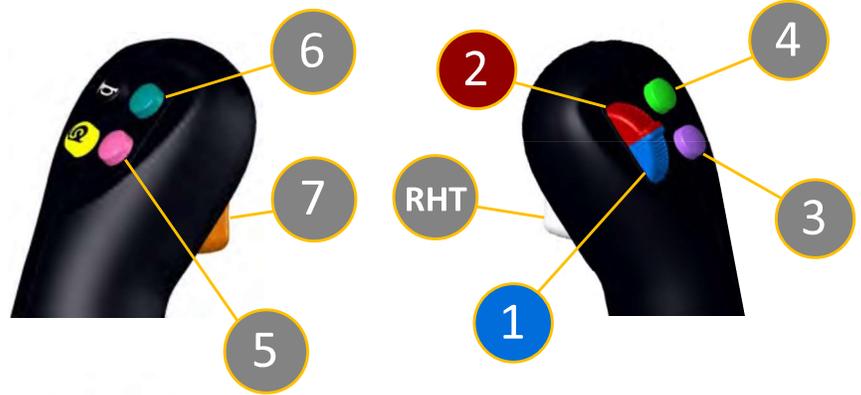


GRAPPLES, MULTI-PURPOSE BUCKETS



ALL MODELS

BUTTONS	FUNCTION
1	Close
2	Open

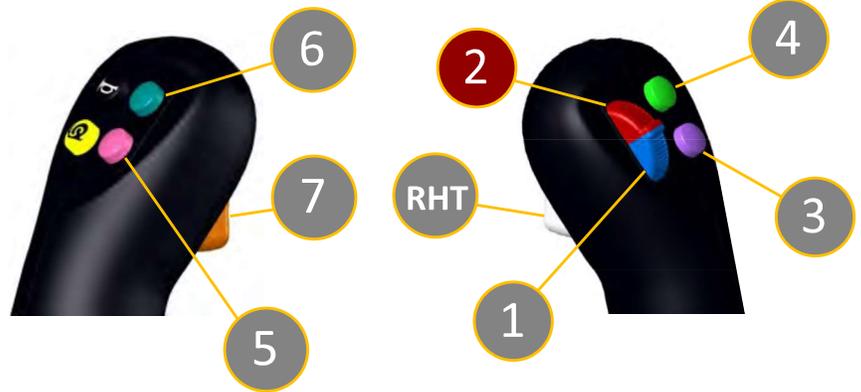


HAMMERS



ALL MODELS

BUTTONS	FUNCTION
2	Hammer

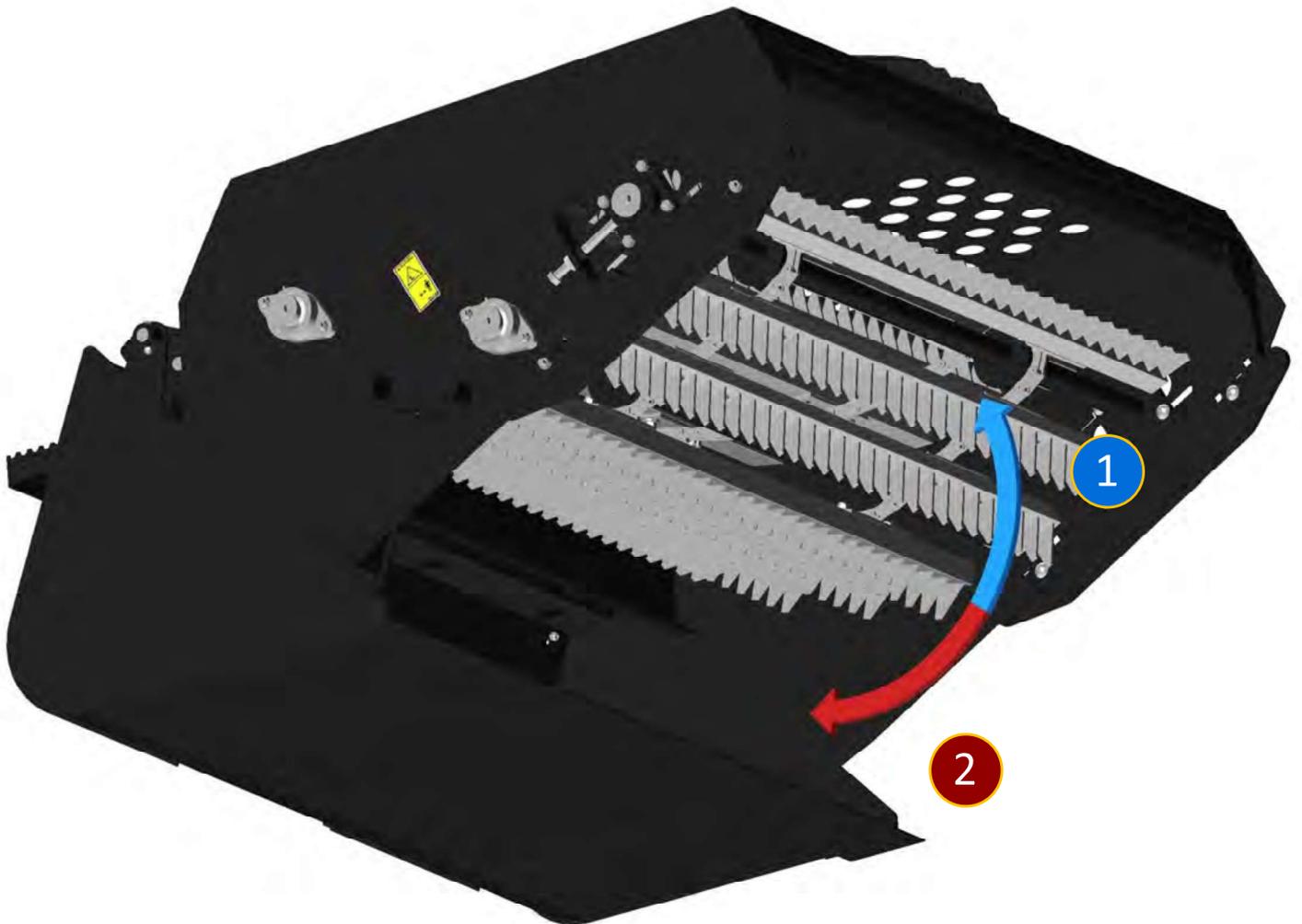
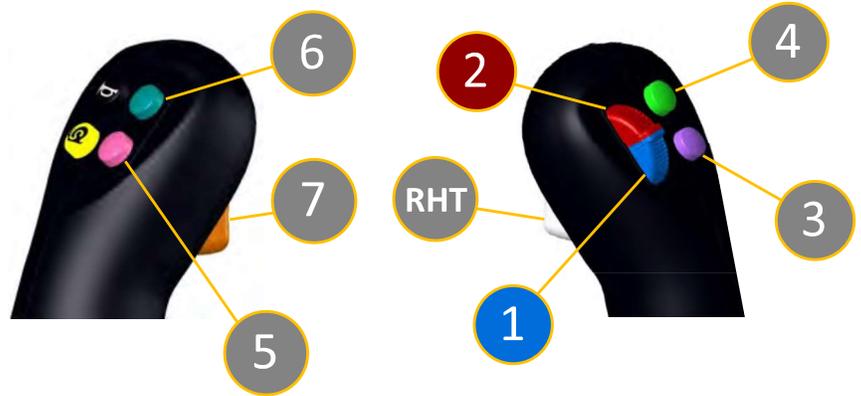


LANDSCAPE RAKES



ALL MODELS

BUTTONS	FUNCTION
1	Raise Hood
2	Rake

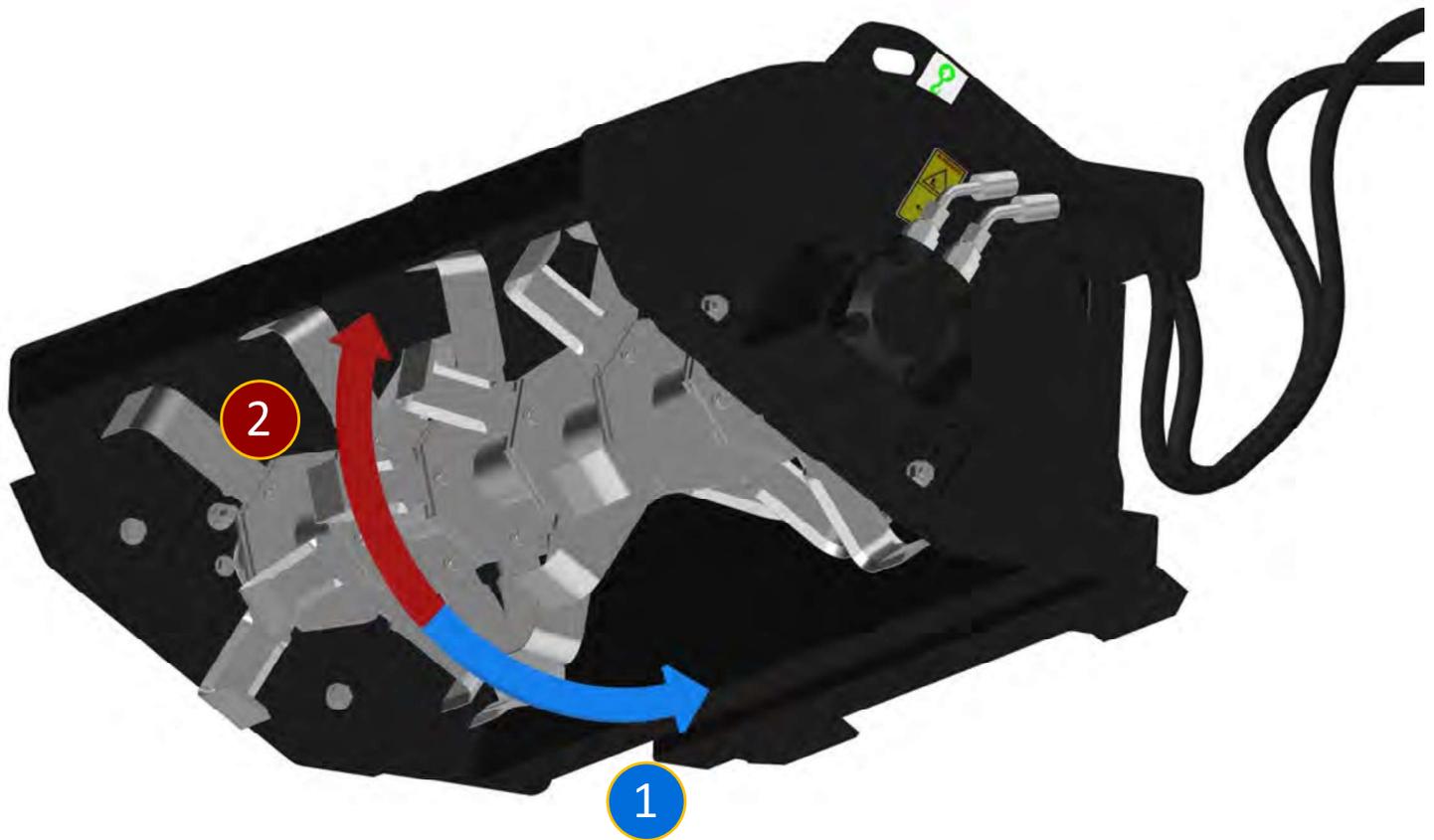
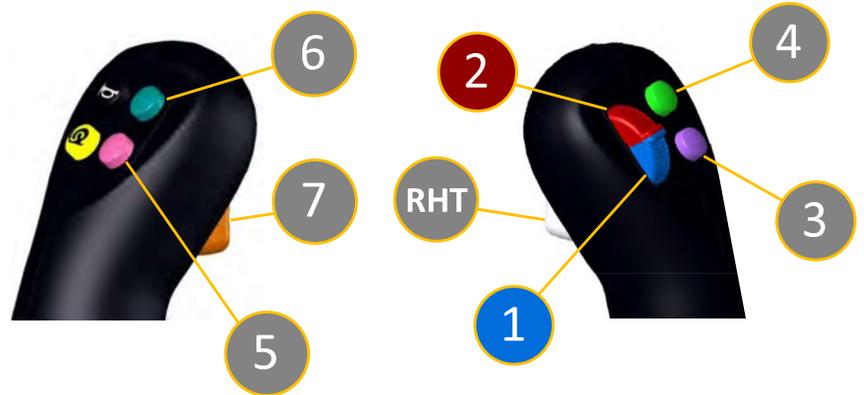


LANDSCAPE TILLERS



ALL MODELS

BUTTONS	FUNCTION
1	CCW Rotation
2	CW Rotation

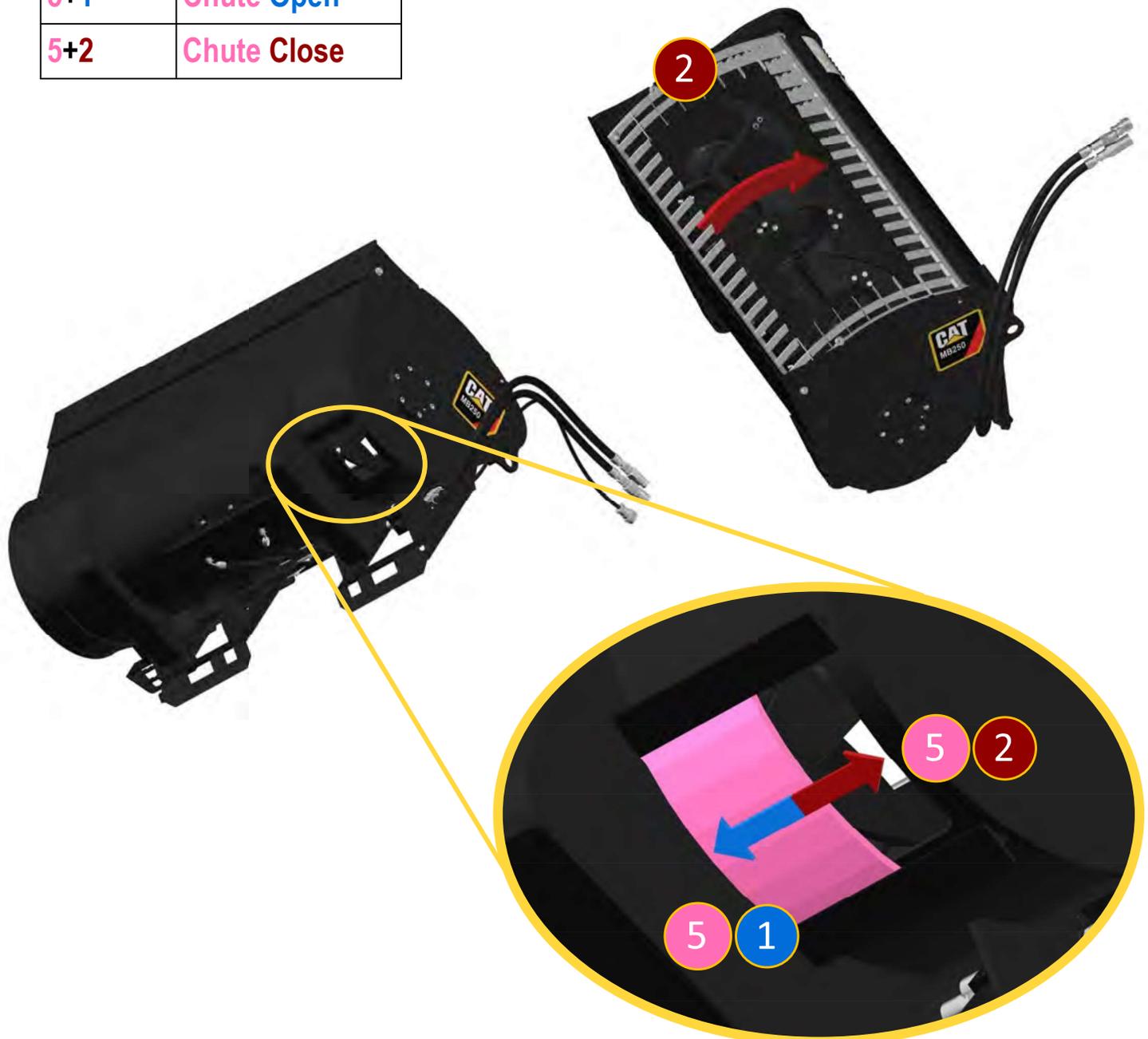
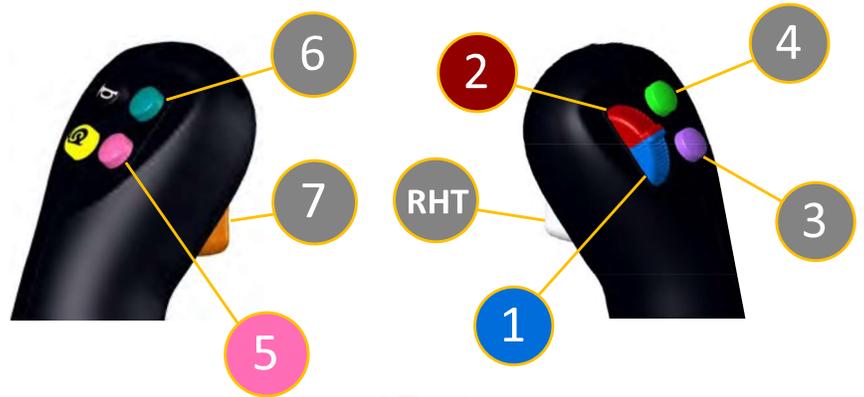


MIXING BUCKETS

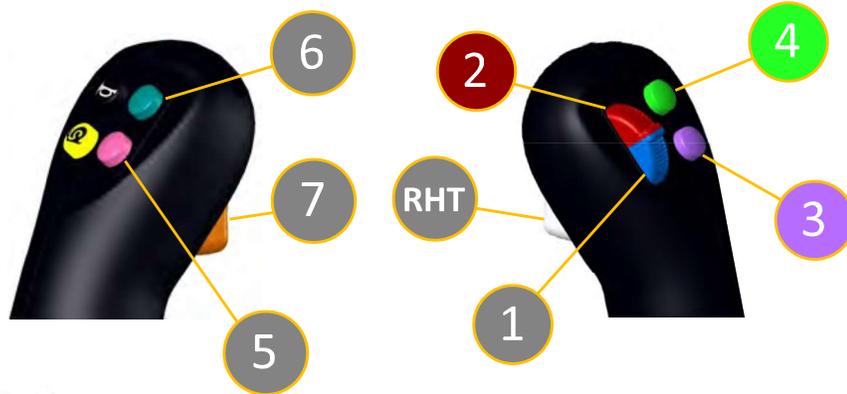


ALL MODELS

BUTTONS	FUNCTION
2	Mix
5+1	Chute Open
5+2	Chute Close



MULCHERS

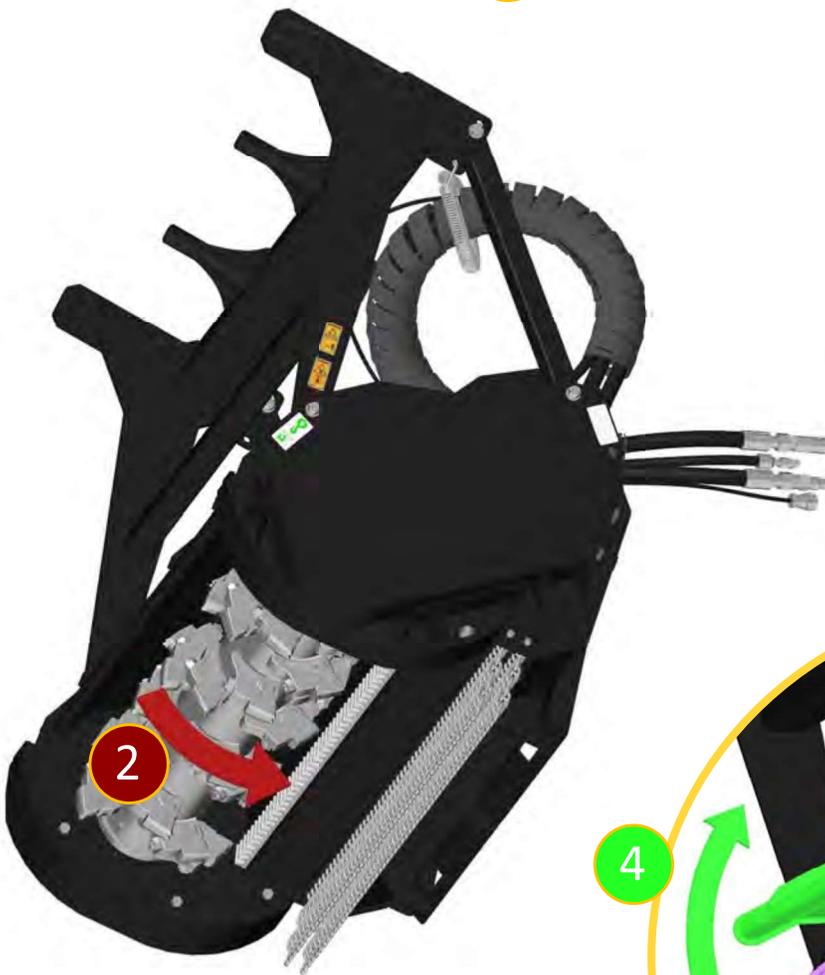


ALL MODELS

BUTTONS	FUNCTION
2	Mulch
3	Door Close
4	Door Open



Must be in Continuous Flow.

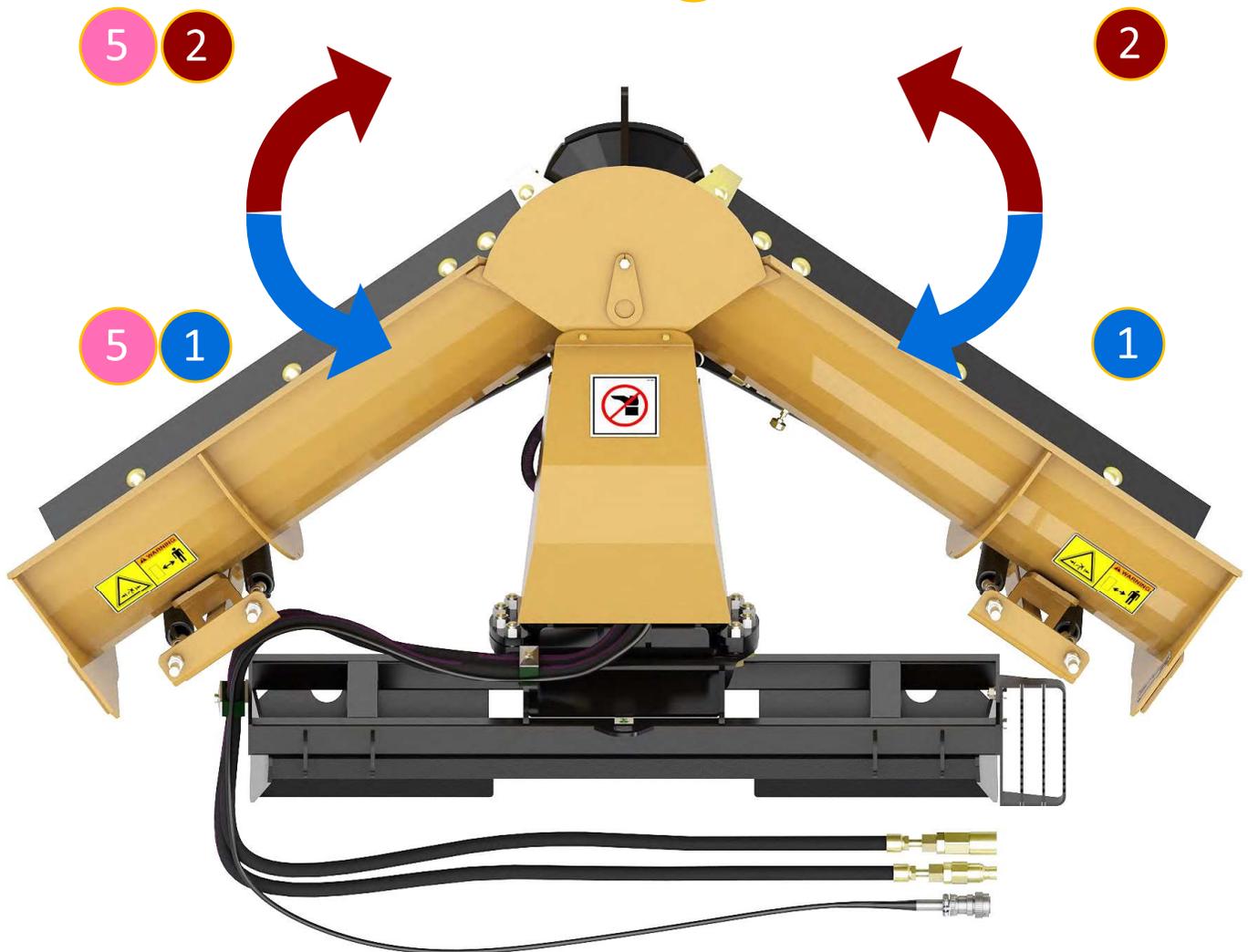
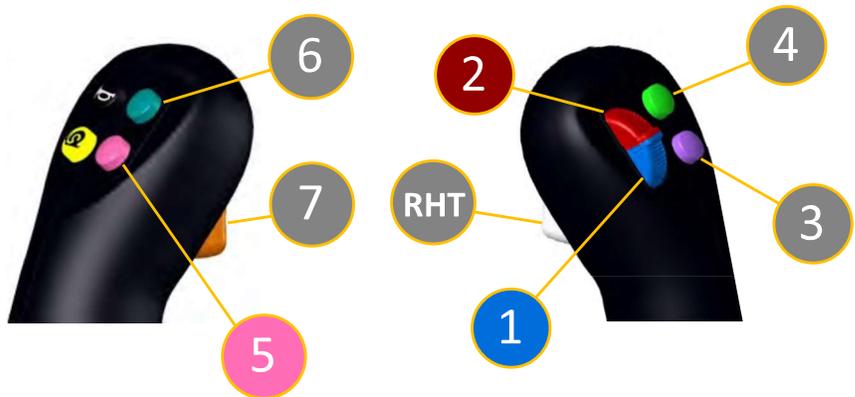


MULTI V-PLOWS



ALL MODELS

BUTTONS	FUNCTION
1	Right Side Back
2	Right Side Fwd
5+1	Left Side Back
5+2	Left Side Fwd

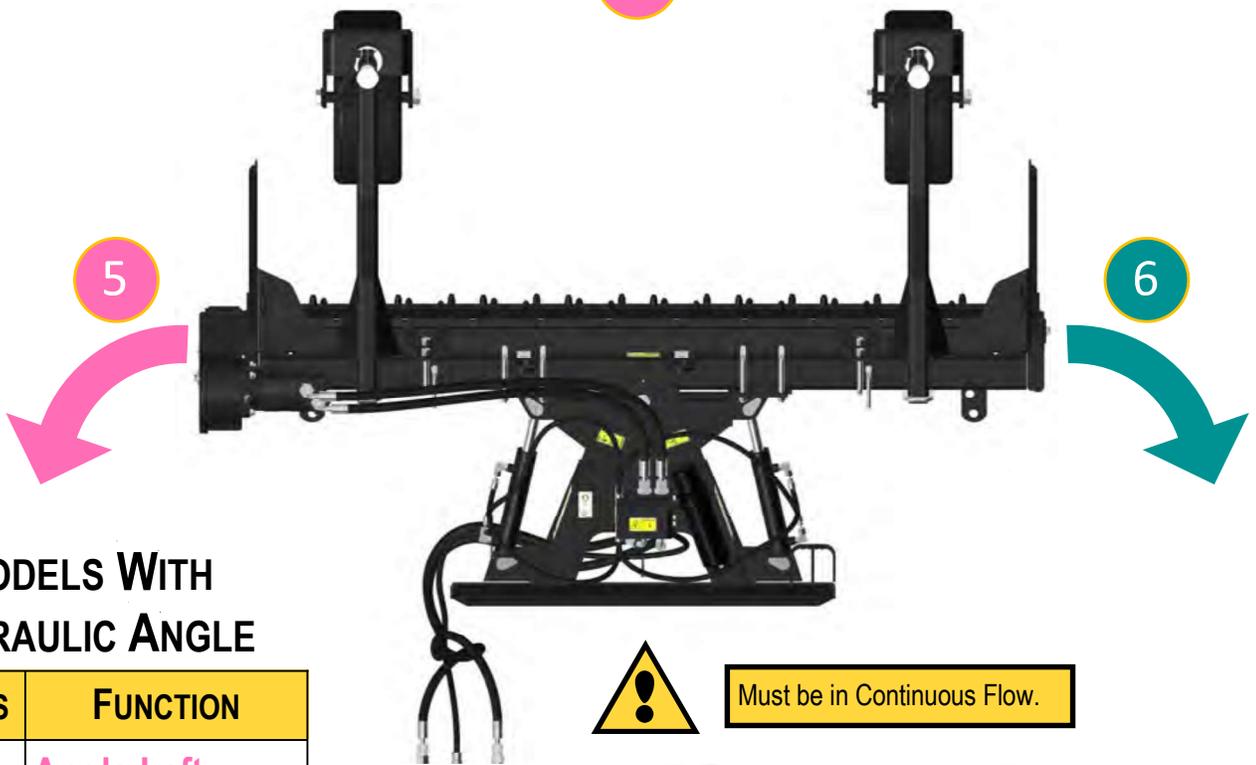
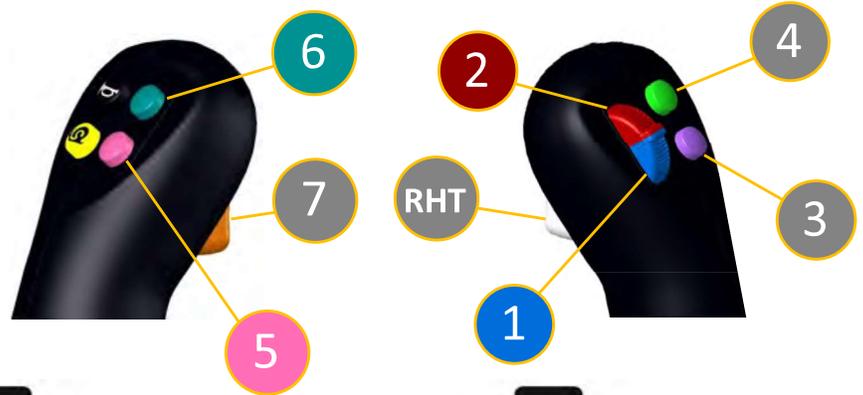


POWER BOX RAKES



ALL MODELS

BUTTONS	FUNCTION
1	Reverse
2	Forward



MODELS WITH HYDRAULIC ANGLE

BUTTONS	FUNCTION
5	Angle Left
6	Angle Right

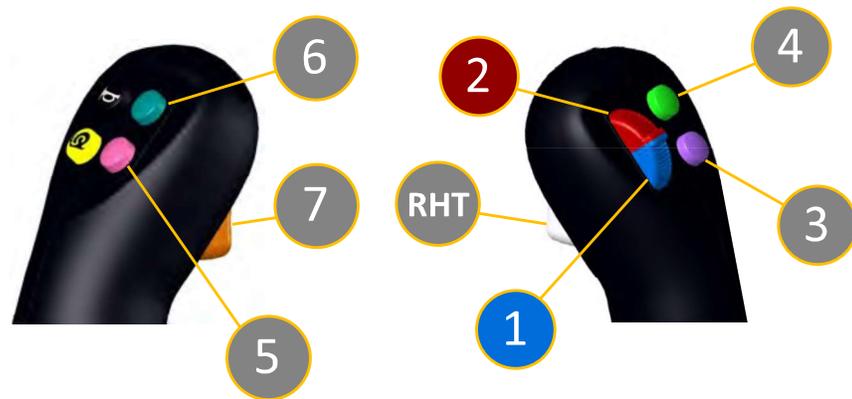


SIDE DISCHARGE BUCKETS



ALL MODELS

BUTTONS	FUNCTION
1	Discharge Right
2	Discharge Left

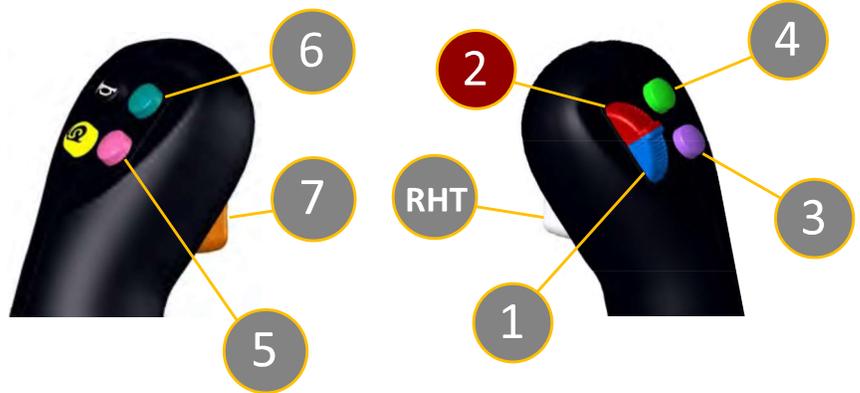


SILAGE DEFACERS



ALL MODELS

BUTTONS	FUNCTION
2	Rotation

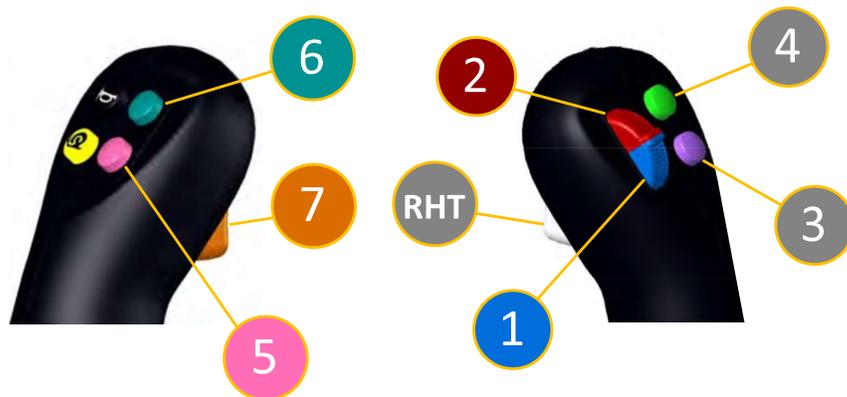


SNOW BLOWERS



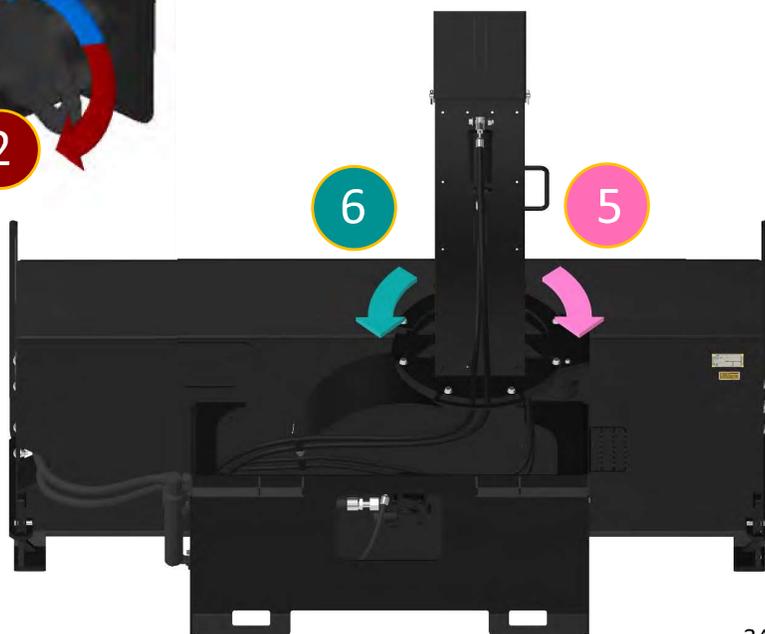
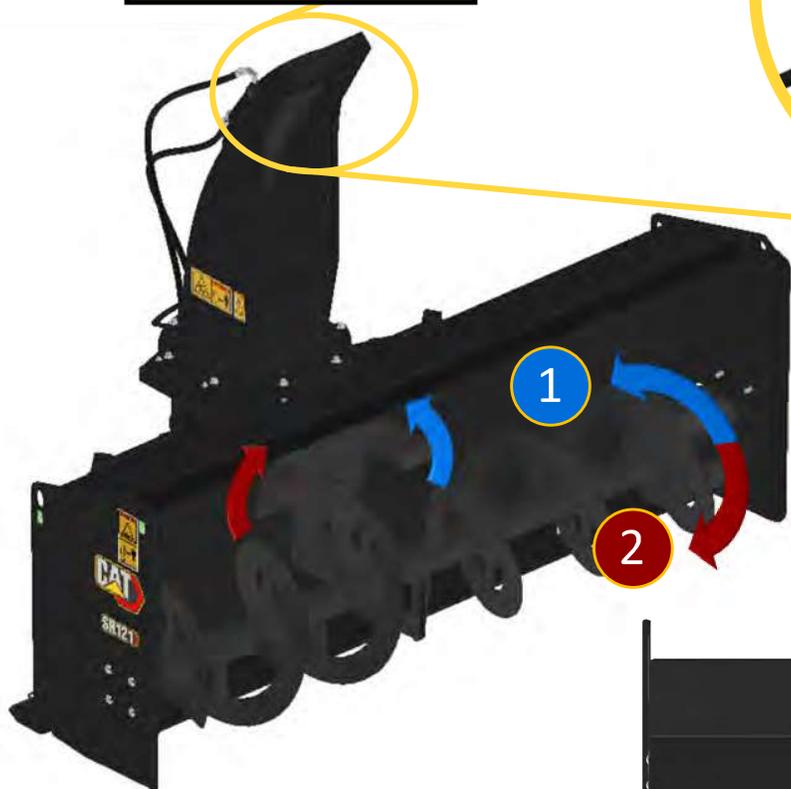
ALL MODELS

BUTTONS	FUNCTION
1	Reverse
2	Forward
5	Chute Right
6	Chute Left
7+5	Deflector Down
7+6	Deflector Up



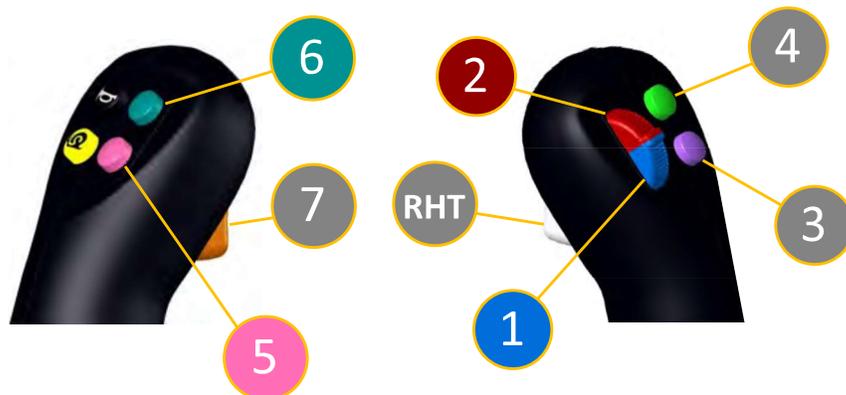
Must be in Continuous Flow.

Must have Aux 7 enabled.

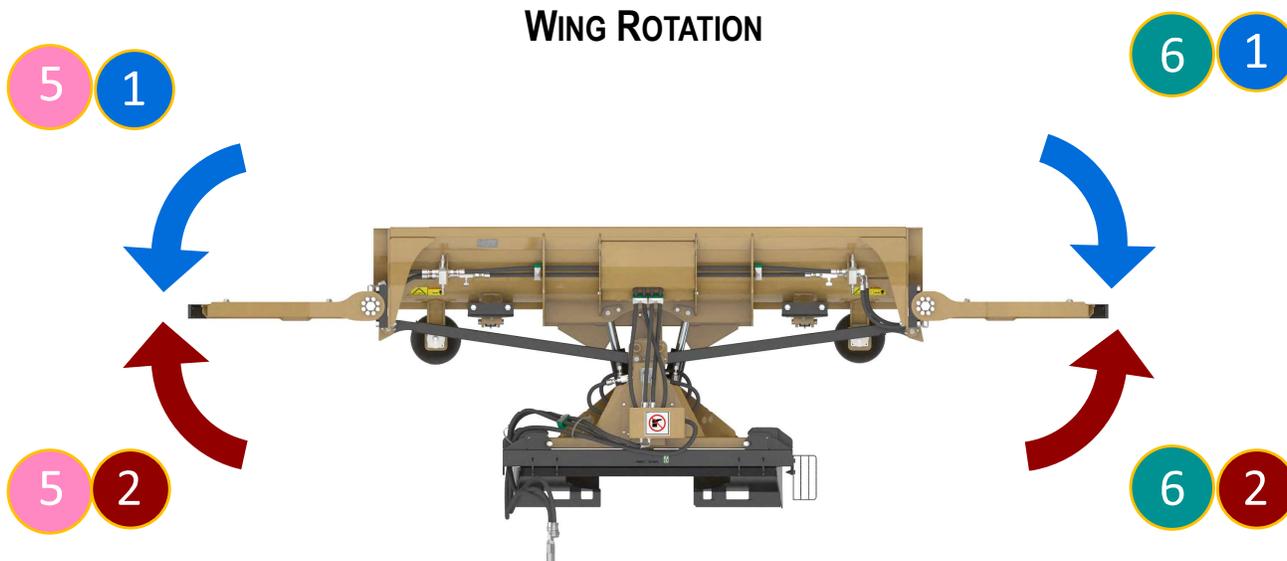


ALL MODELS

COMMAND	FUNCTION
6+1	Right Wing-Rotate Back
6+2	Right Wing-Rotate Forward
5+1	Left Wing-Rotate Back
5+2	Left Wing-Rotate Forward



WING ROTATION

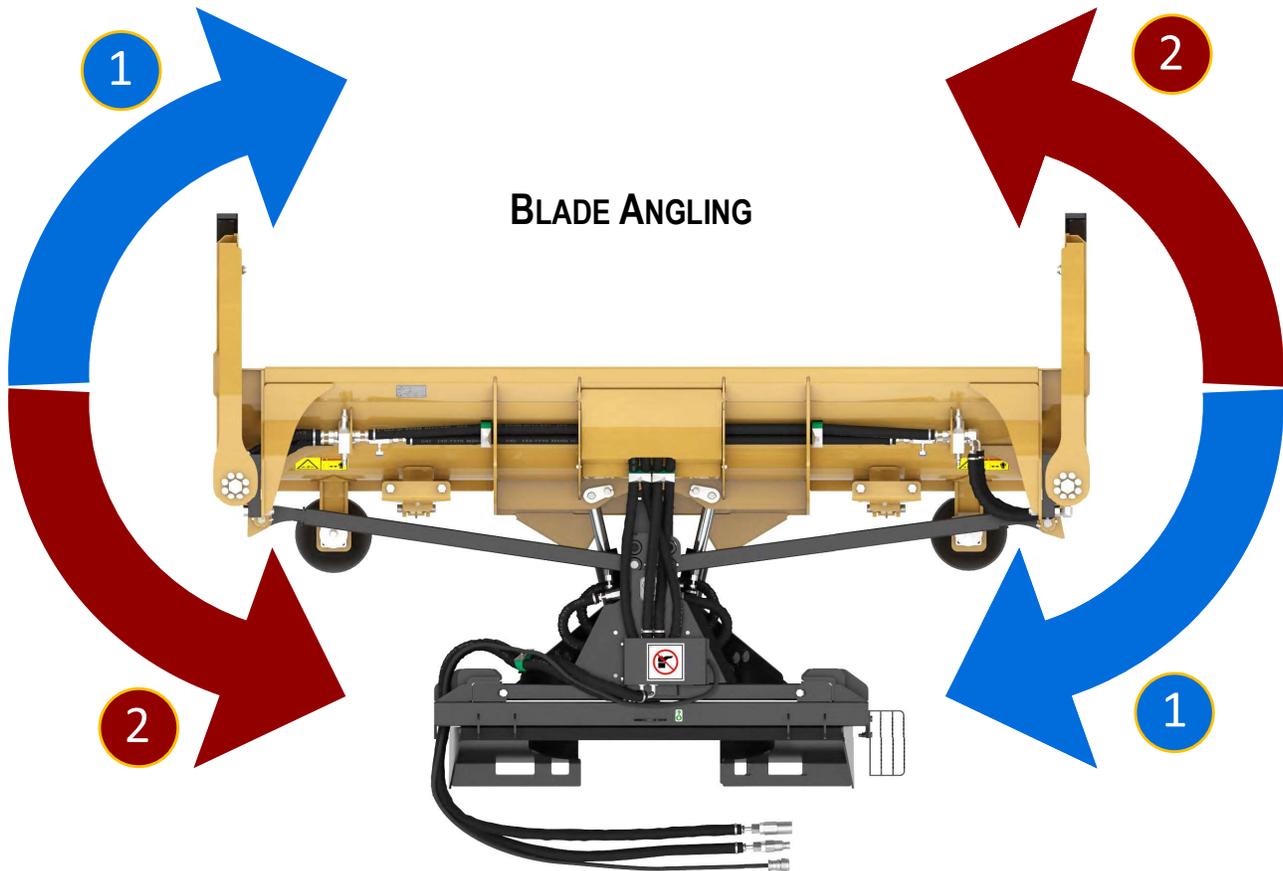
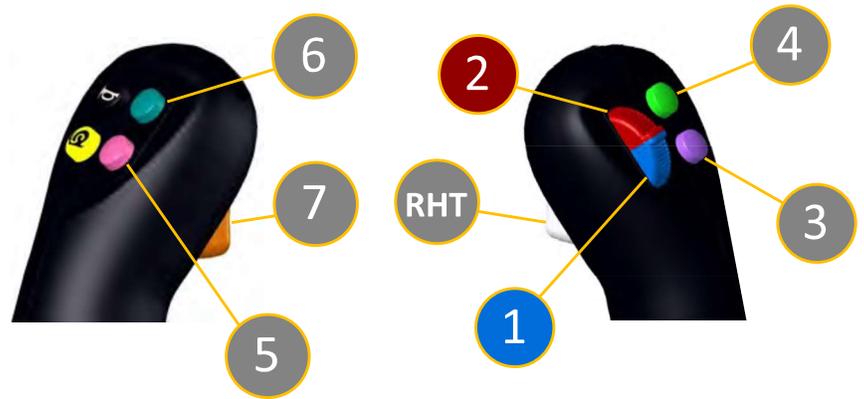


SNOW WINGS (CONTINUED)



ALL MODELS

BUTTONS	FUNCTION
1	Angle Right
2	Angle left



STUMP GRINDERS

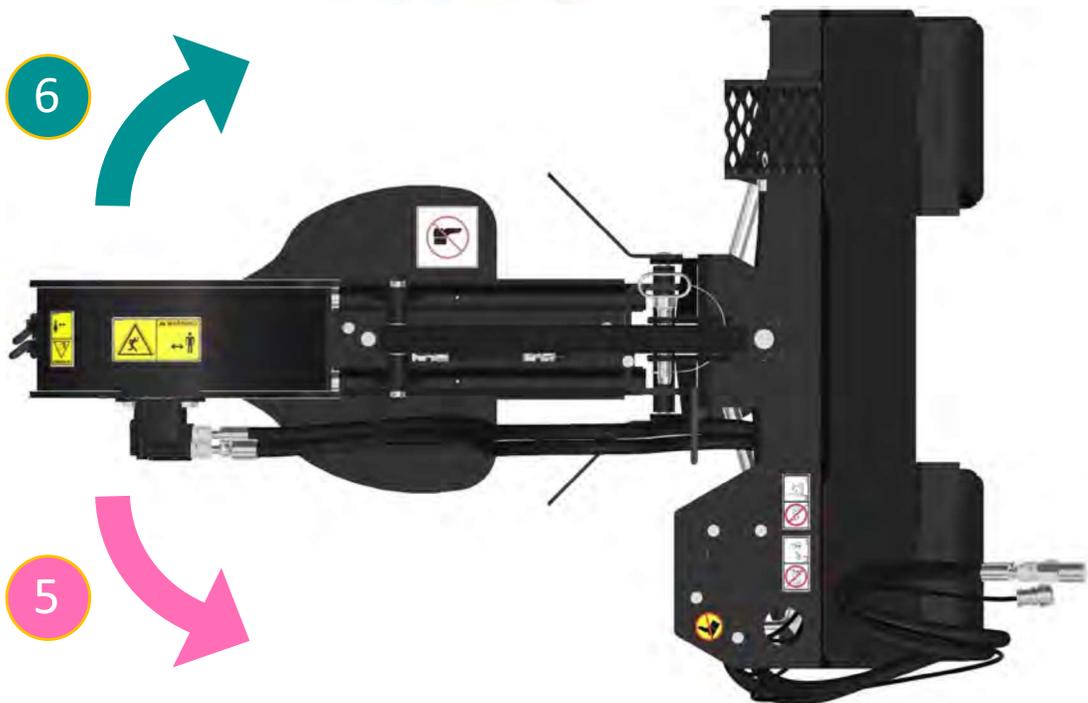
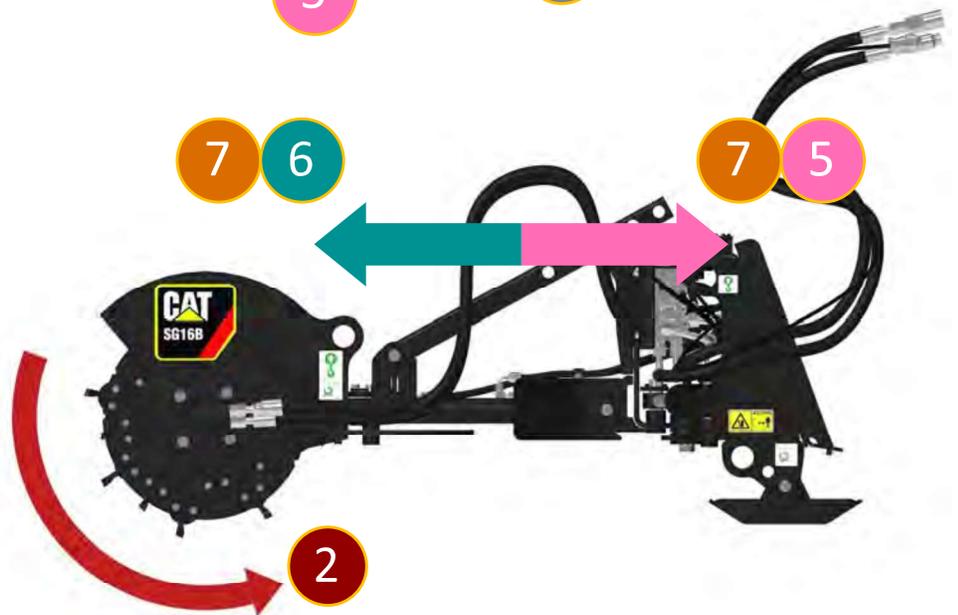
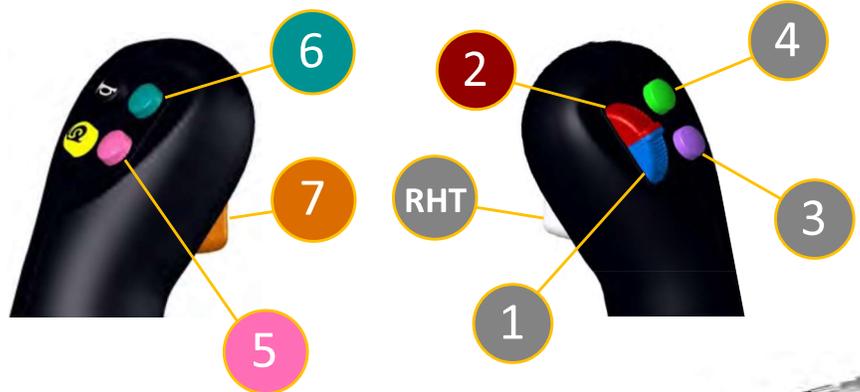


SG16B

BUTTONS	FUNCTION
2	Rotation
5	Swing Left
6	Swing Right
7+5	Retract
7+6	Extend



Must be in Continuous Flow.
Must have Aux 7 enabled.



STUMP GRINDERS (CONT.)

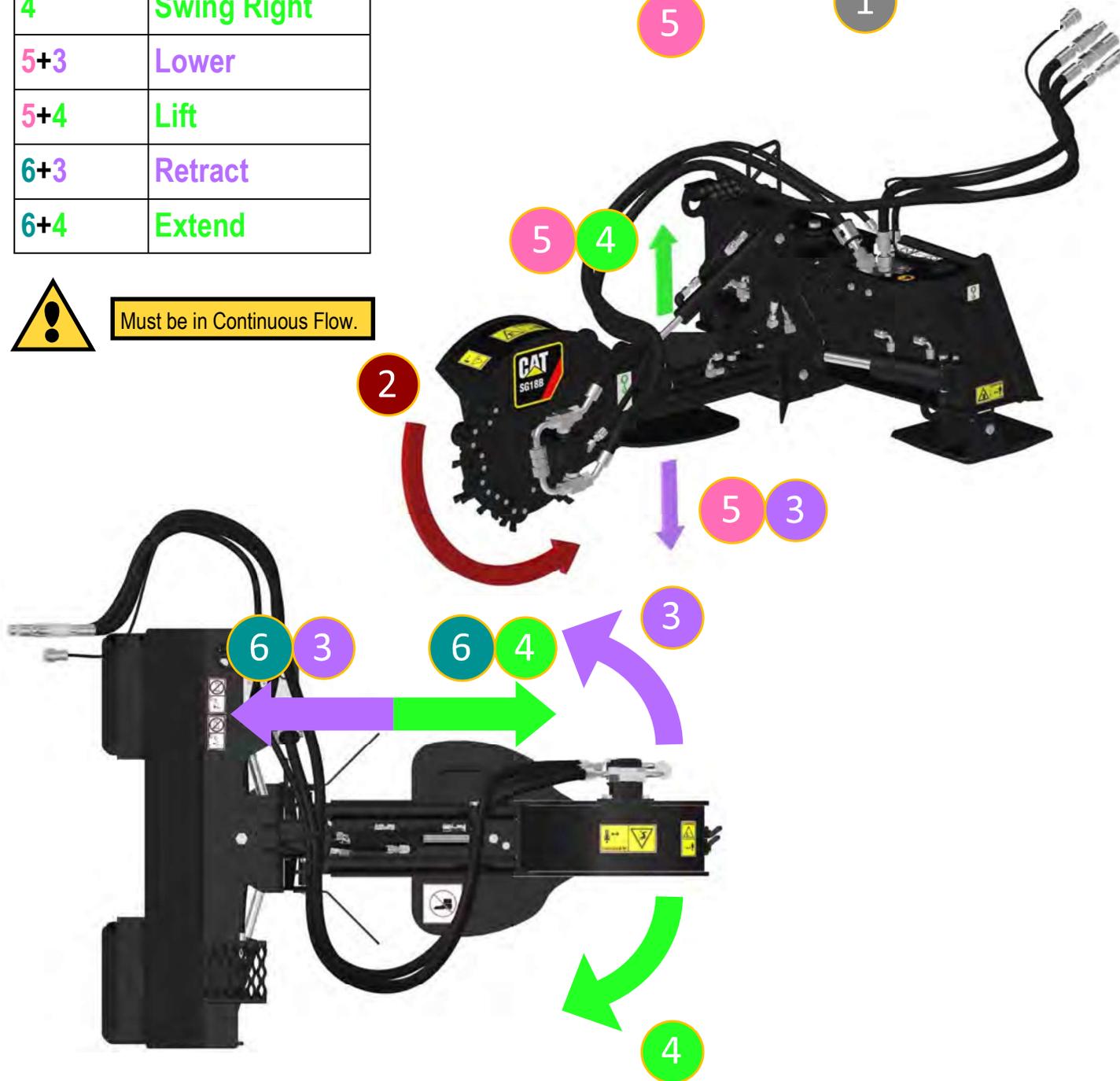
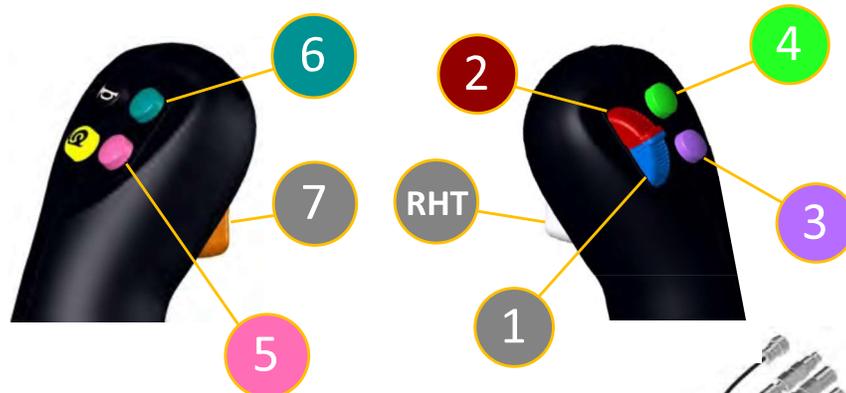


SG18B

BUTTONS	FUNCTION
2	Rotation
3	Swing Left
4	Swing Right
5+3	Lower
5+4	Lift
6+3	Retract
6+4	Extend



Must be in Continuous Flow.



TRENCHERS (CONT.)

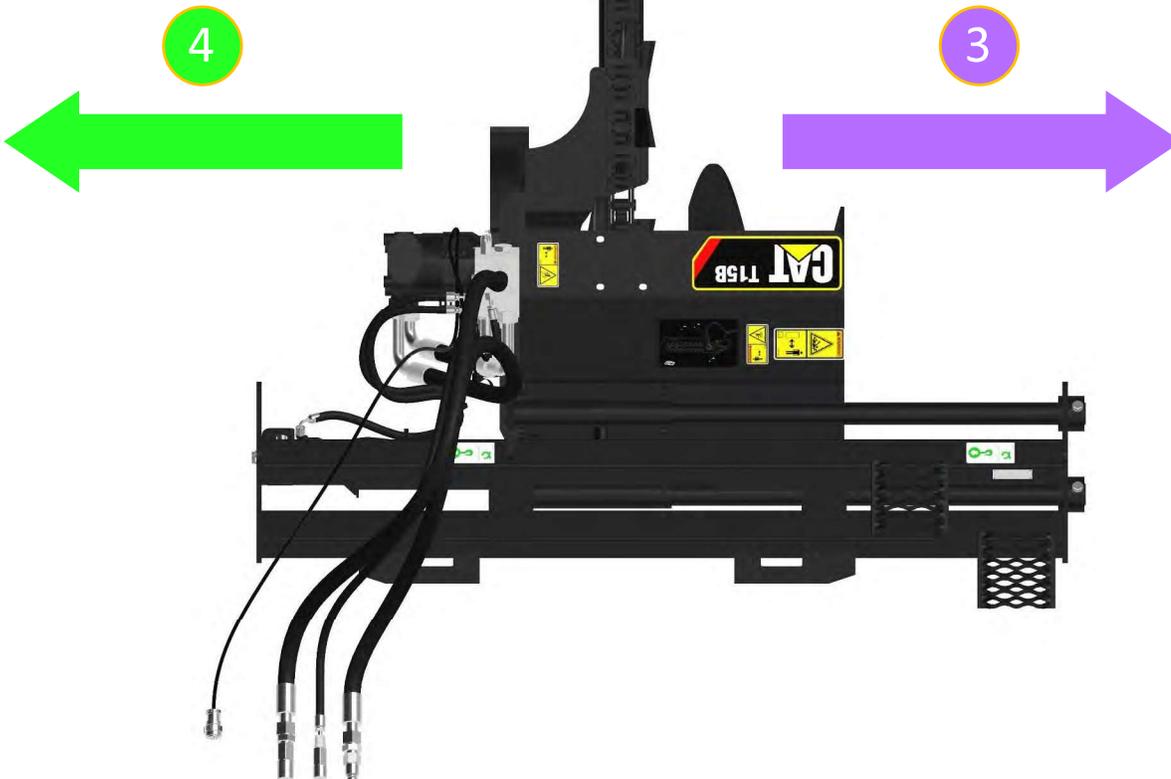
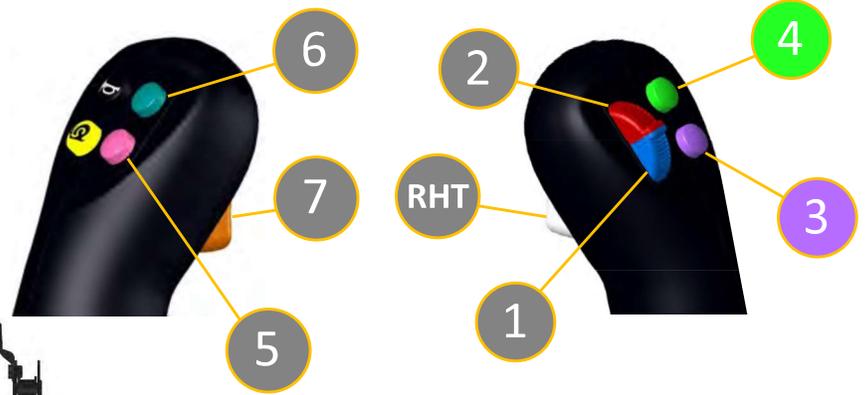


T15B

BUTTONS	FUNCTION
3	Shift Right
4	Shift Left



Must be in Continuous Flow.

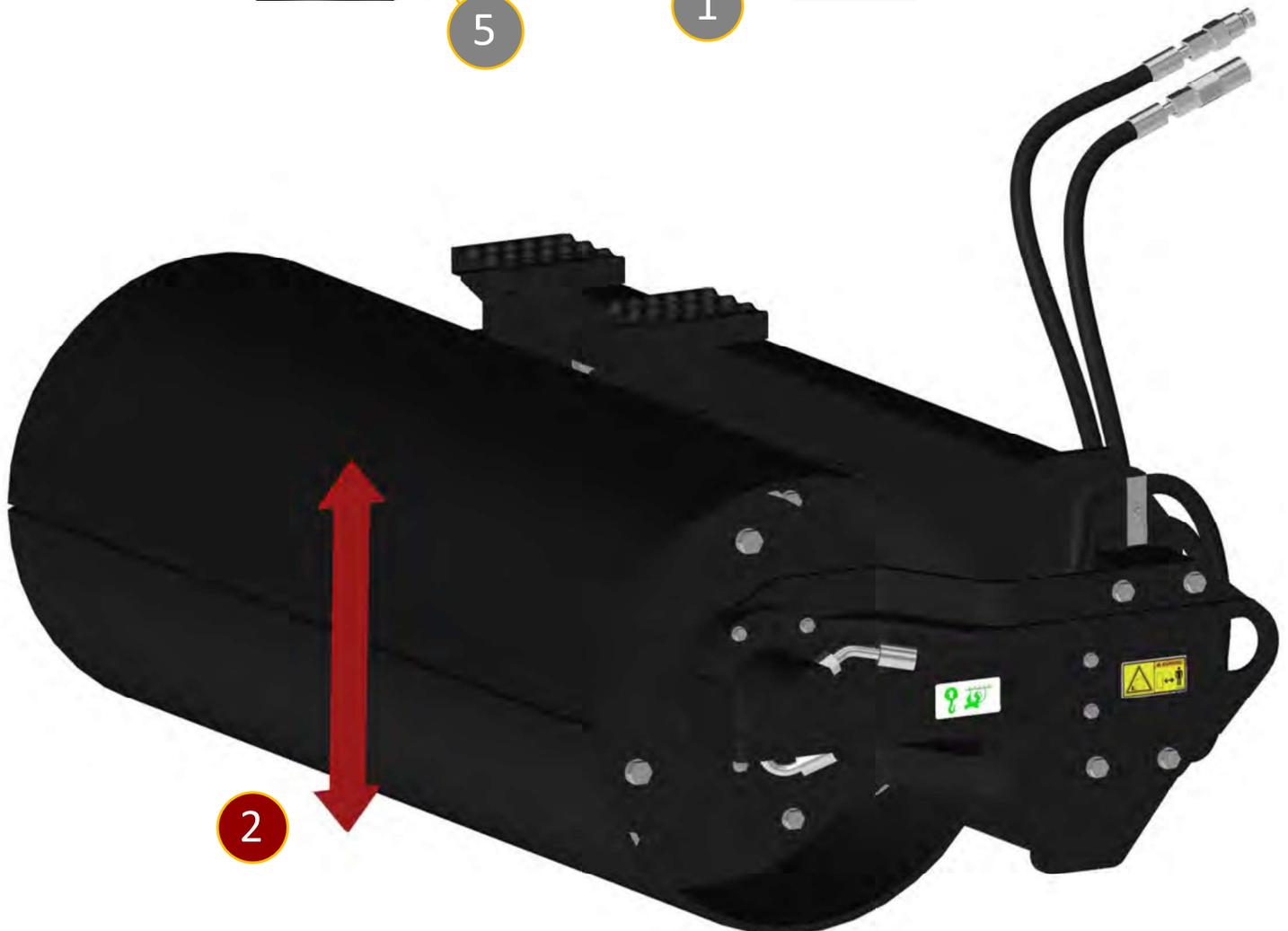
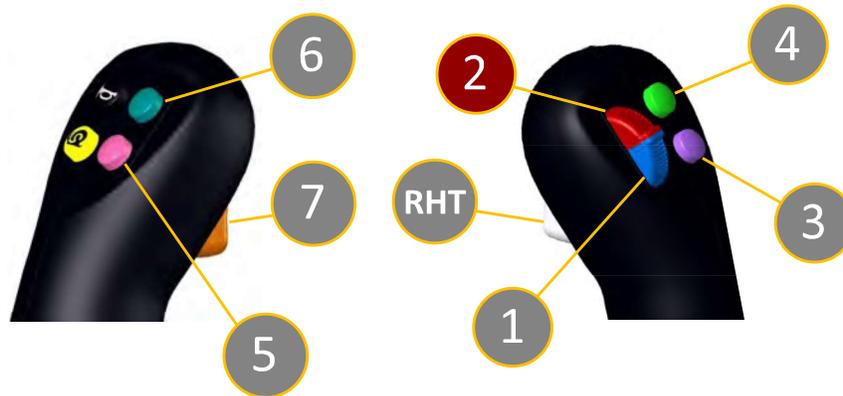


VIBRATORY DRUM COMPACTORS



ALL MODELS

BUTTONS	FUNCTION
2	Vibration

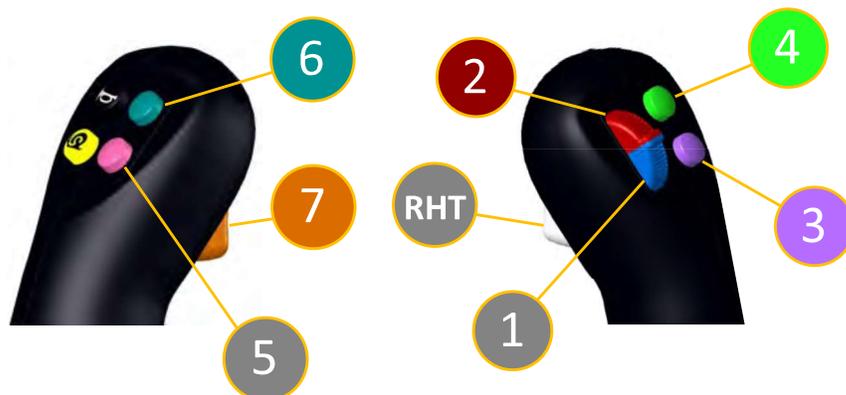


WHEEL SAWS



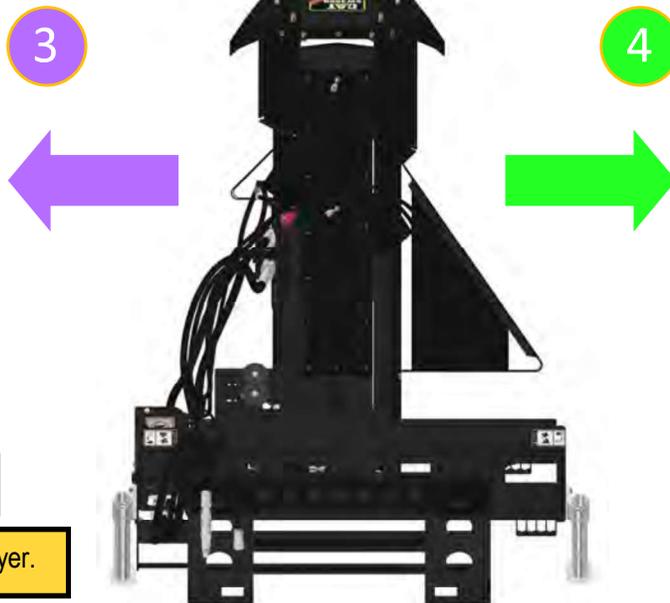
ALL MODELS

BUTTONS	FUNCTION
2	Wheel Rotation
3	Shift Left
4	Shift Right
6+3	Skids Up
6+4	Skids Down



MODELS WITH TRENCH CLEANER

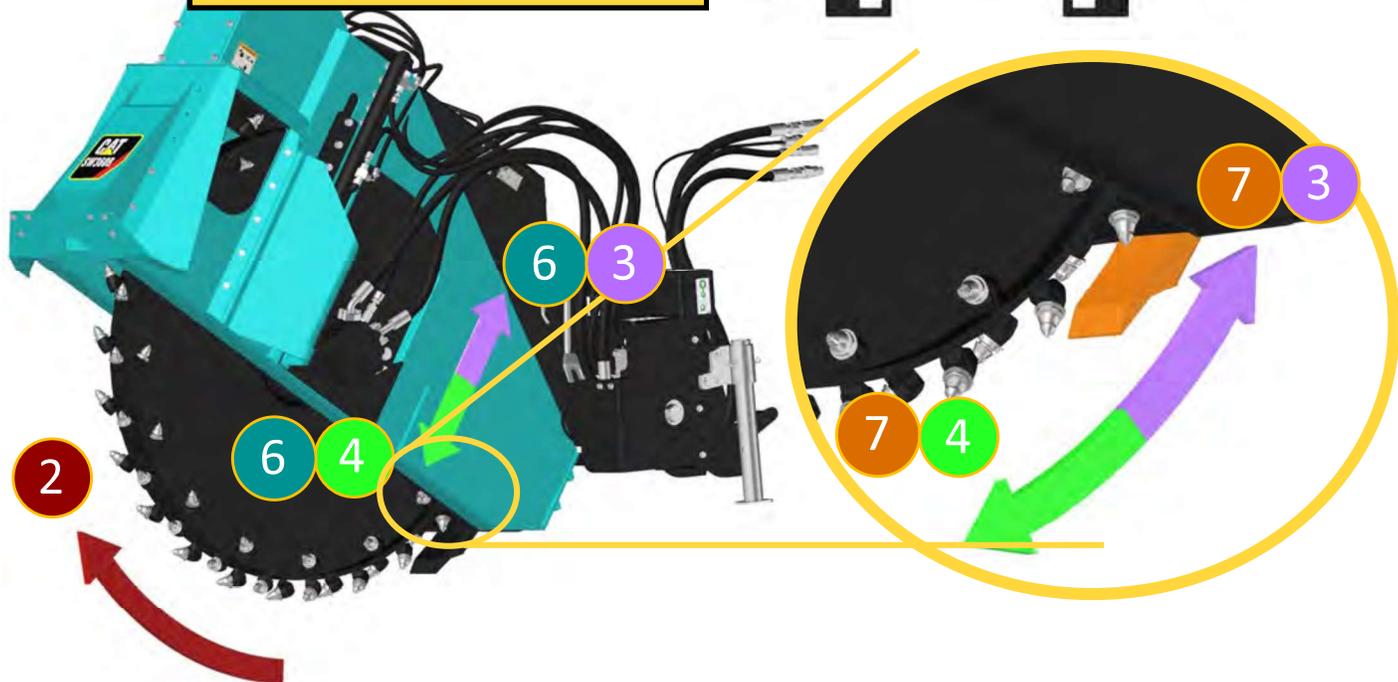
BUTTONS	FUNCTION
7+3	Trench Clean Up
7+4	Trench Clean Down



Must be in Continuous Flow.

Must have Aux Function 7 enabled.

Use Aux 8 to operate optional water sprayer.



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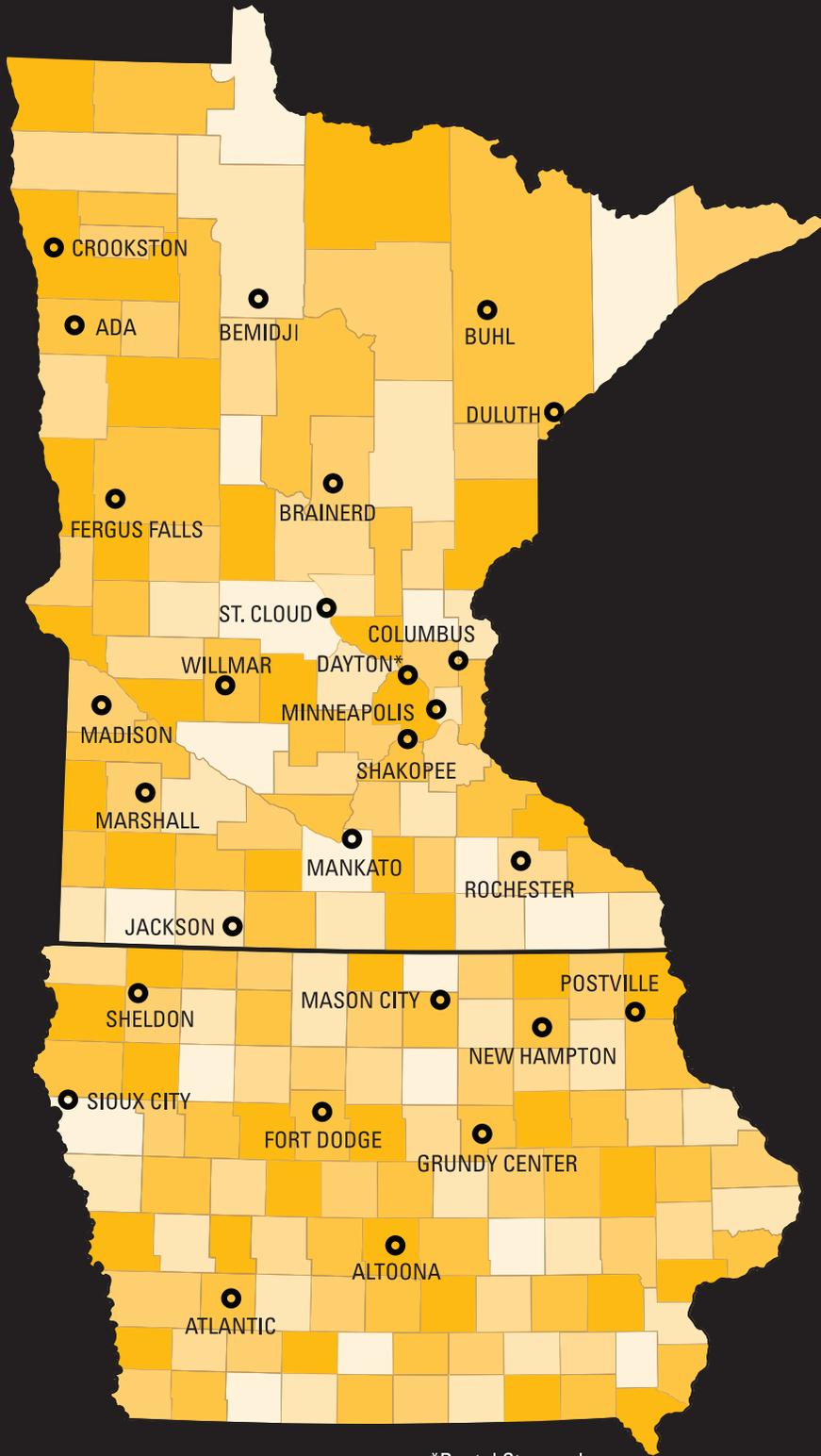
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