



LESSONS LEARNED

Excavator Rollover

WHAT HAPPENED?

The Operator was tasked to move road plates from the lay-down area to the excavation with a model 85G John Deere Excavator. The excavation was on the other side of a 42" high barbed wire fence. When the operator arrived near the excavation, he sat the plate down, repositioned excavator, and lifted the plate over the fence. Once the plate cleared the fence, the operator boomed out, and started to lower the plate. At this point, the plate's inertia counter balanced the excavator causing it to slowly tip over.

KEY & CONTRIBUTING FACTORS

Human and Environmental Factors

- Operator exceeded the manufacturer's excavator lifting capacity for lift configuration.
- Excavator was not setup on level ground to maximize its capabilities.
- Operator failed to utilize excavator load chart or plan the lift to confirm the lift could safely be accomplished. See photo on right.

85G LIFT IN 1000 LBS.
WITH 465 LB. BUCKET, 6 FT. 11 IN. ARM AND 18 IN. SHOES AND BLADE AND STANDARD COUNTERWEIGHT

	5'	10'	15'	20'
20'			3.80	
15'			3.62	
10'			3.50	3.98
5'			3.49	2.23
GROUND LINE			3.25	2.15
-5'	5.91	5.35	3.07	2.08
-10'	5.91	5.35	3.01	
-15'		5.52		

RED-OVER-THE-END
BLACK-OVER-THE-SIDE

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NOTE: SEE OPERATOR'S MANUAL FOR MORE ACCURATE INFORMATION.

LESSONS LEARNED

- Train operators on reading and understanding load charts, configuring load weight, and knowing equipment lifting capabilities.
- Take the time to plan your lifts with everyone involved in the lift.
- Know the capability limits of the equipment you are operating.
- Ensure tasks and steps are clearly defined with supervisor's participation.



This Lessons Learned has been prepared as a communication directly to All Employees. It is for awareness purposes – not to admit or assign blame. REVIEW THIS INFORMATION WITH EVERY EMPLOYEE!