

STAGES INDOOR CYCLING

Solo Bike Assembly and Installation

Standard Operating Procedure (SOP)



As of 10/30/2018

Table of Contents

| | |
|---|-----------|
| SERVICE/ASSEMBLY TOOLS | 3 |
| SOLO BIKE ASSEMBLY | 4 |
| TABLET INSTALLATION | 9 |
| HANDLEBAR INSTALLATION..... | 13 |
| POWER METER INSTALLATION | 14 |
| PEDAL INSTALLATION | 16 |
| TABLET SETUP | 18 |
| PAIRING | 19 |
| ZERO RESET | 20 |
| HEARTRATE PAIRING | 22 |
| PRE/POST INSTALLATION CHECKLIST | 25 |
| BIKE TRANSPORTATION AND INSTALLATION | 26 |
| FIRMWARE UPDATING..... | 27 |
| POWER METER BATTERY MAINTENANCE | 28 |
| FITLOC ADJUSTMENT | 29 |
| PREVENTATIVE MAINTENANCE CHECKLIST | 30 |
| MECHANICAL TROUBLESHOOTING..... | 31 |
| TABLET/POWER METER TROUBLESHOOTING..... | 33 |
| REFERENCE MATERIALS | 35 |
| SERIAL NUMBER LOCATIONS | 36 |
| CUSTOMER SUPPORT | 37 |

This SOP (along with reference material provided, within) contains all information necessary to assemble and install the Stages Solo bike, along with the information necessary to fix any problems that may be found during assembly or installation. *Note: Failure to assemble or install the bikes correctly, could result in installer having to go back out and fix bikes at no cost to Stages Indoor Cycling, or back billing the installer for work that may need to be performed, as a result of the improper assembly or installation of bikes.*

SERVICE/ASSEMBLY TOOLS

SUMMARY: This section provides information in-regards to the necessary tools, optional tools, lubricants and additional tools that are needed to build and service all models of Stages Indoor Cycling bikes. **Note: It is not recommended that you use power tools in the assembly or service of Stages Indoor Cycling bikes.**

DETAILS:

Necessary Tools:

| | |
|---|------------------------------------|
| #0 Phillips screwdriver | Torque wrench (3/8" drive) |
| #1 Phillips screwdriver | Size 7mm Socket (3/8" drive) |
| #2 Phillips screwdriver | Size 8mm Allen socket (3/8" drive) |
| #2 Flat head screwdriver | Size 13mm Socket (3/8" drive) |
| Set of Allen wrenches ranging from Size 2mm-8mm | Size 17mm Socket (3/8" drive) |
| Size 13mm Open-end wrench | 10" Adjustable wrench |
| Size 14mm Open-end wrench | Razor Knife |
| Size 17mm Open-end wrench | 15mm Pedal wrench |
| Size 19mm Open-end wrench | |
| Socket wrench, (3/8" drive) | |

Optional Tools:

Listed below are additional tools that would be needed to perform advance service on all models of Stages Indoor Cycling bikes.

- ISIS bottom bracket tool:** Used to remove the bottom bracket from the bike
Note: You will need to have a 3/8" to 1/2" drive "step-up" adapter to allow the ISIS bottom bracket tool to mount to the torque wrench. It can be found on-line at:



https://www.amazon.com/Truvativ-ISIS-Drive-Bottom-Bracket/dp/B001CJVFMA/ref=sr_1_19?ie=UTF8&qid=1526659384&sr=8-19&keywords=isis+bottom+bracket+tool

- Dust cover removal tool:** Used to remove the dust cover from crank arms and power meters. There are many different types of dust cover removal tools, but this is our recommendation. It can be found on-line at: <http://www.amazon.com/Shimano-TL-FC20-Crank-dustcap-chainring/dp/B000R37JGI>.



- Crank arm puller** – Used to remove the crank arm from the bike. There are several types of crank arm pullers, but this is our recommendation. It can be found on-line at: <http://www.parktool.com/product/crank-puller-for-splined-cranks-ccp-44>. **Note: The cranks on the Stages Solo bikes are supplied with a self-extracting bolt (also known as a 1 key release bolt), so use of this tool will be very unlikely. However, if the self-extractor bolt is inoperable, the crank arm puller will be needed to extract the crank.**



Lubricants/Additional Items:

- Listed below are lubricants that may be needed to perform installation of parts or service on all models of Stages Indoor Cycling bikes.

A. Spray silicone: To be used to lubricate the forward and aft slides and up and down slides of the seat and handlebar stems. **Note: Any type of straight silicone can be used. If spray silicone is not available, a gel silicone can be used.**

B. General purpose grease: To be used to lubricate pedal threads and bottom bracket splines when installing pedals or crank arms on bikes. There are several types of general purpose grease, but this is our recommendation. It can be found on-line at: <https://www.parktool.com/product/polylube-1000-lubricant-tub-ppl-2>

Note: Avoid heavy grease.

- Listed below are other items that may be need to perform installation of parts or service on the Stages Solo bike.

A. Loctite® 240 (blue) thread lock compound (either in liquid or gel form): To be used on parts that have been removed and need to be reinstalled, due to service and originally had LocTite on them.

B. Loctite® 270 (red) thread lock compound (either in liquid or gel form): To be used on parts that have been removed and need to be reinstalled, due to service and originally had LocTite on them.

SOLO BIKE ASSEMBLY

SUMMARY: This section provides information on how to assemble the Stages Solo bike. *Note: It is not recommended that you use power tools in the assembly of the Stages Solo bike.*

DETAILS:

1. To begin you will need to remove the bike from the box. To start the process in removing the bike from the box you will need to turn the bike on its long side, exposing the bottom of the box.



2. Cut the bottom of the box open from top to bottom on either the left or right seam.



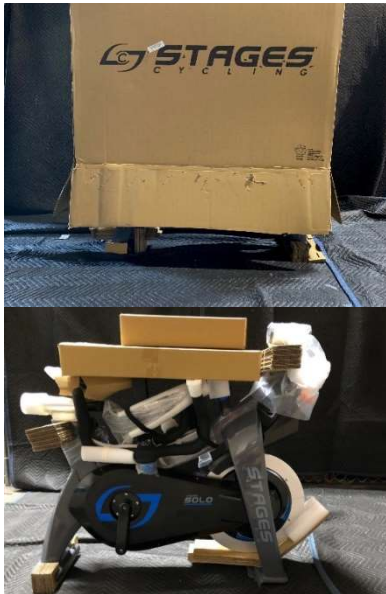
3. Open the bottom flap of the box and remove the power meter and tablet from the bottom of the box (for single bike order). *Note: If multiple Solo bikes are being shipped to a location, the power meters and tablets will come in a separate package.*



4. Tuck the remaining flaps to the outside of the box.



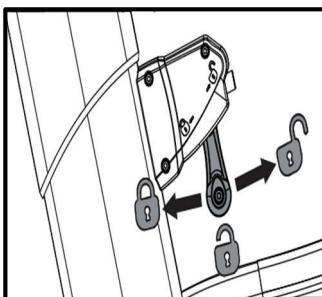
5. Turn the box back onto the bottom and then grab the box and pull it up and off of the bike, exposing the bike and support boxes on the top of the bike and setting the bike on the floor.



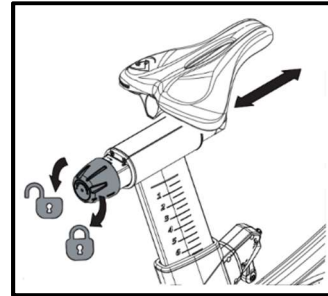
6. Remove all of the packaging from the bike. **Note: Make sure when unpacking the handlebars to not lose the wedge pin.**



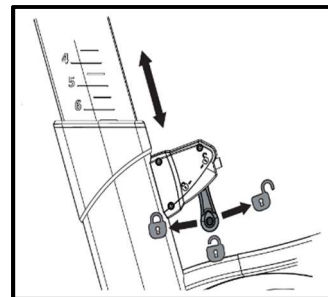
7. Tighten the up and down handlebar movement by engaging the FitLoc on the front of the handlebar stem.



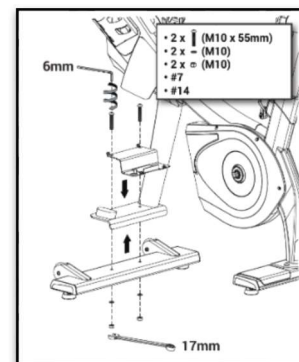
8. Lock the seat forward and aft adjustment by tightening the adjustment knob.



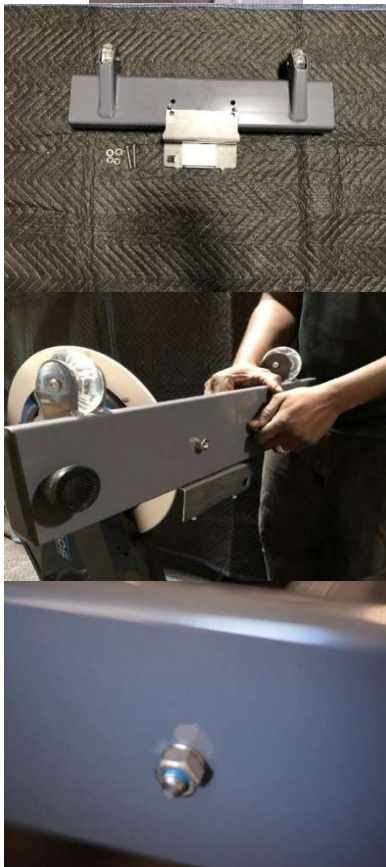
9. Tighten the up and down adjustment by engaging the FitLoc on the frame directly below the seat.



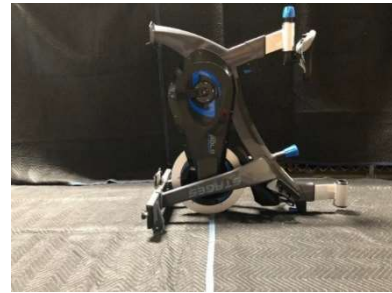
10. Turn the bike so that it is resting on the seat post and rear stabilizer mount area. **Note: Ensure that the bike is not wobbly and won't fall over. If the bike is not stable, position the bike in such a manner that it won't fall over or damage can occur to the bike.**



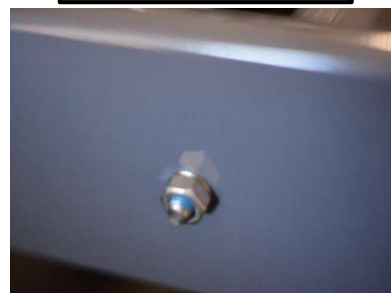
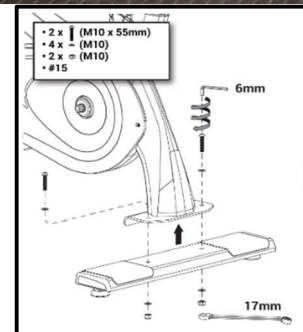
11. Remove the cover from the power brick bracket by loosening the (4) 3mm screws (bracket and cover can be found in the support box). Set aside because it will be used on a later step. Then, install the front stabilizer and power brick bracket on the front of the bike, with the two (2) 6mm bolts, four (4) washers and two (2) nuts provided. **Note:** *Make sure to start the nuts on the bolts by hand before applying a wrench to them (to help prevent cross threading). Tighten, but don't over tighten the bolts. If tightened correctly, you should have a slight dimple in the bottom of the stabilizer.*



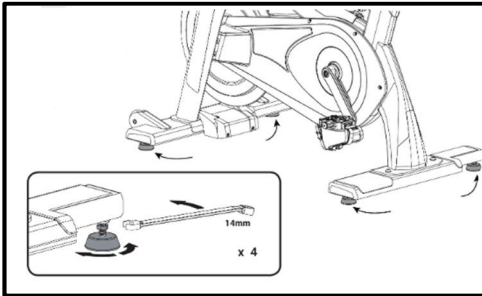
12. Turn the bike to the opposite side so that it is resting on the end cap (if installed) and front stabilizer wheels. **Note:** *Ensure that the bike is not wobbly and won't fall over. If the bike is not stable, position the bike in such a manner that it won't fall over or damage can occur to the bike. Install bolts and stabilizer that doesn't cause damage to the bike.*



13. Install the rear stabilizer on the rear of the bike, with the two (2) 6mm bolts, four (4) washers and two (2) nuts provided. **Note:** *When installing the stabilizer, make sure to line up the bolt holes. Make sure to start the nuts on the bolts by hand, before applying a wrench to them (to help prevent cross threading). Tighten, but don't over tighten the bolts. If tightened correctly, you should have a slight dimple in the bottom of the stabilizer.*



14. Ensure that all of the leveling legs are screwed all the way into the stabilizer and turn the bike so that it is resting on both stabilizers.



15. Align the seat of the bike, ensuring that it is parallel to the floor and in-line with the handle bars. If adjustment is needed, loosen one nut on the seat clamp, align the seat and retighten. ***Note: Make sure that that seat is really tight. Tightness can be checked by pushing down on the front the seat to make sure that it won't move.***



Next Step:

Proceed to the Tablet Installation section of this SOP for the next step in assembling the Solo bike.

TABLET ASSEMBLY

SUMMARY: This section provides information on how to install the tablet bracket and the tablet. *Note: The tablet will come inside the bike box on a single order but if there is multiple bikes it will ship separately. It is not recommended that you use power tools in the assembly of the Stages Solo bike.*

DETAILS:

1. Grab the tablet bracket, phone holder and the hardware. *Note: The phone holder and hardware can be found in the support box.*



2. Remove plastic holder strip from tablet bracket. *Note: Make sure to not lose the screws.*



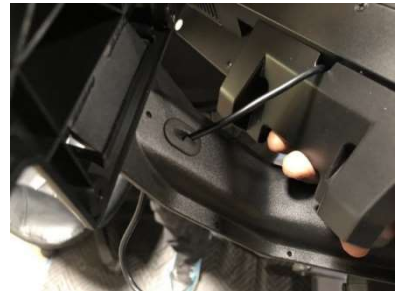
3. Remove tablet and power supply (located in the side of the packaging) from the box.



4. Remove the (4) small Phillips screws from the rear of the tablet. *Note: Make sure to not damage the tablet while removing the screws. Do not lose the screws.*



5. Grab the tablet bracket and insert the tablet cable through the tablet bracket, and then install the cable boot into the bracket. *Note: Make sure that the tablet cable in-line filter is inside the tablet back cover when received, if not, remove the back cover and tuck it in before proceeding.*



6. Attach the tablet to the tablet bracket using the (4) small Philips screws, that you removed previously.



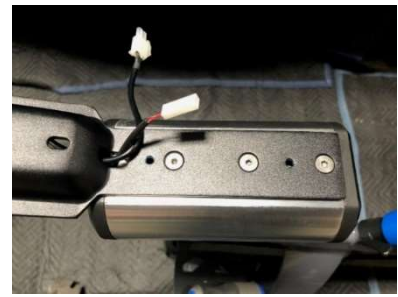
7. Evenly spread out the dove tail nuts in the handlebar stem. Then, run the tablet power cable under the bracket and insert the cable up through the bottom of the bracket.



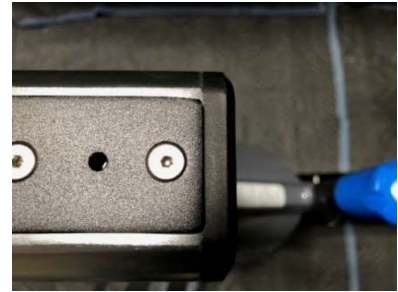
8. Next, insert the cable from the bike handlebar stem through the bottom of the bracket.



9. Line up the holes on the bracket with the dove tail nuts, then insert and loosely attach with (3) flat topped 3mm bolts and bolt to the top of the handlebar stem. **Note: Do fully tighten at this time.**



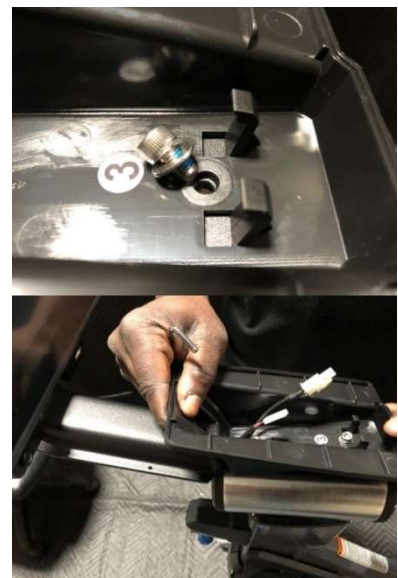
10. Position the tablet bracket so the back of the bracket is touching but not over the rear black plastic endcap of the handlebar stem and then tighten. **Note: Make sure to completely tighten bolts.**



11. Run both the tablet wire and power wire cables through the bottom of the phone holder base.



12. Using the (2) 4mm bolts and washers attach the phone holder base to the tablet bracket by aligning the base with the predrilled holes on bracket. **Note: Make sure to completely tighten bolts.**



13. Attach the extension cable to the tablet cable and to the bike cable. **Note: Extension cable can be found in support box.**



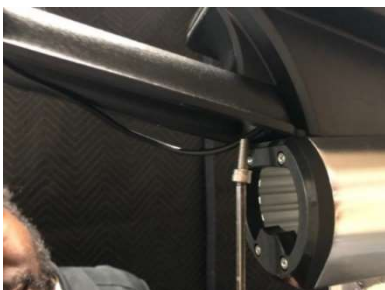
14. Place the cables inside the phone holder and attach the top of the phone holder to the phone holder base. **Note: Pull all extra cable from tablet inside phone holder before attaching top.**



14. Install the phone holder top onto the holder base by placing the back of the cover onto the hooks in the back of the base and then press down the front.



15. Install the long 4mm bolt and washer through the bottom of the bracket and up through the phone holder base into the cover and then tighten.



16. Next grab the bottom tablet bracket cover and the (7) 2mm screws previously removed. **Note: Do not lose screws.**



17. Place the bottom cover on the bottom of the tablet bracket and align the power cable down the center of the bracket. Then bolt down the cover with the (7) 2mm screws.



18. Next you will need to install the power brick onto the bike. Remove the adhesive strip from velcro and attach to the bottom of the power brick and place in center of bracket. Plug the power brick into frame. Then, replace the cover over the power brick (previously removed) and tighten down the (4) 3mm bolts to secure the cover. **Note: Make sure not to pinch the wire when putting on the cover.**



Next Step:

Proceed to the Handlebar Assembly section of the SOP for the next step in assembling the Solo bike.

HANDLEBAR ASSEMBLY

SUMMARY: This section will go over the handlebar assembly and how to attach the aero bar and the end cap. **Note: It is not recommended that you use power tools in the assembly of the Stages Solo bike.**

DETAILS:

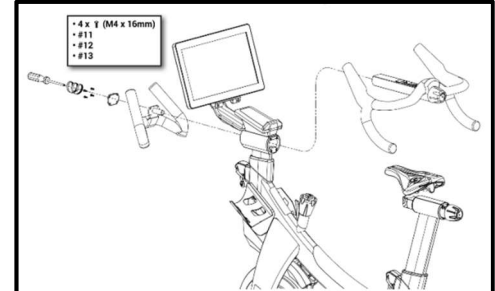
1. Remove the plastic holder strip from the handlebar stem.
Note: Make sure not to lose the wedge when inserting the handlebar into the handlebar stem.



2. Install the handlebars by inserting the handlebars through the handlebar stem and then lock the forward and aft adjustment by tightening the adjustment knob



3. Once the handlebar is installed and the fore/aft is tightened down, insert the aero bars into the end of the handlebar.



4. Next attach the handlebar endcap with the (4) screws provided. This step attaches the endcap and aero bar to the end of the handlebar. Install the end cap on the front of the handlebars with the four (4) screws provided.
Note: Do not overtighten the cap.



Next Step:

Proceed to the Power meter installation section of the SOP for the next step of assembling the Solo bike.

POWER METER INSTALLATION

SUMMARY: This section provides information on how to remove, replace and install the Power Meter on the Stages Solo bike. ***Note:** It is not recommended that you use power tools in the assembly of Stages Solo bike.*

DETAILS:

Removal or replacement of Power Meter:

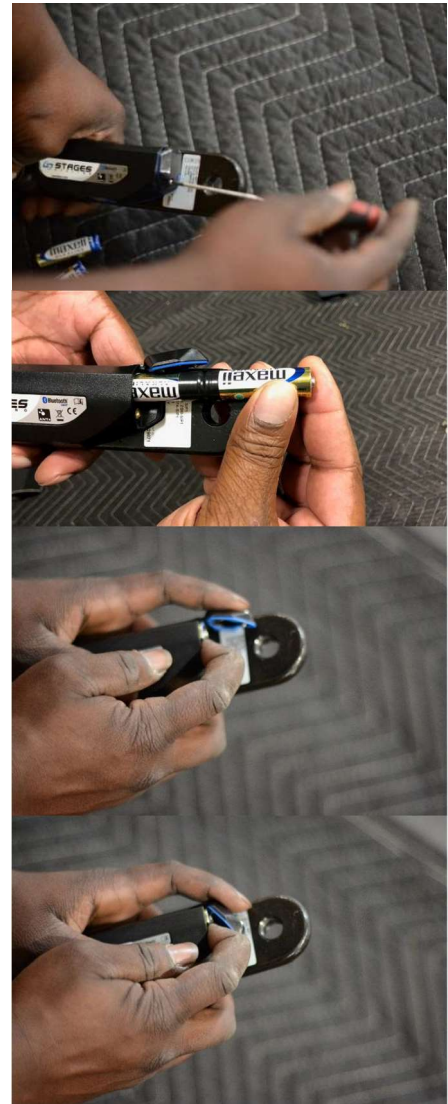
1. Remove the pedal from the current power meter and set aside.
2. Remove the power meter from the bike. ***Note:** Power Meters are self-extracting and don't require a crank arm puller.*

Assembly of Power Meter:

1. Remove the Power Meter contents from its box. ***Note:** This can be done by unfolding the cardboard inset that houses the Power Meter and it will slide out (no need to cut the plastic).*

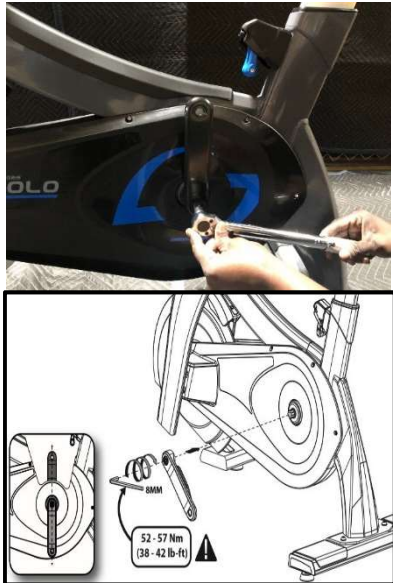


2. Using a small Phillip's screw driver (Size 0), open up the battery door on the power meter and install the (2) AA batteries (positive side up) provided (**DO NOT** remove tape from batteries, batteries need to stay taped together to prevent lateral movement during operation) close the battery door and tighten. ***Note:** Make sure to push down on batteries, prior to closing battery door (to help ease the pressure on the battery posts). Do not over tighten door as it can break the door.*



Installation of Power Meter:

1. If you are replacing a power meter on the bike, make sure to grease the splines on the bottom bracket prior to installing the power meter.
2. Install the power meter on the bike. Ensure that the power meter is being install at 180 degrees opposite of the right crank arm. **Note: Start the power meter bolt with an Allen wrench to help prevent cross threading**



2. Tighten down the power meter ensuring that there is **NO** space between the Power Meter and the bottom bracket. Once you have removed all the space between the power meter and the bottom bracket, torque the power meter to 52-57 NM or 38-42 lb-ft. **Note: Failure to ensure that there is no space between the power meter and bottom bracket prior to torqueing, will allow the power meter to come loose.**



In-Correct



Correct

Next Step:

Proceed to the Pedal Installation section of this SOP for adding pedals on the Solo bike.

PEDAL INSTALLATION

SUMMARY: This section provides information on how to remove, replace and install OEM and after-market pedals on the Stages Solo bike. **Note:** *It is not recommended that you use power tools in the assembly of Stages Solo bike.*

DETAILS:

Removal or replacement of Pedals:

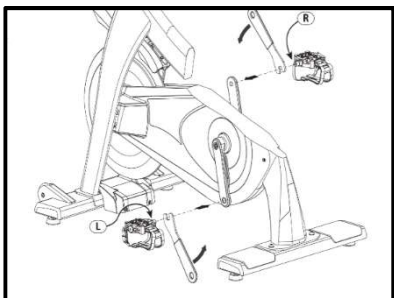
1. If pedal(s) are being removed for replacement, remove pedal(s) with a 15mm pedal wrench. Add Loctite to the new pedal(s) threads if none is preinstalled.

Installation of OEM Pedals:

1. Remove the pedals from their packaging. **Note:** *You will notice that pedals come with Loctite pre-installed on pedals.*



2. Install the pedals on the bike. Pedals are marked with an “L” and “R” indicating which side of the bike that they should be installed on. Start and then tighten the pedals onto the crank arms/power meter as far as you can by hand, prior to tightening them with a 15mm pedal wrench. **Note:** *The left pedal will tighten to the left and the right one to the right. Tighten the pedal as much as possible, to ensure that it won't come loose. Failure to tighten properly will allow the pedal to come loose.*



Installation of after-market pedals:

1. Remove the after-market pedals from their packaging. **Note:** *Apply a fair amount of LocTite to after-market pedals when installing.*

2. Install the pedals on the bike. Pedals should be marked with an “L” and “R” or in some manner or form indicating which side of the bike they should be installed on. Start and then tighten the pedals onto the crank arms/power meter as far as you can by hand, prior to tightening them with a pedal wrench. **Note:** *The left pedal will tighten to the left and the right one to the right. Tighten the pedal as much as possible, to ensure that it won't come loose. Failure to tighten properly will allow the pedal to come loose.*

Installation/routing of pedal straps (OEM and after-market pedals):

1. After installing the pedals, you will need to attach the pedals strap to the strap clamp. **Note:** *Follow pictures below for procedure.*



Reinstallation of pedals:

1. If OEM pedals are being reinstalled after service was performed, make sure that LocTite is added to the threads before reinstalling.
2. If after-market pedals are being reinstalled after service was performed; and no pedal washer is being used, apply a fair amount of blue LocTite on the threads of the pedal(s) prior to installing the pedals on the crank arm/power meter. ***Note: Make sure to clean up the pedal threads as much as possible prior to reinstallation as this will keep the pedals from locking up during reinstallation.***
3. In all cases, ensure that the pedals are being installed on the proper side. Pedals should be marked with an “L” and “R” or in some manner or form indicating which side of the bike they should be installed on. Start and then tighten the pedals onto the crank arms/power meter as far as you can by hand, prior to tightening them with a pedal wrench. ***Note: The left pedal will tighten to the left and the right one to the right. Tighten the pedal as much as possible, to ensure that it won't come loose. Failure to tighten properly will allow the pedal to come loose.***

Next Step:

Proceed to the Tablet Setup section of this SOP for the next step in assembling the Solo bike.

TABLET SET-UP

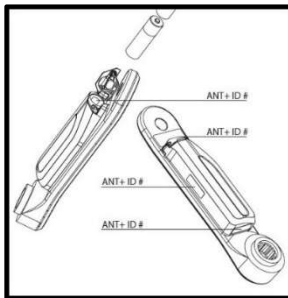
SUMMARY: This section provides information on how to perform the setup of the tablet and power meter on your bike. *Note: The tablet cannot be set up without the customer intake form, which has been filled out by the salesman. This procedure should only be performed when installing a new tablet, power meter (or both), but, should not be used on a routine basis to zero reset the bike. For steps to reset, reference the Zero Reset section in this SOP.*

DETAILS:

1. Plug power cord into bike and then into wall.



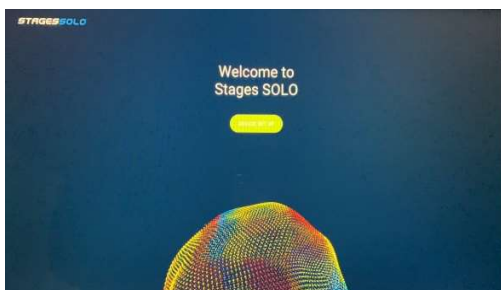
2. Locate the ANT+ ID on the sticker attached to the power meter (left crank arm). *Note: The ANT+ ID will be a 4-5 digit ID number that appears in several stickers applied to the crank arm.*



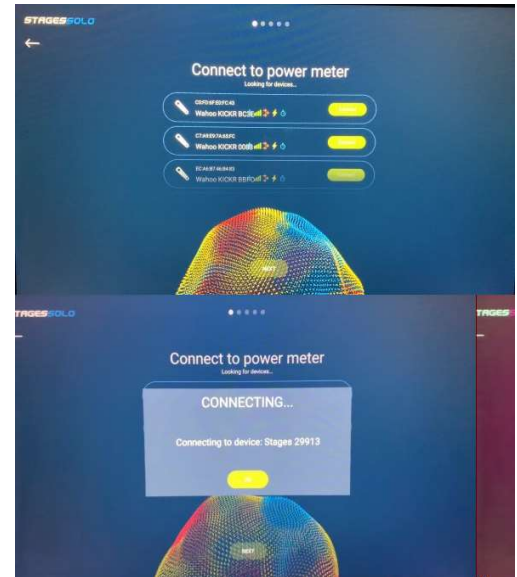
3. The first screen to load up will be the StagesSolo Screen.



4. After the system loads up, the next screen that will appear will be the "Welcome To Stages SOLO" screen. Press the "device set up" tab.



5. The next screen will ask you to connect to a power meter. This is where you will select the power meter that is to be paired to your Solo bike. To bring up the ANT+ ID, pedal your bike until the ANT+ ID on the power meter is shown on the screen. Press "connect" next to your desired power meter. Once connected press the "OK" button.



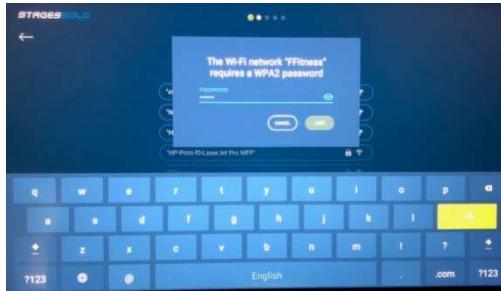
6. The screen will now show any power meters sending a signal and the selected power meter will have a disconnect tab instead of a connect tab. Press the "next" button to continue.



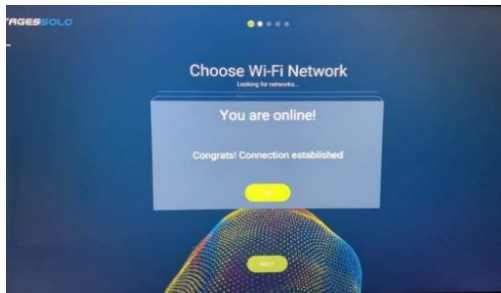
7. The next screen will be to "Choose WiFi Network". Select the desired WiFi for your location.



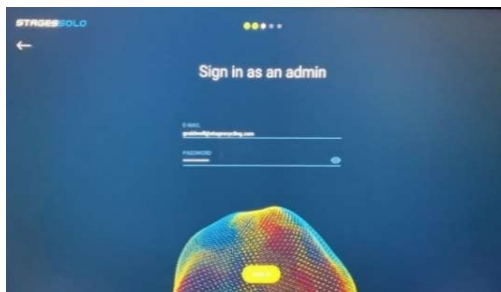
8. Once the chosen WiFi, you will be asked to enter the password, (if needed). The screen will bring up the keyboard. Use the keyboard to enter your password and when done, press the “join” tab.



9. Once the “You are online” screen appears on your screen, press the “OK” button and then press the ”next” tab.



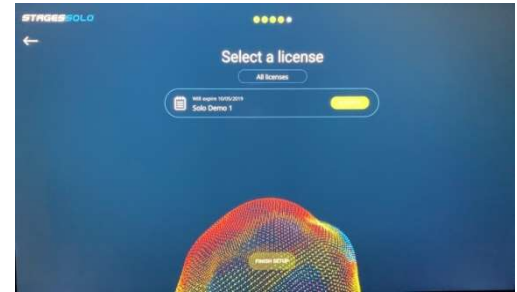
10. On the next screen you will be asked to add the email and password which should be provided by the salesman. To add the email and password just touch the screen on email or password and the keyboard will appear. Once the email and password is added press the “next” tab. **NOTE: You must have the admin and password to finish the set up of the tablet.**



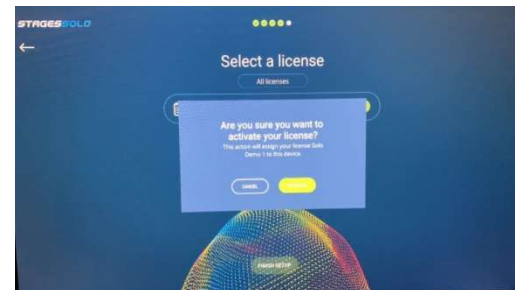
11. Next you will need to accept the privacy policy. Scroll down through the policy to the bottom to accept the policy. Then press the “accept” tab.



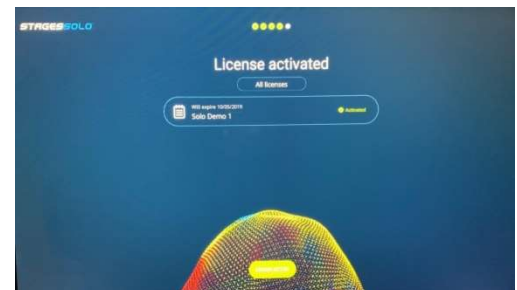
12. Next you will need to select the Solo license. If there is more than one Solo bike for the location, the list of licenses will be Solo 1, Solo 2 and so on. Select desired license and press “activate”.



13. Once your license is selected, press the tab to “activate”.



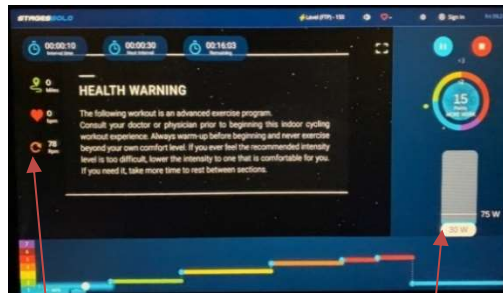
14. To complete the set up press the “finish setup” tab.



15. The next screen to load up will be the start screen. Select quick start and then start a ride to make sure the power meter is connected correctly.



16. Once you have selected a ride, ride the bike to see if the tablet is presenting RPM and WATTS (by applying pressure on the left crank arm. If presenting data your bike is ready to ride. ***Note: If your bike is not presenting watts the bike needs to be zero reset. If your bike is not showing rpm, check and make sure the correct power meter is connected. Go to the Pairing and Zero Reset section of the SOP to perform these tasks.***



RPM

WATTS

Next Step:

Proceed to Zero Reset section of the SOP for the next step in assembling the Solo bike.

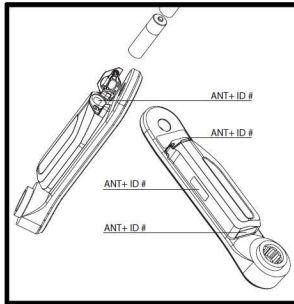
PAIRING

SUMMARY: This section provides information on how to perform the pairing of the power meter on your bike. ***Note: This procedure should only be performed when installing a new tablet, power meter (or both).***

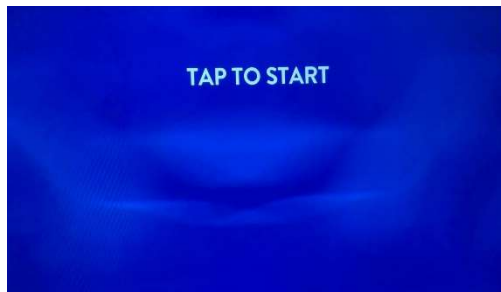
DETAILS:

Pairing Steps:

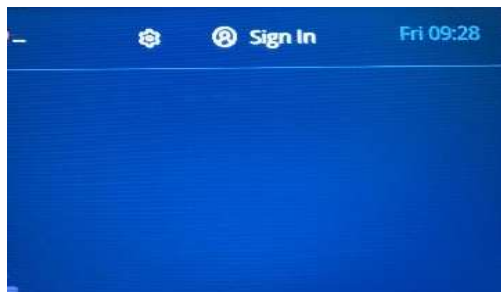
1. Locate the ANT+ ID on the sticker attached to the power meter (left crank arm). ***Note: The ANT+ ID will be a 4-5 digit ID number that appears in several stickers applied to the crank arm.***



2. With the Solo bike powered on, activate the tablet by touching the screen.



3. Press the GEAR (settings) icon in the top right corner of the screen to enter the SETTINGS menu. ***Note: If offline you will be asked to enter a password, it is “cycle123”.***



4. The next screen will show any power meters presenting a reading. You may need to pedal the bike for the power meter to show up.



5. Once you select the correct ANT+ ID for your bike press connect.



6. Once your power meter is connected the screen will show your power meter and a disconnect tab next to your power meter. Then start a ride to make sure the bike is presenting RPM and Watts while pedaling the bike.



ZERO RESET

SUMMARY: This section provides information on how to perform the zero reset of the power meter on your bike. ***Note: This procedure should only be performed when installing a new power meter. You will need to have your phone with the Stages Power app open to perform these steps.***

DETAILS:

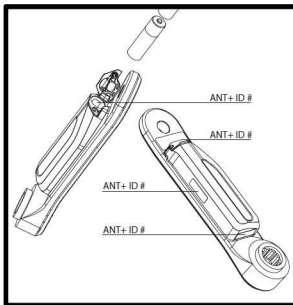
Stages Power App Downloading:

To perform the zero reset on your Solo bike, you will first need to download the Stages Power App to your iOS or Android phone.



Zero Reset Steps:

1. Locate the ANT+ ID on the sticker attached to the power meter (left crank arm). ***Note: The ANT+ ID will be a 4-5 digit ID number that appears in several stickers applied to the crank arm.***



2. Next, you will need to open the Stages Power App on your phone and press the “Connect with Bluetooth”.



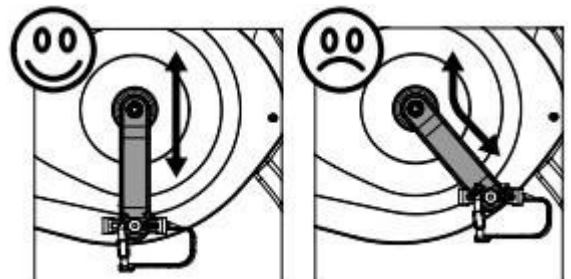
3. Pedal your bike to bring up your ANT+ ID then select your ANT+ ID and press “connect”. ***Note: You will need to power off tablet to allow the power meter to connect to app.***



4. Continue to pedal the bike hard until the app is connected to power meter and the rpm and watts are showing up on the app.



5. Stop the pedals from spinning and place the power meter in the 6 o'clock position with **NO** weight (feet or outside force) on the left pedal.



6. Once connected and the left crank arm is in the 6 o'clock position press the "Zero Reset" tab on the app.



7. Then press the "perform zero reset" tab on your app.



8. Once performed the zero reset value you will be shown on your screen. The Zero Reset process will take a few seconds. If the Zero Reset was performed correctly, you will see a numerical calculation on the screen will appear. The number should be between 790 and 990. If it is not within this range, try and reset. If the word FAILED appears on the screen, don't be alarmed. Ensure that the crank was in the 6 o'clock position and NO weight is on the pedal and try again. **Note: If it continues to fail, reference trouble shooting area.**



Next Step:

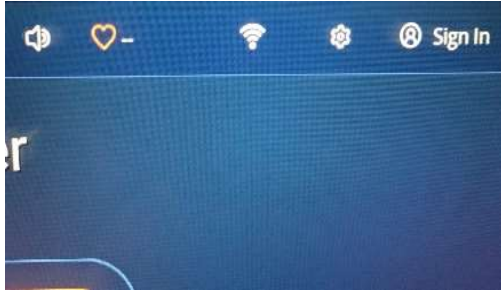
Proceed to the Pre/Post Installation Checklist section of the SOP for the Solo bike.

HEART RATE PAIRING

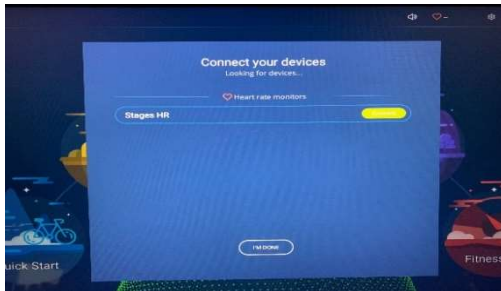
SUMMARY: This section provides information on how to connect the heart rate strap to the tablet. **Note: The tablet will connect to any Bluetooth enabled heart rate strap.**

DETAILS:

1. At any screen before a workout or even during a workout press the HEART icon at the top right corner of the screen.



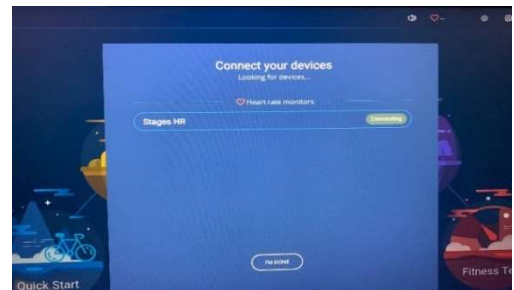
2. The heart rate pairing mode will be shown. Select your heart rate transmitter by pressing the “Connect” button.



3. The heart rate strap will begin to connect.



4. Once your heart rate has connected the screen will show your heart rate connected. Then press the “I’m Done” button. **Note: If your heart rate does not connect to the tablet make sure the back of strap is wet. Also make sure your heart rate is Bluetooth enabled.**



PRE/POST INSTALLATION CHECKLIST

SUMMARY: This section provides a list of items that are required to be checked during the final assembly and after installation of the bike, to ensure that they have been put together correctly, working correctly, installed correctly, **every time, for every Customer.** *Note: This checklist, along with other section contained in this SOP (along with reference material provided, within) must be used during the build and during the installation of bike. Note: Failure to assemble or install the bikes correctly, could result in installer having to go back out and fix bikes at no cost to Stages Indoor Cycling, or back billing the installer for work that may need to be performed, as a result of the improper assembly or installation of bikes.*

DETAILS:

| PRE/POST INSTALLATION CHECKLIST | |
|--|--|
| | Check forward/aft slides on seats and handlebars |
| | Silicone |
| | Set to 0 (and tightened) |
| | Check up/down slides on seat and handlebars |
| | Silicone |
| | Handlebars all set to same height (and locked into place)(if more than 1 Solo bike in facility) |
| | Seats all set to the same height (and locked into place)(if more than 1 Solo bike in facility) |
| | Check and adjust the tension on the FitLoc system |
| | Handlebars |
| | Seats |
| | Check bike leveling |
| | Adjust stabilizer to floor (adjust all the way up first into stabilizer, then to floor) |
| | Tighten nut against stabilizers after leveled |
| | Check tablet and bracket |
| | Ensure tight on handle bar stem |
| | Ensure set to the back of handlebar stem |
| | Check tightness of all |
| | Tablet/tablet base |
| | Stabilizers |
| | Power Meter |
| | Pedals |
| | Seats (level and in-line with handlebars) |
| | Ride and function check the bike |
| | Listen for rubbing noises (metal to metal, plastic, etc.) |
| | Listen and feel for vibrations |
| | Test resistance knob and SprintShift lever |
| | Tablet is displaying watts and rpms (if all functioning, perform zero reset) Via the StagesPower app |
| | Perform adjustments as necessary |
| | Remove any extra packaging material |
| | Ensure bikes is positioned in customers requested location(s) (post install only) |
| | Clean bikes |

Next Step:

Proceed to the Bike Transportation and Installation section of this SOP.

BIKE TRANSPORTATION AND INSTALLATION

SUMMARY: This section provides you the information to help ensure that your installation of Stages Solo Bike(s) will go well and that each customer will receive the same type of install. ***Note: Failure to assemble or install the bikes correctly, could result in installer having to go back out and fix bikes at no cost to Stages Indoor Cycling, or back billing the installer for work that may need to be performed, as a result of the improper assembly or installation of bikes. Use this list along of items along with Exhibit B and C of your installation contract to ensure that you completed all items necessary for the install.***

DETAILS:

Transportation:

1. All bikes should be built prior to installation, so that they can be function checked prior to delivery (and if parts are needed can be sent and problems be addressed, prior to delivery). We do understand that the customer may request that the bikes be built on site, or for logistical reasons that they may need to be built on-site, but this should be exception not the rule.
2. All bikes should transported are blanket wrapped and strapped into the trucks to ensure that no undo damage will occur during transport. Pay close attention to the tablet, during loading and transporting, so it doesn't get broke or scratched.
3. During the loading and unloading of the bikes, all bikes should be carted or carried across the ground, pavement or cement, **NOT** rolled, as it could will tear up the transportation wheels on the bikes and may also embed debris in the wheels that could scratch up a Customer's flooring.

Installation:

1. Bike(s) should be set up and aligned per the Customer's request.
2. Bike(s) should all be function checked according to the Pre/Post Installation Checklist (contained in this document).
3. If bike(s) are built on-site, all cardboard and garbage must be removed unless approved by the Customer.
4. Don't forget to do your paperwork. This information can be found in Exhibit B and C of your installation contract.

Questions:

If you have any questions on building or installation of the bikes, or if the Customer needs help after the install, please call or have the Customer call Customer Support at 1-800-717-8076.

FIRMWARE UPDATING

SUMMARY: Regular service updates may be required to keep the firmware up to date and utilizing our latest revisions, improvements, and bug fixes. Performing a firmware update in the field is easy and simply requires using a compatible mobile device (phone or tablet) with the Stages Power app.

DETAILS:

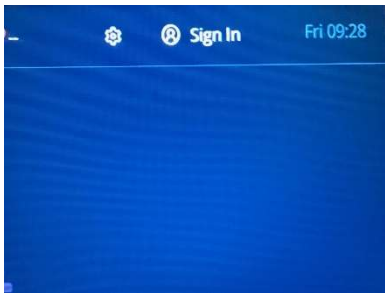
Stages Power App Downloading:

To update the firmware on your power meter or console, you will first need to download the Stages Power App to your iOS or Android phone.

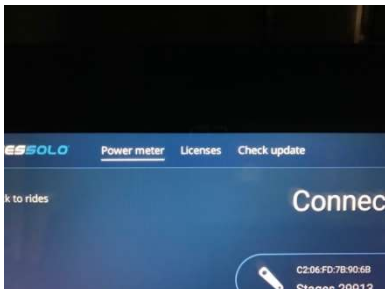


Updating Tablet Firmware:

1. Activate the tablet by touching the screen.
2. Press the GEAR (settings) ICON to advance to the settings mode. *Note: If offline, the password is "cycle123".*



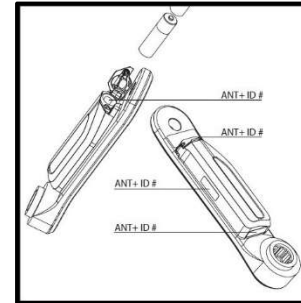
3. In the top left corner of the tablet you will see check update tab.



4. Once the tab is selected the tablet will let you know if there is an update available as long as the bike is online. It will auto populate any new software updates. If there is no update available the tablet will read you have the latest version.

Updating Power Sensor Firmware:

1. Locate the ANT+ ID on your power meter and remember the number.



2. Open the Stages Power App on your phone and observe the various power meters and consoles that are available.
3. Pedal the power meter until (left crank) until you see the ANT+ ID show up on your phone.



4. Select the power meter that you want to update.

5. Once connected you will see the serial number and ANT+ ID of the power meter on the top of the screen and four buttons below. If not on the most current version of firmware the Firmware button will be illuminated.



6. Press Firmware button, which will initiate the update process. This upload should only take 1-2 minutes. If for some reason the app takes longer or fails, close the app, re-open and reconnect to attempt again.

Trick: If you don't have an unlimited data plan or data is unavailable on your phone (for the area you are in), put your phone in airplane mode and then turn on WiFi to connect to the app.

POWER METER BATTERY MAINTENANCE

SUMMARY: This section provides information on how to check the battery levels on your console and power meter and how to change them out if they are. This section applies to the Stages Solo bike(s) that have a tablet on them.

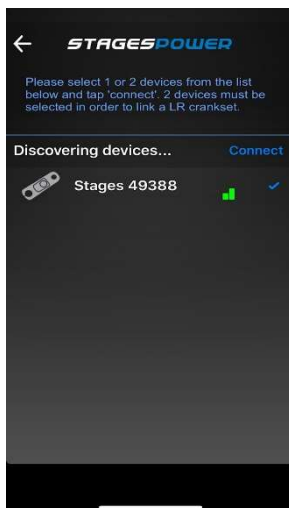
DETAILS:

Checking the Batteries in the Power Meter (using the StagesPower App – Preferred Method):

1. Open the StagesPower App.
2. Look at the ANT+ ID number on the power meter.
3. Spin the power meter equipped crank arm to “wake” up the power meter.
4. Choose “Connect with Bluetooth” from the menu options in the app.

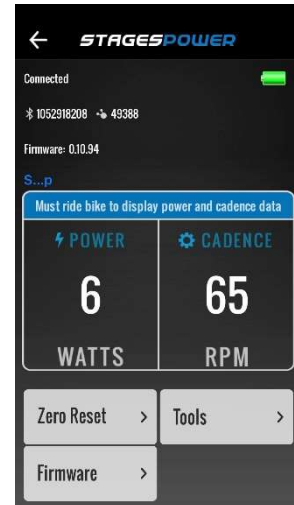


5. Select the Ant + for the power meter that you want to check (will put a check mark by the Ant + on your screen).



6. Click on the button that says connect.

7. The screen should change automatically to the next page where you will see fields for Power and Cadence, you will see both Serial Number and ANT+ ID displayed. (ADC and Temp are shown if you choose Zero Reset)



8. Confirm you have connected to the proper ANT+ ID.
9. Check the battery indicator in the top right corner.

Replacing the Batteries in the Power Meter:

1. Turn the left crank arm to the 12 o'clock position (so you can see the screw at the top of the power meter).
2. Use a size 0 Phillips screwdriver to loosen the screw from the power meter battery door.
3. Change out or install the 2 AA batteries, ensuring that when installing the new ones that the negative (-) ends are against the coils. The batteries should be taped together with electric tape, to prevent the batteries from coming apart while in use in the power meter.
4. Replace the battery cover and lightly tighten the screw to secure the cover. **Note: After changing the batteries in the power meter, it is important to perform a Zero Reset. The purpose of Zero Reset is to ensure the power meter is calibrated correctly. Please see the Zero Reset procedures in this SOP for instructions.**

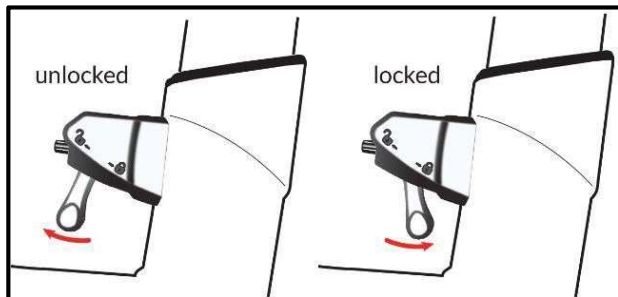
FITLOC ADJUSTMENT

SUMMARY: This section provides you with the information necessary on how to adjust the FitLoc levers on the bikes.

DETAILS:

How to use:

1. Hold the seat and PULL the lever forward to unlock and adjust.

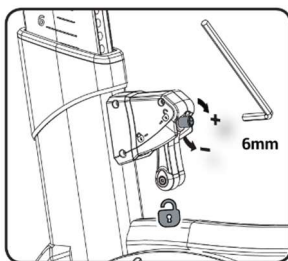


2. Once seat height is set, PUSH the lever back to lock it.
3. An audible “CLICK” indicates the lever is fully locked. Use the same process to adjust handlebars.
4. Tension on the lever should ONLY be adjusted by an instructor or service tech if FitLoc becomes too tight and will not fully lock, or becomes too loose and will not engage.

How to adjust:

How to loosen the tension:

1. Hold onto the seat or handlebar with one hand and unlock the FitLoc lever (pulling out as far as possible). Turn the small micro-adjustment dial (black dial) to the LEFT in small increments. With a 6mm Allen.



Test by locking it into place and continue to adjust until the FitLoc can be firmly locked into position, but isn't too tight or too loose. Turn in small increments until the FitLoc lever can be firmly locked into position.

How to tighten tension:

1. Hold onto the seat or handlebar with one hand and unlock the FitLoc lever (pulling out as far as possible).
2. While the lever is pulled out as far as possible, turn the small micro-adjustment dial (black dial) to the right in small increments (using a 6mm Allen).
3. Test by locking it into place and continue to adjust until the FitLoc can be firmly locked into position, but isn't too tight or too loose.
4. Turn in small increments until the FitLoc lever can be firmly locked into position, but isn't too tight or too loose.

Note: The micro-adjustment on the FitLoc should NEVER be used by riders or members. Also, no pliers or any other type of tool should be used on the micro-adjustment to try to get it to adjust, as it will cause damage or end up breaking the micro-adjuster.

PREVENTATIVE MAINTENANCE CHECKLIST

SUMMARY: This section provides you with a list of required maintenance tasks to be performed on the bikes on a regular basis. All tasks are quick and will help to avoid larger issues in the future.

DETAILS:

Daily:

Wipe down all bikes using mild soap and water or a mild cleaner

Do not use products with ammonium chloride to clean the bikes, as they will cause the glue to come off

Weekly:

Lubricate sliding tubes silicone lubricant (handlebar and seat stems, fore/aft slides) Inspect pedals - Fraying straps, broken bindings, and tightness

Visually inspect all hardware components Check or ask for noises heard while riding

Monthly:

Inspect and adjust FitLoc's for proper tension

Check crank bolt tension (Torque to 52-57 Nm or 38-42 lb – ft)

Check power meter battery levels and change out batteries as needed

Perform zero reset on power meters to ensure high accuracy ***Note: If power meters are updated to firmware version 1.2.0 or newer this is unnecessary as this will be done automatically.***

Yearly:

For maximum performance and safety, replace the pedals every year Inspect bottom brackets

MECHANICAL TROUBLESHOOTING

SUMMARY: This section provides some of the standard Mechanical Troubleshooting items for the Stages Solo bike. *Note: If parts or additional help is needed, please call Customer Support.*

| Problem | Cause | Solution |
|--|--|--|
| Metal to Metal Sound | Brake rubbing on flywheel | Adjust brake |
| Vibration when riding bike | Bike is not level | Level bike |
| | Belt too tight | Adjust tension on belt |
| | Flywheel is crooked in bike | Adjust flywheel to make sure that it is straight in bike |
| | Bike flywheel has been jarred during shipping | Loosen flywheel to allow it to drop back into place, make small forward and aft adjustments as needed |
| Pedal has come loose (Factory or Aftermarket) | Pedal was not tightened properly during installation | Tighten with pedal wrench |
| | Pedal washer was not installed during installation | Install pedal washer and tighten with pedal wrench |
| Pedal has come off of bike | Pedal was not tightened properly during installation | (Pedal and/or crank arm threads are not stripped) Apply a small amount of grease on pedal threads, make sure pedal washer is on pedal and reinstall |
| | | (Pedal and/or crank arm threads are stripped) If crank is stripped, see if you can tap threads and reinstall pedal (and make sure pedal washer is on pedal). If can be fixed, apply a small amount of grease on pedal threads (and make sure pedal washer is on pedal) and reinstall. If unable to fix crank and/or pedal is stripped, order parts and install |
| Power Meter or crank arm has come off of bike (pedal is still attached and tight) | Power Meter was not tightened properly during installation | Check to make sure that there is no damage to crank arm, apply a small amount of grease onto the bottom bracket spline and reinstall Power Meter and set to proper torque setting. Double check pedal tightness as well and tighten as necessary |
| Seat stem is loose and moves during ride | FitLoc not locked into place | Lock FitLoc into place |
| | FitLoc is locked into place | Adjust FitLoc so that it locks tight against seat stem when locked into place |
| Can't lock FitLoc into place (Seat or Handlebars) | FitLoc is over tight | Adjust FitLoc (using micro adjuster) so that it is able to lock, but not over tight |
| | FitLoc is over tight and won't move | Remove FitLoc from frame and see if the shaft is bent, and if so, replace. If not bent, see if you can lubricate to loosen and reinstall, and if not, replace |
| Handlebar stem is loose and move during ride | FitLoc will not lock into place | Lock FitLoc into place |
| | FitLoc is locked into place | Adjust FitLoc (using micro adjuster) so that it locks tight against handlebar when locked into place |
| Seat is loose or has fallen | Seat bolt is not tight | Adjust seat to proper position (parallel to ground and in-line with handlebars) and tighten |
| Seat or handlebars will not adjust forward or aft and cap of adjustment knob is spinning | Adjustment knob has come loose | Remove knob, adjust rod outward, reattach knob and tighten |
| Seat or handlebars will not adjust forward or aft and can loosen and tighten adjustment knob | Wedge pin inside has gotten lodged in tube | Remove knob, and all of components out of seat or handlebar and see if you can un-lodge wedge pin and then put back together. If parts are damaged or unable to un-lodge, order parts and replace |

| | | |
|---|--|--|
| SprintShift moves when adjusting standard resistance knob | SprintShift knob is bad or bent | Order replacement parts and replace. |
| | Detent in SprintShift is not holding | Order replacement part and replace. |
| Rattling noise on bike | Screws on shield or inside front covers are loose | Check all screws and tighten as necessary |
| Plastic to plastic rubbing sound | Power meter or right crank arm rubbing on side covers | Re-adjust side covers |
| Clicking noise in from inside of belt covers | Covers are not aligned properly | Re-align covers |
| Side to side movement at pedal area | Bottom bracket has come loose or needs replacing | Remove cranks and check, replace as necessary |
| Clicking noise in pedals | Cleats are to loose or tight | Adjust cleat tension |
| | Pedal is clicking by crank arm shaft | Remove and lubricate pedal |
| Knocking sound in flywheel area | Bearing have come loose from flywheel | Order spacers for flywheel axle and install parts |
| Clicking noise on outside of covers | Pedals straps are hitting the ground every rotation | Tuck the pedals straps into the clips |
| Seat or Handlebar tubes sleeves are coming out when moving seat or handlebars | Preventative Maintenance is not being performed on bikes | Lubricated seat or handlebar slides |
| | Tabs on sleeve(s) are broken or worn | Replace sleeve(s) |
| Tablet or phone holder is loose on handlebars | Screws attaching phone holder base to handlebar stem have come loose or washer is needed | Remove phone holder top, tighten screw or insert washer in base and re-install phone holder top. Order parts if needed |

TABLET/POWER METER TROUBLESHOOTING

SUMMARY: This section provides some of the standard Tablet/Power Meter Troubleshooting items for the Stages Solo bike. ***Note: If parts or additional help is needed, please call Customer Support.***

| Problem | Cause | Solution |
|---|---|--|
| No readings on tablet (but tablet comes on) | Tablet not Paired to Power Meter | Check Pairing (Ant + number is correct in tablet) and Re-Pair if necessary to Power Meter |
| | No batteries in Power Meter | Install batteries in Power Meter and Pair if necessary |
| | Batteries are inserted wrong in Power Meter | Install batteries correctly in Power Meter and Pair if necessary |
| | Batteries are dead in Power Meter | Insert new batteries in Power Meter and Pair if necessary |
| | New batteries are installed in Power Meter and Paired | Perform external Zero Reset of Power Meter |
| | Power Meter needs to be rebooted | Open battery door and reverse batteries in Power Meter, close battery door for 3 seconds, (this will reboot Power Meter) and then re-insert batteries properly into Power Meter and retest. Re-pair if necessary |
| Only RPM's showing on screen and no watts | No pressure being applied to power meter | Get on bike and ride to make sure that it is working |
| | Tablet is not in sync with power meter | Perform external Zero Reset of Power Meter |
| Tablet not turning on at all | Bike isn't plugged into the wall outlet | Check power cord connection |
| | Connection of the power cord under tablet is not plugged in | Check connections on the back of tablet |
| | Connection of power cable inside phone holder is disconnected | Check both connections inside phone holder |
| | Connection of power brick to bike frame is disconnected | Check connection of power brick at the bottom of bike frame |
| heart rate not showing on tablet | heart rate is not paired to tablet | Hit the heart icon on the top of the screen and pair heart rate to tablet |
| Watts seem too high or low | Tablet not in-sync with Power Meter | Perform external Zero Reset of Power Meter. Using the StagesPower app |
| Tablet will not Pair to Power Meter | No batteries in Power Meter | Install batteries in Power Meter and Pair if necessary |
| | Batteries are inserted wrong in Power Meter | Install batteries correctly in Power Meter and Pair if necessary |
| | Tablet paired to another power meter | Check to see if tablet is paired to another power meter |

| | | |
|---------------------------------|--|--|
| | Batteries are dead in Power Meter | Insert new batteries in Power Meter and Pair if necessary |
| | Power Meter needs to be reset | Open battery door and reverse batteries in Power Meter, close battery door for 3 seconds, (this will reboot Power Meter) and then re-insert batteries properly into Power Meter and retest. Re-pair if necessary |
| | Ant + number from Power Meter in tablet is not correct | Insert proper Ant + number in tablet and Re- Pair |
| Power Meter will not Zero Reset | Power Meter not awake enough | Apply ample pressure and spin power meter enough that it is awake |
| | Load was on Power Meter when been being Zero Reset | Take load off of Power Meter and retry |
| | Battery Door Broke | Check for breaks in battery door, order parts if needed |
| | Power Meter needs to be rebooted | Open battery door and reverse batteries in Power Meter, close battery door for 3 seconds, (this will reboot Power Meter) and then re-insert batteries properly into Power Meter and retest. Re-pair if necessary |

REFERENCE MATERIALS

SUMMARY: This section provides all of the reference material needed for the bike, its components and FAQ's.

DETAILS:

Commonly Used Reference Material:

Solo User Manual can be located by [Clicking Here](#)

SIC Power Meter Manual can be located by [Clicking Here](#)

Preventative Maintenance information can be found by [Clicking Here](#)

Videos:

A Video Library with additional training SOP's can be located by [ClickingHere](#)

Bike Specification Sheets:

Solo Specification Sheet can be located by [Clicking Here](#)

Warranty Information:

Warranty Information for all bikes can be located by [Clicking Here](#)

Preventative Maintenance Information:

Preventative Maintenance Information can be located by [Clicking Here](#)

For all other information not listed:

Go to our website at: <https://stagesindoorcycling.freshdesk.com/support/home> to look up the request information or to look at our FAQ's

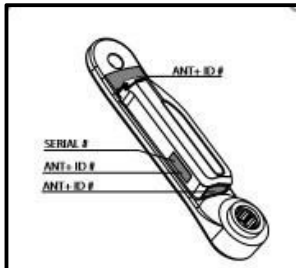
SERIAL NUMBER LOCATIONS

SUMMARY: Each bike, tablet and power meter have a serial number. Please provide the serial number of the relevant components when requesting parts for the bike or replacement tablet and power meters. See illustrations for the location of the serial numbers for each component.

DETAILS:

Power Meters Serial Numbers:

Power meter serial numbers begin with a “1”.



Tablet Serial Number:

Tablet serial: Is on the back of the tablet.



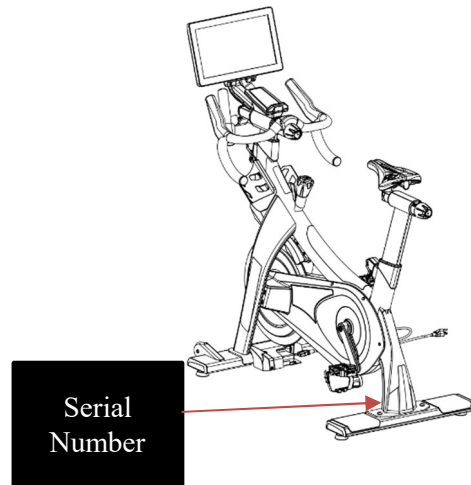
Serial
Number

Frame Serial Numbers:

Frame serial numbers begin with an “A”.

Solo:

Serial number is located on the inside of the rear tube.



CUSTOMER SUPPORT

SUMMARY: This section provides you information necessary to contact our Customer Support Team, such as hours of operation and phone numbers, along with our website that can be used to look up videos, printable material or submit a customer support ticket.

DETAILS:

Contact Information:

If you need to contact Customer Support, call 1-800-717-8076, if you receive no answer, please submit a support ticket by emailing support@stagescycling.com and request a return call back.

Hours of Operation:

Customer Support is available from 6:00am-5:00pm
Monday- Friday, Pacific Standard Time.

Website:

If you need to look up parts, review our FAQ's, look at manuals or videos, or open a customer support ticket, feel free to go onto our website at:

<https://stagesindoorcycling.freshdesk.com/support/home>.

Parts:

When calling in for assistance, we request that you have the serial number of the bike and part number from the manual that you are requesting. If the part request is for a console or power meter, please have the serial number available, part number isn't required.

Pictures and Videos:

Depending on the problem you are having with the bike, you may be asked to supply pictures or videos when calling in for support.

Return Labels:

If a replacement console or power meter is sent to repair a bike, Customer Support will send an electronic return label for you to ship the non-functioning part back. We request that the used console or power meter be put in the box that the new part was sent in, taped shut, label attached and sent back to us as soon as possible.

Standard Warranty Information:

1. Stages Solo bikes carry the following component warranty durations:
Solo Frame: 15 years
Carbon Drive Belt: 10 years Mechanical Systems: 3 years
Electronics: 1 year
Wear Items (Saddle and Pedals): 6 months
2. Extended warranties are not available at this time.