# PART #0550

## CONSTANT TAIL ROTOR DRIVE AUTOROTATION UNIT

## ASSEMBLY INSTRUCTIONS

# IMPORTANT:

The Constant Tail Rotor Drive Autorotation Unit uses a split main gear, enabling the tail rotor system to remain engaged during autorotation maneuvers, therefore allowing complete tail rotor control. Since the tail rotor system is constantly spinning during the auto maneuver it is important that when the throttle hold switch on the transmitter is activated, the tail rotor pitch will go to 0-degrees and the tail rotor compensation is deactivated. This will eliminate any loss of main rotor blade speed due to undesired tail rotor pitch during the autorotation maneuver. Many of the new computer PCM radio systems incorporate this feature in the throttle hold circuitry.

# ASSEMBLY:

First remove the standard #0207, 0209, 0211 autorotation unit. The #0211 spacer will no longer be used. As before, oil (do not grease) the one-way autorotation bearings. With the main rotor shaft #0203 still raised up, slide the new pre-assembled driven autorotation unit into place. Be certain that the shim provided #0550-7 remains centered in between the upper and lower sections of the auto unit. Push the main rotor shaft threw the unit until it extends below the lower section. Reassemble the washer #0213 and collar #0215 (use locktite) on the bottom of the main rotor shaft. Tighten securely.

Apply locktite on the two set screws in the upper aluminum section #0550-4 of the driven auto unit. Adjust the upper section in relationship to the lower section until there is approximately .5mm of up and down play in the lower gear section on the main rotor shaft. Tighten the two Set screws securely on the main rotor shaft.

Now pull up on the main rotor shaft and tighten the two collars #0205 (use locktite). There should be no end play in the main rotor shaft, but still retaining the .5mm play in the lower autorotation gear section.

Now that the unit is securely in place, recheck the clutch bell and tail rotor gear mesh in relation to the driven tail autorotation unit. Adjust as needed. Slightly oil the upper and lower plastic main gears before flying. If you have any questions, please feel free to call.

# RECOMMENDED MAINSHAFT FLATS WHEN INSTALLING #0550 AUTOROTATION

