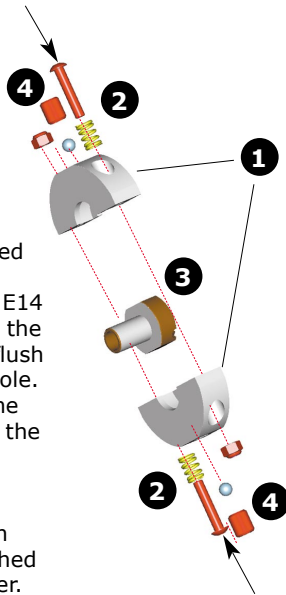


## 6. Two-speed transmission (optional)

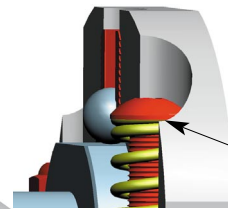
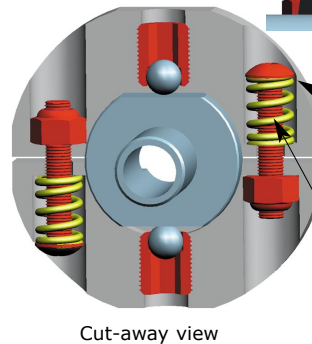
### 6.1

Mounting the 2 clutch shoes:

1. Place the 2 shoes on 2-speed drive adapter
2. Place the spring over screw E14 and apply lock-nut L3. Turn the screws in until the head is flush with the lower part of the hole.
3. Position the shoes so that the larger holes are in line with the flats on the 2-speed drive adapter.
4. Insert the balls and turn the 2-speed adjusting nut in until the shoes are just pushed off the 2-speed drive adapter.



### 6.2



NOTE: Head is flush with side of hole

NOTE: the position of the 2 spring loaded screws. They should be flush with the side of the hole. Final adjustment is made when the car is tested on the track. Turning the screws in will give a later shifting point, turning them out will advance the shifting point.

Cut-away view

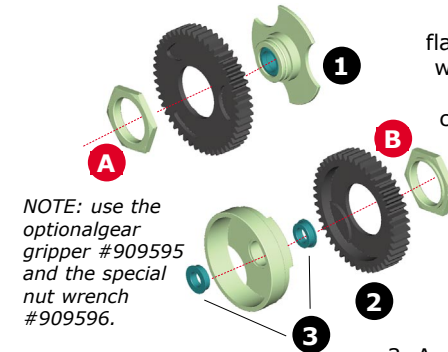
### 6.3



Counter clockwise thread, marked with the small groove



Clockwise thread

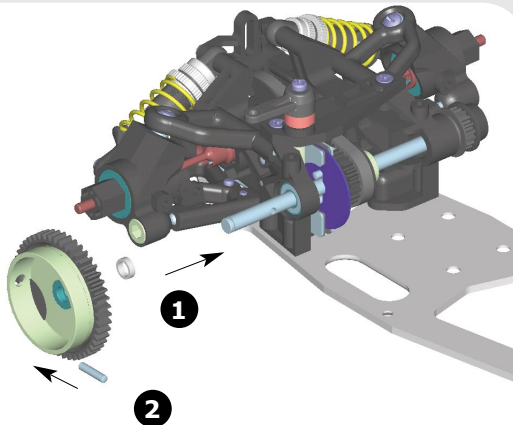


1. Mount the 50T 1st gear on the 2-speed drive flange, using alu. nut A with counter-clockwise thread (turn counter clockwise to tighten!).

2. Mount the 47T second gear on the 2-speed clutch-bell, using the alu. nut B (turn clockwise to tighten).

3. Apply 2 ballbearings V5.

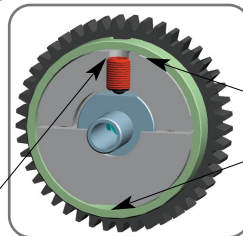
### 6.4



1. Apply the alu. spacer on the 2-speed lay-shaft.
2. Place the 2-speed clutch-bell over the lay-shaft and insert pin P12 through the hole of the 2-speed lay-shaft.

### 6.5

Place the 2-speed drive adapter with the clutch-shoes over the 2-speed lay-shaft.



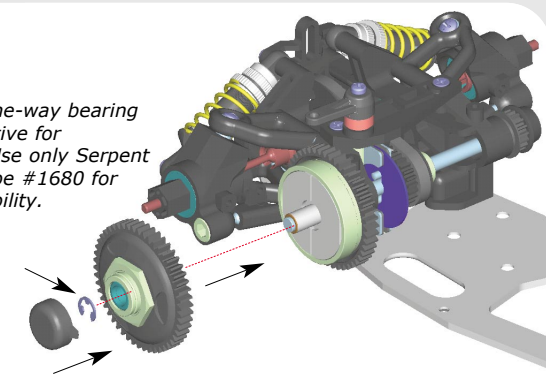
clutch shoe gap

Adjusting 2-speed clutch shoe gap:

Now adjust the 2 center screws. First release both screws to make sure that the shoes rest on the drive adapter. Now turn one screw in until the clutch shoe touches the clutch bell. This can be checked by spinning the clutch-bell. Now turn the center adjusting nut out half a turn, the clutch-bell should spin freely. Repeat this adjustment for the other center adjusting screw.

### 6.6

NOTE: the one-way bearing is very sensitive for lubrication. Use only Serpent One-Way Lube #1680 for highest reliability.



After the 2-speed clutch shoe gap has been adjusted, the drive adapter with the 1st gear can be mounted. Secure with clip R5. Apply the nylon dust-cap by pressing it over the drive-flange.

For the assembly of the 2-speed clutch refer to Clutch Assembly steps (page 20-21).