

**Exercise 13-3** (30 minutes)

1.

	<i>Per Unit Differential Costs</i>		<i>15,000 units</i>	
	<i>Make</i>	<i>Buy</i>	<i>Make</i>	<i>Buy</i>
Cost of purchasing .....		\$35		\$525,000
Direct materials .....	\$14		\$210,000	
Direct labor .....	10		150,000	
Variable manufacturing overhead .	3		45,000	
Fixed manufacturing overhead, traceable <sup>1</sup> .....	2		30,000	
Fixed manufacturing overhead, common.....				
Total costs .....	<u>\$29</u>	<u>\$35</u>	<u>\$435,000</u>	<u>\$525,000</u>
Difference in favor of continuing to make the carburetors .....		<u>\$6</u>		<u>\$90,000</u>

<sup>1</sup> Only the supervisory salaries can be avoided if the carburetors are purchased. The remaining book value of the special equipment is a sunk cost; hence, the \$4 per unit depreciation expense is not relevant to this decision.

Based on these data, the company should reject the offer and should continue to produce the carburetors internally.

2.

	<i>Make</i>	<i>Buy</i>
Cost of purchasing (part 1) .....		\$525,000
Cost of making (part 1) .....	\$435,000	
Opportunity cost—segment margin foregone on a potential new product line .....	<u>150,000</u>	
Total cost.....	<u>\$585,000</u>	<u>\$525,000</u>
Difference in favor of purchasing from the outside supplier .....		<u>\$60,000</u>

Thus, the company should accept the offer and purchase the carburetors from the outside supplier.