

## REPLACEMENT PARTS LIST - CONTRACT W535-AC-8131

Progress Report Date	Part No.	Part Name and Description	No. of Units	Unit Price	Total
11-15-36	501013	Bushing 1-1/4 I.D. x 1-15/32 O.D. x 1-3/8 shouldered. This bushing was scored possibly due to mis-alignment of the shaft or insufficient end clearance on the thrust face. Replaced with new bushing re-bored in place to allow .018 end clearance for accessory gear.	1	10.26	10.26
11-15-36	501008	Bushing 1-7/16 I.D. x 1-21/32 O.D. x 11/16 shouldered. This bushing was scored possibly due to mis-alignment of the shaft or insufficient end clearance on the thrust face. Replaced with new bushing re-bored in place to allow .018 end clearance for accessory gear and .0045 running clearance on shaft.	1	10.86	10.86
11-15-36	503502 503503 503508	Crankcase and Reduction gear housing rear. Re-bored to accommodate new bushings part number 501013 and 501008. Investigation disclosed that it was possible to assemble the reduction gear housing rear to the crankcase in such a manner that the accessory shaft bushings would not be in perfect alignment. This is due to the fact that continued assembly and dis-assembly has worn the dowel pin and locating pilot. All stud holes were opened up 1/64 and the assembly bored for ring dowels which were pressed around two of the studs as shown on drawing number 500617. This repair will eliminate any further possibility of mis-alignment due to assembly.	1	65.82	65.82
11-15-36	503605	Bearing - reduction gear pinion. This bearing was scored on the rear half only. Replaced with a new bearing bored in place having a 1/4" wide by 3/32 deep annular oil groove instead of the longitudinal spreader grooves previously used.	1	16.65	16.65

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11-15-36	501005	Bolt - special dowel. The re-boring of the crankcase dowel hole oversize necessitated a new dowel bolt of a larger diameter.	1	2.47	2.47
11-15-36	503565	Shaft - accessory drive The scratching and picking up of bearings number 501013 and 501008 necessitated the re-grinding of the end journals on the shaft. Re-work present part.	1	4.05	4.05
11-15-36	503801	Pipe - intake The flange on one intake pipe was broken off. Replaced with new part no change.	1		Government Property
11-15-36	503632	Cylinder assembly Cylinder No. 5R was slightly scored all the way around. This was hand lapped to a smooth surface	1		No Charge
11-15-36	503784	Piston ring - compression Cylinder and piston No. 5R were slightly scored and required a new set of rings. No change.	3	.26	.78
11-15-36	503840	Piston ring - A. H. Vented oil 3/16 Scoring of piston No. 5R necessitated a new set of piston rings. No change.	1	.72	.72
11-15-36	500558	Oil pump assembly The operation of the engine disclosed that the present pump was inadequate and a new pump assembly having 37% more capacity on the pressure pump and 25% more capacity on the scavenge was designed. This assembly includes the following parts:			

Quantity	Part No.	Name
1	500559	Housing - oil pump scavenge
1	500560	Plate - oil pump
1	500561	Gear - oil pump pressure drive
2	500562	Gear - oil pump scavenge driven
1	500563	Gear - oil pump pressure driven
1	500564	Gear - oil pump scavenge drive
1	500565	Shaft - oil pump scavenge driven gear

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Progress  
Report

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Quantity    Part No.    Name

6	500566	Stud 1/4-20;1/4-28 x 3-13/32 drilled
8	500567	Stud 1/4-20;1/4-28 x 1-21/32 drilled
1	500568	Housing oil pump pressure
1	2600	Relief Valve (R-670 standard part)
1	2601	Spring (R-670 standard part)
1	2599	Valve housing (R670 Standard part)
1	2373	Gasket - R-670 standard part)

This increased flow capacity should eliminate the dropping off of the oil pressure at full load. Assembly as described above.

1      366.62      366.62

Total of Replacement Parts List dated 11-16-36 .....\$478.23

RECAPITULATION

Replacement parts previously reported .....	\$4,923.33
Total of Replacement Parts List dated 11-16-36 .....	<u>478.23</u>
Total Replacement Parts listed to date 11-16-36 .....	\$5,401.66
Spare Parts Contract W536-AC-8188 P.O. 37-1091 Invoiced 9-16-36 .....	<u>3,372.11</u>
Total Government liability to date, 11-16-36, over and above the amount specified in Article 17, as provided for in paragraph #3d, Item 3 of Article 15, subject contract .....	\$2,029.45

AIR CORPS INSPECTOR'S CERTIFICATE

I certify that the articles listed on pages one to three inclusive of this report dated 11-15-36 were inspected and accepted by me in the quantities stated, and that they conform to the contract requirements for articles and parts used in the subject engine, and that the above replacement articles and parts were necessary for the continued operation of the engine.

Silas C. Snyder  
Inspector's Signature

Procurement Inspector  
U. S. Army Air Corps  
Title and Rank

12-1-36  
Date