

Service and Operational Opportunities to Improve Your Profitability

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BEI Services

- 20 years of experience in performance analysis of machines, parts and technicians
- Currently process 1 million service calls on millions of devices for over 23K technicians – *monthly*
- Created many industry firsts – Introduced, created, and implemented
 - Page-based technician and sales compensation programs
 - Advance Comparative Reporting suit with – Executive Dashboard for Critical Service Indicators (CSI)
 - Effective Workload Distribution (EWD) territory management system with car stock recommendations
 - Created and Launched a *free* Service Reporting Software (SRS) with mobile wireless dispatch access (mSRS) for dealers not using ERP systems to monitor and record service calls (srs.beiservices.com)
- Top 5 manufactures validated, use and continue to embrace BEI's machine and parts performance benchmarks
- Over 180 dealers/manufacturers currently utilizing BEI technician incentive program consisting of over 5,000 technicians
- Created the industries most comprehensive suite of service department analysis tools available



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Ken Staubitz

My background

- BEI Services – National Sales Manager
 - Technician and equipment benchmarking
 - Sales generation
 - Technician compensation planning
 - Territory mapping
 - Inventory management
- Strategy Development – Service Consultant
- Modern Office Methods – Director of Client Services



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Today's Objective – The Basics

**Effective
Service
Management**

**Effective
Inventory
Management**



**Increased Financial
Performance**

Service Basics

Labor – largest cost component of service

Productivity – *“...measure by the quantity of output per time spent...”* – About.com

Efficiency – *“Doing things right”* – Wikipedia

Effectiveness – *“Doing the right things”* – Wikipedia

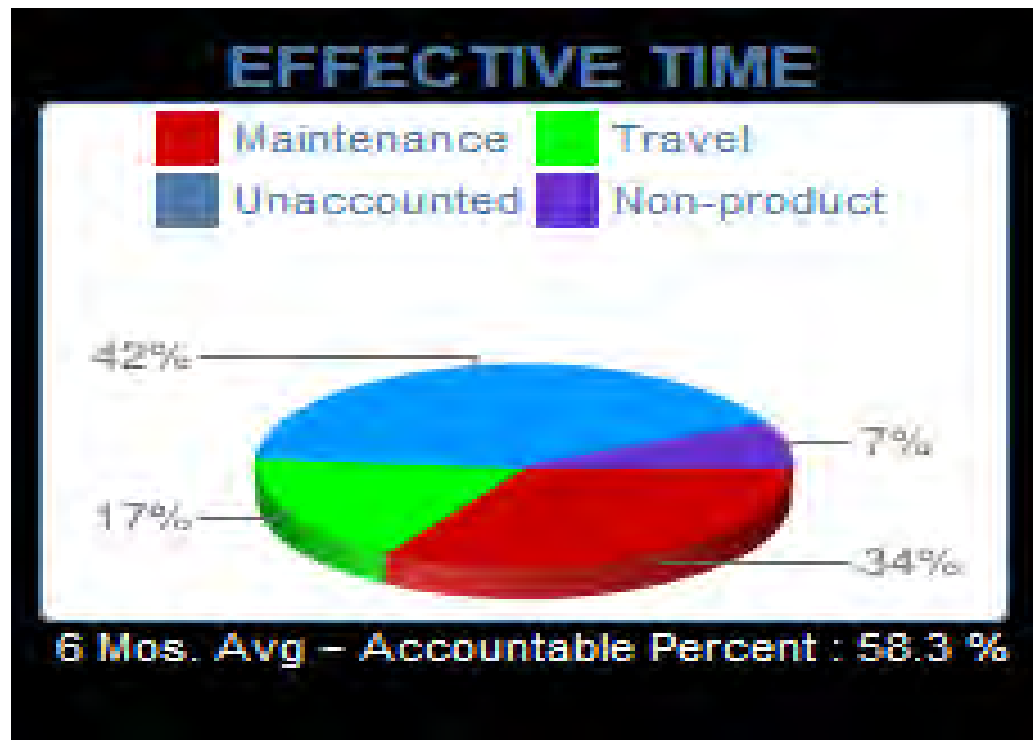


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Service Basics – Key Measurements

Productivity – travel time + “screw driver” time

- Benchmark – 6.8 – 7.2 hours per day (85% – 90%)
- Driven by first call arrival and last call completion



Service Basics – Key Measurements

Technician ID	Assigned Time p/Day	Unaccounted Time p/Month	Average Maintenance Time p/Call	Average Travel Time p/Call	Average First Call Time Dispatched	Average First Call Arrival Time	Average First Call Duration	Average Last Call Time Dispatched	Average Last Call Duration	Average Calls p/Day
Tech 1	6:11	36:12:00	0:57	0:17	8:20	8:30	1:06	14:59	1:46	5
Tech 2	5:34	43:50:00	0:51	0:12	8:23	8:39	1:30	15:11	1:15	5.3
Tech 3	2:11	75:34:00	1:08	0:10	10:51	11:02	1:24	13:04	1:18	1.7
Tech 4	2:20	28:21:00	1:22	0:35	10:53	11:27	1:49	11:38	1:51	1.2
Tech 5	5:11	53:23:00	1:59	0:43	8:16	8:53	2:58	11:16	3:40	2.1
Tech 6	6:47	19:25	1:20	0:26	8:14	8:28	1:49	13:33	1:55	3.9
Tech 7	6:28	29:14:00	1:02	0:22	7:40	8:17	1:54	14:31	1:37	4.9
Tech 8	7:22	12:39	1:24	0:33	8:30	8:55	2:16	14:36	1:59	3.8
Tech 9	2:14	86:35:00	0:47	0:14	11:55	12:06	0:59	14:09	1:03	2.2
Tech 10	3:32	33:43:00	1:18	0:12	9:24	9:44	3:12	12:24	2:25	2.4
Total	4:26	31:52:00	1:16	0:27	8:36	9:01	2:28	13:14	2:36	3.2

Service Basics – Key Measurements

Efficiency & Effectiveness – First Call Effectiveness

- FCE % – 82%, (BEI 65–72%)
- Driven by call backs and incomplete (parts) calls



Service Basics – Key Measurements

Inspect what you expect...



As owners – live in the “show me state...”

Service Basics – Key Measurements

- Tech call report – shows technician start/stop times
- Productive time report
- FCE by company and technician
 - CB rate by technician
 - HP rate by technician
- Top technician report
- Minimum (total) call process



Today's Objective – The Basics



Inventory Management

*Why is managing your inventory
so important?*



Cash Flow

Inventory Turns

Inventory Turn – “...the number of times inventory is sold, or used” –Wikipedia

Higher turns – possible indicator of inadequate inventory levels

Lower turns – symptom of over stock, large purchases, high percentage of obsolete inventory

Benchmark (annual)

- Parts (main inventory) – 3.5+
- Supplies (main inventory) – 7 +
- Tech car stocks – 5.5+



Inventory Turns Example

$$\frac{\text{Cost of Goods Sold (Annualized)}}{\text{Avg. Inventory}} = \text{Inventory turns}$$

Monthly COGS parts = \$35,000
Average Main Parts Inventory = \$200,000

$$\frac{\$35,000 \times 12}{\$200,000} = 2.1$$



Inventory Turns

Parts inventory turn benchmark = 3.5

$$\frac{\$35,000 \times 12}{3.5} = \$120,000$$

Cash improvement of *\$80,000* (\$200K – \$120K)



Common Pitfalls

- Not purchasing based on concrete data
- Chasing discounts
- ERP not used to full potential – reorder, (min/max)
- Poor processes for receiving and transferring
- Poor processes for inventory reconciliation
- Parts person without logistics training
- Not tracking inventory turns
- Techs carry's whatever they “feel” they will use
- Techs not carrying the right inventory = high HP rate
- No high dollar approval process for techs



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Best Practices – Main Inventory

- Understanding the importance of accuracy
- Manage inventory turns
- Purchase based on *data*
- Process, process, process



Best Practices – Main Inventory

Accuracy

- Everything has its place (on the shelf and in ERP)
- Cycle count, or quarterly counts
- Discrepancies are addressed immediately
- Logistics and A/P must work together

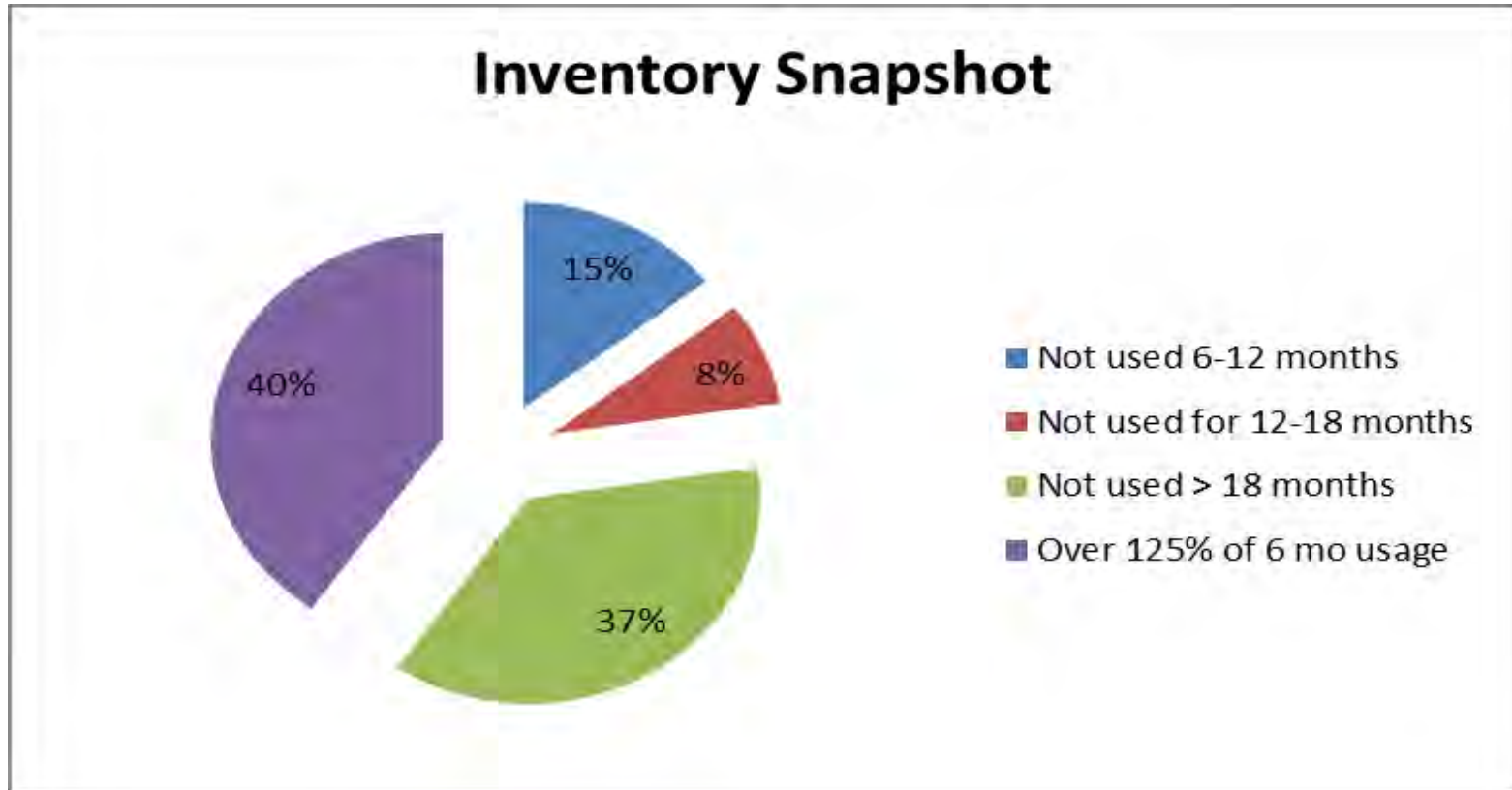


Best Practices – Main Inventory

Manage inventory turns

- Where are you today?
- Identify and maintain min/max levels
- Identify and manage obsolescence

Best Practices – Main Inventory



**data courtesy of OPN*

Best Practices – Main Inventory

Part Number	Part Description	Qty On Hand	Ext Cost	Avg Inv. Cost	Serial Count	Days Since Last Install	BEI Models	Manufacturers	Warehouses
AW100112	THERMISTOR: FUSING: IN	5	XXX	XXX	9	502	AF1022;AF103	hewlett packard;misc	CW0000
AE011061	ROLLER	1	XXX	XXX	21	489	AF1013;AF101	hewlett packard;misc	CW0000
AD027006	CHARGE ROLLER	22	XXX	XXX	0	2567	AF1035;AF103	ricoh	CW0000
B2473161	CLASSIFICATION ASSY	5	XXX	XXX	15	448	AF1060;AF107	ricoh	CW0000
A6801241	FEED BELT	3	XXX	XXX	12	468	AF1018;AF106	ricoh	CW0000
AE031044	FUSING BUSHING	4	XXX	XXX	40	489	AF1013;AF101	ricoh;sharp	CW0000
RB18865000	ROLLER P/U	12	XXX	XXX	184	446	CLF3170;HP40	canon;hewlett packard	CW0000;CWSEL
AW100111	THERMISTOR: FUSING: MI	5	XXX	XXX	24	502	AF1035;AF103	hewlett packard;misc	CW0000
AE030017	C - BALL BEARING - 35X50X	20	XXX	XXX	0	1271	AF1055;AF106	hewlett packard;kyoc	CW0000;CWSEL
AD020053	CHARGE CORONA WIRE	18	XXX	XXX	0	1725	AF1055;AF106	ricoh	CW0000
B2476713	END FENCE FRONT	2	XXX	XXX	20	437	AF1060;AF107	ricoh	CWSEL5
RF53338000	ROLLER FEED KIT	1	XXX	XXX	20	445	HPCLJ5500;HP	hewlett packard	CW0000

**data courtesy of OPN*



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Best Practices – Main Inventory

Purchase based on data

- Usage data for a given period
- Projected sales
 - Historic models sold
 - Historic configurations
 - Trend color vs. b/w
- Blanket Purchase Agreement (BPA) – discount percentage vs. holding expense



Best Practices – Main Inventory

Process, process, process

- Distribution (receive/transfer) with expectations
- Restock
 - min/max
 - auto restock
 - frequency
- Warranty
- Managing discrepancies and write-off

Best Practices – Car Stock

- Determine stocking levels based on usage
- Pull low usage and obsolete items
- Provide reporting to techs for reconciliation
- Provide techs list of equipment serviced
- Process, process, process



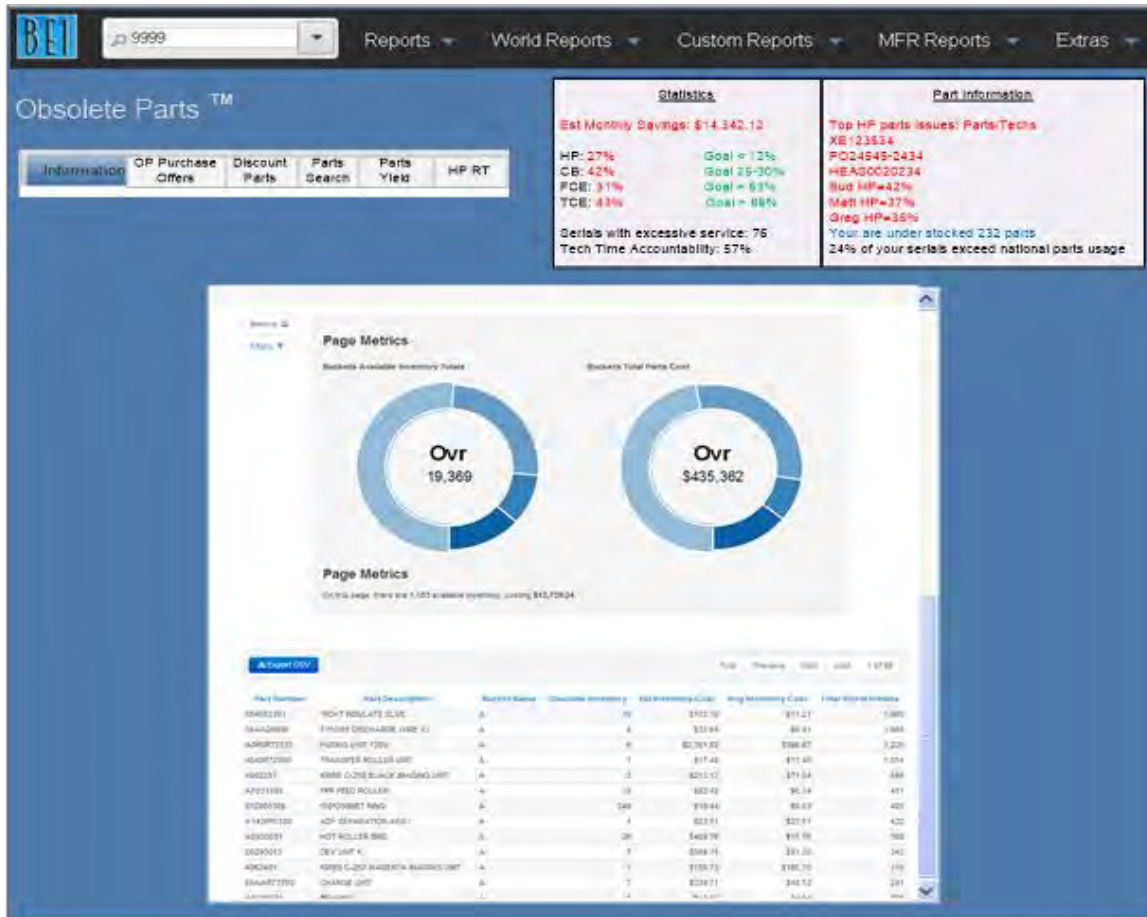
Best Practices – Car Stock

Determine stocking levels based on usage

- Excessive hold for part rate (HP%)– goal 8%–12%
- ERP (E–Automate, OMD, Lacrosse, etc...)
 - Review tech usage
 - Review MIF report
 - Review current stocking
 - Review min/max
- BEI Services
 - Parts usage reporting based on call type i.e. HP
 - EWD – provides recommended car stock



Best Practices – Car Stock



Greatest opportunity to improve HP rate



Identify “under” stock

**data courtesy of OPN*

Best Practices – Car Stock

Purge low usage and obsolete items

- If no usage in 6 months pull from car stock
- Redistribute these items to folks with usage
- Reduces risk of write-off
- Reduces risk of buying parts you already have

Best Practices – Car Stock

Sample Car Stock Report

PartNumber	PartDesc	StockAmt	PartCost	ExtendedCost	TerritoryAMU	TotalUsed	TotalMachines	TotalService
RL1-3167-000	Paper Pickup Roller	2	XXX	XXX	2.83	87	67	74
A00J563600	ROLLER	3	XXX	XXX	1.66	288	95	108
RM1-3717	3005N FUSER (REFURB)	1	XXX	XXX	1.66	71	61	71
Q5998A	MAINT. KIT HP 4245 MFP	1	XXX	XXX	1.33	21	19	20
MPS	MISC SHOP SUPPLIES	1	XXX	XXX	0.66	164	150	164
CB414-67918	ADF FEED ROLLER KIT	1	XXX	XXX	0.5	10	10	10
50GAR70600	WEB	1	XXX	XXX	0.5	8	8	8
A0XV0TD	DR311YMC CLR DRUM	2	XXX	XXX	0.5	30	11	12
Q5997-67901	ROLLER KIT FOR HP 4345MFP	1	XXX	XXX	0.5	6	6	6
2AR07220	PULLEY PAPER FEED	1	XXX	XXX	0.5	17	12	12
2AR07230	PULLEY SEPERATION	1	XXX	XXX	0.5	15	11	12
A02ER73022	TRANSFER BELT KIT	1	XXX	XXX	0.33	38	36	38

**EWD car stock report*



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Best Practices – Car Stock

Items Not Used w/in 6 months

Part Number	Part Description	Inv. Quantity	Ext Inv. Cost	Avg Inv. Cost	Serial Count	Days Since Last Install	Warehouses
XXXX	SOLENOID COIL ARE	4	139.08	34.77	0	201	BK2300
XXXX	FEED ROLLER	1	37.12	37.12	0	264	BK2300
XXXX	DK-320 F4020	5	485.8	97.16	0	319	BK2300
XXXX	PRESSURE ROLLER	8	1092.8	136.6	0	256	BK2300
XXXX	2ND TRANSFER ROLLER	1	80.34	80.34	2	201	BK2300
XXXX	DEVELOPER YELLOW	1	88.34	88.34	2	251	BK2300
XXXX	HP 5100 FUSER ASSY	1	120	120	2	321	BK2300
XXXX	ROLLER SC460	2	70.1	35.05	3	223	BK2300
XXXX	ROLLER	10	414.1	41.41	3	216	BK2300
XXXX	PUMP SC38	2	109.56	54.78	4	321	BK2300
XXXX	300K PM KIT	1	48.73	48.73	5	339	BK2300
XXXX	ROLLER SC460	9	587.79	65.31	5	223	BK2300
			3273.76				

**data courtesy of OPN*

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Best Practices – Car Stock

Provide reporting to technicians

- Weekly usage report
- Weekly car stock inventory snapshot
- Weekly transfer report

If they don't receive this information, how can you hold them accountable?

Best Practices – Car Stock

Provide techs list of gear in their territory

Tech_Number	Model_Number	Serial_Number	Customer_Number	Customer_Address	Customer_City	Customer_State	Customer_Zip	AMV	Demand_time
Barney01	MF255	123345	ABC03	35 BEI Blvd	Cody	WY	82414	1,481	0.81
Barney01	P953D	AA4567	ABC03	35 BEI Blvd	Cody	WY	82414	43,100	0.45
Barney01	C35P	BB6789	ABC03	35 BEI Blvd	Cody	WY	82414	539	0.42
Barney01	M2727	CV9899	ABC03	35 BEI Blvd	Cody	WY	82414	96	0.05
Barney01	M303M	SPR5569	ABC03	35 BEI Blvd	Cody	WY	82414	266	0.03
Barney01	C3550	SNH44230	ABC03	35 BEI Blvd	Cody	WY	82414	1,711	0.12
Barney01	C3550	AASFDH5532	ABC03	35 BEI Blvd	Cody	WY	82414	5,039	0.36
Barney01	M1035	AAERYT3541	DEF04	77 EWD Place	Cody	WY	82414	2,305	0.53
Barney01	M1135	AAASFD32131	DEF04	77 EWD Place	Cody	WY	82414	228	0.12
Barney01	M1135	CV5674561	DEF04	77 EWD Place	Cody	WY	82414	1,225	0.63
Barney01	P1370	CV68745213	DEF04	77 EWD Place	Cody	WY	82414	152	0.18
Barney01	P8600A	CV68743521	GHI05	99 Tech Comp Dr.	Cody	WY	82414	537	0.03
Barney01	P8600A	SPR77456	GHI05	99 Tech Comp Dr.	Cody	WY	82414	535	0.08
Barney01	P8600A	SPR56323	GHI05	99 Tech Comp Dr.	Cody	WY	82414	183	0.12
Barney01	PE460	SP751467754	GHI05	99 Tech Comp Dr.	Cody	WY	82414	6,875	0.52
Barney01	M1135	SNH44856	GHI05	99 Tech Comp Dr.	Cody	WY	82414	2,190	1.15
Barney01	M1135	SNH44789	GHI05	99 Tech Comp Dr.	Cody	WY	82414	649	0.36
Barney01	M1135	SNH44639	GHI05	99 Tech Comp Dr.	Cody	WY	82414	1,225	0.63

Best Practices – Car Stock

Process, process, process

- Transfers to/from inventory locations
- High dollar part approval process
- Hold techs accountable to inventory variances
- Inventory count inaccuracies
- Warranty returns and expectations



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Best Practices – Car Stock

Sample 90 day Warranty Report

Model	Serial No	Part No.	Description	Install Date	Install Meter	Fail Date	Fail Meter	Total Days	Total Copies	Nat Avg Copies	Qty	Cost
MXC402SC	25093818	MXC32FU1	FUSING UNIT	12/21/2012	0	1/30/2013	11456	40	11,456	80,468	1	XXXXX
MPC6501SP	V7601100401	D0812441	CHARGE SECTION ASSY	11/6/2012	573621	1/29/2013	646000	84	72,379	56,570	3	XXXXX
MPC6501SP	V7601100401	D0149510	V-C2:OPC DRUM	11/6/2012	573621	1/29/2013	646000	84	72,379	96,129	1	XXXXX
MPC6501SP	V7610100482	D0819670	RIC MAGENTA DEVELOPER	1/28/2013	216083	1/29/2013	216370	1	287	183,188	2	XXXXX
MX5001	5087280	MX31NUSA	DRUM UNIT MX-2600/3100	11/8/2012	305711	1/29/2013	344780	82	39,069	60,751	3	XXXXX
PROC901S	V9915200003	M0779670	RIC MAGENTA DEVELOPER	11/29/2012	2818741	1/28/2013	2928870	60	110,129	240,286	2	XXXXX
PROC901S	V9915200003	M0779640	RIC BLACK DEVELOPER	11/6/2012	2696233	1/28/2013	2928870	83	232,637	311,090	1	XXXXX
PROC901S	V9915200003	D0169510	PHOTOCONDUCTOR	11/29/2012	2818741	1/28/2013	2928870	60	110,129	115,441	2	XXXXX
PROC901S	V9915200003	PMM077PC	ARIES 1.5 PCUK	11/29/2012	2818741	1/28/2013	2928870	60	110,129	132,904	5	XXXXX
MPC6501SP	V7600500026	D0149510	V-C2:OPC DRUM	1/9/2013	863638	1/25/2013	867000	16	3,362	96,129	2	XXXXX
MX5111FN	15050087	MX51NVSA	SHP COLOR DEVELOPER	11/13/2012	125887	1/25/2013	159000	73	33,113	55,070	1	XXXXX
PROC751EX	V9115900012	D0749510	OPC DRUM	12/5/2012	480386	1/24/2013	631623	50	151,237	74,092	1	XXXXX
AFMP1350	L5760700115	B2349510	OPC DRUM	12/7/2012	12445398	1/24/2013	12597274	48	151,876	1,234,462	1	XXXXX
HPLJ4250	CNGXH20304	Q54216790	HP4250/4350 MAINTENANCE	11/2/2012	3113040	1/23/2013	3247900	82	134,860	136,769	1	XXXXX
MPC6000	M7981200259	D0144090	FUSING BELT	11/1/2012	785458	1/22/2013	833879	82	48,421	213,269	1	XXXXX
MPC6000	M7981200259	D0144300	STRIPPER PLATE UNIT	11/1/2012	785458	1/22/2013	833879	82	48,421	195,774	1	XXXXX
MPC6501SP	V7610600608	D0149510	V-C2:OPC DRUM	1/14/2013	454346	1/22/2013	467287	8	12,941	96,129	2	XXXXX

**BEI Parts Stats report*

We find the problems so you don't have to



NEW Overstock Parts Network

- No cost to participate
- Identify overstock & obsolete parts in your inventory
- Sell your obsolete inventory
- Buy new parts at discounted rates
- Avoid costly write offs



Summary

- Ensure your service team is productive, efficient and effective
- Inventory management directly impacts your customers and dramatically impacts the profitability of your company





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Thank You!

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