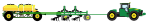
Persona: **Adam - Advanced User**
Scenario: **Start of season, wheat + side-banding urea**
Field: **Flat and rocky, some muddy sloughs**

Equipment: **9R tractor + Scottsdale 1870 with TruSet option + C850 air cart with tank**

Tasks	**Prepare Machine**	**Calibrate Frame**
Thinking/Feeling	“This swivel hitch on the 850 bushel cart makes hooking up so much easier…”	“If the frame isn’t level fore-aft, I’ll have some seed on the ground…”
Machine	 1. Check inflation of cart, tool and tractor tires 2. Hook up tractor hitch to air drill 3. Connect air drill hydraulics to tractor 4. Make electrical connections from air drill to tractor 5. Connect the air drill hitch to the air cart 6. Hook up hydraulics and electrical from air drill to air cart 7. Connect commodity hoses from air drill to air cart	1. Find some flat ground, extend the openers 2. Pull the train out straight 3. Put force on the openers 4. Put the tractor in neutral 5. Lower the fertilizer opener to depth
Display	1. Key on the machine 2. Wait for display to boot up	1. Access the setup screens 2. Set the fertilizer knife breakout force at target 3. Run the automatic frame calibration 4. Establish the ground line
Needs	• *Is the equipment ready for work?*	• *Will the crop come up evenly?*
Field View		

scale option

Fill Commodity Tanks

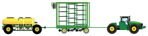
Transport to Field

Work Setup

“I love these new flush tank lids, no more slamming shut from the wind and blocking my seed conveyor…”

“As much soil as these knife openers throw, I can shallow up a bit…”

1. Climb ladder, unlatch and open front tank lid
2. Climb down, then disengage blowers
3. Turn on the remote for conveyance
4. Unlock the conveyance arm pins
5. Guide the conveyor to position above the front tank
6. Run the conveyor using the remote until the fill light is solid
7. Double-check scale and stop conveyor
8. Climb stairs, close the tank lid securely, then open rear lid
9. Go back down and repeat fill-up for dry urea in rear tank



1. Put the tractor in neutral
2. Retract the openers with the display
3. Extend SCV II to fold up the tool automatically
4. Drive toward field
5. Approaching powerlines, bump frame down with SCV II
6. Bump frame back up and continue driving
7. Drive to and arrive at field
8. Unfold with SCV II lever
9. Use display to extend openers from transport position

1. Key on the machine
2. Input the client, farm and field location
3. Setup the wheat application rate
4. Setup the fertilizer application rate
5. Set up the blockage sensitivity per shoot
6. Set up for 4” fertilizer depth
7. Calibrate the meters manually for ballparking

- *I need 5,500lbs of wheat in there, do I have it?*

- *Do I need to seed at 4” + , or is 3.5” better for conditions?*
- *Are all of the openers level?*
- *If my fertilizer plugs a few runs, will I even know about it?*

Field Check

“I always calibrate, same hybrid or not…”

1. Raise frame until fertilizer shank is at the turn height, then make that that the upper set point in the display
2. Drive forward slowly, use SCV I to lower the tool into the ground
3. Put tractor in neutral and get out to check the visual appearance
4. Hop back into cab and set the lower point on the display set point

- *Am I getting a consistent seeding depth?*
- *Am I blowing the seed out of the trench?*
- *Am I cutting through the trash?*
- *Is the sidewall compacting too much?*

Auto-Calibrate the Meters

“I’d love to dial in the metering rates without climbing out and using a hand scale each time…”

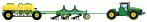
1. Get the fans going again
2. Grab a snapshot of the current scale readings
3. Get moving and lower the openers
4. Complete a lap, then raise the openers and stop

- *What’s my current scale reading?*

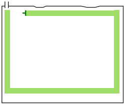
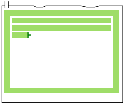
Continue Seeding

“Rates are only 2% off...this auto-calibration feature is the cat’s ass...”

1. Get the fans going again
2. Lower the tool
3. Put the tractor in gear
4. Finish seeding the field



5. Put machine in park and take another snapshot
6. Calculate the new meter displacement and update

- *How accurate is it metering, based on that pass?*