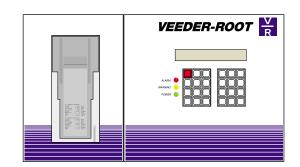
Operator's Quick Help





Manual 576013-939, Rev D

TLS-300

TLS-350

TLS-350R

Notice

Veeder-Root makes no warranty of any kind with regard to this publication, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose.

Veeder-Root shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this publication.

Veeder-Root reserves the right to change system options or features, or the information contained in this publication.

This publication contains proprietary information which is protected by copyright. All rights reserved. No part of this publication may be photocopied, reproduced, or translated to another language without the prior written consent of Veeder-Root.

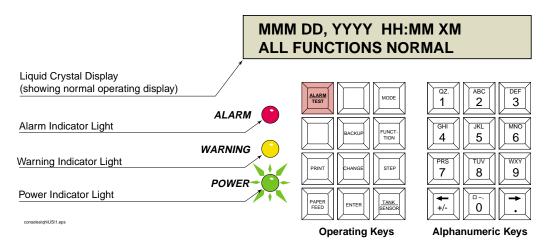
For complete warranty, technical support, and additional product information, refer to your console's Operator Manual.

© Veeder-Root 2000. All rights reserved.

Table of Contents

Console Operating Features	1	System Status Messages	17
Key Functions		To Start An In-Tank Leak Test	18
Automatic Reports	3	To Stop In-Tank Leak Testing	19
Business Inventory Reconciliation (BIR Option)	4	In-Tank Leak Test Reports	20
Variance Reports	5	Last Shift Inventory Report	21
Warnings And Alarms	8	Inventory Increase Report	22
In-Tank Warning And Alarm Levels		Entering A Ticketed Delivery Volume	23
In-Tank Warnings	10	Pressurized Line Leak Detection Tests	24
In-Tank Alarms	. 11	Wireless Pressurized Line Leak Detection Tests	26
Liquid Sensor Alarms	13	To Set The System Date	28
Dual-Float Discriminating Sensor Alarms	14	To Set The System Time	29
Vapor Sensor Alarms		Changing The Printer Paper	30
Groundwater Sensor Alarms			

Console Operating Features



Key Functions



Press to silence the alarm. This will not reset the display or disable any alarm functions.



Press to select the system mode: Operating Mode, Setup Mode, Diagnostic Mode.



Press to select the various Functions within each Mode.



Press to move to the next procedure within each function.



Press to change to the next tank or sensor



Press to change to a different option than currently displayed.



Press to select an option. Also to start leak tests.



Used to move back through Steps, Functions and Modes.



Press to generate the various reports.



Press to advance the paper through the printer.



Select a character by successive presses of the key. Press once for "A". Press again for "B", again for "C" and a fourth time to enter a "2"



The period (.) is on key "1". The decimal point (•) is on the Right Arrow key (→).



The zero key has a space (\Box) , a hyphen (-) and the comma (,).



The Arrow keys are used to move the cursor left and right without changing the displayed character.

Automatic Reports

.....

T 1:REGULAR UNLEADED

INVENTORY INCREASE

INVENTORY INCREASE REPORT

```
INCREASE START
MMM DD, YYYY HH:MM XM
VOLUME = 5146 GALS
HEIGHT = 44 INCHES
WATER = 0.00 INCHES
TEMP = 46.8 DEG F

INCREASE END
MMM DD, YYYY HH:MM XM
VOLUME = 8104 GALS
HEIGHT = 84 INCHES
TEMP = 47.2 DEG F

GROSS INCREASE = 2958
```

TC NET INCREASE = 2983

h.....

This report is generated after each delivery. It shows the volume of the tank contents before and after delivery and the difference between the two volumes; which is the amount delivered less any sales during the delivery period.

Depending on the system configuration, the report may also show the amount delivered taking into account changes in volume caused by temperature changes. (TC NET INCREASE).

There will be a delay of at least four minutes between the end of the delivery and the printing of the report while the console waits for the fuel level in the tank to stabilize.

ADJUSTED DELIVERY REPORT (BIR Option)

```
T 1:PRODUCT 1
ADJUSTED DELIVERY REPORT
MMM DD, YYYY HH:MM XM
DELIVERY VOLUME = 1200
TC DLYY VOLUME = 1189
```

.....

During the delivery the TLS-350R is continuously monitoring any sales from the tank being delivered to.

Within 60 minutes after printing the Inventory Increase Report, the TLS-350R generates an Adjusted Delivery Report.

The TLS-350R adjusts the gross increase fuel volume by adding any fuel dispensed from that tank during the delivery.

If Temperature Compensation has been enabled the temperature compensated volume is also adjusted and will appear on the report.

Business Inventory Reconciliation (BIR Option)

The TLS-350R, in addition to accurately measuring the contents of each tank, also monitors the amount of fuel dispensed at the pumps.

The volume of fuel dispensed is then compared with the fall in fuel level in the appropriate tank; by this means the TLS-350R can recognize the very small differences which could indicate a leak. This process is called **reconciliation**.

The results of the reconciliation process are available as **Reconciliation Reports**. These reports are available for each worked shift, for each day, or for any other specified period.

The Shift Reconciliation Report is illustrated opposite. (See also Automatic Reports.)

TO PRINT A RECONCILIATION REPORT

Press **M** until the display shows:

RECONCILIATION MODE
PRESS <FUNCTION> TO CONT

consoles/qh/5.eps

Press **f** twice and **s** once, and the display will show:

DISPLAY AND PRINT REPORT TYPE: SHIFT

consoles/qh/6.eps

Press **B** Pror a Shift Report.

Press **C E P** for a Daily Report.

Press **C C E P** for a Periodic Report.

Press M three times to return to the Operating mode.

MMM DD, YYYY HH:MM XM

Page 4

OPENING DATE & TIME: MMM DD, YYYY HH:MM XM

CLOSING DATE & TIME: MMM DD, YYYY HH:MM XM

OPENING VOLUME:

5511 GALS DELIVERIES:

0 GALS
METERED SALES:

300 GALS MANUAL ADJUSTMENTS:

0 GALS CALCULATED INVNTRY:

5211 GALS GAUGED INVNTRY:

5211 GALS WATER HEIGHT:

2.11 INCH VARIANCE:

0 GALS

Variance Reports

If enabled in Setup Mode, you can generate daily, weekly, and/or periodic Delivery Variance Reports, Book Variance Reports, and Variance Analysis Reports. Also, you can display and print enabled Variance Reports for all products, or for a specific product. (Refer to the Variance Reports paragraph in the Reconciliation section of the Operator's Manual for complete report printing options, such as printing weekly or periodic reports.)

TO PRINT DELIVERY VARIANCE REPORTS

Press M until the display shows:

RECONCILIATION MODE
PRESS <FUNCTION> TO CONT

Press **f** until the display shows:

DISPLAY AND PRINT DLVY
PRESS <STEP> TO CONTINUE

Press **D** to printout the daily Delivery Variance reports for all products. See example at right.

PROD 1: UNLEADED GASOLIN DELIVERY VARIANCE DATLY MMM DD, YYYY HH:MM XM VOLUMES ARE STANDARD OPENING DATE & TIME: MMM DD, YYYY HH:MM XM CLOSING DATE & TIME: MMM DD, YYYY HH:MM XM TICKET VOL: 5491 GALS GAUGED VOL: 5480 GALS DLVY VAR : 11 GALS

PROD 2: SUPER GASOLINE

KEY SYMBOLS: B Backup C Change E Enter F Function M Mode P Print S Step T Tank/Sensor

TO PRINT BOOK VARIANCE REPORTS

Press M until the display shows:

RECONCILIATION MODE
PRESS <FUNCTION> TO CONT

Press **E** until the display shows:

BOOK VARIANCE PRESS <STEP> TO CONTINUE

Press Proposition to printout the daily Book Variance reports for all products. See example at right.

PROD 1: UNIFADED GASOLIN BOOK VARIANCE DAILY MMM DD, YYYY HH:MM XM VOLUMES ARE STANDARD OPENING DATE & TIME: MMM DD, YYYY HH:MM XM CLOSING DATE & TIME: MMM DD, YYYY HH:MM XM OPN GAUG VOL: 800 GAL METER SALES : 285 GAT TICKET DLVY : 800 GAT MANUAL ADJ : 0 GAL 9704 GAL GAUGED INV : 8904 GAL 0.00 IN VAR: 800 GAL 280.7%

consoles\qh/US\76.eps

TO PRINT VARIANCE ANALYSIS REPORTS

Press M until the display shows:

RECONCILIATION MODE
PRESS <FUNCTION> TO CONT

Press • until the display shows:

VARIANCE ANALYSIS
PRESS <STEP> TO CONTINUE

Press **P** to printout the daily Variance Analysis reports for all products. See example at right.

PROD 1: UNLEADED GASOLIN VARIANCE ANALYSIS DAILY MMM DD, YYYY HH:MM XM VOLUMES ARE STANDARD OPENING DATE & TIME: MMM DD, YYYY HH:MM XM CLOSING DATE & TIME: MMM DD, YYYY HH:MM XM BOOK VAR : 800 GAT BOOK VAR % : 280 GAL DLVY VAR : -99 GAT SALE VAR : 899 GAT. TEMP VAR : 3 GAT. WATER CHG : 0.00 TN UNEX VAR : 895 GAL

INSPECT METERS LEAK TEST RESULTS T 1: UNLEADED GASOLINE PROBE SERIAL NUM 900007 0.20 GAL/HR TEST PASS MMM DD. YYYY HH:MM XM 0.10 GAL/HR TEST INVL MMM DD, YYYY HH:MM XM MONTHLY TANK TEST REPORT T 1: UNLEADED GASOLINE PROBE SERIAL NUM 900007 TEST TYPE: STANDARD PERCENT VOLUME = 24.8 MMM DD, YYYY HH:MM XM * * * * * END * * * * * ^^^^

nsoles/qh/US/77.eps

Warnings And Alarms

The TLS Console is constantly monitoring its probes and sensors for warning and alarm conditions, such as fuel leaks, excessively high or low fuel levels, and equipment problems.

If there is no warning or alarm condition active the system displays the "ALL FUNCTIONS NORMAL" message.

If a warning or alarm condition occurs the system displays condition type and its location, either tank, input or sensor number.

The system prints an alarm report showing the warning or alarm type, its location and the date and time the warning or alarm condition occurred.

If more than one condition exists the console will flash the messages alternately.

WARNINGS

These indicate that an in-tank alarm is imminent or that a system fault has occurred.

ALARMS

Alarms indicate a potentially dangerous situation may have occurred.



Do not ignore alarms!!!

Be sure you are familiar with the alarm response procedures for the site.

To Switch Off All Warnings and Alarms

Press the red ALARM/TEST key to silence the alarm.

The front panel warning and alarm lights cannot be turned off until the cause of the condition has been rectified.

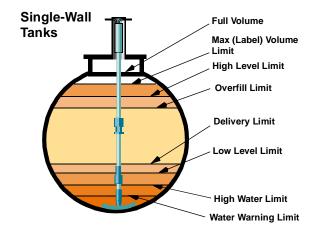
Similarly the warning and alarm displays remain until the cause of the condition has been rectified.

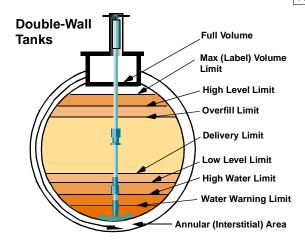
PLLD/WPLLD Alarm Information

For PLLD/WPLLD line leak detection alarms, refer to following manuals:

- PLLD/WPLLD Alarm Quick Help manual (P/N 577013-727)
- TLS-350/TLS-350R Operator's Manual (P/N 576013-610)

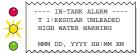
In-Tank Warning And Alarm Levels





In-Tank Warnings

MMM DD, YYYY HH:MM XM T1 : HIGH WATER WARNING



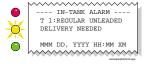
CAUSE:

Water collecting in the tank shown has exceeded the Water Warning level.

ACTION:

Close all pumps attached to this tank. Contact your VR Service Contractor for advice. Silence the alarm by pressing the red ALARM/ TEST kev.

MMM DD, YYYY HH:MM XM T1 : DELIVERY NEEDED



CAUSE:

Fuel level in the tank shown is below the Delivery Needed level.

ACTION:

Arrange a delivery.

Silence the alarm by pressing the red Alarm/ Test key.

MMM DD, YYYY HH:MM XM T1: INVALID FUEL LEVEL



CAUSE:

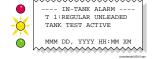
Fuel and water level floats on the probe are too close together due to a lack of fuel in the tank shown.

ACTION:

Arrange a delivery.

Silence the alarm by pressing the red ALARM/ TEST key.

MMM DD, YYYY HH:MM XM T1 : TANK TEST ACTIVE



CAUSE:

If enabled, the system will display this message when a requested tank test is in progress.

ACTION:

Do not deliver to or dispense from the tank being tested.

MMM DD, YYYY HH:MM XM T1: OVERFILL ALARM



MMM DD, YYYY HH:MM XM h....

CAUSE:

Fuel level in the tank shown has exceeded the Overfill Level during a delivery.

ACTION:

Stop the delivery immediately! Silence the alarm by pressing the red ALARM/ TEST key.



IN-TANK ALARM ----

CAUSE:

Fuel loss has exceeded the pre-programmed limit during a leak test in the tank shown. This indicates a possible leak.

ACTION:

Silence the alarm by pressing the red ALARM/TEST key. Contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM T1 · I OW PRODUCT ALARM



MMM DD, YYYY HH:MM XM h

CAUSE:

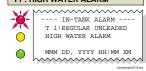
Fuel level in the tank shown has dropped below the Low Product Alarm level.

ACTION: Silence the alarm by pressing the red ALARM/ TEST key. Arrange a delivery.

MMM DD. YYYY HH:MM XM T1: HIGH WATER ALARM

MMM DD. YYYY HH:MM XM

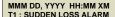
T1: LEAK ALARM

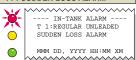


CAUSE:

Water at the bottom of the tank shown has exceeded the High Water Alarm level. ACTION:

Close all pumps attached to this tank.





CAUSE:

Fuel loss in the tank shown has exceeded a pre-set limit during a Leak Test. This indicates a possible leak, fuel being dispensed or other unauthorized loss.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key.

Check that fuel has not been dispensed from the tank during the test period.

Contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM T1 : HIGH PRODUCT ALARM



CAUSE:

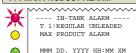
Fuel level in the tank shown has exceeded the High Product Alarm limit.

ACTION:

Stop the delivery immediately!

Silence the alarm by pressing the red ALARM/ TEST kev.

MMM DD, YYYY HH:MM XM T1 : MAX PRODUCT ALARM



CAUSE:

Fuel level in the tank shown has exceeded the Safe Working Capacity.

ACTION:

Stop the delivery immediately!

Silence the alarm by pressing the red ALARM/TEST key.

MMM DD, YYYY HH:MM XM T1: PROBE OUT ALARM



CAUSE:

There is a fault with the sensing probe in the tank shown.

ACTION:

advice.

Liquid Sensor Alarms



CAUSE:

The sensor shown has detected liquid in the sump being monitored.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Investigate the cause of the alarm and take appropriate action.

CAUSE:

The sump sensor shown has been disconnected or is faulty.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Contact your VR Service Contractor for advice.

14-09-97 19:25:47 T1 : INTERSTITIAL ALARM



CAUSE:

The Interstitial Monitor for the tank shown has detected a change in the interstitial fluid level; a fuel leak may have occurred.

ACTION:

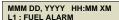
Silence the alarm by pressing the red ALARM/TEST key.

Call a Service Contractor to check for fluid loss.

MMM DD, YYYY HH:MM XM L1 : SENSOR OUT ALARM



Dual-Float Discriminating Sensor Alarms





FUEL ALARM
MMM DD, YYYY HH:MM XM

CAUSE:

The sensor at the location shown has detected fuel vapor or liquid.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Investigate the cause of the alarm and take appropriate action.

14-09-97 19:25:47 L1 : LIQUID ALARM



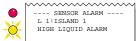
CAUSE:

The sensor at the location shown has detected at least 1 inch of non-hydrocarbon liquid.

ACTION:

Silence the alarm by pressing the red ALARM/TEST key. Contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM L1: HIGH LIQUID ALARM



MMM DD, YYYY HH:MM XM

CAUSE:

The sensor at the location shown has detected at least 8 inches of non-hydrocarbon liquid.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM L1 : SENSOR OUT ALARM

MMM DD, YYYY HH:MM XM L1: SHORT ALARM



---- SENSOR ALARM ---L 1:ISLAND 1
SENSOR OUT ALARM

MMM DD, YYYY HH:MM XM

CAUSE:

The sensor at the location shown has been disconnected or is inoperative.

ACTION:

Vapor Sensor Alarms

MMM DD, YYYY HH:MM XM V1 : FUEL ALARM



FUEL ALARM
MMM DD, YYYY HH:MM XM

CAUSE:

The vapor sensor at the location shown has detected fuel vapor in the monitoring well.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Investigate the cause of the alarm and take appropriate action.

MMM DD, YYYY HH:MM XM V1 : WATER ALARM



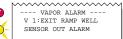
CAUSE:

The vapor sensor at the location shown is immersed in water and will not work.

ACTION:

Silence the alarm by pressing the red ALARM/TEST key. Contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM V1 : SENSOR OUT ALARM



MMM DD, YYYY HH:MM XM

CAUSE:

The vapor sensor at the location shown has been disconnected or is inoperative.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM V1: SHORT ALARM



MMM DD, YYYY HH:MM XM

CAUSE:

The vapor sensor at the location shown is faulty.

ACTION:

Groundwater Sensor Alarms

MMM DD, YYYY HH:MM XM G1: FUEL ALARM

---GROUNDWATER ALARM--G 1: EXIT RAMP WELL
FUEL ALARM

MMM DD. YYYY HH:MM XM

haaaaaaaaaaaad

CAUSE:

The Groundwater sensor at the location shown has detected fuel.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Investigate the cause of the alarm and take appropriate action.

MMM DD, YYYY HH:MM XM G1: WATER ALARM



CAUSE:

The water level in the monitoring well shown is below the Groundwater sensor (this may occur during periods of severe drought).

ACTION:

Silence the alarm by pressing the red ALARM/TEST key. If the condition persists contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM G1: SENSOR OUT ALARM



h

CAUSE:

The Groundwater sensor at the location shown is inoperative.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM G1: SHORT ALARM



CAUSE:

The Groundwater sensor at the location shown is inoperative.

ACTION:

System Status Messages

MMM DD, YYYY HH:MM XM PAPER OUT



CAUSE:

The paper roll is empty.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Replace paper (see Changing the Printer Paper).

MMM DD. YYYY HH:MM XM



PRINTER ERROR

CAUSE:

Either the printer release lever is in the down position, or the printer is inoperative.

ACTION:

Silence the alarm by pressing the red ALARM/ TEST key. Check that the paper release lever is in the up position and, if necessary, contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM BATTERY OFF



CAUSE:

The system backup battery has failed. **ACTION:**

Do not switch off power to the system.

Silence the alarm by pressing the red ALARM/TEST key. Contact your VR Service Contractor for advice.

MMM DD, YYYY HH:MM XM SETUP DATA WARNING



CAUSE:

A system error has occurred.

ACTION:

Press • until the display shows: PRESS <STEP> TO CONTINUE

START IN-TANK LEAK TEST

To test individual tanks press S G B S. To test all tanks press S fix the display will show

TEST CONTROL: ALL TANKS TIMED DURATION

To end the test manually press **C B** or to set a duration for the test press **S**.

Select the test accuracy, either 0.20 gal/hr or 0.10 gal/hr. To change the setting press C . Press to continue.

Enter the Test Duration in hours, press **3**. The display will show

START LEAK TEST TANKS

Press **1** to start the test. For individual tanks press **1** to go to the next tank.

Return to normal operating mode: press
until the date and time display appears.

- Do not start an in-tank leak test if there has been a delivery to the tank to be tested within the previous 8 hours. This will result in an invalid test.
- A delivery to a tank being tested results in an invalid test.
- Dispensing from a tank being tested will cause a Sudden Loss Alarm.

Press **E** until the display shows:

STOP IN-TANK LEAK TEST PRESS <STEP> TO CONTINUE

To stop single tank testing:

Press S C E S . The display will show STOP LEAK TEST PRESS <ENTER>

STOP LEAK TEST : TANK X PRESS <ENTER>

consoles/oh/50.eps

For individual tanks, press **1** to select the desired tank. Press **E** to halt the test.

To stop testing all tanks:

Press S S. The display will show

STOP LEAK TEST : ALL TANKS PRESS <ENTER>

Press **E** to halt the test.

The system confirms the ending of the test by displaying:

LEAK TEST NOT ACTIVE PRESS <FUNCTION> TO CONT.

Return to normal operating mode: press • until the date and time display appears.

In-Tank Leak Test Reports

Press **•** until the display shows:

IN-TANK TEST RESULTS
PRESS <STEP> TO CONTINUE

Press P to generate a report for all tanks.

Press S to generate a report for an individual tank,

press **1** to select the desired tank and **2** to generate the report.

Press **6** until the normal operating mode display appears.

```
MMM DD, YYYY HH:MM XM
 LEAK TEST REPORT
 T 1:REGULAR UNLEADED
 PROBE SERIAL NUM 012345
 TEST STARTING TIME:
 MMM DD, YYYY HH:MM XM
STRT VOLUME = 3725 GALS
 LEAK TEST RESULTS
  0.2 GAL/HR TEST PASS
 T 2: SUPER UNLEADED
 PROBE SERIAL NUM 105792
TEST STARTING TIME:
 TEST LENGTH = 13.6 HRS
```

Inventory Report

MMM DD, YYYY HH:MM XM ALL FUNCTIONS NORMAL

Press **P** for a complete inventory report for all tanks.

To display the inventory information from each tank:

Press **f** until the display shows:

IN-TANK INVENTORY
PRESS <STEP> TO CONTINUE

The system will display the fuel volume for the first tank

Press S to view other in-tank information.

Press T to select a different tank.

Press **P** to print the report.

MMM DD,YYYY HH:MM XM

INVENTORY REPORT

T 1:UNLEADED GASOLINE
VOLUME = 8518 GALS
ULLAGE = 1482 GALS
90% ULLAGE= 482 GALS
TC VOLUME = 8492 GALS
HEIGHT = 76.26 INCHES
WATER VOL = 0 GALS
WATER = 0.00 INCHES
TEMP = 64.6 DEG F

T 2:SUPER UNLEADED

VOLUME = 7545 GALS ULLAGE = 2455 GALS 90% ULLAGE= 1455 GALS TC VOLUME = 7569 GALS TC VOLUME = 67.76 INCHES WATER VOL = 0 GALS

nsoles/qN/US\55.eps

Last Shift Inventory Report

Press **•** until the display shows:

LAST SHIFT INVENTORY
PRESS <STEP> TO CONTINUE

Press **S** to select the shift and to display inventory data.

Press
to select a different tank.

Press P to print the report.

```
SHIFT STARTING INV #1
-----
MMM DD, YYYY HH:MM XM
```

T 1:UNLEADED GASOLINE
VOLUME = 8518 GALS
ULLAGE = 1482 GALS
90% ULLAGE= 482 GALS
TC VOLUME = 8492 GALS

WATER VOL = 0 GALS
WATER = 0.00 INCHES
TEMP = 64.6 DEG F

DLVY ADJUSTMENT : 0 GROSS CHANGE : 0 TC NET CHANGE : 0

HEIGHT = 76.26 INCHES

nsoles/qh/US/59.e

KEY SYMBOLS: B Backup C Change E Enter F Function M Mode P Print S Step T Tank/Sensor

Page 21

Inventory Increase Report

MMM DD, YYYY HH:MM XM ALL FUNCTIONS NORMAL

Press **6** once and **6** until you see the Delivery message (the last delivery amount):

T 1: REGULAR UNLEADED DELIVERY = 2958 GALS

Press **1** to select a different tank.

Press **P** to print the delivery report for the tank shown.

Return to the Date and Time display by pressing **M** until it appears.

····· MMM DD. YYYY HH:MM XM INVENTORY INCREASE INCREASE START MMM DD, YYYY HH:MM XM VOLUME = 5146 GALS WATER = 0.00 INCHES = 46.8 DEG F INCREASE END MMM DD, YYYY HH:MM XM VOLUME = 8104 GALS HEIGHT = 84 INCHES WATER = 0.00 INCHES = 47.2 DEG F GROSS INCREASE = 2958 TC NET INCREASE = 2983 h....

KEY SYMBOLS: B Backup C Change E Enter F Function M Mode P Print S Step T Tank/Sensor

Entering A Ticketed Delivery Volume (BIR Option)

The Delivery Maintenance function, if enabled in Setup Mode, lets you edit, view, and print information about ticketed deliveries (refer to the Delivery Maintenance section of the Operator's Manual for complete instructions and printing options).

In the Operating Mode, press **©** until the display shows:

DELIVERY MAINTENANCE PRESS <STEP> TO CONTINUE

Press S until the display shows:

SELECT: EDIT/VIEW
T 1: [product]

Press until the desired product is visible in the display. If necessary, press until the date/time of the delivery appears. Press to print out a copy of that ticketed delivery (Notice that the ticket volume equals 0 on the printout). Press the number the delivered volume from the ticket using the number keys. Press to confirm your choice. Press the number is to print out a copy of the revised report (see example at right).

T 1: UNLEADED GASOLINE

TICKETED DELIVERY REPORT MMM DD, YYYY HH:MM XM VOLUMES ARE STANDARD

TICKET VOL: 800 GAL
GAUGED VOL: 899 GAL
DLVY VAR : -99 GAL
EST DLVY TEMP : 72.90 F
PRE DLVY TEMP : 72.60 F
POST DLVY TEMP: 73.20 F

KEY SYMBOLS: B Backup C Change E Enter F Function M Mode P Print S Step T Tank/Sensor

You can run a PLLD test on all lines or on a single line.

TO START A PLLD TEST

In the Operating mode, press **E** until the display shows:

START LINE PRESSURE TEST PRESS <STEP> TO CONTINUE

Press S and the display shows:

SELECT LINE ALL LINES

Press S to accept all lines. To select a single line, press C until you see the line you want, then press E and S. The display below appears:

SELECT TEST TYPE 3.0 GPH This step lets you select 3.0, 0.2, or 0.1 gph line leak tests to run on the selected line(s). If your system does not have 0.2 or 0.1 gph test options, you will not see these selections.

To select 3.0 gph test, press **3** . Press **6** to select 0.2 or 0.1 gph tests, then press **5** . To select the 3.0 gph test, press **5** . The displays shows:

3.0 GPH PRESS <STEP> TO CONTINUE

To run the selected test, press **3**. The system displays the message (in this example for all lines):

conspireright LSV pild5.eqs.

START LINE TEST: ALL LINE PRESS <ENTER>

Press **E** to begin the test. The system displays:

Q# : RUNNING PUMP PRESS <STEP> TO CONTINUE

To exit this function, press S.

TO STOP A PLLD TEST

To stop a PLLD test, press

until you see the message:

STOP PRESSURE TEST
PRESS <STEP> TO CONTINUE

Press S. The system displays the message:

SELECT LINE ALL LINES

Press **E** to stop the test on all lines, or press **G**

and the system displays the message:

STOP LINE TEST: LINE (#)
PRESS <ENTER>

Press **I** to stop the test on the line shown,or press **C** until you see the line you want to select, then press **I** . The system stops the test and displays the status message:

Page 25

Q#: TEST ABORTED
PRESS <STEP> TO CONTINUE

When you have stopped the PLLD tests on the desired lines, press

to exit.

TO PRINT ALL PLLD TEST RESULTS

Press **I** until you see the display below then press **P**:

PRESSURE LINE RESULTS
PRESS <STEP> TO CONTINUE

You can run a WPLLD test on all lines or on a single line.

TO START A WPLLD TEST

In the Operating mode, press **E** until the display shows:

START WPLLD LINE TEST PRESS <STEP> TO CONTINUE

Press S and the display shows:

SELECT LINE ALL LINES

Press S to accept all lines. To select a single line, press C until you see the line you want, then press E and S. The display below appears:

SELECT TEST TYPE 3.0 GPH This step lets you select 3.0, 0.2, or 0.1 gph line leak tests to run on the selected line(s). If your system does not have 0.2 or 0.1 gph test options, you will not see these selections.

To select 3.0 gph test, press **3** . Press **6** to select 0.2 or 0.1 gph tests, then press **5** . To select the 3.0 gph test, press **5** . The displays shows:

3.0 GPH PRESS <STEP> TO CONTINUE

To run the selected test, press **3**. The system displays the message (in this example for all lines):

conscientahi US/pikti. ep

START LINE TEST: ALL LINE PRESS <ENTER>

Press

to begin the test. the system displays:

W # : TEST PENDING PRESS <STEP> TO CONTINUE

To exit this function, press S.

TO STOP A WPLLD TEST

To stop a WPLLD test, press **[** until you see the message:

STOP WPLLD LINE TEST PRESS <STEP> TO CONTINUE

Press S. The system displays the message:

SELECT LINE ALL LINES

Press **E** to stop the test on all lines, or press **G**

and the system displays the message:

SELECT LINE W#: WPLLD NUMBER #

Press **3** to stop the test on the line shown,or press **6** until you see the line you want to select, then press **3**. The system stops the test and displays the status message:

Page 27

W#: TEST ABORTED
PRESS <STEP> TO CONTINUE

When you have stopped the WPLLD tests on the desired lines, press

f to exit.

TO PRINT ALL WPLLD TEST RESULTS

Press **B** you see the display below then press **B**:

WPLLD LINE RESULTS
PRESS <STEP> TO CONTINUE

To Set The System Date

SETUP MODE Press M until the display shows: PRESS <FUNCTION> TO CONT SETUP MODE Press **B** . If the system has a security passcode you will be asked to enter a six digit code: ENTER PASSCODE> SYSTEM SETUP Enter the code using the alphanumeric keys and press

The display will show PRESS STEP- TO CONTINUE **SET MONTH DAY YEAR** Press S S S , to display the date: DATE: 01/ 01/1996 If the date is correct press S if not, press C and enter the correct date. (Note that the month must be entered first.) DATE: 02/17/2000 Press **E** , the new date will be displayed:

To Set The System Time

If the date is correct press S.

The display will show:

SET TIME
TIME: 12:34 PM

If the time is correct press M M to return to the Operating mode.

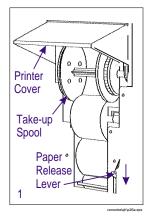
To change the time press (a) and enter the correct time. Select either AM or PM by using the arrow keys.

Press **E** to confirm the time.

The display will show: TIME: 12:45 PM PRESS <STEP> TO CONTINUE

If the time is correct press **M** to return to the Operating mode.

Changing The Printer Paper

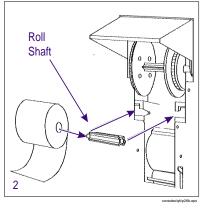


The paper roll should be changed when a red stripe appears on the printouts.

A 3-roll pack of printer paper (Part Number 514100-328) is available from your Service Contractor.

Swing up the printer cover (1) and push the paper feed release lever down.

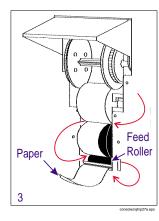
If the take-up spool has been used, pull out the spool with the printed reports and tear off the paper close to the printer feed roller.



Separate the two halves of the take-up spool by pulling them apart (4) and remove the printed reports.

Do not discard any reports as they may be required later.

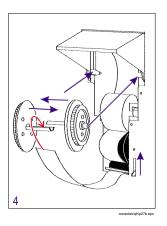
Pull out the old paper roll and any remaining paper. Remove the roll shaft and press it into the new roll (2).



Push the roll into the lower slots in the printer with the paper tail down and from the back.

Feed the paper tail through behind the paper feed roller (3).

If using the Take-up Spool place the paper tail between the two halves and press them firmly together until you hear a click (4).



Push the Take-up Spool into the upper slots. Rotate the spool counterclockwise until you remove all slack in the paper.

If the Take-up Spool is not going to be used, thread the paper tail through the slot in the printer cover.

Push the paper release lever up and close the cover.

