

# Introduction

Thank you for choosing the Team Losi XXX-S Sport Sedan. This is a highly developed R/C model that features a computer based radio system, programmable electronic speed control, and 19-turn high performance motor. Although it is an entry-level model, it does require some mechanical experience and/or parental supervision. This guide contains the basic instructions for operating and maintaining your new XXX-S Sport. It is critical that you read all of the instructions in this and all accompanying manuals in order to operate your model correctly and avoid damage. Please take a moment to look them over before running the model. Your hobby dealer cannot, under any circumstances, accept a model for return or exchange that has been run.

#### **Safety Precautions**

This is a sophisticated, high performance radio controlled model, which needs to be operated with caution and common sense. Failure to operate your model in a safe and responsible manner could result in personal and/or property damage. It is your responsibility to see that the instructions are followed and precautions adhered to. The XXX-S Sport is not intended for use by children without direct adult supervision. Team Losi, JR, Novak, Trinity and Horizon Hobby Inc. shall not be liable for any loss or damages, whether direct, indirect, special, incidental, or consequential, arising from use, misuse, or abuse of this product or any product required to operate it

- Always follow the manufactures instructions for the battery, battery charger, radio and speed controller
- The motor and battery pack will be hot during and after use. Avoid touching either of these until they are allowed to cool.
- It is normal for the battery pack to get slightly warm but not hot while charging. If it does become overheated, disconnect from the charger immediately and let it cool before use.
- Always operate your model in an open area away from cars and people to avoid the potential of injury or damage
- This model is controlled by a radio signal that is subject to interference from sources outside your control. This can cause temporary loss of control so it is advisable to always keep a safety margin in all directions to avoid collisions.
- Never operate your model in standing water or wet conditions as loss of control and damage to the electronics can occur.

## **Service Information**

Electronics (Radio/Motor/Speed Controller) - (877) 504-0233 Horizon Hobby Customer Service Chassis (Anything not electric) - (909) 390-9595 Team Losi Customer Service

# **Required Equipment**

You will need the following items to operate your new XXX-S Sport Sedan.

- 8 each "AA" size Alkaline batteries for the transmitter 7.2 volt rechargeable Ni-Cad battery pack.
- Charger for Ni-Cad batteries.

# **Tools You Will Find Handy**

In addition to the small tools supplied with this model you will find the following most useful • Needle nose

DYN4036

DYN1145

DYN1005

DYN4010

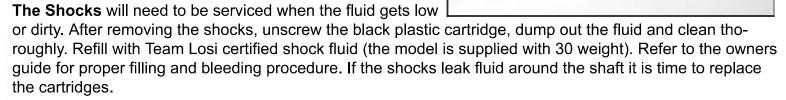
DYN4049

pliers • Hobby knife • Small screw driver • Quality 1/16", and

3/32" hex (Allen) drivers.

## Normal Service, Cleaning, and Adjustments

Cleaning:Performance can be hindered if dirt gets in any of the moving suspension parts. Use compressed air, a soft paint brush and/or toothbrush to remove dust or dirt. Avoid using solvents as this can actually wash dirt into the bearings and areas not accessible with out dissembly.



The Differentials should be serviced when the diff action becomes extremely gritty felling. After disassembly, clean (or replace if necessary) the balls and drive rings then re-lube with Team Losi diff lube (LOSA3065). Complete assembly instructions are available in the enclosed owners manual.

**Differential Adjustment:** The front and rear differentials should be adjusted prior to the first use out of the box or after a rebuild/service and then again after several battery packs have been run. After this initial breakin period it is only necessary to check it after every hour of operation.

Checking/Adjustin the Rear Diff: After removing the gear cover, use your left thumb to hold the spur gear while holding the right side rear tire firmly to work the work surface as shown in Photo #1 of "Checking/Adjusting the Diffs". Now try to turn the left side tire toward the back of the model. It should be very difficult to turn. If not, the diff needs to be addjusted tighter. Step 1) locate the slot of the diff adjustment screw in the left side outdrive. This is done by holding the left rear wheel while turning the right tire (Photo #2). Step 2)Insert the long side of the 1/16" Allen wrench (included in the accessory bag) through the slot of the outdrive and diff screw so that they are locked together (Photo #3). Step 3) While holding the 1/16" Allen wrench in the diff screw and outdrive, trun the right side tire forward tightening the diff about as tight as you would the lid of a jar (Photo #4). Step 4) Recheck the diff and tighten again if necessary. Step 5) Replace the gear cover before operating.

**Checking/Adjusting the Front Diff:** 1)Use your right forearm to hold the left front tire down to the work surface while holding the spur gear with your right hand as shown in photo #5. Now try to turn the right front tire toward the rear of the model to check the adjustment. The diff adjustment screw is located in the left outdrive as in the rear. Use the same technique and **steps 1-5** outline above to adjust the front diff.

#### **Warranty and Technical Information**

This model and the electronics in it have been factory assembled and thoroughly check at the time of shipment and as such is only warranted against original factory defects in materials and/or work workmanship. Under no circumstances will any of the electronics be considered under warranty that have been disassembled or any part of the model that has been used for a purpose or ina fashion other than it was originally intended or designed.

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# **Product Support**

#### DO NOT CONTACT NOVAK ELECTRONICS!

All Speed Control Service and support is only available from Horizon Hobby Inc. If you call Novak Electronics, they will direct you to Horizon Hobby. If you require assistance with your speed control, Contact **Horizon Hobby Customer support at 877-504-0233** 

# **Step 1.Precautions** ★FAILURE TO FOLLOW PRECAUTIONS VOIDS ANY WARRANTY

- WATER & ELECTRONICS DON'T MIX! Do not operate model in or around water. Never allow water, moisture or other foreign materials to get inside the ESC.
- 15-TURN MOTOR LIMIT Use only motors with 15 turns or more. Using motors with fewer than 15 turns will cause overheating and will void the warranty.
- **4 TO 7 CELLS ONLY** Never use fewer than 4, or more than 7 cells (4.8-8.4 volts DC) in the main battery pack.
- NO REVERSE VOLTAGE! Reverse battery polarity can damage speed control—Disconnect battery immediately.
- NO SCHOTTKY DIODES Using external Schottky diodes with reversible ESCs will damage ESC & void warranty.
- **DISCONNECT BATTERIES WHEN NOT IN USE** Always disconnect battery from ESC when unattended or not in use to avoid possible short circuits. Even if switch is off, MOSFETs may fail & cause shorting of battery pack that could result in fire or burning of ESC & surrounding objects.
- TURN TRANSMITTER ON FIRST Turn on transmitter before ESC so you will have control of the radio equipment.
- **INSULATE WIRES** Always insulate exposed wiring with heat shrink tubing or electrical tape to avoid short circuits.

# **Step 2. Programming Speed Control**

With a charged battery pack installed & pluged into the ESC:

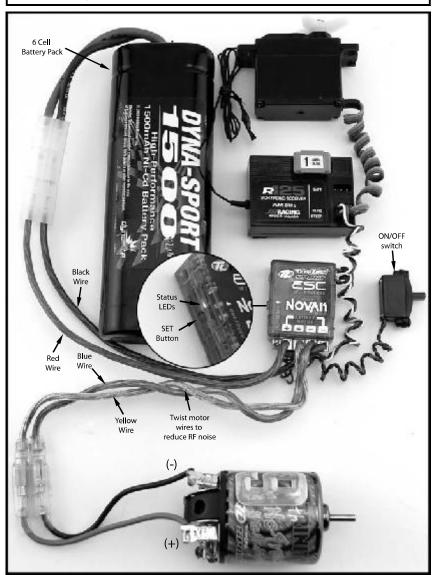
- 1. TURN ON THE TRANSMITTER, THEN SPEED CONTROL
- PRESS & HOLD SPEED CONTROL'S SET BUTTON
   With transmitter throttle at neutral, press and hold the
   ESC SET button until the status LED turns solid red.
- 3. RELEASE ESC SET BUTTON WHEN LED IS RED
- **4. PULL TRANSMITTER THROTTLE TO FULL-ON POSITION**Hold it there until the status **LED** *turns solid green*.

  NOTE: Motor will not run during programming even if connected
- 5. PUSH TRANSMITTER THROTTLE TO FULL-REVERSE Hold it there until the status LED blinks areen.
- **6. RETURN TRANSMITTER THROTTLE TO NEUTRAL**Status LED will turn solid red, indicating that throttle is at neutral and proper programming has been completed.

  If transmitter settings are changed, programming must be repeated.

The Team Losi Sport Esc features "Smart Braking II" circuitry which gives you full range of braking without going into reverse until you shift it into reverse by returning the trigger to neutral.

If you experience any problems, turn off ESC and repeat programming.



# **TROUBLE-SHOOTING GUIDE**

#### **Steering Channel Works But Motor Will Not Run**

- Speed control has thermally shut down Allow ESC to cool down - Use milder motor or smaller pinion gear.
- Check motor connections. Check Motor.
- Make sure ESC is plugged into the trhottle channel of receiver. Check throttle channel operation with a servo.
- Check wiring color sequence of receiver signal harness. Possible internal damage Call Customer Service

# Receiver Glitches/Throttle Stutters During Acceleration

- Motor capacitors broken or missing
- Receiver or antenna to close to speed control, power wires, battery, or motor
- Bad connections Check wiring and connectors
- Motor brushes worn Replace brushes or motor.
- Excessive motor current Use milder motor/smaller pinion gear

#### **Motor and Steering Servo Do Not Work**

- Check wires, receiver signal harness wiring & color sequence, radio system, crystals, battery/motor connectors & battery.
- Possible internal damage Call Customer Service

#### **Model Runs Slowly/Slow Acceleration**

- Check motor and battery connectors Replace if needed.
- Bad battery or motor Check with another battery/motor
- Incorrect transmitter/ESC Adjustment Refer to Step 2.

## **Motor Runs Backwards**

• Motor wired backwards - Check wiring and reverse

For technical assitance regarding the Team Losi Sport Speed Controller, call 877-504-0233

**Do Not Call Novak Electronics** 

XXX-S Trouble Shooting Guide		
Problem	Thing to check	Remedy
Short run time	Battery not charged/bad	Check/charge battery pack
	Motor dirty or brushes worn	Clean/replace
	Diff slipping	Check/adjust differential
Sluggish Acceleration	Motor dirty/brushes worn	Clean/replace
	Bind in drive train	Back of motor and check -
		repair as necessary
Motor/ESC overheated	Allow to cool and retry	
	Over geared	Install smaller pinion gear
Doesn't operate	Transmitter battery	Check meter & batteries
	Transmitter not on	Turn on / check voltage
	Receiver not on	Turn on switch in car
	Check ESC & receiver plugs	
	Battery pack charge/plug	Check plugs, wires, charge
Poor run time	Diff slipping	Check/adjust diffs
	ESC (Elec. Speed Control)	Check program instructions
	Battery pack	Check/replace battery pack
Poor range / Glitches	Transmitter battery low	Check/replace
	Transmitter antenna loose	Check/tighten
	Battery pack not charged	Charge and retry
	Receiver antenna cut/worn	Check, send in for repair
	Motor dirty/worn brushes	Check clean/replace
	Loose plugs or wires	Check all plugs and wires

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