



Your Construction
Technology Provider

Field Reference Guides

GCS900 HEX

Version 13.13

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SITECH TECHNOLOGY DEALER TRAINING CHECKLIST

System: GCS900 HEX

Version: 13.1

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| <input type="checkbox"/> | Verify System Accuracy | 8 |
| <input type="checkbox"/> | Verify Sensor Accuracy | 9 |
| <input type="checkbox"/> | Vertical Offset | 10 |
| <input type="checkbox"/> | Horizontal Offset | 11 |
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| <input type="checkbox"/> | Wireless Data Sync | 21 |
| <input type="checkbox"/> | Start Remote Assistant | 22 |
| <input type="checkbox"/> | Connect to IBSS Base | 23 |

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Training Acknowledgement:

Customer Signature

Date

SITECH Representative

Date

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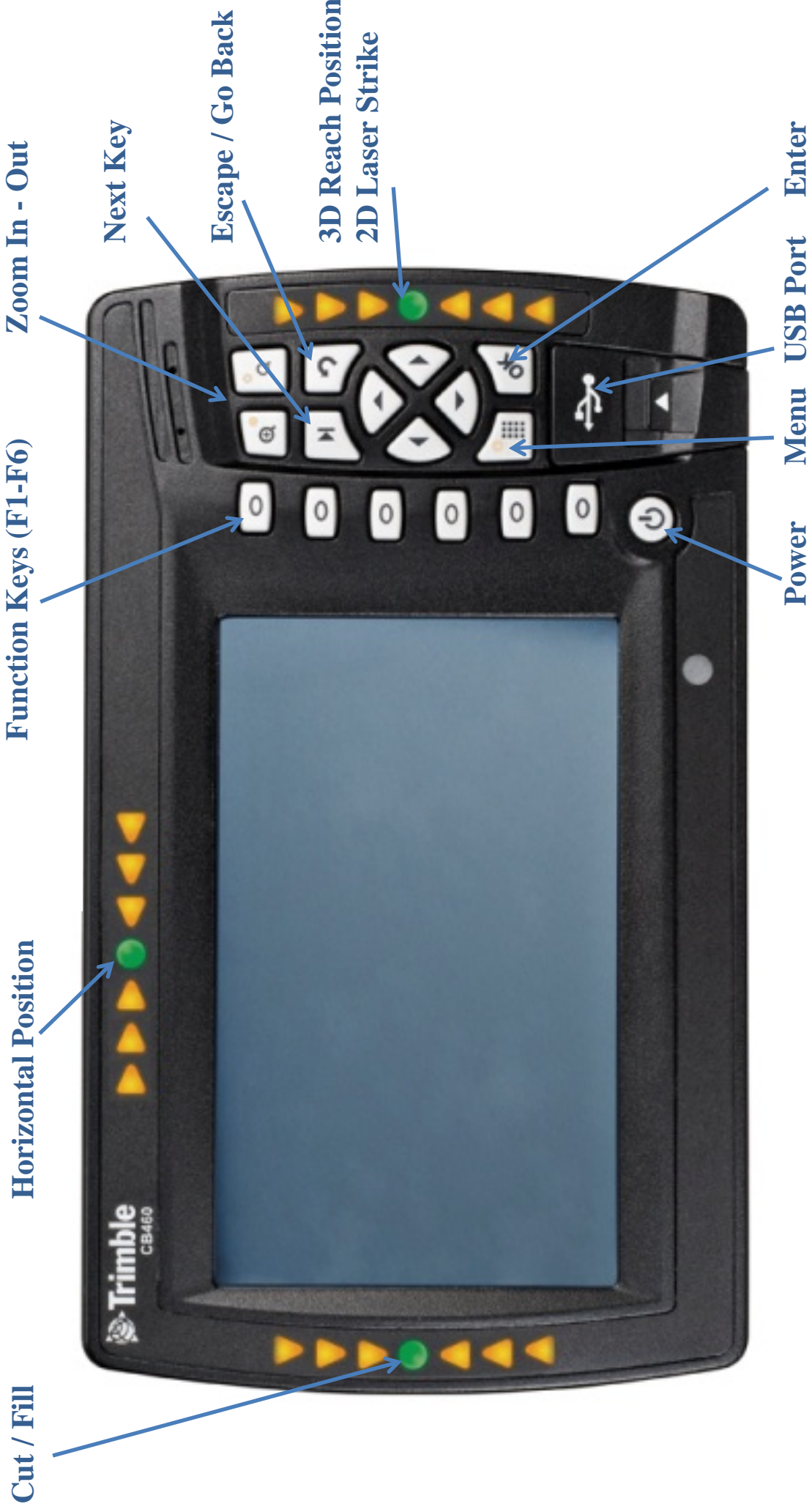
Date

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








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




GCS900 HEX Training Display Settings

Version: 13.1



The **Control Box** must be in **Manager's Mode**

1. Press **"Menu"** 
2. Select **"GNSS Accuracy"** and Press **"OK"**
3. Press and **Hold "F6"** and Press **"F2" Medium Mode**
4. Change **"GPS Horizontal error limit:"** to **"0.30ft or 0.090m"** and Press **"Next"** 
5. Change **"GPS Vertical error limit:"** to **"0.30ft or 0.090m"** and Press **"OK"** Twice
6. Select **"Guidance Method"** and Press **"OK"**
7. Use Arrow to change **Adjust cut to avoid overcut:** to **"NO"** and Press **"OK"**
8. Select **"Text Items"** and Press **"OK"**
9. Press **"F1"**  and Uncheck each Item checked
10. Press **"F1"**  to select **"Cut/Fill Center"** , **"Offline (3D)"** (select in order)
11. Press **"F3" Split View**
12. Press **"F1"**  and Uncheck each Item checked
13. Press **"F1"**  to select **"Cut/Fill Center"** , **"Offline (3D)"** (select in order)
14. Press **"F4" Text View 1**
15. Press **"F1"**  and Uncheck each Item checked
16. Press **"F1"**  to select **"Design Name"** , **"Design Elev.(3D)"** , **"Design XSlope (3D)"** ,
"V. GNSS Err (3D)" and **GNSS Acc. Mode** (select in order)
17. Press **"F5" Text View 2**
18. Press **"F1"**  and Uncheck each Item checked
19. Press **"F1"**  to select **"Northing (3D)"** , **"Easting (3D)"** , **"Elevation (3D)"** , **"Bucket Slope"** and **"Offline (3D)"** (select in order)

20. Press **“OK”**
21. Select **Beeper** and Press **“OK”**
22. Press **“F1”**  and **Uncheck each Item checked**
23. Press **“F1”**  to select **On Grade** and **Below Grade**
24. Press **“OK”**
25. Select **“Save Settings”** and Press **“OK”**
26. Select **“Display Settings”** and Press **“OK”**
27. Enter **Operator’s Name** such as **“Joe G”** and Press **“OK”**
28. Press **“ESC”**  twice to return to operating screen

GCS900 Check Bucket Wear

Version: 13.1

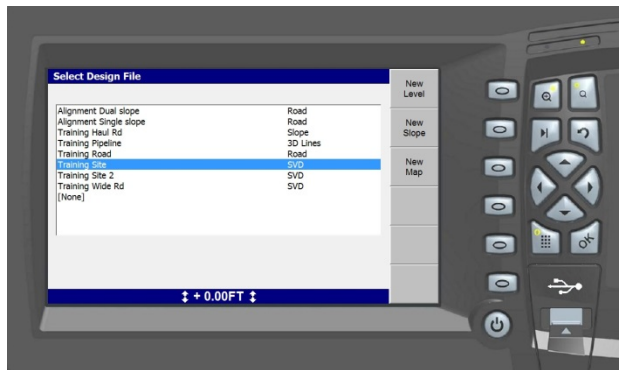
1. Press “Menu” 
2. Select “Bucket Wear” and Press “OK”
3. Measure **J to J1**
4. Enter **Distance** and Press “OK”
5. Press “ESC”  to return to operating screen




GCS900 Load Design

Version: 13.1

1. Press “Menu” 
2. Select “Select Design” and Press “OK”
3. Use Arrows  to highlight **Design** and Press “OK”




4. Press “ESC”  to return to the operating screen

GCS900 Verify HEX System Accuracy


Version: 13.1

Verify the system accuracy by checking into Bench Point



1. Move machine to **Bench Point**
2. Position **Bucket Tip** over **Bench Point**
3. Press “Next”  until **Text Screen 2** is displayed
4. Verify correct **Bucket Tip** is selected



5. Verify **Northing**, **Easting** and **Elevation** are correct (**add distance above Bench Point**)
6. See Supervisor if **Northing** and **Easting** do not match
7. See Supervisor if **Elevation** does not match and Press 

GCS900 HEX Sensor Accuracy Test

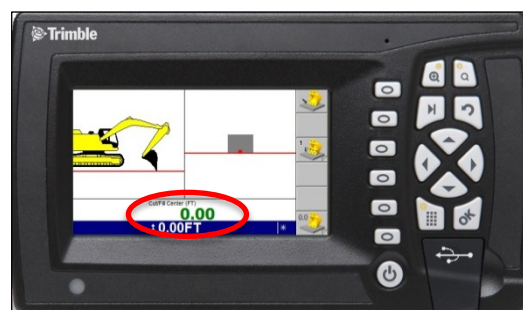
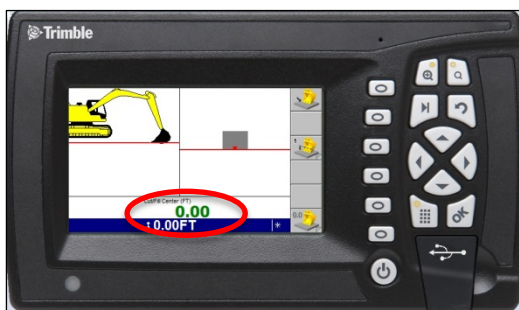
Version: 13.1

1. Place Bucket in vertical position with teeth pointing down on a point on a solid surface
2. Record **Cut/Fill**





3. Uncurl Bucket and position Boom and Stick so **teeth touch the same point**
4. Verify **Cut/Fill**
5. Curl Bucket and position bucket so **teeth touch the same point**
6. Verify **Cut/Fill**

(See Supervisor if Elevation is off by more than 0.2' or 70mm)



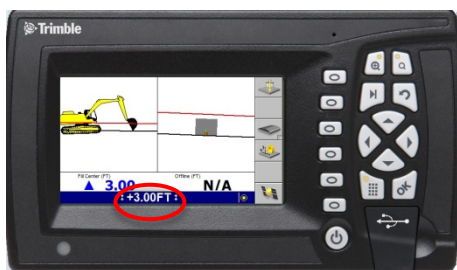
GCS900 HEX Vertical Offset

Version: 13.1

1. Press “F4”  to enter **Horizontal and Vertical Offset**
2. Press “F6” until **Vertical Offset** is displayed at the top left of screen
3. Enter Vertical Offset and Press “F2”  to select above or below **Design**



4. Press “OK” to return to operating screen
5. **Vertical Offset** is displayed at the bottom of the screen



GCS900 HEX Horizontal Offset


Version: 13.1

1. Press “F4”  to enter **Horizontal and Vertical Offset**
2. Press “F6” until **Horizontal Offset** is displayed at the top left of screen



3. Press “F1” **Alignment:**

4. Use Arrows  to Select [**Plan Line**] if list is displayed and Press “OK”

5. Use Arrows  to position cross-hair over **Line** and Press “F1” **Select**




6. Press **“OK”** and enter **Offset distance**





7. Press **“F2”** Select Offset to be **Left** or **Right** of the line (**-3.00 is Left**)
8. Press **“OK”** to return to operating screen

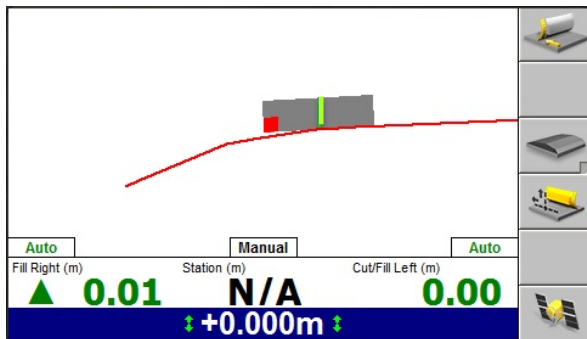


9. **Horizontal Offset** is highlighted in red
10. Press **“F1”**  to change **Bucket Left, Right or Center**

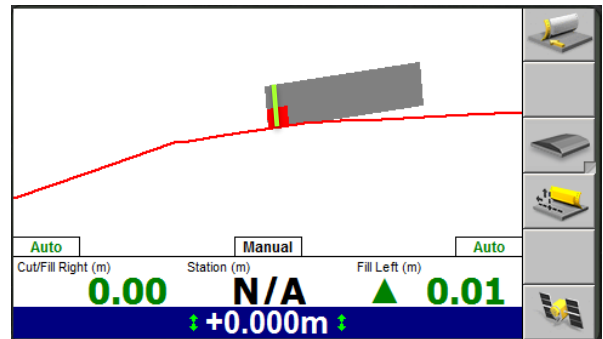
GCS900 Vertical Guidance

Version: 13.1

1. Press “Menu” 
2. Press “Guidance Method” and Press “OK”
3. Change **Adjust cut to avoid overcut:** to “NO”
4. Press “F1” for **Change Method**
5. Select **Method** from list and Press “OK”
6. Press “OK” to accept change
7. Press “ESC”  to return to operating screen







One Point Center is the default setting used for long or wide surfaces. It also allows for shaping crowns by holding the slope past the crown- point.



One Point Focus is used for narrow surfaces such as shoulders or slopes.

GCS900 HEX Cut and Fill Site Map






Version: 13.1

1. Press “Menu”  and select “Mapping/Recording Settings” Press “OK”
2. Change “Mapping for the main screen views” to “Yes” scroll down list
3. Change , “Minimum height mapping “Yes” and “Bucket tip mapping” to “Arm retracting”
4. Press “OK”
5. Select “Main Screen views” and Press “OK”
6. Under Active views select “Terrain “No”, “Cut/Fill “Yes”, “Pass count “No” and Press “OK”
7. Press “Esc”  to Main Screen
8. Press “F5” until  Mapping only in Arm Retracting is displayed
9. Press “Next”  until Plan View with Cut/Fill Scale is displayed



GCS900 HEX UTS Set-up

Version: 13.1

1. Press “Menu” 
2. Press “F4” Mode select “3D UTS” and Press “ESC” 
3. Press “F6”  to Start UTS
4. Verify Auto search: Yes
5. Press “F4” to Start UTS
6. Verify UTS status: Tracking
7. Press “ESC”  to return to operating screen
8. Press and Hold  to open Bench UTS screen



Follow instructions to position Blade over Bench Point

9. Enter Elevation of Bench Point
10. Press “F5 Left or F6 Right” to Bench Blade

Drive to end of work area and check Blade Elevation on a Bench Point to verify Setup

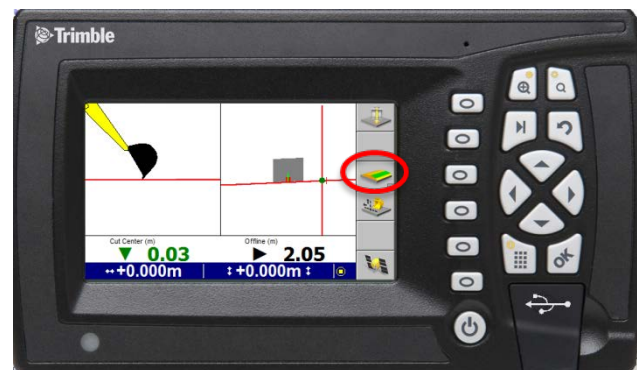
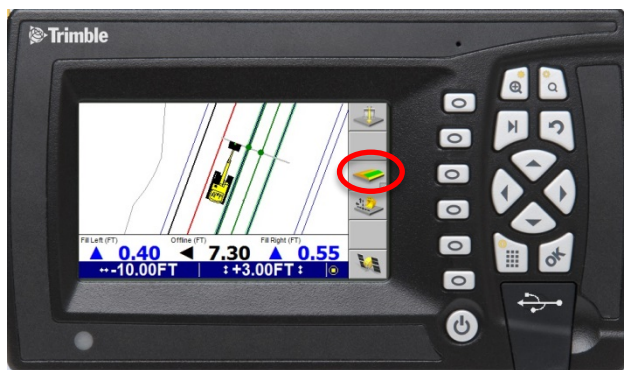
GCS900 Lane Guidance

Version: 13.1

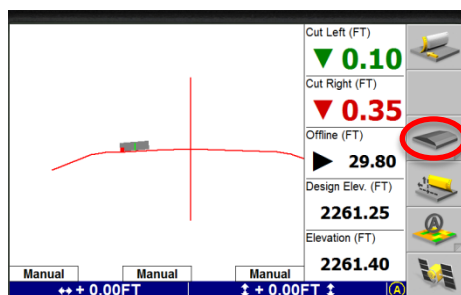
1. Move **Bucket Tip with Focus** over Lane to be Extended



2. Press “F3” for **Lane Guidance**












3. “F3” turns **Lane Guidance** Off and On



GCS900 Create New Bucket




Version: 13.1

1. Press “Menu” 
2. Select “Select Bucket” and Press “OK”
3. Press “F2” Create New
4. Enter **Bucket name:** and Press “F6” 
5. Select **Yes** or **No Tilt Bucket** and Press “F6” 
6. Enter **Dimensions** and Press “F6” 
7. **Plumb Bucket** and Press “F6” 
8. Curl Bucket until Vertical and Press “F6” 
9. Measure **J to J1** and Press “F6” 
10. Press “F6”  **Finish**
11. Select **Bucket** and Press “OK”
12. Press “ESC”  to return to operating screen







Connect to WiFi GCS900

Version: 13.1

1. Press “**Menu**” 
2. Press “**F2**” Installation
3. Select “**Connectivity Settings**” then press “**OK**”
4. Select “**Wi-Fi Network**” then press “**OK**”
5. Press “**F1**” New
6. Select the Wi-Fi you wish to connect to press “**OK**”
7. Enter “**Pass Phrase**”
8. Press “**F6**” 
9. Press “**F6**” Finish
10. Select the Wi-Fi to connect to Press “**OK**”
11. Press  2 times to return to the main menu



TCC Settings GCS900

Version: 13.1

1. Press “**Menu**” 
2. Press “**F2**” Installation
3. Select “**Connectivity Settings**” then press “**OK**”
4. Select “**Connected Community Settings**” then press “**OK**”
5. Enter “**Device Password**” then press “**Next**” 
6. Enter “**Organization**” then press “**Next**” 
7. “**Filespace and Work Group Folder**” should be left to default
8. Press “**OK**”
9. Press  2 times to return to them main screen



Configure Remote Assistant GCS900

Version: 13.1

1. Press “**Menu**” 
2. Press “**F2**” **Installation**
3. Select “**Connectivity Settings**” then press “**OK**”
4. Select “**Remote Assistant Configuration**” then press “**OK**”
5. Enter “**Support Number**”
6. Press “**F1**” Force Upgrade
7. Press “**OK**”
8. Press  2 times to return to them main screen




Wireless Data Sync GCS900

Version: 13.1

1. Press “**Menu**” 
2. Press “**F2**” Installation
3. Select “**Connectivity Settings**” then press “**OK**”
4. Select “**Wireless Data Sync**” then press “**OK**”
5. Press “**F1**” Start
6. When synchronization is complete Press “**ESC**”  3 times to operating screen

Start Remote Assistant GCS900



Version: 13.1

1. Press “**Menu**” 
2. Select “**Remote Assistant**” then press “**OK**”
3. Press “**F1**” Start
4. Once  icon appears at the bottom of the screen the machine is connected
5. Press “**ESC**” 2 times  to return to them main screen

Connect to IBSS Base Station GCS900

Version: 13.1

The Control Box must be in Manager's Mode

1. Press "Menu" 
2. Press "F2" Installation
3. Select "Connectivity Settings" then press "OK"
4. Select "GNSS Base Configuration" then press "OK"
5. Select "IBSS-Remote Base"
6. Press "F1" Create New
7. Device Password and Organization should be populated if not see (TCC Settings Sheet)
8. Press "F6"
9. Select the Base from list and Press "F6"
10. Review **IBSS Base Name** and Press "F6" **Finish**
11. Select "IBSS - Remote Base"
12. Use left or right arrow keys to select correct base name and Press "OK"
13. Press  2 times to return to operating screen



Service and Support

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