HALI	l l	Hale Produ	ıcts, Ind	c. Se	rvice	Bullet	ins	
Bulletin#:	SB-094	Re	evision#:	A		Date:	12/20/2006	
Product Ty Product Co	-	d: Hale Prod	ucts X	c	lass 1			
ALF Geat	box							
Problem S	tatement:							
		ALF Gearboxes novement end pla				•	ccessive, more than m to 0.25mm).	
Written by:	Mario Dilisi			Date:	12/20/2006			
Approved by:	Mike Laskaris, PE							
Product Manag	ger: Gary	Gary Handwerk						
Customer Serv	vice Designee:	·						

BODY OF THE BULLETIN

Please be advised that some American LaFrance ALF Gearboxes, shipped from the factory between July 14, 2006 and December 12, 2006, may excessive, experience more than normal, movement in the output shaft - movement in excess of 0.005" to 0.010" (0.13 mm to 0.25 mm) when measured vertically. See the attached chart for units possibly affected. This appears to be a batch issue that may affect only some units built during this time frame. Please check the attached chart to see if your unit fits within this time frame.

Note: The possibility exists that a shaft characteristic could allow a potential loose fit to the input shaft tapered roller bearings. This loose fit can cause excessive movement.

We recommend that the ALF gearbox, installed on your apparatus and listed in the attached chart, be inspected by pushing the driveline shaft up and down vertically and, using a radial indicator gauge, check to see if the shaft moves more than 0.005" to 0.010" (0.13 mm to 0.25 mm). Also see Figure 1 on next the page.

Checking procedure:

If the vertical end play is in excess of this dimension, proceed as follows:

- 1. Check the attached chart to verify if your gearbox unit is listed.
- 2. Disconnect the driveline at the front input yoke to the gearbox.
- 3. Remove the center bolt and measure the depth from the yoke to the face of the shaft see Figure 1 on next page.
- 4. Record this measurement and contact Hale Products, Incorporated for additional assistance.

5. Inspect the face of the shaft and locate and record the number "IFxxx" stamped in the shaft. Also have this number available when calling Hale.

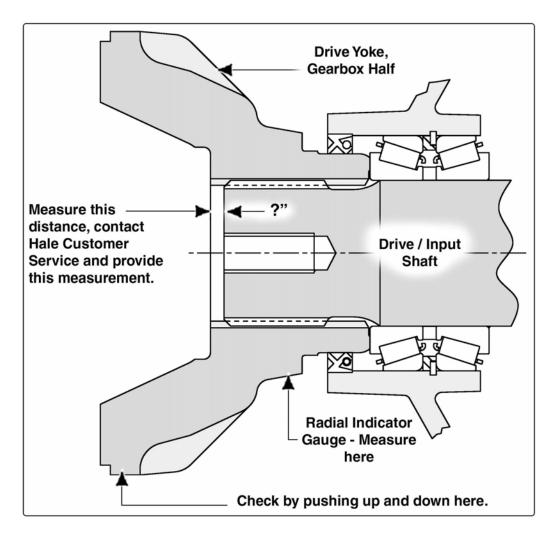


Figure 1

If your ALF gearbox is one those listed in the attached chart, Hale Products, Inc. will pay 40.00 per truck to establish if excess movement (more than 0.005" to 0.010" / 0.13 mm to 0.25 mm) is determined.

Any further work required after reporting the results of the preceding checking procedure will be at the standard warranty rate.

American LaFrance Gearbox Input Shaft Check

Sales Order	CAN	Ship To:	Ship Date	Checked
PAX56434	43620	AMERICAN LAFRANCE AERIALS	7/14/2006	
PAX64882	36302	AMERICAN LAFRANCE LLC-HAMBURG	7/14/2006	
PAX62332	36302	AMERICAN LAFRANCE LLC-HAMBURG	7/24/2006	
PAX72748	54137P	AMERICAN LAFRANCE CORPORATION	7/26/2006	
PAX72749	54137P	AMERICAN LAFRANCE CORPORATION	7/26/2006	
PAY21938	54137P	AMERICAN LAFRANCE CORPORATION	7/26/2006	
PAX65160	43620	AMERICAN LAFRANCE AERIALS	7/27/2006	
PAX85682	43620	AMERICAN LAFRANCE AERIALS	7/27/2006	
PAX65106	43620	AMERICAN LAFRANCE AERIALS	7/31/2006	
PAX66585	43620	AMERICAN LAFRANCE AERIALS	7/31/2006	
P93936	54137P	AMERICAN LAFRANCE CORPORATION	8/9/2006	
PAY23868	54137P	AMERICAN LAFRANCE CORPORATION	8/23/2006	
PAX75459	43620	AMERICAN LAFRANCE AERIALS	8/25/2006	
PAX81626	36302	AMERICAN LAFRANCE LLC-HAMBURG	8/25/2006	
PAY48980	54137P	AMERICAN LAFRANCE CORPORATION	9/26/2006	
PAY24679	54137P	AMERICAN LAFRANCE CORPORATION	9/28/2006	
PAY24689	54137P	AMERICAN LAFRANCE CORPORATION	9/28/2006	
PAY24691	54137P	AMERICAN LAFRANCE CORPORATION	9/29/2006	
PAY20262	43620	AMERICAN LAFRANCE AERIALS	9/29/2006	
PAX83689	36302	AMERICAN LAFRANCE LLC-HAMBURG	9/30/2006	
PAX83690	36302	AMERICAN LAFRANCE LLC-HAMBURG	9/30/2006	
PAY42911	54137P	AMERICAN LAFRANCE CORPORATION	10/4/2006	
PAY58172	54137P	AMERICAN LAFRANCE CORPORATION	10/4/2006	
PAY42912	54137P	AMERICAN LAFRANCE CORPORATION	10/16/2006	
PAY42913	54137P	AMERICAN LAFRANCE CORPORATION	10/16/2006	
PAY42914	54137P	AMERICAN LAFRANCE CORPORATION	10/16/2006	
PAY42915	54137P	AMERICAN LAFRANCE CORPORATION	10/16/2006	
PAY24600	54137P	AMERICAN LAFRANCE CORPORATION	10/18/2006	
PAY24601	54137P	AMERICAN LAFRANCE CORPORATION	10/18/2006	
PAY23604	43620	AMERICAN LAFRANCE AERIALS	10/19/2006	
PAY24554	43620	AMERICAN LAFRANCE AERIALS	10/19/2006	
PAY06672	36302	AMERICAN LAFRANCE LLC-HAMBURG	10/30/2006	
PAY10408	36302	AMERICAN LAFRANCE LLC-HAMBURG	10/30/2006	
PAY12187	36302	AMERICAN LAFRANCE LLC-HAMBURG	11/9/2006	
PAY24557	43620	AMERICAN LAFRANCE AERIALS	11/22/2006	
PAY24559	43620	AMERICAN LAFRANCE AERIALS	11/22/2006	
PAY24760	43620	AMERICAN LAFRANCE AERIALS	11/22/2006	
PAY73043	43620	AMERICAN LAFRANCE AERIALS	11/22/2006	
PAY24560	43620	AMERICAN LAFRANCE AERIALS	12/12/2006	