ROTORWAY INTERNATIONAL

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**TO ALL EXEC, EXEC 90 AND EXEC 162F OWNERS**

**ADVISORY BULLETIN A-40**

Subject: Throttle Correlation

History: Requirements are to have a certain amount of throttle available at specific collective handle/main rotor blade pitch positions. It is also important to limit the workload on the pilot of chasing the throttle position in order to maintain proper main rotor blade RPM. When performing a hovering autorotation it is not desirable to have ANY THROTTLE MOVEMENT when lifting the collective handle.

Throttle correlation is achieved through the throttle linkage on collective control. Movement of the collective handle either up or down will either increase or decrease the amount of throttle opening. The amount of throttle input through collective movement is achieved by manipulating the linkage.

The criteria to strive for is:

1. At hover pitch of main rotor blades, (5-6 degrees or approximately 1/2 to 2/3 collective stick travel) to have 100% throttle available.

2. At full up collective handle and throttle grip full off there should be no throttle opening.

3. Main rotor blade pitch through full travel should not exceed 11 to 11-1/2 degrees total movement. Example: If negative pitch is 2 degrees then positive pitch should be 9 to 9-1/2 degrees.

4. No binding of the throttle linkage through the movement of the collective handle.

Action: If the above criteria cannot be achieved, a new longer control arm is available to replace the “B” control arm. The new control arm “H” will allow for more slack in the throttle cable at full off throttle position and also allow for more cable movement when needed to maintain the correct RPM.

The new Control Arm “H” (p/n E15-5120) can be ordered from the parts department. A kit is also available that includes the parts to replace the passenger transfer shaft that the control arms are mounted to.

Control arm replacement kit p/n E15-6200 consists of:

| QTY. | P/N | DESCRIPTION |
|---|---|---|
| 1 | E15-3170 | Transfer Shaft |
| 2 | E00-5101 | Roll Pin |
| 1 | E15-5120 | Control Arm “H” |
| 1 | E15-5110 | Control Arm “B” |
| 2 | E00-2306 | Bolt 3/16 X 1-1/4 |
| 2 | E00-3301 | 3/16 Fiberlock Nut |
| 4 | E00-4301 | 3/16 Regular Washer |