



# Optimizing Your Pivot

## With Maintenance and Technology

DeLon Crapo  
Oliver Irrigation

# Safety First

- Inspect pivot and components before touching any of the machine
- Always shut off and lock out equipment at disconnect
- If necessary, touch the pivot with the back of your hand

Be Safe!



Broken Conduit



Poor Seal

# Safety First



No Drive Shaft  
Cover



Deep Wheel  
Tracks



# Optimizing Your Pivot

- Boombacks
- Double End Guns
- Dual Running Lights
- Pro2/Select2 Panels

# Flotation

- 3 Wheel Basebeams
- AgriTracks
- RaafT Tracks

# Sprinklers and Regulators



Still Doing The Job?

# Future of Irrigation

- The irrigation world is constantly changing
- New ways of controlling and monitoring equipment are being introduced
- More efficient irrigation practices and products help to use our fresh water resource to the best of our ability



Wireless Pump  
Kill

# GPS Guidance

- Provides the producer the ability to control sprinklers, end guns and corner steering via satellite
- +/- 10 feet accuracy with a Garmin receiver with most at an even greater accuracy
- Compatible with different GPS receivers to meet various accuracy requirements



# Telemetry and Pivot Control

- Control pivot from home computers via the web, Smartphone, or cell phone
- Gives producer full control of pivot
- Ability to monitor all pivots on one screen including current location and direction of travel
- Receive alerts and alarms from a central location if a problem occurs

# Have a Plan!

- Regular service and preventative maintenance can
  - Increase the life of the pivot and components
  - Increase over all productivity of the machine
  - Decrease down time
  - Improve crop yields

# Check List!



## Oliver Irrigation Visual Pivot Audit Check List



Customer \_\_\_\_\_ Date \_\_\_\_\_  
 Pivot # \_\_\_\_\_ CM-sn \_\_\_\_\_ Acct# \_\_\_\_\_  
 Serial # \_\_\_\_\_ RB-sn \_\_\_\_\_ Hrs \_\_\_\_\_  
 Ver \_\_\_\_\_

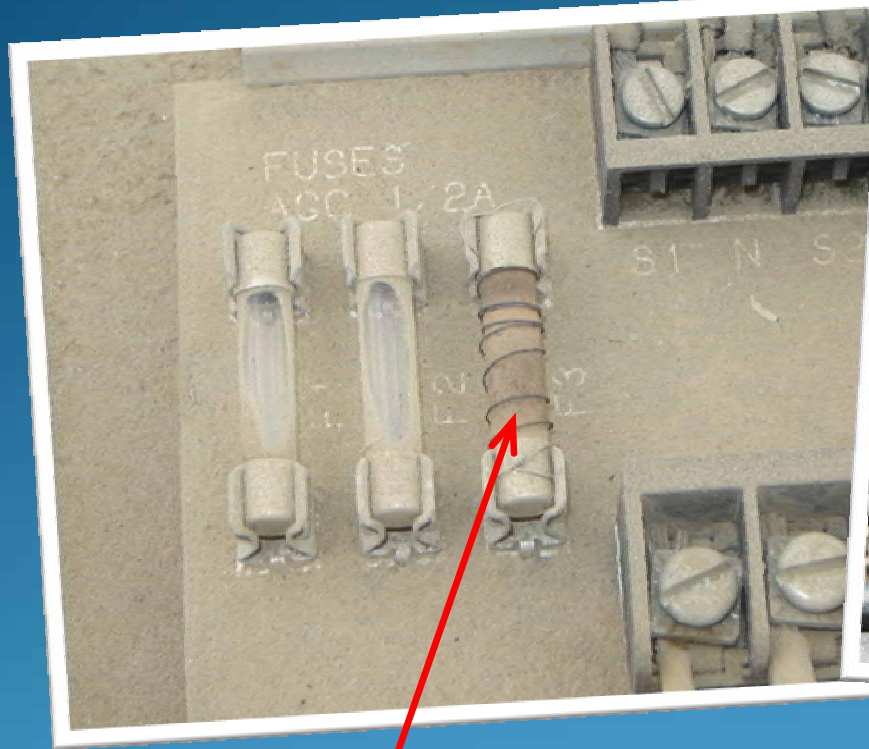
Pivot Point			
Nelson Valve	<input type="checkbox"/>	Panel	<input type="checkbox"/>
Air Relief Valve	<input type="checkbox"/>	Pivot Feet	<input type="checkbox"/>
Ball Valve	<input type="checkbox"/>	Swivel - Grease	<input type="checkbox"/>
BF Valve	<input type="checkbox"/>	Wiring/Cables	<input type="checkbox"/>
		Align Pivot	<input type="checkbox"/>
		Contactor-F	<input type="checkbox"/>
		Contactor-R	<input type="checkbox"/>
		Transformer	<input type="checkbox"/>
		Disconnect	<input type="checkbox"/>
		3P Fuses	<input type="checkbox"/>
		Tran Fused	<input type="checkbox"/>
		Collector Rg	<input type="checkbox"/>
		Pro/Sel PCB	<input type="checkbox"/>
		Oscillator	<input type="checkbox"/>
		EOLP PCB	<input type="checkbox"/>
		Misc Fuses	<input type="checkbox"/>
		5vDC Pwr	<input type="checkbox"/>
		Resolver	<input type="checkbox"/>
		Pivot Grd	<input type="checkbox"/>
		Relays	<input type="checkbox"/>
		Gasket	<input type="checkbox"/>

Drive Train - Tower		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Fwd Wheel	<input type="checkbox"/>	Fwd GB	IP seal	<input type="checkbox"/>	OP Seal	<input type="checkbox"/>	Fwd GB	<input type="checkbox"/>	Span Drain	<input type="checkbox"/>	Spks	<input type="checkbox"/>											
Rev Wheel	<input type="checkbox"/>	Rev GB	IP seal	<input type="checkbox"/>	OP Seal	<input type="checkbox"/>	Rev GB	<input type="checkbox"/>	Cables	<input type="checkbox"/>	Drops	<input type="checkbox"/>											
Wheel Nuts	<input type="checkbox"/>	CD GB	IP seal	<input type="checkbox"/>	OP Seal	<input type="checkbox"/>	CD GB	<input type="checkbox"/>	Grd Wire	<input type="checkbox"/>	Regs	<input type="checkbox"/>											
DS Shields	<input type="checkbox"/>	Drive Shaft	Bells	<input type="checkbox"/>	Gear Clamp	<input type="checkbox"/>	U-Joints	<input type="checkbox"/>	Diaphram	<input type="checkbox"/>	Boot	<input type="checkbox"/>											

Electrical - Tower		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Micro Switch-R	<input type="checkbox"/>	Disconnect	<input type="checkbox"/>	CD Motor	<input type="checkbox"/>	L1	<input type="checkbox"/>	L2	<input type="checkbox"/>	L3	<input type="checkbox"/>												
Micro Switch-S	<input type="checkbox"/>	Ground Strap	<input type="checkbox"/>	TwrBox Lid	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>												
Suppressor	<input type="checkbox"/>	Strain Reliefs	<input type="checkbox"/>	Grd Bonding	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>												
Contactor	<input type="checkbox"/>	Motor Lead	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>												



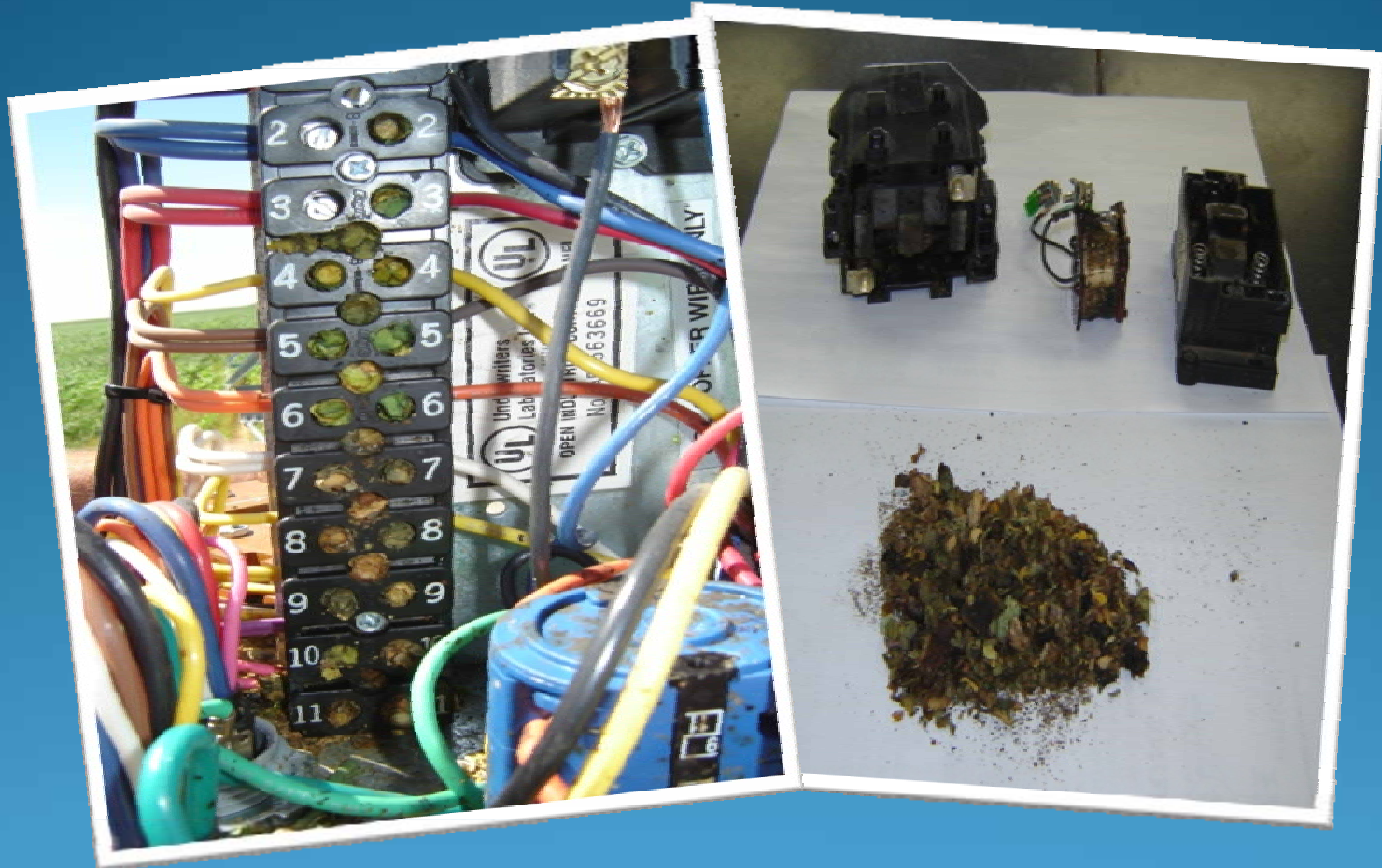
Home  
Made Fuse



No Drive  
Shaft  
Cover

Broken  
Strain Relief

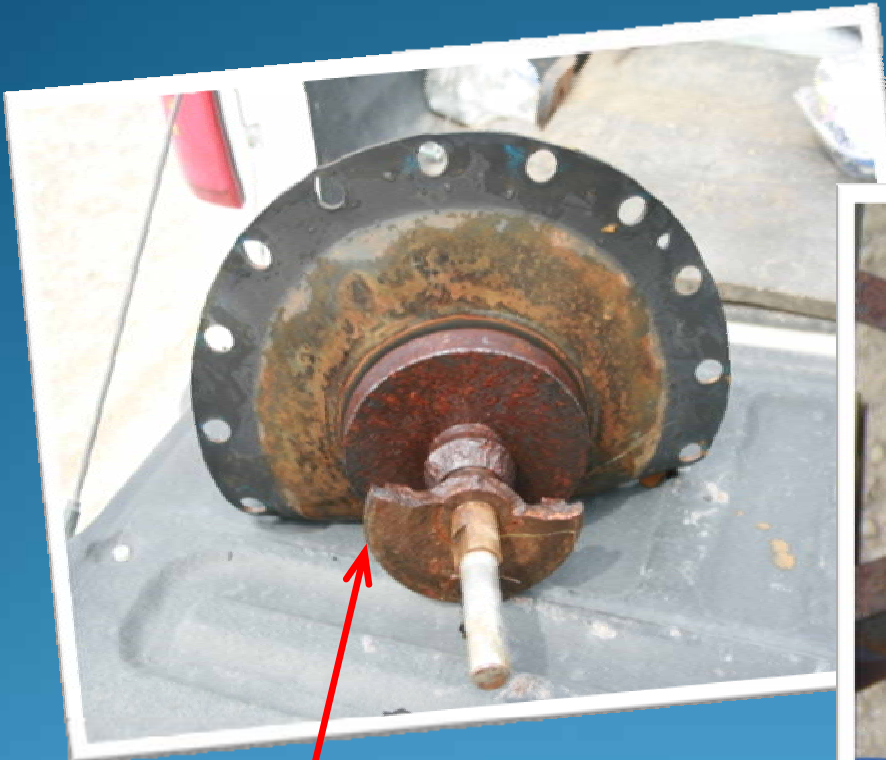
# Blow Out Boxes



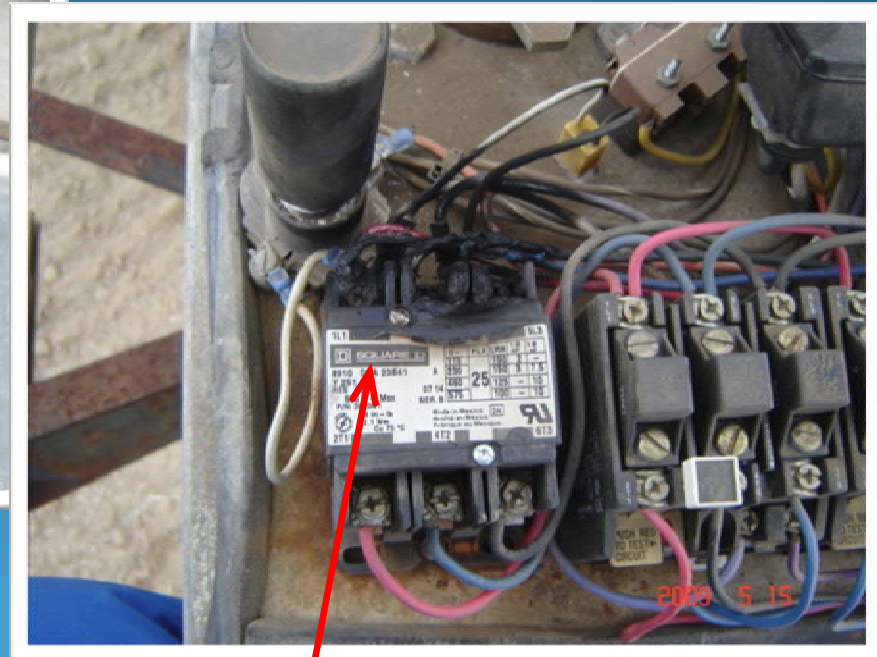
Leafcutter Bees



# Preventative Maintenance



Frost Damage



Dust in the  
Contactor

# Service

- If you are not completely sure what is wrong with the pivot or how to fix the machine then **DON'T**.

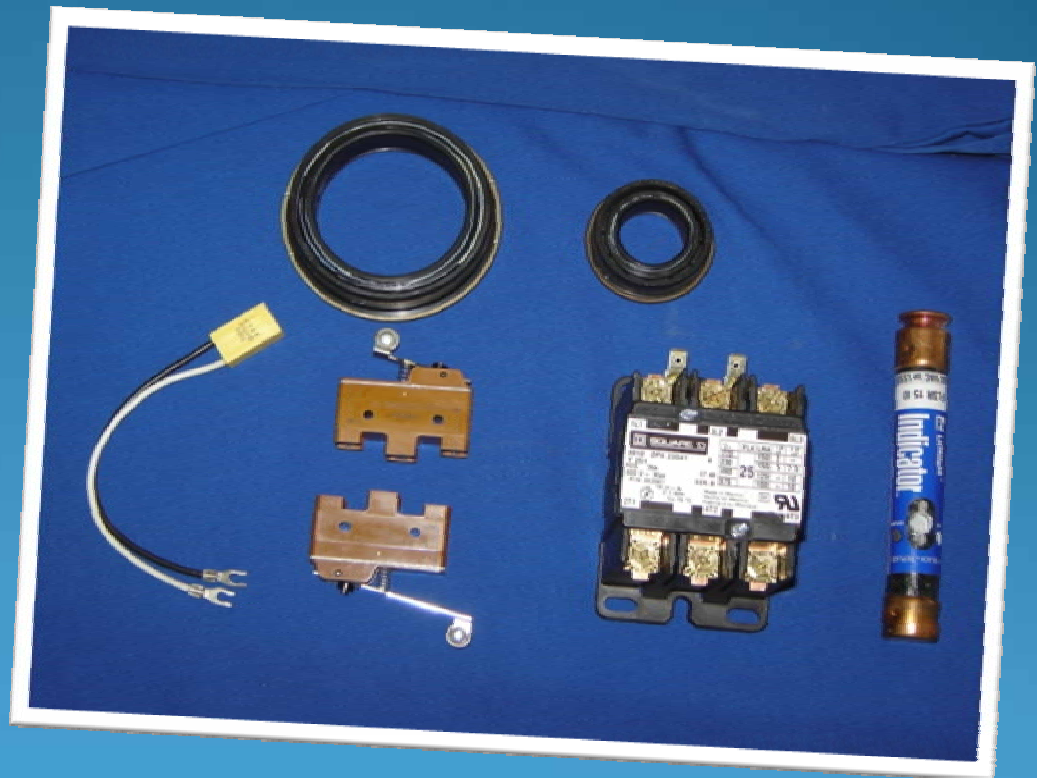


# Life of Components

- Micro Switches
- Contactors
- U-joints
- Tires
- Sprinklers
- Regulators

# Quality Parts

- Use quality parts.
- You get what you pay for.



# Happy Irrigating

