A1

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

TI-NHTSA 002925

TEXAS INSTRUMENTS, INCORPORATED

ISR SUBMISSION

TO FORD MOTOR COMPANY

FOR PART NUMBER F2VC-9F924-AB

NEXT GENERATION SPEED CONTROL

SEPTEMBER 25, 1991

9-20-92

Ford
Installation Torque:

10-15 FT. LBS.

per: Bruce Pease
+
Steve Offler

TO [illegible] 10-11-91
FR J SEMCK
SD: [illegible]

ALERT DETAIL

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

ALERT NUMBER: A191A6195

ORIGIN ACTIVITY: NC08 CHASSIS PRO (LRC4)
INFORMATOR: PEASE, D. F.
CPEC: 040605

TYPE: (B) USE PPM
DATE: 91/10/02
PHONE: 32-27955
NOTICE NO:

STATUS: A
LOCATION: GN 3001, 01D605, P
RESOLVING NOTICE:

ALERT DESC: MONIT TEXAS INSTRUMENTS TO SHIP SPEED CONTROL REDUNDANT DEACTIVATION SWITCH, F2VC-9F924-AB, WITH EXCEPTION TO THE INTENDED MANUFACTURING/ASSEMBLY PROCESS CONSISTING OF

PRODUCTS AFFECTED: 1992 LINCOLN TOWN CAR, CROWN VICTORIA, GRAND MARQUIS WITH NEW GENERATION SPEED CONTROL.

MODEL CODES: CVPA CVPR CVPM
PLANTS AFFECTED: MAT7
MODEL YEAR: 92
MFG CONCERN CNTRL:
PROGRAM:
QTY:
EST INCRN VAR COST: -0.92
EST INCRN VEH COST:
UNIT MEASURE:
SUPP CODE:

MFG CONCERN CNTRL:
EFFECTIVE IN:
DISCUSSION CODE: 050
TIME: 900
EST INCRN TOOL COST: 0
EST INCRN FAC COST: 0
APPEARANCE:

INVALID:
OBT:
DISP: W
EST INCRN LBR COST: 0.00
WT EFFECT: 0.0000

========== AFFECTED PARTS ==========

AFF PART NO:
CPEC: 040605
ACT:
INTER:

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

REL IND: N
PUBC REQD:

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

USERID: DFP2489 ACTIVITY: NC08 ENTRY DATE: 91/10/02
ALERT DESC:
USING A MANUALLY LOADING SEMBRE CRIMPING MACHINE VERSUS THE AUTOMATIC IN LINE LOADED CRIMPER. THE AUTOMATIC CRIMPER HAS BEEN DETERMINED TO HAVE A YET TO BE DEFINED DEFICIENCY THAT RESULTS IN PART FAILURE TO MEET FPS 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 FS TEST. THIS DEVIATION PERMITS INCORPORATION OF THE -AB LEVEL SWITCH AND DELETION OF THE INTERIM -AA SWITCH FOR A COST REDUCTION OF $.92. THE -AB SWITCH IS PIA TO END ITEM

USERID: DFP2489 ACTIVITY: NC08 ENTRY DATE: 91/10/02
ALERT DESC:
PROPORTIONING VALVES F2AC-2B091-BA, F2VC-2B091-CC, AND JUNCTION BLOCK F2AC-ZC328-CB.

USERID: LA20686 ACTIVITY: NC08 ENTRY DATE: 91/10/04
ALERT DESC:
NC. SUPVR. APPROVAL REQ'D. IF PHASE IS AFFECTED. LAZ

USERID: DJM5368 ACTIVITY: NC08 ENTRY DATE: 91/10/04
ALERT DESC:

-MORE-

TI-NHTSA 002928

Process Description/ Function	Potential Failure Mode	Potential Effects of Failure	S E V	C L A S S	Potential Causes of Failure	O C C	Current Controls	D E T	R P N	Recommended Actions	Responsibility/ Target Completion Date	Action Results Actions Taken	S E V	O C C	D E T	R P N
[illegible] OF AIR SUPPLY	[illegible] OP	NO [illegible] OPERATION	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
	[illegible] OP	LOSS OF CALIBRATION	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
	[illegible]	NO [illegible] OPERATION	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
	[illegible]	CONTAMINATE PRODUCT	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	LOSS OF CALIBRATION	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible] STACK FINAL CHEP	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							

Process Description/ Purpose	Potential Failure Mode	Potential Effects of Failure	S E V	C L A S S	Potential Causes of Failure	O C C	Current Controls	D E T	R P N	Recommended Actions	Responsibility/ Target Completion	ACTION RESULTS Actions Taken	S E V	O C C	D E T	R P N
					[illegible]		[illegible]									
	[illegible]	[illegible]	7		[illegible]	3	[illegible]	1	21							
		[illegible]			[illegible]		[illegible]									
					[illegible]		[illegible]									
[illegible]	[illegible]	[illegible]	7		[illegible]	3	[illegible]	3	63							
					[illegible]		[illegible]									
	[illegible]	[illegible]	5		[illegible]	3	[illegible]	1	15							
					[illegible]		[illegible]									
[illegible]	[illegible]	[illegible]	7		[illegible]	3	[illegible]	1	7							
					[illegible]		[illegible]									
	[illegible]	[illegible]	7		[illegible]	3	[illegible]	1	7							
					[illegible]		[illegible]									
	[illegible]	[illegible]	7		[illegible]	4	[illegible]	2	9							
					[illegible]		[illegible]									
	[illegible]	[illegible]	7		[illegible]	4	[illegible]	4	9							
					[illegible]		[illegible]									
[illegible]	[illegible]	[illegible]	7		[illegible]	3	[illegible]	2	30							
					[illegible]		[illegible]									
	[illegible]	[illegible]	7		[illegible]	3	[illegible]	2	30							
							[illegible]									
	[illegible]	[illegible]	7		[illegible]	5	[illegible]	2	40							
[illegible]	[illegible]	[illegible]	7		[illegible]	3	[illegible]	4	37							
					[illegible]		[illegible]									

Process Description/ Purpose	Potential Failure Mode	Potential Effects of Failure	S E V	C L A S S	Potential Causes of Failure	O C C	Current Controls	D E T	R P N	Recommended Actions	Responsibility & Target Completion Date	SECTION B Actions Taken	S E V	O C C	D E T	R P N
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							
	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]							

Process Description/ Purpose	Potential Failure Mode	Potential Effects of Failure	S E V	C L A S S	Potential Causes of Failure	O C C	Current Controls	D E T	R P N	Recommended Actions	Responsibility & Completion Date	Action Results	S E V	O C C	D E T	R P N
	[illegible]	[illegible]	7		[illegible]	2	[illegible]	3	42							
[illegible]	[illegible]	[illegible]	5		[illegible]	1	[illegible]	1	5							
	[illegible]	[illegible]	5		[illegible]	1	[illegible]	1	5							
[illegible]	[illegible]	[illegible]	7		[illegible]	2	[illegible]	3	42							
[illegible]	[illegible]	[illegible]	7		[illegible]	5	[illegible]	3	105							
	[illegible]	[illegible]	7		[illegible]	5	[illegible]	3	105							
	[illegible]	[illegible]	7		[illegible]	2	[illegible]	1	7							
[illegible]	[illegible]	[illegible]	5		[illegible]	2	[illegible]	1	5							
	[illegible]	[illegible]	9		[illegible]	1	[illegible]	1	9							
[illegible]	[illegible]	[illegible]	9		[illegible]	1	[illegible]	1	9							
	[illegible]	[illegible]	9		[illegible]	1	[illegible]	1	9							
	[illegible]	[illegible]	9		[illegible]	1	[illegible]	1	9							
[illegible]	[illegible]	[illegible]	7		[illegible]	2	[illegible]	3	42							

Function Description/ Purpose	Potential Failure Mode	Potential Effects of Failure	SEV	CLASS	Potential Causes of Failure	OCC	Current Controls	DET	RPN	Recommended Actions	Responsibility & Target Completion Date	ACTION RESULTS Actions Taken	SEV	OCC	DET	RPN
							[illegible]									
	[illegible]	[illegible]	9		[illegible]	3	[illegible]	3	27							
		[illegible]			[illegible]		[illegible]									
					[illegible]		[illegible]									
							[illegible]									
							[illegible]									
	[illegible]	[illegible]	9		[illegible]	3	[illegible]	3	27							
					[illegible]		[illegible]									
					[illegible]		[illegible]									
							[illegible]									
[illegible]	[illegible]	[illegible]	7		[illegible]	3	[illegible]	3	27							
		[illegible]			[illegible]		[illegible]									
					[illegible]		[illegible]									
					[illegible]											

Better Copy Need
to be made

Training Description Reason	Potential Failure Mode	Potential Effects of Failure			Potential Causes of Failure		Service Controls			Recommended Actions	Responsibility Completion	Action Results Actions Taken				
[illegible]	[illegible]	[illegible]	7		[illegible]	1	[illegible]	1	7							
ORIGIN ACTIV[illegible] ORIGINATOR: DESC: ALERT DESC:	[illegible]	[illegible]	7		[illegible]	1	[illegible]	1	7							
[illegible] MODEL [illegible] PERIOD AFF. NFC CONCERN [illegible] PROGRAM: DATE: EST INC: EST INCORP: [illegible]	[illegible]	[illegible]	7		[illegible]	1	[illegible]	1	7							
	[illegible]	[illegible]	7		[illegible]	7	[illegible]	1	27							
AFF PART NO: DESC: ACTS:	[illegible]	[illegible]	7		[illegible]	7	[illegible]	1	27							
[illegible]	[illegible]	[illegible]	7		[illegible]	7	[illegible]	1	35							
[illegible]	[illegible]	[illegible]	7		[illegible]	7	[illegible]	1	27							
[illegible]	[illegible]	[illegible]	7		[illegible]	7	[illegible]	1	27							
[illegible]	[illegible]	[illegible]	7		[illegible]	7	[illegible]	1	27							
SERIES: ALERT DESC: PROPORTI[illegible] VALVE: F2AC [illegible] F2V JUNCTION BLOC[illegible] F2AC-/370 [illegible] SERIES: ALERT DESC:	[illegible]	[illegible]														

TI-NHTSA 002936

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

TEXAS INSTRUMENTS
INCORPORATED
MATERIALS AND CONTROLS GROUP
☐ ATTLEBORO, MA 02703 ☐ VERSAILLES, KY 40383
☐ JOHNSON CITY, TN 37601 ☐ CENTRAL LAKE, MI 49622

Shipping Order Sept. 26, 1991
DATE: S.O. # 214054
REF. # DATE SHIPPED 9 28 91
SHIPPED VIA: (1) Overnight Airborne
490364350 01
USE (CHECK ONE)

SHIP TO:
Attn: Joe Sulanik
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. # CC:

QUANTITY	DESCRIPTION/PART #/PO	UNIT PRICE	TOTAL
1	IEIK Submission Package	n/c	
6	77PEL2-1 Samples/Pressure Switches	n/c	

Rita
1@7
9/26/91

TI-001567

GROSS WEIGHT	NO. OF CONTAINERS	ORIGINATOR'S NAME (TYPED)	ORIGINATOR'S SIGNATURE
6 lb	1 ctn	Elaine Rose MS12-27	

S-01514 (1/91)

ORIGINATOR COPY

TEXAS INSTRUMENTS
INCORPORATED
MATERIALS AND CONTROLS GROUP

☐ ATTLEBORO, MA 02703 ☐ MORGANTOWN, KY 42261
☐ JOHNSON CITY, TN 37601 ☐ SESSER, ILLINOIS 62884

Shipping Order

DATE: Sept. 26, 1991 S.O. #: 214054

REF. #: _____ DATE SHIPPED: / /

SHIPPED VIA: Overnight

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

USE (CHECK ONE)

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

CHARGE TO:

DIV/ACCT. #: _____ CC: _____

QUANTITY	DESCRIPTION/PART S/PC	UNIT PRICE	TOTAL
1	ISIR Submission Package	n/c	
6	77PSL2-1 Samples/Pressure Switches	n/c	

TI-001568

GROSS WEIGHT	NO. OF CONTAINERS	ORIGINATOR'S NAME (TYPED)	ORIGINATOR'S SIGNATURE
		Elaine Rose MS12-27	Elaine Rose

S-09146 S/H

ACCOUNTS RECEIVABLE COPY

TI-NHTSA 002938

TEXAS INSTRUMENTS, INCORPORATED

ISR SUBMISSION

TO FORD MOTOR COMPANY

FOR PART NUMBER F2VC-9F924-AB

NEXT GENERATION SPEED CONTROL

SEPTEMBER 26, 1991

TI-001569

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

Pass Car

7778 PARTS LIST

Part Name	Part Number	Test #		Date Sent	Date rec.
SWITCH ASSEMBLY					
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	
Movable Terminal	36887-1	110824		7-17	
Spring	36889-1	110825		7-25	
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	? 34353-1	110831		7-12	7-5
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/A 36656-29				
Disc for PC	N/A 36656-27				
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		
Cap Asm	27370-1	110840			
	27370-2	110841			
	27375-1	110842			

Form No. 10826

TEST NO. 110825

TECHNICAL SERVICE LABS

TEST NO. 110825

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	1K2		
[illegible]	060	[illegible]	[illegible]
[illegible]	[illegible]		
[illegible]	12-27		
[illegible]	3696		
[illegible]	[illegible]		
[illegible]			
[illegible]			
[illegible]			
[illegible]			

REPORT OF RESULTS:

A. J. Ave
7/25/91

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC-325	TM-431	JOCY-125	FACIL-614
PC-127	WIRE-432	CLKE-122	FACIL-621
VERS-166	EFD-621	CAN-904	FACIL-531
AFCC-483	PEP-622	AD DEV-288	STAFF-455
IMC-430	CSD-635	EMCD-677	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

Form No. 1005

TEST NO. 110824

TECHNICAL SERVICE LABS

TEST NO. 110824

[redacted]			

REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC=325	TM=431	JOCY=128	FACIL=614
PC=127	WIRE=432	CLKE=122	FACIL=521
VERS=163	EPD=621	CAN=654	FACIL=531
AFCC=463	PEP=622	AD DEV=286	STAFF=866
IMO=430	CSD=635	EMCD=677	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

Form No. 1020

TEST NO. 110823

TECHNICAL SERVICE LABS

TEST NO. 110823

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC=325	TM=431	JOCY=129	FACIL=514
PD=127	WIRE=432	CLKE=122	FACIL=521
VERS=166	EPD=521	CAN=954	FACIL=531
AFCO=483	PEP=522	AD DEV=296	STAFF=955
MD=490	CSD=535	EMCD=677	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

Form No. 19853

TEST NO. 110831

TECHNICAL SERVICE LABS

TEST NO. 110831

[illegible]	[illegible]	[illegible]	[illegible]
[illegible] COST CENTER	147		
PRODUCT CODE	000		
[illegible]	[illegible]		
MAIL STATION	15-21		
[illegible]	3697		
[illegible]	[illegible]		
DATE SUBMITTED	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		

REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC=325	TM=431	JOCY=126	FACIL=614
PC=127	WIRE=432	CLKE=122	FACIL=621
VERS=188	EPD=621	CAN=654	FACIL=531
AFOC=463	PEP=522	AD DEV=296	STAFF=656
IMD=430	CSD=635	EMCD=677	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TEST NO. 110832

TECHNICAL SERVICE LABS

TEST NO. 110832

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC-325	TM-491	JOCY-126	FACIL-614
PC-127	WIRE-432	CLKE-122	FACIL-621
VERS-169	EPD-621	CAN-654	FACIL-631
APCC-483	PEP-622	AD DEV-286	STAFF-655
IMD-430	CSD-635	EMCD-677	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

Form No. 10863

TEST NO. 110822

TECHNICAL SERVICE LABS

TEST NO. 110822

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC LD.

MC=335	TM=431	JOCY=125	FACIL=514
PC=127	WIRE=432	CLIKE=122	FACIL=521
VERB=165	SPD=521	CAN=954	FACIL=531
APCC=483	PEP=522	AD DEV=269	STAFF=656
BMD=430	OSD=636	EMCD=677	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TI-NHTSA 002947

Form No. 1863

TEST NO. 110821

TECHNICAL SERVICE LABS

TEST NO. 110821

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	[illegible]		

REPORT OF RESULTS:

DATE RECEIVED _____ DATE OUT _____

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC=325	TM=431	JOCY=126	FACIL=614
PC=127	WIRE=432	OLKE=122	FACIL=621
VERS=168	EPD=621	CAN=654	FACIL=631
AFCC=453	PEP=622	AD DEV=366	STAFF=656
IMD=430	OSD=635	EMCD=677	

DISTRIBUTION: White and Yellow - Lab Pink - Requester

Pass Car

77PS PARTS LIST

Part Name	Part Number	Test #	Date Sent	Date rec.
SWITCH ASSEMBLY				
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				
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		
CAP ASM	27370-1	110840		
	27370-2	110841		
	27375-1	110842		

Form No. [illegible] 7/8/91 [illegible]

TEST NO. 110831

TECHNICAL SERVICE LABS

TEST NO. 110831

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	16-69	[illegible]	[illegible]
[illegible]	3698	[illegible]	[illegible]
[illegible]	PCQA	[illegible]	[illegible]
[illegible]	7-16-91	[illegible]	[illegible]
[illegible]	7-29-91	[illegible]	[illegible]
[illegible]	40	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	74353-1 Gas Lot [illegible]

REPORT OF RESULTS:

DATE RECEIVED 7/11/91 DATE OUT 7/29/91 [illegible]

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC=325	TM=431	JOCY=126	FACIL=514
PC=127	WIRE=432	CLKE=122	FACIL=521
VERS=166	EPD=621	CAN=654	FACIL=531
AFCC=483	PEP=622	AD DEV=288	STAFF=655
IMD=430	OSD=635	EMCO=877	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

DRAWINGS AVAILABLE UPON REQUEST

SENT CERT
COPY. -4
ENVIO SEAL
1-9-12
E-

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

FORD AND/OR SUPPLIER PART NAME AND PART NUMBER OF ASSEMBLY AND ITS COMPONENTS

SWITCH ASY - SPEED CONTROL DEACTIVATE

(delta) F2VC-9F924-AB

SUPPLIER PART NUMBER (SEE FORM 1638) XXX

CONSIDER THIS APPROVED ☐ YES ☒ NO

SUPPLIER ☐ 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.

PIECE COST AFFECTED ☐ YES ☒ NO
IF YES, COST EFFECT $

WILL INCORPORATION OF CHANGE AFFECT SHIPPING SCHEDULE? ☐ YES ☒ NO

SIGNATURE [signature] 91105
(FORD CONCURRENCE)

PRODUCT ENGINEERING TO COMPLETE

PER IN PROCESS ☒ APPROVED ☐ REJECTED BY D.F. Pease DATE 91106

CONCURRED BY [signature] DATE [illegible]

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 SPECIFYING 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.

C E 1 1638 (Previous editions may NOT be used) SUPPLIER

TEXAS INSTRUMENTS
INCORPORATED
MATERIALS AND CONTROLS GROUP

☐ ATTLEBORO, MA 02703 ☐ VERSAILLES, KY 40383
☐ JOHNSON CITY, TN 37601 ☐ CENTRAL LAKE, MI 49622

Shipping Order

DATE: / / S.O. # 214084

REF. # DATE SHIPPED 12/1/91

SHIPPED VIA

SHIP TO:
FORD MOTOR COMPANY
1700 Oakwood Blvd.
P. O. Box 1586-D-2015
Dearborn, Michigan 48121
Attn: Mark Scheller

CHARGE TO:

USE (CHECK ONE)

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

4903666730

DIV/ACCT. # CC:

QUANTITY	DESCRIPTION/PART NO	UNIT PRICE	TOTAL
1	ISR Supplement Pkg 6 Bases	N/C	

Rita
1Ca 1
12/20/91

GROSS WEIGHT	NO. OF CONTAINERS	ORIGINATOR'S NAME (TYPED)	ORIGINATOR'S SIGNATURE
3#	1 CTN	Elaine Rose MS 12-27	

S-011145 5/84

ORIGINATOR COPY

TI-NHTSA 002954

[illegible] 9, 1991

[illegible]: Andy McGuirk
Mike DeMattia

CC: Martha Sullivan
Gary Snyder
Charlie Douglas
Yogen Chemburkar

[illegible]: Joe Schuck

[illegible]: Ford 57PS Positional [illegible]ue

[illegible]oce did sign the CCPS t[illegible] [illegible]nge SREA from .5 +/- .20 mm to .[illegible] +/- [illegible]mm.

[illegible] the same time we discussed [illegible] existing 57PS L-switches that are used on the ride height control switch. I brought it to his attention after much discussion, that this product [illegible] also not capable of meeting the specified tolerance. Bruce then agreed to sign off on both SREA's. However, when he [illegible]nt to his supervisor for approval, his supervisor had some questions about [illegible] 57PS. He was concerned that we have been out of control on that [illegible]ension for some time. I agreed with him and said that we believe we have [illegible]n out of specification, however, it did not come to our attention until we [illegible]arted to work on the cruise control program. I also shared with him that [illegible] was embarrassing that we had to bring this up but we would much [illegible]ther deal from a point of honesty then ignore the situation. Steve Fan [illegible] pleased with our position. Now he would like a letter from TI stating [illegible]y the 57PS is out of control, why didn't we pick it up during our annual [illegible]qualification and why didn't we share this information with them earlier. [illegible]oce he has this letter, I see this as a self servicing letter to his file, [illegible] will then approve all SREA's. This letter must be done very [illegible]ip[illegible]omatically and expeditiously.

Th[illegible] you

[illegible]Joe

NEVER on Spec.

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: G — Date: 4-11-91

Engineering Change Authorization: BRUCE-PEASE — Date:

Shown on Drawing No.: F2VC-9F924-AB — Part Weight: 062 lbs

Reason for Initial Sample:

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

SUPPLIER INFORMATION (Manufacturing Location)

Supplier Name: TEXAS INSTRUMENTS — Street Address: 34 FOREST STREET

City: ATTLEBORO — State: MA — Postal Code: 02703 — Country: USA

Supplier Mfg. Location Code – DUNS: TG97K — 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: 2

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
- ☐ Auxiliary Drawings/Sketches
- ☐ Correct Number of Samples
- ☐ Material Test Results
- ☐ Certifications
- ☐ [illegible]
- ☐ Control Plan
- ☐ Process Capability Results
- ☐ [illegible]
- ☐ Gage [illegible]

Supporting data for [illegible] attached upon request.

COMMENTS: TSR [illegible] ADDITIONAL TESTING TO CLOSE OUT ALERT NO. A10166193; ALSO, CORRECTED MANIFOLD DIMENSIONS. PART PERFORMANCE MEETS ON [illegible] 9/6/91

DECLARATION: I affirm that the samples submitted herein are representative of suppliers and have been made to the applicable customer drawings and specifications and have been made on regular production tooling with no deviations other than the regular production process.

Authorized Signature: [signature] — Date: 12/20/91

Print Name: JIM WATT — Title: QA ENGINEER — Phone No.: 508-699-1719

Approval [illegible] ☒ Approved ☐ Rejected

Date: 1/14/92

[illegible] 2020 [illegible] SQA

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 NGSC 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 1.95 - 2.06 was inadvertantly 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 PIBT/PIPC data is required. However, we intend to provide PIBT/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 Watt
QRA 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 INCORPORATED • 34 FOREST STREET • ATTLEBORO, MA 02703
508-699-3600 • TELEX 93-7708 TWX 710-348-0080 • CABLE TEXINS

TEXAS INSTRUMENTS

Ford Motor Company
17000 Oakwood Blvd.
P.O. Box 1536-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 NOSC 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
QRA Engineer
Precision Controls Department
Control Products Division

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

encl: ISIR submission

TEXAS INSTRUMENTS INCORPORATED • 34 FOREST STREET • ATTLEBORO, MA 02703
508-699-3800 • TELEX 910801 • CABLE TIGONS

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

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. – KED

CUSTOMER INFORMATION

Customer Name: Ford Motor Co. – KED 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
- ☐ Auxiliary Drawings/Sketches
- ☐ Correct Number of Samples
- ☐ Dimensional Results
- ☒ Material Test Results
- ☐ Certifications
- ☐ Functional (ES) Test Results
- ☐ Product Engineering Approval
- ☐ Control Plan
- ☐ Process Capability Results
- ☐ Process Flow Diagram
- ☐ 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 Signature: 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 _____

SQA 292c

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

FORD AND/OR SUPPLIER PART NAME AND PART NUMBER OF ASSEMBLY AND ITS COMPONENTS

SWITCH ASY - SPEED CONTROL DEACTIVATE

(delta) F2VC-9F924-AB

☐ YES ☒ NO

☐ 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 [signature] 91105

PRODUCT ENGINEERING TO COMPLETE

FOR IN PROGRESS ☒ APPROVED ☐ REJECTED BY B.F. Pease DATE 91 11 06

CONCURRED BY [signature] DATE [illegible]

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 SUBJECTING 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.

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 diaphram 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
QRA 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-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
- ☐ Engineering Change(s)
- ☐ Tooling Transfer
- ☐ Other – Please Specify: SEE BELOW
- ☐ Change in Optional Construction or Material
- ☐ Additional, Replacement, or Refurbished Tooling
- ☒ Correction of Discrepancy (Preshipment No. _____)
- ☐ Process Change
- ☐ Change in Subcontractor or Source
- ☐ Parts Produced at Additional Location

SUPPLIER INFORMATION (Manufacturing Location)

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

Supporting data for all requirements are available upon request.

COMMENTS:

ISR SUPPLEMENT WITH ADDITIONAL TESTING TO CLOSE OUT ALERT NO. A10166193;

ALSO, CORRECTED BASE MOLD DIMENSIONS.

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: 12/20/91

Print Name: JIM WATT Title: QA ENGINEER Phone No.: 508-699-1712

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

Signature _____ Date _____

Form No. 292c

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

TEXAS INSTRUMENTS
INCORPORATED
MATERIALS AND CONTROLS GROUP

☐ ATTLEBORO, MA 02703 ☐ VERSAILLES, KY 40383
☐ JOHNSON CITY, TN 37601 ☐ CENTRAL LAKE, MI 49622

DATE: 3/26/91 S.O. #: 214084

REF. #: _____ DATE SHIPPED: / /

SHIPPED VIA: _____

SHIP TO:
FORD MOTOR COMPANY
1700 Oakwood Blvd.
P. O. Box 1586-D-2015
Dearborn, Michigan 48121
Attn: Mark Scholler

USE (CHECK ONE)

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

CHARGE TO:

DIV/ACCT. #: _____ CC: _____

QUANTITY	DESCRIPTION/PART #/PO	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	

S-01614 5/84

ACCOUNTS RECEIVABLE COPY

TI-NHTSA 002984

cc = Elaine 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
QRA 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

TI-NHTSA 002966

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 Paane Date: _____

Shown on Drawing No.: F2VC-9F924-AB Part Weight: .062 kg

Reason for Initial Sample:

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

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: TD97K Customer Assigned: Ford Motor Co. EEB

CUSTOMER INFORMATION

Customer Name: Ford Motor Co. EEB Buyer: Fred Ramlarshot Buyer Code: 165

Purchase Order Number: _____ Sample Acceptance Level: _____

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

Supporting data for all requirements are available upon request.

COMMENTS:

Conditional approval utilizing manually crimped parts as detailed in ~~Alert No. A10106193 (attached) Initial ISO Submitted 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: _____

TI-001597

Form 292C

TI-NHTSA 002967

Control copy
FR: D. Smith
SJ: Sign passion report

ALERT DETAIL

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

ALERT NUMBER: A10164193

ORIGIN ACTIVITY: NC00 CHASSIS PED (LNCC)
ORIGINATOR: PEASE, D. F.
CPSC: 060605

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

STATUS: A
LOCATION: BN 3001, DL0603, D
RESOLVING NOTICE:

ALERT DESC: PERMIT TEXAS INSTRUMENTS TO SHIP SPEED CONTROL REFURBACT DEACTIVATION SWITCH, F2VC-9F924-AB, WITH EXCEPTION TO THE INTENDED MANUFACTURING/ASSEMBLY PROCESS CONSISTING OF HARNESS WITH NEW GENERATION SPEED CONTROL.

PRODUCTS AFFECTED: 1992 LINCOLN TOWN CAR, CROWN VICTORIA, GRAND MARQUIS

MODEL CODES: CVFA CVFM CVVB
MODEL YEAR: 92
PLANTS AFFECTED: AA17
NFG CONCERN CNTRL:
NFG CONCERN CNTRL:
INVALID:
PROGRAM:
EFFECTIVE IN:
OUT:
NTT:
TIME: 900
DIVISION CODE: 000
DISP: W
EST INCRN VAR COST: -0.92
EST INCRN TOOL COST: 0
EST INCRN LBR COST: 0.00
EST INCRN VAR COST:
EST INCRN FAC COST: 0
WT EFFECT: 0.0000
UNIT MEASURE:
APPEARANCE:
SUPP DOCS:

---------- AFFECTED PARTS ----------

AFF PART NO:
AFF PART DESC:
SEL IND: N
CPSC: 060605
NOTICE:
ACT:
INTER:
SUPPLY/LOCAL:
AVAIL:
FUNC REQD:
SUPPLIER:

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

USERID: DFP2409 ACTIVITY: NC00 ENTRY DATE: 91/10/02
ALERT DESC:
USING A MANUALLY LOADING SERVOR CRIMPING MACHINE VERSUS THE AUTOMATIC IN LINE LOADED CRIMPER. THE AUTOMATIC CRIMPER HAS BEEN DETERMINED TO HAVE A TEST 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 -AB LEVEL SWITCH AND DELETION OF THE INTERIM -AG SWITCH FOR A COST REDUCTION OF 0.92. THE -AB SWITCH IS P1A TO END ITEM

USERID: DFP2409 ACTIVITY: NC00 ENTRY DATE: 91/10/03
ALERT DESC:
PROPORTIONING VALVES F2AC-2B091-BA, F2VC-2B091-CC, AND JUNCTION BLOCK F2AC-2E320-CB.

USERID: LA20484 ACTIVITY: NC00 ENTRY DATE: 91/10/04
ALERT DESC:
OK. SUPVR. APPROVAL REQ'D. IF PNVBS IS AFFECTED. LA2

USERID: DJM5348 ACTIVITY: NC00 ENTRY DATE: 91/10/04
ALERT DESC:

-MORE-

TI-NHTSA 002988

INITIAL SAMPLE WARRANT

No. 112584

PART INFORMATION

Part Name: NEXT GENERATION SPEED CONTROL DEACTIVATION PRESSURE SWITCH 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
- ☐ Engineering Change(s)
- ☐ Tooling Transfer
- ☐ Other -- Please Specify _____
- ☐ Change in Optional Construction or Material
- ☐ Additional, Replacement, or Refurbished Tooling
- ☐ Correction of Discrepancy (Reclassification No. _____)
- ☐ Process Change
- ☐ Change in Subcontractor or Source
- ☐ Parts Produced at Additional Location

SUPPLIER INFORMATION (Manufacturing Location)

Supplier Name: TEXAS INSTRUMENTS Street Address: 34 Forest St.

City: Attleboro State: Mass. 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 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
- ☐ Auxiliary Drawings/Sketches
- ☒ Correct Number of Samples
- ☒ Dimensional Results
- ☒ Material Test Results
- ☒ Certifications
- ☒ Functional (EE) Test Results
- ☐ Product Engineering Approval
- ☒ Control Plan
- ☒ Process Capability Results
- ☒ Process Flow Diagram
- ☒ 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: [signature] Date: 9/26/91

Print Name: JIM WATT Title: QRA Eng. Phone No.: 508-699-1712

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

Signature _____ Date _____

Quality Form 292c

TI-NHTSA 002969

Initial Sample Report – Dimensional

No. 112384

Page ____ of ____

TO BE COMPLETED BY SUPPLIER

SUPPLIER	LOCATION	CODE	PART NUMBER
Texas Instruments	Attleboro, Ma.	T097K	F2VC-9F924-AB

BUYER	CODE	FORD ENGINEER BY	NO. OF SAMPLES	PRODUCT SHIPPED DESIGNATED CONTROL ITEM (▽)
Fred Hendershot	165	EED	8	YES ☐ NO ☒

REASON FOR SAMPLES

NEW PART ☒ CHANGED PART ☐ NEW LOCATION ☐ NEW TOOLS ☐ MATERIAL CHANGE ☐

PART NAME: Next Generation Speed Control Deactivation Pressure Switch

SUP DATE: 4/17/91

MODEL YEAR AND PRODUCT LINE:

☐ RECEPTION PERSONNEL

AUTHORIZING DERIVATION NO.: N/A

SAMPLE MADE ON PRODUCTION SET-UP AND TOOLS: YES ☐ NO ☐

ADDITIONAL HAND OR TOOL WORK MORE PERFORMED: YES ☐ NO ☐

WE HEREBY CERTIFY THE INSPECTION RESULTS BELOW ARE CORRECT AND THAT OUR SAMPLE MEETS FORD MOTOR COMPANY SPECIFICATIONS

SAMPLE SHIPPED TO SUP DATED: 4/17/91

DATE RECEIVED: 9/20/91

SIGNATURE OF RESPONSIBLE OFFICIAL: [signature] TITLE: QRA Eng. DATE: 9/26/91

CHARACTERISTIC DIMENSION OR SPECIFICATION	CLASS ▽		SUPPLIER INSPECTION RESULTS	CONSUMER VERIFICATION OF INSPECTION RESULTS	PROCESS CAPABILITY STUDY REQUIRED	PROCESS CAPABILITY STUDY COMPLETED
FAI RESULTS RECORDED ON TI FORMAT						

TO BE COMPLETED BY CONSUMER

DISPOSITION	SERIAL NO.	APPROVED	REJECTED	NOT REQ'D.				
DIMENSIONAL SUP DATED	10000				INSPECTION AND TESTING INSTRUCTIONS APPROVED	YES ☐ NO ☐	SPECIAL SAMPLE APPROVED	YES ☐ NO ☐ NOT REQ'D ☐
					INITIAL SAMPLE APPROVAL MUST BE SUBMITTED BY APPROVAL OF FIRST PRODUCTION SHIPMENT	YES ☐ NO ☐	CONTROL PLAN APPROVED	YES ☐ NO ☐ NOT REQ'D ☐
MATERIAL TEST STEL FORM					APPROVED BY STELAM	YES ☐ NO ☐ NOT REQ'D ☐	APPROVED BY FORD ENGINEERING	YES ☐ NO ☐ NOT REQ'D ☐
BB TEST BAR FORM					DIVISION		AUTHORIZED SIGNATURE	DATE

Form Code Date 292a

*DESIGNATED CHARACTERISTIC CLASS
▽ – CONTROL ITEM

COPY 1

TI-NHTSA 002970

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 - 11.69	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 - 19.43	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	11.79	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	8.38 - 9.72	8.43 8.36	8.54 8.57	8.45 8.31	8.31 8.15	8.30 8.34	
9	COLOR: BROWN	OK	OK	OK	OK	OK	
10	2.08 - 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 (F73A-9F24-AA)SWITCHES ARE PRODUCED OFF OF THE SAME PRODUCTION TOOLING.

THE (F73A-9F924-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.

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508-699-8800 • TELEX 95-1708 TWX 710-348-0688 • CABLE TEXINS

TEXAS INSTRUMENTS

DIMENSIONAL ANALYSIS ON PART NUMBER

F3TA-9F924-AA

NOTE: *MARKED PRINT DENOTES CAVITY # A1

	BLUEPRINT SPEC	CAVITY # A2 ACTUAL	CAVITY # C3 ACTUAL	CAVITY # C4 ACTUAL	CAVITY # D5 ACTUAL	CAVITY # B6 ACTUAL	COMMENTS
1	13.43-13.85	13.692	13.623	13.602	13.719	13.646	
2	131DEG +/- 2DEG	130DEG 36MIN	131DEG 01MIN	130DEG 49MIN	132DEG 10MIN	132DEG 22MIN	
3	1.65 - 2.06	2.690	2.669	2.667	2.699	2.692	TOOL TO BE CORRECTED
4	19.02 MAX	18.665	18.663	18.691	18.677	18.636	
5	0.38-0.26 2PL	.199 .137	.200 .154	.245 .197	.225 .176	.169 .161	
6	0.50 +/- 0.25	.582 .510	.515 .453	.419 .347	.392 .353	.429 .396	
7	12.74-3.10 2PL	2.900 2.892	2.896 2.896	2.896 2.900	2.902 2.891	2.867 2.899	
8	19.48-19.81	19.40	19.58	19.61	19.57	19.41	
9	16.56-16.76	16.366	16.400	16.585	16.585	16.625	
10	12.80-13.21	13.040	13.086	13.003	12.978	12.956	
11	11.40-11.90	11.770	11.810	11.780	11.790	11.777	
12	2.84 - 3.05	2.925	2.917	2.923	2.920	2.923	
	0.1 R	.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	11.680	11.737	

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TEXAS INSTRUMENTS

DIMENSIONAL ANALYSIS ON PART NUMBER

[illegible]

	BLUEPRINT SPEC	CAVITY # A2 ACTUAL	CAVITY # C3 ACTUAL	CAVITY # C4 ACTUAL	CAVITY # D5 ACTUAL	CAVITY # D6 ACTUAL	COMMENTS
15	1.24 - 1.55	1.348	1.334	1.337	1.334	1.338	
16	6.60 - 6.81	6.670	6.670	6.680	6.665	6.647	
17	NO FLASH/BURRS	OK	OK	OK	OK	OK	
18	7.23 - 7.73	7.549	7.646	7.639	7.654	7.425	
[illegible]	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	FLATS & PARTS	OK	OK	OK	OK	OK	
22	0.25 DX 40-50 DEG CHAMFER	UNABLE TO MEASURE	MEASURE	BECAUSE THREADS ARE ALREADY IN			
23	13/8-24UNF-2A	OK	OK	OK	OK	OK	
24	1.10 - 1.40	1.220	1.212	1.220	1.234	1.220	
25	12.5 C	.20	.20	.20	.20	.20	
26	0.16 D	.020	.036	.008	.023	.025	
27	M10X1 - 4X0G	MEASURED ON CROSS SECTIONED PIECE					
28	M40X3 - 5X0G	MEASURED ON CROSS SECTIONED PIECE					
29	7.82 - 8.02	7.90 7.91	7.90 7.89	7.89 7.90	7.89 7.88	7.86 7.90	
30	1.50 - 2.04	1.754	1.857	1.861	1.807	1.807	

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TEXAS INSTRUMENTS

DIMENSIONAL ANALYSIS ON PART NUMBER

F9TA-9F924-AA

	BLUEPRINT SPEC	CAVITY # A2 ACTUAL	CAVITY # C2 ACTUAL	CAVITY # C4 ACTUAL	CAVITY # D5 ACTUAL	CAVITY # D6 ACTUAL	COMMENTS
21	9.39 - 9.66	9.55	9.58	9.50	9.50	9.58	
22	9.12 MIN	9.22	9.14	9.19	9.22	9.14	
23	14.22 MAX	13.64	13.62	13.58	12.67	13.66	
24	57.15 MAX	55.60	55.60	55.55	55.54	55.53	
[illegible]	12.55-13.11	12.88	12.83	12.83	12.60	12.82	
26	11.65-12.17	11.79 11.84	11.89 11.91	11.85 11.84	11.99 11.89	11.91 11.94	
27	1.80-2.21R 2PL	1.83	2.02	1.82	1.90	1.80	MEAS.SIDE W/O KEY
28	(NOTE --- 2DEG)(4pl) MEASURED ON SEPARATATE BASE - CROSS SECTIONED						
29	22.51 MAX	31.61 31.69	32.59 31.72	31.68 31.72	31.58 31.65	31.64 31.79	
40	14.02-14.53	14.281	14.221	14.223	14.222	14.221	
41	3.30 - 3.60	3.420 3.413	3.441 3.429	3.435 3.430	3.434 3.428	3.436 3.421	
42	7.23 - 7.97	7.299 7.281	7.340 7.352	7.294 7.284	7.303 7.281	7.309 7.400	
43	5.58 - 5.85	5.684 5.583	5.641 5.642	5.594 5.583	5.610 5.591	5.612 5.590	
44	171.50DEG+/-20MIN	172000 28MIN	172000 50MIN	172000 30MIN	172050 54MIN	172000 29MIN	
	(2 PL)	172000 24MIN	172000 54MIN	171000 33MIN	172000 43MIN	171050 44MIN	
45	1.42-1.63 2PL	1.595 1.572	1.610 1.581	1.541 1.544	1.595 1.592	1.609 1.538	
46	0.35 - 0.66	1.571 .597	1.545 .578	1.530 .573	1.562 .556	1.538 .582	
	(4 PL)	1.582 .568	1.583 .553	1.562 .564	1.565 .569	1.576 .571	

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TEXAS INSTRUMENTS

DIMENSIONAL ANALYSIS ON PART NUMBER

F3TA-9F924-AA

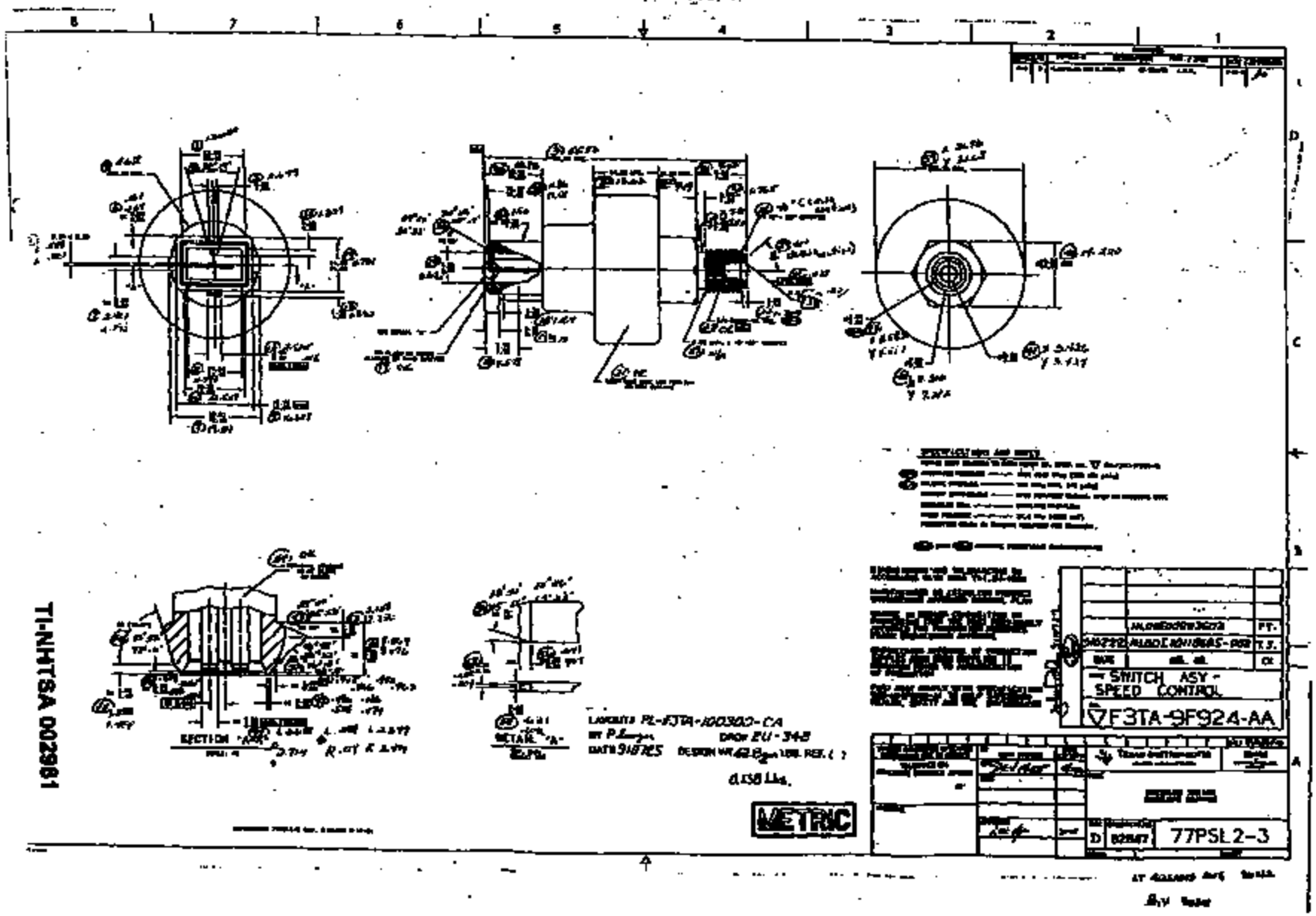
	BLUEPRINT SPEC	CAVITY # A2 ACTUAL	CAVITY # C3 ACTUAL	CAVITY # C4 ACTUAL	CAVITY # B5 ACTUAL	CAVITY # D6 ACTUAL	COMMENTS
47	2.39 - 2.80	L 2.681	L 2.709	L 2.687	L 2.697	L 2.709	
	(2 PL)	R 2.702	R 2.696	R 2.705	R 2.721	R 2.684	
	0.2 B A C	L.021 R.015	L.000 R.075	L.076 R.081	L.081 R.080	L.011 R.154	
	2.465	2.444 2.450	2.465 2.390	2.389 2.394	2.394 2.495	2.476 2.311	
48	0.35 - 0.66	.463 .458	.559 .530	.571 .492	.508 .489	.476 .504	
	(4 PL)	.494 .536	.474 .508	.449 .514	.511 .509	.491 .509	
49	0.86 - 1.17	.985 .995	.959 .962	.968 .989	.990 .959	.987 .955	
	(4 PL)	.943 .952	.996 .959	.975 .923	.955 .934	.980 .974	
50	45DEG +/- 2DEG	44DEG 49MIN	43DEG 50MIN	45DEG 29MIN	45DEG 26MIN	43DEG 58MIN	
	(4 PL)	44DEG 47MIN	44DEG 49MIN	44DEG 40MIN	44DEG 39MIN	45DEG 54MIN	
		45DEG 13MIN	44DEG 37MIN	44DEG 11MIN	45DEG 12MIN	45DEG 54MIN	
		45DEG 04MIN	45DEG 20MIN	44DEG 44MIN	44DEG 23MIN	44DEG 20MIN	
51	8.30-8.72 2PL	8.342 8.450	8.352 8.429	8.264 8.499	8.365 8.429	8.309 8.392	
52	2.15-2.42 2PL	2.180 2.220	2.198 2.159	2.169 2.219	2.161 2.170	2.149 2.194	
53	25DEG +/- 2DEG	24DEG 22MIN	24DEG 10MIN	24DEG 47MIN	24DEG 17MIN	23DEG 37MIN	
	(2 PL)	23DEG 32MIN	23DEG 4MIN	23DEG 50MIN	23DEG 0MIN	23DEG 39MIN	
54	COLOR: BLACK	OK	OK	OK	OK	OK	
55	13-19DEG 2PL	ON CROSS	SECTIONED	PART ON	PRINT		
56	0.66 - 0.97	ON CROSS	SECTIONED	PART ON	PRINT		
57	0.10 - 0.31	.252 .278	.287 .251	.276 .260	.287 .260	.280 .257	
58	0.58 - 0.48	.425 .646	.646 .621	.648 .622	.656 .622	.644 .626	

NOTE: ANY DIMENSION INCORPORATED INTO PRINT BY REFERENCE, MAY DIFFER

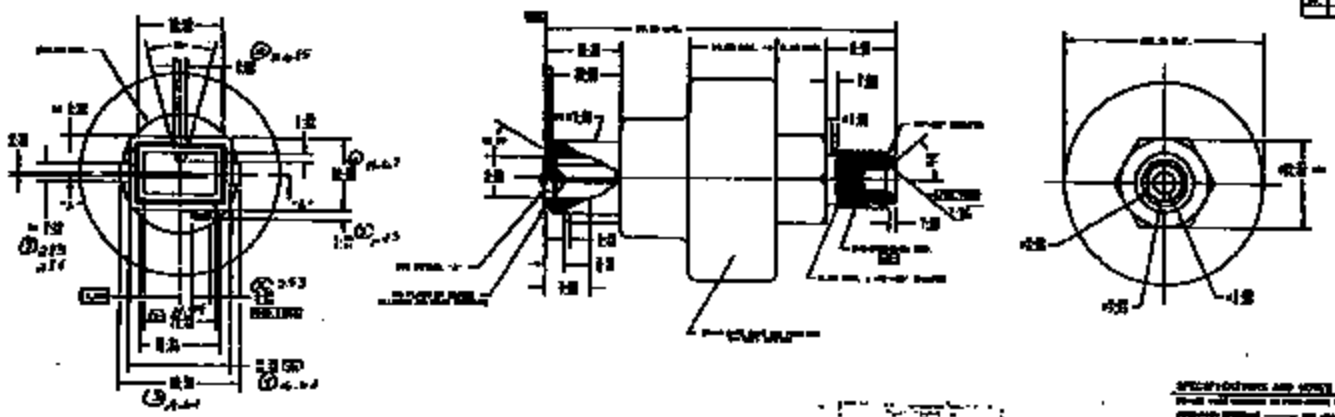
[illegible] • TELEX [illegible] TWX [illegible] • CABLE [illegible]

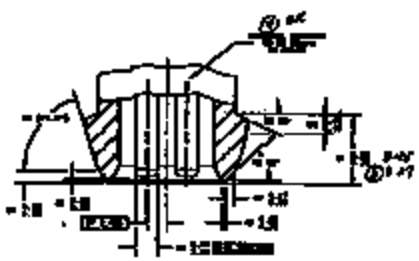
TI-NHTSA 002976

DRAWINGS AVAILABLE UPON REQUEST

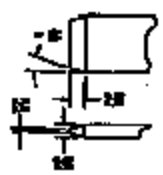


TI-NHTSA 002981





SECTION "A-A"



DETAIL "A"

SPECIFICATIONS AND NOTES

CERTIFIED

REVISED & REDRAWN

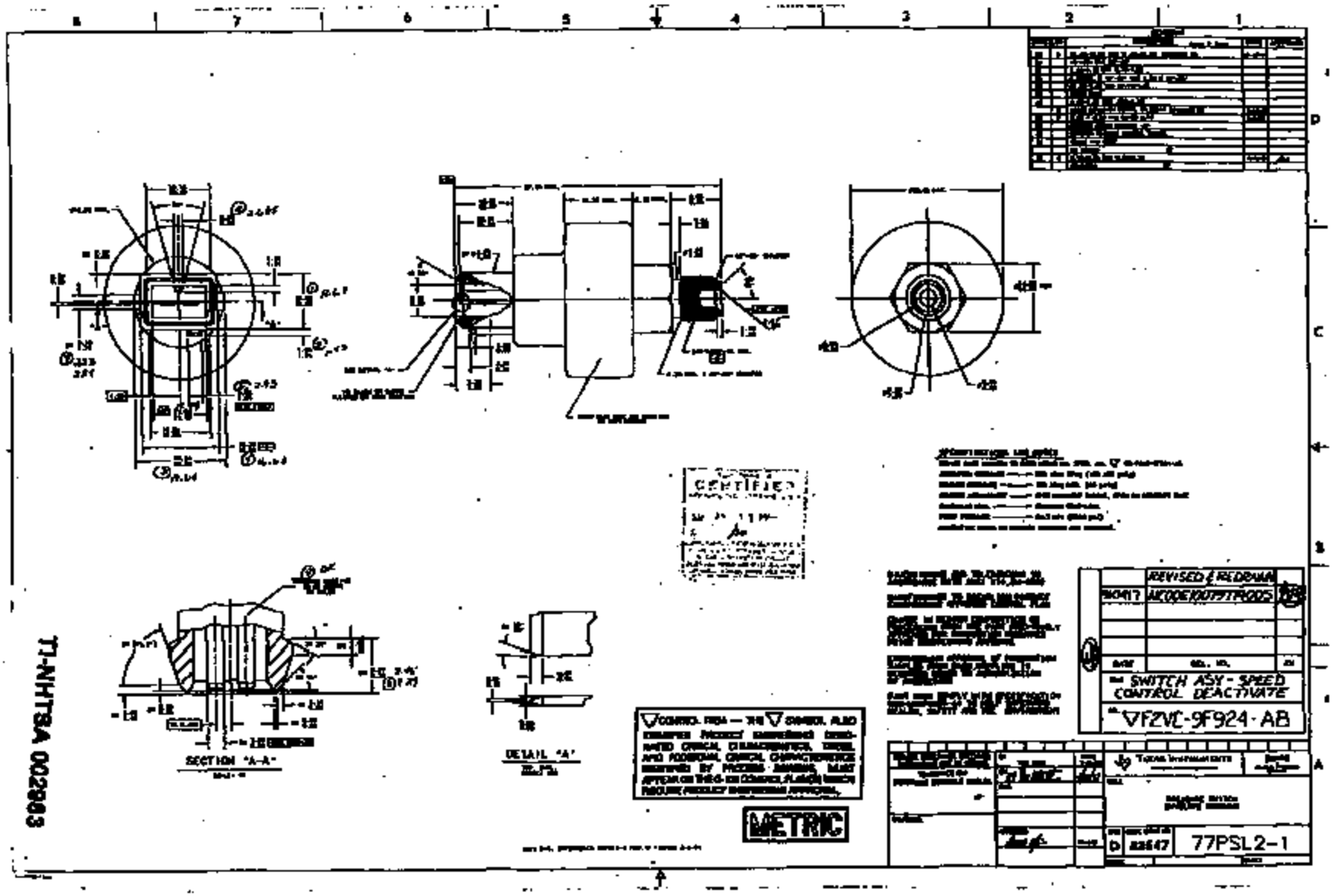
SWITCH ASY - SPEED CONTROL DEACTIVATE

▽F2VC-9F924-AB

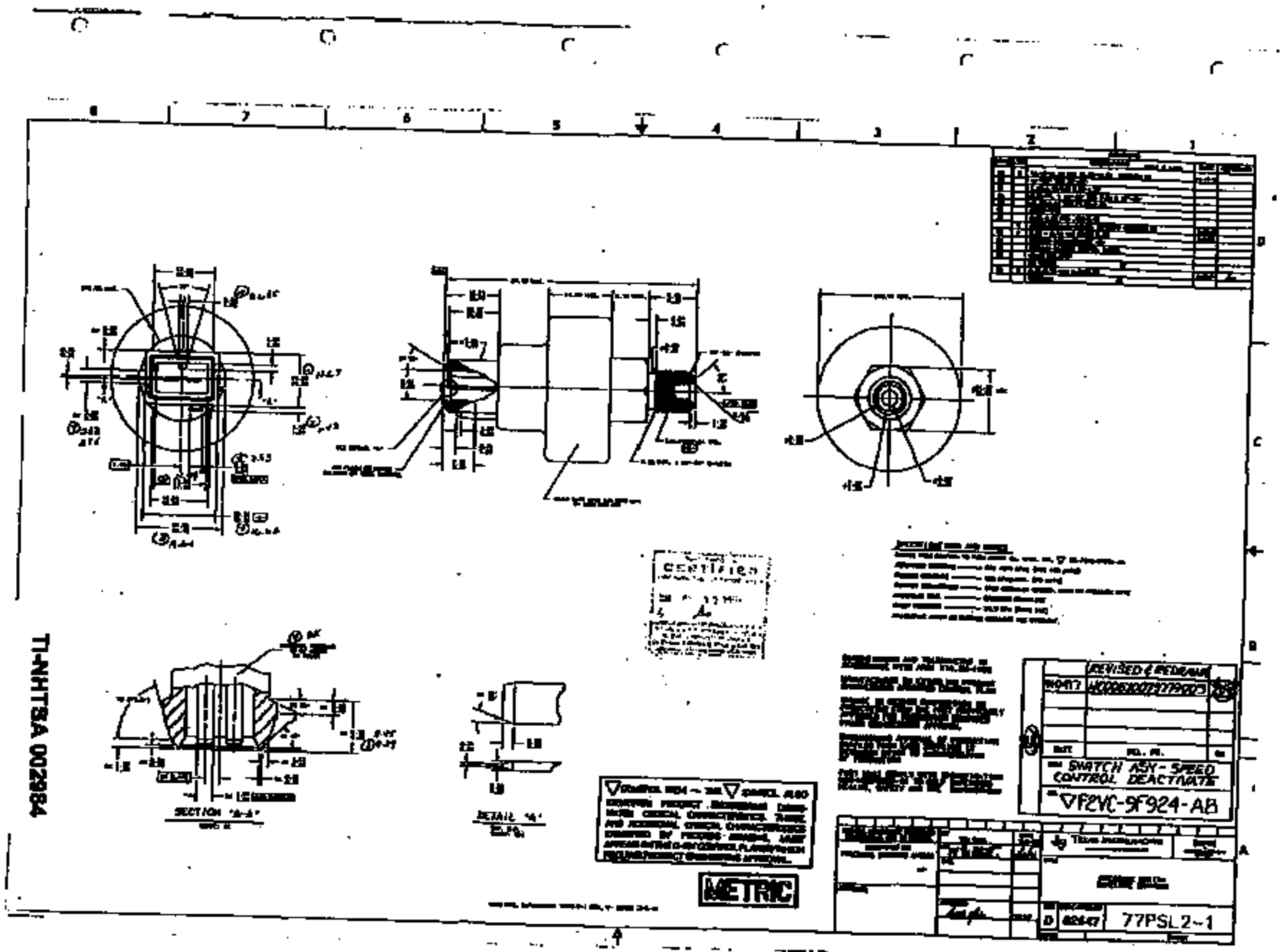
77PSL2-1

METRIC

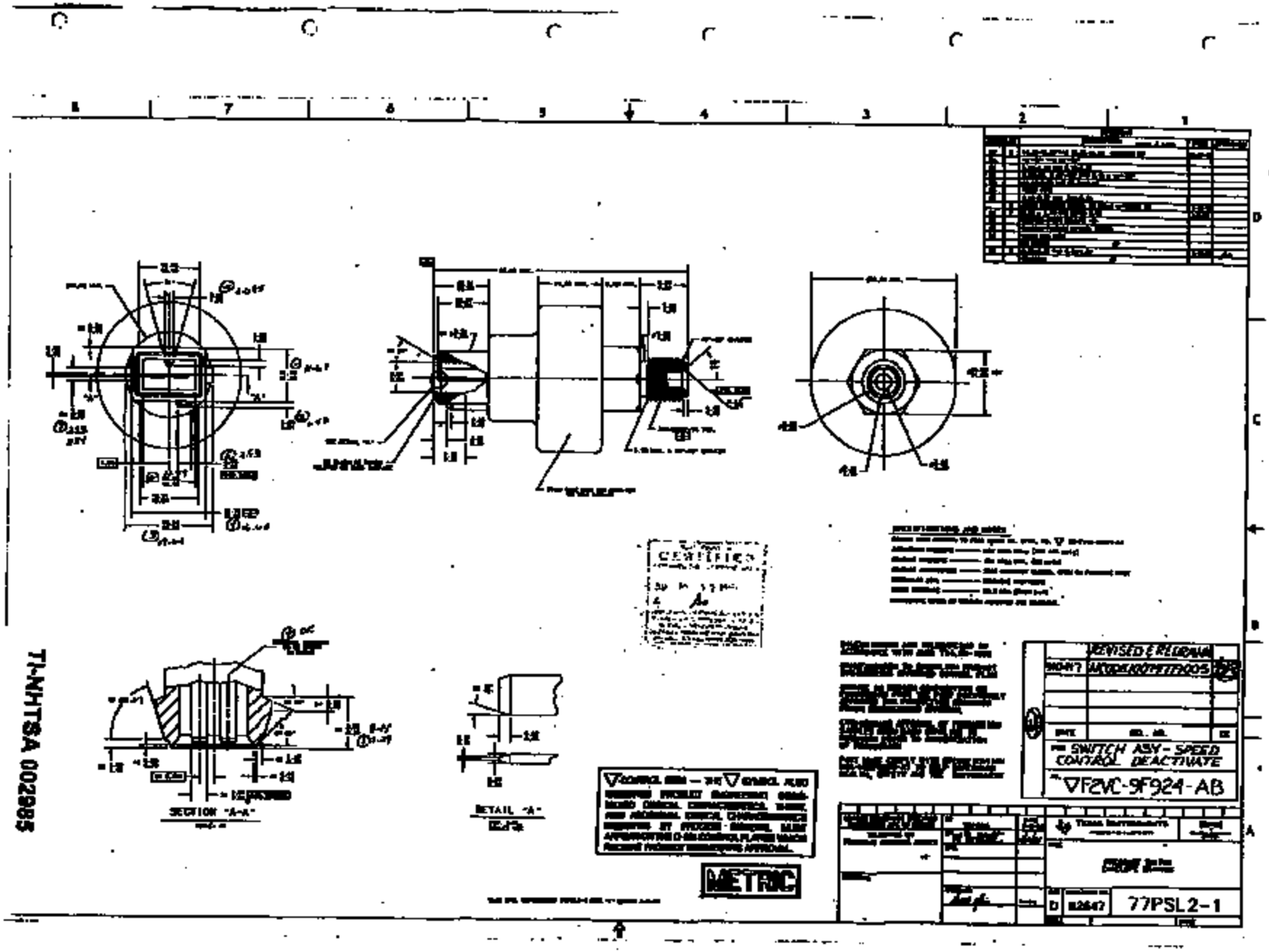
TI-NHTSA 002982



TI-NHTSA 002903



TI-NHTSA 002984



TI-NHTSA 002985

PEST/PEPC DATA

TI-NHTSA 002686

Ford

PROCESS POTENTIAL AND QUALITY INDEXES SUMMARY DATA SHEET

PART #: F2VC-9F924-AB
SUPPLIER: Texas Instruments
CODE: T097K
ADDRESS: 34 Forest St.
Attleboro, MA 02703
VEHICLE BUILD: EP VP FB OTHER

SUPPLIER CONTACT: Jim Marr
CONTACT PHONE: 1-508-699-1719
PART DESCRIPTION: Next Generation Speed Control
SQA CODE: (Mark Scholler)
VEHICLE PROGRAM: Taurus Car

CHARACTERISTIC TYPE

∇ = FORD CRITICAL CHARACTERISTICS

S.C. = FORD OR SUPPLIER SIGNIFICANT CHARACTERISTICS

NUMBER OF CRITICAL AND SIGNIFICANT CHARACTERISTICS:

1: Actuation Pressure	TYPE: SC	Cp = **	Cpk = **
2: Release Pressure	TYPE: SC	Cp = **	Cpk = **
3: 3/8-24UNF-2A Thread	TYPE: SC	Cp = A*	Cpk = A*
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 = 1265/1265 x 100 = 100 %

$PIPC_{Cp}$ = N/A x 100 = _____ % $PIPC_{Cpk}$ = N/A x 100 _____ %

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.

TI-NHTSA 002987

PREPARED BY:

Elaine Rose DATE: 12/20/91

originals

11-1-91

GAK
Act 2.01
Rel. .73

DRAWINGS AVAILABLE UPON REQUEST

PROCESS POTENTIAL AND QUALITY INDEXES SUMMARY DATA SHEET

PART #: F3TA-9F924-AA
SUPPLIER: Texas Instruments
CODE: T097K
ADDRESS: 34 Forest St.
Attleboro, Mass. 02703
VEHICLE BUILD (CIRCLE ONE): EP VP (FP) OTHER (DEFINE)

SUPPLIER CONTACT: Jim Wolff
CONTACT PHONE: 508-699-1719
PART DESCRIPTION: Next Generation Speed Control Deactivate Pressure Switch
SQA CODE:

CHARACTERISTIC TYPE

▽ = FORD CRITICAL CHARACTERISTICS S.C. = FORD OR SUPPLIER SIGNIFICANT CHARACTERISTICS

NUMBER OF CRITICAL AND/OR SIGNIFICANT CHARACTERISTICS:

1: Actuation Pressure	TYPE: SC ▽	Cp = 1.8	Cpk = 1.2	
2: Release Pressure	TYPE: SC	Cp = * 5.2	Cpk = 1.8	
3: 3/8-24UNF-2A Thread	TYPE: SC	Cp =	Cpk = meets Go	
4:	TYPE:	Cp =	Cpk = Does Go	
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 = 530/536 x 100 = 98.8 %

$PIPC_{Cp}$ = 1/1 x 100 = 100 % $PIPC_{Cpk}$ = 2/2 x 100 = 100 %

COMMENTS:
* Cp Index not calculatable on unilateral tolerance

PREPARED BY: Elaine Rose DATE: 9-20-91

AVERAGE AND RANGE (X-R) CHART

PG. 1 of 2

Pressure Switch 77C942-3

300 to 200

Actuation

DIESEL SIMULATION SPEED CONTROL

LIGHT TRUCK

Individual Readings

Sample 10

Averages

Ranges

Manual Logging of Data

See Computer Generated Charts

AVERAGE AND RANGE (X̄-R) CHART

PG. 2 of 2

Pressure Switch 77PSL2-3

400 300

Actuation

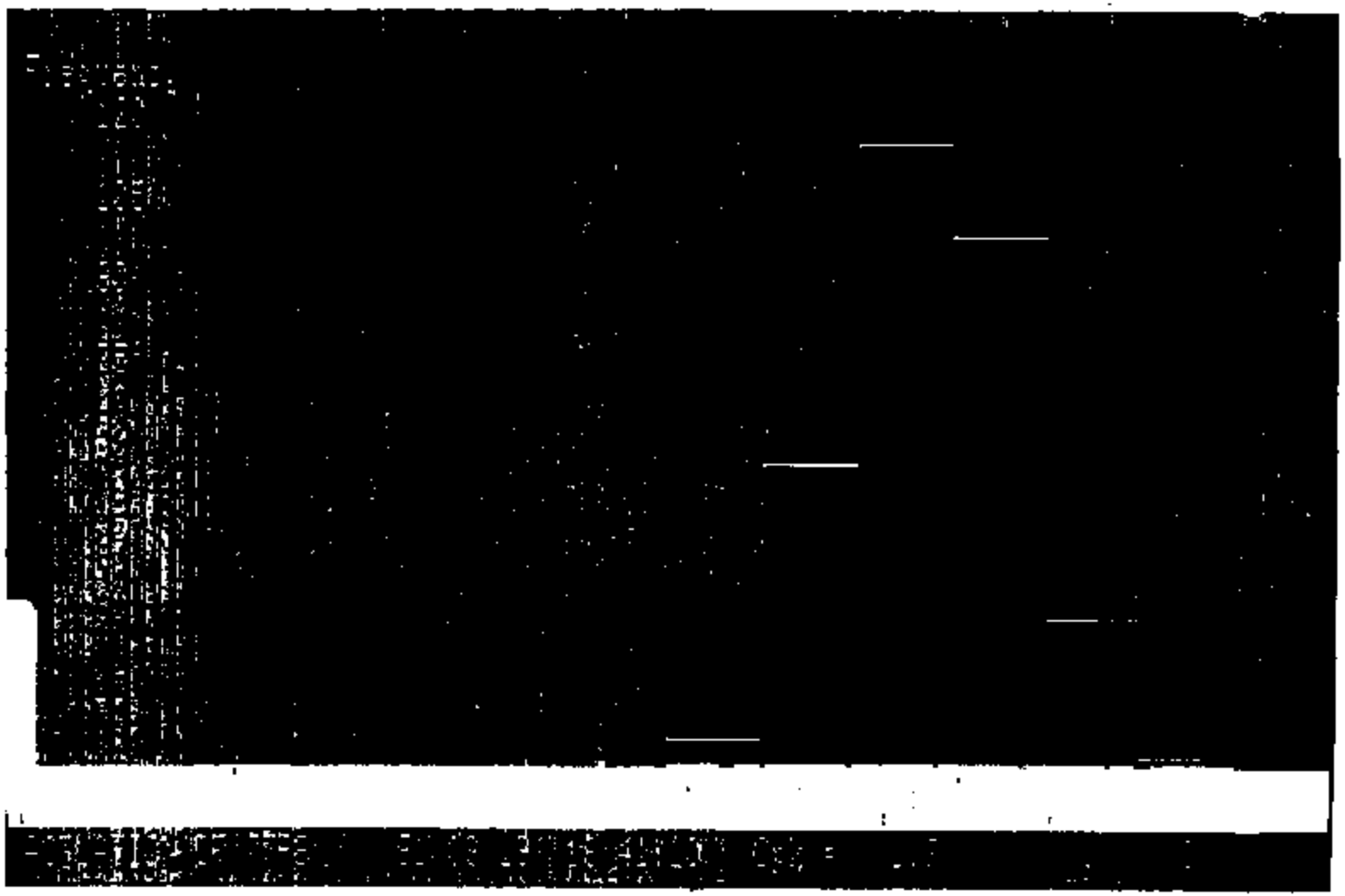
LIGHT TRUCK

Individual Readings

Average

Range

TI-MHTRA 002994



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AVERAGE AND RANGE (X̄-R) CHART

Pressure Switch 77PSL2-3

n = 300 m = 10

Release

NEXT GENERATION SPEED Control

LIGHT TRUCK

PG. 1 of a

Individual Readings

Averages

Ranges

Manual Logging of Data

See Computer Generated Charts

AVERAGE AND RANGE (X-R) CHART

Pressure Switch 77PSL2-3

300 2-40

Release

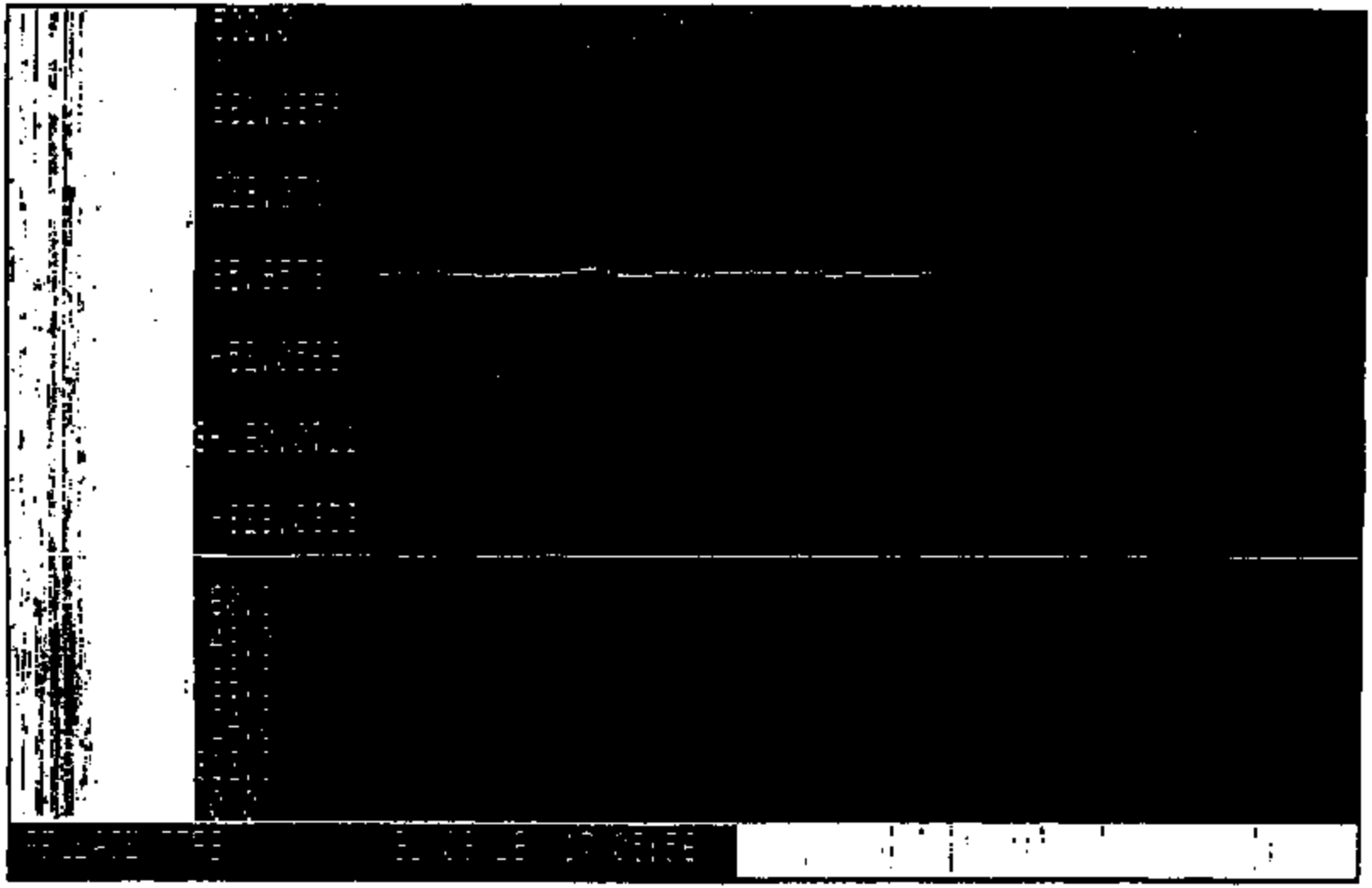
PG. 2 of 2

LIGHT TRUCK

Individual Readings

Average

Range



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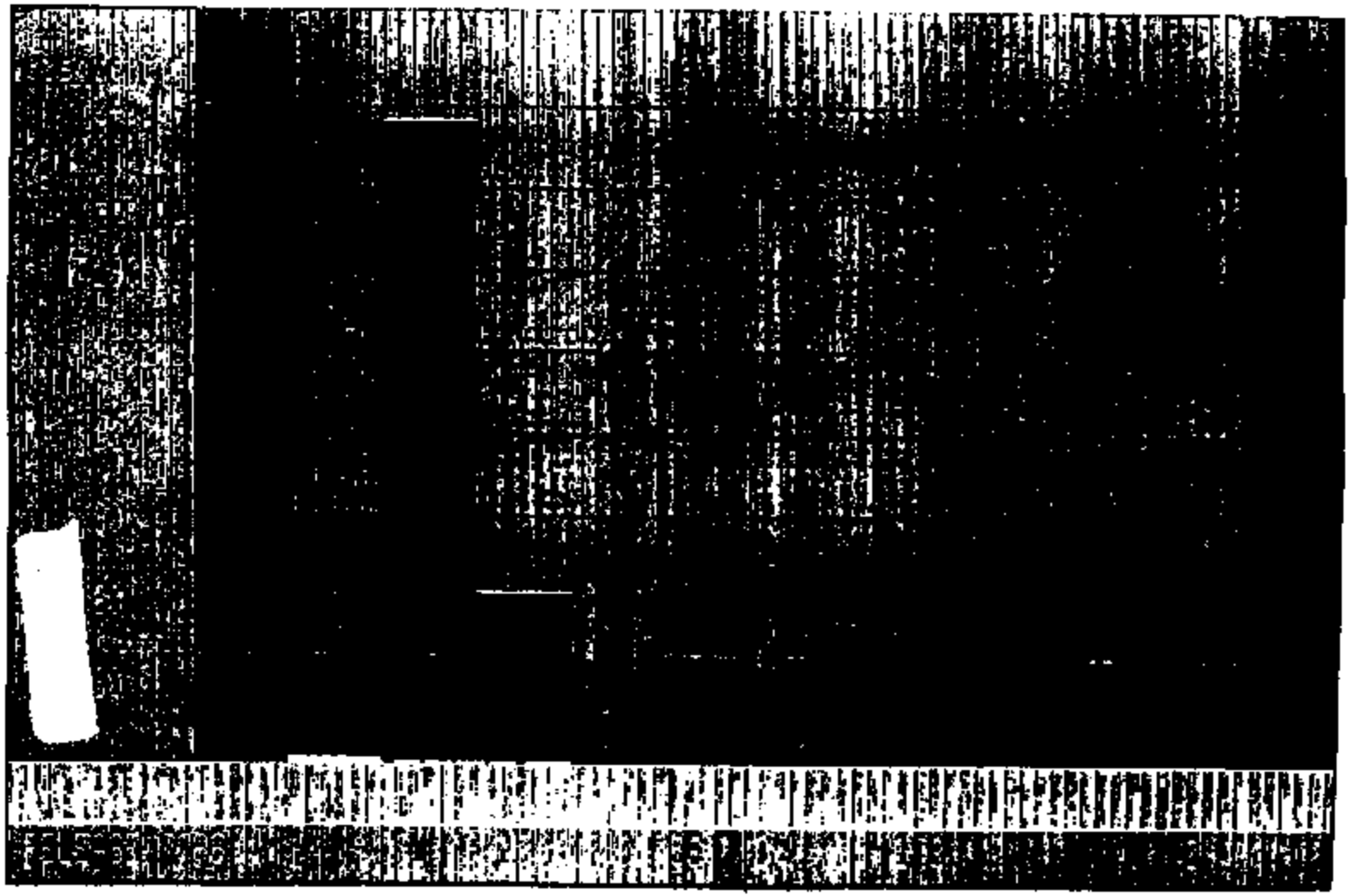

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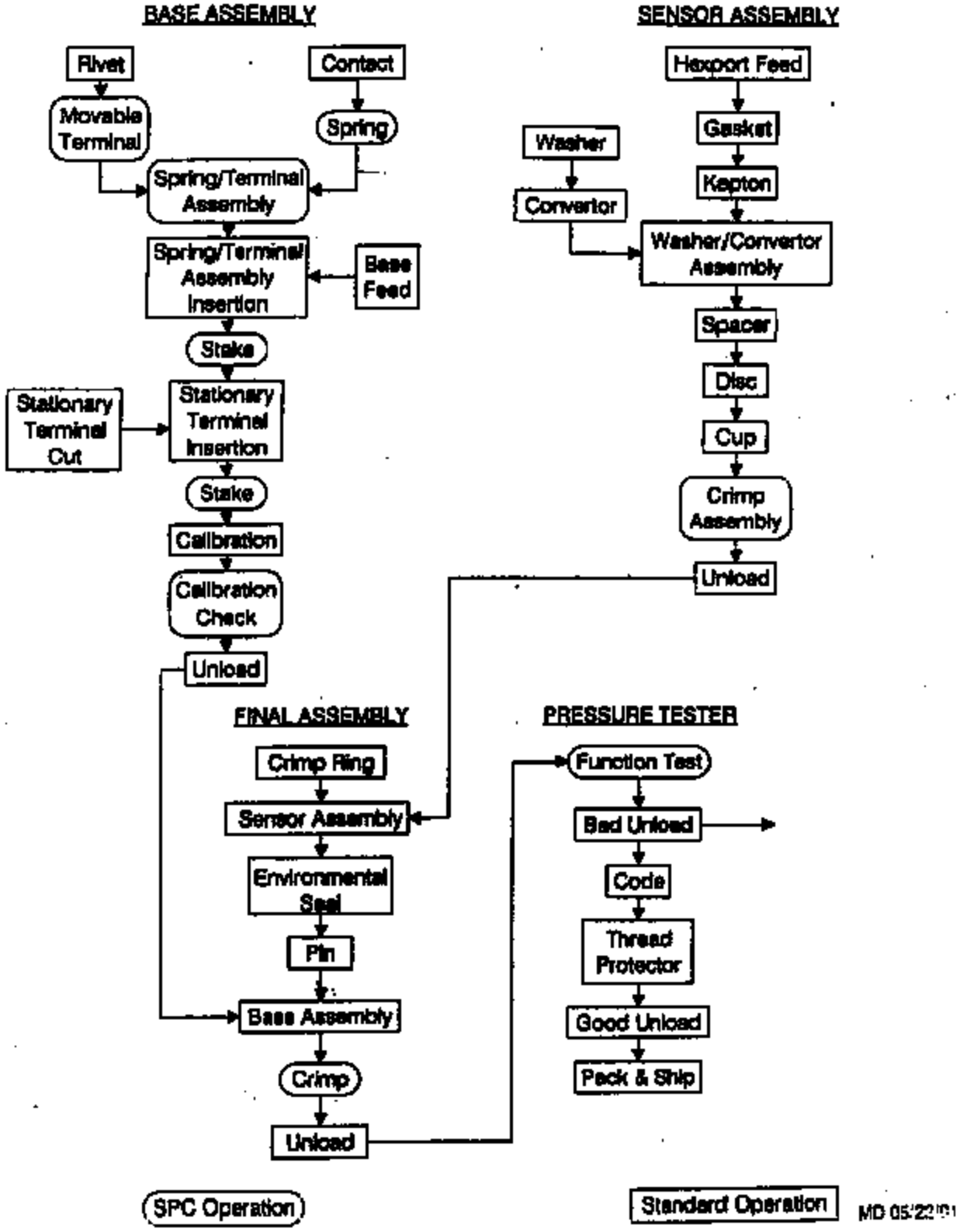
TI-NHTSA 002999

FORD NEXT GENERATION SPEED CONTROL

PROCESS FLOW CHART 77PSL2-1/2-3



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
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 003002

24 September 1991 MJ/Grar 668-6134

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

PROCESS STEP DESCRIPTION	PRODUCT CHARACTERISTICS	EVALUATION METHOD	CONTROL METHOD	FREQUENCY OF TEST	REACTION PLAN
FINAL ASSEMBLY (AMI AUTOMATION)	CRIMP DIAMETER	CALIPER	X/R	5pc/Hr.	SORT SINCE LAST CHECK
	CRIMP HEIGHT	CALIPER	X/R	5pc/Hr.	SORT SINCE LAST CHECK
	BASE TORQUE	TORQUE GAGE	X/R	5pc/Hr.	SORT 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				

24 September 1991 MJ/Kirr 558-6134

[redacted]

TI-NHTSA 003004

GM GAGE STUDY FOR REPEATABILITY AND REPRODUCIBILITY (LONG METHOD
24-Sep-91
77PS PRESSURE TEST
ACTUATION

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
XBARDIFF 1.7625

	MEASUREMENT UNIT ANALYSIS	%TOLERANCE
REPEATABILITY:	3.424202	4.89%
REPRODUCIBILITY:	4.598500	6.57%
RPT & REPR (R&R):	5.730949	8.19%

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

ENTER STUDY TITLES IN CELLS A8,A9,A10, MIN/MAX SPEC IN B12, B13
W7P9 PRESSURE TEST
ACTUATION

MIN SPEC 90
MAX SPEC 160
TOLERANCE 70

DATA FOR OPERATOR 1

PART	TRIAL 1	2	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 RNGE= 1.025
UCL FOR INDIVIDUAL RANGES 2.45025

DATA FOR OPERATOR 2

PART	TRIAL 1	2	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 RNGE: 0.775
UCL FOR INDIVIDUAL RANGES 2.45025

DATA FOR OPERATOR 3

PART	TRIAL 1	2	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 RNGE: 0.45
UCL FOR INDIVIDUAL RANGES 2.45025

GM GAGE STUDY FOR REPEATABILITY AND REPRODUCIBILITY (LONG METHOD
24-Sep-91
77PS PRESSURE TEST
RELEASE

NUMBER OF OPERATORS	3	MIN SPEC	20
NUMBER OF PARTS	4	MAX SPEC	160
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	47.05833	0.433333

MIN XBAR	46.4875
MAX XBAR	47.725
XBARDIFF	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 5.15 SIGMA (99%)

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

MIN SPEC 20
MAX SPEC 160
TOLERANCE 140

DATA FOR OPERATOR 1

PART	TRIAL 1	2	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	44.9				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 RNGE: 0.4
UCL FOR INDIVIDUAL RANGES 1.4157

DATA FOR OPERATOR 2

PART	TRIAL 1	2	3	4	5	AVG	RANGE
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 44.4875 AVG RNGE: 0.475
UCL FOR INDIVIDUAL RANGES 1.4157

DATA FOR OPERATOR 3

PART	TRIAL 1	2	3	4	5	AVG	RANGE
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

GRND AVG: 46.9625 AVG RNGE: 0.425
UCL FOR INDIVIDUAL RANGES 1.4157

GM GAGE STUDY FOR REPEATABILITY AND REPRODUCIBILITY (LONG METHOD
24-Sep-91
DIAL INDICATOR #14509
MOVEABLE TERMINAL

NUMBER OF OPERATORS	2	MIN SPEC	0.469
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
XBARDIFF	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 fixtueing / dial indicator used for Stationary Terminal.

DATA FOR OPERATOR 2

PART	TRIAL 1	2	3	4	5	AVG	RANGE
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

ENTER STUDY TITLES IN CELLS A8,A9,A10, MIN/MAX SPEC IN B12, B13
7DIAL INDICATOR #14508
MOVEABLE TERMINAL

MIN SPEC 0.459
MAX SPEC 0.479
TOLERANCE 0.2

DATA FOR OPERATOR 1

PART	TRIAL 1	2	3	4	5	AVG	RANGE
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 RNGE: 0.0003
UCL FOR INDIVIDUAL RANGES 0.000980

TI-NHTSA 003017

F2VC-3F924-AB

MATERIAL ANALYSIS

PARTS LIST

	PART NAME	PART #	CERTIFIED
1	BASE	46515-2	YES
2	STA.TERM.	36888-1	YES
3	MOVE.CONTACT	74408-1	YES
4	PIVET	74171-1	YES
5	MOVE.TERM.	36887-1	YES
6	SPRING ARM	36889-1	YES
7	J512 HEXPORT	36900-1	YES
8	GASKET	74353-1	YES
9	CUP	27713-1	YES
10	SEAL	74176-1	YES
11	KAPTON STRIP	27225-1	YES
12	WASHER	27639-1	YES
13	CONVERTER	27406-1	YES
14	KAPTON TAPE	74224-1	YES
15	SPACER	73958-2/-3	YES
16	CRIMP RING	74797-1	YES
17	TRANSFER PIN	74078-SEL	YES
18	ENVIO.SEAL	74247-2	YES
19	THREAD CAP	74179-2	YES

SENT COPY of -4
1-9-92

TI-NHTSA 003018

August 28, 1991

To: Donna Moynihan 12-27

From: Beth Kill 10-16

Subject: GP-3 Material Confirmation
TSL Request # 110822

Sample Description:

P/N 46515-2 Thermoplastic Polyester
Celanex 4300

Results:

	P/N 46515-2	Spec.
Glass Fill	32%	30%

TGA results confirm the base contains slightly high glass fill.. DSC results confirm the base material to be a thermoplastic polyester with a melting point at 223 -225 deg. C.,.and a glass transition at 50 - 60 deg. C., consistent with Celanex 4300.

Regards,

Beth X3069

DRAWINGS AVAILABLE UPON REQUEST

Product Quality Documentation

CERTIFICATE OF COMPLIANC

Customer Order Number	Customer Part Number	GE Requisition Number	Material, Grade and Color
[illegible]		1291438/1	NJ-11 GT3850 111

Line Number	Qty Shipped	U.M.	Shipped From	Date Shipped	Shipper's Number
N6211	100	LB	NASE SERVICE, INC	06/05/92	01328195

It is hereby certified that the product indicated above conforms to our standard internal specifications for the designated material. This certification is subject to our standard conditions of sale applying to products sold by the General Electric Company.

Specification

Specification Originator

Specification Comments

TEST	REFERENCE	REQUIREMENT	(ENGLISH)	(METRIC)
LOT DATA:				
HDT 66PSI - 1/4"	ASTM D648	460.0 DEG F MINIMUM	460.0 DEG F	238 DEG C
NOTCHED IZOD IMPACT-1/8"	ASTM D256	1.5 FT-LB/IN MINIMUM	2.0 FT-LB/IN	107.0 J/M
% ELONGATION	ASTM D638	4 % MINIMUM	5 %	
TENSILE YIELD	ASTM D638	20,000 PSI MINIMUM	26,500 PSI	183.0 MPA
FLEXURAL MODULUS	ASTM D790	1,000,000 PSI MINIMUM	1,265,000 PSI	8,718.9 MPA
FLEXURAL STR @ YIELD	ASTM D790	28,000 PSI MINIMUM	37,900 PSI	261.0 MPA
SPECIFIC GRAVITY	ASTM D792	1.31-1.35 G/CC		1.33 G/CC
MOISTURE CONTENT	KM4. FISCHER	0.50 % MAXIMUM	0.08 %	

PRODUCT AUDIT DATA: DATE OF LAST AUDIT: 06/91

FLAMMABILITY,.107" THICK	UL94V0,5V2	4.00 DM/MIN MAXIMUM	SELF-EXTINGUISHING W/NO BURN RATE

ROBERT D. HOFFMEND
Quality Manager

THOMAS HEEPS
Manufacturing Manager

If you have any questions concerning this, please contact:

GINNY SHERRITT

1-919-413-3000

TEXAS INSTRUMENTS INC
ACCOUNTS PAYABLE DEPT
PO BOX 655
ATTLEBORO MA 02703-0062
Attn: JIM KEARN

August 20, 1991

To: Donna Moynihan 12-27

From: Beth Kill 10-16

Subject: GP-3 Material Confirmation
TSL Request # 110823

Sample Description:

P/N 36888-1 Stationary Terminal CDA 260 Brass
1/2 Hard

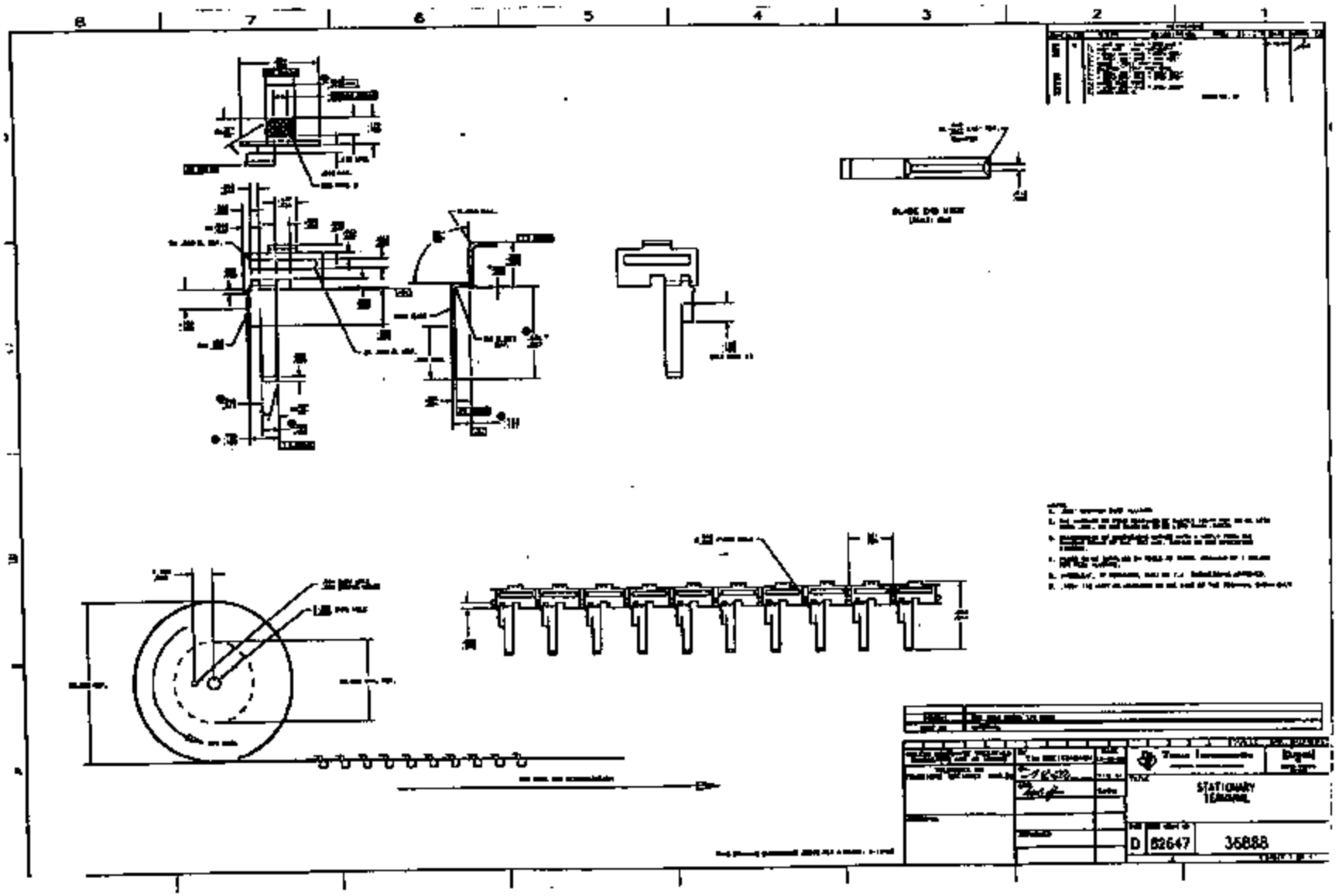
Results:

	P/N 36888-1	Spec. CDA 260
Cu (wt%)	68.5%	68.5 - 71.5%
Fe	0.030	0.05 max
Pb	0.010	0.07 max
Zn	balance	balance
Hardness	73 RB	60 - 77 RB

Results confirm the terminal is made of CDA 260 brass, 1/2 hard.

Regards,

Beth X3069


STATIONARY
TERMINAL
D
82647
36888

DRAWINGS AVAILABLE UPON REQUEST

ACME MILFORD
857 BRIDGEPORT AVE.
MILFORD, CONNECTICUT 06460

TEL\ 203-878-4631 * FAX 203-878-3071

TO: TEXAS INSTRUMENTS

CERTIFICATE OF COMPLIANCE

ACME MILFORD CERTIFIES THAT:

P.O. NUMBER: 500011076
ACME/MILFORD CONTROL NUMBER: 17642
ACME/MILFORD P/N: 6254-A
QUANTITY: 915425

WAS PROCESSED TO CONFORM TO THE FOLLOWING

PART NUMBER: 74409-1
PART REVISION: D
MATERIAL: COPPER CDA 102

HEAT NUMBER:
TENSILE AFTER LIGHT DRAW:
FINISH: .0011-.0024 SILVER PLATE
: [illegible] PIN DIEF [illegible]

SIGNED: DATE: 09-06-91

JOHN MICHAUD
TITLE\ QUALITY CONTROL MANAGER

SWORN TO AND SUBSCRIBED BEFORE ME THIS_____DAY_____MONTH_____YEAR

NOTARY PUBLIC_____

RADCLIFF WIRE INC.

RONZO ROAD • P.O.BOX 609 • BRISTOL, CONNECTICUT 06010
TELEPHONE: 203 / 583-1306 • FAX: 203 / 583-6563

FLAT, SQUARE AND SHAPED WIRE
Flexible Ropes • Inner • Stainless Steel

ORDER NUMBER
5320

MATERIAL CERTIFICATE

SOLD TO
ACME MILFORD
857 BRIDGEPORT AVENUE
MILFORD, CT 06460

SHIP TO

VIA BURTINES

YOUR ORDER NO.	DATE ENTERED	DATE WANTED	DATE PROMISED	F.O.B.
347-2	6/28/91	7/29/91		Bristol

QTY/WEIGHT ORDERED	SIZE/TOLERANCE	SHAPE
300 lbs.	.0575 p/m .0005 Dia.	Round

TEMPER	MATERIAL	EDGE	FINISH
	ETP 110 Copper		

SPECS	TENSILE	
	45-55,000 PSI	[redacted]

SPECIAL CONDITIONS

CERTS/MATL.

SPECIAL CODE

SHIPPING RECORD

DATE	QUANTITY	PACKAGING	TEST
7/16/91	323#	1 Barrel	46,000 PSI

HEAT	C	MN	SI	S	P	CR	NI	CU	B	PB	AL
HARDNESS	TI	CB - TA	CO	MO	V	MG	CE	N	ZN	PB	
TENSILE STR. 46,000 PSI	ZA	CB	TA	SN	BI						

This is to certify that the above wire was proceed from raw material and was found to be incompliance with the specifications of your po#347-2.

TI-NHTSA 003027

RADCLIFF WIRE, INC.

Claire Boucher
AUTHORIZED SIGNATURE
Claire Boucher Quality Control Inspector

AMERICAN ELECTRO PRODUCTS INC.
1368 THOMASTON AVENUE
WATERBURY, CT 06704
(203) 756-7051

Certificate of Compliance

NO. [illegible]
[illegible] 1

[illegible] EIVET & INCH
[illegible]

[illegible] CT [illegible]

DATE [illegible]

YOUR ORDER NO. [illegible]
SHIPPED VIA [illegible] F. E.

This is to verify that parts and/or your material furnished against your purchase order number shown above, have been manufactured in accordance with requirements and specification as required.

PART NO.	DESCRIPTION	QUANTITY
A254A	[illegible]	[illegible]

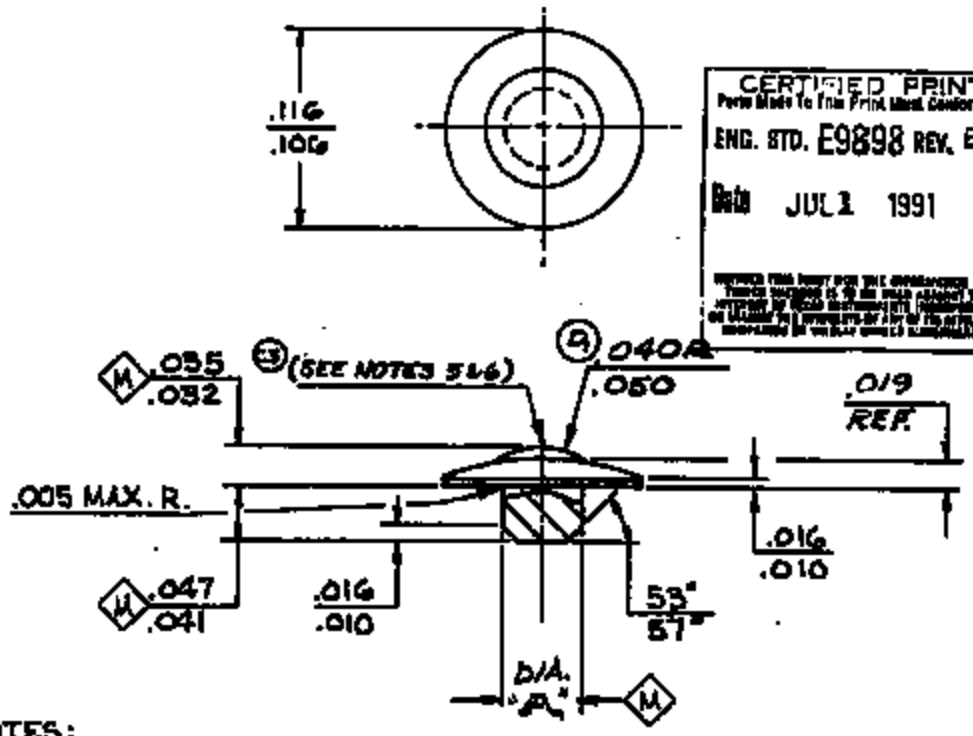
Tests to substantiate this have been performed in our plant (or have been performed by our suppliers) and are available upon request from us/or our suppliers.

Very truly yours,
AMERICAN ELECTRO PRODUCTS, INC.
Signed by: [illegible]
Q.C. Inspector

TITLE MOVABLE CONTACT

REV. D 74408

74408



NOTES:

1. PARTS MUST BE STORED IN PLASTIC BAGS THROUGH ALL SHIPPING AND HANDLING PROCESSES.
2. MATERIAL & PLATING THICKNESS CERTIFICATION REQUIRED WITH EACH SHIPMENT.
3. DIMENSIONS APPLY AFTER PLATING.
4. MEASURE PLATING THICKNESS BY MOUNTING & CROSS-SECTIONING PART.
5. PLATING THICKNESS APPLIES AT THE INDICATED LOCATION ONLY.
6. TOOL VENT MARK ON .040-.050R ALLOWED. DIMENSIONS MAY NOT EXCEED .001 IN HEIGHT AND .003 IN WIDTH. THERE MUST BE NO VOID IN PLATING IN THIS AREA. .032-.035 DIMENSION MAY MEASURE .036 OVER THIS MARK.
7. PLATING THICKNESS OF .0007 MINIMUM ALLOWED ABOVE TOOL VENT MARK ONLY. ADJACENT AREAS MUST MEET "FINISH" REQUIREMENTS.

PART NO.	MATERIAL	FINISH	DIA. "A"
74408-1	COPPER	SILVER PLT. .0011/.0024 THK. (SEE NOTE #6)	.0605~.0685

REV. | BY | CH. | ENG.

TEXAS INSTRUMENTS INCORPORATED
ATTLEBORO, MASS., U.S.A.

ELDON

SIZE A | PART NO. 74408

TI-NHTSA 003029

ACME MILFORD
657 BRIDGEPORT AVE.
MILFORD, CONNECTICUT 06460

TEL 203-878-4631 • FAX 203-878-5071

TO: TEXAS INSTRUMENTS

CERTIFICATE OF COMPLIANCE

ACME MILFORD CERTIFIES THAT:

P.O. NUMBER: 5000115[illegible]
ACME/MILFORD CONTROL NUMBER: [illegible]
ACME/MILFORD P/N: 6051-A
QUANTITY: 59,955

WAS PROCESSED TO CONFORM TO THE FOLLOWING

PART NUMBER: 74171-1
PART REVISION: B
MATERIAL: BRASS CDA 260
HEAT NUMBER:
TENSILE AFTER LIGHT DRAW:
FINISH: PLAIN FINISH

SIGNED: John Michaud DATE: 05-3[illegible]-91

JOHN MICHAUD
TITLE: QUALITY CONTROL MANAGER

SWORN TO AND SUBSCRIBED BEFORE ME THIS/_____DAY_____MONTH_____YEAR

NOTARY PUBLIC_____

SEYMOUR SPECIALTY WIRE COMPANY
(An Employee Owned Company)
15 Franklin Street
Seymour, Connecticut 06483
(203) 888-8773

ANALYSIS REPORT

Customer: Milford Rivet & Machine Co.
Address: P.O. Box 4016
City: Elyria, OH 44035

Date: December 21, 1987
Customer P.O.: 37309
Seymour #: S-34738-1

Material: CDA 260 Wire
Size: .050" Rd.
Specification: W.S. 56/63,000 PSI OR #13 Heavy Soap Coat
Conforms to UNS# C26000

Date Shipped: 12-15-87
Weight: 987 lbs.

CHEMICAL ANALYSIS

COPPER	70.03
LEAD	*.01
IRON	*.01
ZINC	REM.
TIN	
SILICON	
MANGANESE	
PHOSPHOROUS	
NICKEL	
ALUMINUM	

* Less Than

PHYSICAL ANALYSIS

TENSILE STRENGTH PSI	63,000
YIELD STRENGTH PSI	
ELONGATION, % in.	20%
ROCKWELL	
BEND TEST	
GRAIN SIZE, AVERAGE	
RESISTIVITY ohms/cm	
CONDUCTIVITY	

State of Connecticut
County of New Haven

Sworn and subscribed to before me this 21 day of Dec. 1987

Notary Public

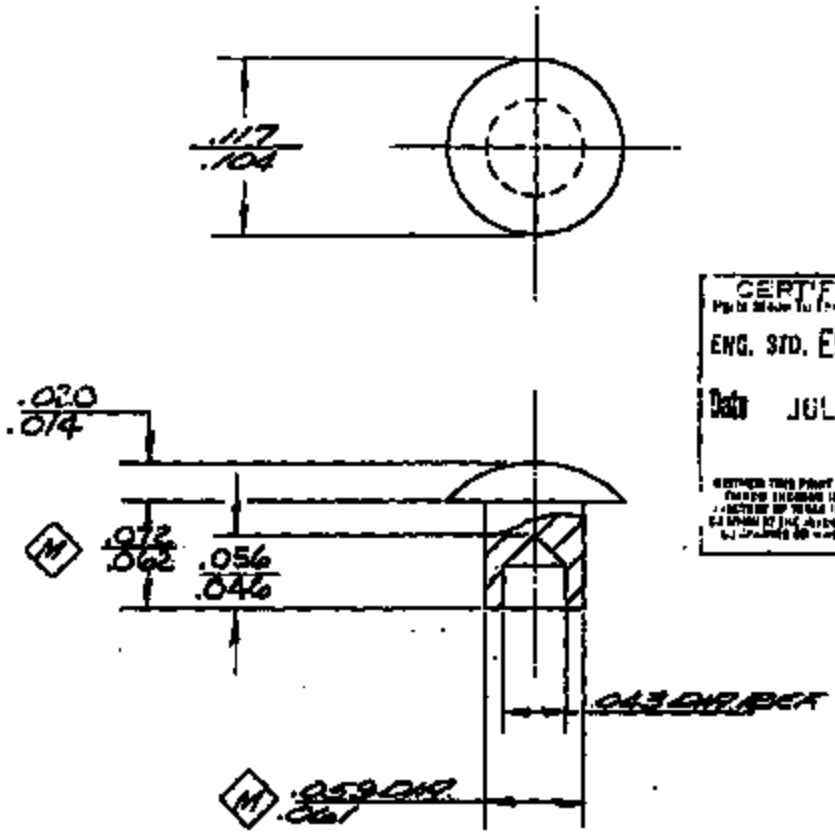
TI-NHTSA 003031

TITLE: RIVET

REV. B

74171

74171



CERTIFIED PRINT
ENG. STD. E9898 REV. E
Date JUL 1 1991

NOTES:
1. PARTS MUST BE STORED IN PLASTIC BAGS THRU ALL SHIPPING AND HANDLING PROCESSES

74171-1	COD #260 BRASS	
PART NO.	MATERIAL	

TVS 6B-101-1 W2-1 P34 P37 P35 P37

BY 2-1-94
CK. K. H. Wa 3-4-94
ENG. D. Hoff 4/4/94

TEXAS INSTRUMENTS INCORPORATED
ATTLEBORO, MASS., U.S.A.

KLIXON CONTROL PRODUCTS DIVISION

A

74171

TI-NHTSA 003032

```
EACC99                    EIS -- CREATE ELECTRONIC ECN                92/04/01  12:31
FUNCTION:  _ INQ _ ADD _ CHG                          _ ASSIGN CCB
PASSWORD:            PROJECT: 3423      CCB: 002
ECN: M08167 DWG PFX: __ DWG NUM: 36887___________     REV: _C CLASS: 425 SZ: D
1ST ISSUE FOR: PRESSURE SWITCH                          DT NEEDED:  920221
STOCK DISP -" FIN DEV:  USE_________________   PART/SUBS:  USE_________________
ORIGINATOR:  ______          STEPHEN B OFFILER                                EDIT
DESCRIPTION OF CHANGE:  IN ZONE A6, PLEASE CHANGE .815-.829 TO .810-.826___  _
_____________________________________________________________________________ _
_____________________________________________________________________________ _
_____________________________________________________________________________ _
_____________________________________________________________________________ _
_____________________________________________________________________________ _
_____________________________________________________________________________ _
_____________________________________________________________________________ _
_____________________________________________________________________________ _
EDIT OPTIONS: A-AFTER  B-BEFORE  C-COPY  D-DELETE  M-MOVE
REASON FOR CHANGE   CORRECTION_____________________________________________
_____________________________________________________________________________
REV DESCRIPTION  CHG_.815-.829_TO_.810-.826____
NEXT INQUIRY: _________________________  <F4> FOR CC2, CC3, CC10, CC11, CN5
EIS5030I    NO FUNCTION SPECIFIED - DEFAULT TO INQUIRE

EIS1000I    INQUIRE COMPLETE
914C/0 361 1 4 13            ADAIMC            a          Printing
```

TI-NHTSA 003033

August 20, 1991

To: Donna Moynihan 12-27

From: Beth Kitt 10-16

Subject: GP-3 Material Confirmation
TSL Request # 110824

Sample Description:

P/N 36887-1 Moving Terminal CDA 260 Brass
1/2 Hard

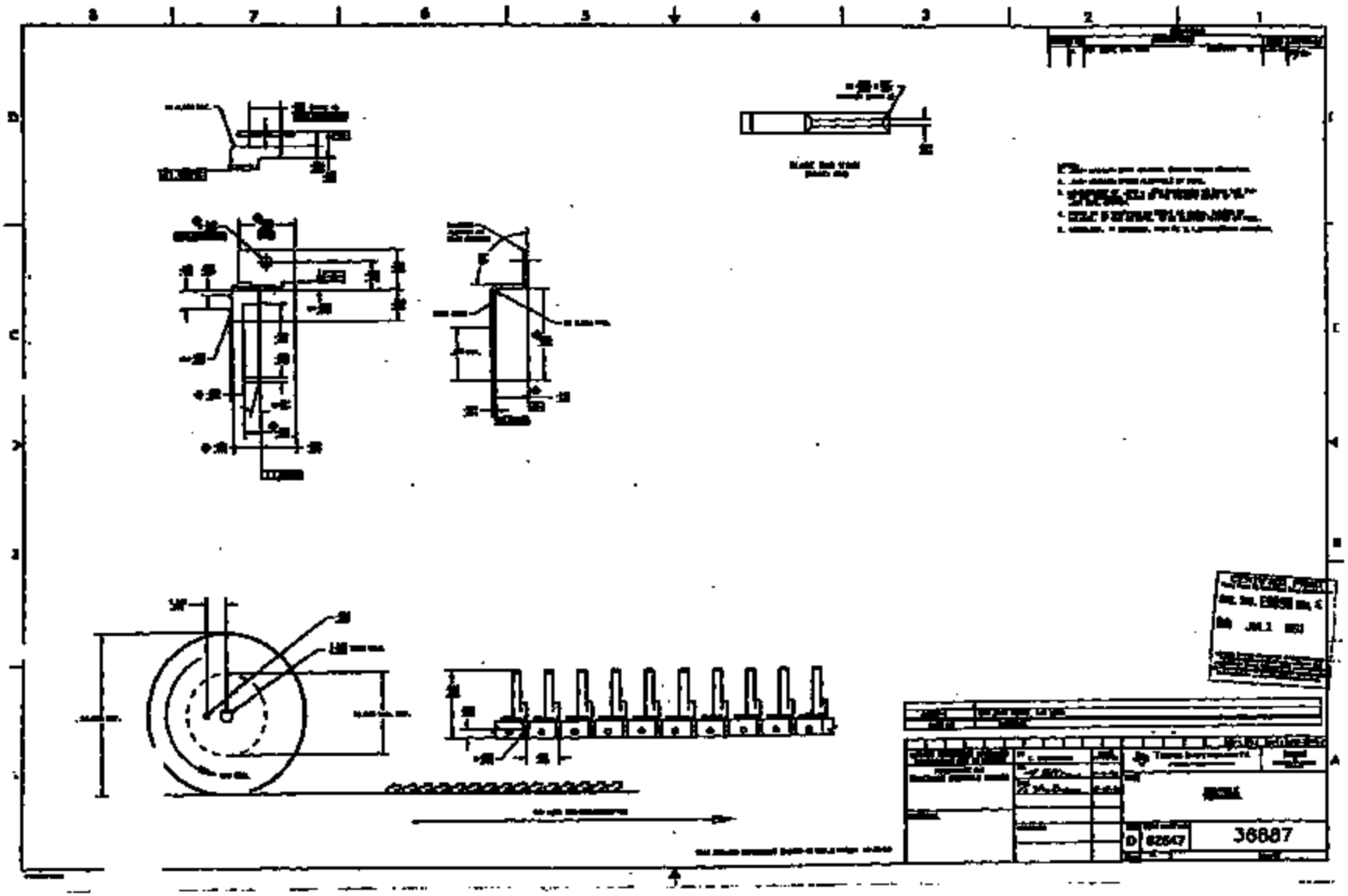
Results:

	P/N 36887-1	Spec. CDA 260
Cu (wt%)	68.7%	68.5 - 71.5%
Fe	0.020	0.05 max
Pb	0.010	0.07 max
Zn	balance	balance
Hardness	80.5 RB	60 - 77 RB

Results confirm the terminal is made of CDA 260 brass, and slightly above 1/2 hard.

Regards,

Beth X3069


36887

August 20, 1991

To: Donna Moynihan 12-27

From: Beth Kill 10-16

Subject: GP-3 Material Confirmation
TSL Request # 110825

Sample Description:

P/N 36889-1 Spring C17200 Beryllium Copper

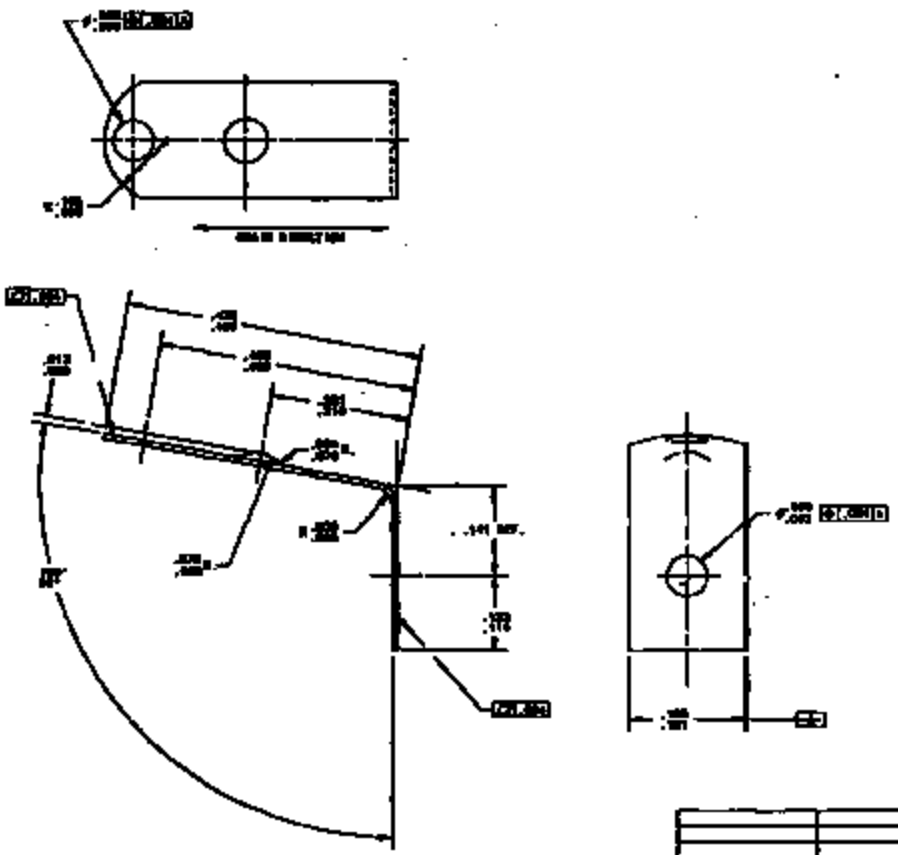
Results:

	P/N 36889-1	Spec. C17200
Be (wt%)	1.87%	1.80 - 2.00%
Fe	0.089	
Ni	0.068	[Fe + Ni + Co <0.6%]
		[Ni + Co >0.2%]
Co	0.220	
Hardness	300 DPH	285 - 343 DPH

Results confirm the spring is made of C17200 beryllium copper at the specified hardness.

Regards,

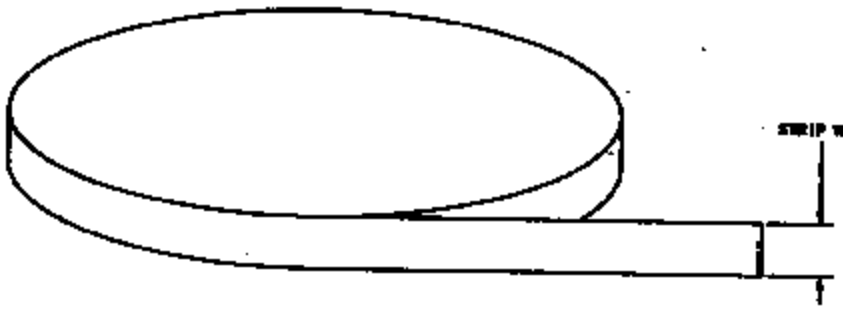
Beth X3069



36889-1	37716-1
PART NO.	MAT FORM

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	BY	DATE	TEXAS INSTRUMENTS
TOLERANCE ON FRACTIONS DECIMALS ANGLES	CH.		TITLE SPRING ARM
MATERIAL	ENG.		
	DRAWN		SIZE C · CODE IDENT NO. 82647 · 36889
			SCALE: NONE · SHEET 1 OF 1

TI-NHTSA 003037



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	B	1. [illegible] 2. ADDED NOTES 6, [illegible] 3. [illegible]	[illegible]	

NOTES:

1. MATERIAL CERTIFICATION INCLUDING TENSILE STRENGTH AND HARDNESS DATA REQUIRED WITH EACH SHIPMENT.
2. EACH REEL TO BE LABELED WITH T.I. PART NUMBER ON INSIDE OF CORE.
3. MAX. ALLOWABLE BURR .001.
4. REELS SLITTED FROM EDGE OF MASTER COIL NOT ACCEPTABLE.
5. MAX. WEIGHT PER REEL 10 LBS.
   MIN. WEIGHT PER REEL 15 LBS.
6. REEL TO BE PANCAKE STYLE.
   12" OD 10" ID.
   [illegible]" MAX. OD.
   3/4" DRIVE HOLE
7. NO SPLICES ALLOWED.

PART NO	MATERIAL	TENSILE STRENGTH (KSI)	HARDNESS RPM	THICKNESS (IN)	STRIP WIDTH	PAD PAT UP (IN) (CD)
27716-1	BERYLLIUM COPPER C17200, MILL HARDENED (BRUSH WELLMAN ALLOY 190 HM)	135-150	286-343	.006 ±.0002	.181-.183	720

THIS DRAWING SUPERSEDES 27716SH1 REV.A DATED: 11-14-88

T. [illegible]	11-14-88	TEXAS INSTRUMENTS	TI-NISSAN CONTROL PRODUCTS DIVISION
		TITLE: SPRING MATERIAL STRIP SPECIFICATION	
		B	82647	27716SH1

TI-NHTSA 003038

ELCO INDUSTRIES, INC.
PRECISION FORMING DIVISION
1111 [illegible]
[illegible]
Phone 612/[illegible] • Fax 612/[illegible]

CERTIFICATION

May 16, 1991

TEXAS INSTRUMENTS INC
ACCTS PAYABLE DEPT
P.O. BOX 655
ATTLEBORO, MA 02703

This is to certify the parts furnished on your purchase order have been produced in accordance with specifications listed on your purchase order and/or blueprint.

MATERIAL CERTIFICATION, FINAL INSPECTION AND SAMPLES BENT

Records covering material used and the tests and inspection conducted are on file, subject to examination.

36100-1

Purchase Order No.	500016567
Register No.	78925
Part No.	36900-1
Description	3/8-24 X .81
Quality Control No.	A9341-6
Quantity	8,735

TI-001672

CERTIFICATION

Authorized Signature
Quality Coordinator

The times call for quality. Elco quality.

F-41

12-14-90

COMPANY LIMITED

PO# 0346

Type & Grade SC-3898 AISI10L10 SAF

Specification

	Heat No.	Coil No.	C % × 100	Mn % × 100	Si % × 100	P % × 1000	S % × 1000	Cu % × 100	Ni % × 100	Cr % × 100	Mo % × 100
Chemical Composition Of Steel	C78314	0001 - 0018	10	41	8	5	21	1	1	2	

	Nominal Diameter		Tolerance of Diameter		Tensile Strength		Deterioration
	in	mm	in	mm	1,000 psi	kg/mm²	Dm/T
Physical Properties	0.565	14.351	+ 0.0040	+ 0.1016	68.9 MAX	48.5 MAX	MAX

	Coil Weight
Packing	ABT. 2.272LBS (ABT. 1.033KGS)
	WRAPPED WITH POLYPROPYLENE SHEET.

Test Results

Sample No.	Diameter mm	Tensile Strength Kg/mm²	Tensile Strength 1,000psi	Sample No.	Diameter mm	Tensile Strength Kg/mm²	Tensile Strength 1,000psi
0001	14.35	33.7	47.9				
0002	14.38	33.7	47.9				
0003	14.37	32.7	46.5				
0004	14.41	33.7	47.9				
0005	14.36	32.3	45.9				
0006	14.36	32.9	46.8				
0007	14.37	33.3	47.4				
0008	14.37	33.8	48.1				
0009	14.38	33.1	47.1				
0010	14.36	34.7	49.4				
0011	14.36	33.1	47.1				
0012	14.36	32.7	46.5				
0013	14.38	34.3	48.8				
0014	14.38	33.8	48.1				
0015	14.37	34.2	48.6				
0016	14.38	35.6	50.5				
0017	14.36	35.6	50.5				
0018	14.36	34.2	48.6				

****

9910 36900-1 5735 103191

TECHNICAL SERVICE LABS

TEST NO. 109407

[illegible]	127	STATE YOUR PROBLEM SAMPLE DESCRIPTION	INFORMATION DESIRED: Please section and 1775 measure 41°-42° per attached drawing. Thank you Sandy
[illegible]	146		
[illegible]	060		
[illegible]	Sandy		
MAIL STATION	11-11		
[illegible]	3021		
[illegible]	AT&C		
DATE SUBMITTED	5/23/91		
DATE RECEIVED	5/24/91		
NO. OF SAMPLES	3		
DISPOSITION			36900-1

REPORT OF RESULTS:

(1) 41.5 - 41

(2) 42 - 41

(3) 41 - 41

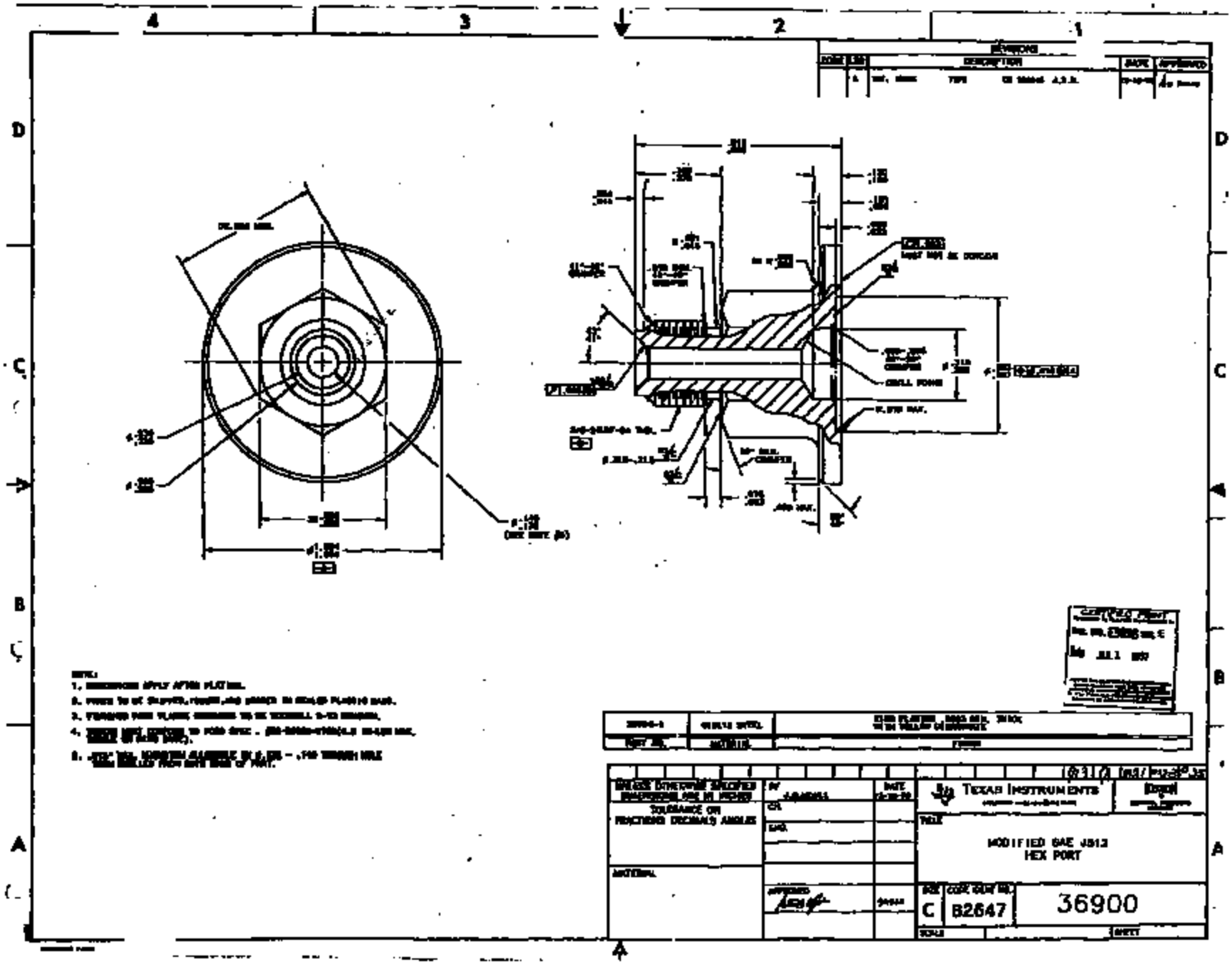
DATE RECEIVED 5/24/91 DATE OUT 5/29/91

TECHNICIAN			
HOURS WORKED			
PROCEDURE USED			

*PCC I.D.

MC=325	TM=431	JOCY=128	FACIL=514
PC=127	WIRE=432	CLIKE=122	FACIL=521
VERS=186	EPD=621	CAN=354	FACIL=531
AFCC=463	PEP=622	AD DEV=259	STAFF=856
IMD=430	CSD=635	EMCD=577	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor



TI-NHTSA 003042

DRAWINGS AVAILABLE UPON REQUEST

July 29, 1991

To: Donna Moynihan 12-27

From: Beth Kill 10-16

Subject: GP-3 Material Confirmation
TSL Request # 110831

Sample Description:

#110831 P/N 74353-1 Gasket Ethylene propylene rubber

Results:

Akron Rubber Development Laboratory Inc. has analyzed the above component. The material conforms to specification. See the enclosed report.

Regards,

Beth X3069

AKRON RUBBER DEVELOPMENT LABORATORY, INC.

300 KENMORE BOULEVARD • AKRON, OHIO 44301
Office (216) 434-6666 Telefax (216) 434-6668

July 24, 1991

Ms. Elizabeth Hill
Texas Instruments
34 Forest St.
MS 10-16
Attleboro, MA 02703

SUBJECT: Chemical analysis on sample submitted by the above company.
PO# 500066978

RECEIVED: One sample identified as; #110831 Ethylene Propylene JEL compound K-7104-70.

POLYMER IDENTIFICATION: ASTM D 3677
Pyrolysis method

SAMPLE	POLYMER IDENTIFICATION
#110831	Ethylene-Propylene Rubber

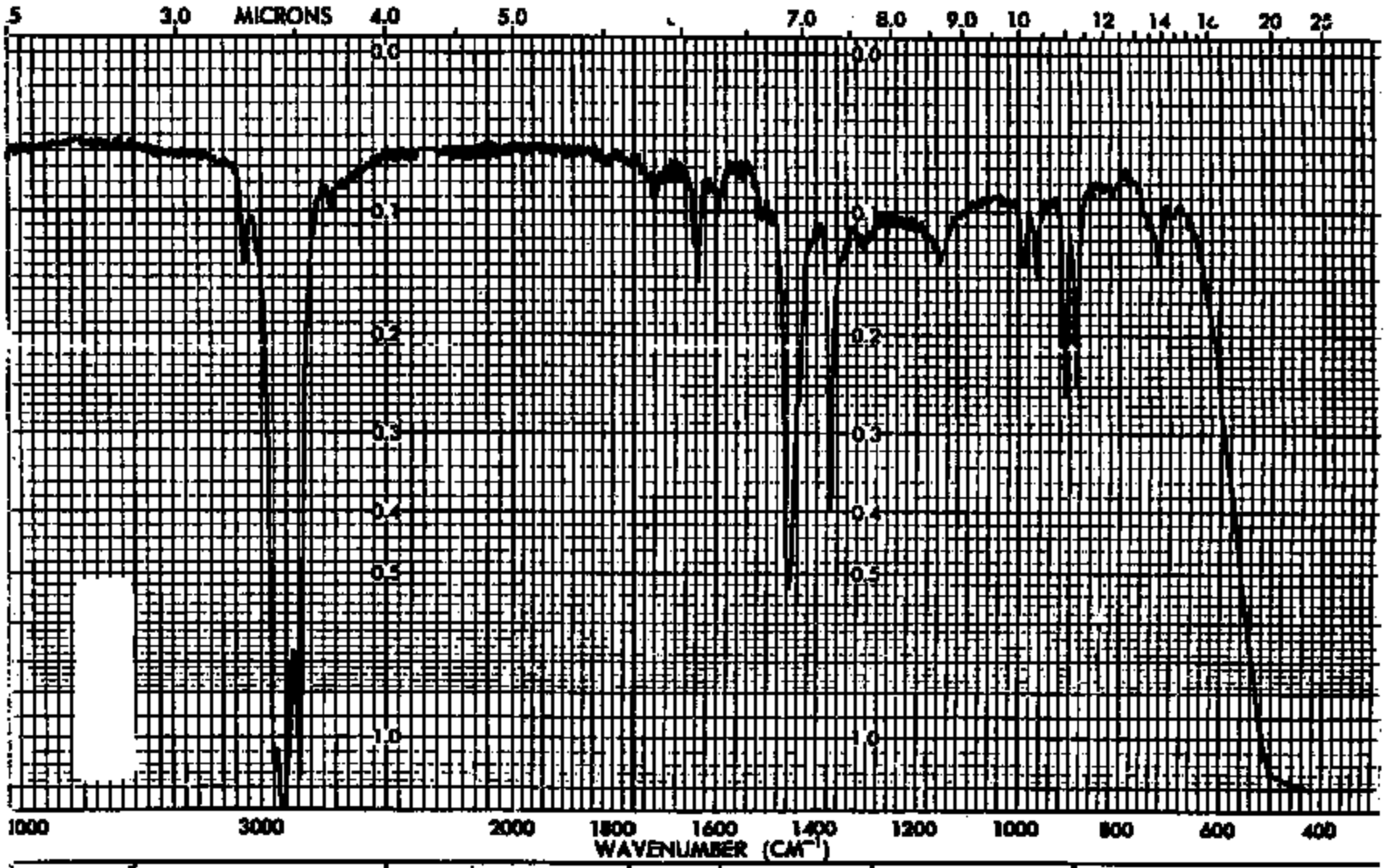
Janis Seifert
Senior Chemical Technician
AKRON RUBBER DEVELOPMENT LABORATORY, INC.

Thomas M. Knowles
Vice President, Chemical Services

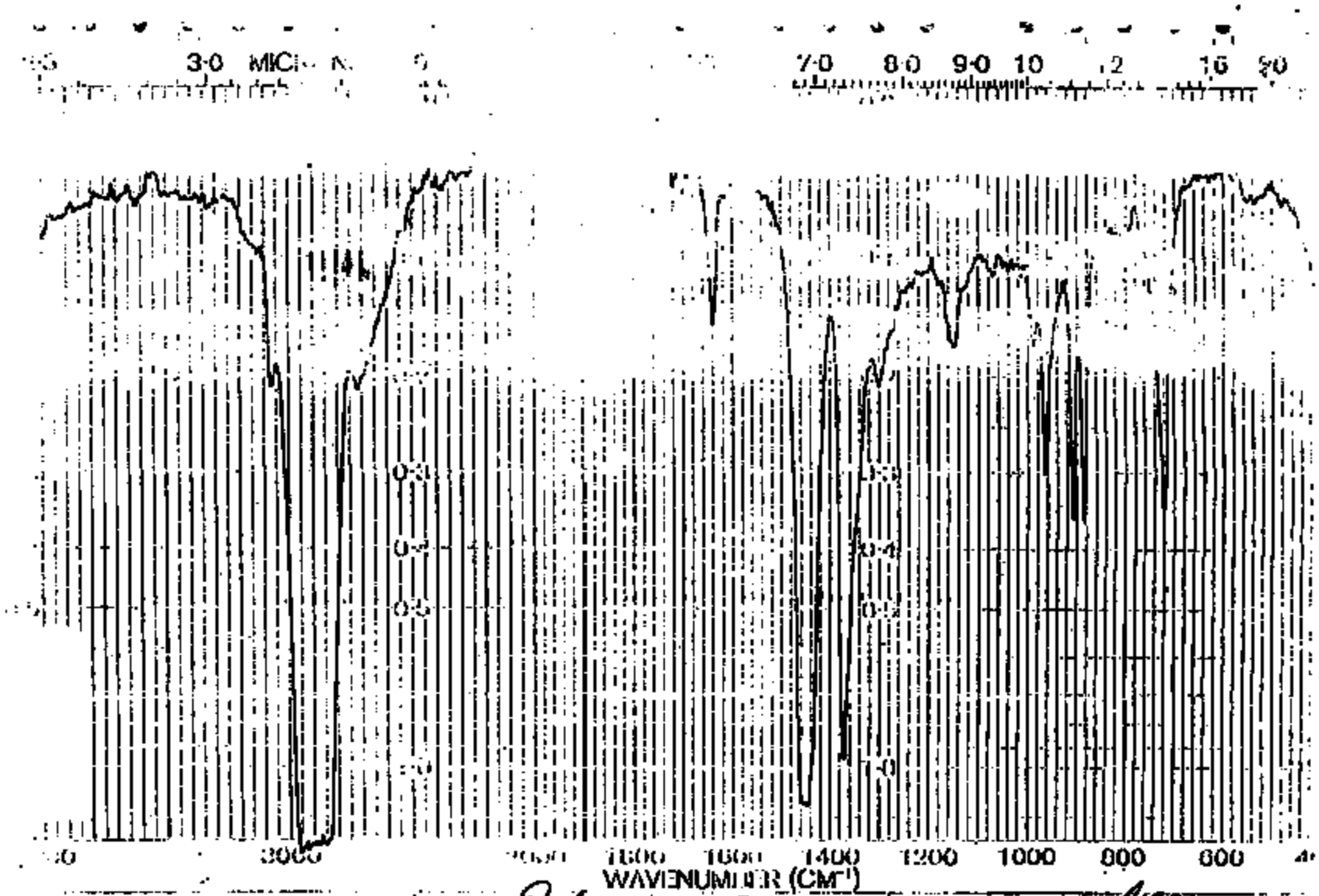
PN# 11726 INV# 31172601

tk

MEMBER OF AMERICAN COUNCIL OF INDEPENDENT LABORATORIES



SAMPLE	SOLVENT	SCAN	SINGLE B.	REMARKS.
	CONC.	SLIT	T. D. SPEED	
	CELL PATH	OPERATOR	ORD. EXP.	
	REFERENCE	DATE	T. CONST.	
ORIGIN		No. PE 5100-1001	REF. No.	



SAMPLE
Ethylene Propylene Rubber

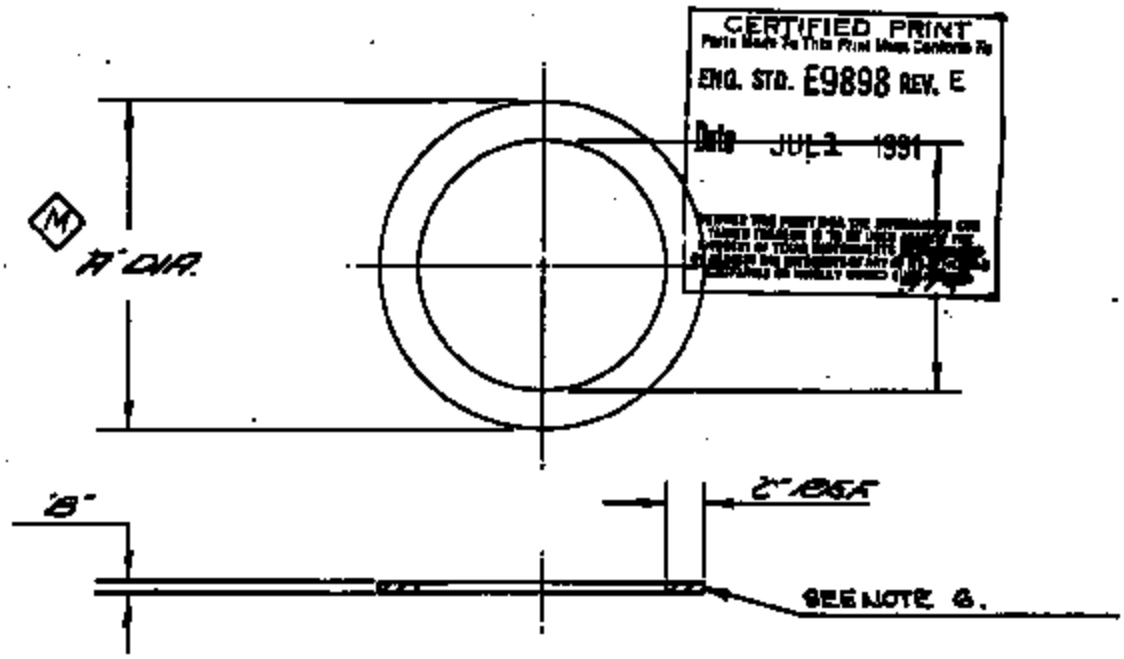
SOLVENT Pyridine
CELL PATH
SCAN 5
CALIBRATOR Tom
ENGINEER
LOCATION
ORDER
LOCATION
BY Control

TI-NHTSA 003047

GASKET

REV. G **74353**

74353



NOTES:

1. PARTS MUST BE PURCHASED FROM T.I. ENGINEERING APPROVED VENDORS, LISTED BELOW.
2. MATERIAL CERTIFICATION REQUIRED WITH EACH SHIPMENT.
3. MATERIAL TO BE COMPATIBLE WITH FREON-12 & REFRIGERANT OIL.
4. PARTS TO BE SHIPPED, ISSUED & STORED IN SEALED PLASTIC BAGS. AND 30,000 PARTS PER BAG MAX.
5. ALL CONTAINERS OF PARTS MUST BE MARKED TO REFLECT ANY MATERIAL LOT, TOOL OR PROCESS CHANGE.
6. (M) DASH 1 (-1) AND DASH 4 (-4) GASKET MUST HAVE FOUR (4) WHITE STRIPING INK MARKS, EQUALLY SPACED AROUND THE CIRCUMFERENCE, AND NOT LESS THAN 1/8 INCH WIDE. NO INK IS ALLOWED ON ANY OTHER SURFACE.

PART NO.	MATERIAL	DUROMETER	COLOR	A (M)	B (M)	C
74353-4	ETYLENE PROPYLENE JBL COMPOUND E-7104-70 JBL PART NO. 61976	70	BLACK	.670-.662	.030-.036	.063
74353-3	ETHYLENE PROPYLENE JBL COMPOUND E-7064	70	WHITE	.670-.662	.030-.036	.063
74353-2	ETHYLENE PROPYLENE JBL COMPOUND E-7064	70	WHITE	.599-.591	.030-.036	.063
74353-1	ETHYLENE PROPYLENE JBL COMPOUND E-7104-70 JBL PART NO. 61976	70	BLACK	.599-.591	.030-.036	.063

DRAWN: 75-4 Q13-1 Q1-1 M11-1 P37-7 P35-1

ST T. Dail 3-18-85
CH. 3-20-85
ENG. 3-19-85

TEXAS INSTRUMENTS INCORPORATED
ATTLEBORO, MASS., U.S.A.

KLEIBON CONTROL PRODUCTS DIVISION

SIZE A

PARTS LIST 74353

COPY INPUT NO 82647

TI-NHTSA 003048

TEST NO. 110831

TECHNICAL SERVICE LABS

TEST NO. 110831

[illegible]	[illegible]
[illegible]	PCCSA
[illegible]	7-26-91
[illegible]	7-19-91
[illegible]	640
[illegible]	

REPORT OF RESULTS:

DATE RECEIVED 7/11/91 DATE OUT 7/29/91 [illegible]

[illegible]			
[illegible]			
[illegible]			

*PCC LD.

MC-325	TM-451	JOCY-126	FACIL-614
PC-127	WRE-432	CLKE-122	FACIL-621
VERS-166	EPD-621	CAN-654	FACIL-631
AFCC-483	PEP-622	AD DEV-266	STAFF-658
IMD-430	CSD-638	EMCD-677	

DISTRIBUTION: White and Yellow - Lab Pink - Requestor

TI-NHTSA 003049

VALENTINE TOOL & STAMPING, INC.

171 WEST MAIN ST. NORTON, MASS. 02766
(508) 285-6911

MATERIAL CERTIFICATION

DATE : FRIDAY JUNE 14, 1991

CUSTOMER : TEXAS INSTRUMENTS INC

CUSTOMER P.O. NO : 505063392 SUPPLIER INVOICE NO.: 19580

PART DESCRIPTION : 27713-1 CUP REV.A

SUPPLIER PJO NO. : 18571

QUANTITY SHIPPED : 1,085

SHIPMENT DATE : 06/14/91

WE CERTIFY THAT THE MATERIAL USED
TO PRODUCE THE PRODUCT IN THIS
SHIPMENT, NAMELY
(C1006)
CONFORMS TO T.I. DRAWINGS AND
T.I. PURCHASE ORDER REQUIREMENTS.

SIGNED Jeanne Laflamme
(Supplier Representative)

Jeanne Laflamme Quality Control Manager

VALENTINE TOOL & STAMPING, INC.

171 WEST MAIN ST. NORTON, MASS. 02766
(508) 285-0911 328-0040

CERTIFICATE OF CONFORMANCE

DATE : FRIDAY JUNE 14, 1991

CUSTOMER : TEXAS INSTRUMENTS INC

CUSTOMER P.O. NO : 505063392 SUPPLIER INVOICE NO.: 79580

PART DESCRIPTION : 27713-1 CUP REV.A

SUPPLIER FJO NO. : 18571

QUANTITY SHIPPED : 1,095

SHIPMENT DATE : 06/14/91

WE CERTIFY THAT ALL ITEMS SHIPPED ON THIS ORDER MEET THE REQUIREMENTS OF THE PURCHASE ORDER AND APPLICABLE DRAWINGS/SPECIFICATIONS. RESULTS OF REQUIRED MECHANICAL, VISUAL, FUNCTIONAL AND CHEMICAL TESTS ARE ON FILE IN OUR QUALITY CONTROL DEPARTMENT.

SIGNED Jeanne Laflamme
Jeanne Laflamme
Quality Control Manager

ROME STRIP STEEL CO., INC.
520 HENRY STA BOX 180
ROME, NEW YO 13440

SALES CODE
.507410

0 1 0 0 0 0 0 0

DATE	INVOICE NO
02/26/91	02740

INVOICE TO: VALENTINE TOOL & STAMPING, INC.
171 W MAIN ST
NORTON, MA 02766

ATTN: JEANNE LAFLAMME, Q.C. MGR.

SHIP TO: VALENTINE TOOL & STAMPING, INC.
171 W MAIN ST
NORTON, MA

UNIT LBS	INV. CLS.	INV. SPEC OR DESC	PREPAID CHARGES	SHIPPED BY
16,154	040	06	CURR	K S S

HT NO	C	MN	P	S	SI	NI	CR MO
466709	07	34	012	006	01		

AL	MN	CU	CR

S REQUIREMENTS OF:
ORDER NO 13428

COLOR CODE

[redacted]02PN X 50.8048

			HEAT NO	PREPAID COLLECT	STAMPING	PAPER WRAP	POLY	CRATES	BOX
			62456	P.S.E.P.A.I.I					
.04000 X 2.0000		TEMPER	COILS OR CUT		BARS	SHEET SIZE			
		R NO MAX	COIL	440 LBS	3000				
CABLE		COIL	LENGTH/WT		BUNDLES				
001 -001 +005 -005		003 SCIT	220 FIN 16 36			3/4"			
025 -025MM +127 -127MM					WIRE	CARRIER	FLATNESS	OIL	TYPE

CLASS	INV NO.
ALUM KILO	C-1006

[redacted]

TEST REPORT

Certificate of Compliance

TEST: [signature]
[illegible] 07285 39/030291
Notary Public, Oneida County
My commission expires 1/31/92

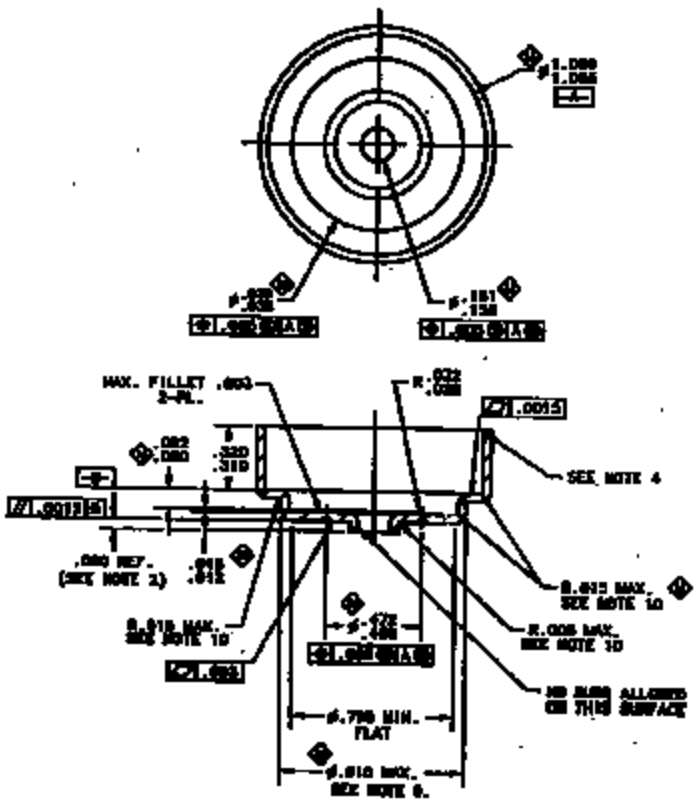
DATE 2/27/91

I certify that the above figures are a true and correct copy of those contained in the records of this corporation.

[signature]
ROME STRIP STEEL CO., INC.

[redacted]

TI-NHTSA 003052



NOTES:
1. .002 MAX. BURR ALLOWED, EXCEPT WHERE INDICATED.
2. .105-.141 F MUST BE MAINTAINED THRU .058 MIN..
3. DIMENSIONS APPLY AFTER PLATING.
4. PINCH OFF BURRS ALLOWED.
5. PARTS TO BE SHIPPED, ISSUED, AND STORED IN SEALED PLASTIC BAGS.
6. ALL CONTAINERS OF PARTS MUST BE DATE CODED, DATE CODE IS TO REFLECT ANY MATERIAL LOT, TOOL OR PROCESS CHANGE.
7. THIS PART IS LOT CONTROLLED. ANY PROCESS CHANGE: NEW SET-UP, PINCH CHANGE, BROKEN TOOL, WORK OR MATERIAL LOT CHANGE WILL SIGNIFY START OF A NEW LOT. EACH LOT WILL HAVE TO BE CODE PRINTED OR SLAP WITH LOT IDENTIFICATION, PALLETIZED LOTS REQUIRE ONE SKID FOR EACH LOT.
8. MATERIAL CERTIFICATION REQUIRED WITH EACH SHIPMENT.
9. .030 - .041 THICKNESS DOES NOT APPLY IN THIS AREA DUE TO WALL THINNING DURING FORMING.
10. EFFECTIVE RADIUS. NO MATERIAL MAY PROTRUDE BEYOND THE THEORETICAL BOUNDARY ESTABLISHED BY THE GIVEN RADIUS.

CERTIFIED PRINT
ENG. STD. E9898 REV. E
JUL 1 2011

PART NO	MATERIAL	THICKNESS	FINISH
27713-1	#1010 OR #1008 C.R.S.	.030-.041	ZINC PLATING W/YELLOW CHROMATE .0002-.0005 THICK

TEXAS INSTRUMENTS

CUP

B | 82647 | 27713

THIS DWG. SUPERSEDES 27713 REV. 'A' DATED 11-3-85

TI-NHTSA 003053

DRAWINGS AVAILABLE UPON REQUEST

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:

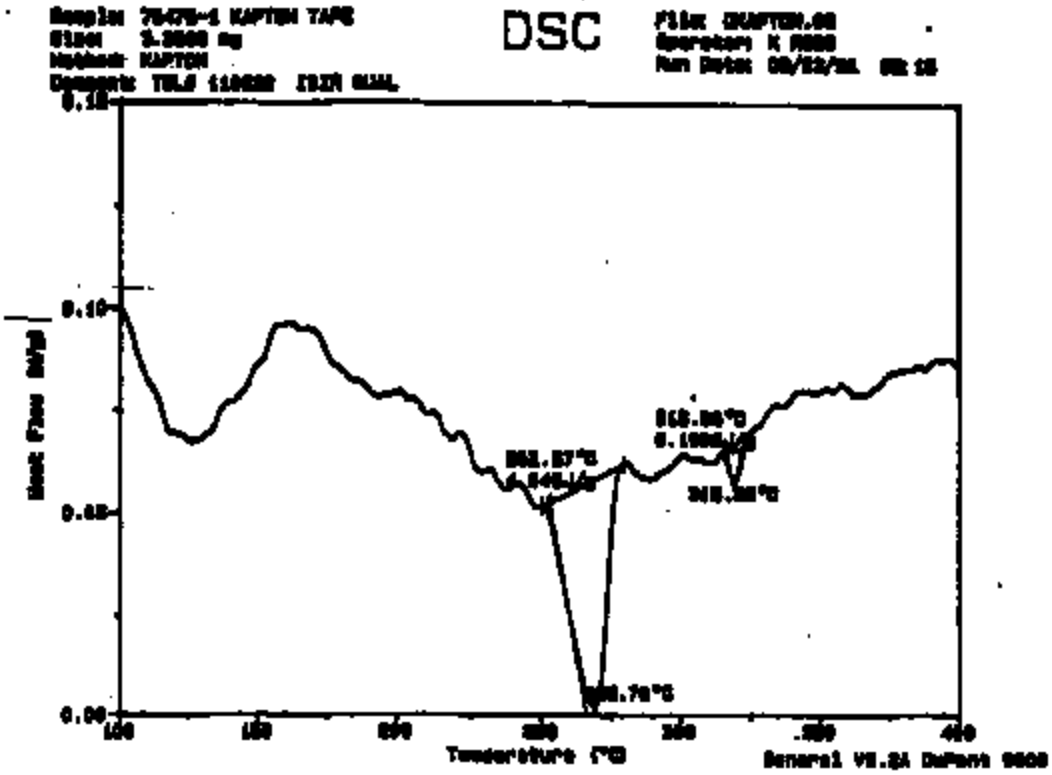
DSC results confirm the presence of Teflon by the characteristic melt point at 316 - 319 degrees C.

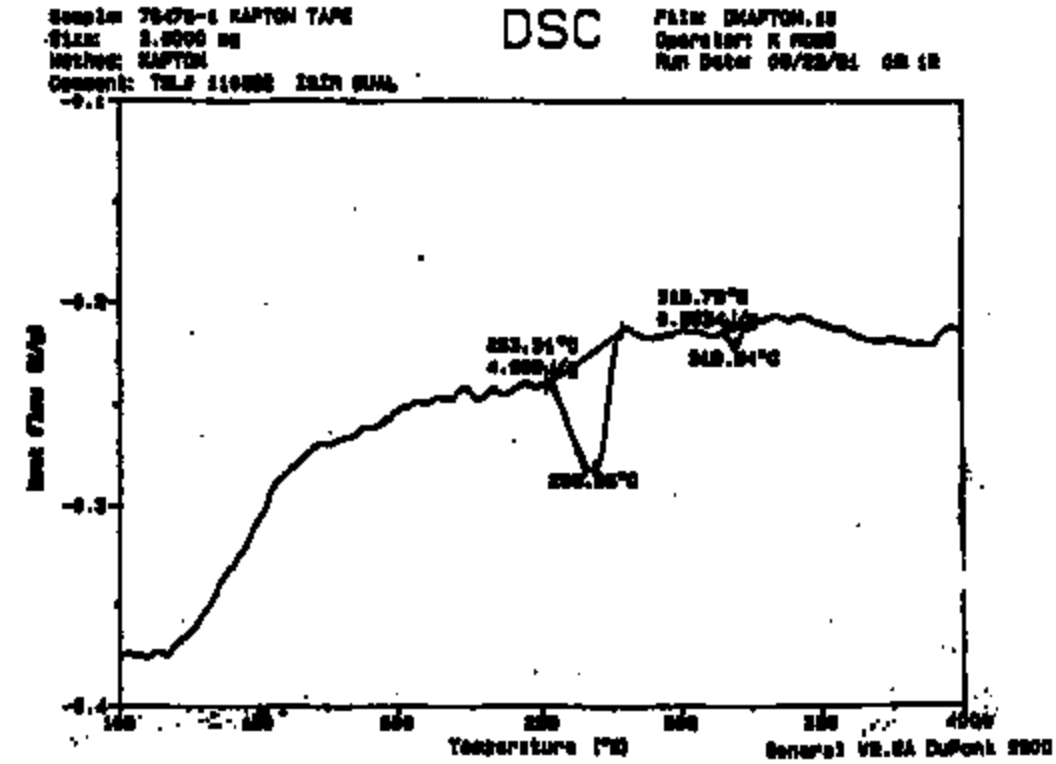
Kapton is confirmed in the seal by the IR scan. It shows the same characteristic absorbances exhibited by the sample known to be Kapton. See the enclosed scan.

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

Regards,

Beth X3069

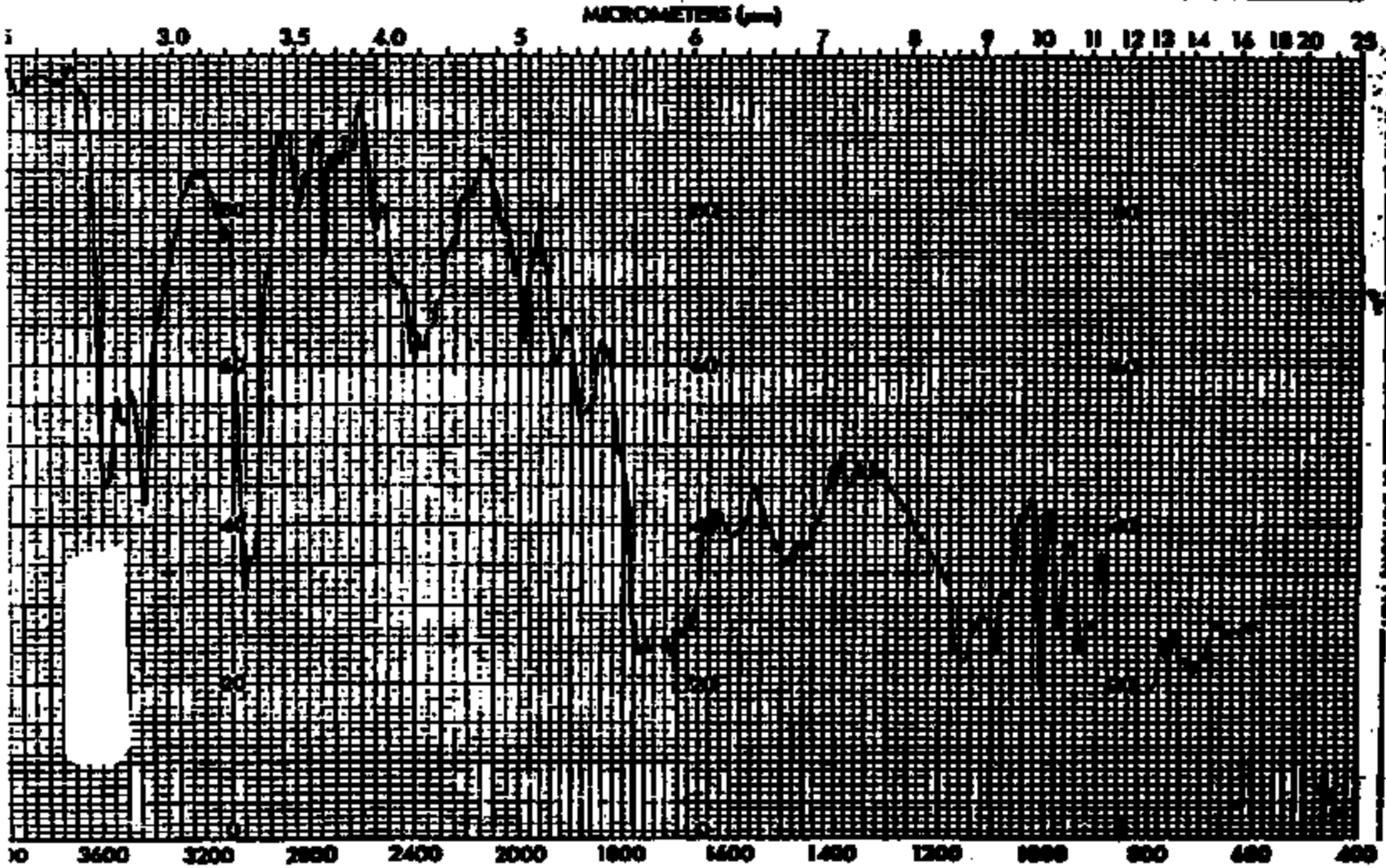

DSC
Temperature (°C)


DSC
Temperature (°C)

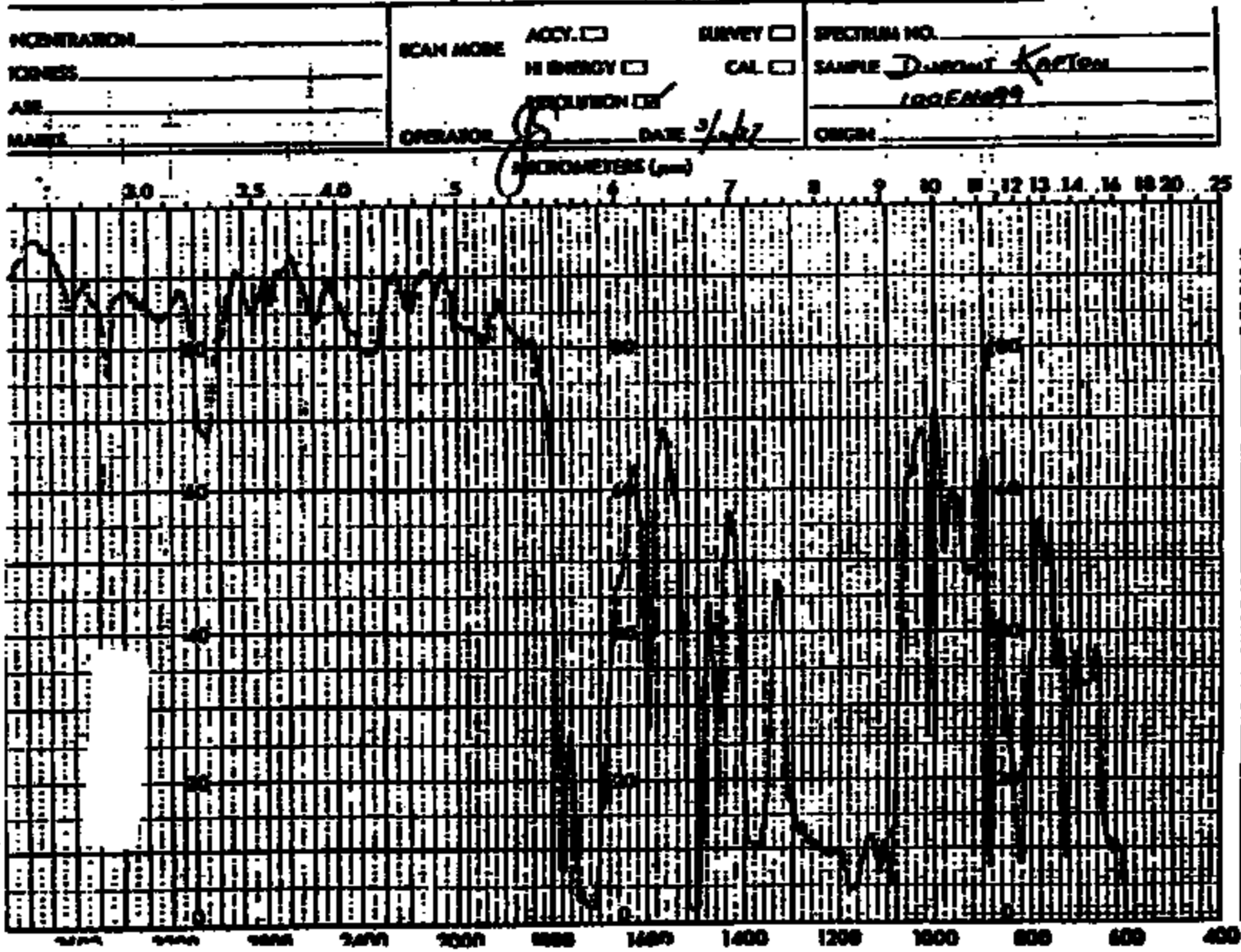
NO. 007-1493

PERKIN-ELMER

CONCENTRATION	SCAN MODE: ACCY. ☐ SURVEY ☐	SPECTRUM NO.
THICKNESS	HI ENERGY ☐ CAL ☐	SAMPLE 110132
PHASE	RESOLUTION ☑	Kapton - Teflon
REMARKS	OPERATOR EK DATE 9/23/91	ORIGIN



SPECTRUM NO.

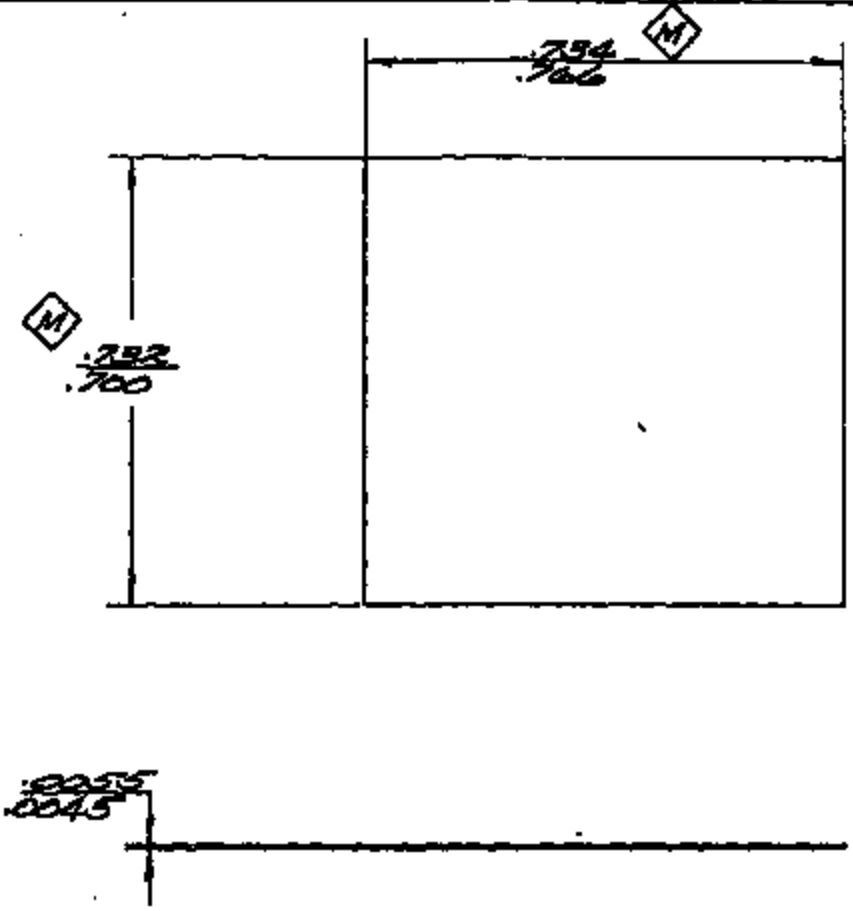

NOMENCLATURE
IONNESS
AGE
MARKS
SCAN MODE
ACCY.
HI ENERGY
RESOLUTION
SURVEY
CAL.
OPERATOR
DATE
SPECTRUM NO.
SAMPLE
ORIGIN
MICROMETERS (μm)
3.0
3.5
4.0
5
6
7
8
9
10
11
12
13
14
16
18
20
25
1600
1400
1200
1000
800
600
400
SAMPLE
SPECTRUM NO.

TITLE SEAL

REV. B

74176

74176



NOTE:
1.001 MAX. BURR ALLOWED

CERTIFIED PRINT
Parts Made To This Print Must Conform To
ENG. STD. E9898 REV. E
Date JUL 1 1991

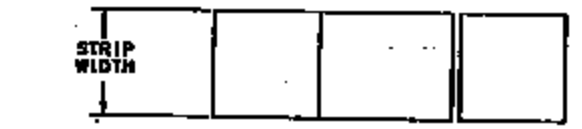
10	74176-1	MAKE FROM 27225-1 (STRIP)
	PART NO.	MATERIAL

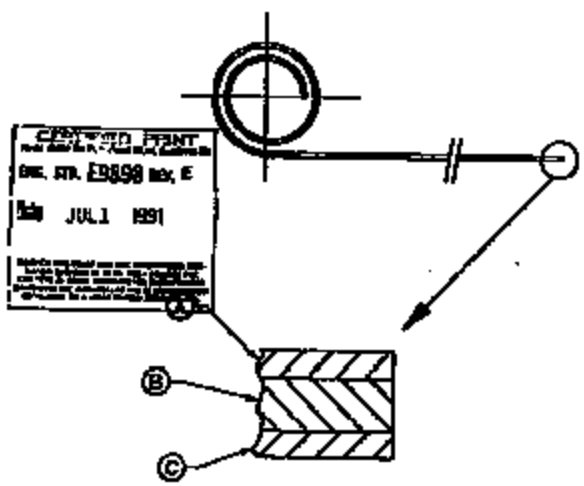
DETAIL							V5		Q13-1	Q1-1	H2H	H4-1	P5H P3T2 P5T1

BY	2-1-84	TEXAS INSTRUMENTS INCORPORATED ATTLEBORO, MASS., U.S.A.	KLIXON	A	74176
CHK.	2-13-84				
ENG.	2/13/84				

TI-NHTSA 003059

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	[illegible]	[illegible]	[illegible]





CERTIFIED PRINT
DWG. NO. 27225 REV. E
Date JUL 1 1991

NOTES:

1. STRIP TO BE INSPECTED FOR TEFLON COATING, THICKNESS, DEFORMITIES, BUBBLES, AND LAMINATE SEPARATION.
2. EACH KAPTON STRIP ROLL MUST BE LABELED WITH T.I. PART NO. ON INSIDE OF CORE.
3. NO MORE THAN 2 SPLICES PER COIL PERMITTED. SPLICES TO BE CLEARLY MARKED WITH YELLOW MYLAR.
4. MATERIAL CERTIFICATION REQUIRED WITH EACH SHIPMENT.
5. ROLLS SLITTED FROM END OF MASTER COIL NOT ACCEPTABLE.
6. BUCKLING OF THE CORE ALLOWED UP TO 1/4" MEASURED RADIALLY AWAY FROM THE CORE.
7. DENT RIP OR JAGGED EDGES ON MATERIAL NOT ALLOWED.
8. ROLLS ARE TO BE SHIPPED WITH PROTECTIVE INSERT CORES IN THE PACKING BOX.

THIS DWG. SUPERSEDES 27225 REV. "A" DATED 12-13-88

PART NO.	MATERIAL	THICKNESS (MILS)	TEFLON FIB (A)	ADHESIVE TYPE & THICK (B)	TEFLON FIB (C)	STRIP WIDTH (IN.)	PKG CUT UP (I.D.)(O.D.) (IN.)	CORE MATERIAL
			CONSTRUCTION (MILS) (SEE NOTE 6)					
27225-3	DUPONT 300 FN000	3 x 4.4 MILS	0.6	3	0.3	.503-.504	3 x 9 1/2	PLASTIC (WHITE)
27225-2	DUPONT 500 FN031	4 x 4.5 MILS	1	3	1	.503-.504	3 x 9 1/2	CARDBOARD
27225-1	DUPONT 500 FN036	5 x 4.5 MILS	1	3	1	.734-.739	6 x 9 1/2	CARDBOARD

TEXAS INSTRUMENTS			
TITLE: KAPTON STRIP SPECIFICATION			
SIZE B	CODE IDENT NO. 82647	27225	

T1-NHTSA 003060

DRAWINGS AVAILABLE UPON REQUEST

DIEMASTERS

CERTIFICATE OF CONFORMANCE

SHIP TO: TEXAS INSTRUMENTS

FROM: Diemasters Manufacturing, Inc.
787 Industrial Drive
Elmhurst, Illinois 60126

DATE SHIPPED: 6-18-91 PURCHASE ORDER #: SUBWORK

SHIPPING OR INVOICE NUMBER: 6-18-91

MATERIAL TRACE NUMBER (P.O. # HEAT, LOT, OR ROUTE SHEET NUMBER): 65-7196

QUANTITY SHIPPED: 75,790

PART NUMBER: 27639-1 REVISION: D

PART DESCRIPTION: WASHER

OPERATION PERFORMED: MANUFACTURING

SPECIFICATION: 27639-1 REVISION: D

THE MATERIAL DESCRIBED ABOVE WAS PROCESSED, INSPECTED AND FOUND TO CONFORM TO THE DRAWING(S) AND SPECIFICATION(S) LISTED.

QUALITY CONTROL 08-14-91 DATE

ENCLOSURES: ☒ CERTIFICATE OF RAW MATERIAL TRACEABLE LOT# 79

☐ INDEPENDENT LABORATORY TEST REPORT OF RAW MATERIAL

☐ INSPECTION REPORT(S)

☒ SUB ~~PLATING~~ HEAT TREAT SUPPLIER'S CERTIFICATION(S) OF CONFORMANCE

☐ FORM _____ NON-CONFORMANCE RELEASED BY: _____

☐ REWORK EXPLANATION

RIVERDALE PLATING & HEAT TREATING, INC.
860 West 134th Street Riverdale, Illinois 60627-1194

TELEPHONES
(708) 849-2050
(312) 568-2400

DIEMASTERS MANUFACTURING, INC.
757 INDUSTRIAL DR
ELMHURST IL 60126-1525

27639-1

JUN - 3 1991

THIS IS TO CERTIFY THAT THE PARTS, FURNISHED AGAINST THE LISTED PURCHASE ORDER, WERE PROCESSED IN ACCORDANCE TO SPECIFICATION.

133431	108647	AUSTEMPER TO R/C 40-45	74,515	1,559	5/29/91
133431	108657	ZINC .0012 - .0006	74,515	1,559	5/29/91

Subscribed and sworn to before me

THIS 29 DAY OF MAY , 1991

Lynne O. Bryntesen
Notary Public

"OFFICIAL SEAL"
Lynne O. Bryntesen
Notary Public, State of Illinois
My Commission Expires 7/20/92

RIVERDALE PLATING & HEATING TREATING, INC.

Alfred K. Nelson
Vice President

TI-NHTBA 003063

[redacted] that material meets ordered specification

Size
1 3/8 x .098"
PO Number
021540
Mill Number
62276

Bally Dimmetics

TEXAS INSTR.
27639-1

QUALITY CONTROL
APR 30 1991
E. BALLO

Heat						AISI			Rockwell		
657196						C-1050			B 74/78		
%C	%Mn	%P	%S	%Si	%Ni	%Cr	%Mo	%Al	%Cu	%V	%Cb
.52	.78	.015	.008	.23							
Tensile Strength (psi)			.2% Yield Strength (psi)			% Elongation in 2"					
Surface		Inclusion Rating				Grain Size					
Decarburization						Microstructure					
Cold Bend											
Parallel to the rolling direction over a						Radius Bend					
Perpendicular to the rolling direction over a						Radius Bend					
Hardenability						Miscellaneous					

J

I certify that the above data is correct

Date 4/26/91

Notary Public, State of New York, County of Oneida

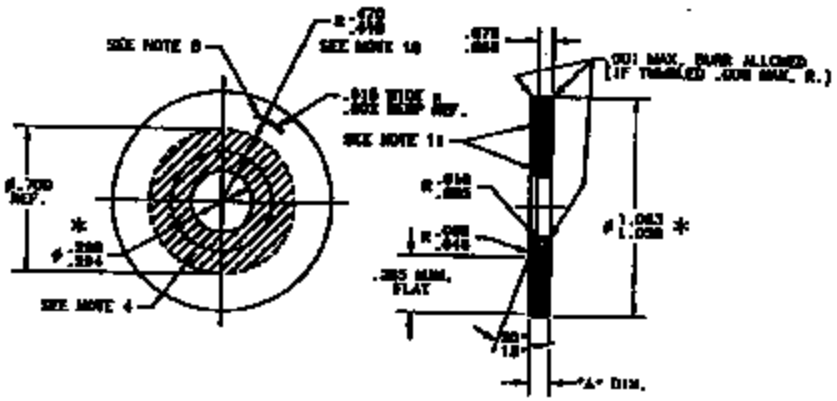
My commission expires 5/1/92

ROME STRIP STEEL

530 Henry St.
Rome, NY 13440

315-336-5500
FAX 315-336-5510

ZONE	LTR	REVISIONS DESCRIPTION	DATE	APPROVED
	B	[illegible]	[illegible]	[illegible]



NOTES:

1. PART MUST BE FLAT TO WITHIN .006 T.I.R..
2. DIAMETERS MARKED WITH ✱ MUST BE CONCENTRIC TO WITHIN .004 T.I.R..
3. PARTS TO BE SHIPPED, ISSUED, AND STORED WITH APPLIED RUST PREVENTIVE BEFORE PLATING. AFTER PLATING, PARTS TO BE SHIPPED, ISSUED, AND STORED IN SEALED PLASTIC BAGS.
4. NO TOOL MARKS ALLOWED IN THE SHADED AREA ON BEVELED SIDE OF WASHER.
5. THE PARTS HARDNESS IS MEASURED AFTER A .005-.010 THICK SKIN IS REMOVED.
6. THIS PART IS LOT CONTROLLED. ANY PROCESS CHANGE, NEW SETUP, FURNACE CHANGE, MAJOR TOOL WORK OR MATERIAL LOT CHANGE WILL IDENTIFY START OF A NEW LOT. NO MINIMUM LOT SIZE. EACH NEW WILL HAVE A LOT NUMBER. EACH LOT WILL HAVE TI'S OWN PACKING SLIP WITH LOT IDENTIFICATION.
7. MATERIAL CERTIFICATION REQUIRED WITH EACH SHIPMENT.
8. STAMP IDENTIFICATION CODE AS REQUIRED TO IDENTIFY SUPPLIER TOOL. CODE SHALL BE CLEARLY VISIBLE AFTER PLATING. NO BURR OR SHARP EDGES PERMITTED. (-6 ONLY)
9. DIM. "A" TO BE MEASURED WITH STANDARD RINGER GAUGE.
10. IDENTIFICATION MARKS ALLOWED BETWEEN .410-.690..
11. THESE SURFACES MUST BE SMOOTH AND FREE OF ANY PLATING ASPERITIES OR INCLUSIONS. (i.e. NO FRINGED EFFECTS OR PARTICULATE CONTAMINATION IN THE PLATING.)

THIS NO. SUPERSEDES 27639 REV. "C" DATED 3-30-90

CERTIFIED PRINT
ENG. STD. E9898 REV. E
DATE JUL 1 1991

PART NO	MATERIAL	FINISH	HEAT TREAT	"A" DIM.
27639-1	1050 CRS	ZINC PLATE .0002 - .0005 THK	HEAT TREAT TO ROCKWELL C40-50	.087 - .101

TEXAS INSTRUMENTS

TITLE: WASHER

SIZE B | 82647 | 27639

TI-NHTSA 003065