MARKING GUIDE
GRANGER AUTOMOTIVES
ASSESSMENT OPPORTUNITIES

To: Harry Granger
From: CPA
Subject: Granger Automotives

Assessment Opportunity #1

The candidate correctly calculates the total gross profit for the transaction described.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:
3.6.1 – Evaluates performance using accepted frameworks (Core Level B; moves to Level A in the Performance Management Elective)

Total Gross Profit Calculation:

Selling price (new car)	$	23,000	Normal gross profit of dealership
Allowance on trade-in	$	7,500	(based on new car sales)
Cash received from customer	$	15,500	
Selling price (used car)	$	8,500	
Total cash inflow	$	24,000	
Cost of goods sold (new car)	$	19,550	
Cost of repairs	$	800	
Total costs (cash outflow)	$	20,350	
Total dealership gross profit	$	3,650	Gross profit on this transaction

The overall gross profit on this transaction is $3,650. The gross profit margin on this transaction is therefore over 15%, as compared with the gross profit margin before general and administrative expenses on the income statement of 6%. However, the calculations exclude commission costs.

Assessment Opportunity #2

The candidate correctly calculates divisional profit for the used car received in the recent transaction.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:
3.3.2 – Evaluates and applies cost management techniques appropriate for specific costing decisions (Core Level B; moves to Level A in the Performance Management Elective)

Divisional Profit Calculations

	New Cars		Used Cars		Service
Selling price of new car	$23,000	Selling price of used car	$8,500	Repair revenue~	$1,080
Amount allowed for trade	$ 7,500	Transfer price paid to new car dept.*	$7,500	Cost of repairs	$ 800
Cash received from customer	$15,500		$1,000		
Transfer price rec'd from used car dept.*	$ 7,500	Transfer price paid to service dept.~	$1,080		
COGS	$19,550				
Divisional profit	**$ 3,450**		**($ 80)**		**$ 280**
Total profit	$ 3,650				

*The important issue is that the same transfer price is used by both the new car and the used car department for the trade and by both the used car and the service department for the repairs.

Regardless of the transfer prices chosen, the sum of the divisional profits should equal the profit of $3,650.

It is reasonable to use $800 for the repairs, which would result in the used car department having a profit of $200 and the service department breaking even.

Assessment Opportunity #3

The candidate recommends an appropriate transfer pricing policy to implement the proposed incentive scheme.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:
3.7.1 – Analyzes the implications of management incentive schemes and employee compensation methods (Core Level B; moves to Level A in the Performance Management Elective)

The current incentive scheme motivates the three department managers to focus solely on divisional profit. This is reinforced with remuneration determined as a straight percentage of divisional gross margin for each manager. It assumes each of the departments is a profit centre.

The setting of the transfer prices between departments (profit centres) should be based on market rates. This is sometimes difficult to determine. If there is an external price available, this should be used for used cars transferred from the new car department. Nancy should have this information available to her when negotiating the sale of a new car with a trade-in.

The external market rate for used cars would be the selling value of the used car, so the trade-in value should allow for Oliver to make a profit. That margin should be fixed. For example, if a trade-in has a market price of $10,000, then Nancy should offer only $8,000 for the trade-in so that Oliver can make a $2,000 profit when selling it.

The service department creates a different problem. When treated as a profit centre, it should be allowed to make a profit on all service done, including internal work. This is especially true when it is at capacity, which may be the situation here since Frank states that customers frequently have to wait to get an appointment. If Frank does not obtain a return on internal work, he could refuse to do it and obtain profit from accepting additional outside work.

Assessment Opportunity #4

The candidate discusses the conflict between the structure of the incentive system and Mr. Granger's needs.

The candidate demonstrates competence in Strategy and Governance.

CPA Map Competencies:
2.1.1 – Evaluates the entity's governance structure (policies, processes, codes) (Core Level B; moves to Level A in the Performance Management Elective)

It is incongruent with Mr. Granger's goals for retirement and a source of income to set up the dealership with three profit centres. The challenge is that Mr. Granger has always had a global perspective on the business and has made decisions accordingly.

Mr. Granger needs to understand the downsides to his new incentive scheme. For example, the new incentive structure assumes that each department is independent; however, there are significant interactions among the three department that do not work for such a decentralized incentive scheme. The new car department will want to drive up sales by providing a high trade-in value for used cars, which has a negative impact on the profitability of the used car department.

If the service department is driven by profit, it will charge the other departments the full price on internal repair work, which will negatively affect the used car department. Alternatively, the service department could prioritize external work in the queue and leave internal work to be completed whenever there's an opportunity, which would result in a backlog of internal work to be done.

The incentive scheme should be structured to encourage the managers to work together. Several improvements could be put in place, such as the following:

- Managers could receive a percentage of overall dealership profit.
- The new car department could be a profit centre, and both the used car and service departments could be cost centres when it comes to internal work.
- Mr. Granger might appoint a single manager to oversee the dealership (much like he had in the past) to ensure that dealership profit is maximized.

Assessment Opportunity #5 *

The candidate prepares a reasonable quantitative analysis of the three divisions.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:
3.6.1 – Evaluates performance using accepted frameworks (Core Level B; moves to Level A in the Performance Management Elective)

Since Mr. Granger is focused on profit, the profit performance of each department needs to be analyzed and compared to the overall company performance.

New car division profit	$ 419,923	÷	$ 7,634,961	5.50%
Used car division profit	343,573	÷	3,435,733	10.00%
Service division profit (all work)	22,056	÷	1,145,244	1.93%
Service division profit (external work only)	296,915	÷	1,145,244	25.93%
Overall dealership profit	479,187	÷	12,215,938	3.92%

New car division GM	419,923			
Used car division GM	343,573			
Service division GM (external work only)	1,145,244	-	848,329	$ 296,915

While Mr. Granger thinks that the service department is just necessary in order to generate new car sales, the service department actually has the highest margin of the three departments. If anything, he should consider ways to expand the service department to increase profitability, since it is over capacity.

The margins above could also be used to determine transfer pricing between departments, particularly for repair work where internal work is severely affecting the service department's margins.

**Updated March 2017*

Assessment Opportunity #6

The candidate recommends appropriate performance measures and identifies key success factors.

The candidate demonstrates competence in Management Accounting.

CPA Map Competencies:
3.6.1 – Evaluates performance using accepted frameworks (Core Level B; moves to Level A in the Performance Management Elective)

Mr. Granger identified several important considerations for him, such as being "focused on new car sales," "counting on [the dealership] as a source of income for retirement," wanting "to maintain its excellent reputation given the business will continue in his name," providing "excellent service," and running "each department effectively." These considerations should be incorporated in a more robust performance measurement scheme.

To accomplish many of Mr. Granger's goals, a key point is the importance of his management team working together to maximize dealership profit, not divisional profit.

It would be reasonable to recommend a balanced scorecard with several measures that address Mr. Granger's key factors and the things that make Granger Automotives successful. These measures may include the following:

Financial
- Company gross margin
- Inventory turnover (both new and used cars)
- Cost per service job in the service department

Customer
- Number of new car customers who use the service department for regular service
- Number of repeat customers for new cars
- Customer feedback on overall service

Internal Process
- Cycle time for repairs

Learning and Growth
- Training time for mechanics to keep up to date

Assessment Opportunity #7

The candidate recommends an implementation action that aligns with his or her analysis.

The candidate demonstrates competence in Financial Reporting.

CPA Map Competencies:
1.4.5 – Analyzes and predicts the impact of strategic and operational decisions on financial results [(c) Recommends actions to take as a result of strategic and operational decisions] (Core Level B; moves to Level A in the Performance Management Elective)

The current performance measures need to change to encourage more desirable actions from the managers. While gross margin is important, it should be more focused on company margin instead of divisional margins. Mr. Granger should consider hiring a general manager who can make the transferprice decisions with the interests of the company in mind.

Analysis shows that the service department contributes a significant amount to the profitability of the dealership based on external work. Therefore, there are several possible actions that ensure that profitability continues, such as the following:

- Expanding the service bays to address capacity issues and decrease wait and appointment times
- Allocating an amount of time for internal work to ensure work on used cars is not put off in favour of better-paying external work and that used cars are ready for sale
- Providing performance metrics for Frank that are based on external work (e.g., turnover time,customer satisfaction, profitability of external work)

Mr. Granger also points out that the tools and equipment for the service department are a large investment, so he would like to get a return from the service department to pay for these assets. Therefore, the service department should receive some profit from internal work to show a reasonablereturn on assets.

Margins and sales on used cars could be better, and there are a few ways to improve this:

- Assign a fixed percent of market price to used car trade-ins that accounts for both used carprofit and any repairs (e.g. all used cars are given a credit of 90% of market price after repairs).
- Implement a policy for valuing used cars that the new car department accepts to allow moreprofitability for the used car department.
- Modify the commissions paid to new and used car staff to encourage used car profitability.
- Increase the inventory of used cars through other means, such as services like AutoTRADER.ca™ and auctions.

The numbers do not tell the whole story. There may be no need for the service department without robust new car sales. Conversely, the service department may be so good that it encourages customers to buy their new and used cars from Granger over other dealerships.

Granger could invest resources into investigating the value of the service department with existing customers. This is a highly integrated organization, and it is difficult to assess the contribution of one department to the organization as a whole.