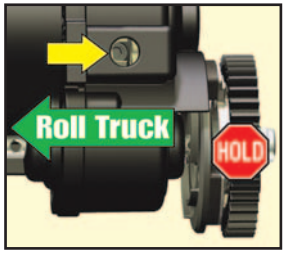
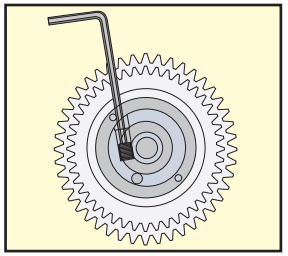
Two Speed Adjustment note: If the truck will not roll forward while the spur gear is held, the transmission may still be in reverse gear.

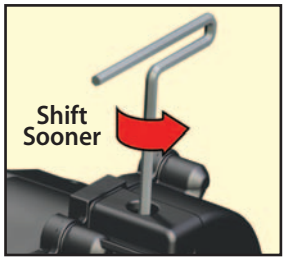
For adjusting two-speed and gear ratios see *Advanced Tuning Adjustments* on page 44.

Adjusting the Two-Speed Transmission

Revo comes equipped with an adjustable two-speed transmission. When the shift point on the transmission is adjusted correctly, it will maximize acceleration and improve drivability. Use a 2mm hex wrench to adjust the shift point. To make the adjustment, the engine must be off (not running).

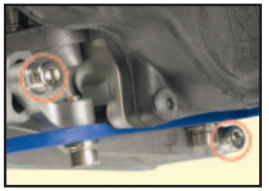






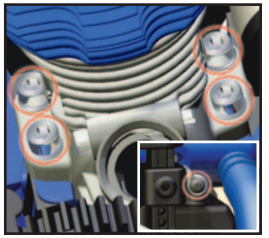
1. Shift the transmission into forward gear (shift button down).
2. Remove the rubber access plug from the top of the transmission housing.
3. While looking through the opening, rotate the spur gear to align the cutout (notch) on the internal 2-speed clutch drum with the opening.
4. Hold the spur gear and slowly roll the truck forward until the hex on the black adjustment set screw becomes visible in the opening. **Note:** the truck will only roll forward (not backwards) when the spur gear is held stationary.
5. Insert the 2.0mm hex wrench through the clutch drum and into the adjustment screw.
6. Turn the adjustment screw 1/8 turn counter clockwise to lower the shift point (shifts sooner). Be careful not to loosen the adjustment screw too much or you may cause the screw and spring to fall out (requiring major disassembly and repair). Turn the adjustment screw clockwise for later shifts.
7. Reinstall the rubber access plug to prevent dirt from entering the transmission. Do not put oil or other lubricants into the transmission through the two-speed adjustment access.
8. Check performance by running a test lap after each adjustment. On a small race track with many tight turns, try setting the shift point later so that the truck only shifts into second gear on the main straightaway. This will prevent an unexpected shift in the middle of a turn. On larger tracks it may be necessary to allow earlier shifts for increased speed.

Adjusting the Spur Gear/Clutch Bell Gear Mesh



The ideal spur gear/clutch bell gear mesh for Revo is 0.1mm. To set the gear mesh, place a strip of standard letter/A4 size copy or printer paper (about 0.1mm thick) between the mating teeth. Loosen the two horizontal engine mount screws and slide the engine mount up to push the clutch bell gear against the spur gear so that the that the paper is not too tight to pull out or too loose that it will fall out. Tighten the two horizontal engine mount screws securely. When the paper is removed, you should feel only the slightest amount of play between the gears (almost none) and there should be no binding or friction.

Changing the Spur Gear



1. Remove the four cap head screws that secure the engine to the engine mount.
2. Remove the button head screw that secures the pipe hanger to the rear body mount (see inset).
3. Carefully remove the engine and exhaust system from the spur gear area to allow enough room to remove the spur gear.
4. Remove the three screws on the slipper clutch assembly using a 2.5mm hex wrench. Slide the spur gear off of the slipper shaft. If the spur gear is too tight on the shaft, gently pry on the back of the gear with a flat screw driver to loosen it.

Repeat the above steps in reverse order to install the new spur gear.

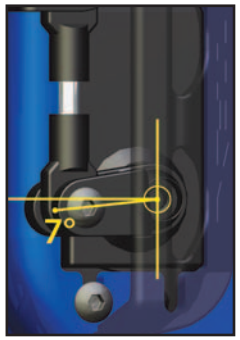
Dual Servo Steering System

Revo uses dual-servo steering and a single heavy-duty servo saver for powerful, responsive steering. To prevent unnecessary receiver battery drain it is important to make sure that the servos are “at rest” when the steering is at neutral. If one servo is out of adjustment, then both servos will work against each other, fighting to find center.

Adjusting The Steering System

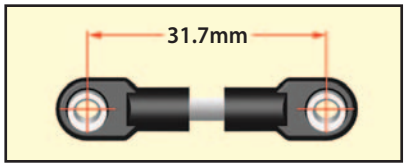
1. Remove the servo horns and steering links from the servos. Disconnect the steering links from the servo saver.

2. Adjust both the steering links to be the exact same length (31.7mm - use "Steering Servo Horn Link Length Template" on page 39 to set length).
3. Switch on the power to the receiver and the transmitter.
4. Adjust the steering trim on the transmitter to the neutral "0" position.
5. Connect one end of a steering link to the steering servo saver arm and the other end to the servo horn
6. Position the steering servo saver arm perpendicular to the centerline of the vehicle.
7. While holding the steering servo saver arm in the position mentioned in step 6, install the servo horn onto the servo such that the steering link is parallel with the centerline of the vehicle. This will automatically set the servo horn at the 7-degree offset shown in the illustration.
8. Install the second servo horn on the other side following the same procedure.



If necessary, fine-tune the length of the second steering link to eliminate any load on the steering system in the neutral position.

If you are using aftermarket servos, it is important to use servo horns designed for Revo. Optional steering servo horns are sold separately for use with non-Traxxas servos.



Steering Link Length Template

Servo Saver Tuning

An optional stiffer spring is available for the servo saver when using servos with metal gear sets (see parts list for details). Do not use this spring with standard Traxxas high-torque servos.

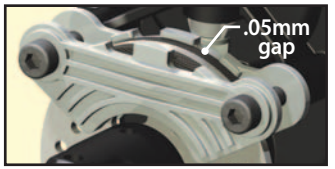
Brake Setup & Adjustment

Revo is equipped with a disc brake that rides on the yoke of the transmission's front output shaft. The brake is preset at the factory and should not require attention. As the brake material wears, future adjustments may be necessary.

Brake Shoulder Screw Adjustment

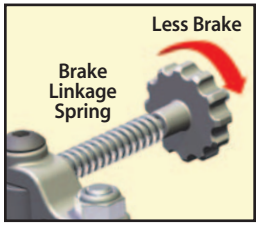
The two shoulder bolts that are used to secure the brake pads to the transmission housing may need to be adjusted periodically as the brake material wears down. They should be tightened so a 0.50mm (.020") gap exists between the disk and the brake pad (on the transmission side). Adjust in one of the following ways:

1. Use a .50mm feeler gauge between the brake pad insert and brake disk.
2. Push the outer brake pad firmly against the inner pad with your finger, sandwiching the brake disk between the brake calipers. Tighten the brake shoulder bolts until they just barely touch the brake pads. Do not over tighten these fasteners or you could damage the brake calipers. Loosen each of the shoulder bolts by 1 turn.

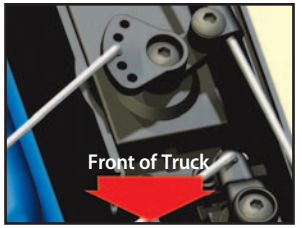


Brake Linkage Adjustment

When correctly adjusted, the brake linkage spring should barely touch the rod guide when the servo is in neutral position (closed throttle). This will ensure no brake drag during operation of the vehicle. The brake adjustment knob can be threaded away from the spring for less braking power if desired. Do not adjust knob to apply pressure against the spring while the servo is in the neutral position. This will induce brake drag and cause undesirable handling.



The position of the z-bend from the factory is in the middle position of the servo horn. Changing this position will affect the way the brake force is applied. The brake adjustment knob will need to be readjusted if this position is changed.



Brake Pad Wear and Replacement

During normal use the brake pads should wear at a relatively slow rate. However, if the brake pads wear down close to the metal pad holders, they should be replaced. Any more wear than this could cause damage to the brake parts and improper operation of the brake system.