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UNITED STATES GENERAL ACCOUNTING OFFICE  
WASHINGTON, D.C. 20548

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GENERAL GOVERNMENT  
DIVISION

MAR 9 1976

Mr. Edward Dorsey  
Senior Assistant Postmaster  
General for Operations  
United States Postal Service

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Dear Mr. Dorsey:

In November 1975, the General Accounting Office reported on the operations of the Postal Service's centralized automotive parts distribution system. As an adjunct of that review, we surveyed the use of rebuilt automotive parts in the Service's vehicle maintenance program. Our survey was conducted at the Service Headquarters in Washington, D.C., and Eastern Region Headquarters and the Philadelphia Vehicle Maintenance Facility (VMF) in Philadelphia, Pennsylvania.

In summary, the Postal Service has not determined whether the use of rebuilt automotive parts is a cost effective alternative to the use of new parts.

Our survey showed rebuilt parts, purchased by the Philadelphia VMF, resulted in significant dollar savings over new items purchased commercially. Some are even less expensive than new parts supplied by the Service's automotive parts center. However, while the Service has used a number of rebuilt parts for some time, little information is available on the useful life and reliability of rebuilt items--necessary considerations of any policy decision on the use of rebuilt items rather than new items. At present, the decision, to use or not use rebuilt items is made by VMF personnel based on their individual experience.

Because of the large postal fleet and the possible economies that may be realized, we believe the Service should evaluate the cost effectiveness of using rebuilt rather than new automotive parts. Based upon the results of this evaluation, the Service should issue policy guidelines to insure that decisions to acquire new or rebuilt automotive parts are consistent and result in the most effective and efficient vehicle maintenance program.

Details of our survey follow.

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## REPAIR PARTS PROCUREMENT PRACTICES

During fiscal year 1975, the Service used repair parts costing about \$19.5 million, of which the Philadelphia VMF spent approximately \$515,000. 1/

The VMF obtains replacement items in a variety of ways, including purchasing new parts from either commercial sources or the Service's automotive parts center, purchasing rebuilt items from commercial sources, and rebuilding parts in-house. The procurement method is determined by the VMF manager, depending upon considerations such as the item needed or the type of vehicle involved. For example, the Philadelphia VMF generally rebuilds all of its starters and alternators in-house. However, if necessary, rebuilt parts are obtained commercially or, as a last resort, it will obtain new parts from commercial sources or the Service's supply center. In other situations, such as carburetors for 1-ton and smaller vehicles, the VMF uses only new parts. Rebuilt carburetors are used for larger vehicles.

According to a Regional official, VMF managers are given wide latitude to decide to use or not to use rebuilt items. Our survey showed that the VMF manager's decision is based on his personnel experience and judgement. Similarly, a Regional official informed us that in-house rebuilding decisions had been delegated to VMF managers. The VMF manager determines whether or not to rebuild items in-house largely on the basis of available manpower. For example, the Philadelphia VMF uses two mechanics assigned to light duty because of medical reasons for in-house rebuilding. During fiscal year 1975, the Philadelphia VMF rebuilt 764 starters, alternators, and undetermined numbers of other items.

Although the Service uses both new and rebuilt items it has not made any controlled field tests to determine the cost effectiveness of rebuilt parts and, has not issued guidelines to VMF managers concerning the appropriate use and cost effectiveness of rebuilt items.

### COST DIFFERENTIALS BETWEEN NEW AND REBUILT PARTS

There can be a significant difference in the procurement cost of automotive parts depending on whether the item is

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This does not include the labor and overhead cost associated with the in-house rebuilding of parts.

purchased new or rebuilt. The chart below shows some examples of the price variances of different items procured by the Philadelphia VMF.

Type of item (note a)	Unit Price			
	New		Rebuilt	
	Commercial	Central warehouse (note b)	With trade-in	Without trade-in
<b>Alternator</b>				
A	\$ 56.82	\$19.00	\$ 14.25	-
B	207.60	(c)	138.11	-
C	82.92	26.75	-	\$34.70
<b>Starter</b>				
D	64.65	24.87	20.00	30.85
E	58.51	25.25	24.00	-
F	46.22	27.72	14.25	32.00
<b>Carburetors</b>				
G	27.33	16.38	19.50	-
H	25.69	(c)	19.50	-
I	37.80	(c)	19.50	-

a Letter used to designate different part numbers for various postal vehicles.

b The central warehouse catalog price does not include handling and transportation costs estimated at 25 percent of the unit cost.

c Item not stocked by the Service's automotive parts center.

As previously mentioned, the VMF does some parts rebuilding in-house. However, because of the manner in which the Service maintains its accounting records, it was not possible for us to determine the cost of rebuilding the above parts in-house. The Service had not determined whether in-house rebuilding was less expensive than purchasing new or rebuilt items.

In addition to rebuilding electrical items such as starters and alternators, the VMF also reconditions transmissions. This item is costly and time consuming to recondition. A test of available VMF records showed that the cost of reconditioning transmissions commercially was from about one-third to one-half below the average cost of reconditioning them in-house.

NEED TO ESTABLISH  
CONTROLS OVER USED PARTS

When vehicle parts break or wear out, the replaced item-- usually referred to as a core--can often be of some value as a trade-in for a similar rebuilt item or it can be built in-house.

The Postal Service has not established controls over the use made of cores. The disposition of these items is left to the discretion of the VMF managers. The Philadelphia VMF instituted a policy requiring the return of used parts when replacements were requested. However, no records were maintained of cores turned in and their ultimate disposition. Supply personnel informed us that some of the cores were rebuilt in-house.

As an indication of the value of cores, commercial rebuilders informed us that cores are highly sought after. The industry accounts for and charges distributors more if cores are not traded-in. A commercial rebuilder advised us that about 80 percent of the cores used for rebuilding are obtained from trade-ins.

CONCLUSIONS AND RECOMMENDATION

Both new and rebuilt replacement parts are used in the Service's maintenance program. However, the Service has not made a determination as to which type of part--new or rebuilt-- is the most cost effective. While rebuilt items seem to be more economical from a procurement point of view, procurement cost is only one consideration. The reliability and useful life of the item are factors in its use or nonuse. The Service has not determined the reliability or useful life of rebuilt items to determine if they should be used in lieu of new parts. Complicating matters is the fact that new parts supplied by the Service's automotive parts center are often as cheap or nearly as cheap as rebuilt parts. However, even here some economies may be possible, particularly if it were feasible for the parts center to stock rebuilt parts.

Because of the latitude given VMF managers and the alternatives available to them, definitive guidance is needed to insure that the most cost effective parts are used in the Service's vehicle maintenance program.

Accordingly, we recommend that the Senior Assistant Postmaster General for Operations undertake a study to determine the appropriate role rebuilt parts should play in the maintenance program. Key elements in such a study would be:

--field tests to establish the reliability of rebuilt parts vis-a-vis new parts,

- economic (cost/benefit) analysis of commercially supplied parts, both new and rebuilt; new parts supplied by the Service's parts center and parts rebuilt in-house to identify the specific opportunities for savings,
- the feasibility of supplying rebuilt parts through the Service's automotive parts center, and
- the degree of control over cores needed to insure that the Service realizes their full value.

Based upon the results of this study, policy guidelines should be issued to insure that decisions to acquire new or rebuilt automotive parts result in the most efficient vehicle maintenance program.

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We wish to acknowledge the cooperation extended to us during our survey by Service officials at all the installations visited. We would appreciate being informed of any actions taken in response to our recommendation.

Sincerely yours,

  
John Landicho  
Associate Director