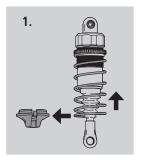
### **VEHICLE MAINTENANCE**

The following items require semi-frequent maintenance. Always clean screw threads and apply removeable thread locking compound when threading machine screws into metal parts.

# SHOCK DISASSEMBLY/CLEANING

Remove the shocks and service as needed. Replace worn parts.

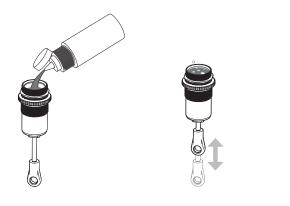
- Pull the spring up and away from the lower cup. Slide the lower spring cup up and off
  of the shaft. Clean with a soft brush. Remove the shock boot.
- Use the wheel wrench to hold the shock body and remove the top cap. Empty the fluid from out of the shock.
- 3. Hold the shaft with a multi-wrench and remove the shock end. Push the shaft into the shock body and remove through the top. Remove the lower shock cap, dust cover, Orings and spacer. Clean the shock body. Install new Orings, re-install the spacer, replace the Oring and install the lower shock cap. DO NOT TIGHTEN. Install the shock shaft through the shock bottom and tighten the bottom cap. Re-install the boot and shock end on the shaft.

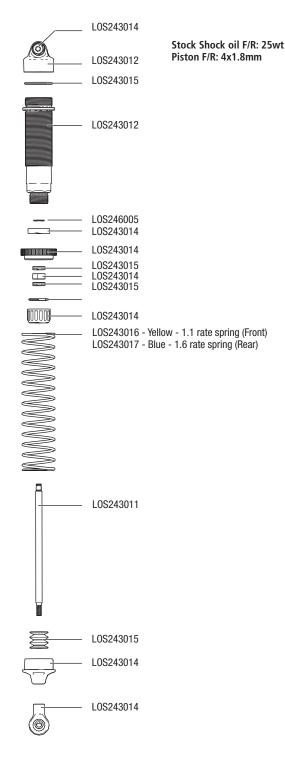




### REFILLING/BLEEDING SHOCKS

- Fill the shock body 5mm (0.2 in) from the top with 25wt silicone shock oil (TLR74004 2oz, TLR74022 4oz).
- Slowly move the piston up and down 5 times, allowing air to rise to the top. Let the shock sit for 5 minutes.
- With the piston all the way down, fill the shock body 1mm (0.04 in) from the top. Replace the shock cap, spring and spring cup.



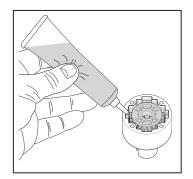


#### DIFFERENTIALS

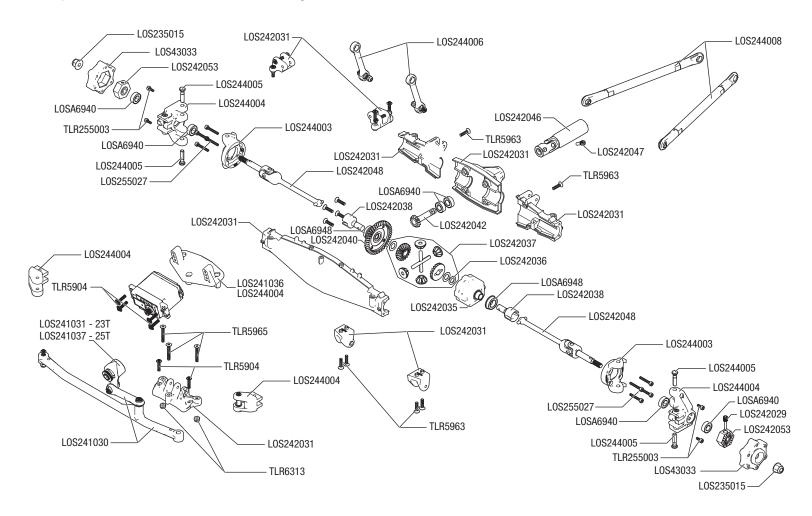
Differential	Light Weight Oil	Heavier Weight Oil
Front	Increases off-power steering. Oil that is too thin will make diff action inconsistent	Increases off-power stability and on-power steering
Center	Has less forward drive and can unload the drivetrain easier under acceleration, which can be good on rough and slick tracks	Has more acceleration and increases on-power steering, but decreases off-power steering. Thicker center diff oil is better on high traction/smooth tracks
Rear	Has more side traction and increased steering in the middle of a turn	Has less steering in the middle of the turn but more forward traction

### FRONT DIFFERENTIAL

- To Remove the front differential from the axial housing, start by removing the steering servo and servo mount from the axle.
- 2. Remove the screw holding the upper 4-link bars to the mount
- 3. Remove the Sway bar links, shocks and lower 4-link bars from the axle housing.
- 4. With the axle free from the chassis, remove the third member and pinion gear.
- Remove the steering spindle and spindle carrier from one side of the axle with the front universal. This will provide enough clearance to remove the differential from the axle housing.
- Check the ring and pinion as well as the bevel gears in the differential. Replace as needed. If fluid is leaking, replace the outdrive o-rings and ring gear gasket. Be sure to grease the outdrives prior to sliding them through the o-rings. Apply more grease to the ring and pinion (LOSA99209).
- Check the differential fluid and refill or replace as needed with TLR75004 (100k) fluid.
   The fluid level should be about 0.12 in (3.0mm) from the top surface of the case. Do not overfill or the differential unit might leak.

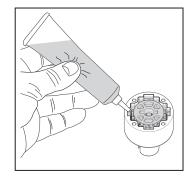


Front Differential Fluid: 100,000

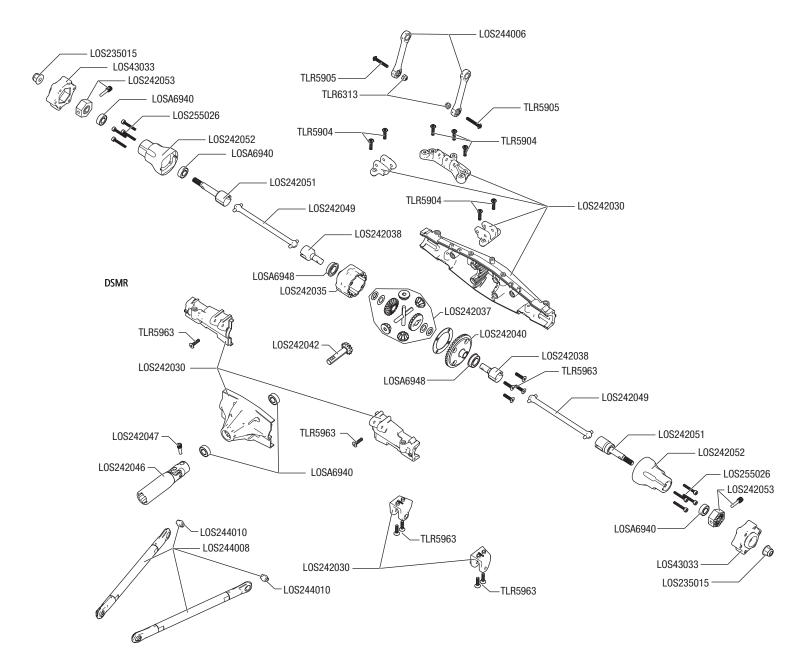


#### REAR DIFFERENTIAL

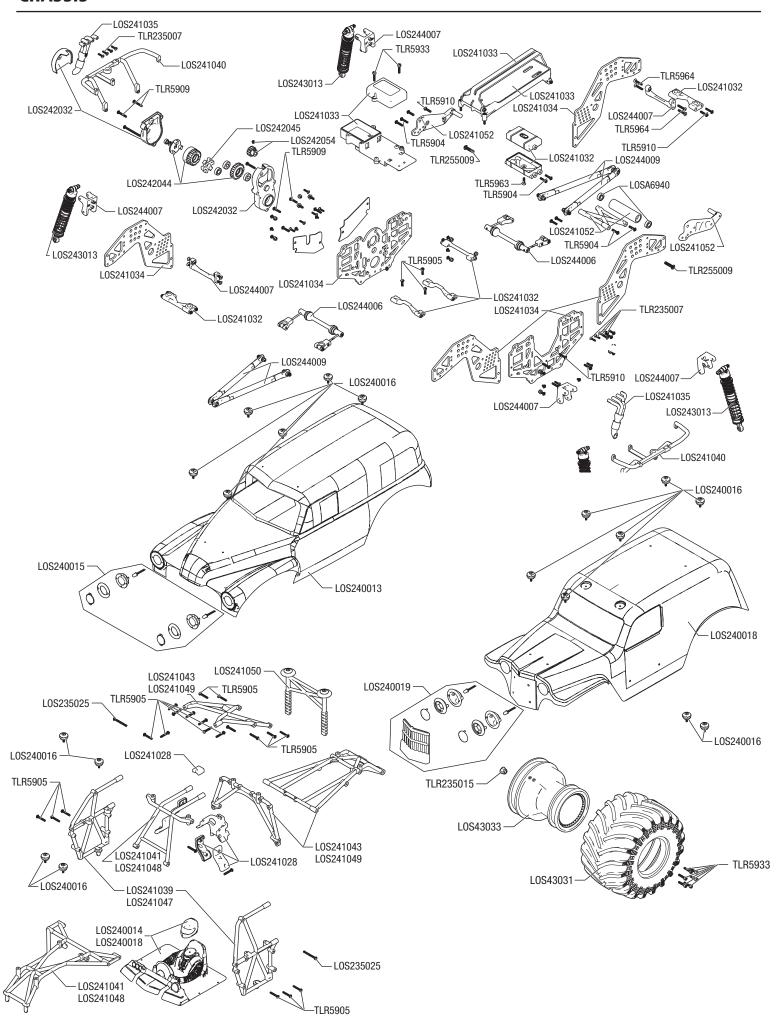
- 1. To remove the rear differential, start by removing the upper 4-link mount bolt.
- 2. Remove the Sway Bar Links and Shocks from the Axle.
- 3. Remove the lower 4-link bars from the axle housing.
- The axle housing is now free. Remove the third member and pinion gear from the axle mount.
- Remove one side of the axle housing with the axle and dogbone. This will provide enough clearance to remove the rear differential.
- Check the ring and pinion as well as the bevel gears in the differential. Replace as needed. If fluid is leaking, replace the outdrive o-rings and ring gear gasket. Be sure to grease the outdrives prior to sliding them through the o-rings. Apply more grease to the ring and pinion (LOSA99209).
- Check the differential fluid and refill or replace as needed with TLR75004 (100k) fluid.
   The fluid level should be about 0.12 in (3.0mm) from the top surface of the case. Do not overfill or the differential unit might leak.



Rear Differential Fluid: 100,000

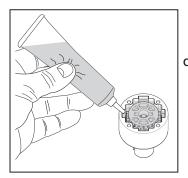


# **CHASSIS**



### **CENTER DIFFERENTIAL**

- To remove the center differential from the vehicle, remove the two screws in the center cover to expose the center differential.
- 2. Remove the four screws holding the diff support blocks, and remove the diff support
- 3. Remove the two screwpins holding the front and rear drivelines, and remove the center halves of the driveline. This will provide enough clearance to remove the differential out of the bottom of the vehicle.
- 4. Check the ring and pinion as well as the bevel gears in the differential. Replace as needed. If fluid is leaking, replace the outdrive o-rings and ring gear gasket. Be sure to grease the outdrives prior to sliding them through the o-rings.. Apply more grease to the ring and pinion (LOSA99209).
- Check the differential fluid and refill or replace as needed with TLR75009 (500k) fluid.
   The fluid level should be about 0.12 in (3.0mm) from the top surface of the case. Do not overfill or the differential unit might leak.



Center Differential Fluid: 500,000

