

Government list of minimum services required below. One annual service to be performed on Wintersteiger Delta and Quantum plot combines between January 1<sup>st</sup> and July 1<sup>st</sup> each year. Inspect, repair, replace, or adjust as needed to ensure optimum performance of plot combines for research plot harvest. If unsure of part replacement consult location, contact Chris Evans. No additional work outside the tasks below shall be done without prior approval from the Contracting Officer. A negotiated modification may be needed for additional work, as needed. There may be repairs needed during the harvest season (July 1<sup>st</sup> thru September 15<sup>th</sup>) if needed.

2006 Wintersteiger Delta Combine  
2020 Wintersteiger Quantum

Serial Number: 1650-2006-0049  
Serial Number: 1801-0179

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### **First Look at Machine**

1. Run machine and listen for problems
2. Look for problems and feel bearings for excessive heat
3. Check air conditioning site glass and recharge if needed
4. Verify operation of all operation systems (threshing drum speed, grain tank, fan speed adjustments, clean out, header float, lights, windshield wiper, header reverser etc.)  
Adjust as needed.
5. Verify threshing drum high speed
6. Verify threshing drum low speed
7. Verify cleaning fan high speed
8. Verify cleaning fan low speed

### **Electrical – Adjust, repair or replace items as needed.**

1. Check all wiring for damage (frayed, reroute, and tie up loose wires)
2. Check all connections, pilot lamps, and head lamps
3. Check display for code errors
4. Check battery terminals, starter terminals, counsel connections, and wires possibly rubbing on engine. Repair or replace as needed
5. Inspect counsel, check circuit boards (connections, diodes), inspect proportional amplifiers, check all wire connections and fuses
6. Verify operation of all electric buttons

### **Engine – Adjust, repair or replace items as needed.**

1. Check all belts for tension, including drive belts
2. Inspect motor mounts
3. Check all coolant and breather hoses looking for leaks and hose clamp tightness
4. Check and lube throttle cable, look for wear, proper mounting, and hanging up
5. Inspect radiator and oil cooler fins looking for bent ones, clogged ones, leaks and vibration mounts

6. Check and clean air filter, change yearly
7. Inspect seal on rotary screen and also drive belt
8. Inspect cooling fan
9. Check main engine drive bearing and shaft
10. Change oil and filter, change fuel filter
11. Verify engine RPM accuracy

**Platform/Cab – Adjust, repair or replace items as needed.**

1. Concave adjustment full range, inspect concave, and make sure it adjusts easily
2. Check operation of fan, air conditioning buttons, etc.
3. Make sure heater and air conditioning lines are not pinched
4. Inspect cab mounting
5. Recharge air conditioning system if needed

**Hydraulics – Adjust, repair or replace items as needed.**

DO NOT OVER FILL HYDRAULIC TANK

1. Inspect for leaks
2. Change oil and filters.

**Variator – Adjust, repair or replace items as needed.**

1. Feel for heat @ bearings
2. Check operations of variator adjustment motor, check chain and idler
3. Inspect variator pulleys, check both pulley mounting bolt
4. Inspect belt for cracks or burnt spots. Repair or replace as needed
5. Inspect beater drum (remove shaker)

**Shaker & Sieve – Adjust, repair or replace items as needed.**

1. Inspect sieve bushings and connection arms
2. Inspect shaker make sure everything is aligned properly
3. Inspect shaker and sieve for wear (welds and rivets)
4. Inspect cleaning fan fins
5. Inspect retaining rings on inside of threshing case
6. Crawl inside the combine and inspect beater and threshing drum

**Conveyor Belt – Adjust, repair or replace items as needed.**

1. Check tension and alignment and condition of belt
2. Disconnect conveyor drive and check roller and bearings

**Driveline – Adjust, repair or replace items as needed.**

1. Inspect frame
2. Inspect rear axle
3. Inspect all tie down eyelets for cracks

**Belts and Pulleys – Adjust, repair or replace items as needed.**

1. Check for wear on belts and pulleys

**Bearings – Adjust, repair or replace items as needed.**

1. Inspect all bearings for any signs of wear
2. Inspect cross-over shaft

**Header – Adjust, repair or replace items as needed.**

1. Inspect side panels
2. Check mesh of gears
3. Check alignment of crop dividers & make sure they pivot up and down
4. Make sure reel raises evenly and check reel adjustment
5. Check nylon wheels on reel
6. Inspect reel pivot points
7. Inspect sickle drive (drive chain tension), and mounting bolts
8. Inspect lock collars and snap rings
9. Inspect header lift cylinders
10. Inspect reel lift arms at mounting
11. Inspect feeder house gears for cracks
12. Adjust feeder house chain to specification
13. Check auger drive belts
14. Check for bent guards or broken sickles

**Running Check – Adjust, repair or replace items as needed.**

1. Check adjustment of cleaning fan, inspect cleaning fan motor and valve
2. Inspect variator adjustment (belt riding up to high on top adjustment)
3. Listen for any unusual sounds

**Grain Tank – Adjust, repair or replace items as needed.**

1. Check bearings and U joint in auger
2. Check hydraulic motor mounts
3. Check hydraulic motor operation
4. Check mounting bolts on auger mounting on inside of tank