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The design of a field failure data feedback system

Zimolong, Dieter Gunther

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FAILURE DATA

Part	PRODUCT NO.	PART REP	DATE	ENV	Part DESC.	FORM NO.	PROD DESC	AGE	FAILURE	DESCRIPTION	
01	1	01	83/06/29	OP	PIN	018	A	US	BR		
01	1	01	83/07/07	OP	PIN	025	A	US	BR		
										PRODUCT TOTAL	2
01	2	01	83/07/04	OP	PIN	044	A	US	BR		
01	2	01	83/07/13	OP	PIN	060	A	US	BR		
										PRODUCT TOTAL	2
01	3	01	83/07/01	OP	PIN	090	A	US	BR		
01	3	01	83/07/06	OP	PIN	094	A	US	BR		
01	3	01	83/07/09	OP	PIN	105	A	US	BR		
01	3	01	83/07/10	OP	PIN	107	A	US	BR		
01	3	01	83/07/10	OP	PIN	108	A	US	BR		
										PRODUCT TOTAL	5
										PART TOTAL	9
03	1	03	83/06/25	OP	BOLT	013	A	US	BR		
03	1	03	83/06/25	OP	BOLT	014	A	US	BR		
03	1	03	83/06/25	OP	BOLT	013	A	US	BR		
03	1	03	83/06/25	OP	BOLT	014	A	US	BR		
03	1	03	83/06/28	OP	BOLT	015	A	US	BR		
03	1	03	83/06/29	OP	BOLT	020	A	US	BR		
03	1	03	83/07/04	OP	BOLT	023	A	US	BR		
03	1	03	83/07/07	OP	BOLT	026	A	US	BR		
03	1	03	83/07/10	OP	BOLT	028	A	US	BR		
03	1	03	83/07/10	OP	BOLT	027	A	US	BR		
										PRODUCT TOTAL	10
03	2	03	83/06/23	OP	BOLT	036	A	US	BR		
03	2	03	83/06/28	OP	BOLT	039	A	US	BR		
03	2	03	83/06/29	OP	BOLT	041	A	US	BR		
03	2	03	83/07/05	OP	BOLT	047	A	US	BR		
03	2	03	83/07/05	OP	BOLT	046	A	US	BR		
03	2	03	83/07/06	OP	BOLT	049	A	US	BR		
03	2	03	83/07/09	OP	BOLT	054	A	US	BR		
03	2	03	83/07/13	OP	BOLT	058	A	US	BR		
03	2	03	83/07/83	OP	BOLT	052	A	US	BR		
										PRODUCT TOTAL	9
03	3	03	83/06/24	OP	BOLT	077	A	US	BR		
03	3	03	83/06/29	OP	BOLT	081	A	US	BR		
03	3	03	83/06/28	OP	BOLT	080	A	US	BR		
03	3	03	83/06/29	OP	BOLT	085	A	US	BR		

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03	3	03	83/06/29	OP	BOLT	084	A	US	BR	
03	3	03	83/06/30	OP	BOLT	089	A	US	BR	
03	3	03	83/07/04	OP	BOLT	045	A	US	BR	
03	3	03	83/07/04	OP	BOLT	092	A	US	BR	
03	3	03	83/07/06	OP	BOLT	096	A	US	BR	
03	3	03	83/07/07	OP	BOLT	099	A	US	BR	
03	3	03	83/07/09	OP	BOLT	102	A	US	BR	
03	3	03	83/07/09	OP	BOLT	104	A	US	BR	
03	3	03	83/07/10	OP	BOLT	106	A	US	BR	
03	3	03	83/07/13	OP	BOLT	111	A	US	BR	
									PRODUCT TOTAL	14
									PROJECT TOTAL	33
07	2	07	83/06/29	OP	PIPE	040	A	US	BR	

		FAILURE DATA							REPORT
PART	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FCPH NO.	PART DESC	AGE	FAILURE
07	2	07	83/07/09	OP	PIPE	053	A	US	BR
07		07	83/07/13	OP	PIPE	056	A	US	BR
07		07	83/07/13	OP	PIPE	057	A	US	BR
									PRODUCT TOTAL 4
07	3	07	83/06/30	OP	PIPE	089	A	US	BR
07	3	07	83/07/07	OP	PIPE	101	A	US	BR
									PRODUCT TOTAL 2
									PART TOTAL 6
08	1	08	83/05/25	OP	CYLINDER	012	A	US	BR
									PRODUCT TOTAL 1
									PART TOTAL 1
09	1	09	83/06/25	OP	DRIVE	015	A	US	FU
									PRODUCT TOTAL 1
09	3	09	83/06/27	OP	DRIVE	078	A	US	BR
09	3	09	83/06/28	OP	DRIVE	079	A	US	BR
									PRODUCT TOTAL 2
									PART TOTAL 3
10	1	10	83/06/28	OP	CONTROLS	017	A	US	BR
10	1	10	83/07/04	OP	CONTROLS	024	A	US	BR
									PRODUCT TOTAL 2
10	2	10	83/07/05	OP	CONTROLS	043	A	US	BR
									PRODUCT TOTAL 1
10	3	10	83/06/28	OP	CONTROLS	082	A	US	BR
10	3	10	83/07/10	OP	CONTROLS	109	A	US	BR
									PRODUCT TOTAL 2
									PART TOTAL 5
11	1	11	83/06/31	OP	WHEEL	022	A	US	BR
11	1	11	83/06/83	OP	WHEEL	021	A	US	BR
									PRODUCT TOTAL 2
11	2	11	83/06/28	OP	WHEEL	038	A	US	BR
11	2	11	83/07/13	OP	WHEEL	059	A	US	BR
									PRODUCT TOTAL 2
11	3	11	83/07/01	OP	WHEEL	091	A	US	BR
									PRODUCT TOTAL 1
									PART TOTAL 5

12	2	12	83/07/06	OP	AXEL	050	A	US	BR		
										PRODUCT TOTAL	1
12	3	12	83/07/06	OP	AXEL	097	A	US	BR		
12	3	12	83/07/07	OP	AXEL	100	A	US	BR		
12	3	12	83/07/09	OP	AXEL	103	A	US	BR		
										PRODUCT TOTAL	3
										Prer TOTAL	4
13	2	13	83/06/23	OP	CAM	035	A	US	BR		
13	2	13	83/06/30	OP	CAM	042	A	US	BR		
13	2	13	83/07/09	OP	CAM	055	A	US	BR		
										PRODUCT TOTAL	3
13	3	13	83/07/13	OP	CAM	112	A	US	BR		

LINE	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FORM NO.	DESC	AGE	FAILURE	
										PRODUCT TOTAL 1
										PART TOTAL 4
14	2	14	83/06/23	OP	EXHAUST	037	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
15	2	**	83/06/30	OP	SUPPORT	043	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
16	2	16	83/07/06	OP	CABLE	051	A	US	BR	
16	2	16	83/07/13	OP	CABLE	061	A	US	FU	
										PRODUCT TOTAL 2
16	3	16	83/06/29	OP	CABLE	086	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 3
18	2	13	83/07/13	OP	OUTLET	062	A	US	BR	
18	3	**	83/07/06	OP	OUTLET	098	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 2
19	2	19	83/07/13	OP	U TUBE	063	A	US	BR	
										PRODUCT TOTAL 1
19	3	19	83/07/05	OP	U TUBE	093	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 2
22	3	22	83/05/04	OP	INDICATOR	073	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
23	3	23	83/06/29	OP	HEATING	083	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
25	3	25	83/07/11	OP	SLEEVE	110	A	US	FU	
										PRODUCT TOTAL 1
										PART TOTAL 1

FAILURE DATA

PART	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FORM NO.	DESC	AGE	FAILURE	
										PRODUCT TOTAL 1
										PART TOTAL 4
14	2	14	83/06/23	OP	EXHAUST	037	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
15	2	**	83/06/30	OP	SUPPORT	043	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
16	2	16	83/07/06	OP	CABLE	051	A	US	BR	
16	2	16	83/07/13	OP	CABLE	061	A	US	FU	
										PRODUCT TOTAL 2
16	3	16	83/06/29	OP	CABLE	086	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 3
18	2	18	83/07/13	OP	OUTLET	062	A	US	BR	
18	3	**	83/07/06	OP	OUTLET	098	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 2
19	2	19	83/07/13	OP	U TUBE	063	A	US	BR	
										PRODUCT TOTAL 1
19	3	19	83/07/05	OP	U TUBE	093	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 2
22	3	22	83/05/04	OP	INDICATOR	073	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
23	3	23	83/06/29	OP	HEATING	083	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
25	3	25	83/07/11	OP	SLEEVE	110	A	US	FU	
										PRODUCT TOTAL 1
										PART TOTAL 1

APPENDIX XI

A sort of the parts failed per month April, May, June, and July of part numbers in order of product.

(FARPI)

M	PROD DESC	AGE	FAILURE		
A		NE	BR	PRODUCT TOTAL	1
A		NE	BP	PRODUCT TOTAL	1
				PART TOTAL	2
A		NE	FU		
A		NE	BR		
A		US	BR	PRODUCT TOTAL	3
A		US	BR	PRODUCT TOTAL	1
A		NE	BR	PRODUCT TOTAL	1
				PART TOTAL	5
A		NE	BR	PRODUCT TOTAL	1
A		US	BR	PRODUCT TOTAL	1
				PART TOTAL	2
A		NE	FU	PRODUCT TOTAL	1
A		NE	BP	PRODUCT TOTAL	1
				PART TOTAL	2
A		US	FU	PRODUCT TOTAL	1
				PART TOTAL	1
A		US	BP	PRODUCT TOTAL	1
A		NE	BR	PRODUCT TOTAL	1
				PART TOTAL	2
A		US	BR		

FAILURE DATA

MAT	PRODUCT NO.	PART REP	DATE	ENV	PART	DESC.	FGR NO
01	1	01	83/04/20	TR	PIN		001
01	2	01	83/04/20	TR	PIN		064
02	1	02	83/04/20	TR	NUT		002
02	1	02	83/04/20	TR	NUT		029
02	1	02	83/04/26	TR	NUT		005
02	2	02	83/04/26	TR	NUT		032
02	4	02	83/04/21	TR	NUT		113
03	1	**	83/04/26	TR	BOLT		003
03	3	**	83/04/26	TR	BOLT		066
04	1	**	83/04/26	TR	LEVER		004
04	2	04	83/04/20	TR	LEVER		030
05	1	**	83/04/27	TR	CAP		006
07	3	07	83/04/24	TR	PIPE		069
07	4	07	83/04/26	TR	PIPE		114
11	2	11	83/04/26	TR	WHEEL		031

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11	3	**	83/04/26	TR	WHEEL	065	A	US	BR	
										PRODUCT TOTAL 1
										PRODUCT TOTAL 1
										PART TOTAL 2
20	3	**	83/04/28	TR	DOOR	067	A	US	BR	
										PRODUCT TOTAL 1
20	4	20	83/04/26	TR	DOOR	115	A	NE	FO	
										PRODUCT TOTAL 1
										PROD TOTAL 2
21	3	**	83/04/21	TR	LIGHT	068	A	US	BR	
										PRODUCT TOTAL 1
21	4	21	83/04/26	TR	LIGHT	116	A	NE	BR	
										PRODUCT TOTAL 1
										ICN TOTAL 2

FAILURE DATA

PART	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FCRP NO.	PROD DEST	AGE	FAILURE		
01	1	01	83/05/06	TR	PIN	011	A	05	BR		
										PRODUCT TOTAL	1
01	2	01	83/05/03	TR	PIN	127	A	05	BR		
										PRODUCT TOTAL	1
										PART TOTAL	2
02	1	02	83/05/03	TR	NUT	089	A	05	BR		
										PRODUCT TOTAL	1
02	2	02	83/05/03	TR	NUT	033	A	05	BR		
										PRODUCT TOTAL	1
02	3	02	83/05/06	TR	NUT	075	A	05	BR		
										PRODUCT TOTAL	1
										PART TOTAL	3
03	2	03	83/05/06	TR	BOLT	034	A	05	BR		
										PRODUCT TOTAL	1
03	3	03	83/05/04	TR	BOLT	071	A	05	BR		
03	4	03	83/05/03	TR	BOLT	119	A	05	BR		
03	4	03	83/05/03	TR	BOLT	111	A	05	BR		
										PRODUCT TOTAL	2
										PART TOTAL	4
06	1	**	83/05/03	TR	CHAIN	007	A	05	BR		
06	1	06	83/05/03	TR	CHAIN	010	A	05	BR		
										PRODUCT TOTAL	2
06	3	06	83/05/04	TR	CHAIN	072	A	05	BR		
										PRODUCT TOTAL	1
										PART TOTAL	3
07	1	07	83/05/03	TR	PIPE	004	A	05	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1
08	1	08	83/05/25	OP	CYLINDER	012	A	05	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1
11	3	11	83/05/03	TR	WHEEL	070	A	05	BR		

11	3	**	83/05/04	TR	WHEEL	C74	A	US	BR		
										PRODUCT TOTAL	2
										PART TOTAL	2
12	4	12	83/05/03	TR	AXEL	120	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1
16	4	16	83/05/06	TR	CABLE	124	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1
17	4	17	83/05/06	TR	INLET	2**	A	US	BR		
										PRODUCT TOTAL	1

FAILURE DATA (CONT.)

PART	PRODUCT NO.	PART REF	DATE	ENV	PART DESC.	PROD NO.	PROD DESC	AGE	FAILURE		
										PART TOTAL	1
22	1	22	83/05/04	OP	INDICATOR	074	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1
26	4	26	83/05/03	TR	SEALS	121	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1

FAILURE DATA (FBRP1)

PART	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FORM NO.	PROD DESC	AGE	FAILURE		
01	1	01	83/06/29	OP	PIN	018	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1
03	1	03	83/06/28	OP	BOLT	016	A	US	BR		
03	1	03	83/06/29	OP	BOLT	020	A	US	BR		
										PRODUCT TOTAL	2
03	2	03	83/06/28	OP	BOLT	039	A	US	BR		
03	2	03	83/06/29	OP	BOLT	041	A	US	BR		
										PRODUCT TOTAL	2
03	3	03	83/06/28	OP	BOLT	081	A	US	BR		
03	3	03	83/06/28	OP	BOLT	080	A	US	BR		
03	3	03	83/06/29	OP	BOLT	084	A	US	BR		
03	3	03	83/06/29	OP	BOLT	085	A	US	BR		
03	3	03	83/06/30	OP	BOLT	089	A	US	BR		
										PRODUCT TOTAL	5
										PART TOTAL	9
07	1	07	83/06/29	OP	PIPE	019	A	US	BR		
										PRODUCT TOTAL	1
07	2	07	83/06/29	OP	PIPE	040	A	US	BR		
										PRODUCT TOTAL	1
07	3	07	83/06/30	OP	PIPE	088	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	3
09	3	09	83/06/27	OP	DRIVE	078	A	US	BR		
09	3	09	83/06/28	OP	DRIVE	079	A	US	BR		
										PRODUCT TOTAL	2
										PART TOTAL	2
10	1	10	83/06/28	OP	CONTROLS	017	A	US	BR		
										PRODUCT TOTAL	1
10	3	10	83/06/28	OP	CONTROLS	082	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	2
11	1	11	83/06/31	OP	WHEEL	021	A	US	BR		
11	1	11	83/06/31	OP	WHEEL	022	A	US	BR		

FAILURE DATA (FARP1)

PART	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FORM NO.	PROD DESC	AGE	FAILURE		
11	1	11	83/06/31	OP	WHEEL	021	A	US	BR		
11	1	11	83/06/31	OP	WHEEL	022	A	US	BR		
										PRODUCT TOTAL	2
										PART TOTAL	2
										PRODUCT TOTAL	2
11	2	11	83/06/28	OP	WHEEL	038	A	US	BR		
										PRODUCT TOTAL	1
										PARTTOTAL	3
13	2	13	83/06/30	OP	CAM	042	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1
16	3	16	83/06/29	OP	CABLE	086	A	US	BR		

FAILURE DATA (FARP1)

PART	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FORM NO.	PROD DESC	AGE	FAILURE		
										PRODUCT TOTAL	1
										PART TOTAL	1
23	3	23	83/06/29	OP	HEATING	083	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1

FAILURE DATA (FARPI)

PART	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FORM NO.	PROD DESC	AGE	FAILURE		
03	1	03	83/06/25	OP	BOLT	013	A	US	BR		
03	1	03	83/06/25	OP	BOLT	014	A	US	BR		
03	1	03	83/06/25	OP	BOLT	013	A	US	BR		
03	1	03	83/06/25	OP	BOLT	014	A	US	BR		
										PRODUCT TOTAL	4
03	2	03	83/06/23	OP	BOLT	036	A	US	BR		
										PRODUCT TOTAL	1
03	3	03	83/06/20	TR	BOLT	076	A	US	BR		
03	3	03	83/06/24	OP	BOLT	077	A	US	BR		
										PRODUCT TOTAL	2
										PART TOTAL	7
09	1	09	83/06/25	OP	DRIVE	015	A	US	FU		
										PRODUCT TOTAL	1
										PART TOTAL	1
13	2	13	83/06/23	OP	CAM	035	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1
14	2	14	83/06/23	OP	EXHAUST	037	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	1

FAILURE DATA (FBRP11)

PART	PRODUCT NO.	PART REP	DATE	ENV	PART DESC.	FORM NO.	PROD DESC	AGE	FAILURE	
01	1	01	83/07/07	OP	PIN	025	A	US	BR	
										PRODUCT TOTAL 1
01	2	01	83/07/04	OP	PIN	044	A	US	BR	
01	2	01	83/07/13	OP	PIN	060	A	US	BR	
										PRODUCT TOTAL 2
01	3	01	83/07/01	OP	PIN	090	A	US	BR	
01	3	01	83/07/06	OP	PIN	094	A	US	BR	
01	3	01	83/07/09	OP	PIN	105	A	US	BR	
01	3	01	83/07/10	OP	PIN	108	A	US	BR	
01	3	01	83/07/10	OP	PIN	107	A	US	BR	
										PRODUCT TOTAL 5
										PART TOTAL 8
02	4	02	83/07/29	TR	NUT	117	A	US	BR	
										PRODUCT TOTAL 1
										PART TOTAL 1
03	1	03	83/07/04	OP	BOLT	023	A	US	BR	
03	1	03	83/07/10	OP	BOLT	027	A	US	BR	
03	1	03	83/07/10	OP	BOLT	028	A	US	BR	
										PRODUCT TOTAL 4
03	2	03	83/07/05	OP	BOLT	046	A	US	BR	
03	2	03	83/07/05	OP	BOLT	047	A	US	BR	
03	2	03	83/07/05	OP	BOLT	049	A	US	BR	
03	2	03	83/07/09	OP	BOLT	054	A	US	BR	
03	2	03	83/07/13	OP	BOLT	058	A	US	BR	
03	2	03	83/07/83	OP	BOLT	052	A	US	BR	
										PRODUCT TOTAL 6
03	3	03	83/07/04	OP	BOLT	045	A	US	BR	
03	3	03	83/07/04	OP	BOLT	092	A	US	BR	
03	3	03	83/07/06	OP	BOLT	096	A	US	BR	
03	3	03	83/07/07	OP	BOLT	099	A	US	BR	
03	3	03	83/07/09	OP	BOLT	104	A	US	BR	
03	3	03	83/07/09	OP	BOLT	102	A	US	BR	
03	3	03	83/07/10	OP	BOLT	106	A	US	BR	
03	3	03	83/07/13	OP	BOLT	111	A	US	BR	
										PRODUCT TOTAL 8
										PART TOTAL 18

07	2	07	83/07/09	OP	PIPE	053	A	US	BR		
07	2	07	83/07/13	OP	PIPE	057	A	US	BR		
07	2	07	83/07/13	OP	PIPE	056	A	US	BR		
										PRODUCT TOTAL	3
07	3	07	83/07/07	OP	PIPE	101	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	4
10	1	10	83/07/04	OP	CONTROLS	024	A	US	BR		
10	2	10	83/07/05	OP	CONTROLS	043	A	US	BR	PRODUCT TOTAL	1
10	3	10	83/07/10	OP	CONTROLS	109	A	US	BR	PRODUCT TOTAL	1

FAILURE DATA REPORT

PART	PRODUCT NO.	MFR REP	DATE	ENV	PART DESC.	FORM NO.	PROD DESC	AGE	FAILURE		
										PRODUCT TOTAL	1
										PART TOTAL	3
11	2	11	83/07/13	OP	WHEEL	059	A	US	BR		
										PRODUCT TOTAL	1
11	3	11	83/07/01	OP	WHEEL	091	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	2
12	2	12	83/07/06	OP	AXEL	050	A	US	BR		
										PRODUCT TOTAL	1
12	3	12	83/07/06	OP	AXEL	097	A	US	BR		
12	3	12	83/07/07	OP	AXEL	100	A	US	BR		
12	3	12	83/07/09	OP	AXEL	103	A	US	BR		
										PRODUCT TOTAL	3
										PART TOTAL	4
13	2	13	83/07/09	OP	CAM	055	A	US	BR		
										PRODUCT TOTAL	1
13	3	13	83/07/13	OP	CAM	112	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	2
16	2	16	83/07/06	OP	CABLE	051	A	US	BR		
16	2	16	83/07/13	OP	CABLE	061	A	US	FU		
										PRODUCT TOTAL	2
										PART TOTAL	2
11	2	18	83/07/13	OP	OUTLET	062	A	US	BR		
										PRODUCT TOTAL	1
19	3	**	83/07/06	OP	OUTLET	093	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	2
19	2	19	83/07/13	OP	U TUBE	063	A	US	BR		
										PRODUCT TOTAL	1
19	3	19	83/07/05	OP	U TUBE	093	A	US	BR		
										PRODUCT TOTAL	1
										PART TOTAL	2

25	3	25	83/07/11	DP	SLEEVE	110	A	US	FU				1
										PRODUCT TOTAL		1	198
										PART TOTAL		1	

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