

PE10-049

GM

2-11-2011

Q 11

Schwans Review

12 18 06 rev

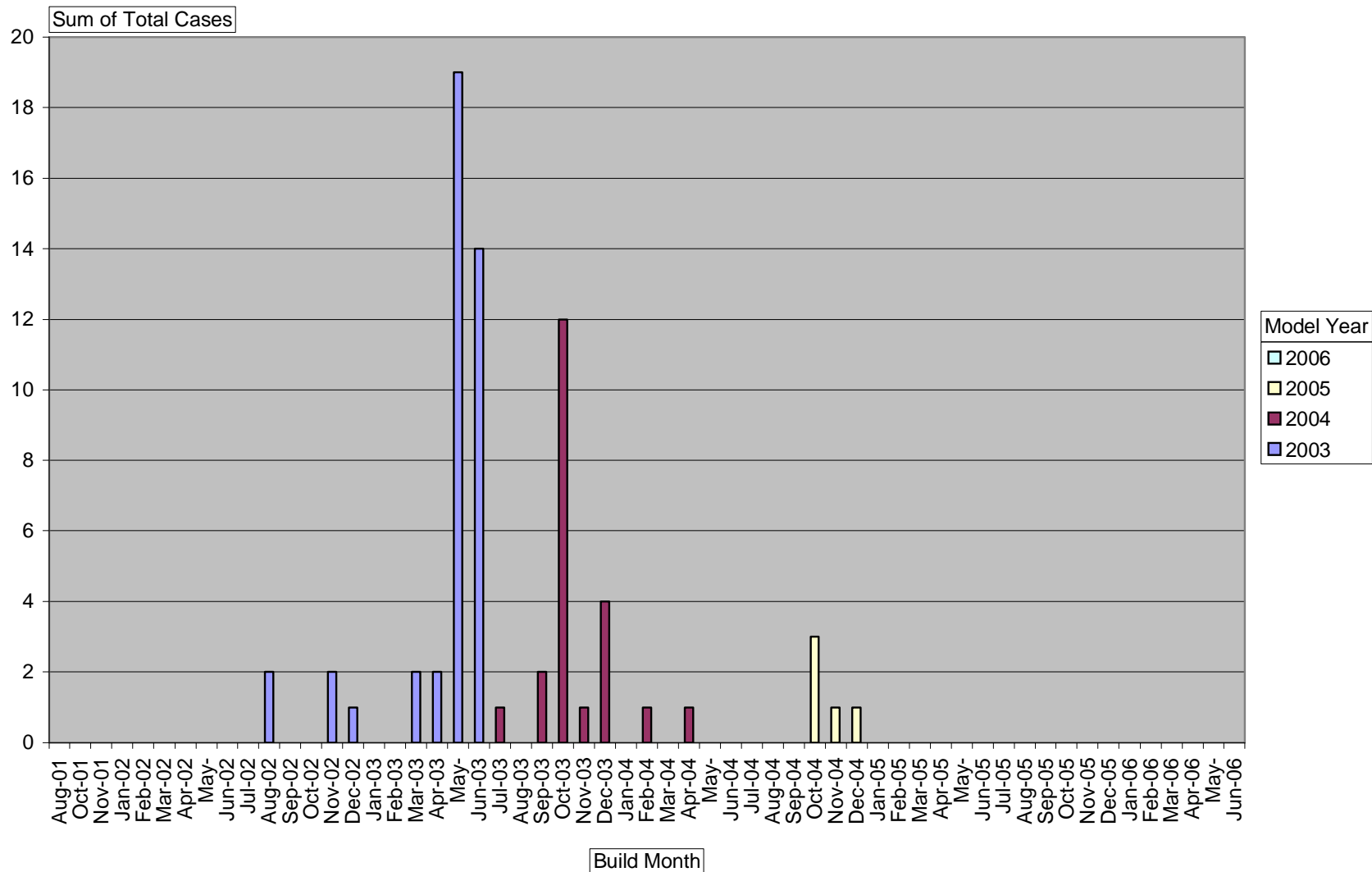
Schwan's Fleet Engineering Update

GM Vehicle Engineering

December 18, 2006

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PE10-049

GM

2-11-2011

Q 11

GMT560 Fan

2006 CY

Investigation

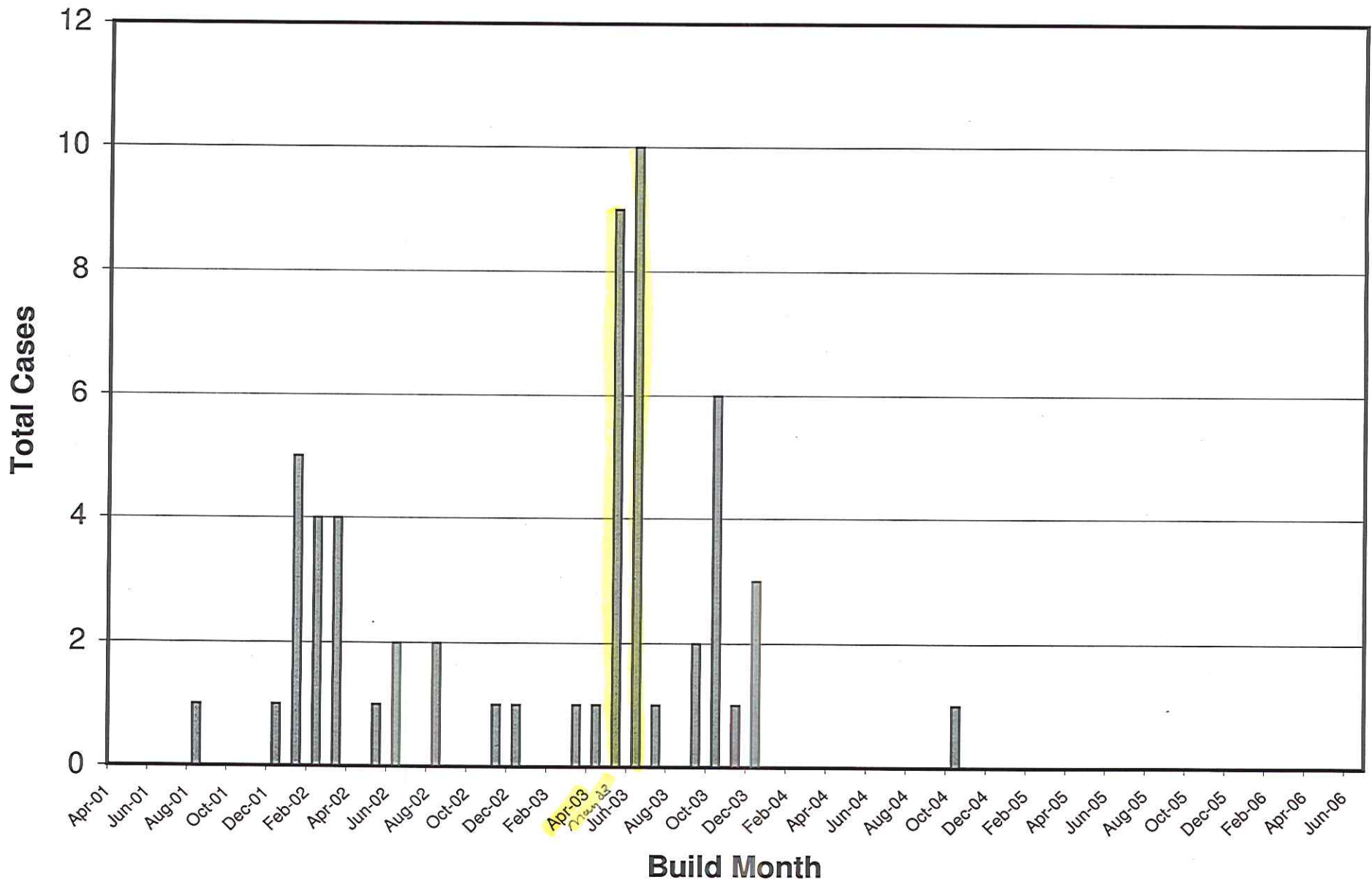




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GMT560 Fan Blade Replacements By Build Month



8/28/2006



Harry A.
Wiedenmeyer/US/GM/GMC
02/15/2007 12:34 PM

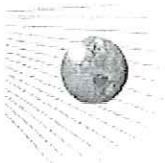
To Ray Sasinowski/US/GM/GMC
cc
bcc
Subject Re: Follow-up - GMT560 L18 Fan

Ray,

I am open all morning next Wed. the 21st. Let me know the particulars and I'll be there.

HAW

Ray Sasinowski/US/GM/GMC



Ray Sasinowski /US/GM/GMC
02/15/2007 11:46 AM

To Harry A. Wiedenmeyer/US/GM/GMC@GM
cc Tom Lockwood/US/GM/GMC@GM
Subject Re: Follow-up - GMT560 L18 Fan

Harry,

There are approximately 4,742 trucks in the Schwans fleet. 99% of the vehicles are 8.1L gas engines. A very small # of trucks are 6.6L diesel engines, GMT530 trucks, or W series vehicles.

Tom Leslie the GMICT Schwans fleet contact has been sending us some of the fans from across the Schwans fleet.

I will be Flint the rest of the week. Can we setup a meeting for next Wednesday morning to get together? Let me know and I'll setup a conference room.

Thank you,
Ray Sasinowski
248-318-4072

Jalal - in spec



Harry A.
Wiedenmeyer/US/GM/GMC
02/15/2007 10:37 AM

To Ray Sasinowski/US/GM/GMC
cc
bcc
Subject Follow-up - GMT560 L18 Fan

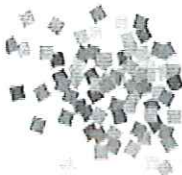
Ray,

You sent me a preliminary response to my "questionnaire" memo (below) and indicated you would be providing more specific answers this week (you were out of the office for several days). Have you had an opportunity to pull that together yet? I want to try to keep the root cause investigation proceeding. Thanks again in advance!

If it would be useful for you, Tom Lockwood and me to have a general sit-down at some point, I'm all for it.

HAW
2-6585

----- Forwarded by Harry A. Wiedenmeyer/US/GM/GMC on 02/15/2007 10:37 AM -----



Harry A.
Wiedenmeyer/US/GM/GMC
02/08/2007 02:16 PM

To Ray Sasinowski/US/GM/GMC
cc Tom Lockwood/US/GM/GMC@GM, Doug
Wachtel/US/GM/GMC@GM
Subject Fw: GMT560 L18 Fan

Ray,

Would it be possible to get a copy of the correspondence or bulletin provided to the Schwan's fleet maintenance organizations (including the instructive photos Tom mentions in his note below)?

Is it our intent to have them inspect every L18-equipped truck for a cracked fan or only a few at random? Are the removed fans coming back to us? If we cover them all in this manner, a formal FPE field action should probably not be needed, but I will want to summarize what we did for internal closure of the issue. Also, it is important to try to understand and eliminate the physical root cause(s), whether quality- or design-related.

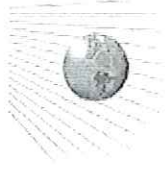
Last dumb question: Who would be able to tell me about how many Schwan's trucks (with L18) exist altogether, in order to have an idea how prevalent the condition is percentage-wise?

Thanks for your assistance.


Harry A. Wiedenmeyer
Product Investigations
VEC 1P40-09 (Yellow)
phone 586-492-6585
fax 586-492-1502
mail 480-210-G11

----- Forwarded by Harry A. Wiedenmeyer/US/GM/GMC on 02/08/2007 01:55 PM -----

Tom Lockwood/US/GM/GMC



Ray Sasinowski /US/GM/GMC
02/08/2007 03:56 PM

To Harry A. Wiedenmeyer/US/GM/GMC@GM
cc Tom Lockwood/US/GM/GMC@GM, AI
Cheesebrough/US/GM/GMC@GM
bcc
Subject Re: Fw: GMT560 L18 Fan 

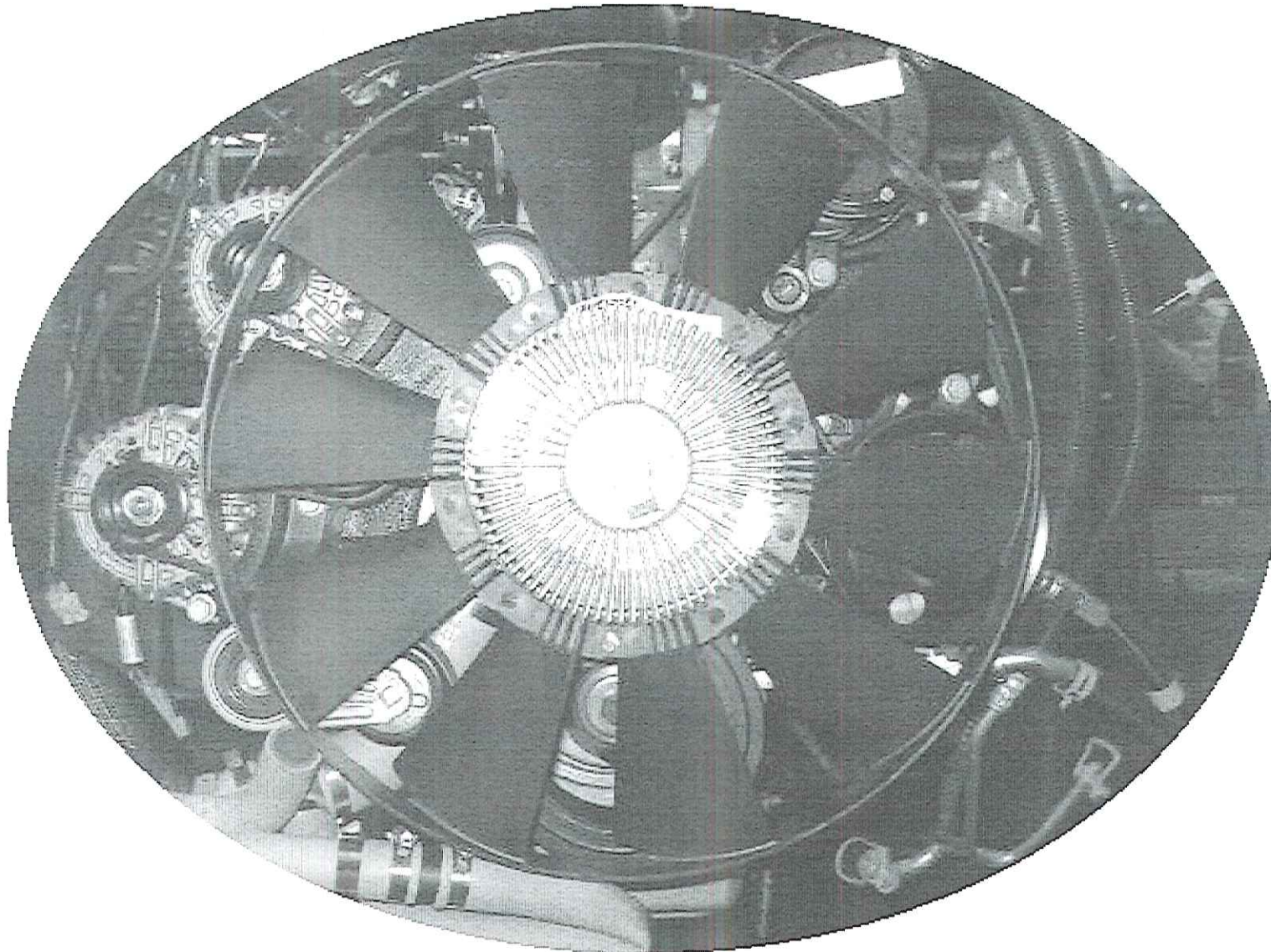
Harry,

I will try and get answers to your questions by Monday February 12. Attached is the Presentation I sent to the PEM Kurt Heier would pass it on to Schwans. We are not asking Schwans to check all trucks right now, but part of Schwans' normal preventative maintenance schedule. I believe there are approximately 5,000 L18 Schwans vehicles in their fleet. I need to confirm a formal number. Schwans is bringing in house all warranty and maintenance work to their vehicles. Schwans has an official dealership number assign to them; so all warranty work on fans would be recorded in our warranty system. I would need to setup a labor code return through the warranty part center to get all returns.



Fan Blade PMI Checks rev b.ppt

Thank you,
Ray Sasinowski
248-318-4072



L18 Fan & Clutch in Vehicle position


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Harry A.
Wiedenmeyer/US/GM/GMC
02/09/2007 06:41 AM

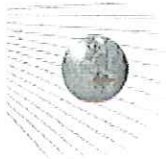
To Ray Sasinowski/US/GM/GMC
cc Tom Lockwood/US/GM/GMC
bcc
Subject Re: Fw: GMT560 L18 Fan 

Ray,

Thanks for the preliminary info. It would perhaps be useful to get a part return program set up to get back failed and suspect parts for analysis, so I would encourage doing that. Depending on what you and Tom think, it may also be beneficial to get back at least a handful of high-mileage non-failed fans from the Schwan's fleet to compare with the failed ones. At some point a decision could be made whether to replace fans on all Schwan's trucks. The downside of that is the replacement fans may also crack just like the originals. I will anticipate your answers to my "questionnaire". Keep me in the loop on what's happening as this investigation is still active from my standpoint.

HAW
2-6585

Ray Sasinowski/US/GM/GMC



Ray Sasinowski /US/GM/GMC
02/08/2007 03:56 PM

To Harry A. Wiedenmeyer/US/GM/GMC@GM
cc Tom Lockwood/US/GM/GMC@GM, AI
Cheesebrough/US/GM/GMC@GM
Subject Re: Fw: GMT560 L18 Fan 

Harry,

I will try and get answers to your questions by Monday February 12. Attached is the Presentation I sent to the PEM Kurt Heier would pass it on to Schwans. We are not asking Schwans to check all trucks right now, but part of Schwans' normal preventative maintenance schedule. I believe there are approximately 5,000 L18 Schwans vehicles in their fleet. I need to confirm a formal number. Schwans is bringing in house all warranty and maintenance work to their vehicles. Schwans has an official dealership number assign to them; so all warranty work on fans would be recorded in our warranty system. I would need to setup a labor code return through the warranty part center to get all returns.

[attachment "Fan Blade PMI Checks rev b.ppt" deleted by Harry A. Wiedenmeyer/US/GM/GMC]

Thank you,
Ray Sasinowski
248-318-4072

{ * }

Report Selection Criteria

Analysis Date: 1/2/2007
MY: 2003 2004 2005 2006 2007
Beg. MOB: n/a to End MOB: n/a
Exposure: MYTD = 613 Avg Days
Vehicle Line: Med Duty
Plants: n/a
Engine: L18
Transmission: n/a
Labor Ops: J3380
CC: n/a
TC: n/a

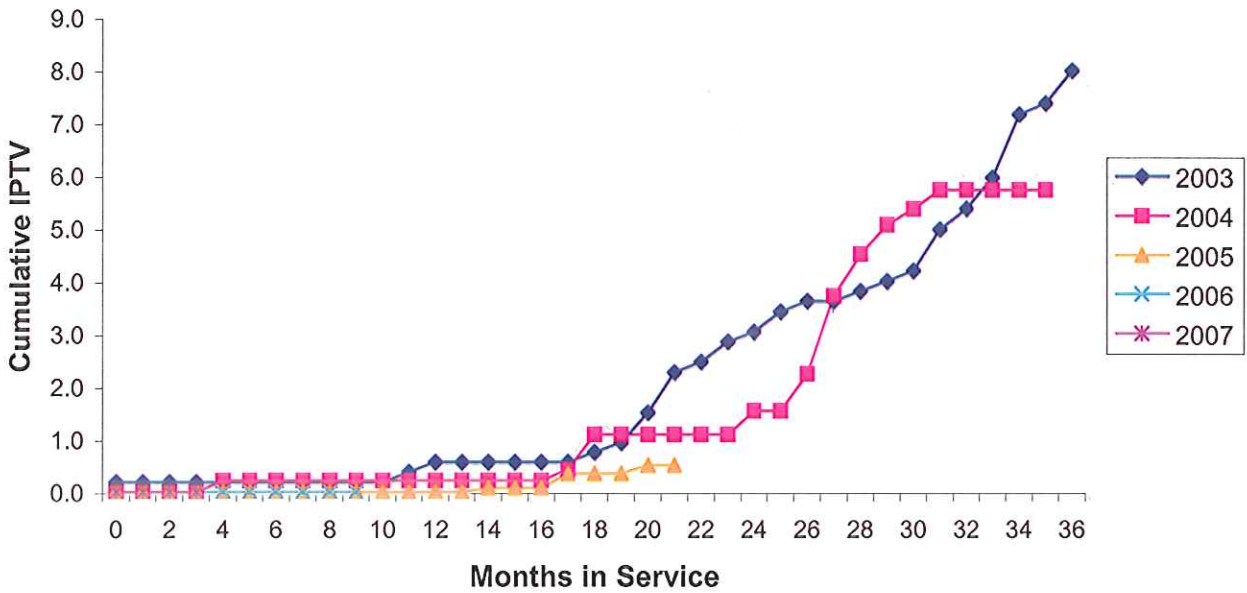
Vehicle Line: Med Duty Plants: n/a MY: 2003 2004 2005 2006 2007 Beg. MOB: n/a to End MOB: n/a Analysis Date: 1/2/2007 Exposure: MYTD = 613 Avg Days	Engine: L18 Transmission: n/a Labor Ops: J3380 CC: n/a TC: n/a
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Top Issues by Labor Code

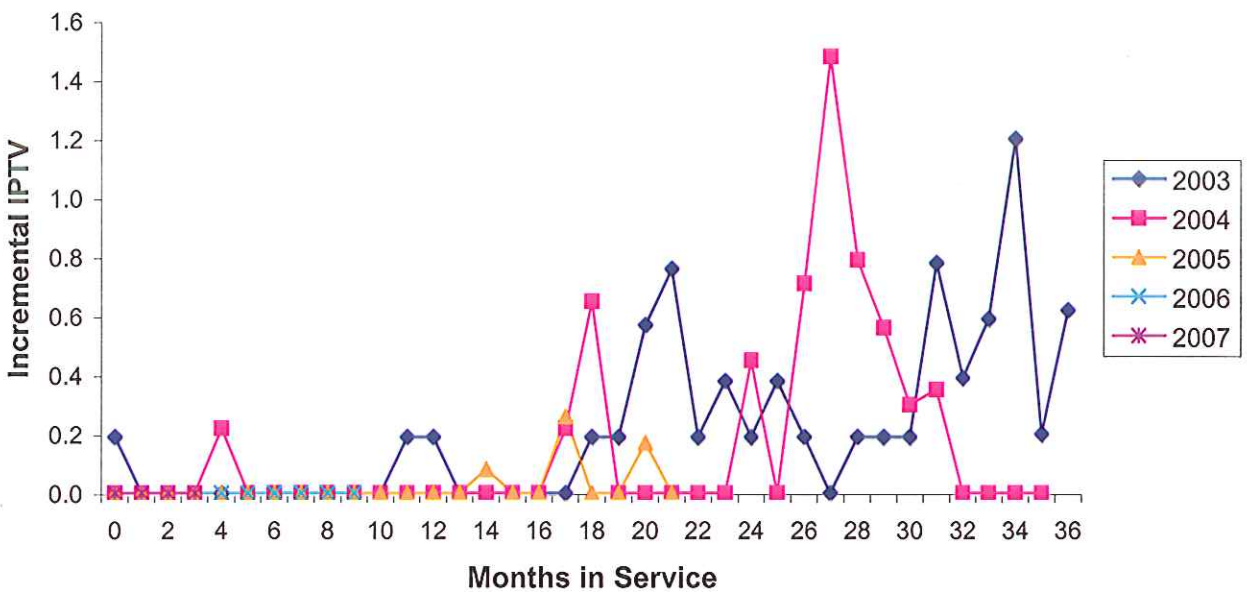
Labor Code	LC Description	IPTV	CPV	E[Cost]	E[Cases]	Vehicles	Obs Cost	Obs Cases	SMT	BOM Row
J3380	BLADE, FAN - REPLACE	2.04	[**]	[**]	70	34,232	[**]	70	HVAC & POWERTRA	Front End Exterior Airflow (C

Vehicle Line: Med Duty	Engine: L18
Plants: n/a	Transmission: n/a
MY: 2003 2004 2005 2006 2007 Beg. MOB: n/a to End MOB: n/a	Labor Ops: J3380
Analysis Date: 1/2/2007 Exposure: MYTD = 613 Avg Days	CC: n/a TC: n/a

Cumulative Fan Chart - IPTV

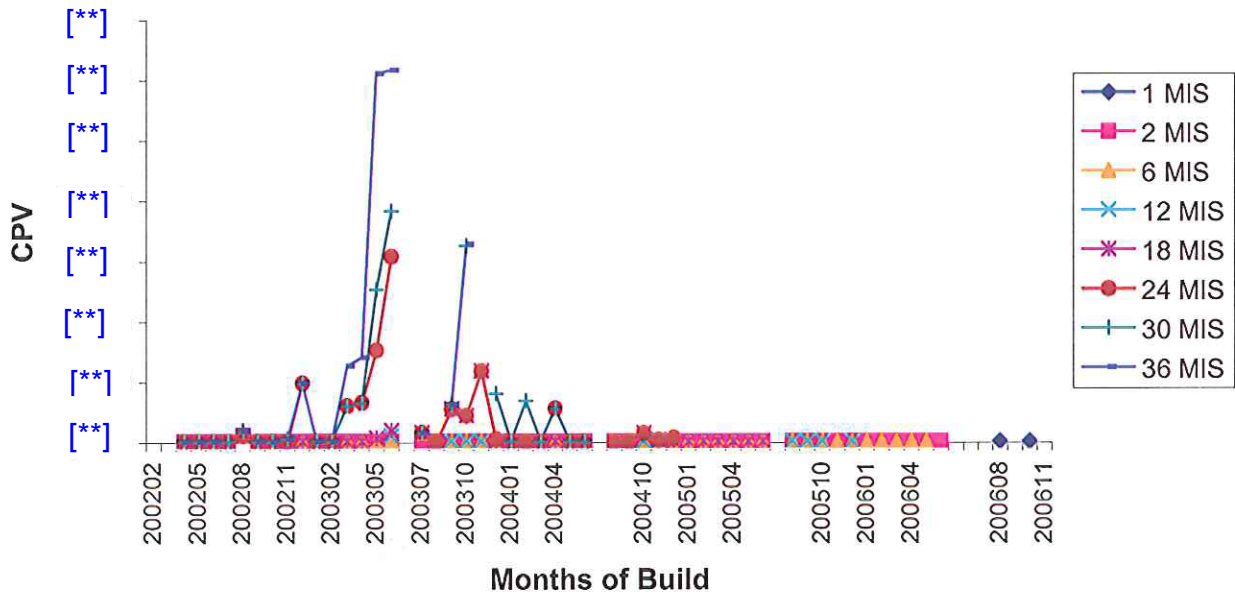


Incremental Fan Chart - IPTV

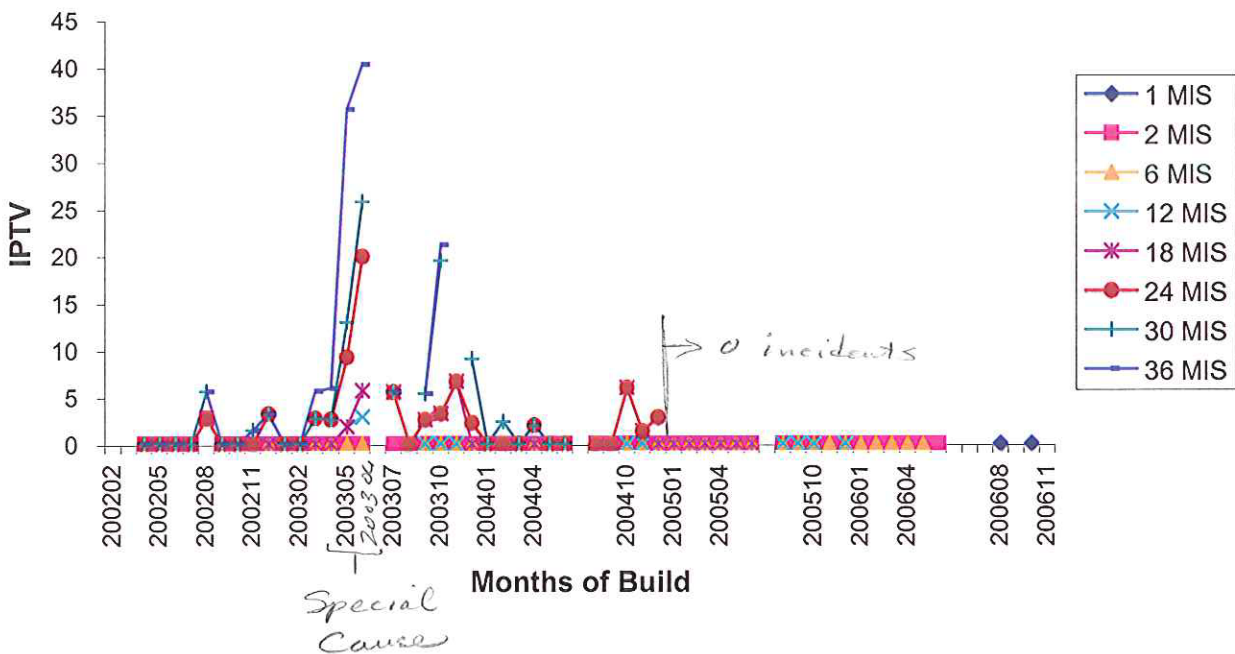


Vehicle Line: Med Duty	Engine: L18
Plants: n/a	Transmission: n/a
MY: 2003 2004 2005 2006 2007 Beg. MOB: n/a to End MOB: n/a	Labor Ops: J3380
Analysis Date: 1/2/2007 Exposure: MYTD = 613 Avg Days	CC: n/a TC: n/a

Trend Chart - Cost Per Vehicle (SOLD only)



Trend Chart - Incidents per Thousand Vehicles (SOLD only)



Vehicle Line: Med Duty Plants: n/a MY: 2003 2004 2005 2006 2007 Beg. MOB: n/a to End MOB: n/a Analysis Date: 1/2/2007 Exposure: MYTD = 613 Avg Days	Engine: L18 Transmission: n/a Labor Ops: J3380 CC: n/a TC: n/a
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Analysis By: Repair Age

Repair Age	IPTV	CPV	Total Cases	Total Cost
0	0.0	[**]	1	[**]
0091-0120	0.0	[**]	1	[**]
0301-0330	0.0	[**]	1	[**]
0331-0360	0.0	[**]	1	[**]
0361- UP	1.9	[**]	66	[**]

Analysis By: Mileage

Mileage	Total Cases	Percent
0 - 4,999	2	2.9
5,000 - 9,999	1	1.4
10,000 - 14,999	1	1.4
20,000 - 24,999	1	1.4
25,000 - 29,999	1	1.4
30,000 - AND UP	64	91.4

Analysis By: Repeat Occurances

Frequency	Total Cases	Percent
1	63	95.5
2	2	3.0
3	1	1.5

Analysis By: VIN

VIN	Total Cases
1GDG5E1E73F900916	3
1GDG5E1E43F901067	2
1GDG5E1E93F901131	2
1GBC4E1E03F505163	1
1GBM7C1E74F505677	1
1GBM7E1E33F520123	1
1GBM8C1E34F100462	1
1GDG5C1E14F900383	1
1GDG5C1E14F900402	1
1GDG5C1E14F900514	1

Vehicle Line: Med Duty Plants: n/a MY: 2003 2004 2005 2006 2007 Beg. MOB: n/a to End MOB: n/a Analysis Date: 1/2/2007 Exposure: MYTD = 613 Avg Days	Engine: L18 Transmission: n/a Labor Ops: J3380 CC: n/a TC: n/a
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Analysis By: Part Number

Part Number	Part Number Description	Number of Cases	Cost per Repair	Average Case Age
NO PART		45	[**]	849
15167687	BLADE	20	[**]	613
15011511	BLADE	5	[**]	434

Analysis By: Repairing Dealer

Repairing Dlr Code	Dealer Name	Telephone Number	State	Cases
196817	SCHWANS	(724)743-3083	PA	26
130477	SCHWAN'S SALES ENTERPRISES	()	CO	19
196816	SCHWANS	(608)275-6877	WI	8
196814	SCHWANS	(507)537-8761	MN	5
196815	SCHWANS	(602)544-3466	AZ	2
196818	SCHWANS	(813)615-2474	FL	2
111422	DWAIN TAYLOR CHEVROLET-GMC, INC.	(270)753-2617	KY	1
113292	BOB GRIMM CHEVROLET, INC.	(309)263-2241	IL	1
165498	CARRIBEAN AUTO-MART, INC.	(340)777-7600	VI	1
115859	SELLERS BUICK PONTIAC GMC, INC.	(248)478-8000	MI	1

62

Analysis By: Repairing Division

Division	Vehicle Count	Average Days in Service	IPTV	CPV	Total Cases	Total Cost
GMC	23,412	577	2.8	[**]	66	[**]
Chevrolet	10,820	690	0.4	[**]	4	[**]

Analysis By: Vehicle Breakdown

Nameplate	Description	Vehicle Count	Avg Days in Service	IPTV	CPV	Total Cases	Total Cost
Chevrolet	Chev 8500 Reg Cab	78	522	12.8	[**]	1	[**]
GMC	GMC 5500 Reg Cab	15,414	536	4.2	[**]	64	[**]
Chevrolet	Chev 7500 Reg Cab	907	695	2.2	[**]	2	[**]
GMC	GMC 7500 Reg Cab	2,838	558	0.7	[**]	2	[**]
Chevrolet	Chev 4500 Reg Cab	4,152	860	0.2	[**]	1	[**]
Chevrolet	Chev 4500 Com Cutaway	362	483	0.0	[**]	0	[**]
Chevrolet	Chev 4500 Crew Cab	241	729	0.0	[**]	0	[**]
Chevrolet	Chev 4500 MH Cutaway	2	1,340	0.0	[**]	0	[**]
Chevrolet	Chev 5500 Com Cutaway	723	550	0.0	[**]	0	[**]
Chevrolet	Chev 5500 Crew Cab	135	309	0.0	[**]	0	[**]

Vehicle Line: Med Duty Plants: n/a MY: 2003 2004 2005 2006 2007 Beg. MOB: n/a to End MOB: n/a Analysis Date: 1/2/2007 Exposure: MYTD = 613 Avg Days	Engine: L18 Transmission: n/a Labor Ops: J3380 CC: n/a TC: n/a
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Analysis By: Assembly Plant

Plant	Vehicle Count	Avg Days in Service	IPTV	CPV	Total Cases	Total Cost
Flint - Med Duty	34,232	612.9	2.0	[**]	70	[**]

Analysis By: Engine

Engine	Vehicle Count	Avg Days in Service	IPTV	CPV	Total Cases	Total Cost
L18 - GAS, 8 CYL, 8.1L, MFI	34,232	612.9	2.0	[**]	70	[**]

Analysis By: Transmission

Transmission	Vehicle Count	Avg Days in Service	IPTV	CPV	Total Cases	Total Cost
MTX - AUTO 5 SPD, ALLISON, 2200 SERIES, CONV C	14,747	527.0	4.3	[**]	64	[**]
MSC - MAN 5 SPD, EATON, 6.99 1ST, 1.28 4TH, DIRE	306	1,102.3	3.3	[**]	1	[**]
MM7 - MAN 6 SPD, EATON BOOS SYNC, 9.01 1ST, 5	3,313	510.4	1.2	[**]	4	[**]
M74 - AUTO 5 SPD, ALLISON, LCT 1000, 3.10 1ST, 1.	10,688	724.1	0.1	[**]	1	[**]
-	553	33.2	0.0	[**]	0	[**]
MB7 - AUTO 5 SPD, ALLISON, LCT 1000 PTS.	726	440.7	0.0	[**]	0	[**]
MB8 - AUTO 5 SPD, ALLISON, LCT 2200 PTS.	106	404.1	0.0	[**]	0	[**]
ML6 - MAN 6 SPD, ZF, 105MM, 5.79 1ST, 0.72 6TH, O	674	1,047.5	0.0	[**]	0	[**]
MPU - MAN 5 SPD, EATON, 7.52 1ST, 1.52 4TH, O/D	905	684.6	0.0	[**]	0	[**]
MSG - MAN 5 SPD, EATON, 8.05 1ST, DIRECT DRIVE	38	1,162.3	0.0	[**]	0	[**]

Analysis By: Geographic - Repairing Dealer State

Repairing State	IPTV	Total Cost	Repairing Province	IPTV	Total Cost
Colorado	174.3	[**]			
Pennsylvania	26	[**]			
Wisconsin	21.1	[**]			
New Mexico	17.9	[**]			
Kentucky	8.4	[**]			
Arizona	8.3	[**]			
Florida	7.6	[**]			
Michigan	1.5	[**]			
Ohio	1.4	[**]			
Illinois	1.3	[**]			