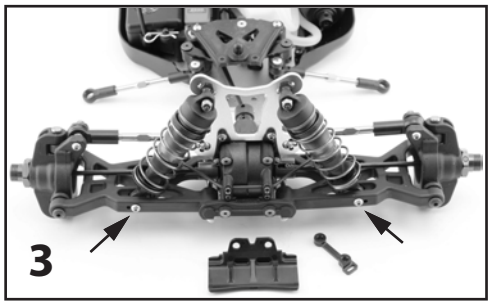
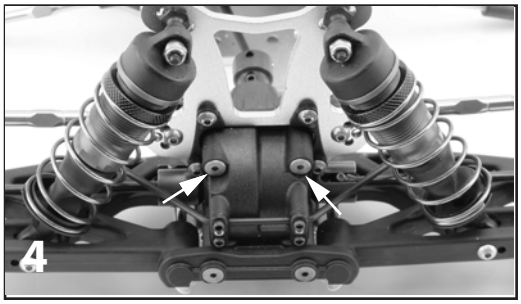
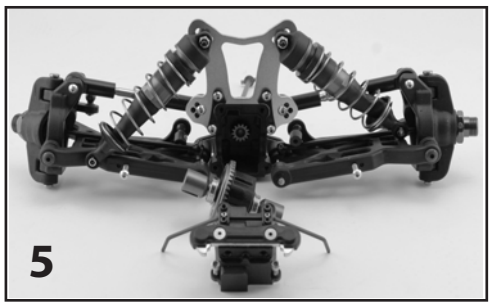
Removing The Front Differential - continued

Remove the 5-40 shock screws from the suspension arms. (fig. 3) Loosen the 5-40 set screws on the sway bar ball ends. Remove the two 5-40 flathead screws from the front of the diff cover (fig. 4), and remove the two 5-40 caphead screws from the bottom of the diff cover. Slide the diff cover off of the bulkhead and remove the diff. (fig. 5)

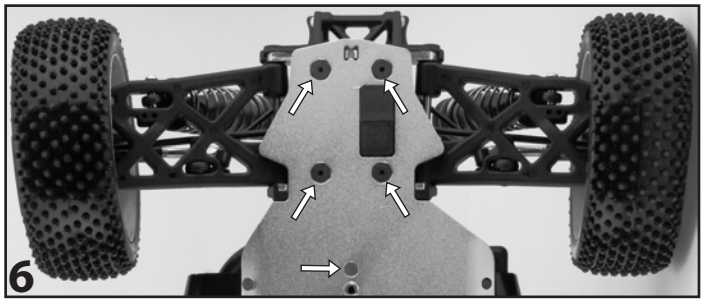


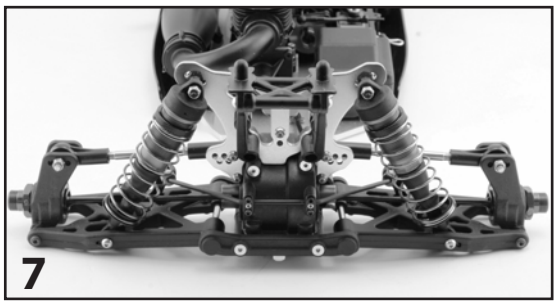




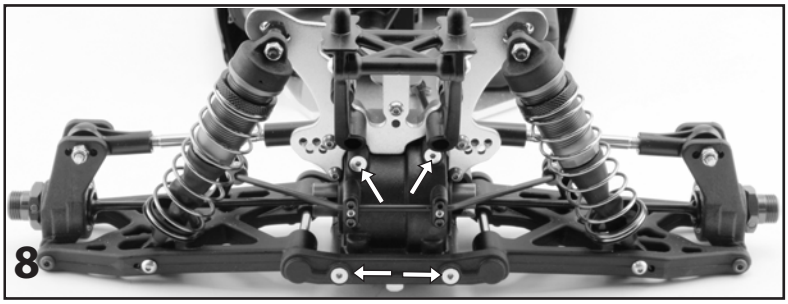
Removing The Rear Differential

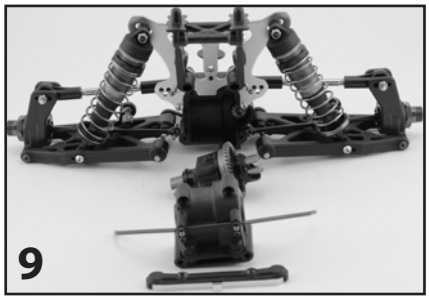
To remove the rear differential, the "rear clip" of your 8IGHT RTR has to be removed. Remove four 8-32 flathead screws from the chassis and the 5-40 flathead screw from the brace (fig. 6). Lift the rear clip up and off of the chassis (fig. 7).





Loosen the 5-40 setscrews on the sway bar ball ends and remove the ball ends from the sway bar. Remove four 5-40 flathead screws from the rear clip (fig. 8). Slide the pivot support and rear diff cover off of the bulkhead and remove the diff (fig. 9).

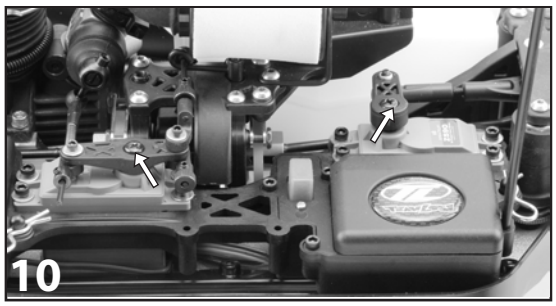


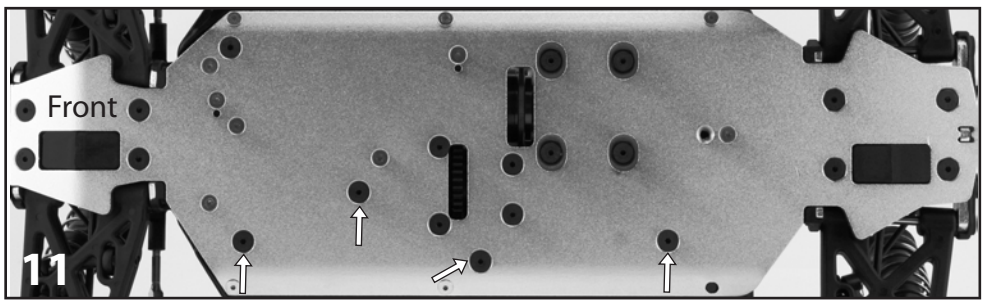


Removing The Center Differential

To remove the center differential, the radio tray on your 8IGHT RTR has to be removed.

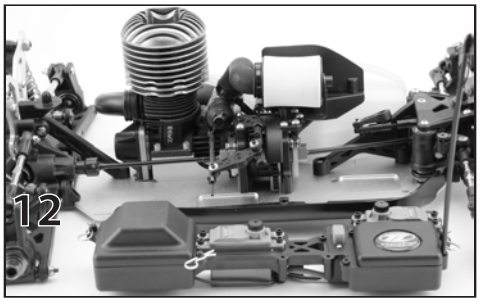
- Turn on the transmitter and receiver.
- Note the position of the throttle and steering servo horns. This is important so you know where to position the servo horns during re-assembly.
- Remove the 3mm Phillips head machine screw, (fine threads), from the steering servo and the 3mm self tapping screw, (coarse threads), from the throttle servo, (fig.10). Remove the servo horns leaving the inserts on the servos. Turn the transmitter and receiver off.
- Remove the four 8-32 x 3/8" flathead screws from the radio tray, (fig. 11).

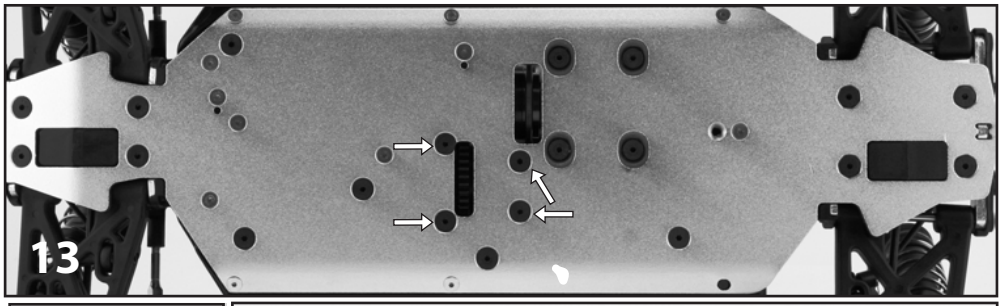


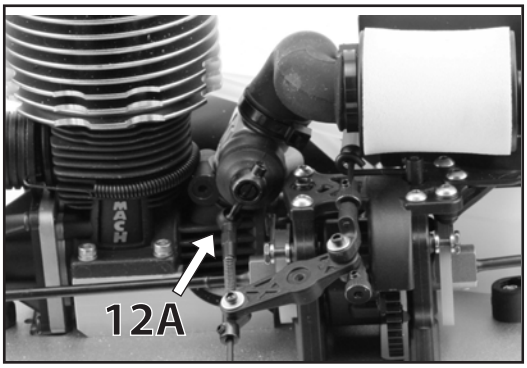


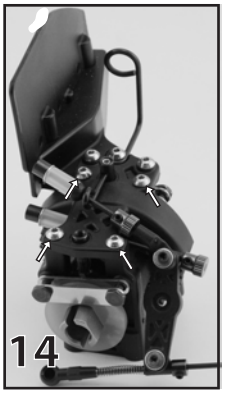
Removing The Center Differential - continued

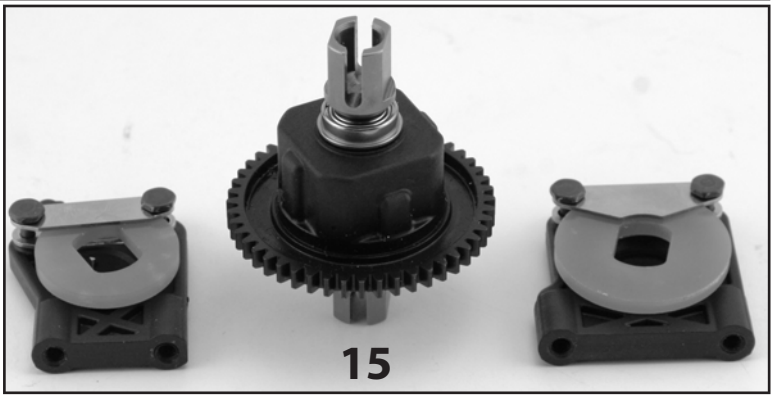
- Remove the radio tray from the chassis, (fig. 12).
- Pop the ball end off of the carburetor slide, fig. (12A)
- Remove four 8-32 x 1/2" flathead screws from the center differential housing, (fig. 13), and remove the center diff from the chassis.
- Remove four 5-50 x 3/8" button head screws from the center top brace, (fig. 14).
- Slide the front and rear brake rotor assemblies off of the center diff, (fig. 15). NOTE: There are two different size brake discs. The large disc is in the front brake assembly and the small disc is in the rear brake assembly.











Diff Service - Refer to exploded views on page 8.

- Remove the four 3mm flat head screws from the ring gear allowing it to be removed (use the 5/64 allen wrench).
- Inspect the ring and pinion gears for wear - replace if necessary.
- Remove the cross shafts and bevel gears from the carrier.
- Clean and inspect all parts - replace as needed.
- Check all ball bearings. Clean or replace as necessary.
- Lube all shafts and gears with LOSA3066 assembly grease and reassemble.
- Load cross shafts with gears into the carrier with extra grease. Apply the diff seal gasket to the carrier and reinstall ring gear.
- Lube ring and pinion and with grease (LOSA #3066), and reassemble diff into diff housing.
- Grease the edges of the gear cases. This will ensure a dust free seal.
- Reinstall into chassis

For Viscous Differential

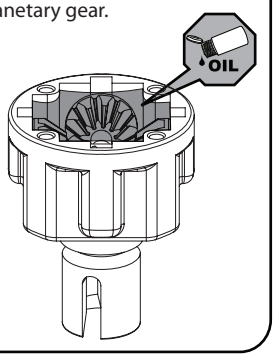
Instead of grease you can use Silicone fluid in the differential for a limited slip feel as desired for racing. Simply fill the diff up to the top of the gears before replacing the ring gear. (Be sure to reinstall the rubber gasket). You may have to replace the o-rings on the outdrives at the same time you change to this type of differential if the old ones are worn. Team Losi recommends 5000cs. fluid for the front diff, 7000cs. fluid for the center diff, and 2000cs. fluid for the read diff.

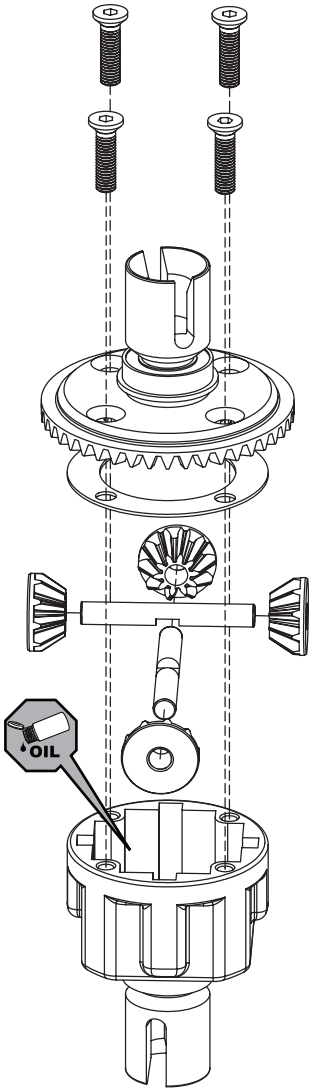
TEAM LOSI
SILICONE DIFF FLUID
A5278 - 2000 cs.
A5280 - 5000 cs.
A5281 - 7000 cs.

Front, Rear and Center Differential Exploded Views

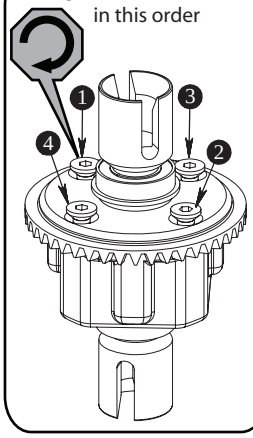
Front & Rear Differentials

Fill with 5000cs. oil (front) or 2000cs. oil (rear) just above the planetary gear.



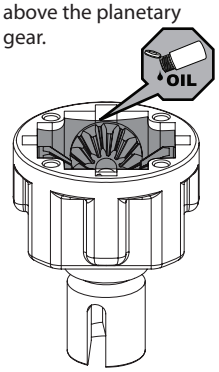


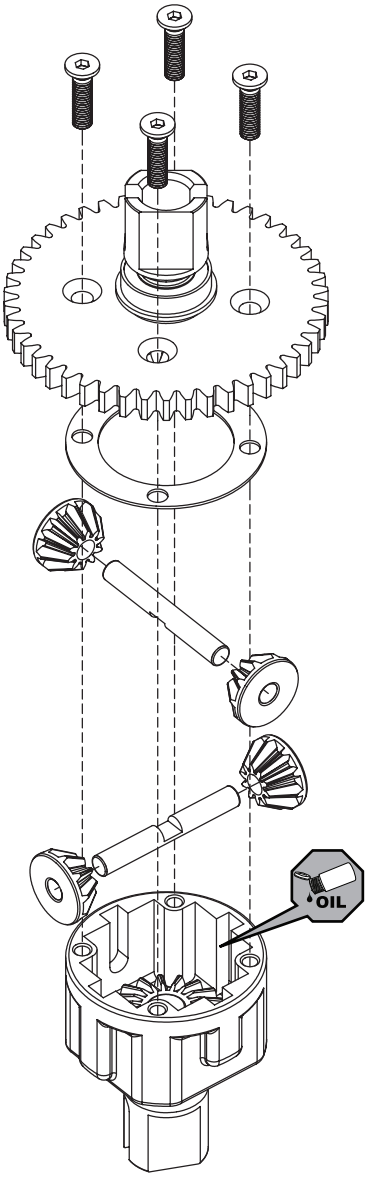
Tighten the diff screws in this order



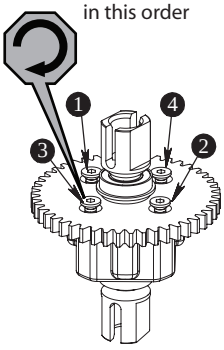
Center Differential

Fill with 7000cs. oil just above the planetary gear.



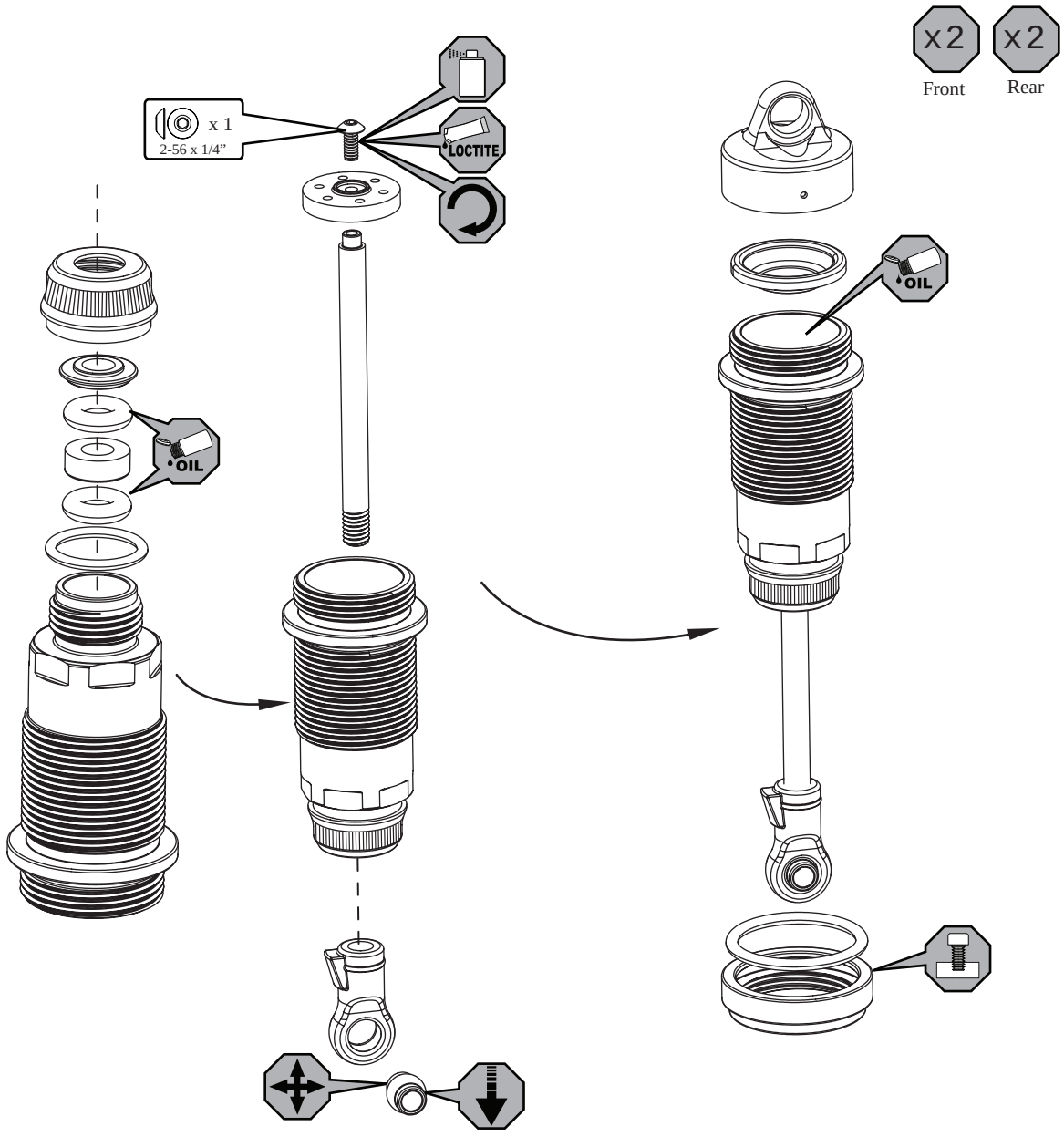


Tighten the diff screws in this order



Rebuilding/Refilling the Shocks

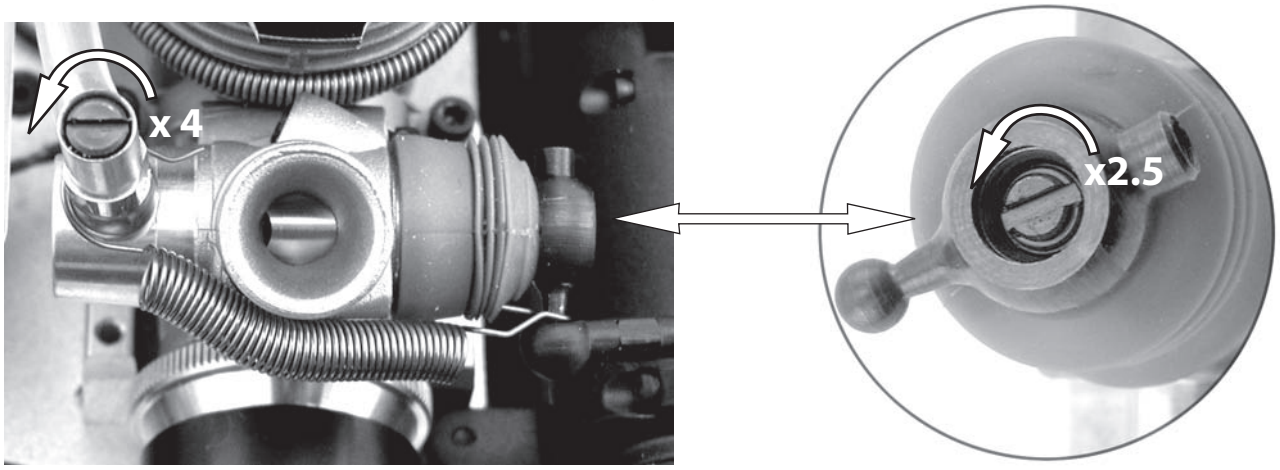
- Clean the 2-56 x 1/4” button head screw and apply loctite to the threads.
- Install the #55 shock piston using the 2-56 x 1/4” button screw into the shock shaft with a .050” allen wrench.
- Place a drop of Shock Oil into the bottom of the Shock Body to lubricate the Shock Seals.
- Thread the shock shaft into the shock end using pliers. Use caution when threading the shock shaft ends onto the shafts. Avoid gouging or scratching the shock shaft while gripping the shock shaft with pliers by placing the edge of a towel over the shaft, then gripping the portion of the shaft covered by the towel. This method will work very well to protect the shock shafts from damage.
- Ensure the shaft is fully extended when filling the shock.
- Fill the shock body with 35wt. shock oil until the oil is to the top of the body.
- “Work” the shock shaft up and down a few times. This will release the air bubbles trapped beneath the piston. Place the filled shock, in the upright position, off to the side for a few minutes until the air bubbles escape from the oil.
- Once all the air bubbles are out of the oil, gently place the shock bladder onto the shock as shown. Some oil should “bleed” from the shock.
- Screw the shock cap onto the body until some resistance is felt.
- Slowly push the shock shaft up. This will bleed excess oil from the shock.
- Tighten the cap all the way down using the shock tools included in your kit**.**
- Move the shock shaft up and down. The shaft should be easy to push up into the body of the shock. If increased pressure is felt towards the top, there is to much oil in the shock. Loosen the shock cap and “bleed” the shock as done previously.
- Make sure each pair (front/rear) shocks have the same rebound and compression. This is checked by holding one shock in each hand horizontally and pushing them together by the shock end. Watch carefully to ensure that both compress evenly. Now release both shocks and again watch carefully as they should rebound the same.



Quick Reference Guide

Initial Factory Settings

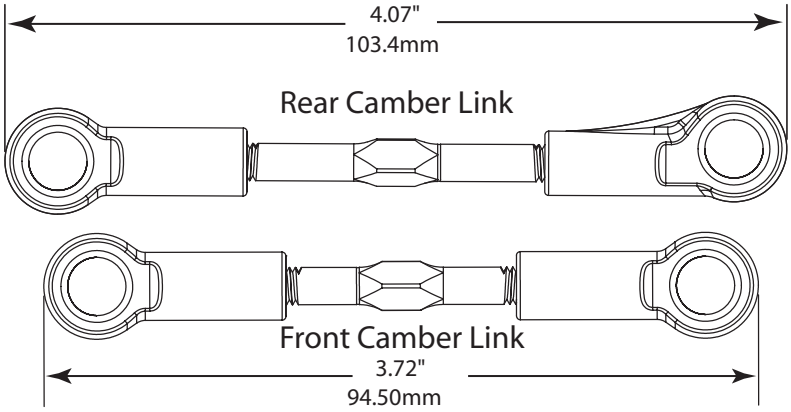
Engine



Hi-Speed Needle - 4 turns out

Low-Speed Needle 2.5 turns out

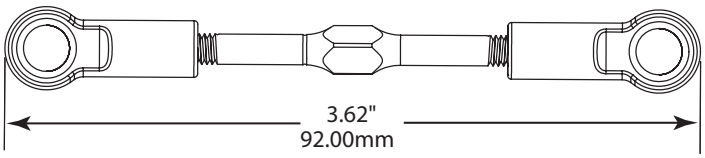
Camber Links



Shocks

Team Losi 35wt Shock Oil (LOSA5225)

Steering Tie Rods



Losi 427 Customer Support
Horizon Hobby Inc
4105 Fieldstone Rd.
Champaign, IL 61821
1-877-504-0233

Trouble shooting Chart

Losi 427 Customer Support
Horizon Hobby Inc
4105 Fieldstone Rd.
Champaign, IL 61821
1-877-504-0233

Problem	Things To Check	Remedy
Engine won't start.....	Out of fuel	
	Spoiled or improper fuel	
	Glow plug not lighting	
	Glow igniter not charged	Check/Replace Glow plug
	Engine overheating	Charge/change battery
	Engine flooded	Let cool - see "Testing the Teperature
	Air cleaner blocked	Clean & reoil aircleaner
	Exhaust blocked	
Engine won't turn over.....	Engine is flooded	See "About Glow Plugs"
	Engine seized	
Engine starts then stalls.....	Idle speed set too low	See "Engine Tuning"
	Glow plug is fouled/weak	See "About Glow Plugs"
	Air bubbles in fuel line	Check for split/hole in fuel line
	Engine is overheated	See "Testing the Temperature"
	Insufficient fuel tank pressure/blockage	Clear pressure line
Engine performing poorly.....	Hi-Speed fuel mixture is too rich	See "Engine Tuning"
	Engine overheating	
	Leaking glow plug	Replace glow plug
	Carburetor dirty or blocked	
	Fuel bad or contaminated	Try fresh fuel
	Clutch slipping	Clean/Adjust/Repair
	Bound up drive-train	Check for binds in drive-train
	Engine worn out	Rebuild
Engine overheats.....	Hi-Speed fuel mixture is too lean	See "Understanding Rich and Lean
	Low-Speed fuel mixture too lean	
	Spoiled or improper fuel	
	Cooling air is being blocked	Clean head fins
	Excessive load on the engine	Check for binds
Engine hesitates or stumbles.....	Engine overheated	See "Engine Tuning"
	Hi-Speed mixture too lean	
	Low-Speed mixture to rich	
	Air bubbles in fuel line	Check fuel line for holes
	Glow plug fouled	Change glow plug
Engine stalls instantly when throttle is fully opened from idle.....	Glow plug fouled	Change glow plug
	Hi-Speed mixture too rich	See "Engine Tuning"
	Low-Speed mixture too lean	
Engine stalls while driving around turns.....	Fuel level is low	Add Fuel
	Idle speed set too low	Increase Idle speed
Engine stalls while idling.....	Low-Speed mixture too rich	See "Engine Tuning"
	Low-Speed mixture too lean	
	Idle speed to low	Increase idle speed
	Clutch shoes dragging	Check for broken clultch springs
	Clutch spring broken	
	Clutch bearings failed	Check/Clean/Replace
	Engine worn out	Rebuild