

Technical Bulletin



DP08	TB015-DP08-2011	Élan Motorsports Technologies	
From:	John Harris		
Subject:	Rear Wing Endfish	Date:	5/17/11

Attention all USF2000 teams:

In an effort to extend the service life of existing rear wing upper and middle elements, Élan Motorsports Technologies has made available an aluminium endfish to replace the existing steel units when those suffer damage or come to the end of their useful service life.

Teams can purchase an endfish kit from Carl Haas Auto (Upper P/N ADP08-47-020, Middle P/N ADP08-47-019) and perform the procedure as described below. One kit is sufficient for both ends of one wing element. These kits will be available for purchase on 5/27/11. Élan also recommends the use of a Rear Wing Flap Separator (P/N 01-B-2005) to all teams. Contact Carl Haas Auto for current prices.

Replacement Procedure:

- 1) Drill out existing rivets securing endfish in wing element using appropriate drill size.
- 2) Remove steel endfish from wing elements.
- 3) Clean out remaining epoxy from openings in wing element.
- 4) Roughen outer surface of new aluminium endfish to aid in bonding of epoxy.
- 5) Fit endfish into openings in wing element and drill appropriately sized holes into new aluminium endfish through existing rivet holes of the wing element. Please note that, due to manufacturing variances, endfish may require trimming to fit.
- 6) Remove new endfish, de-burr sharp edges.
- 7) Apply 3M DP420 epoxy (or equivalent) to outer surface of new endfish and reinsert them into the wing element openings.
- 8) Fill gaps and old rivet holes not to be used with 3M DP420 epoxy or equivalent.
- 9) Allow epoxy to cure for an amount of time as specified in epoxy application instructions.
- 10) Install rivets into holes drilled in Step 5. **DO NOT GRIND DOWN RIVET HEADS.**

If preferred, Élan can refurbish them at a cost of \$270 per wing element, which includes all parts, materials and labor. Please contact Guy Oder (goder@elangroup.com) to organize return and receipt of your wing element(s). Please allow approximately 5 working days from Élan's receipt of the components.

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