



Cat[®] SMART Dozer Blades

COMPACT TRACK LOADERS

Cat[®] SMART Dozer Blades are for cutting, moving and grading dirt, gravel, sand and virtually any other material used as a base. They feature integrated joystick controls for more intuitive operation, grade indications of the machine and blade in the advanced machine display, and operator assist features to help create smooth grades faster and with less operator effort. The combination of these features along with the support of the Cat dealer network makes this attachment Industry leading due to the industry first features.

SMART Attachment

What makes the SMART Dozer smart? The first step is attachment recognition. The D3 host machine recognizes that there is a SMART Dozer attached to the machine. This unlocks additional, dedicated machine display screens to allow the operator to interface with the machine and have options on how the attachment is controlled. And as a SMART attachment, the SMART Dozer allows for mode select and pattern change. That is, the existing machine joysticks are repurposed to perform functions on the attachment.

Features:

Full modulated joystick control

- Full modulated joystick control operates the attachment with right joystick. Main functions are incorporated into joystick for an intuitive operator experience.

Dedicated display screens

- Dedicated display screens provide feedback to operator on blade slope (tilt) and blade angle.

Operator assist features

- Operator assist maintains a steady blade mainfall and/or blade slope and helps achieve a smoother finish in less passes.
- Blade slope assist helps maintain blade slope angle.
- Blade slope memory and blade slope mirror recall programmed blade slope position.

Three-piece, replaceable, bolt-on cutting edge

- Three-piece replaceable, bolt-on cutting edge delivers long life and high performance.
- Center section is reversible.
- Angle end bits with wear indicators allows flush-cutting against vertical surfaces when fully tilted.

Trapezoidal blade

- Trapezoidal blade is modeled after dozer blades and allows flush cutting against a vertical surface when blade is fully tilted.

Spill guard

- Spill guard prevents material from spilling over the top of the blade in full blade scenarios.

Mast mounting points

- Mast mounting points accept external reference masts (e.g. Laser, GPS)

Serrated step

- Serrated step provides safe entry and exit of machine cab.

OMM container

- OMM (Operation and Maintenance Manual) container is a protective case on the attachment, where the OMM can be conveniently accessed.



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Compatibility

Model	Machines
2337 mm (92 in)*	279D3, 289D3, 299D3, 299D3 XE

*Requires high flow XPS or high flow XE on machine.

Current production machines listed. Machine model availability and attachment vary by region. Contact your local Cat dealer for exact compatibility and availability.

Mode Select – Operator has two modes available to choose how the cutting edge is controlled vertically: lift mode and tilt mode. The modes indicate which cylinders on the host machine control the vertical movement of the cutting edge. While in lift mode, the tilt function is available by pressing the 3 and 4 buttons. Similarly, when in tilt mode, the lift function is also available by pressing the 3 and 4 buttons. See chart on following page.

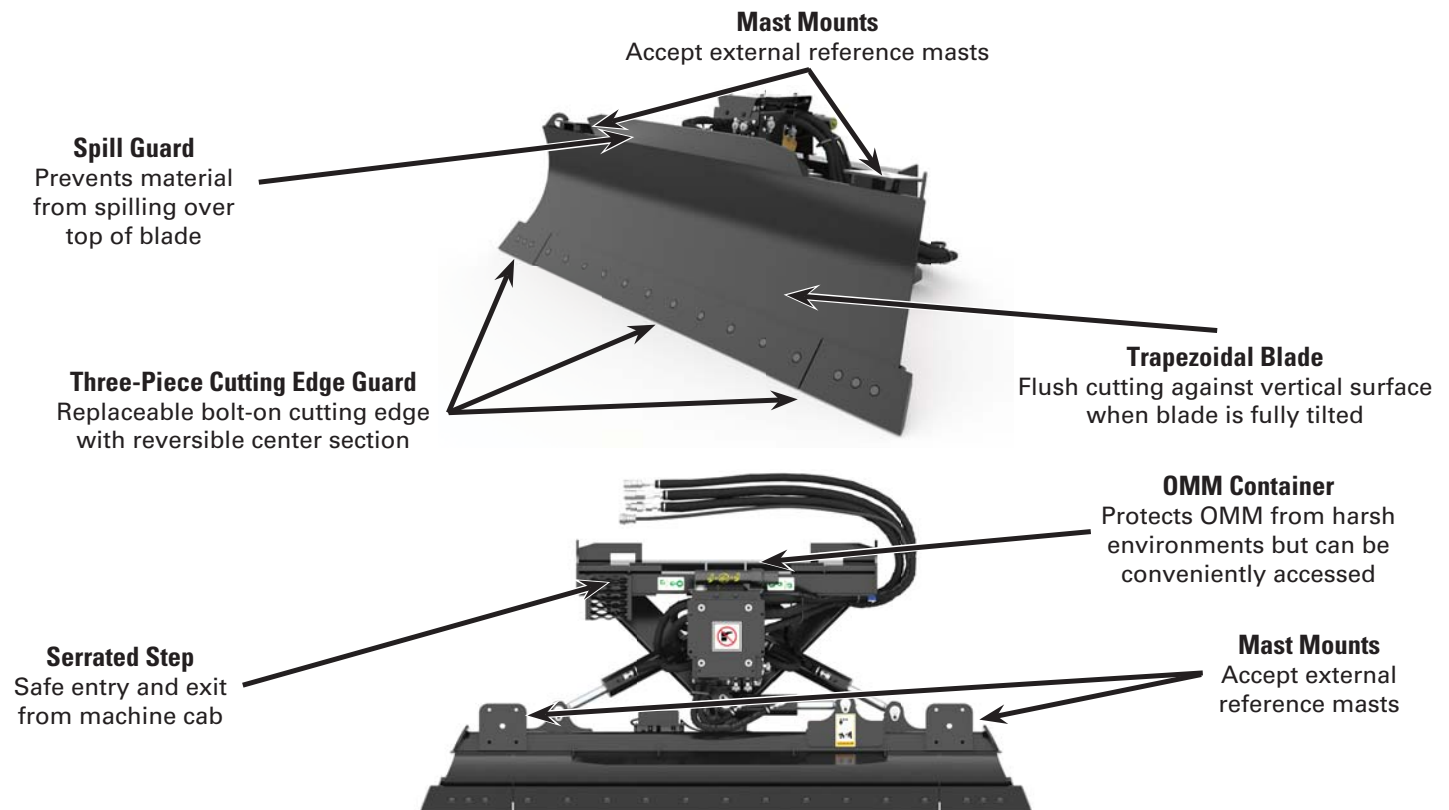
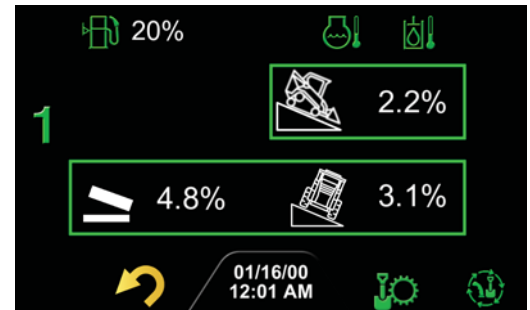
Operator Assist – While in attachment control mode, press the right-hand trigger (RHT) to activate Operator Assist. The gray box(es) in the display will turn green, and the green LED light on the attachment, visible from the operator’s station, will illuminate when Operator Assist is active. Operator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

Memory/Recall/Mirror – (five button) 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 – (six button) Press and release this button to return to a blade slope of zero. Operator Assist must be active to use this feature.

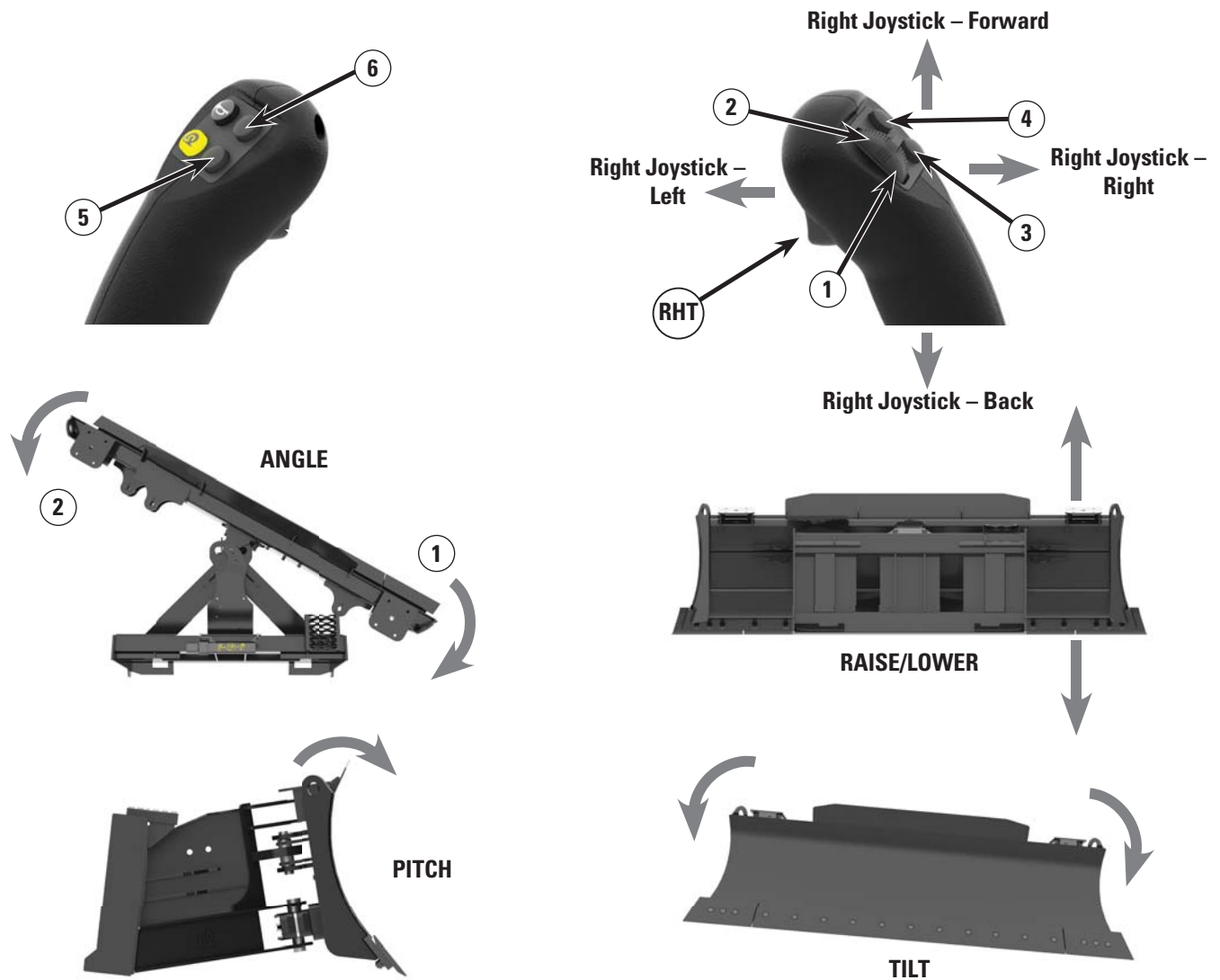
Indication – Once the Smart Dozer is attached, and the additional screens are accessed, the operator now has indication in the monitor.

The top indicator is machine mainfall. The bottom left indicator is blade slope, and the bottom right indicator shows machine slope. The green boxes indicate that Operator Assist is enabled and active. The green boxes also indicate which of the two assist features are selected. The box around the mainfall indicator and the box around the slope indicators signify both functions of the assist are selected (active due to being green).



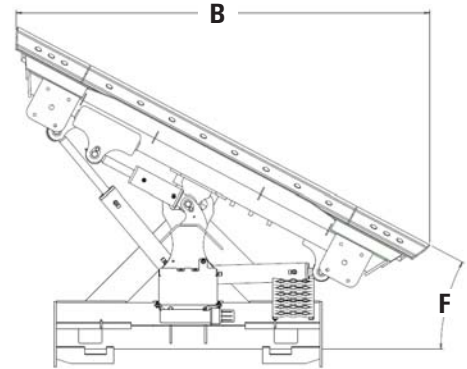
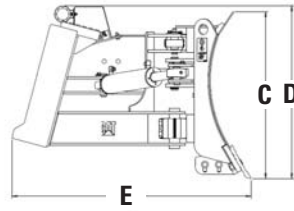
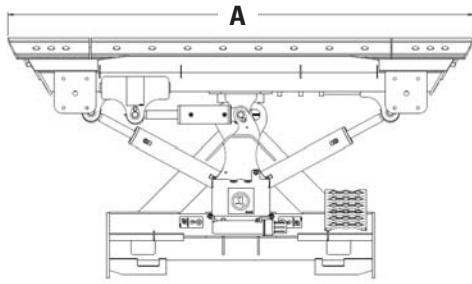
Joystick Operation

Command	Lift Mode	Tilt Mode
1	Angle Right	Angle Right
2	Angle Left	Angle Left
Right Joystick – Forward	Lower Blade	Pitch Forward
Right Joystick – Back	Raise Blade	Pitch Back
3	Pitch Back	Raise Blade
4	Pitch Forward	Lower Blade
Right Joystick – Right	Tilt Right	Tilt Right
Right Joystick – Left	Tilt Left	Tilt Left
RHT (Right Hand Trigger)	Operator Assist	Operator Assist
5 (assist on)	Memory/Recall/Mirror	Memory/Recall/Mirror
6 (assist on)	Return to Zero	Return to Zero



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Specifications



Model	2337 mm (92 in)			
A Blade Width	mm	(in)	2337	(92)
B Width (fully angled)	mm	(in)	2049	(81)
C Blade Height	mm	(in)	619	(24)
D Overall Height	mm	(in)	785	(31)
E Length	mm	(in)	1028	(41)
F Maximum Blade Angle – Right/Left of Center	degrees		30	
Tilt Angle Range ±	degrees		10	
Weight	kg	(lb)	528	(1,164)
Optimal Hydraulic Flow	L/min	(gpm)	42-86	(11-23)
Optimal Hydraulic Pressure	bar	(psi)	145-235	(2,100-3,400)
Cutting Edge Thickness	mm	(in)	16	(0.6)

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