1.

Before & After

Left: weeds un-zapped

Right: weeds immediately after zapping

Section 1: The Weed Zapper Broadleaf or Large, Moist Stem Weed Treatment Techniques

A. Heavy Weed Pressure

1. 1st Pass: “Broadleaf”- 2nd Pass: “Broadleaf or Grass”- 3rd Pass: “Grass”
2. Speed: 1st Pass: 3 mph- 2nd Pass: 3 to 4 mph- 3rd Pass: 3 to 4 mph depending on weed pressure
3. “Grass” setting is 15% more energy; why not just use it? (heating, high amperage droop, excessive component wear)

Interesting fact concerning the difference between the "Broadleaf” and “Grass” settings on the machine

a. In moderate weed pressure conditions (as indicated by the amperage graph on monitor) the “Grass” setting produces about 15% more energy

b. In heavy weed pressure (as indicated by the amperage graph on monitor) the system will only produce about 2%-3% more energy

c. In heavy weed conditions the grass setting will cause about 20% higher system operating temperatures

d. The increased system operating temperatures will cause system overheating and shutdown in about 1/2 of the time in the same field

4. Monitor system overload based on the "Amperage Graph" on the monitor screen
5. Better results require better techniques
6. The No-Sunshine difference... In a sunny weather pattern you will typically see slight plant discoloration and damage within 72 hours after zapping. In a cloudy weather pattern it will take twice as long to have this effect.

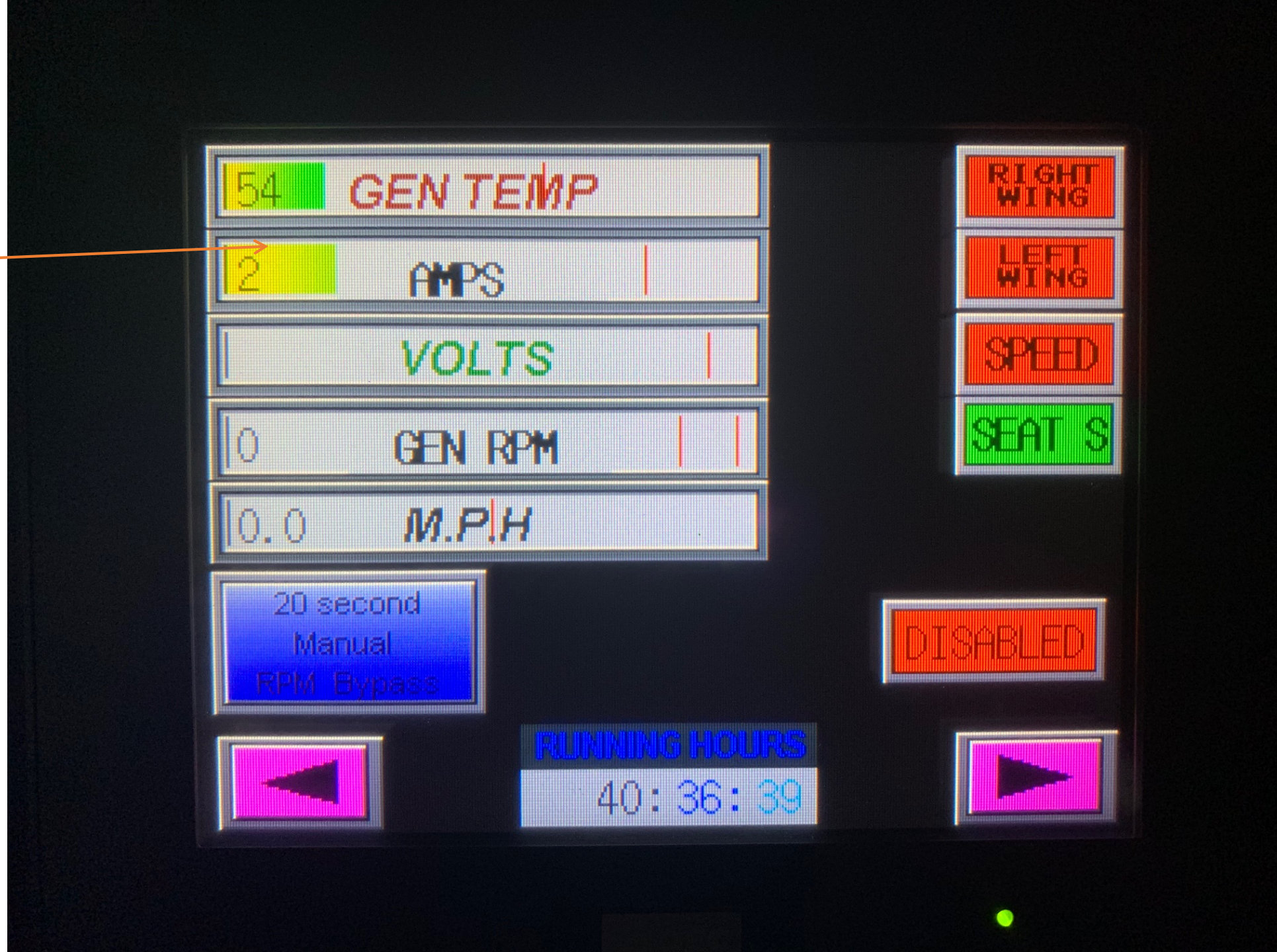
B. Light to Moderate Weed Pressure

1. 1st Pass: “Broadleaf”- 2nd Pass: "Grass”- 3rd Pass- “Grass”
2. Speed: 1st Pass: 3-3.5 mph- 2nd Pass: 3 to 4 mph- 3rd Pass: 3 to 4 mph depending on weed pressure
3. “Grass” setting is 15% more energy; why not just use it? (heating, high amperage droop, excessive component wear)
4. System overload monitoring based on the "Amperage Bar Graph" on the monitor
5. Better results require better techniques
6. The No-Sunshine difference... In a sunny weather pattern you will typically see slight plant discoloration and damage within 72 hours after zapping. In a cloudy weather pattern it will take twice as long to have this effect.

2.

Run Screen with Amp Bar Graph

…used as a indicator tool to alert operator of continual system overloading. This can cause reduced kill rate when zapping.



Before & After

Top Left: Before zapping

Top Center: 1 hour after zapping

Top Right: 24 hours after zapping

Bottom: Stems going into the ground 3 weeks after zapping

“We had almost no sunshine during this week! Tons of rain and still this effective”

Derek's Field Picture #1

5.

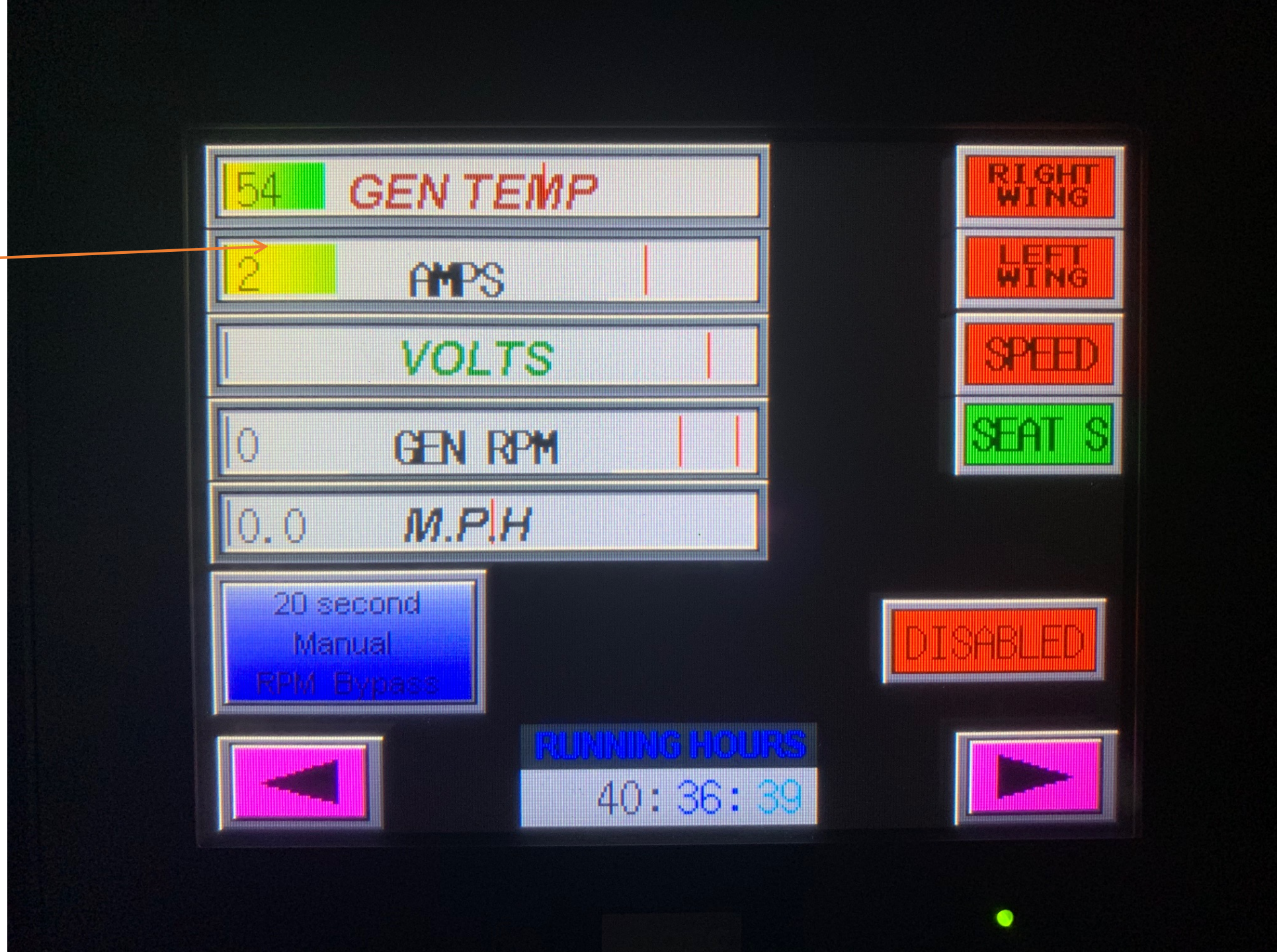
Derek's Field Picture #2

6. Weed Roots – Before and 1 Week After

7.

Run Screen with Amp Bar Graph

…used as a indicator tool to alert operator of continual system overloading. This can cause reduced kill rate when zapping.



8.

Johnson Grass that was treated with one pass.

Picture is showing results at 3 weeks after zapping.

Section 2: The Weed Zapper Grass or Woody Stem Hard-To-Kill Species Treatment Techniques

A. Heavy Grass/Weed Pressure

1. Pass #1: “Broadleaf” setting- Pass #2: “Grass” setting- Pass #3: “Grass” setting
2. Speed: Pass #1- 2 mph- Pass #2- 2 to 3 mph- Pass #3- 3 to 3.5 mph dependent on weed pressure
3. “Grass” setting is 15% more energy; why not just use it ?(heating, high amperage droop, excessive component wear)

Interesting fact for the difference between the “Broadleaf” and “Grass” settings on the machine.

a. In moderate weed pressure conditions (as indicated by the amperage graph on monitor), the “Grass” setting produces about 15% more energy

b. In heavy weed pressure (as indicated by the amperage graph on monitor) the system will only produce about 2%-3% more energy

c. In heavy weed conditions the grass setting will cause about 20% higher system operating temperatures

d. The increased system operating temperatures will cause system overheating and shutdown in about 1/2 of the time in the same field

4. Monitor system overload based on the "Amperage Graph" on the monitor screen
5. Better results require better techniques
6. The No-Sunshine difference... In a sunny weather pattern you will typically see slight plant discoloration and damage within 72 hours after zapping. In a cloudy weather pattern it will take twice as long to have this effect

B. Light to Moderate Weed Pressure

1. Pass #1: “Broadleaf” setting- Pass #2: “Grass” setting- Pass #3: “Grass” setting
2. Speed: Pass #1- 2 mph- Pass #2- 2 to 3 mph- Pass #3- 3 to 3.5 mph dependent on weed pressure
3. “Grass” setting is 15% more energy; why not just use it? (heating, high amperage droop, excessive component wear)
4. System overload monitoring based on the "Amperage Bar Graph" on the monitor
5. Better results require better techniques
6. The No-Sunshine difference... In a sunny weather pattern you will typically see slight plant discoloration and damage within 72 hours after zapping. In a cloudy weather pattern it will take twice as long to have this effect.

9.

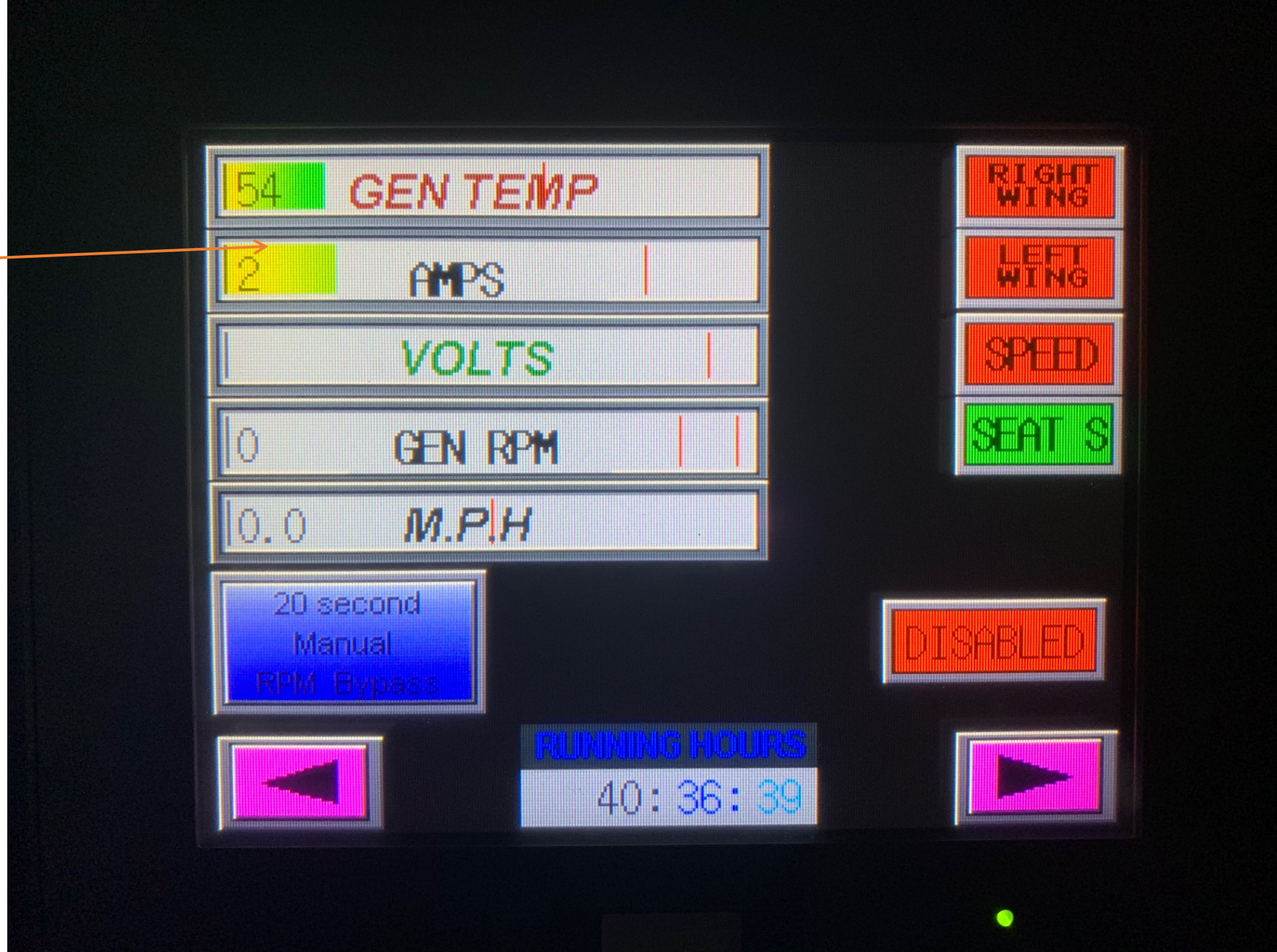
Johnson Grass – Before and 2 Weeks After

10.

7.

Run Screen with Amp Bar Graph

…used as a indicator tool to alert operator of continual system overloading. This can cause reduced kill rate when zapping.



11.

Before & After
Giant Rag Weed

12.

The Weed Zapper works very well on ***thistle and wild oats.*** I have and will continue to recommend it to others. It's a machine we fully intend to use more and more every year, on several different kinds of crops.

Alberta, Canada 2019

13.

"The Weed Zapper will be huge for conventional farmers because there is no weed resistance that can stand up to 15,000 volts." -Kansas 2018

14.

Conventional Clean-Up

Zapped Area

Un-Zapped Area

Weed Zapper For The Win!

Notice the left hand side; it's been hit by The Weed Zapper. The triangle-like shape on the right, however, hasn't been touched, except for by conventional chemicals, x3.

The Weed Zapper: 1 Conventional Chemicals: 0

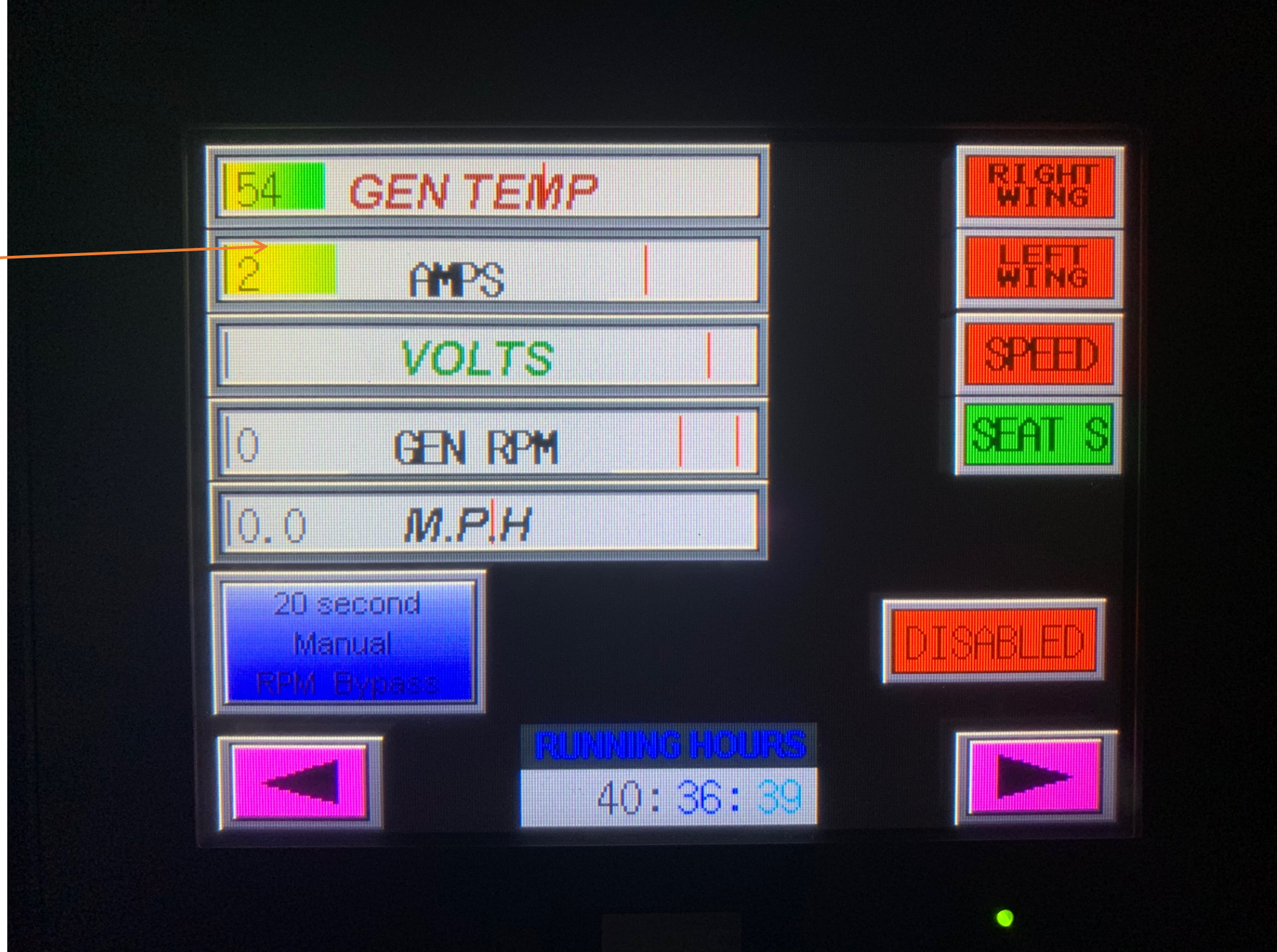
15. Queen Anne's Lace – Before and 1 Day After

16. Young Tree Sapling: Left = Before – Center = 1 Hour After – Right = 1 Day After

7.

Run Screen with Amp Bar Graph

…used as a indicator tool to alert operator of continual system overloading. This can cause reduced kill rate when zapping.



Section 3: The Weed Zapper Safety Features and Controls

1. A number of various screens dedicated to safety and control

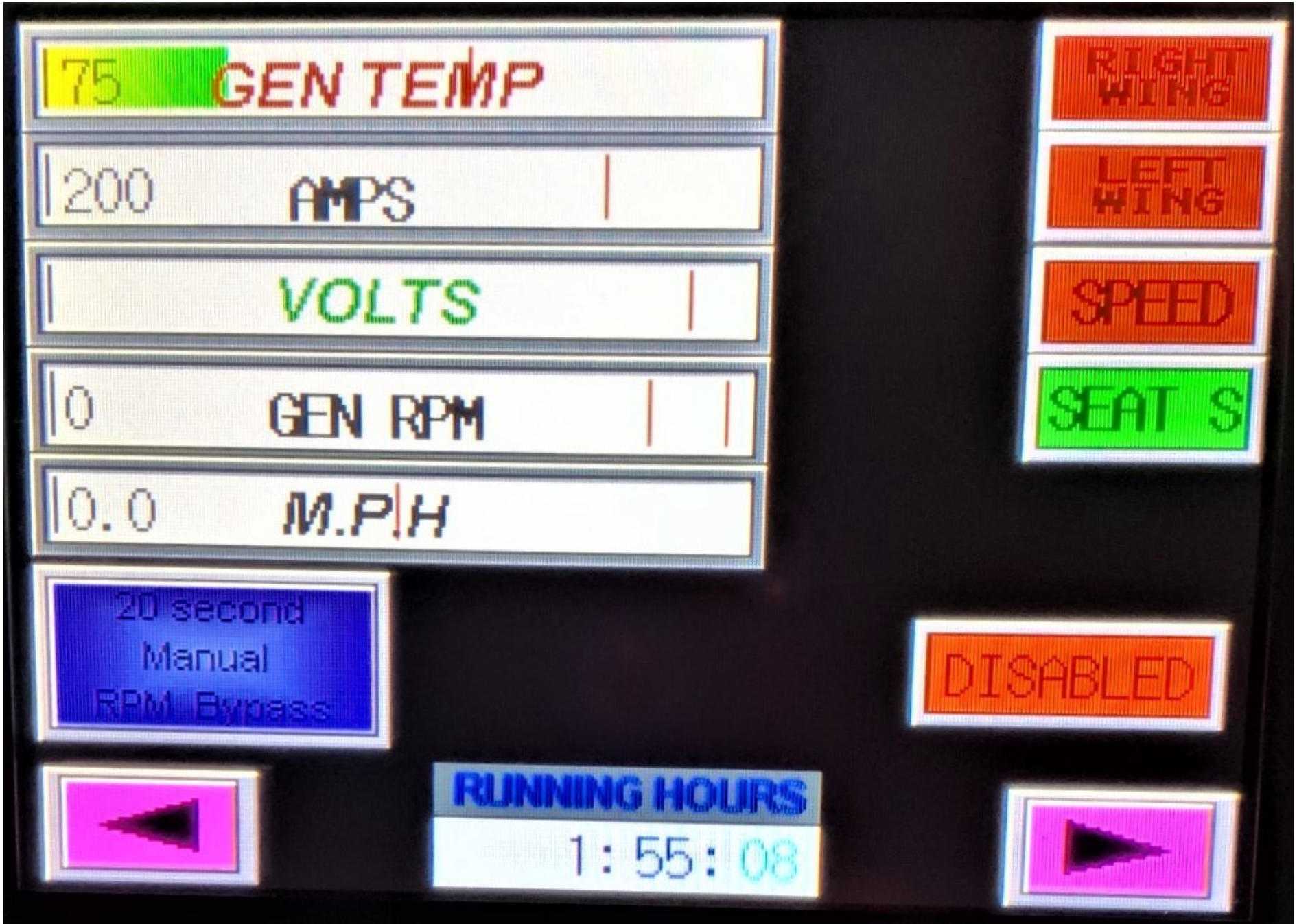
2. System sensor self-checks and diagnostics

3. Shorted system indicator… (This really works well)

4. Rainy versus muddy conditions- Rain can cause damaged and shorted wire

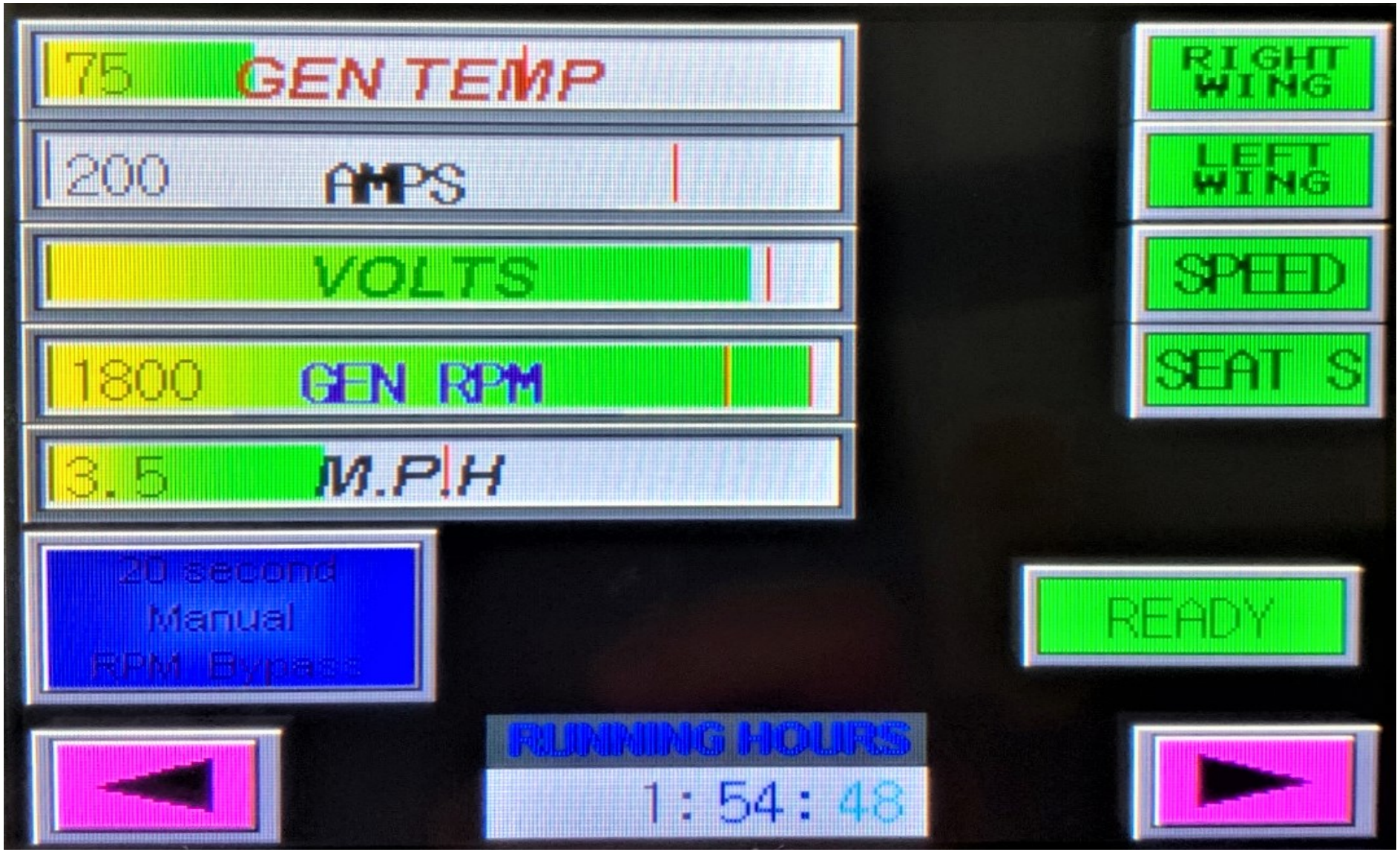
5. Real World (operator testimonial)

17. **2019 Safety Sensors Unsatisfied Monitor Screen**



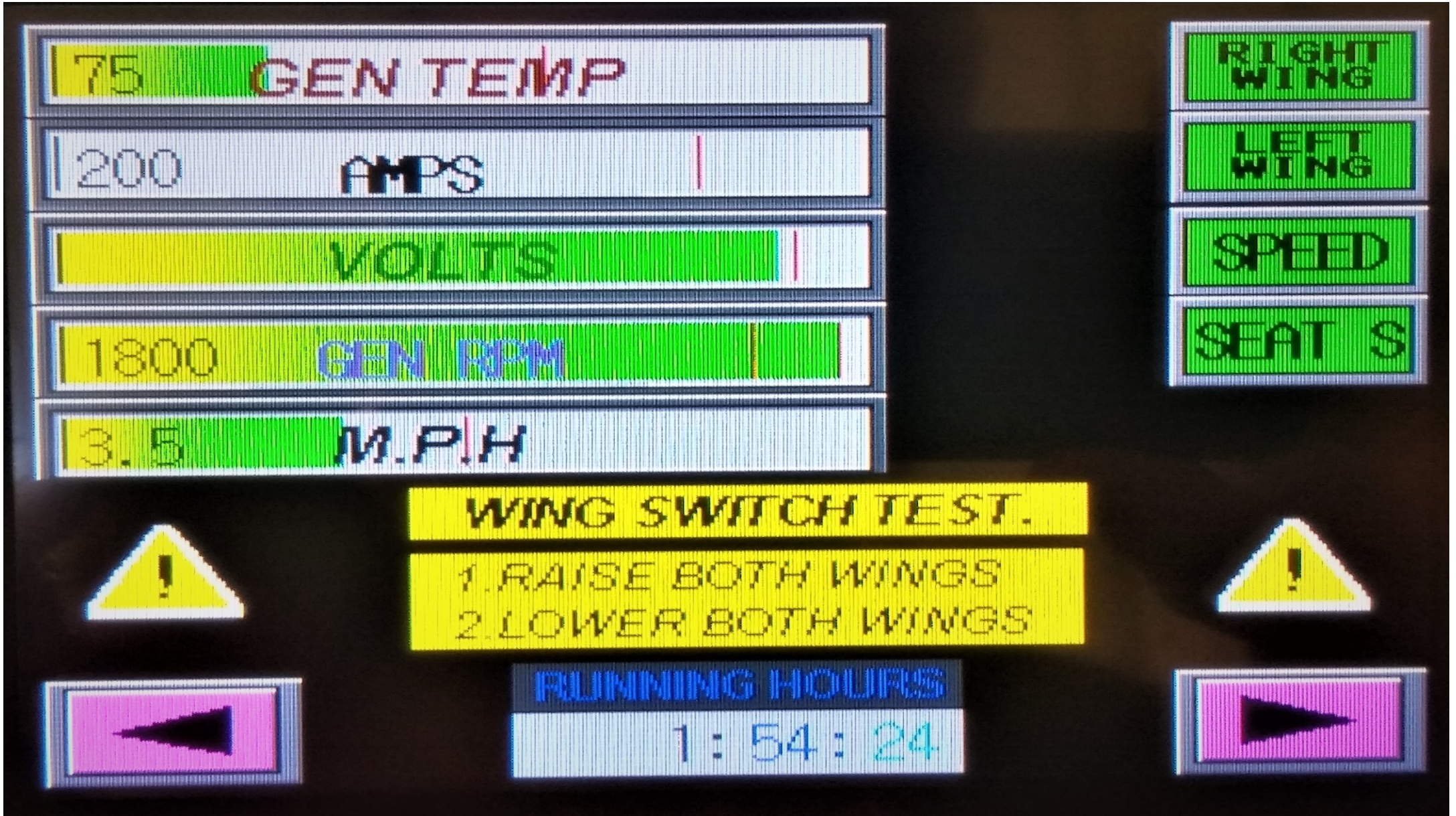
18.

2019- Monitor Screen Showing All Safety Sensors Satisfied

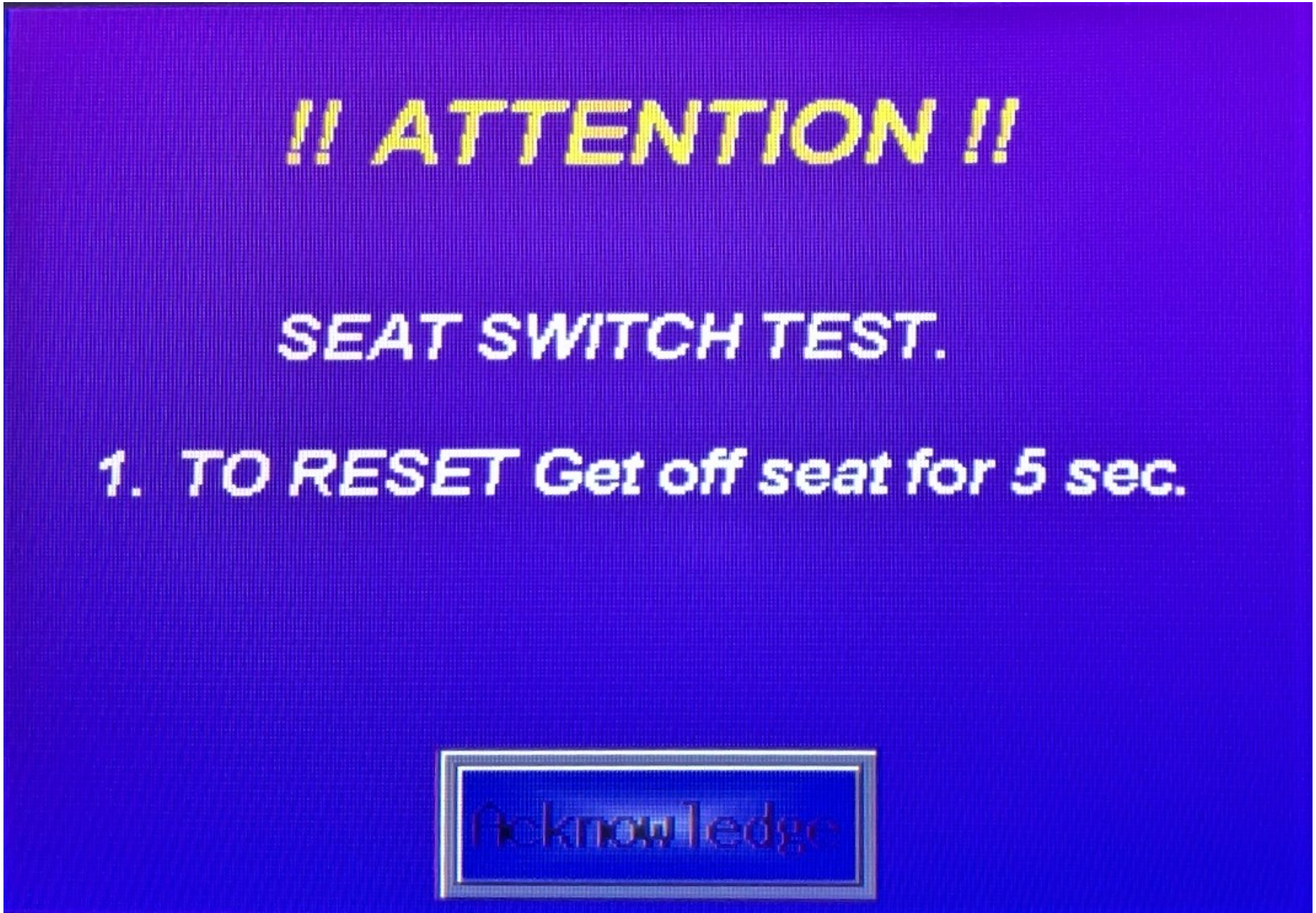


19.

2019- Monitor Screen Showing Wing Switch Test Displayed



20. **2019- Monitor Screen Showing Seat Switch Test**



Section 4: The Weed Zapper Features and Improvements

1. 2018 models: powerful but little control

2. 2019 models: Operator adjustable outputs, stronger-tougher boom, easier hookup, 25% more powerful system for grasses

3. 2020 models: Sectionalized boom operator height control, automated belt tensioner, higher HP belt configuration, more robust and protected electronics

21.

Notable Machine Improvements By Year

2018

- Newly Designed Prototype Machine from Front to Rear
- Flexible, Front-Mount Boom
- Powder-Coat Paint
- New 8-Row Model Introduced
- Marathon Severe-Duty Generators
- New Digital Screen Which Allowed Improved Operator Monitoring with Minimal Adjustments

2018 Boom Design
12R30 Model Shown

- Fast-Acting 18” Hydraulic Cylinder and Linkage
- Over-Centering Hinge Point Allowing Full-Flex Motion…
  …Same Size as 4” Frame
- Insulator Arm Pocket…
  …In-Line w/Boom Design

23.

Notable Machine Improvements By Year

2019

- More Powerful and Smoother Operating Hydraulics
- Gooseneck Pocket Design Allowing Higher Crop Clearance
- Larger Electronics Cart with More Head-Room
- A Cart 3-pt. Hitch That Accepts Most Category 2 & 3 Hitches
- Completely New Automation and Operating System Allowing Improved Horsepower Controllability and “On-the-Fly Adjustments”
- New Monitor with True Touch-Screen Capability
- New 16R30 Model,
- Self-Diagnostic Capabilities
- Breaker-Trip Prevention Software
- Most Owners Would say “Way Too Many Software Updates”

24.

2019 Boom Design w/Changes Shown
Model 12R30 Shown

25.

2019 Larger and Stronger Hinge Point

26.

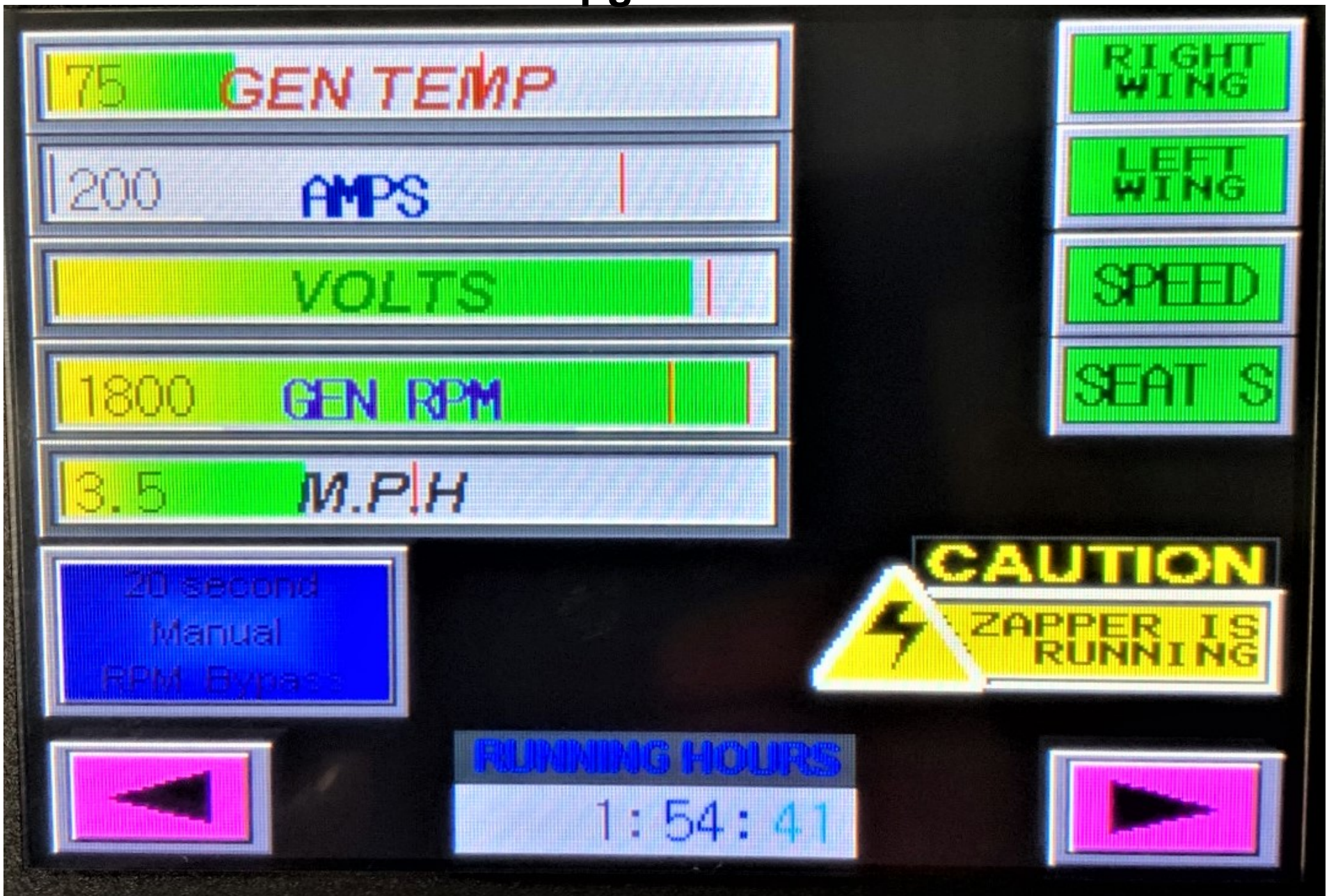
The Weed Zapper Annihilator

- The Weed Zapper Annihilator 6R30
  - 16ft. with some overlap
  - Requires a minimum of 135 PTO HP
- The Weed Zapper Annihilator 8R30
  - 21ft. with some overlap
  - Requires a minimum of 150 PTO HP
- The Weed Zapper Annihilator 12R30
  - 31ft. with some overlap
  - Requires a minimum of 225 PTO HP
- The Weed Zapper Annihilator 16R30
  - 41ft. with some overlap
  - Requires a minimum of 275 PTO HP

27.

Monitor Screen Showing Foliage Type Selection Screen
2019 Upgrade Features

28. Monitor Screen Showing All Sensors Satisfied and Zapper Running
2019 Upgrade Features

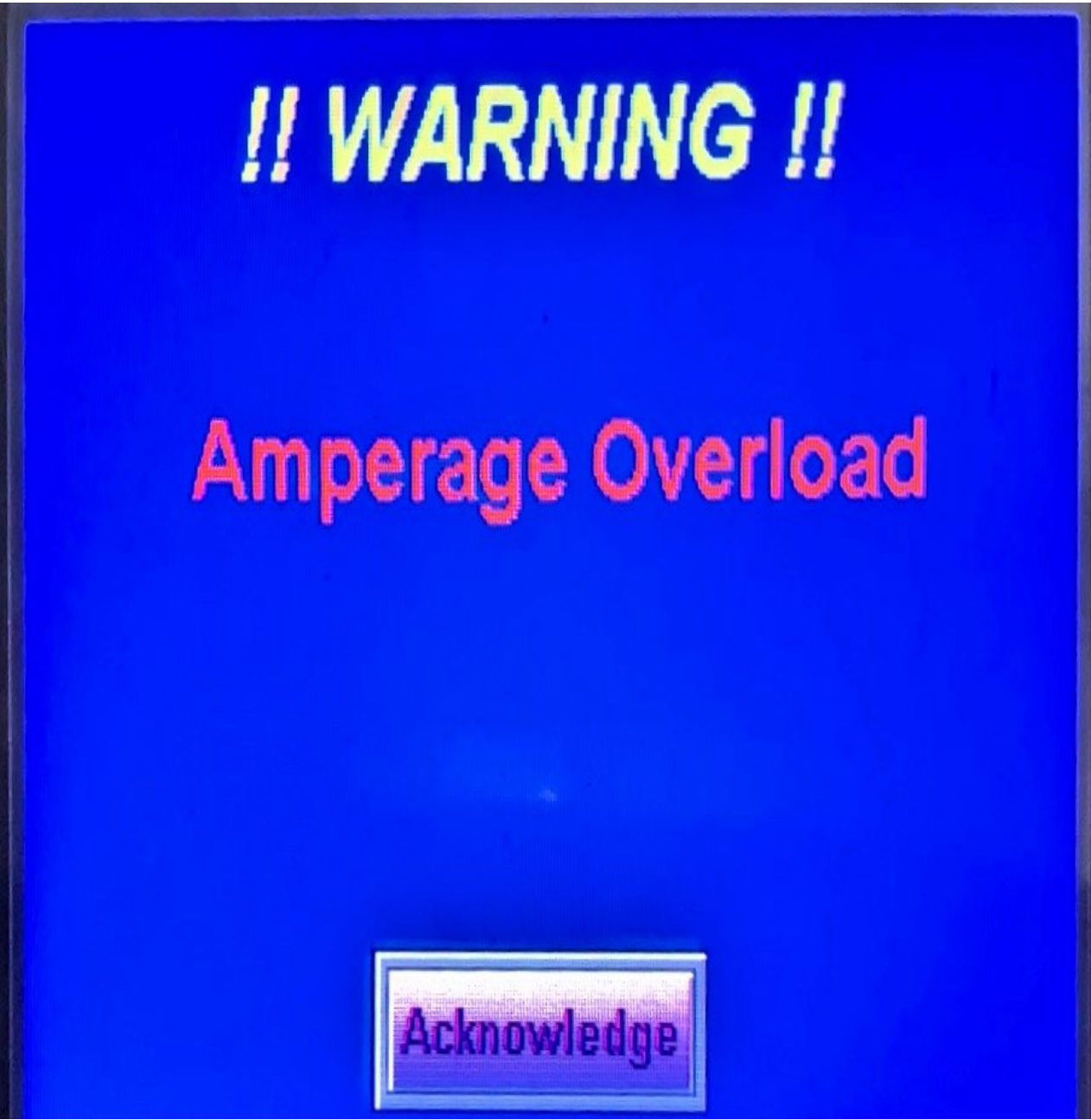


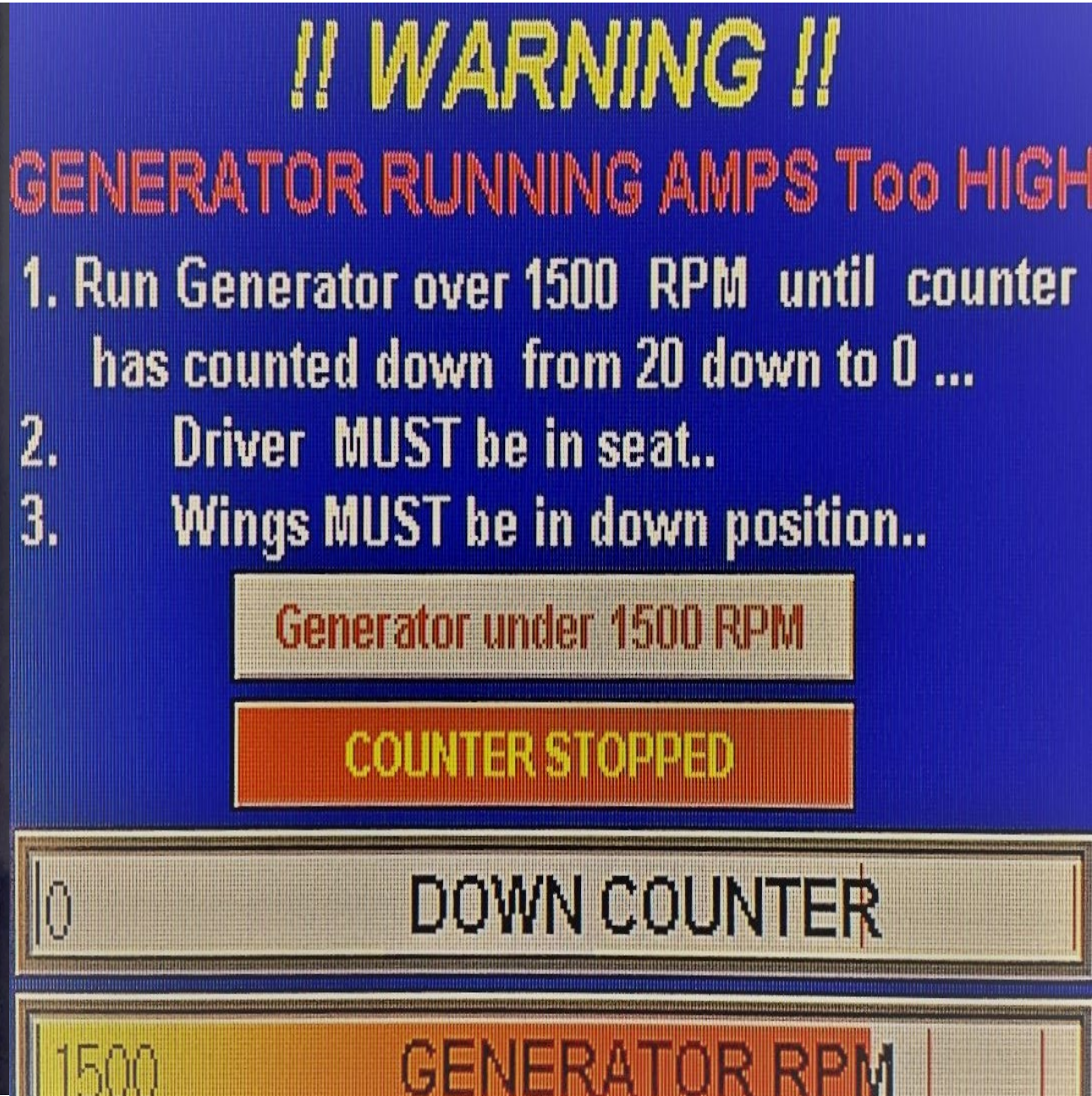
29.

This is the first time I have ever had my conventional farming neighbors jealous of my success with weed control. They actually hired me to run the Zapper in their fields. -Iowa 2019

30.

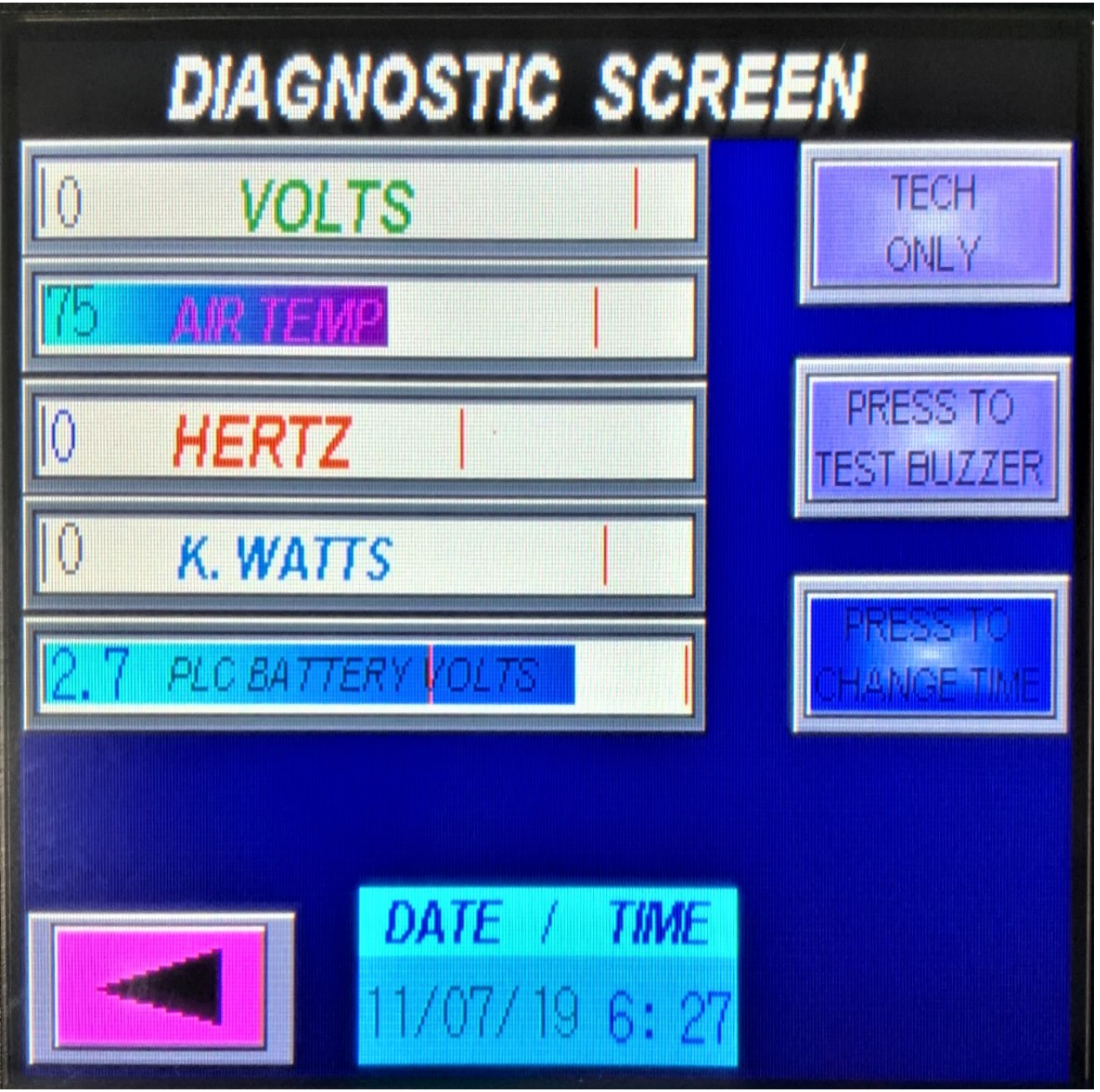
Various Self-Diagnostic Monitor Screens





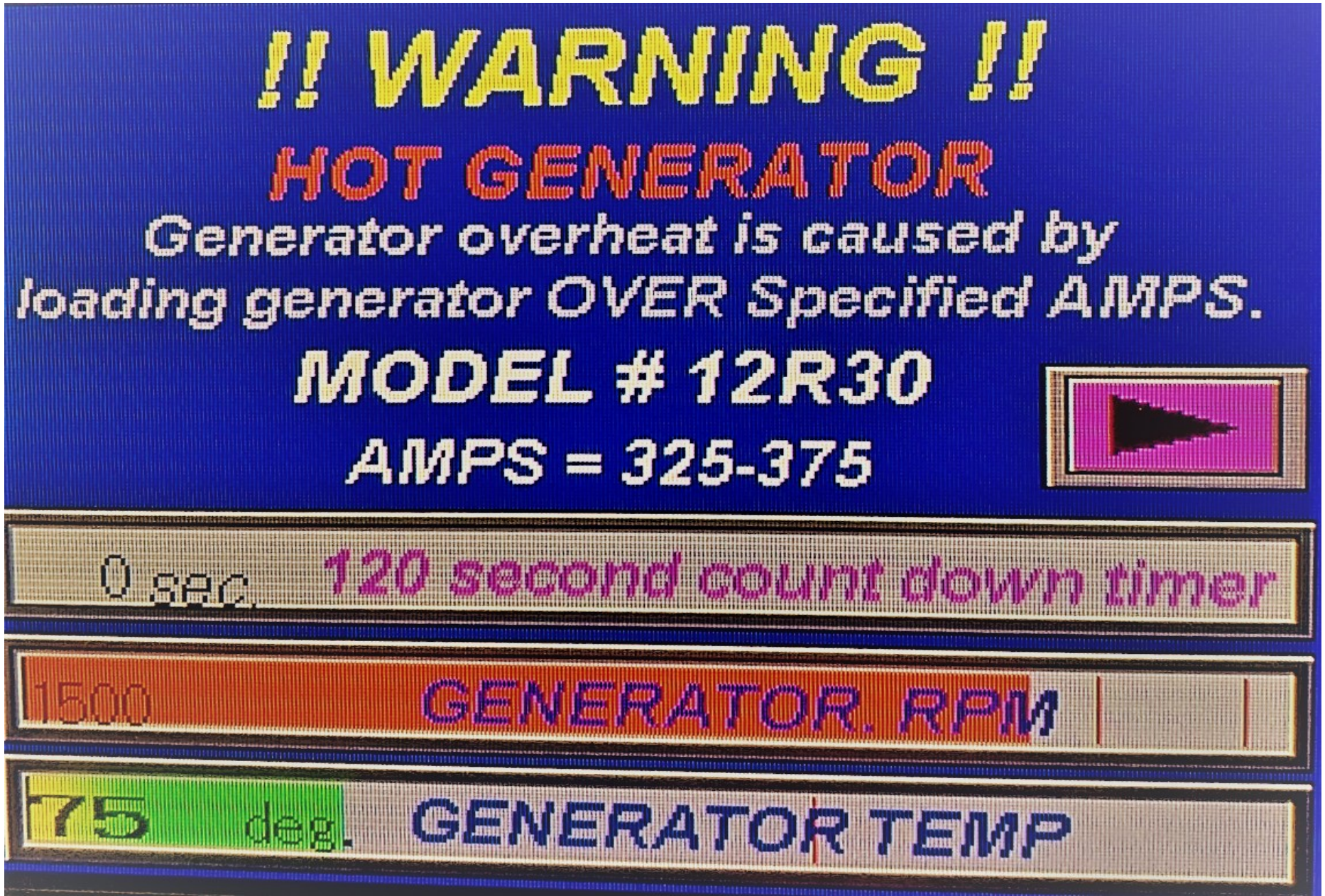
31.

Various Self-Diagnostic Monitor Screens
2019 Upgrade Features



32.

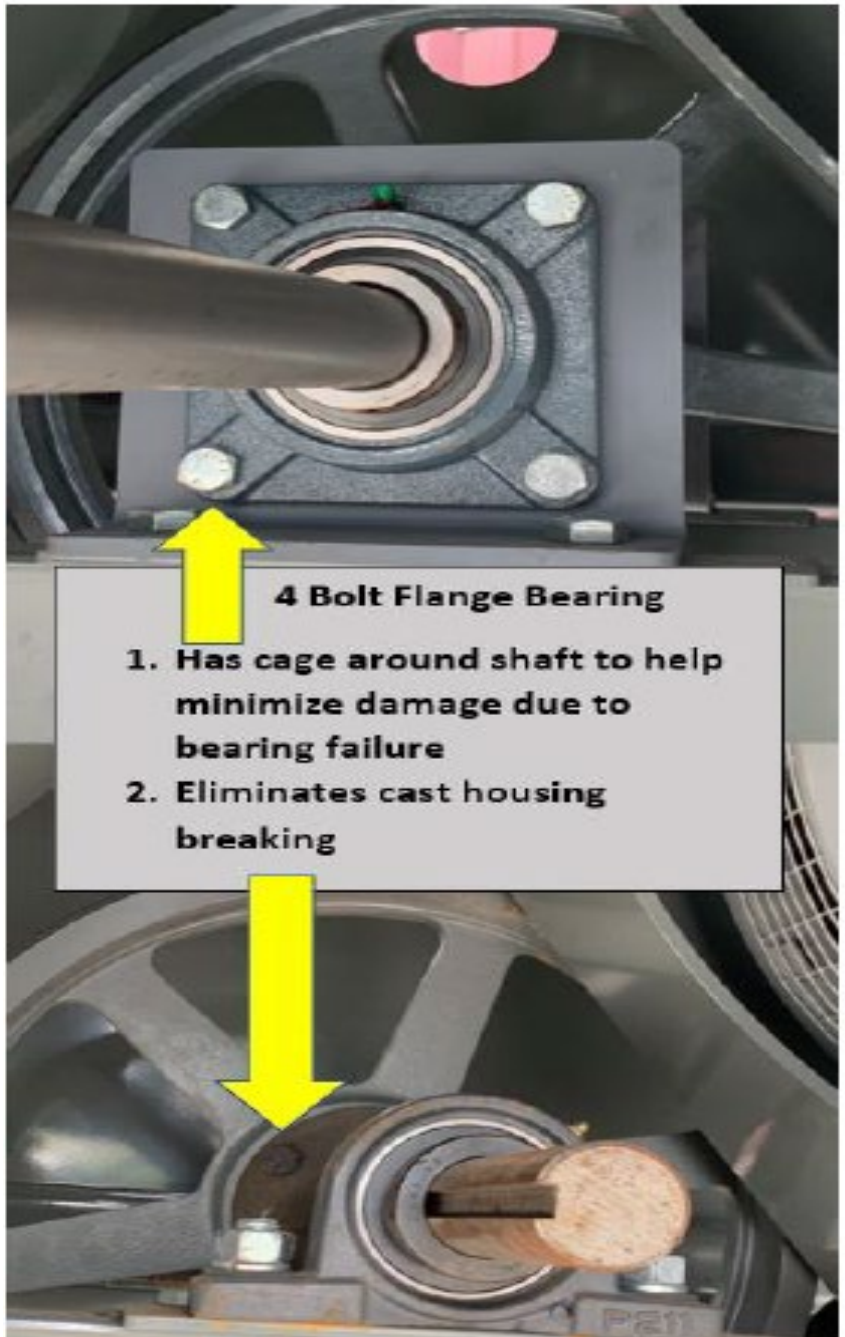
Self-Diagnostic Monitor Screen
Late Season 2019 Upgrade Feature

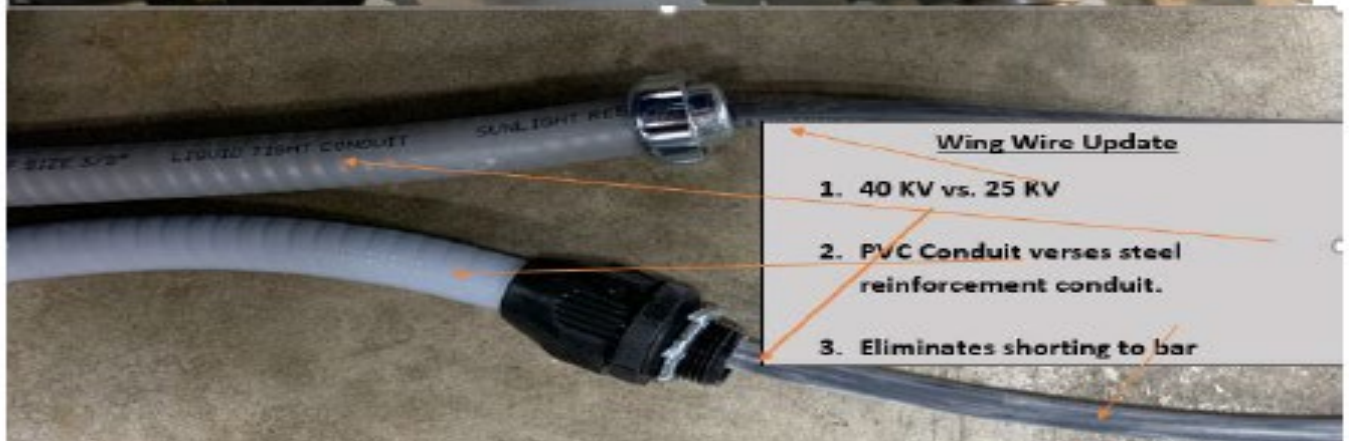


33. **Notable Machine Improvements For 2020**

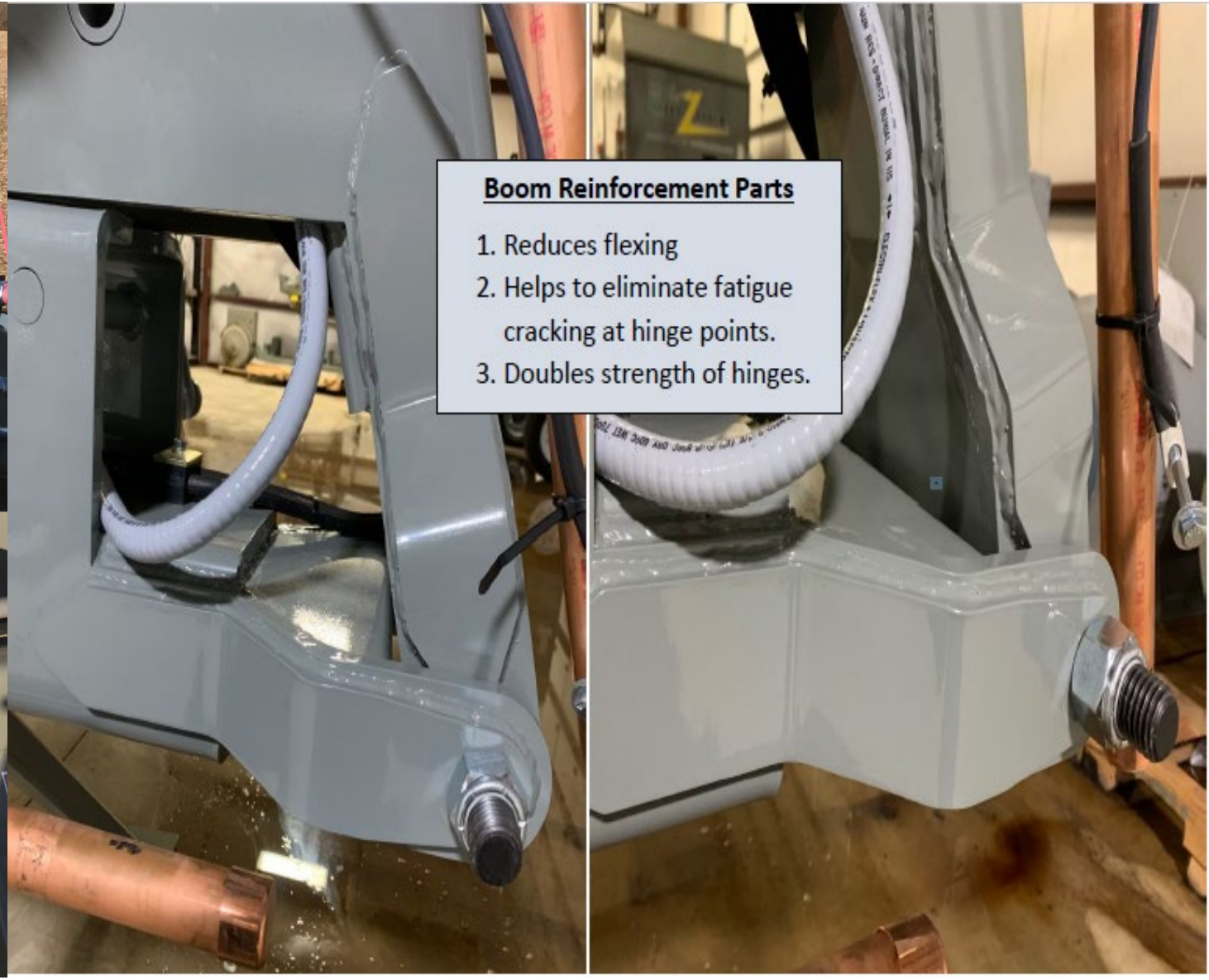
- **Generator Overheat Software Prevention Measures**
- **Automatic Belt Tensioning System**
- **New Heavy-Duty Flange Bearings**
- **PTO Shaft Cage**
- **Sectionalized Boom Height Control**
- **Newly Designed Cart 3-pt. Hitch Allows Category 2, 3, and most category 4 narrow Hitches**
- **Improved Hinge point Reinforcements**
- **Improved Protection For Sensitive System Electronics**
- **Troubleshooting Screens Added to Monitor**
- **Operator Training Via an Additional 32 Pages in Manual**
- **2020-2021 As the old saying goes, “The sky is the limit,” and we are getting closer to it with our higher-clearance Zapper series**

34. 2020 Upgrades





35.



Left to Right: Original Design--New Design

R & D Ideas & Upgrades
Sectionalized Boom Height Control

37.

Sectionalized Boom Height Control
Various Electrode Heights Shown

38.

Sectionalized Boom Height Control
Various Electrode Heights Shown

39.

"Having owned both a 2018-12R30 Weed Zapper and now the new 2019-16R30 Weed Zapper, there is no comparison. The new 2019 model has more power, more control, and is heavier built all around. I have *never* seen so many improvements in one year on *any* machine. I highly recommend this tool. It's a game changer." -Illinois

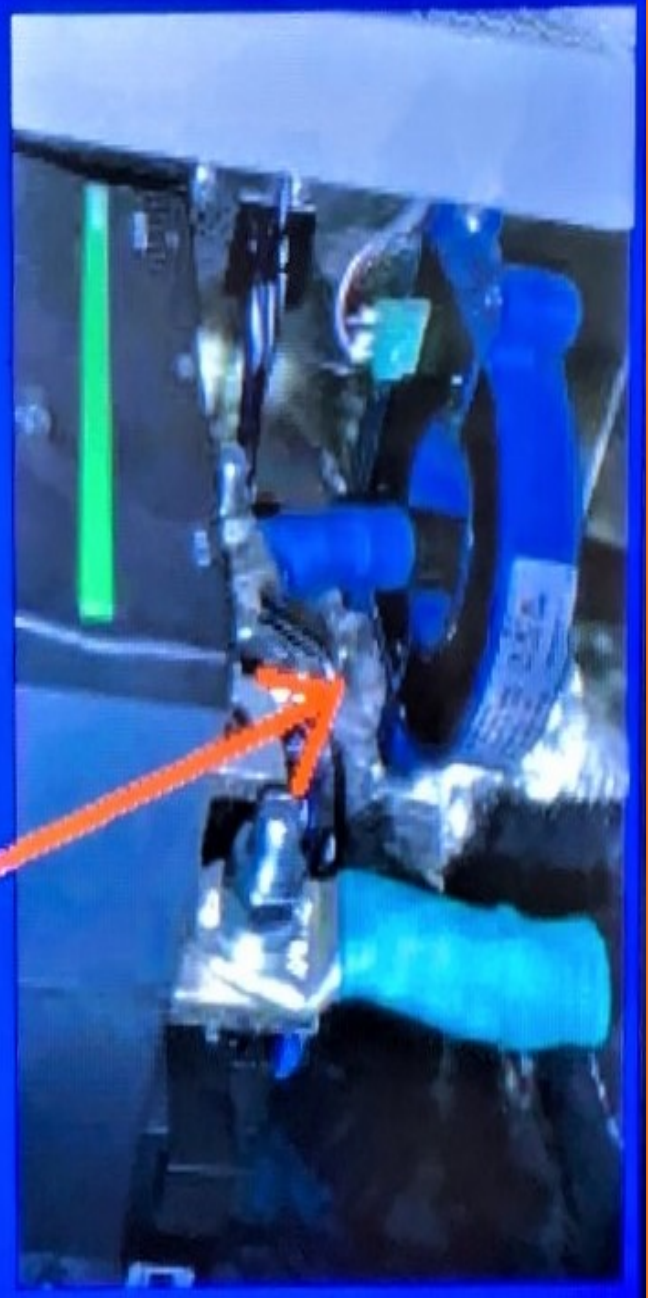
40.

2019 Self-Diagnostic Monitor Screens

!! ATTENTION !!

ERROR with
Current Sensor

1. Replace
Current Sensor



Acknowledge

!! ATTENTION !!

ERROR WITH COMPUTER.

CODE # XM8070.8
XD8251= 15183
XD0524= 0

CALL TECH @ 660-851-8800

41.

Front Mounted 3-point Hitch

Manufactured by Old School Mfg.

42.

I used The Weed Zapper on conventional soybeans instead of Dicamba. The 40 acre field beside my house was the cleanest in the county. While I was running the Zapper, my neighbors would stop on the gravel road and take pictures of me running. I even had some ask me to run their beans.

-Nebraska 2019

43.

"The Weed Zapper cleaned up my conventional fields that the spray couldn't kill. We sprayed 3 different times. The Weed Zapper did it in 1 time!“

-Missouri 2019

44.

“In 2019 I got over about 3,400 acres. I think it's fantastic. ...it's the perfect tool for controlling water hemp… and I can't say enough about the company owners. Ben Kroeger is nice to work with, very attentive, and he really knows his stuff. I'm very happy with them and their machine.” –Illinois 2019

45.

"One of the biggest problems with the machine is it's hard to get home, because of all the people wanting and needing help on their fields! We are able to cover about 20 acres per hour. Even customers with bad, problem fields, that seemed beyond saving, were very happy with the results." - Wisconsin

46.

"It was such a crazy, wet year. Our weed control was a huge challenge, but thanks to The Weed Zapper, we saved our organic soybean crop for 2019." - Missouri

47.

“The weeds in our organic soybeans were so bad that we always traded all potential profit for hand labor. This year, we eliminated all hand labor and had profitable soybeans in our rotation. The Weed Zapper machine is a *game changer* for our operation.”

- North Carolina

The Weed Zapper is a complete game changer. With this machine, we eliminated field walkers and actually grew edible beans in western Kansas. We saved $200/acre for hand labor on 500 acres in our first year of ownership.

Kansas 2019

49.

“This is one of the coolest machines we've ever owned! We bought it for our 300 acres of organic beans, but when our neighbors saw what it did, we ended up doing 600 acres of custom zapping as well.”

-Ohio 2019

50.

We were able to use soybeans in our rotation this year because of The Weed Zapper!

-Iowa 2019

51.

"I paid for the whole machine on one 60-acre organic soybean field!" -Nebraska 2019

52.

“I have fallen *head-over-heels* for this machine so I think everyone needs to know about it...I can't say enough great things about this company as they have been fantastic on support and always willing to look at ways to improve their product.” 2019 Iowa

53.

"The velvetleaf has been a challenge this year because of the growth stage. Next year we can start when they are in the full growth mode and the plant has more moisture it, thanks to The Weed Zapper."