



mini sprint

1/18 SCALE MINI SPRINT CAR

OPERATION MANUAL

Thank you for choosing the Mini Sprint from Losi. This guide contains the basic instructions for operating your new Mini Sprint. While the Mini Sprint is great for first-time R/C drivers, it does require some mechanical experience and/or parental supervision for drivers under 14. It is critical that you read all of the instructions in order to operate your model correctly and avoid unnecessary damage. Please take a moment to look over all the printed materials before operating your new Mini Sprint.

AGE RECOMMENDATION

14 years or over. This is not a toy. This product is not intended for use by children without adult supervision.



Bind-N-Drive.™ Ready to run. redefined.



NOTICE: All instructions, warranties and other collateral documents are subject to change at the sole discretion of Horizon Hobby, Inc. For up-to-date product literature, visit <http://www.horizonhobby.com> and click on the support tab for this product.

Meaning of Special Language:

The following terms are used throughout the product literature to indicate various levels of potential harm when operating this product:

NOTICE: Procedures, which if not properly followed, create a possibility of physical property damage AND little or no possibility of injury.

CAUTION: Procedures, which if not properly followed, create the probability of physical property damage AND a possibility of serious injury.

WARNING: Procedures, which if not properly followed, create the probability of property damage, collateral damage, and serious injury OR create a high probability of superficial injury.

 **WARNING:** Read the ENTIRE instruction manual to become familiar with the features of the product before operating. Failure to operate the product correctly can result in damage to the product, personal property and cause serious injury.

This is a sophisticated hobby product and NOT a toy. It must be operated with caution and common sense and requires some basic mechanical ability. Failure to operate this Product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not attempt disassembly, use with incompatible components or augment product in any way without the approval of Horizon Hobby, Inc. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to assembly, setup or use, in order to operate correctly and avoid damage or serious injury.

QUICK START

CHARGING WARNINGS AND PRECAUTIONS

Failure to exercise caution while using this product and comply with the following warnings could result in product malfunction, electrical issues, excessive heat, FIRE, and ultimately injury and property damage.

- Read all safety precautions and literature prior to use of this product.
- Never leave the battery and charger unattended during use.
- Never attempt to dismantle the charger.
- Never attach your charger to both an AC and DC power source at the same time.
- Never reverse the positive and negative terminals. Wrong connection will damage the battery and may cause damage to the charger.
- Never allow minors to charge battery packs without adult supervision.
- Never drop charger or batteries.
- Never attempt to charge dead or damaged batteries
- Never attempt to charge a battery pack containing different types of batteries.
- Never charge a battery if the cable has been pinched or shorted.
- Never allow batteries or battery packs to come into contact with moisture at any time.
- Never charge batteries in extremely hot or cold places (recommended between 50-80 degrees F) or place in direct sunlight.
- Always use only rechargeable batteries. This charger cannot charge batteries such as "heavy duty," "Alkaline battery," or "Mercury battery."
- Always connect the positive red lead (+) and negative black lead (-) terminals of the battery to the charger terminals correctly.
- Always disconnect the battery after charging, and let the charger cool between charges.
- Always inspect the battery before charging.
- Always terminate all processes and contact Horizon Hobby if the product malfunctions.
- Always keep batteries and charger away from any material that could be affected by heat (such as ceramic and tile), as they can get hot.
- Always monitor the area, use a fire alarm and have a fire extinguisher available at all times.
- Always make sure you know the specifications of the battery to be charged or discharged to ensure it meets the requirements of this charger.
- Never connect more than one battery pack to this charger at a time.
- Always constantly monitor the temperature of the battery pack while charging.
- Always end the charging process if the charger or battery becomes hot to the touch or starts to change form (swell) during the charge process.



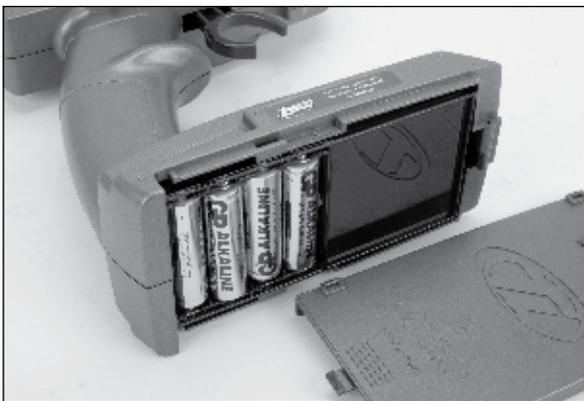
SETTING BATTERY

STEP 1



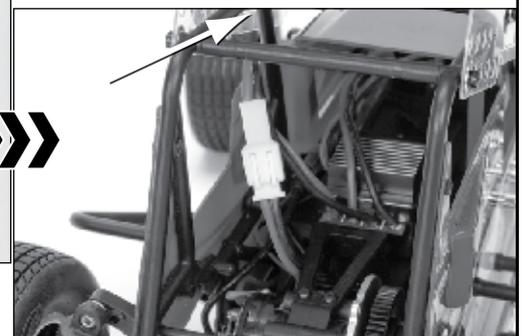
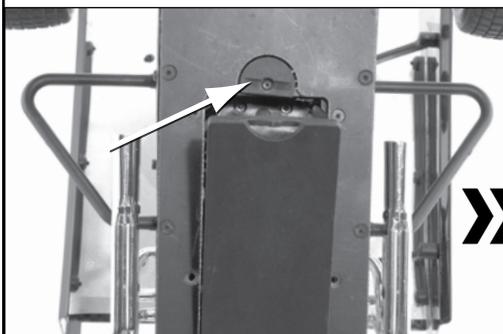
Choose the correct adaptor for your country and plug the charger into the proper wall receptacle. Plug the battery pack into the charger and let it charge for 3 hours for the first time. After running, or when the Mini Sprint slows noticeably, recharge the battery pack for 5 to 6 hours for a full charge.

STEP 2



Remove the transmitter battery cover by sliding the cover from left to right. Install four (4) AA batteries into the battery holder. Pay close attention to the correct direction of the positive (+) and negative (-) ends as marked in the tray. Once all 4 batteries have been installed, reinstall the battery cover by sliding it on from right to left.

STEP 3



Use the molded plastic key (included) to turn the battery door lock 1/2 turn which will allow the door to open.

Insert the power leads through the opening in the back of the battery box as you install the battery. Close the door and turn the lock 1/2 turn to lock it shut.

Plug the ESC into the battery pack being careful to use the keyed plugs correctly - Do Not Force. If



STEP 4



Always turn on the transmitter first by sliding the switch on the left side of the wheel from left to right. The small red and green lights above the switch should both light up. If not, you need to check for low or incorrectly installed batteries.



- Turn on the transmitter before the vehicle
- Use caution when running your vehicle near people
- Turn both the Mini-Slider and transmitter "Off" when done
- Check the battery condition of the transmitter before running



- Operate the Mini-Slider with low battery power
- Run the Mini-Slider through water or wet grass
- Use chemicals to clean the chassis
- Run the Mini-Slider without a gear cover

STEP 5

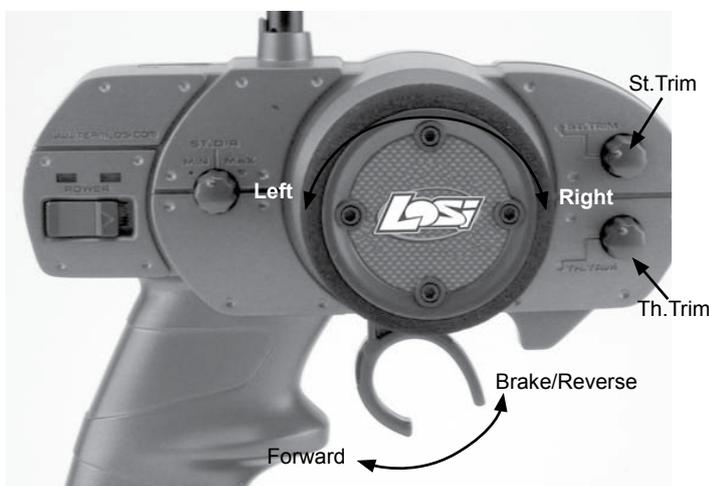


Although set at the factory, below are the steps required to re-bind your transmitter to the receiver should the need arise. During the bind process there is a unique ID from the transmitter communicated to the receiver to ensure trouble-free radio operation.

Steps to Re-Bind

1. Ensure that the transmitter and vehicle are both turned off.
2. Using the supplied Bind plug (which looks like a standard receiver plug with a wire loop installed) insert or plug into the receiver slot labeled "BIND". Looking down on the receiver this slot would be below the LED and is the farthest from the LED, or nearest to the corner of the receiver.
- Note: you do not need to remove any of the other plugs to re-bind.
3. With the Bind plug installed, turn on the vehicle. Notice a blinking Orange LED within the receiver.
4. Now you are ready to turn on the transmitter. You should notice on the back of the transmitter a similar blinking Orange LED under the translucent cover.
5. Both the receiver and transmitter blinking Orange LED's will stop blinking and become solid, indicating they have "bound" themselves together.
6. Please turn off both the vehicle and transmitter to remove the Bind plug from the receiver. Failing to remove the Bind plug will cause the transmitter to attempt to rebind every time you turn on the vehicle and transmitter.
7. Turn on both the vehicle and transmitter to ensure operation. If the transmitter does not control the vehicle, please repeat steps 1 to 6. Should this not correct the problem, please call Horizon Service/Repair for further assistance.
8. The Bind process is complete. Your vehicle's radio system should be ready for use.

STEP 6



Once the transmitter has been turned on, turn on the Mini-Slider by sliding the switch on the speed controller to the "On" position. If the rear wheels turn, adjust the "TH. Trim" knob located to the lower right of the steering wheel until they stop. To go forward, pull the trigger back. If you should need reverse, wait for the model to stop then push the trigger forward. When going forward the model should move in a straight line. If not, adjust the "ST. TRIM" so that it tracks in a straight line without having to turn the steering wheel. After you are finished, turn the Mini-Slider off **FIRST** by sliding the switch to the "OFF" position. After the model has been turned off, turn off the transmitter. If you wish to clean your Mini-Slider, use compressed air and/or a soft paintbrush to remove dust and dirt. **NEVER** use chemicals or anything wet as it can cause damage to both electronics and plastic parts.



Mini Sprint Troubleshooting Guide

Doesn't operate	Battery not charged or plugged in Receiver switch not "On" Transmitter not "On" or low battery	Charge battery / plug-in Turn on receiver switch Turn on / replace batteries
Motor runs but rear wheels don't move	Pinion not meshing with spur gear Pinion spinning on motor shaft Slipper too loose Transmission gears stripped Drive pin in axle missing	Adjust pinion/spur mesh Replace pinion gear on motor Check & adjust slipper Replace transmission gears Check & replace
Steering doesn't work	Servo plug not in receiver Servo gears or motor damaged	Check if plug in / all the way Replace or repair servo
Won't turn one direction	Servo gears damaged	Replace servo gears
Motor doesn't run	Motor plugs loose Motor wire broken ESC damaged	Plug in completely Repair or replace as needed Call Electronics Tech
ESC gets hot	Motor over-gearred Driveline bound up	Put smaller pinion on motor Check wheels & trans for binds
Poor run time and/or sluggish acceleration	Ni-MH pack not fully charged Charger not allowing full charge Slipper slipping too much Motor worn out Driveline bound up	Recharge Try another charger Check/adjust slipper Replace motor Check wheels & trans for binds
Poor range/glitches	Transmitter batteries low Transmitter antenna damaged Battery low in truck Loose plugs or wires	Check & replace as necessary Check & tighten Replace or recharge Check motor and power plugs
Slipper won't adjust	Drive pin missing in shaft Spur gear face worn out	Replace drive pin Replace spur gear & adjust slipper



SAFETY PRECAUTIONS

This is a sophisticated radio controlled model that must be operated with caution and common sense. Failure to operate your Mini Sprint in a safe and responsible manner could result in damage to the model and property. The Mini Sprint is not intended for use by children without direct adult supervision. Losi and Horizon Hobby shall not be liable for any loss or damages, whether direct, indirect, special, incidental, or consequential, arising from the use, misuse, or abuse of this product or any product required to operate it.

- This model is controlled by a radio signal subject to interference from many sources outside your control. This interference may cause momentary loss of control so it is advisable to always keep some distance in all directions around your model as a safety margin to avoid collisions.
- Always operate your model in an open area away from cars, traffic and people.
- Avoid running your model in the street where damage can occur.
- Never run your Mini Sprint with low transmitter batteries.
- Carefully follow the directions and warnings for this and any optional support equipment.
- Keep all chemicals, small parts and anything electrical out of the reach of children.

TOOLS AND ITEMS YOU WILL FIND HANDY

- Soft bristle brush for cleaning
- LOSA99161 5.5mm nut driver or similar
- LOAS99105 1.5mm Allen wrench or similar
- LOSA99100 .050" Allen Wrench



Note

Use only Losi tools or other high quality tools. Use of inexpensive tools can cause damage to the small screws and parts used on this type of model.

THE RADIO SYSTEM

The following is an overview of the various functions and adjustments found on the Mini Sprint radio system. Since the Mini Sprint operates on a radio signal you control, it is important for you to read and understand about all of these functions and adjustments before driving.

THE RECEIVER

1. **Throttle Port:**
Where the Electronic Speed Control (ESC) plugs in.
2. **Steering Port:**
Where the steering servo(s) plug in.
3. **Bind Port:**
Used to "bind" the receiver to the transmitter.
4. **Indicator Light:**
Shows that a frequency/channel is being received.



THE ELECTRONIC SPEED CONTROLLER (ESC)

1. **On/Off Switch:**
Powers the receiver and ESC.
2. **Setup Button and Indicator Light:**
Used for re-setting the ESC.
3. **Battery Lead:**
Connects to the battery pack for power.
4. **Motor Lead:**
Connects to the wire leads from the motor.



ESC SPECIFICATIONS

□ **Supports LiPo / NiMh battery type**

□ **2 different modes:**

1. Forward/Reverse & Smart Brake Mode
2. Forward only Mode

□ **One touch setup**

□ **LED indicator**

Immediately after ESC is turned ON (for 2 sec):

Only the RED LED flashing = LiPo Battery

Only the GREEN LED flashing = NiMh Battery

During Normal Operation:

Stop/Neutral (Depends on Mode)-Fwd/Reverse Mode = GREEN LED on solid

Stop/Neutral (Depends on Mode)-Forward Only Mode = GREEN LED flashing fast

Forward (not full speed) = All LED's are OFF

Forward (full speed) = Red LED is ON

Reversing (not full speed) = All LED's are OFF

Reversing (full speed) = Red LED is ON

Brake (full brake) = Red and Green LED is ON

Overheated = Flashing of Red and Green LED's

□ **Thermal protection**

If the ESC gets overheated it will shut off power output automatically, and the red and green LEDs will alternate flashing for 30sec. After 30 sec, the ESC will return to normal operation.

□ **Over load protection**

When the motor is stalled the ESC will automatically shut off the power output with the red LED flashing for 30seconds. After 30 seconds the ESC will return to normal operation.

□ **Voltage Protection (NiMh or LiPo)**

The user can select either 6V cutoff (Red LED for LiPo) or 4V cutoff (Green LED for NiMh).

When the input voltage becomes less than the selected value/battery type the ESC will automatically shut off the power output to protect the battery from over discharging.

□ **Electrical Specifications:**

Forward:

- Max instantaneous Current : 75A
- Max continuous Current : 15A
- On resistance : 0.004 ohm

Reverse:

- Max instantaneous Current : 75A
- Max continuous Current : 10A
- On resistance : 0.006 ohm

PWM frequency : 1 kHz

Operation Voltage : 4.8V ~ 8.4V

BEC : 5V/1A max at 7.2V

□ **Smart Brake:**

When the throttle is moved from Forward to Reverse or Reverse to Forward, the ESC will go into brake mode instead of allowing the motor to go into reverse immediately.



The ESC will remain in brake mode until the throttle is returned to the neutral position for a short time before moving it in the opposite direction.



ESC SETUP PROCEDURE

□ **Battery Selection:**

When the ESC is turned on the LED will flash for 2 seconds to indicate the Selected Battery Type. While the LED is flashing you can press the button to select the other battery type. After the button is pressed the LED will flash for 2 more seconds.

- A. Turn on ESC and push the button once within 2 seconds to change the battery type - pushing the button again will toggle between LiPo/NiMh battery types.
- B. Red light will select a LiPo battery and 6V cutoff
- C. Green light will select a NiMh battery and 4V cutoff

□ **One touch End-Points Setup:**

- A. Turn on the Transmitter with the throttle in the neutral position.
- B. Press the button and turn the ESC ON - release when the red/green LEDs light up.
- C. When the green LED flashes pull the throttle to the full forward position and hold until the green LED stays on solid. Release the throttle to the neutral position.
- D. Wait until the red LED flashes then push the throttle to the full reverse position and hold until the red LED stays on solid.
- E. Release the throttle to the neutral position and the ESC will return to the Battery Selection mode as mentioned above.

□ **ESC Mode Selection:**

During normal operation, GREEN LED indicates the ESC is in the motor off position:

- Forward/Reverse Mode = GREEN LED is on solid
- Forward Only Mode = GREEN LED is flashing fast

During Normal Operation, pressing the setup button over 2 seconds will select the alternate mode.

THE TRANSMITTER

1. **Steering Wheel:** Controls direction (left/right) of the model.
2. **Throttle Trigger:** Controls speed and direction (forward/reverse) of the model.
3. **Antenna:** Transmits signal to the model.
4. **On/Off Switch:** Turns the power on for the transmitter operation.
5. **Indicator Lights:** Green (top) light indicates adequate battery power. Red (bottom) light indicates signal strength.
6. **Steering Trim (ST. TRIM):** Adjusts the "hands off" direction of the model.
7. **Throttle Trim (TH. TRIM):** Adjusts the motor speed to stop at neutral.
8. **Steering Rate:** Adjusts amount front wheels move when the steering wheel is turned left or right.
9. **Steering Reverse Switch (ST. REV):** Reverses the function of the steering when the wheel is turned left or right.
10. **Throttle Reverse Switch (TH. REV):** Reverses the function of the speed control when pulled back or pushed forward.
11. **Bottom Cover:** Covers and holds the batteries powering the transmitter.



RE-BINDING THE TRANSMITTER TO THE RECEIVER

The Losi DSM radio system included in the Mini Sprint operates on 2.4 GHz, and provides 79 different channels which are automatically selected when the transmitter and vehicle are turned on. The communication between the transmitter and receiver starts in the few seconds after the transmitter and vehicle are both turned on. This is called the “binding process”. The Losi DSM radio system will not interfere with previous technology radio systems that operate on 27 MHz or 75 MHz frequencies and you will not receive any interference from them.

Although set at the factory, below are the steps required to re-bind your transmitter to the receiver should the need arise. During the bind process there is a unique ID from the transmitter communicated to the receiver to ensure trouble free radio operation.

STEPS TO RE-BIND

1. Ensure that the transmitter and vehicle are both turned off, and the transmitter is several feet away from the receiver.
2. Using the supplied Bind plug (which looks like a standard receiver plug with a wire loop installed) insert or plug into the receiver slot labeled “BIND”. Looking down on the receiver this slot would be below the LED and is the furthest from the LED, or nearest to the corner of the receiver.



You do not need to remove any of the other plugs to re-bind.

3. With the Bind plug installed, turn on the vehicle. Notice a blinking Orange LED within the receiver.
4. Now you are ready to turn on the transmitter. You should notice on the back of the transmitter a similar blinking Orange LED under the translucent cover.
5. Both the receiver and transmitter blinking Orange LED will stop blinking and become solid indicating they have “bound” themselves together.
6. Please turn off both the vehicle and transmitter to remove the Bind plug from the receiver. Failing to remove the Bind plug will cause the transmitter to attempt to rebind every time you turn on the vehicle and transmitter.
7. Turn on both the vehicle and transmitter to ensure operation. If the transmitter does not control the vehicle, please repeat steps 1 to 6. Should this not correct the problem please call Horizon Service/Repair for further assistance.
8. The Bind process is complete. Your vehicle’s radio system should be ready for use.



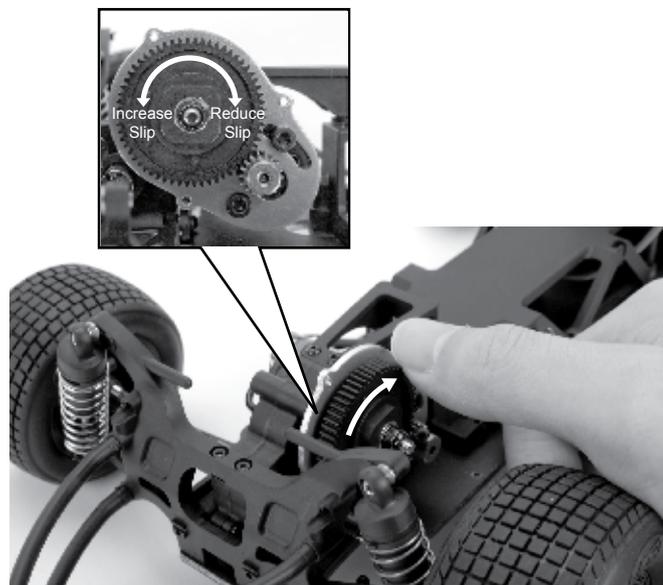
For Bind-N-Drive version, see your transmitter manual for binding instructions.

CHASSIS TUNING

The Mini Sprint has several adjustments available to you for tuning the performance for your needs. Although there are multiple shock positions and camber link locations provided, we have built the model with the best overall settings. The following are simple adjustments and easily maintained settings to assure proper operation and performance. It is advised when making any adjustment that you do so in small increments and always check for other parts of the chassis that are affected.

SLIPPER ADJUSTMENTS

The Mini Sprint is equipped with a slipper device offering both traction control and protection for the transmission. The slipper is primarily used to help absorb sudden impacts on the drivetrain due to landing big jumps or when using more powerful aftermarket motors and/or battery packs. Additionally, it can be used to smooth out the flow of power to the rear wheels and limit wheel spin when running on extremely slick surfaces. Adjustment is made by turning the 3mm adjustment nut clockwise (to the right) to reduce the slip, or counterclockwise (to the left) to increase the slip. When adjusted properly, you should be able to hold the rear tires firmly and barely be able to push the spur gear forward with your thumb. To track test, turn the Mini Sprint on and place it on the ground. As you push it backwards allowing it to roll freely, punch the throttle. The slipper should slip no more than an inch or two as it accelerates. With the included motor and battery pack it should slip just a little.



STEERING RATE

Your transmitter is equipped with a steering rate control to the left of the steering wheel. This advanced feature, usually found only on competition-type radios, allows you to adjust the amount the front tires move when you turn the steering wheel. This is really helpful when you are on slick, as well as high traction, surfaces. If your Mini Sprint turns too sharply and/or spins out easily, try turning the steering rate down by rotating the knob counterclockwise (to the left). For sharper or additional steering, try turning the knob clockwise (to the right).

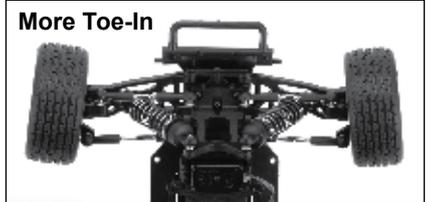
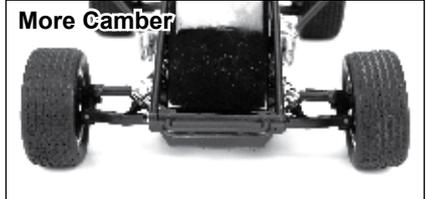
Less Rate

Full Rate



CAMBER

Camber is the angle of the tires to the racing surface when viewed from the front or rear of the truck. You want to keep both the front and rear tires straight up and down or leaning in at the top very slightly. If you are running on carpet or similar high traction surfaces, you may find leaning the tires in a bit more helps. This adjustment is made with the threaded links extending from the front or rear bulkhead to the spindle carrier or rear hub. Making the camber rods shorter increases the camber and lean-in of the tire, while making the camber rods longer decreases the camber.



TOE-IN

This is the relationship of the left and right side tire to one another. Ideally you want the front of the tires to be pointed inward toward each other just slightly when viewed from above. This makes the model track straight and stable. This is controlled with the threaded steering rods on either side. As you make them longer you will increase the toe-in and vice versa.

RIDE HEIGHT

This is the height the chassis sits and runs at. Spring spacers included with the Mini Sprint, when installed between the shock top and spring, will increase the pre-load on the spring and raise the chassis. You may want to try this when running on extremely rough surfaces.

SERVICE/REPAIR

RADIO/SPEED CONTROL AND MOTOR

If you have any problems other than those covered in the troubleshooting section, please call the electronics service department at (877) 504-0233. They will be able to give your specific problem additional attention and instruct you as to what needs to be done.

CHASSIS

If you have any questions other than those covered in the troubleshooting or maintenance sections, please call (877) 504-0233.

CLEANING

Performance can be hindered if dirt gets in any of the moving suspension parts. Use compressed air, a soft paintbrush, or toothbrush to remove dust or dirt. Avoid using solvents or chemicals as they can actually wash dirt into the bearings or moving parts as well as cause damage to the electronics.

REBUILDING THE DIFFERENTIAL

The gears in the differential will wear over time. The same is true for the outdrives, driveshafts, and rear axles. We suggest using a small rag or paper towel to lay out the parts you remove to make it easier to reassemble.

DISASSEMBLY

1. Unplug the motor.
2. Remove the two screws attaching the roll cage at the back as well as the two at the top and bottom of the shock tower.
3. Remove the two screws attaching the rear brace to the transmission and the four screws at the bottom of the chassis holding the gearbox in place and slide it out of the chassis.
4. Remove the steel outdrives from either side then the left side of the gearbox by removing the four screws.
5. Carefully remove the large plastic sun gear and the bevel gears on either side of it. You can use the removed differential assembly as a guide for putting together the replacement unit (a little Team Losi Teflon grease #LOSA3066 or LOSA99208 can be applied for even better performance).
6. Remove the center mounted idler gear from the gearbox. Remove the shaft and push out the ball bearings from either side. Install these bearings in the new gear.



REASSEMBLY

Replace the idler gear and shaft into the center of the same right side of the gearbox. Replace the large bevel gears into the bearings in both the left and right side gear box half. Place the center diff gear with the three small bevel gears already installed into the center so the bevel gears seat with each other. Replace the screws and reinstall the rebuilt gearbox using the steps in reverse order that were used to remove it.

CHANGING THE SPUR GEAR

If you are replacing the spur gear with one of a different size (number of teeth), you must first loosen (do not remove) the two screws that secure the motor and slide it back slightly. Remove the 3mm nut at the end of the slipper shaft and all of the slipper parts on the outside of the spur gear as well as the old gear. Place the new spur gear into position and replace the slipper parts. If you have changed the size of the spur, see Setting the Gear Mesh below. After you have changed the spur gear, you will have to adjust the slipper as described elsewhere.

CHANGING THE PINION GEAR/GEAR RATIO

Before you change the pinion gear ask yourself why you are doing it. In general, if you change to a larger pinion the top speed will improve but you will see less acceleration and run time, This can also lead to the motor failing due to excess heat and load which is not covered by the warranty. This would only be advisable for really long rack layouts with few tight turns. Changing to a smaller pinion will give you quicker acceleration and possibly a bit longer run time. This would be good for short layouts or when running hotter motors. The pinion on the Mini Sprint offers the best balance of both. To change the pinion, loosen the motor screws, and slide the motor back. Place the new pinion on the end of the motor shaft, so the set screw is located over the flat on the shaft. Position it so the teeth line up with the spur gear and secure by tightening the set screw. See Setting the Gear Mesh below.



When running aftermarket motors, check with the motor manufacturer for correct gearing. Never over-gear the motor as it can cause overheating, damaging it and the speed control.

SETTING THE GEAR MESH

The motor screws should be slightly loose. Slide the motor back allowing the pinion gear to mesh with the spur gear. Snug (not tight) the bottom motor screw and try rocking the spur back and forth. There should be a slight bit of movement before the motor is forced to turn over. If not, pull the top of the motor forward slightly and recheck. If there is too much slop between the gears, push the top of the motor back. When set properly the wheels can be spun forward freely with very little noise. Make sure to tighten both motor screws before running.



STEERING SERVO INSTALLATION/REMOVAL

Unplug the servo lead from the receiver. Remove the four small screws that secure the servo mount/chassis brace to the chassis. Use a screwdriver or small pliers to pop the steering link off of the servo, so it can be removed before installing the servo saver on a new servo plug the servo into the receiver and turn the radio ON to let it center and allow for the servo saver to be located properly. Replace in the reverse sequence used to remove it.

RECEIVER/SPEED CONTROL (ESC) INSTALLATION/REMOVAL

Unplug the power lead, motor leads and steering servo. Do not attempt to open the receiver or electronic speed control (ESC) as only a factory technician has the proper tools and parts to make any repairs necessary. The receiver and ESC are mounted with double-sided foam tape. Use your thumb and index finger at the bottom of the front corners to pull them from the mount. If this is difficult, ask for help. If necessary, carefully use a large flat blade screwdriver between the unit and the mount to pry it loose. Make sure you remove any left over foam or adhesive before remounting with common servo tape or hobby type foam tape.



LOSI DSM RADIO SYSTEM

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

This product contains a radio transmitter with wireless technology which has been tested and found to be compliant with the applicable regulations governing a radio transmitter in the 2.400 GHz to 2.4835 GHz frequency range.

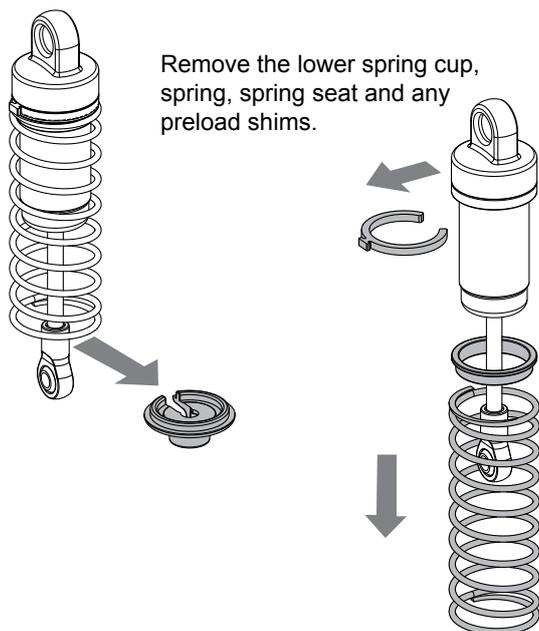
The following countries associated regulatory agencies recognizing the noted certifications for this product as authorized for sale and use are: **USA - Belgium - Canada - Denmark - Finland - France - Germany - Italy - Netherlands - Spain - Sweden - UK**



Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

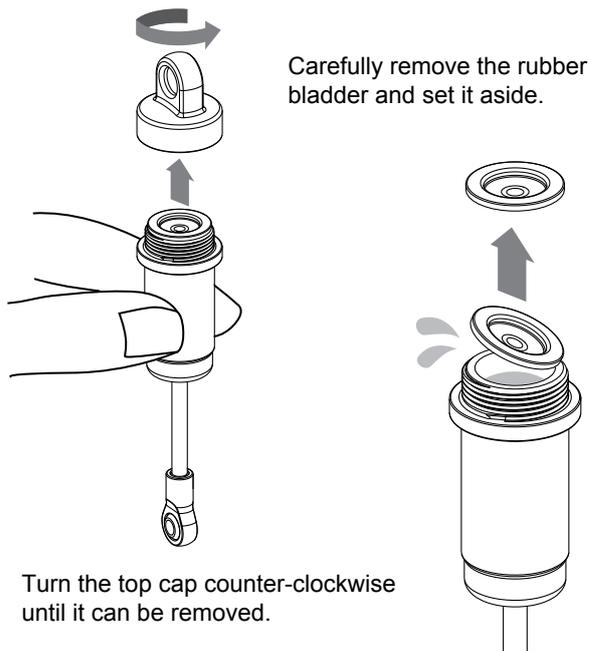
REBUILDING/REFILLING THE SHOCKS

STEP 1



Remove the lower spring cup, spring, spring seat and any preload shims.

STEP 2



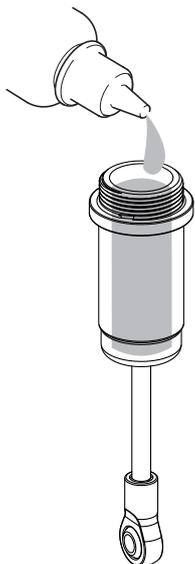
Carefully remove the rubber bladder and set it aside.

Turn the top cap counter-clockwise until it can be removed.

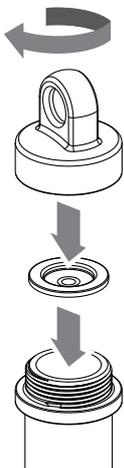
STEP 3

Bleeding:

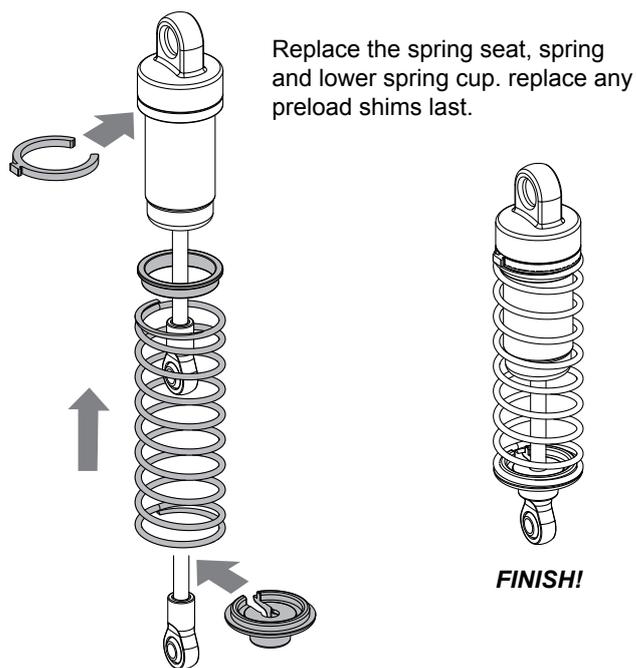
1. Loosen the cap one turn, slowly push the bottom of the shaft up until it stops - allowing any extra oil to escape.
2. Re-tighten the cap and check for smooth operation.
3. If resistance is felt at the top repeat bleeding steps.



Refill or change the fluid leaving 1/16" of air space at the top. Replace the bladder and cap.



STEP 4



Replace the spring seat, spring and lower spring cup. replace any preload shims last.

FINISH!



WARRANTY PERIOD

Exclusive Warranty- Horizon Hobby, Inc., (Horizon) warranties that the Products purchased (the "Product") will be free from defects in materials and workmanship at the date of purchase by the Purchaser.

LIMITED WARRANTY

Horizon reserves the right to change or modify this warranty without notice and disclaims all other warranties, express or implied.

(a) This warranty is limited to the original Purchaser ("Purchaser") and is not transferable. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. This warranty covers only those Products purchased from an authorized Horizon dealer. Third party transactions are not covered by this warranty. Proof of purchase is required for all warranty claims.

(b) Limitations- HORIZON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCT. THE PURCHASER ACKNOWLEDGES THAT THEY ALONE HAVE DETERMINED THAT THE PRODUCT WILL SUITABLY MEET THE REQUIREMENTS OF THE PURCHASER'S INTENDED USE.

(c) Purchaser Remedy- Horizon's sole obligation hereunder shall be that Horizon will, at its option, (i) repair or (ii) replace, any Product determined by Horizon to be defective. In the event of a defect, these are the Purchaser's exclusive remedies. Horizon reserves the right to inspect any and all equipment involved in a warranty claim. Repair or replacement decisions are at the sole discretion of Horizon. This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of or to any part of the Product. This warranty does not cover damage due to improper installation, operation, maintenance, or attempted repair by anyone other than Horizon. Return of any Product by Purchaser must be approved in writing by Horizon before shipment.

DAMAGE LIMITS

HORIZON SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCT, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE, OR STRICT LIABILITY. Further, in no event shall the liability of Horizon exceed the individual price of the Product on which liability is

asserted. As Horizon has no control over use, setup, final assembly, modification or misuse, no liability shall be assumed nor accepted for any resulting damage or injury. By the act of use, setup or assembly, the user accepts all resulting liability.

If you as the Purchaser or user are not prepared to accept the liability associated with the use of this Product, you are advised to return this Product immediately in new and unused condition to the place of purchase.

Law: These Terms are governed by Illinois law (without regard to conflict of law principals).

WARRANTY SERVICES**QUESTIONS, ASSISTANCE, AND REPAIRS**

Your local hobby store and/or place of purchase cannot provide warranty support or repair. Once assembly, setup or use of the Product has been started, you must contact Horizon directly. This will enable Horizon to better answer your questions and service you in the event that you may need any assistance. For questions or assistance, please direct your email to productsupport@horizonhobby.com, or call 877.504.0233 toll free to speak to the Product Support Department.

INSPECTION OR REPAIRS

If this Product needs to be inspected or repaired, please use the Horizon Online Repair Request submission process found on our website or call Horizon to obtain a Return Merchandise Authorization (RMA) number. Pack the Product securely using a shipping carton. Please note that original boxes may be included, but are not designed to withstand the rigors of shipping without additional protection. Ship via a carrier that provides tracking and insurance for lost or damaged parcels, as Horizon is not responsible for merchandise until it arrives and is accepted at our facility. An Online Repair Request is available at www.horizonhobby.com <http://www.horizonhobby.com> under the Repairs tab. If you do not have internet access, please contact Horizon Product Support to obtain a RMA number along with instructions for submitting your product for repair. When calling Horizon, you will be asked to provide your complete name, street address, email address and phone number where you can be reached during business hours. When sending product into Horizon, please include your RMA number, a list of the included items, and a brief summary of the problem. A copy of your original sales receipt must be included for warranty consideration. Be sure your name, address, and RMA number are clearly written on the outside of the shipping carton.

Notice: Do not ship batteries to Horizon. If you have any issue with a battery, please contact the appropriate Horizon Product Support Department.

WARRANTY INSPECTION AND REPAIRS

To receive warranty service, you must include your original sales receipt verifying the proof-of-purchase date. Provided warranty conditions have been met, your Product will be repaired or replaced free of charge. Repair or replacement decisions are at the sole discretion of Horizon.



WARRANTY INFORMATION

WARRANTY PERIOD

Should your repair not be covered by warranty the repair will be completed and payment will be required without notification or estimate of the expense unless the expense exceeds 50% of the retail purchase cost. By submitting the item for repair you are agreeing to payment of the repair without notification. Repair estimates are available upon request. You must

include this request with your repair. Non-warranty repair estimates will be billed a minimum of ½ hour of labor. In addition you will be billed for return freight. Horizon accepts money orders and cashiers checks, as well as Visa, MasterCard, American Express, and Discover cards. By submitting any item to Horizon for inspection or repair, you are agreeing to Horizon's Terms and Conditions found on our website under the Repairs tab.

Country of Purchase	Horizon Hobby	Address	Phone Number/ Email
United States	Horizon Service Center (Electronics and engines)	4105 Fieldstone Rd Champaign, Illinois 61822 USA	877-504-0233 productsupport@horizonhobby.com
	Horizon Product Support (All other products)	4105 Fieldstone Rd Champaign, Illinois 61822 USA	877-504-0233 productsupport@horizonhobby.com
United Kingdom	Horizon Hobby Limited	Units 1-4 Ployters Rd Staple Tye Harlow, Essex CM18 7NS United Kingdom	+44 (0) 1279 641 097 sales@horizonhobby.co.uk
Germany	Horizon Technischer Service	Hamburger Str. 10 25335 Elmshorn Germany	+49 4121 46199 66 service@horizonhobby.de
France	Horizon Hobby SAS	14 Rue Gustave Eiffel Zone d'Activité du Réveil Matin 91230 Montgeron	+33 (0) 1 60 47 44 70

COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

CE DECLARATION OF CONFORMITY

(in accordance with ISO/IEC 17050-1)

No. HH20100704

Product(s): Losi Mini Sprint

Item Number(s): LOSB0206

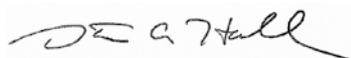
Equipment class: 1

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

EN 300-328 Technical requirements for Radio equipment.
EN 301 489-1, 301 489-17 General EMC requirements
EN 60950 Safety

Signed for and on behalf of:

Horizon Hobby, Inc.
Champaign, IL USA
July 04, 2010



Steven A. Hall
Vice President
International Operations and Risk Management
Horizon Hobby, Inc.

(in accordance with ISO/IEC 17050-1)

No. HH20100409

Product(s): 1/18 Mini-Sprint Bind & Drive

Item Number(s): LOSB0206BD

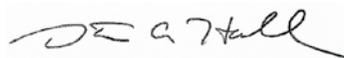
Equipment class: 1

The object of declaration described above is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

EN 301 489-1, 301 489-17 General EMC requirements

Signed for and on behalf of:

Horizon Hobby, Inc.
Champaign, IL USA
July 04, 2010



Steven A. Hall
Vice President
International Operations and Risk Management
Horizon Hobby, Inc.





**INSTRUCTION FOR DISPOSAL OF
WEEE BY USERS IN THE EUROPEAN UNION**

This product must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or where you purchased the product.



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