Financial Calculations and Formulas

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Class #	N396

Service Department Sales And Gr

Category	Sales
Customer Pay	$ 145,329
Customer	
Customer Other	
Warranty	$ 46,643
Warranty Other	
Internal	$ 32,518
NVI / Road Ready/ PDI	
Adj. Cost Of Labor	
Total	$ 224,490

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Customer Pay Gross Profit %

Total Service Dept. G.P. %

oss (Labor Only)

Gross	Gross as % of Sales	%Sales Contribution
$ 101,252	69.67%	64.74%
	0%	0.00%
	0%	0.00%
$ 33,523	71.87%	20.78%
	0%	0.00%
$ 16,969	52.18%	14.49%
	0%	0.00%
$ (15,821)	0%	0.00%
$ 135,923	60.55%	100.00%

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69.67%
60.55%

Parts To Labor Ratios

Category	Parts Sales	Labor Sales	P/L Ratio
Customer Pay	$ 108,361	$ 145,329	0.75
Customer		$ -	0.00
Customer Other		$ -	0.00
Warranty	$ 86,528	$ 46,643	1.86
Warranty Other		$ -	0.00
Internal	$ 46,175	$ 32,518	1.42
Total	$ 241,064	$ 224,490	1.07

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Customer Pay Gross Profit %	69.67%
Total Service Dept. G.P. %	60.55%
Parts / Labor Ratio (Cust. Pay Only)	0.75

Service Department Profit Centering

Expense Category	Dollar Amount	% of Gross	Profile
Department Gross	$ 135,923		
Variable Expense	$ 56,820	41.80%	
Selling Expense		0.00%	
Personnel Expense		0.00%	
Semi-Fixed Expense	$ 33,371	24.55%	
Fixed Expense	$ 23,975	17.64%	
Unallocated Expense		0.00%	
Dealer's Salary	$ -	0.00%	
Total Expenses	$ 114,166	83.99%	
Net Profit	$ 21,757	16.01%	

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Customer Pay Gross Profit %	69.67%
Total Service Dept. G.P. %	60.55%
Parts / Labor Ratio (Cust. Pay Only)	0.75
Total Service Dept. Expenses	$ 114,166

Fixed Absorption

		% Adj Ovh
Parts Department Total Gross	$ 160,155	22.65%
Service Department Total Gross	$ 137,782	19.49%
Body Shop Department Total Gross	$ 84,345	11.93%
Total Fixed Gross Profit	$ 382,282	
Total Dealership Expense	$ 707,045	

Overhead Expense	$ 707,045	
Total Fixed Gross Profit	$ 382,282	
Total Dealership Expense	$ 707,045	
Fixed Absorption Percentage	54.07%	**Guideline**

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Customer Pay Gross Profit %	69.67%
Total Service Dept. G.P. %	60.55%
Parts / Labor Ratio (Cust. Pay Only)	0.75
Total Service Dept. Expenses	$ 114,166


d Exp
60%

NADA ACTUAL SERVICE ANALYSIS

	Labor Sales / Month		Effective Labor Rates	
Customer Pay	$ 145,329	÷	69.54	=
Customer	$ -	÷		=
Customer Other	$ -	÷		=
Warranty	$ 46,643	÷	125.75	=
Internal	$ 32,518	÷	69.54	=
New Vehicle Prep	$ -	÷		=
Total	$ 224,490			

POTENTIAL

$ 224,490	÷	2928.40	=	
Total labor sales for month		Total hours billed		
19.00	x	8	x	
# Service mechanical technicians		# Hours/Day		
3,800.0	x	$ 76.66	=	
Hours Available to Sell		Effective Labor Rate		

How proficient are your technicians ?

2,928.4	÷	3,800.00	=
Total Hours Billed		Hours Available to Sell	

Hours Per RO (RO Analysis)	0.7
Percent of One Item R.O.'s (RO Analysis)	60.00%
Customer Pay Effective Labor Rate (DMS Reoprt)	$ 69.54
Warranty Labor Rate (DMS Report)	$ 125.75
Total Overall Effective Labor Rate	$ 76.66
Overall Technician Proficiency	77.06%

Hours Billed
2089.9
0.00
0.00
370.9
467.6
0.00
2928.4

$ 76.66
Effective Labor Rate

25.0 = 3,800.0
Working Days/Month — Hours Available to Sell

$ 291,307 — Labor sales potential @100%

$ 364,133.62 — Labor sales potential @ 125%

77.06%
Tech Proficiency

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FACILITY POTENTIAL

Number of Bays	32	
	x	
Number of Days	25	
	x	
Number of Hours	12	
	x	
Effective Labor Rate	$ 76.66	
	equals	
FACILITY POTENTIAL		$ 735,933

FACILITY UTILIZATION

Total Labor Sales	$ 224,490	
	÷	
Facility Potential	$ 735,933	
	equals	
FACILITY UTILIZATION		30.50%

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Calculating Real Cost of Labor

$ 224,490	Labor Sales
2,928.4	Divided by Hours Billed
$ 76.66	= OELR

$ 86,708	Labor Cost
2,928.40	/ Hours Billed
$ 29.61	=Real Cost

$29.61	÷	24.00%	=	
Real Cost				

$ 224,490
Labor Sales

$ 137,782
-Labor Gross

$ 86,708
=Labor Cost

$123.38
E.L.R. Needed to earn

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OWNER BASE POTENTIAL

3043	x	8	=	24,344.0
5 Year Owner Base		Annual Hours Purchased		Market Potential / Hours
24,344.0	x	$ 76.66	=	$ 1,866,202
Market Potentail/ Hours		Effective Labor Rate		5 Yr. O.B Sales Potential
$ 166,435	x	12	=	$ 1,997,220
Avg. Mos. Labor Sales		Annualized		Current Labor Sales Trend
$ 1,997,220	÷	$ 1,866,202	=	107.02%
Labor Sales Trend		5 Yr. O.B. Sales Potential		Ouch

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

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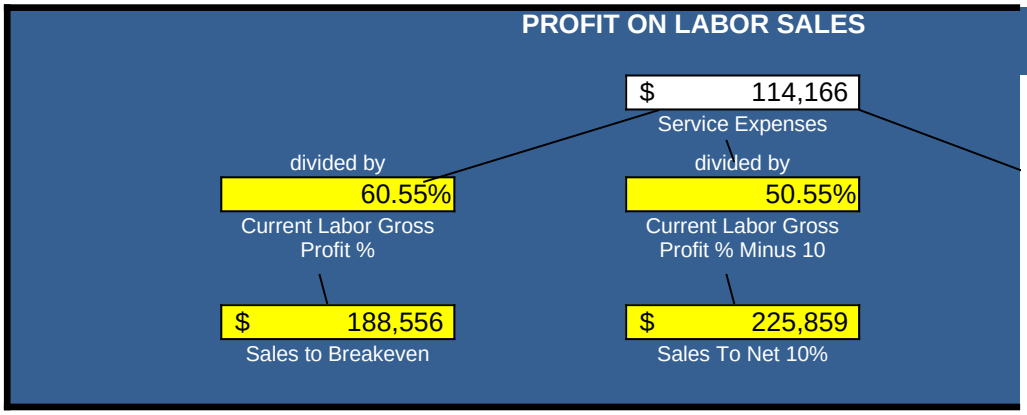

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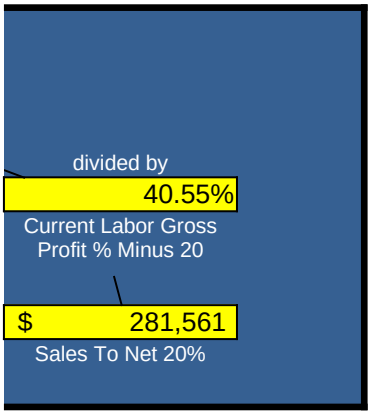
Customer Pay Gross Profit %	69.67%	Customer Pay
Total Service Dept. G.P.%	60.55%	Total (overall)
Parts / Labor Ratio (Cust Pay Only)	0.75	Warranty Lab
Total Service Dept Expense	$ 114,166	Overall Tech
Hours Per R.O (recap)	0.72	
Percent Of One Item R.O.'s	60.00%	



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y E.L.R.	$ 69.54
) E.L.R.	$ 76.66
or Rate	$ 125.75
Proficiency	77.06%

Technician Value

Calculate using daily available hours per technician

Hours		Days	
8	x	25	x

Sales Value		Gross Margin	
$ 15,332	x	60.55%	=

$ 9,283	x	70%		$ 6,498
$ 9,283	x	80%		$ 7,426
$ 9,283	x	90%	proficiency	$ 8,355
$ 9,283	x	100%		$ 9,283
$ 9,283	x	110%		$ 10,211
$ 9,283	x	120%		$ 11,140
$ 9,283	x	77.1%	=	$ 7,154
Profit Value		**Your Proficiency #**		Adjusted Profit Val

Labor Rate		Sales Value
$ 76.66	=	$ 15,332

Profit Value

$ 9,283

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STAFFING REQUIREMENTS

A. Sales To Break Even

Service Expenses for One Month		Current Gross Profit Percent	
$ 114,167	¸	60.55%	=

B. Sales To Generate 20% Net

Service Expenses for One Month		Current Gross Profit Percent (Minus 20)	
$ 114,167	¸	40.55%	=

C. Technician Value

Daily Work Hours	X	Average Proficiency Rate	X	Overall Effective Labor Rate	X
8		80%		$ 76.66	
8		90%		$ 76.66	
8		100%		$ 76.66	
8		120%		$ 76.66	

D. Staffing To Break Even

Sales To Break Even		Technician Value

$	188,558	12,266	@ 80%
$	188,558	13,799	@ 90%
$	188,558	15,332	@ 100%
$	188,558	18,398	@ 120%

E. Staffing To Generate 20% Net

Sales To Generate 20% Net		Technician Value	
$	281,564	$ 12,266	@ 80%
$	281,564	$ 13,799	@ 90%
$	281,564	$ 15,332	@ 100%
$	281,564	$ 18,398	@ 120%

Sales To Break Even

$ 188,558

Sales To Generate 20% Net

$ 281,564

Work Days Per Month	=	Technician Value
25		$12,266
25		$13,799
25		$15,332
25		$18,398

= Staffing

=	15.4
=	13.7
=	12.3
=	10.2

=	Staffing
=	23.0
=	20.4
=	18.4
=	15.3

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How To Set Advisor Sales Objectives To: Beak Even, N

Break Even

1 Service Department's Monthly Expenses		$114,167
2 Divide by current labor gross profit % to break even	÷	60.55%
3 Equals New Sales Objective	=	$ 188,558
4 Number of Advisors	÷	5.0
5 Equals Sales Objective per Advisor	=	$ 37,712
6 Number of work days per month	÷	25
7 Equals daily sales objective per advisor	=	$ 1,508
8 Current overall effective labor rate	÷	$ 76.66
9 Equals daily sales objective per advisor (FRH's)	=	19.7

Service Advisor Performance

let 10%, & Net 20%

Net 10 %

1	Service Department's Monthly Expenses		$114,167
		÷	
2	Divide by current labor gross profit % minus 10 to net 10%		50.55%
		=	
3	Equals New Sales Objective		$ 225,861
		÷	
4	Number of Advisors		5.0
		=	
5	Equals Sales Objective per Advisor		$ 45,172
		÷	
6	Number of work days per month		25
		=	
7	Equals daily sales objective per advisor		$ 1,807
		÷	
8	Current overall effective labor rate		$ 76.66
		=	
9	Equals daily sales objective per advisor (FRH's)		23.6

Net 20 %

1	Service Department's Monthly Expenses		$114,167
		÷	
2	Divide by current labor gross profit % minus 20 to net 20%		40.55%
		=	
3	Equals New Sales Objective		$ 281,564
		÷	
4	Number of Advisors		5.0
		=	
5	Equals Sales Objective per Advisor		$ 56,313
		÷	
6	Number of work days per month		25
		=	
7	Equals daily sales objective per advisor		$ 2,253
		÷	
8	Current overall effective labor rate		$ 76.66
		=	
9	Equals daily sales objective per advisor (FRH's)		29.4

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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			1109
	x		
Multiply by .3 hours			0.3 hours
Additional customer labor hours generated	=		332.70
	x		
Multiply by Customer Labor Rate			$ 69.54
Equals additional Customer Labor Sales Generated	=		$ 23,136
	x		
Multiply by customer Labor Gross Profit %			69.67%
Equals additional Labor Gross Profit $ generated	=	(A)	$ 16,119
Divide Parts Sales R.O. by Labor Sales R.O. to calculate $ parts sales per 1$ of Labor Sales	=		0.75
	x		
Multiply by Customer Labor Sales			$ 23,136
	=		
Equals additional Customer Parts Sales generated			$ 17,251

	x		
Multiply by Customer Parts Sales Gross Profit %			35.20%
Equals additional Parts Gross Profit $ Generated	=	(B)	$ 6,072
Add Gross Profit from Labor (A) and Parts (B)	=		$ 22,191

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orm

Labor Rate Calculations

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

A/C Charge and Check

Labor Price	$144.00
Units	1.2

$144.00	¸	1.2	=	$120.00
Price		Units		Labor Rate

2 Calculate the **Effective Labor Rate** for the following "Repair" opera

Labor Operations	Labor Price		Labor Units
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
	$ 429.40	¸	4.0
	Total Price		Total Units

tions.

	Labor Rate
=	$ 98.00
=	$ 120.00
=	$ 98.00
=	$ 120.00
=	$ 107.35

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 gross profit (round to the nearest cent)

100%		35%	=	
100%		Desired Gross Profit percent		
$6.72	X	1.54	=	
Part Cost		Mark-Up Factor		

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

Item	Cost		Annual Turnover	
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

$ 1,921.56	¸	491	=	$ 3.91
Total Cost		Total Items		Average **Cost**
$ 3.91	X	1.67	=	$ 6.54
Cost		Factor		Average **Price**

ɔ attain a 35%

1.54
Mark-Up Factor

$10.34
Retail Price

or the following

Total Cost
$488.32
$224.56
$302.60
$779.72
$126.36
$1,921.56

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Cost Of A Come-Back

Lost Customer Opportunity		1.5	
Average Hours per R.O.	X	0.7	
	=	1.1	
Effective Labor Rate	X	$ 76.66	
Lost Labor Sales	=	$ 83	(A)
Service Department Gross Profit % (Excluding Sublet)	X	60.55%	
Lost Labor Gross	=	$ 50	(B)
Lost Labor Sales		$ 83	(A)
Parts / Labor Ratio	X	0.75	
	=	$ 62	
Parts Dept Gross Profit % R.O.Sales	X	35.20%	
Lost Parts Gross	=	$ 22	(C)
Lost Labor Gross		$ 50	(B)
Lost Parts Gross	+	$ 22	(C)
Total Lost Gross	=	$ 72	

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