Fixed Operations 2 -

Financial Calculations and Formulas

ROBERT ARISTY

Service

Service Department Sales And Gross (Labor Only)

Category	Sales	Gross	Gross as % of Sales	%Sales Contribution
Customer Car	$ 111,982	$ 92,418	82.53%	26.21%
Customer Express	$ 40,423	$ 35,908	88.83%	9.46%
Customer other	$ 16,012	$ 7,432	46.42%	3.75%
Warranty	$ 170,453	$ 132,765	77.89%	39.90%
Quick service		$ (18,257)	0%	0.00%
Internal	$ 53,208	$ 38,150	71.70%	12.45%
NVI / Road Ready/ PDI	$ 35,147	$ 29,165	82.98%	8.23%
Adj. Cost Of Labor		$ (30,875)	0%	0.00%
Total	$ 427,225	$ 286,706	67.11%	100.00%

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Customer Pay Gross Profit %	80.61%
Total Service Dept. G.P. %	67.11%

Parts To Labor Ratios

Category	Parts Sales	Labor Sales	P/L Ratio
Customer Car	$ 105,440	$ 111,982	0.94
Customer quick service	$ 47,558	$ 40,423	1.18
Customer Other SC	$ 14,236	$ 16,012	0.89
Warranty	$ 176,683	$ 170,453	1.04
Warranty Other		$ -	0.00
Internal	$ 65,326	$ 53,208	1.23
Total	$ 409,243	$ 392,078	1.04

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Customer Pay Gross Profit %	80.61%
Total Service Dept. G.P. %	67.11%
Parts / Labor Ratio (Cust. Pay Only)	0.99

Service Department Profit Centering

Expense Category	Dollar Amount	% of Gross	Profile
Department Gross	$ 286,706		
Variable Expense	$ 19,782	6.90%	
Selling Expense		0.00%	
Personnel Expense	$ 43,083	15.03%	
Semi-Fixed Expense		0.00%	
Fixed Expense	$ 70,248	24.50%	
Unallocated Expense	$ 9,392	3.28%	
Dealer's Salary	$ 39,681	13.84%	
Total Expenses	$ 182,186	63.54%	
Net Profit	$ 104,520	36.46%	

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Customer Pay Gross Profit %	80.61%
Total Service Dept. G.P. %	67.11%
Parts / Labor Ratio (Cust. Pay Only)	0.99
Total Service Dept. Expenses	$ 182,186

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xed Absorption

			% Adj Ovhd Exp
Parts Department Total Gross	$	314,490	121.21%
Service Department Total Gross	$	288,780	111.30%
Body Shop Department Total Gross			0.00%
Total Fixed Gross Profit	$	603,270	
Total Dealership Expense	$	259,456	

Overhead Expense	$	259,456	
Total Fixed Gross Profit	$	603,270	
Total Dealership Expense	$	259,456	
Fixed Absorption Percentage		232.51%	**Guideline** 60%

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Customer Pay Gross Profit %		80.61%
Total Service Dept. G.P. %		67.11%
Parts / Labor Ratio (Cust. Pay Only)		0.99
Total Service Dept. Expenses	$	182,186

NADA ACTUAL SERVICE ANALYSIS

Performance

		Labor Sales / Month		*Hourly Labor Rate*		*Hours Billed*
Customer Car*	$	111,982	÷	160.81	=	696.4
Customer Truck*	$	40,423	÷	160.81	=	251.4
Customer Other*	$	16,012	÷	160.81	=	99.6
Warranty	$	170,453	÷	152.88	=	1114.9
Internal	$	53,208	÷	117.64	=	452.3
New Vehicle Prep	$	35,147	÷	152.88	=	229.9
Total	$	427,225				2844.4

POTENTIAL

$	427,225	÷	2844.45	=	$	150.20		
Total labor sales for month			Total hours billed		Effective Labor Rate			
17.00		x	8	x	23		=	3,128.0
# Service mechanical technicians			# Hours/Day		Working Days/Month			Clock Hour Aval
3,128.0		x	$ 150.20	=	$	469,814		
Clock Hours Available			Effective Labor Rate		Labor sales potential			

How proficient are your technicians ?

2,735.4	÷	3,128.00	=	87.45%
Total Hours Billed		Hours Available		Tech Proficiency

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Hours Per RO (Recap Sheet)	2.3
Percent of One Item R.O.'s (Recap Sheet)	58.33%
Customer Pay Effective Labor Rate (Recap Sheet)	$ 160.81
Warranty Labor Rate (Recap Sheet)	$ 152.88
Total Overall Effective Labor Rate	$ 150.20
Overall Technician Proficiency	87.45%

FACILITY POTENTIAL

Number of Bays	19	
	x	
Number of Days	26	
	x	
Number of Hours	9	
	x	
Effective Labor Rate	160.81	
	equals	
FACILITY POTENTIAL		$ 714,961

FACILITY UTILIZATION

Total Labor Sales	$ 427,225	
	÷	
Facility Potential	$ 714,961	
	equals	
FACILITY UTILIZATION		###

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NADA "QUICK" SERVICE A

$ 427,225
Labor Sales

2,735.4
Divided by Hours Billed

156.183739124077
= OELR

$ 140,519
Labor Cost

2,735.40
/ Hours Billed

###
=Real Cost

$51.38 ÷ 26.00%
Real Cost

ıNALYSIS

$ 427,225 Labor Sales						
$ 286,706 -Labor Gross						
$ 140,519 =Labor Cost						

= $197.62
E.L.R. Needed to earn
74%

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OWNER BASE POTENTIAL

7016 5 Year Owner Base	x	8 Annual Hours Purchased	=	56,128.0 Market Potential / Hours		
56,128.0 Market Potentail/ Hours	x	156.183739124077 Effective Labor Rate	=	$ 8,766,281 5 Yr. O.B Sales Potential		

YEARLY LABOR SALES cp & warranty

$ 430,664 Avg. Mos. Labor Sales (excluding internal, PDI and NVI)	x	12 Annualized	=	$ 5,167,965 Current Labor Sales Trend		
$ 5,167,965 Labor Sales Trend	÷	$ 8,766,281 5 Yr. O.B. Sales Potential	=	58.95% Ouch		

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

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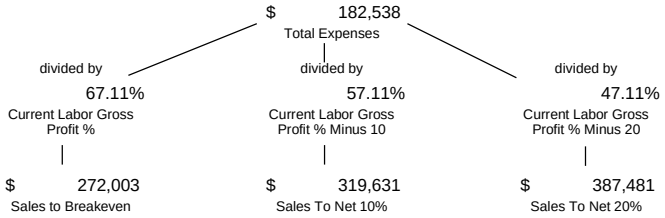
PROFIT ON LABOR SALES



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Customer Pay Gross Profit %	80.61%	Customer Pay E.L.R.	$ 160.81
Total Service Dept. G.P.%	67.11%	Total (overall) E.L.R.	$ 150.20
Parts / Labor Ratio (Cust Pay Only)	0.99	Warranty Labor Rate	$ 152.88
Total Service Dept Expense	$ 182,186	Overall Tech Proficiency	87.45%
Hours Per R.O (recap)	2.30		
Percent Of One Item R.O.'s	58.33%		

Technician Value

Calculate using daily available hours per technician

Hours		Days		Labor Rate		Sales Value
9	x	23	x	$ 150.20	=	$ 31,091

Sales Value		Gross Margin		Profit Value
$ 31,091	x	67.11%	=	$ 20,865

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$ 20,865	70%	$ 14,605	
$ 20,865	80%	$ 16,692	
$ 20,865	90%	$ 18,778	
$ 20,865	100%	$ 20,865	
$ 20,865	110%	$ 22,951	
$ 20,865	120%	$ 25,038	

Profit Value — Adjusted Profit Value

STAFFING REQUIREMENTS

A. Sales To Break Even

Total Expenses for One Month		Current Gross Profit Percent	=	Sales To Break Even
$ 182,538	|	67.11%	=	$ 272,003

B. Sales To Generate 20% Net

Total Expenses for One Month		Current Gross Profit Percent (Minus 20)	=	Sales To Generate 20% Net
$ 182,538	|	47.11%	=	$ 387,481

C. Technician Value

Daily Work Hours	X	Average Proficiency Rate	X	Overall Effective Labor Rate	X	Work Days Per Month	=	Technician Value
9		80%		$ 150.20		23		$24,873
9		90%		$ 150.20		23		$27,982
9		100%		$ 150.20		23		$31,091
9		120%		$ 150.20		23		$37,309

D. Staffing To Break Even

Sales To Break Even		Technician Value	=	Staffing
$ 272,003	|	24,873 @ 80%	=	###
$ 272,003	|	27,982 @ 90%	=	###
$ 272,003	|	31,091 @ 100%	=	###
$ 272,003	|	37,309 @ 120%	=	###

E. Staffing To Generate 20% Net

Sales To Generate 20% Net		Technician Value	=	Staffing
$ 387,481	|	$ 24,873 @ 80%	=	###
$ 387,481	|	$ 27,982 @ 90%	=	###
$ 387,481	|	$ 31,091 @ 100%	=	12.462950296036
$ 387,481	|	$ 37,309 @ 120%	=	###

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Service Advisor Performance

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

Break Even

1	Department's Average Monthly Expenses	$182,538
2	Divide by current labor gross profit % to break even	67.11%
3	Equals New Sales Objective	$ 272,003
4	Number of Advisors	2.0
5	Equals Sales Objective per Advisor	136001.334206469
6	Number of work days per month	23
7	Equals daily sales objective per advisor	5913.1014872378
8	Current overall effective labor rate	$ 150.20
9	Equals daily sales objective per advisor (FRH's)	39.4

Net 10 %

1	Department's Average Monthly Expenses	$182,538
2	Divide by current labor gross profit % minus 10 to net 10%	57.11%
3	Equals New Sales Objective	$ 319,631
4	Number of Advisors	2.0
5	Equals Sales Objective per Advisor	159815.719198224
6	Number of work days per month	23
7	Equals daily sales objective per advisor	6948.50953035759
8	Current overall effective labor rate	$ 150.20
9	Equals daily sales objective per advisor (FRH's)	46.3

Net 20 %

1	Department's Average Monthly Expenses	$182,538
2	Divide by current labor gross profit % minus 20 to net 20%	47.11%
3	Equals New Sales Objective	$ 387,481
4	Number of Advisors	2.0
5	Equals Sales Objective per Advisor	193740.459030811
6	Number of work days per month	23
7	Equals daily sales objective per advisor	8423.4982187309
8	Current overall effective labor rate	$ 150.20
9	Equals daily sales objective per advisor (FRH's)	56.1

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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			741
	x		
Multiply by .3 hours			0.3 hours
Additional customer labor hours generated	=		222.30
	x		
Multiply by Customer Labor Rate		$	160.81
Equals additional Customer Labor Sales Generated	=	$	35,748
	x		
Multiply by customer Labor Gross Profit %			80.61%
Equals additional Labor Gross Profit $ generated	= (A)	$	28,816

Divide Parts Sales R.O. by Labor Sales R.O. to calculate $ parts sales per 1$ of Labor Sales	=		0.99
	x		
Multiply by Customer Labor Sales		$	35,748
	=		
Equals additional Customer Parts Sales generated		$	35,497
	x		
Multiply by Customer Parts Sales Gross Profit %			
Equals additional Parts Gross Profit $ Generated	= (B)	$	-
Add Gross Profit from Labor (A) and Parts (B)	=	$	28,816

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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	
		Units	1.2	
$144.00	|	1.2	=	120
Price		Units		Labor Rate

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

Labor Operations	Labor Price		Labor Units		Labor Rate
Clean Fuel Injectors	$	117.60	1.20	=	$ 98.00
R&R Rear Hub Bearing.	$	96.00	0.80	=	$ 120.00
Replace Trans. Pan gasket	$	107.80	1.10	=	$ 98.00
R&R Headlight unit (1)	$	108.00	0.90	=	$ 120.00
Total Price	$	429.40	Total Units	4.0	
	$	429.40		4.0 =	107.35
	Total Price			Total Units	Effective Labor Rate
					(For This R.O.)

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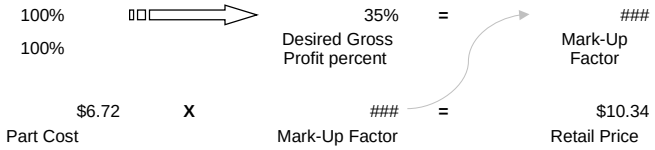
Calculating Mark-Up

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



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

Item	Cost		Annual Turnover		Total Cost
Filter #1	$4.36	**X**	112	**=**	$488.32
Filter #2	$4.01	**X**	56	**=**	$224.56
Filter #3	$3.56	**X**	85	**=**	$302.60
Filter #4	$3.86	**X**	202	**=**	$779.72
Filter #5	$3.51	**X**	36	**=**	$126.36
	Total Items		491	Total Cost	$1,921.56

$ 1,921.56 Total Cost		491 Total Items	**=**	$ 3.91 Weighted Average **Cost**
$ 3.91 Weighted Average Cost	X	1.67 Mark-Up Factor	**=**	$ 6.54 Weighted Average **Price**

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Cost Of A Come-Back

Lost Customers			1.5	
Average Hours per R.O.	X		2.3	
	=		3.5	
Effective Labor Rate	X	$	150.20	
	=	$	518	(A) Service Labor Sales
Service Department Gross Profit % (Excluding Sublet)	X		67.11%	
	=	$	348	(B) Service Labor Gross
Service Labor Sales (A)		$	518	
Parts / Labor Ratio	X		0.94	
	=	$	488	
Parts Dept Gross Profit % R.O.Sales	X		40.00%	
	=	$	195	(C) Service Parts Gross
(B) Service Labor Gross		$	348	
(C) Service Parts Gross	+	$	195	
Lost Gross	=	$	543	

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