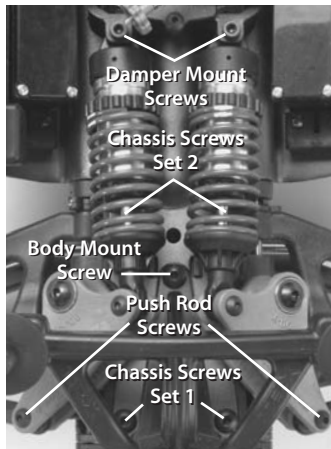


Differential Rebuild Instructions

Covers Parts #5379, 5380, 5382

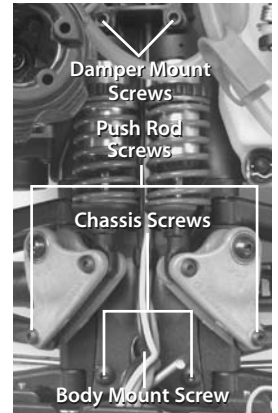
Removal and Installation of Front Differential

1. Disengage both steering servo links from the steering servo saver input arm (shown right).
2. Remove the screw pin that secures the brake mount yoke to the transmission output shaft and slide the yoke off the transmission output shaft. During this process the male center front drive shaft will wedge itself into the female center front drive shaft.
3. Remove the chassis screws (Set 1) and the body mount screw, and remove the body mount and bumper assembly from the chassis.
4. Remove damper mount screws.
5. Swing the dampers inboard one at a time to access and remove the chassis screws (Set 2).
6. Slightly lower the front of the bulkhead from the chassis and slide it out of the chassis. The steering system, differential, front center drive shaft assembly, front skid plates and left and right suspension assemblies will slide out with the bulkhead.
7. Remove the three screw pins that secure the three yokes to the differential and slide the yokes off the differential.
8. Disconnect the push rods from the rocker arms and rotate the rocker arms so the rocker arms are clear of the differential (shown right).
9. Lift differential off the bulkhead. **Note the orientation of differential in the bulkhead before removal.**
10. Install in reverse order of disassembly.



Removal and Installation of Rear Differential

1. Remove the two screws that secure the engine mount brace to the bulkhead and the screw pin that holds the yoke of the center drive shaft to the rear differential (see right). Slide the yoke off the differential.
2. Remove the screw that holds the tuned pipe hanger to the rear body mount. Remove the body mount screw and the two chassis screws (see right) and remove body mount and bumper assembly (from the chassis). **Be careful not to damage the EZ-Start wires.**
3. Remove the two damper mount screws (see right).
4. Lower the rear of the bulkhead slightly from the chassis and slide the bulkhead assembly out of the chassis. The rear differential, rear dampers along with rocker arms, rear skid plate and rear left and right suspension assemblies will slide out with the bulkhead. **Note: The bulkhead assembly may be a little tight, but should come out with minimal effort.**
5. Disconnect the push rods at the rocker arms.
6. Remove screw pins that secure both the outboard drive shaft yokes to the differential and slide the yokes off the differential output shafts.
7. Swing rockers out such that the rocker arms do not obstruct the differential (see right).
8. Lift differential off the bulkhead. **Note the orientation of differential in the bulkhead before removal (see right).**
9. Install in reverse order of disassembly.



Reassembly Notes:

- While inserting the bulkhead assembly onto the chassis, guide the brake yoke onto the transmission output shaft (this can be easily achieved if the vehicle is held vertical during the insertion process).
- It is preferable to connect the push rods at the end of the reassembly process.

Reassembly Note:

It is preferable to connect the push rod at the end of the reassembly process.

Rebuilding the Differential

Remove the housing cover and pull out the diff carrier with ring gear. Remove the ring gear to access the inside of the carrier. Remove the bevel diff gears and clean the old lube from the diff carrier and the gears. Inspect the diff gears for excessive wear and replace the gear if necessary. Reinstall the diff gears and fill the carrier with Traxxas Diff Lube. Key the gasket into the case and secure the ring gear onto the diff case with the four screws. Wipe away the excess diff lube. Lube the ring gear with lithium grease and install the diff into the diff carrier. Replace the cover. Installation of the differential is in the reverse of removal.

Traxxas Diff Lube

10K	Part #5135	50K	Part #5137
30K	(stock) Part #5136	Complete Set	#5136X

Use higher viscosity (thicker) oil for:

- More power to the wheels with the most traction.
- Racing on low-traction smooth surfaces .
- Better performance for climbing on uneven terrain.

Using lower viscosity (thinner) oil for:

- More power to the wheels with least traction.
- Racing on low-traction rough surfaces.

