

EA02-025

FORD 10/27/03

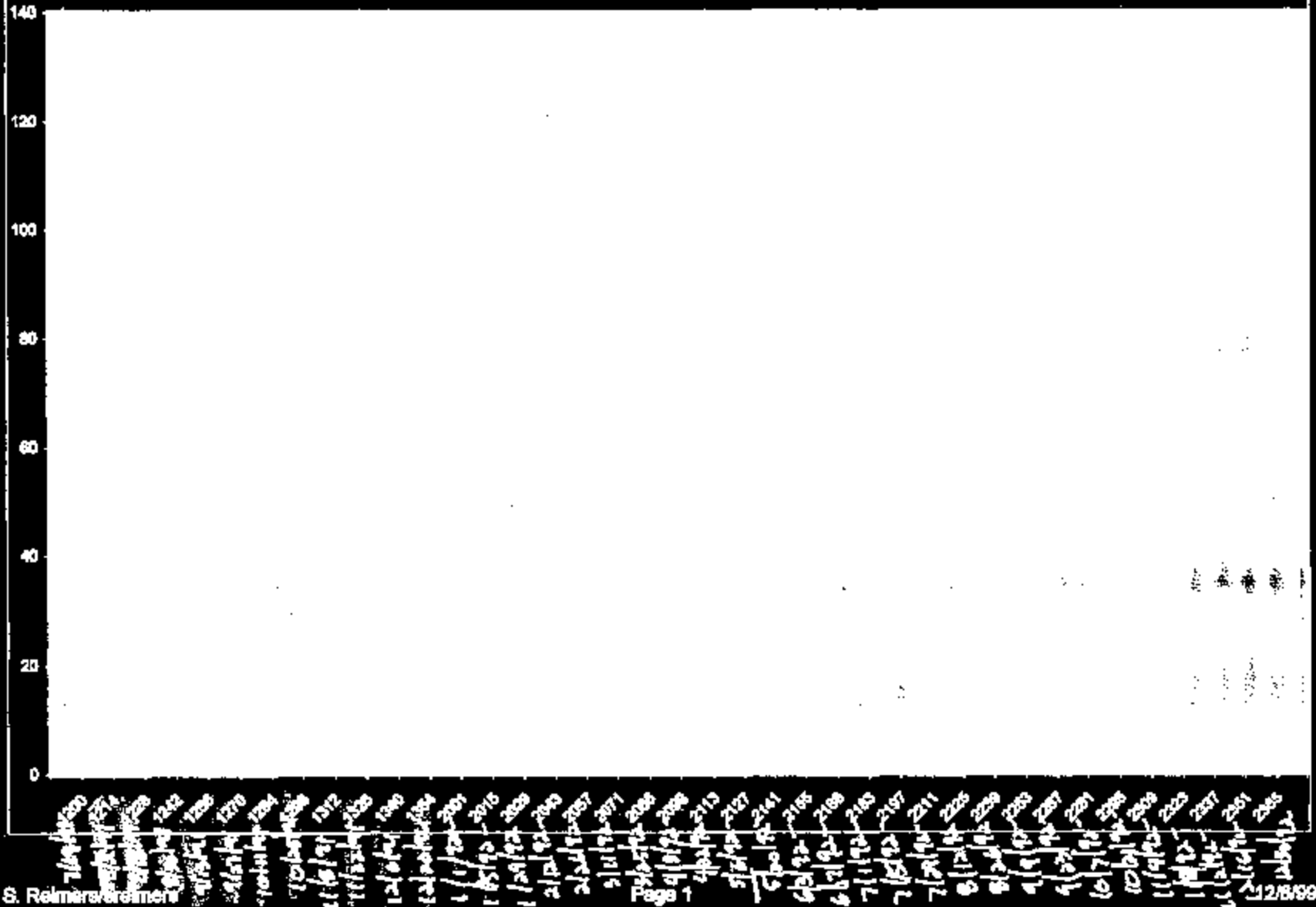
APPENDIX N

BOOK 31 OF 61

PART 3 OF 4

3713 5718

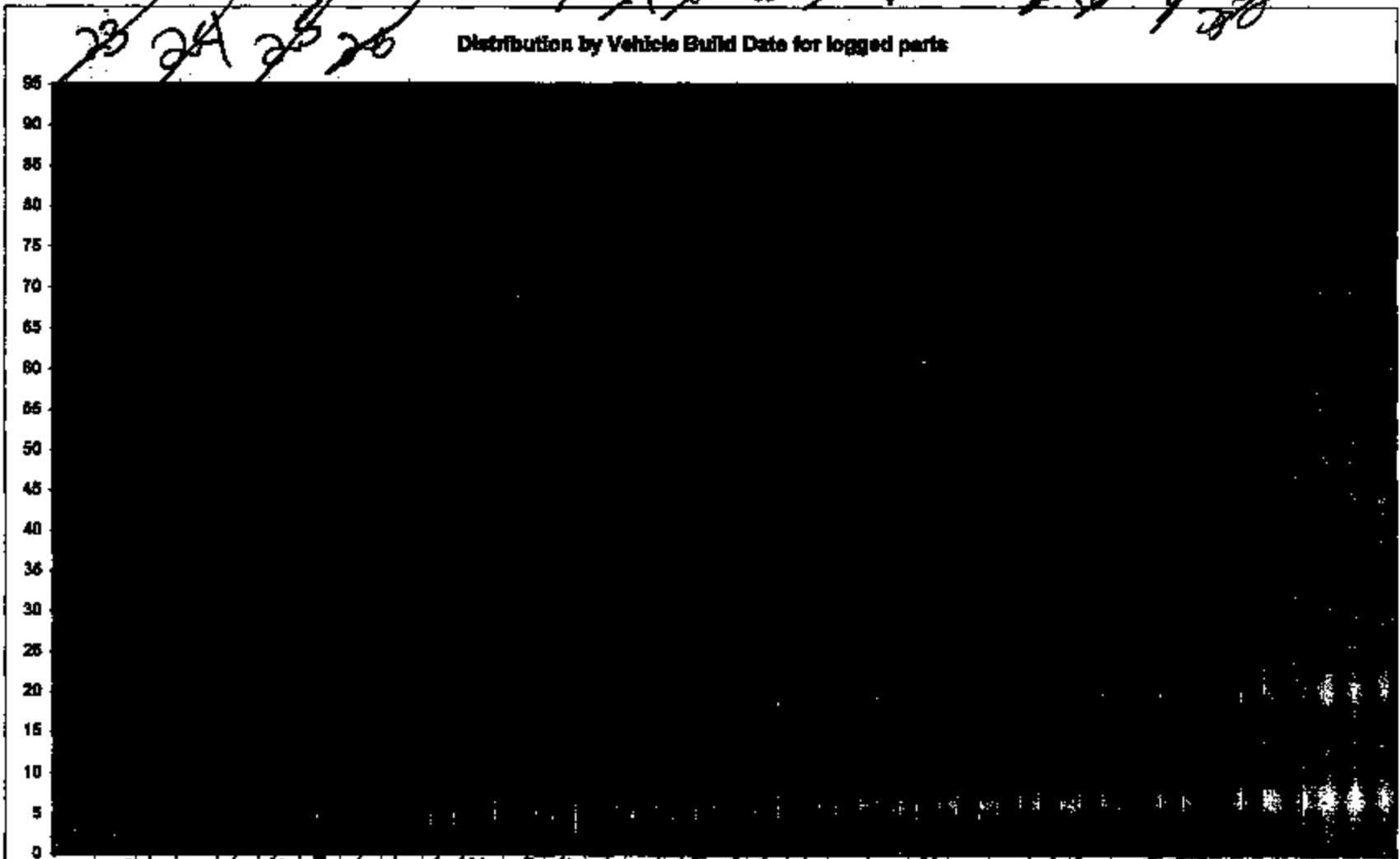
Distribution by Date Code for logged parts



~~1 2 3 4 5 6 7 8 9 10 11~~ ~~12 13 14 15 16 17 18 19 20 21 22~~

Dist plot Chart 4

Distribution by Vehicle Build Date for logged parts



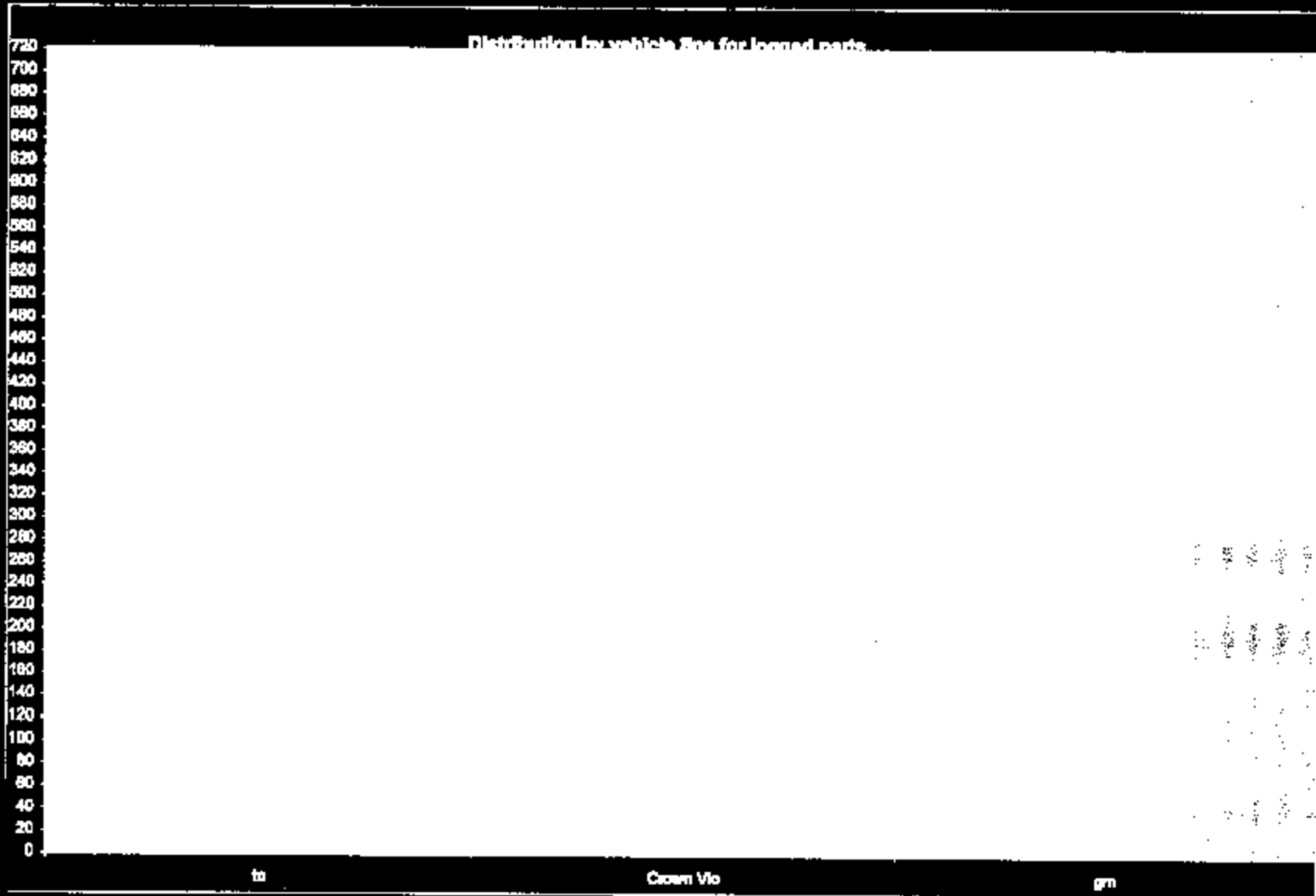
~~34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53~~

3713 9719

7-7-92
4

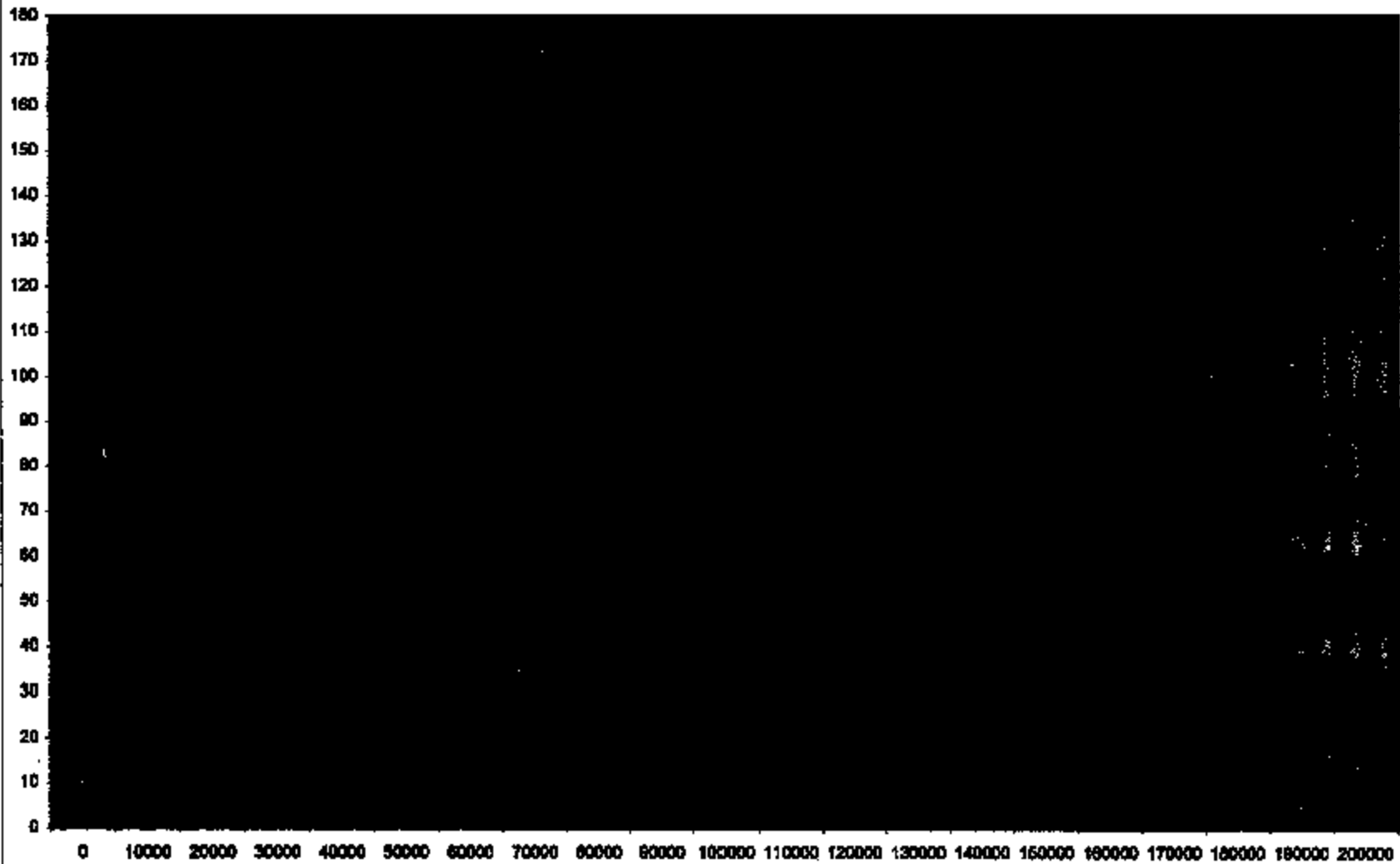
D-161023

Distribution Chart 1



3713 9720

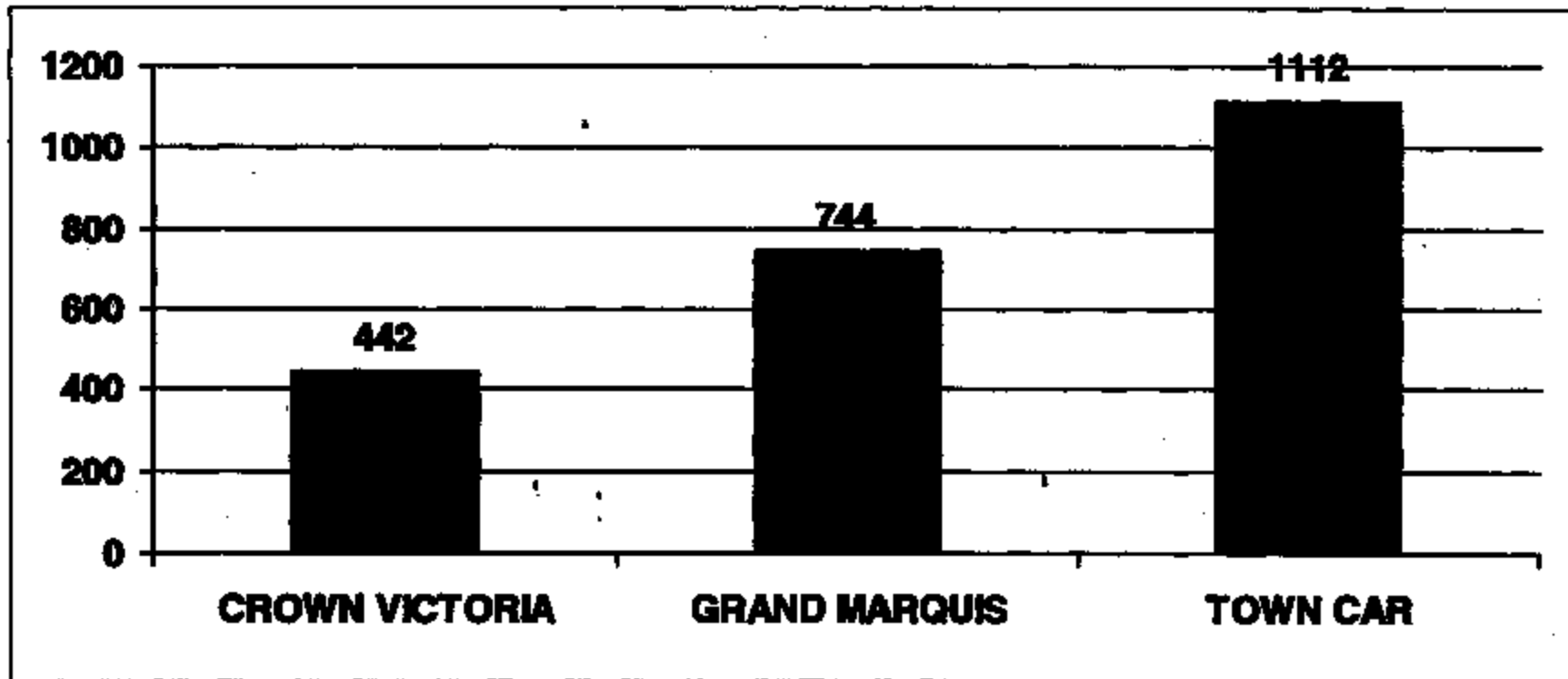
Distribution by mileage for logged parts



3713 5721

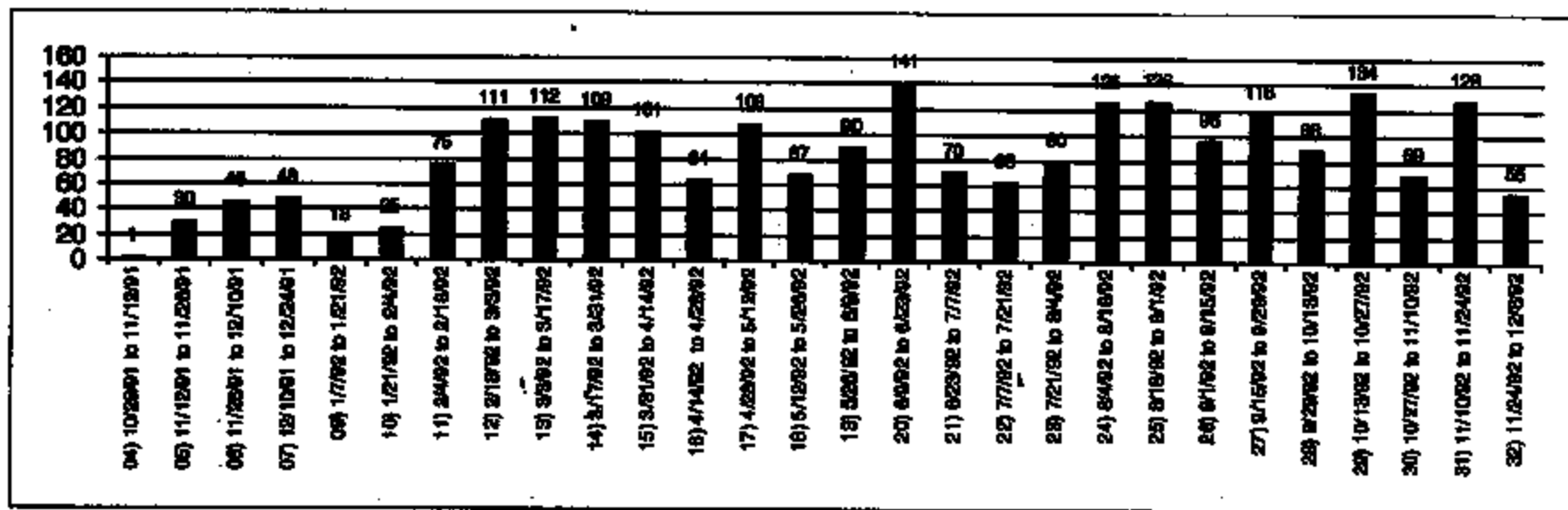
Summary of Parts by Vehicle Type

<u>Vehicle Description</u>	<u>Number of Parts</u>
CROWN VICTORIA	442
GRAND MARQUIS	744
TOWN CAR	1112



Summary of Parts by Vehicle Build Date

Date Range	Number of Parts	Date Range	Number of Parts	Date Range	Number of Parts
04) 10/29/91 to 11/12/91	1	16) 4/14/92 to 4/29/92	64	27) 9/15/92 to 9/29/92	116
05) 11/12/91 to 11/26/91	30	17) 4/29/92 to 5/12/92	108	28) 9/29/92 to 10/13/92	88
06) 11/26/91 to 12/10/91	46	18) 5/12/92 to 5/26/92	67	29) 10/13/92 to 10/27/92	134
07) 12/10/91 to 12/24/91	48	19) 5/26/92 to 6/9/92	90	30) 10/27/92 to 11/10/92	88
08) 1/7/92 to 1/21/92	18	20) 6/9/92 to 6/23/92	141	31) 11/10/92 to 11/24/92	128
10) 1/21/92 to 2/4/92	26	21) 6/23/92 to 7/7/92	70	32) 11/24/92 to 12/8/92	56
11) 2/4/92 to 2/18/92	76	22) 7/7/92 to 7/21/92	68		
12) 2/18/92 to 3/5/92	111	23) 7/21/92 to 8/4/92	60		
13) 3/5/92 to 3/17/92	112	24) 8/4/92 to 8/18/92	125		
14) 3/17/92 to 3/31/92	108	25) 8/18/92 to 9/1/92	128		
15) 3/31/92 to 4/14/92	101	26) 9/1/92 to 9/15/92	96		

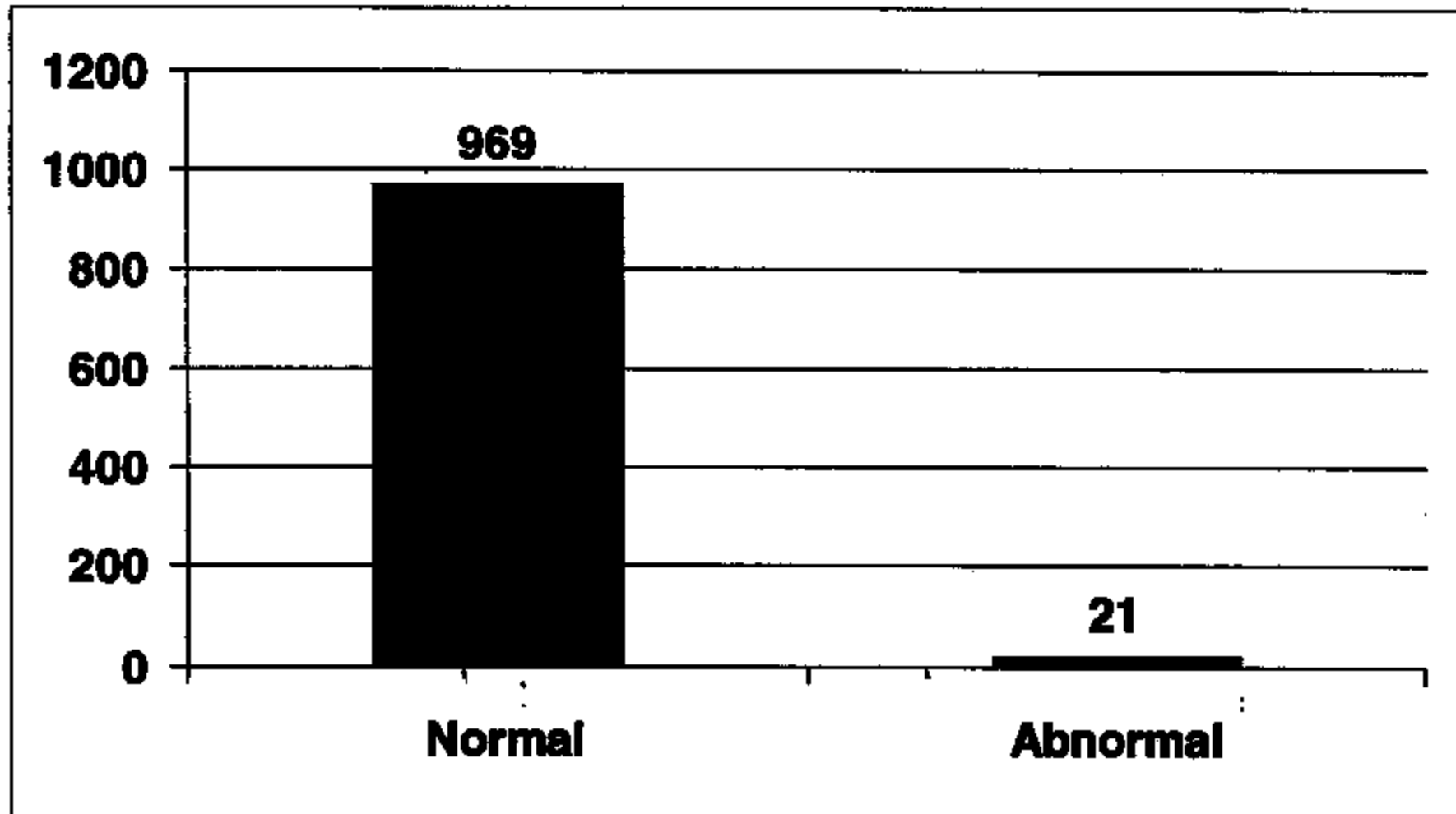


Part Summary by Terminal to Terminal Resistance

Resistance Value

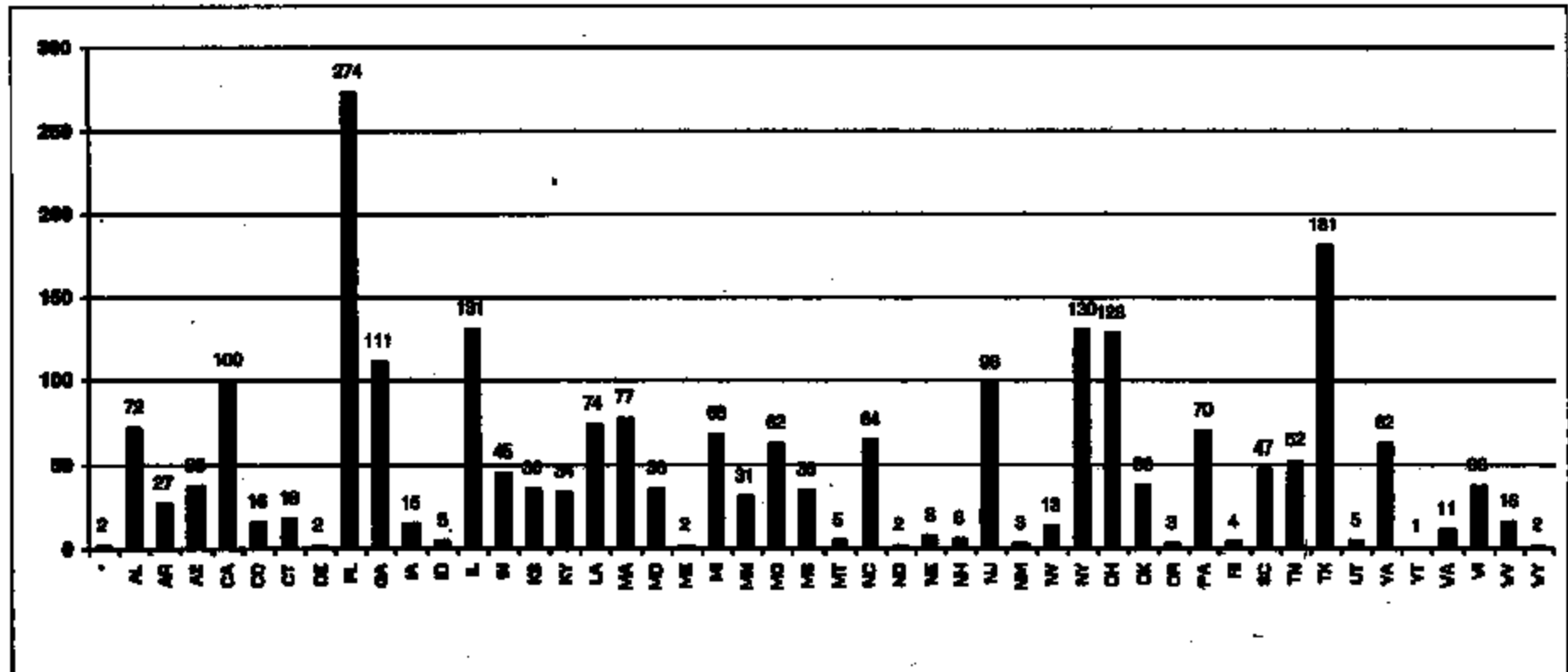
Number of Parts

Normal	969
Abnormal	21



Number of Ports by State

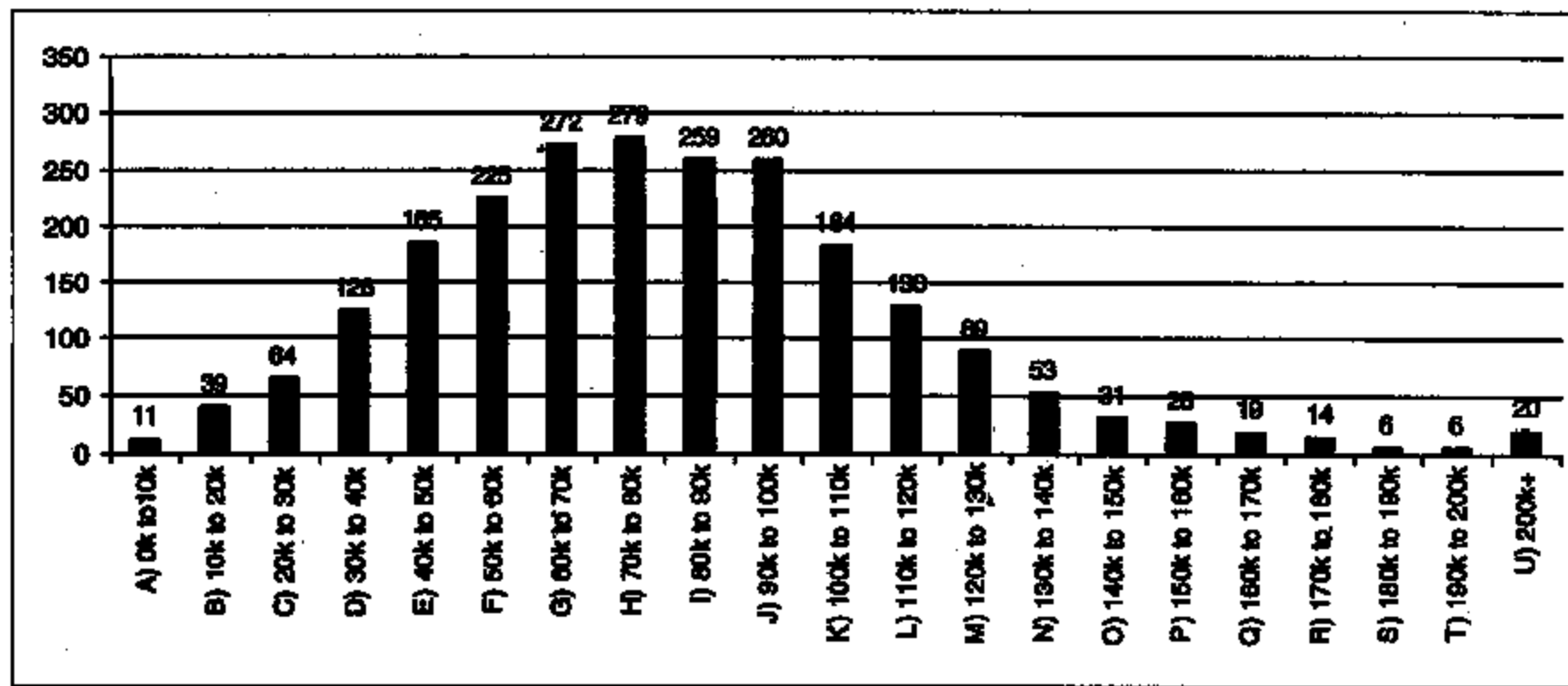
State	# of Pts.	State	# of Pts.	State	# of Pts.	State	# of Pts.	State	# of Pts.	State	# of Pts.		
AK	2	DE	2	KS	38	MN	31	NH	8	OR	3	VA	82
AL	72	FL	274	KY	34	MO	82	NJ	98	PA	70	VT	1
AR	27	GA	111	LA	74	MS	36	NM	3	RI	4	WA	11
AZ	38	IA	16	MA	77	MT	5	NV	18	SC	47	WI	38
CA	100	ID	5	MD	36	NC	84	NY	130	TN	82	WV	16
CO	18	IL	191	ME	2	ND	2	OH	128	TX	181	WY	2
CT	18	IN	45	MI	68	NE	8	OK	38	UT	5		





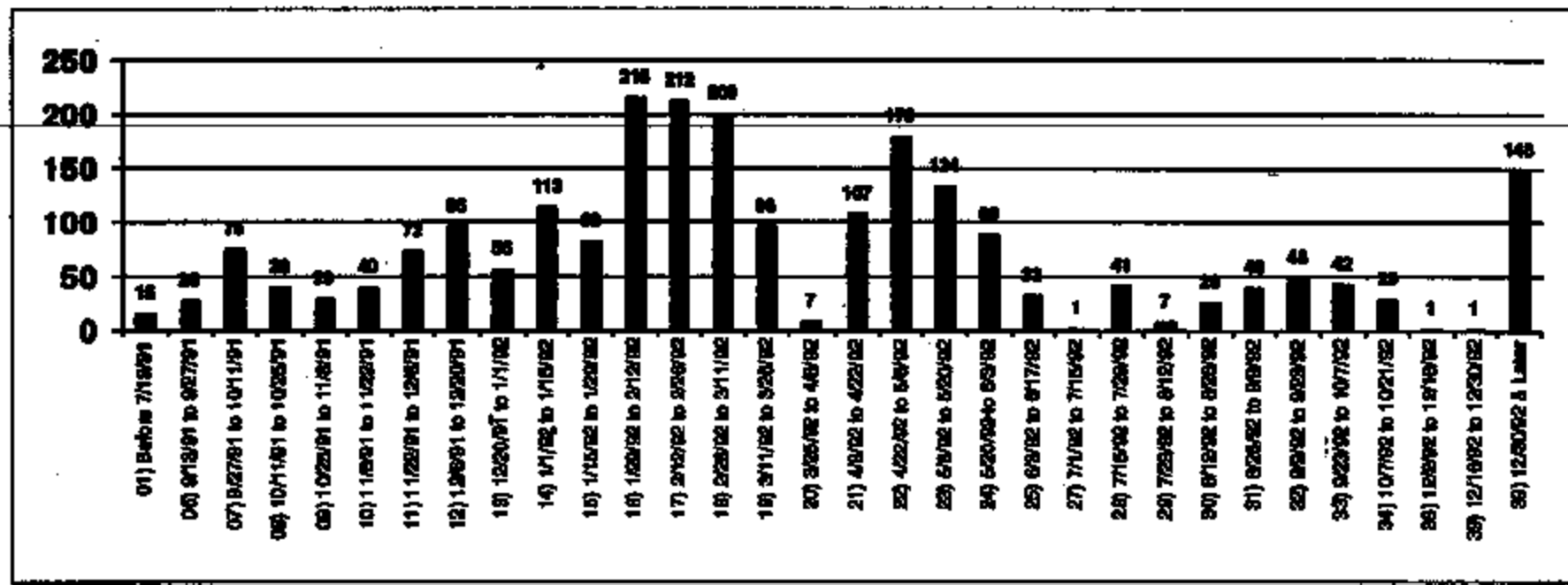
Summary of Parts by Mileage

Mileage	Number of Parts	Mileage	Number of Parts
A) 0k to 10k	11	M) 120k to 130k	89
B) 10k to 20k	39	N) 130k to 140k	53
C) 20k to 30k	64	O) 140k to 150k	31
D) 30k to 40k	128	P) 150k to 160k	26
E) 40k to 50k	186	Q) 160k to 170k	19
F) 50k to 60k	225	R) 170k to 180k	14
G) 60k to 70k	272	S) 180k to 190k	6
H) 70k to 80k	279	T) 190k to 200k	6
I) 80k to 90k	259	U) 200k+	20
J) 90k to 100k	260		
K) 100k to 110k	184		
L) 110k to 120k	130		



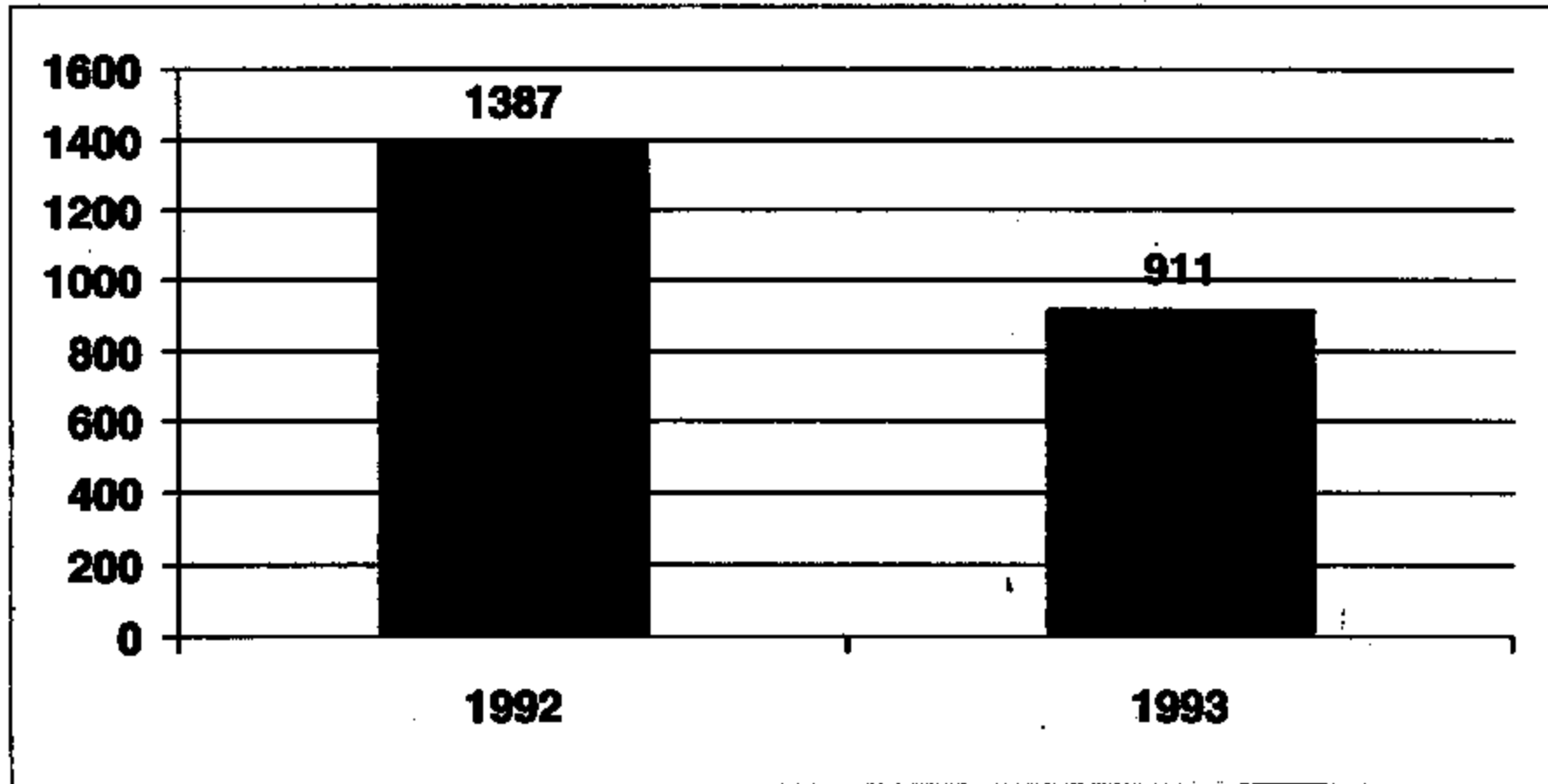
Summary of Parts by Part Build Date

<u>Date Ranges</u>	<u>Number of Parts</u>	<u>Date Ranges</u>	<u>Number of Parts</u>	<u>Date Ranges</u>	<u>Number of Parts</u>
01) Before 7/1/91	15	17) 2/12/92 to 2/28/92	212	30) 8/12/92 to 8/28/92	28
02) 9/13/91 to 9/27/91	28	18) 2/29/92 to 3/11/92	200	31) 8/29/92 to 8/30/92	40
03) 9/27/91 to 10/11/91	75	19) 3/11/92 to 3/25/92	96	32) 8/31/92 to 9/23/92	48
04) 10/11/91 to 10/25/91	38	20) 3/25/92 to 4/8/92	7	33) 9/23/92 to 10/7/92	42
05) 10/25/91 to 11/8/91	29	21) 4/8/92 to 4/22/92	107	34) 10/7/92 to 10/21/92	28
06) 11/8/91 to 11/22/91	40	22) 4/22/92 to 5/6/92	178	35) 12/2/92 to 12/16/92	1
07) 11/22/91 to 12/6/91	72	23) 5/6/92 to 5/20/92	134	36) 12/16/92 to 12/30/92	1
08) 12/6/91 to 12/20/91	95	24) 5/20/92 to 6/3/92	88	36) 12/30/92 & Later	148
09) 12/20/91 to 1/1/92	68	25) 6/3/92 to 6/17/92	32		
10) 1/1/92 to 1/15/92	113	26) 7/1/92 to 7/15/92	1		
11) 1/15/92 to 1/29/92	82	26) 7/15/92 to 7/29/92	41		
12) 1/29/92 to 2/12/92	215	27) 7/29/92 to 8/12/92	7		



Model Year Summary of Parts

<i>MY</i>	<i>Number of Parts</i>
1992	1387
1993	911



Summary of Parts by External Signs Exhibited

Did Part Exhibit External Signs of a Problem ?

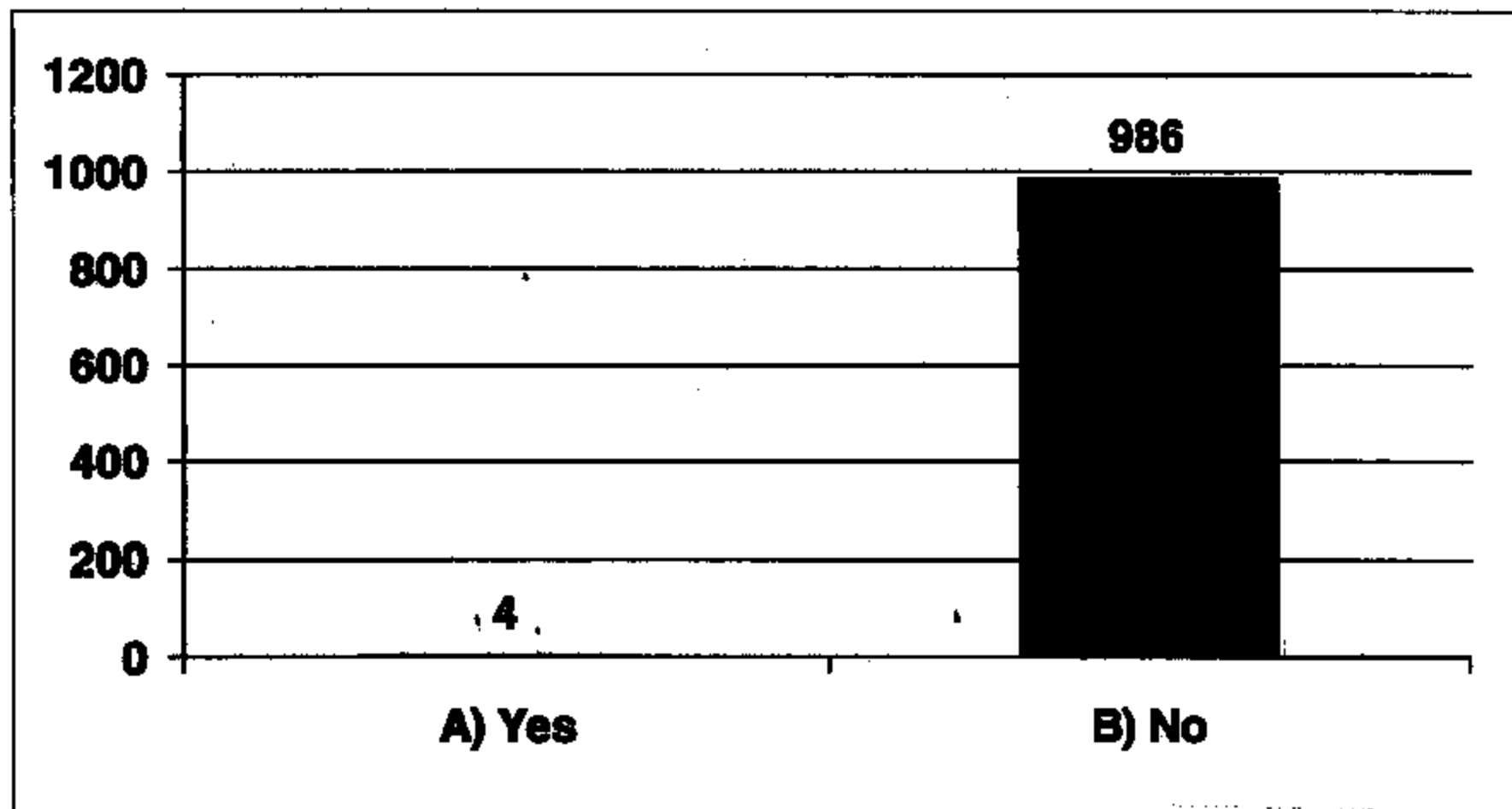
Number of Parts

A) Yes

4

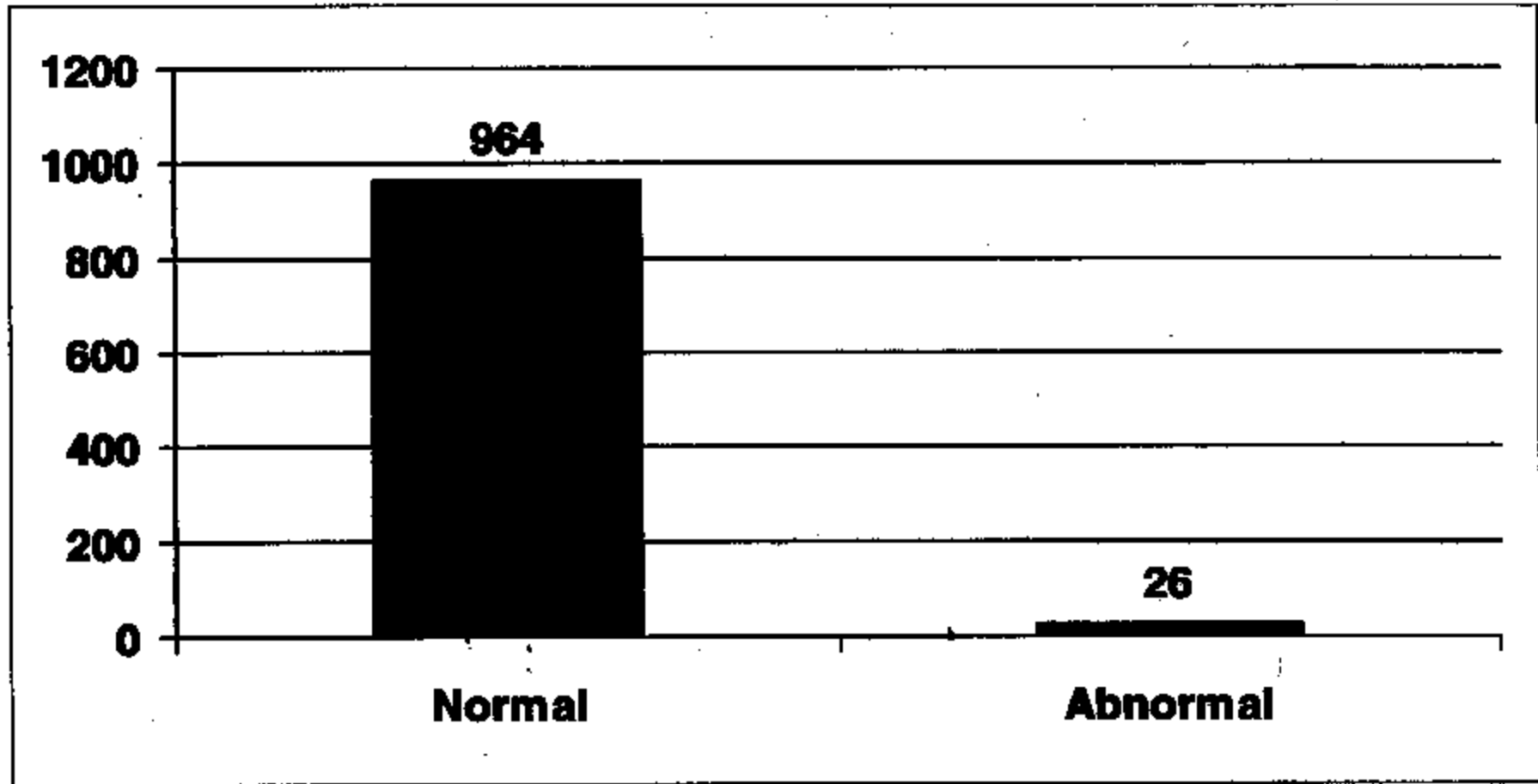
B) No

986



Part Summary of Moveable Terminal to Hex Port Resistance

<i>Resistance Value</i>	<i>Number of Parts</i>
Normal	964
Abnormal	26



Robert Panek

From: Reimers, Steve (S.J.) [sreimers@ford.com]
 Sent: Friday, November 12, 1999 2:11 PM
 To: Robert Panek (E-mail)
 Subject: DOE.xls

Rob, This is the DOE I mentioned on Wednesday. Zeros in the right-most column are samples we have not been able to find in the parts we have here. Please look for these samples as you log and bin the parts you have.

Don't know

All samples must be F2VC-8F924-AB
 mileage for all samples must be between 70,000 and 90,000.
 All samples must be have a date code that precedes build date by no less than 14 days. ✓

Sample Criteria (see factor definitions below)

Sample number	Date code	Region	n/s	e/w	Prod date	VL	located samples
1	late	coast	n	e	early	cv	0
2	late	coast	n	e	late	cv	0
3	late	coast	s	w	late	tc	1
4	late	inland	n	e	early	tc	0
5	late	inland	s	w	late	tc	0
6	late	inland	s	w	early	cv	0
7	late	dry	n	e	early	tc	0
8	late	dry	n	w	late	cv	0
9	late	dry	s	e	late	cv	0
10	early	coast	n	w	late	tc	1
11	early	coast	s	e	early	tc	2
12	early	coast	s	w	early	cv	0
13	early	inland	n	e	late	cv	2
14	early	inland	n	w	early	cv	0
15	early	inland	s	e	late	tc	1
16	early	dry	n	w	early	tc	0
17	early	dry	s	e	late	cv	0
18	early	dry	s	w	early	tc	2

roff roff
0069008259
209200
Build date N.G.

Pat 12708
0069008259
cal car
971540
69271835
69263632
2059

(2x5) 0069008259
101842
784777
0069008259
0069008259
0069008259

Factor Definitions

date code early = 1338 to 2081 (12/4/91 to 4/1/92)
 late = 2213 to 2304 (8/1/92 to 10/31/92)

cal Date

3713 9731

12/4/91 - 3/20/92

Build

early = 3/1/82 to 5/1/82

late = 9/1/82 to 10/31/82

regions

dry	n	w
coast	s	e
dry	s	w
inland	n	w
coast	s	w
inland	s	e
coast	n	w
inland	n	e
dry	s	e
inland	s	w
dry	n	e
coast	n	e

~~mont idaho dakota~~
 fla geog carolinas
 ariz new mex okla
~~high dakota~~
~~so. cal do. tex ark~~
~~ky kent~~
 2 midw
~~oreg wash~~
 penn ohio w. vir
~~missouri~~
 Utah colo
 ver newham
 main mass ri conn nyc
 ME MA

MT D ND/S D

can't do

can't do

can't

RI CT NY

vehicles town car

cv/gm

3713 9732

Part Summary by Terminal to Terminal Resistance

Resistance Value

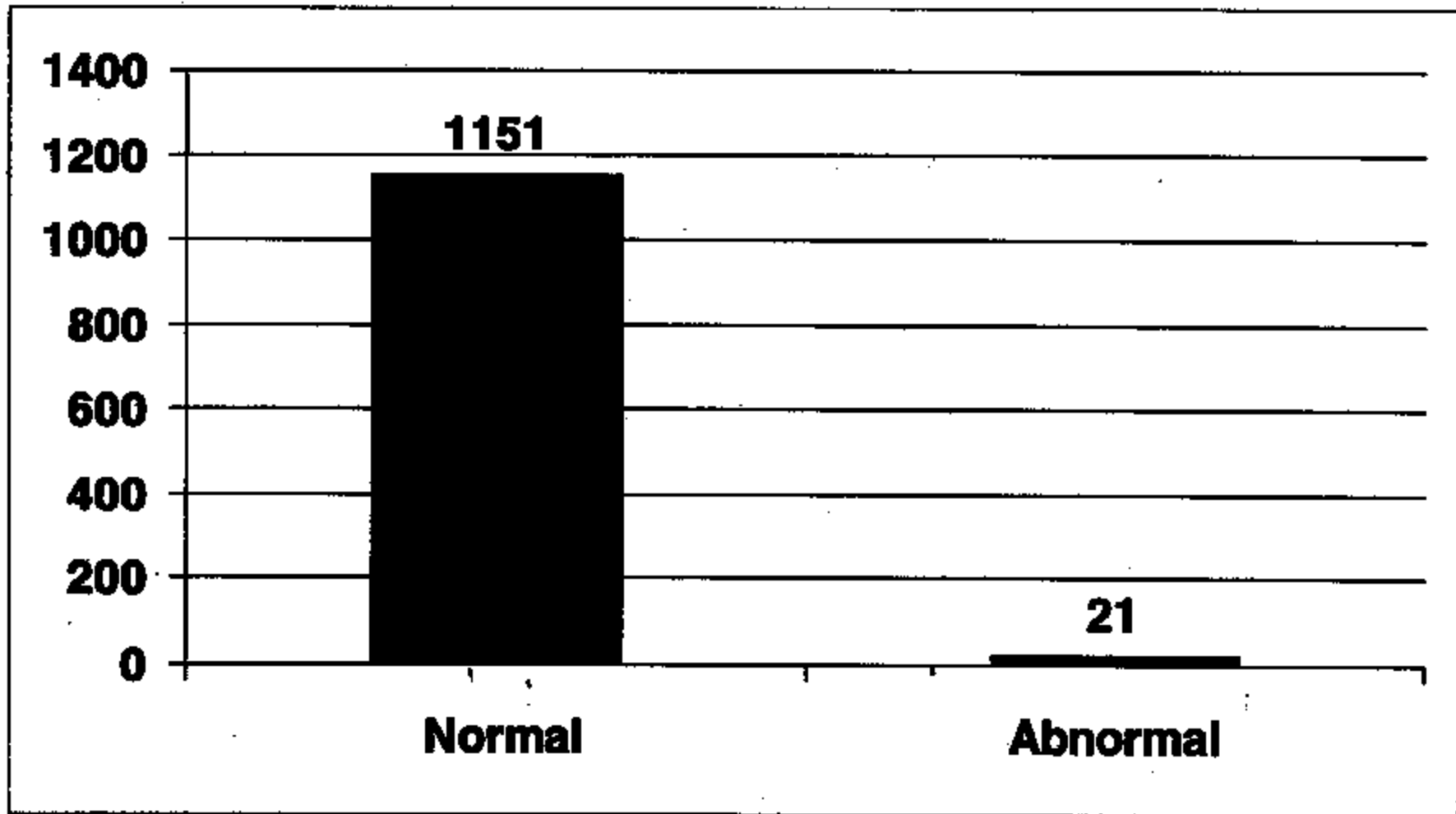
Number of Parts

Normal

1151

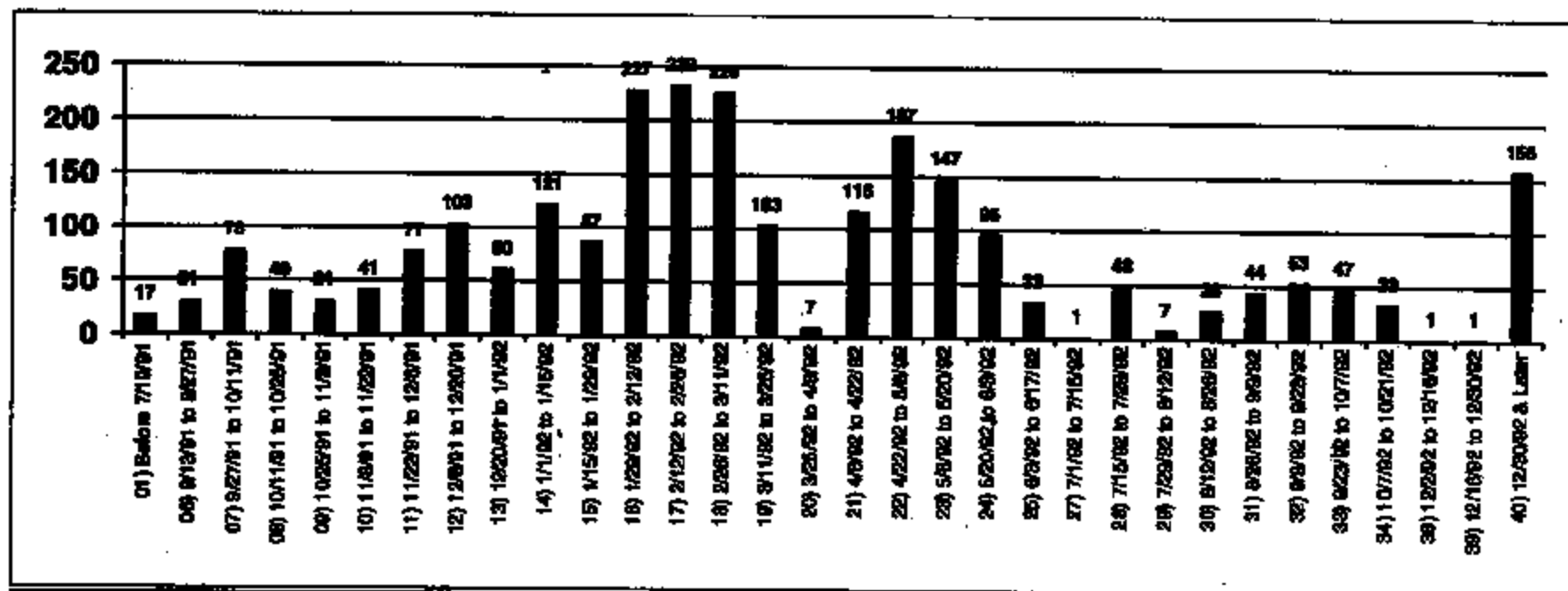
Abnormal

21



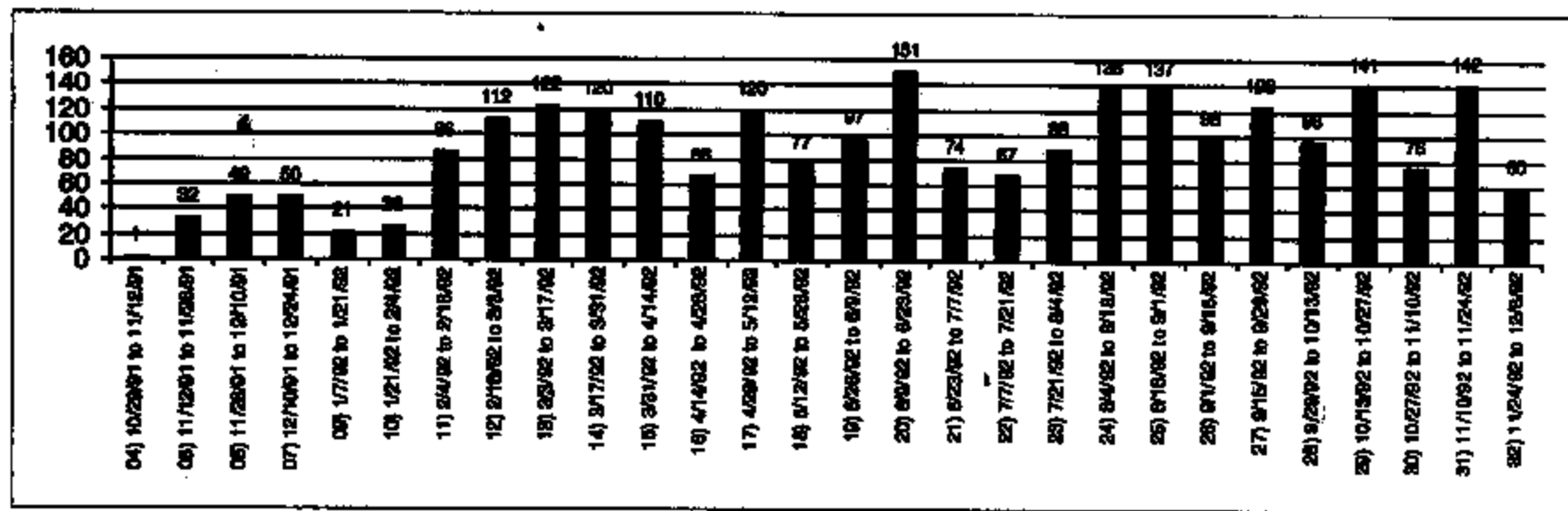
Summary of Parts by Part Build Date

Date Ranges	Number of Parts	Date Ranges	Number of Parts	Date Ranges	Number of Parts
01) Before 7/1/81	17	17) 2/12/82 to 2/28/82	232	30) 8/12/82 to 8/25/82	28
06) 8/1/81 to 8/27/81	31	18) 2/28/82 to 3/11/82	236	31) 8/25/82 to 8/30/82	44
07) 8/27/81 to 10/11/81	78	19) 3/11/82 to 3/25/82	103	32) 8/30/82 to 9/23/82	53
08) 10/11/81 to 10/25/81	40	20) 3/25/82 to 4/8/82	7	33) 9/23/82 to 10/7/82	47
09) 10/25/81 to 11/8/81	31	21) 4/8/82 to 4/22/82	118	34) 10/7/82 to 10/21/82	33
10) 11/8/81 to 11/22/81	41	22) 4/22/82 to 5/6/82	187	35) 12/8/82 to 12/15/82	1
11) 11/22/81 to 12/6/81	77	23) 5/6/82 to 5/20/82	147	36) 12/15/82 to 12/30/82	1
12) 12/6/81 to 12/20/81	103	24) 5/20/82 to 6/3/82	95	40) 12/30/82 & Later	158
13) 12/20/81 to 1/1/82	80	25) 6/3/82 to 6/17/82	38		
14) 1/1/82 to 1/15/82	121	27) 7/1/82 to 7/15/82	1		
15) 1/15/82 to 1/29/82	87	28) 7/15/82 to 7/29/82	48		
16) 1/29/82 to 2/12/82	227	29) 7/29/82 to 8/12/82	7		



Summary of Parts by Vehicle Build Date

Date Ranges	Number of Parts	Date Ranges	Number of Parts	Date Ranges	Number of Parts
04) 10/29/01 to 11/12/01	1	16) 4/14/02 to 4/25/02	60	27) 9/16/02 to 9/29/02	129
05) 11/12/01 to 11/29/01	32	17) 4/26/02 to 5/12/02	120	28) 9/29/02 to 10/13/02	96
06) 11/29/01 to 12/10/01	46	18) 5/12/02 to 5/28/02	77	29) 10/13/02 to 10/27/02	141
07) 12/10/01 to 12/24/01	50	19) 5/29/02 to 6/8/02	97	30) 10/27/02 to 11/10/02	76
08) 1/7/02 to 1/21/02	21	20) 6/9/02 to 6/23/02	161	31) 11/10/02 to 11/24/02	142
09) 1/21/02 to 2/4/02	26	21) 6/23/02 to 7/7/02	74	32) 11/24/02 to 12/8/02	60
10) 2/4/02 to 2/18/02	88	22) 7/7/02 to 7/21/02	67		
11) 2/18/02 to 3/2/02	112	23) 7/21/02 to 8/4/02	86		
12) 3/2/02 to 3/17/02	122	24) 8/4/02 to 8/18/02	138		
13) 3/17/02 to 3/31/02	120	25) 8/18/02 to 9/1/02	137		
15) 3/31/02 to 4/14/02	110	26) 9/1/02 to 9/15/02	89		



Part Summary by Stationary Terminal to Hex Port Resistance

Resistance Value

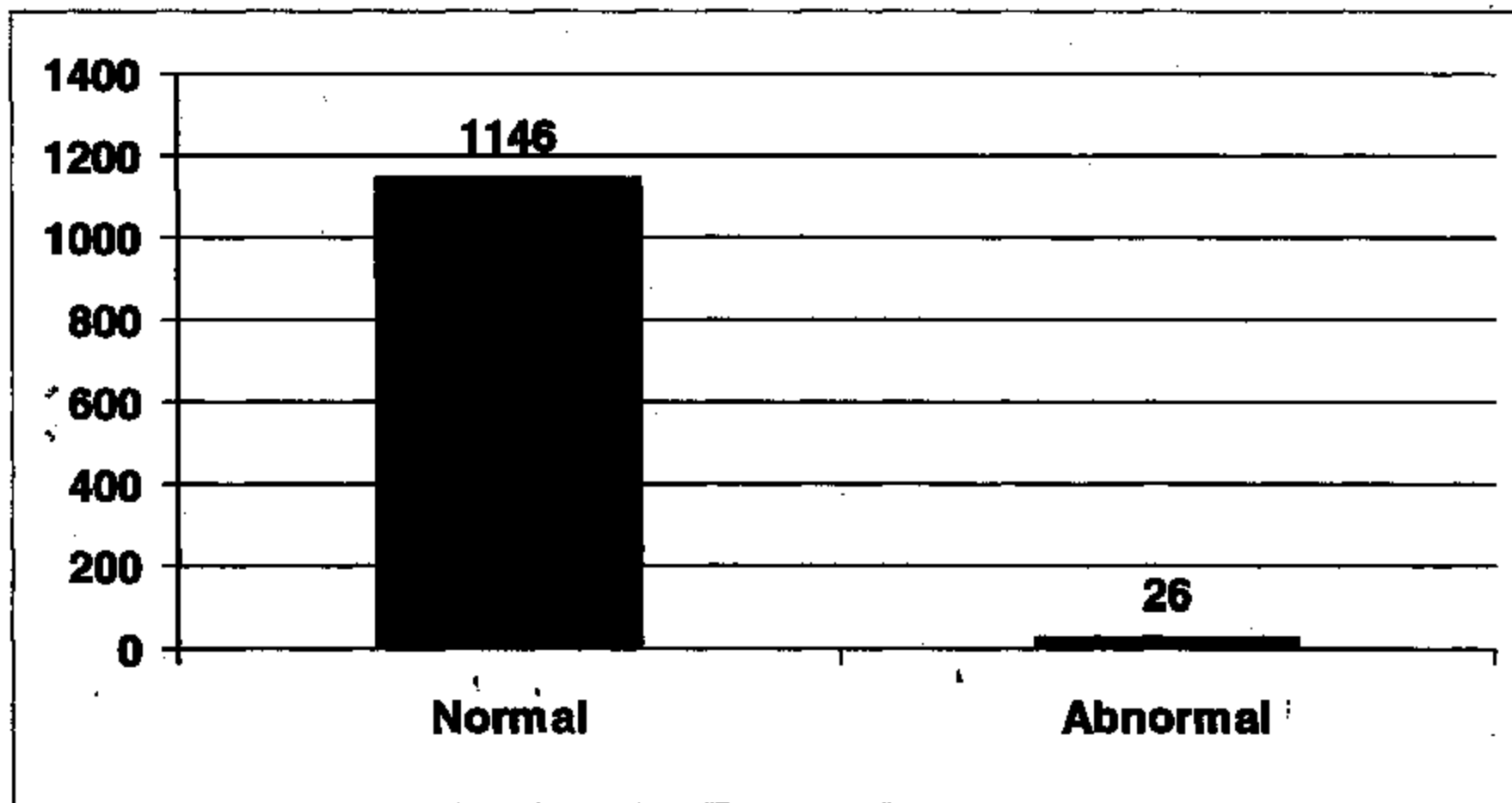
Number of Parts

Normal

1146

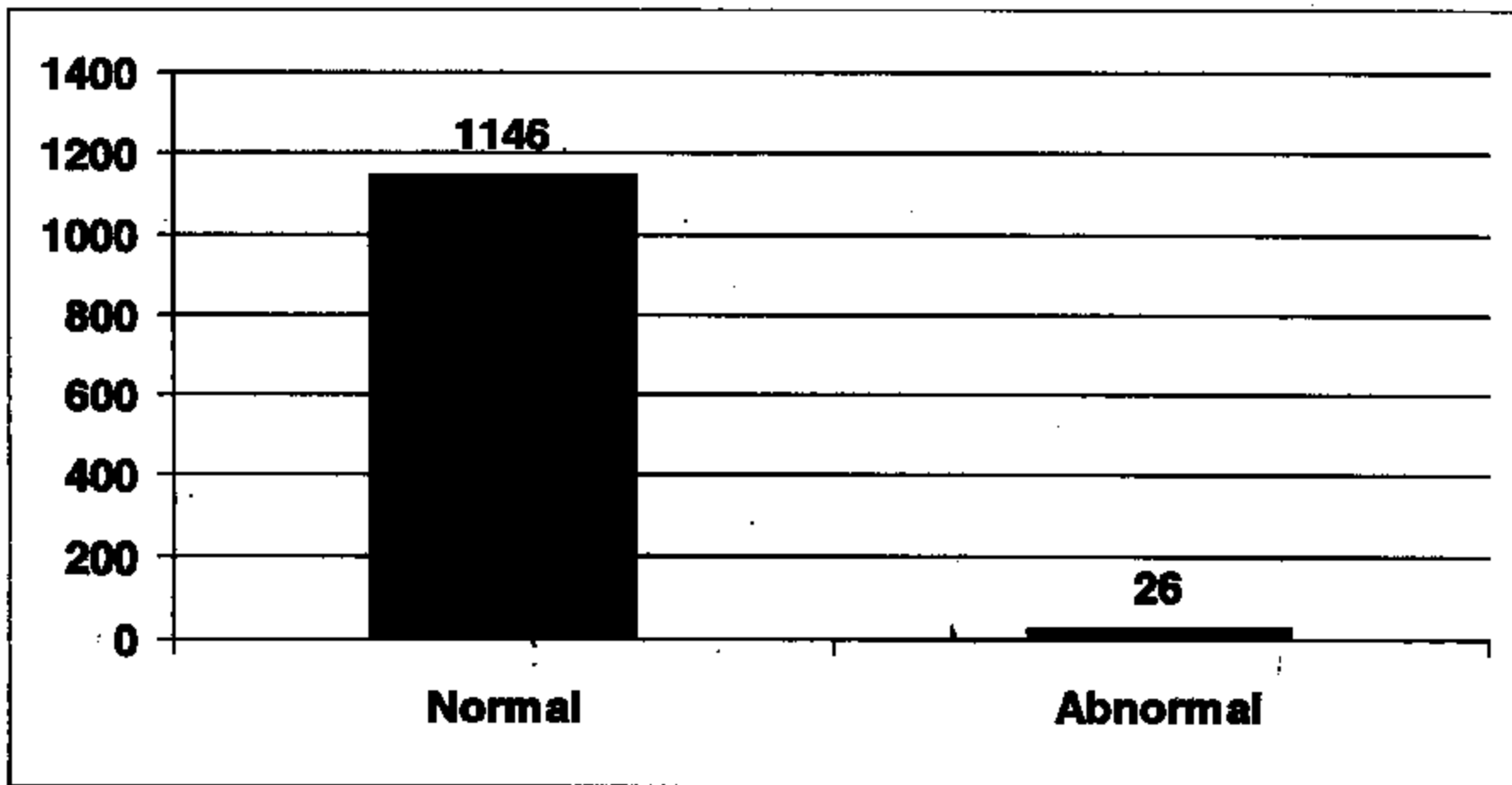
Abnormal

26



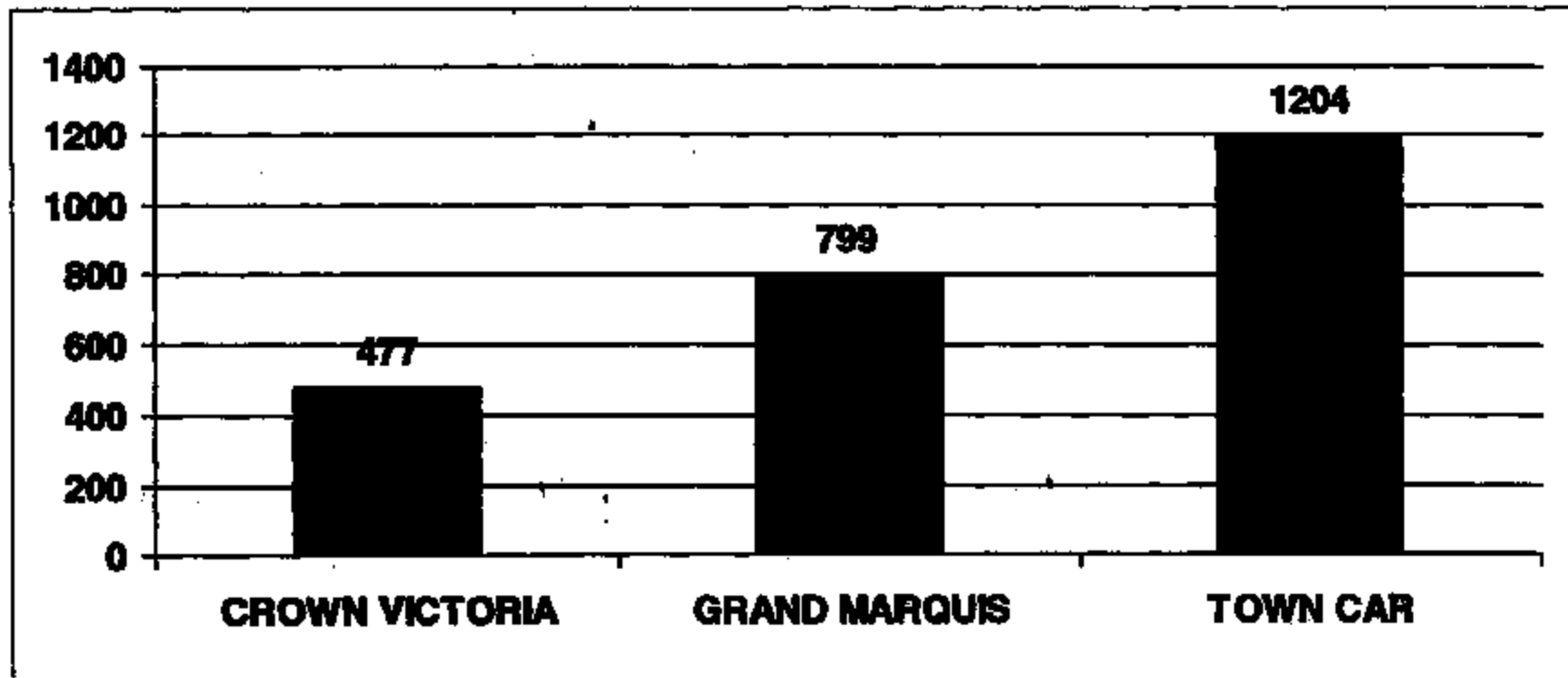
Part Summary of Moveable Terminal to Hex Port Resistance

<i>Resistance Value</i>	<i>Number of Parts</i>
Normal	1146
Abnormal	26



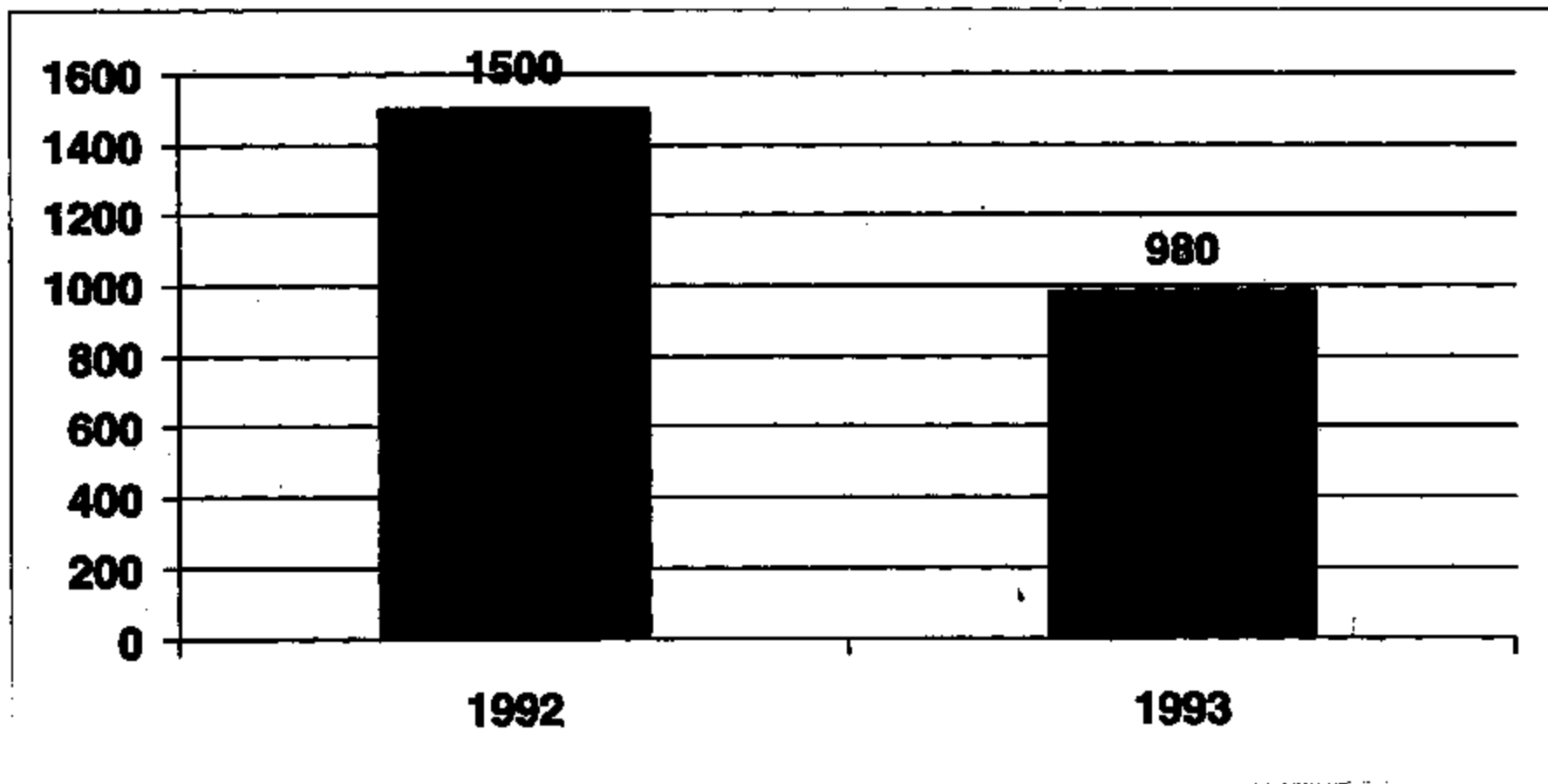
Summary of Parts by Vehicle Type

<u>VehicleDescription</u>	<u>Number of Parts</u>
CROWN VICTORIA	477
GRAND MARQUIS	799
TOWN CAR	1204



Model Year Summary of Parts

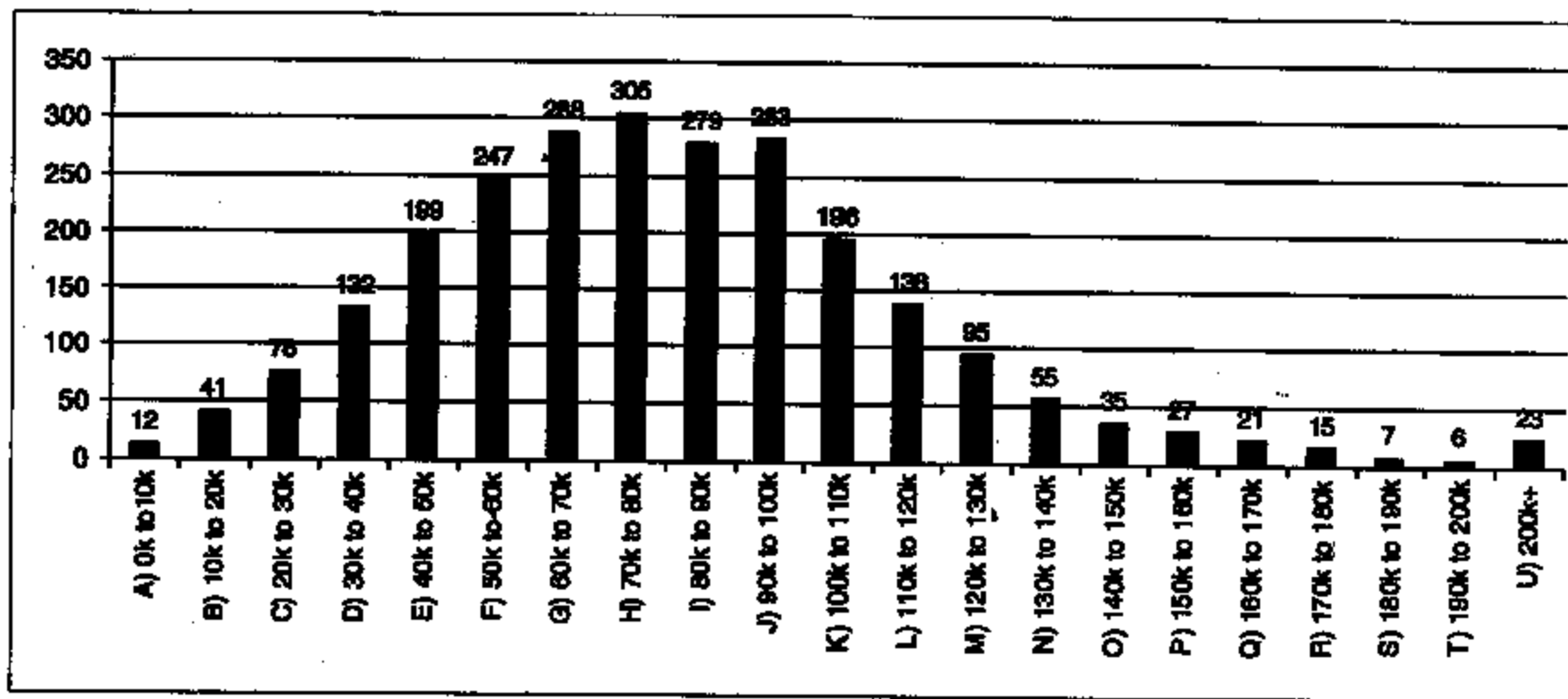
<i>MY</i>	<i>Number of Parts</i>
1992	1500
1993	980





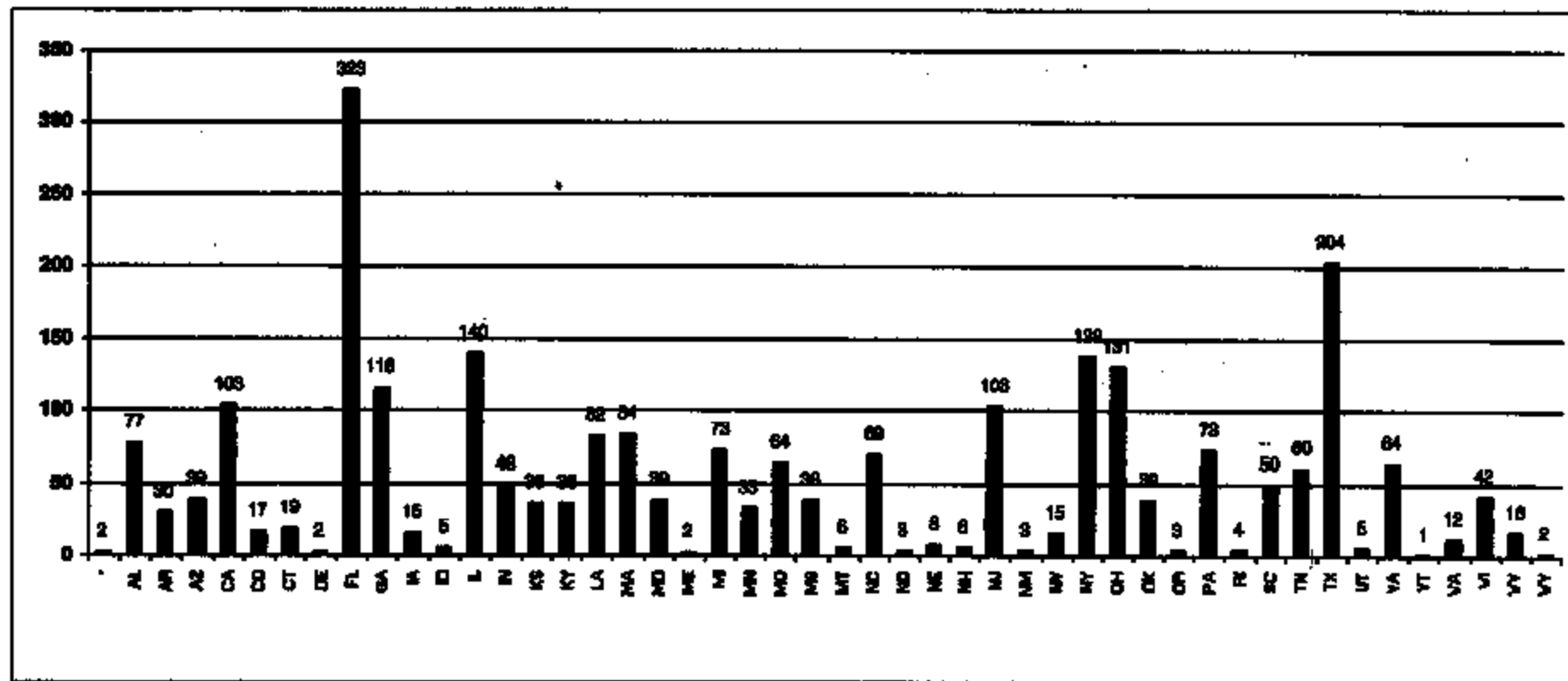
Summary of Parts by Mileage

Mileage	Number of Parts	Mileage	Number of Parts
A) 0k to 10k	12	M) 120k to 130k	95
B) 10k to 20k	41	N) 130k to 140k	55
C) 20k to 30k	76	O) 140k to 150k	35
D) 30k to 40k	132	P) 150k to 160k	27
E) 40k to 50k	199	Q) 160k to 170k	21
F) 50k to 60k	247	R) 170k to 180k	15
G) 60k to 70k	289	S) 180k to 190k	7
H) 70k to 80k	305	T) 190k to 200k	6
I) 80k to 90k	279	U) 200k+	23
J) 90k to 100k	283		
K) 100k to 110k	198		
L) 110k to 120k	138		



Number of Courts by State

State	# of Pts.	State	# of Pts.	State	# of Pts.	State	# of Pts.	State	# of Pts.	State	# of Pts.		
AL	2	DE	2	KS	38	MN	33	NH	8	OR	3	VA	64
AK	77	FL	323	KY	86	MO	64	MI	103	PA	73	VT	1
AR	30	GA	118	LA	82	MS	38	NM	3	RI	4	WA	12
AZ	88	IA	16	MA	64	MT	8	NV	15	SC	60	WI	42
CA	103	ID	5	MD	38	NC	69	NY	138	TN	60	WV	18
CO	17	IL	140	ME	2	ND	3	OH	131	TX	204	WY	2
CT	19	IN	48	MI	73	NE	8	OK	38	UT	5		



Summary of Parts by External Signs Exhibited

Did Part Exhibit External Signs of a Problem ?

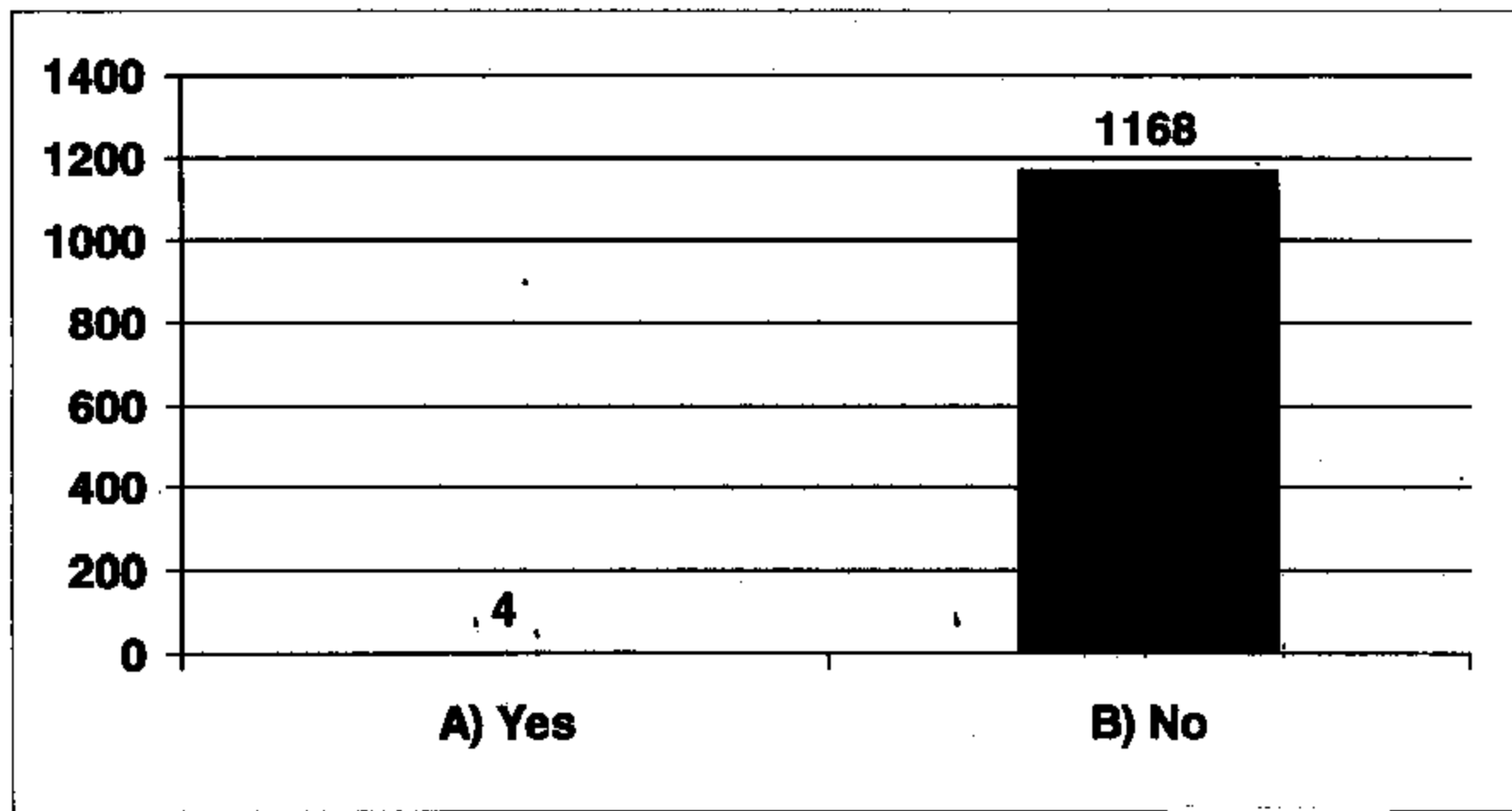
Number of Parts

A) Yes

4

B) No

1168



Exponent
Failure Analysis Associates*

Project file

Exponent
19700 Country Club Drive
Farmington Hills, MI 48331

telephone 248-324-9700
texas 248-124-9799
www.exponent.com

October 28, 1999

Mr. Frederick J. Porter
Ford Motor Company
Security, Safety & Chassis Appl.
E/E Systems Engineering
Advanced Vehicle Technology
20000 Rotunda Drive
Bldg. 5, 3E004, Mail Drop 5030
Dearborn, MI 48121-2053

Subject: Brake Switch Analysis Project
Project No. DT55052

Dear Mr. Porter:

Thank you for contacting Exponent Failure Analysis Inc. regarding the subject project. We are pleased to provide the consulting services discussed in our meeting of October 12, 1999. The project involves the analysis of several parameters of the subject switch, in an attempt to identify the root cause of the premature failures exhibited in some components. The complexity and scope of the analysis is yet to be determined and will become more evident as information/data is generated. We understand the results of this work to determine the root cause of switch performance concerns, may be used in further actions by Ford

As the scope of efforts in this matter is only partially defined, it is not possible to accurately estimate the cost associated with our activities. However for your planning purposes, Exponent currently bills my time at \$240 an hour, Mr. Robert Panek's time at \$125 an hour, our Laboratory Technician Mr. Paul Richards at \$75 an hour, and other personnel at various rates commensurate with their backgrounds. It is anticipated that a significant portion of the work on this project will be done by or under the direction of Mr. Robert Panek with other personnel assisting him on an "as required" basis. I expect to participate in and supervise the project.

DT55052.000 A#00 1099 0001

3713 9743

Mr. Frederick J. Porter
October 28, 1999
Page 2 of 2

Exponent offers services on a time and materials basis unless we can define specific pieces of work that can be budgeted on a fixed price basis. Based on our discussions, it is my understanding that FaAA's retention in this matter is with your Product Engineering Office and thus our invoices will be forwarded to your attention unless you identify another party for this purpose.

Thank you for your interest in Exponent Failure Analysis Associates. We look forward to working with you in this matter. If you have any questions regarding this information, please call me at your convenience at (248) 324-9123.

Very truly yours,


Richard E. Keefer
Principal Engineer

cc: Jay Logel - Ford Motor Company
Steve Riemers - Ford Motor Company
Rob Panek - Exponent

22nd - 61302

Kapton - Plastic - GE?

Very strong/durable not resilient to chemicals

- TeFlon
- Kapton
- Teflon

then - photos

Technologist → Allen Janotik ←

Discussions to work @ hand

① Fred Porter 845-3722

Steve Reiners - 390-3286

② Jeff Manske - Brown M^cCarroll - Atty

512-471-9761

Sara M^cClave - 248-574-0373

248-258-0421 fax

③ Doug Lange -

248-258-0421

Dave Spear -

 Facsimile Transmittal

Date 1/20/00 No. of Pages 7
(including this Transmittal)

To: R. PANEK

From: Reimers

Location _____ Room _____

Location _____ Room _____

FAX No. _____

FAX No. _____

Telephone No. _____

Telephone No. 313 390 3286

Comments:

I found 97 tags to resolve
the duplicates.

Safe to assume that the correct
tag number is the one that
has the earliest issue date.

Steve

3713 9746

Need to ck Blue against the Database in hold
Long Tag's

t of Long Tag Number				
Data Code	RNumber	Long Tag Number	Tag Issue Date	Total
1140 ✓	1299 ✓	008289445	08/18/88	1
		008289408	08/24/88	1
	129045 ✓	0082143218	08/08/88	1
		0082143218	10/18/88	1
1269 ✓	22022 ✓	0082143218	08/08/88	1
		0070821878	10/04/88	1
	88892 ✓	0074788098	11/21/88	1
		0082143218	10/18/88	1
1275 ✓	78875 ✓	0082143218	08/14/88	1
		0082143218	10/18/88	1
	78011 ✓	0082188391	08/08/88	1
		0082143218	10/18/88	1
1280 ✓	21258 ✓	0082185391	08/08/88	1
		0082143218	10/18/88	1
	22207 ✓	0082111410	08/08/88	1
		0082143218	10/18/88	1
1291 ✓	87150 ✓	0082048288	08/08/88	1
		0082143218	10/18/88	1
	88003 ✓	0082182008	08/08/88	1
		0070821878	10/18/88	1
	88003 ✓	0082018888	08/03/88	2
		0082143218	10/18/88	1
1308 ✓	44411 ✓	0082143218	10/18/88	1
	730 ✓	0082143218	10/18/88	1
1312 ✓	1312 ✓	0082143218	10/18/88	1
		0082143218	10/18/88	1
	27888 ✓	0070821878	10/18/88	1
		0082143218	10/18/88	1
	55114 ✓	0082143218	08/18/88	1
		89108288	10/18/88	1
75787 ✓	0082141307	08/08/88	1	
	0082143218	10/18/88	1	
15488 ✓	0082182785	08/08/88	1	
	0082143218	10/18/88	1	
1331 ✓	52862 ✓	008212700	08/08/88	1
		0070821878	10/08/88	1
	108188 ✓	0082102028	08/07/88	1
		0070821878	10/18/88	1
1338 ✓	32152 ✓	0070821878	10/18/88	1
		008222318	08/08/88	1
	41068 ✓	0082143218	08/07/88	1

OK

1338	✓ 54113 →	0069021752	08/03/99	1
@ EXPONANT	✓ 71081 →	0069308140	08/13/99	1
	86707 →	0071021358	10/18/99	1
	✓ 134183 →	0069488728	08/15/99	1
		0071187028	10/20/99	1
		0070208857	08/30/99	1
1345	19427 →	0072283047	11/16/99	1
		0069035704	08/08/99	1
	64251 →	0071228573	10/21/99	1
	@ C.S.L.	0069399088	08/02/99	1
	71415 →	0070200014	08/30/99	1
		0069039135	08/07/99	1
1347	61319 →	0069031572	08/07/99	1
	✓ 13492 →	0070889345	12/08/99	1
	✓ 18408 →	0069208185	08/06/99	1
		0069483858	11/01/99	1
1352	✓ 18408 →	0070337846	10/04/99	1
		0069288144	11/03/99	1
		0069035490	08/03/99	2
1354	45184 →	0069255167	08/10/99	2
	48831 →	0069386314	08/02/99	1
		0071339872	10/25/99	1
1363	46941 →	0069378275	08/02/99	1
		0069348838	08/20/99	1
		0070053780	08/28/99	1
1366	✓ 135978 →	0069752541	08/21/99	1
		0075823104	12/08/99	1
		0070813034	10/07/99	1
2008	✓ 10285 →	0069220108	08/10/99	1
		0071288728	11/03/99	1
	48410 →	0069310800	08/18/99	1
	@ EXPON	0070698184	10/15/99	1
		0070830338	10/18/99	1
		0070888888	11/03/99	1
2013	✓ 97285 →	0069038188	08/03/99	1
	@ TI	0070888888	10/15/99	1
		0070888888	10/15/99	1
		0069087000	08/08/99	1
2014	20348 →	0070248582	08/30/99	1
		0069878281	08/02/99	1
2015	34848 →	0070453328	10/05/99	1
		0069208013	08/08/99	1
	42271 →	0071080180	10/18/99	1
2027	✓ 8888 →	0069038188	08/03/99	1
	89115 →	0070888888	10/15/99	1
		0069458871	08/15/99	1
2028	✓ 10401 →	0070184043	08/30/99	1
		0069028273	08/13/99	1
	88537 →	0071364484	10/05/99	1
2029	88870 →	0070823422	10/02/99	1
		0069381888	11/03/99	1
		0069488479	08/18/99	1
2030	48122 →	0071124882	10/18/99	1
		0069501328	08/13/99	1
	78283 →	0070402820	10/05/99	1
	✓ 98512 →	0069271379	08/10/99	1
@ C.S.L.	0070888888	11/03/99	1	
	0069182724	08/08/99	1	

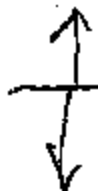
@ TI

ECSE

2050	98512	0066307131	08/13/99	1
2051	57651 →	0069155732	08/08/99	1
		0071076883	10/18/99	1
2056	1851 →	0068152384	08/08/99	1
		0070167889	08/20/99	1
	46078 →	0068898470	08/21/99	1
		0070004535	08/27/99	1
		0070781818	10/13/99	1
	✓ 80748 →	0068208805	08/08/99	1
		0071388478	11/02/99	1
	72819 →	0068083830	08/07/99	1
		0070881480	10/18/99	1
		0070888818	10/18/99	1
2056	58832 →	0068525488	08/18/99	1
2058	✓ 81887 →	0070488182	10/08/99	1
		0068145201	08/08/99	1
		0071388880	10/08/99	1
	88381 →	0068183880	08/08/99	1
		0071225828	10/21/99	1
2059	54774 →	0068570828	08/13/99	1
		0070708708	10/12/99	1
2062	✓ 47141 →	0068153840	08/08/99	1
		0071388888	10/08/99	1
	✓ 57587 →	0070888887	10/14/99	1
		0071388888	11/03/99	1
	✓ 88588 →	0068274770	08/18/99	1
		0071478888	10/18/99	1
2063	✓ 34214 →	0068014788	08/03/99	1
		0071478888	10/18/99	1
	✓ 78888 →	0068007801	08/02/99	1
		0070888888	10/18/99	1
		0071478888	10/18/99	1
2068	✓ 22208 →	0068887888	08/18/99	1
		0071388888	11/14/99	1
2052	07284 →	0068088888	08/03/99	1
		0071021888	10/18/99	1
	✓ 129188 →	0068887888	08/02/99	1
		0071388888	10/08/99	1
2084	80180	0068888281	08/03/99	1
		0068888214	08/24/99	1
		0070882853	10/04/99	1
	62807 →	0068113885	08/07/99	1
		0071327148	10/22/99	1
2085	10084 →	0068888812	08/15/99	1
		0070181882	08/20/99	1
	✓ 17177 →	0068197813	08/08/99	1
		0071388888	11/03/99	1
	✓ 57728 →	0068080488	08/02/99	1
		0071388888	11/03/99	1
	✓ 84777 →	0068185782	08/08/99	1
		0071388888	11/03/99	1
	87828 →	0068124884	08/07/99	1
		0070788871	10/12/99	1
2058	✓ 41888 →	0070888883	10/04/99	1
		0071388888	11/03/99	1
	100888 →	0068018880	08/08/99	1
		0070888874	10/08/99	1
2057	✓ 48888 →	0068000884	08/03/99	1
		0071388888	11/03/99	1
	52708 →	0068088888	08/08/99	1
		0070781808	10/18/99	1
2088	✓ 80288 →	0068177434	08/08/99	1
		0071388888	11/03/99	1
2088	✓ 28388 →	0068228878	08/12/99	1
		0071388888	11/03/99	1

2063	56828 →	0069114857	08/07/99	1
		0070888508	10/04/99	1
		0071687181	11/05/99	1
	✓ 71643 →	0069171807	08/08/99	1
		0070888508	10/04/99	1
2068	98832 →	0069826498	08/18/99	1
		0070493182	10/08/99	1
	48892 →	0069620848	09/18/99	1
	✓ @EXPD	0071121778	10/18/99	1
		0071468808	10/28/99	1
2071	54818 →	0069558257	08/18/99	1
		0071884482	10/21/99	1
	✓ 58894 →	0070488088	10/08/99	1
		0070888508	10/04/99	1
	2074	02708 →	0069882818	08/02/99
2079		0069888948	10/08/99	1
	20348 →	006973251	08/02/99	1
		0070452828	10/05/99	1
2080	88180 →	0069888081	08/02/99	1
		0069888948	10/08/99	1
	✓ 23804 →	0069164830	08/08/99	1
		0071883858	11/08/99	1
	✓ 82888 →	0069180888	08/08/99	1
2089		0069888948	10/08/99	1
		0070888508	10/04/99	1
	78800	0069888824	08/12/99	1
		0069887858	08/17/99	1
	✓ 87818 →	0071887888	10/28/99	1
2104	77800 →	0069000088	08/02/99	1
		0072188838	11/21/99	1
2106	70188 →	0069278824	08/10/99	1
2108		0070308758	10/01/99	1
	40817 →	0069418590	08/14/99	1
2112		0071388728	10/21/99	1
	71880	0069087828	08/07/99	1
	28248 →	0069148881	08/08/99	1
2115		0069111273	08/07/99	1
		0070318830	10/04/99	1
	✓ 40558 →	0069078858	08/07/99	1
		0072888888	11/21/99	1
2114	✓ 40881 →	0069888824	08/02/99	1
		0072888830	11/21/99	1
	✓ 78858 →	0069288848	08/08/99	1
2118		0074888848	10/28/99	1
	78283 →	0069081828	08/02/99	1
		0071088188	10/18/99	1
2119		0072488188	10/07/99	1
	12788	0069887877	08/02/99	2
2119	✓ 38818 →	0069888948	10/08/99	2
		0069888948	10/08/99	2
2120	✓ 38818 →	0069888948	10/08/99	1
	44882 →	0069187218	08/08/99	1
2125	85884 →	0071888938	10/28/99	1
		0069178780	08/08/99	1
2126	✓ 78504 →	0069175418	08/08/99	1
		0071888938	10/28/99	1
2127	✓ 48185 →	0069114857	08/07/99	1
		0070888508	10/04/99	1
	18700 →	0069078858	08/13/99	1
		0071088511	10/18/99	1

0067232931



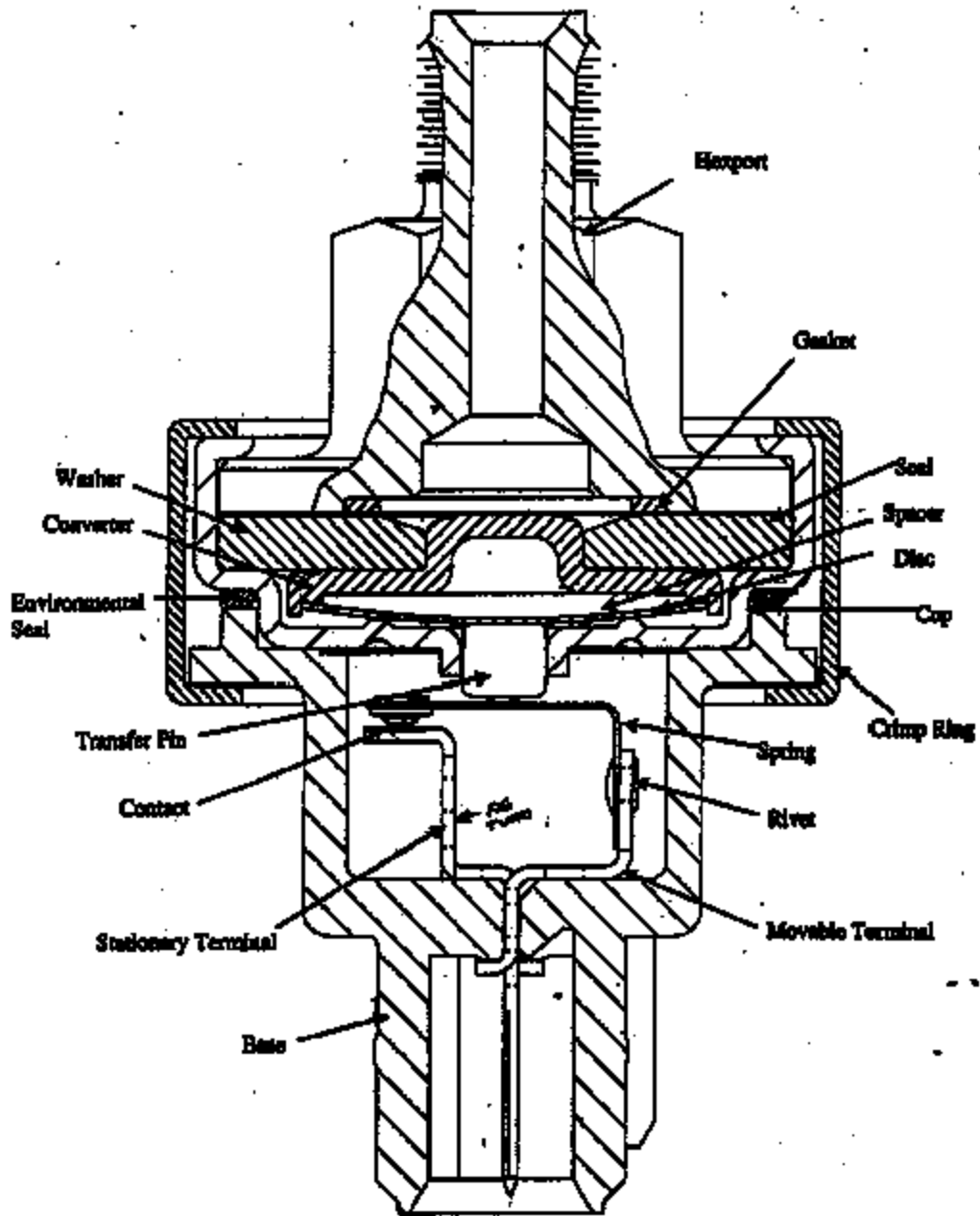
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		0071078243	10/15/99	1
	55907	0070416680	10/08/99	1
		0071125883	10/18/99	1
2136	61259	0068888807	08/02/99	1
		0068888808	08/02/99	1
2137	16908	0069780084	08/21/99	1
		0069780085	08/21/99	1
	86718	0069445205	08/15/99	1
		0070298288	10/01/99	1
2139	82476	0069258064	08/10/99	1
		0069258065	08/10/99	1
2147	44088	0069168088	08/08/99	1
		0069168089	08/08/99	1
	84782	0069025487	08/05/99	1
		0071088858	10/18/99	1
2150	34885	0069458285	08/14/99	1
		0069458286	08/14/99	1
		0070878796	10/18/99	1
	86286	0069083088	08/07/99	1
		0069083089	08/07/99	1
	47275	0068981194	08/02/99	1
		0068981195	08/02/99	1
	93218	0069178781	08/08/99	1
		0069178782	08/08/99	1
2155	252414	0069088394	08/07/99	1
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2154	12457	0069064377	08/02/99	1
		0069064378	08/02/99	1
2158	8239	0069218533	08/08/99	1
		0069678783	10/14/99	1
	40423	0069708749	08/21/99	1
		0069708750	08/21/99	1
2160	77115	0069307811	08/15/99	1
		0069307812	08/15/99	1
2205	46833	0069078982	08/02/99	1
		0069078983	08/02/99	1
		0069480400	08/15/99	1
	85695	0070238673	10/01/99	1
		0070238674	10/01/99	1
	100168	0069480400	08/15/99	1
		0069480401	08/15/99	1
2238	73843	0069118801	08/07/99	1
		0069118802	08/07/99	1
2239	28144	0068978851	08/02/99	1
		0068978852	08/02/99	1
	134211	0068289007	08/10/99	1
		0068289008	08/10/99	1
2240	14189	0069014888	08/02/99	1
		0069014889	08/02/99	1
2248	202880	0069884047	08/13/99	1
		0069884048	08/13/99	1
2285	68197	0070288213	10/01/99	1
		0070288214	10/01/99	1
2289	88789	0069175081	08/08/99	1
		0070885242	10/07/99	1
2274	54995	0069331114	08/18/99	1
		0070888808	10/11/99	1
2278	33881	0069482888	08/18/99	1
		0069482889	08/18/99	1
2281	81082	0069801089	08/17/99	1

QTI
QTI

✓ 8028	✓ 68288	✓ 0089178773	08/08/88	1
✓ 8500	✓ 75454	✓ 0089044870	08/08/88	1
✓ 7082	✓ 78337	✓ 0089005228	08/02/88	1
✓ 7817	✓ 88808	✓ 0088988270	08/02/88	1
✓ 8128	✓ 81767	✓ 0088226180	08/02/88	1
✓ 8154	✓ 18088	✓ 0087238232	07/15/88	1
✓ 8142	✓ 25882	✓ 0088851788	08/24/88	1
✓ 8148	✓ 81884	✓ 0088067235	08/07/88	1
✓ 8168	✓ 81578	✓ 0070128718	08/28/88	1
(blank)	(blank)	0088225543	08/03/88	1
		0071818244	10/22/88	1
		008878212	08/02/88	1
		0071885188	10/28/88	1
(blank)	(blank)	(blank)	(blank)	(blank)

3713 9752

Hydraulic Pressure Switch Cross Section



Exponent
Failure Analysis Associates

Exponent
149 Commonwealth Dr.
Menlo Park, CA 94025

telephone 650-326-9400
facsimile 650-326-8071
www.exponent.com

F A X C O V E R S H E E T

To: Norman LaPointe 313-337-8256
Name Fax
Ford Motor Company 10-11-00
Company Date

From: Bruce Ketcham 248-324-9118
Name Telephone
Managing Engineer 248-324-9199
Title Fax

Data Plot
Subject
2
Total pages including this page. E-mail

If you do not receive all of the pages indicated, please call _____
at () _____ as soon as possible.

PLEASE NOTE: The information contained in this facsimile transmission is intended to be sent only to the stated recipient of the transmission. If the reader of this message is not the intended recipient's agent, you are hereby notified that any dissemination, distribution or copying of the information contained in this facsimile transmission is prohibited. You are further asked to notify us of the error as soon as possible at the telephone number shown above and to return the facsimile documents to us immediately by mail at the address shown above. Thank you.

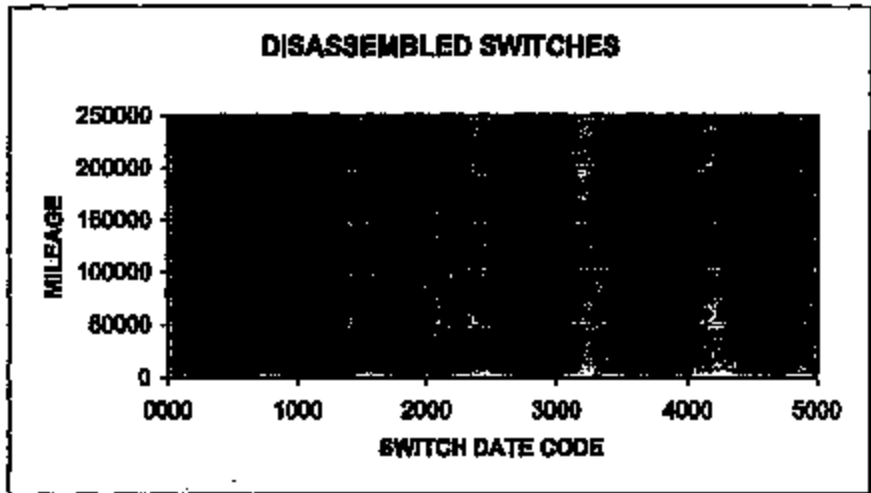
SPECIAL INSTRUCTIONS:

Norm:
Data plot as requested.
Regards,
Bruce

3713 9754

4138	60034
3280	85790
2294	54481
2128	97633
2127	91828
2116	38575
2114	45290
2114	81417
2107	81554
2065	88300
2064	98972
2082	58676
2057	127040
2054	95894
2052	213200
2052	88247
2048	142826
2045	110449
2043	138560
2043	148767
2043	70166
2042	100264
2038	191169
2038	82915
2031	13987
2031	8038
2030	47919
2030	48868
2030	80083
2030	82020
2030	91621
2027	77378
2015	81121
2014	92139
2013	132848
2013	74945
2008	78901
1384	109711
1384	141839
1384	58837
1384	84248
1347	193295
1347	53248
1347	88049
1338	45220
1331	84818

FORD BRAKE SWITCH

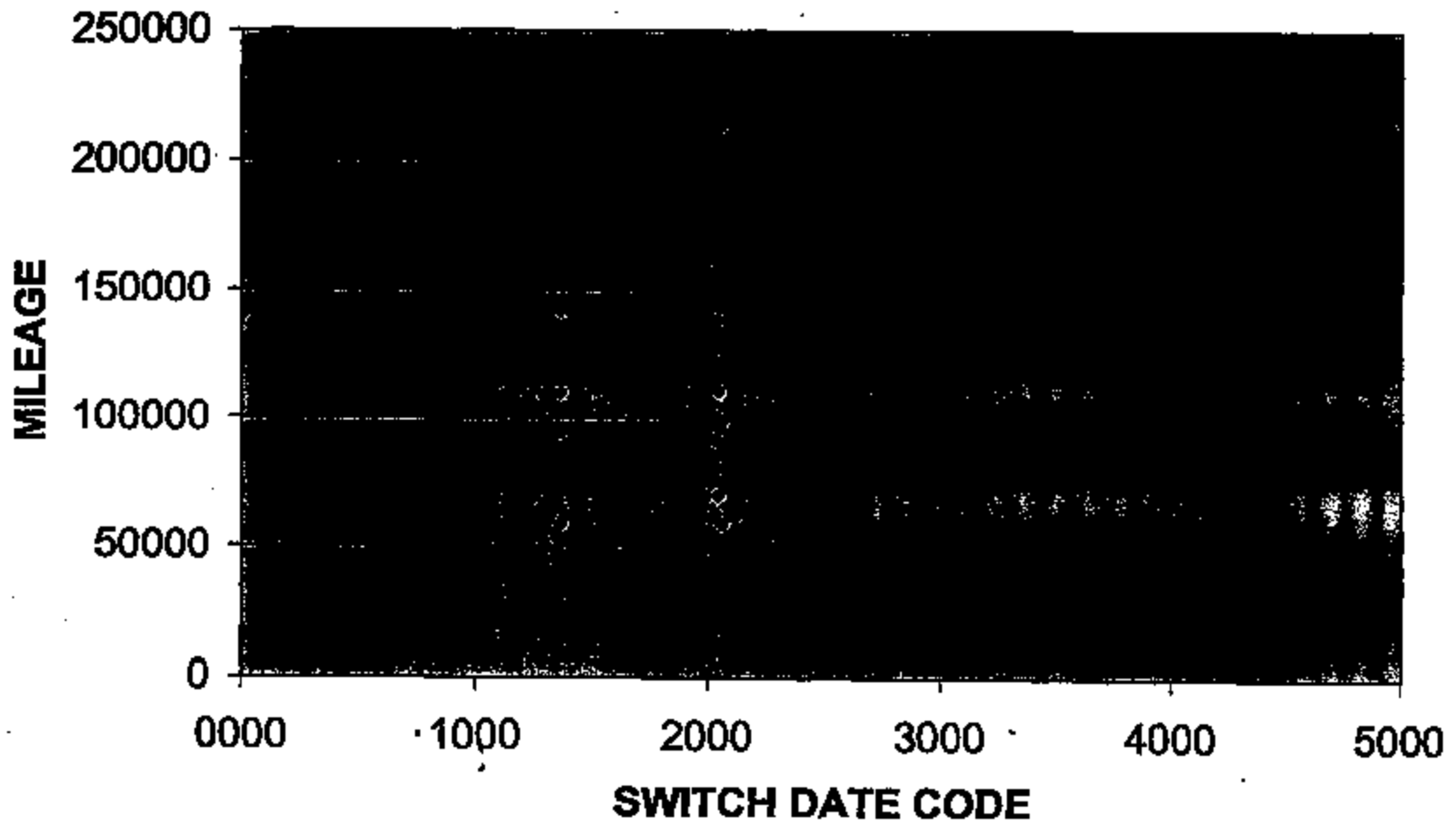


Correlation Coefficient -0.11363

10/11/00

3713 9755

DISASSEMBLED SWITCHES



3713 9756

Matthew Brach

From: Reimers, Steve (S.J.) [sreimers@ford.com]
Sent: Monday, August 07, 2000 12:11 PM
To: 'mbrach@exponent.com'
Subject: Box Numbers Received Since March 2000

9181933.xls 9173478.xls 9173397.xls 9173398.xls 9173399.xls 9173400.xls

9173479.xls 9181934.xls 9181935.xls 9181936.xls

Matt,

Can you verify that you have box number shown below for each boxfile. This data is to be incorporated into the ACCESS database table named Boxfiles.

Each record is to have the box number appended.

I think Rob picked up these parts from the Ford Warranty Parts Return Center.

<<9181933.xls>> <<9173479.xls>> <<9173397.xls>> <<9173398.xls>>
<<9173399.xls>> <<9173400.xls>> <<9173478.xls>> <<9181934.xls>>
<<9181935.xls>> <<9181936.xls>>

I will call you regarding the August 14 resumption of dissecting.

regards,
Steve

Steve Reimers
RV&T HESSE Chassis E/E Systems
313 39 03286, fax 313 39 04145

70388817
71228706
71061852
70967663

New Typ Resistance

sorted & Not Bund

~~99~~ parts 2 tag's issued
same vehicle (replaced twice)

~~What's in boxes~~
~~List of sub~~

• Date code
• Prod date
w/ tag No.

~~How many parts are coming~~

~~All parts old same~~

~~Keep interest in effort storage parts~~

~~Looking for connectors w/ parts~~

~~Storage parts mixed~~

~~Aug 01 006896783-4~~

(4/30) - corrosion on seal
& terminal (maybe part
damaged)

~~What parts was picked for
dissection - (Metal)~~

p90 - .96

Ford Switch Project

313-390-3286

Steve Reimer

Rob - 616-764-1712

60k Po used
60k almost used

40 parts - w/ Electrical Anomalies Returns

7 were melted → Resistive short -

Want all opened examined a document

Brake Parts Database Folder -

55062 →

Bin - Non typical parts
Data Entered

Disassembled Parts → 7 Parts

Access -

2 Test fixtures - Needs one →

Jeff

Ken Porter 313-815-3722 →
10 or 11 parts disappeared

Disassembled @ Central Labs - would have photos

In a box 1 1/2 foot³

Heat damaged →

22-161 30 SHEETS
22-162 180 SHEETS
22-164 200 SHEETS



3713 9765

Steve Reimers

• Speculating →

Jeff Mawski → Outside Counsel

Doug Lampe → OGC Atty.

Suit w/ TI + countersuit -

Fred Porter - Ford Corporate Eng. Expert - Supervisor
913-845-8722

Recall May of 1999 - Now down to trickle

Town Car -

Cr. Vic -

Gr. Magpul -

We have 20,000 parts in our building -

3200 have been looked @

to separated out w/ electrical anomalies -

1. Separate base from sensor on 33 balance →

Orientation - of base relative to switch.

Sharpie

Scribe

Date Code -

50 SHEETS
100 SHEETS
200 SHEETS

22-141
22-142
22-144



OSCOPE Reviews of Parts

3-6-00

1328 - 1334

007 025 780 2 1331

Notes
Teflon Cracks AB

Nothing

007 020 690 9 1331 AB

Teflon Cracks
1-2 Tear Drops

Tear Drop

007 072 2535 1331 AB

1 Tear Drop AB

50 SHEETS
100 SHEETS
200 SHEETS

007 145 7458 1331 AB

- Teflon Cracks AB
- Bubbles
- Tear Drop Indistinguishable

22-141
22-142
22-144

007 0938416 1331 AB

- Teflon Cracks
- Possible tear drop

22-141

0069390939 1331 AB

- Large Teflon Cracks
- Tear drops indistinguishable

0070916251 1331 AB

- 1 large Teflon Crack
across middle
- Looks like Tear drop

22-141

0069218717 1331 AB

- Small Teflon Cracks

007 000 690 9 1331 AB

007 042 5280 AB

- 1 Tear drop

~~007 000 690 9~~ 2143 - 2148

006 974 5262 2143 AB

- OK

007105 489 3 2147 AB

- small circular teflon cracks

007067 2611 2147 AA

- possible 2 drops (very weak)
small crack

0070785 727 2147 AA

- 1-2 small cracks

007146 385 9 2142 AA

- Heavily Faded
Teflon Cracks
Can't see Tear drop

007 120 7719 2142 AA

- Small cracks
Possible Tear drop - Unclear

3713 9767

OSCOPE Revisions of Parts

3-7-00

1349-1355

0070677591 1352 AB 1 Teardrop

0069669144 1352 AB OK

0070939111 1352 AB Large Teflon crack

0070378058 1352 AB 1 Teardrop

0070347724 1354 AB Large Bubble

0071993241 1352 AB Large Bubble

007009612 1354 AB Cracks Large Bubble

0070868979 1352 AB Teflon Bubble

0071504424 1352 AB CRACKS

20 SHEETS
100 SHEETS
22-141
22-142
22-144
200 SHEETS



OSCOPPE Review of Parts

3-7-00

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

Part Number	Part Number	Material	Notes
2128 - 2130			
007 106 9136	2128	AB	Notes Bubble under Teflon under difficult to tell OK
007 106 8922	2128	AB	
007 046 4042	2128	AB	Possible 1 Tear drop (not very pronounced)
007 123 2461	2128	AB	Possible 11 Tear drops (not very pronounced)
007 05666 89	2128	AB	3mm. Circle Crack
007 0812020	2128	AB	Small Cracks
007 039003	2128	AB	Small Cracks
007 0863477	2128	AB	Cracked & Bubbled
007 0863477			
2100 - 2106			
007 1107356	2101	AA	Low Spot - possible teardrop not likely
007 0663932	2104	AB	Large Teflon Bubble
007 0539339	2106	AA	OK
007 0694199	2104	AB	Possible slight Tear Drop (2) Teflon Bubble
007 083 5755	2106	AA	- Teflon Crack
007 0905563	2101	AA	- Surface Bubble OK
007 0698340	2103	AB	cracks - teardrop
007 0495737	2104	AB	small cracks

0070814034

01114011401757423

FNC

-1

9F924

-1

AB

-1

Town Car

1308

1992

319

308

base is cracked and missing at the meeting with the cup and aluminum ring. Material - possibly burnt found inside on the cup. Ceramic pin missing, no other components were available

-1

Not Applicable most of base missing

-1

Significant amount of corrosion found within the ring

-1

[Redacted]

Most of base is missing, signs of corrosion residue

[Redacted]

0

Significant corrosion around the outside rim of the cup, but not continuing beyond the location of the rubber gasket. Significant black residue found on surface that meets the base.

0

501

518

3713 9778

Brown residue on inside of port.

901

Bubble and 2 parallel cracks. 2 ears noted.

904

905

908

Figure 10 - 9771

Two teflon parallel cracks and one semi-circular bubble. Brownish residue found in part.

909

911

One teflon crack through the center, one bubble in teflon through the center. Brownish residue found in part.

912

914

One teflon crack side to side through center. Two large bubbles.

915

917

One teflon crack from edge to center. One large, center bubble.

916

921

Two teflon cracks from edge to button. Two arched teflon bubbles.

922

925

Small arched cracks. No bubbles observed. Black residue on surface.

926

928

3713 9771

Black residue on beveled edge of washer and button.

929

935

0070491707

UNLMB91W00Y

HOUSTON

TX

Team Car

1992

F2VC

3F924

AB

2030

1320000

300000

20

301

318

Base has 10 mm melted area near hex port end on
layed side of the base. A small perforation is in the
melted area.

-2

-1

-1



6

6

Small amount of brake fluid found in base.

Small amount of orange residue found in approx. 45 deg. region of inside of crimp ring.

Melted area found at base in line with the area of residue found in Aluminum crimp ring. Significant residue found with ceramic pin and portions of the moving terminal embedded in it.

Residue found on the rim in the location of the melting of the base and the residue in the Al crimp ring. Significant residue found on surface that meets with the base and inside the cup as viewed through the ceramic pin locating hole. Crimp marks are light.

601

616

Black residue on inside of port.

Large circular bubble. Two ears. Two radial cracks. (Tag number in photograph was incorrectly written as D070991707).

1001

1005

1006

1009

Two ears. One teflon crack. Almost complete teflon delamination with the exception of the center button section.

1010

1013

One ear. Circular delamination with bubble around the button. Three small teflon cracks. Of these, two cracks are on one ear.

1018

1021

Circular teflon delamination with bubble around button. Two parallel teflon cracks on ear.

1025

1028

Crack from edge to edge through center. Teflon delamination in center.

1014

1017

One small radial crack.

1019

1024

Black residue around area of ear. Small teflon crack at ear location. Small amount of black residue around button area.

1029

1032

Black/brown residue on button and beveled edge of washer. Noticeable wearing of washer coating in location of kapton ear from third layer.

1033

1036

3713 9774

0069494364

ZNELM731710C
SAN ANTONIO
TX
Grand Marquis
1992

FZVC
SF924
AB
2107

-1
-1
-1

401
418

Base switch separated at the cup. Ceramic pin missing. Plastic connector exists with no seals or additional components.

-1
-1
-1



Connector has no sign of heat damage.
Cannot check engagement because the
base is broken.

1101

1110

Most of base is missing- no
material collected

Small amount of residue located in ring interior opposite
of part no.

Black/Green residue found on remainder of base

Residue found on outer edge of cup in same location as
residue on Al ring. Green/Black residue found on the switch
end of cup and inside cup where ceramic pin sits

519

536

Brown/black residue inside interior.

One ear. Two teflon cracks with a circular
deformation bubble.

1111

1114

1115

1117

One ear. Two teflon cracks with a circular delamination bubble. Black residue seen under teflon layer near ear.

1118

1122

One ear with two small delamination bubbles. Small arched crack on outer edge near ear.

1125

1128

Two delamination bubbles, each side of ear. Teflon crack at outside edge of ear with black residue in it.

1132

1134

One ear. Teflon delamination small triangular shape around ear. Three small areas of teflon cracks.

1123

1124

One ear with two small delamination bubbles. Small arched crack on outer edge near ear.

1129

1131

Small teflon cracks around ear. Greenish-white material over surface.

1135

1137

ANALYSIS OF POLYMERIZATION ASSISTANT

Reddish-brown residue on button and beveled edge of washer.

1201

1204

3713 9777

0071234299

2FACF73W1ND

NEWLEAH

FL

Crown Victoria

1992

F2VC

SP924

AB

2013

-1

800000

-1

219

296

Moving terminal missing. Base switch melted and deformed. No other parts present.

[REDACTED] -2

[REDACTED] -3

[REDACTED] -1



[REDACTED] 6

[REDACTED] 0

Liquid collected from the opening of the crimp ring

Small amount of material located within the ring. Very wet with brake fluid.

Significant melting and deformation of base completely around the switch section of the base. A perforation of the base approx. 10mm long and 3 mm high is present. The spring portion of the moveable terminal is not missing.

Light crimp on cup. Significant amount of residue located on meeting surface of the cup with the base. Outside rim has corrosion for approximately 90 deg of its circumference. Ceramic pin still in place.

[REDACTED] 701

[REDACTED] 71B

Black residue inside hexport with built up on one side near rubber seal.

Two bars. Two teflon cracks running parallel on opposite sides of center. Teflon delamination almost completely around the button.

[REDACTED] 1205

[REDACTED] 1208

[REDACTED] 1209

[REDACTED] 1212

Two ears. Two teflon cracks running parallel on opposite sides of center. Teflon delamination almost completely around the button. Black residue removed along side of button and within the teflon.

1213

1216

One teflon crack from edge to edge near center. One teflon crack from center to edge. Two ears with a teflon crack at the edge of one ear. Slack residue inside. Delamination bubbles around button.

1221

1224

One teflon crack from center out to edge. Two dog ears with cracks near them. Two small delamination bubbles.

1229

1232

Two teflon cracks with one running edge to edge through the center. Complete delamination in button area.

1217

1220

Delamination of teflon in center. Two ears, three teflon cracks radiating into center.

1225

1228

Both black and grey/green residue. Small teflon cracks.

1233

1236

Orange/brown residue on button and beveled edge. Noticeable wearing of plating in same location as Kopton case.

1301

1305

3713 9780

0075389965

DFAC/SW5M

F2VC

7000000

ANCHORAGE

DF924

2400000

AK

AB

2500000

Crown Victoria

2031

1992

Broken Coupler, 2 wires, & wire grommet with part.
Switch base has 15-20mm melted area toward cup.
Small perforation in melted area

201

215

-1

-1

-1

Seal is not present

Only the portion of the connector that surrounds the wire grammet exists. Shows some possible heat damage.

1306

1325

Brown/green residue inside hexport.

One ear. Two teflon cracks, one crack around center button and edge to edge, one crack around center button. One bubble arc around the center button.

None-base melted and perforated

Small amount of material located within the crimp ring. Interior of Crimp ring is wet with brake fluid.

Approximately 90 deg of base at the switch is melted with 1 small 2mm perforation. Most of moveable terminal is missing. Significant amount of material is found in the switch area.

Cup is lightly crimped. Ceramic pin is held in place by material that is present over the surface of the cup that meets the base. Outside rim of cup has no signs of corrosion or foreign material.

719

796

1326

1380

1331

1337

Black residue between teflon and flaptor. One ear.
Two teflon cracks, one crack around center button
and edge to edge, one crack around center button.
One bubble around the center button.

1401

1404

Teflon crack edge to edge near center. One ear.
Teflon mostly delaminated.

1409

1412

Ear. Teflon crack from center to edge of ear. Two
delamination bubbles around center button.

1417

1420

One teflon crack through the center edge to edge.
Teflon delamination in button area.

1405

1408

Small teflon cracks around ear. One small bubble
near ear.

1413

1416

Teflon crack on outside edge near ear. Brownish
residue on surface.

1421

1424

Reddish-brown residue on button and beveled edge of
washer. Washer plating worn in area of ear.

1425

1428

3713 9783

0075578048

ZHECHONG

F24C

12000

TULARE

DF24

6000000

CA

AB

999999999

Grand Magus

2008

1992

10 X 25 mm (drilled hole in the hex port end of base switch. Coupler included with no seal or additional components.

119

135

-1

-1

-1

Seal not present

Connector shows signs of melting in vicinity of path of wires. Connector engages and locks with the base.

1429

1500

None - large hole in Base

Inside is damp with no significant residue

Base has large melted hole approx. 10x25 mm next to the cavity containing the switch. Movable part of the switch is missing along with a portion of the stationary part. Slight melting also noted opposite of the hole near the support of the stationary terminal and the notched section of the

No residue around outside rim. Significant amounts of residue on face that meets base. Ceramic pin missing. Crimp marks on cup appear light.

619

638

Brown residue inside part

Cup spun relative to the herport mis-aligning Kapton-weather-cup-herport during opening. Top layer of Kapton damaged also. 2 eers are present.

1507

1511

1512

1514

Teflon layer has been torn off during opening.
Teflon layer shows two cracks in the location of the ears.

1515

1518

Two ears with residue present in them. Two teflon cracks from edge to the center. Determination of failure around outside of button.

1522

1525

Two ears with black residue present in them. Determination bubbles almost completely around button area. Small teflon cracks around button.

1530

1533

Teflon crack edge to edge to through center. Teflon determination in center.

1519

1521

Two ears with small teflon cracks near one ear. Teflon determination in the center.

1526

1529

Blackish-brown residue on surface surrounding button and in center of the button. Small teflon cracks around button. Small teflon determination bubbles.

1534

1537

77-4814-1 (Rev. 1-20-64) (NSA-401072)

Brownish-black residue on button and beveled edge.
Wearing of plating in areas of ears.

1601

1604

3713 9786

0070758090

ZHELNG-7W172
OCALA
FL
Grand Marais
1993

FZVC
SP924
AB
2052

1700000
1600000
10

101
118

Switch base has 1/8x 10 mm milled hole toward
report side. No additional parts are with the switch.

[REDACTED] -1

[REDACTED] -1

[REDACTED] -1

[REDACTED]

[REDACTED]

[REDACTED] 0

[REDACTED] 0

None - Base has hole in side

No significant residue, interior found very wet with brake fluid.

Significant melting of approx. 180 deg of base around switch area. A 10x10 mm perforation is located in the middle of the melted area. The moving terminal is partially missing. The remaining portion of the moving terminal is out of place and adhered to the significant amount of

Residue found at approximately 90 degrees of the outside rim of the cup. Residue found on surface meeting the base with a greater concentration in the region coinciding with the residue found on the rim. Grip marks for cup appear light.

[REDACTED] 801

[REDACTED] 836

Greenish-brown residue inside part.

Part damaged during opening. Teflon delamination around center button. One ear with teflon crack on it. One crack opposite side of button from ear.

[REDACTED] 1605

[REDACTED] 1608

[REDACTED] 1609

[REDACTED] 1612

Teflon delamination around center button. One ear with teflon crack on it. One crack opposite side of button from ear.

1613

1616

Teflon delamination almost completely around center button except for ear area. Ear has black residue in it. Small teflon crack near ear.

1621

1624

Teflon delamination almost completely around button, except ear. Ear has one crack in it running along the ear. Black residue in ear.

1629

1632

Small crack near edge. Center teflon delamination. Ear has black residue in it.

1617

1620

Teflon delamination in center. Teflon crack along ear. One small crack opposite the ear.

1625

1628

One small crack in ear. One small delamination bubble near ear. Black residue on surface, concentrated around the ear.

1633

1637

Greenish-brown material on beveled edge of washer and button. Noticeable wearing of plating in the location of the ear.

1701

1705

3713 9789

0068576539

ILNLM81W1NY
MARIETTA
GA
Town Car
1992

FZVC
9F924
AB
2084

-1
-1
-1

-1
-1

Part disassembled by Ford before examination. Base shows melting.

[REDACTED] -2

[REDACTED] -3

[REDACTED] -4

[REDACTED]

[REDACTED]

[REDACTED] 0

[REDACTED] 0

NA, Ford removed prior to examination.

Greenish-brown residue.

Base is melted approximately 180 degrees around switch area. Melted in various places around the terminal area. One perforation in melted area. Moving terminal missing. Ceramic pin caught in black residue inside.

NA, Ford opened prior to examination.

[REDACTED] 1706

[REDACTED] 1728

1114 1731 1732 1733 1734 1735 1736

Brown residue inside handset.

One ear with residue present in it. Teflon delamination around the bubble. Several small cracks along surface.

[REDACTED] 1729

[REDACTED] 1732

[REDACTED] 1733

[REDACTED] 1737

One ear with residue present in it. Teflon delamination around the bubble. Several small cracks along surface.

1801

1805

Ear present, teflon crack at outside edge of ear. Teflon delamination around button.

1810

1813

Ear present, teflon crack at outside edge of ear, residue in crack. Teflon delamination around ear.

1817

1820

Teflon crack straight through center. Delamination in button area. Ear with residue in it.

1806

1809

Ear present, teflon crack at outside edge of ear. Teflon delamination at button.

1814

1816

Residue on surface. Ear present with teflon delamination near it and small teflon cracks.

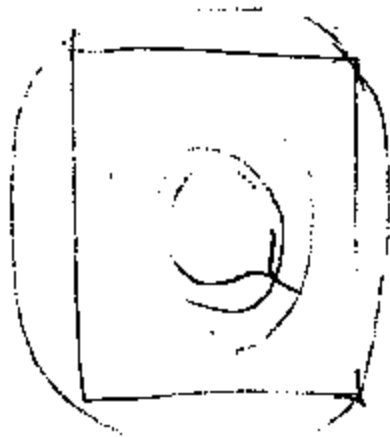
1821

1824

Brown residue on beveled edge and button. Slight wearing of plating in area of ear.

1825

1837



3713 9793



3713 9794





