



SERVICE *No. 218* BULLETIN

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)

| <u>AIRCRAFT SERIAL NO.</u> | <u>PUMP SERIAL NO.</u> | <u>AIRCRAFT SERIAL NO.</u> | <u>PUMP SERIAL NO.</u> |
|------------------------------|------------------------|----------------------------|------------------------|
| Model PA-18: | | Model PA-23-250 | |
| 18-8036 | 7G-2539 | | Left Pump |
| Model PA-22-108: | | | Right Pump |
| 22-9696 | 7G-2531 | 27-2437 | 7G-2541 |
| 22-9700 | 7G-2522 | 27-2438 | ok |
| 22-9702 | 7G-2532 | 27-2439 | 8G-2853 |
| 22-9715 | 7G-2524 | 27-2441 | 8G-2797 |
| 22-9730 | 7G-2540 | 27-2442 | ok |
| 22-9736 | 7G-2538 | 27-2449 | ok |
| 22-9740 | 8G-2800 | 27-2450 | 8G-2777 |
| 22-9744 | 8G-2779 | Model PA-30: | |
| 22-9747 | 7G-2557 | | |
| Model PA-23-235: | | 30-123 | 7G-2582 |
| | Left Pump | 30-129 | ok |
| | Right Pump | 30-131 | ok |
| 27-587 | 7G-2535 | 30-133 | ok |
| 27-585 | 7G-2520 | 30-134 | 7G-2580 |
| | | 30-136 | ok |
| Model PA-23-250 (six place): | | 30-138 | ok |
| 27-2418 | ok | 30-139 | ok |
| 27-2423 | 7G-2527 | 30-140 | ok |
| 27-2426 | ok | 30-151 | 8G-2837 |
| 27-2427 | 7G-2523 | 30-152 | 8G-2833 |
| 27-2428 | 7G-2521 | 30-153 | 8G-2821 |
| 27-2429 | ok | 30-154 | 8G-2827 |
| 27-2432 | 7G-2542 | 30-155 | 8G-2844 |
| 27-2436 | 7G-2543 | 30-156 | 8G-2845 |
| | | 30-157 | 8G-2826 |
| | | 30-158 | 8G-2824 |
| | | | 8G-2828 |

| <u>AIRCRAFT SERIAL NO.</u> | <u>PUMP SERIAL NO.</u> | <u>AIRCRAFT SERIAL NO.</u> | <u>PUMP SERIAL NO.</u> |
|----------------------------|------------------------|----------------------------|------------------------|
| Model PA-30: | | Model PA-30: | |
| | Left Pump | | Left Pump |
| | Right Pump | | Right Pump |
| 30-159 | 8G-2850 | 30-167 | 9G-3078 |
| 30-160 | 8G-2846 | 30-168 | 9G-3076 |
| 30-161 | 8G-2842 | 30-169 | ok |
| 30-162 | 8G-2847 | 30-170 | ok |
| 30-163 | 8G-2848 | 30-171 | 9G-3107 |
| 30-164 | 8G-2801 | 30-172 | 9G-3079 |
| 30-165 | 8G-2838 | 30-175 | 9G-2813 |
| 30-166 | ok | 30-182 | 9G-3120 |
| | | | ok |
| | | | ok |
| | | | ok |
| | | | ok |
| | | | ok |
| | | | 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 of 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, Model 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.

DISTRIBUTORS: Submit your purchase orders for your requirements of the coupling, Piper part number 753 865, for compliance with this bulletin. It is requested that your requirements be carefully screened with your sales and service records for the past two months to avoid over-ordering due to limited supply available at this time.

Credit for compliance with this Bulletin will be issued by following the normal warranty and credit claim procedure. One and one-half (1-1/2) hours labor per coupling change and credit for the coupling will be allowed.