SERVICE BULLETIN

No. 218

Piper Aircraft Corporation

Lock Haven, Pennsylvania, U.S.A.

November 11, 1963

SUBJECT: Replacement of Vacuum Pump Splined Coupling

MODELS AFFECTED: PA-18, PA-22-108, PA-23-235, PA-23-250 (six place), PA-24, PA-24 "250" and PA-30 Aircraft. (SEE PARAGRAPH 2, ALL PIPER MODELS)

AIRCRAFT SERIAL NO.	PUMP SERIAL NO.
Model PA-18:	
18-8036	7G-2539
Model PA-22-108:	
22-9696	7G-2531
22-9700	7G-2522
22-9702	7G-2532
22-9715	7G-2524
22-9730	7G-2540
22-9736	7G-2538
22-9740	8G-2800
22-9744	8G-2779
22-9747	7G-2557

AIRCRAFT SERIAL NO.	PUMP SERIAL NO. Left Pump	Right Pump
Model PA-23-235:		
27-587	7G-2535	7G-2517
27-585	7G-2520	7G-2515
Model PA-23-250 (six place):		
27-2418	ok	7G-2525
27-2423	7G-2527	ok
27-2426	ok	7G-2514
27-2427	7G-2523	7G-2529
27-2428	7G-2521	7G-2516
27-2429	ok	7G-2518
27-2432	7G-2542	ok
27-2436	7G-2543	ok
Model PA-23-250 (cont):		
27-2437	7G-2541	ok
27-2438	ok	7G-2536
27-2439	8G-2853	8G-2799
27-2441	8G-2797	ok
27-2442	ok	8G-2856
27-2449	ok	8G-2855
27-2450	8G-2777	ok
Model PA-30:		
30-123	7G-2582	ok
30-129	ok	7G-2578
30-131	ok	7G-2577
30-133	ok	7G-2579
30-134	7G-2580	ok
30-136	ok	7G-2583
30-138	ok	7G-2576
30-139	ok	7G-2581
30-140	ok	7G-2585
30-151	8G-2837	8G-2831
30-152	8G-2833	8G-2839
30-153	8G-2821	8G-2829
30-154	8G-2827	8G-2830
30-155	8G-2844	8G-2641
30-156	8G-2845	8G-2825
30-157	8G-2826	8G-2823
30-158	8G-2824	8G-2828

AIRCRAFT SERIAL NO.	PUMP SERIAL NO.		AIRCRAFT SERIAL NO.	PUMP SERIAL NO.	
Model PA-30:	Left Pump	Right Pump	Model PA-30:	Left Pump	Right Pump
30-159	8G-2850	8G-3843	30-167	9G-3078	9G-3118
30-160	8G-2846	8G-2822	30-168	9G-3076	9G-3110
30-161	8G-2842	8G-2849	30-169	ok	9G-3114
30-162	8G-2847	8G-2835	30-170	ok	9G-3071
30-163	8G-2848	8G-2816	30-171	9G-3107	ok
30-164	8G-2801	8G-2811	30-172	9G-3079	ok
30-165	8G-2838	8G-2836	30-175	9G-2813	ok
30-166	ok	9G-3077	30-182	9G-3120	ok

We have received reports indicating that the vacuum pump splined coupling, part number 753 865, on Airborne Mechanisms Vacuum Pumps, Models 113A5 and 113A8, may fail prematurely as a result of over-curing. The failure of the splined coupling renders the vacuum flight instruments of the aircraft inoperative.

There are two phases to this bulletin and they are as follows: First, the original factory installations and, second, field replacements and field stocks of pumps and couplings. Compliance with both phases of this bulletin are as follows:

1. All aircraft indicated by the serial numbers listed above and the pump serial numbers which are also listed as being installed on the aircraft must have the splined coupling replaced.

2. All Piper model aircraft which have had a dry vacuum pump of Airborne Mechanism's manufacture, Models 113A5 or 113A8, Piper part numbers 481 681 or 481 683, replaced between August 15, 1963 and November 5, 1963 inclusive, must be inspected and providing the pump falls within the pump serial number range 7G-2494 through 7G-2678, 8G-2679 through 8G-2892, 9G-2893 through 9G-3250 and 10G-3251 through 10G-3714 inclusive, the coupling, Piper part number 753 865, must be changed.

3. All couplings, Piper part number 753 865, which have been replaced since October 1, 1963 must be changed. All couplings, Piper part number 753 865, in field stocks which have been received prior to November 5, 1963 are to be immediately returned to the factory for credit. They must not be used.

NOTE

THE SUBJECT AIRCRAFT SHOULD NOT BE OPERATED IN INSTRUMENT FLIGHT CONDITIONS UNTIL COMPLIANCE WITH THIS BULLETIN HAS BEEN ACCOMPLISHED.