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Fixed Operations 2 -

Financial Calculations and Formulas

Ramsey Mazda

Dealership

Micah Westrum

Student

N444

Class #

Service

Service Department Sales And Gross (Labor Only)

Category	Sales	Gross	Gross as % of Sales	Net as % of Sales
Customer Pay	\$ 72,584	\$ 57,384	79.03%	29.96%
Customer			0%	0.00%
Customer Other			0%	0.00%
Warranty	\$ 30,515	\$ 24,785	81.22%	12.43%
Warranty Other			0%	0.00%
Internal	\$ 142,435	\$ 111,187	78.00%	58.03%
NV/PC/Read Ready			0%	0.00%
Unapplied Time/SL Cost Of Labor			0%	0.00%
Total	\$ 245,534	\$ 193,336	78.74%	100.00%

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The Picture

Customer Pay Gross Profit %	79.03%
Total Service Dept. G.P. %	78.74%

Parts To Labor Ratios

Category	Parts Sales	Labor Sales	PL Ratio
Customer Pay	\$ 140,751	\$ 72,584	1.94
Customer	\$ -	\$ 0.00	
Customer Other	\$ -	\$ 0.00	
Warranty	\$ 141,270	\$ 30,515	4.63
Warranty Other	\$ -	\$ 0.00	
Internal	\$ 78,805	\$ 142,435	0.55
Total	\$ 360,826	\$ 245,534	1.47

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The Picture

Customer Pay Gross Profit %	79.03%
Total Service Dept. G.P. %	78.74%
Parts / Labor Ratio (Cust. Pay Only)	1.94

Service Department Profit Centering

Expense Category	Dollar Amount	% of Gross	Profit
Department Gross	\$ 193,336		
Variable Expense		0.00%	
Selling Expense		0.00%	
Personnel Expense	\$ 50,563	26.15%	
Semi-Fixed Expense	\$ 7,853	4.06%	
Fixed Expense	\$ 32,564	16.84%	
Unallocated Expense		0.00%	
Dealers Salary	\$ 90,980	47.06%	
Total Expenses	\$ 102,366		
Net Profit	\$ 90,980		

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Customer Pay Gross Profit %	79.03%
Total Service Dept. G.P. %	78.74%
Parts / Labor Ratio (Cust. Pay Only)	1.94
Total Service Dept. Expenses	\$ 90,980

Parts Department Total Gross

Service Department Total Gross

Body Shop Department Total Gross

Total Fixed Gross Profit

Total Dealership Expense

Overhead Expense

Total Fixed Gross Profit

Total Dealership Expense

Fixed Absorption Percentage

Guideline 60%

The Picture

Customer Pay Gross Profit %	
Total Service Dept. G.P. %	
Parts / Labor Ratio (Cust. Pay Only)	
Total Service Dept. Expenses	

	% Ag Cont Exp
\$ 76,012	17.27%
\$ 223,686	50.82%
\$ -	0.00%

\$ 299,697
\$ 440,162

\$ 440,162
\$ 299,697
\$ 440,162
68.09%

79.02%
78.74%
1.94
\$ 90,980

SERVICE INVENTORY ANALYSIS

	<i>Labor Sales / Month</i>	<i>Effective Labor Rates</i>	<i>Hours Billed</i>
Customer Pay	\$ 72,584	÷ \$ 179.00 =	405.5
Customer	\$ -	÷ =	0.00
Customer Other	\$ -	÷ =	0.00
Warranty	\$ 30,515	÷ 137.00 =	222.7
Internal	\$ 142,435	÷ 106.00 =	1343.7
New Vehicle Prep	\$ -	÷ =	0.00
Total	\$ 245,534		1972.0

POTENTIAL

\$ 245,534	÷	1971.96	=	\$ 124.51
Total labor sales for month		Total hours billed		Effective Labor Rate
17.00	x	8	x	24.0 = 3,264.0
# Service mechanical technicians		# Hours/Day		Working Days/Month Hours Available to Sell
3,264.0	x	\$ 124.51	=	\$ 406,409 \$ 508,011.47
Hours Available to Sell		Effective Labor Rate		Labor sales potential @100% Labor sales potential @ 125%

How proficient are your technicians ?

1,972.0	÷	3,264.00	=	60.42%
Total Hours Billed		Hours Available to Sell		Tech Proficiency

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Hours Per RO (RO Analysis)	0.6
Percent of One Item R.O.'s (RO Analysis)	60.00%
Customer Pay Effective Labor Rate (DMS Report)	\$ 124.57
Warranty Labor Rate (DMS Report)	\$ 171.00
Total Overall Effective Labor Rate	\$ 124.51
Overall Technician Proficiency	60.42%

	FACILITY POTENTIAL		Calculating Real Cost of	
Number of Bays				
	x		\$	245,534
Number of Days				Labor Sales
	x			
Number of Hours				Divided by Hours Billed
	x			
Effective Labor Rate	\$	124.51		0.00
		<i>equals</i>		= OELR
FACILITY POTENTIAL	\$	-		

	FACILITY UTILIZATION			\$	245,534
Total Labor Sales	\$	245,534			Labor Cost
		÷			
Facility Potential	\$	-			0.00
		<i>equals</i>			/ Hours Billed
FACILITY UTILIZATION			0.00%		\$0.00
					=Real Cost

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		÷		24.00%
Real Cost				

Labor

\$ 245,534
Labor Sales

-Labor Gross

\$ 245,534
=Labor Cost

OWNER BASE POTENTIAL

5 Year Owner Base x Annual Hours Purchased 8 = Market Potential / Hours 0.0

0.0 x Effective Labor Rate 0.00 = \$ 5 Yr. O.B Sales Potential -

Avg. Mos. Labor Sales (excluding internal, PDI and NVI) x Annualized 12 = \$ Current Labor Sales Trend -

\$ Labor Sales Trend - ÷ \$ 5 Yr. O.B. Sales Potential = 0.00%
Ouch

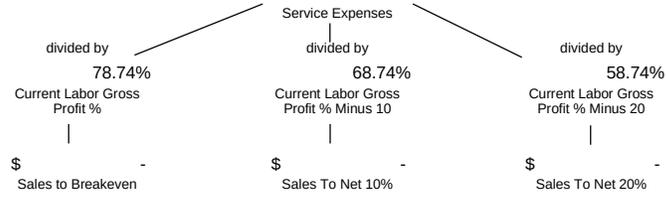
**Note: The industry average of 35% is very poor performance.*

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= \$0.00
E.L.R. Needed to earn
76%

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PROFIT ON LABOR SALES



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Customer Pay Gross Profit %	79.03%	Customer Pay E.L.R.	\$ 124.57
Total Service Dept. G.P.%	78.74%	Total (overall) E.L.R.	\$ 124.51
Parts / Labor Ratio (Cust Pay Only)	1.94	Warranty Labor Rate	\$ 171.00
Total Service Dept Expense	\$ 90,980	Overall Tech Proficiency	60.42%
Hours Per R.O (recap)	0.62		
Percent Of One Item R.O.'s	60.00%		

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Technician Value

Calculate using daily available hours per technician

Hours		Days		Labor Rate		Sales Value
	X		X	\$ 124.51	=	\$ -

Sales Value		Gross Margin		Profit Value
\$ -	X	78.74%	=	\$ -

\$ -	X	70%	\$ -
\$ -	X	80%	\$ -
\$ -	X	90%	\$ -
\$ -	X	100%	\$ -
\$ -	X	110%	\$ -
\$ -	X	120%	\$ -
\$ -	X	0.0%	\$ -

Your Proficiency # = Adjusted Profit Value

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STAFFING REQUIREMENTS

A. Sales To Break Even

Service Expenses for One Month		Current Gross Profit Percent	=	Sales To Break Even
		78.74%	=	\$ -

B. Sales To Generate 20% Net

Service Expenses for One Month		Current Gross Profit Percent (Minus 20)	=	Sales To Generate 20% Net
\$ -		58.74%	=	\$ -

C. Technician Value

Daily Work Hours	X	Average Proficiency Rate	X	Overall Effective Labor Rate	X	Work Days Per Month	=	Technician Value
0	X	80%	X	\$ 124.51	X	0	=	\$0
0	X	90%	X	\$ 124.51	X	0	=	\$0
0	X	100%	X	\$ 124.51	X	0	=	\$0
0	X	120%	X	\$ 124.51	X	0	=	\$0

D. Staffing To Break Even

Sales To Break Even		Technician Value	=	Staffing
\$ -		0 @ 80%	=	0.0
\$ -		0 @ 90%	=	0.0
\$ -		0 @ 100%	=	0.0
\$ -		0 @ 120%	=	0.0

E. Staffing To Generate 20% Net

Sales To Generate 20% Net		Technician Value	=	Staffing
\$ -		\$ - @ 80%	=	0.0
\$ -		\$ - @ 90%	=	0.0
\$ -		\$ - @ 100%	=	0.0
\$ -		\$ - @ 120%	=	0.0

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Service Advisor Performance

How To Set Advisor Sales Objectives To: Break Even, Net 10%, & Net 20%

Break Even	Net 10 %	Net 20 %																																																																																																																																																																																																												
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Exercise to See What Happens When You Increase Your Hours Per Repair Order

	Number of customer R.O.'s for the month	X	
	Multiply by .3 hours		0.3 hours
\$0	Additional customer labor hours generated	=	0.00
		X	
58.74%	Multiply by Customer Labor Rate	\$	124.57
\$ -	Equals additional Customer Labor Sales Generated	= \$	-
		X	
0.0	Multiply by customer Labor Gross Profit %		79.03%
\$0.00	Equals additional Labor Gross Profit \$ generated	= (A) \$	-
0			
\$0.00			
	Divide Parts Sales R.O. by Labor Sales R.O. to calculate \$ parts sales per 1\$ of Labor Sales	=	1.94
\$ 124.51		X	
0.0	Multiply by Customer Labor Sales	\$	-
		=	
	Equals additional Customer Parts Sales generated	\$	-
		X	
	Multiply by Customer Parts Sales Gross Profit %		
	Equals additional Parts Gross Profit \$ Generated	= (B) \$	-
	Add Gross Profit from Labor (A) and Parts (B)	= \$	-

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Labor Rate Calculations

1 Calculate the **Labor Rate** for the following operation.

A/C Charge and Check

	Labor Price:	\$144.00		
	Hours:	1.2		
Price	Hours		=	\$0.00
			=	Labor Rate

2 Calculate the **Effective Labor Rate** for the following "Repair" operations.

Labor Operations	Labor Price		Labor Hours		Labor Rate
Clean Fuel Injectors	\$ 117.60		1.20 =		
R&R Rear Hub Bearing.	\$ 96.00		0.80 =		
Replace Trans. Pan gasket	\$ 107.80		1.10 =		
R&R Headlight unit (1)	\$ 108.00		0.90 =		
	Total Price		Total Hours	=	\$0.00
				=	Effective Labor Rate
					(For This R.O.)

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Calculating Mark-Up

- 3 Using the following formula, mark-up a part costing \$6.72 to attain a 35% gross profit (round to the nearest cent)

100%	→	=	0.00
100%		Desired Gross Profit percent	Mark-Up Factor
	X	0.00	=
Part Cost		Mark-Up Factor	Retail Price

- 4 Calculate the "Weighted Average" price at a 40% Gross Profit for the following parts (round to the nearest cent)

Item	Cost	X	Annual Turnover	=	Total Cost
Filter #1	\$4.36	X	112	=	
Filter #2	\$4.01	X	56	=	
Filter #3	\$3.56	X	85	=	
Filter #4	\$3.86	X	202	=	
Filter #5	\$3.51	X	36	=	
	Total Items		491		Total Cost
					\$0.00

$$\begin{array}{r}
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 \end{array}$$

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Cost Of A Come-Back

Lost Customer Opportunity

Average Hours per R.O.	X		
	=		0.0
Effective Labor Rate	X	\$	124.51
Lost Labor Sales	=	\$	- (A)
Service Department Gross Profit % (Excluding Sublet)	X		78.74%
Lost Labor Gross	=	\$	- (B)
Lost Labor Sales		\$	- (A)
Parts / Labor Ratio	X		1.94
	=	\$	-
Parts Dept Gross Profit % R.O.Sales	X		
Lost Parts Gross	=	\$	- (C)
Lost Labor Gross		\$	- (B)
Lost Parts Gross	+	\$	- (C)
Total Lost Gross	=	\$	-

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