

RIN
Slides

TI-NHTSA 002683

GM GAGE STUDY FOR REPEATABILITY AND REPRODUCIBILITY (LONG METHOD)

24-Sep-91

7778 PRESSURE TEST

SITUATION

NUMBER OF OPERATORS	3	MIN SPEC	90
NUMBER OF PARTS	4	MAX SPEC	160
NUMBER OF TRIALS	2	TOLERANCE	70

DATA SUMMARY

OPERATOR	AVERAGE	RANGE
1	114.7875	1.025
2	113.9375	0.775
3	113.025	0.45
4	NA	NA
5	NA	NA
6	NA	NA
7	NA	NA
8	NA	NA
9	NA	NA
10	NA	NA
AVERAGE	113.9166	0.75

MIN XBAR 113.025

MAX XBAR 114.7875

RARDIFF 1.7625

	MEASUREMENT UNIT ANALYSIS	%TOLERANCE
REPEATABILITY:	3.424202	4.69%
REPRODUCIBILITY:	4.595500	6.57%
RPT & REPR (R&R):	5.730949	8.19%

NOTE: ALL CALCULATIONS BASED ON 5.15 SIGMA (99%)

TI-NHTSA 002884

ENTER STUDY TITLES IN CELLS A8,A9,A10, MIN/MAX SPEC IN B12, B13
 77PS PRESSURE TEST
 ACTUATION

MIN SPEC 90
 MAX SPEC 160
 TOLERANCE 70

DATA FOR OPERATOR 1

PART	1	2	TRIAL 3	4	5	AVG	RANGE
1	120.8	121.6				121.2	0.8
2	123.8	123.5				123.65	0.3
3	107.9	106.4				107.15	1.5
4	107.9	106.4				107.15	1.5
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 114.7875 AVG RANGE: 1.025
 UCL FOR INDIVIDUAL RANGES 2.45025

TI-NHTSA 002685

DATA FOR OPERATOR 2

PART	1	2	TRIAL 3	4	5	AVG	RANGE
1	120.1	120.9				120.5	0.8
2	122.2	122.9				122.55	0.7
3	107	107.5				107.25	0.5
4	106	104.9				105.45	1.1
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 113.9375 AVG RANGE: 0.775
 UCL FOR INDIVIDUAL RANGES 2.45025

DATA FOR OPERATOR 3

PART	1	2	TRIAL 3	4	5	AVG	RANGE
1	121.9	123				122.45	1.1
2	119.1	117.8				117.95	0.9
3	107	106.8				106.9	0.2
4	104.9	104.7				104.8	0.2
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 113.025 AVG RANGE: 0.45
 UCL FOR INDIVIDUAL RANGES 2.45025

TI-NHTSA 002687

GM GAGE STUDY FOR REPEATABILITY AND REPRODUCIBILITY (LONG METHOD)

24-Sep-91

17PS PRESSURE TEST

RELEASE

NUMBER OF OPERATORS	3	MIN SPEC	20
NUMBER OF PARTS	4	MAX SPEC	140
NUMBER OF TRIALS	2	TOLERANCE	140

DATA SUMMARY

OPERATOR	AVERAGE	RANGE
1	47.725	0.4
2	46.4875	0.475
3	46.9625	0.425
4	NA	NA
5	NA	NA
6	NA	NA
7	NA	NA
8	NA	NA
9	NA	NA
10	NA	NA

AVERAGE	47.05933	0.433333
---------	----------	----------

MIN XBAR 46.4875

MAX XBAR 47.725

SBARDIFF 1.2375

	MEASUREMENT UNIT ANALYSIS	%TOLERANCE
REPEATABILITY:	1.978427	1.41%
REPRODUCIBILITY:	3.262574	2.33%
RPT & REPR (R&R):	3.815569	2.73%

NOTE: ALL CALCULATIONS BASED ON 3.15 SIGMA (99%)

TI-NHTSA 002888

ENTER STUDY TITLES IN CELLS A8,A9,A10, MIN/MAX SPEC IN B12, B13
 97PS PRESSURE TEST
 RELEASE

MIN SPEC 20
 MAX SPEC 160
 TOLERANCE 140

DATA FOR OPERATOR 1

PART	1	2	TRIAL 3	4	5	AVG	RANGE
1	44.1	43.6				43.85	0.5
2	57.8	57.6				57.7	0.2
3	44	44.2				44.1	0.2
4	45.6	46.9				45.25	0.7
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 47.725 AVG RANGE: 0.4
 UCL FOR INDIVIDUAL RANGES 1.4157

TI-NHTSA 002689

DATA FOR OPERATOR 2

PART	TRIAL					AVG	RANGE
	1	2	3	4	5		
1	43.4	43.7				43.55	0.3
2	56	54.9				55.45	1.1
3	43.1	42.9				43	0.2
4	44.1	43.8				43.95	0.3
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 46.4875

AVG RANGE: 0.475

UCL FOR INDIVIDUAL RANGES

1.4157

TI-NHTSA 002690

DATA FOR OPERATOR 3

PART	TRIAL					AVG	RANGE
	1	2	3	4	5		
1	43.2	43				43.1	0.2
2	58	57.1				57.55	0.9
3	43.6	43.1				43.35	0.5
4	43.8	43.9				43.85	0.1
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRAND AVG: 46.9625 AVG RANGE: 0.425
 UCL FOR INDIVIDUAL RANGES 1.4157

TI-NHTSA 002691

ON GAGE STUDY FOR REPEATABILITY AND REPRODUCIBILITY (LONG METHOD)

24-Sep-91

7DIAL INDICATOR #14508

MOVEABLE TERMINAL

NUMBER OF OPERATORS	2	MIN SPEC	0.459
NUMBER OF PARTS	10	MAX SPEC	0.479
NUMBER OF TRIALS	2	TOLERANCE	0.2

DATA SUMMARY

OPERATOR	AVERAGE	RANGE
1	0.46925	0.0003
2	0.46925	0.0003
3	NA	NA
4	NA	NA
5	NA	NA
6	NA	NA
7	NA	NA
8	NA	NA
9	NA	NA
10	NA	NA
AVERAGE	0.46925	0.0003

MIN XBAR	0.46925
MAX XBAR	0.46925
SBARDIFF	0

	MEASUREMENT UNIT ANALYSIS	%TOLERANCE
REPEATABILITY:	0.001369	0.68%
REPRODUCIBILITY:	0	0.00%
RPT & REPR (R&R):	0.001369	0.68%

NOTE: ALL CALCULATIONS BASED ON 5.15 SIGMA (99%)

Note: Same fixturing / dial indicator
used for Stationary Terminal.

ENTER STUDY TITLES IN CELLS A8,A9,A10, MIN/MAX SPEC IN B12, B13

DIAL INDICATOR #14508

MOVEABLE TERMINAL

MIN SPEC 0.459

MAX SPEC 0.479

TOLERANCE 0.2

DATA FOR OPERATOR 1

PART	TRIAL					AVG	RANGE
	1	2	3	4	5		
1	0.468	0.469				0.4685	0.001
2	0.468	0.468				0.468	0
3	0.469	0.469				0.469	0
4	0.469	0.469				0.469	0
5	0.47	0.47				0.47	0
6	0.469	0.47				0.4695	0.001
7	0.47	0.47				0.47	0
8	0.469	0.469				0.469	0
9	0.47	0.471				0.4705	0.001
10	0.469	0.469				0.469	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 0.46925 AVG RANGE: 0.0003
UCL FOR INDIVIDUAL RANGES 0.000980

TI-NHTSA 002693

DATA FOR OPERATOR 2

PART	TRIAL					AVG	RANGE
	1	2	3	4	5		
1	0.469	0.469				0.469	0
2	0.467	0.468				0.4675	0.001
3	0.469	0.469				0.469	0
4	0.469	0.469				0.469	0
5	0.47	0.469				0.4695	0.001
6	0.469	0.469				0.469	0
7	0.47	0.47				0.47	0
8	0.469	0.47				0.4695	0.001
9	0.471	0.471				0.471	0
10	0.469	0.469				0.469	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 0.46925 AVG RNGE: 0.0003
 UCL FOR INDIVIDUAL RANGES 0.000980

FORD NEXT GENERATION SPEED CONTROL (77PS) MANUFACTURING CONTROL PLAN

PROCESS STEP DESCRIPTION	PRODUCT CHARACTERISTICS	EVALUATION METHOD	CONTROL METHOD	FREQUENCY OF TEST	REACTION PLAN
BASE ASSEMBLY (AMI AUTOMATION)	TERMINAL HEIGHT	DIAL INDICATOR	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	TERMINAL PUSHOUT	FORCE GAGE/ DIAL INDICATOR	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	TERMINAL SEPERATION/ ALIGNMENT	PLUG GAGE	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	SPRING CONTACT WIDTH	CALIPERS	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	SPRING TORQUE	FORCE GAGE	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	SPRING BUMP HEIGHT	DIAL INDICATOR	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	RIVET HEIGHT	DIAL INDICATOR	X/R	5Pc/ Hr.	SORT SINCE LAST CHECK
	CALIBRATION DEFORMATION	CUSTOM CONTINUITY SYSTEM	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	VISUAL QUALITY	VISUAL	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	CRIMP DIAMETER	CALIPERS	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
SENSOR ASSEMBLY	CRIMP HEIGHT	CALIPERS	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	VISUAL QUALITY	VISUAL	P	5pc/ Hr.	SORT SINCE LAST CHECK

FORD NEXT GENERATION SPEED CONTROL (77PS) MANUFACTURING CONTROL PLAN

PROCESS STEP DESCRIPTION	PRODUCT CHARACTERISTIC	EVALUATION METHOD	CONTROL METHOD	FREQUENCY OF TEST	REACTION PLAN
BASE ASSEMBLY (AMI AUTOMATION)	TERMINAL HEIGHT	DIAL INDICATOR	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	TERMINAL PUSHOUT	FORCE GAUGE/ DIAL INDICATOR	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	TERMINAL SEPERATION/ ALIGNMENT	PLUG GAUGE	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	SPRING ANGLE	COMPARATOR	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	SPRING FORCE	CUSTOM FORCE GAUGE	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	SPRING CONTACT LOCATION	COMPARATOR	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	SPRING BUMP LOCATION	COMPARATOR	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	CALIBRATION DEFORMATION	CUSTOM CONTINUITY SYSTEM	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	VISUAL QUALITY	VISUAL	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
SENSOR ASSEMBLY	CRIMP DIAMETER	CALIPERS	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	CRIMP HEIGHT	CALIPERS	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	VISUAL QUALITY	VISUAL	P	5pc/ Hr.	SOFT SINCE LAST CHECK
	O-RING PRESENCE	PROBE	P	100%	MACHINE STOP

9 November 1990 MJB/cnr 058-0134

TI-NHTSA 002689

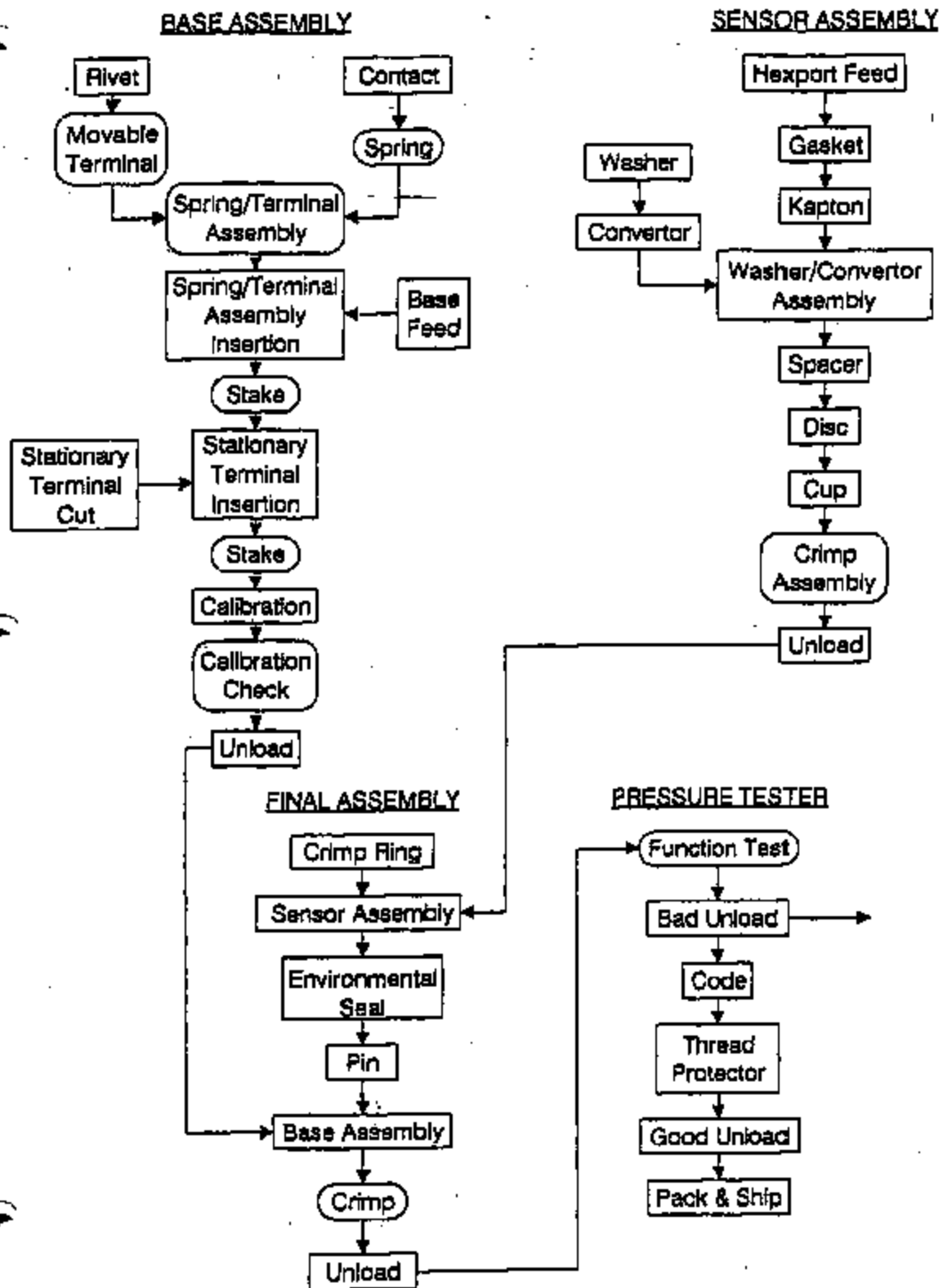
Urbil

TI-NHTSA 002700

FIGURE 1.1
CONCEPT, PLAN

FORD NEXT GENERATION SPEED CONTROL

PROCESS FLOW CHART 77PSL2-1/2-3



SPC Operation

Standard Operation

MD 05/22/01

TI-NHTSA 002701

FORD NEXT GENERATION SPEED CONTROL (77PS) MANUFACTURING CONTROL PLAN

<u>PROCESS STEP DESCRIPTION</u>	<u>PRODUCT CHARACTERISTICS</u>	<u>EVALUATION METHOD</u>	<u>CONTROL METHOD</u>	<u>FREQUENCY OF TEST</u>	<u>REACTION PLAN</u>
BASE ASSEMBLY (AMI AUTOMATION)	TERMINAL HEIGHT	DIAL INDICATOR	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	TERMINAL PUSHOUT	FORCE GAGE/ DIAL INDICATOR	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	TERMINAL SEPERATION/ ALIGNMENT	PLUG GAGE	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	SPRING CONTACT WIDTH	CALIPERS	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	SPRING TORQUE	FORCE GAGE	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	SPRING BUMP HEIGHT	DIAL INDICATOR	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	RIVET HEIGHT	DIAL INDICATOR	X/R	5Pc/ Hr.	SORT SINCE LAST CHECK
	CALIBRATION DEFORMATION	CUSTOM CONTINUITY SYSTEM	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	VISUAL QUALITY	VISUAL	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
SENSOR ASSEMBLY	CRIMP DIAMETER	CALIPERS	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	CRIMP HEIGHT	CALIPERS	X/R	5pc/ Hr.	SORT SINCE LAST CHECK
	VISUAL QUALITY	VISUAL	P	5pc/ Hr.	SORT SINCE LAST CHECK

TI-NHTSA 002702

FORD NEXT GENERATION SPEED CONTROL (77PS) MANUFACTURING CONTROL PLAN

<u>PROCESS STEP DESCRIPTION</u>	<u>PRODUCT CHARACTERISTICS</u>	<u>EVALUATION METHOD</u>	<u>CONTROL METHOD</u>	<u>FREQUENCY OF TEST</u>	<u>REACTION PLAN</u>
FINAL ASSEMBLY (AMI AUTOMATION)	CRIMP DIAMETER	CALIPER	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	CRIMP HEIGHT	CALIPER	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
	BASE TORQUE	TORQUE GAGE	X/R	5pc/ Hr.	SOFT SINCE LAST CHECK
FUNCTION TESTER (CUSTOM)	ACTUATION/ RELEASE POINTS	MASTERS	X/R	EACH SHIFT	TOOL ROOM/ ENGINEERING EVALUATIONS
	ACTUATION/ RELEASE POINTS	RAMP THROUGH PRESSURE RANGE	X/R	100%	YIELD TRACKING/ SCRAP CONTROL
Q.C. AUDITS	FUNCTION TESTING DURABILITY TESTING ELEVATED TEMP TESTING ENVELOP DIMENSIONAL CHECKS				

TI-NHTSA 002703

GM GAGE STUDY FOR REPEATABILITY AND REPRODUCIBILITY (LONG METHOD)
 24-Sep-91
 77#5 PRESSURE TEST
 SITUATION

NUMBER OF OPERATORS	3	MIN SPEC	90
NUMBER OF PARTS	4	MAX SPEC	160
NUMBER OF TRIALS	2	TOLERANCE	70

DATA SUMMARY

OPERATOR	AVERAGE	RANGE
1	114.7875	1.025
2	113.9375	0.775
3	113.025	0.45
4	NA	NA
5	NA	NA
6	NA	NA
7	NA	NA
8	NA	NA
9	NA	NA
10	NA	NA
AVERAGE	113.9166	0.75

MIN XBAR 113.025
 MAX XBAR 114.7875
 BARDIFF 1.7625

	MEASUREMENT UNIT ANALYSIS	%TOLERANCE
REPEATABILITY	3.424202	4.89%
REPRODUCIBILITY	4.595500	6.57%
RPT & REPR (R&R)	5.730949	8.19%

NOTE: ALL CALCULATIONS BASED ON 3.15 SIGMA (99%)

TI-NHTSA 002704

ENTER STUDY TITLES IN CELLS A8,A9,A10, MIN/MAX SPEC IN B12, B13
 W7PS PRESSURE TEST
 ACTUATION

MIN SPEC 90
 MAX SPEC 160
 TOLERANCE 70

DATA FOR OPERATOR 1

PART	TRIAL					AVG	RANGE
	1	2	3	4	5		
1	120.8	121.6				121.2	0.8
2	123.8	123.5				123.65	0.3
3	107.9	106.4				107.15	1.5
4	107.9	106.4				107.15	1.5
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRAND AVG: 114.7875 AVG RANGE: 1.025
 UCL FOR INDIVIDUAL RANGES 2.45025

TI-NHTSA 002705

DATA FOR OPERATOR 2

PART	1	2	TRIAL 3	4	5	AVG	RANGE
1	120.1	120.9				120.5	0.8
2	122.2	122.9				122.55	0.7
3	107	107.5				107.25	0.5
4	106	104.9				105.45	1.1
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 113.9375 AVG RANGE: 0.775
 UCL FOR INDIVIDUAL RANGES 2.45025

TI-NHTSA 002706

DATA FOR OPERATOR 3

PART	1	2	TRIAL 3	4	5	AVG	RANGE
1	121.9	123				122.45	1.1
2	118.1	117.8				117.95	0.3
3	107	106.8				106.9	0.2
4	104.9	104.7				104.8	0.2
5						NA	0
6						NA	0
7						NA	0
8						NA	0
9						NA	0
10						NA	0
11						NA	0
12						NA	0
13						NA	0
14						NA	0
15						NA	0
16						NA	0
17						NA	0
18						NA	0
19						NA	0
20						NA	0
21						NA	0
22						NA	0
23						NA	0
24						NA	0
25						NA	0

GRND AVG: 113.025 AVG RANGE: 0.45
 UCL FOR INDIVIDUAL RANGES 2.45025

TI-NHTSA 002707

09. 25. 91 10:37 AM

FUE

September 25, 1991

To: Donna Moynihan 12-27

From: Beth Kill 10-16

Subject: Material Confirmation
TSL Request # 110832

Sample Description:

P/N 74176-1 Seal Teflon and Kapton

Results:

DSC results confirm the presence of Teflon by the characteristic melt point at 316 - 319 degrees C.

Kapton is confirmed in the seal by the IR scan. It shows the same characteristic absorbances exhibited by the sample known to be Kapton. See the enclosed scan.

Finally, the Teflon is confirmed to be on the surface of both sides of the seal by EDAX analysis.

Regards,

Beth X3069

TI-NHTSA 002708

CONCENTRATION _____

THICKNESS _____

ASE _____

MARKS _____

SCAN MODE

ACCY. ☐

SURVEY ☐

HI ENERGY ☐

CAL ☐

RESOLUTION ☒

OPERATOR *JS*

DATE *3/1/77*

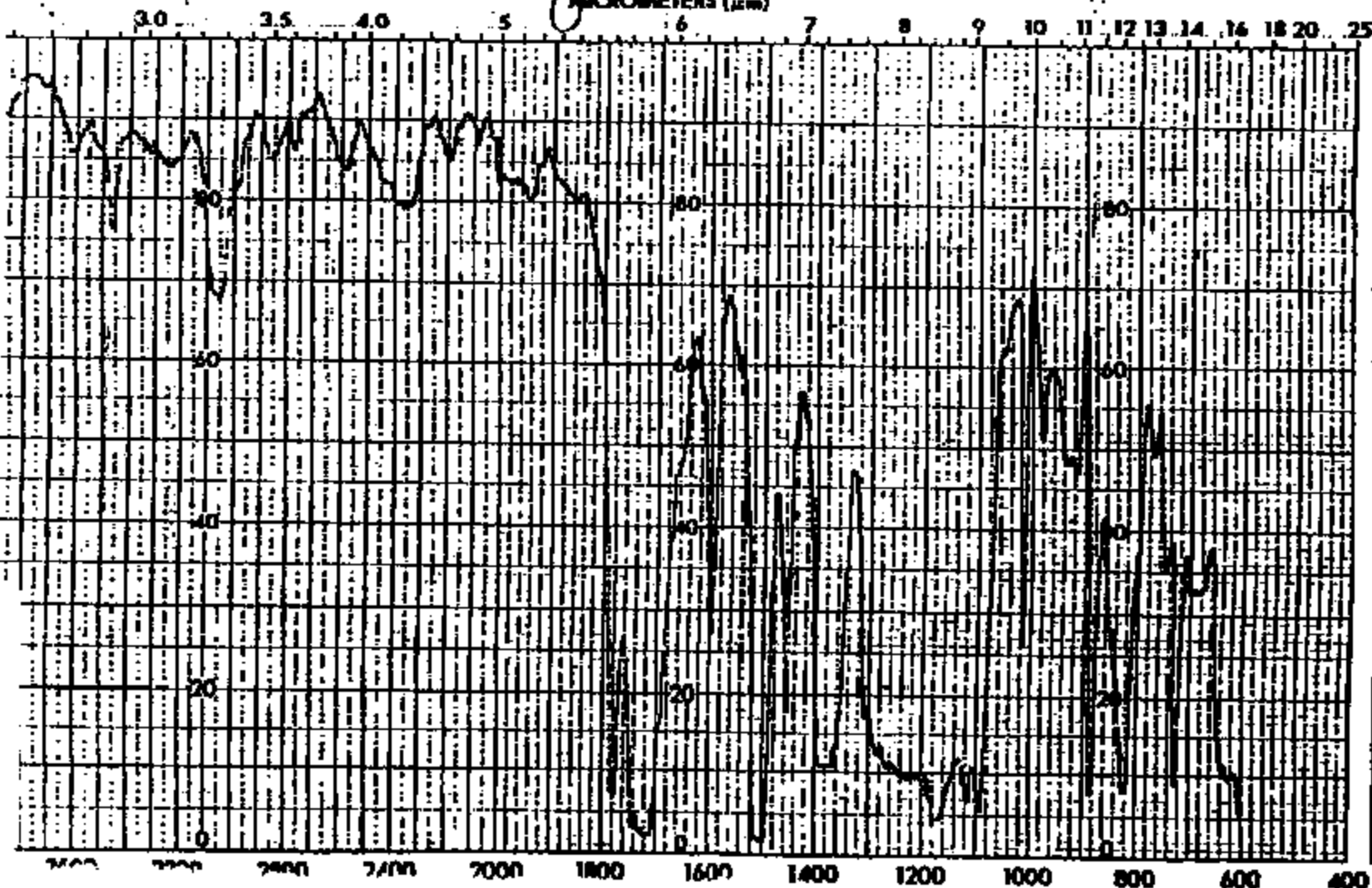
SPECTRUM NO. _____

SAMPLE *DUPONT KAPTON*

100EN099

ORIGIN _____

MICROMETERS (μ m)



SAMPLE

SPECTRUM NO.

08.25.81 10:37 AM

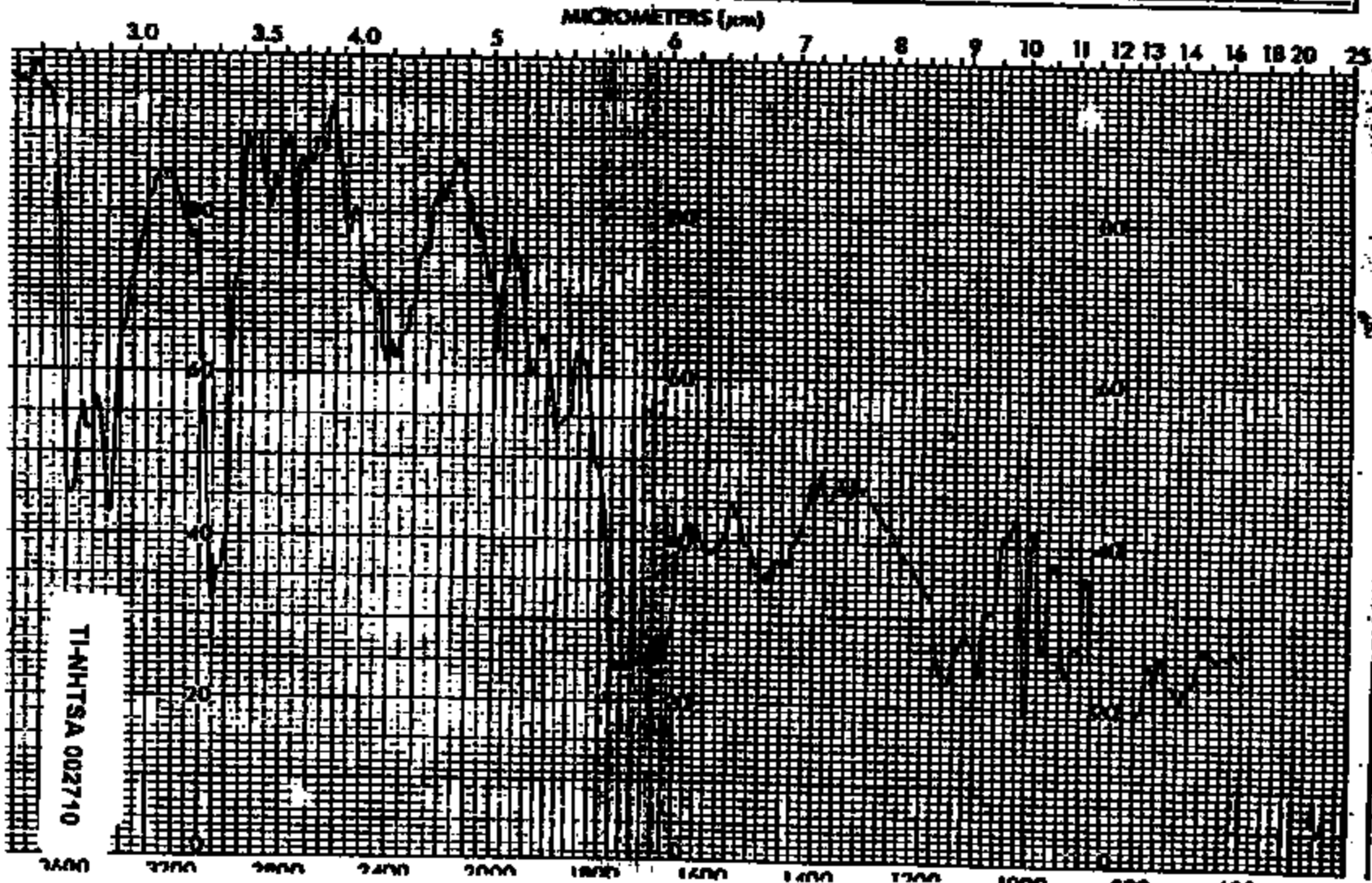
P05

TLNHTSA 002709

NO. 007-1493

PERKIN-ELMER

CONCENTRATION _____	SCAN MODE	ACCY. ☐	SURVEY ☐	SPECTRUM NO. _____
THICKNESS _____		HI ENERGY ☐	CAL. ☐	SAMPLE <u>110932</u>
SE _____		RESOLUTION ☒		<u>Kapton - Teflon</u>
WAVES _____	OPERATOR <u>EX</u>	DATE <u>9/23/91</u>	ORIGIN _____	



08-25-91

10:37 AM

SAMPLE

SPECTRUM NO.

208

TEXAS INSTRUMENTS, INCORPORATED

ISR SUBMISSION

TO FORD MOTOR COMPANY

FOR PART NUMBER F2VC-9F924-AB

NEXT GENERATION SPEED CONTROL

SEPTEMBER 26, 1991

TI-NHTSA 002711

September 25, 1991

To: Donna Noynihan 12-27
From: Beth Kill 10-16
Subject: Material Confirmation
TSL Request # 110832

Sample Description:

P/N 74176-1 Seal Teflon and Kapton

Results:

DSC results confirm the presence of Teflon by the characteristic melt point at 316 - 319 degrees C.

Kapton is confirmed in the seal by the IR scan. It shows the same characteristic absorbances exhibited by the sample known to be Kapton. See the enclosed scan.

Finally, the Teflon is confirmed to be on the surface of both sides of the seal by EDAX analysis.

Regards,

Beth X3069

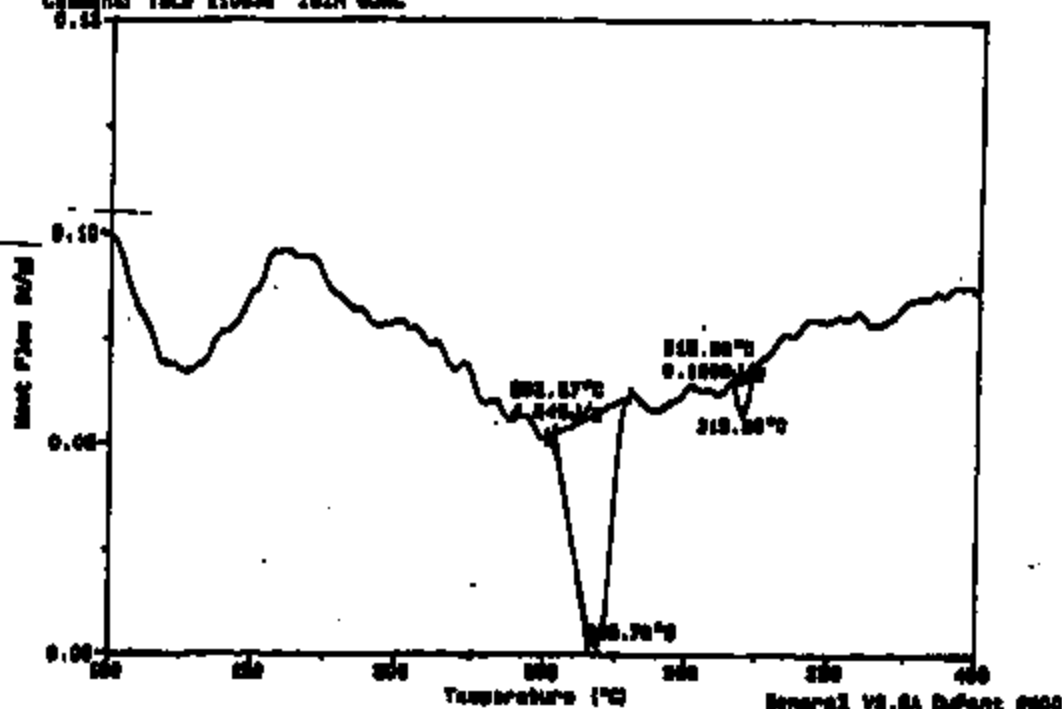
08/25/91 10:27 AM

P07

Sample: 78475-1 KAPTON TAPE
Size: 3.5600 mg
Method: KAPTON
Comments: TML 110000 1000 0.00

DSC

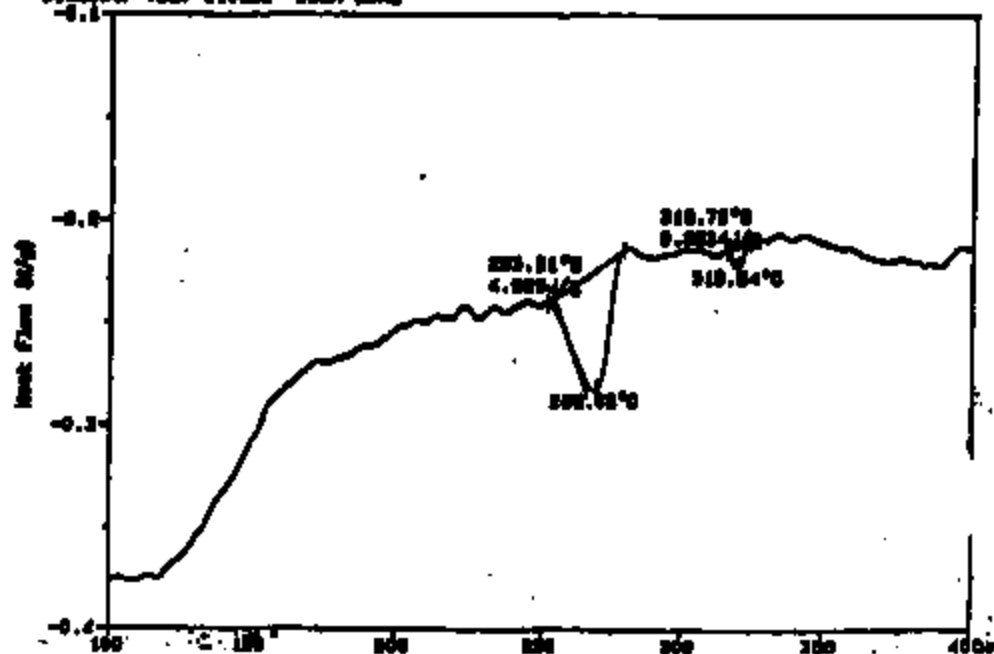
File: DSC100.00
Operator: N. HORN
Run Date: 08/25/91 08:18



Sample: 78475-2 KAPTON TAPE
Size: 3.5600 mg
Method: KAPTON
Comments: TML 110000 1000 0.00

DSC

File: DSC100.00
Operator: N. HORN
Run Date: 08/25/91 08:18

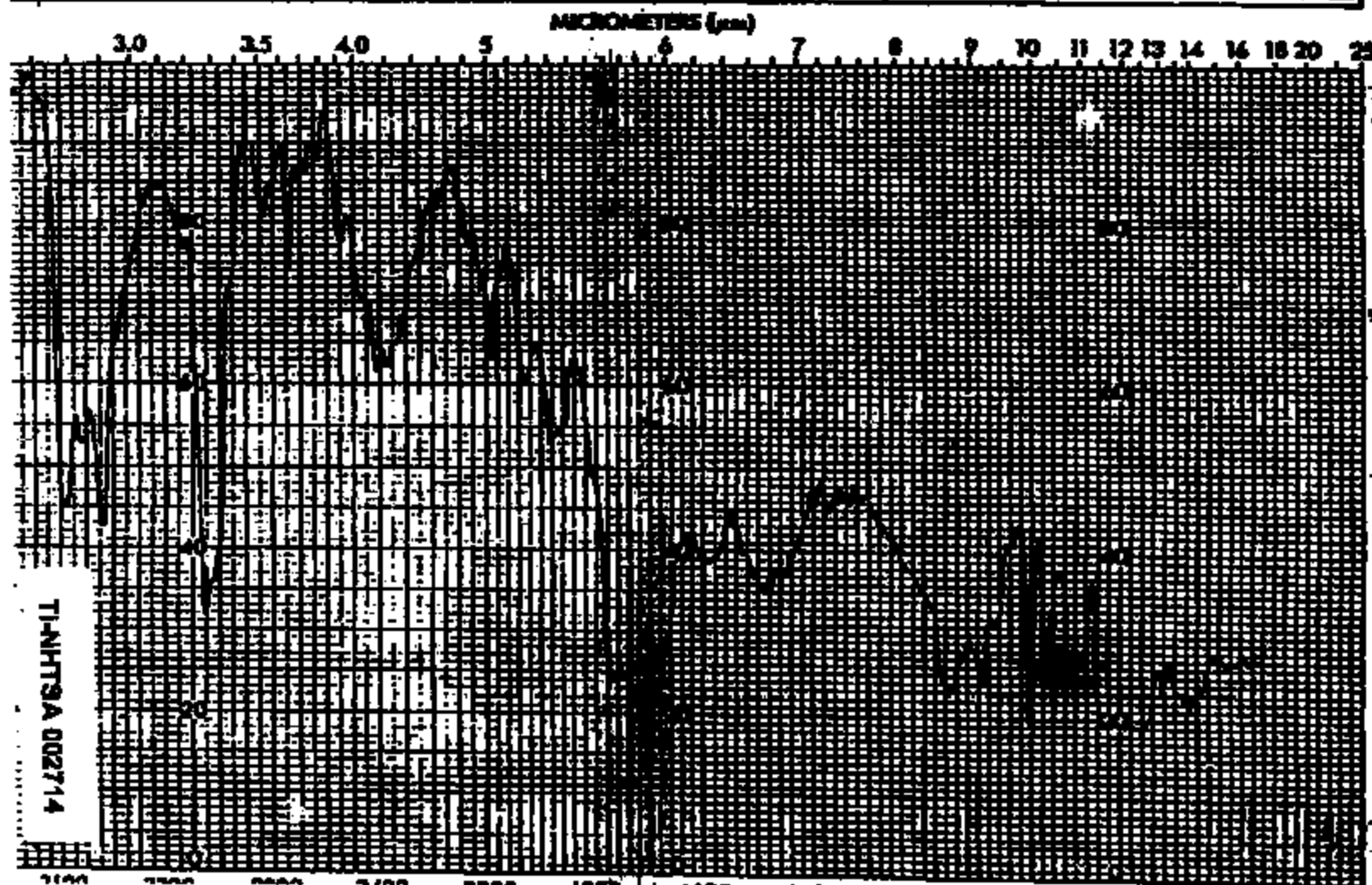


TI-NHTSA 002713

NO. 007-1493

PERKIN-ELMER

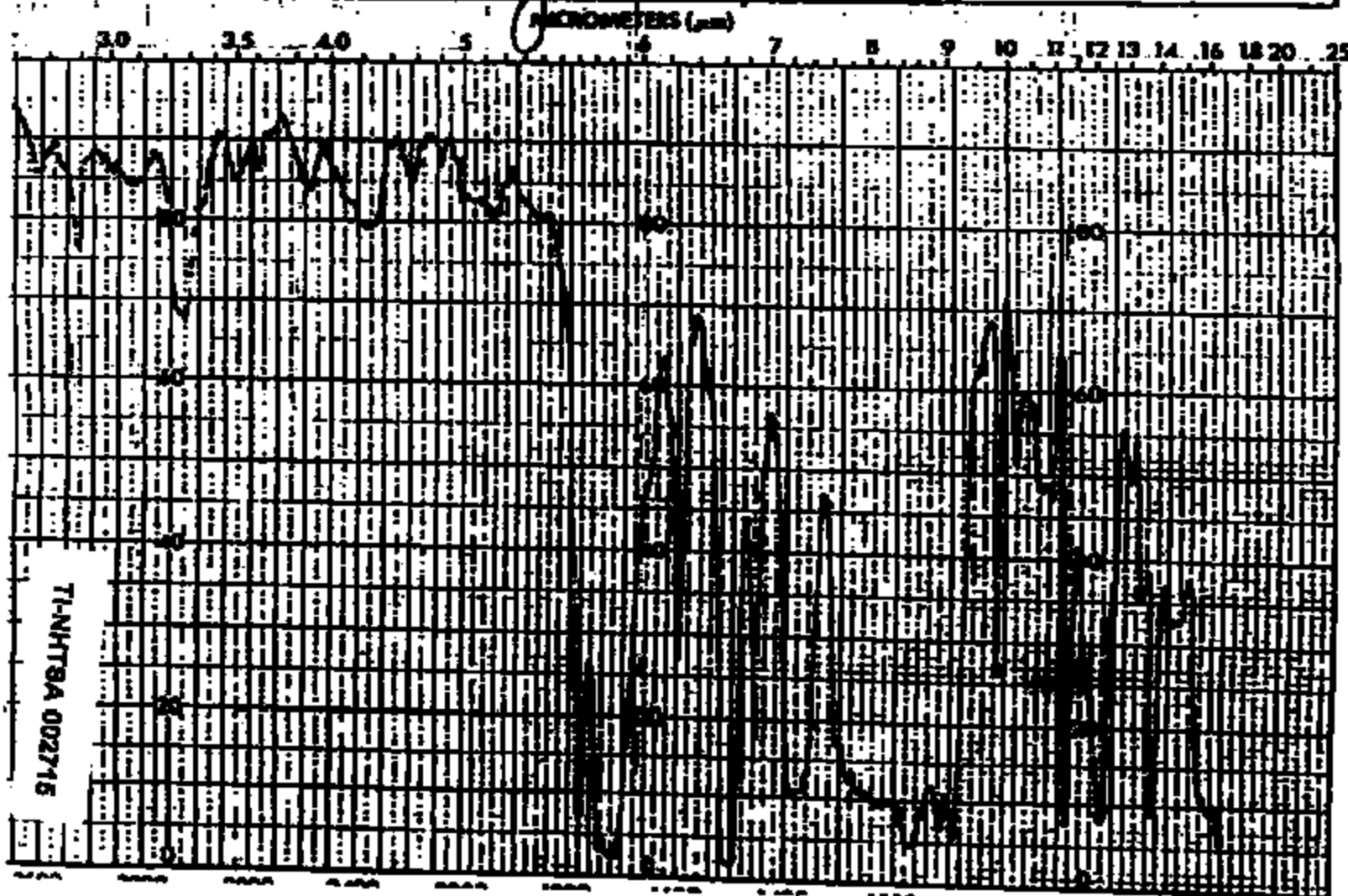
CONCENTRATION _____	SCAN MODE	ACCY. ☐	SURVEY ☐	SPECTRUM NO. _____
WESS _____		HI ENERGY ☐	CAL ☐	SAMPLE <u>110932</u>
IR _____		RESOLUTION ☒		<u>Kapton - Teflon</u>
UNITS _____	OPERATOR <u>EL</u>	DATE <u>9/23/91</u>	ORIGIN _____	



SPECTRUM NO.

P08

NITRATION LESS RS	SCAN MODE	ACQY. ☐	SURVEY ☐	SPECTRUM NO.
		IR ENERGY ☐	CAL. ☐	SAMPLE <u>DIAMOND KAPTON</u>
		RESOLUTION ☒		<u>100EN099</u>
	OPERATOR <u>JS</u>	DATE <u>3/1/77</u>	ORIGIN	



SAMPLE

SPECTRUM NO.

09.26.81 10:37 AM

908

74176

PT54

SEAL

REV. B

74176

M

.232
/100.234
/100

M

.005
/100NOTE:
1.001 MAX. DIMS ALLOWED

CERTIFIED PRINT
 Part Made to This Print Under Control of
 ENG. STD. E9898 REV. E
 Date JUL 1 1991
 RECEIVED FROM THE USER AND THE ASSOCIATED
 COMPANY (FURNISH A 1/2 IN. X 1/2 IN. X 1/2 IN.
 LABEL OF THE MATERIAL FROM WHICH
 THE PART WAS MADE TO THE USER'S
 CUSTODY TO VERIFY THE PART'S QUALITY.

74176-1

MARKS FROM 27225-1 (STENO)

D

PART NO.

MATERIAL

REV.

VS

0131 01-1 1924 1991 P3H P372P-25/109

BY

JLB 2-1-84

CH

K.H. 2-13-84

TEXAS INSTRUMENTS
INCORPORATED

KILGON

REV.
DATE

P3H P372P-25/109

74176

TI-NHTSA 002715

No. 147671

Supplier Request for Engineering Approval

DATE November 3 19 91

SUPPLIER TO COMPLETE	
SUPPLIER NAME AND ADDRESS Texas Instruments Incorporated, 34 Forest Street, Attleboro, MA 02703	
FORD AND/OR SUPPLIER PART NAME AND PART NUMBER OF ASSEMBLY AND ITS COMPONENTS SWITCH AST - SPEED CONTROL DEACTIVATE (delta) F2VC-9F924-AB	BUSINESS CONTROL CODE NUMBER (SEE FORM 16-107) 000 CORRELATION AFFECTED ☐ YES ☒ NO CRITICAL ITEM ☐ YES ☒ NO
CHANGE: ☐ DESIGN ☒ COMPOSITION ☐ PROCESSING DESCRIPTION The proposed change involves use of a blue-colored environmental seal in place of the present seal, which is reddish in color with a black stripe on its outer circumference. The blue seal is identical in dimensions and material, except for pigmentation. Presently, only the black stripe differentiates the pass-car seal, which has slightly different dimensions from other similar seals.	
EFFECT OF CHANGE No effect on device performance or cost. Benefit is deduced possibility of assembly error.	
INTERCHANGEABILITY AFFECTED ASSEMBLY ☐ YES ☒ NO COMPONENTS ☐ YES ☒ NO	TOOLING OR FACILITY CHANGES REQUIRED ☐ YES ☒ NO IF YES, COST EFFECT \$
TIME TO INCORPORATE CHANGE AFTER APPROVAL Approx. 4-6 weeks.	PIECE COST AFFECTED ☐ YES ☒ NO IF YES, COST EFFECT \$
WILL INCORPORATION OF CHANGE AFFECT SHIPPING SCHEDULE? ☐ YES ☒ NO	SIGNATURE <i>A. M. [Signature]</i> 911105 SELLER REPRESENTATIVE
PRODUCT ENGINEERING TO COMPLETE	
PCR IN PROCESS ☒ APPROVED ☐ REJECTED BY <i>B.T. Pease</i> DATE <i>9/11/06</i>	CONCURRED BY <i>[Signature]</i> DATE <i>9/11/06</i>
BLANKET APPROVAL GRANTED FOR SUBSEQUENT CHANGES WHICH ARE SAME AS DESCRIBED ABOVE ☐ YES ☒ NO	SAMPLE OF CHANGED COMPONENT REQUIRED ☐ YES ☒ NO
REASON FOR REJECTION OR QUALIFYING CONDITIONS OF ACCEPTANCE:	
TI-NHTSA 002718	
* This approval is granted upon the understanding that it is advisory in nature and in no manner changes the Seller's original responsibility for insuring that all characteristics, designated in the applicable engineering specifications and/or inherent in samples as originally tested and approved, are maintained. Seller accepts full responsibility for the changes or types of changes listed above; and should such changes result in less satisfactory performance than experienced with the originally approved item, Seller will fully reimburse the Buyer for all expenses incurred to correct the deficiency.	

Alert Detail
在表中可找到所有报警

PRINT DATE/TIME: 01/10/11 09:39
PAGE: 1

ALERT NUMBER
A70166193

ON-PER ACTIVITY: HCSO CLASSIC PRO (LNCB)
ORIGINATOR: DEANE, D. F.
CITY: SACRED

TYPE: (U) USE PPM
DATE: 01/10/02
PHONE: 32-37955
NOTICE NO:

STATE: A
LOCATION: NW 5001, ELDOREO, D
NO NOTICE:

ALERT DESC: RECALL TEXAS INSTRUMENTS TO SHIP SPEED CONTROL REDUNDANT
DEACTIVATION SWITCH FZVC-0924-AS, WITH EXCEPTION TO THE
PRODUCTS AFFECTED: 1992 LINCOLN TOWN CAR, CROWN VICTORIA, GRAND
MARQUIS WITH NEW GENERATION SPEED CONTROL.
MODEL CODES: CREA, CREA, CREA

PRODUCTS AFFECTED:

MODEL CODE:
PLANTS AFFECTED:
NPO CONCERN ENTL:
PROGRAM:
QTY:
EST INCRN VAR COST:
EST INCRN YTD COST:
UNIT MEASURE:
NPP CODE: DTS:

MODEL YEAR: 92

TIME: 900 EFFECTIVE IN: 000
EST INCRN TOOL COST: 0
EST INCRN FAC COST: 0
APPEARANCE:

INVALID:
OUT:
DISP: U
EST INCMN LGE COST: 0.00
WT EFFECT: 0.0000

AFFECTED PARTS

AFF PART NO: 060603
 SPEC: INTER.
 ACT:

AFF PART DESC:
NOTICE:
SUPPLY/LOCAL:
SUPPLINE:

AVAIL:

REL INP: 2
FUNC REGO:

***** FURTHER DESCRIPTION/ALERT RESOLUTION/REASON FOR REJECTION ETC. *****
 USERID: BPP2409
 ALERT DESC: ACTIVITY: NCOD ENTRY DATE: 01/10/02

USERID: BPPZ409
 ALERT MSG: ACTIVITY: MCON
 USING A MANUALLY LOADING SENSOR CRIMPING MACHINE VERSUS THE
 AUTOMATIC IN LINE LOADED CRIMPER. THE AUTOMATIC CRIMPER HAS
 BEEN DETERMINED TO SAVE A YET TO BE DEFINED EFFICIENCY THAT
 RESULTS IN PART FAILURE TO MEET THE REQUIRED NUMBER OF CYCLE
 IN THE IMPULSE TEST. THE SUPPLIER IS GIVEN A 90 DAY PERIOD
 TO RESOLVE THE ISSUE. THE MANUALLY CRIMPED PARTS PASS THE
 TEST. THIS DEVIATION PERMITS INCORPORATION OF THE -AB
 LEVEL SWITCH AND DELETION OF THE INTERIM -AB SWITCH FOR A
 COST REDUCTION OF 3.92. THE -AB SWITCH IS PIA TO END ITEM

ENTRY DATE: 9/10/02

USERID: BFPZ409
 ALERT DESC: ACTIVITF: NCDD
 REPORTING VALVES FZAC-Z8091-AA, FZVC-Z8091-CC, AND
 JUNCTION BLOCK FZAC-Z8091-CA

ENTRY DATE: 91/10/03

USERID: LAZ0404 ACTIVITY: NCOD
ALERT MSG: OK, IMPVR. APPROVAL REQ'D. IF PVMS IS AFFECTED. LAZ

ENTRY DATE: 91/10/04

USERID: DJN5248
ALERT MSG: ACTIVITY: NCND

ENTRY DATE: 01/10/06

- NOTE -

[illegible]

Journal of Management Education 32(10) 1039-1054

Abstract

[illegible]



INCORPORATED
MATERIALS AND CONTROLS GROUP
LITTLE ROCK, AR 01703 ☐ VERSAILLES, KY 40383
☐ JOHNSON CITY, TN 37601 ☐ CENTRAL LAKE, MI 48022

Shipping Order Sept. 26, 1991

DATE: ~~XXXXXXXXXX~~ S.O. # 214054

REF. # DATE SHIPPED 9/28/91

SHIPPED VIA: 61 Overnight Airplane
490364350 01
USE (CHECK ONE)

BHP
TO:

ACK: Joe Salasch
TI Field Sales Mgr.
33737 W. 12 Mile Road
Farmington Hills, Mich 48331

CHARGE
TO:

- ☐ SCRAP SALES
☐ SALE OF ASSETS
☐ OUTSIDE PROCESSING
☐ TRANSFERS BETWEEN TI LOCATIONS
☐ EXPENSE MATERIAL
☐ OTHER, EXPLAIN:

DIV/ACCT. # CO:

QUANTITY	DESCRIPTION/PART #/PC	UNIT PRICE	TOTAL
1	ISIR Submission Package	n/a	
6	77P611-1 Samples/Pressure Switches	n/a	

Rita
107
7/26/91

GROSS WEIGHT	NO. OF CONTAINERS	ORIGINATOR'S NAME (TYPED)	ORIGINATOR'S SIGNATURE
6#	1	Klaime Ross MS12-27	

5-01548 524

ORIGINATOR COPY

TI-NHTSA 002727

**INCORPORATED**

MATERIALS AND CENTRAL SCULPT

☐ ATTLEBORO, MA 02763 ☐ VERMILION, KY 40383
☐ JOHNSON CITY, TN 37604 ☐ CENTRAL LAKE, MI 49832

Shipping Order Sept. 26, 1991

DATE: XINCHONGXINXIN a.c. # 214054

REF. # _____ DATE SHIPPED _____ / ____ / ____

SHIPPED VIA: Overnight

USE (CHECK ONE)

TO:

Att: Joe Schuck
TI Field Sales Eng.
33737 W. 12 Mile Road
Farmington Hills, Mich 48331

CHARGE
TO:

☐ SCRAP SALES
☐ SALE OF ASSETS
☐ OUTSIDE PROCESSING
☐ TRANSFERS BETWEEN TI LOCATIONS
☐ EXPENSE MATERIAL
☐ OTHER, EXPLAIN: _____

DIV/ACCT. # _____ GC _____

QUANTITY	DESCRIPTION/PART #/PC	UNIT PRICE	TOTAL								
1	ISIR Submission Package	n/c									
6	77PSL2-1 Samples/Pressure Switches	n/c									
<table border="1"> <tr> <td>GROSS WEIGHT</td> <td>NO. OF CONTAINERS</td> <td>ORIGINATOR'S NAME (TYPED)</td> <td>ORIGINATOR'S SIGNATURE</td> </tr> <tr> <td></td> <td></td> <td>Elaine Rose MS12-27</td> <td><i>Elaine Rose</i></td> </tr> </table>				GROSS WEIGHT	NO. OF CONTAINERS	ORIGINATOR'S NAME (TYPED)	ORIGINATOR'S SIGNATURE			Elaine Rose MS12-27	<i>Elaine Rose</i>
GROSS WEIGHT	NO. OF CONTAINERS	ORIGINATOR'S NAME (TYPED)	ORIGINATOR'S SIGNATURE								
		Elaine Rose MS12-27	<i>Elaine Rose</i>								

3-816146 6444

ACCOUNTS RECEIVABLE COPY

TI-NHTSA 002728

TEXAS INSTRUMENTS, INCORPORATED

ISR SUBMISSION

TO FORD MOTOR COMPANY

FOR PART NUMBER F2VC-9F924-AB

NEXT GENERATION SPEED CONTROL

SEPTEMBER 26, 1991

TI-NHT8A 002729

**TEXAS INSTRUMENTS, INCORPORATED ISR SUBMISSION
TO FORD FOR PART NUMBER
F2VC-9F924-AB**

TI-NHTSA 002730

Pass Car

77PS PARTS LIST

Part Name

Part Number

SWITCH ASSEMBLY

Base (Black) for LT

✓46515-1

TEST *

Date Sent

Date Rec.

Base (Brown) for PC

✓46515-2

110821

7-17

Stationary Terminal

✓36888-1

110822

7-17

Movable Terminal

✓36887-1

110823

7-17

Spring

✓36889-1

110824

7-17

Movable Contact

✓74408-1

110825

7-25

Rivet

✓74171-1

110826

have

110827

have

SENSOR ASSEMBLY

Hexport

✓36900-1

110828

have

Cup for LT

✓27288-1

110829

have

Cup for PC

✓27713-1

110830

have

Gasket

✓24353-1

110831

7-12

8-5

Seals (3)

✓74176-1

110832

7-25

Washer

✓27639-1

110833

have

Converter

✓27406-1

110834

have

Spacer

✓73958-1

110835

have

Disc for LT

N/A36656-29

Disc for PC

N/A36656-27

FINAL ASSEMBLY:

Switch Assembly

Sensor Assembly

Crimp Ring

✓74797-1

110836

have

Environmental Seal

✓74247-2

110837

have

Transfer Pin

✓74078-0.149

110838

have

Thread cap

✓74179-2

110839

have

Cas Asn

27370-1

110840

27370-2

110841

27375-1

110842

TI-NHTSA 002731

TEST NO. 110825

TECHNICAL SERVICE LABS

TEST NO. 110825

REPORT OF RESULTS:

A. ✓ Aul
7/25/91

DATE RECEIVED _____

DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURES USED			

*PCC I.D.

MC-325	TM-431	JOCY-128	FACIL-514
PC-127	WIRE-432	CLKE-122	FACIL-521
VERB-168	EPD-821	CAN-854	FACIL-531
AFCC-483	PEP-822	AD DEV-286	STAFF-855
IMO-430	CSD-835	EMCD-877	

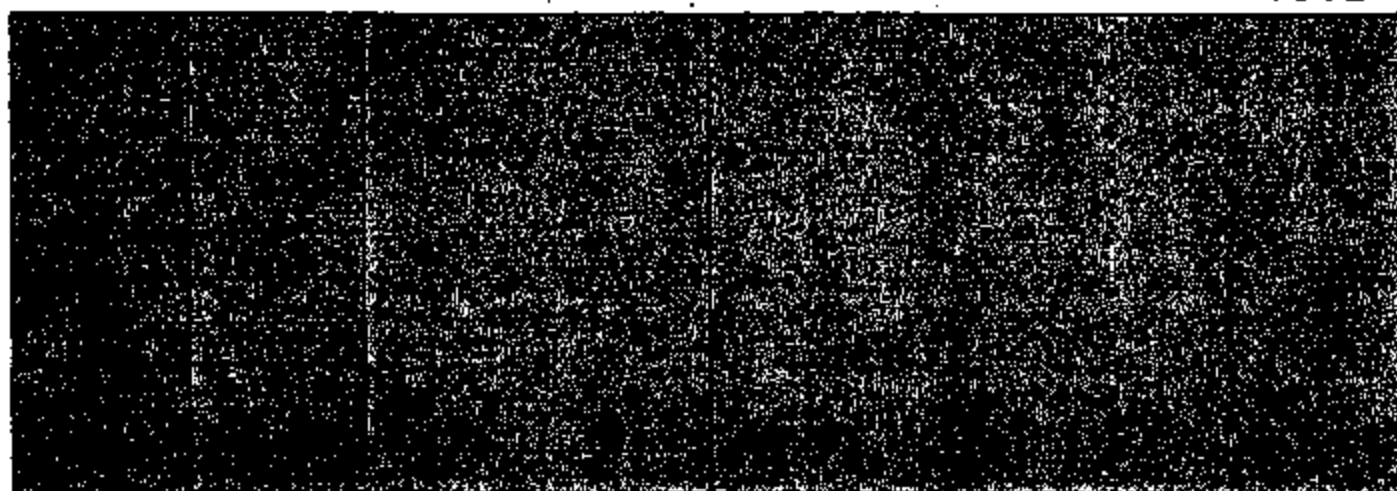
DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TI-NHTSA 002732

TEST NO. 110824

TECHNICAL SERVICE LABS

TEST NO. 110824



REPORT OF RESULTS:

DATE RECEIVED _____

DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

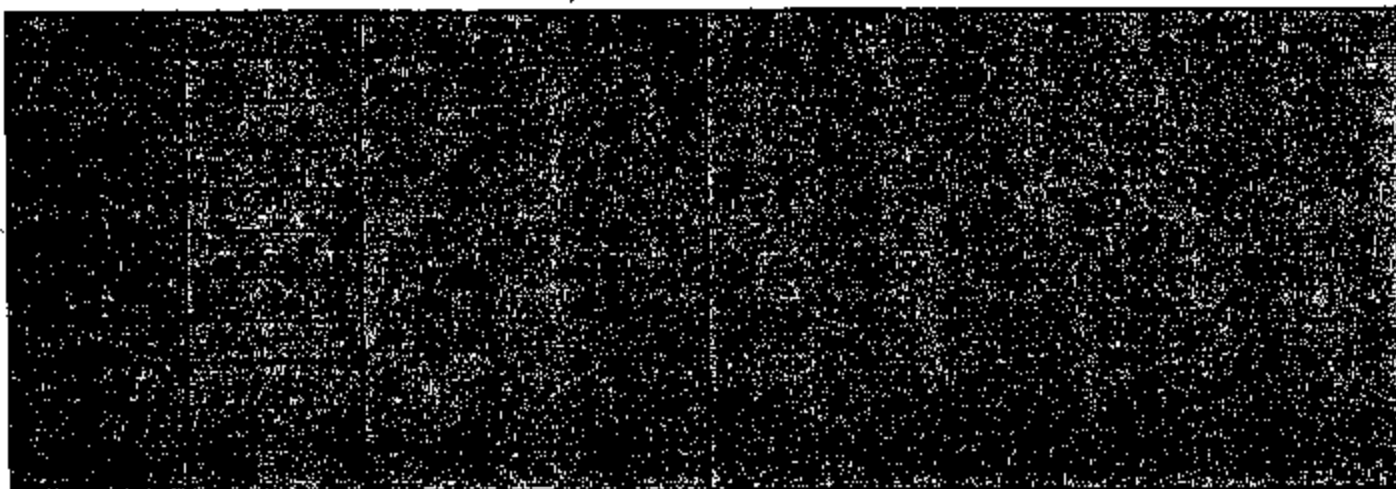
MC-325	TM-431	JOCY-128	FACIL-514
PC-127	WIRE-432	CLKE-122	FACIL-521
VERB-166	EPD-821	CAN-954	FACIL-531
AFCC-483	PEP-822	AD DEV-288	STAFF-856
IMD-430	CSD-835	EMCD-877	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TEST NO. 110823

TECHNICAL SERVICE LABS

TEST NO. 110823



REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC-325	TM-431	JOCY-128	FACIL-514
PC-127	WIRE-432	CLKE-122	FACIL-521
VERS-168	EPD-621	CAN-854	FACIL-531
AFCC-483	PEP-822	AD DEV-286	STAFF-866
IMO-430	CSD-835	EMCD-877	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TI-NHTSA 002734

7/18/91

Michael D. Miller

TEST NO. 110831

TECHNICAL SERVICE LABS

TEST NO. 110831

REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC LD.

MC-325	TM-431	JOCY-128	FACIL-514
PC-127	WIRE-432	CLKE-122	FACIL-521
VERS-168	EPD-821	CAN-954	FACIL-631
AFCC-483	PEP-822	AD DEV-285	STAFF-855
IMD-430	CSD-835	EMCD-877	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TI-NHTSA 002735

TEST NO. 110832

TECHNICAL SERVICE LABS

TEST NO. 110832

REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

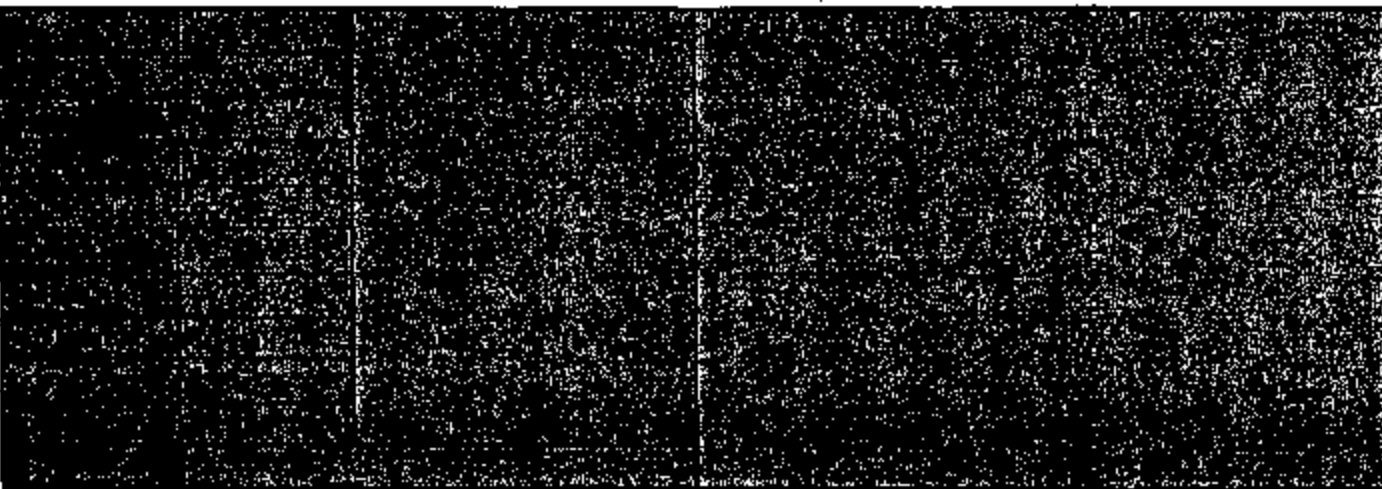
MC-325	TM-431	JOCY-128	FACIL-514
PC-127	WIRE-432	CLKE-122	FACIL-521
VERB-168	EPD-621	CAN-854	FACIL-531
AFCC-483	PEP-822	AD DEV-288	STAFF-856
IMD-430	CSD-835	EMCD-877	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TEST NO. 110822

TECHNICAL SERVICE LABS

TEST NO. 110822



REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC-325	TM-431	JOCY-126	FACIL-514
PC-127	WIRE-432	CLKE-122	FACIL-621
VERB-166	EPD-321	CAN-854	FACIL-531
AFCC-483	PEP-822	AD DEV-286	STAFF-655
IMD-430	CSD-635	EMCD-677	

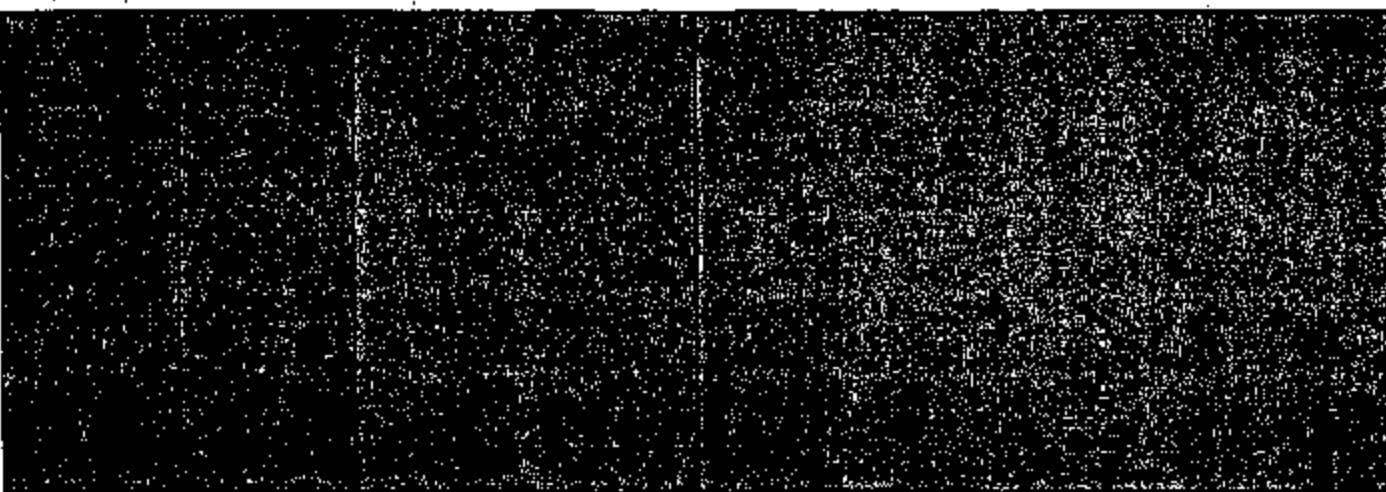
DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TI-NHTSA 002737

TEST NO. 110821

TECHNICAL SERVICE LABS

TEST NO. 110821



REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC LD.

MC-325	TM-431	JOCY-128	FACIL-514
PC-127	WIRE-432	CLKE-122	FACIL-521
VERS-188	EPD-821	CAN-954	FACIL-531
AFCC-483	PEP-822	AD DEV-286	STAFF-855
IMD-490	CSD-595	EMCD-877	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TI-NHTSA 002738

Pass Car

77PS PARTS LIST

Part Name

Part Number

SWITCH ASSEMBLY

		Test #	Date Sent	Date rec.
Base (Black) for LT	46515-1	110821	7-17	
Base (Brown) for PC	46515-2	110822	7-17	
Stationary Terminal	36888-1	110823	7-17	8-21
Movable Terminal	36887-1	110824	7-17	8-21
Spring	36889-1	110825	7-25	8-21
Movable Contact	74408-1	110826 have		
Rivet	74171-1	110827 have		

SENSOR ASSEMBLY

Hexport	36900-1	110828 have		
Cup for LT	27288-1	110829 have		
Cup for PC	27713-1	110830 have		
Gasket	74353-1	110831	7-12	7-29
Seals (3)	74176-1	110832	7-25	
Washer	27639-1	110833 have		
Converter	27406-1	110834 have		
Spacer	73958-1	110835 have		
Disc for LT	36656-29			
Disc for PC	36656-27			

FINAL ASSEMBLY:

Switch Assembly				
Sensor Assembly				
Crimper Ring	74797-1	110836 have		
Environmental Seal	74247-2	110837 have		
Transfer Pin	74078-0.149	110838 have		
Thread cap	74179-2	110839 have		

CAP A 3R	27370-1	110840
	27370-2	110841
	27375-1	110842

TEST NO. 110831

TECHNICAL SERVICE LABS

TEST NO. 110831

REPORT OF RESULTS:

DATE RECEIVED

7/11/91

DATE OUT

7/29/91 EKiD

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC-325
PC-127
VERS-188
AFCC-483
IMD-430TM-431
WIRE-432
EPD-821
PEP-822
CBD-635JOCY-128
CLKE-122
CAN-854
AD DEV-298
EMOD-877FACIL-514
FACIL-521
FACIL-531
STAFF-855

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TI-NHTSA 002740

Becky's GAGE
Split Ring

.3750 - 24UNF-2A

Go PD .3468

Rick's GAGE
Split Ring

.375 - 24UNF-2A

Go PD .3468

Rick's gage
acc./rej. one
"side" use.
the
other

D

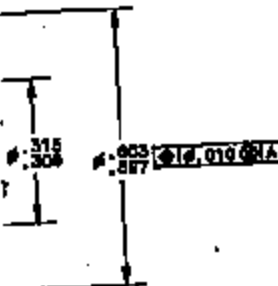
C

B

A

REVISIONS		DATE	APPROVED
DESCRIPTION			
TYPE	ON 188540 J.D.M.	2-19-90	Go 3000

HE CONCAVE



CERTIFIED PRINT
Parts Made To This Print Must Conform To
ENG. STD. E9898 REV. E
Date MAY 9 1991
VERIFY THIS PRINT FOR SIZE INFORMATION ONLY
TOLERANCES ARE TO BE USED AS A GUIDE
UNLESS OTHERWISE SPECIFIED
OR AS NOTED BY THE DRAWING OR ANY OF THE ATTACHED
COMPANIES OR INDUSTRY OWNED EQUIPMENT.

NOTE:

1. DIMENSIONS
2. PARTS TO B
3. FINISHED IN DISCRETE
4. THREAD MAX TOLERANCE ON FINISH
5. .015" MAX WHEN SHIT



TEXAS INSTRUMENTS
ATTENTION: MANUFACTURING

ADDITIONAL PRODUCTS
COUNCIL

P. TITLE

MODIFIED SAE J512
HEX PORT

SIZE	CODE IDENT NO.	
C	82647	36900
SCALE		SHEET

No. 147671

Supplier Request for Engineering Approval

DATE November 5 19 91

SUPPLIER TO COMPLETE SUPPLIER NAME AND ADDRESS Texas Instruments Incorporated, 34 Forest Street, Attleboro, MA 02703		REVISION HISTORY DATE REVISION (SEE FORM 74-107) 000 CONTROL ITEM AFFECTED ☐ YES ☒ NO CRITICAL ITEM ☐ YES ☒ NO	
FOR AND/OR SUPPLIER PART NAME AND PART NUMBER OF ASSEMBLY AND ITS COMPONENTS SWITCH ASY - SPEED CONTROL DEACTIVATE (delta) F2VC-9F924-AB			
CHANGE: ☐ DESIGN ☒ COMPOSITION ☐ PROCESSING ☐ DESCRIPTION			
The proposed change involves use of a blue-colored environmental seal in place of the present seal, which is reddish in color with a black stripe on its outer circumference. The blue seal is identical in dimensions and material, except for pigmentation. Presently, only the black stripe differentiates the pass-car seal, which has slightly different dimensions from other similar seals.			
EFFECT OF CHANGE: No effect on device performance or cost. Benefit is reduced possibility of assembly error.			
INTERCHANGEABILITY AFFECTED ASSEMBLY ☐ YES ☒ NO COMPONENTS ☐ YES ☒ NO		TOOLING OR FACILITY CHANGES REQUIRED ☐ YES ☒ NO IF YES, COST EFFECT \$	
TIME TO INCORPORATE CHANGE AFTER APPROVAL Approx. 4-6 weeks.		PIECE COST AFFECTED ☐ YES ☒ NO IF YES, COST EFFECT \$	
WILL INCORPORATION OF CHANGE AFFECT SHIPPING SCHEDULE? ☐ YES ☒ NO		SIGNATURE <u><i>John J. ...</i></u> 9/11/06 TITLE <u>...</u>	
PRODUCT ENGINEERING TO COMPLETE			
FOR IN PROCESS ☒ APPROVED ☐ REJECTED		BY <u>B.F. Pease</u> DATE <u>9/11/06</u>	
PLANNED APPROVAL GRANTED FOR SUBSEQUENT CHANGES WHICH ARE SAME AS DESCRIBED ABOVE ☐ YES ☒ NO		CONCURRED BY <u><i>B.J. ...</i></u> DATE <u>9/11/06</u> SAMPLE OF CHANGE COMPONENT NUMBER ☐ YES ☒ NO	
REASON FOR REJECTION OR QUALIFYING CONDITIONS OF ACCEPTANCE 			

TEXAS INSTRUMENTS

Shipping Order

INCORPORATED

MATERIALS AND CONTROLS GROUP

- ☐ ATTLEBORO, MA 01903 ☐ VERSAILLES, KY 40383
☐ JOHNSON CITY, TN 37601 ☐ CENTRAL LAKE, MI 48822

DATE: 1/1

S.O. #

214084

REF. #

DATE SHIPPED

12/1/71

SHIPPED VIA

6F Airborne

USE (CHECK ONE)

- ☐ SCRAP SALES
☐ SALE OF ASSETS
☐ OUTSIDE PROCESSING
☒ TRANSFERS BETWEEN TI LOCATIONS
☐ EXPENSE MATERIAL
☐ OTHER, EXPLAIN: _____

490366730

DIV/ACCT. #

CC:

SHIP TO:

FORD MOTOR COMPANY
1700 Oakwood Blvd.
P. O. Box 1586-D-2815
Dearborn, Michigan 48121

Attn: Mark Scheller

CHARGE TO:

QUANTITY	DESCRIPTION/PART #/PC	UNIT PRICE	TOTAL
1	ISR Supplement Pkg 6 Bases	N/C	
<i>Rate</i> <i>1001</i> <i>12/20/71</i>			
GROSS WEIGHT 3#	NO. OF CONTAINERS 1 CTN	ORIGINATOR'S NAME (TYPED) Elaine Rose MS 12-27	ORIGINATOR'S SIGNATURE

5-01010 5M4

ORIGINATOR COPY

TI-NHTSA 002743

04/09/91 03:34 PM

04/09/91 03:34 PM

AT-04/09/91 03:34 PM

11 9, 1991

Andy McGuire
Mike DeMa

to: Marti
Gar
C
You

to: Joe

to: F

ruce
Ann.

at the a
the ride
discussio
tolerance
want to
the 57Ps
then
can
start
to
rather
was p
why the
sequa
once
he
di

and on
much
that
the
and up advisor had some questions about
that
I have
will we
being this
much
more
like
ating
information with
er.
servicing letter
file,
This letter must be done very

NEVER ON SPEC.

TI-NHTSA 002744

INITIAL SAMPLE WARRANT

No. 112384

PART INFORMATION

Part Name NEXT GENERATION SPEED CONTROL

Part Number F2VC-9F924-A8

Control Item ☒ Yes ☐ No Engineering Change Level G

Date 4-11-91

Engineering Change Authorization BRUCE PACE

Date

Shown on Drawing No. F2VC-9F924-A8

Part Weight 062

kg

Reason for Initial Sample:

- | | | |
|---|--|--|
| ☐ Initial Submission | ☐ Change in Optional Construction or Material | ☐ Process Change |
| ☐ Engineering Change(s) | ☐ Additional, Replacement, or Refurbished Tooling | ☐ Change in Subcontractor or Source |
| ☐ Tooling Transfer | ☒ Correction of Discrepancy (Resubmission No. <u>SEE BELOW</u>) | ☐ Parts Produced at Additional Location |
| ☐ Other - Please Specify | | |

SUPPLIER INFORMATION (Manufacturing Location)

Supplier Name TEXAS INSTRUMENTS

Street Address 34 FOREST STREET

City ATTLESBORO

State MA

Postal Code 02703

Country USA

Supplier Mfg. Location Code - DUNS TQ97K

Customer Assigned FORD MOTOR CO - BED

CUSTOMER INFORMATION

Customer Name FORD MOTOR CO - BED

Buyer FRED HENDERSHOT

Buyer Code 165

Purchase Order Number

Sample Acceptance Level 2

Application NEXT GENERATION SPEED CONTROL

RESULTS

The results for dimensional measurements ☒, material tests ☒, and functional (EE) tests ☒ meet all drawing and specification requirements ☒ Yes ☐ No

Inspection Checklist

- | | | |
|--|--|--|
| ☐ Checked Print | ☐ Material Test Results | ☐ Control Plan |
| ☐ Auxiliary Drawings/Sketches | ☐ Certifications | ☐ Process Capability Results |
| ☐ Correct Number of Samples | ☐ Inspection Report | ☐ Statistical Process Control |
| ☐ Supporting Documentation | ☐ Process Flowchart | ☐ First Article Inspection Report |

Supporting documentation requirements are specified on drawing.

COMMENTS

FOR SUPPLEMENTARY DIMENSIONAL TESTING TO CLOSE OUT ALERT NO. A10166183.

ALSO, FOR THE DIMENSIONAL DIMENSIONS. PART PARTIALLY APPROVED ON

12/28/91

INSPECTION

The results of the inspection are representative of our parts and have been made to the specific customer requirements. The results of the inspection are representative of our parts and have been made to the specific customer requirements. The results of the inspection are representative of our parts and have been made to the specific customer requirements.

Signature [Signature] Title QA ENGINEER

Date 12/28/91 Phone No. 508-699-1719

Approved ☒ Rejected ☐

Date 1/1/92

TEXAS INSTRUMENTS



Ford Motor Company
17000 Oakwood Blvd.
P.O. Box 1586-D-2015
Dearborn, Michigan 48121

September 27, 1991

Attn: Mr. Mark Scholler

Subj: Initial ISR Submission
Ford Part Number F2VC-9F924-AB
Pass Car Series

Ref: My September 20, 1991 Telephone Call

Dear Mark,

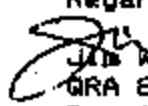
Enclosed, please find our initial ISR submission for the NOSC deactivation switch, Ford part number F2VC-9F924-AB. The submission includes complete product validation testing which is enclosed with the documentation.

We noted one discrepancy during the dimensional analysis. Dimension 1.85 - 2.06 was inadvertently transferred in error from the envelope drawing to the component drawing, resulting in the one out of dimension measurement (2.699). Sample bases with the corrected dimension will be forwarded to you within three weeks.

We noted that the pass car print does not indicate any significant characteristics, and therefore, no PIST/PIPC data is required. However, we intend to provide PIST/PIPC data on actuation, release, and thread specifications similar to what was provided on the F3TA-9F924-AA light truck ISIR submission, and forward the data to you.

Please let me know if you have any questions or if I may be of any further assistance.

Regards,


Jim Matt
GRA Engineer
Precision Controls Department
Control Products Division

cc: Dave Czarn, MS 12-29; Charlie Douglas, MS 12-33
Andy McGuirk, MS 12-27
Joe Schuck, TI Farmington Hills, Michigan

encl: ISIR submission

TEXAS INSTRUMENTS



Ford Motor Company
17000 Oakwood Blvd.
P.O. Box 1586-D-2015
Dearborn, Michigan 48121

January 10, 1992

Attn: Mr. Mark Scholler

Subj: ISIR Submission (Component Material Change)
Ford Part Number F2VC-9F924-AB
Pass Car Series

Ref: SREA No. 147671

Dear Mark,

Enclosed, please find our ISIR submission to document the environmental seal material change for the NGSC deactivation switch, Ford part number F2VC-9F924-AB. The submission includes a copy of the approved Supplier Request For Engineering Approval (SREA) no. 147671.

Please let me know if you have any questions or if I may be of any further assistance.

Regards,


Jim Watt

URA Engineer
Precision Controls Department
Control Products Division

cc: Dave Czarn, MS 12-29; Charlie Douglas, MS 12-33
Andy McGuirk, MS 12-27
Steve Majors, TI Farmington Hills, Michigan

encl: ISIR submission

INITIAL SAMPLE WARRANT

No. 112384

PART INFORMATION

Part Name Next Generation Speed Control Part Number F2VC-9F924-AB
Control Item ☐ Yes ☐ No Engineering Change Level _____ Date _____
Engineering Change Authorization Bruce Pease Date _____
Shown on Drawing No. F2VC-9F924-AB Part Weight .062 kg

Reason for Initial Sample:

☐ Initial Submission ☒ Change in Optional Construction or Material ☐ Process Change
☐ Engineering Change(s) ☐ Additional, Replacement, or Refurbished Tooling ☐ Change in Subcontractor or Source
☐ Tooling Transfer ☐ Correction of Discrepancy (Resubmission No. _____) ☐ Parts Produced at Additional Location
☐ Other - Please Specify _____

SUPPLIER INFORMATION (Manufacturing Location)

Supplier Name Texas Instruments Inc. Street Address 34 Forest Street
City Attleboro State Ma Postal Code 02703 Country USA
Supplier Mfg. Location Code - DUNS T097K Customer Assigned Ford Motor Co. - EED

CUSTOMER INFORMATION

Customer Name Ford Motor Co. - EED Buyer Fred Henderahot Buyer Code 165
Purchase Order Number _____ Sample Acceptance Level _____
Application Next Generation Speed Control

RESULTS

The results for dimensional measurements ☐, material tests ☐, and functional (EIS) tests ☐ meet all drawing and specification requirements ☐ Yes ☐ No

Submission Checklist

☐ Checked Print ☒ Material Test Results ☐ Control Plan
☐ Auxiliary Drawings/Sketches ☐ Certifications ☐ Process Capability Results
☐ Correct Number of Samples ☐ Functional (EIS) Test Results ☐ Process Flow Diagram
☐ Dimensional Results ☐ Product Engineering Approval ☐ Gage (Measurement) Studies

Supporting data for all requirements are available upon request.

COMMENTS:

Submission due to change of environmental seal material composition
and copy of area is attached.

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts and have been made to the applicable customer drawings and specifications from specified materials, on regular production tooling with no operations other than the regular production process.

Authorized Signatures Jim Watt Date 9 JAN 92
Print Name Jim Watt Title QA Engineer Phone No. 508-699-1719

APPROVAL (when required by customer procedure) ☐ Approved ☐ Rejected

Signature _____ Date _____

Form 292C

TI-NHTSA 002748

No. 147671

5577

Supplier Request for Engineering Approval

DATE November 5 19 91

SUPPLIER TO COMPLETE	
SUPPLIER NAME AND ADDRESS Texas Instruments Incorporated, 34 Forest Street, Attleboro, MA 02703	
FORD AND/OR SUPPLIER PART NAME AND PART NUMBER OF ASSEMBLY AND ITS COMPONENTS SWITCH ASY - SPEED CONTROL DEACTIVATE (delta) F2VC-97924-AB	
SPEED CONTROL COST REASON USE FORM 74-107 000 SECTION 1100 APPROVED ☐ YES ☒ NO CORRECTED YES ☐ YES ☒ NO	
CHANGE: ☐ DESIGN ☒ COMPOSITION ☐ PROCESSING ☐ DESCRIPTION The proposed change involves use of a blue-colored environmental seal in place of the present seal, which is reddish in color with a black stripe on its outer circumference. The blue seal is identical in dimensions and material, except for pigmentation. Presently, only the black stripe differentiates the pass-car seal, which has slightly different dimensions from other similar seals.	
EFFECT OF CHANGE: No effect on device performance or cost. Benefit is reduced possibility of assembly error.	
INTERCHANGEABILITY AFFECTED ASSEMBLY ☐ YES ☒ NO COMPONENTS ☐ YES ☒ NO	TOOLING OR FACILITY CHANGES REQUIRED ☐ YES ☒ NO IF YES, COST EFFECT \$
TIME TO INCORPORATE CHANGE AFTER APPROVAL Approx. 4-6 weeks.	PRICE COST AFFECTED ☐ YES ☒ NO IF YES, COST EFFECT \$
WILL INCORPORATION OF CHANGE AFFECT SHIPPING SCHEDULE? ☐ YES ☒ NO	SIGNATURE <u><i>John P. ...</i></u> 911105 DATE
PRODUCT ENGINEERING TO COMPLETE	
FOR IN PROCESS ☒ APPROVED ☐ REJECTED BY <u>B.F. Pears</u> DATE <u>911106</u>	CONSIDERED BY <u><i>B.J. ...</i></u> DATE <u>11/6/91</u>
BLANKET APPROVAL GRANTED FOR SUBSEQUENT CHANGES WHICH ARE SAME AS DESCRIBED ABOVE ☐ YES ☒ NO	SAMPLE OF CHANGED COMPONENT REQUIRED ☐ YES ☒ NO
REASON FOR REJECTION OR QUALIFYING CONDITIONS OF ACCEPTANCE:	
* This approval is granted upon the understanding that it is advisory in nature and in no manner changes the Seller's original responsibility for insuring that all characteristics, designated in the applicable engineering specifications and/or inherent in samples as originally tested and approved, are maintained. Seller accepts full responsibility for the changes or types of changes listed above; and should such changes result in less satisfactory performance than experienced with the originally approved item, Seller will fully reimburse the Buyer for all expenses incurred to correct the deficiency.	

TI-NHTSA 002749

TEXAS INSTRUMENTS



Ford Motor Company
17000 Oakwood Blvd.
P.O. Box 1586-D-2015
Dearborn, Michigan 48121

December 20, 1991

Attn: Mr. Mark Scholler

Subj: Supplemental ISR Submission
Ford Part Number F2VC-9F924-AB
Pass Car Series

Ref: Initial ISR Submission

Dear Mark,

Enclosed, please find our supplemental sample warrant for NGSC deactivation switch, Ford part number F2VC-9F924-AB. The warrant includes reference to the alert no. A10166193 providing conditional approval of switches utilizing manually crimped parts.

A copy of the supplemental ISR testing addressing diaphragm life during impulse testing. PIST information is also enclosed. Finally, (8) samples of bases with the corrected 1.85 - 2.06 base cavity mold dimension are enclosed.

Please let me know if you have any questions or if I may be of any further assistance.

Regards,


Jim Watt
DRA Engineer
Precision Controls Department
Control Products Division

cc: Dave Czarn, MS 12-29; Charlie Douglas, MS 12-33
Andy McGuirk, MS 12-27
Steve Majors, TI Farmington Hills, Michigan

encl: ISR Supplement, ISR Warrant, Sample corrected bases



INITIAL SAMPLE WARRANT

No. 112384

PART INFORMATION

Part Name NEXT GENERATION SPEED CONTROL Part Number F2VC-9F924-ABControl Item ☐ Yes ☐ No Engineering Change Level _____ Date _____Engineering Change Authorization BRUCE PEASE Date _____Shown on Drawing No. F2VC-9F924-AB Part Weight 062 kg

Reason for Initial Sample:

- | | | |
|--|--|--|
| ☐ Initial Submission | ☐ Change in Optional Construction or Material | ☐ Process Change |
| ☐ Engineering Change(s) | ☐ Additional, Replacement, or Refurbished Tooling | ☐ Change in Subcontractor or Source |
| ☐ Tooling Transfer | ☒ Correction of Discrepancy (Resubmission No. _____) | ☐ Parts Produced at Additional Location |
| ☐ Other - Please Specify <u>SEE BELOW</u> | | |

SUPPLIER INFORMATION (Manufacturing Location)

Supplier Name TEXAS INSTRUMENTS Street Address 34 FOREST STREETCity ATTLEBORO State MA Postal Code 02703 Country USASupplier Mfg. Location Code - DUNS T097K Customer Assigned FORD MOTOR CO - EED

CUSTOMER INFORMATION

Customer Name FORD MOTOR CO - EED Buyer FRED HENDERSHOT Buyer Code 165

Purchase Order Number _____ Sample Acceptance Level _____

Application NEXT GENERATION SPEED CONTROL

RESULTS

The results for dimensional measurements ☐, material tests ☐, and functional (ES) tests ☐ meet all drawing and specification requirements ☐ Yes ☐ No

Submission Checklist

- | | | |
|--|--|---|
| ☐ Checked Print | ☐ Material Test Results | ☐ Control Plan |
| ☐ Auxiliary Drawings/Sketches | ☐ Certifications | ☐ Process Capability Results |
| ☐ Correct Number of Samples | ☒ Functional (ES) Test Results | ☐ Process Flow Diagram |
| ☐ Dimensional Results | ☐ Product Engineering Approval | ☐ Gage (Measurement) Studies |

Supporting data for all requirements are available upon request.

COMMENTS:

ISR SUPPLEMENT WITH ADDITIONAL TESTING TO CLOSH OUT ALERT NO. A10166193;ALSO, CORRECTED BASE MOLD DIMENSTIONS.

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts and have been made to the applicable customer drawings and specifications from specified materials, on regular production tooling with no operations other than the regular production process.

Authorized Signature Jim Watt Date 12/20/91Print Name JIM WATT Title QA ENGINEER Phone No. 508-699-1719APPROVAL (when required by customer procedure) ☐ Approved ☐ Rejected

Signature _____ Date _____

Qty 292c

TI-NHT8A 002751

CORRECTED MOLD DIMENSIONS

F2VC-9F924-AB

CAVITY #	SPEC. 2.06 - 1.85
A1	1.92
A	1.94
B1	1.985
B	1.99
C1	1.985
C	2.00
D1	1.99
D	1.975

TI-NHTSA 002752

LEAS INSTRUMENTS

INCORPORATED

MATERIALS AND CONTROLS GROUP

- ☐ ATTLEBORO, MA 01903 ☐ VERMILION, KY 40383
☐ JOHNSON CITY, TN 37601 ☐ CENTRAL LAKE, MI 48828

DATE: 12/20/91 S.O. # 214054

REF. # _____ DATE SHIPPED 1/1

SHIPPED VIA: _____

USE (CHECK ONE)

- ☐ SCRAP SALES
☐ SALE OF ASSETS
☐ OUTSIDE PROCESSING
☐ TRANSFERS BETWEEN TI LOCATIONS
☐ EXPENSE MATERIAL
☐ OTHER, EXPLAIN: _____

DIV/AOCT. # _____ CC: _____

SHIP TO:

FORD MOTOR COMPANY
 1700 Oakwood Blvd.
 P. O. Box 1586-D-2015
 Dearborn, Michigan 48121

Attn: Mark Scholler

CHARGE TO:

QUANTITY	DESCRIPTION/PART #/PG	UNIT PRICE	TOTAL
1	ISR Supplement Pkg 6 Bases	N/C	

GROSS WEIGHT	NO. OF CONTAINERS	ORIGINATOR'S NAME (TYPED)	ORIGINATOR'S SIGNATURE
		Elaine Rose MS 12-27	

8-015148 504

ACCOUNTS RECEIVABLE COPY

TI-NHTSA 002753

SECRET

TI-NHTSA 002754

CC: G/HINE R.

TEXAS INSTRUMENTS



Ford Motor Company
17000 Oakwood Blvd.
P.O. Box 1586-D-2015
Dearborn, Michigan 48121

December 04, 1991

Attn: Mr. Mark Scholler

Subj: Initial ISR Submission
Ford Part Number F2VC-9F924-AB
Pass Car Series

Ref: My December 04, 1991 Telephone Call

Dear Mark,

Enclosed, please find our subsequent initial sample warrant for NGSC deactivation switch, Ford part number F2VC-9F924-AB. The warrant includes reference to the alert no. A10166193 providing conditional approval of switches utilizing manually crimped parts.

A copy of the referenced alert is also enclosed for your information.

Please let me know if you have any questions or if I may be of any further assistance.

Regards,


Jim Watt
GRA Engineer
Precision Controls Department
Control Products Division

cc: Dave Czarn, MS 12-29; Charlie Douglas, MS 12-33
Andy McGuirk, MS 12-27
Steve Majors, TI Farmington Hills, Michigan

encl: Alert no. A10166193
Initial Sample Warrant



INITIAL SAMPLE WARRANT

No. 112384

PART INFORMATION

Part Name NEXT GENERATION SPEED CONTROL Part Number F2VC-9F924-AB
Control Item ☐ Yes ☐ No Engineering Change Level _____ Date _____
Engineering Change Authorization Bruce Pease Date _____
Shown on Drawing No. F2VC-9F924-AB Part Weight .062 kg

Reason for Initial Sample:

- | | | |
|---|---|--|
| ☐ Initial Submission | ☐ Change in Optional Construction or Material | ☐ Process Change |
| ☐ Engineering Change(s) | ☐ Additional, Replacement, or Refurbished Tooling | ☐ Change in Subcontractor or Source |
| ☐ Tooling Transfer | ☐ Correction of Discrepancy (Resubmission No. _____) | ☐ Parts Produced at Additional Location |
| ☐ Other - Please Specify _____ | | |

SUPPLIER INFORMATION (Manufacturing Location)

Supplier Name Texas Instruments Inc. Street Address 34 Forest Street
City Attleboro State MA Postal Code 02703 Country USA
Supplier Mfg. Location Code - DUNS T097K Customer Assigned Ford Motor Co. EED

CUSTOMER INFORMATION

Customer Name Ford Motor Co. EED Buyer Fred Henderson Buyer Code .165
Purchase Order Number _____ Sample Acceptance Level _____

Application Next Generation Speed Control

RESULTS

The results for dimensional measurements ☐, material tests ☐, and functional (ES) tests ☐ meet all drawing and specification requirements ☐ Yes ☐ No

Submission Checklist

- | | | |
|---|--|---|
| ☒ Checked Print | ☒ Material Test Results | ☐ Control Plan |
| ☐ Auxiliary Drawings/Sketches | ☒ Certifications | ☐ Process Capability Results |
| ☒ Correct Number of Samples | ☒ Functional (ES) Test Results | ☐ Process Flow Diagram |
| ☒ Dimensional Results | ☐ Product Engineering Approval | ☐ Gage (Measurement) Studies |

Supporting data for all requirements are available upon request.

COMMENTS:

Conditional approval utilising manually crimped parts as detailed in
Alert No. A10105193 (attached) Initial ISW Scheduled 9/26/91

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts and have been made to the applicable customer drawings and specifications from specified materials, on regular production tooling with no operations other than the regular production process.

Authorized Signature *Jim Watt* Date 12/4/91
Print Name Jim Watt Title QA Engineer Phone No. 508-699-1719

APPROVAL (when required by customer procedure) ☐ Approved ☐ Rejected

Signature _____ Date _____

Quality Dept 292C

THE CROWN
CROWN DIESEL
FR: J. S. JACK
SD: JOHN PASSION ALER;

ALERT DETAIL

PRINT DATE/TIME: 91/10/11 09:39
PAGE: 1

ALERT NUMBER
A10106193

STATUS: A
LOCATION: RM 3001, BLDG 5, D
RESOLVING NOTICE:

ORIGIN ACTIVITY: NC88 CHASSIS PEO (LNCO)
ORIGINATOR: PEASE, B. F.
CPSC: 040605

TYPE: (U) USE PPM
DATE: 91/10/02
PHONE: 32-37955
NOTICE NO:

ALERT DESC: PERMIT TEXAS INSTRUMENTS TO SHIP SPEED CONTROL REDUNDANT
DEACTIVATION SWITCH, FZVC-9F924-AN, WITH EXCEPTION TO THE
INTENDED MANUFACTURING/ASSEMBLY PROCESS CONSISTING OF
1992 LINCOLN TOWN CAR, CROWN VICTORIA, GRAND
MARQUIS WITH NEW GENERATION SPEED CONTROL.
CYFA CYFH CYVB
HA17

PRODUCTS AFFECTED:
MODEL CODES:
PLANTS AFFECTED:
MFG CONCERN CNTRL:
PROGRAM:
QTY:
EST INCRM VAR COST:
EST INCRM YED COST:
UNIT MEASURE:
SUPP DOC#:

-0.92

TIME: 900
EST INCRM TOOL COST:
EST INCRM FAC COST:
APPEARANCE:

MODEL YEAR: 92

END CONCERN CNTRL:
EFFECTIVE IN:
EMISSION CODE: 000
EST INCRM LBR COST: 0.00
WT EFFECT: 0.5000

INVALID:
QNT:
DISP: U
EST INCRM LBR COST: 0.00
WT EFFECT: 0.5000

***** AFFECTED PARTS *****

AFF PART NO:
CPSC:
ACT:

040605

INTER:

AFF PART DESC:
NOTICE:
SUPPLY/LOCAL:
SUPPLIER:

AVAIL:

REL INO: B
FUNC REQ:

***** FURTHER DESCRIPTION/ALERT RESOLUTION/REASON FOR REJECTION ETC. *****

USERID: BPP2409 ACTIVITY: NC88 ENTRY DATE: 91/10/02
ALERT DESC:
USING A MANUALLY LOADING SENSOR CRIMPING MACHINE VERSUS THE
AUTOMATIC IN LINE LOADED CRIMPER. THE AUTOMATIC CRIMPER HAS
BEEN DETERMINED TO HAVE A VET TO BE DEFINED DEFICIENCY THAT
RESULTS IN PART FAILURE TO MEET THE REQUIRED NUMBER OF CYCLE
IN THE IMPULSE TEST. THE SUPPLIER IS GIVEN A 90 DAY PERIOD
TO RESOLVE THE ISSUE. THE MANUALLY CRIMPED PARTS PASS THE
ES TEST. THIS DEVIATION PERMITS INCORPORATION OF THE -AS
LEVEL SWITCH AND DELETION OF THE INTERIM -DS SWITCH FOR A
COST REDUCTION OF \$0.92. THE -AS SWITCH IS PIA TO END ITEM

USERID: BPP2409 ACTIVITY: NC88 ENTRY DATE: 91/10/03
ALERT DESC:
PROPORTIONING VALVES FZAC-2B091-BA, FZVC-2B091-CC, AND
JUNCTION BLOCK FZAC-2C320-CB.

USERID: LAZ0606 ACTIVITY: NC88 ENTRY DATE: 91/10/04
ALERT DESC:
OK. SUPVR. APPROVAL REQ'D. IF FRVSS IS AFFECTED. LAZ

USERID: BJMS308 ACTIVITY: NC88 ENTRY DATE: 91/10/04
ALERT DESC:

-MORE-

TI-NHTSA 002757



INITIAL SAMPLE WARRANT

No. 112384

PART INFORMATION

Part Name NEXT GENERATION SPEED CONTROL DEACTIVATION PRESSURE SWITCH Part Number F2VC-9F924-ABControl Rem ☐ Yes ☐ No Engineering Change Level _____ Date _____Engineering Change Authorization Bruce Pease Date _____Shown on Drawing No. F2VC-9F924-AB Part Weight .062 kg

Reason for Initial Sample:

- | | | |
|--|---|--|
| ☒ Initial Submission | ☐ Change in Optional Construction or Material | ☐ Process Change |
| ☐ Engineering Change(s) | ☐ Additional, Replacement, or Refurbished Tooling | ☐ Change in Subcontractor or Source |
| ☐ Tooling Transfer | ☐ Correction of Discrepancy (Resubmission No. _____) | ☐ Parts Produced at Additional Location |
| ☐ Other - Please Specify _____ | | |

SUPPLIER INFORMATION (Manufacturing Location)

Supplier Name TEXAS INSTRUMENTS Street Address 34 Forest St.City Attleboro State Mass. Postal Code 02703 Country USASupplier Mfg. Location Code - DUNS T097K Customer Assigned Ford Motor Co. EED

CUSTOMER INFORMATION

Customer Name FORD MOTOR CO. EED Buyer Fred Hendershot Buyer Code 165

Purchase Order Number _____ Sample Acceptance Level _____

Application NEXT GENERATION SPEED CONTROL

RESULTS

The results for dimensional measurements ☐, material tests ☐, and functional (EE) tests ☐ meet all drawing and specification requirements ☐ Yes ☐ No

Submission Checklist

- | | | |
|---|--|--|
| ☒ Checked Print | ☒ Material Test Results | ☒ Control Plan |
| ☐ Auxiliary Drawings/Sketches | ☒ Certifications | ☒ Process Capability Results |
| ☒ Correct Number of Samples | ☒ Functional (EE) Test Results | ☒ Process Flow Diagram |
| ☒ Dimensional Results | ☐ Product Engineering Approval | ☒ Gage (Measurement) Studies |

Supporting data for all requirements are available upon request.

COMMENTS:

DECLARATION

I affirm that the samples represented by this warrant are representative of our parts and have been made to the applicable customer drawings and specifications from specified materials, on regular production tooling with no operations other than the regular production process.

Authorized Signature JEM NATT Date 9/26/91Print Name JEM NATT Title QRA Eng. Phone No. 508-698-1719APPROVAL (when required by customer procedure) ☐ Approved ☐ Rejected

Signature _____ Date _____

Form 292c

TI-NHTSA 002758

No. 112384

Page _____ of _____

TO BE COMPLETED BY SUPPLIER										Page <u> </u> of <u> </u>	
SUPPLIER			LOCATION			CODE		PART NUMBER			
Texas Instruments, Attleboro, Ma.			T097K					F2VC-9F924-AB			
BUYER		CODE		FORD CONSUMER DIV.		NO. OF SAMPLES		PRODUCT EMERG. DESIGNATED CONTROL ITEM ()		YES ☐ NO ☒	
Fred Hendershot		165		BRD		0					
REASON FOR SAMPLES						PART NAME Next Generation Speed Control Deactivation Pressure Switch					
NEW PART ☒ CHANGED PART ☐ NEW LOCATION ☐ NEW TOOL ☐ MULTIPLE CAVITY DIE ☐						B/P DATE		MODEL YEAR AND PRODUCT LINE			
						4/17/91					
						IS DISPOSITION PENDING ☐		AUTHORIZING DEVIATION NO. N/A			
SAMPLE MADE ON PRODUCTION SET-UP AND TOOLS			YES ☐ NO ☐			ADDITIONAL HAND ON TOOL ROOM WORK PERFORMED			YES ☐ NO ☐		
SAMPLE MADE TO B/P DATED			4/17/91			DATE INSPECTED			9/20/91		
WE HEREBY CERTIFY THE INSPECTION RESULTS BELOW ARE CORRECT AND THAT OUR SAMPLE MEETS FORD MOTOR COMPANY SPECIFICATIONS						SIGNATURE OF RESPONSIBLE OFFICIAL					
						 TITLE QRA Eng. DATE 9/26/91					

[illegible]

TO BE COMPLETED BY CONSUMER										
DISPOSITION	SERIAL NO.	APPROVED	REJECTED	NOT REQ'D	INSPECTION AND TESTING INSTRUCTIONS APPROVED	YES ☐	NO ☐	SPECIAL CASES APPROVED	YES ☐	NOT REQ'D ☐
DIMENSIONAL B/P DATED	XXXX				INITIAL SAMPLE APPROVAL MUST BE SUPPLEMENTED BY APPROVAL OF FIRST PRODUCTION SHIPMENT	YES ☐	NO ☐	CONTROL PLAN APPROVED	YES ☐	NOT REQ'D ☐
MATERIAL TEST 278a FORM					APPROVED BY STYLING	YES ☐	NOT REQ'D ☐	APPROVED BY FORD ENGINEERING	YES ☐	NOT REQ'D ☐
GS TEST 544 FORM					DIVISION	AUTHORIZED SIGNATURE			DATE	

Printed On: 2028

*DESIGNATED CHARACTERISTIC CLASS
▽ - CONTROL ITEM

COPY 1

TI-NHTSA 002759



TI-NHTSA 002760

TEXAS INSTRUMENTS



DIMENSIONAL ANALYSIS ON PART NUMBER

F2VC-9F924-AB

NOTE: MARKED PRINT DENOTES CAVITY # 1A

BLUEPRINT SPEC	CAVITY # 2A ACTUAL	CAVITY # 3C ACTUAL	CAVITY # 4C ACTUAL	CAVITY # 5B ACTUAL	CAVITY # 6C ACTUAL	COMMENTS
1 11.92 - 11.60	11.68	11.69	11.69	11.70	11.69	
2 1.45 - 1.24	1.42	1.29	1.33	1.26	1.31	
3 19.81 - 19.45	19.62	19.64	19.64	19.60	19.66	
4 16.76 - 16.56	16.62	16.64	16.64	16.64	16.65	
5 3.05 - 2.84	2.91	2.91	2.91	2.91	2.90	
6 11.90 - 11.40	11.78	11.79	11.78	11.77	11.78	
7 3.10 - 2.79	2.84 2.85	2.83 2.84	2.84 2.85	2.86 2.86	2.89 2.85	
8 8.30 - 8.72	8.43 8.36	8.54 8.57	8.45 8.31	8.31 8.35	8.38 8.34	
9 COLOR - BROWN	OK	OK	OK	OK	OK	
10 2.00 - 1.85	2.695	2.685	2.660	2.705	2.685	TOOL TO BE CORRECTED

THE PASS CAR (F2VC-9F924-AB) AND LIGHT TRUCK (F3TA-9F24-AA) SWITCHES ARE PRODUCED OFF OF THE SAME PRODUCTION TOOLING.

THE (F3TA-9F24-AA) FULL DIMENSIONAL ANALYSIS FOLLOWS. DIMENSIONS # 1-10 LISTED ABOVE PERTAIN TO THE POLARITY KEY FEATURE WHICH IS DIFFERENT ON THE (F2VC-9F924-AB) SWITCH.

TEXAS INSTRUMENTS



DIMENSIONAL ANALYSIS ON PART NUMBER

F374-9F924-AA

NOTE: MARKED PRINT DENOTES CAVITY # A1

	BLUEPRINT SPEC	CAVITY # A2 ACTUAL	CAVITY # C3 ACTUAL	CAVITY # D4 ACTUAL	CAVITY # D5 ACTUAL	CAVITY # D6 ACTUAL	COMMENTS
1	13.43-13.85	13.692	13.623	13.602	13.719	13.646	
2	13IDES +/- 2DES 30DES 36MIN		13IDES 01MIN	30DES 49MIN	32DES 10MIN	32DES 27MIN	
3	1.85 - 2.06	2.690	2.669	2.667	2.699	2.692	ITMIL TO BE CORRECTED
4	10.05 MAX	10.685	10.668	10.691	10.677	10.634	
5	10.05-0.26 2PL	.199 .137	.208 .196	.245 .197	.225 .176	.169 .161	
6	10.50 +/- 0.25	.583 .510	.515 .433	.419 .347	.392 .333	.429 .396	
7	12.75-3.10 2PL	2.900 2.898	2.898 2.896	2.896 2.900	2.902 2.891	2.867 2.899	
8	19.45-19.81	19.60	19.58	19.61	19.57	19.61	
9	16.56-16.76	16.544	16.408	16.585	16.585	16.625	
10	12.80-13.21	13.040	13.036	13.033	12.978	12.956	
11	11.40-11.90	11.770	11.810	11.788	11.790	11.777	
12	2.84 - 3.05	2.925	2.917	2.923	2.920	2.928	
	0.1 A	.094	.013	.019	.004	.032	
13	1.24 - 1.45	1.397	1.294	1.292	1.328	1.326	
14	11.60-11.92	11.742	11.672	11.745	11.688	11.737	

TEXAS INSTRUMENTS



DIMENSIONAL ANALYSIS ON PART NUMBER

F3TA-9F924-AA

	BLUEPRINT SPEC	CAVITY # A2 ACTUAL	CAVITY # C3 ACTUAL	CAVITY # C4 ACTUAL	CAVITY # D5 ACTUAL	CAVITY # D6 ACTUAL	COMMENTS
15	1.24 - 1.55	1.349	1.334	1.337	1.334	1.333	
16	6.60 - 6.81	6.670	6.678	6.680	6.665	6.667	
17	NO FLASH/BURR	OK	OK	OK	OK	OK	
18	7.22 - 7.75	7.549	7.646	7.639	7.454	7.425	
19	2.79 - 3.41	3.10	3.10	3.10	3.07	3.07	
20	0.67 - 1.30	1.096	1.096	1.102	1.112	1.141	
21	DATE & PART#	OK	OK	OK	OK	OK	
22	0.25MIN 40-50° DED CHAMFER	UNABLE TO MEASURE	MEASURE	BECAUSE	THREADS ARE	ALREADY IN	
23	3/8-24UNF-2A	OK	OK	OK	OK	OK	
24	1.10 - 1.40	1.220	1.213	1.230	1.234	1.320	
25	2.5 C	.20	.20	.20	.20	.20	
26	0.16 D	.020	.036	.008	.023	.025	
27	410ES - 430ES	MEASURED ON CROSS SECTIONED PIECE					
28	440ES - 500ES	MEASURED ON CROSS SECTIONED PIECE					
29	7.82 - 8.03	7.90 7.91	7.90 7.89	7.89 7.93	7.89 7.88	7.86 7.90	
30	1.50 - 2.04	1.754	1.857	1.831	1.807	1.807	

TEXAS INSTRUMENTS INCORPORATED • 34 FOREST STREET • ATTLEBORO, MA 01908
603-886-8800 • TELEX 88-7788 TYX 710-346-0888 • CABLE TEXINS

TI-NHTSA 002763

TEXAS INSTRUMENTS



DIMENSIONAL ANALYSIS ON PART NUMBER

F3TA-9F92A-AA

	BLUEPRINT SPEC	CAVITY # A2 ACTUAL	CAVITY # C3 ACTUAL	CAVITY # C4 ACTUAL	CAVITY # D5 ACTUAL	CAVITY # D6 ACTUAL	COMMENTS
31	9.35 - 9.66	9.55	9.58	9.50	9.50	9.58	
32	8.12 MIN	9.22	9.14	9.19	9.22	9.14	
33	14.23 MAX	13.64	13.62	13.58	13.67	13.66	
34	57.15 MAX	55.60	55.60	55.55	55.58	55.52	
35	12.59-13.11	12.83	12.83	12.83	12.80	12.83	
36	11.65-12.17	11.79	11.64	11.69	11.64	11.69	11.69
37	1.80-2.21R 2PL	1.80	2.02	1.82	1.80	1.80	MEAS. SIDE W/O KEY
38	29DEG +/- 20DEG (401)	MEASURED ON SEPARATE BASE - CROSS SECTIONED					
39	32.53 MAX	31.61	31.68	32.59	31.72	31.68	31.73
40	14.02-14.33	14.281	14.221	14.225	14.222	14.221	
41	3.30 - 3.60	3.420	3.413	3.441	3.429	3.433	3.450
42	7.23 - 7.37	7.299	7.281	7.340	7.352	7.294	7.284
43	5.58 - 5.85	5.604	5.585	5.641	5.662	5.594	5.583
44	71.5DEG +/- 20DEG (2 PL.)	72DEG 23MIN	72DEG 50MIN	72DEG 30MIN	72DEG 54MIN	72DEG 29MIN	
45	1.42-1.63 2PL	1.595	1.572	1.610	1.581	1.541	1.544
46	0.35 - 0.66	0.571	0.557	0.545	0.575	0.550	0.573
47	(4 PL.)	0.582	0.568	0.583	0.553	0.562	0.564

TEXAS INSTRUMENTS INCORPORATED • 2400 WEST STREET • ARLINGTON, TEXAS 76010

800-898-8820 • TELEX 98-7705 TWX 710-348-8088 • CABLE TIDINS

TI-NHTSA 002764

TEXAS INSTRUMENTS



DIMENSIONAL ANALYSIS ON PART NUMBER

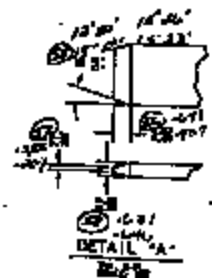
F3TA-9F924-AA

	BLUEPRINT SPEC	CAVITY # A2 ACTUAL	CAVITY # C3 ACTUAL	CAVITY # C4 ACTUAL	CAVITY # D5 ACTUAL	CAVITY # D6 ACTUAL	COMMENTS
47	2.59 - 2.80	L 2.681	L 2.705	L 2.687	L 2.697	L 2.709	
	(2 PL)	R 2.702	R 2.696	R 2.705	R 2.721	R 2.684	
	0.2 ± A C	L.021 R.015	L.000 R.075	L.076 R.081	L.081 R.030	L.011 R.154	
	2.465	2.444 2.450	2.465 2.390	2.389 2.384	2.384 2.495	2.476 2.311	
48	0.35 - 0.64	.463 .450	.339 .530	.571 .492	.508 .463	.476 .504	
	(4 PL)	.494 .538	.474 .505	.449 .514	.511 .509	.491 .509	
49	0.86 - 1.17	.985 .995	.939 .962	.968 .989	.990 .953	.967 .935	
	(4 PL)	.943 .952	.996 .959	.975 .923	.935 .934	.960 .974	
50	45DEG +/- 20DEG	44DEG 45MIN	43DEG 50MIN	45DEG 39MIN	45DEG 24MIN	43DEG 58MIN	
	(4 PL)	44DEG 47MIN	44DEG 45MIN	44DEG 05MIN	44DEG 39MIN	45DEG 58MIN	
		45DEG 13MIN	44DEG 37MIN	44DEG 11MIN	45DEG 12MIN	45DEG 54MIN	
		45DEG 06MIN	45DEG 20MIN	46DEG 44MIN	44DEG 23MIN	44DEG 20MIN	
51	8.30-8.72 2PL	8.342 8.430	8.352 8.423	8.344 8.499	8.345 8.429	8.509 8.392	
52	2.15-2.42 2PL	2.180 2.220	2.196 2.153	2.169 2.219	2.161 2.170	2.149 2.194	
53	25DEG +/- 20DEG	24DEG 22MIN	24DEG 10MIN	24DEG 47MIN	24DEG 17MIN	23DEG 37MIN	
	(2 PL)	23DEG 32MIN	23DEG 41MIN	23DEG 50MIN	23DEG 04MIN	23DEG 39MIN	
54	(COLOR) BLACK	OK	OK	OK	OK	OK	
55	13-17DEG 2PL	ON CROSS	SECTIONED	PART ON	PRINT		
56	0.46 - 0.87	ON CROSS	SECTIONED	PART ON	PRINT		
57	0.10 - 0.31	.232 .278	.287 .251	.276 .260	.287 .260	.280 .257	
58	0.58 - 0.68	.625 .646	.644 .621	.648 .622	.656 .622	.644 .626	

001-000-0000 • TELE 00-7700 TWX 710-040-0000 • CABLE TIDING

TI-NHTSA 002785

**DRAWINGS AVAILABLE UPON
REQUEST**



TI-NHTSA 002771

SPRING HOLIDAY TRIP AND TRAVEL
 PERSONAL MAIL INFORMATION TO: Mr. J. Edgar Hoover, FBI, 400 ...
 ADDRESS: Washington, D.C. 20535
 CITY: Washington, D.C. STATE: DC ZIP: 20535
 COUNTRY: USA
 PHONE: (202) 452-1234
 FAX: (202) 452-1234
 E-MAIL: john.doe@fbi.gov
 COMMENTS: ...

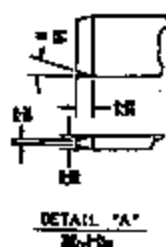
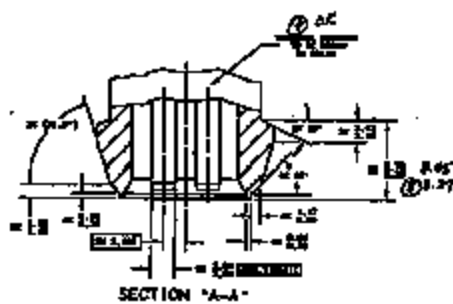
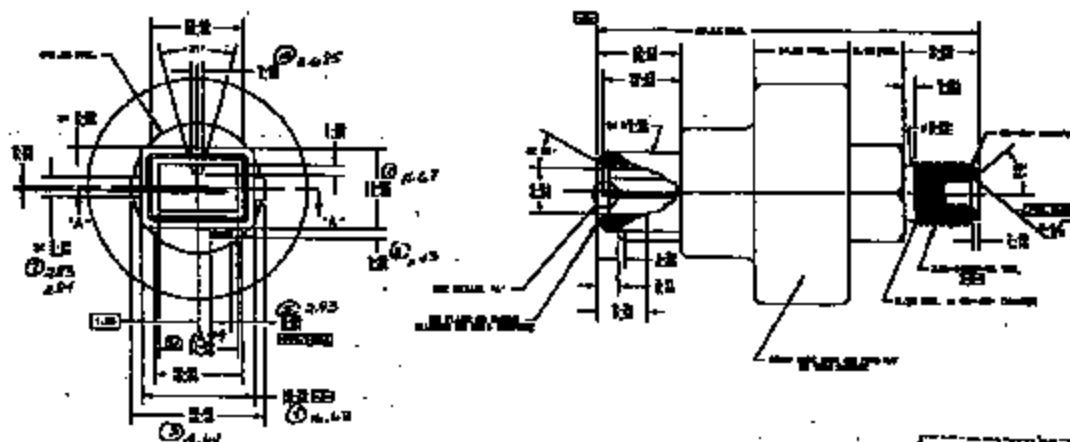
[illegible]

LAYOUT PL-F31A-100300-CA
BY P. Zanger DWN 2U-348
DATE 910725 DESIGN WT. 62.8 gms LBS. REF. (1)
0.158 lbs

METRIC[illegible]

67 EIGHTH AVE TORONTO
 JOHN LEECH

TI-NHTSA 002772



VOCONTEC, INC. — THE V SYMBOL ALSO
 CERTIFIES PRODUCT ENGINEERING DESIGN
 AND CONSTRUCTION CRITICAL CHARACTERISTICS
 ENGINEERING BY PRODUCT DESIGNERS, MUST
 APPROVE DESIGN CONTROL PLANS FOR EACH
 DESIGN PRODUCT ENGINEERING APPROVAL.

METRIC

SPECIFICATIONS AND NOTES

UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE IN INCHES, FRACTIONS, DECIMALS, OR MILLIMETERS.
 UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO BE HOLD.
 UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO BE HOLD.
 UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO BE HOLD.
 UNLESS NOTED OTHERWISE, ALL DIMENSIONS ARE TO BE HOLD.

REVISIONS AND TOLERANCES IN
 DIMENSIONS ARE TO BE HOLD.
 DIMENSIONS IN MILLIMETERS ARE TO BE HOLD.
 DIMENSIONS IN INCHES ARE TO BE HOLD.
 DIMENSIONS IN MILLIMETERS ARE TO BE HOLD.
 DIMENSIONS IN INCHES ARE TO BE HOLD.

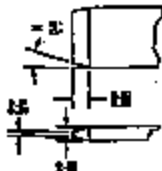
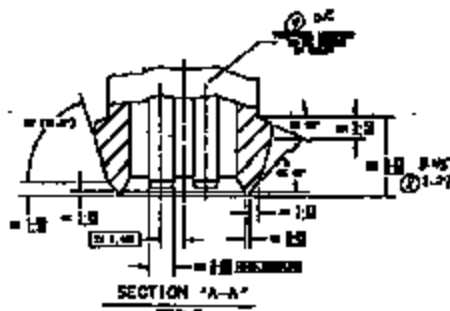
REV.	DESCRIPTION	DATE	BY	CHKD.
1	ISSUED FOR PRODUCTION	10/1/77	J. J. J.	J. J. J.
2	REVISION	10/1/77	J. J. J.	J. J. J.
3	REVISION	10/1/77	J. J. J.	J. J. J.
4	REVISION	10/1/77	J. J. J.	J. J. J.
5	REVISION	10/1/77	J. J. J.	J. J. J.
6	REVISION	10/1/77	J. J. J.	J. J. J.
7	REVISION	10/1/77	J. J. J.	J. J. J.
8	REVISION	10/1/77	J. J. J.	J. J. J.
9	REVISION	10/1/77	J. J. J.	J. J. J.
10	REVISION	10/1/77	J. J. J.	J. J. J.

REVISED REDRAWN	
910417	10/01/77 779005
DATE	REV. NO.
SWITCH ASSY - SPEED CONTROL DEACTIVATE	
VZVC-9F924-AB	

DESIGNER'S SIGNATURE		DATE	
J. J. J.		10/1/77	
CHECKED BY		DATE	
J. J. J.		10/1/77	
APPROVED BY		DATE	
J. J. J.		10/1/77	
PART NO.		REV.	
82547		77PSL2-1	

[illegible][illegible][illegible]

	REVISED & REDRAWN
NO. 417	NO. 10797179005
DATE	REL. NO.
SWITCH ASY - SPEED CONTROL DEACTIVATE	
▽F2VC-9F924-AB	



DETAIL 'A'

▽CONTROL PEN — THE **▽** SYMBOL ALSO CONFIRMS PRODUCT ENGINEERING COMBINES CRITICAL CHARACTERISTICS TESTS AND ADDITIONAL CRITICAL CHARACTERISTICS INSPECTED BY PROCESS - REVIEW. MUST APPEAR ON THIRD-SET CONTROL PLANS WHICH INCLUDE PRODUCT ENGINEERING APPROVAL.

METRIC[illegible]

TI-NHTBA 002773

10



□

□

□

□

□

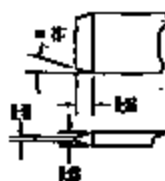
□

□

ТИ-ННТБА 002774

和

DOI: 10.1002/for

[illegible]

DETAIL "A"

▽ CONTROL DATA — THE ▽ SYMBOL ALSO IDENTIFIES PRODUCT, IMMEDIATELY DERIVED CRITICAL CHARACTERISTICS, TIME, AND MATERIAL CRITICAL CHARACTERISTICS OBTAINED BY PROCESS HISTORY, MUST APPLY TO ALL CRITICAL PLANNED WORK CRITICAL PRODUCT DEVELOPMENT APPROVAL.

METRIC**SPECIFICATIONS AND NOTES:**

1. **DATE OF BIRTH** _____
 2. **DATE OF DEATH** _____
 3. **DATE OF BURIAL** _____
 4. **DATE OF CREMATION** _____
 5. **DATE OF INTERMENT** _____
 6. **DATE OF REINTERMENT** _____
 7. **DATE OF EXHUMATION** _____
 8. **DATE OF REINTERMENT** _____
 9. **DATE OF EXHUMATION** _____
 10. **DATE OF REINTERMENT** _____
 11. **DATE OF EXHUMATION** _____
 12. **DATE OF REINTERMENT** _____
 13. **DATE OF EXHUMATION** _____
 14. **DATE OF REINTERMENT** _____
 15. **DATE OF EXHUMATION** _____
 16. **DATE OF REINTERMENT** _____
 17. **DATE OF EXHUMATION** _____
 18. **DATE OF REINTERMENT** _____
 19. **DATE OF EXHUMATION** _____
 20. **DATE OF REINTERMENT** _____
 21. **DATE OF EXHUMATION** _____
 22. **DATE OF REINTERMENT** _____
 23. **DATE OF EXHUMATION** _____
 24. **DATE OF REINTERMENT** _____
 25. **DATE OF EXHUMATION** _____
 26. **DATE OF REINTERMENT** _____
 27. **DATE OF EXHUMATION** _____
 28. **DATE OF REINTERMENT** _____
 29. **DATE OF EXHUMATION** _____
 30. **DATE OF REINTERMENT** _____
 31. **DATE OF EXHUMATION** _____
 32. **DATE OF REINTERMENT** _____
 33. **DATE OF EXHUMATION** _____
 34. **DATE OF REINTERMENT** _____
 35. **DATE OF EXHUMATION** _____
 36. **DATE OF REINTERMENT** _____
 37. **DATE OF EXHUMATION** _____
 38. **DATE OF REINTERMENT** _____
 39. **DATE OF EXHUMATION** _____
 40. **DATE OF REINTERMENT** _____
 41. **DATE OF EXHUMATION** _____
 42. **DATE OF REINTERMENT** _____
 43. **DATE OF EXHUMATION** _____
 44. **DATE OF REINTERMENT** _____
 45. **DATE OF EXHUMATION** _____
 46. **DATE OF REINTERMENT** _____
 47. **DATE OF EXHUMATION** _____
 48. **DATE OF REINTERMENT** _____
 49. **DATE OF EXHUMATION** _____
 50. **DATE OF REINTERMENT** _____
 51. **DATE OF EXHUMATION** _____
 52. **DATE OF REINTERMENT** _____
 53. **DATE OF EXHUMATION** _____
 54. **DATE OF REINTERMENT** _____
 55. **DATE OF EXHUMATION** _____
 56. **DATE OF REINTERMENT** _____
 57. **DATE OF EXHUMATION** _____
 58. **DATE OF REINTERMENT** _____
 59. **DATE OF EXHUMATION** _____
 60. **DATE OF REINTERMENT** _____
 61. **DATE OF EXHUMATION** _____
 62. **DATE OF REINTERMENT** _____
 63. **DATE OF EXHUMATION** _____
 64. **DATE OF REINTERMENT** _____
 65. **DATE OF EXHUMATION** _____
 66. **DATE OF REINTERMENT** _____
 67. **DATE OF EXHUMATION** _____
 68. **DATE OF REINTERMENT** _____
 69. **DATE OF EXHUMATION** _____
 70. **DATE OF REINTERMENT** _____
 71. **DATE OF EXHUMATION** _____
 72. **DATE OF REINTERMENT** _____
 73. **DATE OF EXHUMATION** _____
 74. **DATE OF REINTERMENT** _____
 75. **DATE OF EXHUMATION** _____
 76. **DATE OF REINTERMENT** _____
 77. **DATE OF EXHUMATION** _____
 78. **DATE OF REINTERMENT** _____
 79. **DATE OF EXHUMATION** _____
 80. **DATE OF REINTERMENT** _____
 81. **DATE OF EXHUMATION** _____
 82. **DATE OF REINTERMENT** _____
 83. **DATE OF EXHUMATION** _____
 84. **DATE OF REINTERMENT** _____
 85. **DATE OF EXHUMATION** _____
 86. **DATE OF REINTERMENT** _____
 87. **DATE OF EXHUMATION** _____
 88. **DATE OF REINTERMENT** _____
 89. **DATE OF EXHUMATION** _____
 90. **DATE OF REINTERMENT** _____
 91. **DATE OF EXHUMATION** _____
 92. **DATE OF REINTERMENT** _____
 93. **DATE OF EXHUMATION** _____
 94. **DATE OF REINTERMENT** _____
 95. **DATE OF EXHUMATION** _____
 96. **DATE OF REINTERMENT** _____
 97. **DATE OF EXHUMATION** _____
 98. **DATE OF REINTERMENT** _____
 99. **DATE OF EXHUMATION** _____
 100. **DATE OF REINTERMENT** _____

BUREAU OF THE ARMY AND THE NAVY IN
 ACCORDANCE WITH THE 114th, 115th, 116th,
 117th, 118th, 119th, 120th, 121st, 122nd,
 123rd, 124th, 125th, 126th, 127th, 128th,
 129th, 130th, 131st, 132nd, 133rd, 134th,
 135th, 136th, 137th, 138th, 139th, 140th,
 141st, 142nd, 143rd, 144th, 145th, 146th,
 147th, 148th, 149th, 150th, 151st, 152nd,
 153rd, 154th, 155th, 156th, 157th, 158th,
 159th, 160th, 161st, 162nd, 163rd, 164th,
 165th, 166th, 167th, 168th, 169th, 170th,
 171st, 172nd, 173rd, 174th, 175th, 176th,
 177th, 178th, 179th, 180th, 181st, 182nd,
 183rd, 184th, 185th, 186th, 187th, 188th,
 189th, 190th, 191st, 192nd, 193rd, 194th,
 195th, 196th, 197th, 198th, 199th, 200th,
 201st, 202nd, 203rd, 204th, 205th, 206th,
 207th, 208th, 209th, 210th, 211st, 212th,
 213th, 214th, 215th, 216th, 217th, 218th,
 219th, 220th, 221st, 222nd, 223rd, 224th,
 225th, 226th, 227th, 228th, 229th, 230th,
 231st, 232nd, 233rd, 234th, 235th, 236th,
 237th, 238th, 239th, 240th, 241st, 242nd,
 243rd, 244th, 245th, 246th, 247th, 248th,
 249th, 250th, 251st, 252nd, 253rd, 254th,
 255th, 256th, 257th, 258th, 259th, 260th,
 261st, 262nd, 263rd, 264th, 265th, 266th,
 267th, 268th, 269th, 270th, 271st, 272nd,
 273rd, 274th, 275th, 276th, 277th, 278th,
 279th, 280th, 281st, 282nd, 283rd, 284th,
 285th, 286th, 287th, 288th, 289th, 290th,
 291st, 292nd, 293rd, 294th, 295th, 296th,
 297th, 298th, 299th, 300th, 301st, 302nd,
 303rd, 304th, 305th, 306th, 307th, 308th,
 309th, 310th, 311st, 312th, 313th, 314th,
 315th, 316th, 317th, 318th, 319th, 320th,
 321st, 322nd, 323rd, 324th, 325th, 326th,
 327th, 328th, 329th, 330th, 331st, 332nd,
 333rd, 334th, 335th, 336th, 337th, 338th,
 339th, 340th, 341st, 342nd, 343rd, 344th,
 345th, 346th, 347th, 348th, 349th, 350th,
 351st, 352nd, 353rd, 354th, 355th, 356th,
 357th, 358th, 359th, 360th, 361st, 362nd,
 363rd, 364th, 365th, 366th, 367th, 368th,
 369th, 370th, 371st, 372nd, 373rd, 374th,
 375th, 376th, 377th, 378th, 379th, 380th,
 381st, 382nd, 383rd, 384th, 385th, 386th,
 387th, 388th, 389th, 390th, 391st, 392nd,
 393rd, 394th, 395th, 396th, 397th, 398th,
 399th, 400th, 401st, 402nd, 403rd, 404th,
 405th, 406th, 407th, 408th, 409th, 410th,
 411st, 412th, 413th, 414th, 415th, 416th,
 417th, 418th, 419th, 420th, 421st, 422nd,
 423rd, 424th, 425th, 426th, 427th, 428th,
 429th, 430th, 431st, 432nd, 433rd, 434th,
 435th, 436th, 437th, 438th, 439th, 440th,
 441st, 442nd, 443rd, 444th, 445th, 446th,
 447th, 448th, 449th, 450th, 451st, 452nd,
 453rd, 454th, 455th, 456th, 457th, 458th,
 459th, 460th, 461st, 462nd, 463rd, 464th,
 465th, 466th, 467th, 468th, 469th, 470th,
 471st, 472nd, 473rd, 474th, 475th, 476th,
 477th, 478th, 479th, 480th, 481st, 482nd,
 483rd, 484th, 485th, 486th, 487th, 488th,
 489th, 490th, 491st, 492nd, 493rd, 494th,
 495th, 496th, 497th, 498th, 499th, 500th,
 501st, 502nd, 503rd, 504th, 505th, 506th,
 507th, 508th, 509th, 510th, 511st, 512th,
 513th, 514th, 515th, 516th, 517th, 518th,
 519th, 520th, 521st, 522nd, 523rd, 524th,
 525th, 526th, 527th, 528th, 529th, 530th,
 531st, 532nd, 533rd, 534th, 535th, 536th,
 537th, 538th, 539th, 540th, 541st, 542nd,
 543rd, 544th, 545th, 546th, 547th, 548th,
 549th, 550th, 551st, 552nd, 553rd, 554th,
 555th, 556th, 557th, 558th, 559th, 560th,
 561st, 562nd, 563rd, 564th, 565th, 566th,
 567th, 568th, 569th, 570th, 571st, 572nd,
 573rd, 574th, 575th, 576th, 577th, 578th,
 579th, 580th, 581st, 582nd, 583rd, 584th,
 585th, 586th, 587th, 588th, 589th, 590th,
 591st, 592nd, 593rd, 594th, 595th, 596th,
 597th, 598th, 599th, 600th, 601st, 602nd,
 603rd, 604th, 605th, 606th, 607th, 608th,
 609th, 610th, 611st, 612th, 613th, 614th,
 615th, 616th, 617th, 618th, 619th, 620th,
 621st, 622nd, 623rd, 624th, 625th, 626th,
 627th, 628th, 629th, 630th, 631st, 632nd,
 633rd, 634th, 635th, 636th, 637th, 638th,
 639th, 640th, 641st, 642nd, 643rd, 644th,
 645th, 646th, 647th, 648th, 649th, 650th,
 651st, 652nd, 653rd, 654th, 655th, 656th,
 657th, 658th, 659th, 660th, 661st, 662nd,
 663rd, 664th, 665th, 666th, 667th, 668th,
 669th, 670th, 671st, 672nd, 673rd, 674th,
 675th, 676th, 677th, 678th, 679th, 680th,
 681st, 682nd, 683rd, 684th, 685th, 686th,
 687th, 688th, 689th, 690th, 691st, 692nd,
 693rd, 694th, 695th, 696th, 697th, 698th,
 699th, 700th, 701st, 702nd, 703rd, 704th,
 705th, 706th, 707th, 708th, 709th, 710th,
 711st, 712th, 713th, 714th, 715th, 716th,
 717th, 718th, 719th, 720th, 721st, 722nd,
 723rd, 72

**RESEARCH AND DEVELOPMENT OF AN INNOVATIVE
PRODUCT FOR THE FUTURE**

FOR THE UNITED STATES DEPARTMENT OF JUSTICE

	REVISED & REDRAWN	
MOU'7	NOV060019T9005	7
DATE	REV. NO.	CHK
SWITCH ASY - SPEED CONTROL DEACTIVATE		
77-27VC-9F924-AB		

[illegible]

REST/PEARL DATA

TI-NHTSA 002777



PROCESS POTENTIAL AND QUALITY INDEXES SUMMARY DATA SHEET

PART #: F2YC-9F924-AB SUPPLIER CONTACT: Jim Watt
 SUPPLIER: Texas Instruments CONTACT PHONE: 1-508-689-1710
 CODE: 1027K PART DESCRIPTION: Next Generation
 ADDRESS: 34 Forest St. Speed Control
Attleboro, MA 02703 SOA CODE: (Mark Scholler)
 VEHICLE BUILD: EP VP FB OTHER VEHICLE PROGRAM: PAGE CAT

CHARACTERISTIC TYPE

▽ = FORD CRITICAL
CHARACTERISTICS

S.C. = FORD OR SUPPLIER SIGNIFICANT
CHARACTERISTICS

NUMBER OF CRITICAL AND SIGNIFICANT CHARACTERISTICS:

1: <u>Activation Pressure</u>	TYPE: <u>SC</u>	Cp = <u>**</u>	Cpk = <u>**</u>
2: <u>Release Pressure</u>	TYPE: <u>SC</u>	Cp = <u>**</u>	Cpk = <u>**</u>
3: <u>3/8-24UNF-2A Thread</u>	TYPE: <u>SC</u>	Cp = <u>A*</u>	Cpk = <u>A*</u>
4: _____	TYPE: _____	Cp = _____	Cpk = _____
5: _____	TYPE: _____	Cp = _____	Cpk = _____
6: _____	TYPE: _____	Cp = _____	Cpk = _____
7: _____	TYPE: _____	Cp = _____	Cpk = _____
8: _____	TYPE: _____	Cp = _____	Cpk = _____
9: _____	TYPE: _____	Cp = _____	Cpk = _____
10: _____	TYPE: _____	Cp = _____	Cpk = _____
11: _____	TYPE: _____	Cp = _____	Cpk = _____
12: _____	TYPE: _____	Cp = _____	Cpk = _____
13: _____	TYPE: _____	Cp = _____	Cpk = _____
14: _____	TYPE: _____	Cp = _____	Cpk = _____
15: _____	TYPE: _____	Cp = _____	Cpk = _____

PIST = $\frac{1265}{1265} \times 100 = 100\%$

PIPC_{Cp} = $\frac{N/A}{N/A} \times 100 = \text{N/A}\%$ PIPC_{Cpk} = $\frac{N/A}{N/A} \times 100 = \text{N/A}\%$

COMMENTS:

** Calibration check is done 100 percent, parts tested 300; defective 0 percent of defect 0.

A* Threads are checked on a GO/NOGO gage.

PREPARED BY:

Klaus Rose

DATE: 12/20/91

**DRAWINGS AVAILABLE UPON
REQUEST**

PROCESS POTENTIAL AND QUALITY INDEXES SUMMARY DATA SHEET

PART #: E3TA-9F924-AA
 SUPPLIER: TEXAS Instruments
 CODE: T09TK
 ADDRESS: 34 Forest ST.
Attleboro, Mass. 01763

SUPPLIER CONTACT: Jim Watt
 CONTACT PHONE: 508-699-1719
 PART DESCRIPTION: Next Generation
Speed Control Deactivate Pressure Switch
 BOA CODE: _____
 VEHICLE BUILD (CIRCLE ONE): EP VP EP OTHER (DEFINE) _____

CHARACTERISTIC TYPE

▽ = FORD CRITICAL
 CHARACTERISTICS

S.C. = FORD OR SUPPLIER SIGNIFICANT
 CHARACTERISTICS

NUMBER OF CRITICAL AND/OR SIGNIFICANT CHARACTERISTICS:

1: <u>Actuation Pressure</u>	TYPE: <u>SC</u>	Cp = <u>1.2</u>	Cpk = <u>1.2</u>
2: <u>Release Pressure</u>	TYPE: <u>SC</u>	Cp = <u>* 5.2</u>	Cpk = <u>1.2</u>
3: <u>3/8-24UNF-28 Thread</u>	TYPE: <u>SC</u>	Cp = _____	Cpk = <u>meets Go</u>
4: _____	TYPE: _____	Cp = _____	Cpk = <u>meets Go</u>
5: _____	TYPE: _____	Cp = _____	Cpk = _____
6: _____	TYPE: _____	Cp = _____	Cpk = _____
7: _____	TYPE: _____	Cp = _____	Cpk = _____
8: _____	TYPE: _____	Cp = _____	Cpk = _____
9: _____	TYPE: _____	Cp = _____	Cpk = _____
10: _____	TYPE: _____	Cp = _____	Cpk = _____
11: _____	TYPE: _____	Cp = _____	Cpk = _____
12: _____	TYPE: _____	Cp = _____	Cpk = _____
13: _____	TYPE: _____	Cp = _____	Cpk = _____
14: _____	TYPE: _____	Cp = _____	Cpk = _____
15: _____	TYPE: _____	Cp = _____	Cpk = _____

PIST = $\frac{539.536}{536} \times 100 = \underline{98.8} \%$

PIPC_{Cp} = $\frac{1/1}{1} \times 100 = \underline{100} \%$ PIPC_{Cpk} = $\frac{2/2}{2} \times 100 = \underline{100} \%$

COMMENTS:

* Cp Index not calculatable on unilateral tolerance

PREPARED BY: Elaine Rose

DATE: 9-20-91

AVERAGE AND RANGE (A-R) CHART

Pressure Switch 77PS42-3
 300 200
 Actuation

TEST NUMBER, TEST NAME AND COMMENTS

PG. 1 of 2

NEXT GENERATION SPEED CONTROL

LIGHT TRUCK

TIME	TEST	TEST NAME	TEST NUMBER	TEST COMMENTS
10:00	10	10	10	10
10:05	10	10	10	10
10:10	10	10	10	10
10:15	10	10	10	10
10:20	10	10	10	10
10:25	10	10	10	10
10:30	10	10	10	10
10:35	10	10	10	10
10:40	10	10	10	10
10:45	10	10	10	10
10:50	10	10	10	10
10:55	10	10	10	10
11:00	10	10	10	10
11:05	10	10	10	10
11:10	10	10	10	10
11:15	10	10	10	10
11:20	10	10	10	10
11:25	10	10	10	10
11:30	10	10	10	10
11:35	10	10	10	10
11:40	10	10	10	10
11:45	10	10	10	10
11:50	10	10	10	10
11:55	10	10	10	10
12:00	10	10	10	10
12:05	10	10	10	10
12:10	10	10	10	10
12:15	10	10	10	10
12:20	10	10	10	10
12:25	10	10	10	10
12:30	10	10	10	10
12:35	10	10	10	10
12:40	10	10	10	10
12:45	10	10	10	10
12:50	10	10	10	10
12:55	10	10	10	10
13:00	10	10	10	10
13:05	10	10	10	10
13:10	10	10	10	10
13:15	10	10	10	10
13:20	10	10	10	10
13:25	10	10	10	10
13:30	10	10	10	10
13:35	10	10	10	10
13:40	10	10	10	10
13:45	10	10	10	10
13:50	10	10	10	10
13:55	10	10	10	10
14:00	10	10	10	10
14:05	10	10	10	10
14:10	10	10	10	10
14:15	10	10	10	10
14:20	10	10	10	10
14:25	10	10	10	10
14:30	10	10	10	10
14:35	10	10	10	10
14:40	10	10	10	10
14:45	10	10	10	10
14:50	10	10	10	10
14:55	10	10	10	10
15:00	10	10	10	10
15:05	10	10	10	10
15:10	10	10	10	10
15:15	10	10	10	10
15:20	10	10	10	10
15:25	10	10	10	10
15:30	10	10	10	10
15:35	10	10	10	10
15:40	10	10	10	10
15:45	10	10	10	10
15:50	10	10	10	10
15:55	10	10	10	10
16:00	10	10	10	10
16:05	10	10	10	10
16:10	10	10	10	10
16:15	10	10	10	10
16:20	10	10	10	10
16:25	10	10	10	10
16:30	10	10	10	10
16:35	10	10	10	10
16:40	10	10	10	10
16:45	10	10	10	10
16:50	10	10	10	10
16:55	10	10	10	10
17:00	10	10	10	10
17:05	10	10	10	10
17:10	10	10	10	10
17:15	10	10	10	10
17:20	10	10	10	10
17:25	10	10	10	10
17:30	10	10	10	10
17:35	10	10	10	10
17:40	10	10	10	10
17:45	10	10	10	10
17:50	10	10	10	10
17:55	10	10	10	10
18:00	10	10	10	10
18:05	10	10	10	10
18:10	10	10	10	10
18:15	10	10	10	10
18:20	10	10	10	10
18:25	10	10	10	10
18:30	10	10	10	10
18:35	10	10	10	10
18:40	10	10	10	10
18:45	10	10	10	10
18:50	10	10	10	10
18:55	10	10	10	10
19:00	10	10	10	10
19:05	10	10	10	10
19:10	10	10	10	10
19:15	10	10	10	10
19:20	10	10	10	10
19:25	10	10	10	10
19:30	10	10	10	10
19:35	10	10	10	10
19:40	10	10	10	10
19:45	10	10	10	10
19:50	10	10	10	10
19:55	10	10	10	10
20:00	10	10	10	10
20:05	10	10	10	10
20:10	10	10	10	10
20:15	10	10	10	10
20:20	10	10	10	10
20:25	10	10	10	10
20:30	10	10	10	10
20:35	10	10	10	10
20:40	10	10	10	10
20:45	10	10	10	10
20:50	10	10	10	10
20:55	10	10	10	10
21:00	10	10	10	10
21:05	10	10	10	10
21:10	10	10	10	10
21:15	10	10	10	10
21:20	10	10	10	10
21:25	10	10	10	10
21:30	10	10	10	10
21:35	10	10	10	10
21:40	10	10	10	10
21:45	10	10	10	10
21:50	10	10	10	10
21:55	10	10	10	10
22:00	10	10	10	10
22:05	10	10	10	10
22:10	10	10	10	10
22:15	10	10	10	10
22:20	10	10	10	10
22:25	10	10	10	10
22:30	10	10	10	10
22:35	10	10	10	10
22:40	10	10	10	10
22:45	10	10	10	10
22:50	10	10	10	10
22:55	10	10	10	10
23:00	10	10	10	10
23:05	10	10	10	10
23:10	10	10	10	10
23:15	10	10	10	10
23:20	10	10	10	10
23:25	10	10	10	10
23:30	10	10	10	10
23:35	10	10	10	10
23:40	10	10	10	10
23:45	10	10	10	10
23:50	10	10	10	10
23:55	10	10	10	10
24:00	10	10	10	10

Manual Logging of Data
 See Computer Generated Charts

AVERAGE AND RANGE (R-R) CHART

Part Name PRESSURE SWITCH Part No. 77PSL2-3

Inspection No. 400 in. 300

Actuation

LIST NUMBER OF 1/2 IN. & 3/4 IN. HOLES AND CONNECTING HOLES

PG. 1 of 2

LIGHT TRUCK

Individual Readings

Sample size

Sample frequency

Average

Range

910.0

293.08

282.1722

283.2567

254.3422

240.4278

225.5133

50.0

40.0

30.0

20.0

10.0

0.0

ACTUATION OF CPE

91/09/13 16:41:10.1

0017

cale

perator

lot overlay

very n

imits

Frequency

120

105

90

75

60

45

30

15

ACTUATOR 08-77F3

84-03-13-18-11-13

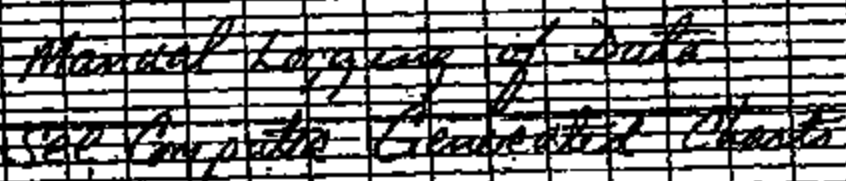
Don = 1.2

8

uit ivisions ast i p ☐ perator very n

TI-NHT3A 002786

ALERT GENERATION SPEED CONTROL
LIGHT TRUCK



AVERAGE AND RANGE (R-R) CHART

MAXIMUM PRESSURE IN PSI AND CONNECTIONS ACTING

PG. 2 of 2

Part name PRESSURE SWITCH Part No. 77PSL2-3
 Operator No. _____ Machine name and No. _____
 Rev. 200 40 Inspector _____
RELEASE

LIGHT TRUCK

Range																					
Individual Readings																					
Sample size																					
Sample frequency																					
Time																					
Date																					
Average																					
Range																					

500.0

351.8375

223.5715

85.9570

-51.0569

6-130.0711

-326.0953

80.0

43.0

63.0

24.0

312.0

0.0

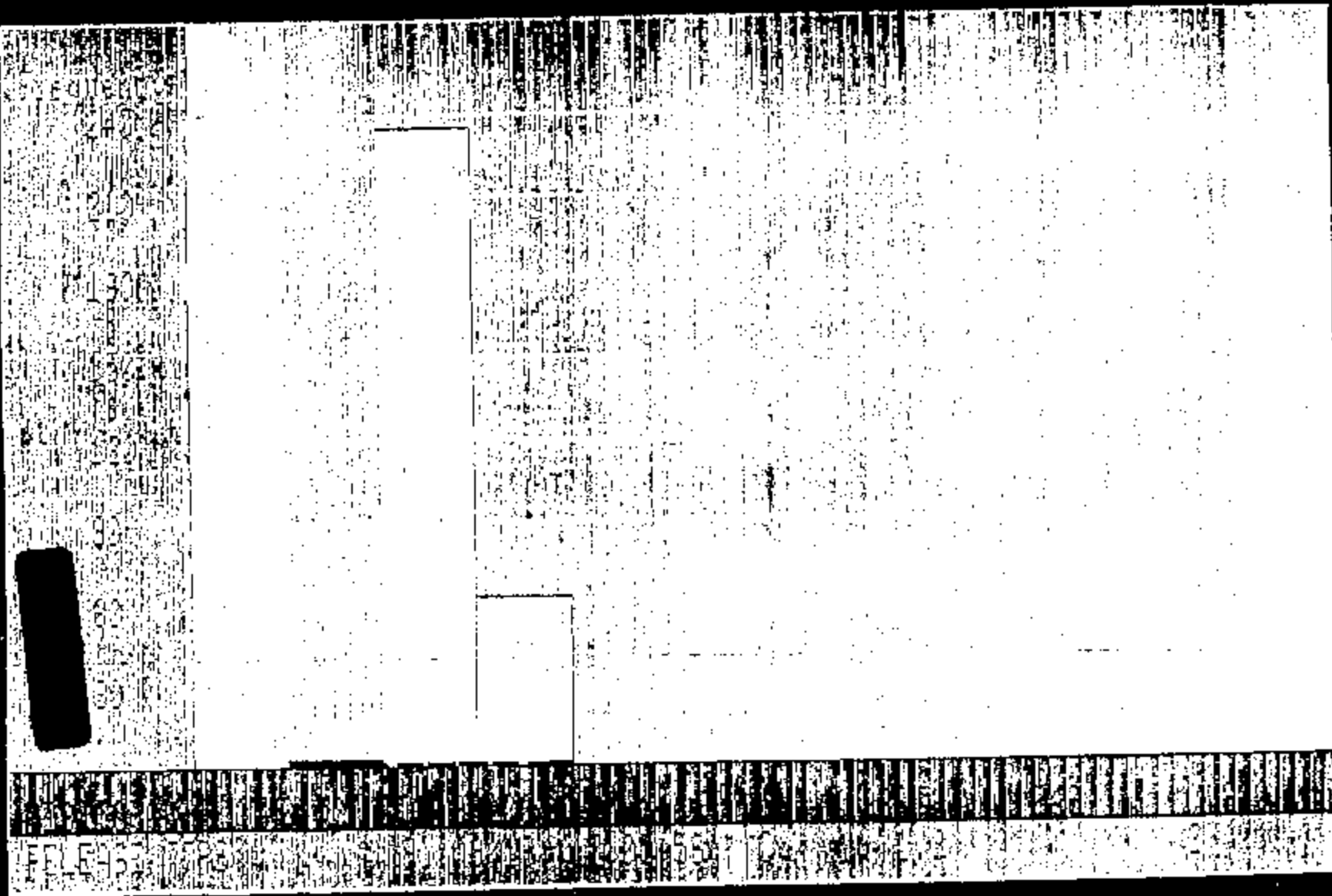
RELEASE TYPE

91/03/19 17:05:56

000000

cale perator lot overlay very n imits

TI-NHTSA 002788



Quit Divisions last li Op **apk** operator lvery n