Fixed Operations 2 -

Financial Calculations and Formulas

Service

Service Department Sales And Gross (Labor Only)

Category	Sales	Gross	Gross as % of Sales	%Sales Contribution
Customer Car Subaru	$ 142,237	$ 115,877	81.47%	45.95%
Customer Express	$ 17,455	$ 13,364	76.56%	5.64%
Customer Other Kia	$ 45,592	$ 38,467	84.37%	14.73%
Warranty	$ 35,503	$ 29,412	82.84%	11.47%
Warranty Other kia	$ 20,530	$ 19,720	96.05%	6.63%
Internal	$ 48,246	$ 41,650	86.33%	15.59%
NVI / Road Ready/ PDI			0%	0.00%
Adj. Cost Of Labor		$ 3,630	0%	0.00%
Total	$ 309,563	$ 262,120	84.67%	100.00%

Clear Form

The Picture

Customer Pay Gross Profit %	81.70%
Total Service Dept. G.P. %	84.67%

Parts To Labor Ratios

Category	Parts Sales	Labor Sales	P/L Ratio
Customer Car subaru	$ 54,996	$ 142,237	0.39
Customer express	$ 20,080	$ 17,455	1.15
Customer Other kia	$ 40,356	$ 45,592	0.89
Warranty	$ 49,878	$ 35,503	1.40
Warranty Other Kia	$ 22,877	$ 20,530	1.11
Internal	$ 40,918	$ 48,246	0.85
Total	$ 229,105	$ 309,563	0.74

Clear Form

The Picture

Customer Pay Gross Profit %	81.70%
Total Service Dept. G.P. %	84.67%
Parts / Labor Ratio (Cust. Pay Only)	0.56

Service Department Profit Centering

Expense Category	Dollar Amount	% of Gross	Profile
Department Gross	$ 262,120		
Variable Expense	$ 66,456	25.35%	
Selling Expense		0.00%	
Personnel Expense	$ 152,718	58.26%	
Semi-Fixed Expense		0.00%	
Fixed Expense	$ 40,837	15.58%	
Unallocated Expense		0.00%	
Dealer's Salary		0.00%	
Total Expenses	$ 260,011	99.20%	
Net Profit	$ 2,109	0.80%	

Clear Form

The Picture

Customer Pay Gross Profit %	81.70%
Total Service Dept. G.P. %	84.67%
Parts / Labor Ratio (Cust. Pay Only)	0.56
Total Service Dept. Expenses	$ 260,011

Fixed Absorption

		% Adj Ovhd Exp
Parts Department Total Gross	$ 129,193	10.95%
Service Department Total Gross	$ 262,347	22.23%
Body Shop Department Total Gross	$ 61,521	5.21%
Total Fixed Gross Profit	$ 453,061	
Total Dealership Expense	$ 1,180,233	

Overhead Expense	$ 1,180,233
Total Fixed Gross Profit	$ 453,061
Total Dealership Expense	$ 1,180,233
Fixed Absorption Percentage	38.39%

Guideline 60%

Clear Form

The Picture	
Customer Pay Gross Profit %	81.70%
Total Service Dept. G.P. %	84.67%
Parts / Labor Ratio (Cust. Pay Only)	0.56
Total Service Dept. Expenses	$ 260,011

NADA ACTUAL SERVICE ANALYSIS

Performance

	Labor Sales / Month		Effective Labor Rates		Hours Billed
Customer Subaru	$ 142,237	÷	127.63	=	1114.4
Customer express	$ 17,455	÷	115.47	=	151.2
Customer Kia	$ 45,592	÷	127.63	=	357.2
Warranty	$ 56,033	÷	125.92	=	445.0
Internal	$ 48,246	÷	100.59	=	479.6
New Vehicle Prep	$ -	÷		=	0.00
Total	$ 309,563				2547.5

POTENTIAL

$ 309,563	÷	2547.45	=	$ 121.52			
Total labor sales for month		Total hours billed		Effective Labor Rate			
20.00	x	10	x	17	=	3,400.0	
# Service mechanical technicians		# Hours/Day		Working Days/Month		Clock Hour Aval	
3,400.0	x	$ 121.52	=	$ 413,164		$ 516,454.39	
Clock Hours Available		Effective Labor Rate		Labor sales potential @100%		Labor sales potential @ 125%	

How proficient are your technicians ?

2,547.5	÷	3,400.00	=	74.93%
Total Hours Billed		Hours Available		Tech Proficiency

Clear Form

Hours Per RO (Recap Sheet)	0.6
Percent of One Item R.O.'s (Recap Sheet)	96.00%
Customer Pay Effective Labor Rate (Recap Sheet)	$ 127.63
Warranty Labor Rate (Recap Sheet)	$ 125.92
Total Overall Effective Labor Rate	$ 121.52
Overall Technician Proficiency	74.93%

FACILITY POTENTIAL

Number of Bays	18	
	x	
Number of Days	24	
	x	
Number of Hours	10.5	
	x	
Effective Labor Rate	$ 121.52	
	equals	
FACILITY POTENTIAL		$ 551,209

FACILITY UTILIZATION

Total Labor Sales	$ 309,563	
	÷	
Facility Potential	$ 551,209	
	equals	
FACILITY UTILIZATION		56.16%

Clear Form

NADA "QUICK" SERVICE ANALYSIS

$ 309,563	Labor Sales
2,547.5	Divided by Hours Billed
$ 121.52	= OELR

$ 309,563	Labor Sales
$ 262,120	-Labor Gross
$ 47,443	=Labor Cost

$ 47,443	Labor Cost
2,547.50	/ Hours Billed
$ 18.62	=Real Cost

$21.49	÷	24.00%	=	$89.54
Real Cost				E.L.R. Needed to earn 74%

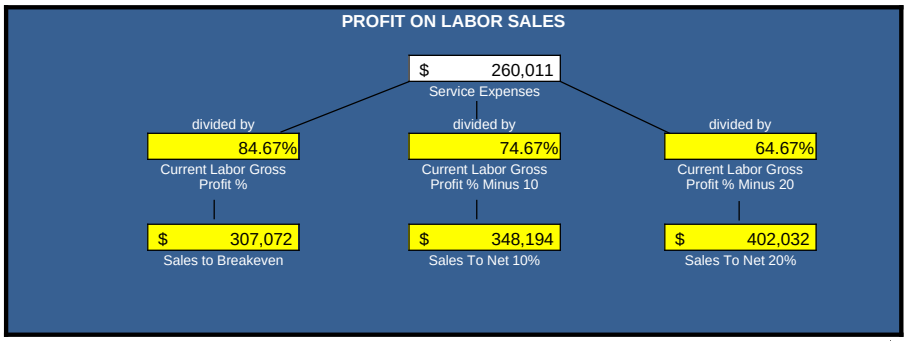
Clear Form

OWNER BASE POTENTIAL

8429	x	8	=	67,432.0
5 Year Owner Base		Annual Hours Purchased		Market Potential / Hours
67,432.0	x	$ 121.52	=	$ 8,194,093
Market Potentail/ Hours		Effective Labor Rate		5 Yr. O.B Sales Potential
$ 321,121	x	12	=	$ 3,853,452
Avg. Mos. Labor Sales (excluding internal, PDI and NVI)		Annualized		Current Labor Sales Trend
$ 3,853,452	÷	$ 8,194,093	=	47.03%
Labor Sales Trend		5 Yr. O.B. Sales Potential		Ouch

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

Clear Form



Clear Form

The Picture

Customer Pay Gross Profit %	81.70%	Customer Pay E.L.R.	$ 127.63
Total Service Dept. G.P.%	84.67%	Total (overall) E.L.R.	$ 121.52
Parts / Labor Ratio (Cust Pay Only)	0.56	Warranty Labor Rate	$ 125.92
Total Service Dept Expense	$ 260,011	Overall Tech Proficiency	74.93%
Hours Per R.O (recap)	0.57		
Percent Of One Item R.O.'s	96.00%		

Technician Value

Calculate using daily available hours per technician

Hours		Days		Labor Rate		Sales Value
10	x	17	x	$ 121.52	=	$ 20,658

Sales Value		Gross Margin		Profit Value
$ 20,658	x	84.67%	=	$ 17,492

Clear Form

Profit Value		Your #		Adjusted Profit Value
$ 17,492	x	70%		$ 12,245
$ 17,492	x	80%		$ 13,994
$ 17,492	x	90%	proficiency	$ 15,743
$ 17,492	x	100%		$ 17,492
$ 17,492	x	110%		$ 19,241
$ 17,492	x	120%		$ 20,991
$ 17,492	x	74.9%	=	$ 13,107

STAFFING REQUIREMENTS

A. Sales To Break Even

Service Expenses for One Month	÷	Current Gross Profit Percent	=	Sales To Break Even
$ 260,011	÷	84.67%	=	$ 307,072

B. Sales To Generate 20% Net

Service Expenses for One Month	÷	Current Gross Profit Percent (Minus 20)	=	Sales To Generate 20% Net
$ 260,011	÷	64.67%	=	$ 402,032

C. Technician Value

Daily Work Hours	X	Average Proficiency Rate	X	Overall Effective Labor Rate	X	Work Days Per Month	=	Technician Value
10		80%		$ 121.52		17		$16,527
10		90%		$ 121.52		17		$18,592
10		100%		$ 121.52		17		$20,658
10		120%		$ 121.52		17		$24,790

D. Staffing To Break Even

Sales To Break Even	÷	Technician Value		=	Staffing
$ 307,072	÷	16,527	@ 80%	=	18.6
$ 307,072	÷	18,592	@ 90%	=	16.5
$ 307,072	÷	20,658	@ 100%	=	14.9
$ 307,072	÷	24,790	@ 120%	=	12.4

E. Staffing To Generate 20% Net

Sales To Generate 20% Net	÷	Technician Value		=	Staffing
$ 402,032	÷	$ 16,527	@ 80%	=	24.3
$ 402,032	÷	$ 18,592	@ 90%	=	21.6
$ 402,032	÷	$ 20,658	@ 100%	=	19.5
$ 402,032	÷	$ 24,790	@ 120%	=	16.2

Clear Form

Service Advisor Performance

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

Break Even

1	Service Department's Monthly Expenses	$26,011
	÷	
2	Divide by current labor gross profit % to break even	84.67%
	=	
3	Equals New Sales Objective	$ 30,719
	÷	
4	Number of Advisors	7.0
	=	
5	Equals Sales Objective per Advisor	$ 4,388
	÷	
6	Number of work days per month	22
	=	
7	Equals daily sales objective per advisor	$ 199
	÷	
8	Current overall effective labor rate	$ 121.52
	=	
9	Equals daily sales objective per advisor (FRH's)	1.6

Net 10 %

1	Service Department's Monthly Expenses	$26,011
	÷	
2	Divide by current labor gross profit % minus 10 to net 10%	74.67%
	=	
3	Equals New Sales Objective	$ 34,833
	÷	
4	Number of Advisors	7.0
	=	
5	Equals Sales Objective per Advisor	$ 4,976
	÷	
6	Number of work days per month	22
	=	
7	Equals daily sales objective per advisor	$ 226
	÷	
8	Current overall effective labor rate	$ 121.52
	=	
9	Equals daily sales objective per advisor (FRH's)	1.9

Net 20 %

1	Service Department's Monthly Expenses	$26,011
	÷	
2	Divide by current labor gross profit % minus 20 to net 20%	64.67%
	=	
3	Equals New Sales Objective	$ 40,219
	÷	
4	Number of Advisors	7.0
	=	
5	Equals Sales Objective per Advisor	$ 5,746
	÷	
6	Number of work days per month	22
	=	
7	Equals daily sales objective per advisor	$ 261
	÷	
8	Current overall effective labor rate	$ 121.52
	=	
9	Equals daily sales objective per advisor (FRH's)	2.1

Clear Form

Exercise to See What Happens When You Increase Your Hours Per Repair Order

Number of customer R.O.'s for the month			1220
	x		
Multiply by .3 hours			0.3 hours
Additional customer labor hours generated	=		366.00
	x		
Multiply by Customer Labor Rate			$ 127.63
Equals additional Customer Labor Sales Generated	=		$ 46,713
	x		
Multiply by customer Labor Gross Profit %			81.70%
Equals additional Labor Gross Profit $ generated	=	(A)	$ 38,162
Divide Parts Sales R.O. by Labor Sales R.O. to calculate $ parts sales per 1$ of Labor Sales	=		0.56
	x		
Multiply by Customer Labor Sales			$ 46,713
	=		
Equals additional Customer Parts Sales generated			$ 26,267
	x		
Multiply by Customer Parts Sales Gross Profit %			49.00%
Equals additional Parts Gross Profit $ Generated	=	(B)	$ 12,871
Add Gross Profit from Labor (A) and Parts (B)	=		$ 51,033

Clear Form

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" 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.)

Clear Form

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%		35%	=	1.54
100%		Desired Gross Profit percent		Mark-Up Factor
$6.72	X	1.54	=	$10.34
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		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	÷	491	=	$ 3.91
Total Cost		Total Items		Weighted Average **Cost**
$ 3.91	X	1.67	=	$ 6.54
Weighted Average Cost		Mark-Up Factor		Weighted Average **Price**

Clear Form

Cost Of A Come-Back

Lost Customers		1.5	
Average Hours per R.O.	X	0.6	
	=	0.9	
Effective Labor Rate	X	$ 121.52	
	=	$ 104	(A) Service Labor Sales
Service Department Gross Profit % (Excluding Sublet)	X	84.67%	
	=	$ 88	(B) Service Labor Gross
Service Labor Sales (A)		$ 104	
Parts / Labor Ratio	X	0.39	
	=	$ 40	
Parts Dept Gross Profit % R.O.Sales	X	49.00%	
	=	$ 20	(C) Service Parts Gross
(B) Service Labor Gross		$ 88	
(C) Service Parts Gross	+	$ 20	
Lost Gross	=	$ 108	

Clear Form