

UNI-9 DB / XL Preventive Maintenance Guide

The following information is provided by Rice Lake Weighing Systems to assist Authorized Service Offices performing preventive maintenance on Rice Lake Weighing Systems Wrapping and weighing equipment in Costco Wholesale Warehouses

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Ishida UNI 9 DB / XL Preventative Maintenance Guide

| Inspection Date: | | | Meat Manager Signature: | | | | | |
|------------------------|------------------------|---------------------|---|-------------------------------|--------------------|--|--|--|
| Costco Store Number: | | | Deli Manager Signature: | | | | | |
| Service Company: | | | Hand Wrap: Serial Number, Print Count and Overall Condition | | | | | |
| Technician(s): | | | SN: Head Usage: Good / Fair / P | | | | | |
| Deli Prep: Serial Numb | per, Print Count and C | Overall Condition | Seafood #1: S | erial Number, Print Count and | Overall Condition | | | |
| SN: | Head Usage: | Good / Fair / Poor | SN: | Head Usage: | Good / Fair / Poor | | | |
| Deli Rot: Serial Numbe | er, Print Count and O | verall Condition | Seafood #2: S | erial Number, Print Count and | Overall Condition | | | |
| SN: | Head Usage: | Good / Fair / Poor | SN: | Head Usage: | Good / Fair / Poor | | | |
| Seafood #3: Serial Nu | mber, Print Count and | d Overall Condition | Seafood #4: S | erial Number, Print Count and | Overall Condition | | | |
| SN: | Head Usage: | Good / Fair / Poor | SN: | Head Usage: | Good / Fair / Poor | | | |

This UNI-9 DB / XL Preventative Maintenance Guide is divided into three intervals - DAILY, 6-MONTH, YEARLY. The DAILY maintenance is generally the responsibility of the end-user. It is recommended that the servicing technician review these daily maintenance checks with the appropriate manager, especially if it is evident these checks are not being performed properly.

Pages 1-18 should be printed, filled, scanned and returned to RLWS along with photographic documentation of all issues such as: user abuse, water damage/corrosion, premature failures, etc.).

** Allow 30 minutes for a 6-MONTH inspection and 45 minutes for a YEARLY inspection for each scale. *

| | Sections | | Sections | | Sections |
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| 1 | SCREEN DISPLAY | 4 | SCALE | 7 | ADJUSTMENTS, PARTS |
| 2 | KEYBOARD ASSEMBLY | 5 | DATA BACKUP | 8 | SAMPLE LABELS |
| 3 | PRINTER | 6 | FIRMWARE | 9 | REFERENCE DRAWINGS |

Required materials:

- Isopropyl Alcohol
- Wrench set, metric
- Clean, lint-free rags
- Compressed Air /
- Socket set, metric (optional)
- Screwdrivers, assorted
- Allen wrench set, metric
- Machinist Ruler

- Adhesive remover (for labels)
- Thermal head cleaning kit
- Test weight set (30 lbs for DB and 60lbs for XL)
- USB flash drive (8 GB or smaller, FAT32 format, USB 3.0)
- White Grease RLWS PN 77933 or CRC SL35600

The parts listed in the Check Points and Replacement Parts columns on pages 2~17 are identified by a drawing number and part number. The drawing number refers to the parts drawings on pages 19~25. For example, in section 1: Screen Display on page 2, the LCD display is identified as #103, p/n 185546. This refers to #103 on the Screen Display drawing on page 20.

| | Section | Check Points | Comments | Tool/Grease/ | Replacement | C | Chec | k | <u>_</u> |
|---|----------------------|--|--|--|----------------------------------|---|------|---|----------|
| | | | | Program | Parts | D | 6 | Y | • |
| 1 | SCREEN DISPLAY | Contrast - LCD Display (#103) - Display Control Bd (#104) | Verify brightness of the display. Replace Invertor or Display as needed. | Adjust Menu, Display Check | 185546 (#103) 87519 (#104) | | X | X | |
| | | Touchscreen operation - Touch Panel (#102) - Sheet (#4) | Confirm accuracy. Calibrate or replace as needed. | Adjust Menu, Touch Screen | 87529 (#102) 185539 (#4) | | X | X | |
| | | Touchscreen cleaning | Clean touchscreen display | Cloth | | Х | Х | Χ | |
| 2 | KEYBOARD ASSEMBLY | Keyboard - Keyboard Assy (#105) | Confirm all keys function and show as dark squares | Adjust Menu, Key Check | 87525 (#105) | | Х | X | |
| | | Keyboard Transparent cover - Sheet (#4) | Clean keyboard cover. Replace as needed. | Cloth | 185539 (#4) | X | X | Х | |
| 3 | PRINTER | Printing Quality - Print Head (Printer Unit: #102) | Verify print is complete and legible. Clean print head. | Adjust Menu, Printer, Head tab, Test Print: Checker. Cloth. Isopropyl | 158271 (#102) | | X | X | |
| | | Label Feeding - Print Roller (Printer Cassette #5) | Check if printing expands or contracts. Check and clean print roller. Check for cuts. Remove paper dust. | Cloth. Isopropyl alcohol. Vacuum. | 163028 (#5) | | X | X | |
| | | Label Gap Sensor - Photo interrupter, reflection Printer Frame (Printer Frame #100) - Block B, Prism (Printer Cassette #14) | Check that sensor readings are normal (baseline near 60, spike near 160). Clean, calibrate, or replace sensors and prism as needed. Clean pin hole on the cassette. | Adjust Menu, Printer, Label Feed tab | 87533 (#100) 182039 (#14) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | placement Chec | | k | |
|---|-------------------|--|---|---|--|----------------|---|---|---|
| | Section | Check Foints | Comments | Program | Parts | D | 6 | Υ | v |
| 3 | PRINTER (CONT) | Peel sensor - Transmitter, Left Side (Printer Frame #101) Receiver, Right Side (Printer Frame #102) | Check that sensor readings are normal (over 200 when blocked and under 40 when open). Clean, calibrate, or replace sensors as needed. | Adjust Menu, Printer, Peel Sensor tab | 158272 (#101) 158274 (#102) | | X | Х | |
| | | Drive Gears - Gear Flat (Printer Frame #6) - Timing Pulley S2M (Printer Cassette #6) - Timing pulley, S2M, with gear (Printer Cassette #17) - Pulley, idler (Printer Cassette #18) - Torque limiter (Printer Cassette #23) - Timing belt, S2M (Printer Cassette #195) | Clean debris. Examine gears and belt for cracks or chips. Verify cassette holds and printer drive gears mesh well at home position | | 181151 (Frame #6) 175372 (Cassette #6) 175375 (#17) 181141 (#18) 181144 (#23) 181146 (#195) | | | x | |
| | | Home position - Cassette Sensor (Main Body Frame #102) - Seal Sensor (Printer Cassette #31) | Clean and inspect the Seal and Sensor for wear. | Cloth. Isopropyl alcohol. | 93235 (#31) | | | x | |
| | | Take Spool - Bobbin Roll (Printer Cassette #24) | Clean and inspect. | Cloth. Isopropyl alcohol | 162104 (#24) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | ent Cł | | :k | √ |
|---|----------------|--|--|---|-------------|--------|---|----|----------|
| | Section | Check Folints | Comments | Program | Parts | D | 6 | Υ | • |
| 4 | SCALE | Weighing | Correct weighing | 1 lb. test weight | | X | Χ | X | |
| | | Check zero and calibration | | 30 lb. test weights | | | X | Х | |
| | | Shift test in all four | | 5 lb. test weight | | | Χ | X | |
| | | Seal | Refer to local regulations | Lead or paper seal | | | X | X | |
| | | Stainless Scale Platter - Platter (#1) | Replace if damaged. | Soap & Water (Daily) | 171675 (#1) | | X | X | |
| 5 | DATA BACKUP | | Insert a blank USB stick of 8 gig of less into the access hatch on the upper left side. Create and name a backup location under "OUTPUT SELECT" | Setup Menu, File Save/Load, Scale >USB tab, Output Select, Exec, All Sel, Exec, Exec. Also possible with SLP-5. | | | X | X | |
| 6 | FIRMWARE | Main Firmware: | Load firmware on a blank USB stick of 8 gig or less. Insert into the access hatch on the upper left side. Reboot Afterwards. | Adjust Menu, Download, Main tab "USB>MAIN (PRG+IMG)", USB Memory Folder, select file, EXEC, EXEC. | | | | | |
| | | Sub Apps: | Load both sub apps; reboot after each. Take a second backup once the firmware upgrades have been completed. | Adjust Menu, Download, Sub App tab, Printer, Exec, Exec. Reboot. Adjust Menu, Download, Sub App tab, FPGA, Exec, Exec. Reboot. | | | | | |

7. ADJUSTMENTS, COMMENTS, PARTS REQUIRED, ETC.

| Section | Inspection Items and Contents | Comments | Replacement Parts |
|---------|-------------------------------|----------|-------------------|
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8. SAMPLE LABELS

[SAMPLE LABELS]

| | Section | Check Points | Comments | Tool/Grease/ | Replacement | 0 | Check | | |
|---|----------------------|--|--|--|----------------------------------|---|-------|---|---|
| | | | | Program | Parts | D | 6 | Y | v |
| 1 | SCREEN DISPLAY | Contrast - LCD Display (#103) - Display Control Bd (#104) | Verify brightness of the display. Replace Invertor or Display as needed. | Adjust Menu, Display Check | 185546 (#103) 87519 (#104) | | X | X | |
| | | Touchscreen operation - Touch Panel (#102) - Sheet (#4) | Confirm accuracy. Calibrate or replace as needed. | Adjust Menu, Touch Screen | 87529 (#102) 185539 (#4) | | X | X | |
| | | Touchscreen cleaning | Clean touchscreen display | Cloth | | Х | Х | Х | |
| 2 | KEYBOARD ASSEMBLY | Keyboard - Keyboard Assy (#105) | Confirm all keys function and show as dark squares | Adjust Menu, Key Check | 87525 (#105) | | Х | X | |
| | | Keyboard Transparent cover - Sheet (#4) | Clean keyboard cover. Replace as needed. | Cloth | 185539 (#4) | X | Х | X | |
| 3 | PRINTER | Printing Quality - Print Head (Printer Unit: #102) | Verify print is complete and legible. Clean print head. | Adjust Menu, Printer, Head tab, Test Print: Checker. Cloth. Isopropyl | 158271 (#102) | | X | X | |
| | | Label Feeding - Print Roller (Printer Cassette #5) | Check if printing expands or contracts. Check and clean print roller. Check for cuts. Remove paper dust. | Cloth. Isopropyl alcohol. Vacuum. | 163028 (#5) | | X | Х | |
| | | Label Gap Sensor - Photo interrupter, reflection Printer Frame (Printer Frame #100) - Block B, Prism (Printer Cassette #14) | Check that sensor readings are normal (baseline near 60, spike near 160). Clean, calibrate, or replace sensors and prism as needed. Clean pin hole on the cassette. | Adjust Menu, Printer, Label Feed tab | 87533 (#100) 182039 (#14) | | X | X | |

| | Section | Chook Points | Commonto | Tool/Grease/ | Replacement | (| Chec | k | ./ |
|---|-------------------|--|---|---|--|---|------|---|----|
| | Section | Check Foints | Comments | Program | Parts | D | 6 | Υ | • |
| 3 | PRINTER (CONT) | Peel sensor - Transmitter, Left Side (Printer Frame #101) Receiver, Right Side (Printer Frame #102) | Check that sensor readings are normal (over 200 when blocked and under 40 when open). Clean, calibrate, or replace sensors as needed. | Adjust Menu, Printer, Peel Sensor tab | 158272 (#101) 158274 (#102) | | X | X | |
| | | Drive Gears - Gear Flat (Printer Frame #6) - Timing Pulley S2M (Printer Cassette #6) - Timing pulley, S2M, with gear (Printer Cassette #17) - Pulley, idler (Printer Cassette #18) - Torque limiter (Printer Cassette #23) - Timing belt, S2M (Printer Cassette #195) | Clean debris. Examine gears and belt for cracks or chips. Verify cassette holds and printer drive gears mesh well at home position | | 181151 (Frame #6) 175372 (Cassette #6) 175375 (#17) 181141 (#18) 181144 (#23) 181146 (#195) | | | X | |
| | | Home position - Cassette Sensor (Main Body Frame #102) - Seal Sensor (Printer Cassette #31) | Clean and inspect the Seal and Sensor for wear. | Cloth. Isopropyl alcohol. | 93235 (#31) | | | x | |
| | | Take Spool- Bobbin Roll (Printer Cassette #24) | Clean and inspect. | Cloth. Isopropyl alcohol | 162104 (#24) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | nt Ch | | :k | √ |
|---|----------------|--|--|---|-------------|-------|---|----|----------|
| | Section | Check Folints | Comments | Program | Parts | D | 6 | Υ | • |
| 4 | SCALE | Weighing | Correct weighing | 1 lb. test weight | | Χ | Χ | X | |
| | | Check zero and calibration | | 30 lb. test weights | | | X | X | |
| | | Shift test in all four | | 5 lb. test weight | | | Χ | Χ | |
| | | Seal | Refer to local regulations | Lead or paper seal | | | Х | X | |
| | | Stainless Scale Platter - Platter (#1) | Replace if damaged. | Soap & Water (Daily) | 171675 (#1) | | X | X | |
| 5 | DATA BACKUP | | Insert a blank USB stick of 8 gig of less into the access hatch on the upper left side. Create and name a backup location under "OUTPUT SELECT" | Setup Menu, File Save/Load, Scale >USB tab, Output Select, Exec, All Sel, Exec, Exec. Also possible with SLP-5. | | | X | X | |
| 6 | FIRMWARE | Main Firmware: | Load firmware on a blank USB stick of 8 gig or less. Insert into the access hatch on the upper left side. Reboot Afterwards. | Adjust Menu, Download, Main tab "USB>MAIN (PRG+IMG)", USB Memory Folder, select file, EXEC, EXEC. | | | | | |
| | | Sub Apps: | Load both sub apps; reboot after each. Take a second backup once the firmware upgrades have been completed. | Adjust Menu, Download, Sub App tab, Printer, Exec, Exec. Reboot. Adjust Menu, Download, Sub App tab, FPGA, Exec, Exec. Reboot. | | | | | |

9. ADJUSTMENTS, COMMENTS, PARTS REQUIRED, ETC.

| Section | Inspection Items and Contents | Comments | Replacement Parts |
|---------|-------------------------------|----------|-------------------|
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10. SAMPLE LABELS

[SAMPLE LABELS]

| | Section | Check Points | Comments | Tool/Grease/ | A Replacement Check | | < | 1 | |
|---|----------------------|--|--|--|----------------------------------|---|---|---|---|
| | | | | Program | Parts | D | 6 | Υ | v |
| 1 | SCREEN DISPLAY | Contrast - LCD Display (#103) - Display Control Bd (#104) | Verify brightness of the display. Replace Invertor or Display as needed. | Adjust Menu, Display Check | 185546 (#103) 87519 (#104) | | X | Х | |
| | | Touchscreen operation - Touch Panel (#102) - Sheet (#4) | Confirm accuracy. Calibrate or replace as needed. | Adjust Menu, Touch Screen | 87529 (#102) 185539 (#4) | | X | X | |
| | | Touchscreen cleaning | Clean touchscreen display | Cloth | | Х | Х | Х | |
| 2 | KEYBOARD ASSEMBLY | Keyboard - Keyboard Assy (#105) | Confirm all keys function and show as dark squares | Adjust Menu, Key Check | 87525 (#105) | | Х | Χ | |
| | | Keyboard Transparent cover - Sheet (#4) | Clean keyboard cover. Replace as needed. | Cloth | 185539 (#4) | X | X | Х | |
| 3 | PRINTER | Printing Quality - Print Head (Printer Unit: #102) | Verify print is complete and legible. Clean print head. | Adjust Menu, Printer, Head tab, Test Print: Checker. Cloth. Isopropyl | 158271 (#102) | | X | X | |
| | | Label Feeding - Print Roller (Printer Cassette #5) | Check if printing expands or contracts. Check and clean print roller. Check for cuts. Remove paper dust. | Cloth. Isopropyl alcohol. Vacuum. | 163028 (#5) | | X | X | |
| | | Label Gap Sensor - Photo interrupter, reflection Printer Frame (Printer Frame #100) - Block B, Prism (Printer Cassette #14) | Check that sensor readings are normal (baseline near 60, spike near 160). Clean, calibrate, or replace sensors and prism as needed. Clean pin hole on the cassette. | Adjust Menu, Printer, Label Feed tab | 87533 (#100) 182039 (#14) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | (| Chec | k | |
|---|-------------------|--|---|---|--|---|------|---|---|
| | Section | CHeck Follits | Comments | Program | Parts | D | 6 | Υ | • |
| 3 | PRINTER (CONT) | Peel sensor - Transmitter, Left Side (Printer Frame #101) Receiver, Right Side (Printer Frame #102) | Check that sensor readings are normal (over 200 when blocked and under 40 when open). Clean, calibrate, or replace sensors as needed. | Adjust Menu, Printer, Peel Sensor tab | 158272 (#101) 158274 (#102) | | X | X | |
| | | Drive Gears - Gear Flat (Printer Frame #6) - Timing Pulley S2M (Printer Cassette #6) - Timing pulley, S2M, with gear (Printer Cassette #17) - Pulley, idler (Printer Cassette #18) - Torque limiter (Printer Cassette #23) - Timing belt, S2M (Printer Cassette #195) | Clean debris. Examine gears and belt for cracks or chips. Verify cassette holds and printer drive gears mesh well at home position | | 181151 (Frame #6) 175372 (Cassette #6) 175375 (#17) 181141 (#18) 181144 (#23) 181146 (#195) | | | x | |
| | | Home position - Cassette Sensor (Main Body Frame #102) - Seal Sensor (Printer Cassette #31) | Clean and inspect the Seal and Sensor for wear. | Cloth. Isopropyl alcohol. | 93235 (#31) | | | X | |
| | | Take Spool - Bobbin Roll (Printer Cassette #24) | Clean and inspect. | Cloth. Isopropyl alcohol | 162104 (#24) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | Chec | | :k | √ |
|---|----------------|--|--|---|-------------|------|---|----|----------|
| | Section | Check Follits | Comments | Program | Parts | D | 6 | Υ | • |
| 4 | SCALE | Weighing | Correct weighing | 1 lb. test weight | | X | Χ | Χ | |
| | | Check zero and calibration | | 30 lb. test weights | | | X | Х | |
| | | Shift test in all four | | 5 lb. test weight | | | Χ | Χ | |
| | | Seal | Refer to local regulations | Lead or paper seal | | | Х | X | |
| | | Stainless Scale Platter - Platter (#1) | Replace if damaged. | Soap & Water (Daily) | 171675 (#1) | | Χ | X | |
| 5 | DATA BACKUP | | Insert a blank USB stick of 8 gig of less into the access hatch on the upper left side. Create and name a backup location under "OUTPUT SELECT" | Setup Menu, File Save/Load, Scale >USB tab, Output Select, Exec, All Sel, Exec, Exec. Also possible with SLP-5. | | | X | X | |
| 6 | FIRMWARE | Main Firmware: | Load firmware on a blank USB stick of 8 gig or less. Insert into the access hatch on the upper left side. Reboot Afterwards. | Adjust Menu, Download, Main tab "USB>MAIN (PRG+IMG)", USB Memory Folder, select file, EXEC, EXEC. | | | | | |
| | | Sub Apps: | Load both sub apps; reboot after each. Take a second backup once the firmware upgrades have been completed. | Adjust Menu, Download, Sub App tab, Printer, Exec, Exec. Reboot. Adjust Menu, Download, Sub App tab, FPGA, Exec, Exec. Reboot. | | | | | |

11. ADJUSTMENTS, COMMENTS, PARTS REQUIRED, ETC.

| Section | Inspection Items and Contents | Comments | Replacement Parts |
|---------|-------------------------------|----------|-------------------|
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12. SAMPLE LABELS

[SAMPLE LABELS]

| | Section | Check Points | Comments | Tool/Grease/ | Replacement | Check D 6 Y | | 1 | |
|---|----------------------|--|--|--|----------------------------------|----------------|---|---|---|
| | | | | Program | Parts | D | 6 | Υ | v |
| 1 | SCREEN DISPLAY | Contrast - LCD Display (#103) - Display Control Bd (#104) | Verify brightness of the display. Replace Invertor or Display as needed. | Adjust Menu, Display Check | 185546 (#103) 87519 (#104) | | X | X | |
| | | Touchscreen operation - Touch Panel (#102) - Sheet (#4) | Confirm accuracy. Calibrate or replace as needed. | Adjust Menu, Touch Screen | 87529 (#102) 185539 (#4) | | X | X | |
| | | Touchscreen cleaning | Clean touchscreen display | Cloth | | Χ | Х | Χ | |
| 2 | KEYBOARD ASSEMBLY | Keyboard - Keyboard Assy (#105) | Confirm all keys function and show as dark squares | Adjust Menu, Key Check | 87525 (#105) | | Х | X | |
| | | Keyboard Transparent cover - Sheet (#4) | Clean keyboard cover. Replace as needed. | Cloth | 185539 (#4) | X | X | X | |
| 3 | PRINTER | Printing Quality - Print Head (Printer Unit: #102) | Verify print is complete and legible. Clean print head. | Adjust Menu, Printer, Head tab, Test Print: Checker. Cloth. Isopropyl | 158271 (#102) | | X | X | |
| | | Label Feeding - Print Roller (Printer Cassette #5) | Check if printing expands or contracts. Check and clean print roller. Check for cuts. Remove paper dust. | Cloth. Isopropyl alcohol. Vacuum. | 163028 (#5) | | X | Х | |
| | | Label Gap Sensor - Photo interrupter, reflection Printer Frame (Printer Frame #100) - Block B, Prism (Printer Cassette #14) | Check that sensor readings are normal (baseline near 60, spike near 160). Clean, calibrate, or replace sensors and prism as needed. Clean pin hole on the cassette. | Adjust Menu, Printer, Label Feed tab | 87533 (#100) 182039 (#14) | | X | X | |

| | Section | Chook Dointo | Commonto | Tool/Grease/ | Replacement | (| Chec | k | ./ |
|---|-------------------|--|---|---|--|---|------|---|----|
| | Section | Check Points | Comments | Program | Parts | D | 6 | Υ | v |
| 3 | PRINTER (CONT) | Peel sensor - Transmitter, Left Side (Printer Frame #101) Receiver, Right Side (Printer Frame #102) | Check that sensor readings are normal (over 200 when blocked and under 40 when open). Clean, calibrate, or replace sensors as needed. | Adjust Menu, Printer, Peel Sensor tab | 158272 (#101) 158274 (#102) | | Х | x | |
| | | Drive Gears - Gear Flat (Printer Frame #6) - Timing Pulley S2M (Printer Cassette #6) - Timing pulley, S2M, with gear (Printer Cassette #17) - Pulley, idler (Printer Cassette #18) - Torque limiter (Printer Cassette #23) - Timing belt, S2M (Printer Cassette #195) | Clean debris. Examine gears and belt for cracks or chips. Verify cassette holds and printer drive gears mesh well at home position | | 181151 (Frame #6) 175372 (Cassette #6) 175375 (#17) 181141 (#18) 181144 (#23) 181146 (#195) | | | x | |
| | | Home position - Cassette Sensor (Main Body Frame #102) - Seal Sensor (Printer Cassette #31) | Clean and inspect the Seal and Sensor for wear. | Cloth. Isopropyl alcohol. | 93235 (#31) | | | x | |
| | | Take Spool - Bobbin Roll (Printer Cassette #24) | Clean and inspect. | Cloth. Isopropyl alcohol | 162104 (#24) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | Chec | | :k | √ |
|---|----------------|--|--|---|-------------|------|---|----|----------|
| | Section | Check Folints | Comments | Program | Parts | D | 6 | Υ | • |
| 4 | SCALE | Weighing | Correct weighing | 1 lb. test weight | | X | Χ | Χ | |
| | | Check zero and calibration | | 30 lb. test weights | | | X | Х | |
| | | Shift test in all four | | 5 lb. test weight | | | Χ | Χ | |
| | | Seal | Refer to local regulations | Lead or paper seal | | | Х | X | |
| | | Stainless Scale Platter - Platter (#1) | Replace if damaged. | Soap & Water (Daily) | 171675 (#1) | | Χ | X | |
| 5 | DATA BACKUP | | Insert a blank USB stick of 8 gig of less into the access hatch on the upper left side. Create and name a backup location under "OUTPUT SELECT" | Setup Menu, File Save/Load, Scale >USB tab, Output Select, Exec, All Sel, Exec, Exec. Also possible with SLP-5. | | | X | X | |
| 6 | FIRMWARE | Main Firmware: | Load firmware on a blank USB stick of 8 gig or less. Insert into the access hatch on the upper left side. Reboot Afterwards. | Adjust Menu, Download, Main tab "USB>MAIN (PRG+IMG)", USB Memory Folder, select file, EXEC, EXEC. | | | | | |
| | | Sub Apps: | Load both sub apps; reboot after each. Take a second backup once the firmware upgrades have been completed. | Adjust Menu, Download, Sub App tab, Printer, Exec, Exec. Reboot. Adjust Menu, Download, Sub App tab, FPGA, Exec, Exec. Reboot. | | | | | |

13. ADJUSTMENTS, COMMENTS, PARTS REQUIRED, ETC.

| Section | Inspection Items and Contents | Comments | Replacement Parts |
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14. SAMPLE LABELS

[SAMPLE LABELS]

| | Section | Check Points | Comments | Tool/Grease/ | Replacement | Check D 6 Y | | < | 1 |
|---|----------------------|--|--|--|----------------------------------|----------------|---|---|---|
| | | | | Program | Parts | D | 6 | Υ | • |
| 1 | SCREEN DISPLAY | Contrast - LCD Display (#103) - Display Control Bd (#104) | Verify brightness of the display. Replace Invertor or Display as needed. | Adjust Menu, Display Check | 185546 (#103) 87519 (#104) | | X | Х | |
| | | Touchscreen operation - Touch Panel (#102) - Sheet (#4) | Confirm accuracy. Calibrate or replace as needed. | Adjust Menu, Touch Screen | 87529 (#102) 185539 (#4) | | X | X | |
| | | Touchscreen cleaning | Clean touchscreen display | Cloth | | Х | Х | Х | |
| 2 | KEYBOARD ASSEMBLY | Keyboard - Keyboard Assy (#105) | Confirm all keys function and show as dark squares | Adjust Menu, Key Check | 87525 (#105) | | Х | Χ | |
| | | Keyboard Transparent cover - Sheet (#4) | Clean keyboard cover. Replace as needed. | Cloth | 185539 (#4) | X | X | Х | |
| 3 | PRINTER | Printing Quality - Print Head (Printer Unit: #102) | Verify print is complete and legible. Clean print head. | Adjust Menu, Printer, Head tab, Test Print: Checker. Cloth. Isopropyl | 158271 (#102) | | X | X | |
| | | Label Feeding - Print Roller (Printer Cassette #5) | Check if printing expands or contracts. Check and clean print roller. Check for cuts. Remove paper dust. | Cloth. Isopropyl alcohol. Vacuum. | 163028 (#5) | | X | X | |
| | | Label Gap Sensor - Photo interrupter, reflection Printer Frame (Printer Frame #100) - Block B, Prism (Printer Cassette #14) | Check that sensor readings are normal (baseline near 60, spike near 160). Clean, calibrate, or replace sensors and prism as needed. Clean pin hole on the cassette. | Adjust Menu, Printer, Label Feed tab | 87533 (#100) 182039 (#14) | | X | X | |

| | Section | Check Deinte | Commonto | Tool/Grease/ | Replacement | 0 | Chec | k | ./ |
|---|-------------------|--|---|---|--|---|------|---|----|
| | Section | Check Points | Comments | Program | Parts | D | 6 | Υ | v |
| 3 | PRINTER (CONT) | Peel sensor - Transmitter, Left Side (Printer Frame #101) Receiver, Right Side (Printer Frame #102) | Check that sensor readings are normal (over 200 when blocked and under 40 when open). Clean, calibrate, or replace sensors as needed. | Adjust Menu, Printer, Peel Sensor tab | 158272 (#101) 158274 (#102) | | X | X | |
| | | Drive Gears - Gear Flat (Printer Frame #6) - Timing Pulley S2M (Printer Cassette #6) - Timing pulley, S2M, with gear (Printer Cassette #17) - Pulley, idler (Printer Cassette #18) - Torque limiter (Printer Cassette #23) - Timing belt, S2M (Printer Cassette #195) | Clean debris. Examine gears and belt for cracks or chips. Verify cassette holds and printer drive gears mesh well at home position | | 181151 (Frame #6) 175372 (Cassette #6) 175375 (#17) 181141 (#18) 181144 (#23) 181146 (#195) | | | X | |
| | | Home position - Cassette Sensor (Main Body Frame #102) - Seal Sensor (Printer Cassette #31) | Clean and inspect the Seal and Sensor for wear. | Cloth. Isopropyl alcohol. | 93235 (#31) | | | X | |
| | | Take Spool - Bobbin Roll (Printer Cassette #24) | Clean and inspect. | Cloth. Isopropyl alcohol | 162104 (#24) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | Chec | | :k | √ |
|---|----------------|--|--|---|-------------|------|---|----|----------|
| | Section | Check Follits | Comments | Program | Parts | D | 6 | Υ | • |
| 4 | SCALE | Weighing | Correct weighing | 1 lb. test weight | | Х | Χ | Χ | |
| | | Check zero and calibration | | 30 lb. test weights | | | X | Х | |
| | | Shift test in all four | | 5 lb. test weight | | | Χ | Χ | |
| | | Seal | Refer to local regulations | Lead or paper seal | | | Х | X | |
| | | Stainless Scale Platter - Platter (#1) | Replace if damaged. | Soap & Water (Daily) | 171675 (#1) | | Χ | X | |
| 5 | DATA BACKUP | | Insert a blank USB stick of 8 gig of less into the access hatch on the upper left side. Create and name a backup location under "OUTPUT SELECT" | Setup Menu, File Save/Load, Scale >USB tab, Output Select, Exec, All Sel, Exec, Exec. Also possible with SLP-5. | | | X | X | |
| 6 | FIRMWARE | Main Firmware: | Load firmware on a blank USB stick of 8 gig or less. Insert into the access hatch on the upper left side. Reboot Afterwards. | Adjust Menu, Download, Main tab "USB>MAIN (PRG+IMG)", USB Memory Folder, select file, EXEC, EXEC. | | | | | |
| | | Sub Apps: | Load both sub apps; reboot after each. Take a second backup once the firmware upgrades have been completed. | Adjust Menu, Download, Sub App tab, Printer, Exec, Exec. Reboot. Adjust Menu, Download, Sub App tab, FPGA, Exec, Exec. Reboot. | | | | | |

15. ADJUSTMENTS, COMMENTS, PARTS REQUIRED, ETC.

| Section | Inspection Items and Contents | Comments | Replacement Parts |
|---------|-------------------------------|----------|-------------------|
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16. SAMPLE LABELS

[SAMPLE LABELS]

| | Section | Check Points | Comments | Tool/Grease/ | Replacement | (| Chec | < | ./ |
|---|----------------------|--|--|--|----------------------------------|---|------|---|----|
| | | | | Program | Parts | D | 6 | Υ | v |
| 1 | SCREEN DISPLAY | Contrast - LCD Display (#103) - Display Control Bd (#104) | Verify brightness of the display. Replace Invertor or Display as needed. | Adjust Menu, Display Check | 185546 (#103) 87519 (#104) | | Х | Х | |
| | | Touchscreen operation - Touch Panel (#102) - Sheet (#4) | Confirm accuracy. Calibrate or replace as needed. | Adjust Menu, Touch Screen | 87529 (#102) 185539 (#4) | | X | X | |
| | | Touchscreen cleaning | Clean touchscreen display | Cloth | | Х | Х | Х | |
| 2 | KEYBOARD ASSEMBLY | Keyboard - Keyboard Assy (#105) | Confirm all keys function and show as dark squares | Adjust Menu, Key Check | 87525 (#105) | | X | X | |
| | | Keyboard Transparent cover - Sheet (#4) | Clean keyboard cover. Replace as needed. | Cloth | 185539 (#4) | X | X | X | |
| 3 | PRINTER | Printing Quality - Print Head (Printer Unit: #102) | Verify print is complete and legible. Clean print head. | Adjust Menu, Printer, Head tab, Test Print: Checker. Cloth. Isopropyl alcohol. | 158271 (#102) | | X | X | |
| | | Label Feeding - Print Roller (Printer Cassette #5) | Check if printing expands or contracts. Check and clean print roller. Check for cuts. Remove paper dust. | Cloth. Isopropyl alcohol. Vacuum. | 163028 (#5) | | X | X | |
| | | Label Gap Sensor - Photo interrupter, reflection Printer Frame (Printer Frame #100) - Block B, Prism (Printer Cassette #14) | Check that sensor readings are normal (baseline near 60, spike near 160). Clean, calibrate, or replace sensors and prism as needed. Clean pin hole on the cassette. | Adjust Menu, Printer, Label Feed tab | 87533 (#100) 182039 (#14) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | Check | | k | 1 |
|---|-------------------|--|---|---|--|-------|---|---|---|
| | Section | Check Follits | Comments | Program | Parts | D | 6 | Υ | v |
| 3 | PRINTER (CONT) | Peel sensor - Transmitter, Left Side (Printer Frame #101) Receiver, Right Side (Printer Frame #102) | Check that sensor readings are normal (over 200 when blocked and under 40 when open). Clean, calibrate, or replace sensors as needed. | Adjust Menu, Printer, Peel Sensor tab | 158272 (#101) 158274 (#102) | | X | x | |
| | | Drive Gears - Gear Flat (Printer Frame #6) - Timing Pulley S2M (Printer Cassette #6) - Timing pulley, S2M, with gear (Printer Cassette #17) - Pulley, idler (Printer Cassette #18) - Torque limiter (Printer Cassette #23) - Timing belt, S2M (Printer Cassette #195) | Clean debris. Examine gears and belt for cracks or chips. Verify cassette holds and printer drive gears mesh well at home position | | 181151 (Frame #6) 175372 (Cassette #6) 175375 (#17) 181141 (#18) 181144 (#23) 181146 (#195) | | | x | |
| | | Home position - Cassette Sensor (Main Body Frame #102) - Seal Sensor (Printer Cassette #31) | Clean and inspect the Seal and Sensor for wear. | Cloth. Isopropyl alcohol. | 93235 (#31) | | | X | |
| | | Take Spool - Bobbin Roll (Printer Cassette #24) | Clean and inspect. | Cloth. Isopropyl alcohol | 162104 (#24) | | X | X | |

| | Section | Chack Points | Commonts | Tool/Grease/ | Replacement | Check | | k | |
|---|----------------|--|--|---|-------------|-------|---|---|---|
| | oconom | Check I Onits | Comments | Program | Parts | D | 6 | Y | - |
| 4 | SCALE | Weighing | Correct weighing | 1 lb. test weight | | Χ | Χ | Х | |
| | | Check zero and calibration | | 30 lb. test weights | | | Χ | X | |
| | | Shift test in all four | | 5 lb. test weight | | | Χ | Х | |
| | | Seal | Refer to local regulations | Lead or paper seal | | | Х | x | |
| | | Stainless Scale Platter - Platter (#1) | Replace if damaged. | Soap & Water (Daily) | 171675 (#1) | | Χ | X | |
| 5 | DATA BACKUP | | Insert a blank USB stick of 8 gig of less into the access hatch on the upper left side. Create and name a backup location under "OUTPUT SELECT" | Setup Menu, File Save/Load, Scale >USB tab, Output Select, Exec, All Sel, Exec, Exec. Also possible with SLP-5. | | | | | |
| 6 | FIRMWARE | Main Firmware: | Load firmware on a blank USB stick of 8 gig or less. Insert into the access hatch on the upper left side. Reboot Afterwards. | Adjust Menu, Download, Main tab "USB>MAIN (PRG+IMG)", USB Memory Folder, select file, EXEC, EXEC. | | | | | |
| | | Sub Apps: | Load both sub apps; reboot after each. Take a second backup once the firmware upgrades have been completed. | Adjust Menu, Download, Sub App tab, Printer, Exec, Exec. Reboot. Adjust Menu, Download, Sub App tab, FPGA, Exec, Exec. Reboot. | | | | | |

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7. ADJUSTMENTS, COMMENTS, PARTS REQUIRED, ETC.

| Section | Inspection Items and Contents | Comments | Replacement Parts |
|---------|-------------------------------|----------|-------------------|
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8. SAMPLE LABELS

[SAMPLE LABELS]

| | Section | Check Points | Comments | Tool/Grease/ | Tool/Grease/ Replaceme | | 0 | Check | | |
|---|----------------------|--|--|--|----------------------------------|---|---|-------|---|--|
| | | | | Program | Parts | D | 6 | Y | • | |
| 1 | SCREEN DISPLAY | Contrast - LCD Display (#103) - Display Control Bd (#104) | Verify brightness of the display. Replace Invertor or Display as needed. | Adjust Menu, Display Check | 185546 (#103) 87519 (#104) | | X | X | | |
| | | Touchscreen operation - Touch Panel (#102) - Sheet (#4) | Confirm accuracy. Calibrate or replace as needed. | Adjust Menu, Touch Screen | 87529 (#102) 185539 (#4) | | X | X | | |
| | | Touchscreen cleaning | Clean touchscreen display | Cloth | | Х | Х | Х | | |
| 2 | KEYBOARD ASSEMBLY | Keyboard - Keyboard Assy (#105) | Confirm all keys function and show as dark squares | Adjust Menu, Key Check | 87525 (#105) | | X | X | | |
| | | Keyboard Transparent cover - Sheet (#4) | Clean keyboard cover. Replace as needed. | Cloth | 185539 (#4) | X | X | Х | | |
| 3 | PRINTER | Printing Quality - Print Head (Printer Unit: #102) | Verify print is complete and legible. Clean print head. | Adjust Menu, Printer, Head tab, Test Print: Checker. Cloth. Isopropyl | 158271 (#102) | | X | X | | |
| | | Label Feeding - Print Roller (Printer Cassette #5) | Check if printing expands or contracts. Check and clean print roller. Check for cuts. Remove paper dust. | Cloth. Isopropyl alcohol. Vacuum. | 163028 (#5) | | X | X | | |
| | | Label Gap Sensor - Photo interrupter, reflection Printer Frame (Printer Frame #100) - Block B, Prism (Printer Cassette #14) | Check that sensor readings are normal (baseline near 60, spike near 160). Clean, calibrate, or replace sensors and prism as needed. Clean pin hole on the cassette. | Adjust Menu, Printer, Label Feed tab | 87533 (#100) 182039 (#14) | | X | X | | |

| | Section | Check Points | Commonts | Tool/Grease/ | Replacement | t Cheo | | k | |
|---|-------------------|--|---|---|--|--------|---|---|---|
| | Section | Check Follits | Comments | Program | Parts 158272 (#101) | D | 6 | Υ | • |
| 3 | PRINTER (CONT) | Peel sensor - Transmitter, Left Side (Printer Frame #101) Receiver, Right Side (Printer Frame #102) | Check that sensor readings are normal (over 200 when blocked and under 40 when open). Clean, calibrate, or replace sensors as needed. | Adjust Menu, Printer, Peel Sensor tab | 158272 (#101) 158274 (#102) | | X | X | |
| | | Drive Gears - Gear Flat (Printer Frame #6) - Timing Pulley S2M (Printer Cassette #6) - Timing pulley, S2M, with gear (Printer Cassette #17) - Pulley, idler (Printer Cassette #18) - Torque limiter (Printer Cassette #23) - Timing belt, S2M (Printer Cassette #195) | Clean debris. Examine gears and belt for cracks or chips. Verify cassette holds and printer drive gears mesh well at home position | | 181151 (Frame #6) 175372 (Cassette #6) 175375 (#17) 181141 (#18) 181144 (#23) 181146 (#195) | | | X | |
| | | Home position - Cassette Sensor (Main Body Frame #102) - Seal Sensor (Printer Cassette #31) | Clean and inspect the Seal and Sensor for wear. | Cloth. Isopropyl alcohol. | 93235 (#31) | | | X | |
| | | Take Spool - Bobbin Roll (Printer Cassette #24) | Clean and inspect. | Cloth. Isopropyl alcohol | 162104 (#24) | | X | X | |

| | Section | Chock Points | Commonts | Tool/Grease/ | Replacement | it <u>Check</u> | | ;k | |
|---|----------------|---|--|---|-------------|-----------------|---|----|---|
| | Section | Check Points | Comments | Program | Parts | D | 6 | Υ | v |
| 4 | SCALE | Weighing | Correct weighing | 1 lb. test weight | | Χ | Χ | Χ | |
| | | Check zero and calibration | | 60 lb. test weights | | | X | X | |
| | | Shift test in all four | | 5 lb. test weight | | | Χ | Χ | |
| | | Seal | Refer to local regulations | Lead or paper seal | | | X | X | |
| | | Stainless Scale Platter - Platter (#1) | Replace if damaged. | Soap & Water (Daily) | 171675 (#1) | | X | X | |
| 5 | DATA BACKUP | | Insert a blank USB stick of 8 gig of less into the access hatch on the upper left side. Create and name a backup location under "OUTPUT SELECT" | Setup Menu, File Save/Load, Scale >USB tab, Output Select, Exec, All Sel, Exec, Exec. Also possible with SLP-5. | | | | | |
| 6 | FIRMWARE | Main Firmware: | Load firmware on a blank USB stick of 8 gig or less. Insert into the access hatch on the upper left side. Reboot Afterwards. | Adjust Menu, Download, Main tab "USB>MAIN (PRG+IMG)", USB Memory Folder, select file, EXEC, EXEC. | | | | | |
| | | Sub Apps: | Load both sub apps; reboot after each. Take a second backup once the firmware upgrades have been completed. | Adjust Menu, Download, Sub App tab, Printer, Exec, Exec. Reboot. Adjust Menu, Download, Sub App tab, FPGA, Exec, Exec. Reboot. | | | | | |

| Section | Check Points | Comments | Tool/Grease/ | Replacement | (| Chec | < | |
|---------------------------------------|---|--|--------------|---|---|------|---|---|
| Occubii | | Comments | Program | Parts | D | 6 mo | Υ | • |
| SUPPLEMENTAL: HAND WRAP STATION | Sealing pad - Element (not pictured) - Teflon Cover 6"x15" (not pictured) - Thermostat (not pictured) - Circuit Control Board (not pictured) | Sealing pad is in working order. Responds to thermostat adjustments. Teflon cover is in place and not torn or worn. Replace if needed. | | 72927 (element) 53866 (cover) 72936 (thermostat) 172928 (board) | | X | x | |
| | Film Cut Rods - Cut Off Rod 20-3/4" (not pictured) | Cut rods should be in good working order. | | 72929 (cut rod) | | X | X | |
| | Stability | Station should be level and stable; adjust legs if needed. | | | | X | X | |
| | Film Roll - Film Core Axle (not pictured) - Core Adaptor set (not pictured) | Film rolls should spin freely on axle. Axle should not be bent or damaged. Core adaptors plastic threads should not be damaged. | | 86003 (axle) 86002 (core set) | | x | X | |

7. ADJUSTMENTS, COMMENTS, PARTS REQUIRED, ETC.

| Section | Inspection Items and Contents | Comments | Replacement Parts |
|---------|-------------------------------|----------|-------------------|
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8. SAMPLE LABELS

[SAMPLE LABELS]

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9. REFERENCE DRAWINGS

MAIN BODY FRAME OVERVIEW



Ishida UNI 9 DB / XL Preventative Maintenance Guide

SCREEN DISPLAY: FRONT W/ KEYBOARD(Section 1 and 2)



SCREEN DISPLAY: REAR (Section 1)



PRINTER UNIT (Section 3)



PRINTER FRAME (Section 3)



Ishida UNI 9 DB / XL Preventative Maintenance Guide

PRINTER CASSETTE (Section 3)



Ishida UNI 9 DB / XL Preventative Maintenance Guide

SCALE (Section 4)

