



CWS INDUSTRIES (MFG) CORP.

# Angle Dozers

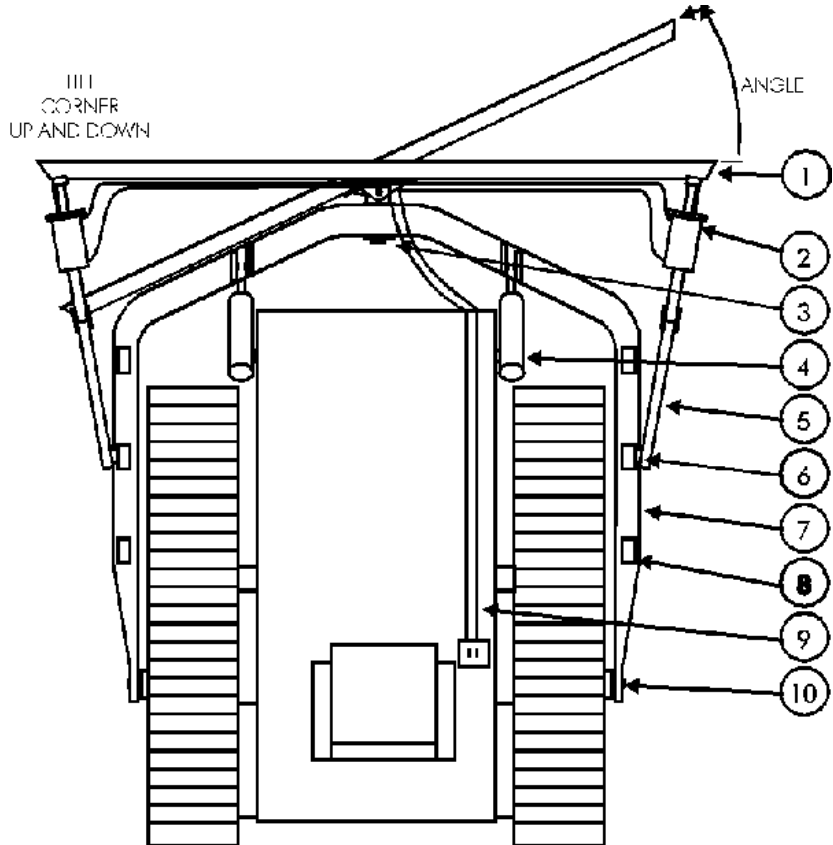
Angle Dozers can be recognized by their C-frame. They are designed to cast material left or right during pushing. Moldboards are capable of Angle and Tilt functions.

*link to Straight Dozers*

## (Pocket Angling in Illustration)

### PARTS

- 1 ) Moldboard (Dozer Blade)
- 2 ) Twin Hydraulic Tilt Cylinders
- 3 ) Center Pivot Pin (Bull Pin)
- 4 ) Dozer Lift Cylinders
- 5 ) Brace Arm
- 6 ) Angling Trunnion Ball
- 7 ) C-frame
- 8 ) Pockets
- 9 ) Tilt Circuit Piping to center of blade
- 10) Dozer Mounting Trunnions



Remember:

- Angle Dozers cannot tip forward and back
- To angle the blade the

operator must remove the angling trunnion balls from the c-frame pockets, reposition the blade then replace the trunnions in the forward and back pockets.

- Standard Angle Dozers have two manual screw struts for tilting.
- Optional Dual Hydraulic Tilt Cylinder Kits are available.
- Dual (2) Tilt Cylinders are required since the blade pivots around the bull pin when angling and tilting. (If one side goes down, the other must come up.)



**D6H Cat**  
Extreme Service Angle Dozer c/w Dual Tilt Cylinders  
*click on photo for larger view*



**D65 Komatsu**  
Extreme Service Angle Dozer c/w Dual Tilt Cylinders  
*click on photo for larger view*

## ANGLE DOZERS - Outside Mounted C-frame Style

- Pocket Angling
- Manual Slider Angling
- Hydraulic Slider Angling



**Pocket Angling** - This version incorporates pockets into the top of the c-frame to which brace arms from the back corners of the blade are attached. To angle the blade, the operator must disconnect both arms from the pockets, then manually push the blade to the desired angle, pivoting it about its center mounting point. Normally three positions, 25 degrees left, 25 right and straight are provided. Once in place the arms are again connected to the pockets by inserting their trunnions and locking them in place. Much of the time, reconnecting to the pockets is a difficult chore due to the need for the operator to balance the blade weight while inserting the trunnions into their pockets. Any misalignment makes the chore next to impossible.

**Manual Slider Angling**- This version incorporates a slider track along the top of the c-frame. Trunnions from the brace arms are attached to a shoe which slides along this track insuring that blade is always aligned with the top of the c-frame. To angle the blade the sliding shoe is unlocked from its position on the slider track. By moving the tractor backwards or forwards with one corner of the blade touching the ground, the blade can be angled without manual work. Once the blade is angled to the desired angle, the sliding shoe is once again locked to the track. Normally three locking positions are provided, similar to those on the Pocket Angling.



**Hydraulic Slider Angling** - This version incorporates angling cylinders along with a slider track and sliding shoe mounted on top of the c-frame. Any angle between the extremes of left and right can be dynamically set from the operators console. In effect, this is an **Outside Mounted PAT Blade** or **6 Way Blade** (Raise - Lower, Tilt Left - Right, Angle Left - Right).

When an P.A.T. Blade is to be used on a job requiring a large tractor, this is the blade to choose.

### **ANGLE DOZERS - Inside Mounted "P.A.T." Style**



**PAT - Power Angle and Tilt** - This special category of Angle Blades is generally mounted on smaller tractors due to limitations of the narrow inside push frame. Angling and Tilting cylinders are provide infinite adjustment of all functions.