
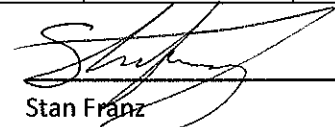


SERVICE LETTER

Service Letter Number	Simplex Model	Issue Date	Revision	Revision Date
SL2009-011	301	March 17, 2010	I/R	March 17, 2010

Written By: 
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 Engineering

Approved By: 
 Stan Franz
 Director of Engineering

Subject: Dispersal Door Overhaul

Applicability: This service letter is applicable to Simplex Manufacturing Model 301 Fire Attack System installed on Eurocopter AS 365N series rotorcraft.

Reference: Simplex Manufacturing Model 301 Maintenance Manual Document Number 301-102005-002 Rev A.

NOTE: *The information contained in this document is for reference only and does not supersede the service instructions contained in the Model 301 Maintenance Manual (MM) 301-102005-002A.*

Purpose: This document was drafted to recommend door overhaul intervals to ensure peak performance and reduce unscheduled maintenance.

Compliance: Compliance of this service letter is recommended prior to heavy seasonal use on systems that are more than 3 years since new or with more than 1500 hours time in service and every 3 years or 1500 hours thereafter, whichever comes first.

Parts: The parts and materials required to comply with this Service Letter are listed in Table 1. Replacement parts and equipment may be ordered through your local authorized Simplex Representative or directly from Simplex Manufacturing.

Table 1 Parts Required

Part Number	Description	Qty
300-106004-003	Control Arm Assembly Kit	4
300-106004-005	Door Pull Assembly Kit	12
301-602018-001	Door Seal	2
301-203008-001*	Door Assembly (Ref)	2
300-106011-000	Door Adjustment Tool Kit	1
000-159100-000	732 Sealant	A/R

* Only required if damaged or unserviceable



Equipment:

1. Typical mechanics tool kit
2. Suitable ground handling equipment for access to dispersal doors and internal door mechanisms.
3. Door adjustment tool kit 300-106011-000

Consumables:

1. 242 Loctite (Blue)
2. Acetone

Procedure:

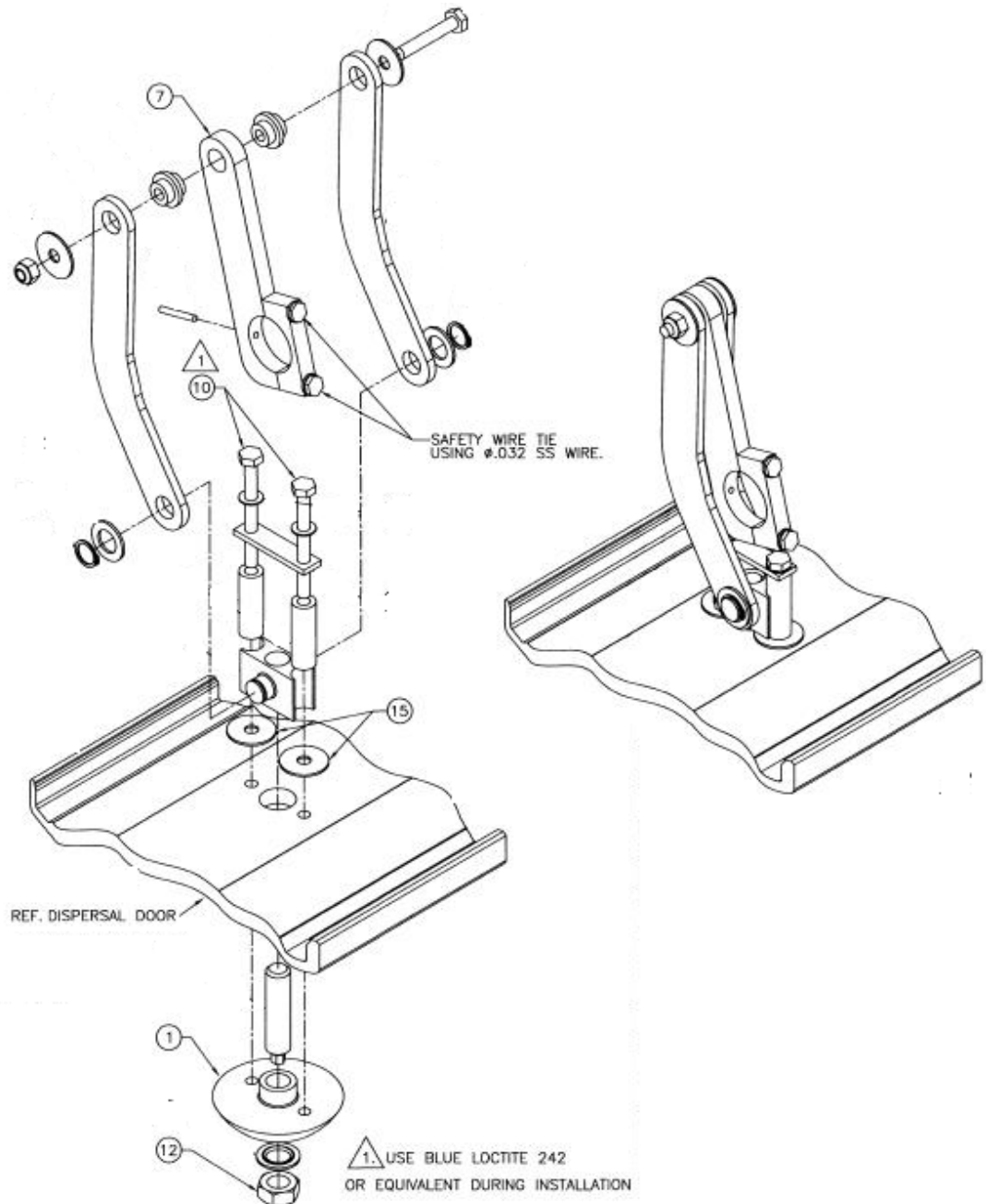
1. Review rotorcraft log books and determine date of initial installation, hours in service, and time in service of Fire Attack System.
2. Empty and flush tank with fresh water.
3. Remove tank from rotorcraft in accordance with Model 301 MM or ICA.
4. Thoroughly clean tank, inside and out. Flush system with fresh water.
5. Support tank in accordance with MM in order to gain access to the door mechanisms. It is permissible to turn tank bottom side up for this procedure provided the tank is cushioned and supported as required in the MM.
6. Block doors open.
7. Disconnect control arms from doors. Allow control arms to pivot out of the way inside tank.
8. Cut safety wire, bolts and roll pins from Item 7, Bell Crank Assemblies where they attach to the torque tubes (Figure 1).
9. Remove door.
10. Remove door seals.
11. Clean tank surfaces of adhesive residue in accordance with MM seal replacement procedures.

NOTE:

Surfaces and pass-throughs must be free of all sealant and adhesive residue prior to installing new seal.

12. Remove control arm assemblies from inside tank.
13. Inspect tank internal attachment brackets for condition. Replace brackets if control arm to bracket interface shows signs of wear or other damage.

14. Inspect door shafts and bearings at each baffle for condition and operation. Replace any corroded hardware or components that show signs of wear.
15. Remove door pulls by removing nut, Item 12 and bolts, Items 10 (Figure 1).

**Figure 1 Door Pull Detail**

16. Remove control arm brackets from door.
17. Thoroughly clean and inspect dispersal door for damage. If damage is found contact Simplex Manufacturing for door replacement.

NOTE: *Dispersal Doors are not field repairable. Return damaged doors to Simplex for repair.*

NOTE: *Control Arm and Door Pull Assemblies are fully assembled when shipped from the factory and are shown exploded in figures for detail only.*

18. Install door pull assemblies on door by applying 732 Sealant to the mating surface of Item 1 and Items 15 (Figure 1). Apply 242 Loctite to the threads of bolts, Items 10 and assemble as shown in Figure 1. Torque bolts in accordance with standard practices stated in MM.
19. Install control arm brackets to doors using supplied hardware as shown in Figure 2. Apply 732 Sealant to mating sides of washers and brackets. Torque bolts in accordance with standard practices stated in MM.
20. Install control arms (300-106004-003) to internal tank bracket using hardware included with new control arms and secure with self locking nuts (Figure 2). Torque bolts in accordance with standard practices stated in MM.

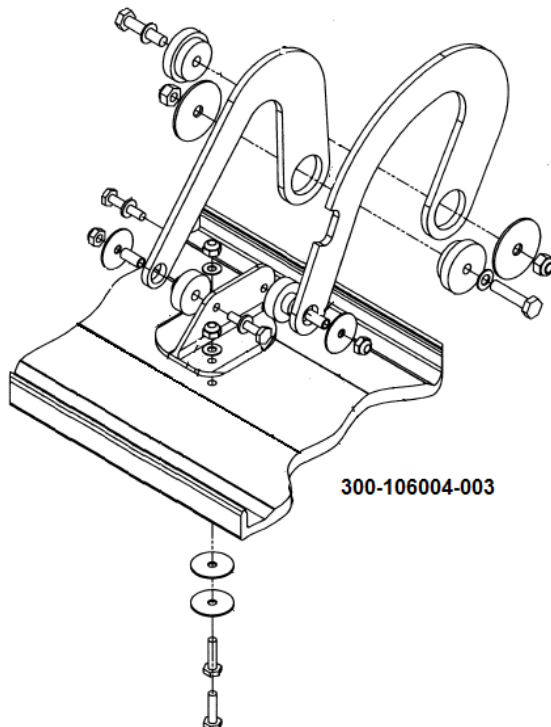
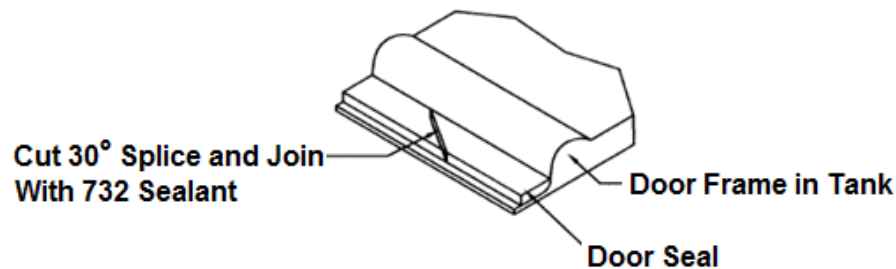


Figure 2: Control Arm Details



21. Install door assembly by attaching Item 7 (Figure 1) to torque tube using supplied hardware. Torque bolts in accordance with standard practices stated in MM and safety wire. Install new roll pin (supplied) in torque tube slot.
22. Install control arms to dispersal doors using hardware included with new control arms and secure with self locking nuts (300-106004-003 Figure 2). Torque bolts in accordance with standard practices stated in MM.
23. Install new seal in groove as shown in Figure 3 with 732 Sealant. Cut seal mating ends to 30° as shown. Press seal uniformly in groove, Ensure that seal is free of wrinkles or bulges. Allow a minimum of 24 hours cure time prior to filling tank with water.



Clean door frame with acetone and let dry. Install seal with a uniform bead of 732 Sealant and smooth out any bubbles or wrinkles. Allow sealant 24 hours dry.

Figure 3: Door Seal Installation

24. Ensure roll pins are installed in door shafts as required in Figure 1.
25. Verify that doors open and close properly and that there is no binding or roughness during door motion.
26. Adjust doors so that there are no visible gaps or deep seal depressions using 300-106011-001 adjustment tools and door adjustment procedures stated in MM.
27. Reinstall tank assembly in accordance with MM.
28. Leak check tank in accordance with MM and readjust doors as required.
29. Return rotorcraft to service and make the appropriate logbook entries.

