

DP12-002

HONDA

8-3-2012

ATTACHMENT

Q14

14C

DVP2_FTA_REVISIED_0209_

E REDACTED

[HG-FMEA-0000]

FTA Report Documents

Theme: Electrically controlled brake assist system

Model	
Model year	03.5 M/Y
Stage	P2

Contents

- 1. Summary of FTA investigation results Page 1
- 2. System structure diagram Pages 1 ~ 8
- 3. System function and failure list Page 1
- 4. Definition of system level of seriousness Page 1
- 5. Failure mode list (FTA) Page 1 ~ 8

Action date Sept. 27th, 2002

Approval
Yasugi

【HG-FMEA-0010】

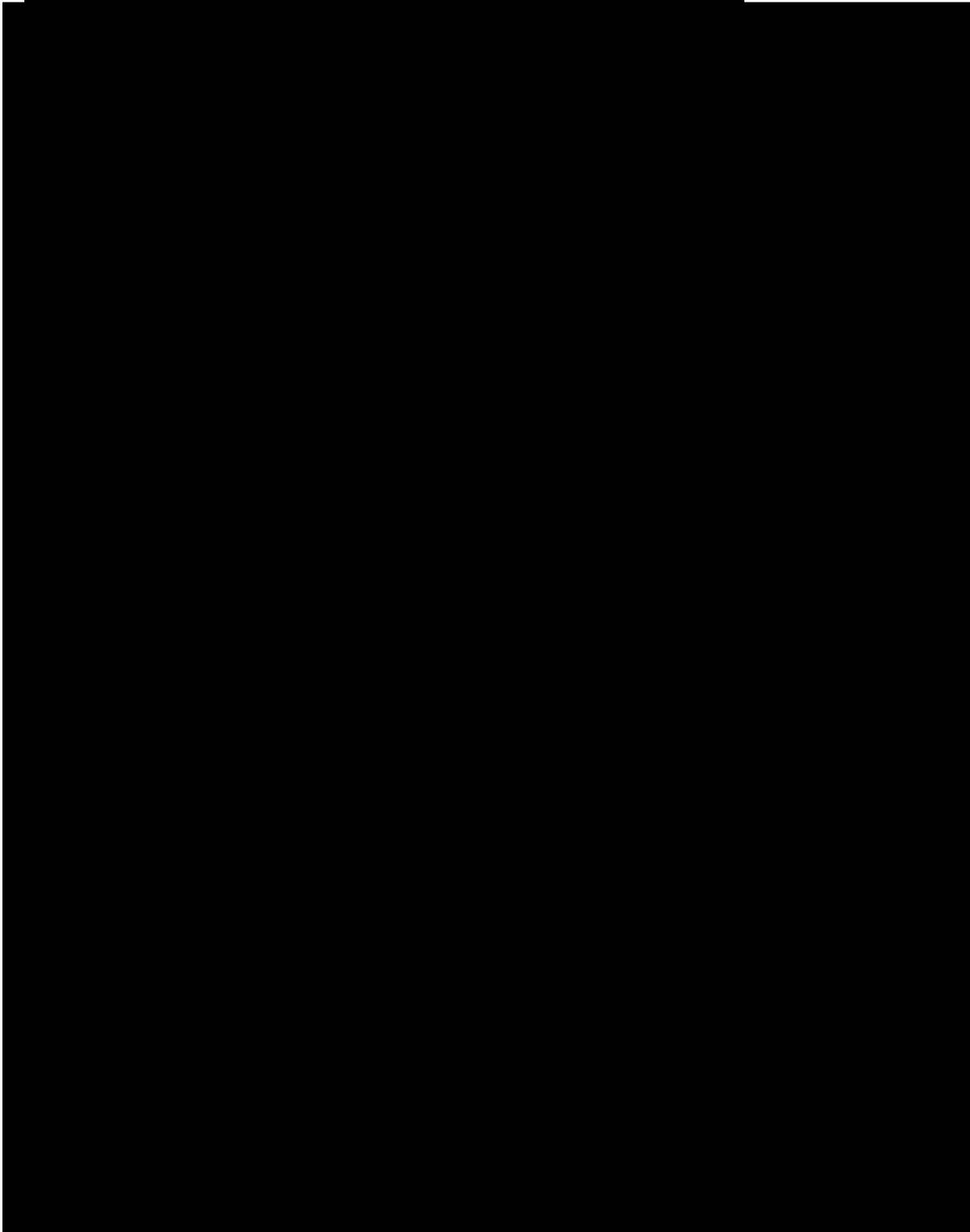
Summary of FTA Investigation Results

Model 

<System name> ~~Electrically controlled brake assist system~~

Approval
Kiryu

Sept. 26th, 2002



System Structure Diagram [1/8]

△			
△			
New	02/9/26	Aoki	Kiryu
System name : Electrically controlled brake assist system		Date	Prepared by / Approved by

Supplier Nissin Ind.

ECU

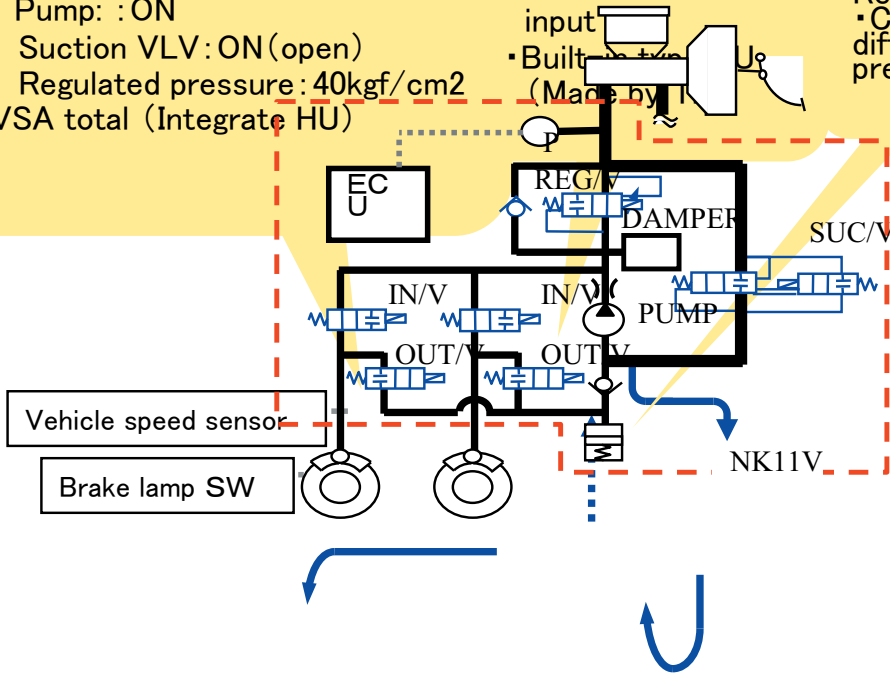
- Detect sudden braking & drive HU Pump: : ON
- Suction VLV : ON (open)
- Regulated pressure : 40kgf/cm²
- VSA total (Integrate HU)

Oil pressure sensor

- Detect brake control input
- Built-in pressure sensor (Made by T)

Regulator VLV

- Control differential pressures



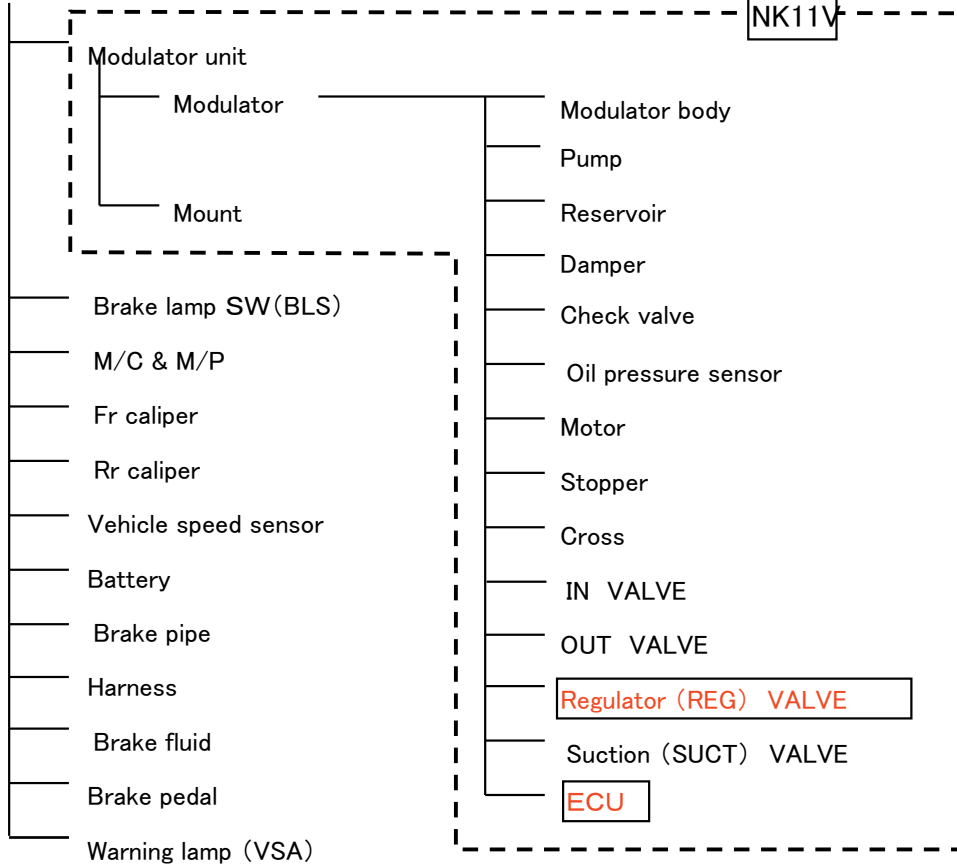
System Structure Diagram [2/8]

△			
↑	02/9/26	Aoki	Kiryu
New	01/12/26	Aoki	Kiryu
System name : Electrically controlled brake assist system		Date	Prepared by / Approved by

Supplier Nissin Ind.

The system shares the hardware with VSA (NK11V); therefore, structure is same as NK11. However for 03M NK11V, regulator was changed to linear and regulator VLV current F/B circuit was added to ECU.

Electrically controlled brake assist system



CONFIDENTIAL BUSINESS INFORMATION

【HG-FMEA-0004】

System Structure Diagram [3/8]

System name : Electrically controlled brake assist system

New	02/9/26	Aoki	Kiryu
	Date	Prepared by	Approved by

Change point from 03M NK11V (written in red letters)

Supplier

IN VALVE

- 1. VALVE COMP. IN
- 2. COIL ASSY. IN
- 3. CLIP 13X1.0

OUT VALVE

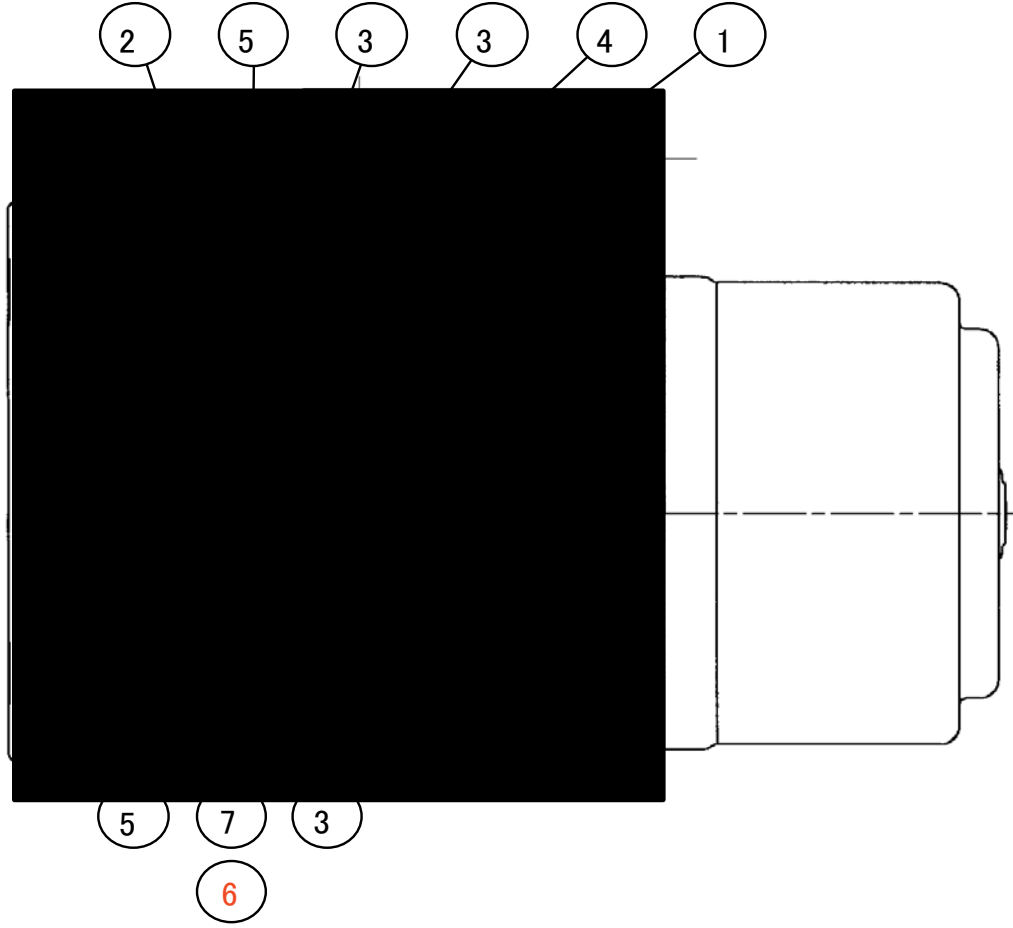
- 4. VALVE COMP. OUT
- 5. COIL ASSY. OUT
- 3. CLIP 13X1.0

REG VALVE

- 6. VALVE COMP. REG. L
- 5. COIL ASSY. OUT
- 3. CLIP 13X1.0

SUCT VALVE

- 7. VALVE COMP. SUCT
- 5. COIL ASSY. OUT
- 3. CLIP 13X1.0



【HG-FMEA-0004】

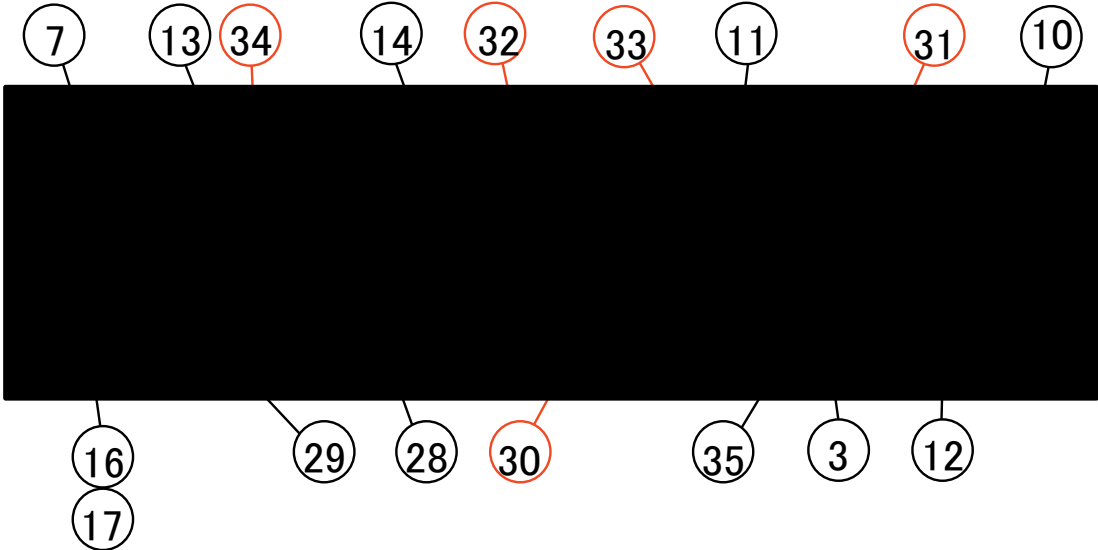
System Structure Diagram [4/8]

New	02/9/26	Aoki	Kiryu
System name : <u>Electrically controlled brake assist system</u>		Date	Prepared by
		Approved by	

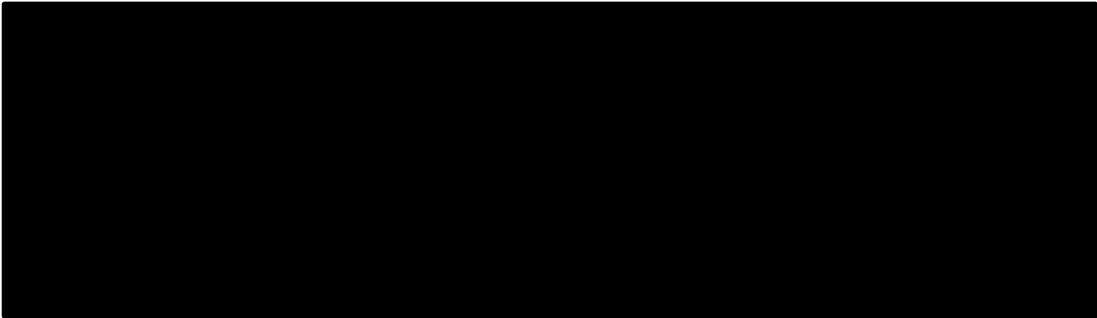
System name : Electrically controlled brake assist system

Supplier

Structure diagram: VALVE COMP (REG.L)



Previous (03M) structure: VALVE COMP (REG.M)



【HG-FMEA-0004】

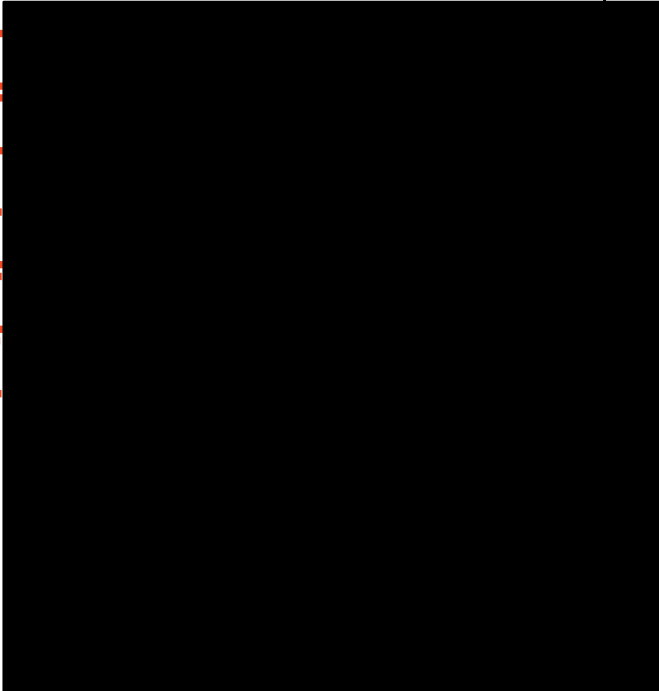
System Structure Diagram [5/8]

System name : Electrically controlled brake assist system

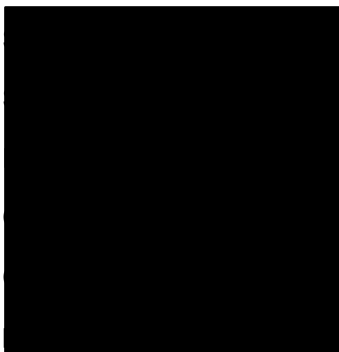
New	02/9/26	Aoki	Kiryu
	Date	Prepared by	Approved by

Supplier

- VALVE COMP (REG.L)
- 30. BODY REG.L
 - 31. SEAT 90
 - 3. SPG. RET. IN 35
 - 32. RETAINER
 - 33. ROD SEAL 1.2
 - 34. ARMATURE REG
 - 7. PIPE IN
 - 35. FILTER REG
 - 10. FILTER IN
 - 11. O-RING S9
 - 12. VALVE ONE WAY



- COIL ASSY(OUT)
- 13. YOKE SOL TOP
 - 14. YOKE SOL CASE
 - 28. WIRE, MAGNET OUT
 - 16. TERMINAL R
 - 17. TERMINAL L
 - 29. BOBBIN OUT



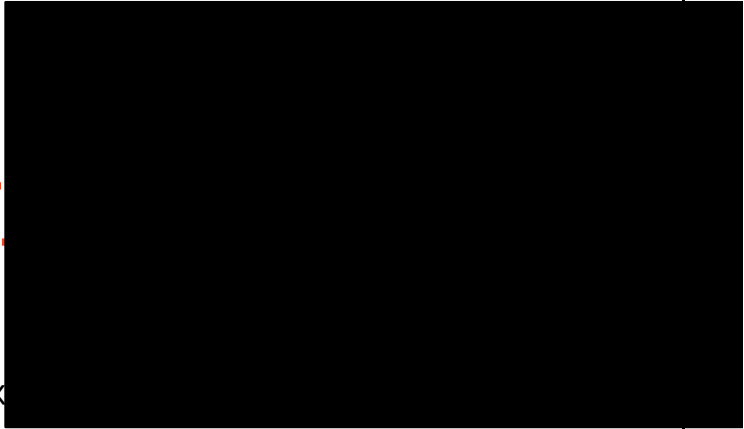
【HG-FMEA-0004】

System Structure Diagram [6/8]

△			
△			
New	02/9/26	Aoki	Kiryu
System name : Electrically controlled brake assist system	Date	Prepared by	Approved by

Supplier Nissin Industries

- ECU
- 46. ECU HOUSING
 - 47. COIL ASSY. IN
 - 48. COIL ASSY. OUT
 - 49. PWB ASSY (6/7)
 - 50. COVER HOUSING
 - 51. SEAL HOUSING
 - 52. SCREW 4X8(TORX)



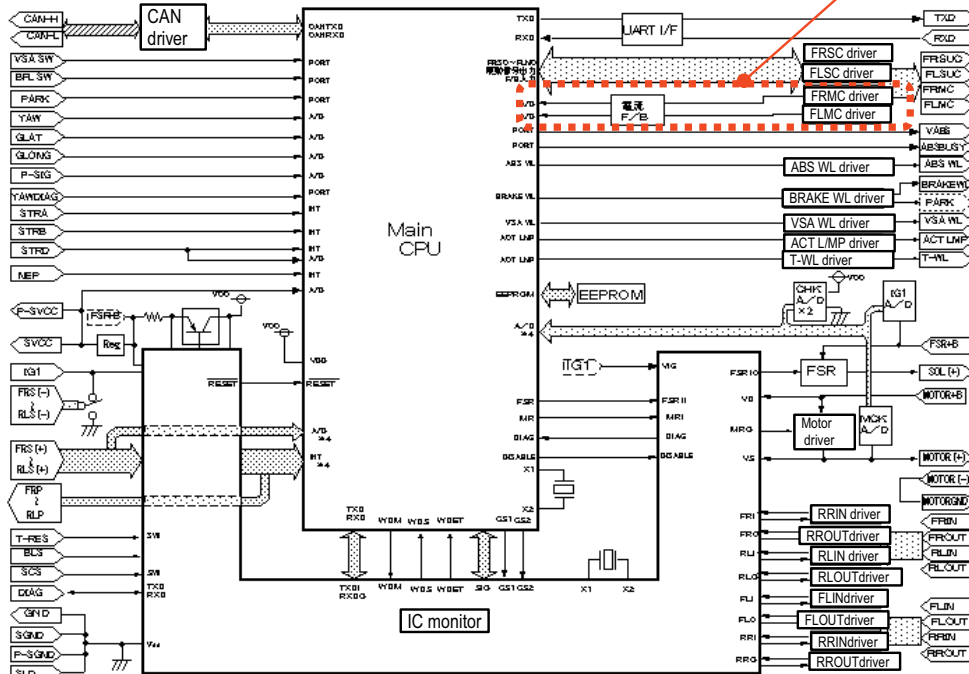
[HG-FMEA-0004]

System Structure Diagram [7/8]

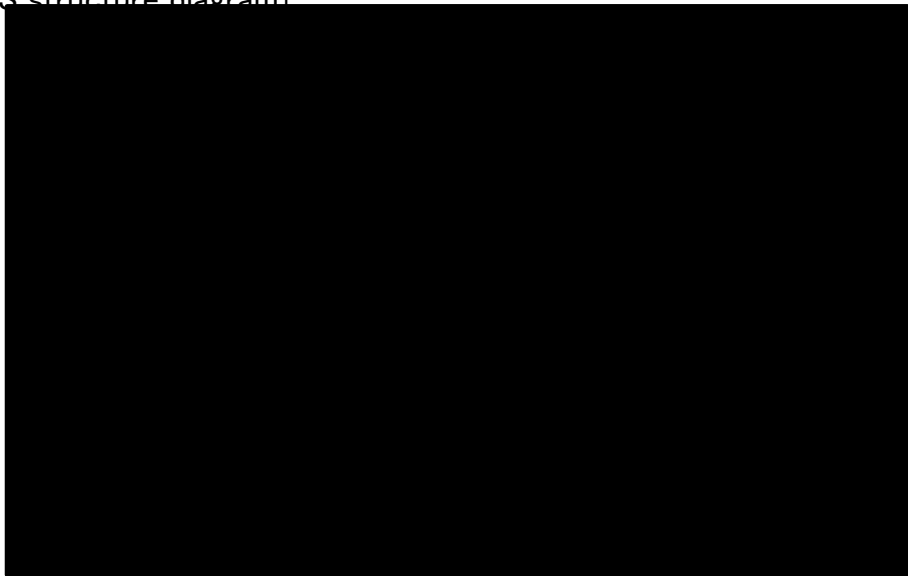
System name : Electrically controlled brake assist system	02/9/26	Yoshima	Kiryu
	Date	Prepared by	Approved by

[ECU structure diagram]

Current FB circuit was added



[F/S structure diagram]



【HG-FMEA-0004】

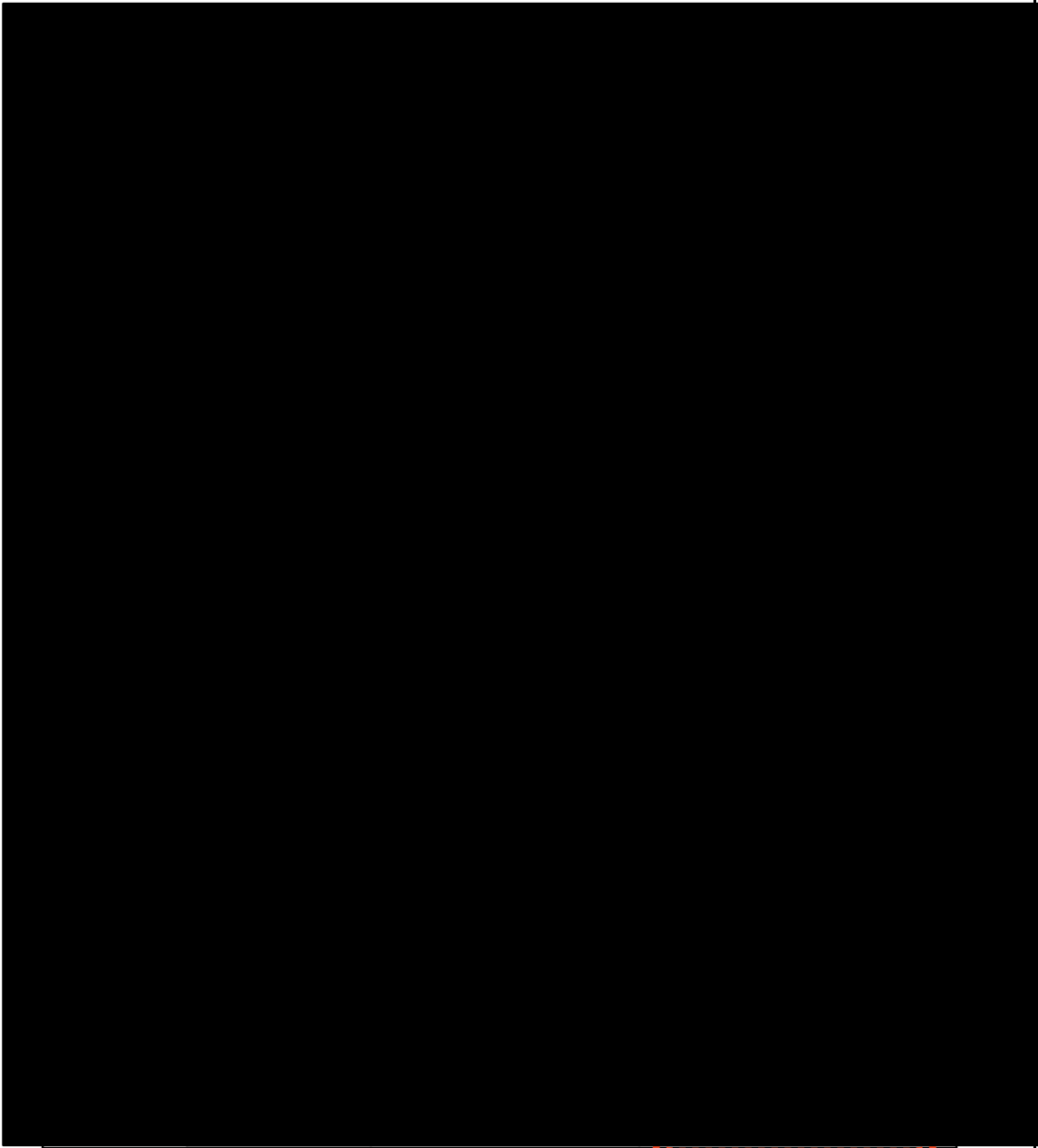
System Structure Diagram [8/8]

System name : Electrically controlled brake assist system

△			
△			
△			
	02/9/26	Yoshima	Kiryu
	Date	Prepared by	Approved by

[ECU structure drawing]

Linear regulator valve drive
circuit system structure



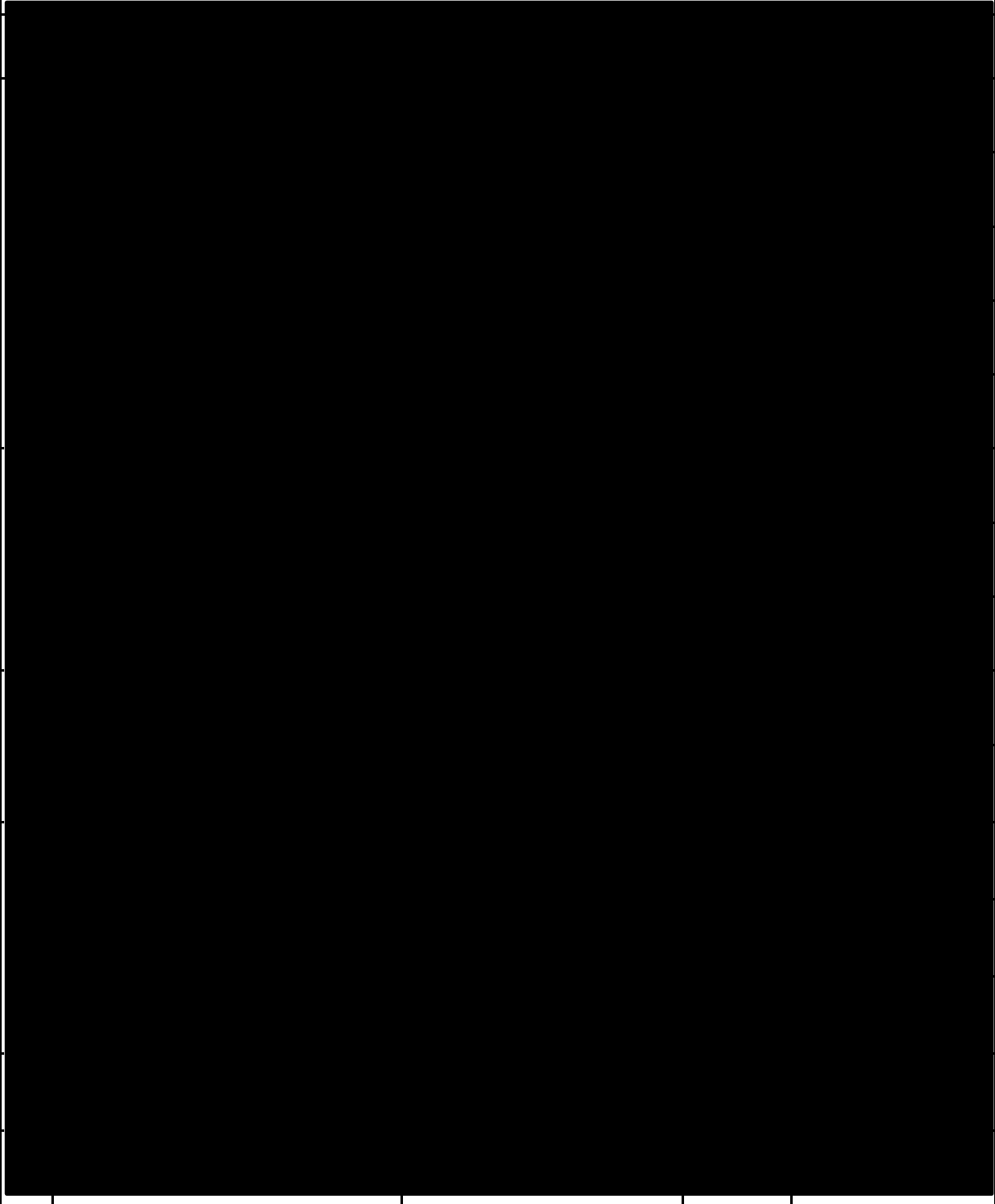
er

【HG-FMEA-0008】

System function and failure list [1/1

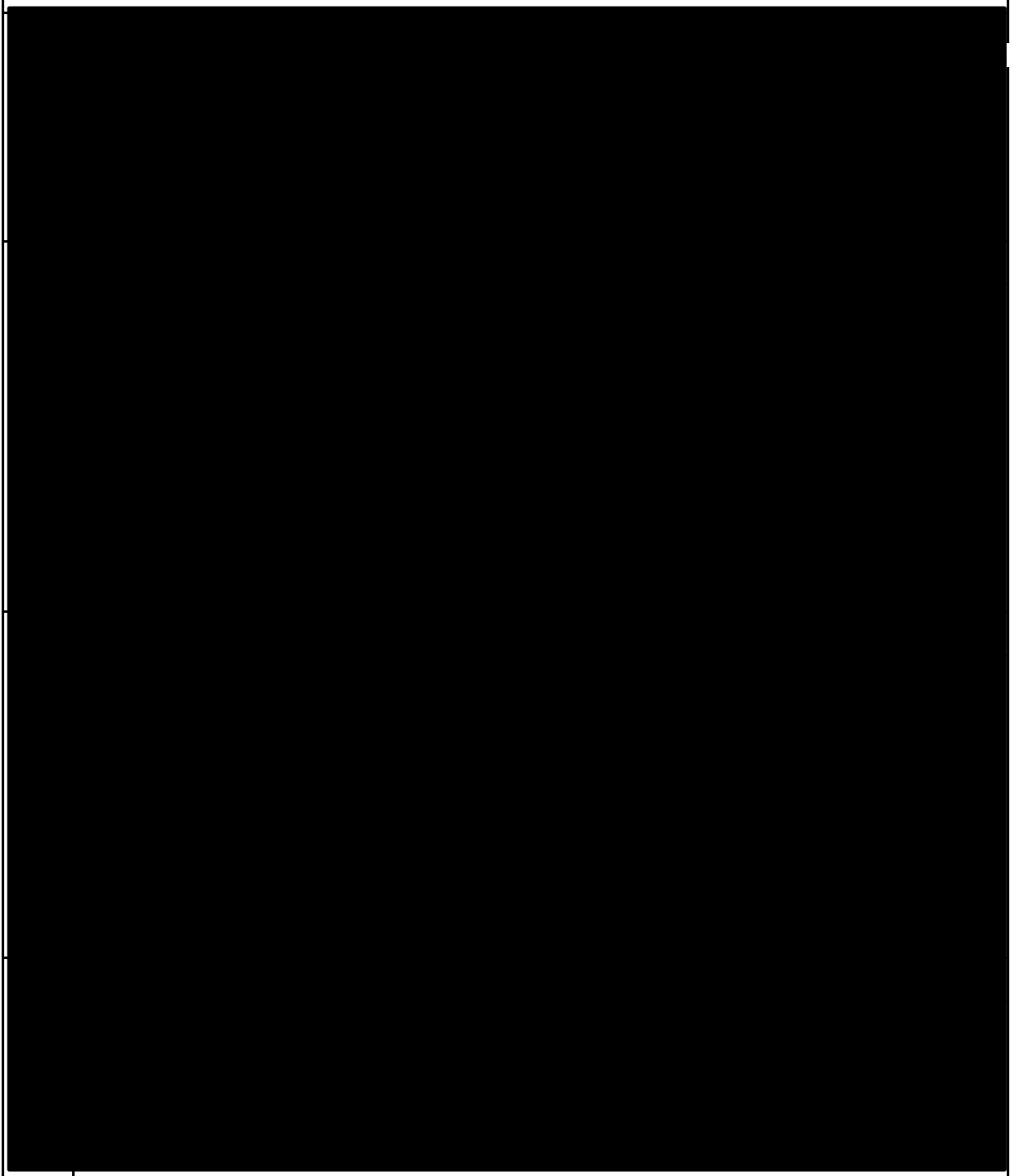
System name : Electrically controlled brake assist

△			
△			
△	01.12.26	Aoki	Kiryu
△	Date	Prepared by	Approved by



【HG-FMEA-0009】

<u>System seriousness and definition</u> [1/1]				
	00	01.12.26.	Aoki Kiryu	
	System name	Electrically controlled brake assist system	Date	Prepared by	Approved by



[HG-FMEA-0005]

Failure mode list [0 / 8]

System name —Electrically controlled brake assist system

(FTA)

△			
△			
00	01.12.26	Aoki	Kiryu
	Date	Prepared by	Approved by



(Component) was added.

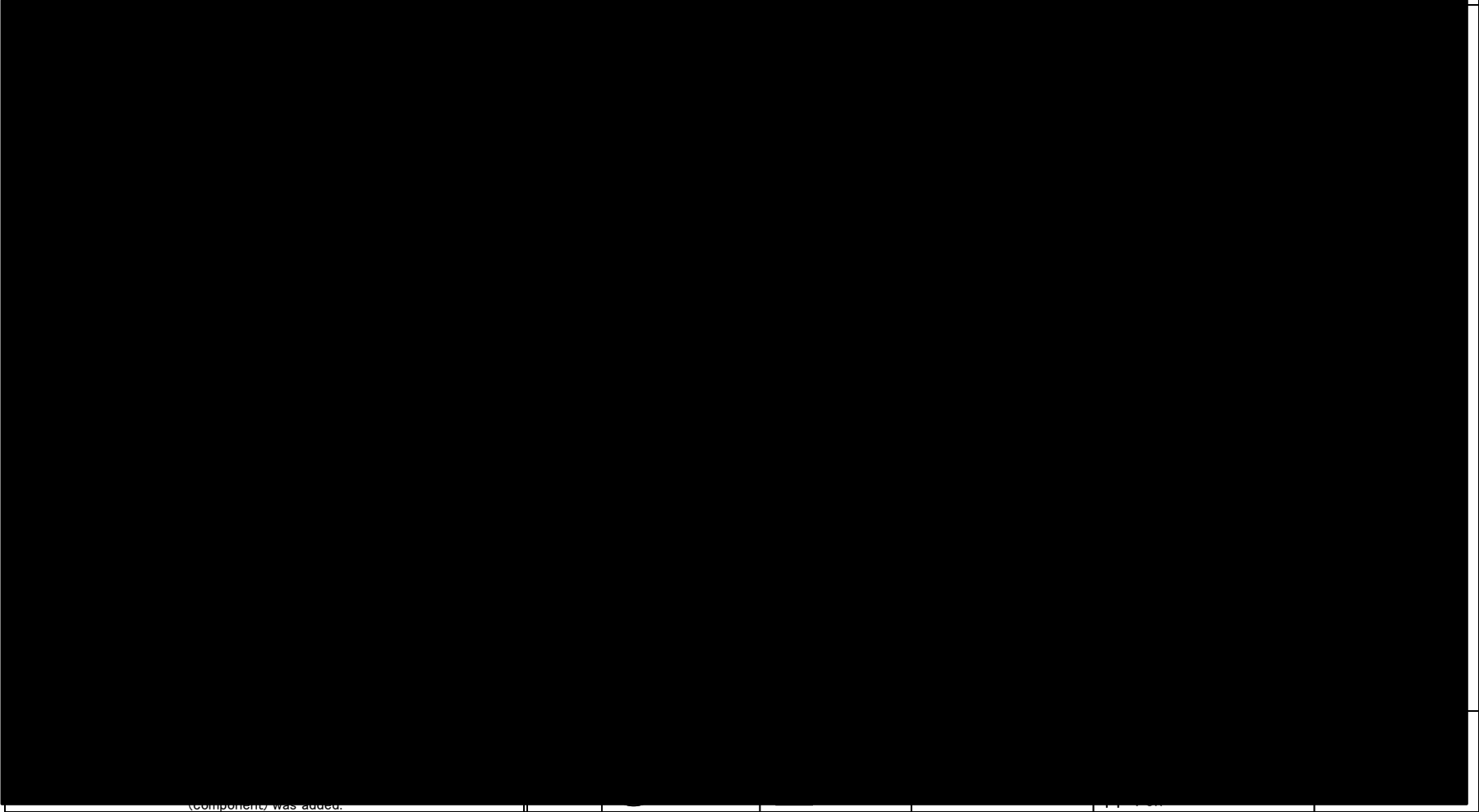
[HG-FMEA-0005]

Failure mode list [1 / 8]

System name ~~Electricaly controlled brake assist system~~

(FTA)

△			
△			
00	01.12.25	Yoshima	Kiryu
	Date	Prepared by	Approved by



(Component) was added.

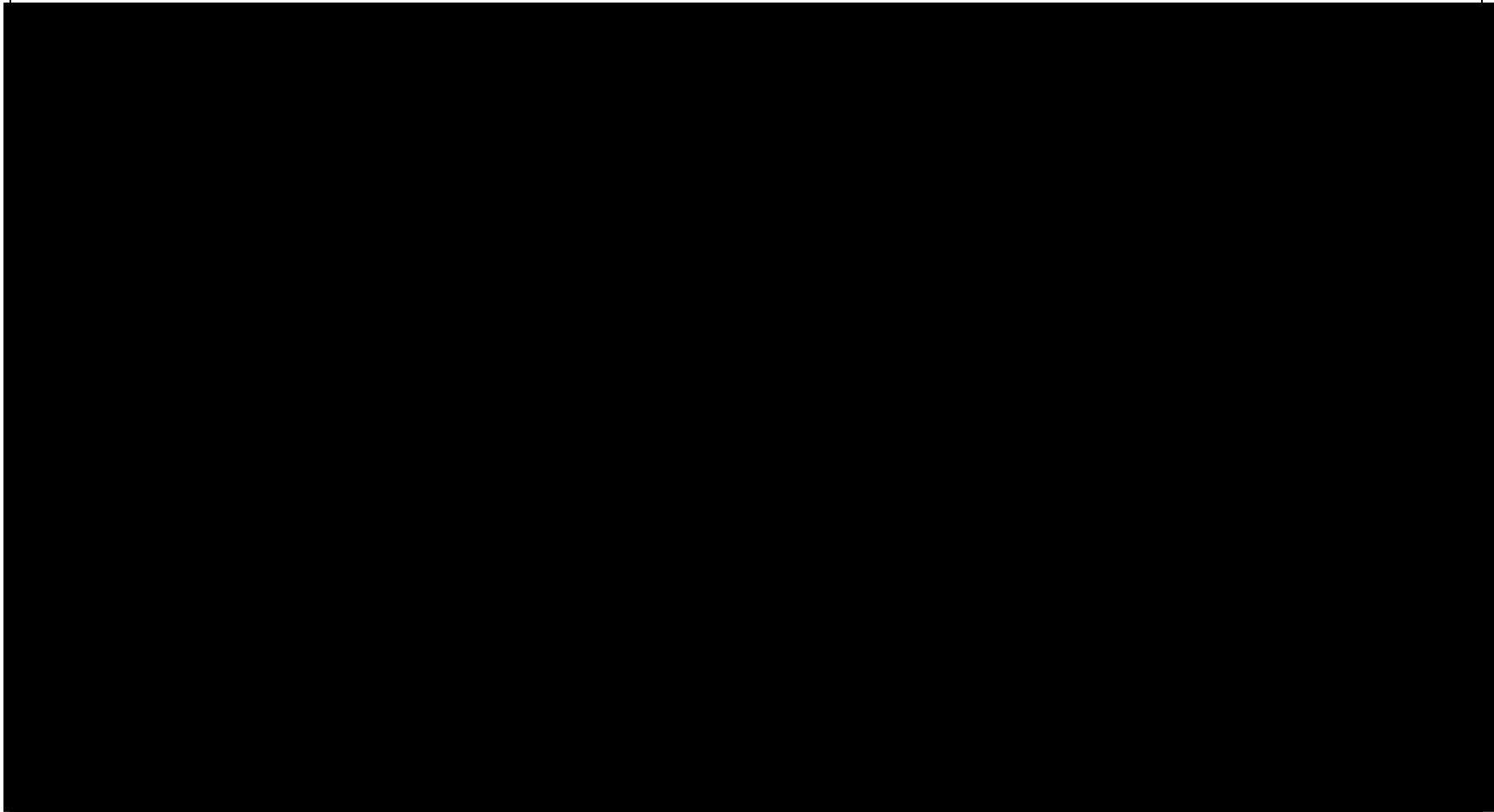
[HG-FMEA-0005]

Failure mode list [2 / 8]

System name ~~Electrically controlled brake assist system~~

(FTA)

△			
1	02.9.26	Aoki	Kiryu
00	01.12.25	Yoshima	Kiryu
	Date	Prepared by	Approved by



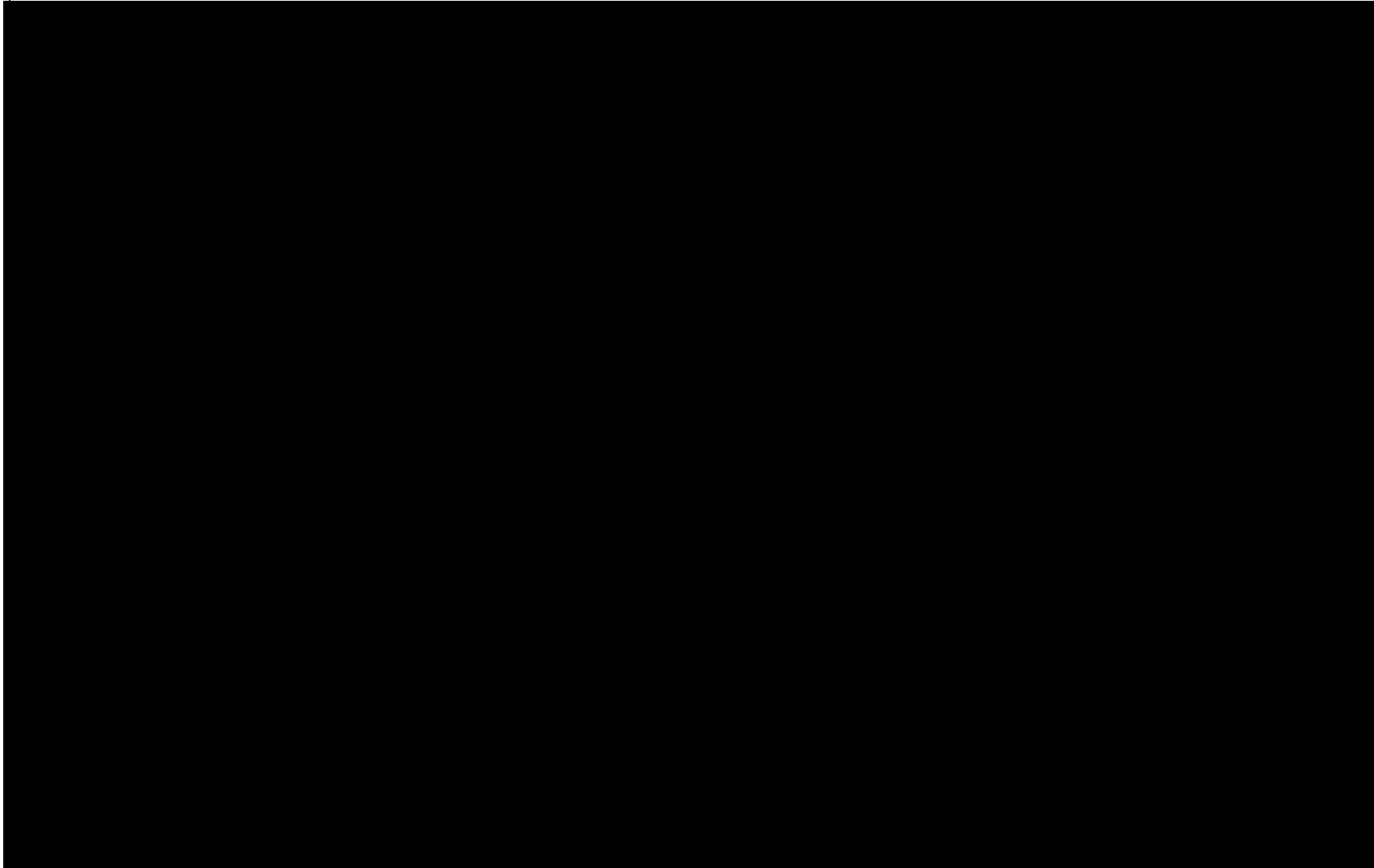
[HG-FMEA-0005]

Failure mode list [3 / 8]

System name ~~Electrically controlled brake assist system~~

(FTA)

▲			
1	02.9.26	Aoki	Kiryu
00	01.12.25	Yoshima	Kiryu
	Date	Prepared by	Approved by



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

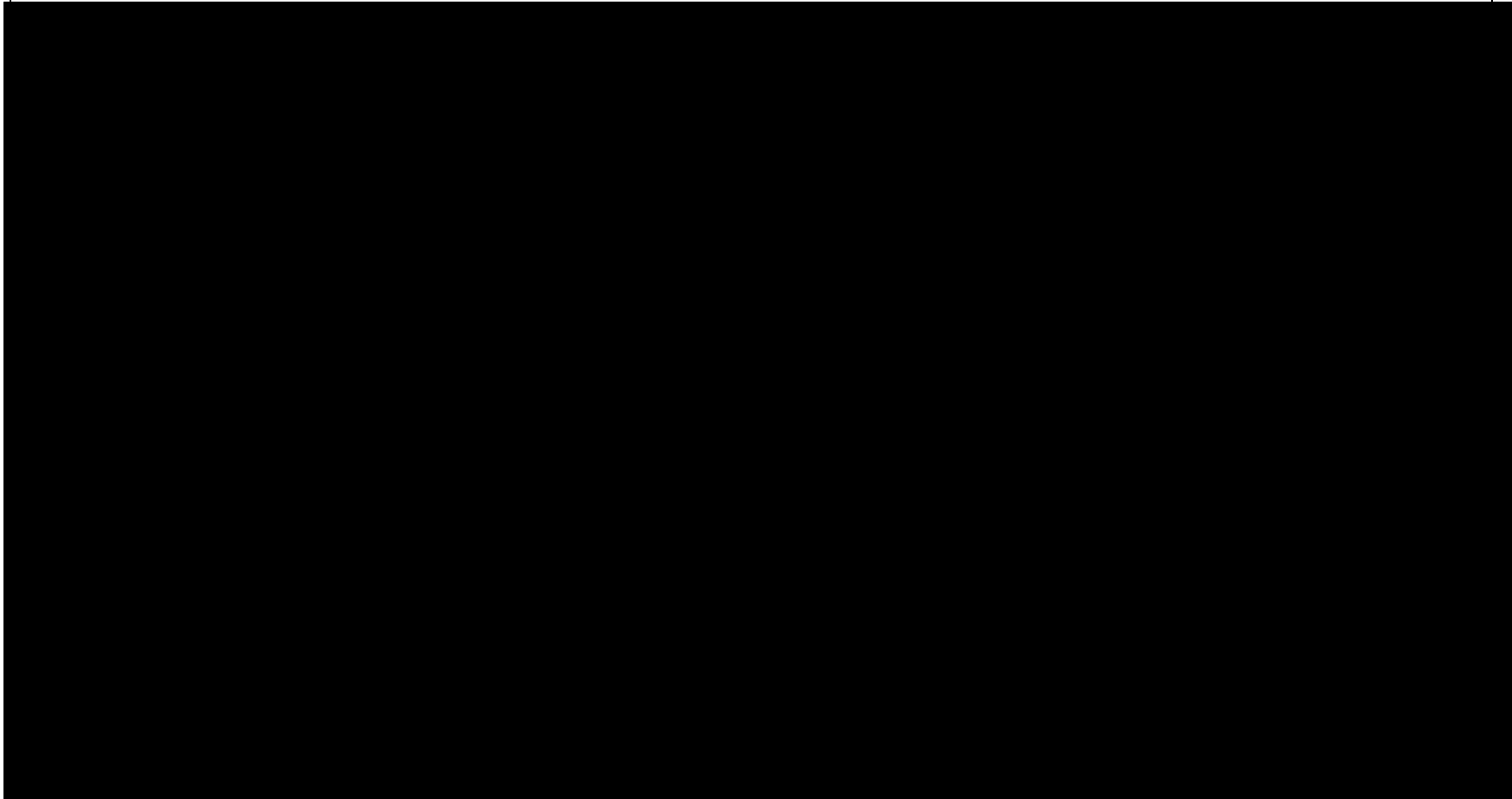
[HG-FMEA-0005]

Failure mode list [4 / 8]

System name Electrically controlled brake assist system

(FTA)

1	02.9.26	Aoki	Kiryu
00	01.12.25	Yoshima	Kiryu
	Date	Prepared by	Approved by



(component) was added.

event

ITN : OR

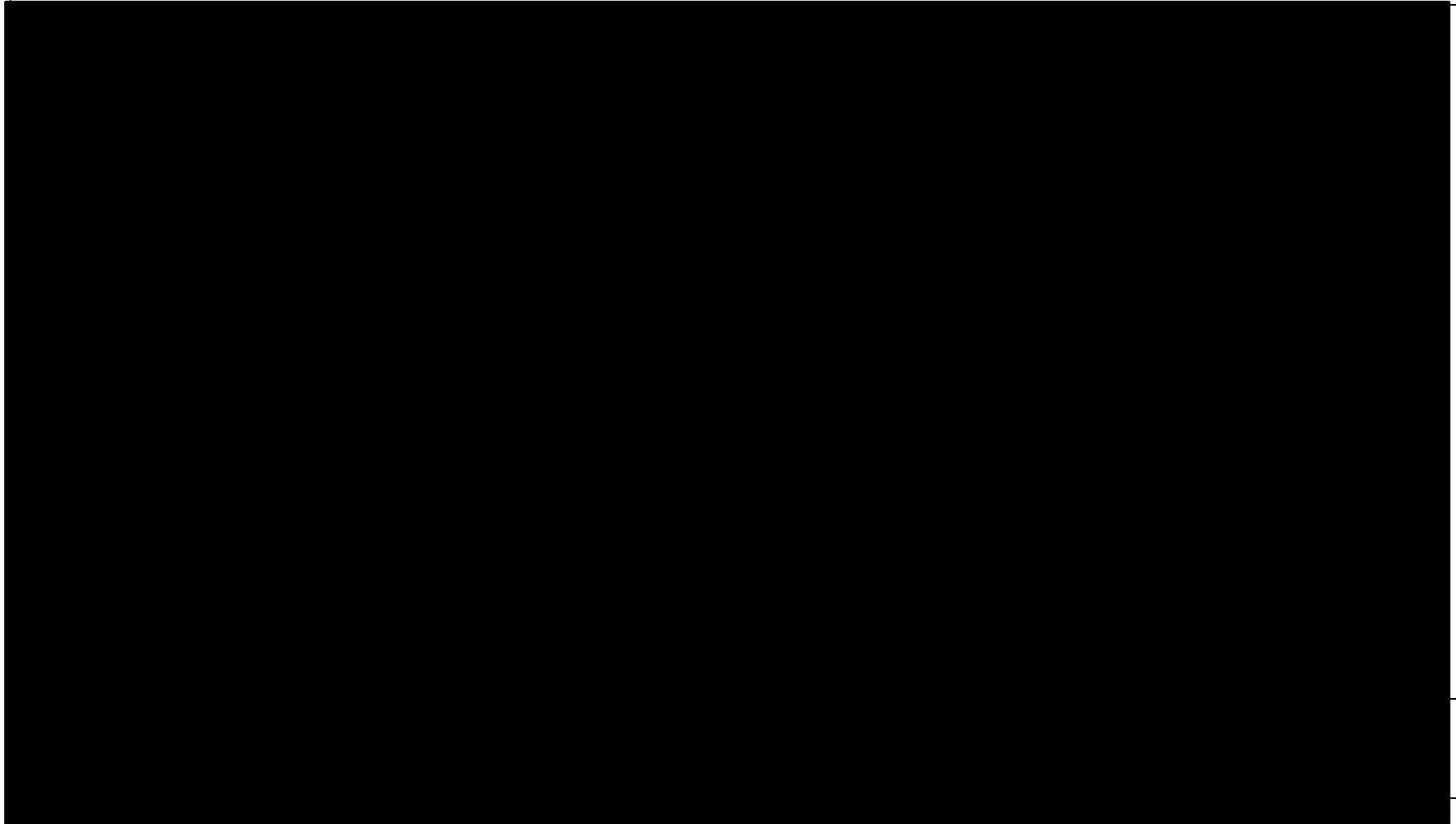
[HG-FMEA-0005]

Failure mode list [5 / 8]

System name Electrically controlled brake assist system

(FTA)

△			
1	02.9.26	Aoki	Kiryu
00	01.12.25	Yoshima	Kiryu
	Date	Prepared by	Approved by



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

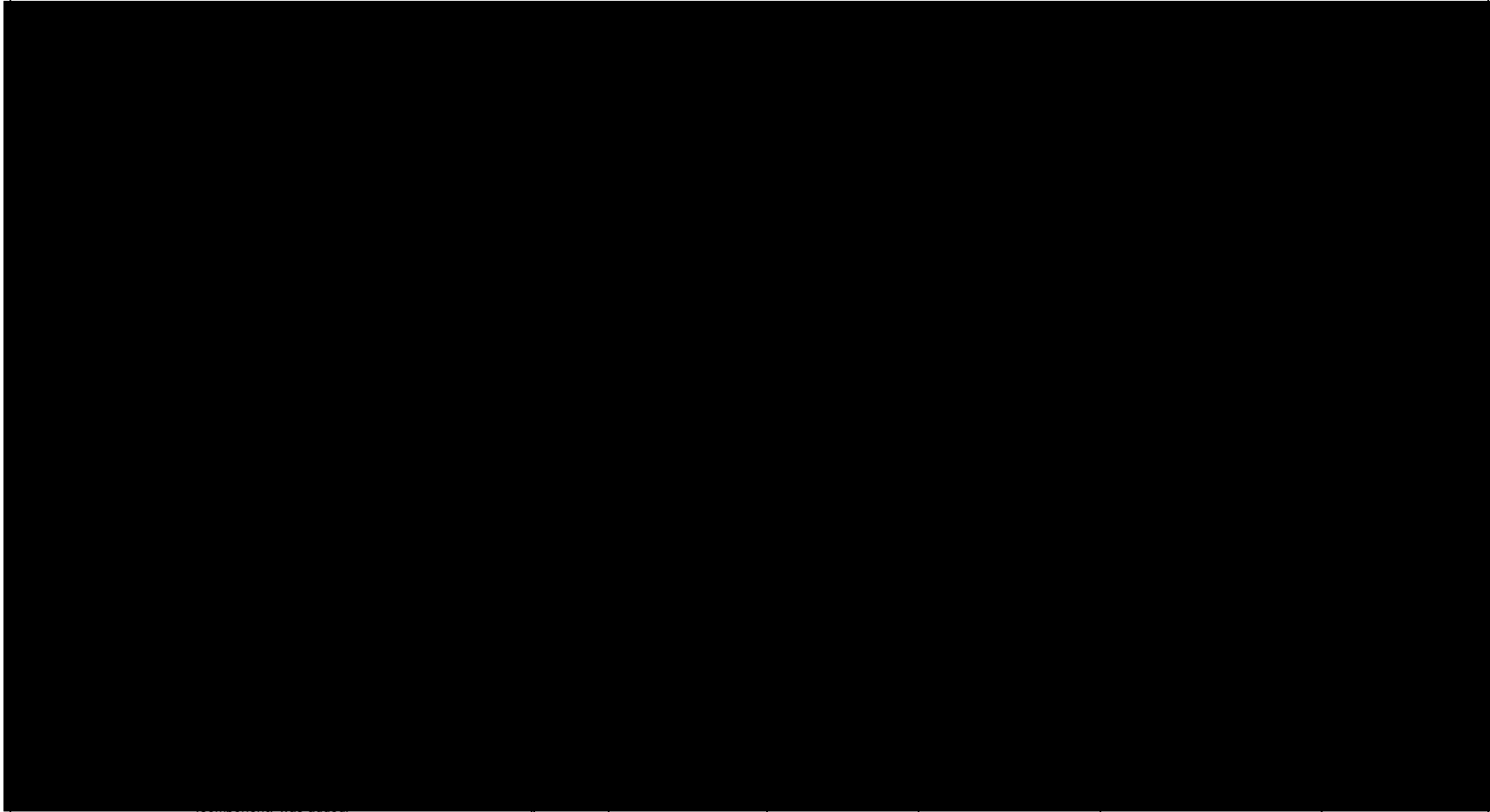
[HG-FMEA-0005]

Failure mode list [6 / 8]

System name Electrically controlled brake assist system

(FTA)

△			
1	02.9.26	Aoki	Kiryu
00	01.12.25	Yoshima	Kiryu
	Date	Prepared by	Approved by



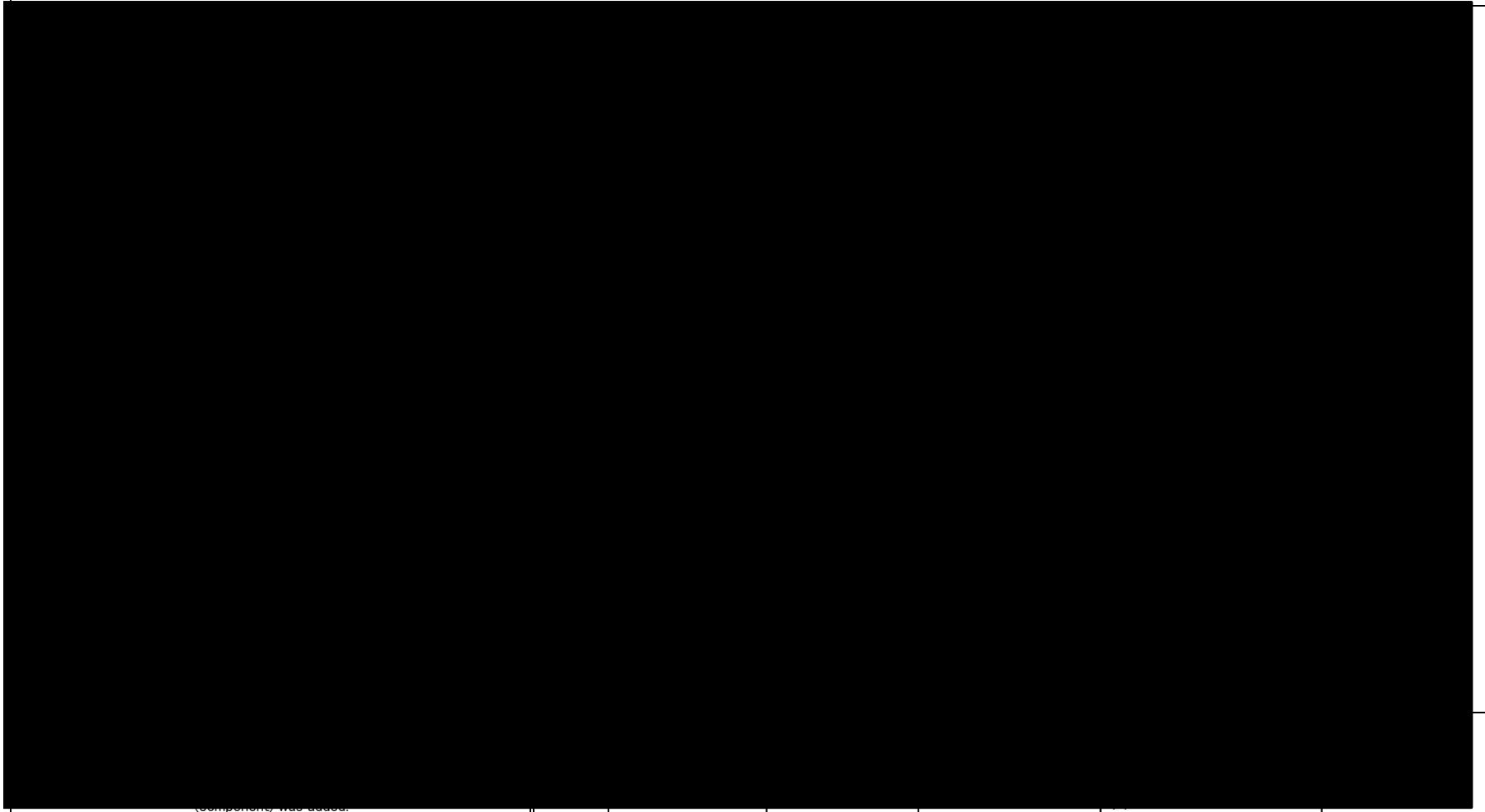
[HG-FMEA-0005]

Failure mode list [7 / 8]

System name Electrically controlled brake assist system

(FTA)

△			
1	02.9.26	Aoki	Kiryu
00	01.12.25	Yoshima	Kiryu
	Date	Prepared by	Approved by



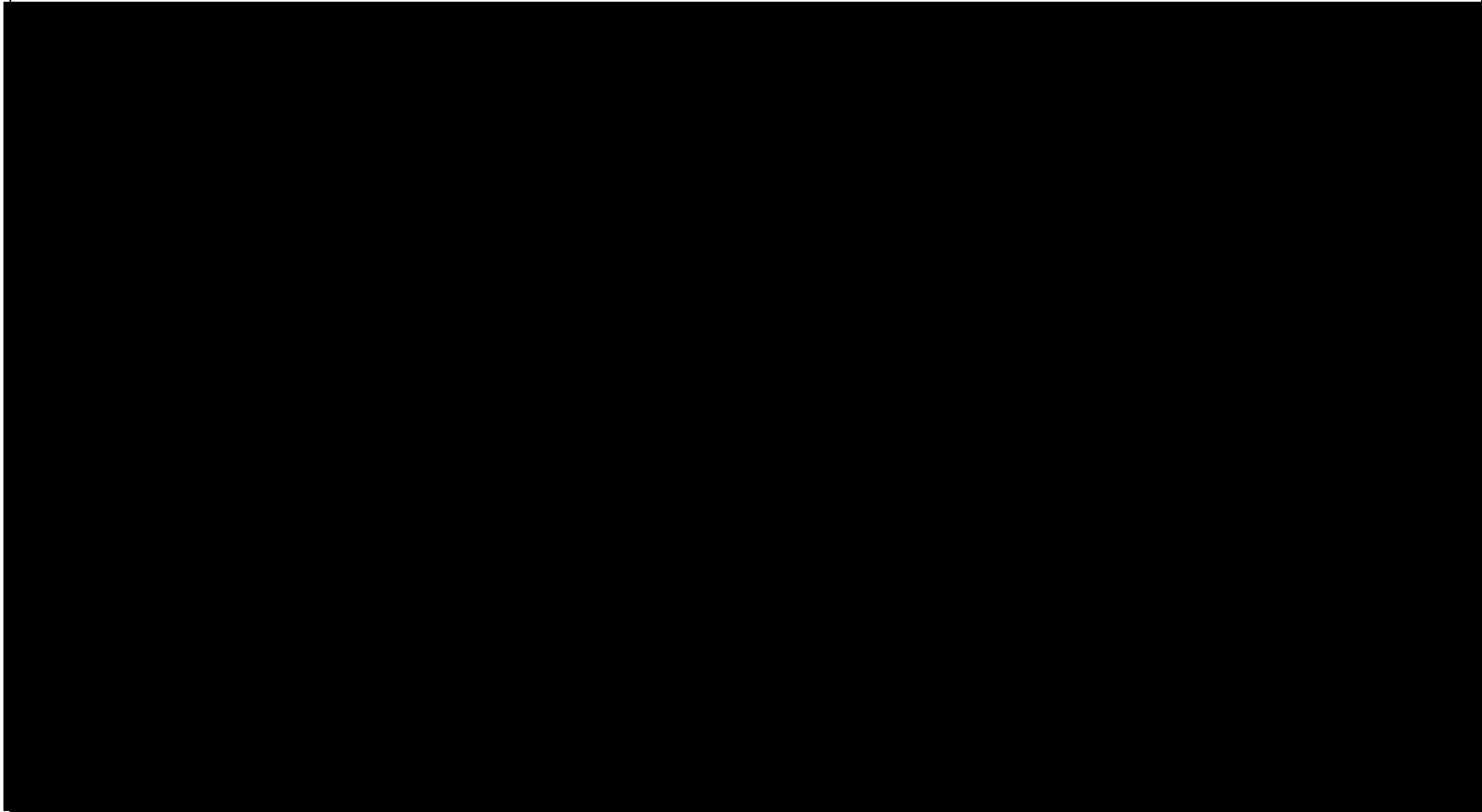
[HG-FMEA-0005]

Failure mode list [8 / 8]

System name Electrically controlled brake assist system

(FTA)

△			
1	02.9.26	Aoki	Kiryu
00	01.12.25	Yoshima	Kiryu
	Date	Prepared by	Approved by



DP12-002

HONDA

8-3-2012

ATTACHMENT

Q14

14C

DVP2_FTA_REVISIED_0209_

J REDACTED

【HG-FMEA-0000】

FTA 報告資料

テーマ名：電子制御式ブレーキアシストシステム

呼 称	██████████
年次モデル	03.5 M/Y
次 元	P2

内 容

- | | | |
|------------------|-------|------|
| 1. FTA検討結果まとめ | ..... | 1頁 |
| 2. システム構成図 | ..... | 1～8頁 |
| 3. システム機能及び故障リスト | ..... | 1頁 |
| 4. システム重大性の定義付け | ..... | 1頁 |
| 5. 故障モードリスト(FTA) | ..... | 1～8頁 |

実施日 '02 年 9 月 27 日

機種承認

安木

【HG-FMEA-0010】

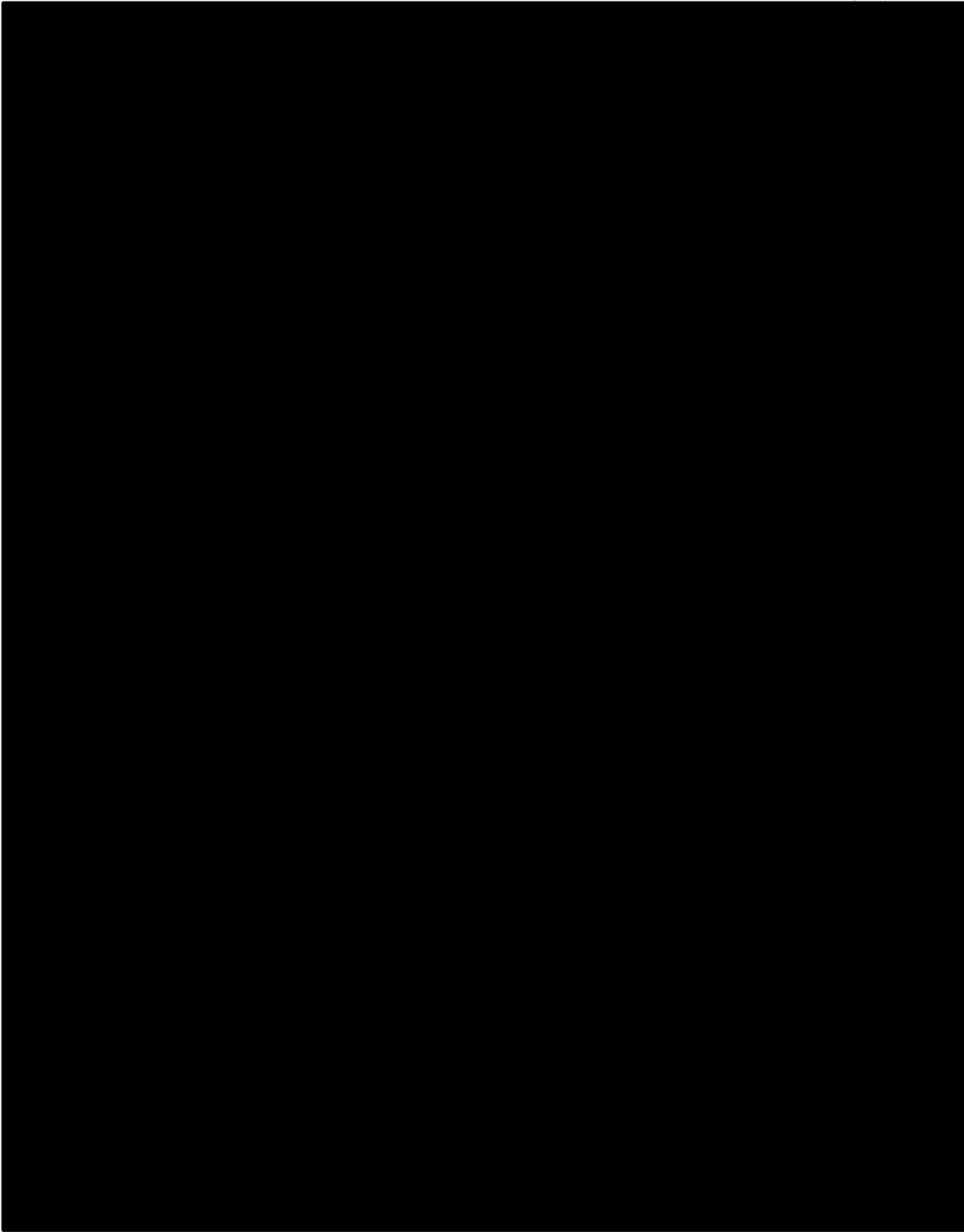
F T A 検 討 結 果 の ま と め



<システム名> 電子制御式ブレーキアシストシステム

機能承認
霧生

02年 9月 26日



システム構成図 [1/8]

システム名称 : 電子制御式ブレーキアシストシステム

△			
△			
新規	02/9/26	青木	霧生
	日付	作成	承認

メーカー名 日信工業

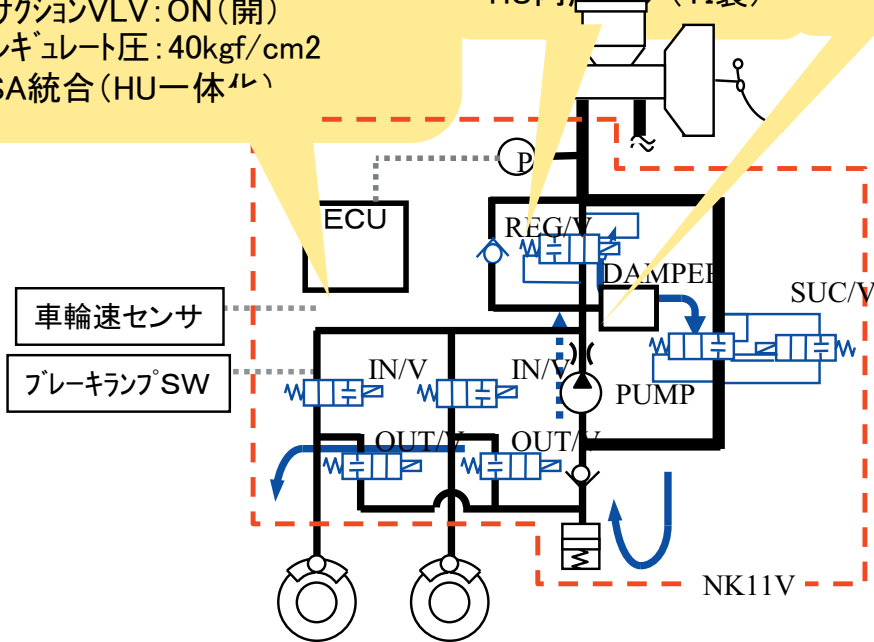
ECU

- ・パニックブレーキを判断し、HUを駆動
- ポンプ: ON
- サクションVLV: ON(開)
- レギュレート圧: 40kgf/cm²
- ・VSA統合(HU一体)

油圧センサー

- ・ブレーキ操作量を検出
- ・HU内蔵タイフ(TI製)

レギュレータ VLV



システム構成図 [2/8]

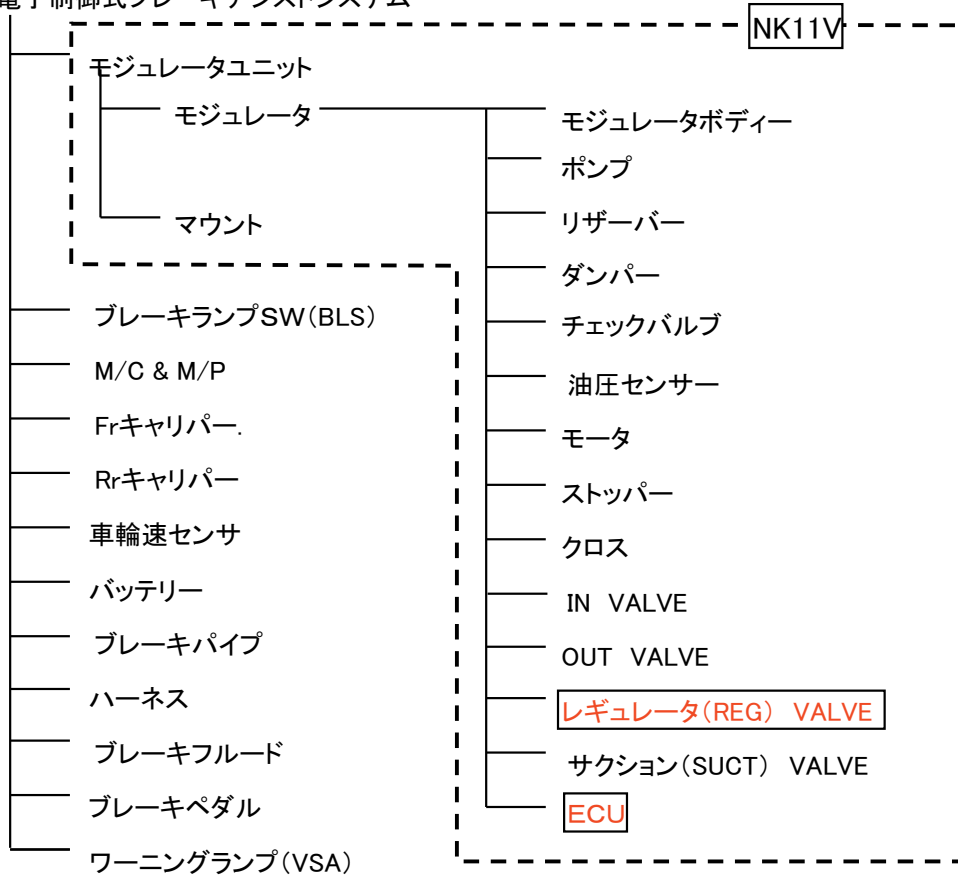
システム名称 : 電子制御式ブレーキアシストシステム

△			
↑	02/9/26	青木	霧生
新規	01/12/26	青木	霧生
	日付	作成	承認

メーカー名 日信工業

ハードウェアはVSA(NK11V)と共用の為、構成はNK11Vと同一。
 但し、03M NK11Vに対し、レギュレータVLVをリニア化、ECUにレギュレータVLV電流F/B回路を追加。

電子制御式ブレーキアシストシステム



【HG-FMEA-0004】

システム構成図 [3/8]

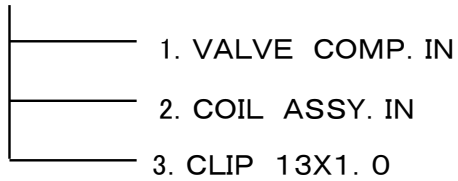
システム名称 : 電子制御式ブレーキアシストシステム

新規	02/9/26	青木	霧生
	日付	作成	承認

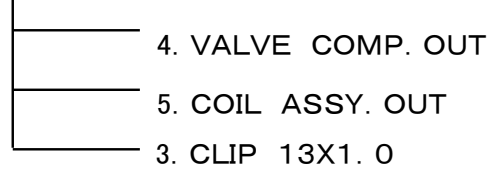
03M NK11Vからの変化点(赤字)

メーカー名

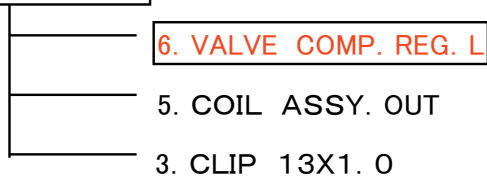
IN VALVE



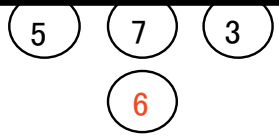
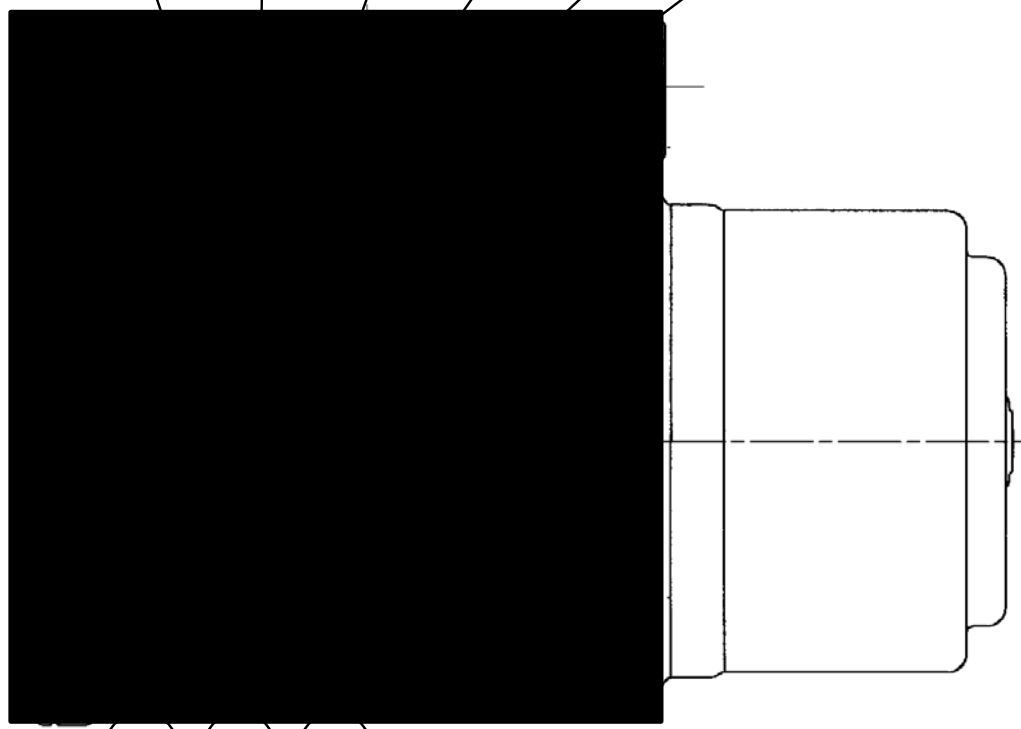
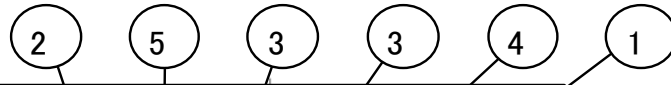
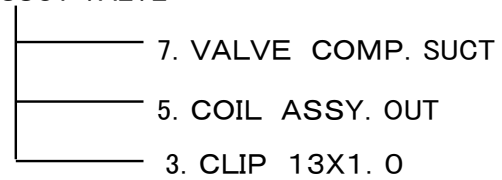
OUT VALVE



REG VALVE



SUCT VALVE



【HG-FMEA-0004】

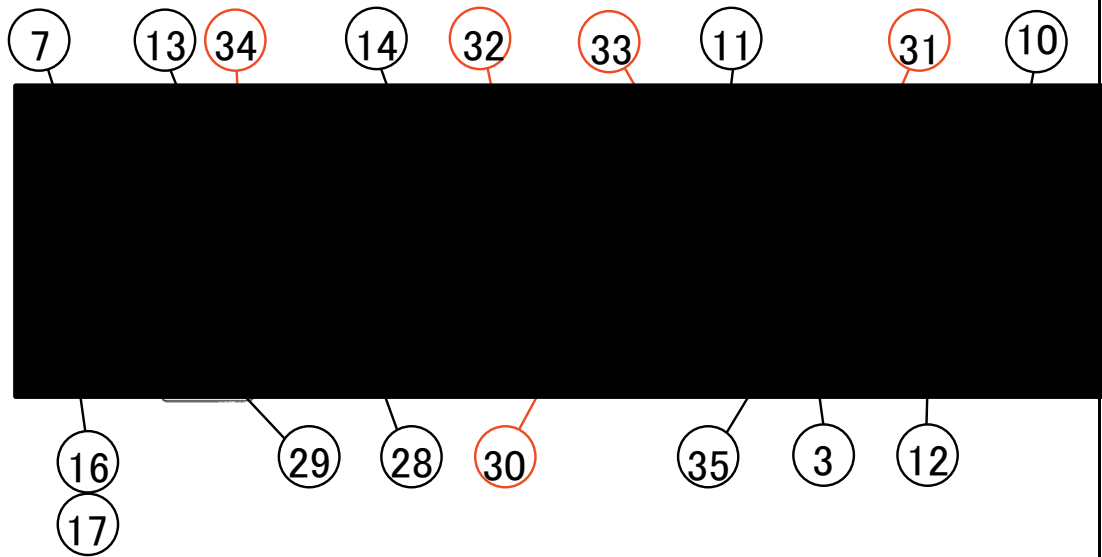
システム構成図 [4/8]

システム名称 : 電子制御式ブレーキアシストシステム

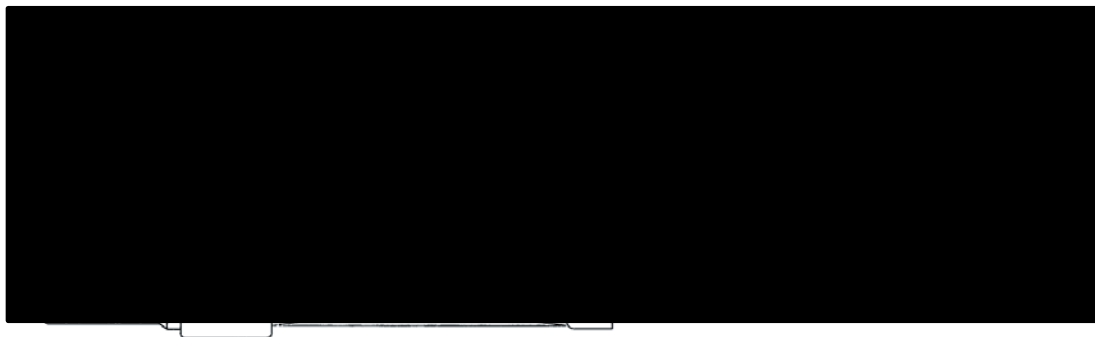
新規	02/9/26	青木	霧生
	日付	作成	承認

メーカー名

構造図: VALVE COMP (REG.L)



従来(03M)構造: VALVE COMP (REG.M)



【HG-FMEA-0004】

システム構成図 [5/8]

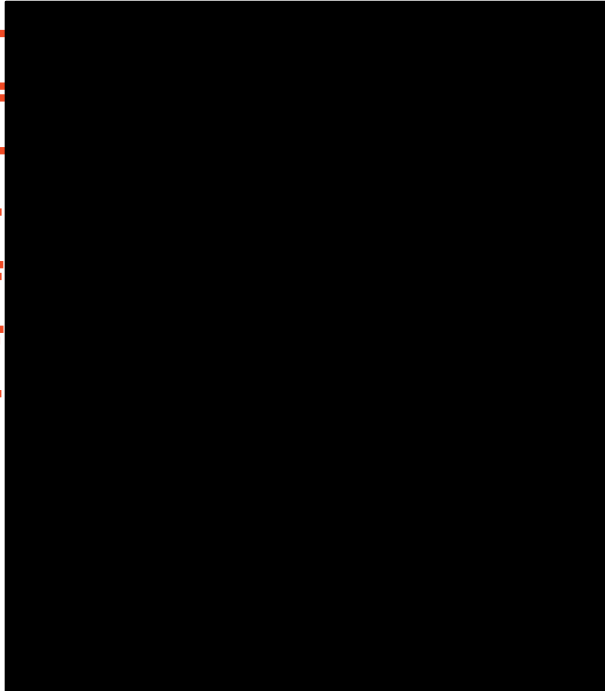
システム名称 : 電子制御式ブレーキアシストシステム

新規	02/9/26	青木	霧生
	日付	作成	承認

メーカー名

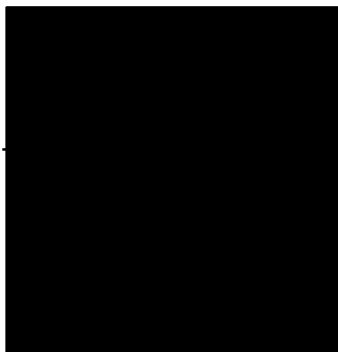
VALVE COMP (REG.L)

- 30. BODY REG.L
- 31. SEAT 90
- 3. SPG. RET. IN 35
- 32. RETAINER
- 33. ROD SEAL 1.2
- 34. ARMATURE REG
- 7. PIPE IN
- 35. FILTER REG
- 10. FILTER IN
- 11. O-RING S9
- 12. VALVE ONE WAY



COIL ASSY(OUT)

- 13. YOKE SOL TOP
- 14. YOKE SOL CASE
- 28. WIRE, MAGNET OUT
- 16. TERMINAL R
- 17. TERMINAL L
- 29. BOBBIN OUT



【HG-FMEA-0004】

システム構成図 [6/8]

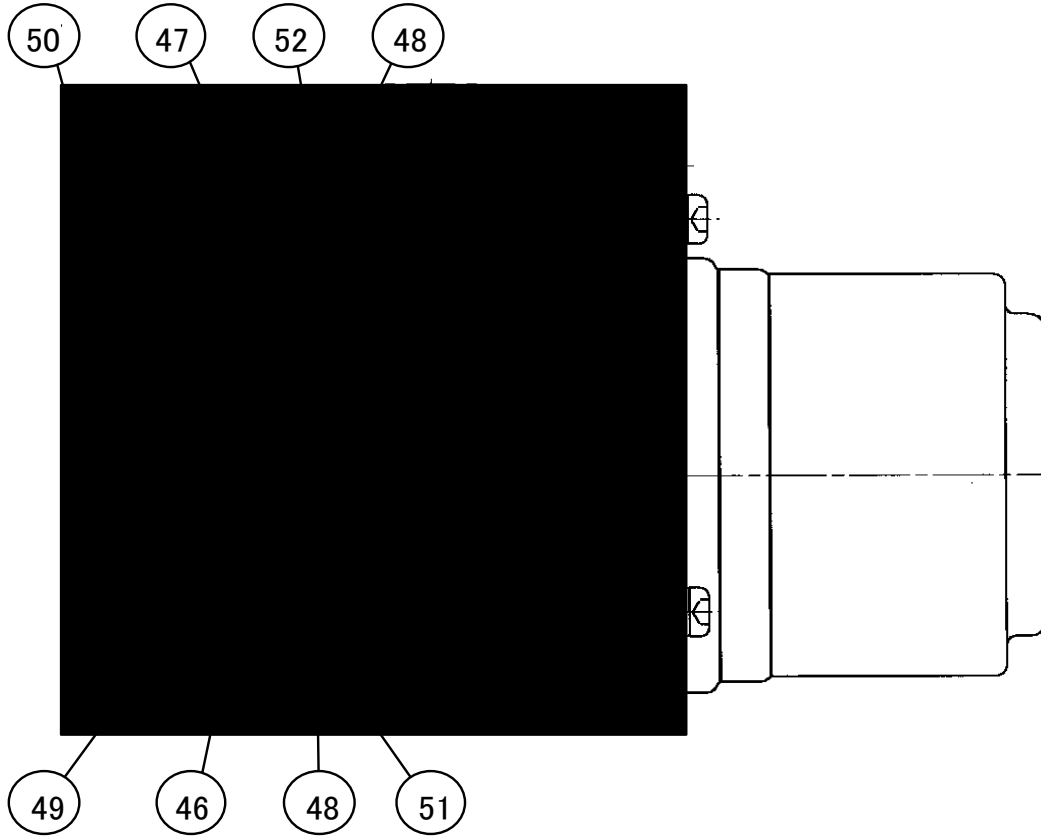
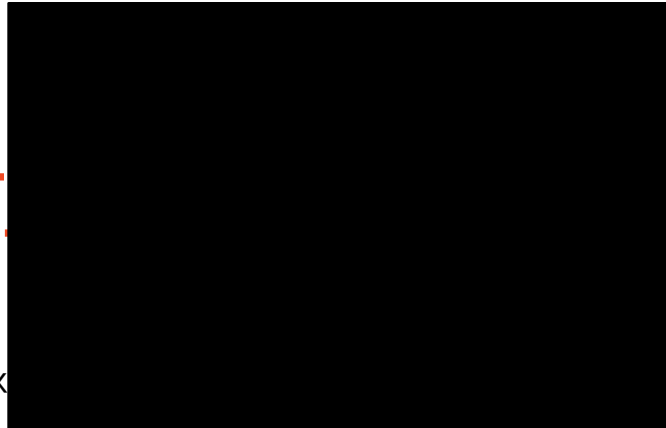
システム名称 : 電子制御式ブレーキアシストシステム

△			
△			
新規	02/9/26	青木	霧生
	日付	作成	承認

メーカー名 日信工業(株)

ECU

- 46. ECU HOUSING
- 47. COIL ASSY. IN
- 48. COIL ASSY. OUT
- 49. PWB ASSY (6/7)
- 50. COVER HOUSING
- 51. SEAL HOUSING
- 52. SCREW 4X8(TORX)



【HG-FMEA-0004】

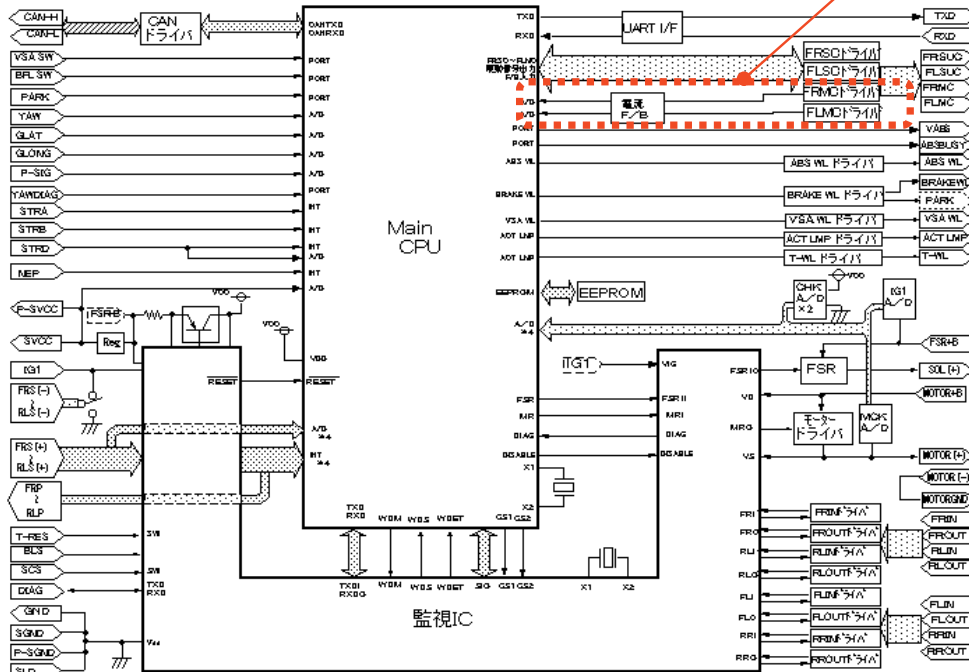
システム構成図 [7/8]

システム名称 : 電子制御式ブレーキアシストシステム

△			
△			
△			
—	02/9/26	吉間	霧生
	日付	作成	承認

[ECU構成図]

電流FB回路追加



[F/S構成図]



【HG-FMEA-0004】

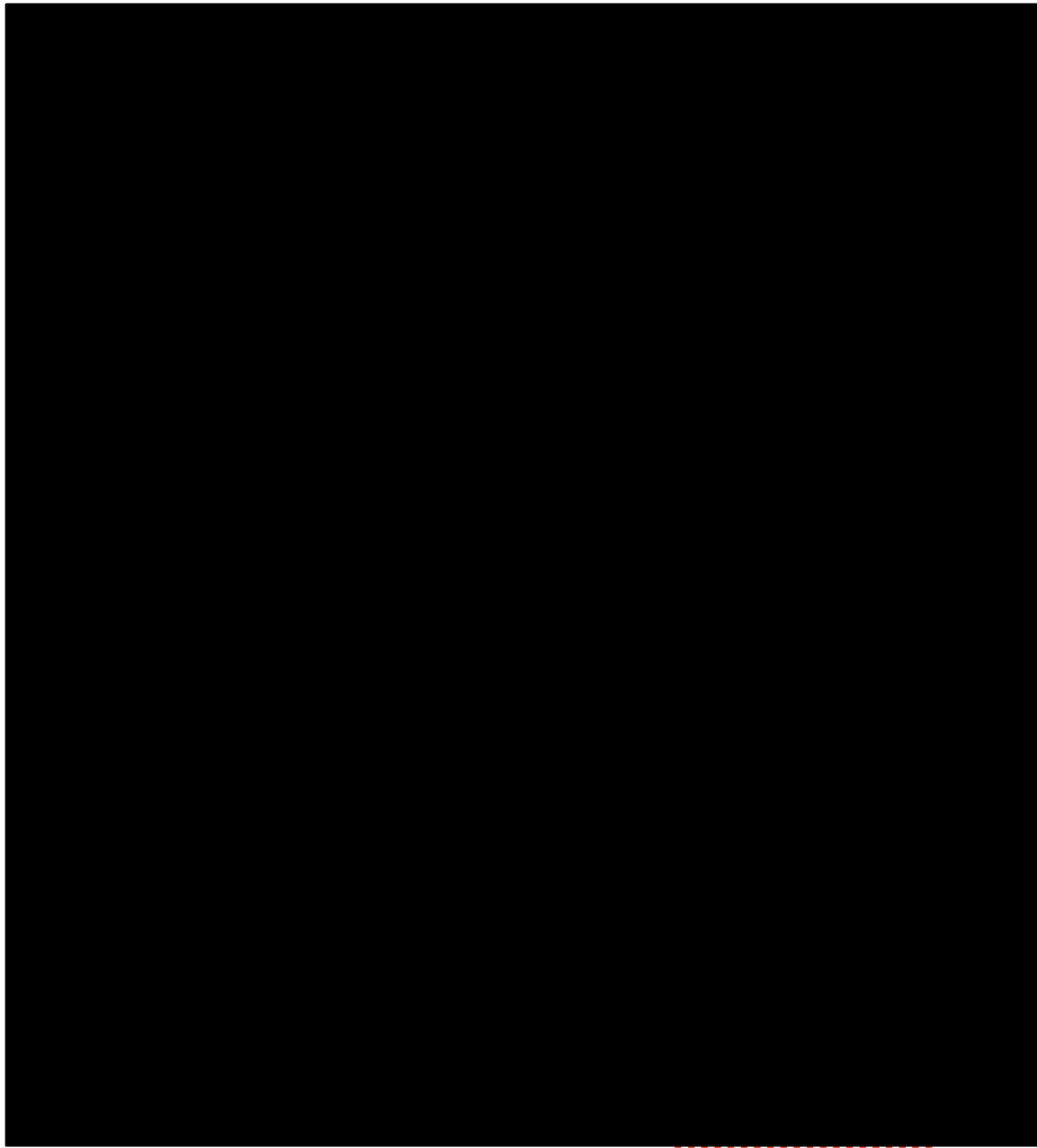
システム構成図 [8/8]

システム名称 : 電子制御式ブレーキアシストシステム

△			
△			
△			
—	02/9/26	吉間	霧生
	日付	作成	承認

[ECU構成図]

リアレギュレタバルブ駆動回路構成図



【HG-FMEA-0008】

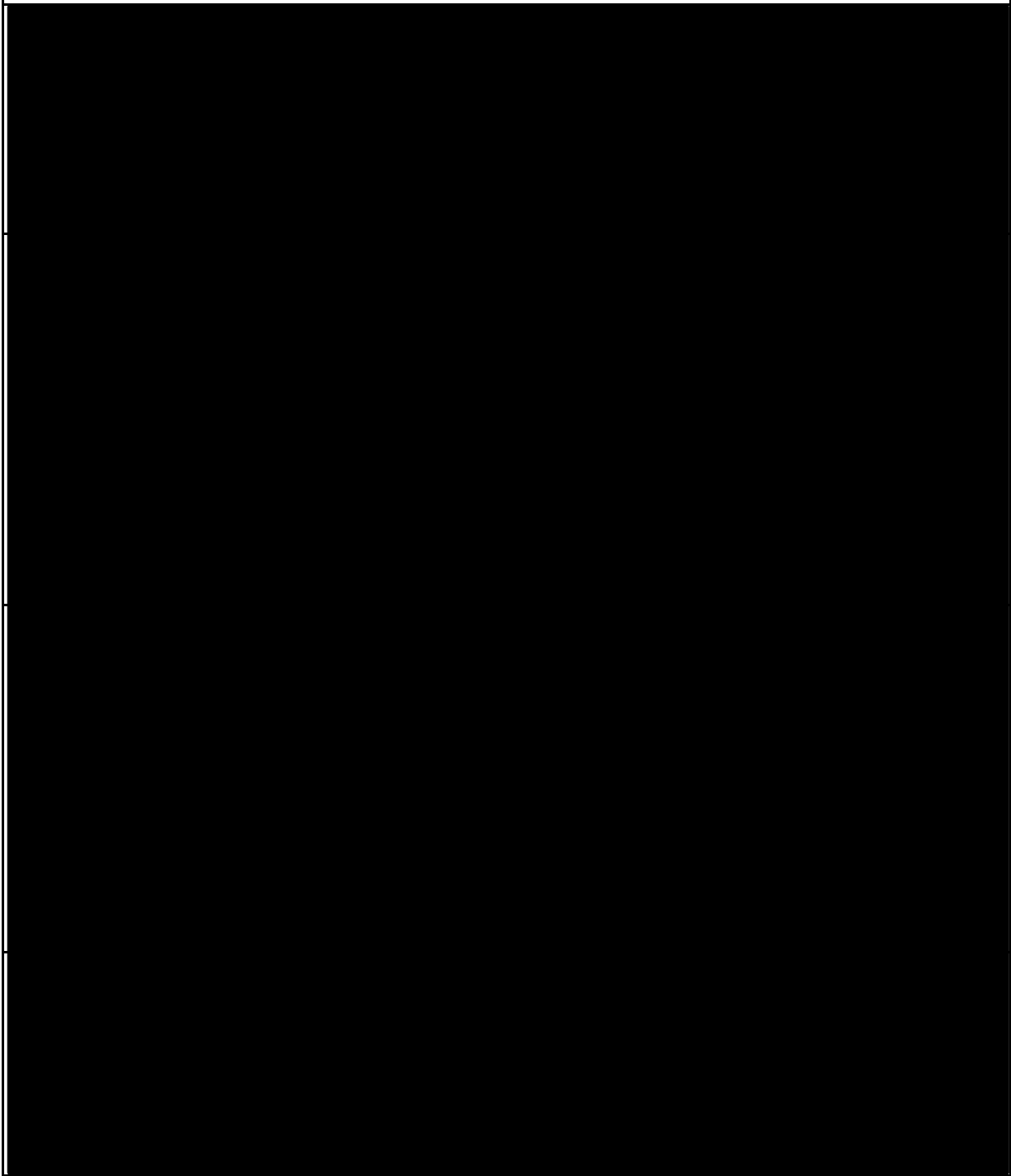
システム機能及び故障リスト[1/1]		△			
		△			
システム名称 電子制御式ブレーキアシスト		00	01.12.26	青木	霧生
			日付	作成	承認

【HG-FMEA-0009】

システム重大性と定義付け [1 / 1]

システム名称 電子制御式ブレーキアシスト

△			
△			
00	01.12.26.	青木	霧生
	日付	作成	承認

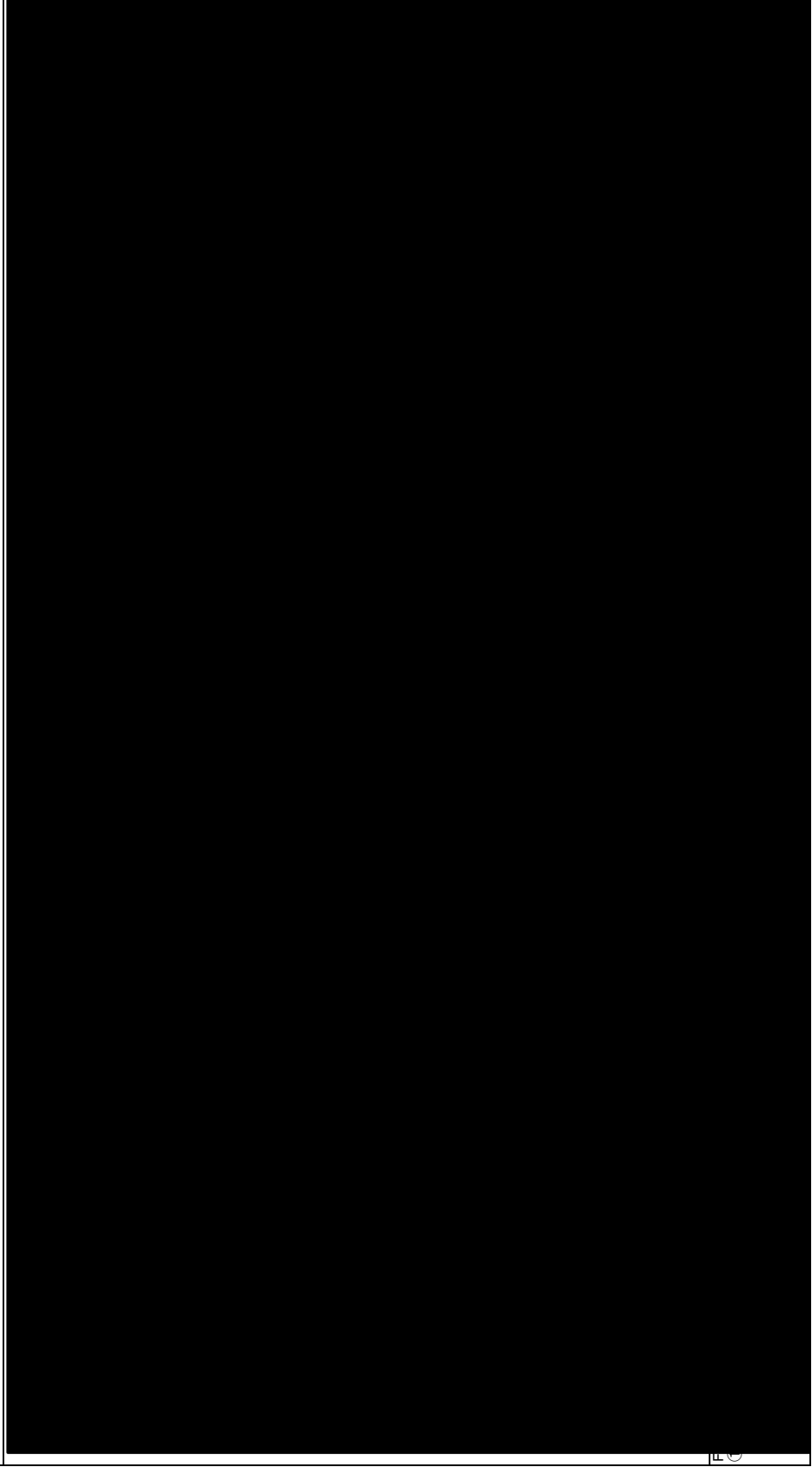


【HG-FMEA-0005】

システム名称 電子制御式ブレーキシステム

故障モードリスト [0 / 8]
(FTA)

△					
△					
△	00	01.12.26	青木	霧生	
		日付	作成	承認	



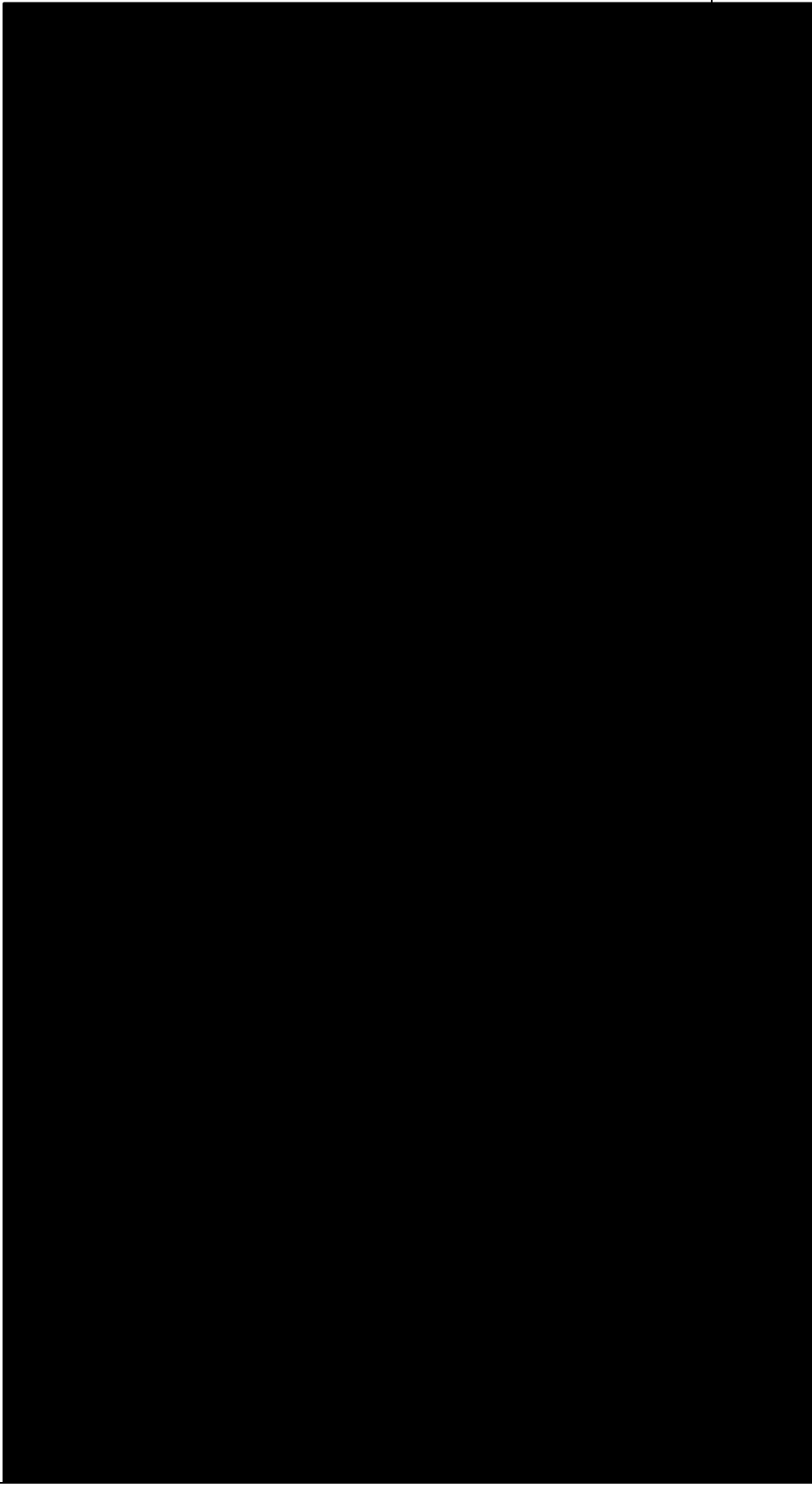
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

【HG-FMEA-0005】

システム名称 電子制御式エレキアシスト

故障モードリスト [1 / 8]
(FTA)

△					
△					
△	01.12.25	吉間	霧生		
	日付	作成	承認		

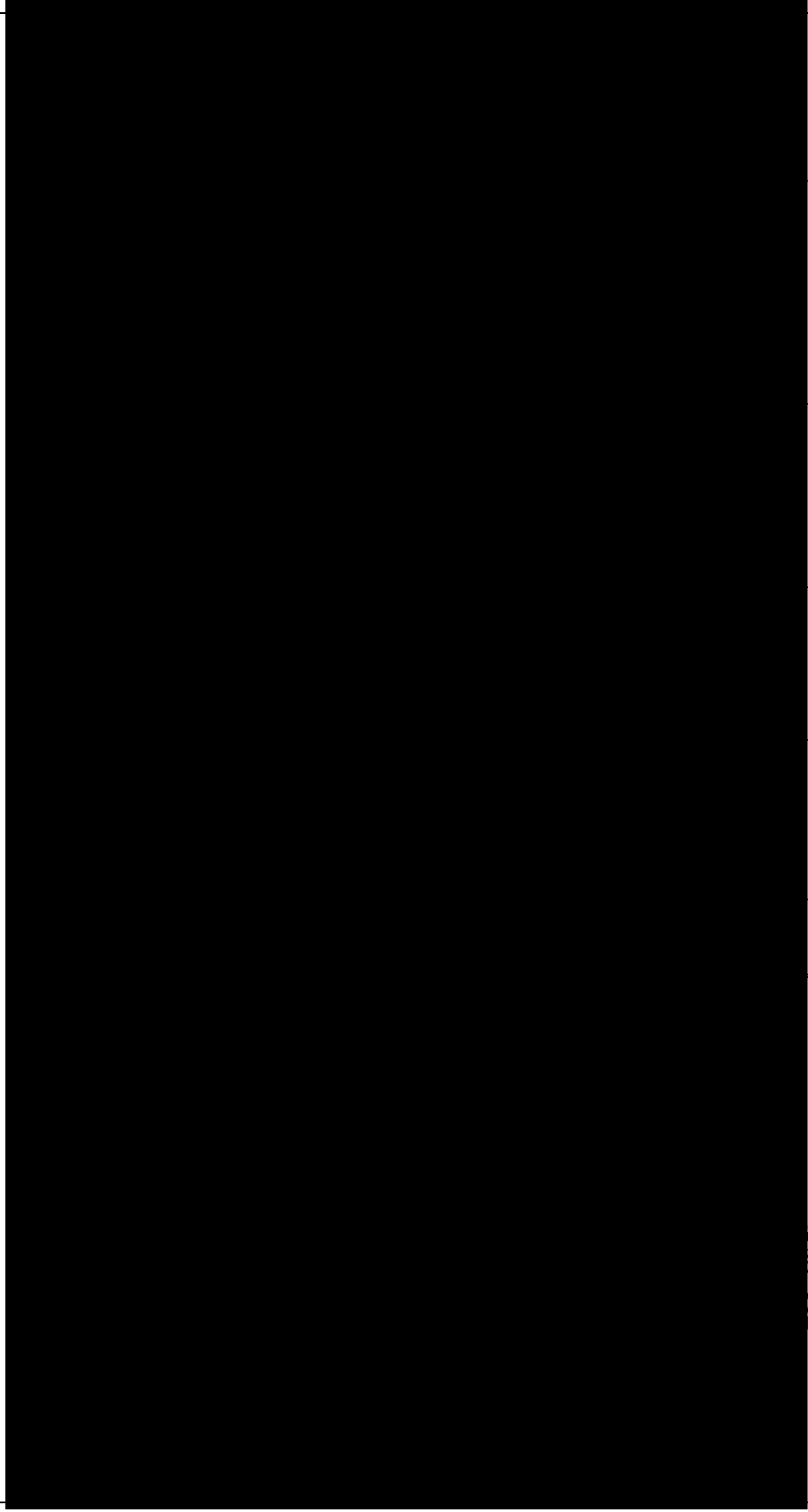


【HG-FMEA-0005】

システム名称 電子制御式ブレーキアシスト

故障モードリスト [2 / 8]
(FTA)

△	02.9.26	青木	霧生
△	01.12.25	吉間	霧生
△	日付	作成	承認



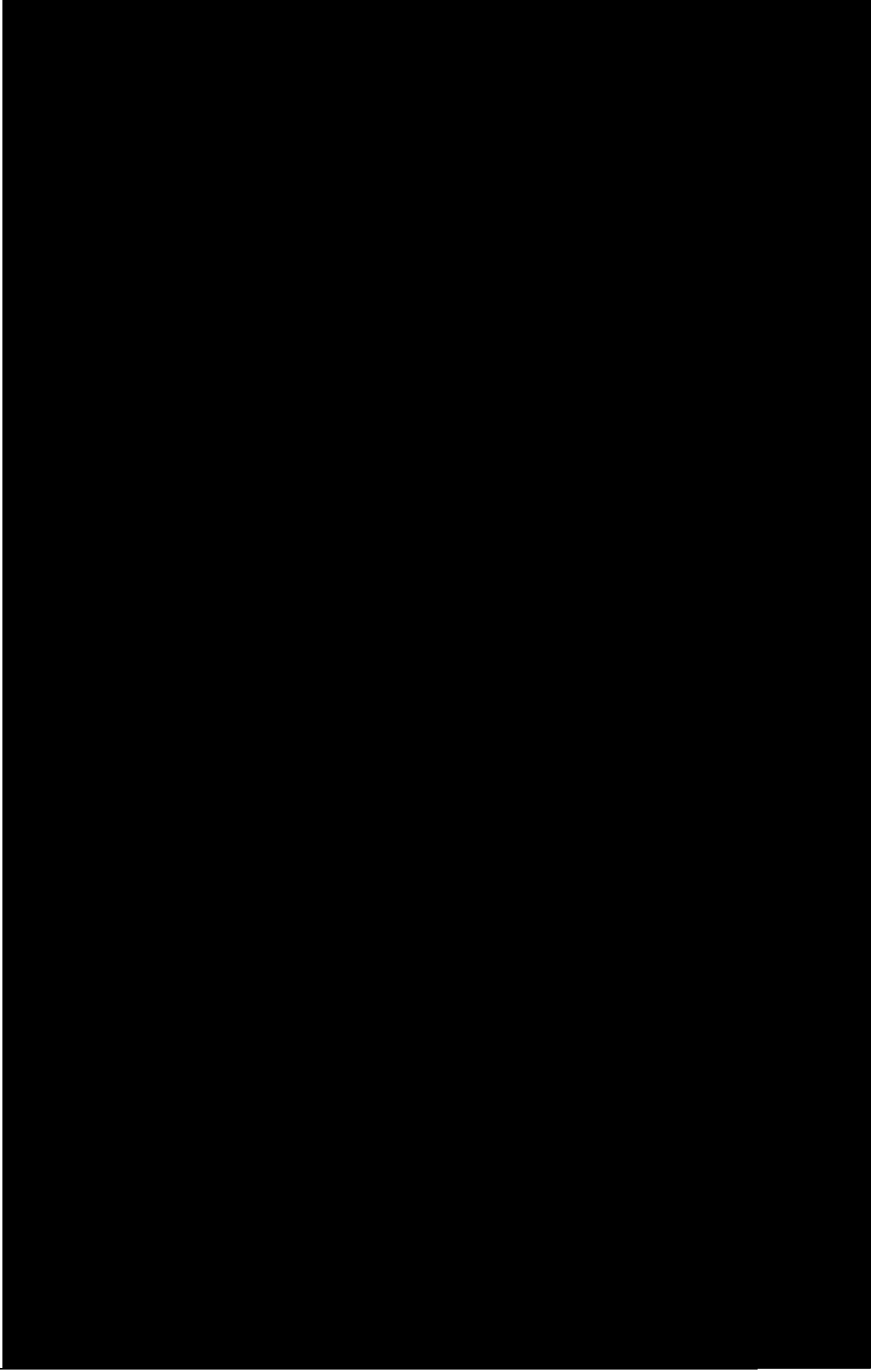
【HG-FMEA-0005】

システム名称 電子制御式エレキアシスト

故障モードリスト [3 / 8]

(FTA)

△	02.9.26	青木	霧生
△	01.12.25	吉間	霧生
△	日付	作成	承認



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

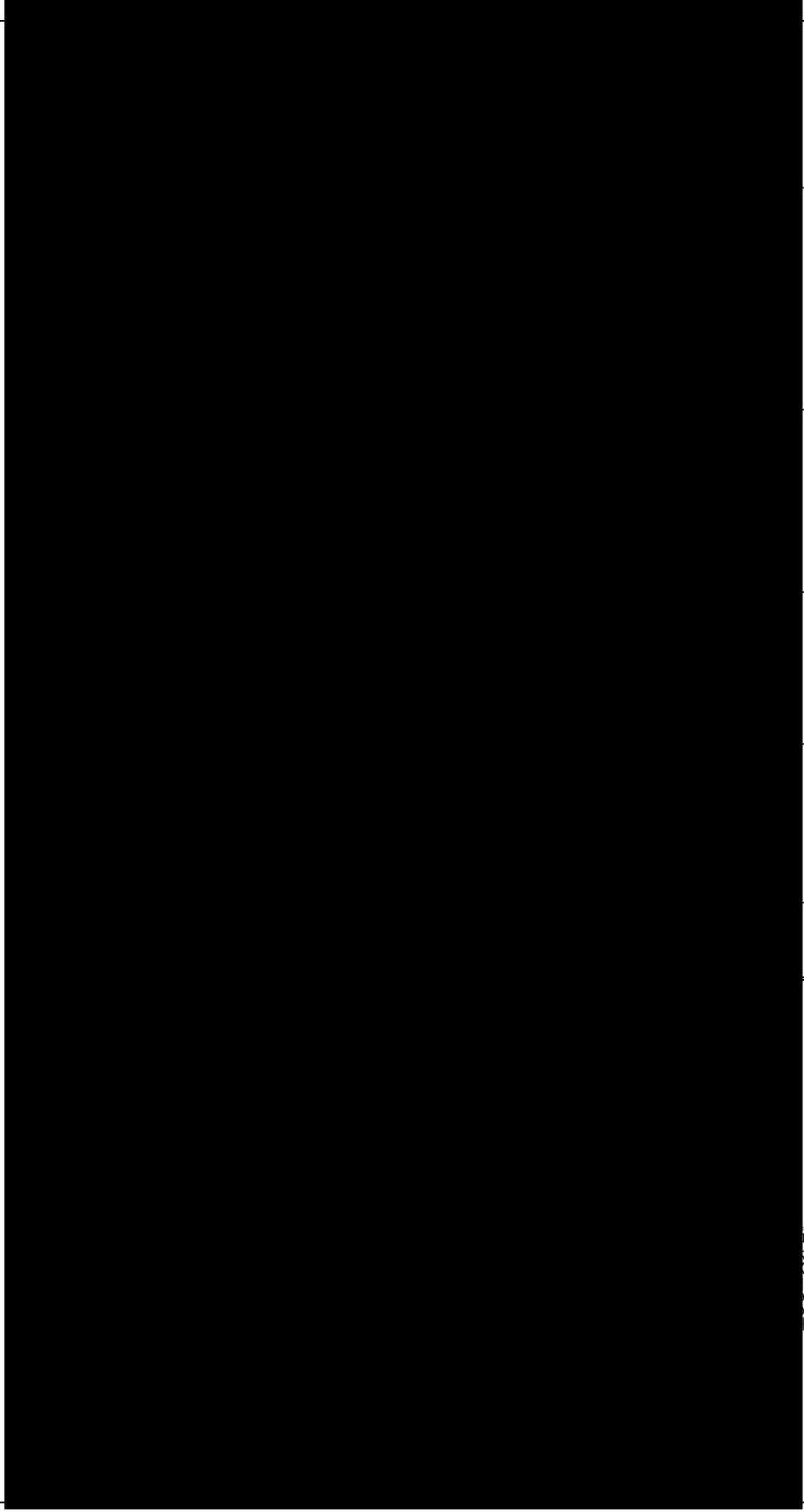
【HG-FMEA-0005】

システム名称 電子郵便式プレーキアシスト

故障モードリスト [4 / 8]

(FTA)

△	02.9.26	青木	霧生
△	01.12.25	吉間	霧生
△	日付	作成	承認



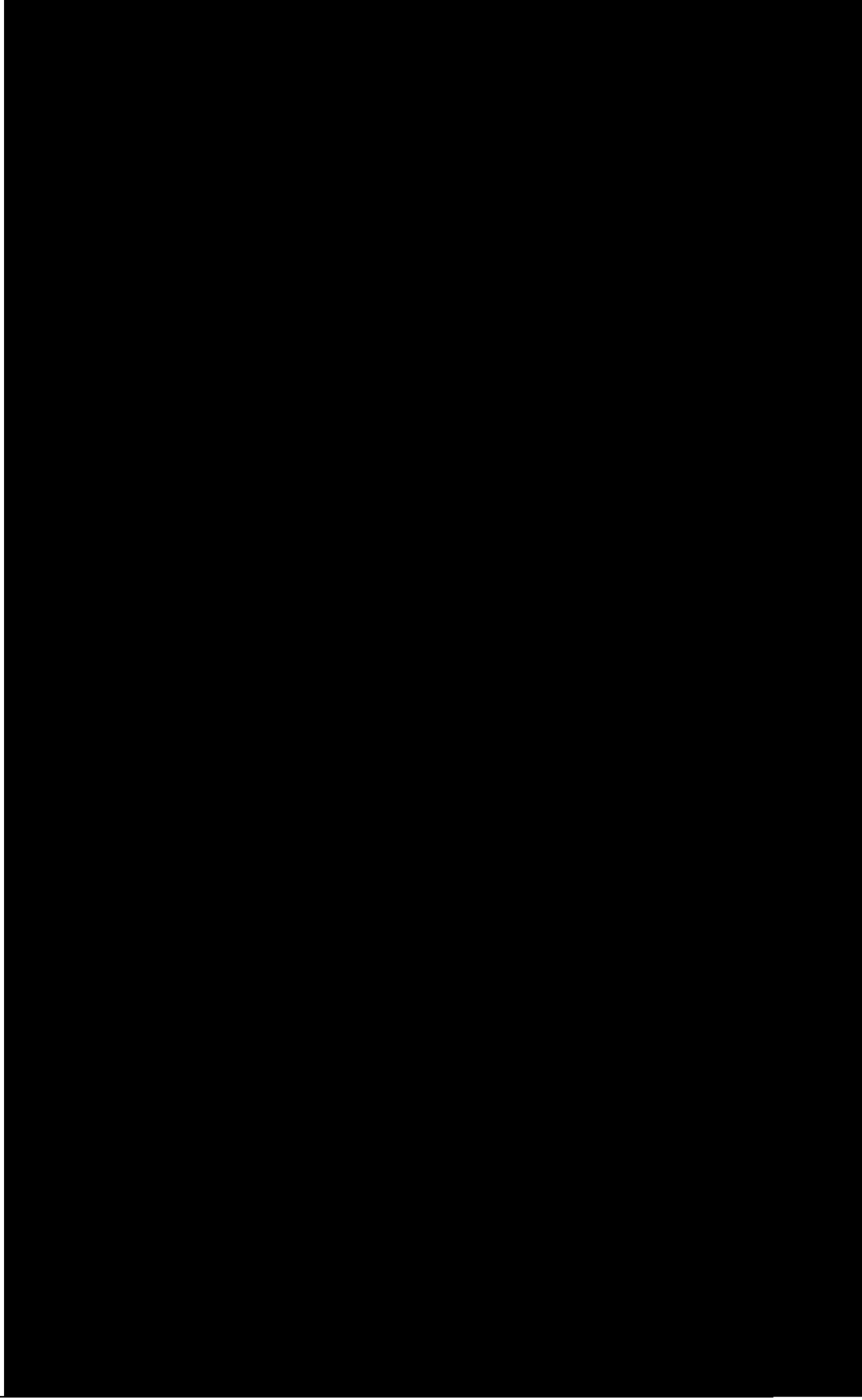
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

【HG-FMEA-0005】

システム名称 電子制御式ブレーキシステム

故障モードリスト [5 / 8]
(FTA)

△	02.9.26	青木	霧生
△	01.12.25	吉間	霧生
	日付	作成	承認



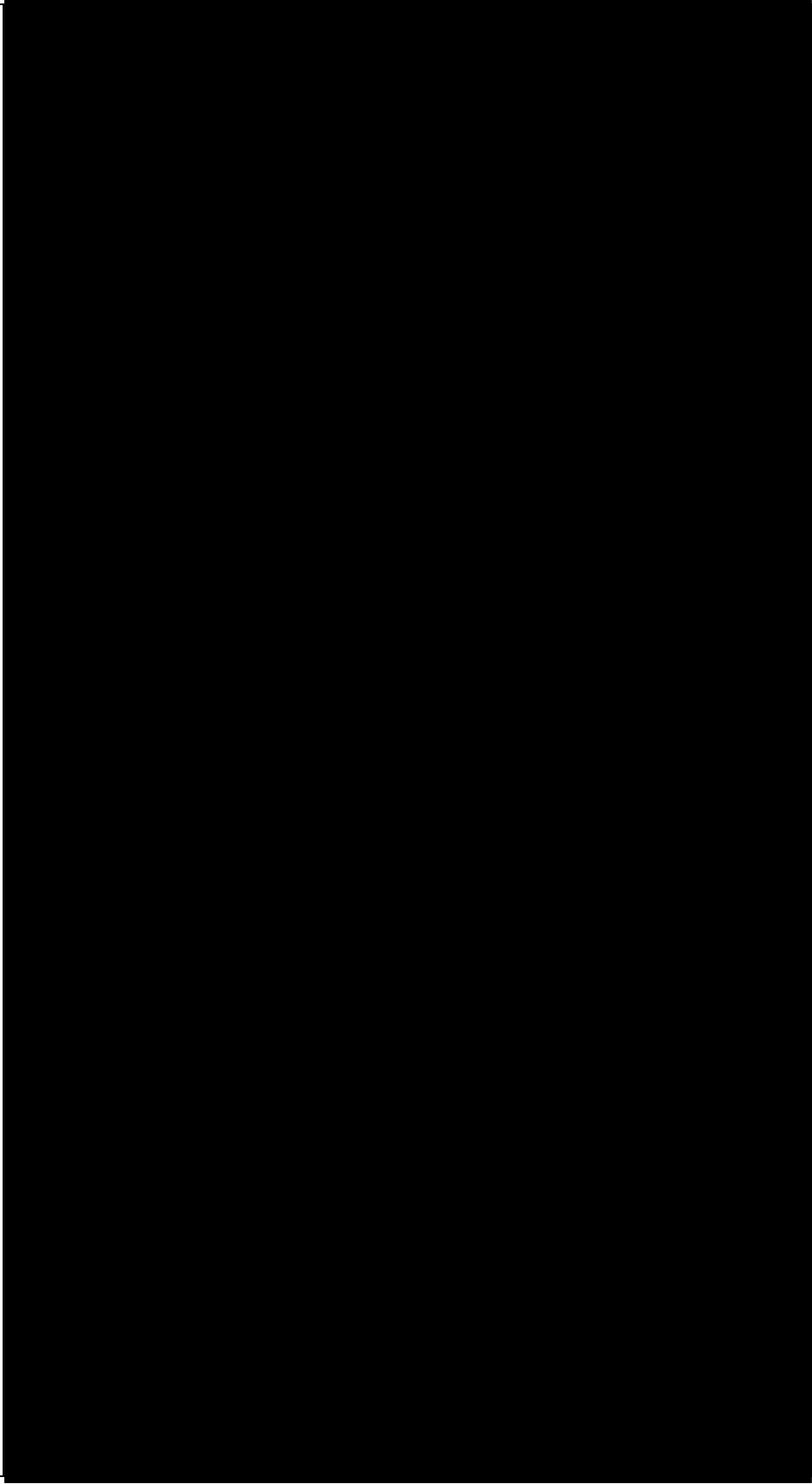
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

【HG-FMEA-0005】

システム名称 電子制御式ブレーキアシスト

故障モードリスト [6 / 8]
(FTA)

△	02.9.26	青木	霧生
△	01.12.25	吉間	霧生
△	日付	作成	承認



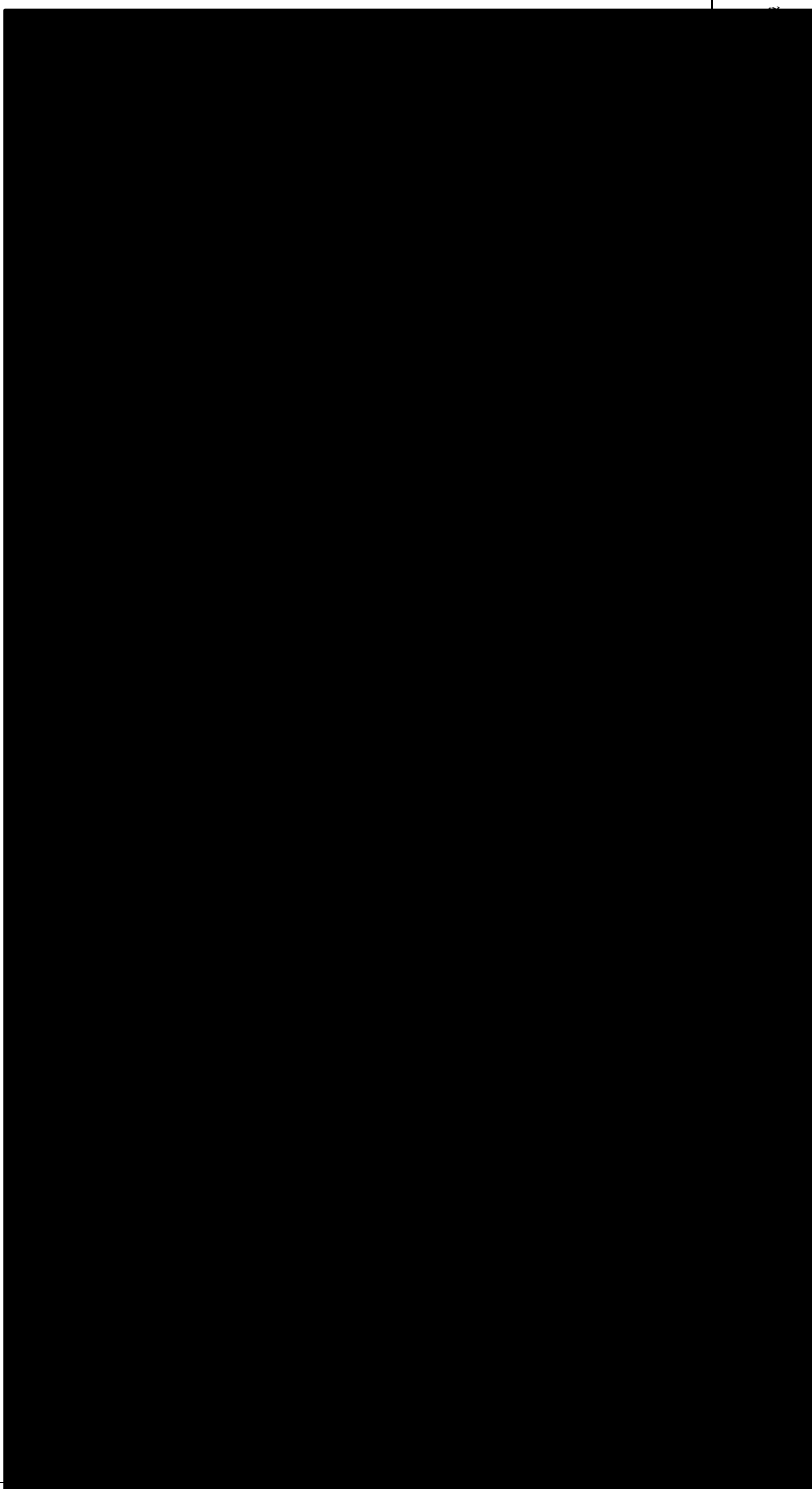
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

【HG-FMEA-0005】

システム名称 電子制御式ブレーキアシスト

故障モードリスト [7 / 8]
(FTA)

△					
1	02.9.26	青木	霧生		
00	01.12.25	吉間	霧生		
	日付	作成	承認		



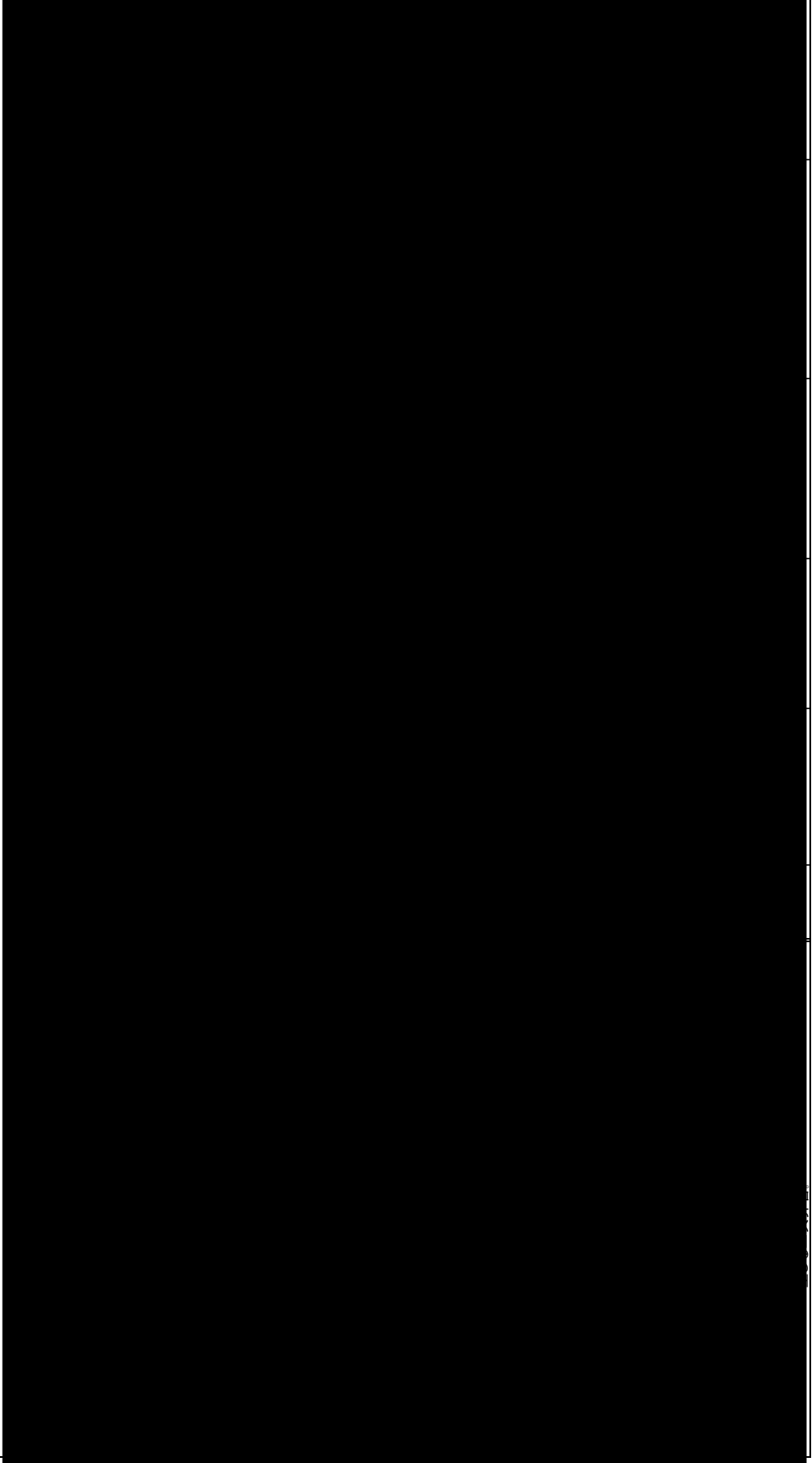
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

【HG-FMEA-0005】

システム名称 電子制御式プレキアシスト

故障モードリスト [8 / 8]
(FTA)

△	02.9.26	青木	霧生
△	01.12.25	吉間	霧生
△	日付	作成	承認



DP12-002

HONDA

8-3-2012

ATTACHMENT

Q14

14C

FMEA-YG_Sensor_E

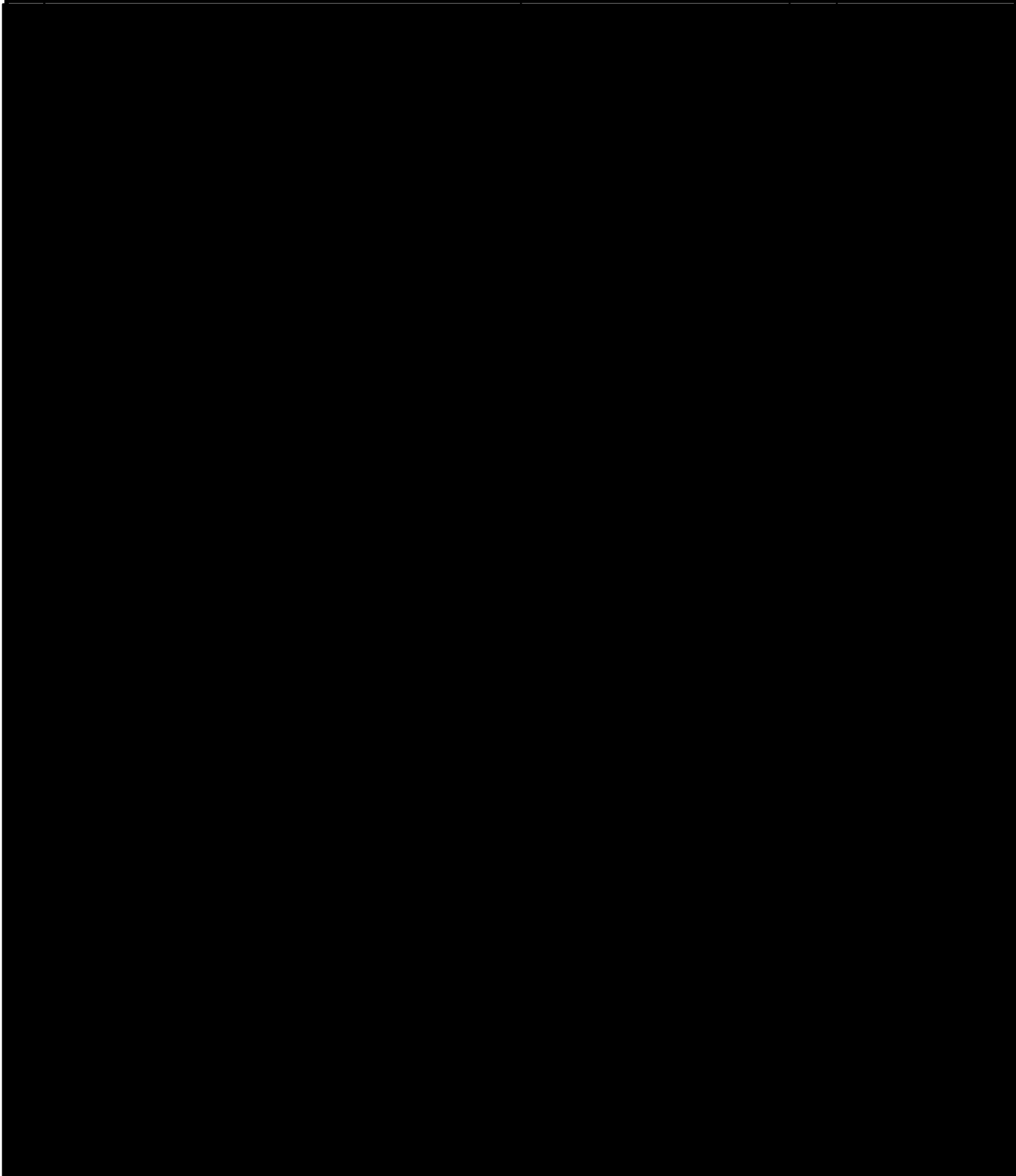
REDACTED

【HG-FMEA-0008】

System Function and Failure List [1/1]

System Name: _____ VSA (NK11V) _____

△			
△			
△	2001/APR/2		
	Date	Prepared	Approved



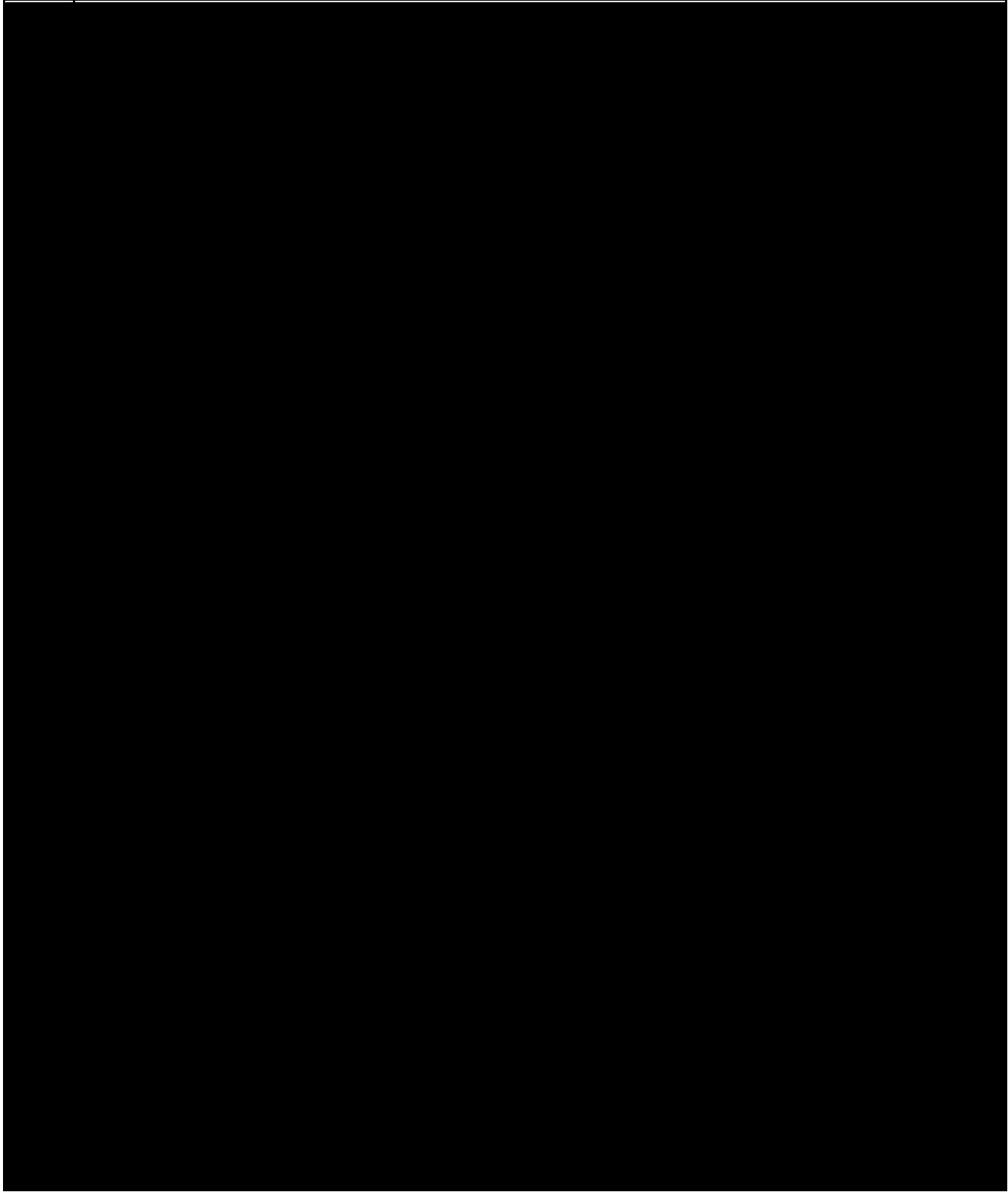


【HG-FMEA-0009】

System Severity and definitions [1 / 1]

System Name: _____ VSA (NK11V) _____

△			
△			
△	2001/APR/2		
	Date	Prepared	Approved

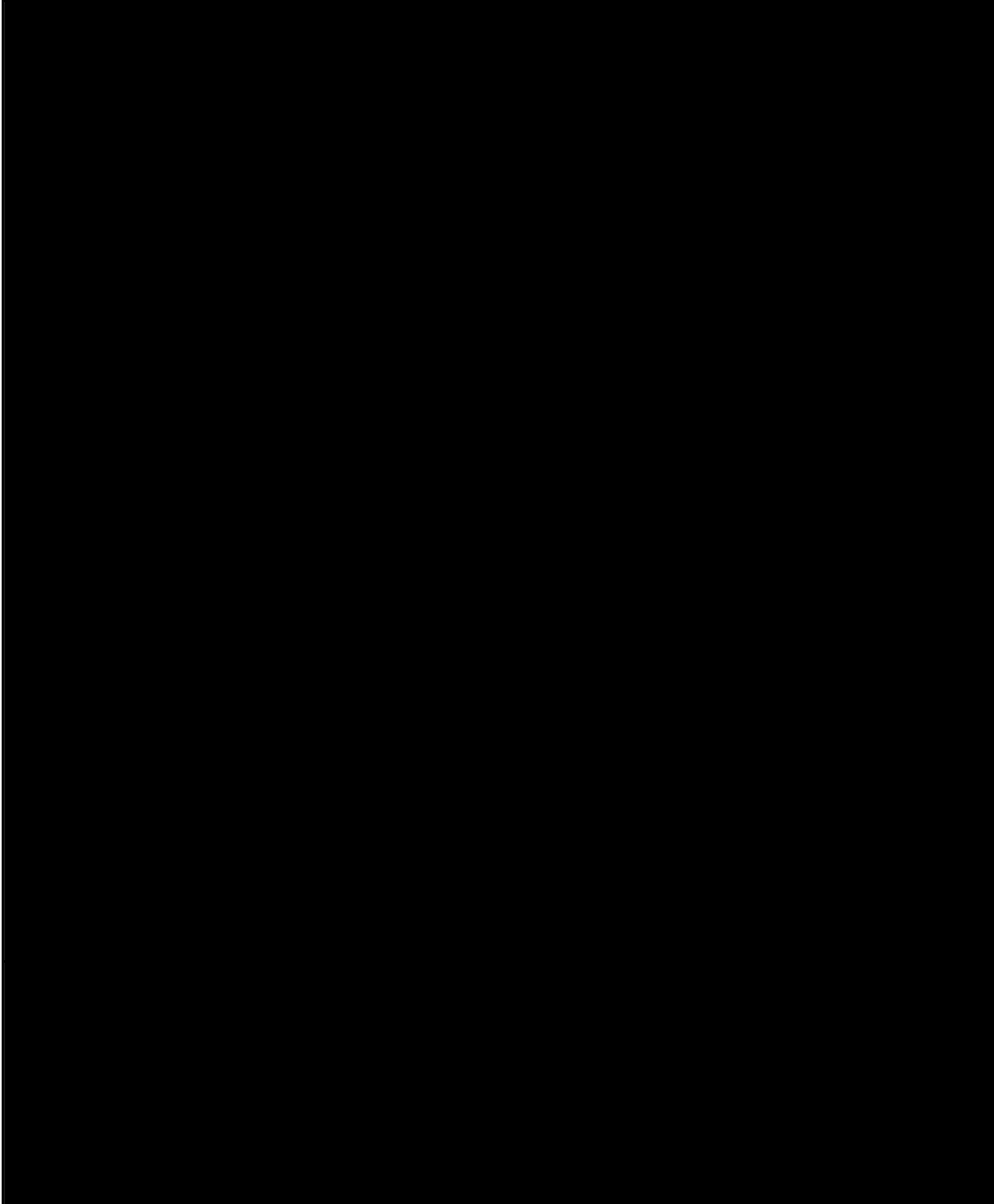


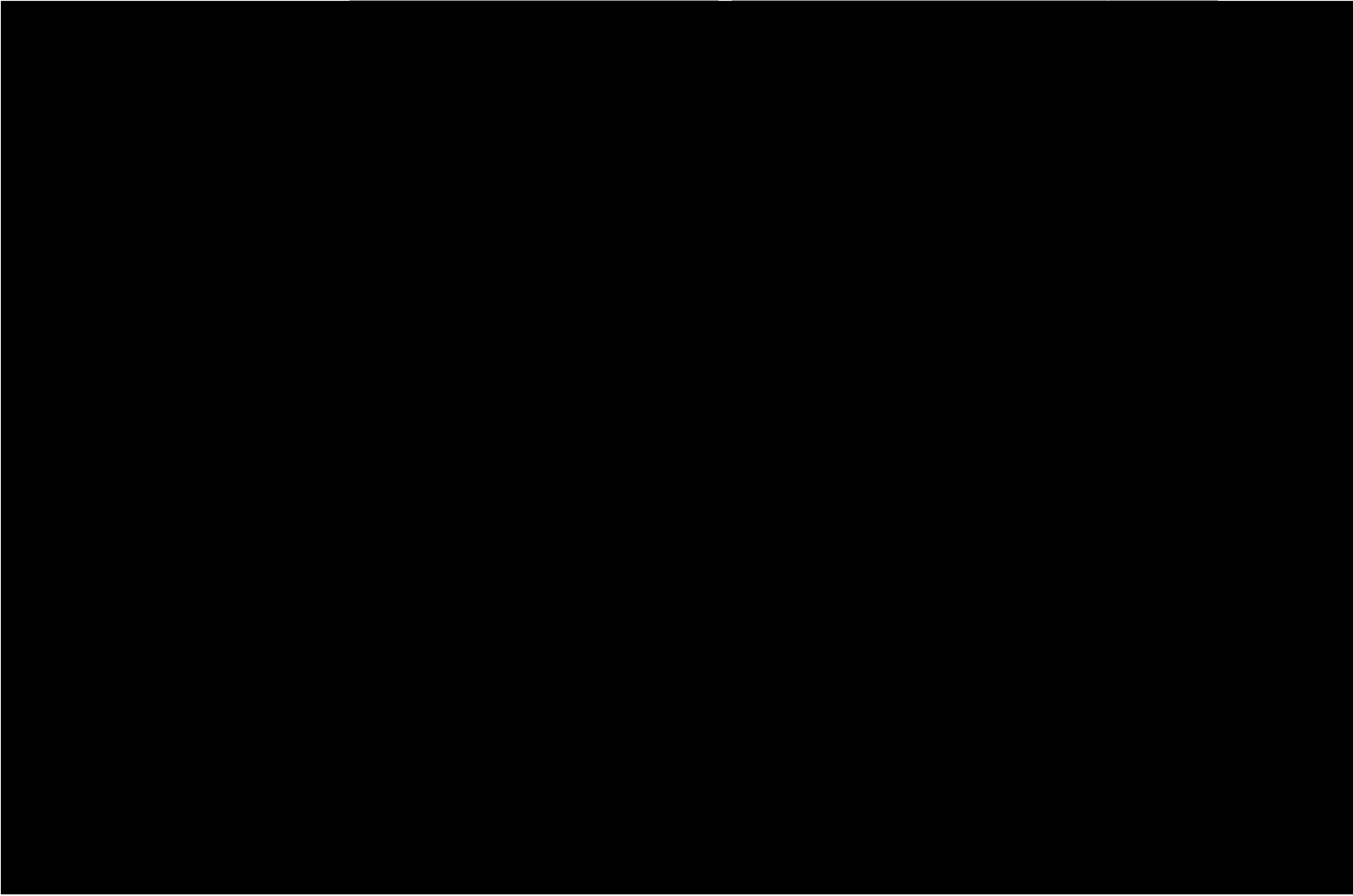
【HG-FMEA—****】

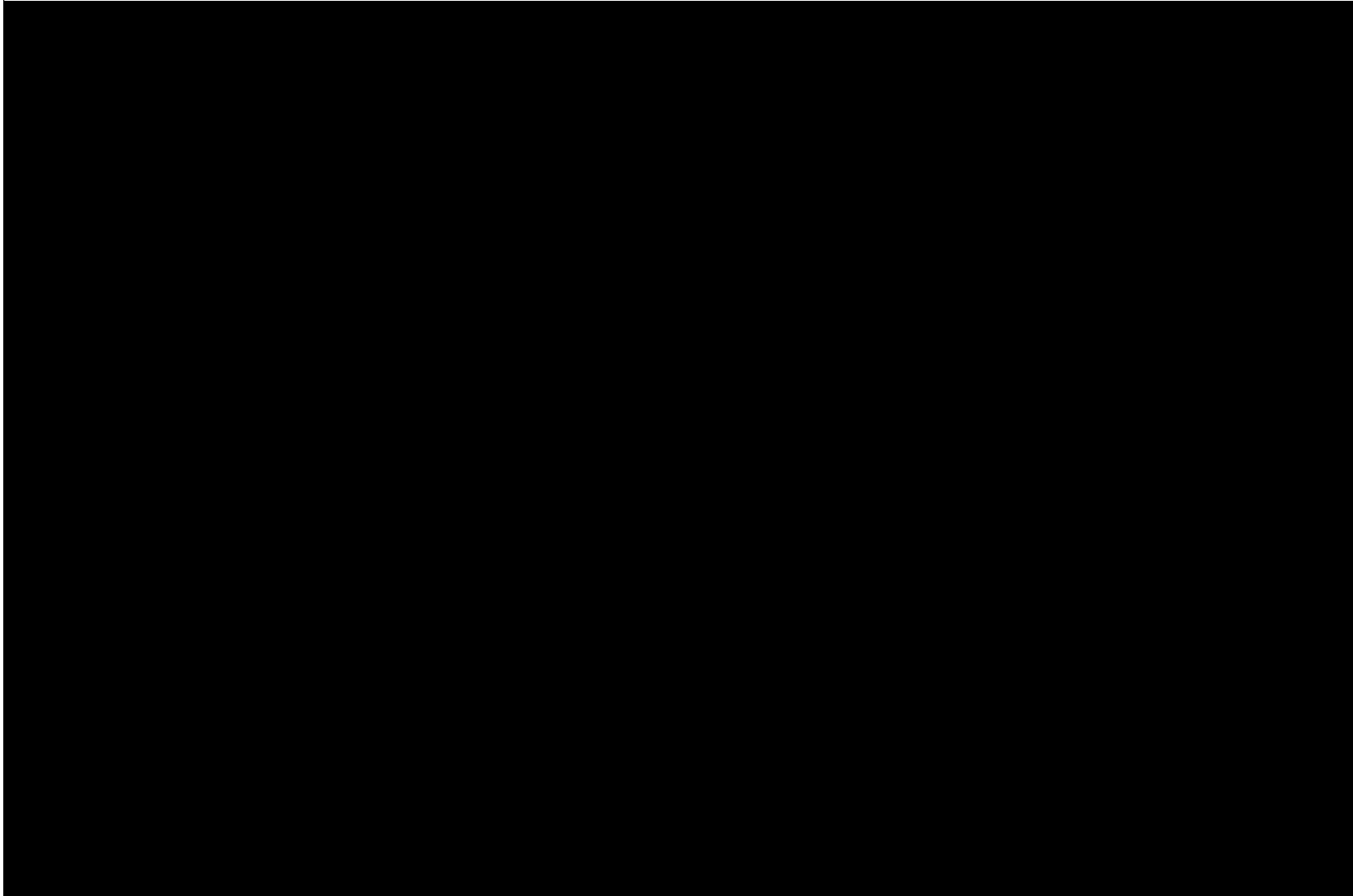
Severity matrix

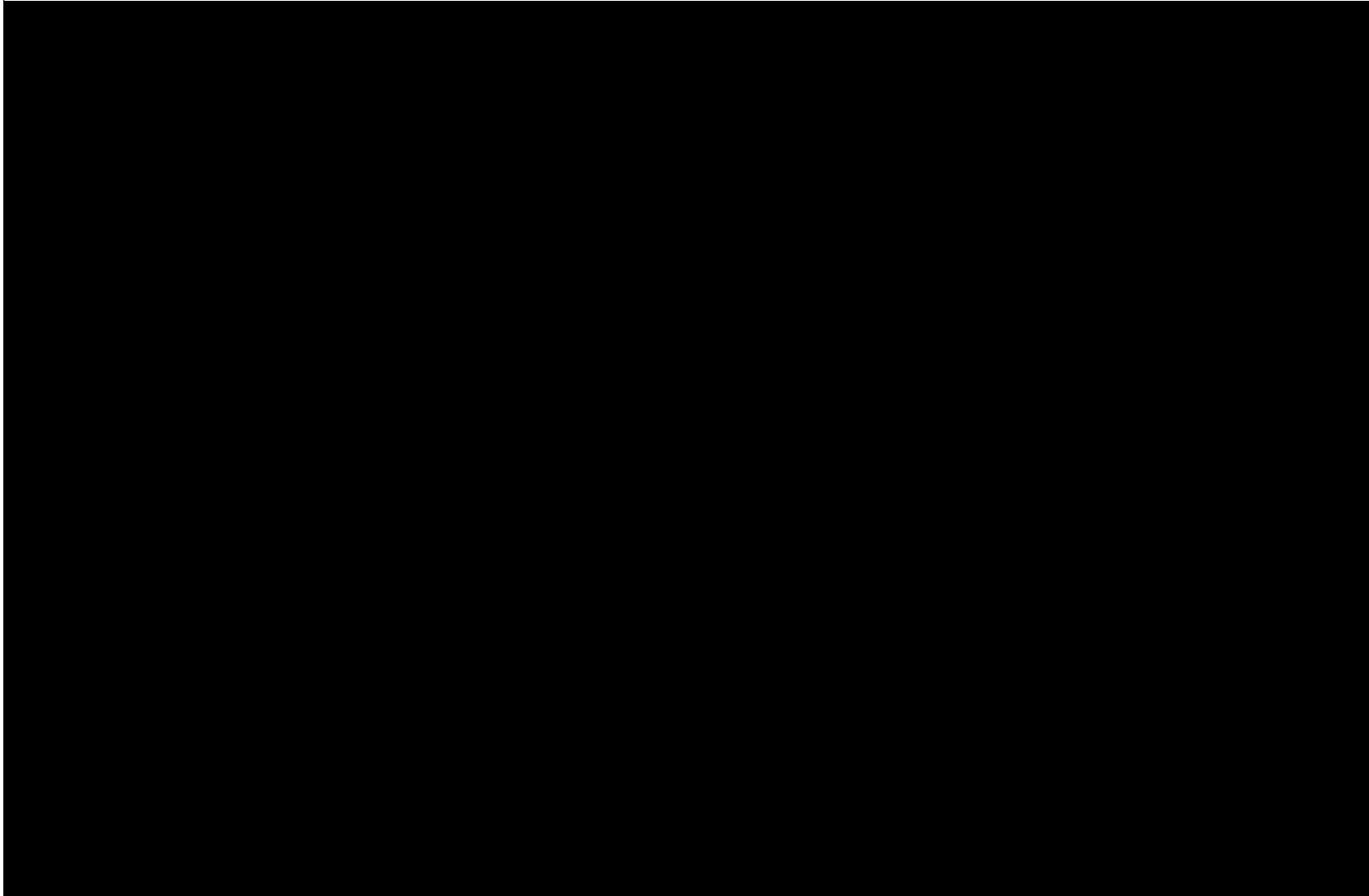
System name

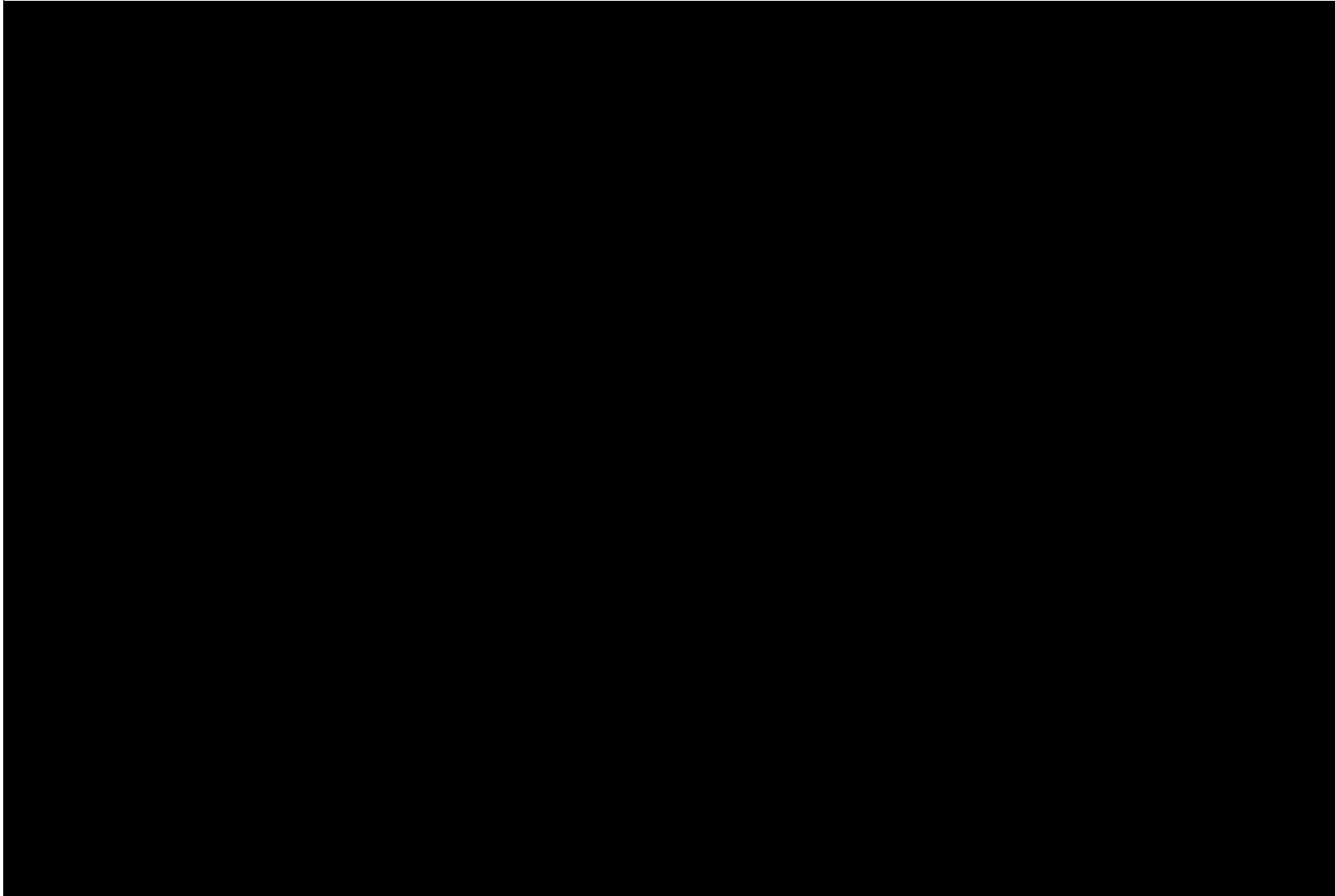
△			
↑	020904	[REDACTED]	
New	011204		
	Date	Created	Approved

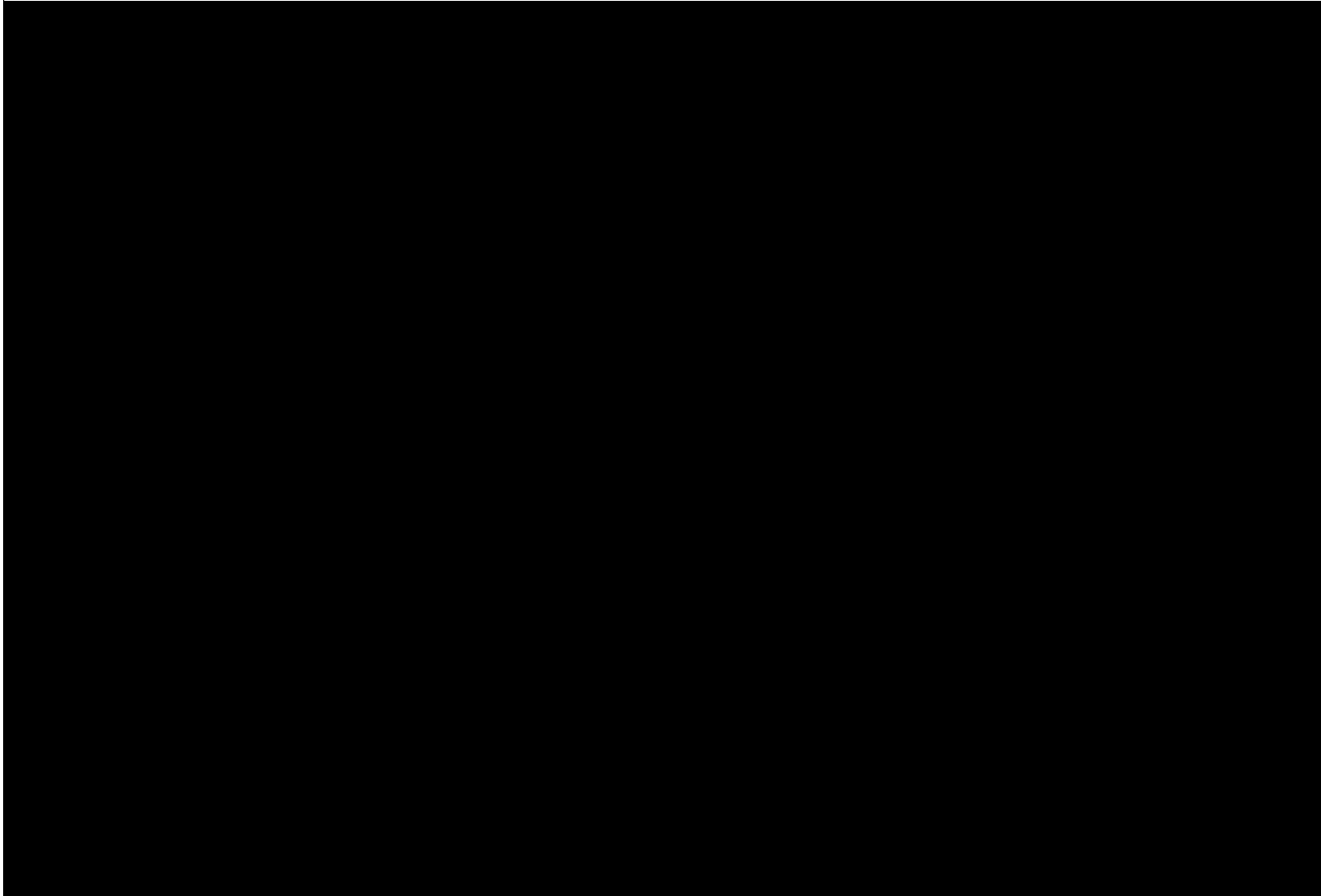


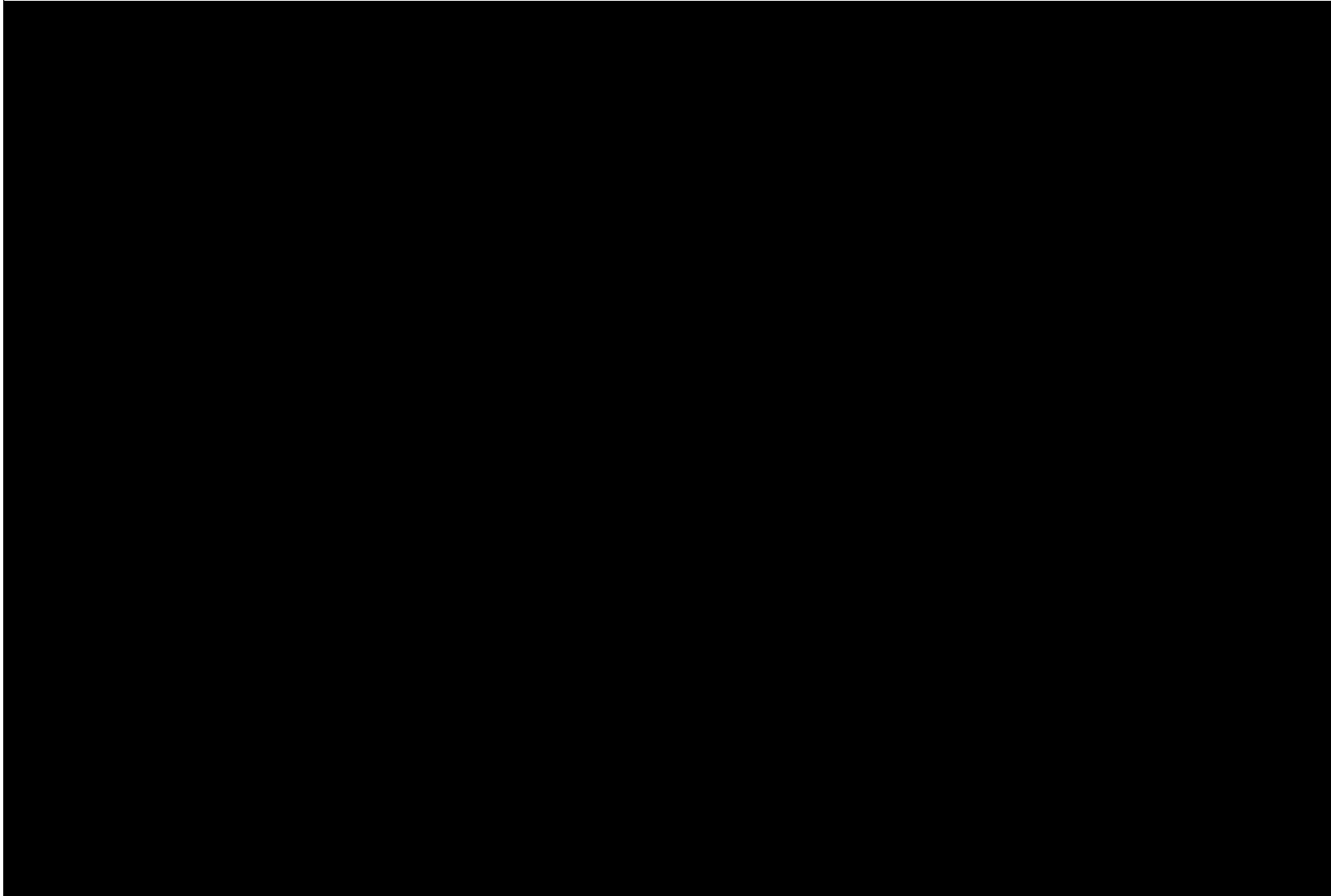


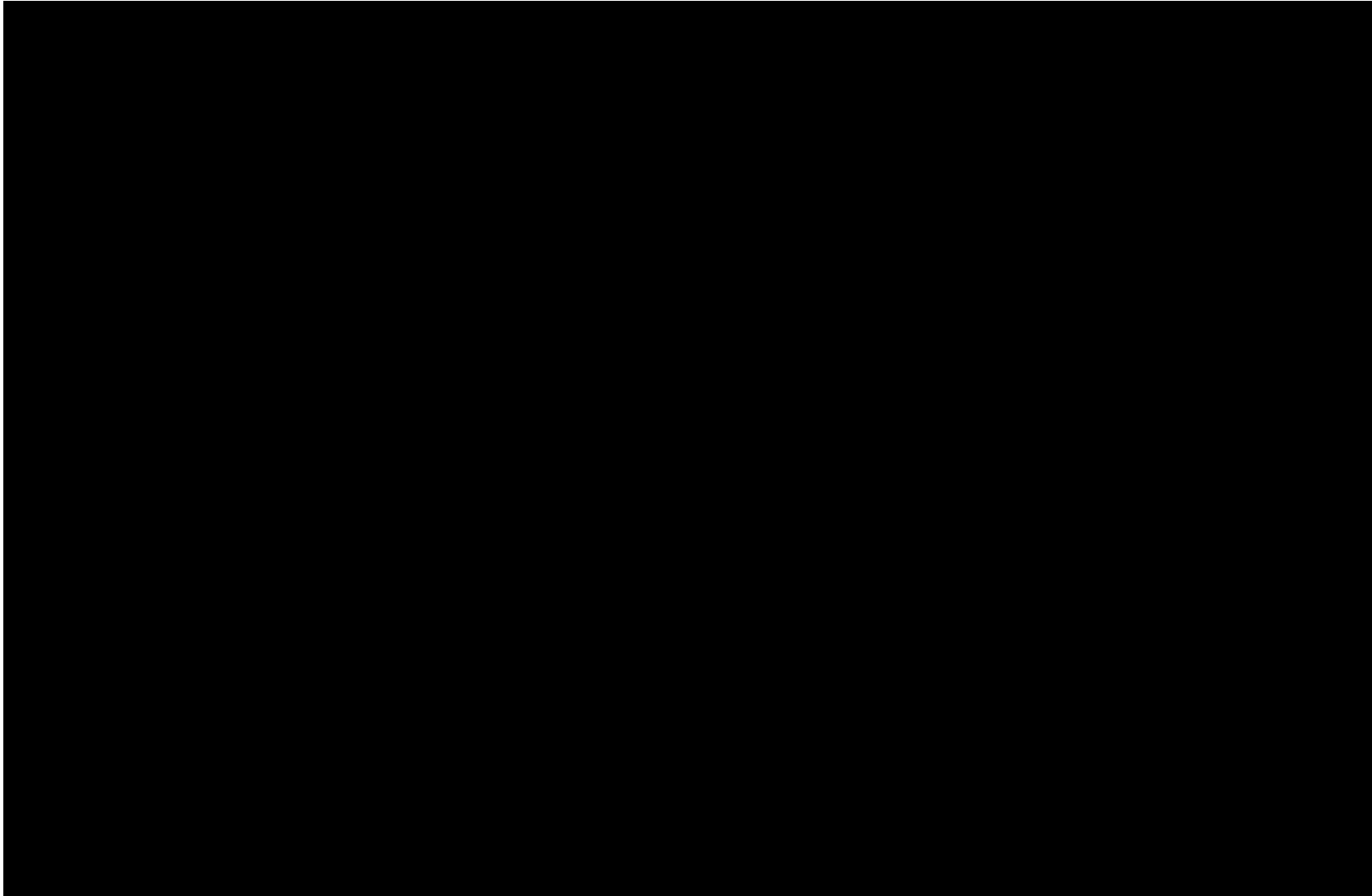


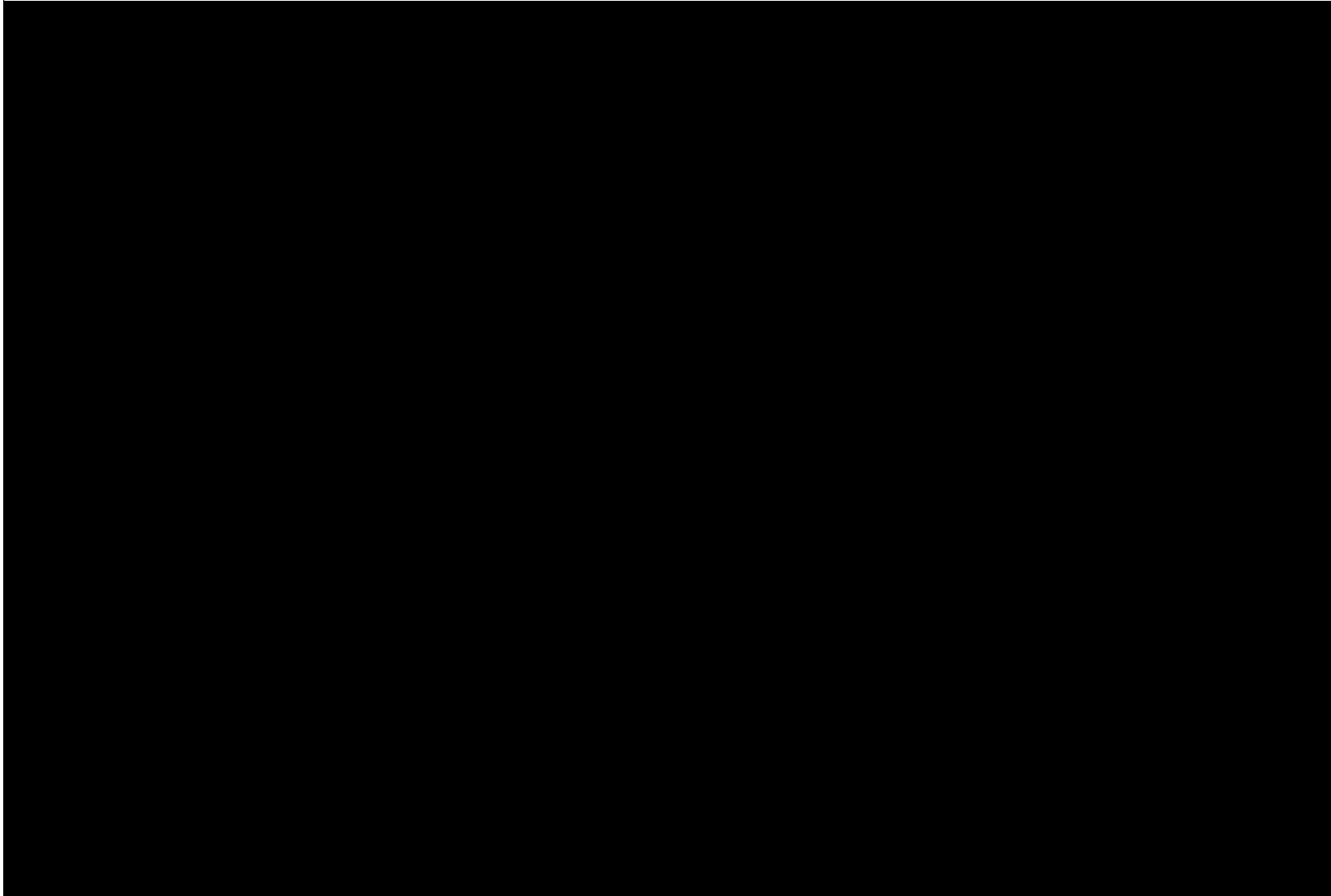


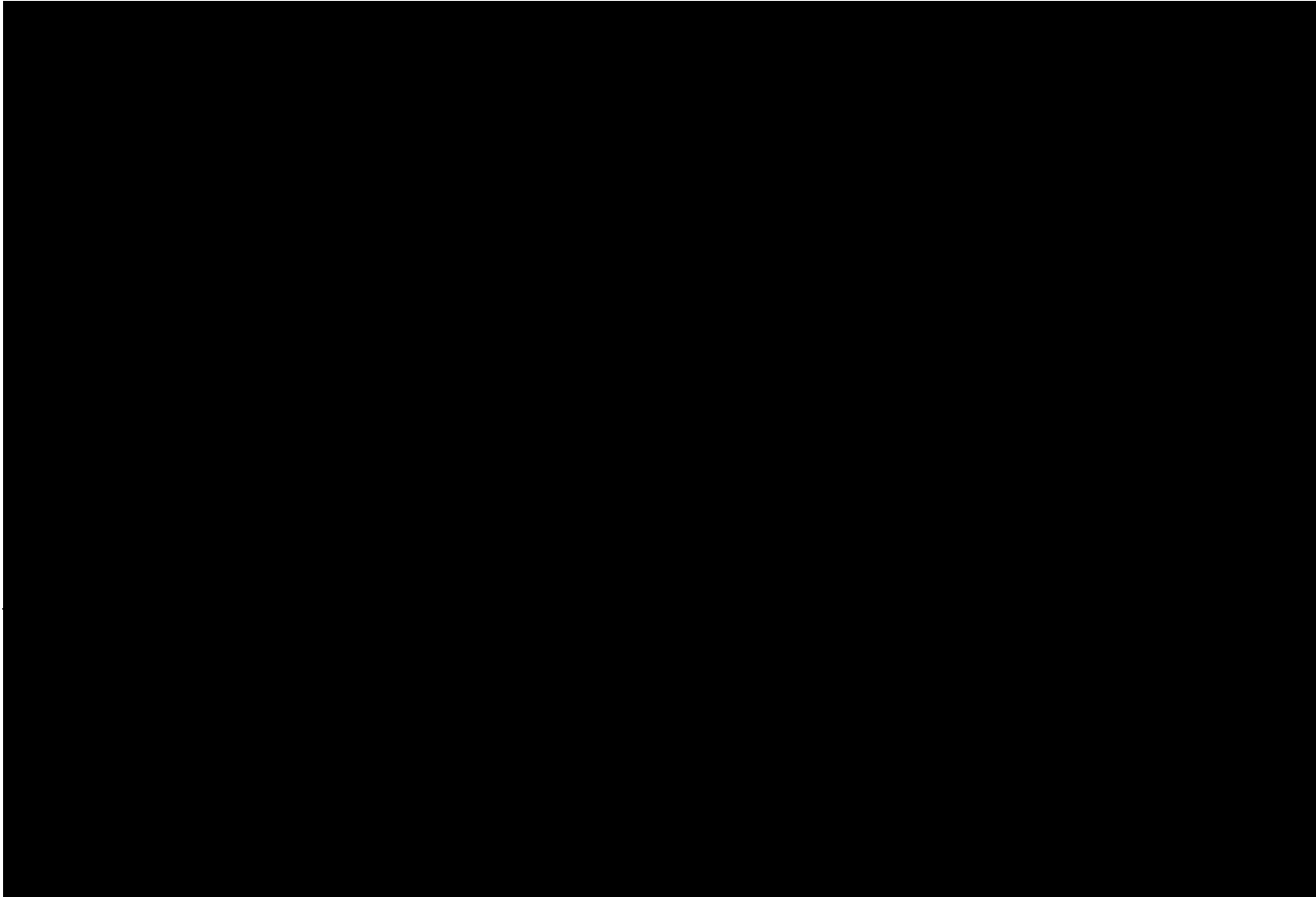


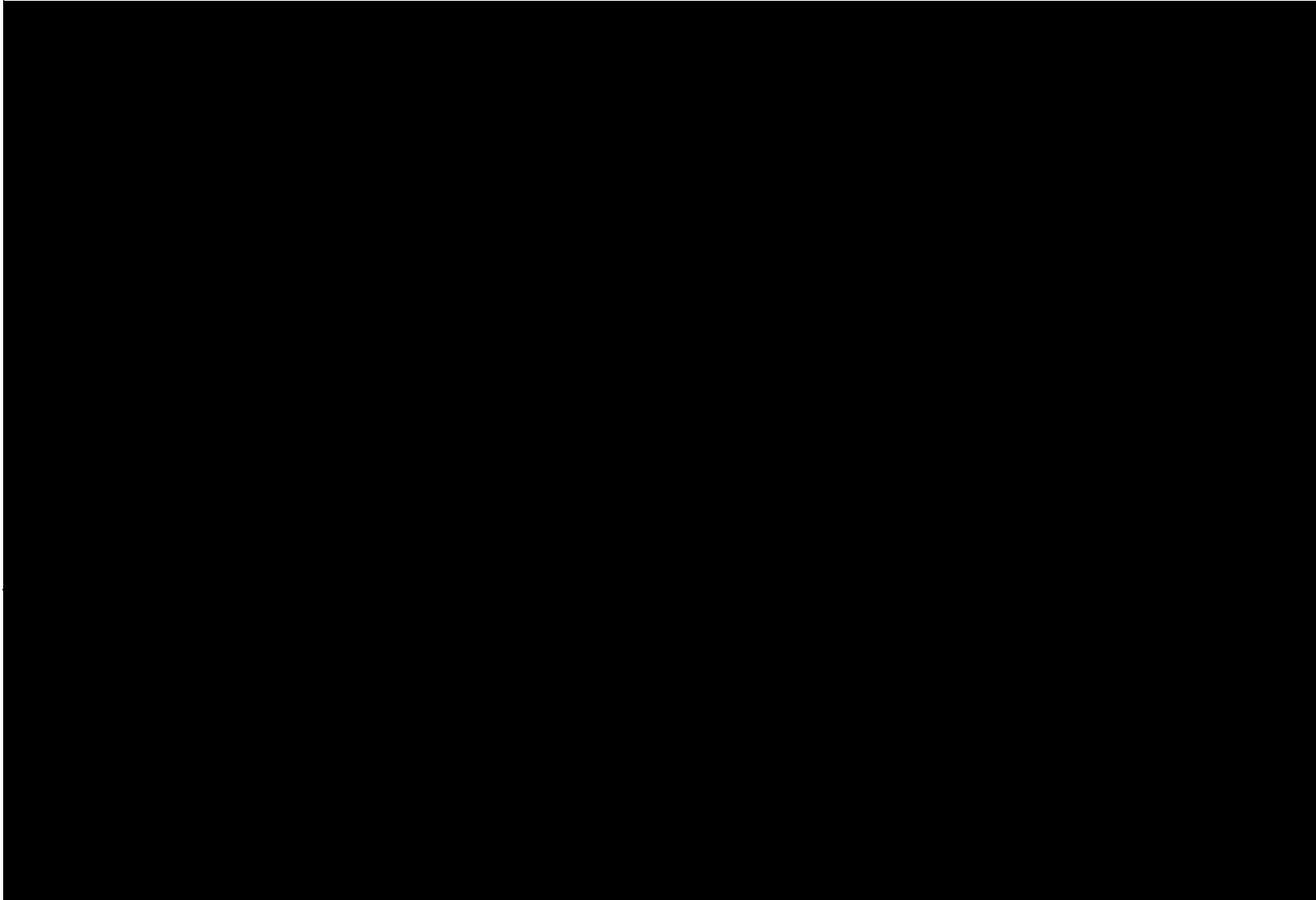


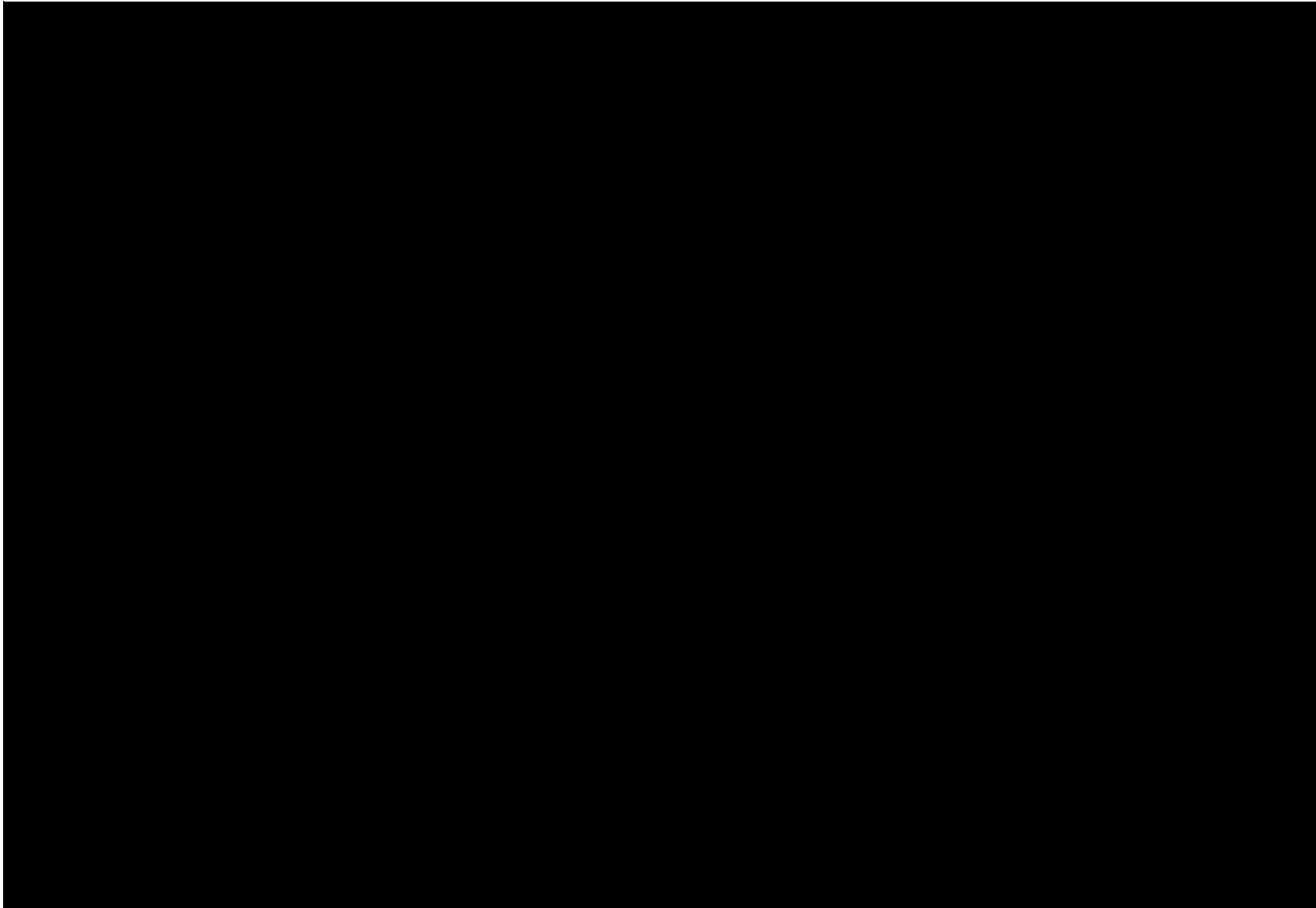


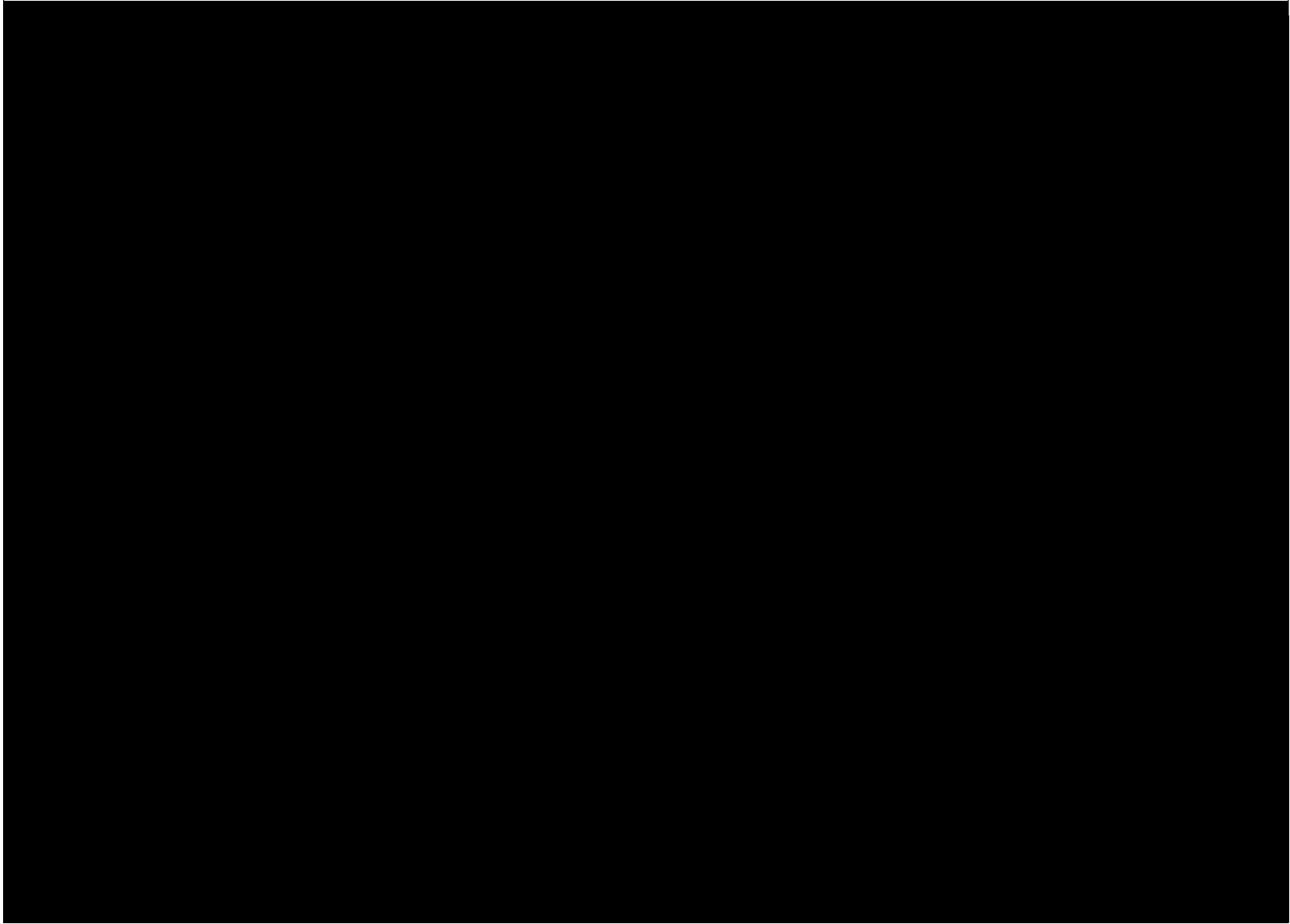


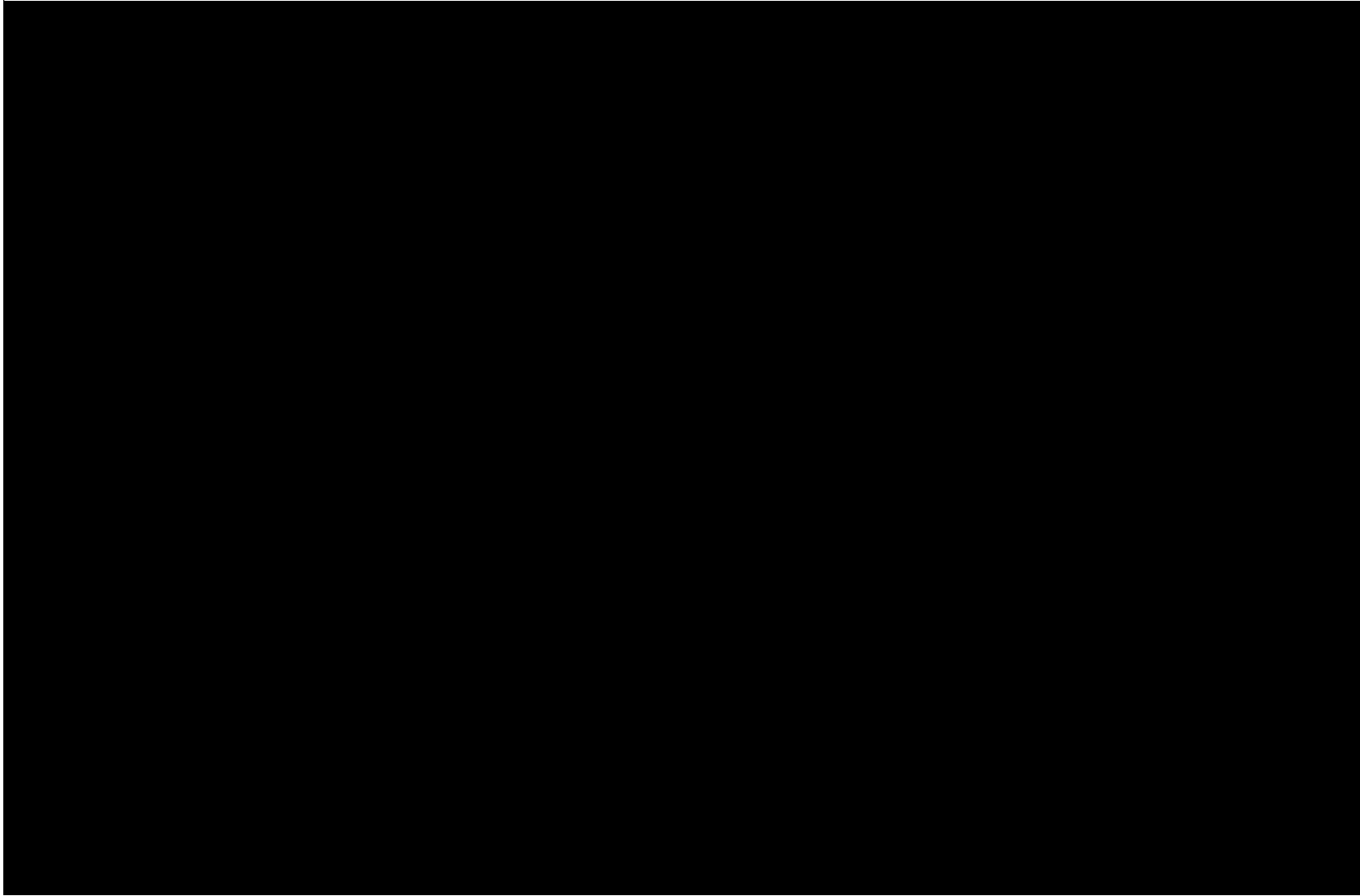


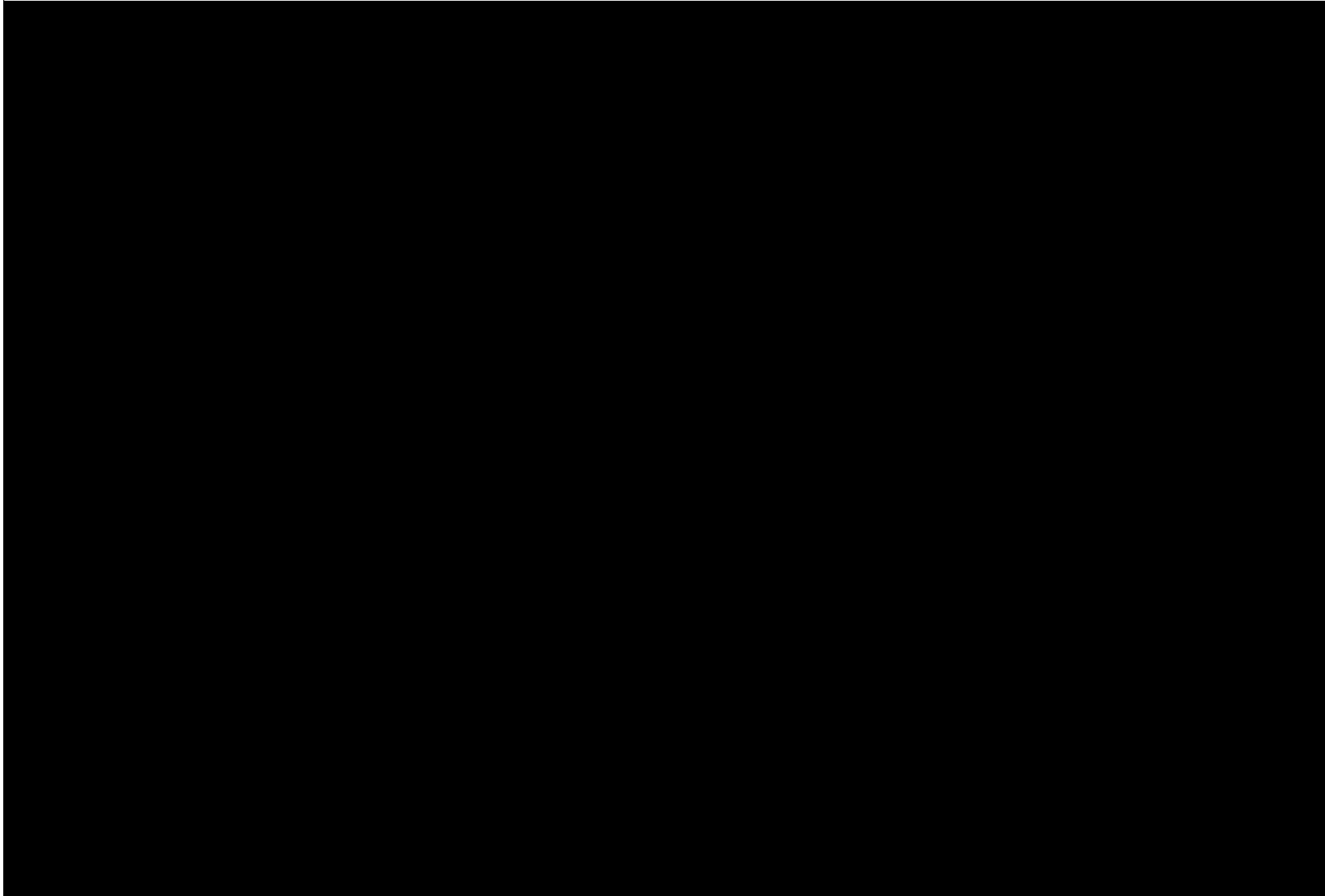


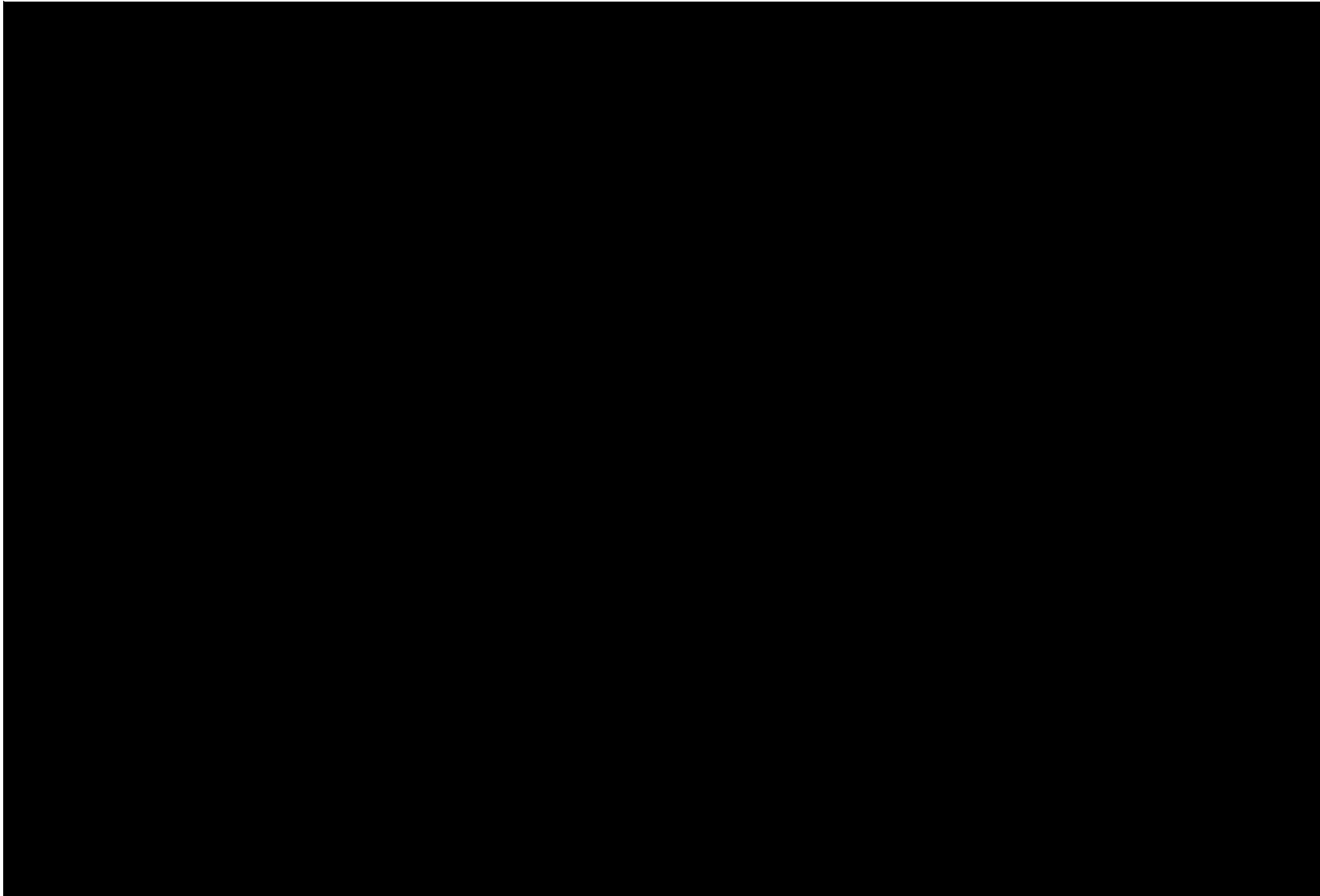


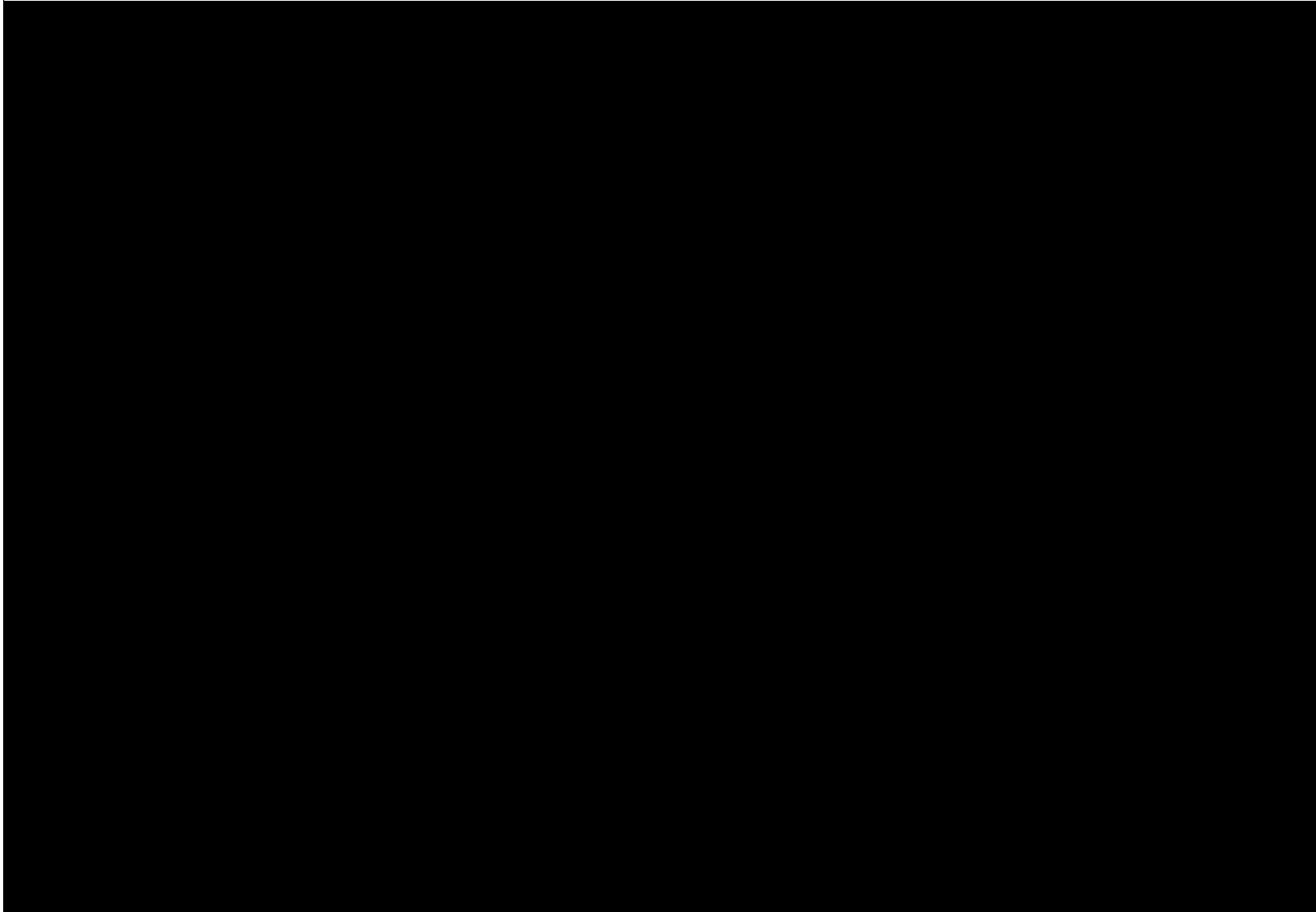


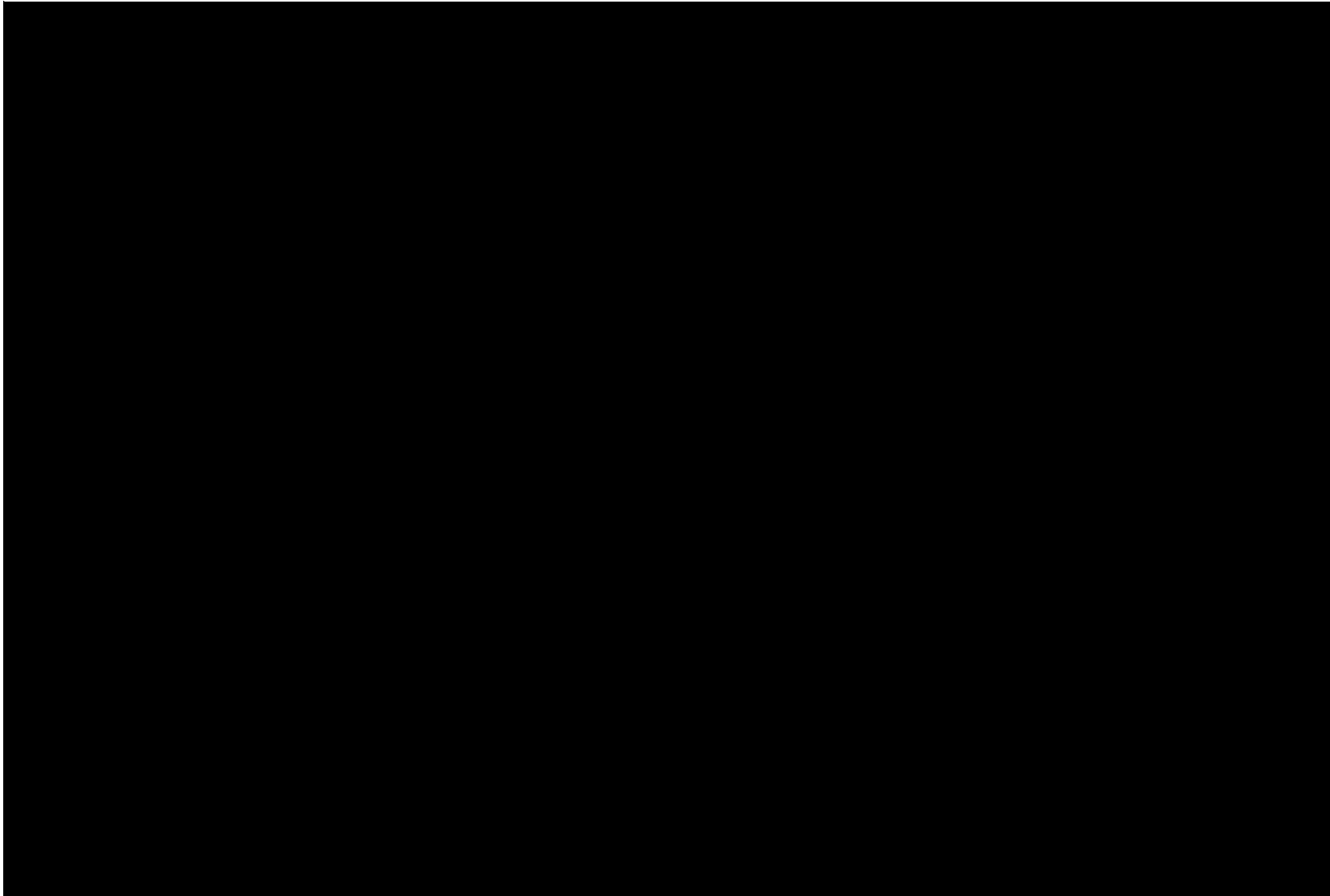


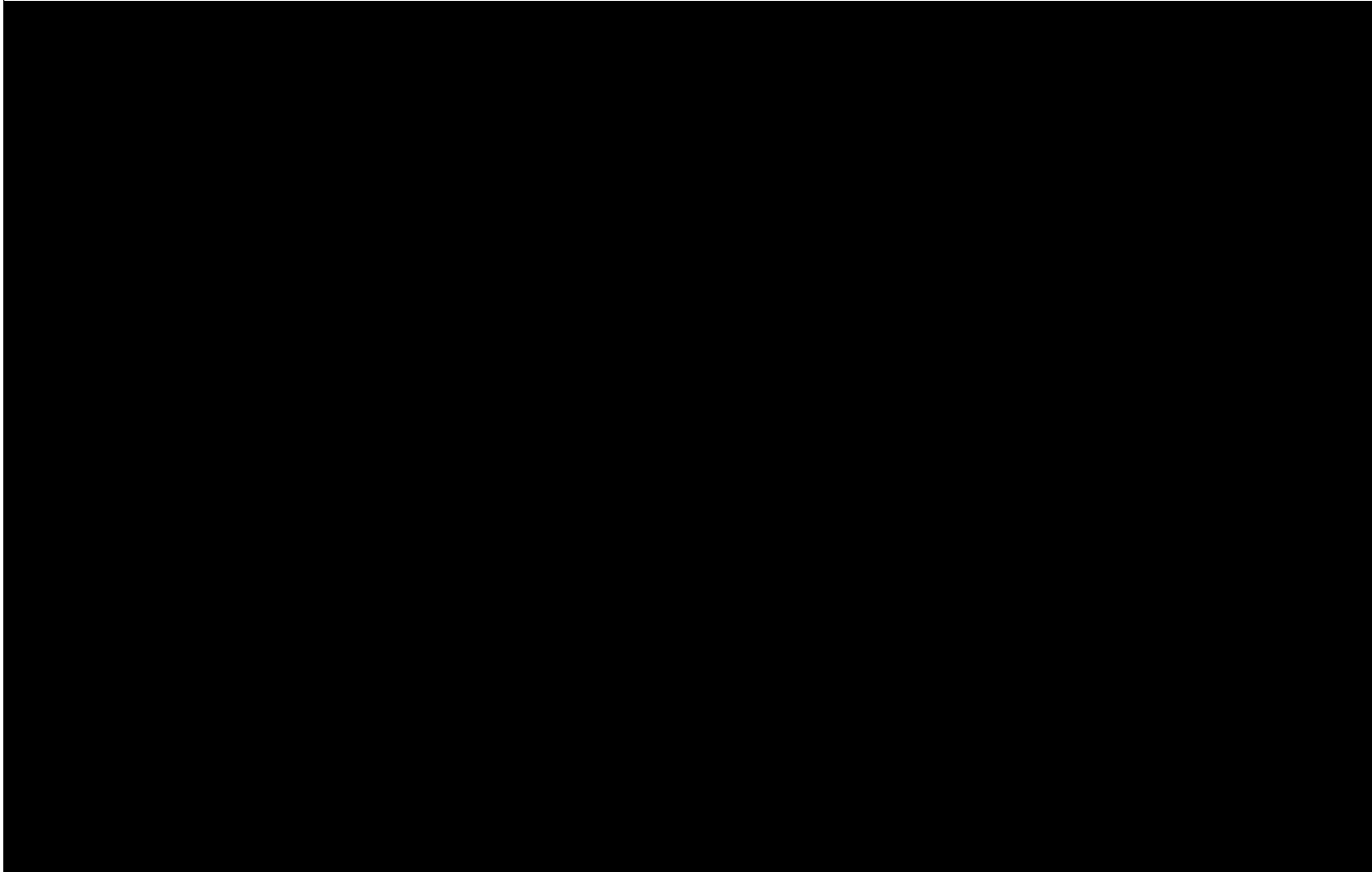


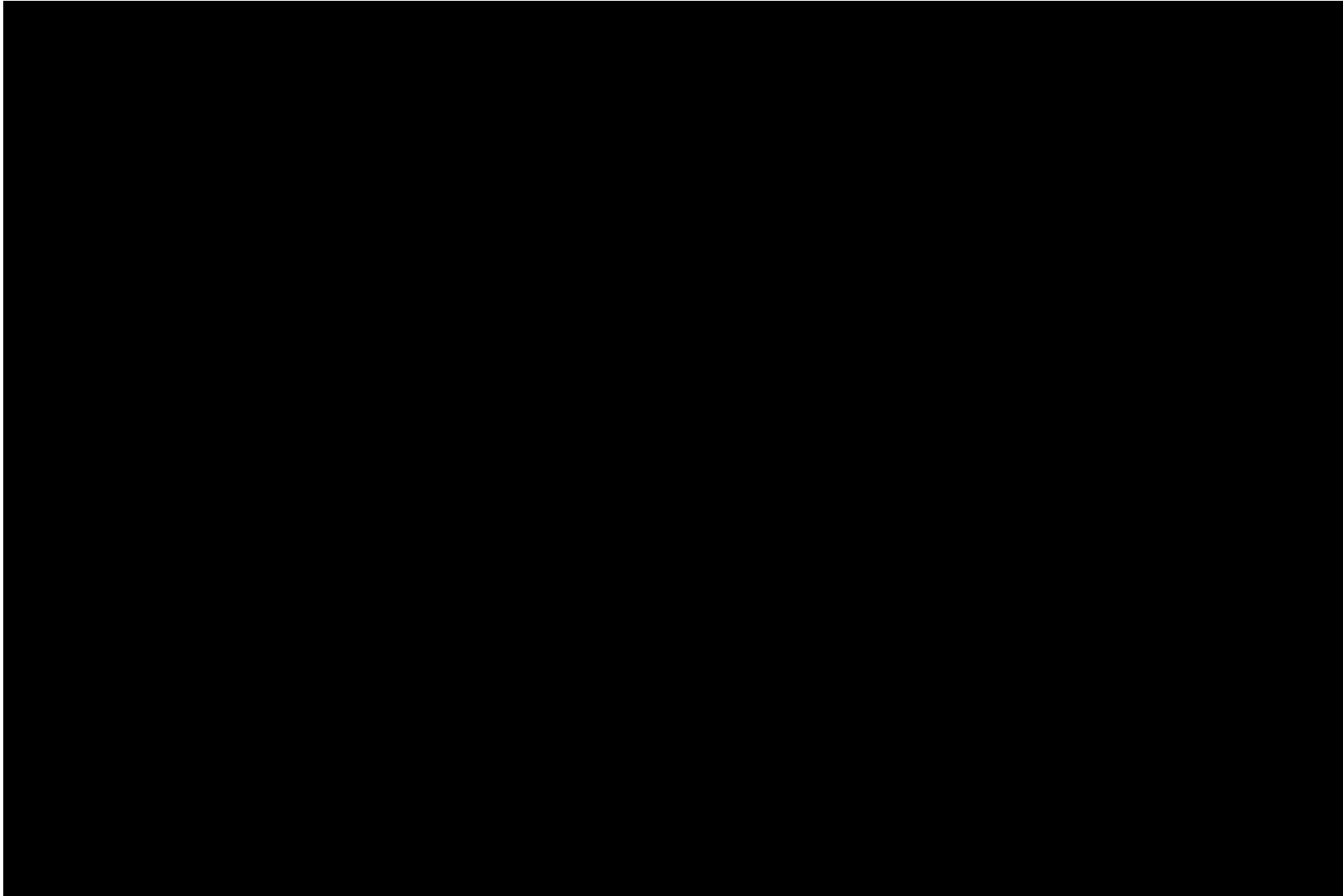


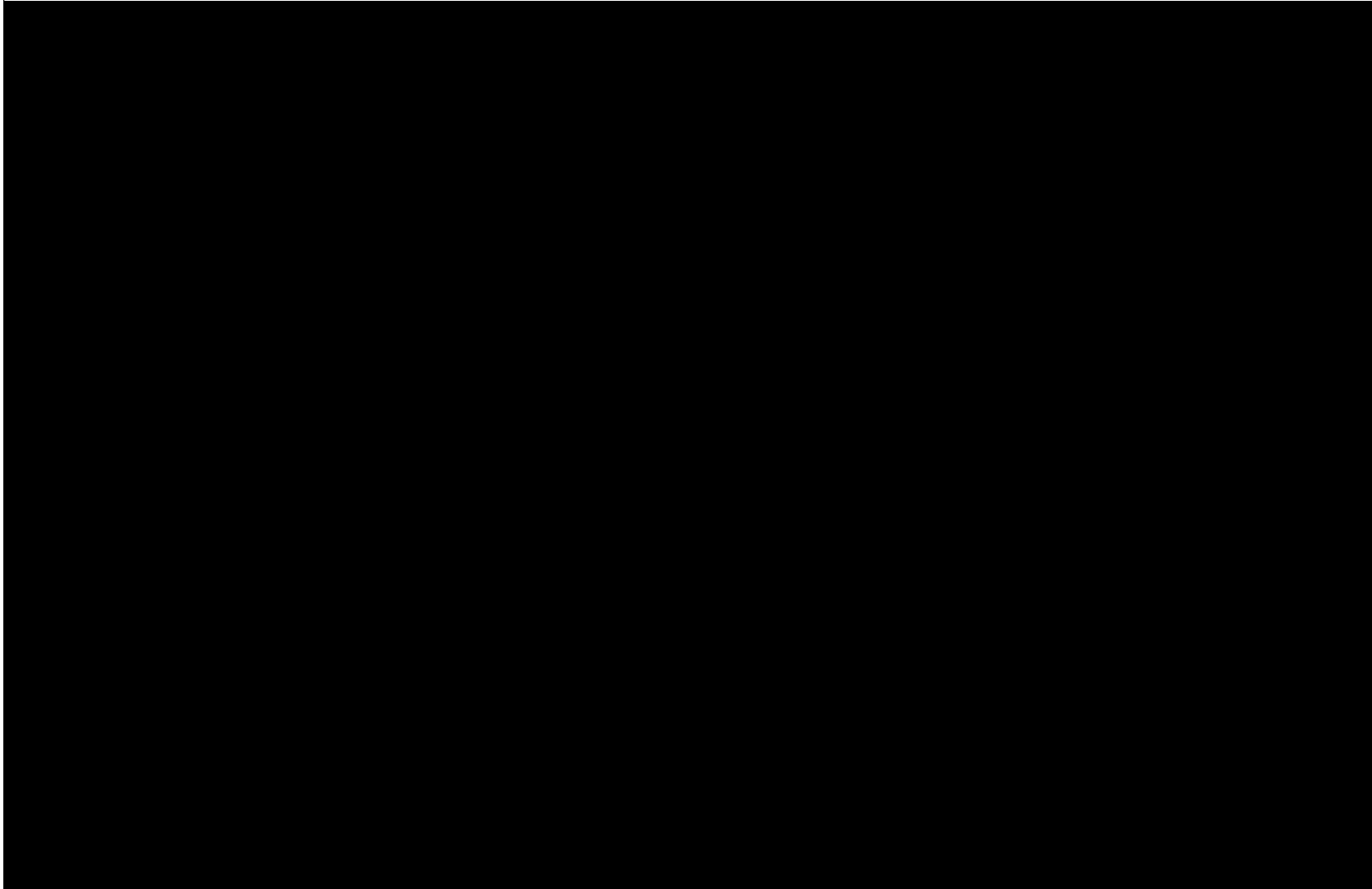


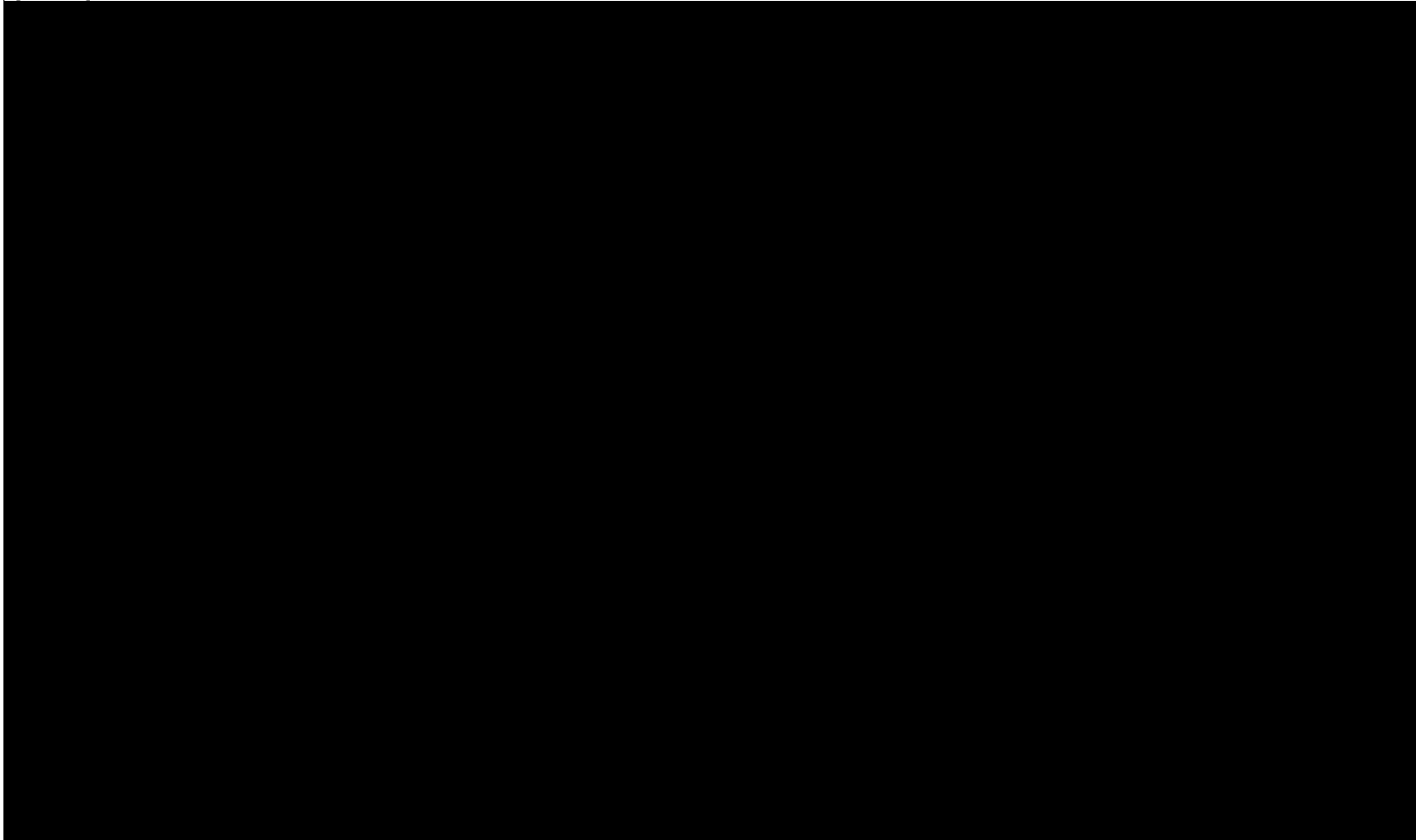




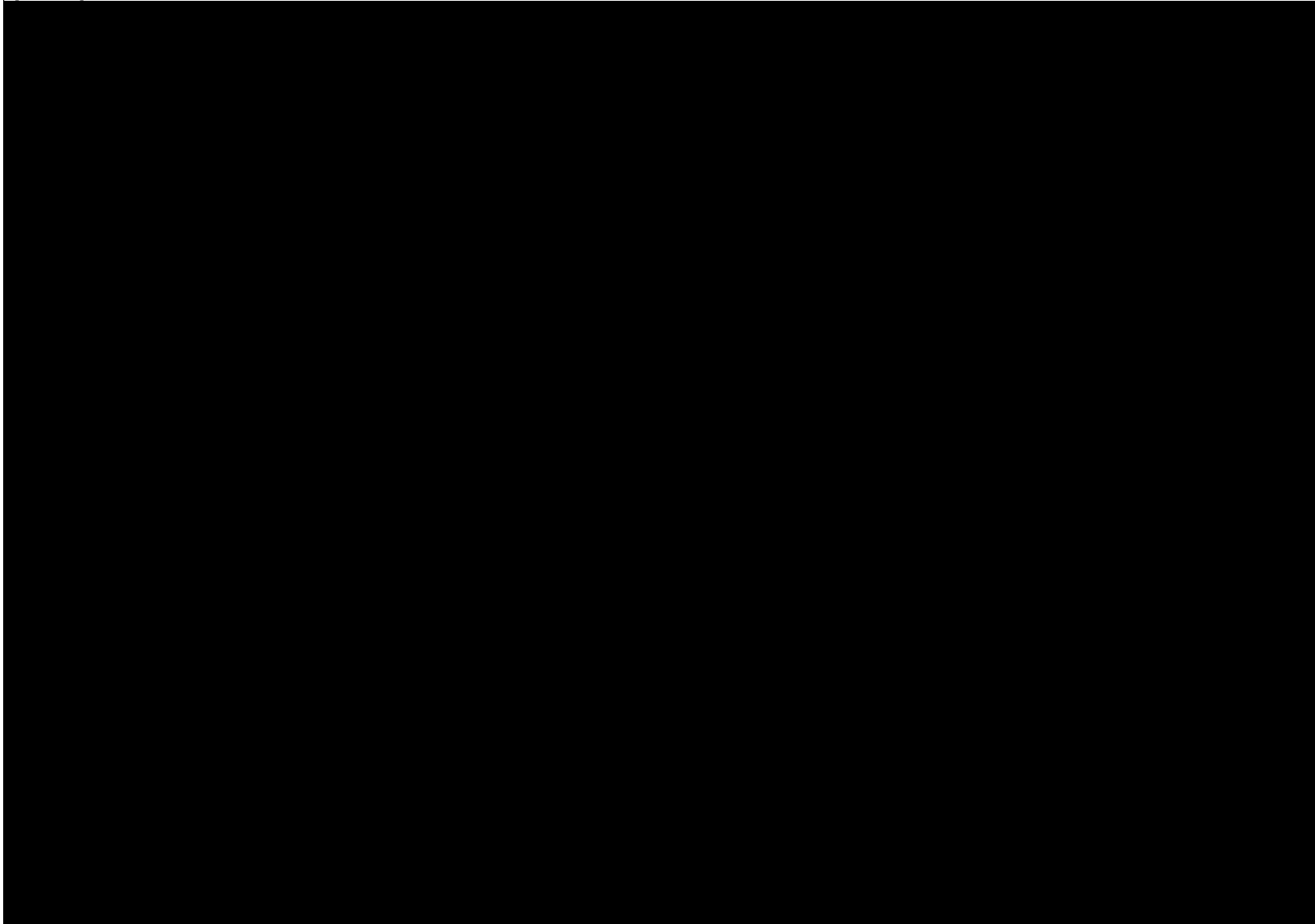


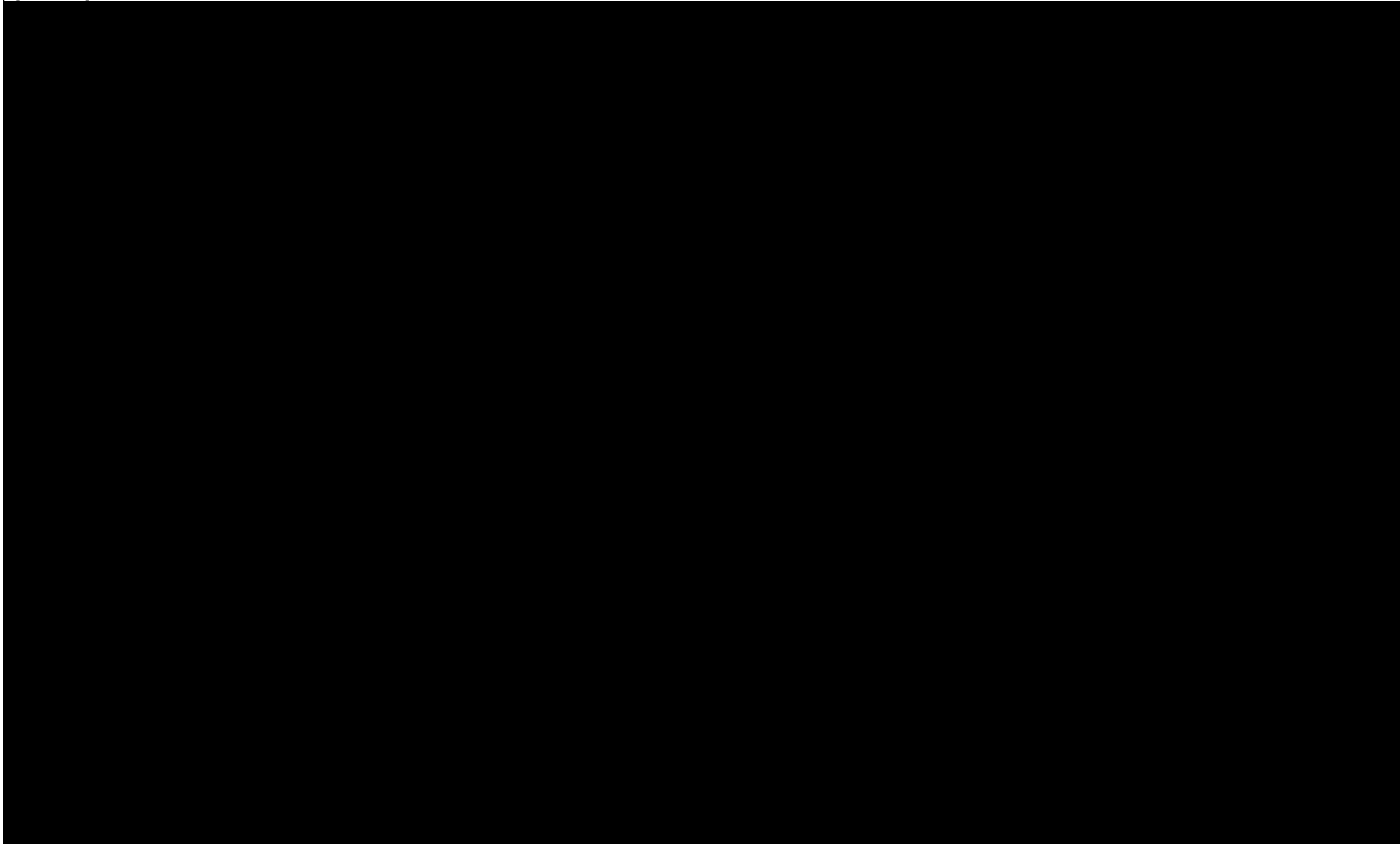


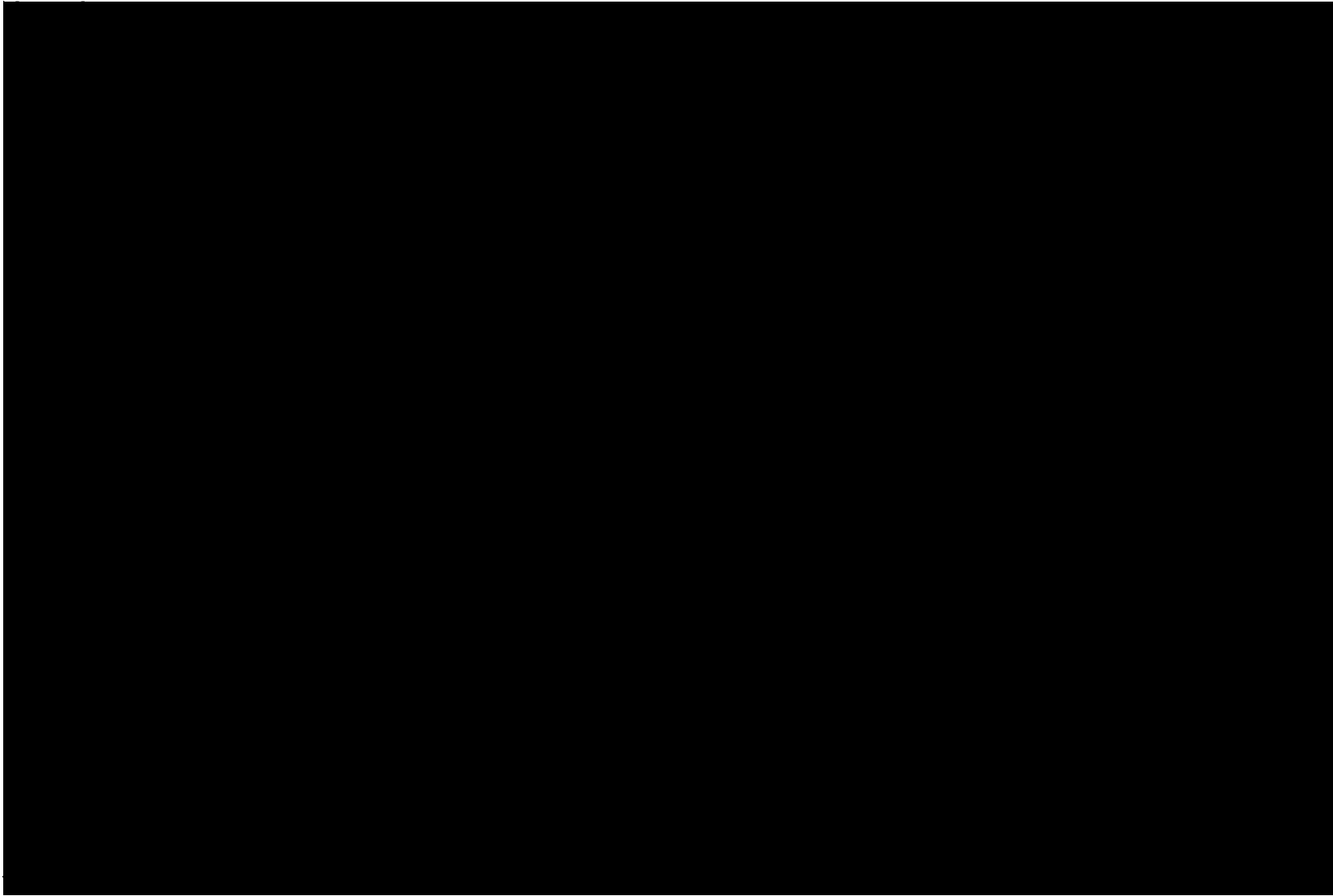


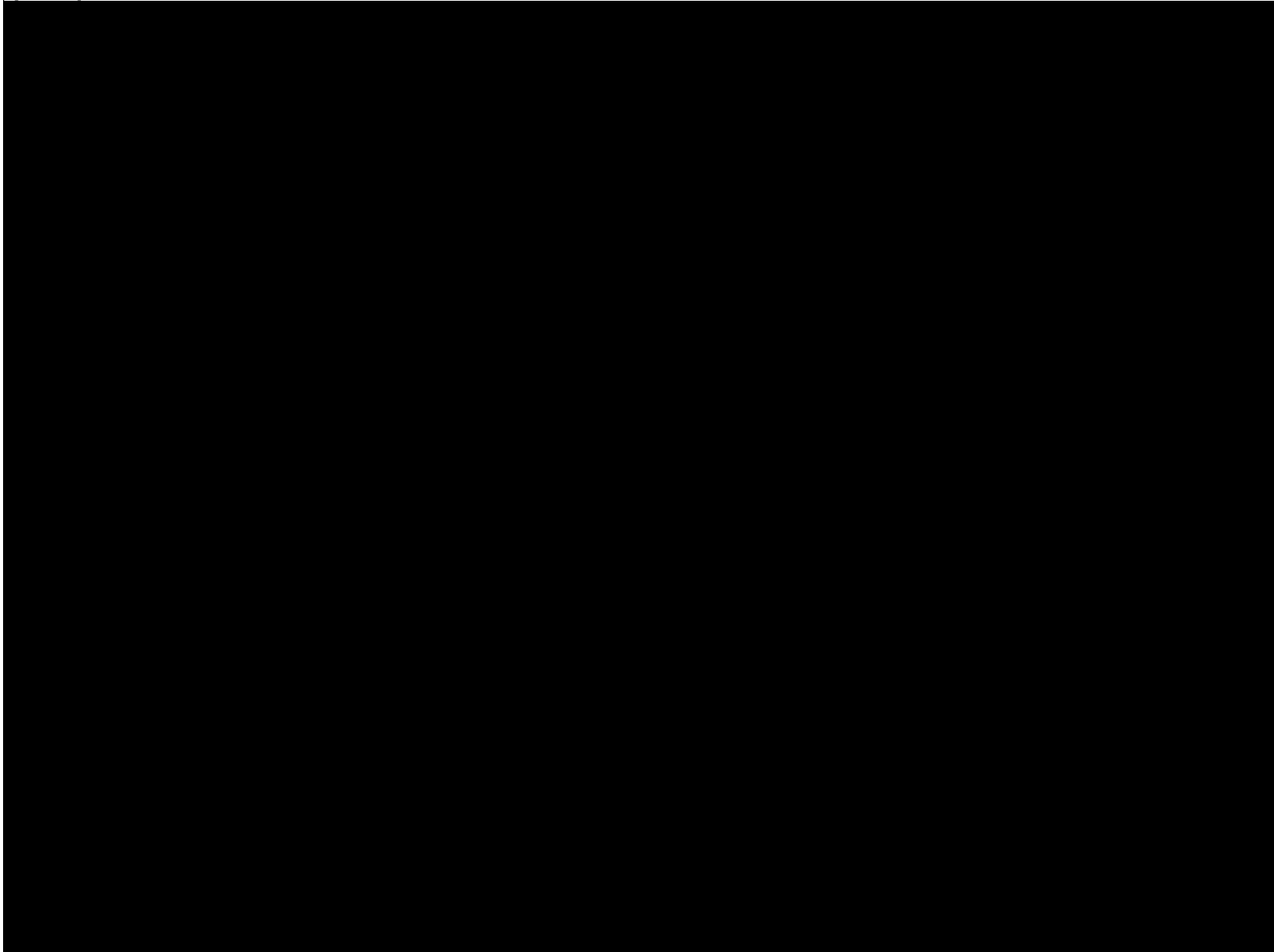












DP12-002

HONDA

8-3-2012

ATTACHMENT

Q14

14C

FMEA-YG_Sensor_J

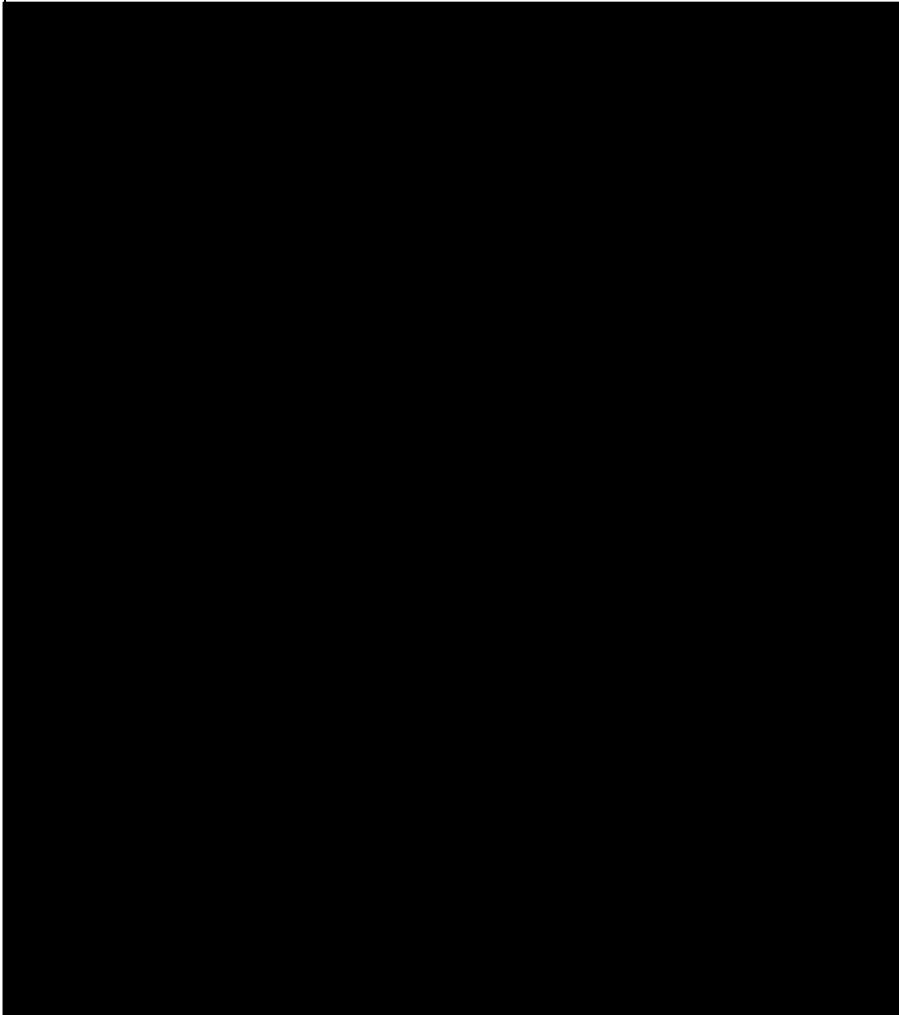
REDACTED

【HG-FMEA-0008】

システム機能及び故障リスト[1/1]

システム名称 VSA(NK11V)

△			
△			
△	2001/APR/2		
	日付	作成	承認

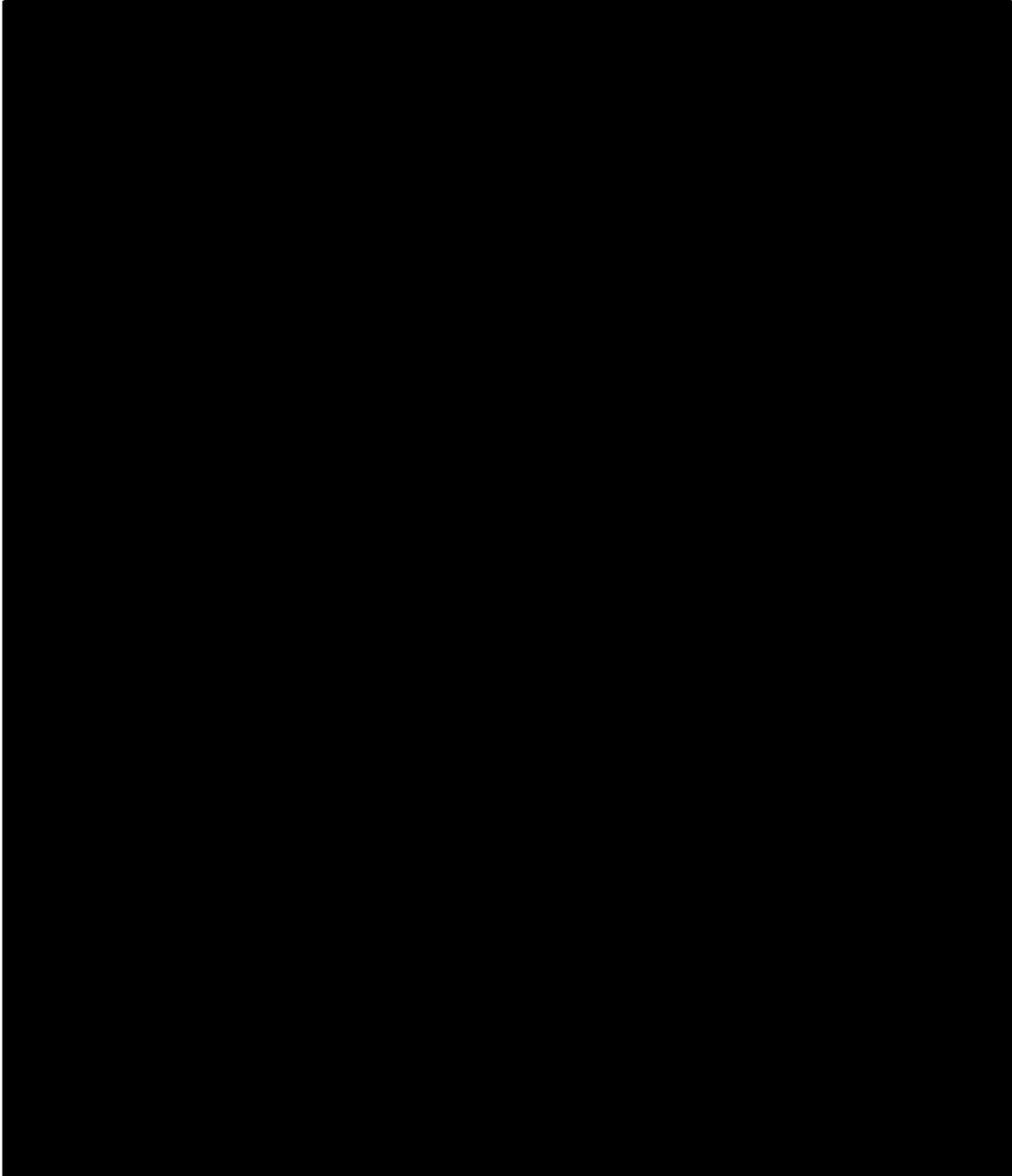


【HG-FMEA-0009】

システム重大性と定義付け [1 / 1]

システム名称 VSA(NK11V)

△			
△			
△	2001/APR/2		
	日付	作成	承認

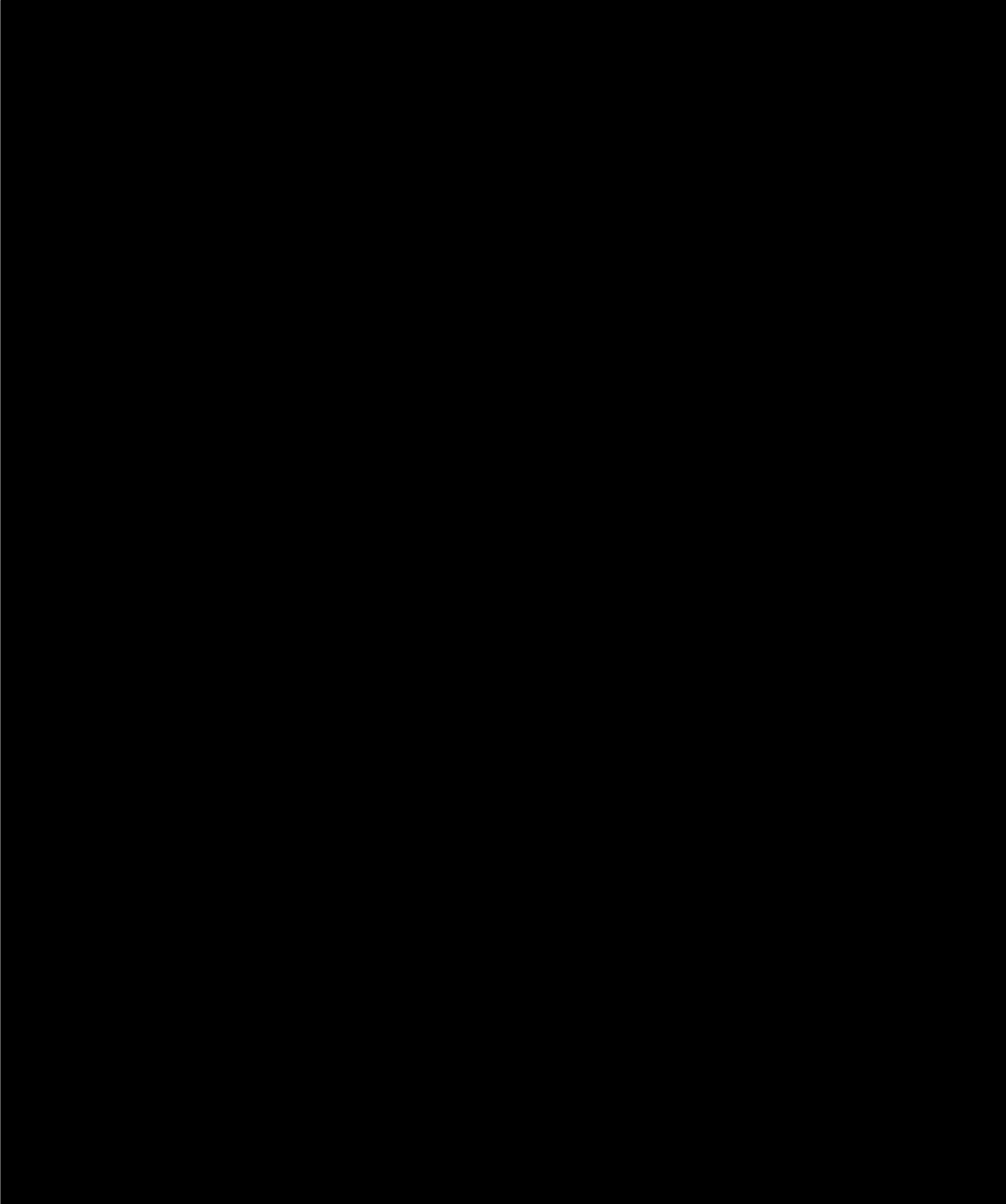


【HG-FMEA-****】

致命度マトリックス

システム名称 _____

△			
1	020904	[REDACTED]	
△ 新	011204	[REDACTED]	
	日付	作成	承認



【HG-FMEA-****】

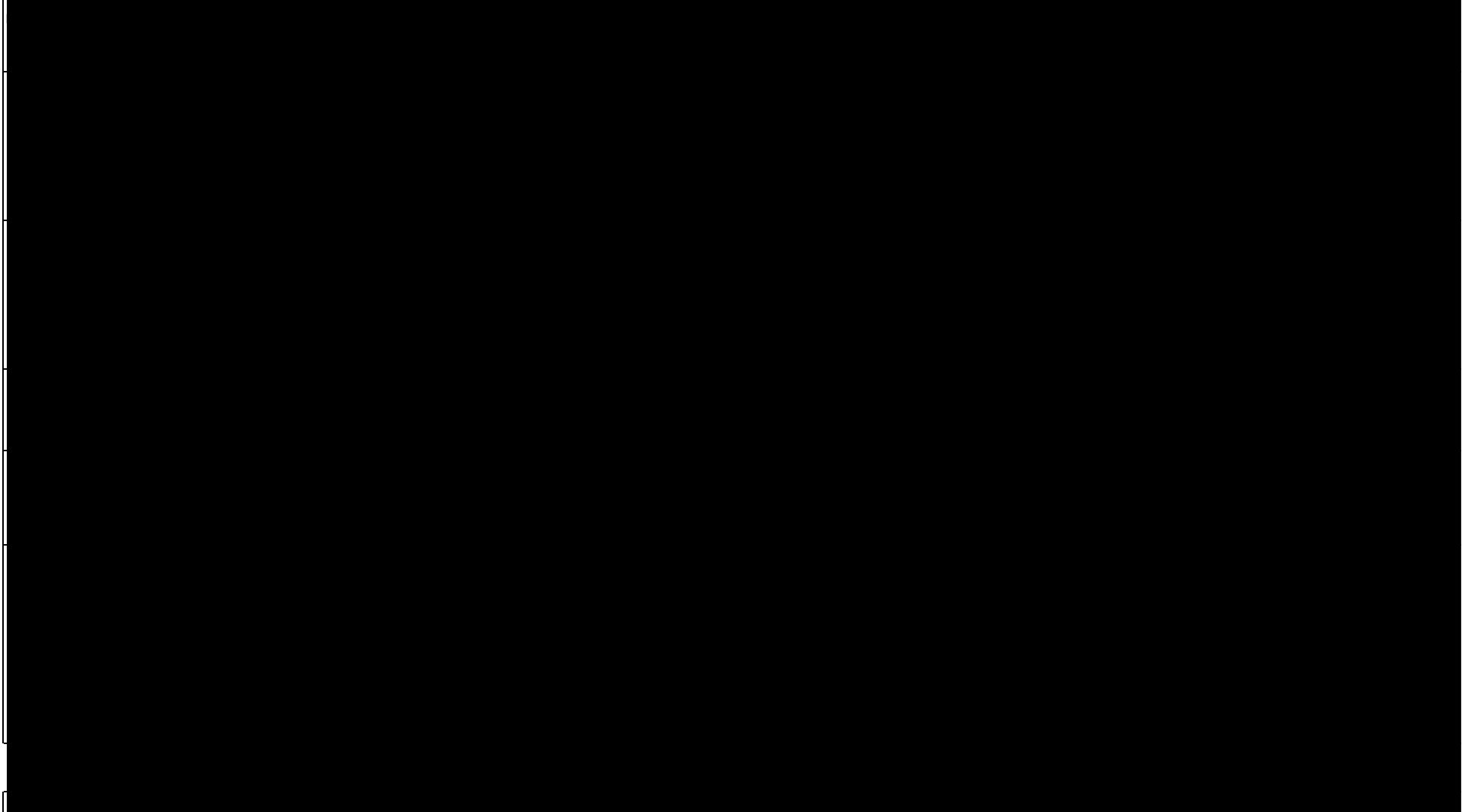
システム名称 VSA

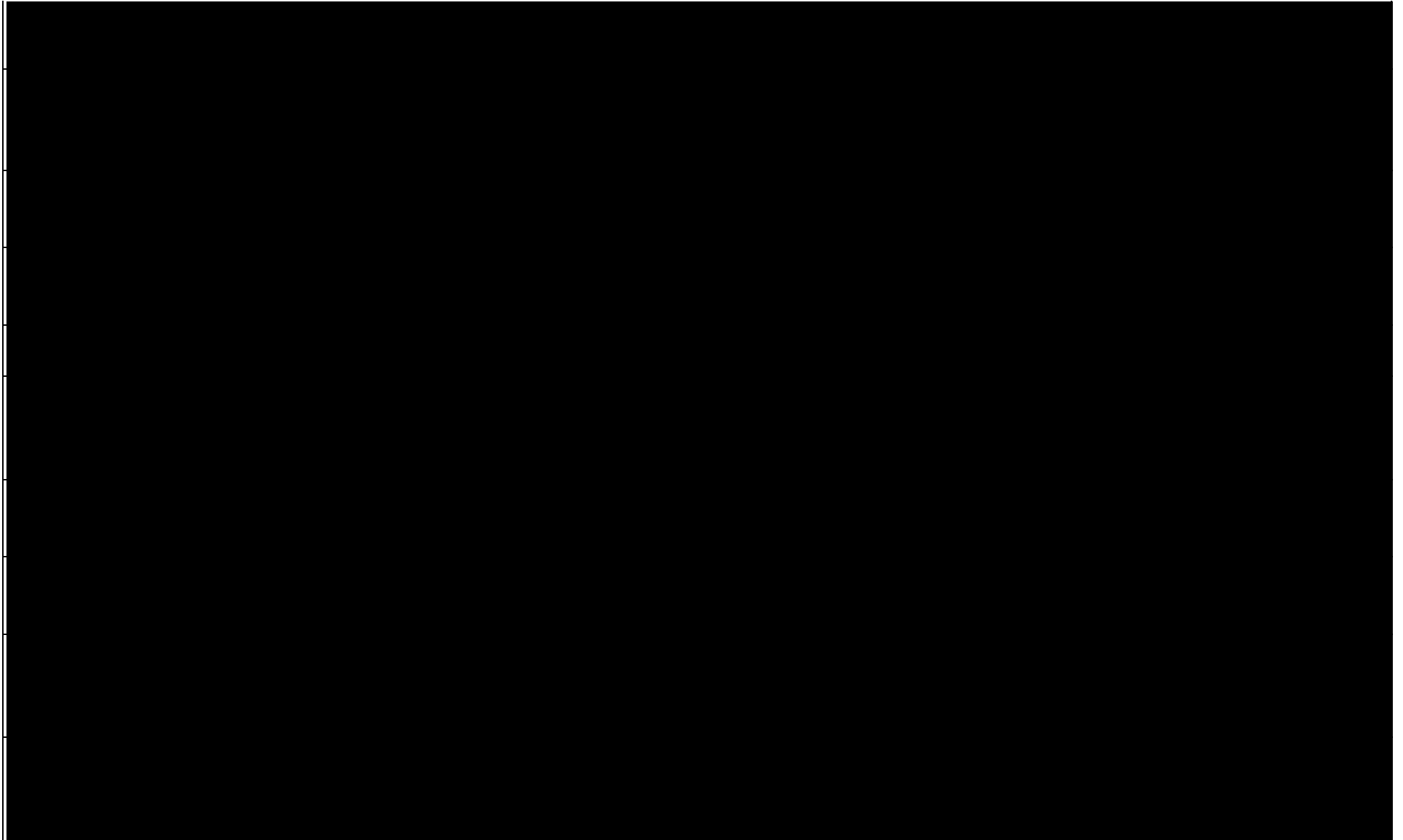
FMEA表 [1 / 26]

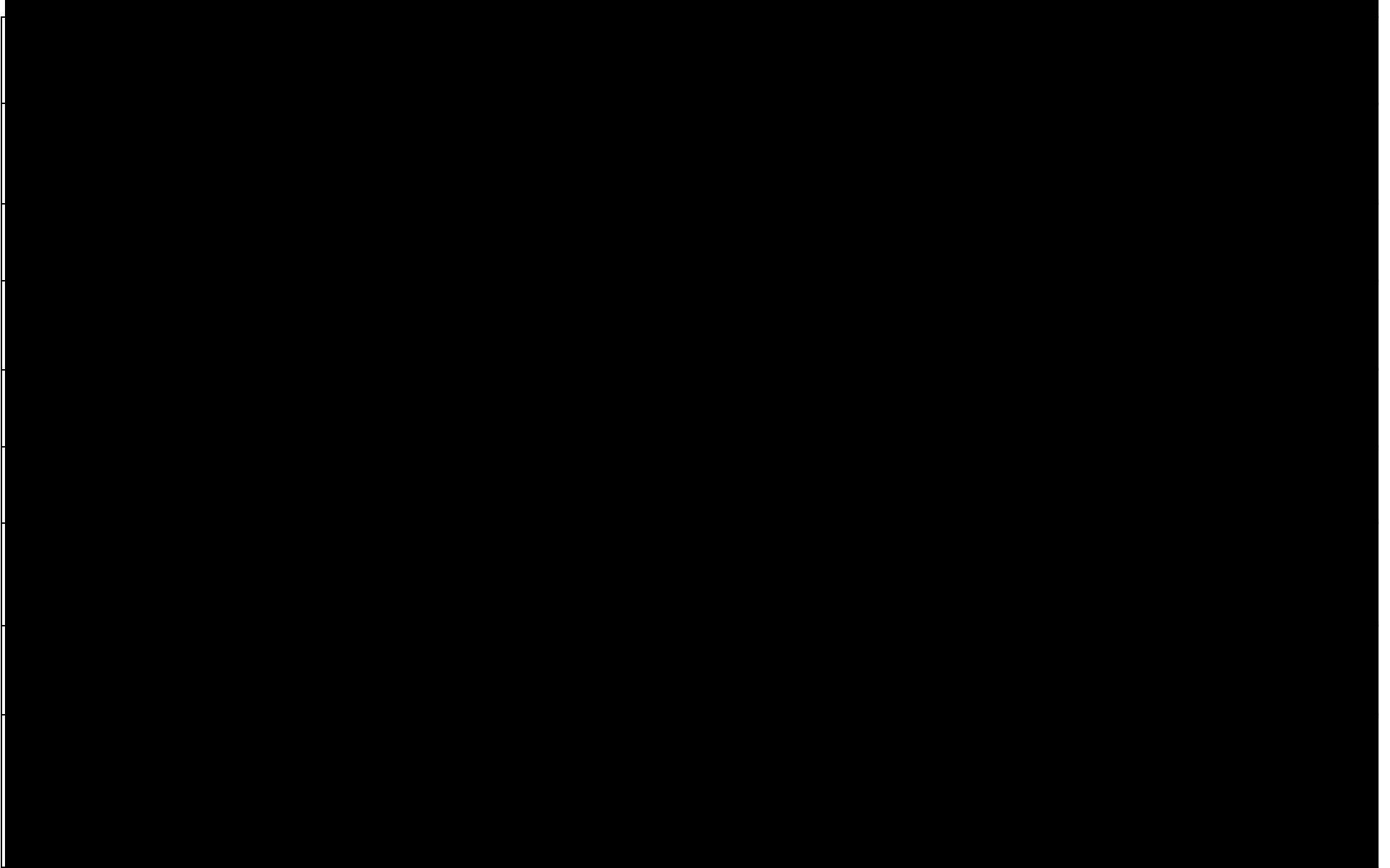
コンポーネント ヨーレートセンサ & Gセンサ (メイン基板)

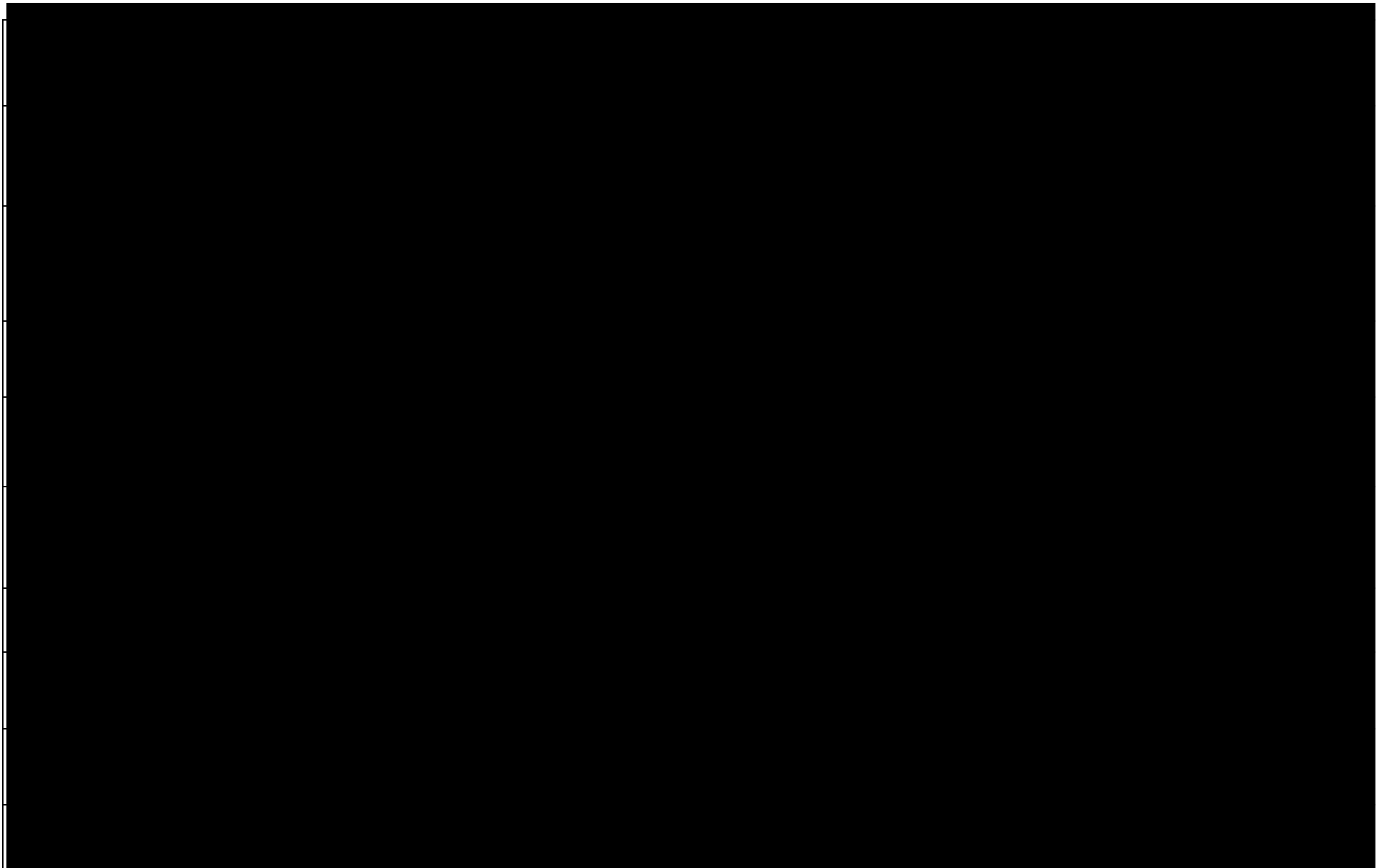
△			
↑	'020904		
新	'011204		
	日付	作成	承認

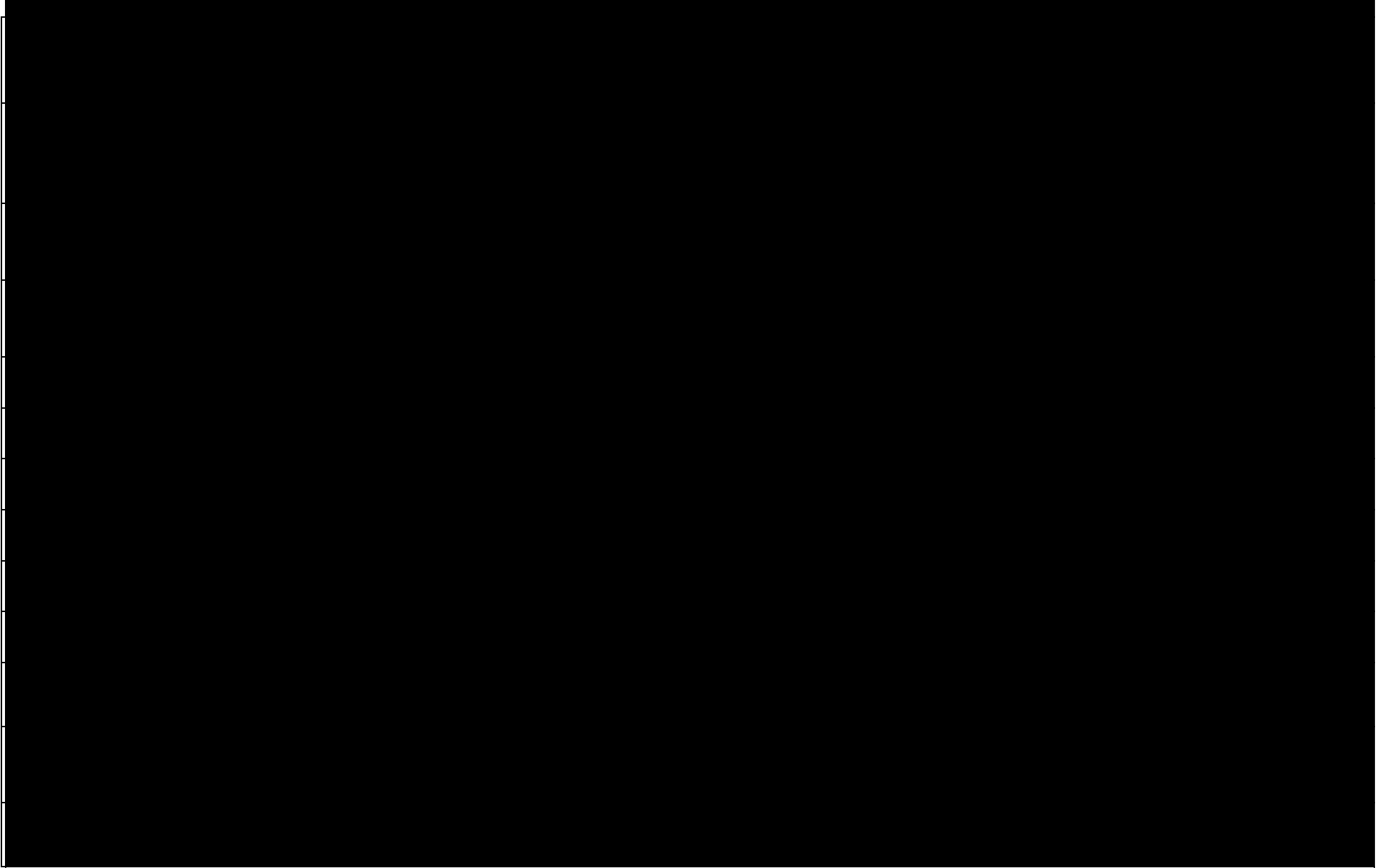
①	②	③	④	故障の影響	⑦	⑧	⑨	⑩	⑪ 対策	⑫
---	---	---	---	-------	---	---	---	---	------	---

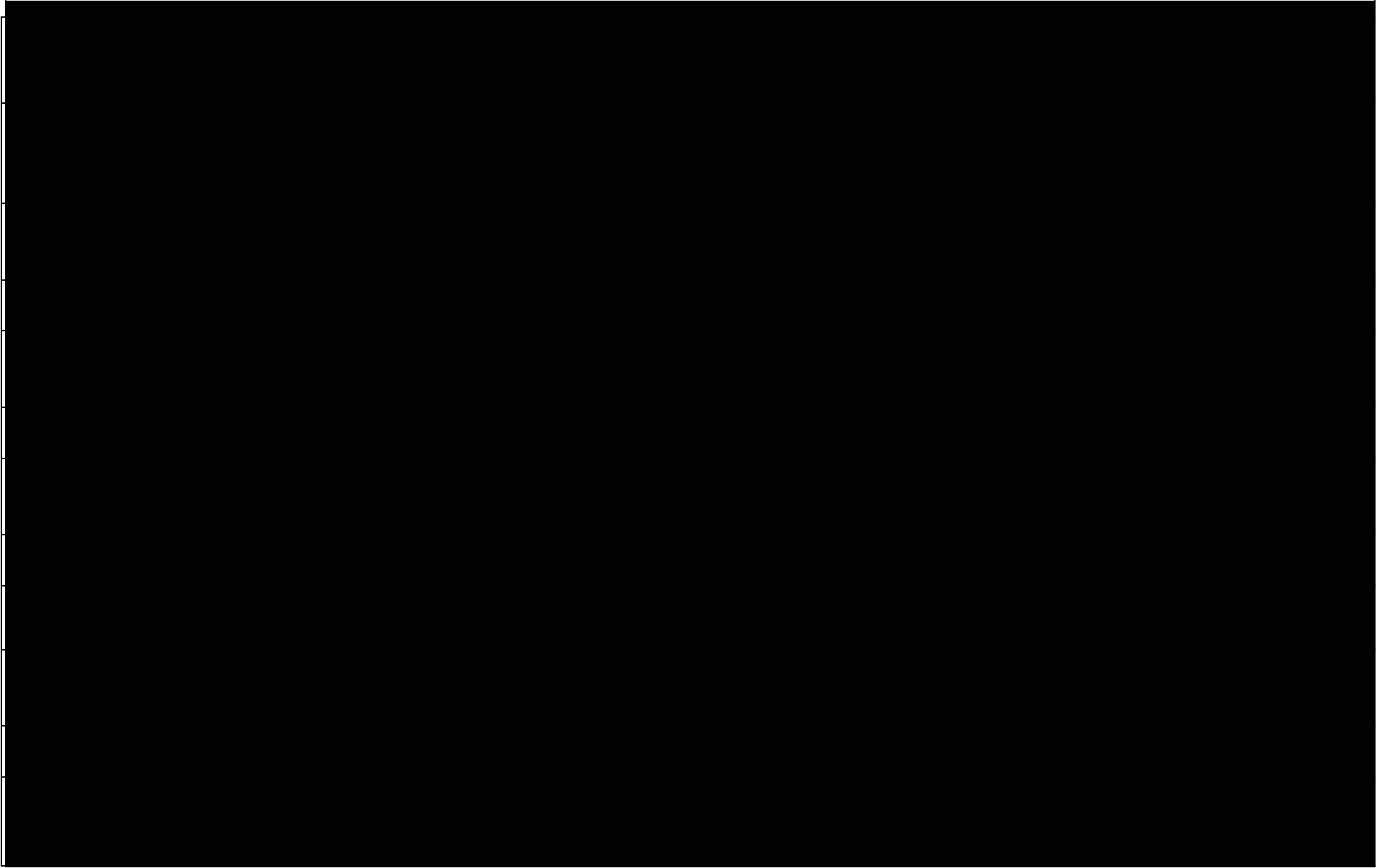


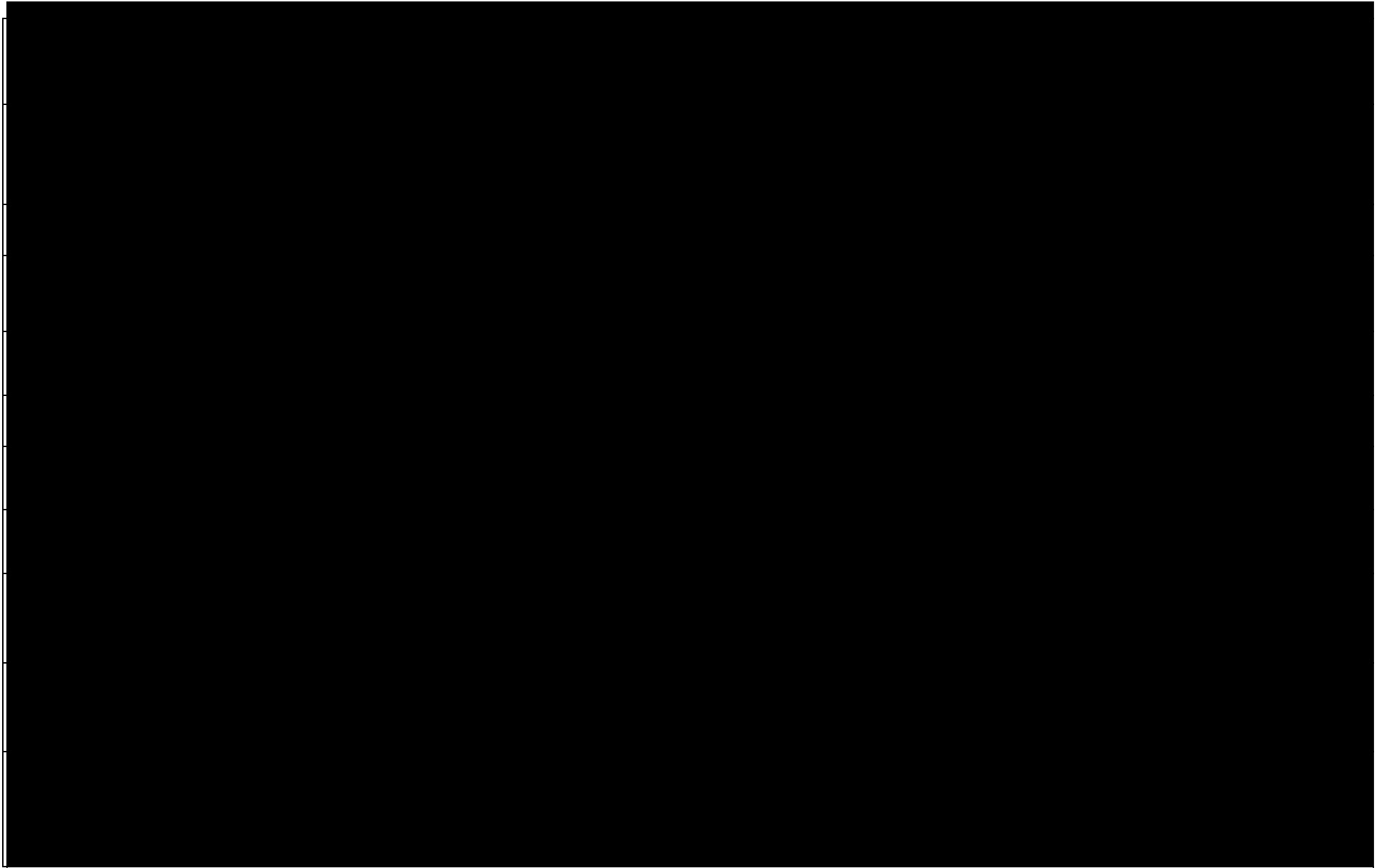


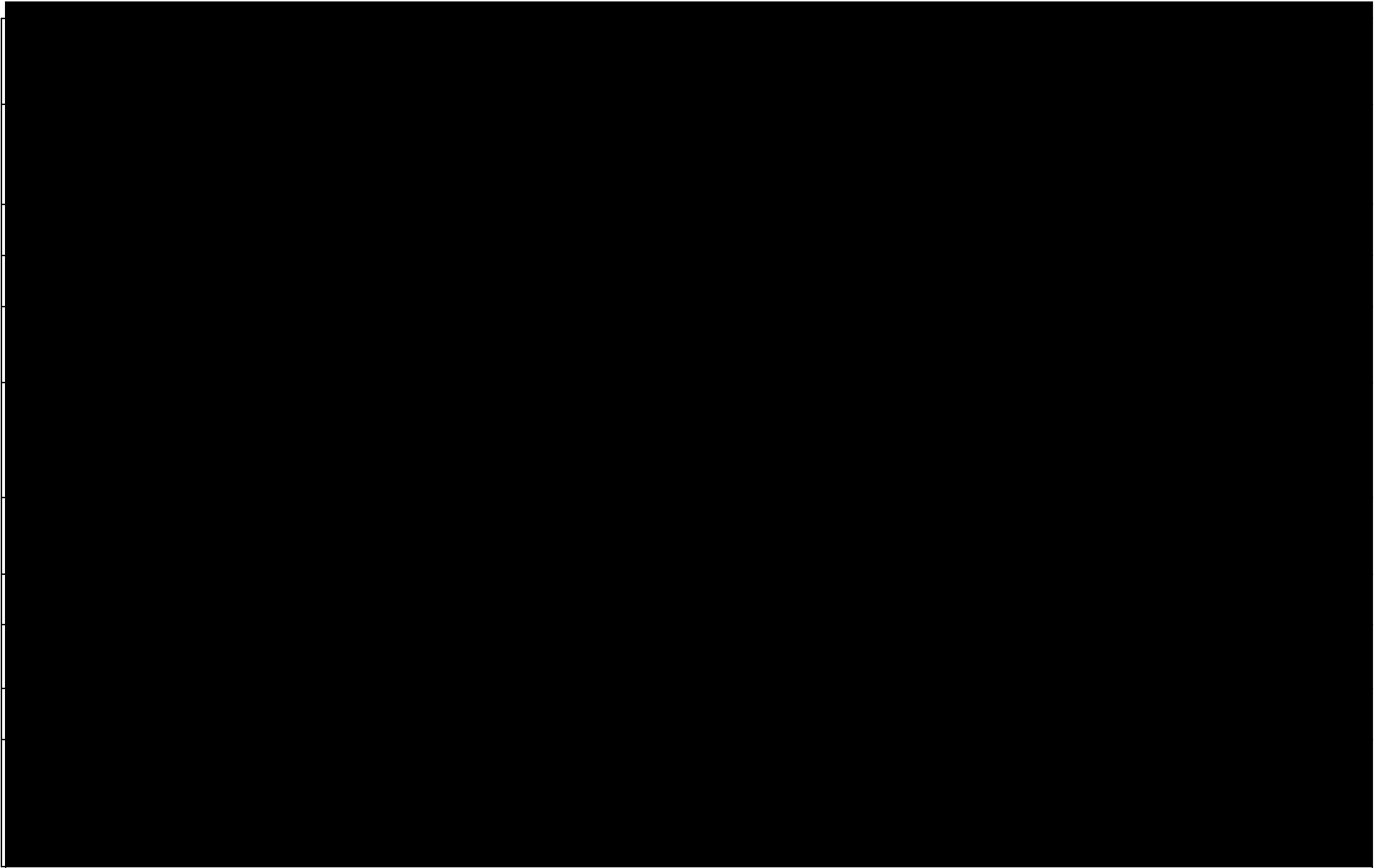


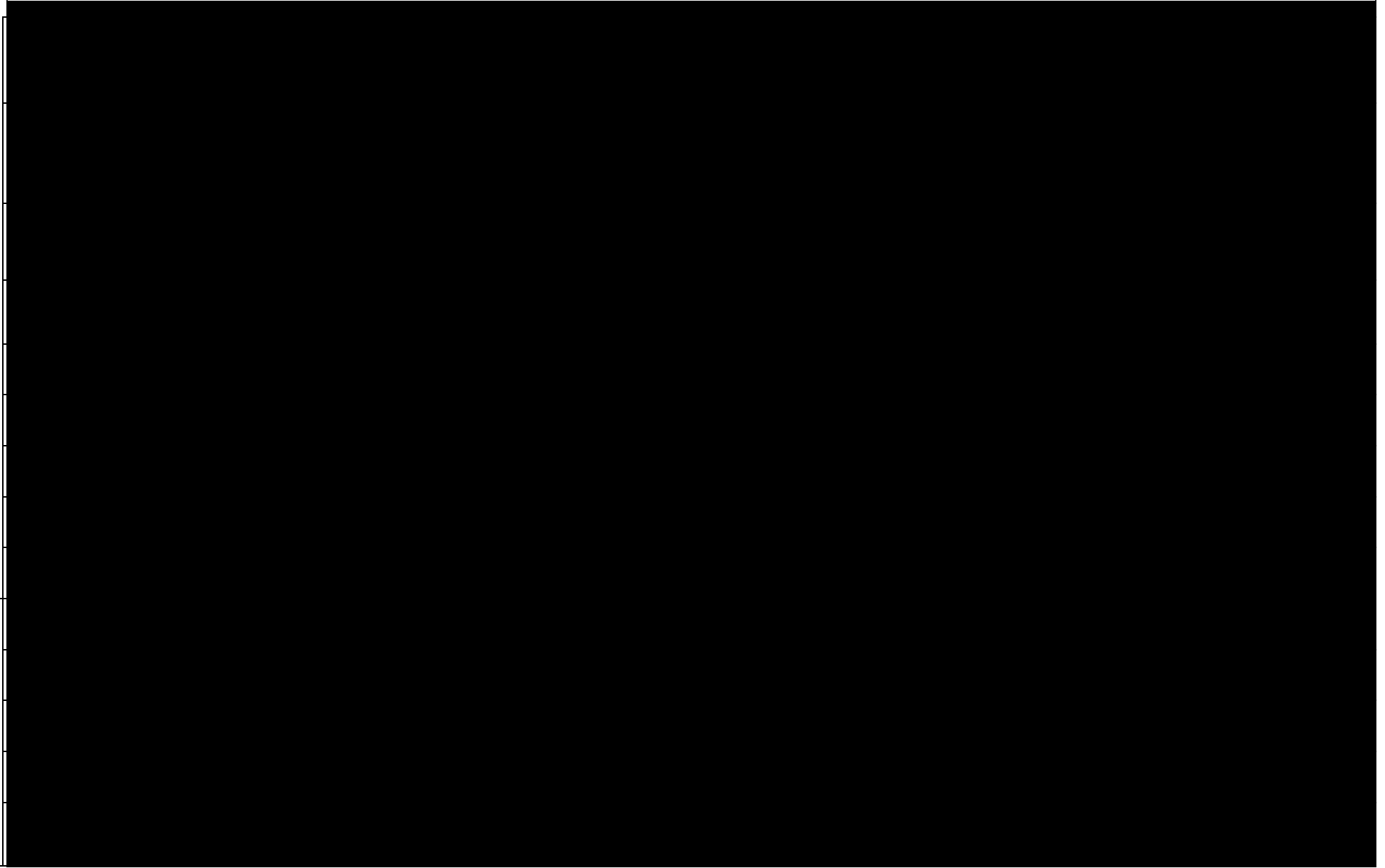


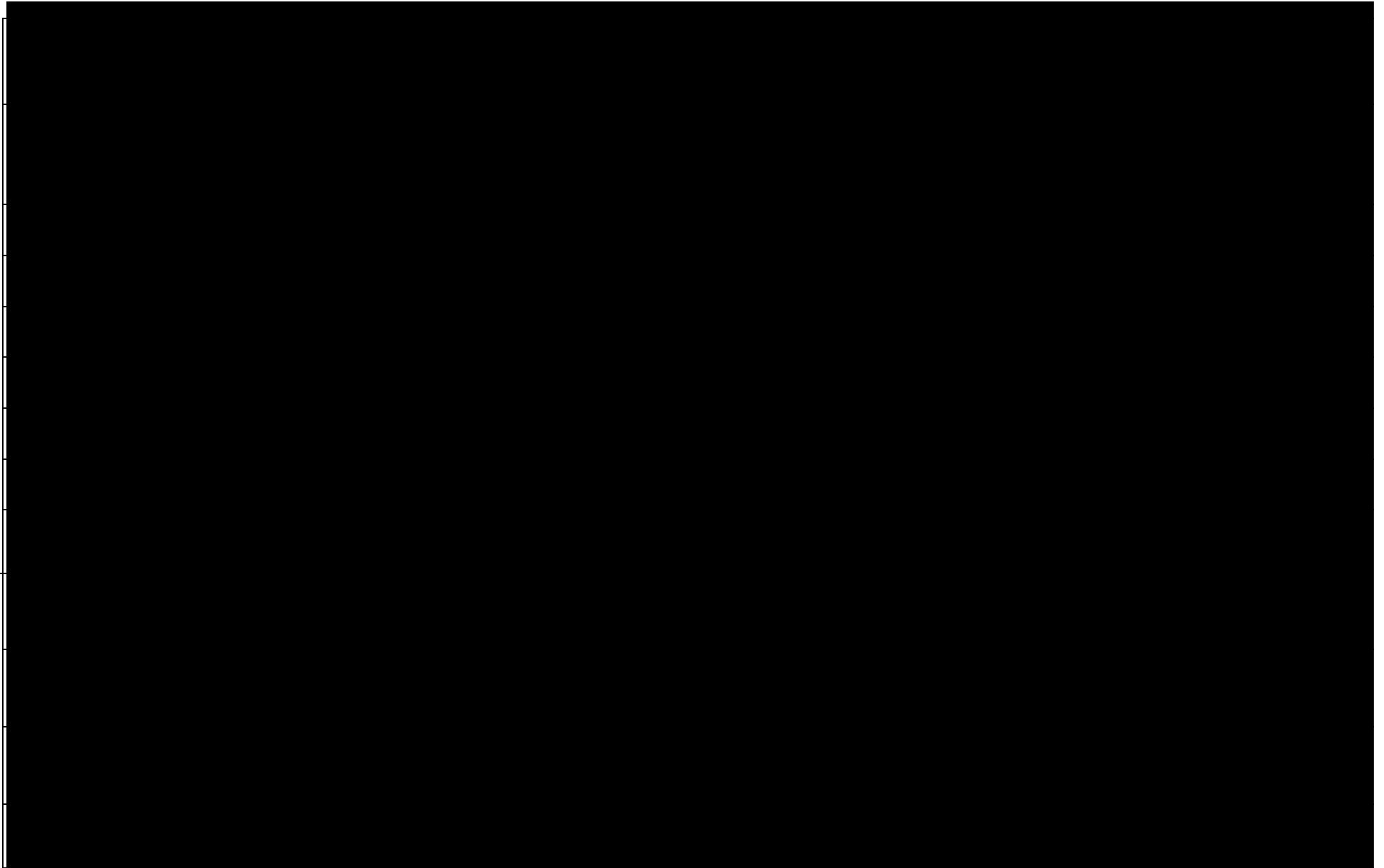


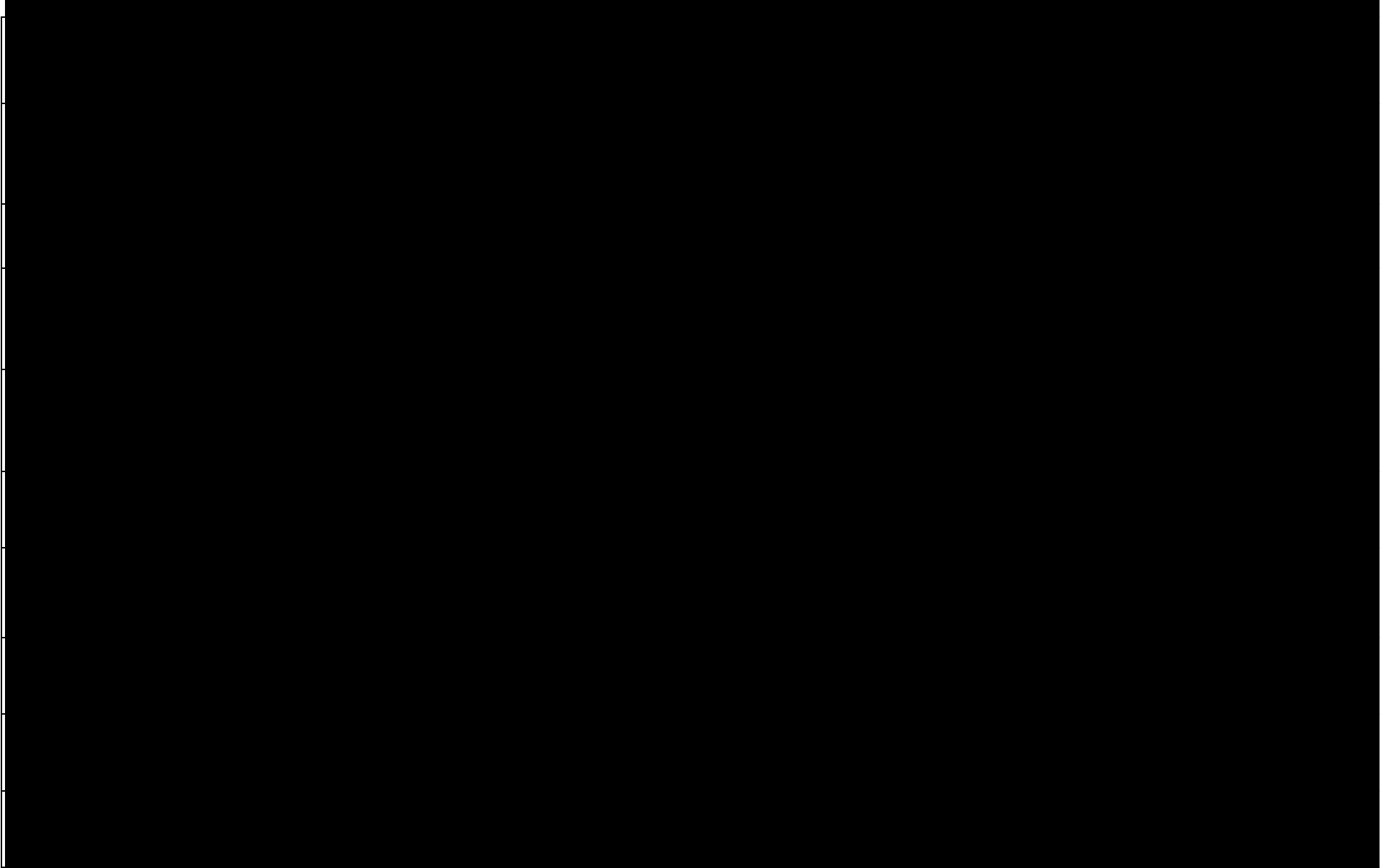


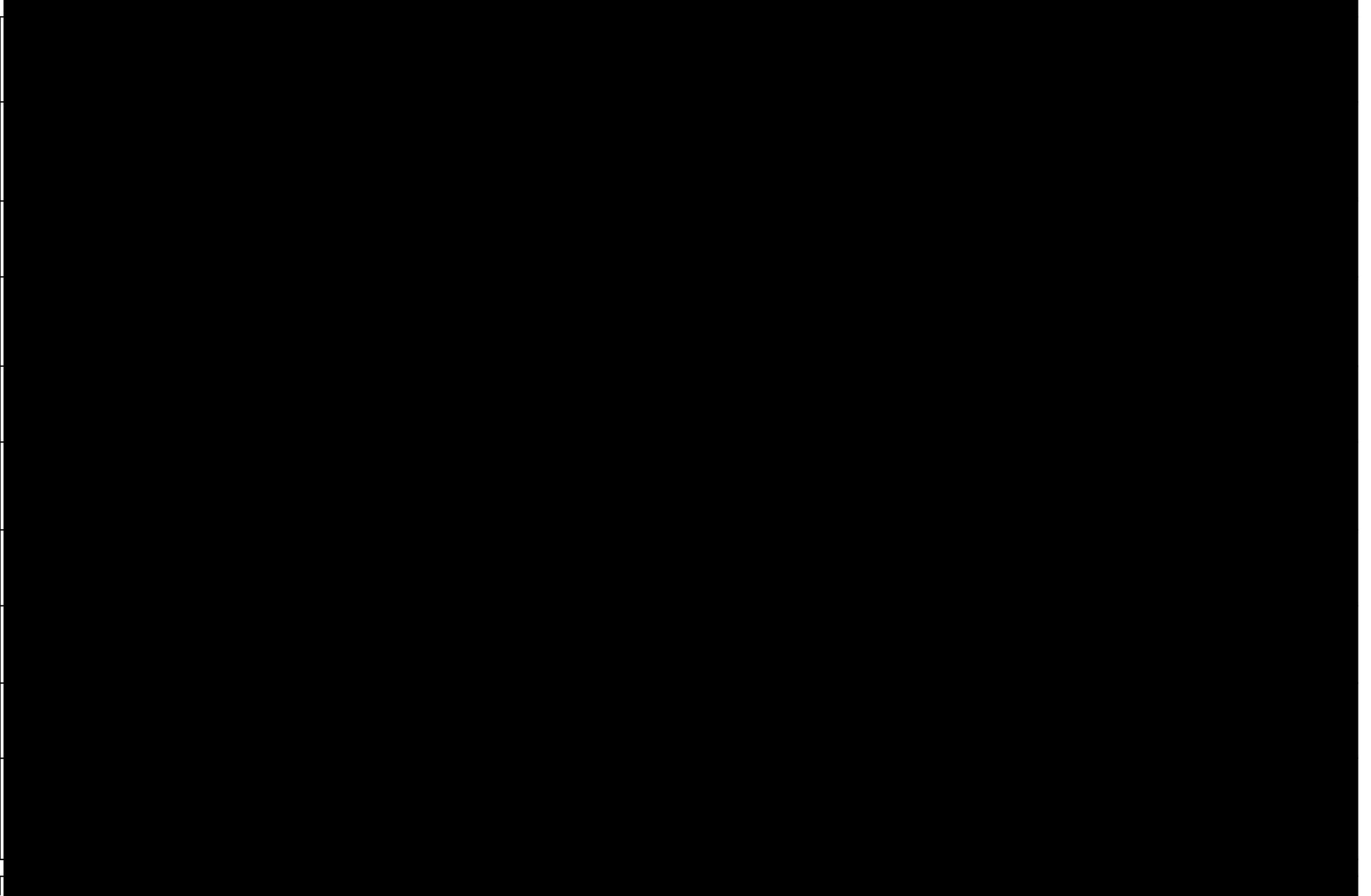


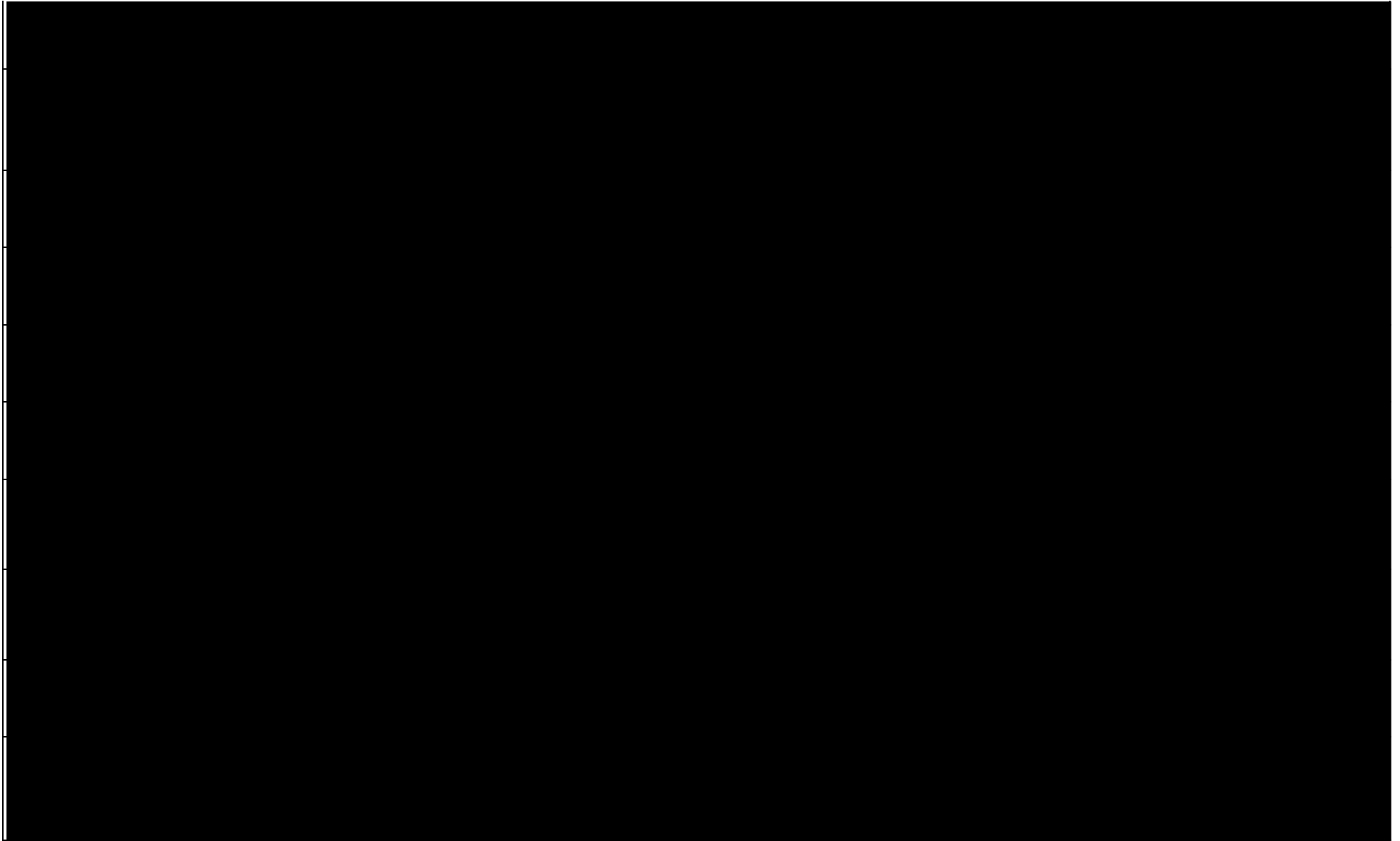


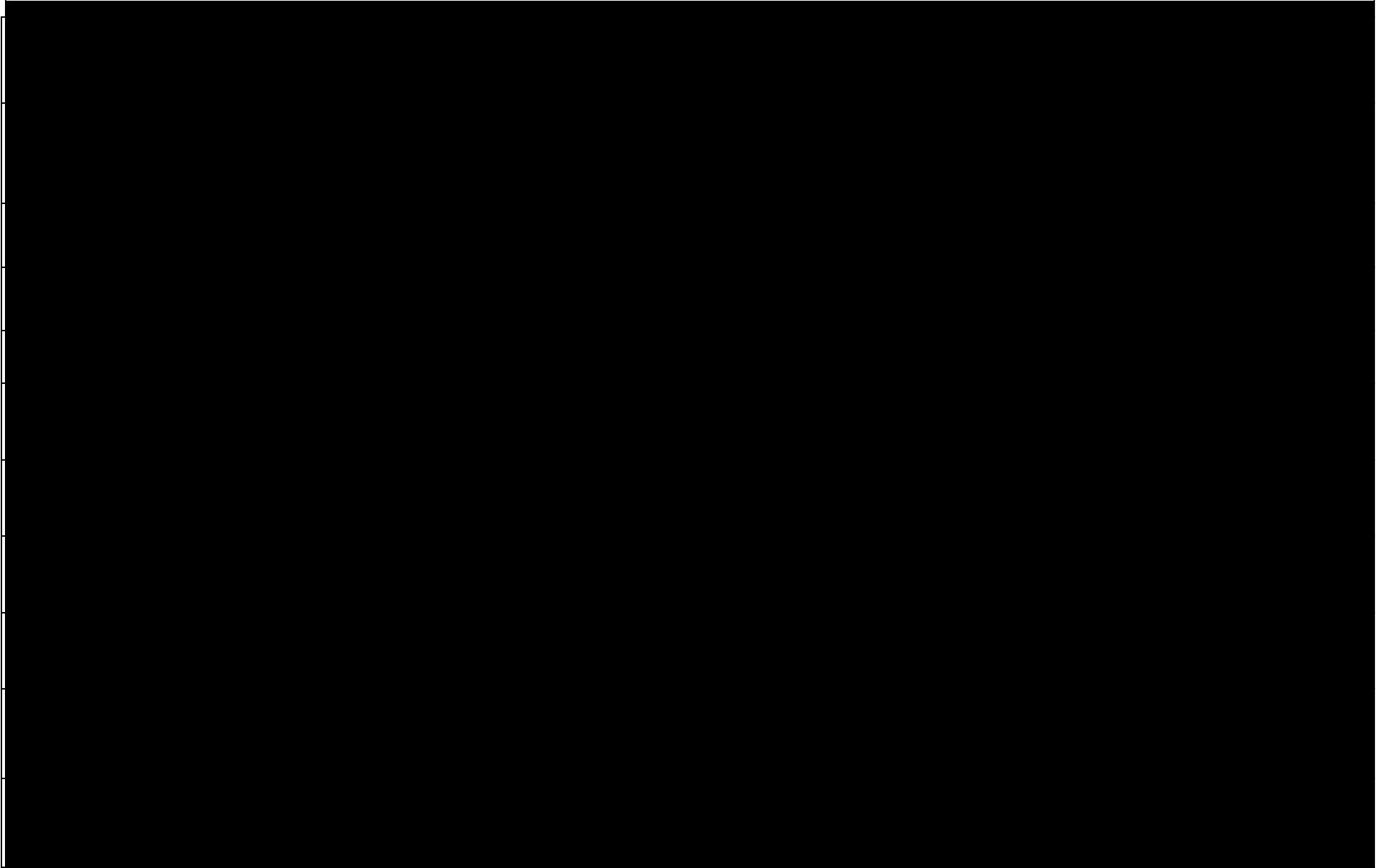


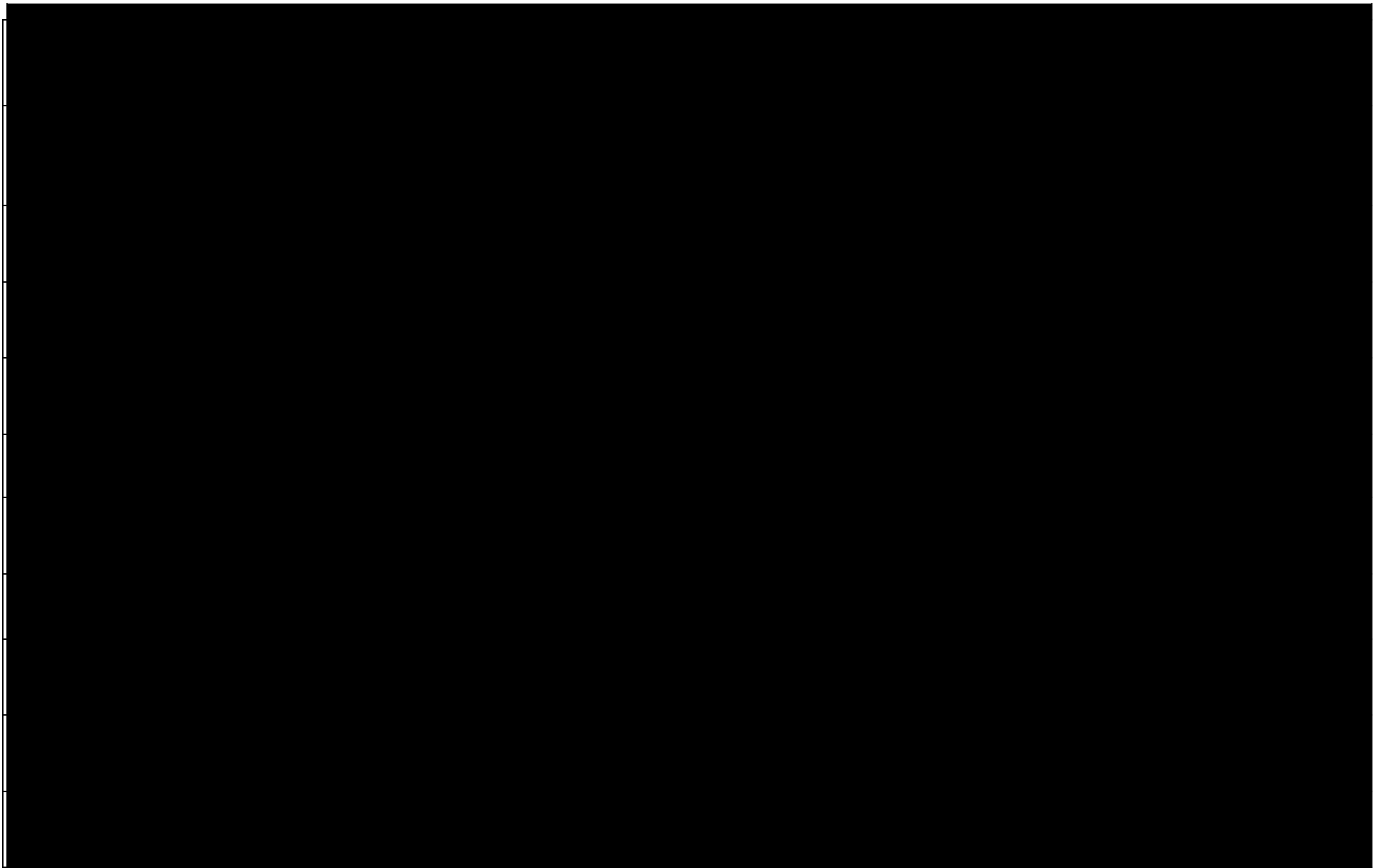


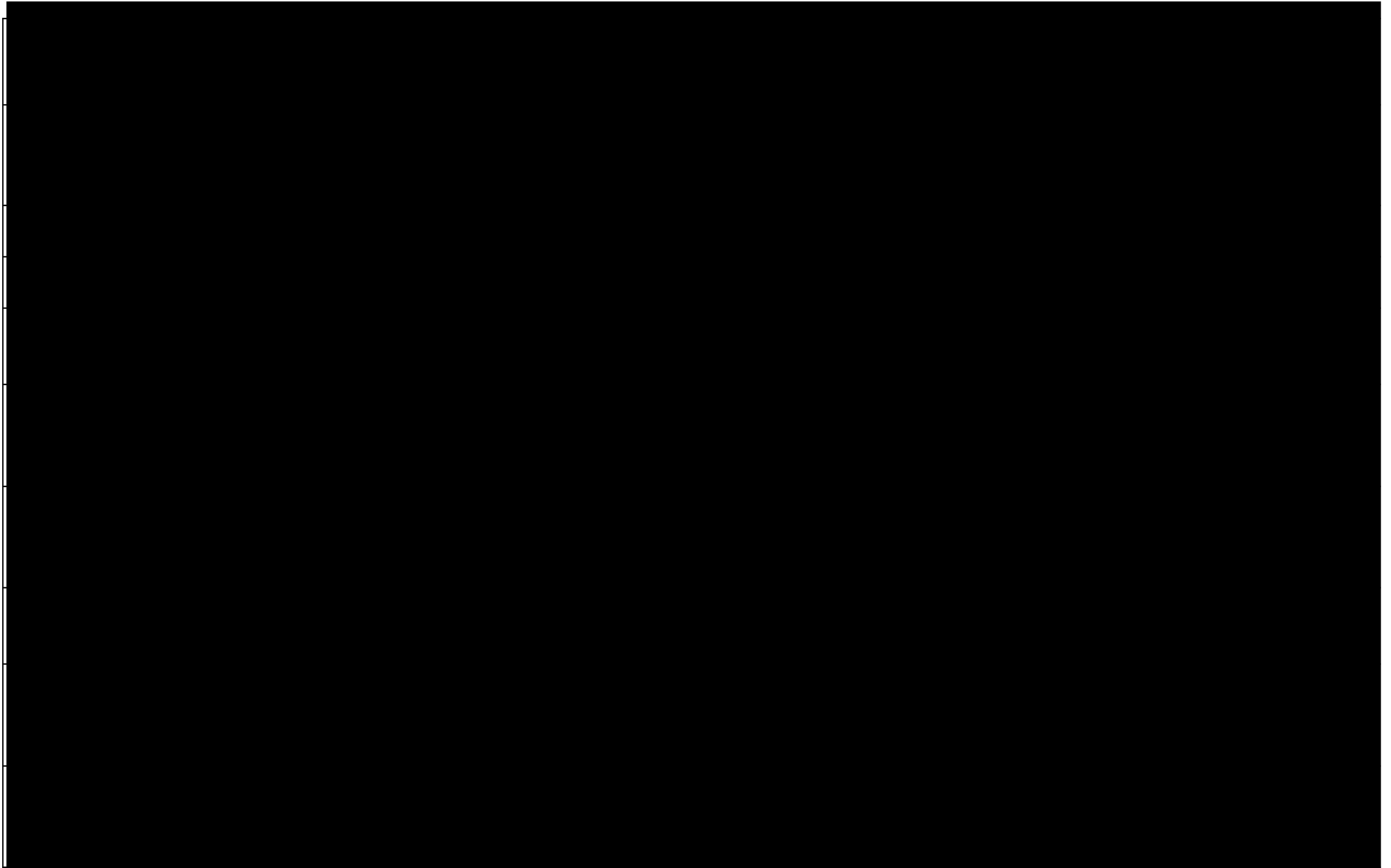


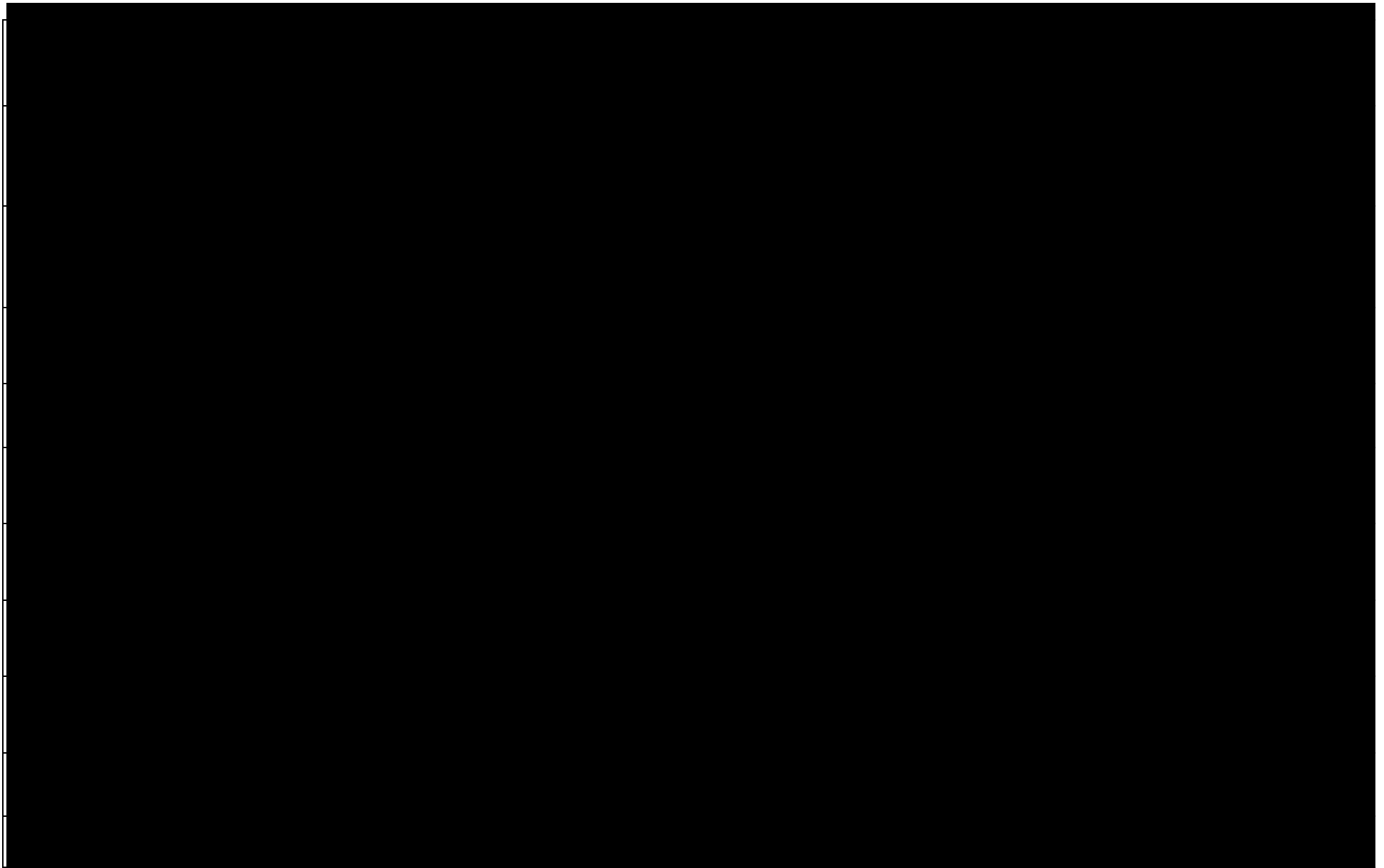


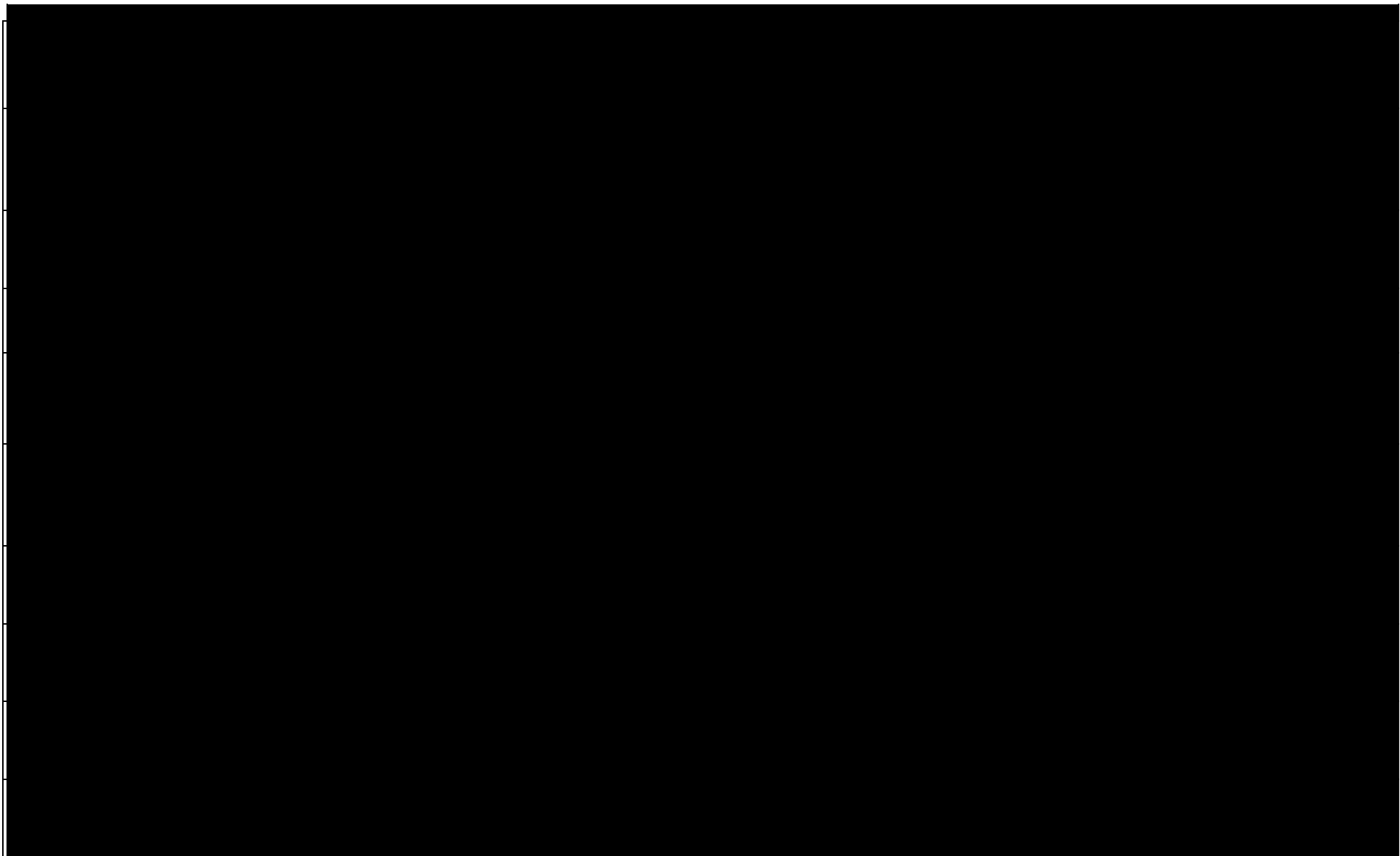


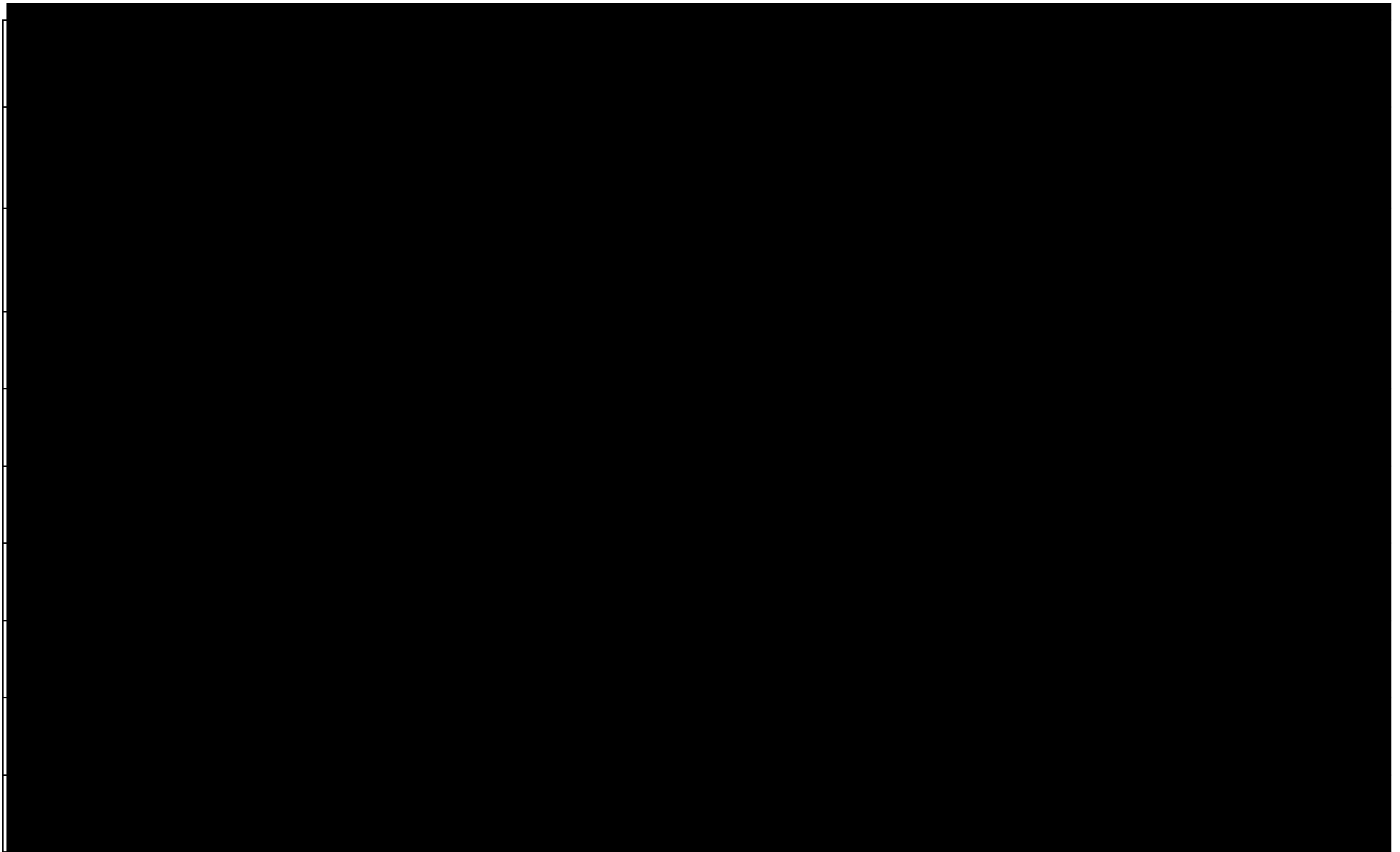


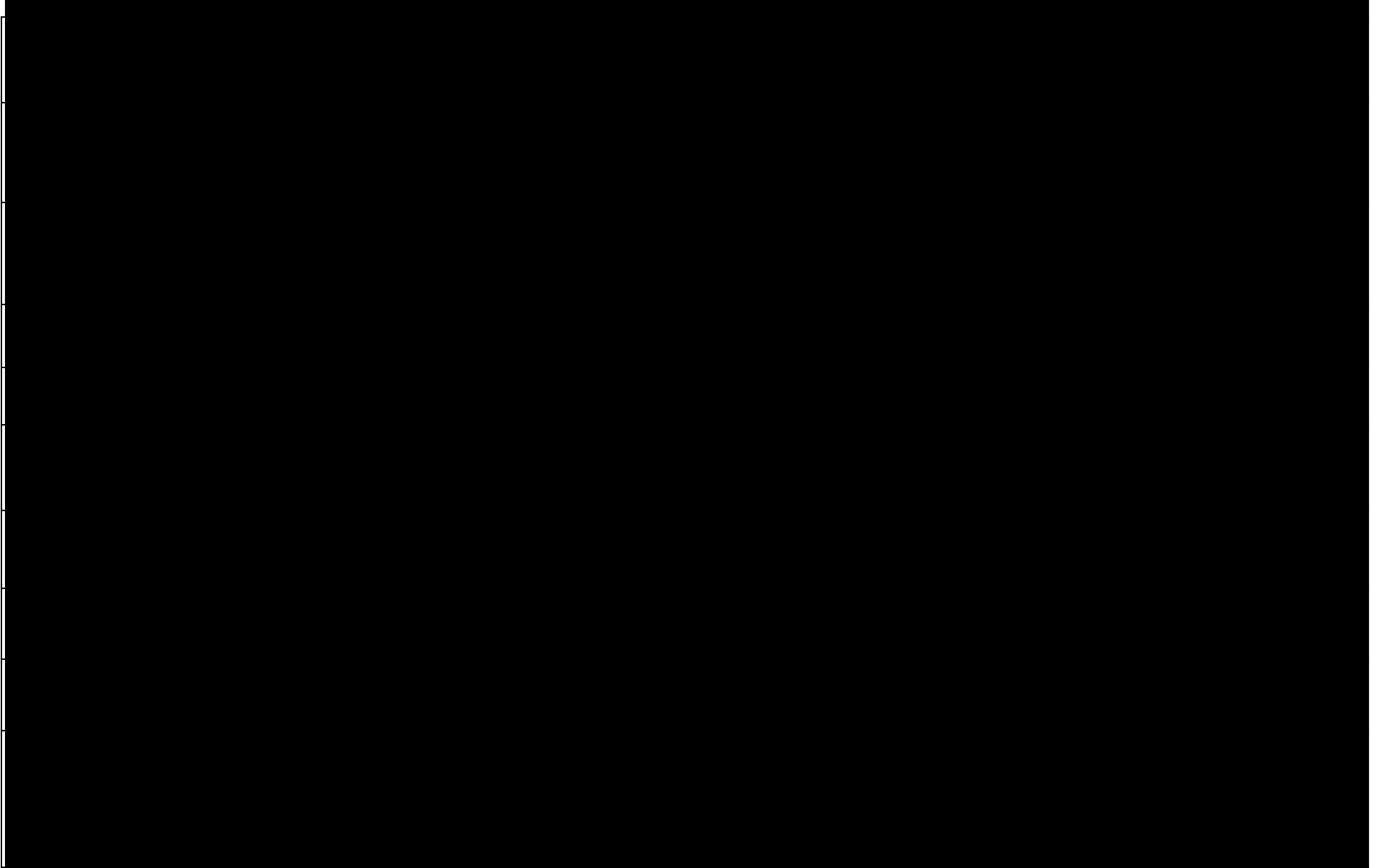


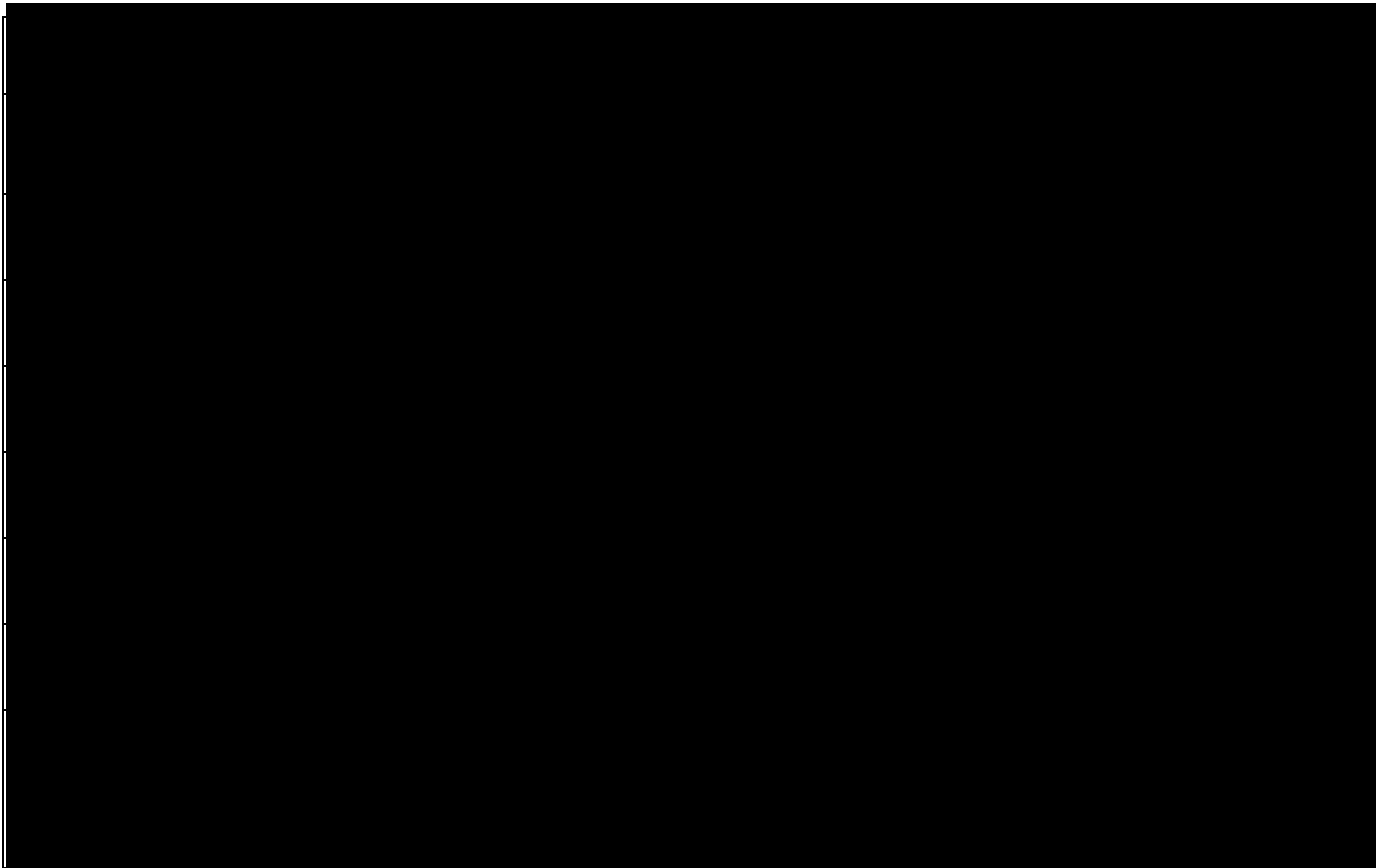


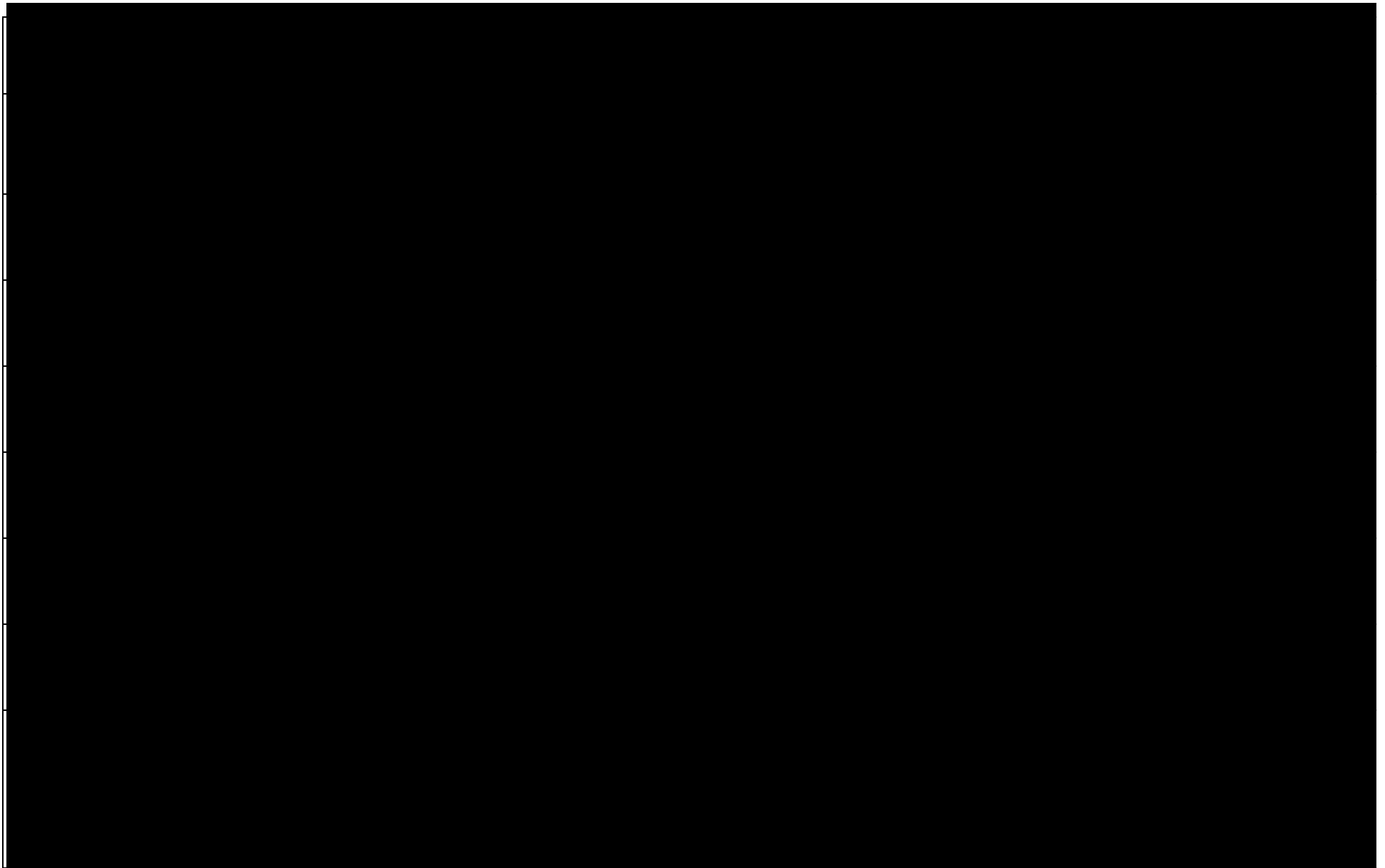


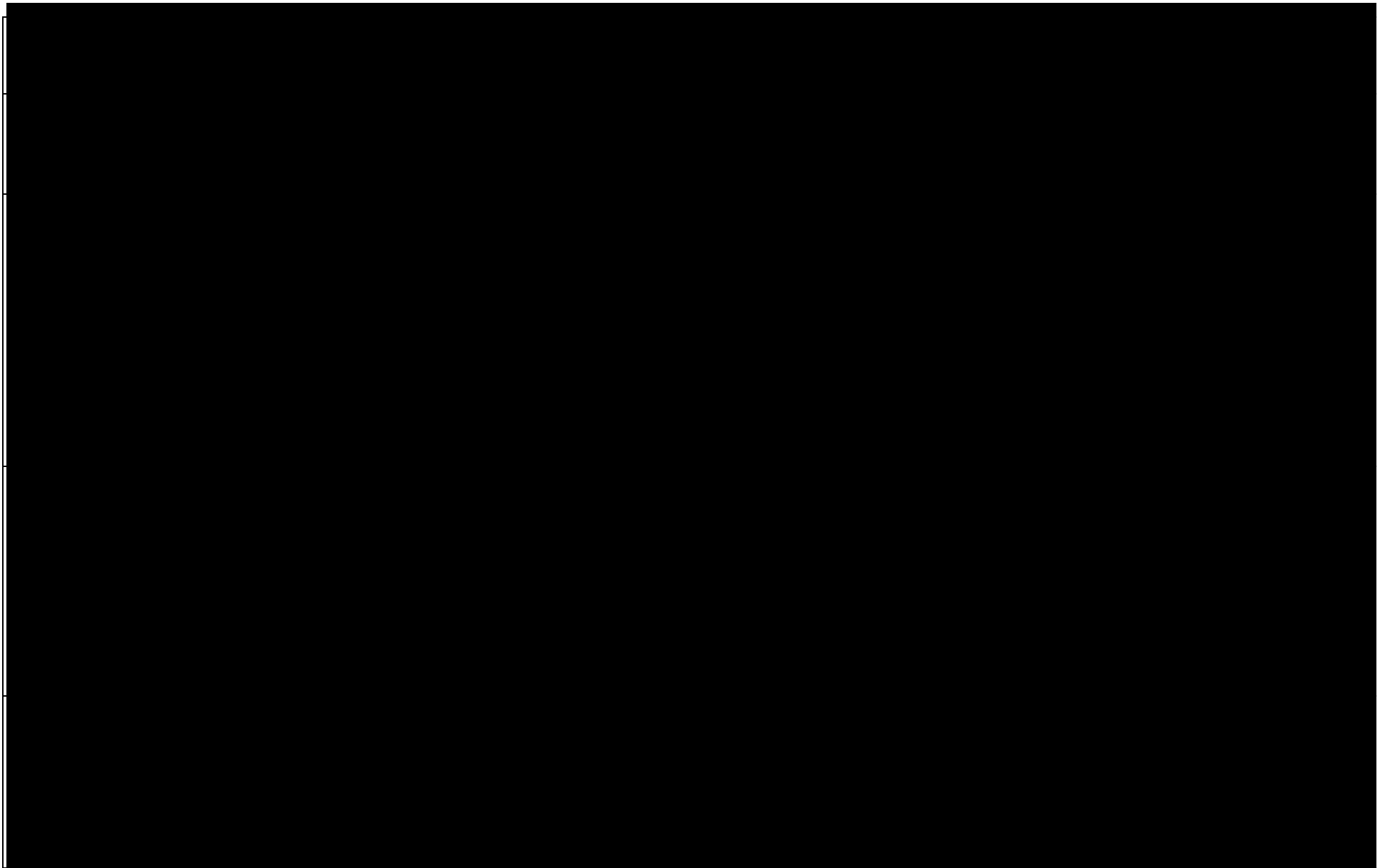


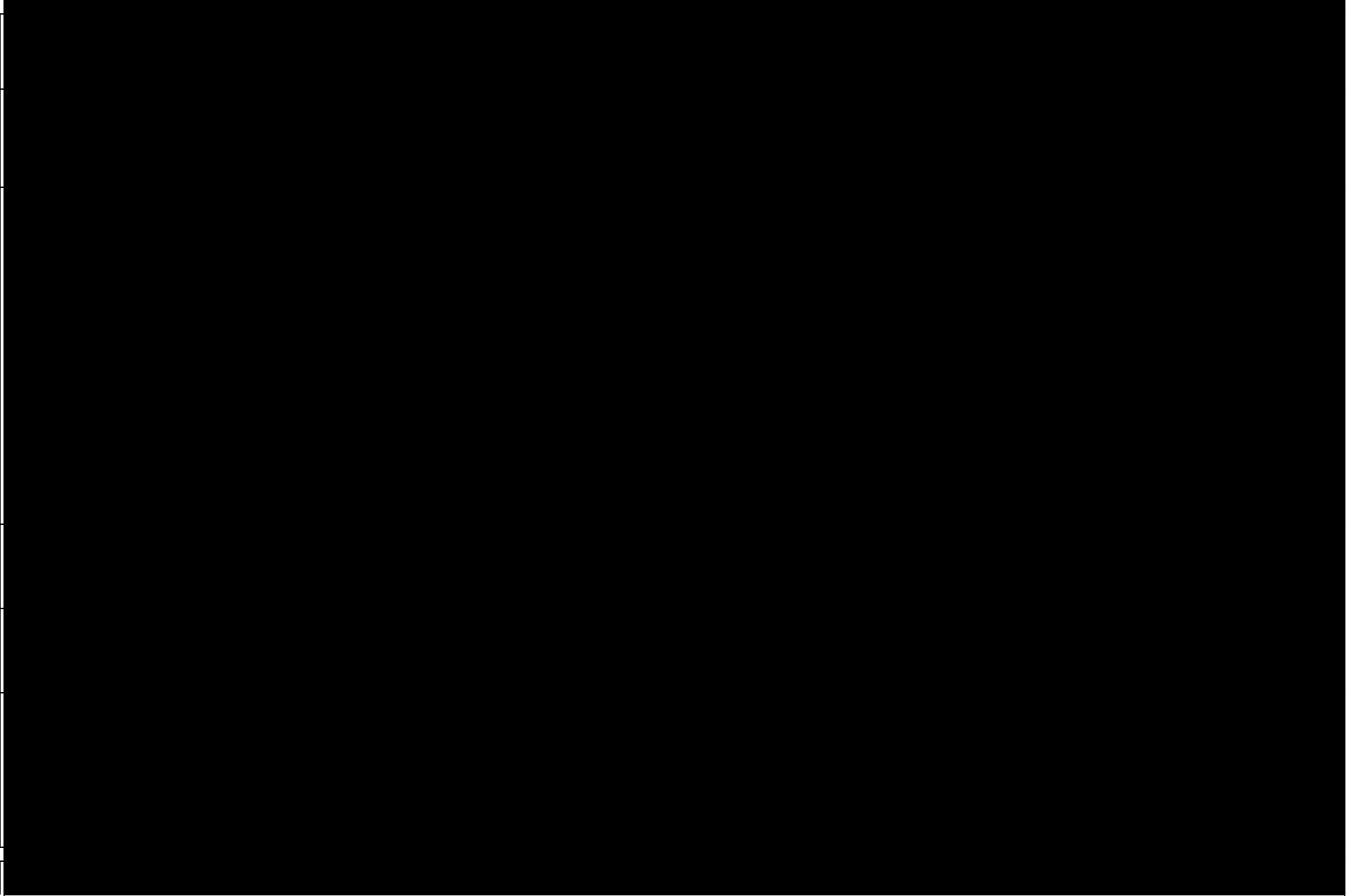


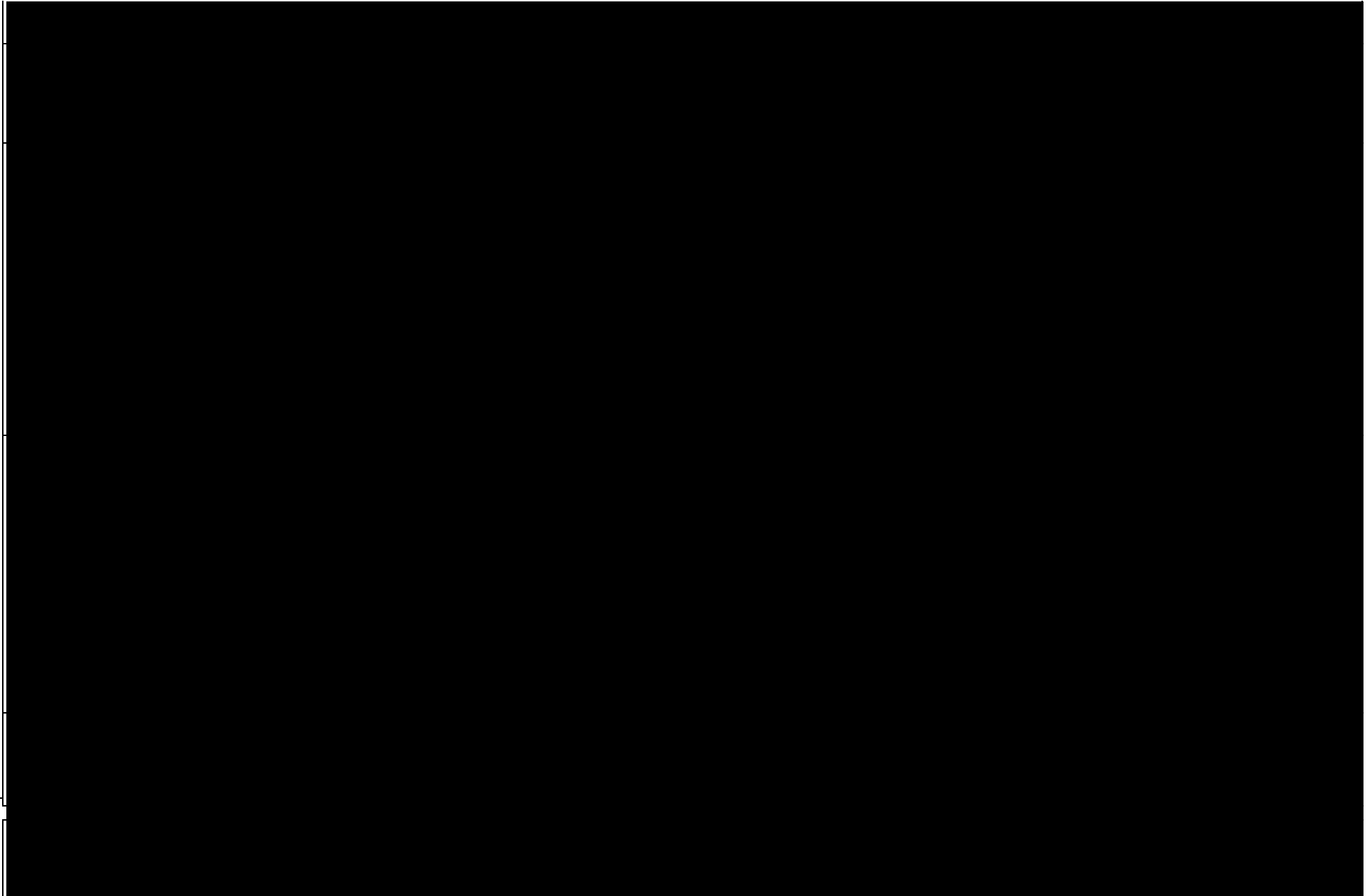


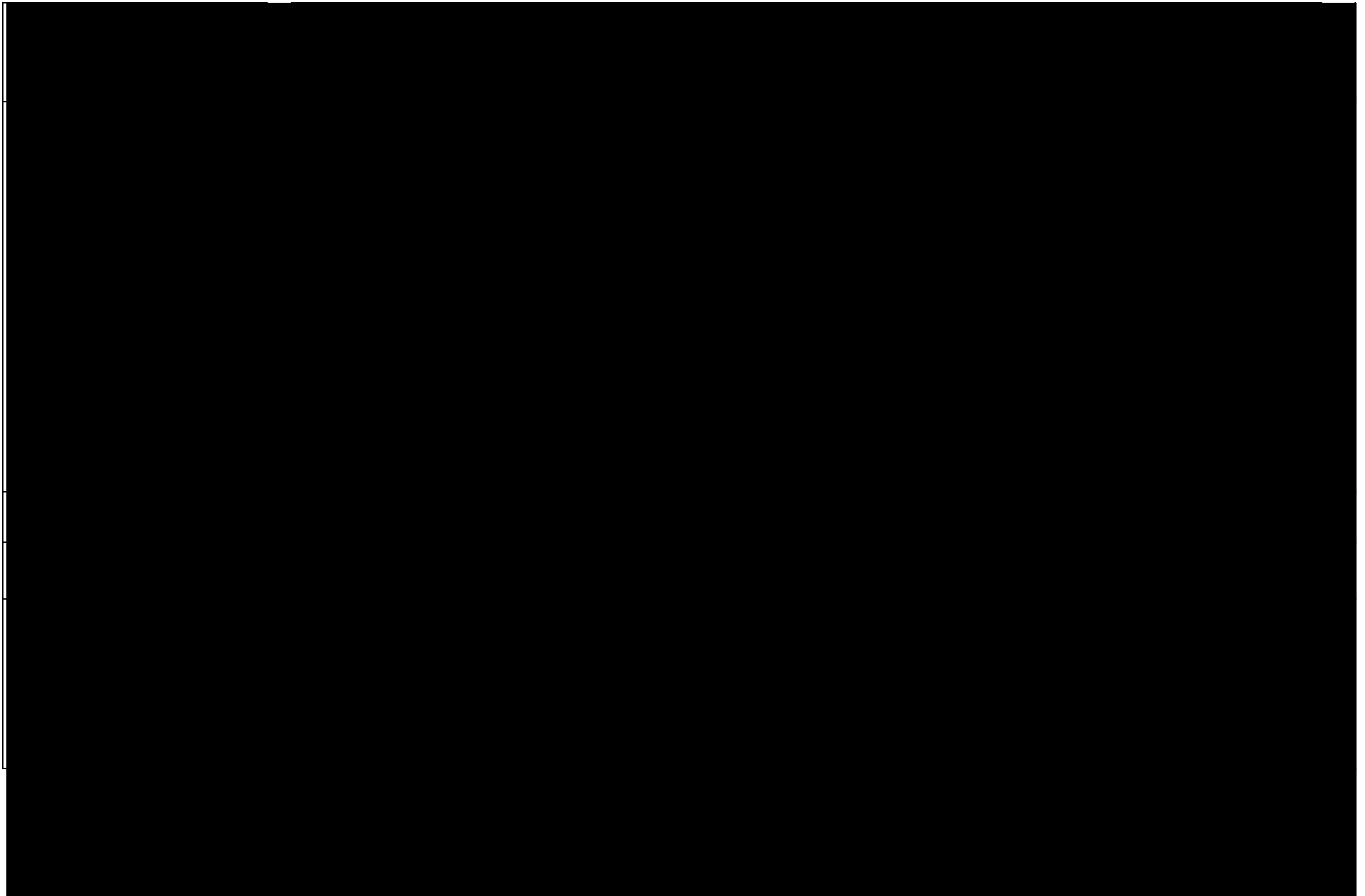


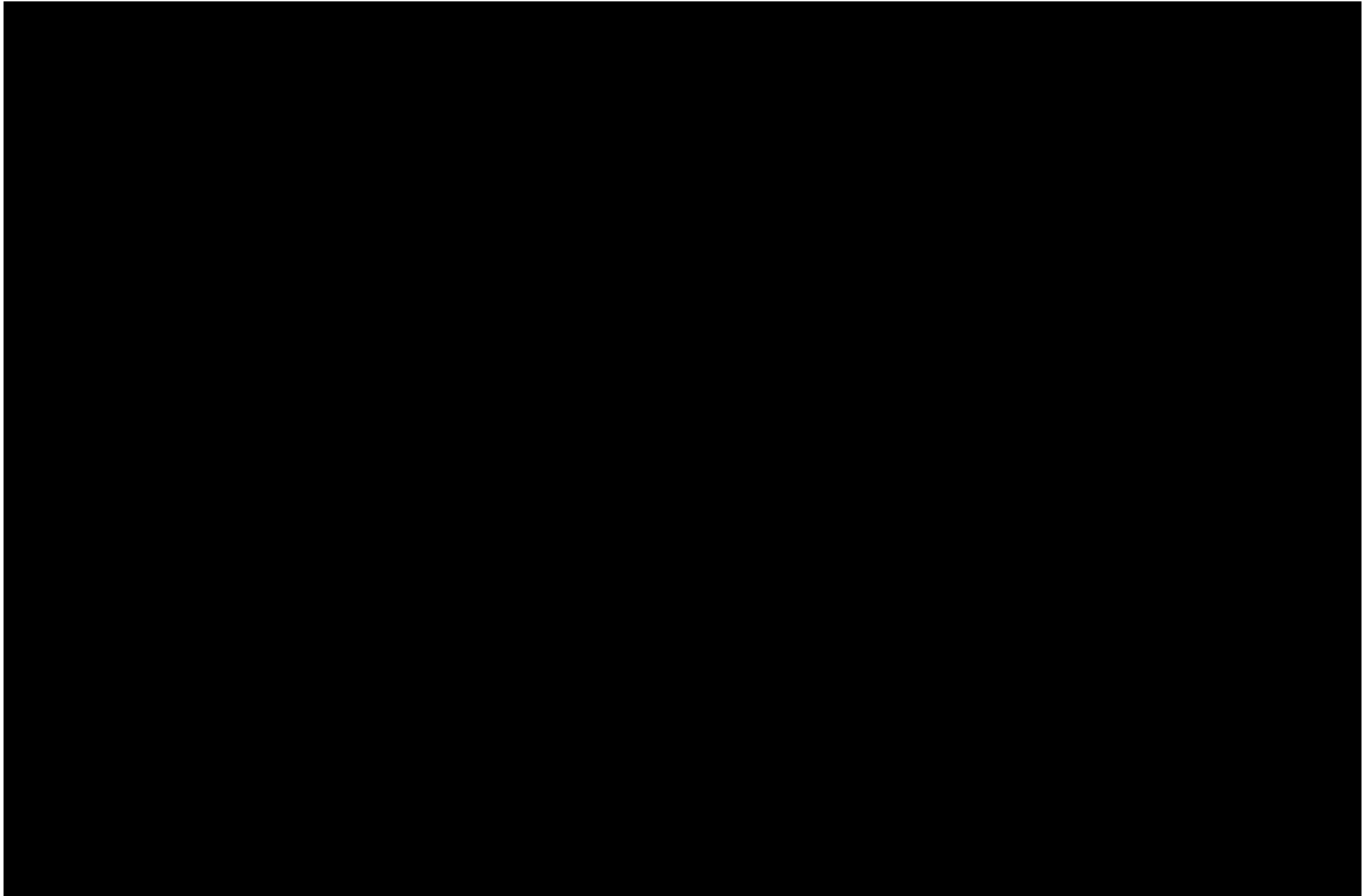


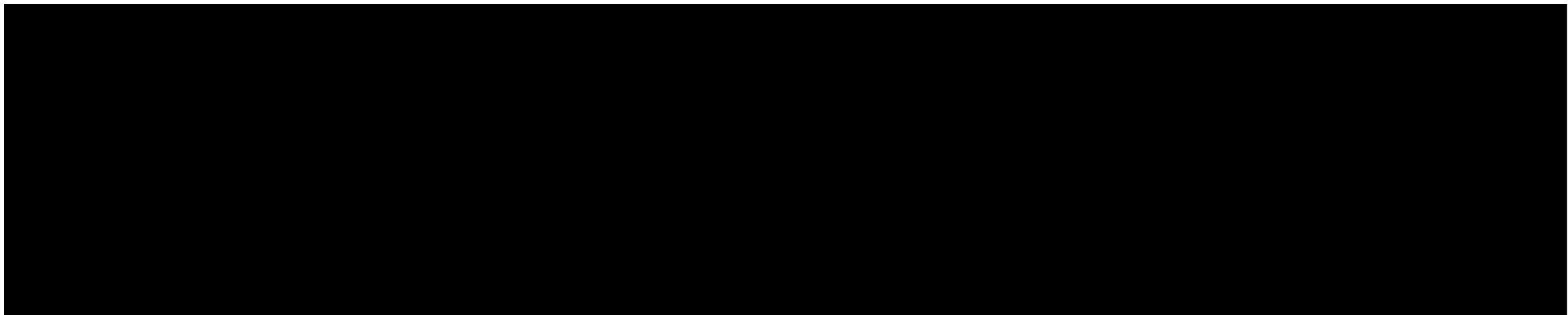












DP12-002

HONDA

8-3-2012

ATTACHMENT

Q14

14C

NK11ATV _FTA 01NOV08_E

REDACTED

FTA Report

Subject: VSA/TCS/ABS(NK11V/T/A)

Model Code	UD
Model Year	03 M/Y
Stage	P2

Contents

1. Summary of FTA Investigation Results	.... 1page
2. System Structure Diagram	.... 29 pages
3. System Function and Failure List	.... 1 page
4. Definition of System Severity Levels	.... 1 page
5. Failure Mode List (FTA) (Control)	.... 73 pages
(H/U)	.... 51 pages
6. Undeveloped event assessment	.... 2 pages

Date: April 2, 2001

LPL
Rep. 佐々木

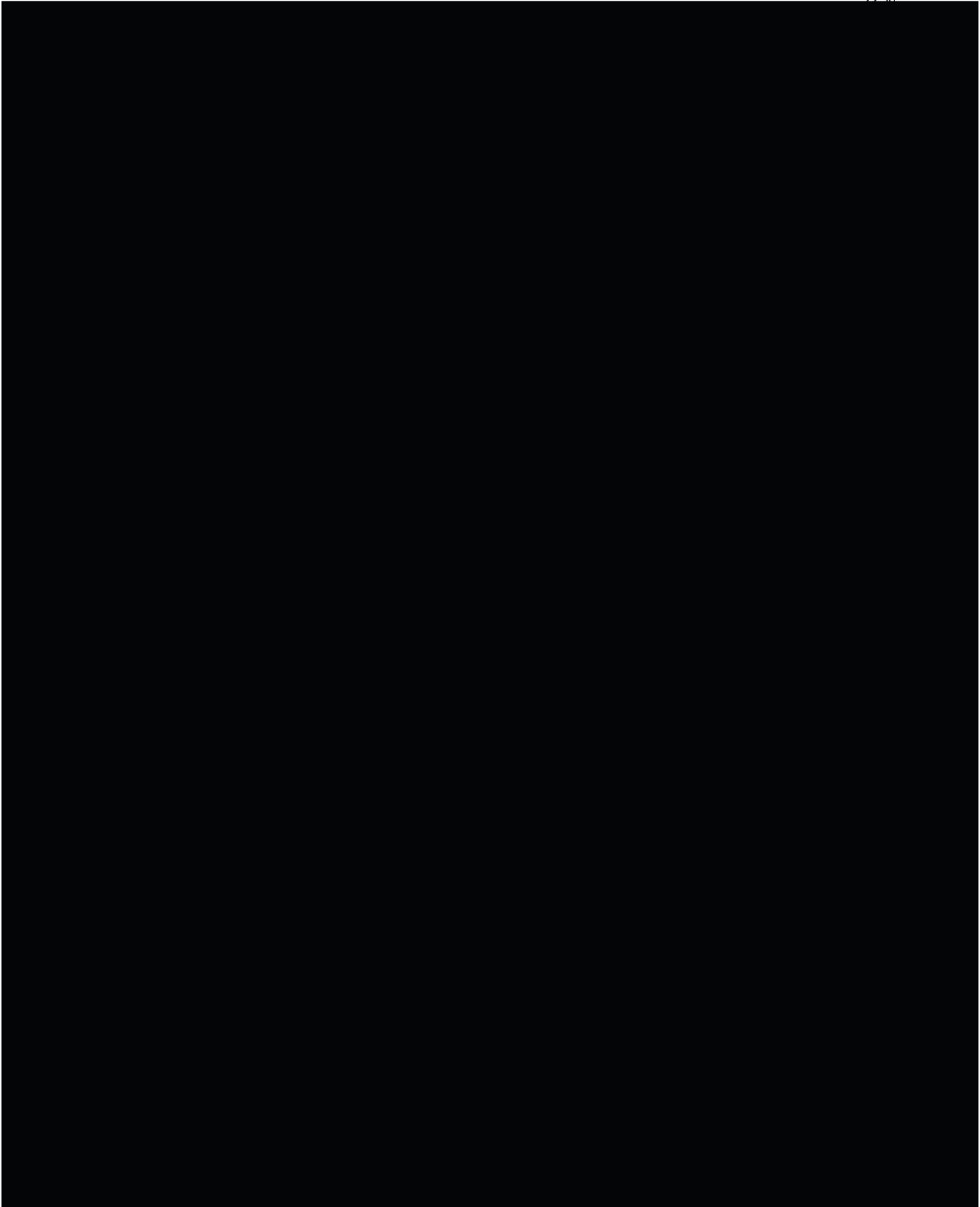
【HG-FMEA-0010】

Summary of FTA Investigation Results

Model	UD
-------	----

Approve
服部

<System Name> VSA/TCS/ABS (NK11V/T/A)

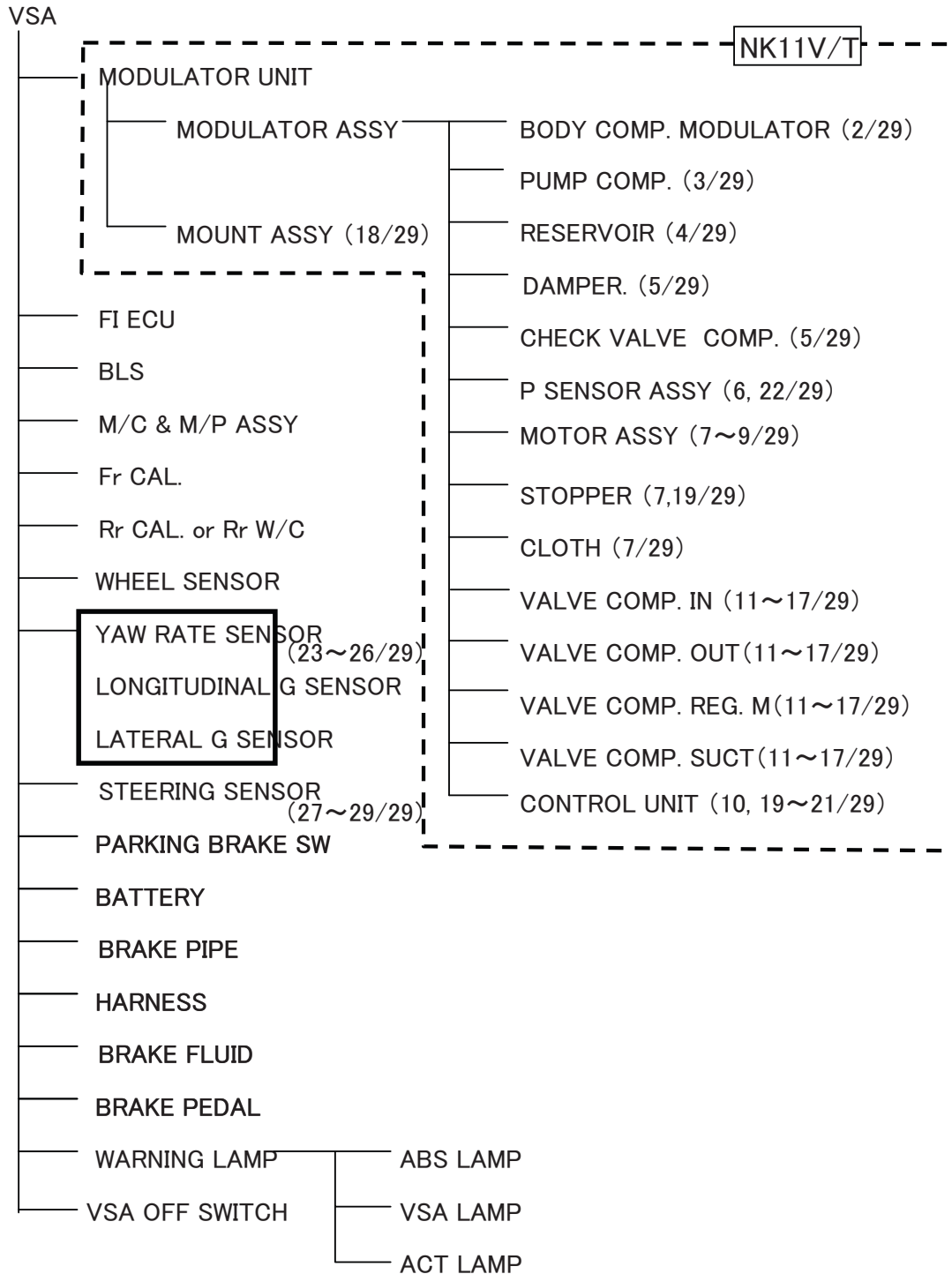


System Structure Diagram [1 / 29]

System Name: MODULATOR UNIT

△			
1	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.



【HG-FMEA-0004】

System Structure Diagram [2 / 29]

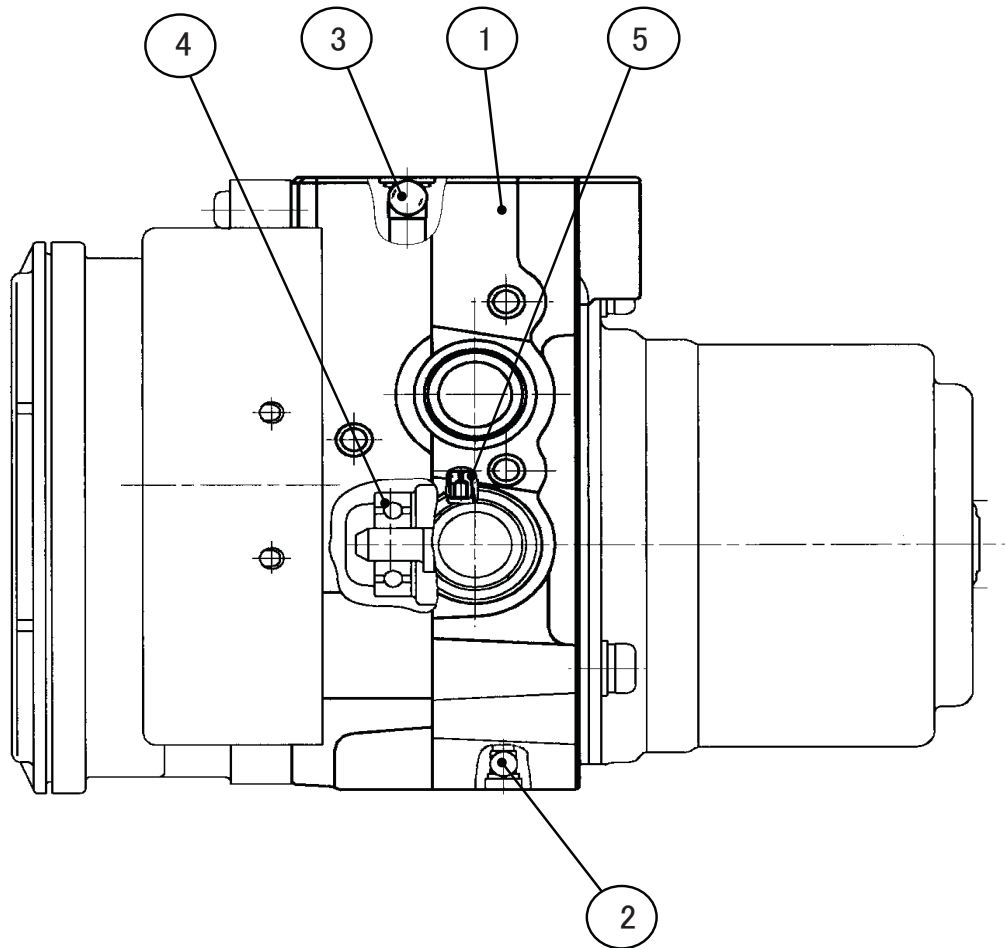
System Name: MODULATOR UNIT

△			
1	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

BODY COMP. MODULATOR

- 1. BODY MODULATOR [REDACTED] T1
- 2. BALL STEEL [REDACTED]
- 3. BALL STEEL [REDACTED]
- 4. BEARING BALL [REDACTED]
- 5. ORIFICE DAMPER [REDACTED]



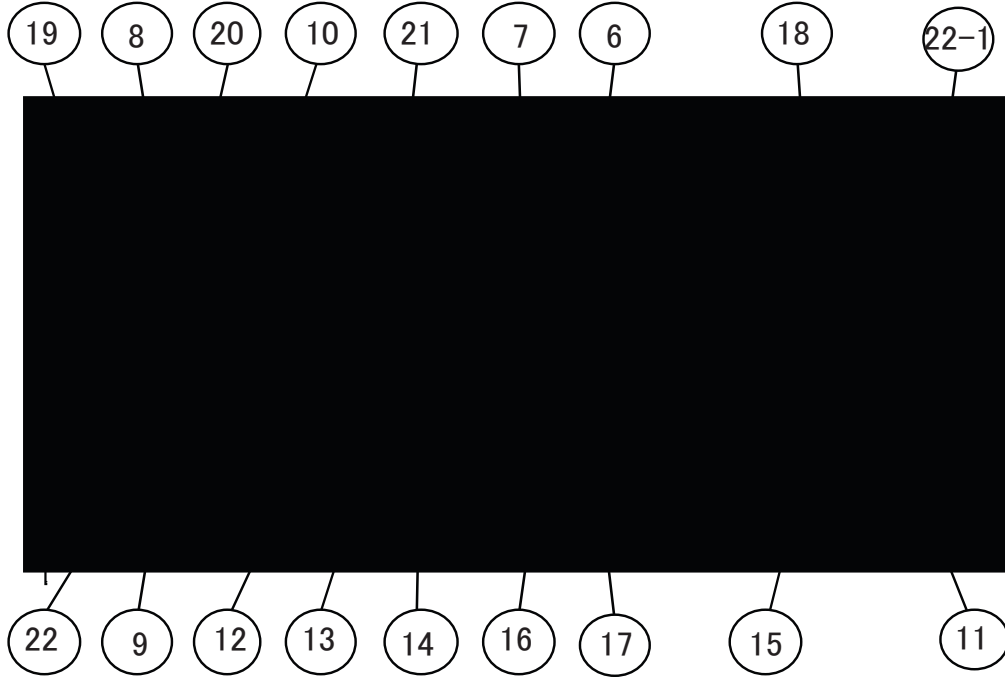
【HG-FMEA-0004】

System Structure Diagram [3 / 29]

System Name: MODULATOR UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.



PUMP COMP.

- | | |
|---------------------------------|--------------------------------|
| — 6. CYLINDER PUMP [REDACTED] | — 14. BALL STEEL [REDACTED] |
| — 7. O-RING [REDACTED] M | — 15. X-RING [REDACTED] M |
| — 8. RETAINER OUTLET [REDACTED] | — 16. D-RING [REDACTED] M |
| — 9. SPG. OUTLET [REDACTED] B | — 17. RING BACK UP [REDACTED] |
| — 10. BALL STEEL [REDACTED] 2 | — 18. O-RING [REDACTED] M |
| — 11. PISTON PUMP [REDACTED] | — 19. PLUG PUMP [REDACTED] |
| — 12. SPG. INLET [REDACTED] PB | — 20. O-RING [REDACTED] M |
| — 13. SPG. PISTON [REDACTED] | — 21. SPG. PUMP SET [REDACTED] |
| | — 22. CLIP [REDACTED] C |
| | — 22-1. GREASE [REDACTED] M |

【HG-FMEA-0004】

System Structure Diagram [4/29]

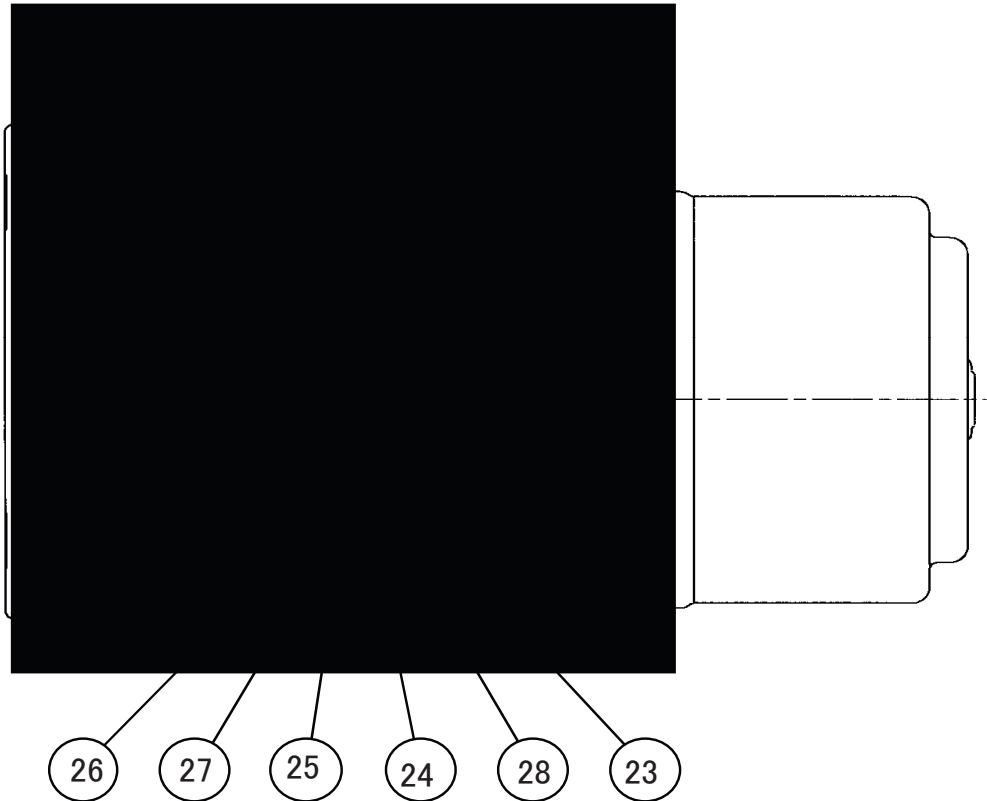
System Name: MODULATOR UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

RESERVOIR

- 23. PISTON RES [REDACTED]
- 24. O-PING [REDACTED]
- 25. SPG. RES. [REDACTED]
- 26. PLUG RES. [REDACTED] 56
- 27. CLIP [REDACTED]
- 28. GREASE [REDACTED]



【HG-FMEA-0004】

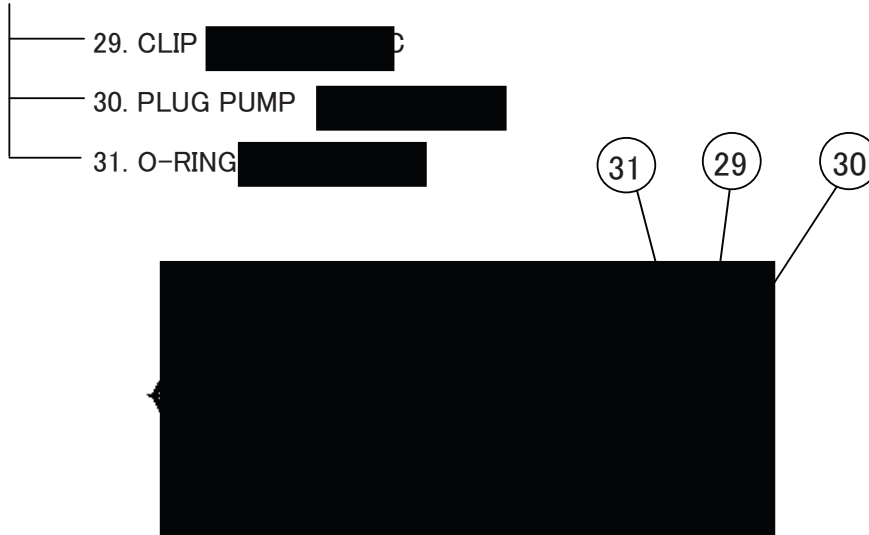
System Structure Diagram [5 / 29]

System Name: MODULATOR UNIT

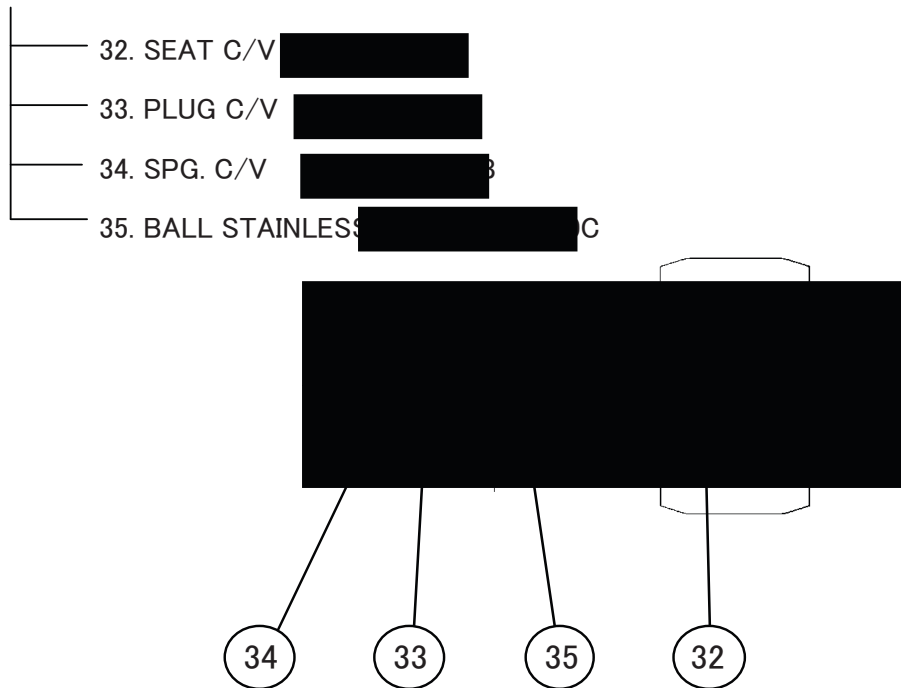
△			
1	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

DAMPER



CHECK VALVE COMP



【HG-FMEA-0004】

System Structure Diagram [6 / 29]

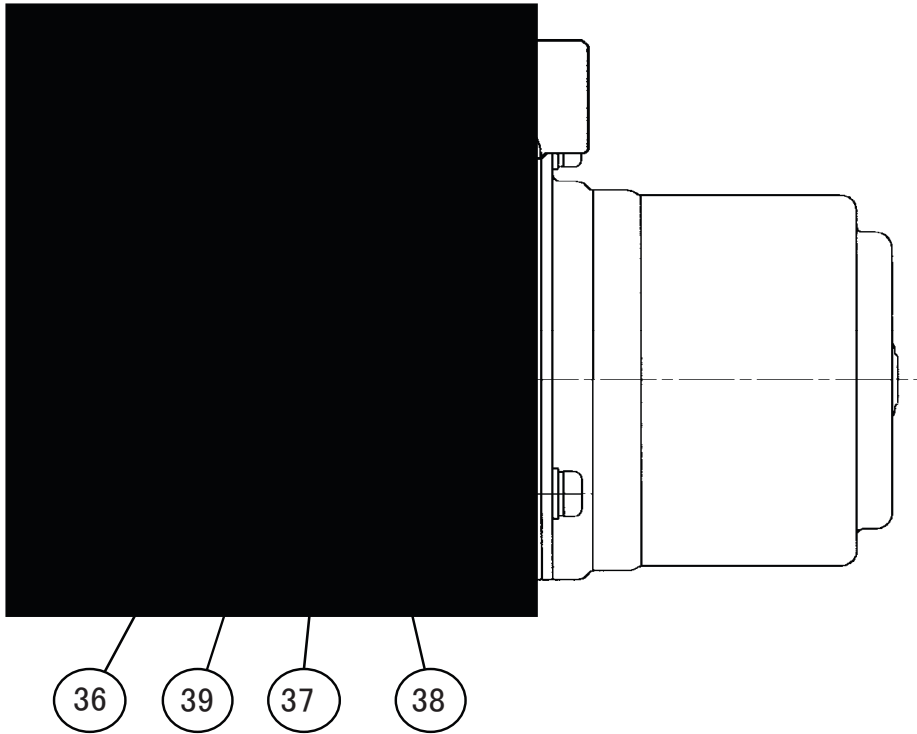
System Name: MODULATOR UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

P SENSOR ASSY
(Projection Welding)

- 36. P SENSOR
- 37. O-RING [REDACTED] M
- 38. SPG. SENSOR SET [REDACTED]
- 39. CLIP [REDACTED] C



【HG-FMEA-0004】

System Structure Diagram [7 / 29]

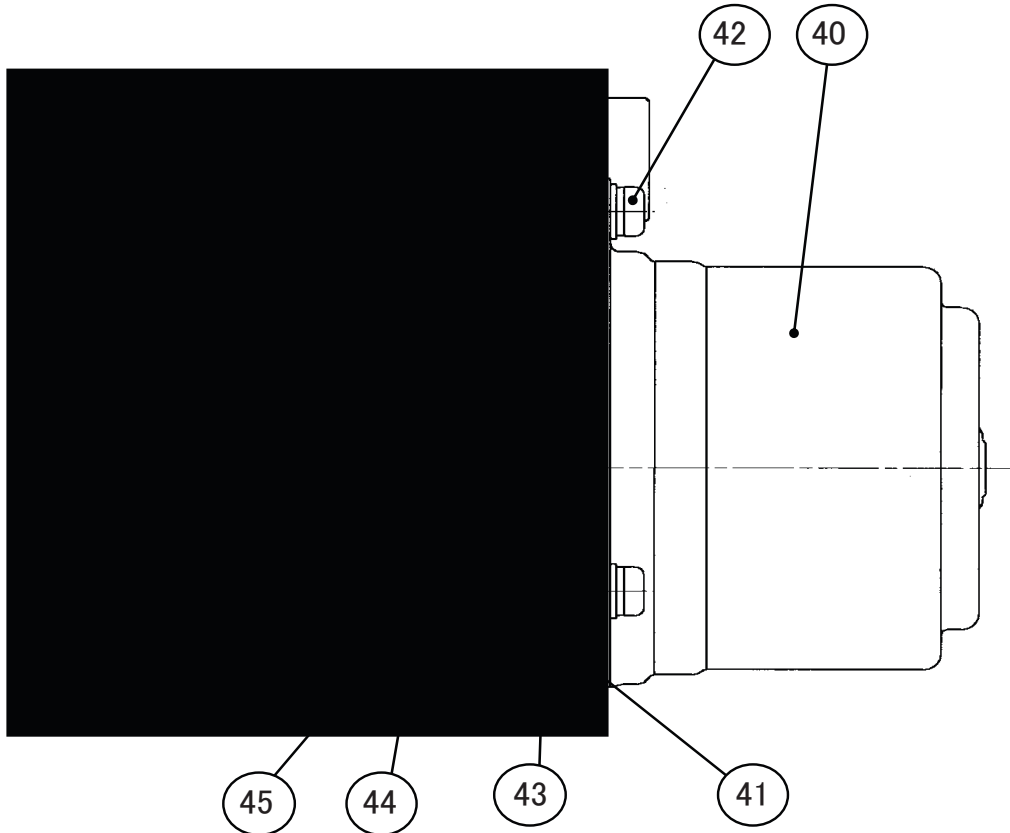
System Name: MODULATOR UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

MOTOR ASSY

- 40. MOTOR ASSY
- 41. O-RING [REDACTED]
- 42. SCREW & WASHER [REDACTED] 435
- 43. O-RING [REDACTED]
- 44. STOPPER [REDACTED]
- 45. CLOTH [REDACTED]



【HG-FMEA-0004】

System Structure Diagram [8 / 29]

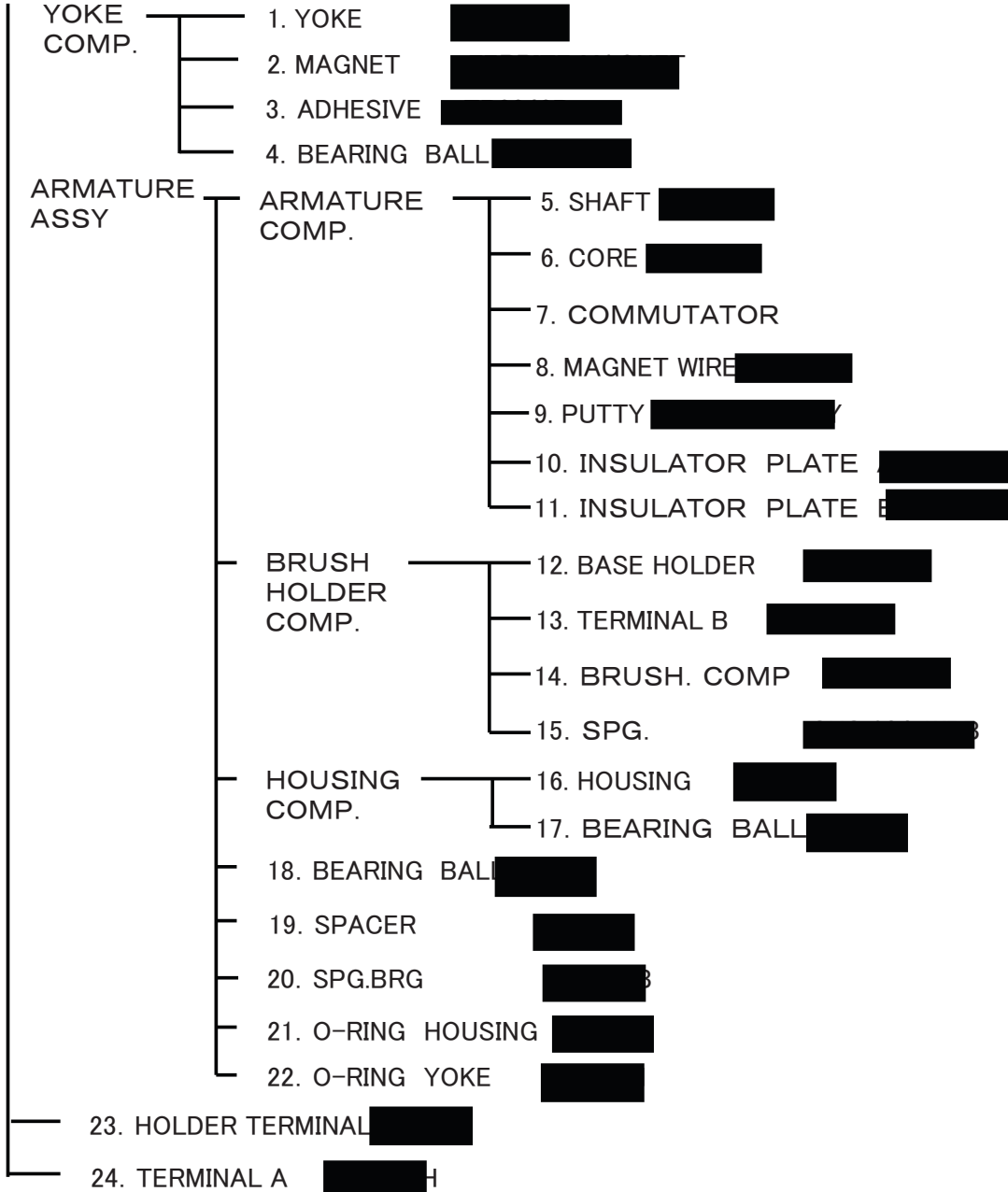
System Name: MODULATOR UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

MOTOR ASSY System Structure

Supplier Nisshin Kogyo Co.

40. MOTOR ASSY



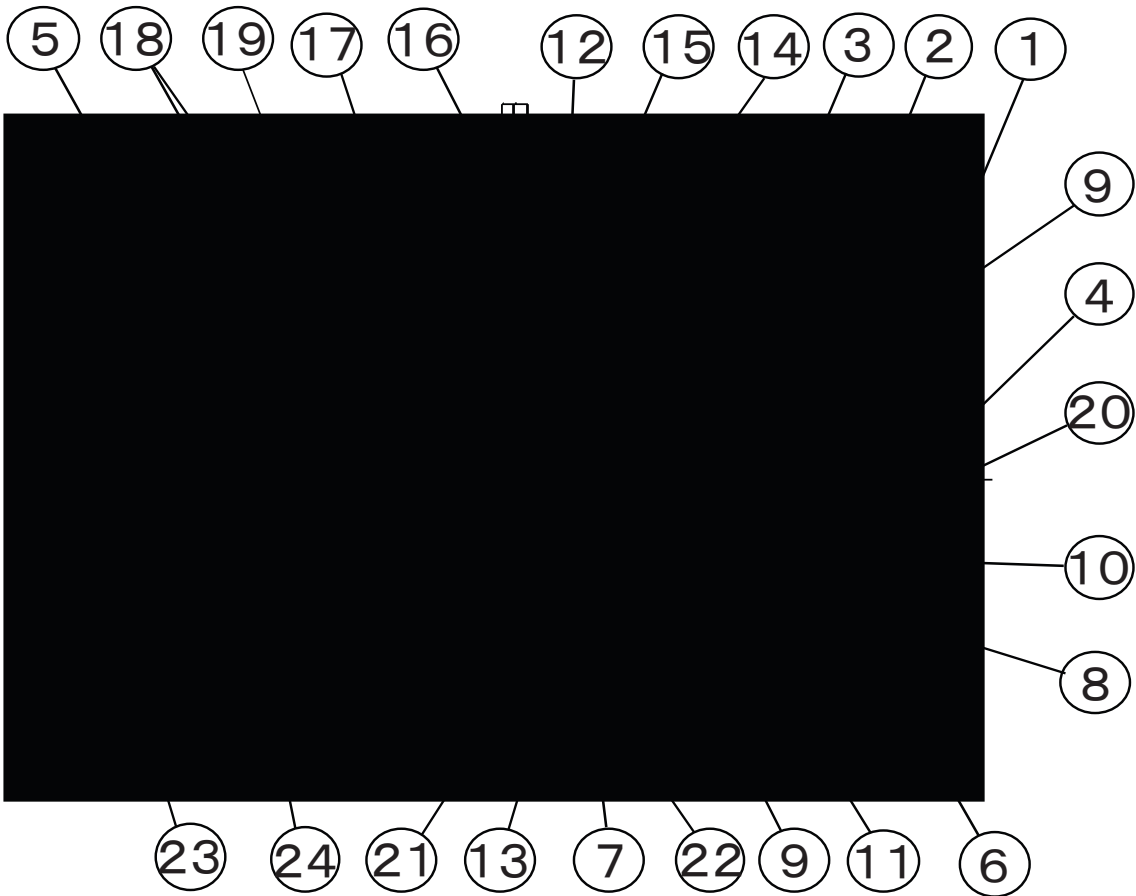
【HG-FMEA-0004】

System Structure Diagram [9 / 29]

System Name: _____

△			
1	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.



【HG-FMEA-0004】

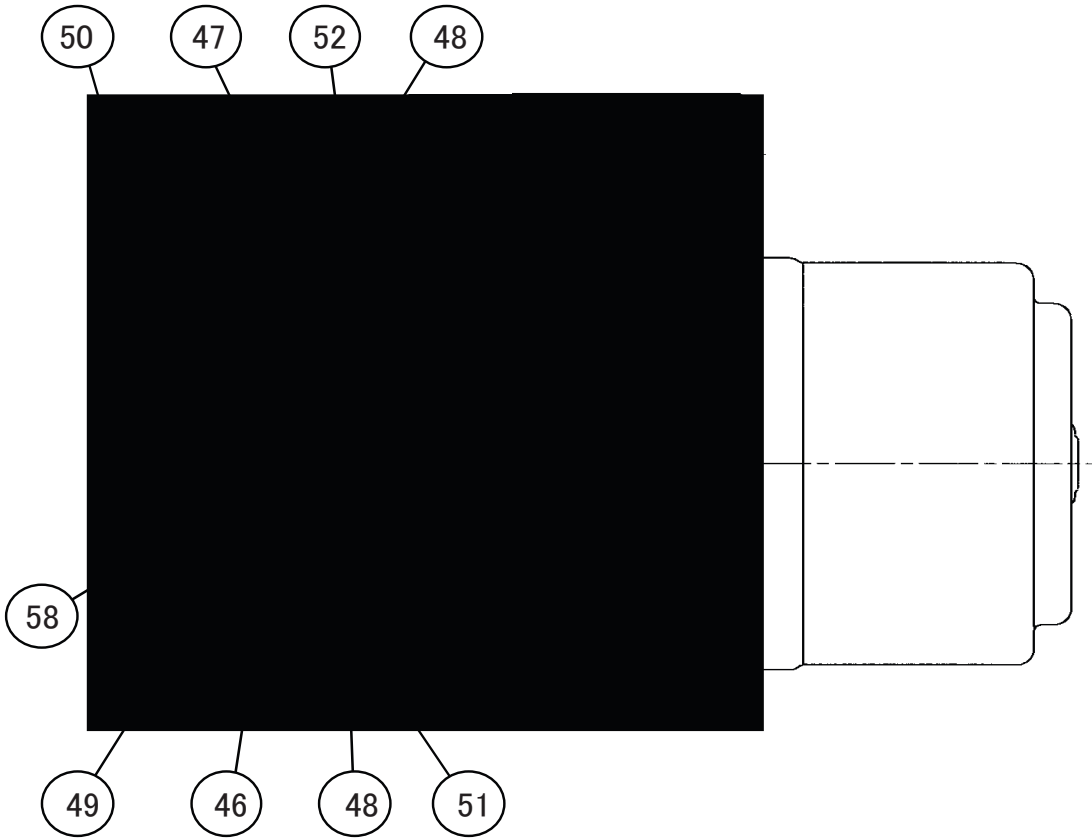
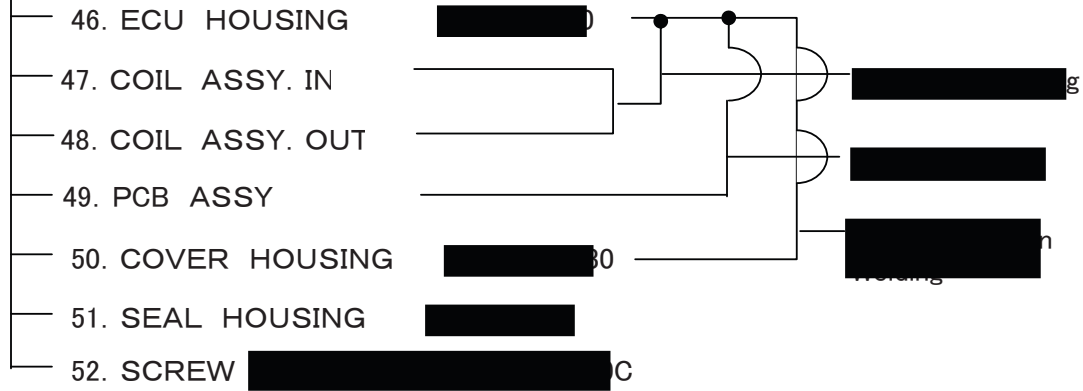
System Structure Diagram [10 / 29]

System Name: _____

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

CONTROL UNIT



【HG-FMEA-0004】

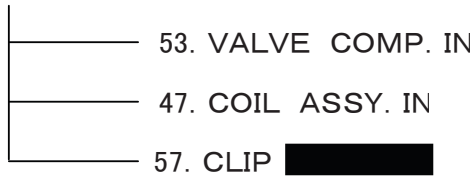
System Structure Diagram [11 / 29]

System Name: MODULATOR UNIT

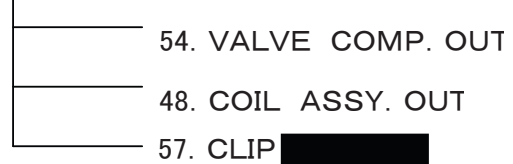
△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier

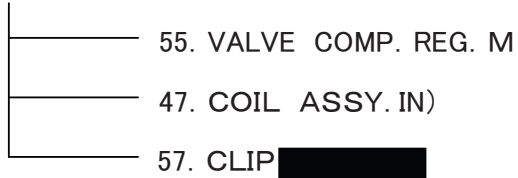
VALVE COMP. IN



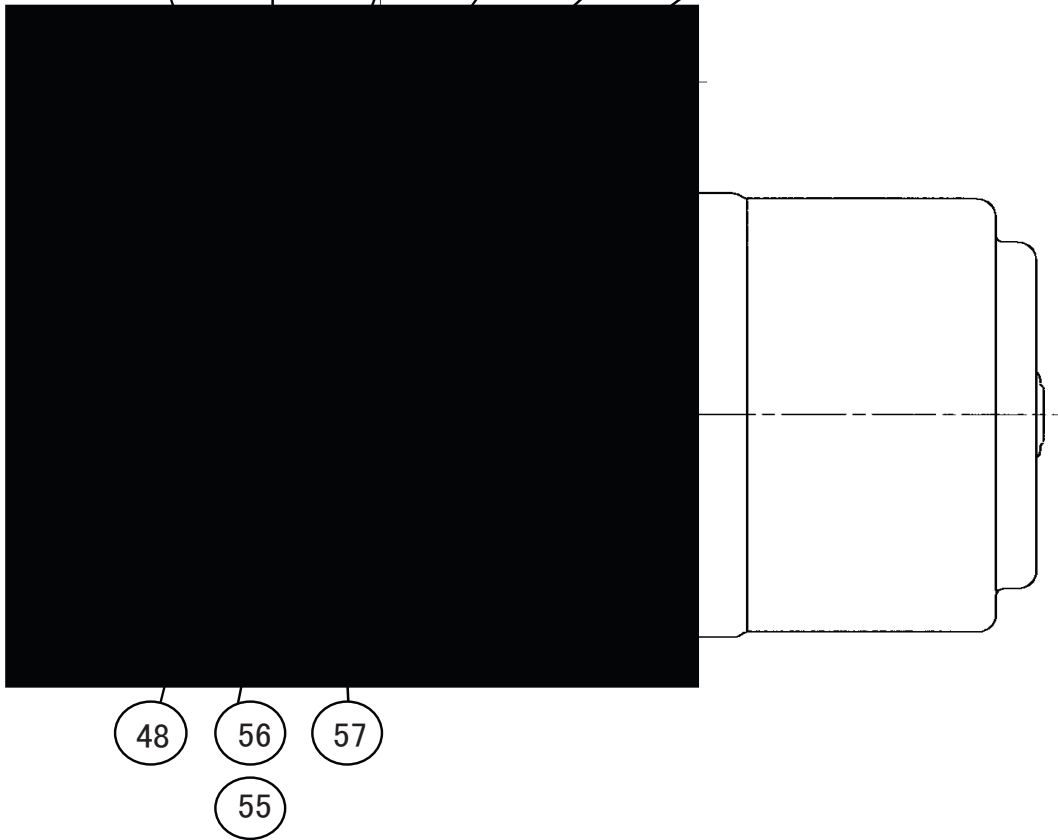
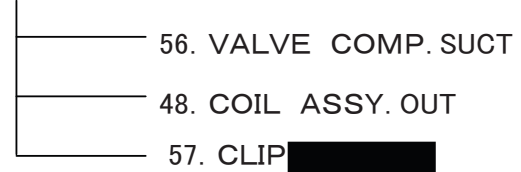
VALVE COMP. OUT



VALVE COMP. REG. M



VALVE COMP. SUCT



【HG-FMEA-0004】

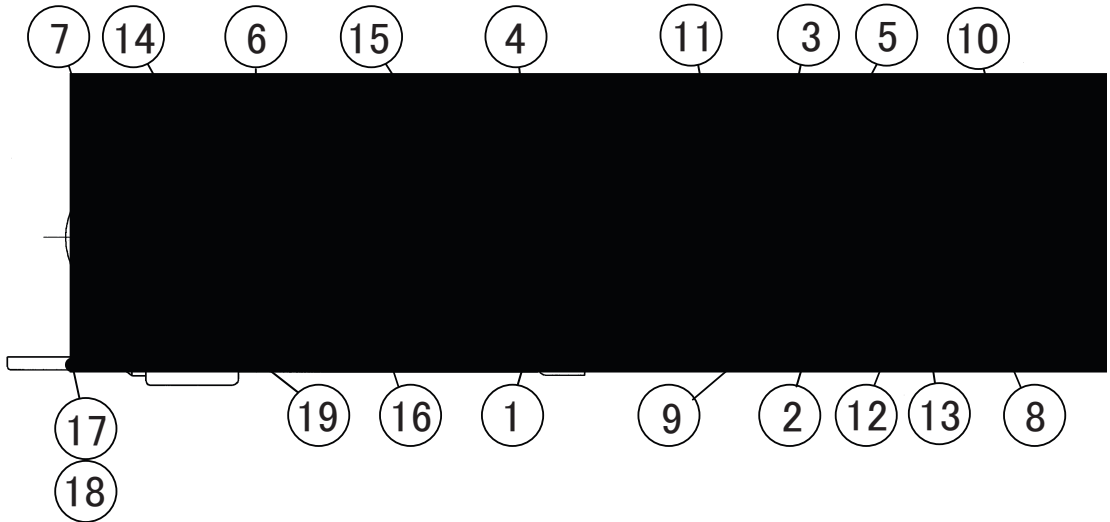
System Structure Diagram [12 / 29]

System Name: MODULATOR UNIT

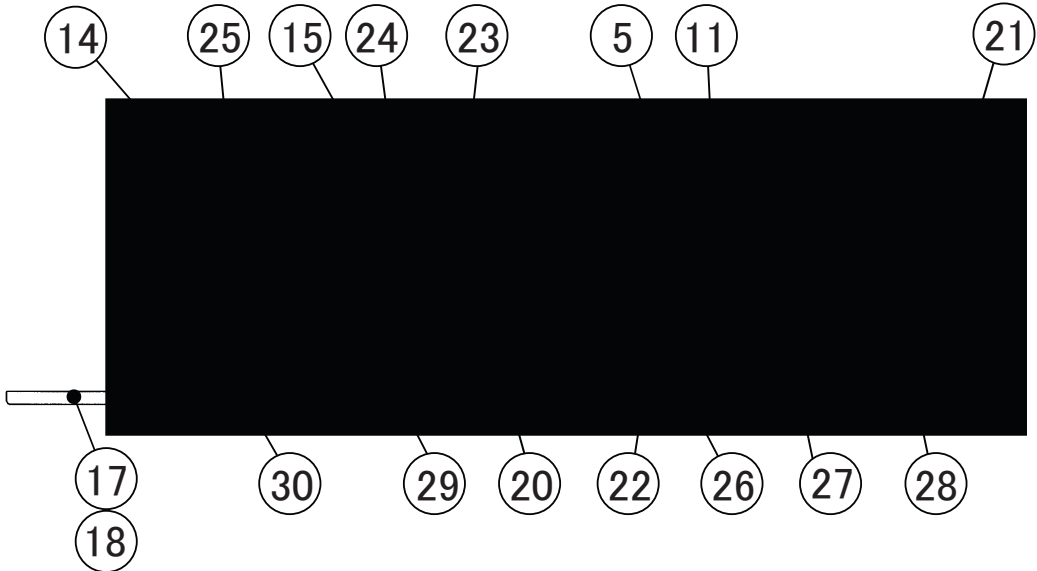
△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier

Structure Diagram: VALVE COMP (IN)



Structure Diagram: VALVE COMP (OUT)



【HG-FMEA-0004】

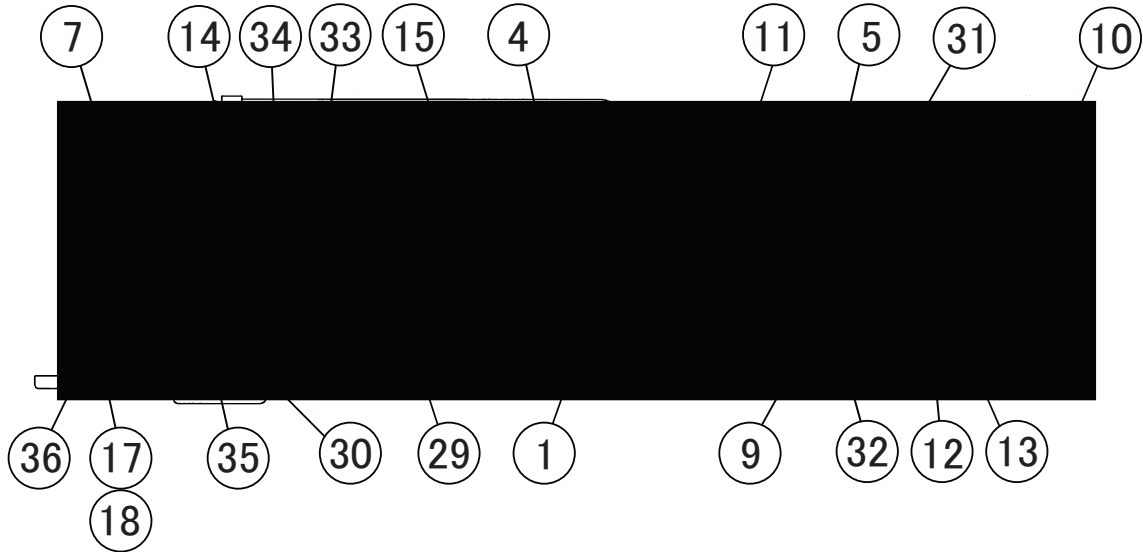
System Structure Diagram [13 / 29]

System Name: MODULATOR UNIT

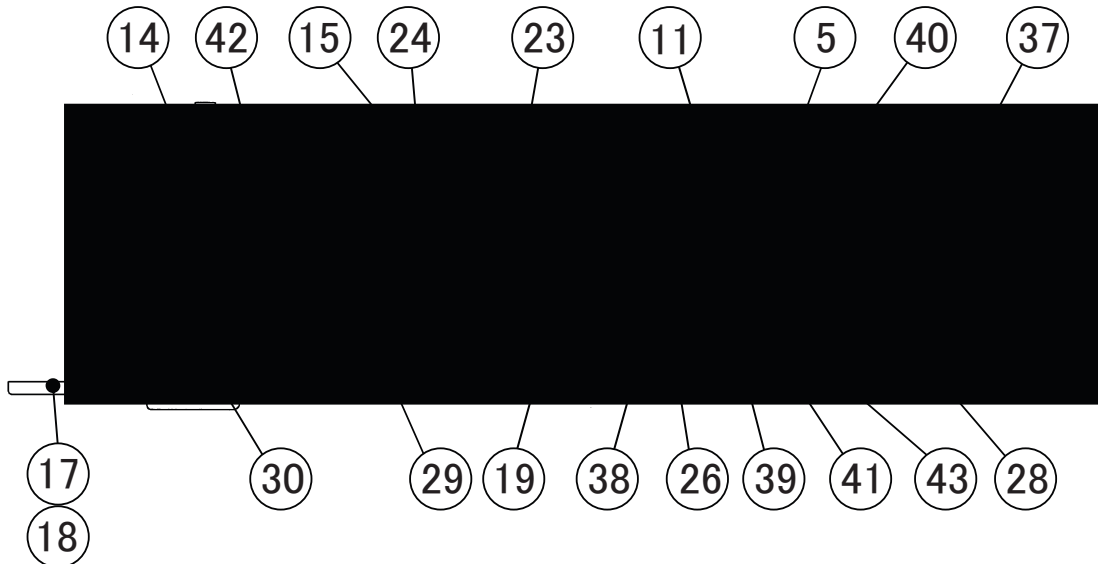
1	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier

Structure Diagram: VALVE COMP (REGULATOR)



Structure Diagram: VALVE COMP (SUCTION)



【HG-FMEA-0004】

System Structure Diagram [14 / 29]

System Name: MODULATOR UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier

VALVE COMP. (IN)

- 1. BODY IN [REDACTED]
- 2. SEAT [REDACTED]
- 3. SPG. RET. IN [REDACTED]
- 4. RETAINER BALL [REDACTED]
- 5. BALL STAINLES [REDACTED]
- 6. ARMATURE IN [REDACTED]
- 7. PIPE IN [REDACTED]
- 8. ORIFICE IN [REDACTED]
- 9. FILTER SECOND [REDACTED]
- 10. FILTER IN [REDACTED]
- 11. O-RING [REDACTED]
- 12. RING, BACK UP [REDACTED]
- 13. VALVE ONE WAY [REDACTED]

COIL ASSY (IN)

- 14. YOKE SOL TOP [REDACTED]
- 15. YOKE SOL CASE [REDACTED]
- 16. WIRE, MAGNET IN [REDACTED]
- 17. TERMINAL R [REDACTED]
- 18. TERMINAL L [REDACTED]
- 19. BOBBIN IN [REDACTED] 0)

【HG-FMEA-0004】

System Structure Diagram [15 / 29]

System Name: MODULARTOR UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier

VALVE COMP. (OUT)

- 20. PIPE OUT [REDACTED]
- 21. SEAT OUT [REDACTED]
- 22. ARMATURE OUT [REDACTED]
- 5. BALL STAINLES [REDACTED]
- 23. SPG. RET. OUT [REDACTED]
- 24. PLATE SHUT [REDACTED] H
- 25. CORE OUT [REDACTED]
- 26. PLUG OUT [REDACTED]
- 27. FILTER OUT [REDACTED]
- 11. O-RING S9 [REDACTED]
- 28. O-RING S7 [REDACTED]

COIL ASSY(OUT)

- 14. YOKE SOL TOP [REDACTED]
- 15. YOKE SOL CASE [REDACTED]
- 29. WIRE, MAGNET OUT [REDACTED]
- 17. TERMINAL R [REDACTED] H
- 18. TERMINAL L [REDACTED]
- 30. BOBBIN OUT [REDACTED] (230)

【HG-FMEA-0004】

System Structure [16 / 29]

System Name: MODULATOER UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier

VALVE COMP (REGULATOR)

- 1. BODY IN [REDACTED]
- 31. SEAT 110 [REDACTED]
- 32. SPG. RET. REC [REDACTED]
- 4. RETAINER BALL [REDACTED]
- 5. BALL STAINLES [REDACTED]
- 33. ARMATURE REG. M [REDACTED]
- 34. PIPE SLIDE [REDACTED]
- 35. SPG. REG. M [REDACTED]
- 36. STOPPER SPG. [REDACTED]
- 7. PIPE IN [REDACTED]
- 9. FILTER SECOND [REDACTED]
- 10. FILTER IN [REDACTED]
- 11. O-RING S9 [REDACTED]
- 12. RING,BACK UP [REDACTED]
- 13. VALVE ONE WAY [REDACTED]

COIL ASSY(OUT)

- 14. YOKE SOL TOP [REDACTED]
- 15. YOKE SOL CASE [REDACTED]
- 29. WIRE, MAGNET OUT [REDACTED]
- 17. TERMINAL R [REDACTED]
- 18. TERMINAL L [REDACTED]
- 30. BOBBIN OUT [REDACTED] 30)

【HG-FMEA-0004】

System Structure Diagram [17 / 29]

System Name: MODULATOER UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier

VALVE COMP (SUCTION)

- 19. PIPE OUT [REDACTED]
- 37. SEAT [REDACTED]
- 5. BALL STAINLESS [REDACTED]
- 38. ARMATURE SUCTION [REDACTED]
- 39. GUIDE [REDACTED]
- 40. FLOW SEAT [REDACTED]
- 41. SPG. RET SUCTION [REDACTED]
- 23. SPG. RET. OUT [REDACTED]
- 24. PLATE SHUT [REDACTED]
- 42. CORE SUCTION [REDACTED]
- 26. PLUG OUT [REDACTED]
- 43. FILTER SUCTION [REDACTED]
- 11. O-RING S9 [REDACTED]
- 28. O-RING S7 [REDACTED]

COIL ASSY (OUT)

- 14. YOKE SOL TOP [REDACTED]
- 15. YOKE SOL CASE [REDACTED]
- 29. WIRE, MAGNET OUT [REDACTED]
- 17. TERMINAL R [REDACTED]
- 18. TERMINAL L [REDACTED]
- 30. BOBBIN OUT [REDACTED] 30)

【HG-FMEA-0004】

System Structure Diagram [18 / 29]

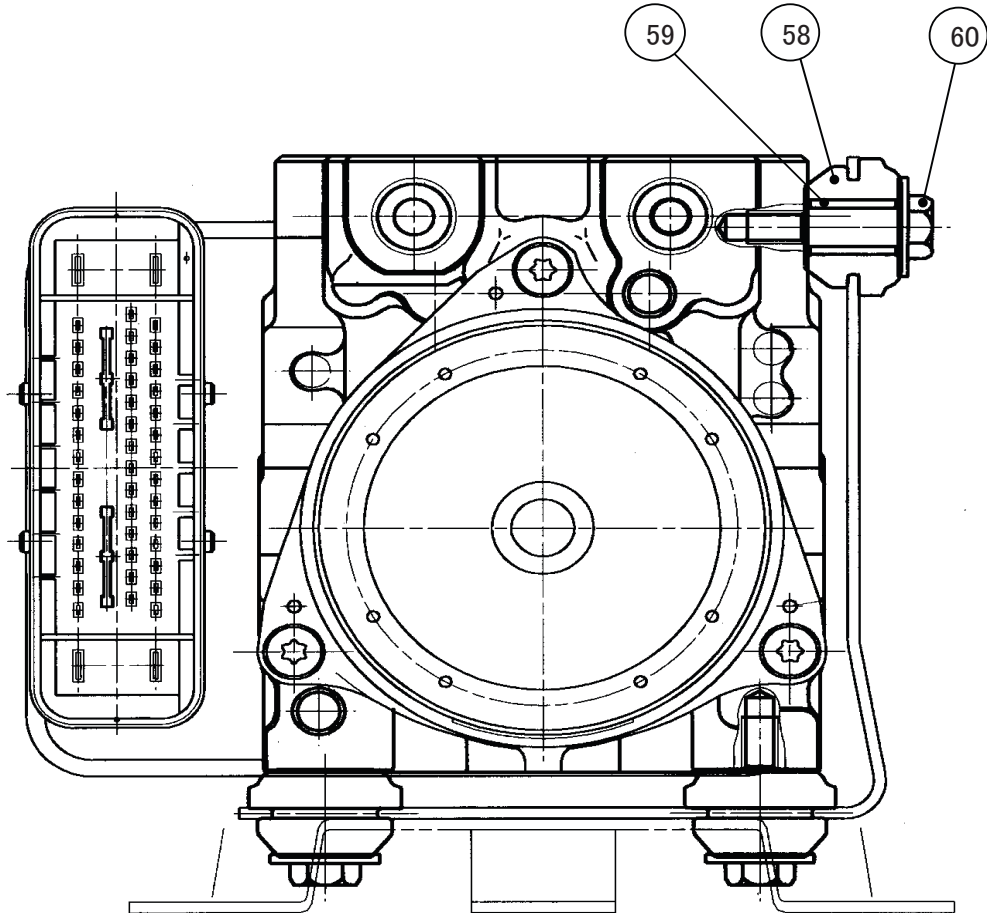
System Name _____

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

MOUNT ASSY

- 58. RUBBER MOUNT [REDACTED]
- 59. COLLAR [REDACTED] OR
- 60. BOLT WASHER [REDACTED] 50C



System Structure Diagram [19 / 29]

System Name: VSA/TCS Control Unit

△			
△			
△			
—	06.NOV.'01	Hayashibe	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

CONTROL UNIT

- 46. ECU HOUSING
- 49. PWB ASSY
- 150. CONNECTOR TERMINAL
- 151. INSIDE TERMINAL
- 152. SNAP FIT
- 153. SOLDER WIRE
- 154. FLUX
- 155. COATING

[REDACTED]

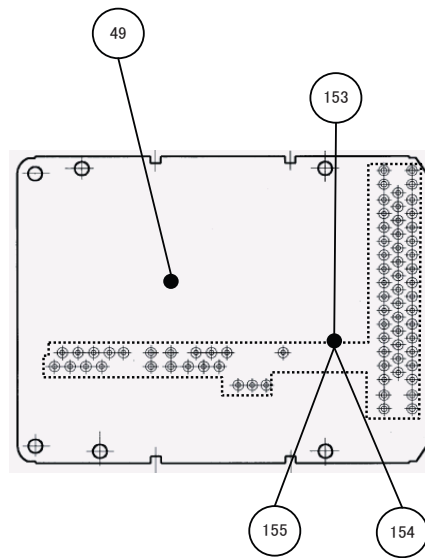
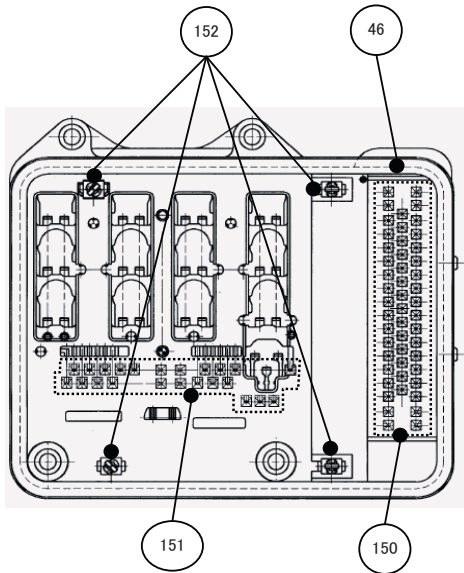
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



[HG-FMEA-0004]

System Structure Diagram [20 / 29]

System Name: VSA/TCS Control Unit

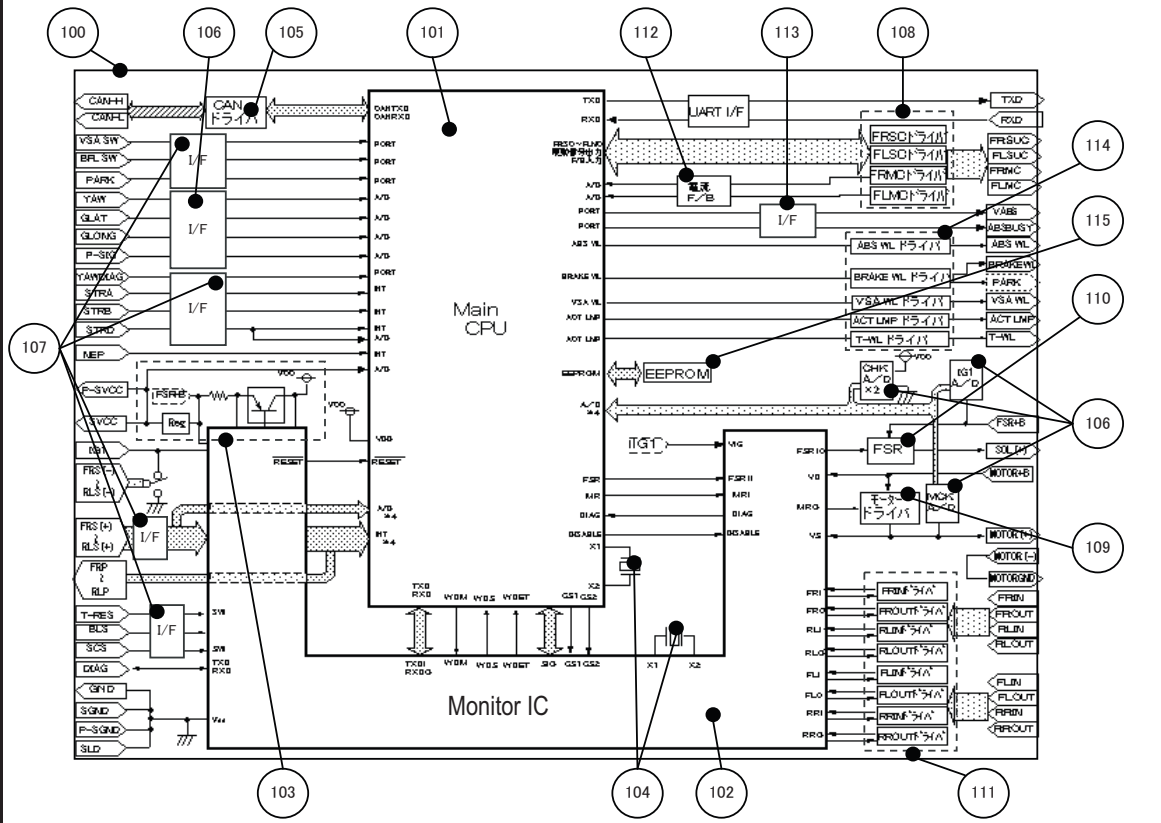
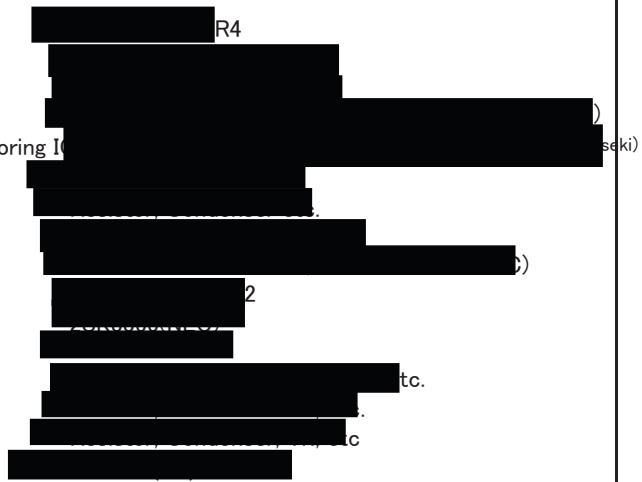
△			
△	06.NOV.'01	Hayashibe	
—	26.MAR.'01	Hayashibe	
	Date	Prepared	Approved

Supplier NEC Co., Nextech

[PWB ASSY Structure Diagram]

49. PWB ASSY

- 100. PWB
- 101. 32BIT Microcomputer
- 102. Monitor IC
- 103. Power IC(SVCC, 3.3V)
- 104. CLOCK(Microcomputer, Monitoring IC)
- 105. FULL CAN DRIVER
- 106. A/D INPUT CIRCUIT
- 107. ON/OFF INPUT CIRCUIT
- 108. SOL DRIVER FET
- 109. MOTOR DRIVER FET
- 110. F/S RELAY DRIVER FET
- 111. SOL ON/OFF F/B CIRCUIT
- 112. SOL LINEAR F/B CIRCUIT
- 113. ON/OFF OUTPUT CIRCUIT
- 114. W/L OUTPUT CIRCUIT
- 115. 2Kbit EEPROM



[HG-FMEA-0004]

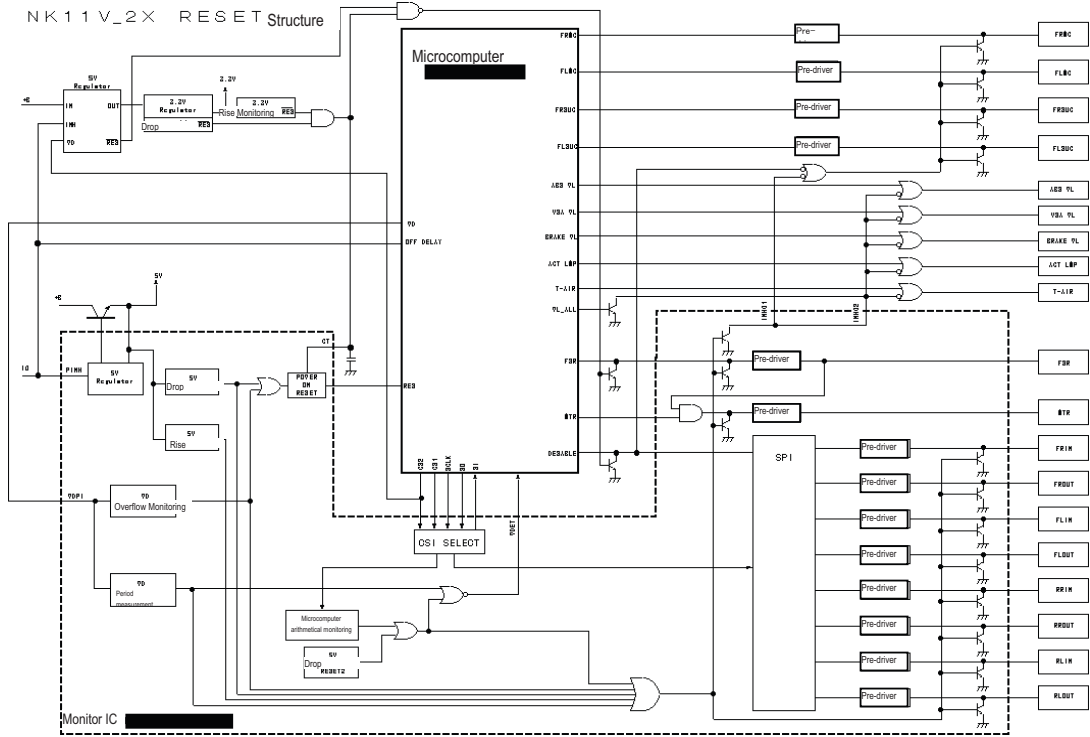
System Structure Diagram [21 / 29]

System Name: VSA/TCS Control Unit

	26.MAR.'01	Hayashibe	
	Date	Prepared	Approved

Supplier NEC Co, Nextech

[F/S Structure Diagram]



【HG-FMEA-0004】

System Structure Diagram [19 / 19]

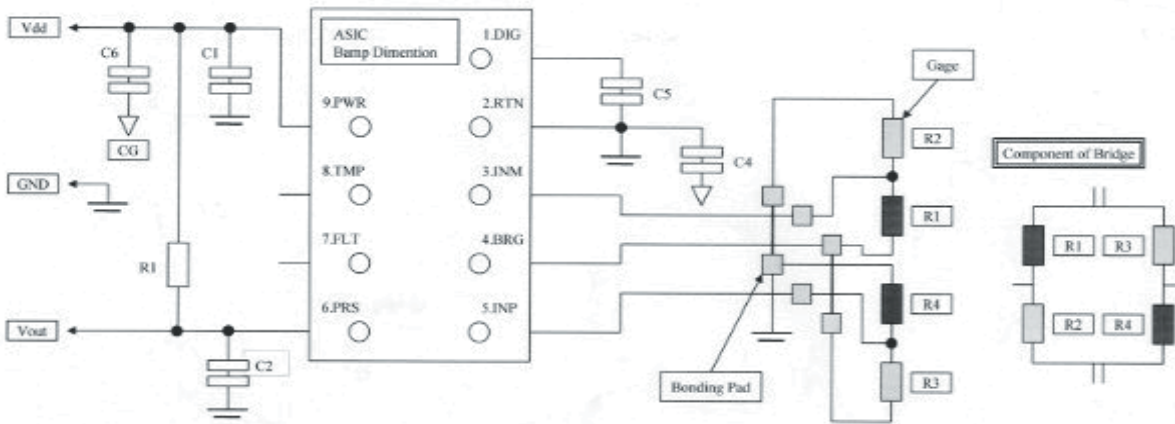
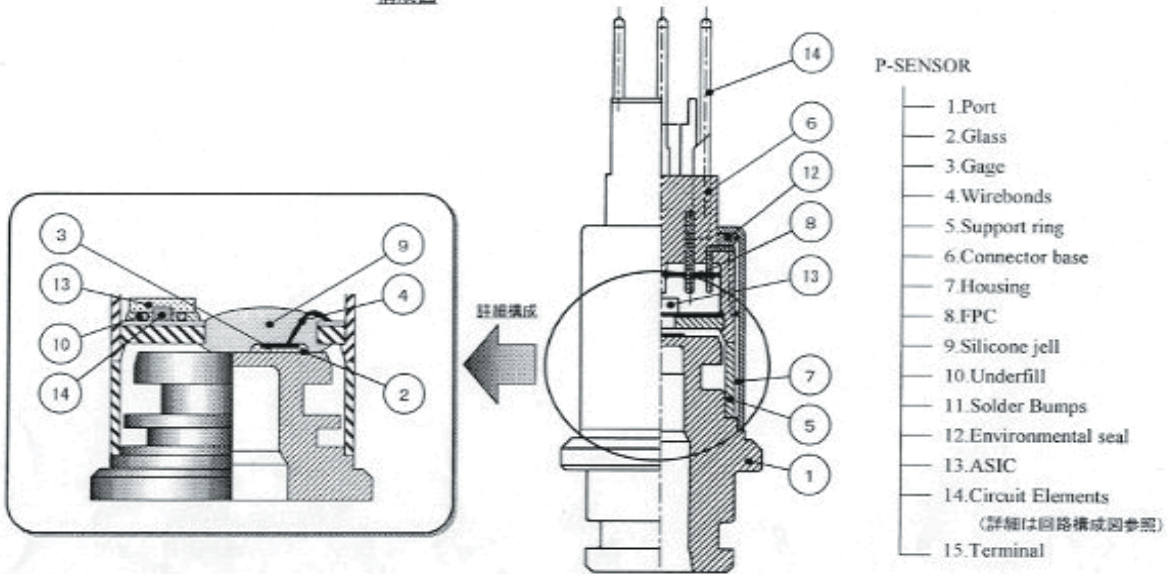
System Name : MODULATOR UNIT

△			
↑	2.NOV.'01	Nakano	
New	28.MAR.'01	Nakano	
	Date	Prepared	Approved

Supplier Nisshin Kogyo Co.

P SENSOR ASSY

構成図



【HG-FMEA-0004】

System Structure Diagram [23 / 29]

System Name: Yaw Rate/G Sensor

△			
△			
1	7.NOV.'01	Wada	
—	26.MAR.'01	Wada	
	Date	Prepared	Approved

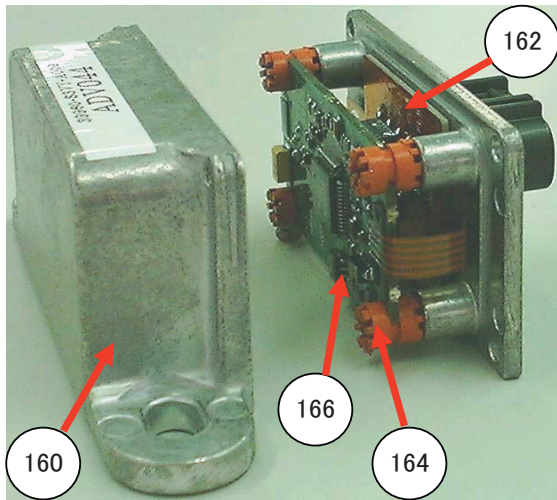
[Yaw Rate/G Sensor Structure Diagram]

Supplier Akebono Brake Industry Company

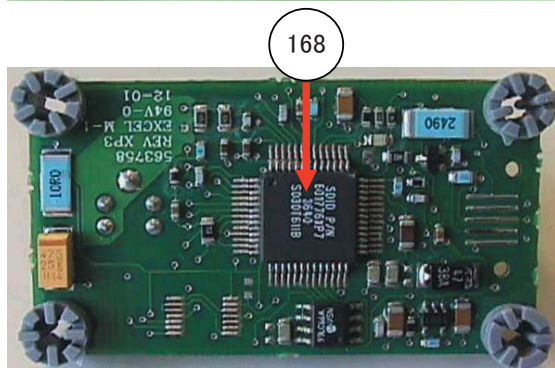
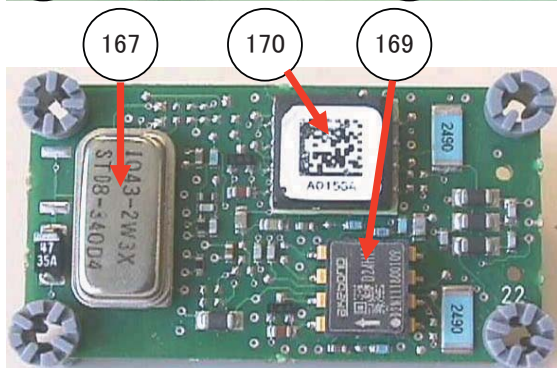
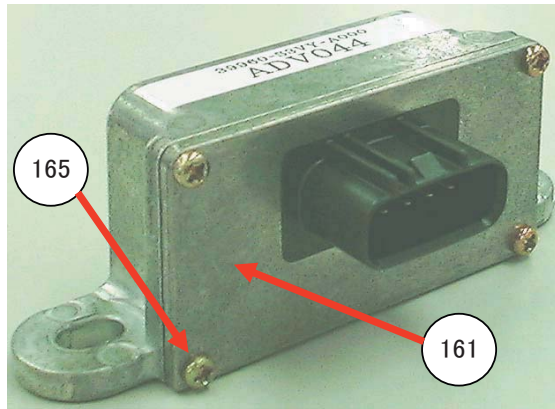
Yaw Rate/G Sensor

- 160 Housing
- 161 Cover ASSY
- 162 Sub-PCB ()
- 143 Circuit Element: Resistor, Condenser, etc.
- 164 Rubber Bushing
- 165 Screw
- 166 Sensor PCB ()
- 167 Yaw Rate Sensor(BEI)
- 168 Yaw Rate Sensor ASIC(BEI)
- 169 Lateral G Sensor (VDI)
- 170 Longitudinal G Sensor (Akebono)
- 171 Circuit Element : Resistor, Condenser, Tr., etc.





<Structure>



<Exterior>






【HG-FMEA-0004】

<u>System Structure Diagram</u> [24 / 29] <u>System Name: Yaw Rate/G Sensor</u>				
				
		7.NOV.'01	Wada	
		26.MAR.'01	Wada	
		Date	Prepared	Approved
[Yaw/G Sensor Block Diagram]	Supplier	Akebono Brake Industry Company		



【HG-FMEA-0004】

<u>System Structure Diagram</u> [25 / 29]				
				
				
	—	7.NOV.'01	Wada	
<u>System Name: Yaw Rate/G Sensor</u>	Date	Prepared	Approved	
[Yaw/G Sensor Circuit Diagram]	Supplier	Akebono Brake Industry Company		

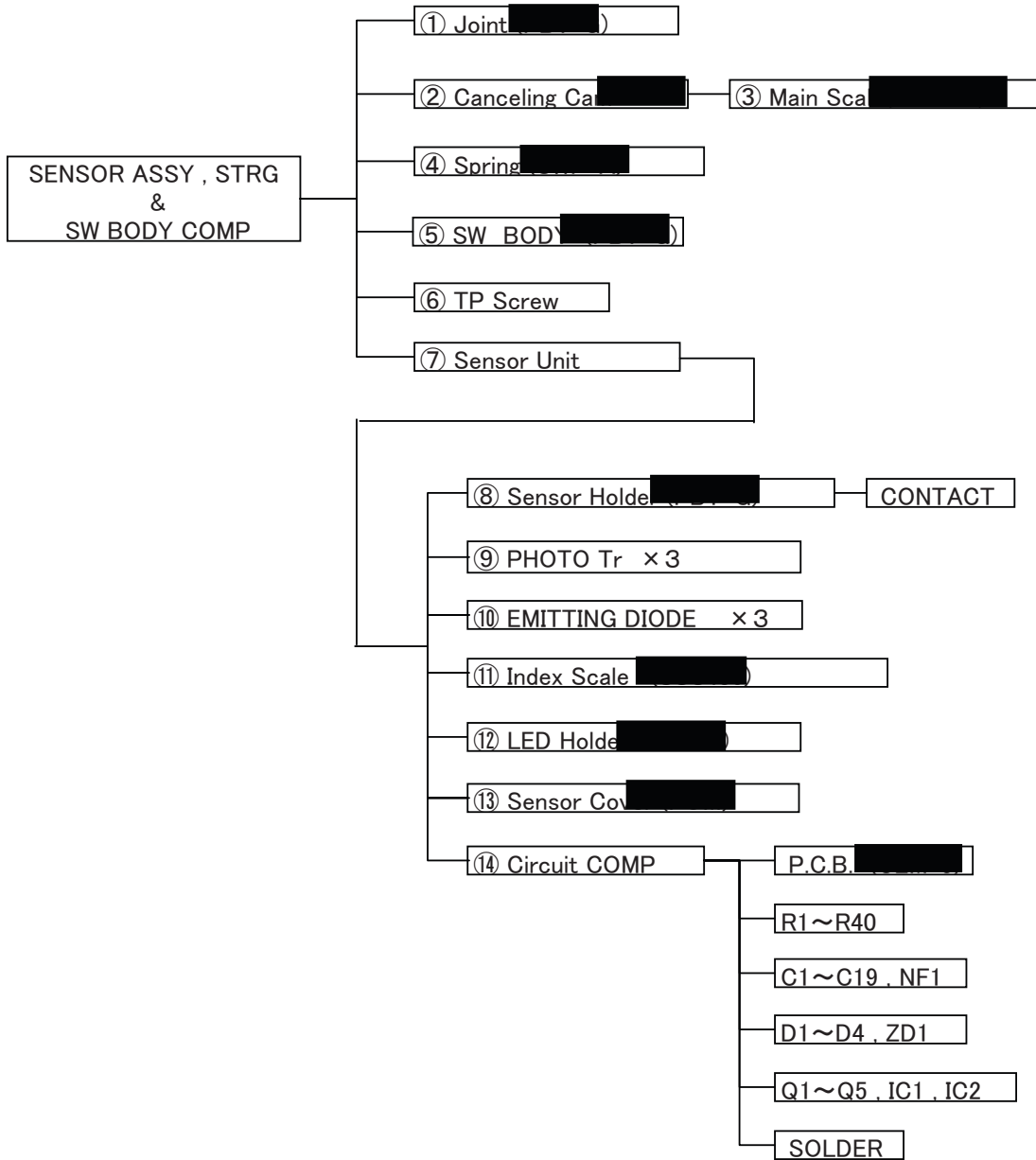


【HG-FMEA-0004】

System Structure Diagram [27 / 29]

Steering Angle Sensor with Self Diagnosis
System Name: Function (Toyo Denso-made)

△			
△			
△			
—	01.Nov.'01	F. Sato	
	Date	Prepared	Approved



【HG-FMEA-0004】

System Structure Diagram [28 / 29]

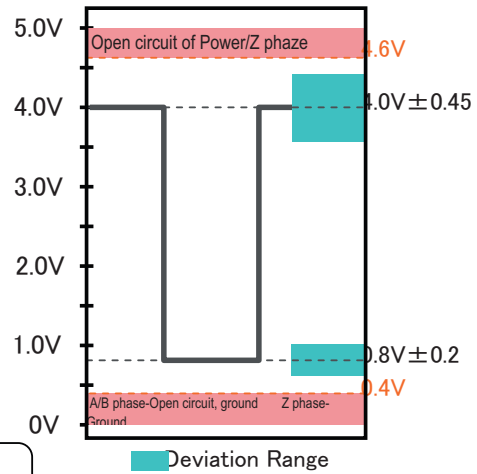
Steering Angle Sensor with Self
System Name: Diagnosis Function (Toyo Denso-made)

	01.Nov.'01	F. Sato	
	Date	Prepared	Approved

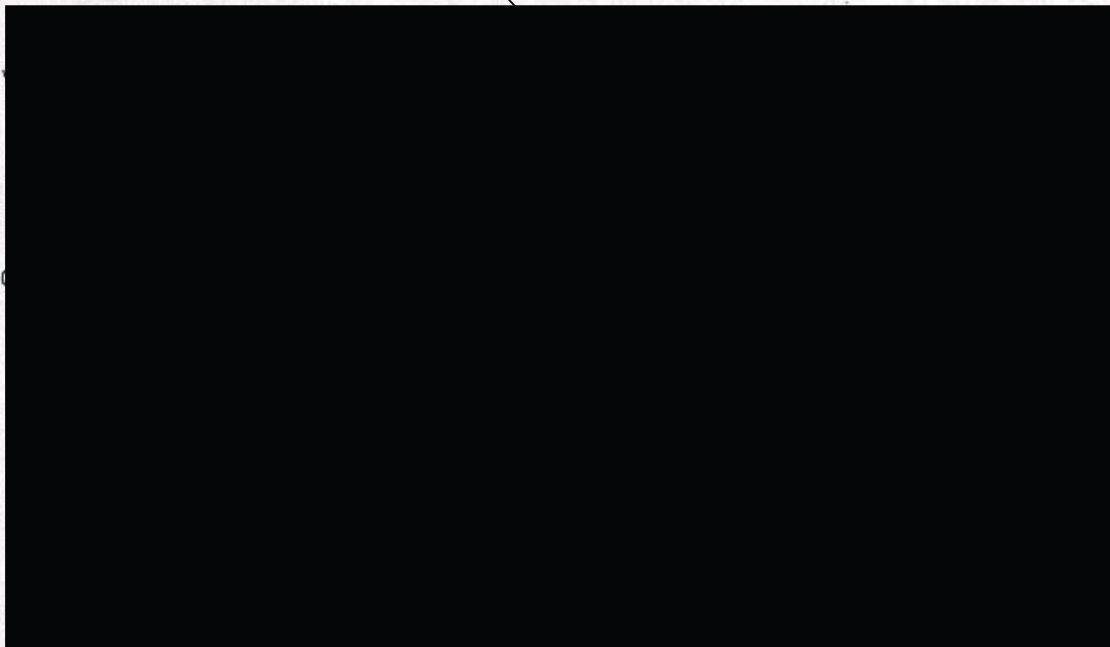
[Steering Angle Sensor Circuit

Addition of self-diagnosis function of open circuit and ground-fault enables abnormal detection while vehicle is

Z phase Output Voltage Characteristics



Z phase Hi Output Voltage Regulator Circuit



A/B Phase Open/Short-circuit Detection Circuit

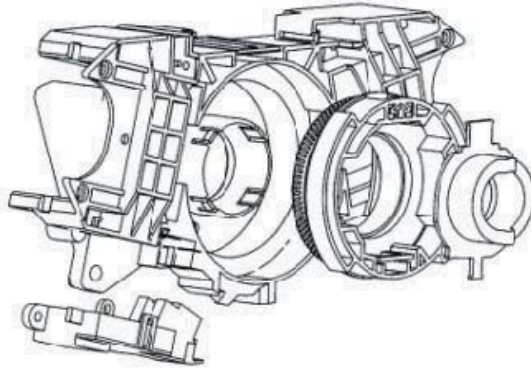
System Structure Diagram [29 / 29]

Steering Angle Sensor with Self
System Name: Diagnosis Function (Toyo Denso-made)

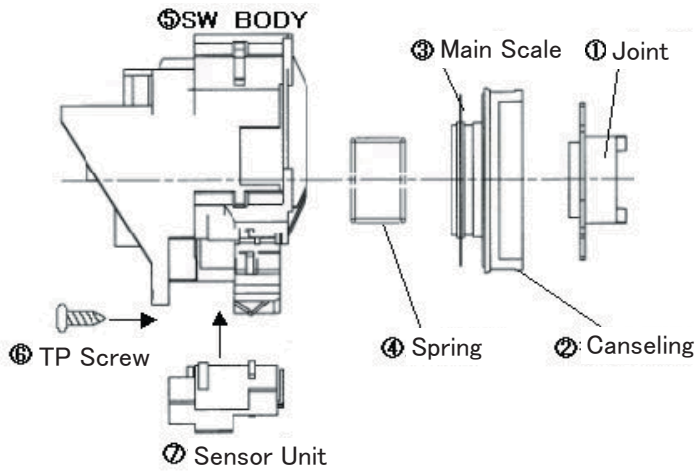
△			
△			
△			
—	01.Nov.'01	F. Sato	
	Date	Prepared	Approved

[Steering Angle Sensor Structure Diagram]

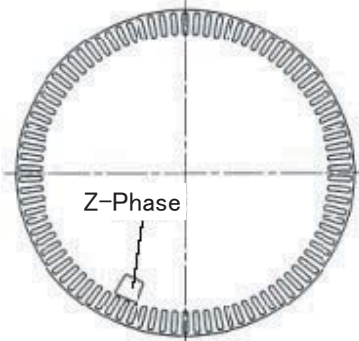
<General View>



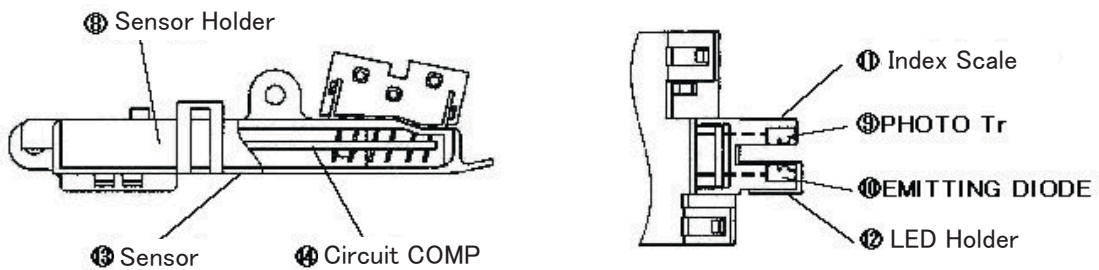
<Sectional View>



<Main Scale>



<Sensor>

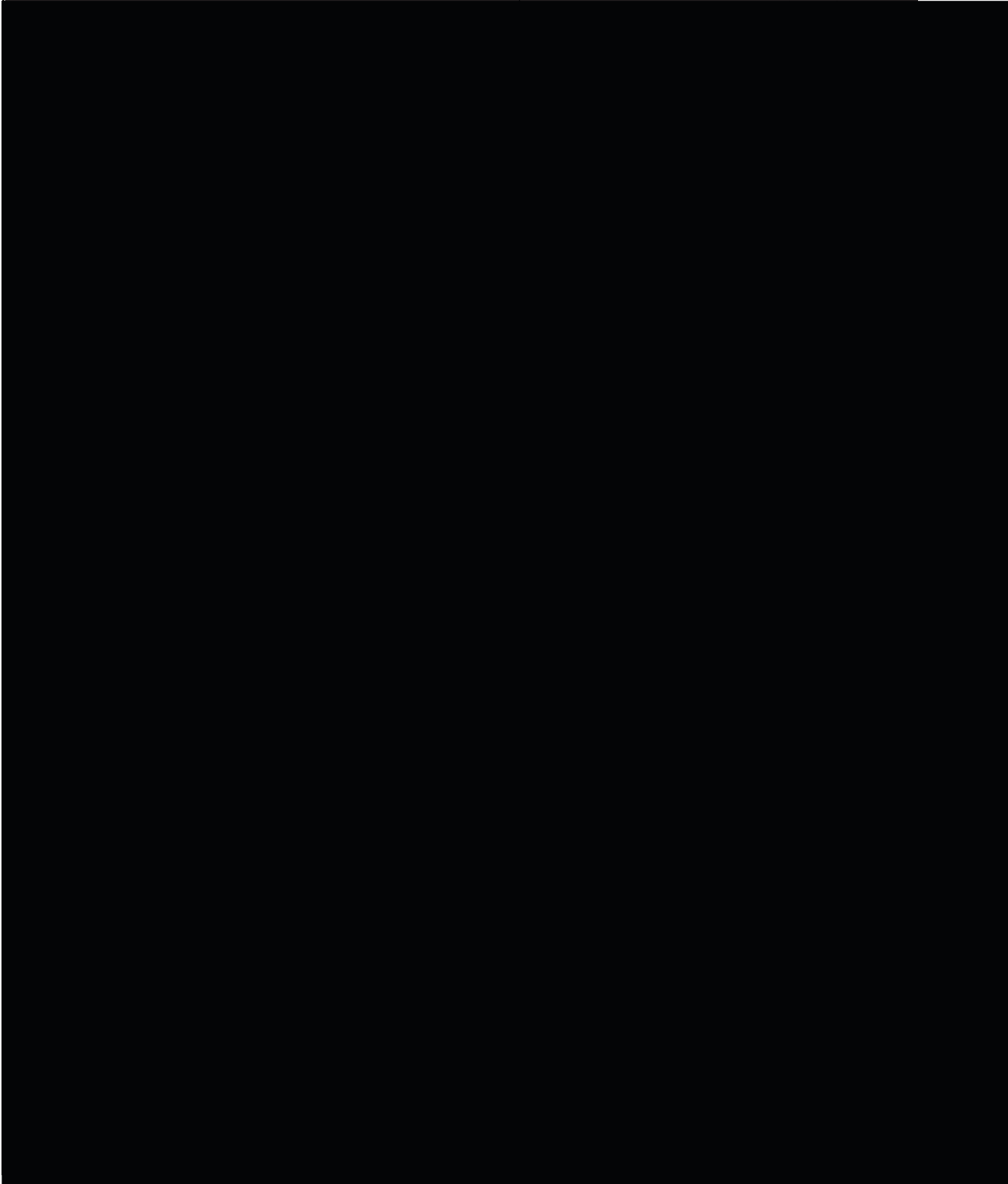


【HG-FMEA-0008】

System Function and Failure List [1/1]

System Name: _____ VSA (NK11V) _____

△		
△		
△	2001/APR/2	20D Kawa
	Date	Prepared

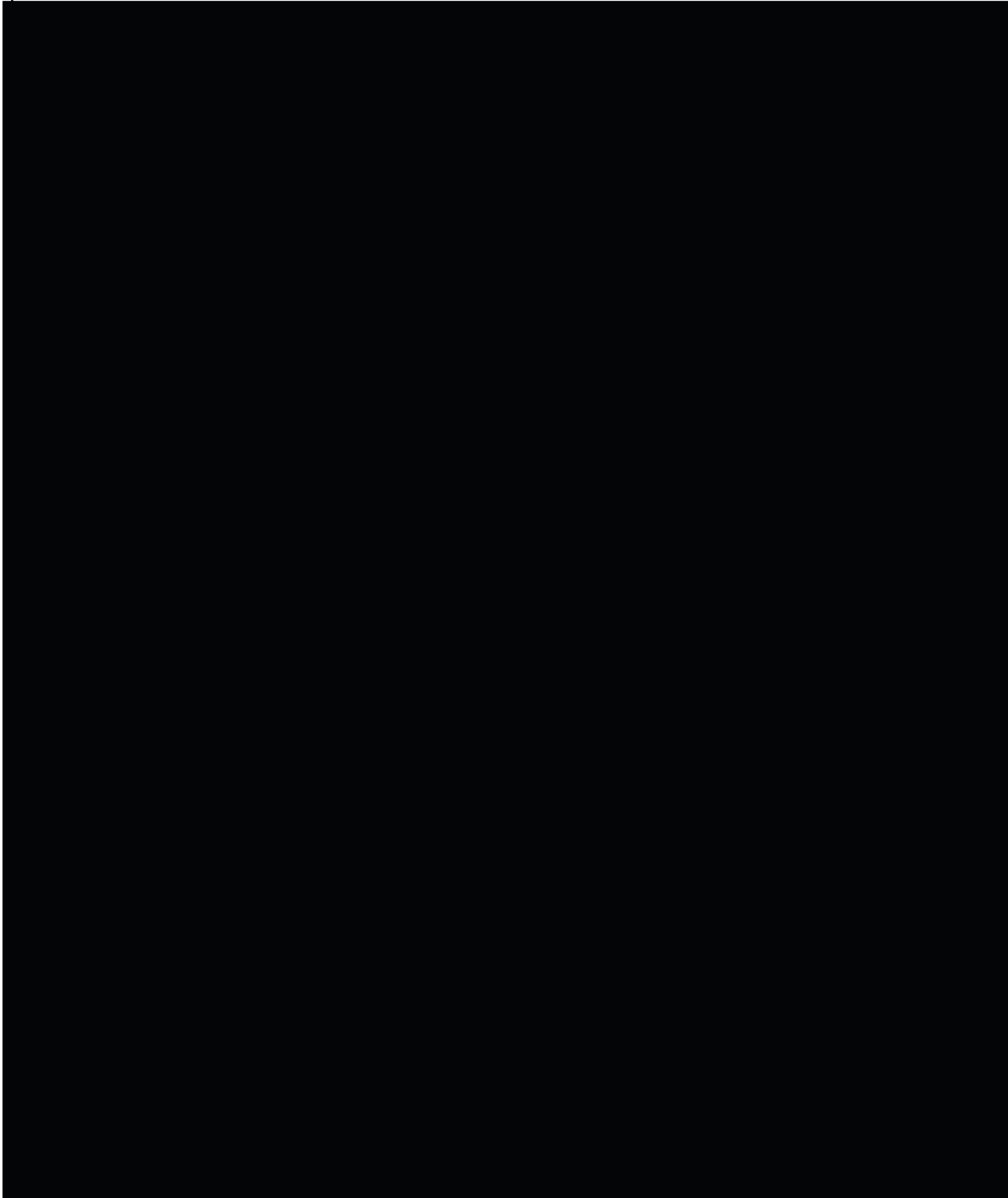


【HG-FMEA-0009】

System Severity and definitions [1 / 1]

System Name: VSA(NK11V)

△		
△		
△	2001/APR/2	20D Kawan
	Date	Prepared



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA - 0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [1 / 73]
(FTA)

			2000/APR/20D	Kawamoto
			Date	Prepared
				Approved



1
2
3

[HG-FMEA-0005]

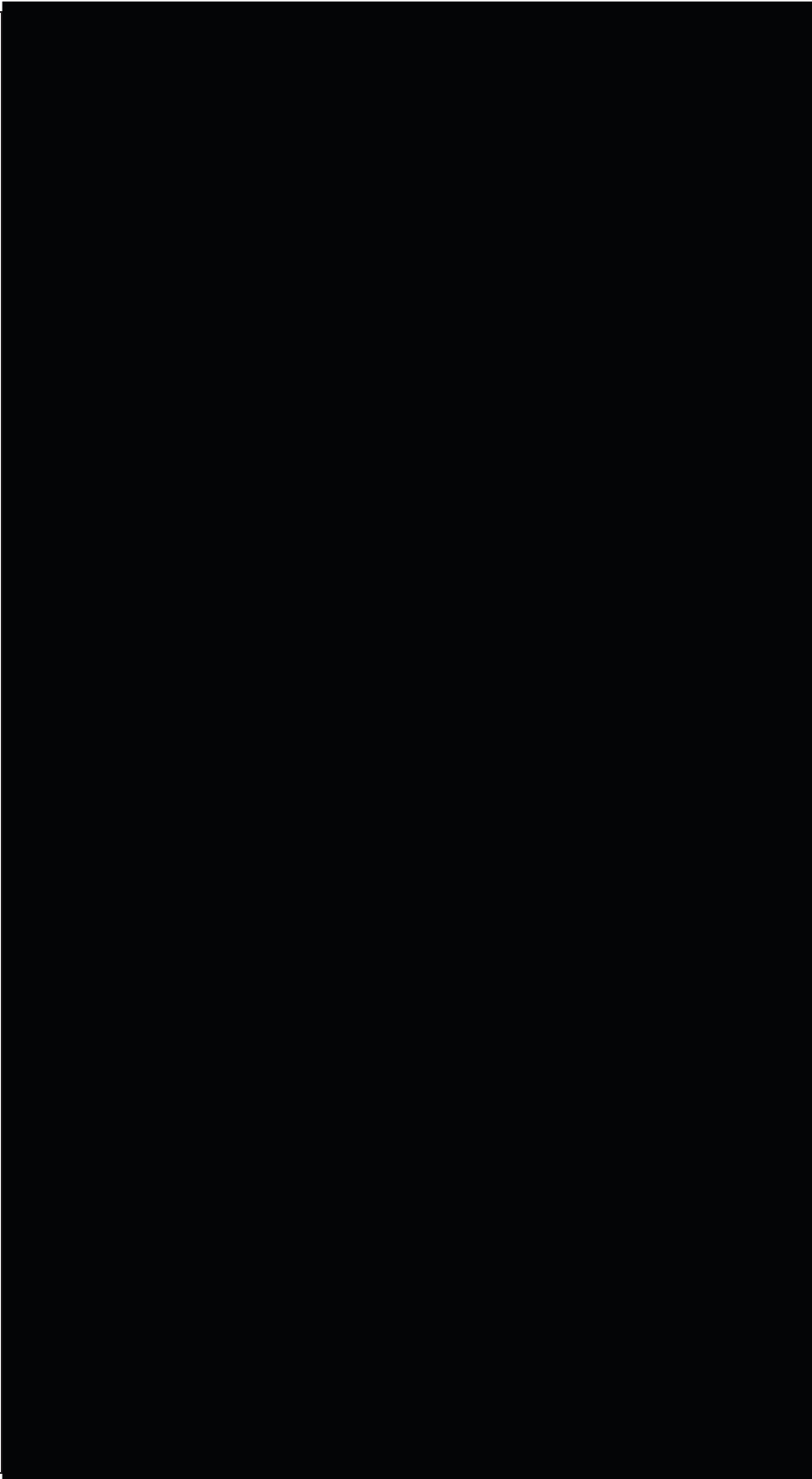
A	T	V
●	●	●

System Name: NK11A(ABS)/(TOS)/(VSA)

Failure Mode List [2 / 73]

(FTA)

△	△	△				
△	△	△	2001APR2	20D	Kawanoto	
△	△	△	Date	Prepared	Approved	



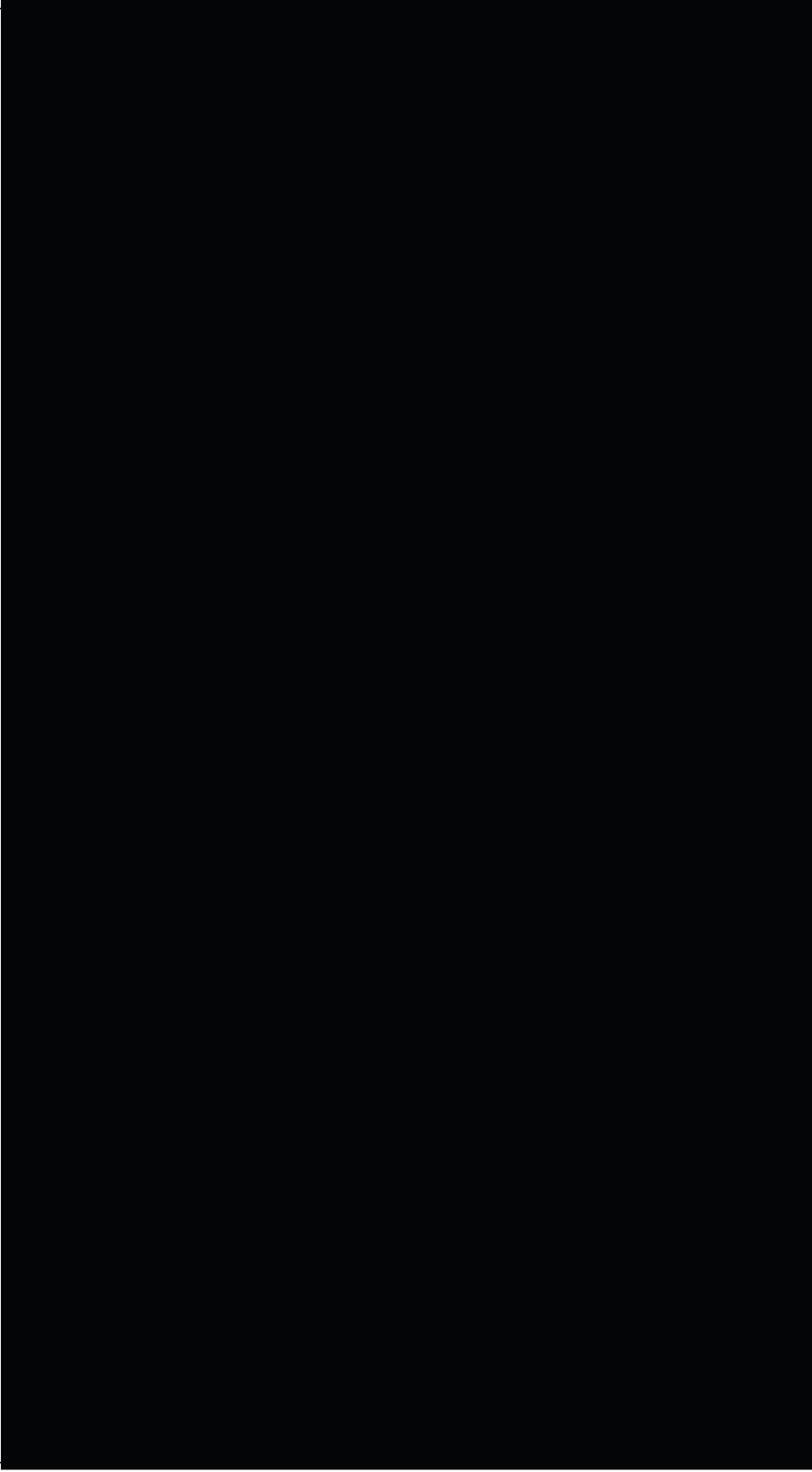
[HG-FMEA - 0005]

A	T	V
●	●	●

System Name NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [3 / 73]
(FTA)

△					
△					
△					
△					
		2001APR2	20D	Kawanoto	
		Date		Prepared	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

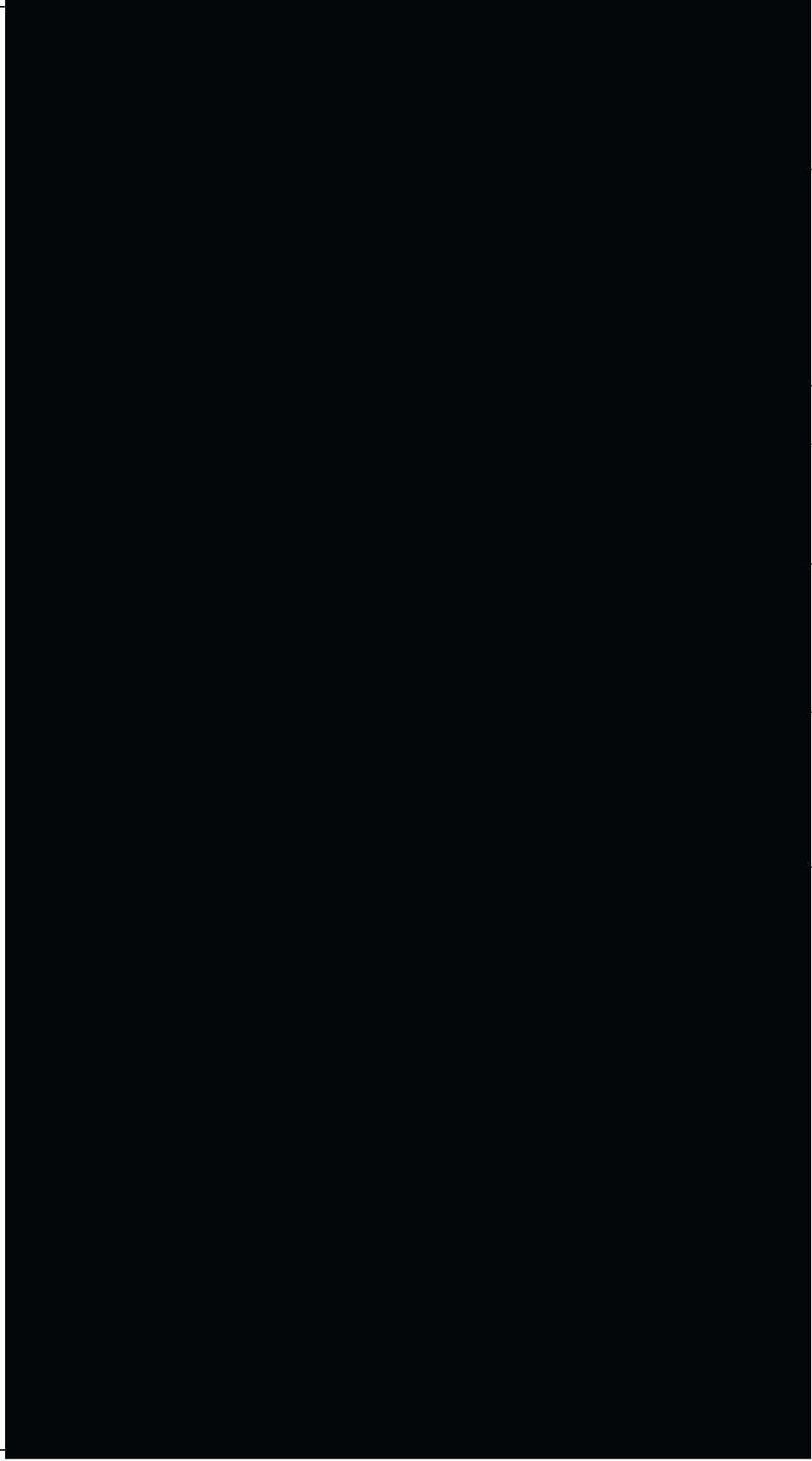
[HG-FMEA-0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [4 / 73]
(FTA)

△					
△					
△					
△		2001APR2	20D	Kawanoto	
		Date	Prepared	Approved	



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [5 / 73]
(FTA)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2001/APP/2	20D	Kawamoto
			Date	Prepared	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [6 / 73]
(FTA)

				2001/APR/2	20D	Kawamoto		
				Date	Prepared	Approved		



[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [7 / 73]
(FTA)

△					
△					
△	2001/APP/2	20D	Kawanoto		
	Date	Prepared	Approved		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

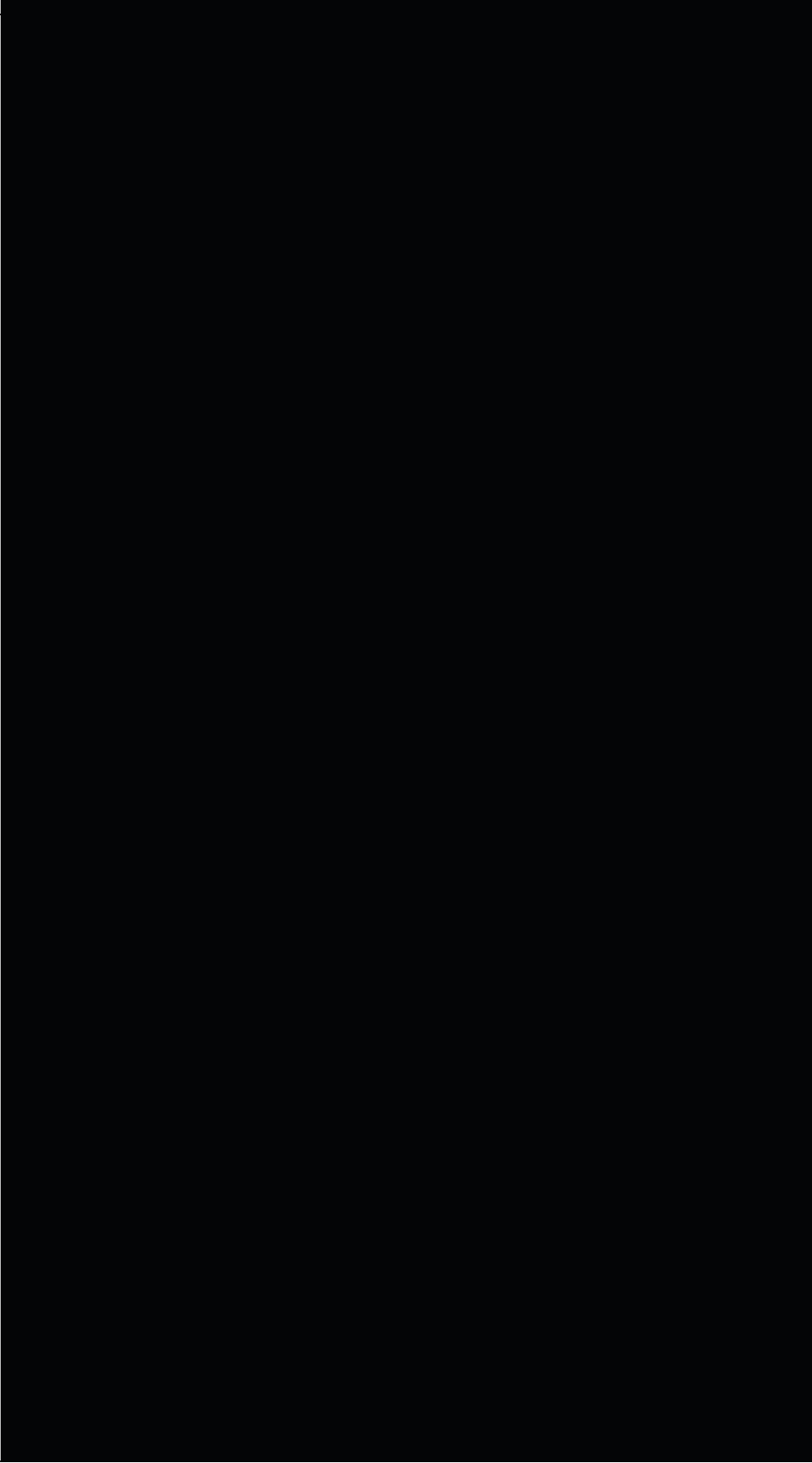
A	T	V
	●	●

NK11A(ABS)/T(TCS)/V(VSA)

System Name

Failure Mode List [8 / 73]
(FTA)

△					
△					
△					
	2001/APR/2	20D	Kawanoto		
	Date	Prepared	Approved		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

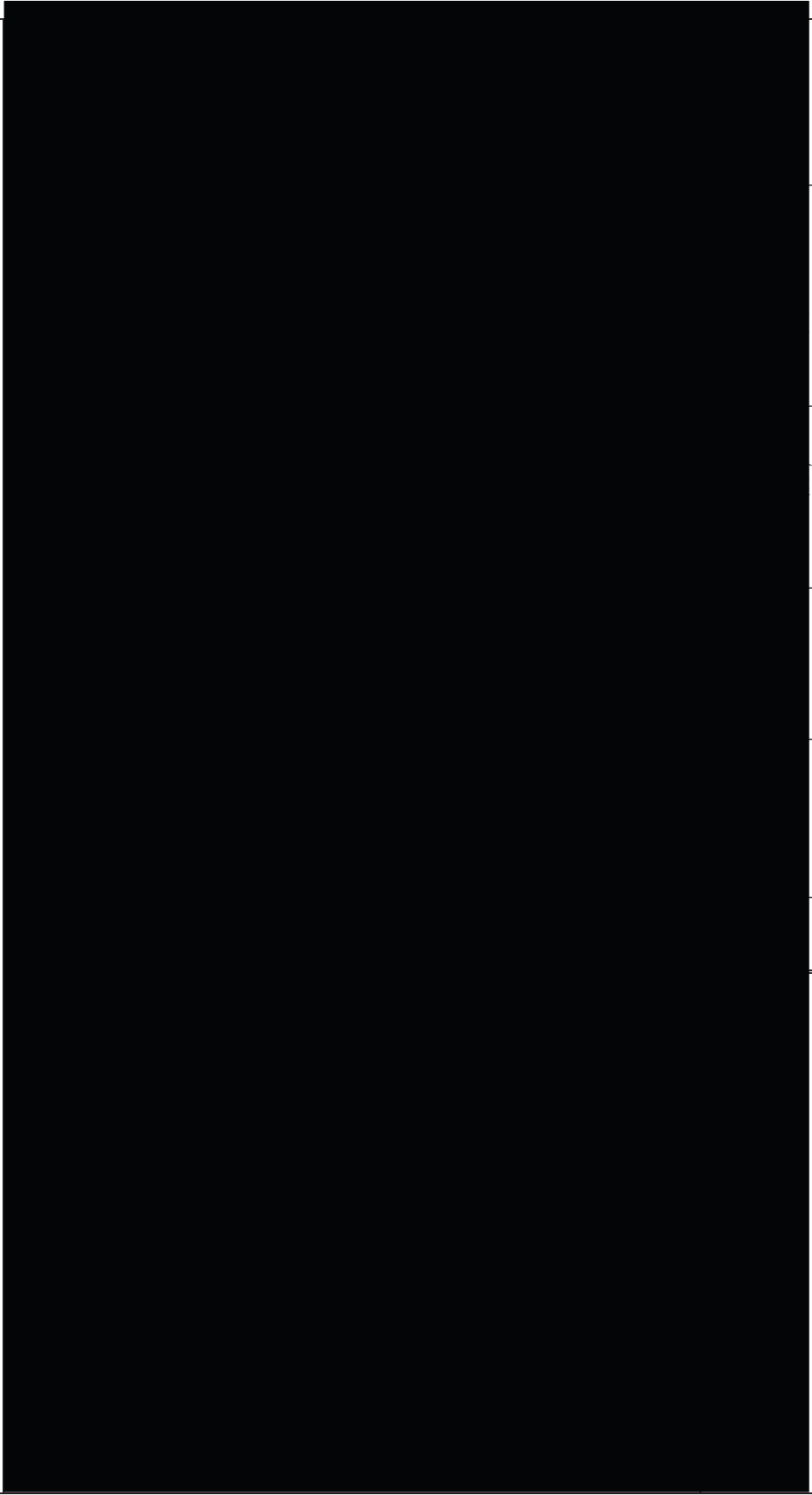
[HG-FMEA-0005]

A	T	V
	●	●

System name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [9 / 73]
(FTA)

△					
△					
△	2001/04/27	20D	Kawamoto		
	Date	Prepared	Approved		



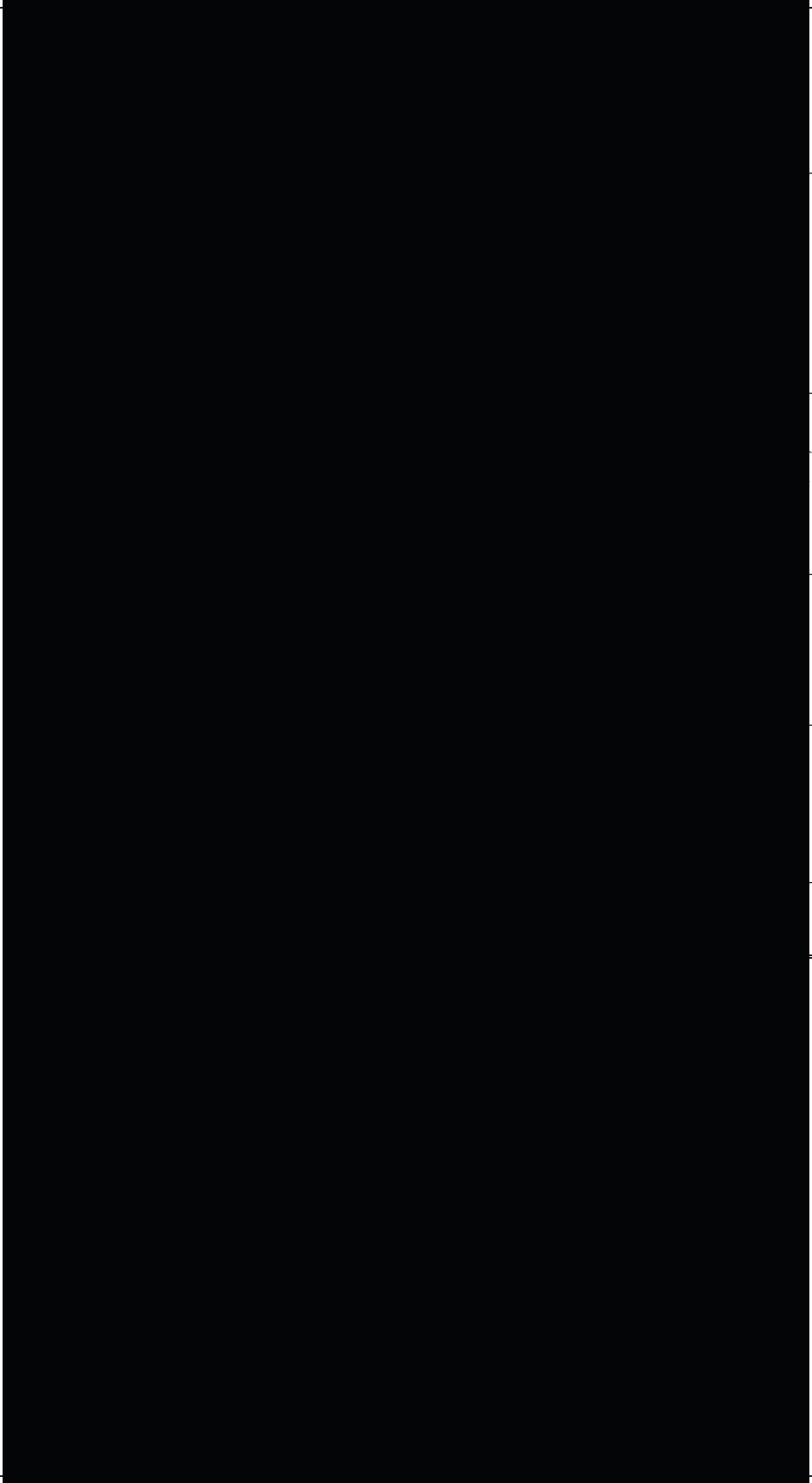
[HG-FMEA-0005]

A	T	V
●	●	●

System name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [10/73]
(FTA)

△					
△					
△		2001/APP2	20D	Kawamoto	
		Date	Prepared	Approved	



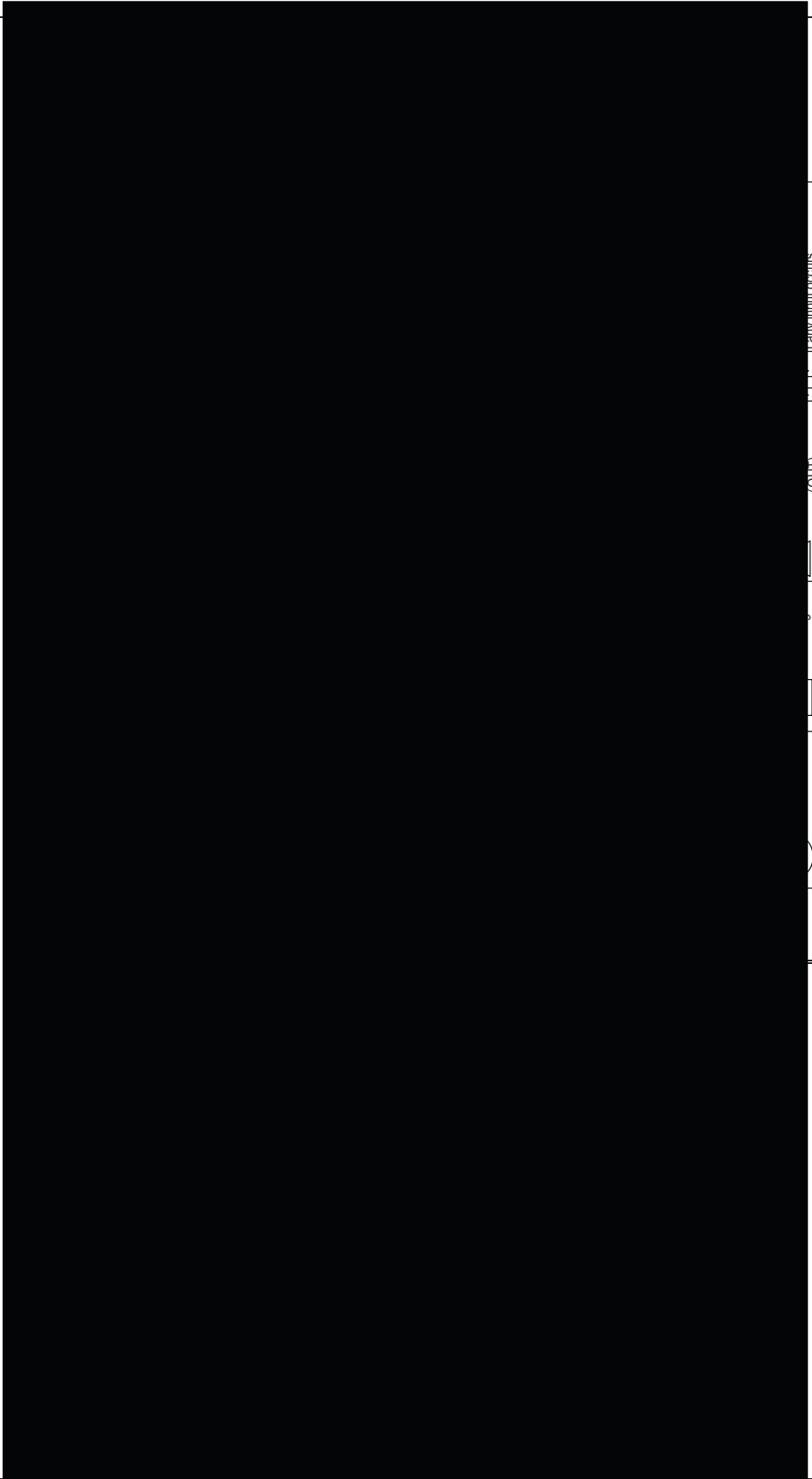
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [11 / 73]
(FTA)



	2001/APP2	20D	Kawamoto	
	Date	Prepared	Approved	

(OUT) ir any input occurs

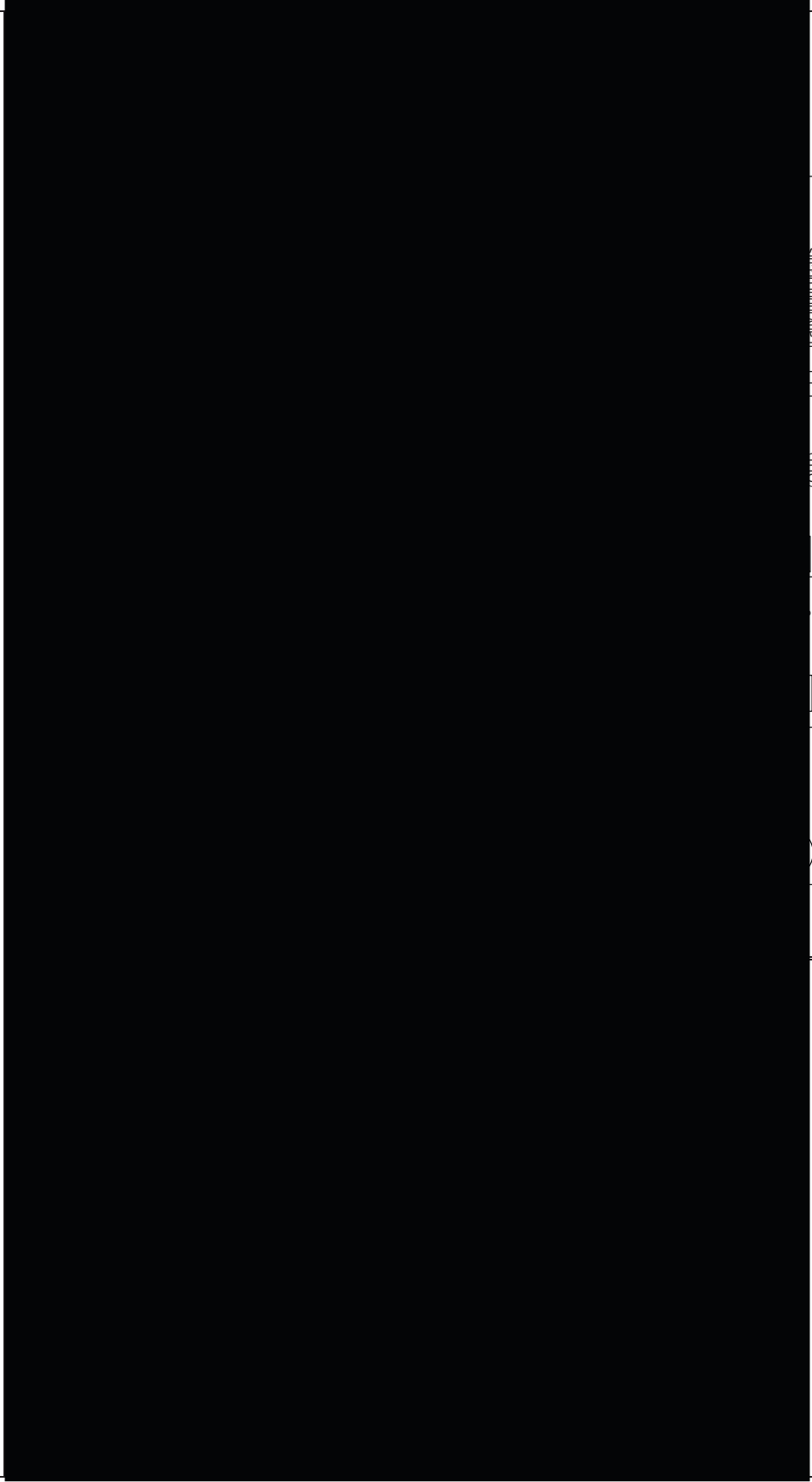
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
		●

System name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List (12/73)
(FTA)



		2001APR2	20D	Kawamoto
		Date	Prepared	Approved

ir entry input occurs

(UUI)

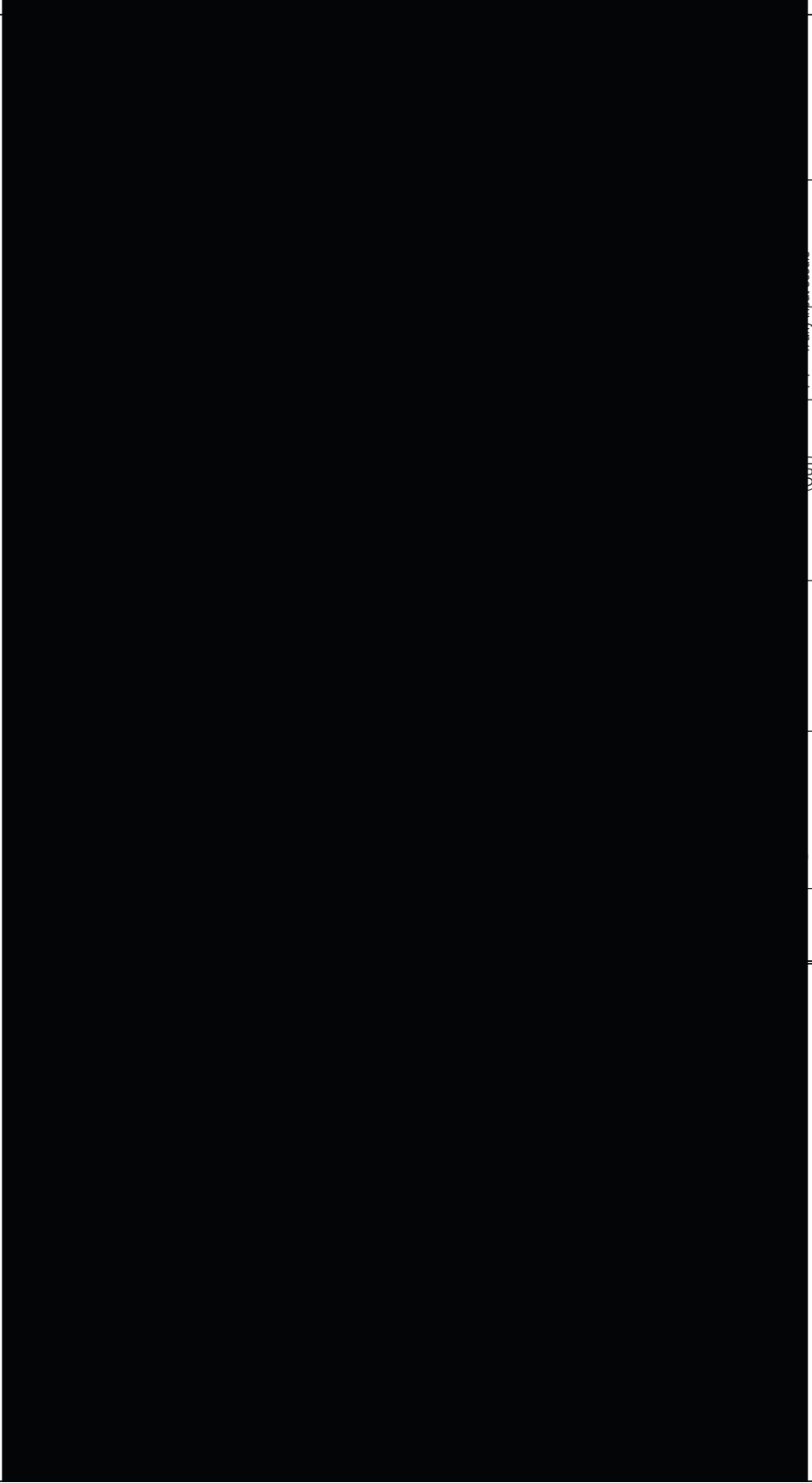
[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [13 / 73]
(FTA)

△					
△					
△	2001/APP2	20D	Kawamoto		
	Date	Prepared	Approved		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

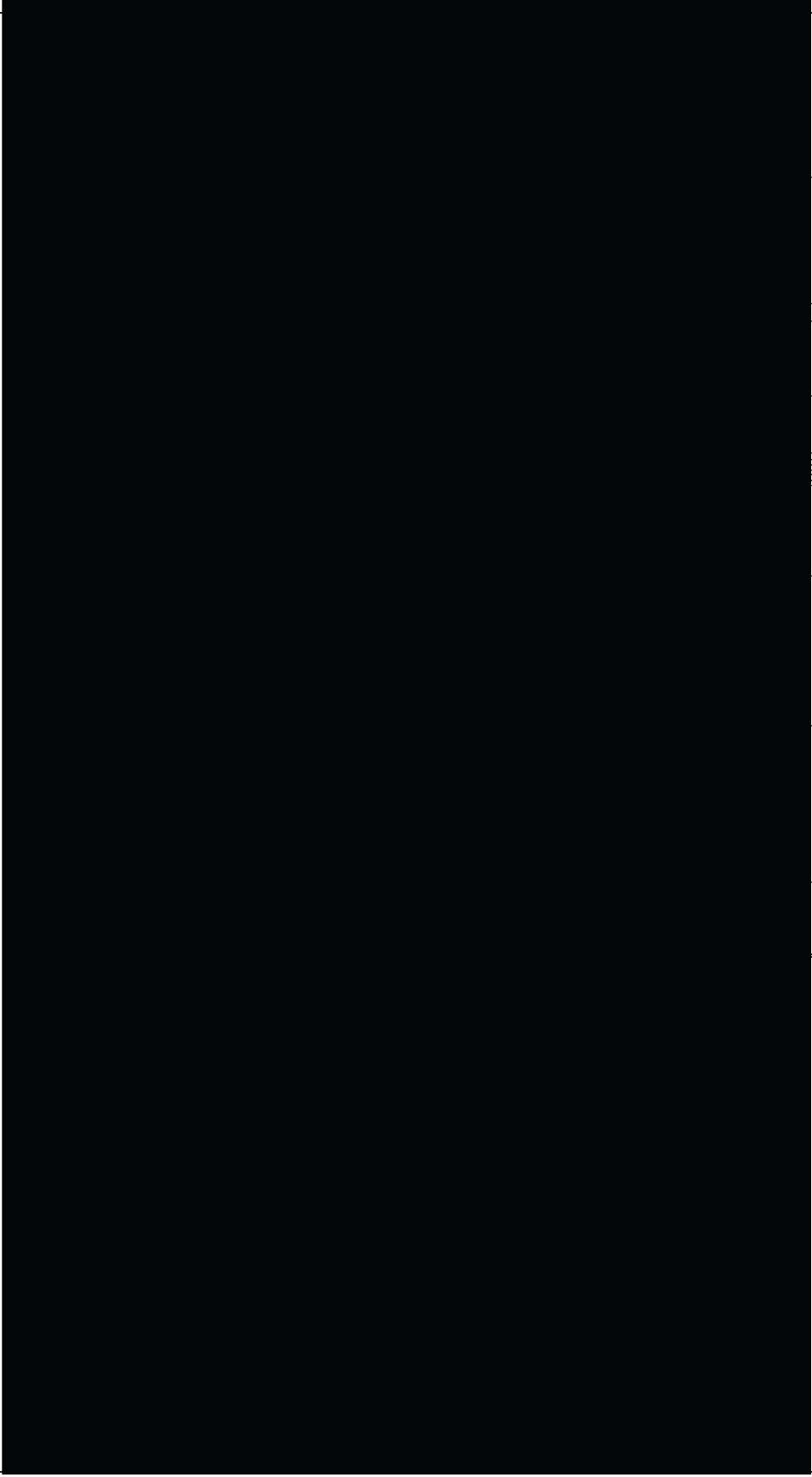
[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [14 / 73]
(FTA)

△					
△					
△					
		2001/04/22	20D	Kawamoto	
		Date	Prepared	Approved	



CONFIDENTIAL BUSINESS INFORMATION

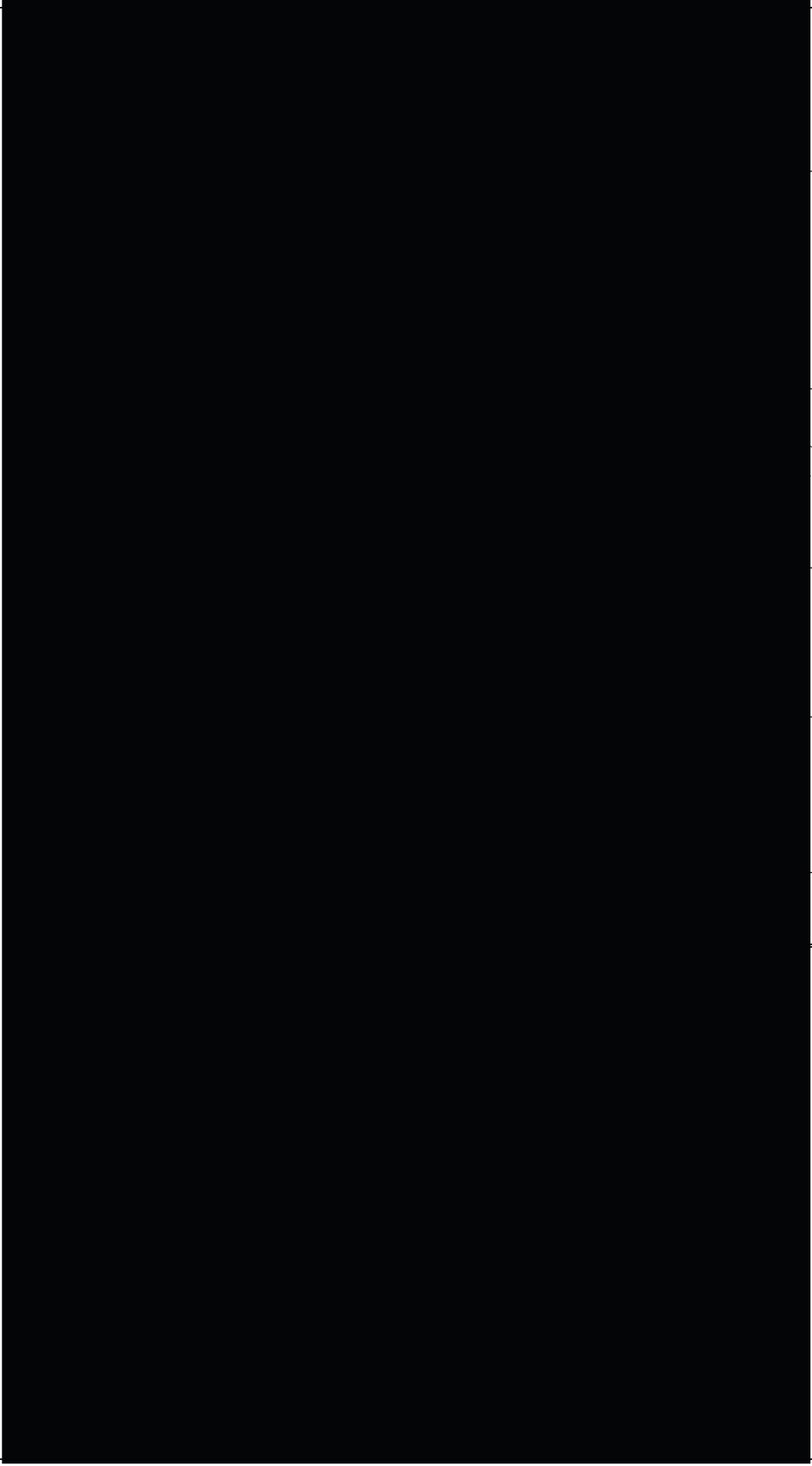
[HG-FMEA—0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [15 / 73]
(FTA)

▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
▲	▲	▲	▲	2001/04/22	20D	Kawamoto	Prepared	Approved	
				Date					

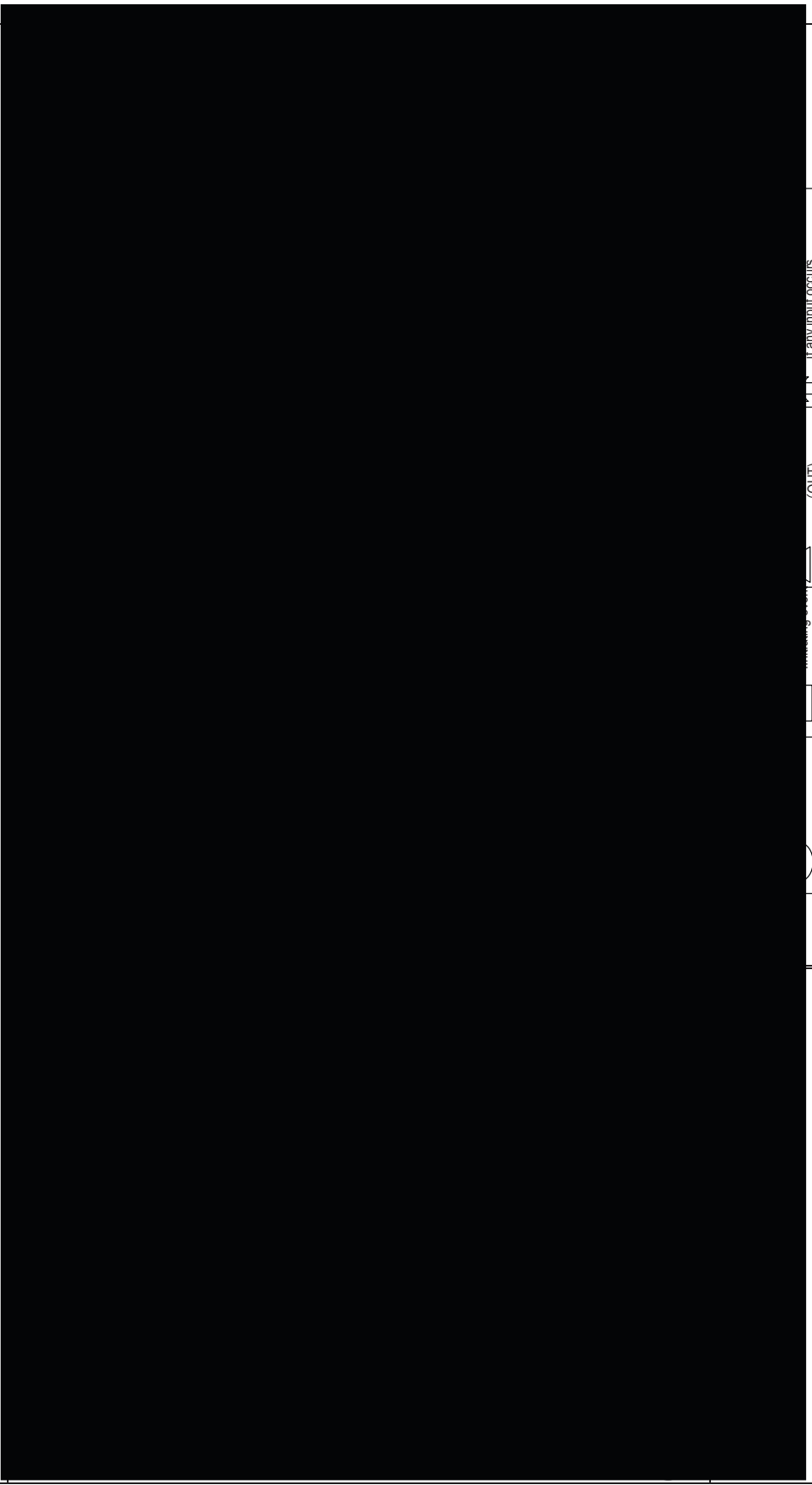


[HG-FMEA-0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [17 / 73]
(FTA)



△				
△	2001APR2	20D	Kawamoto	
△	Date	Prepared	Approved	

if any input occurs

(OUT)

ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

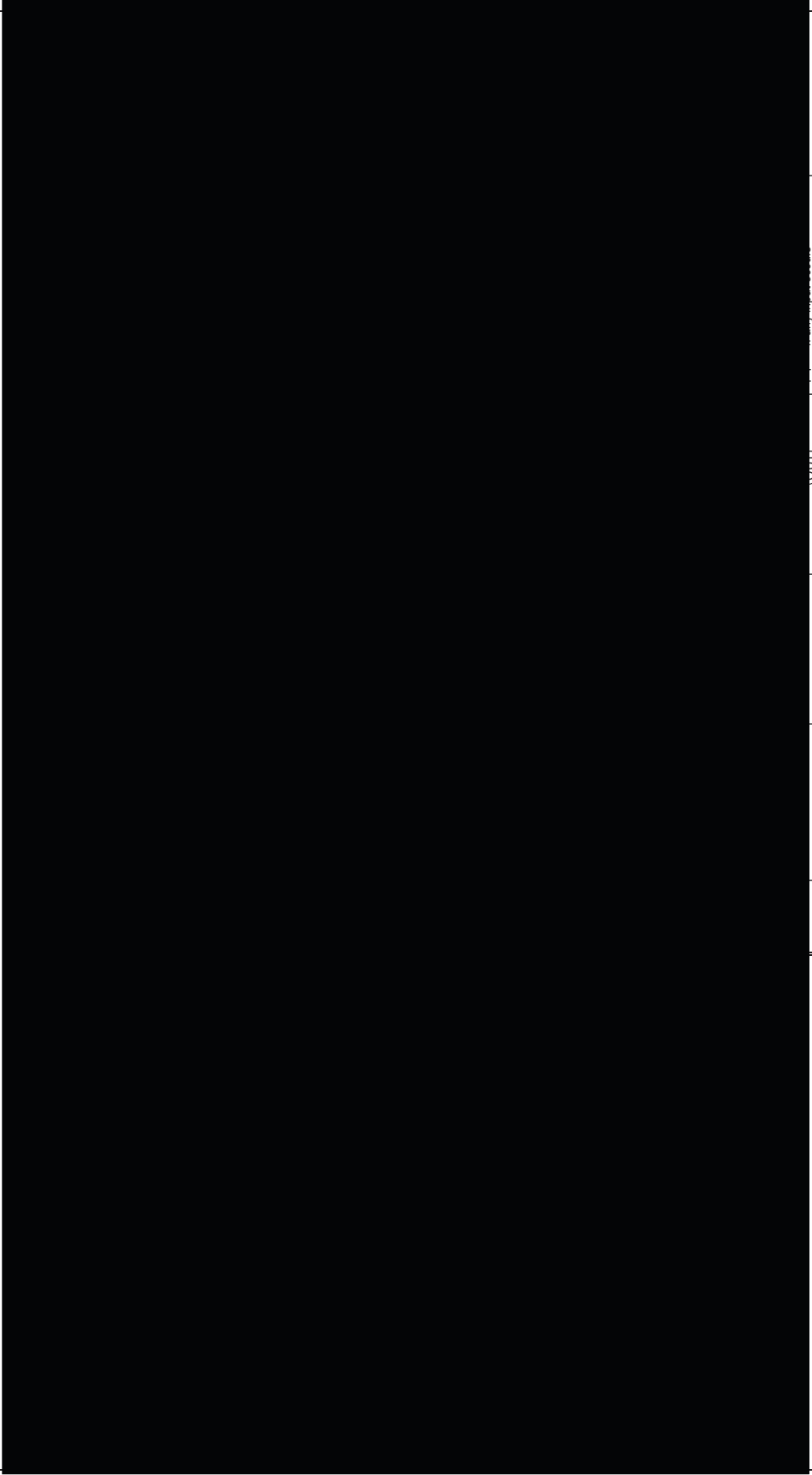
[HG-FMEA-0005]

A	T	V
●	●	●

System name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [18 / 73]
(FTA)

△					
△	2001/APP2	20D	Kawamoto		
	Date	Prepared	Approved		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [19 / 73]
(FTA)

X	X	X	X	X	X	X	X
			2001APR2 200	Kawanoto			
			Date	Prepared	Approved		



trany input occurs

(OUT)

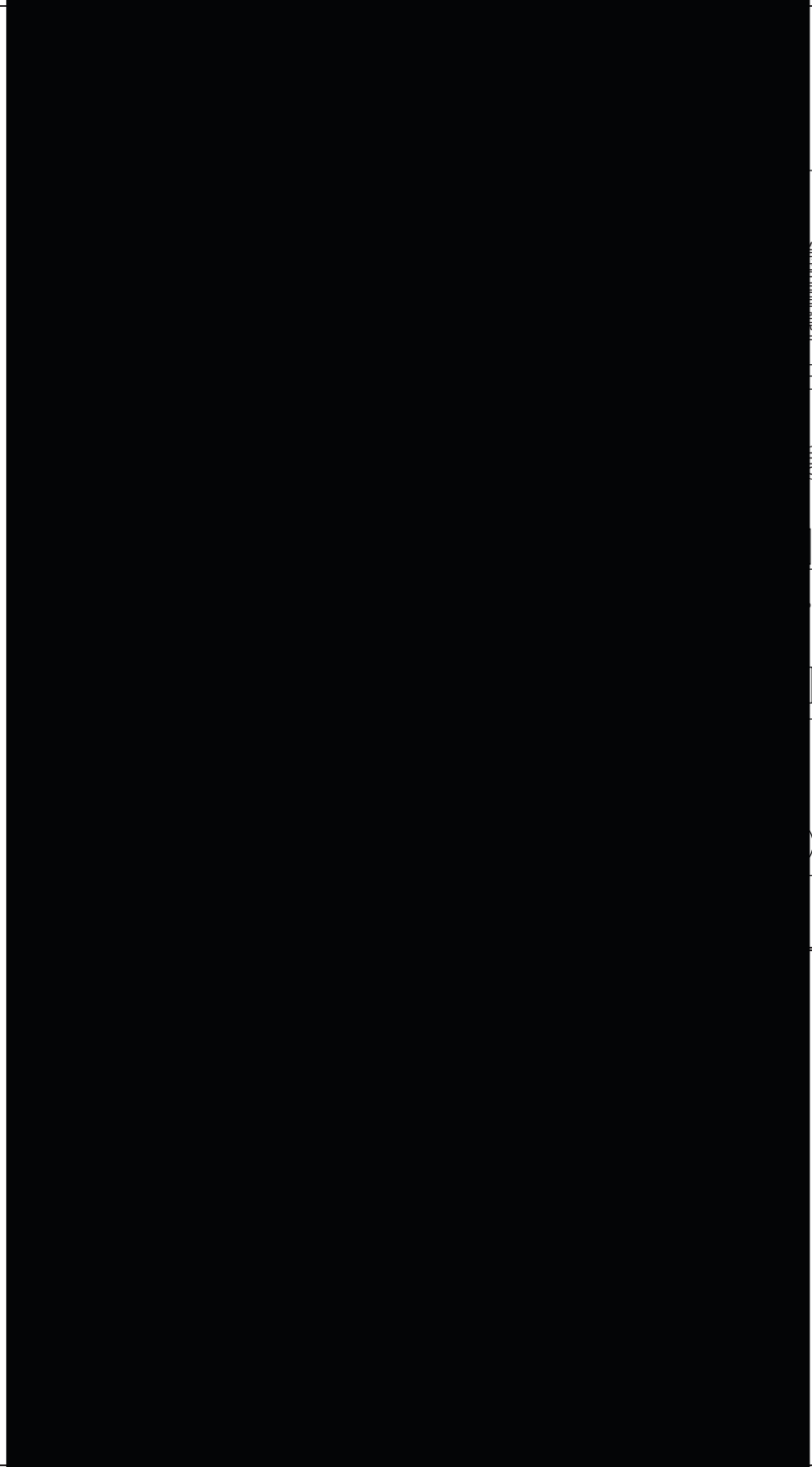
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [20/73]
(FTA)



▲					
▲					
▲	2001/APP2	20D	Kawamoto		
	Date	Prepared	Approved		

(UUI) in entry input occurs

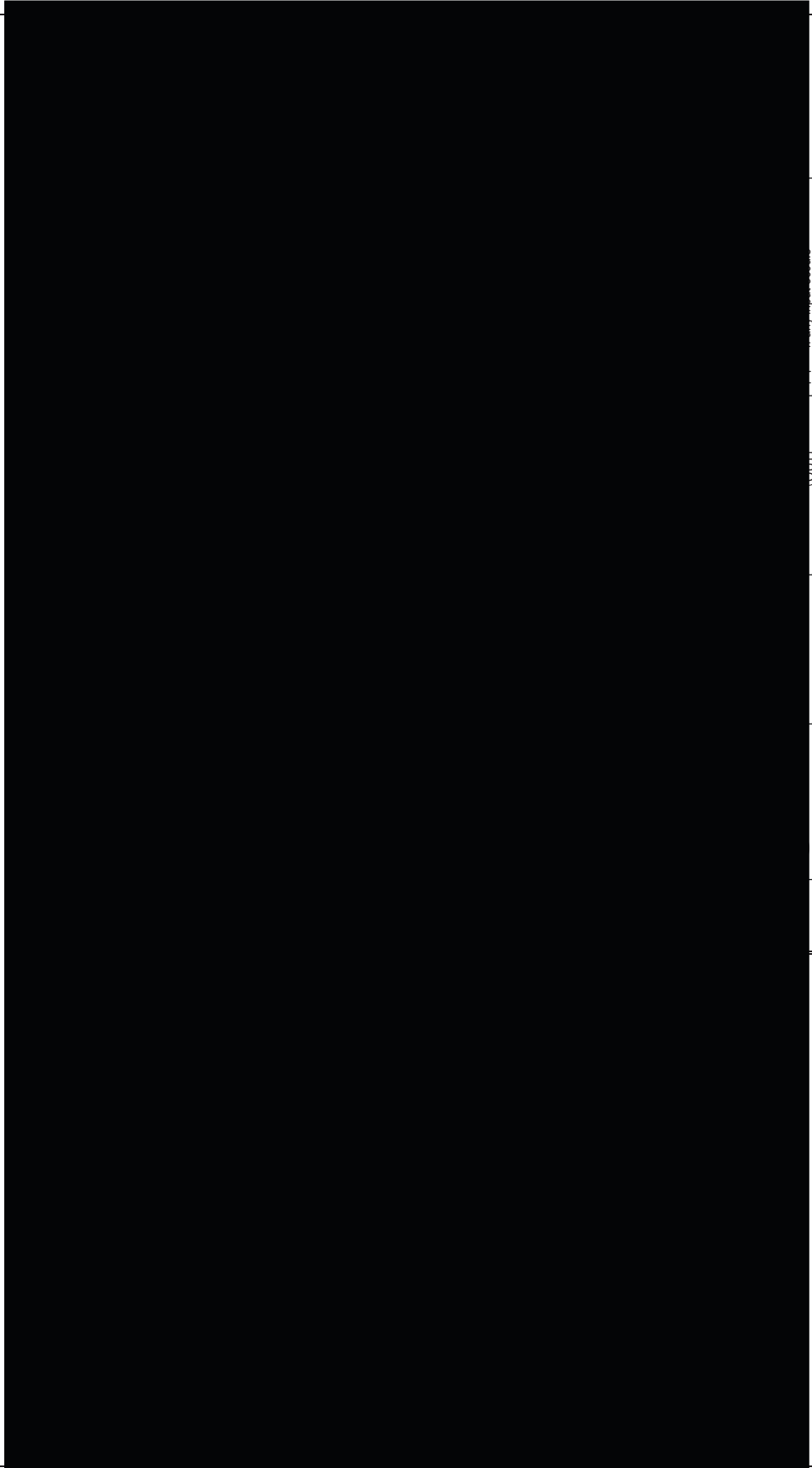
[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [21/73]
(FTA)

		2001/APP2	20D	Kawamoto	
		Date	Prepared	Approved	



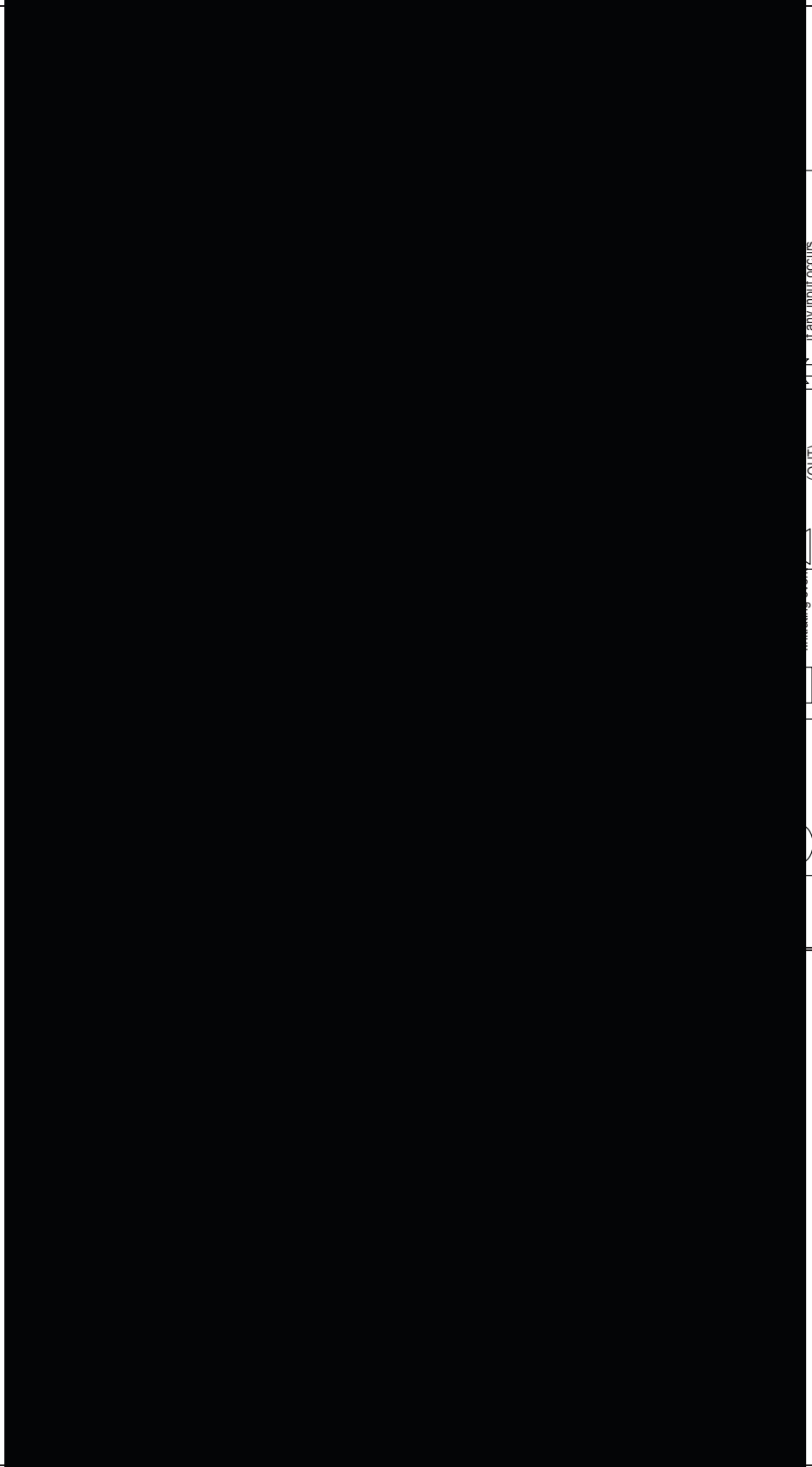
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [22 / 73]
(FTA)



△					
△					
△	2001/APP2	20D	Kawamoto		
	Date	Prepared	Approved		

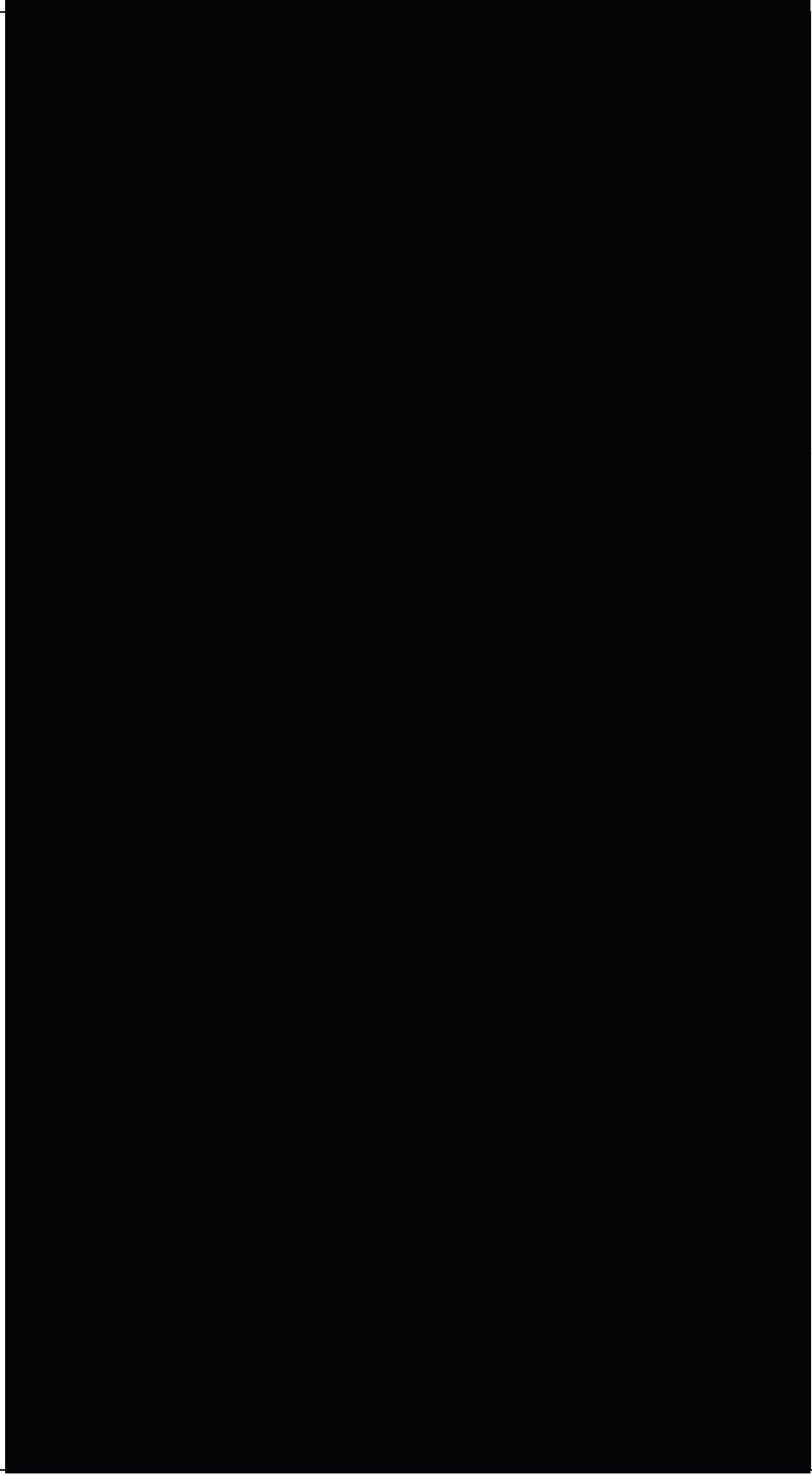
[HG-FMEA - 0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [23 / 73]
(FTA)

△					
△					
△					
△					
		2001APR2	20D	Kawanoto	
		Date		Prepared	Approved



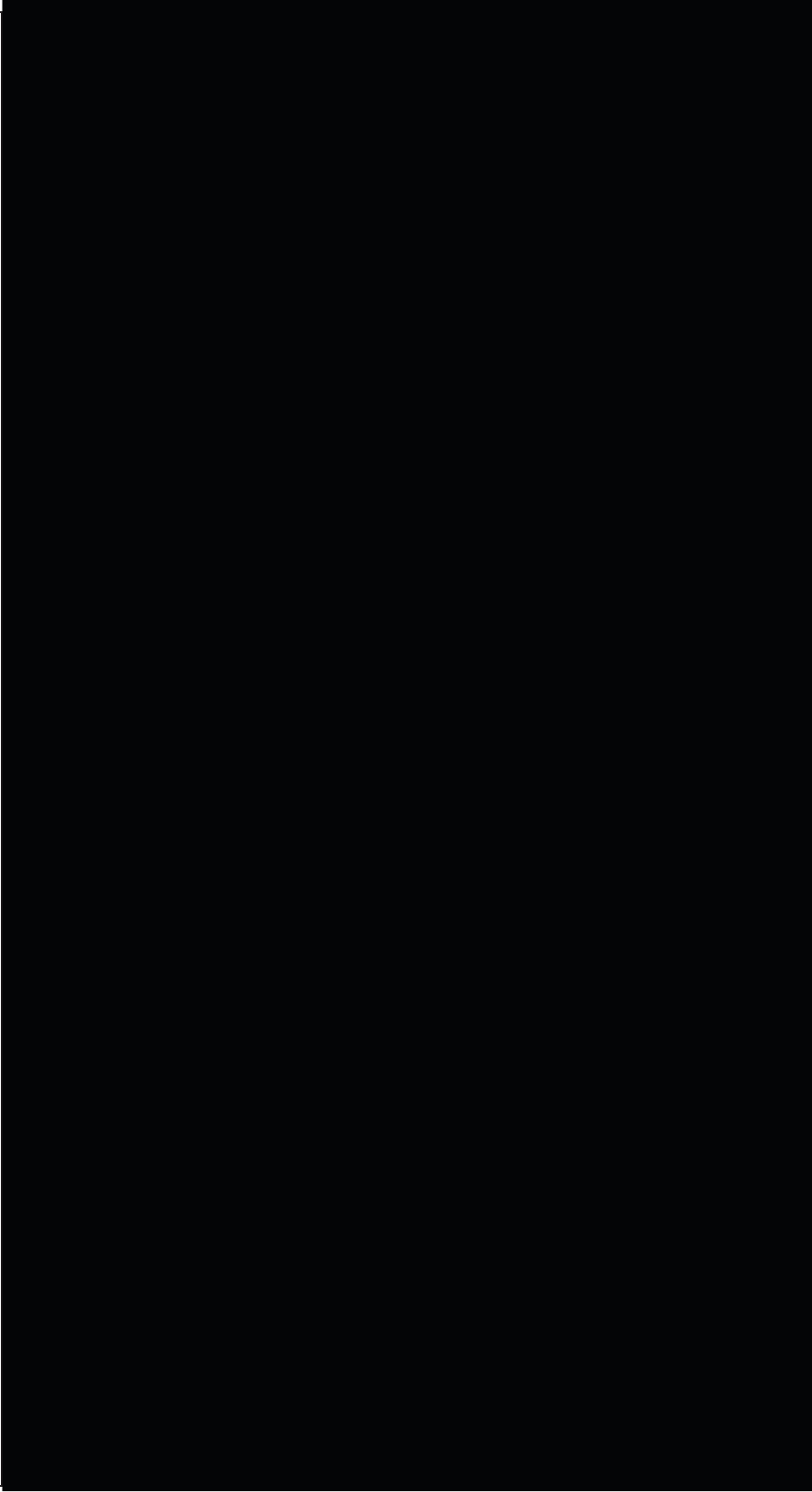
[HG-FMEA - 0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [24 / 73]
(FTA)

		2001APR2	20D	Kawanoto
		Date	Prepared	Approved



(001)

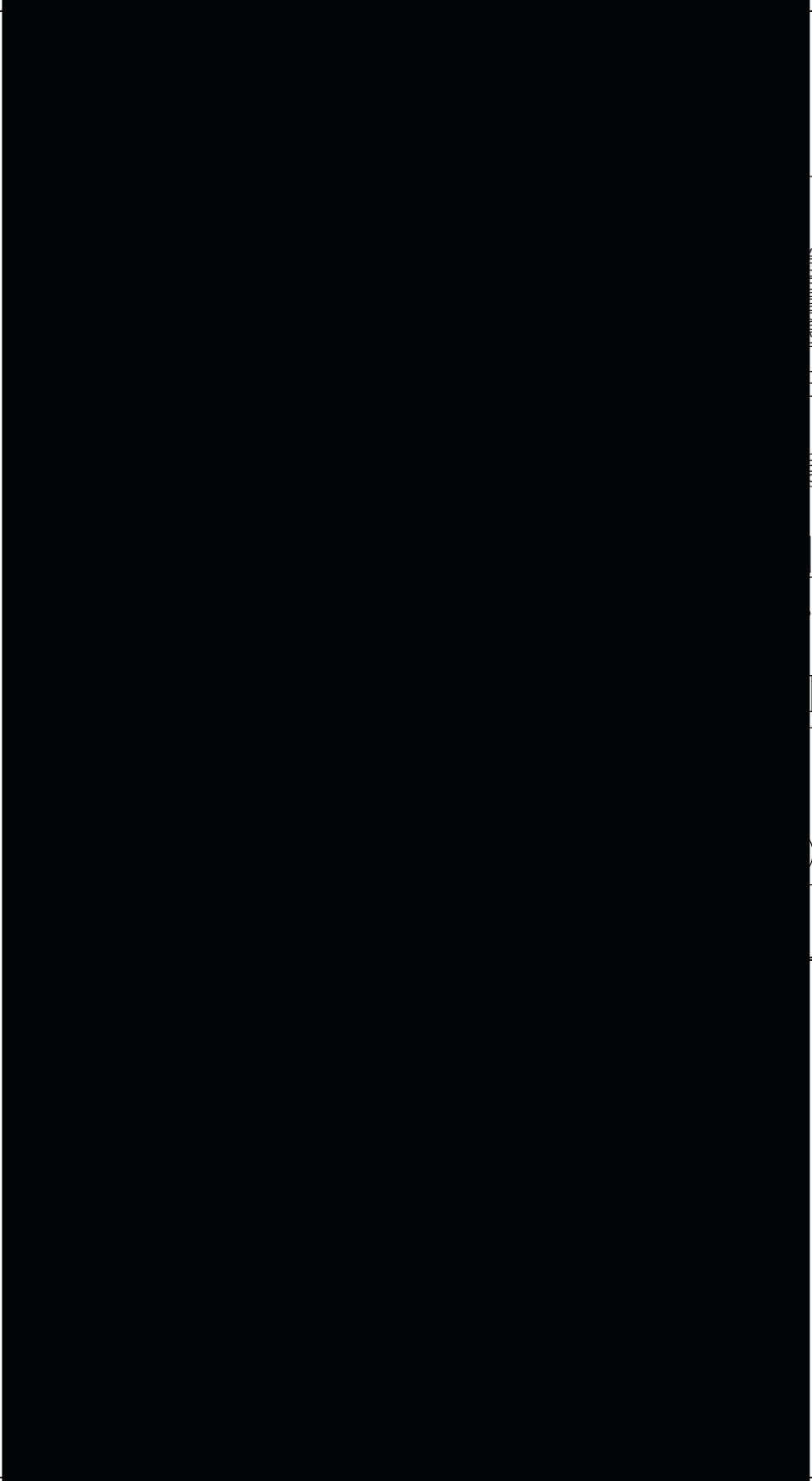
ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [27 / 73]
(FTA)



△					
△					
△	2001/APP2	20D	Kawamoto		
	Date	Prepared	Approved		

(UUI) in early input occurs

[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [28 / 73]
(FTA)

△					
△					
△					
△					
		2001APR2	20D	Kawanoto	
		Date		Prepared	Approved



[HG-FMEA - 0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [29 / 73]
(FTA)

		2001APR2 20D	Kawanoto
		Date	Prepared | Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

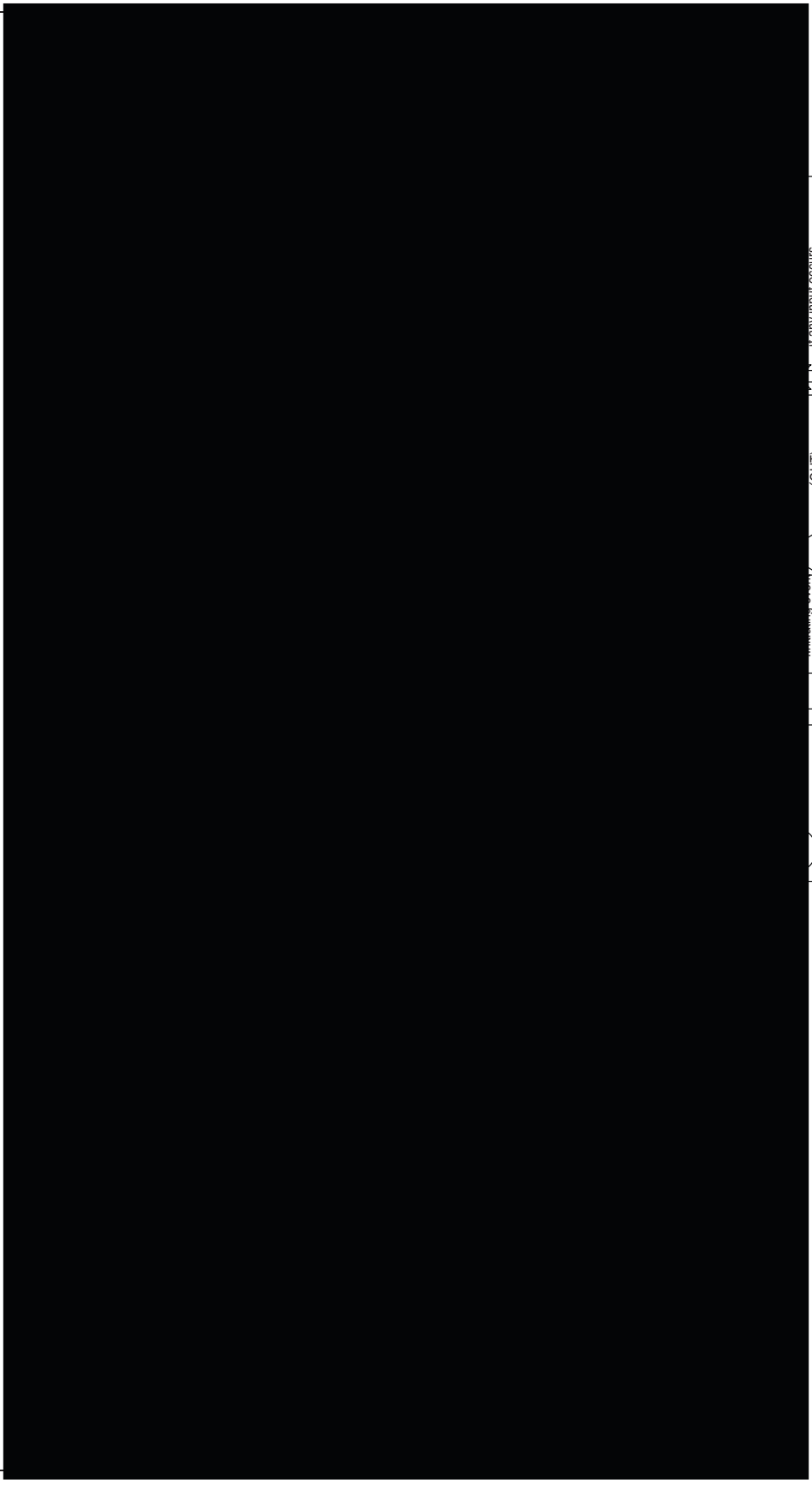
[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [30 / 73]
(FTA)

△				
△				
△		2001APR2	200	Kawamoto
		Date	Prepared	Approved



(OUT) ... if any input occurs

[HG-FMEA - 0005]

A	T	V	<input checked="checked" type="checkbox"/>
---	---	---	--

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [31 / 73]
(FTA)

<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>
<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>
Date			2001	APR2	2001	Kawanoto		Prepared | Approved	



[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [32 / 73]
(FTA)

△	△			
△	△			
△	△	2001APR2	20D	Kawanoto
		Date	Prepared	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA - 0005]

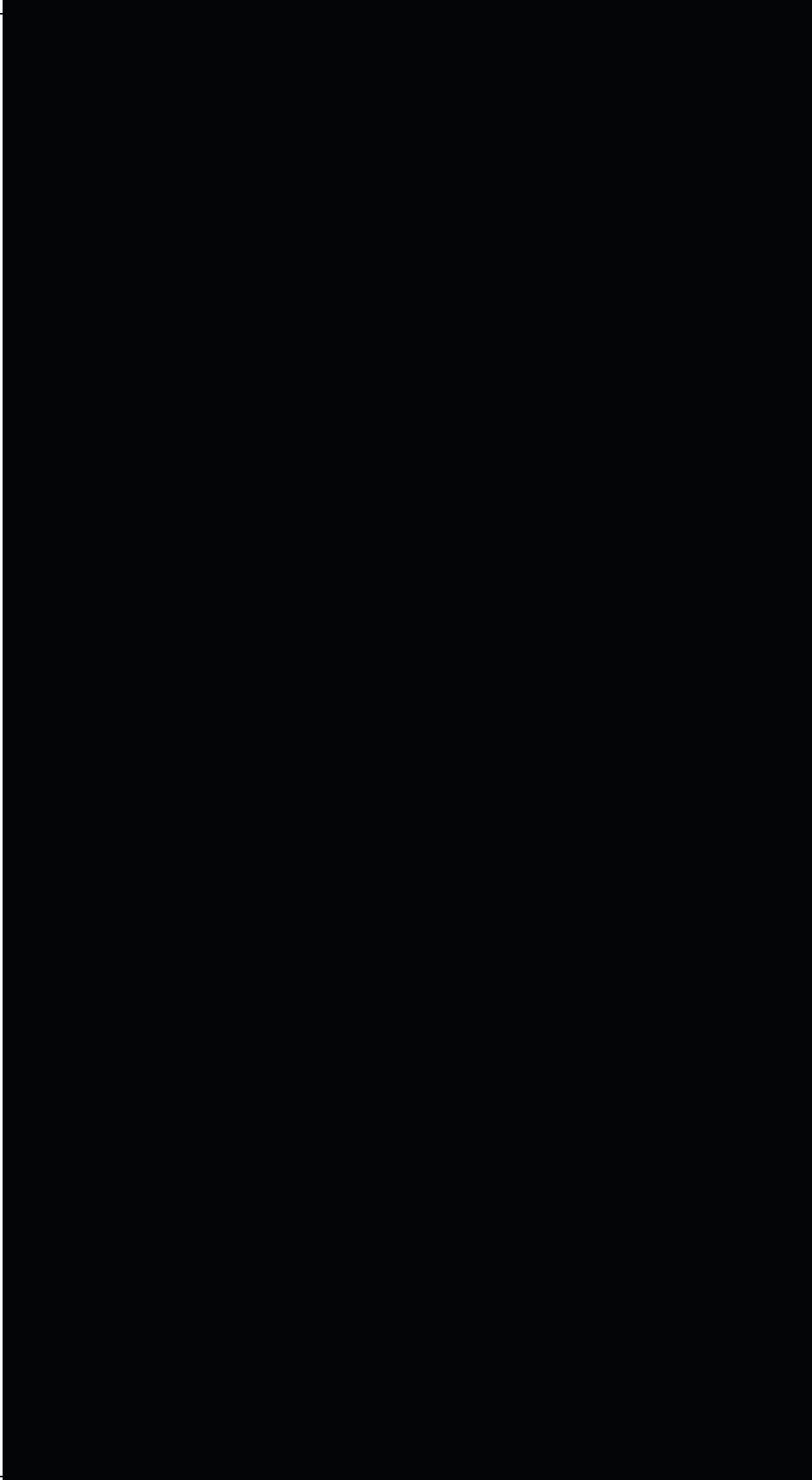
A	T	V
		●

Only applicable to 4WD

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [34 / 73]
(FTA)

△	△				
△	△		2001APR2	20D	Kawanoto
			Date		Prepared / Approved



[HG-FMEA - 0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [35 / 73]
(FTA)

△					
△					
△					
△					
		2001APR2	20D	Kawanoto	
		Date		Prepared	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA - 0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [.36 / 73]
(FTA)

▲					
▲					
▲			2001APR2	20D	Kawanoto
			Date	Prepared	Approved



[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [37 / 73]
(FTA)

△				
△				
△		2001 APR 2	20D	Kawa
		Date		Prepared



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [38 / 73]
(FTA)

		2001APR2	Kawamoto
		Date	Prepared | Approved



(007)

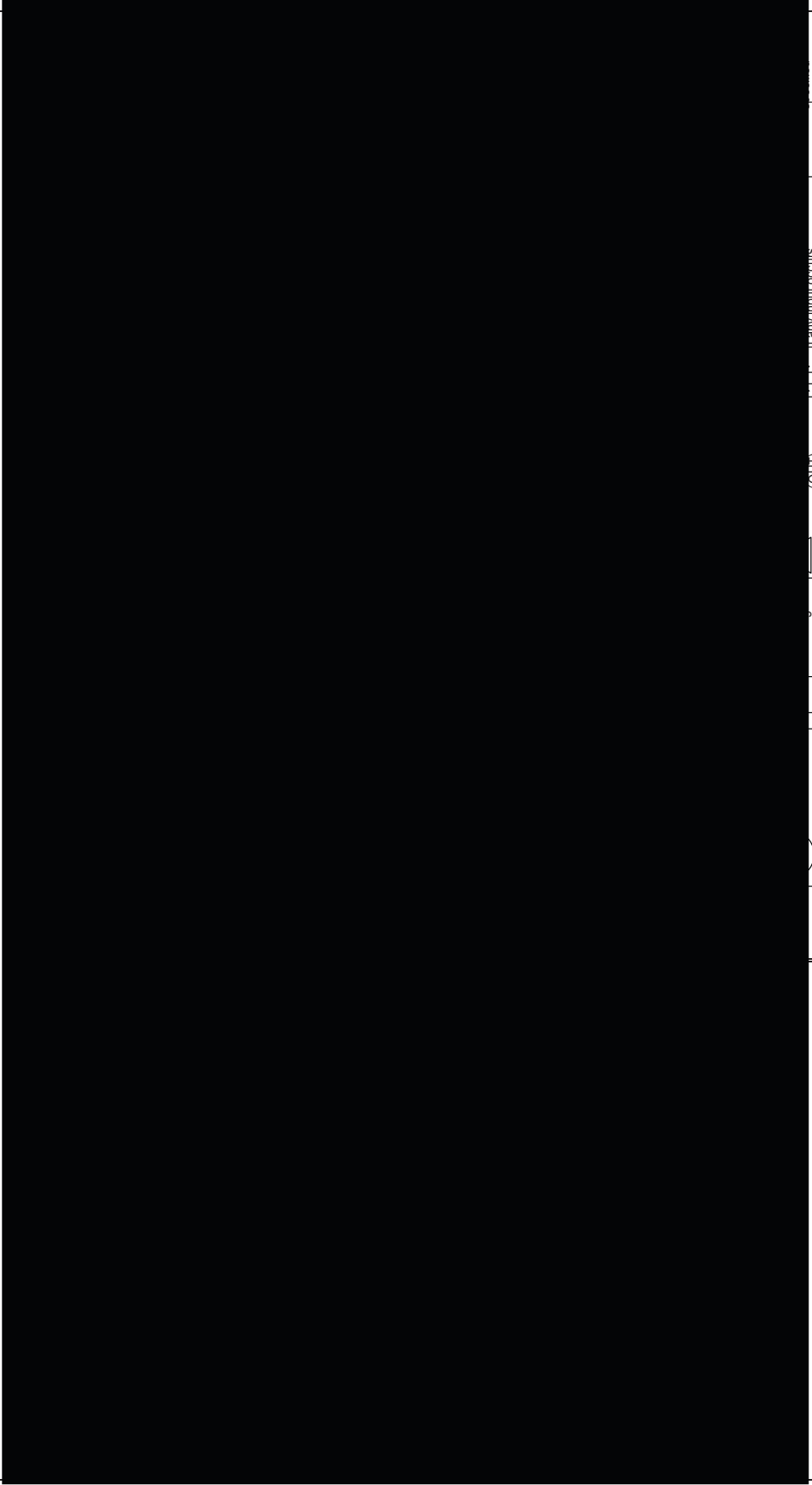
[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [39 / 73]
(FTA)

△					
△					
△					
		2001APR2	20D	Kawamoto	
		Date	Prepared	Approved	



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [41 / 73]
(FTA)

△	△	△	△	△	△	△	△
△	△	△	△	△	△	△	△
△	△	△	△	△	△	△	△
△	△	△	△	△	△	△	△
				2001APR2	20D	Kawanoto	
				Date	Prepared	Approved	



[HG-FMEA - 0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [42 / 73]
(FTA)

△	△	△	△	△	△
△	△	△	△	△	△
△	△	△	△	△	△
				2001 APR 20	Kawanoto
				Date	Prepared | Approved



Priority input occurs

(OUT)

ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [43 / 73]
(FTA)

			2001APR2	20D	Kawanoto
			Date	Prepared	Approved



(b) (5) - Confidential Business Information

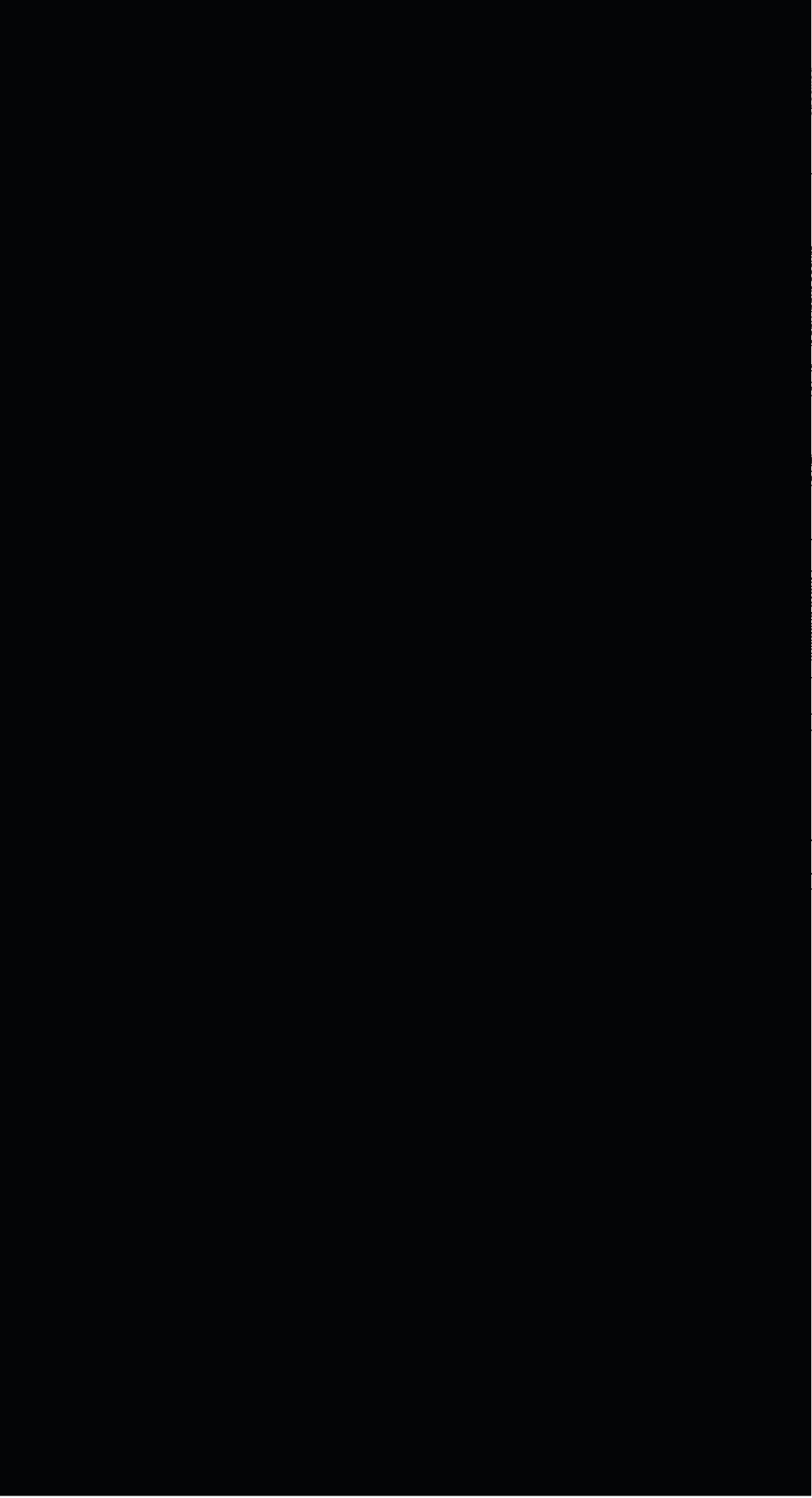
[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [44 / 73]
(FTA)

△	△	△	△	△	△	△	△	△
△	△	△	△	△	△	△	△	△
△	△	△	△	△	△	△	△	△
					2001APR2	20D	Kawanoto	
					Date	Prepared	Approved	



(OU1) | T T T | trany input occurs

ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA - 0005]

A	T	V
	●	●

System Name

NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [45 / 73]

(FTA)

△	△				
△	△	2001APR2	20D	Kawanoto	
△	△	Date	Prepared	Approved	



...ity input occurs

(OUT)

[HG-FMEA - 0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [46 / 73]
(FTA)

✓				
✓				
✓		2001APR2	20D	Kawanoto
		Date		Prepared | Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

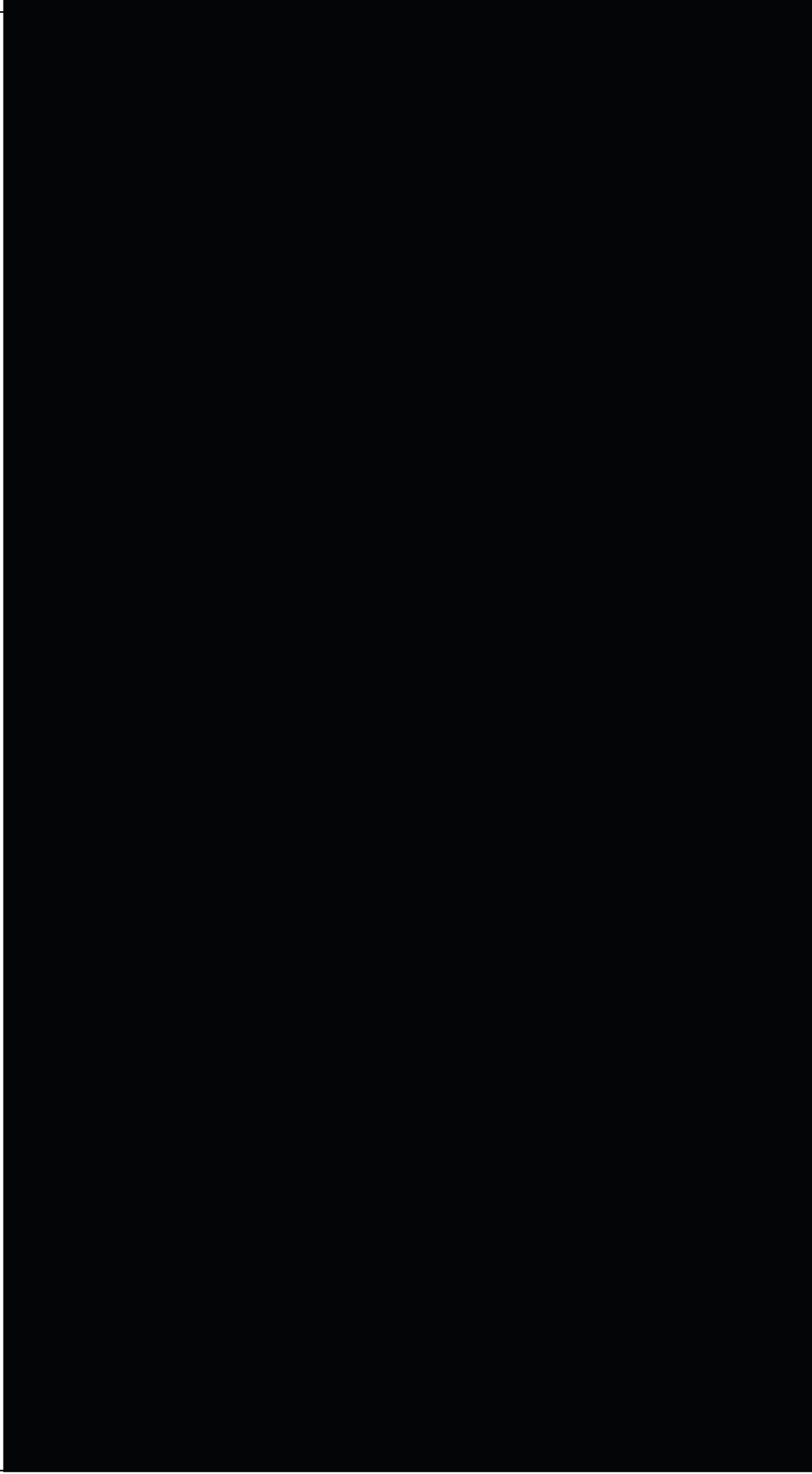
[HG-FMEA-0005]

A	T	V
	●	●

System Name NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [47 / 73]
(FTA)

△					
△					
△	2001APR2	20D	Kawanoto		
	Date		Prepared		Approved



(007)

[HG-FMEA-0005]

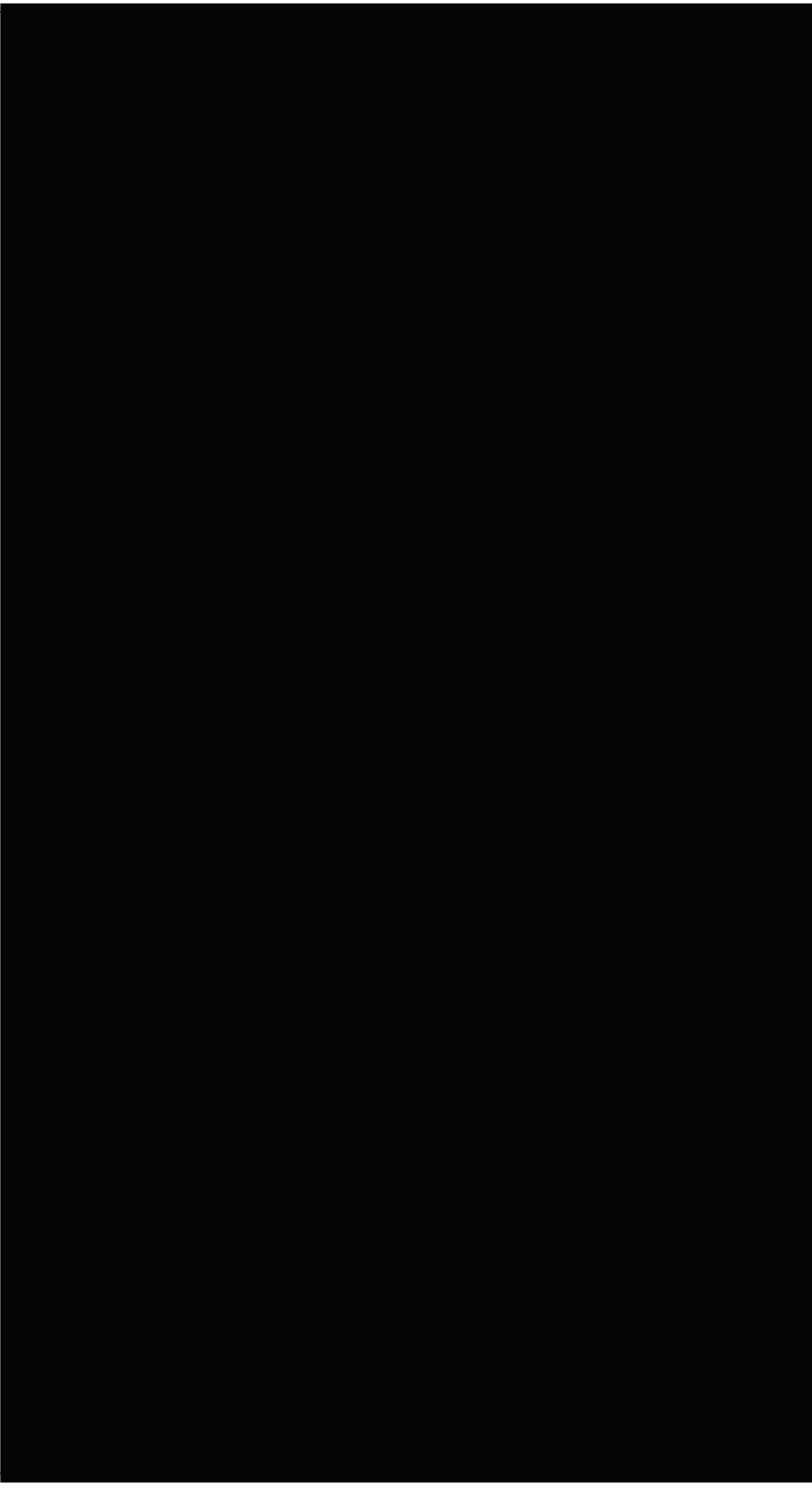
A	T	V
		●

Only applicable to 4WD

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [48 / 73]
(FTA)

△					
△					
△					
△					
		2001APR2	20D	Kawamoto	
		Date		Prepared	Approved



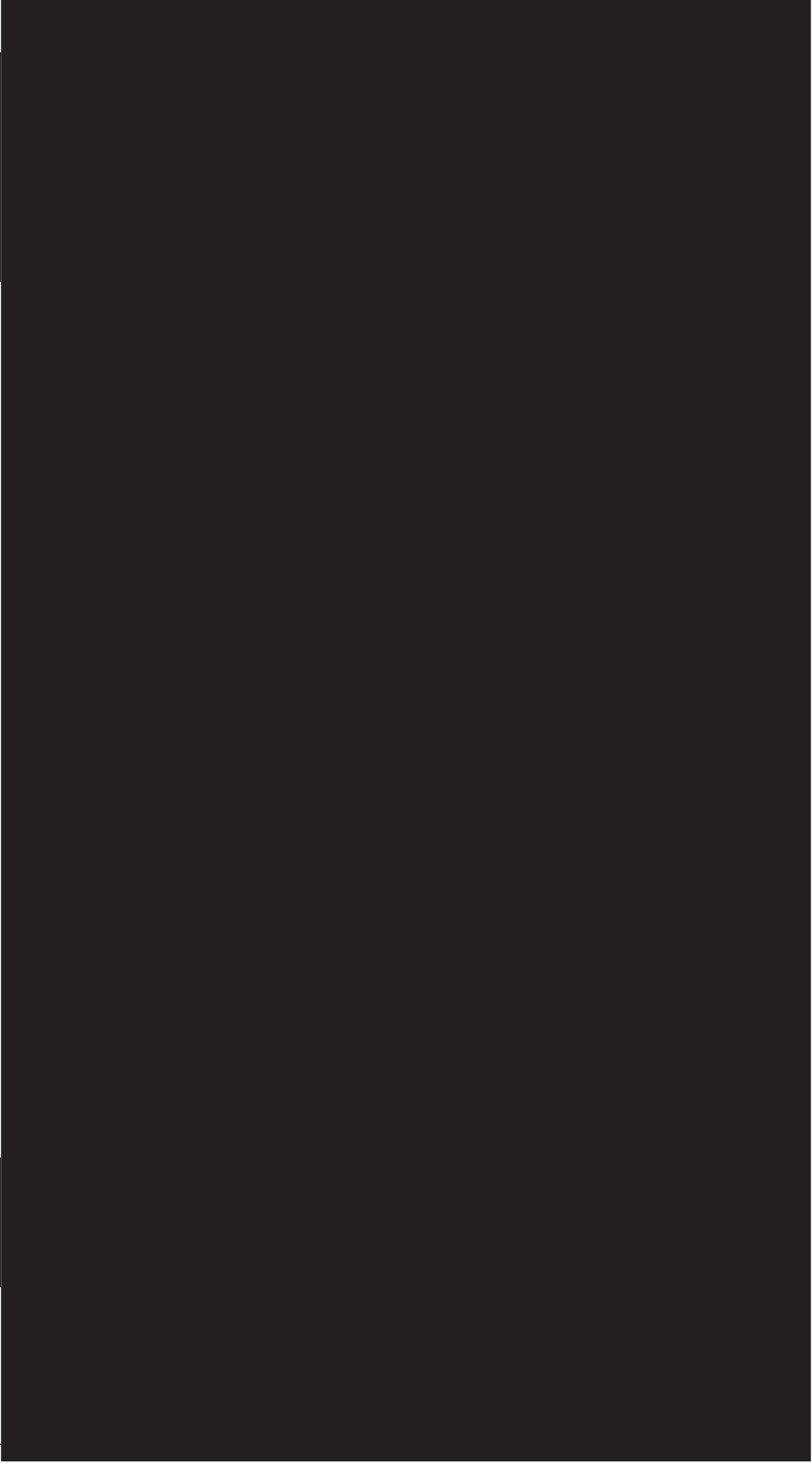
[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [49 / 73]
(FTA)

△	△				
△	△	2001APR2	20D	Kawanoto	
△	△	Date	Prepared	Approved	



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
	●	●

System Name NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [50 / 73]
(FTA)

△					
△					
△					
△					
		2001APR2	20D	Kawanoto	
		Date		Prepared	Approved



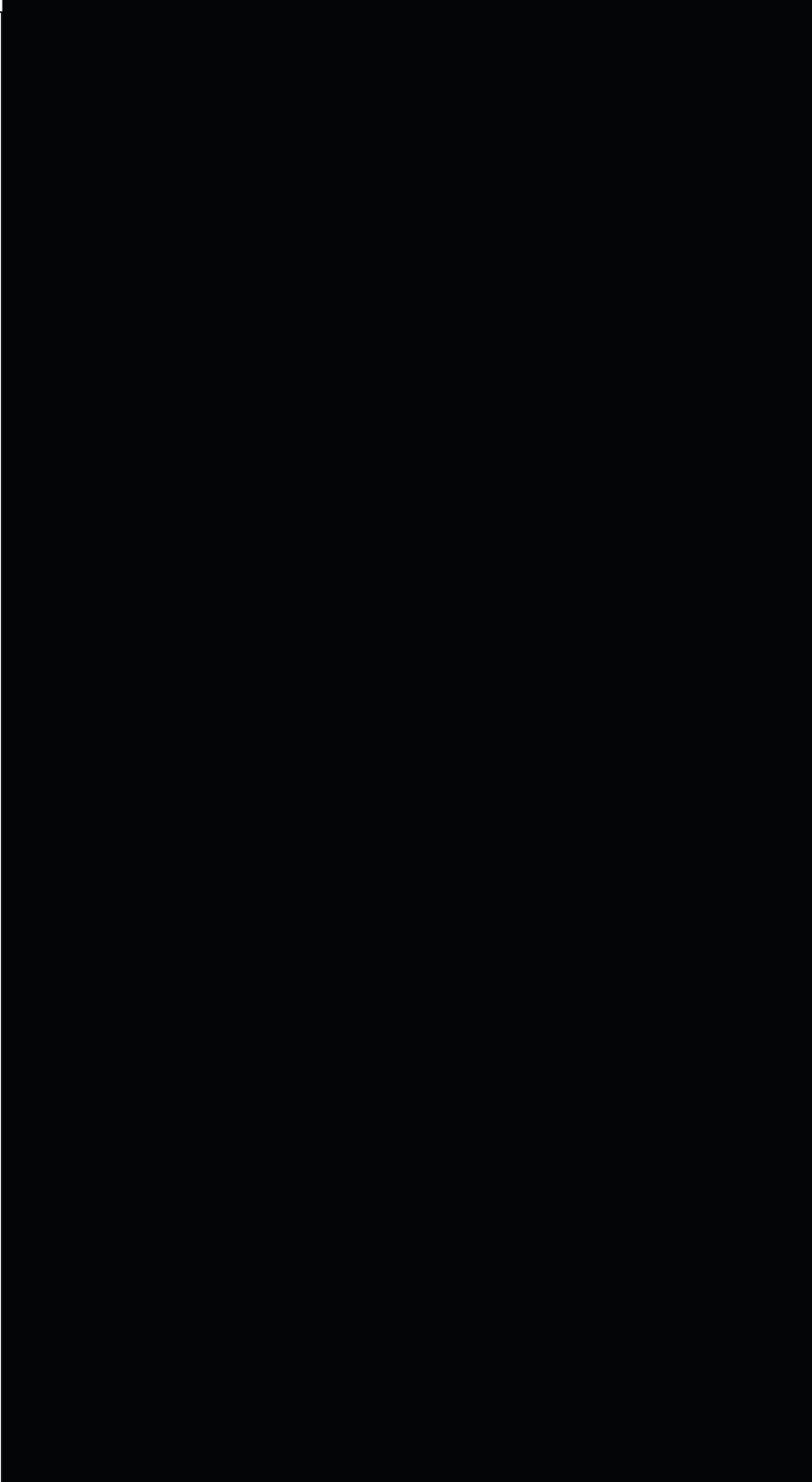
[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [51 / 73]
(FTA)

△					
△					
△					
△					
		2001APR2	20D	Kawanoto	
		Date		Prepared	Approved



(OUT) If any input occurs

[HG-FMEA-0005]

A	T	V
	●	●

System Failure: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [52 / 73]
(FTA)

△					
△					
△					
	2001APR2	20D	Kawanoto		
	Date		Prepared		Approved



[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [53 / 73]
(FTA)

△					
△					
△					
△	2001APR2	20D	Kawanoto		
	Date		Prepared		Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

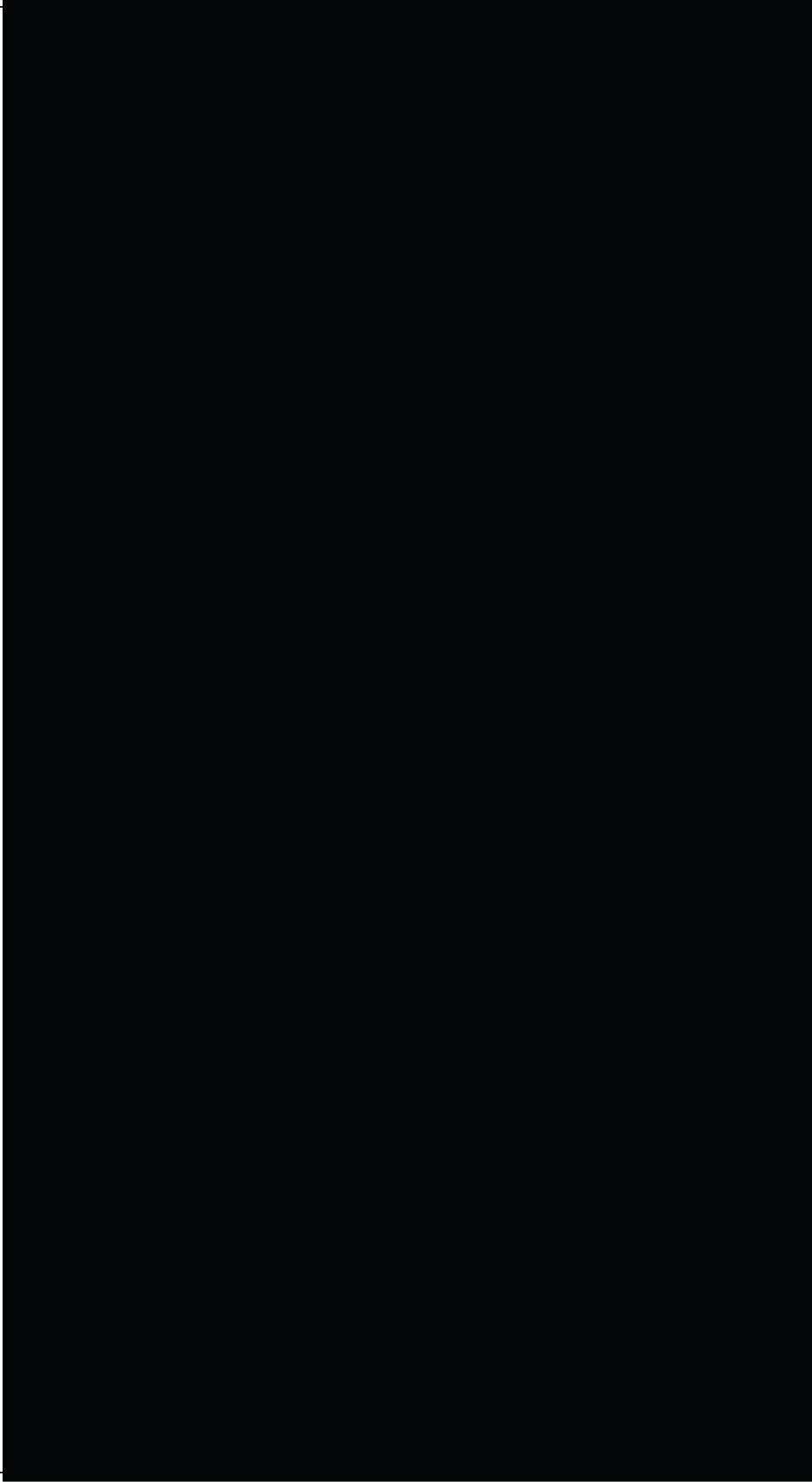
[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [54 / 73]
(FTA)

△	△	△	△	△	△
△	△	△	2001APR2	200	Kawanoto
△	△	△	Date	Prepared	Approved



[HG-FMEA - 0005]

A	T	V
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [.55 / .73]
(FTA)

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2001APR2	2001 Kawamoto
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date	Prepared | Approved



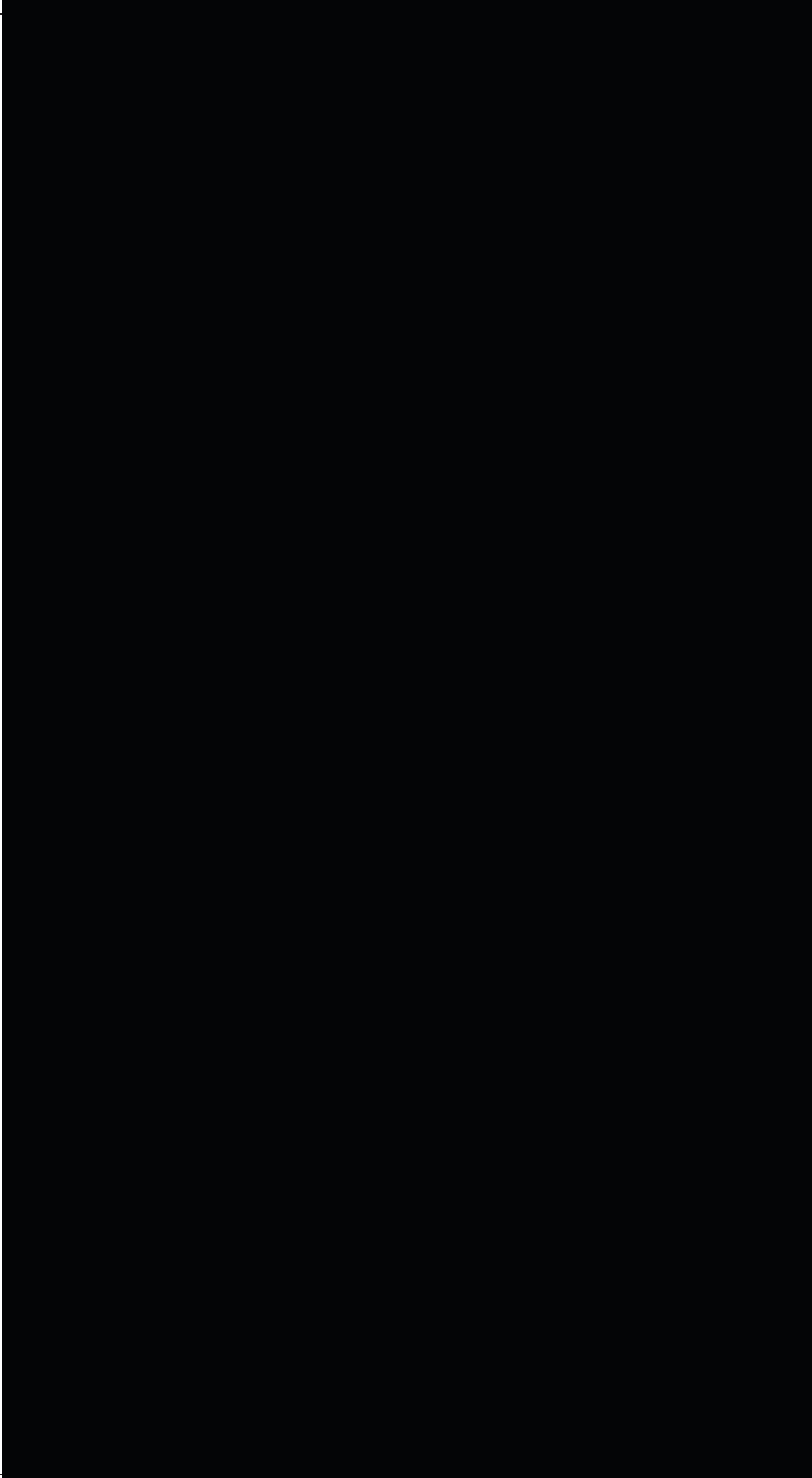
[HG-FMEA-0005]

A	T	V
<input type="checkbox"/>	<input checked="checked" type="checkbox"/>	<input checked="checked" type="checkbox"/>

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [56 / 73]
(FTA)

		2001APR2	20D	Kawanoto
		Date	Prepared	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

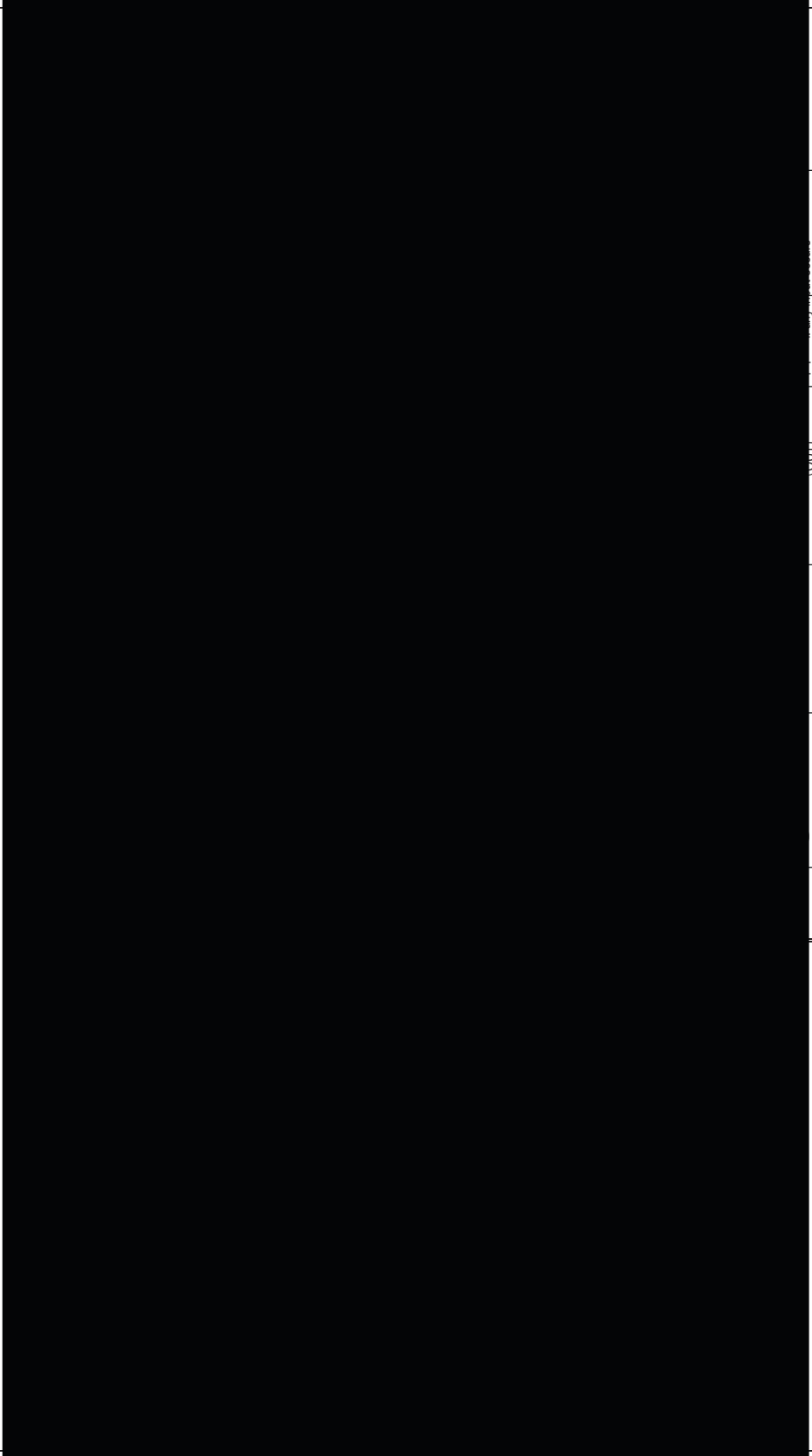
【HG-FMEA-0005】

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [57 / 73]
(FTA)

△				
△				
△	2001APR2	20D	Kawamoto	
	Date	Prepared	Approved	



05/11

ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA - 0005]

A	T	V
		●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [59 / 73]
(FTA)

△					
△					
△		2001APR2	20D	Kawamoto	
		Date	Prepared	Approved	



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

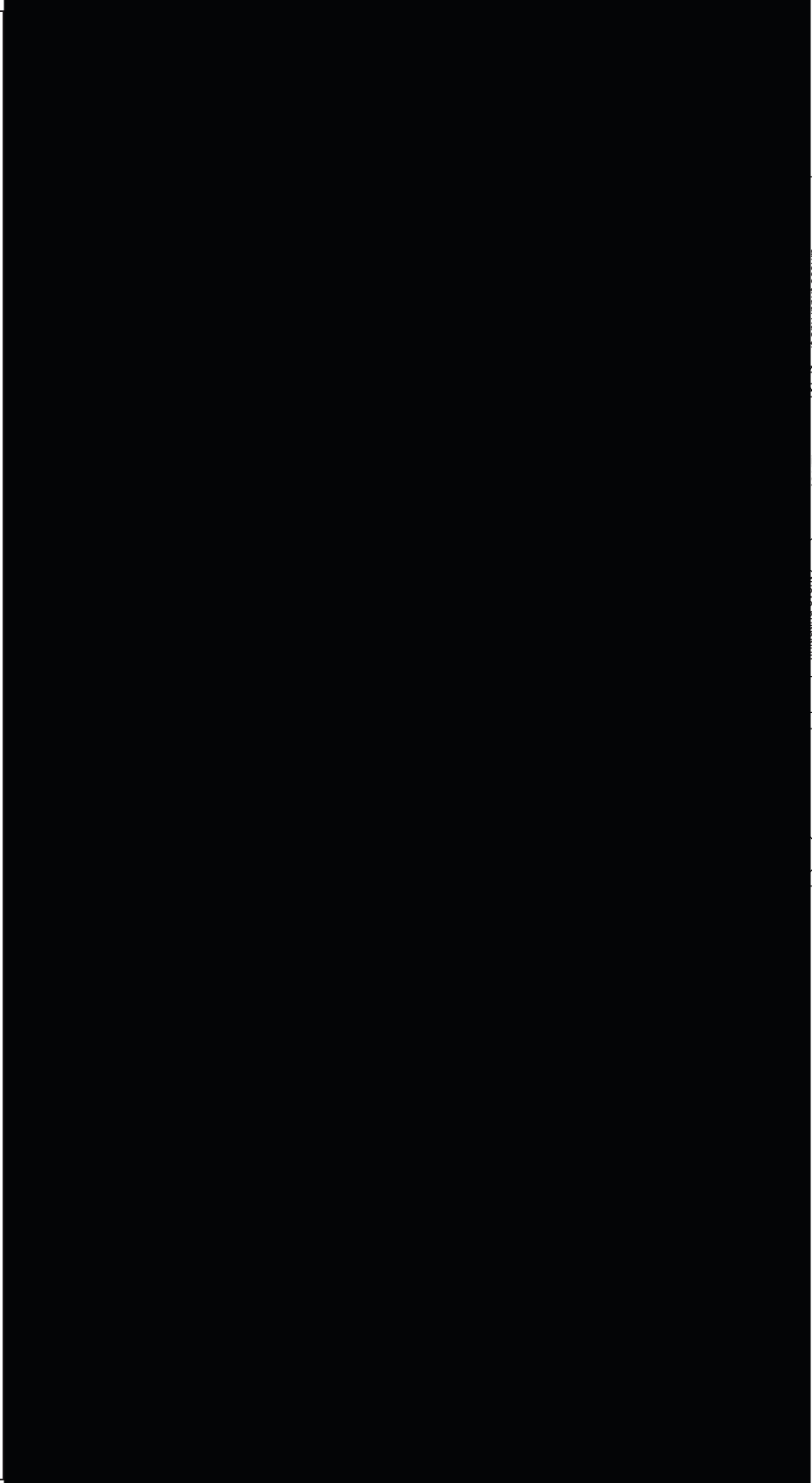
[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [58 / 73]
(FTA)

△					
△					
△					
		2001/APP2	20D	Kawamoto	
		Date	Prepared	Approved	



if any input occurs

(OUT)

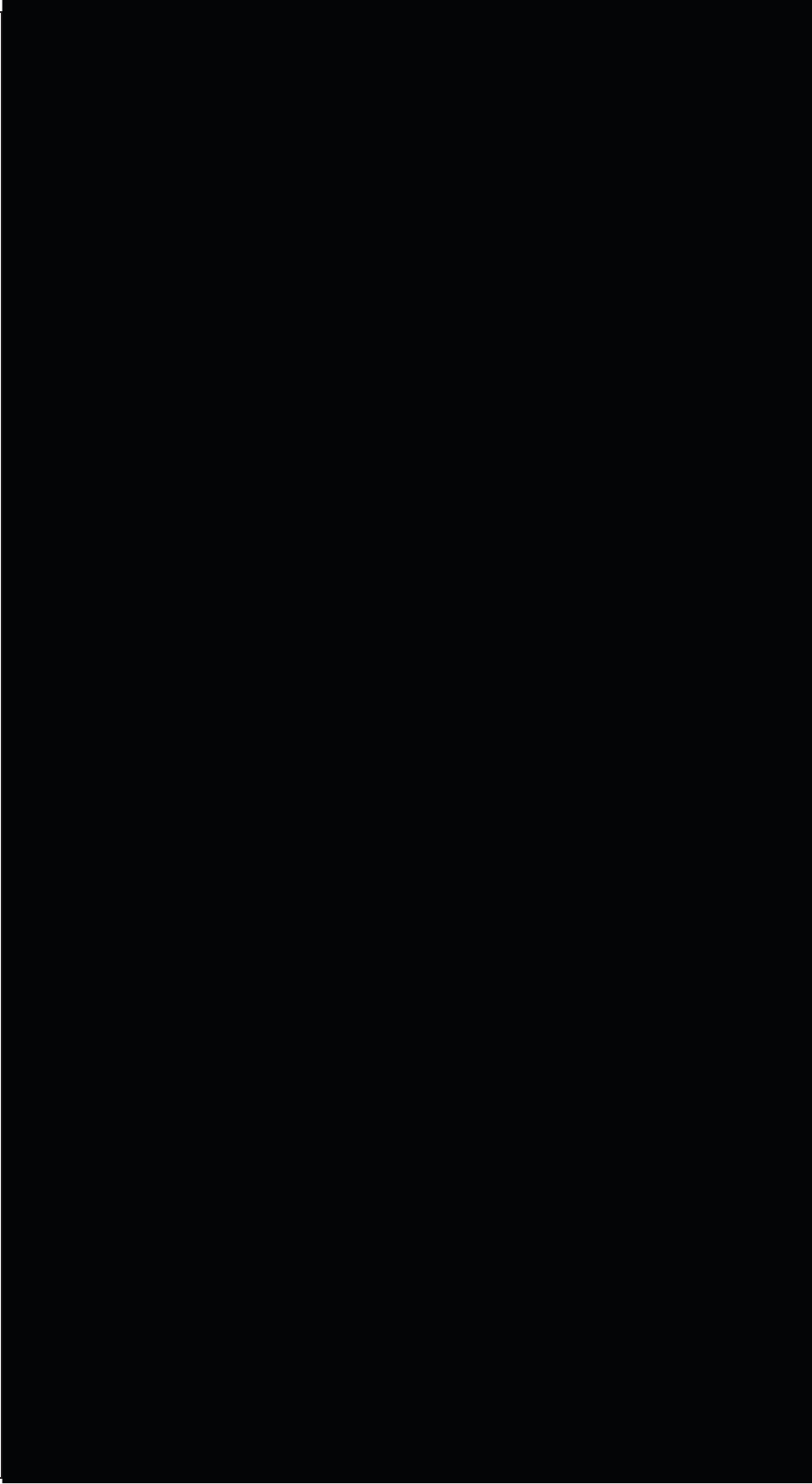
[HG-FMEA - 0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List (60 / 73)
(FTA)

			2001APR2 20D	Kawanoto
			Date	Prepared | Approved



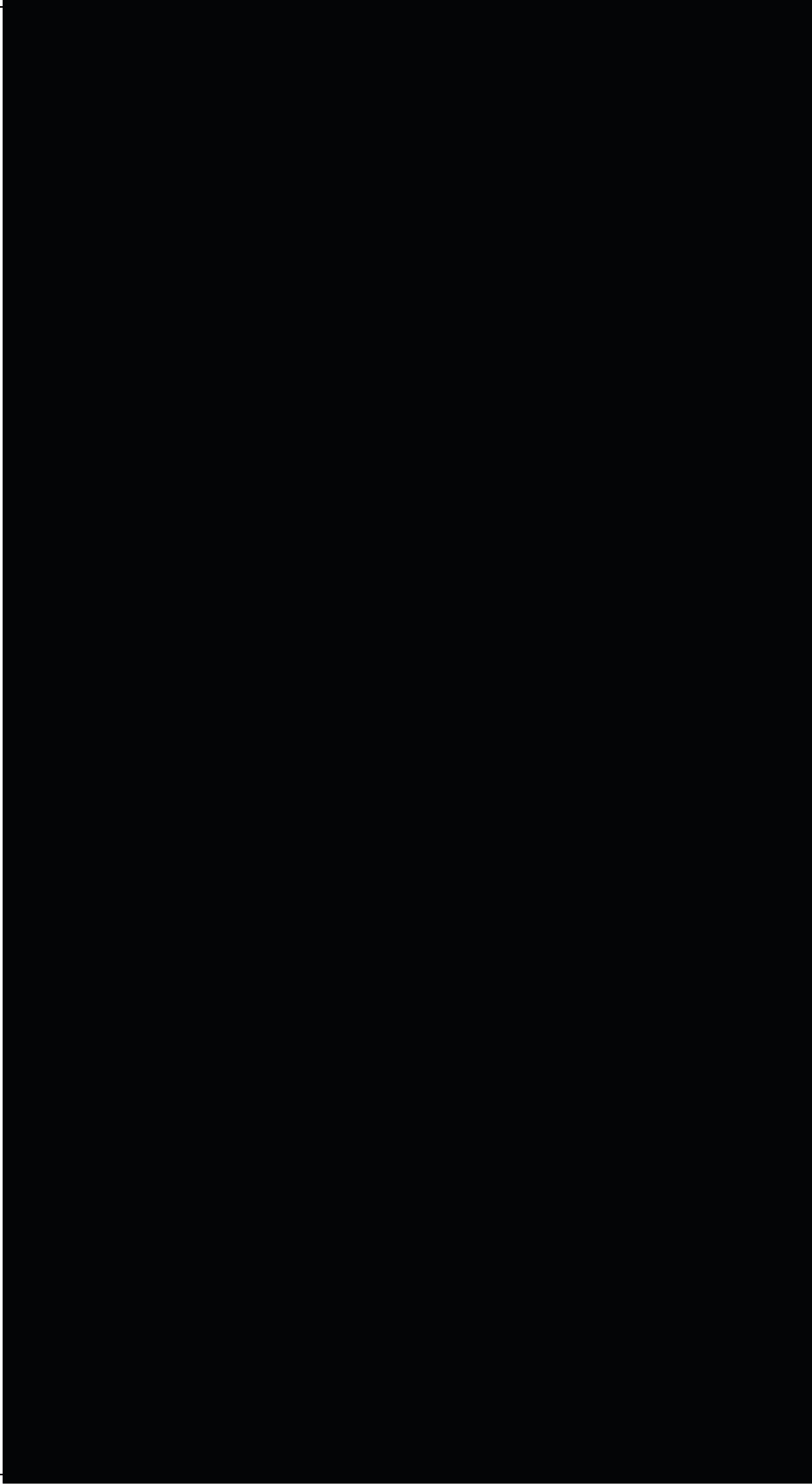
[HG-FMEA - 0005]

A	T	V
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [61 / 73]
(FTA)

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2001APR2	200	Kawanoto
<input checked="" type="checkbox"/>		Date	Prepared	Approved



Priority input occurs

(OUT)

ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

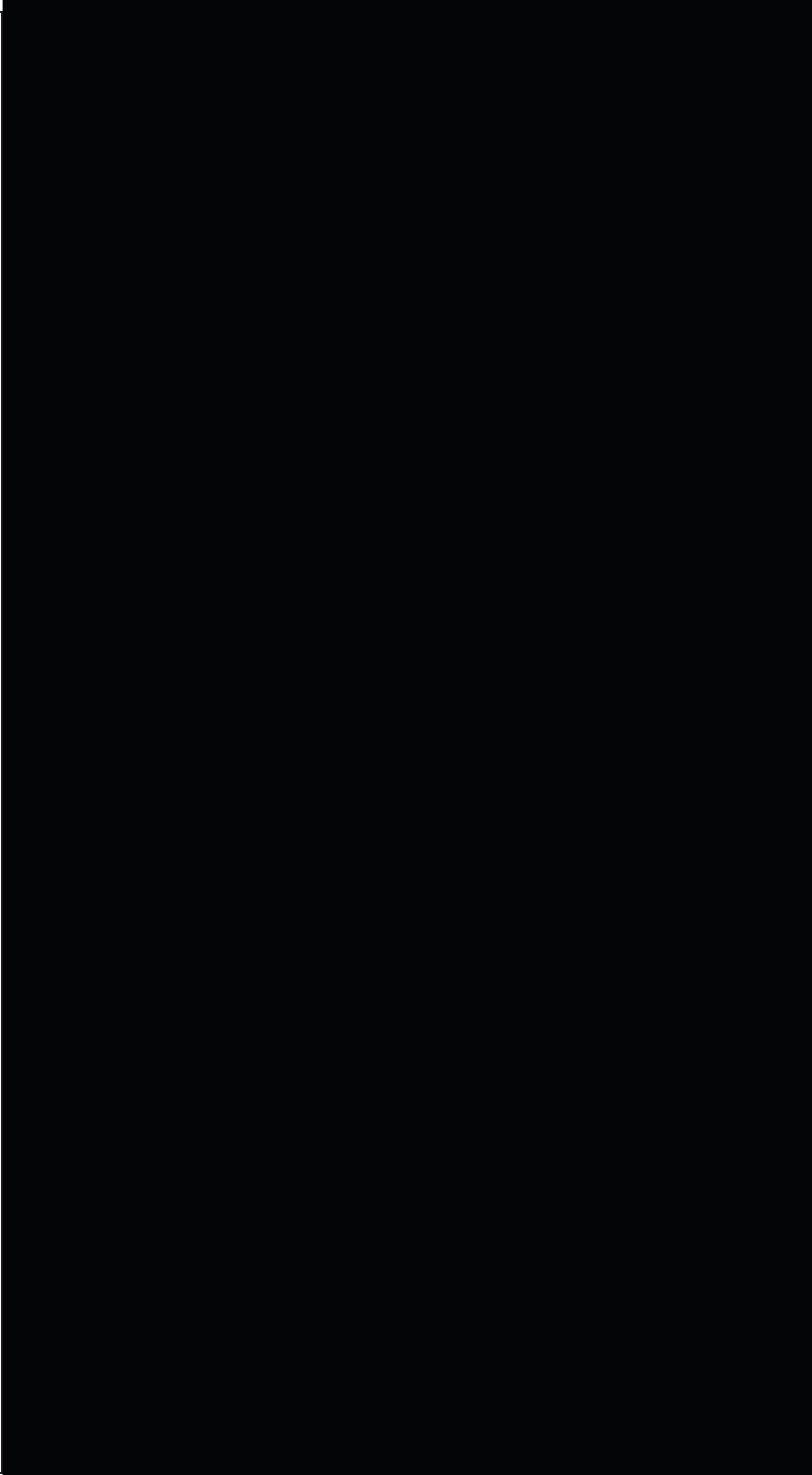
[HG-FMEA-0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [62 / 73]
(FTA)

	2001APR2	200	Kawanoto
	Date	Prepared	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA - 0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [63 / 73]
(FTA)

△					
△					
△					
△	2001APR2	20D	Kawanoto		
	Date		Prepared	|	Approved



(504)

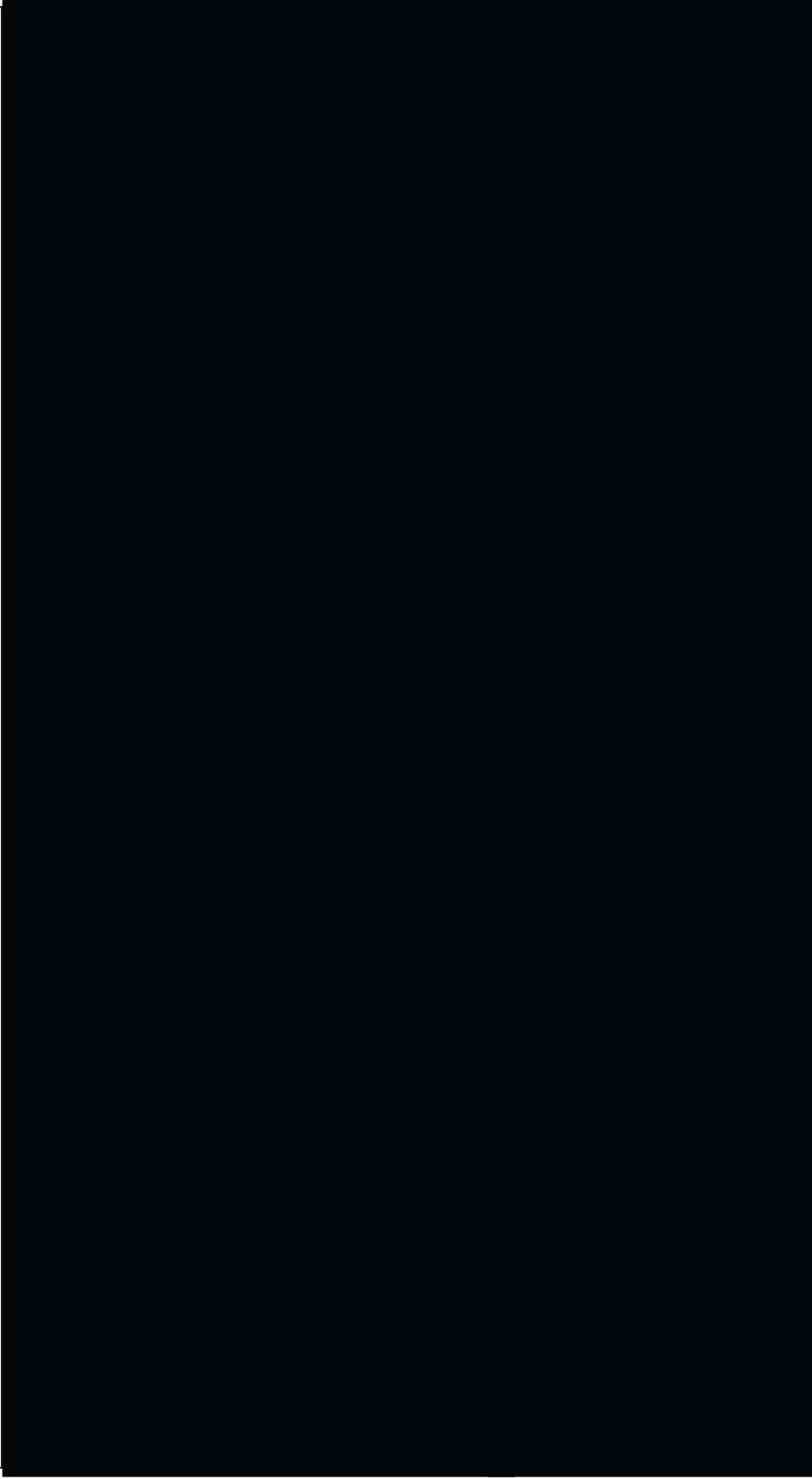
[HG-FMEA - 0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [64 / 73]
(FTA)

△					
△					
△					
△		2001APR2	20D	Kawanoto	
		Date		Prepared	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

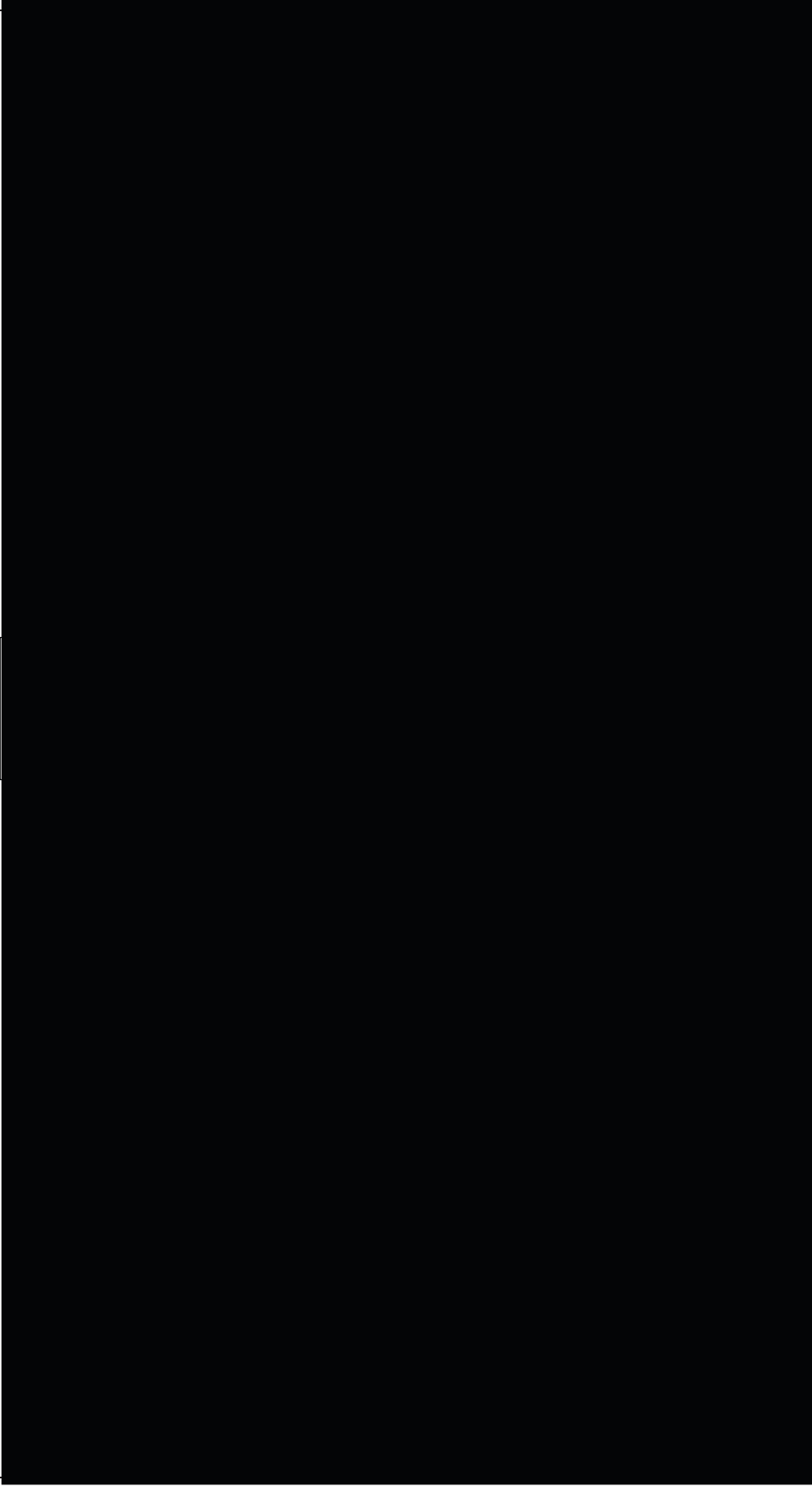
[HG-FMEA-0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [.65 / .73]
(FTA)

△	△				
△	△	2001APR2	20D	Kawanoto	
△	△	Date	Prepared	Approved	



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

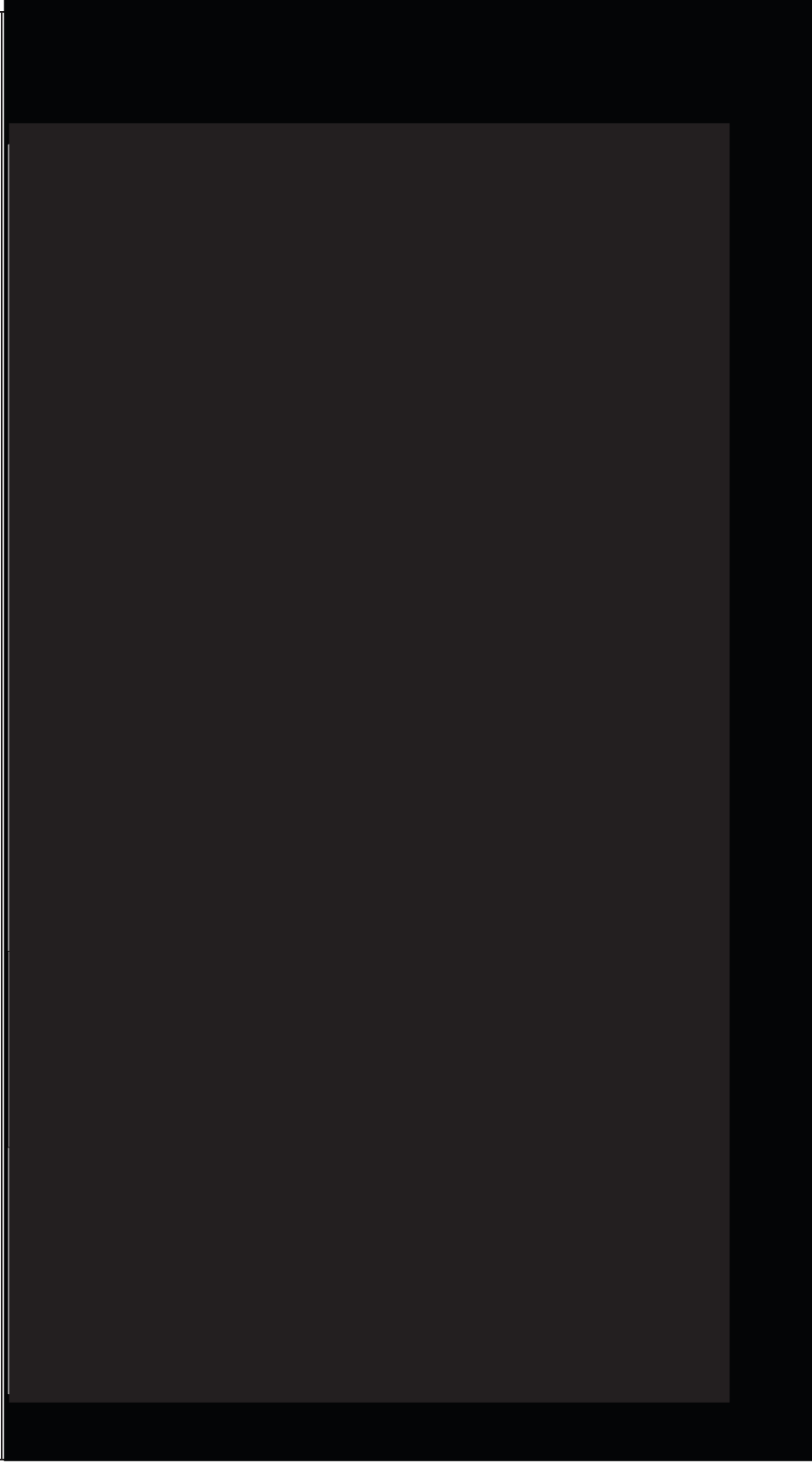
[HG-FMEA-0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [.66 / 73]
(FTA)

△	△	△	△				
△	△	△	△	2001APR2	200	Kawanoto	
				Date	Prepared	Approved	



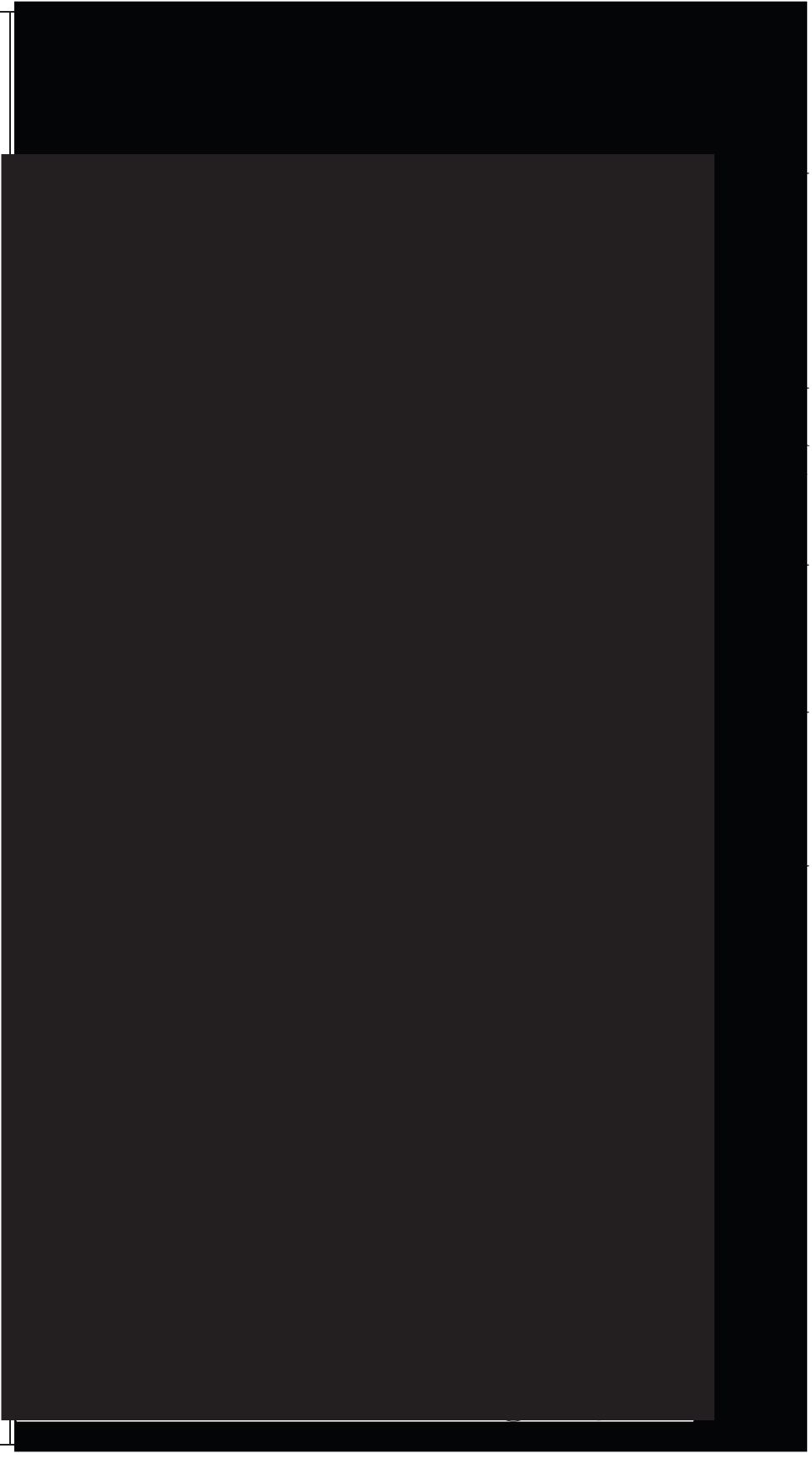
[HG-FMEA - 0005]

A	T	V
●	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [67 / 73]
(FTA)

		2001APR2 20D Kawamoto	
		Date	Prepared | Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA - 0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [70 / 73]
(FTA)

▲						
▲						
▲						
				2001APR2 20D	Kawanoto	
				Date	Prepared |	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

[HG-FMEA-0005]

A	T	V
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [71 / 73]
(FTA)

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2001APR2	20D	Kawanoto
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Date	Prepared	Approved



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

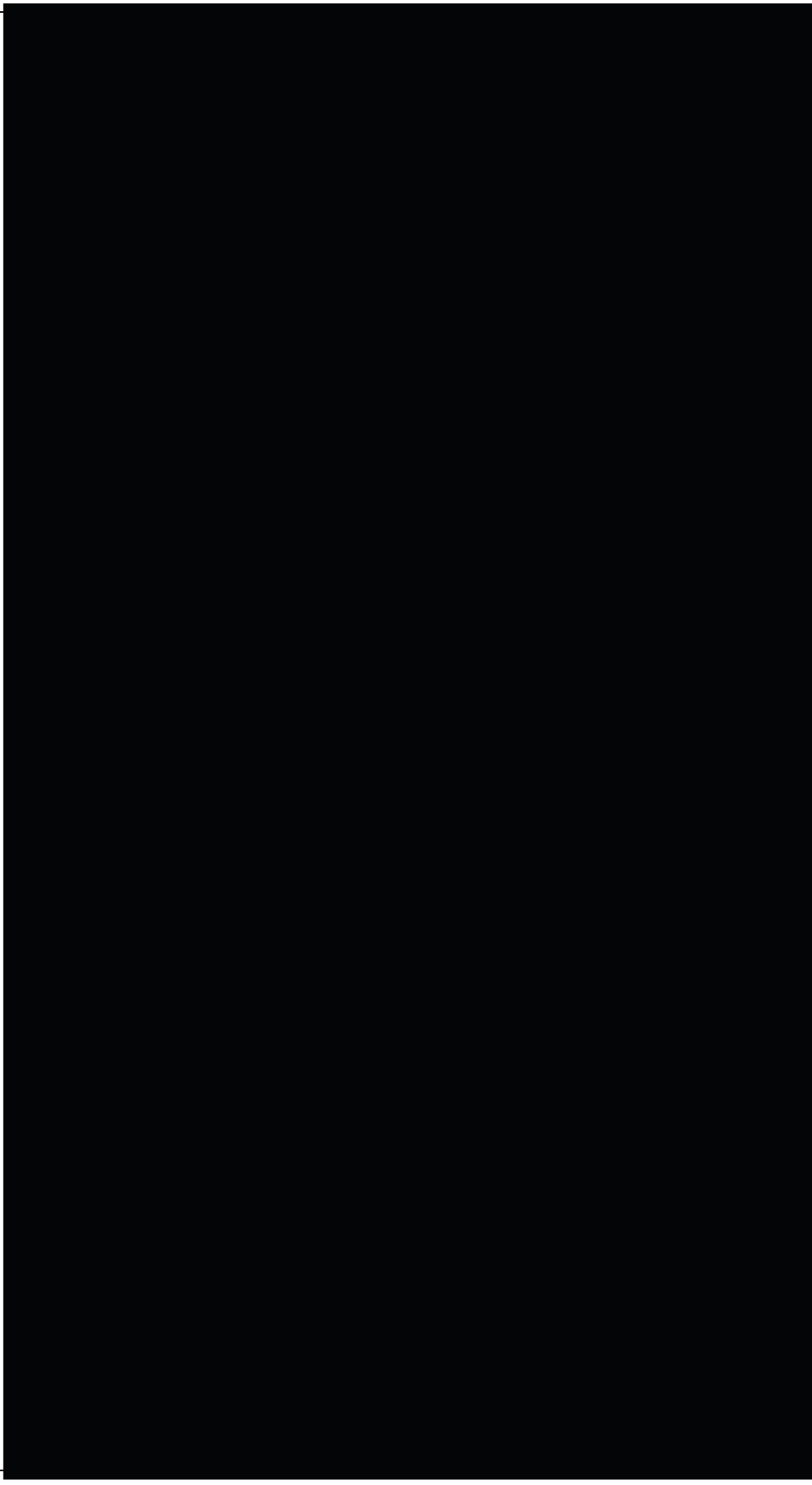
[HG-FMEA - 0005]

A	T	V
	●	●

System Name: NK11A(ABS)/T(TCS)/V(VSA)

Failure Mode List [73 / 73]
(FTA)

△					
△					
△	2001APR2	20D	Kawanoto		
	Date		Prepared	Approved	



trarily input occurs

(OUT)

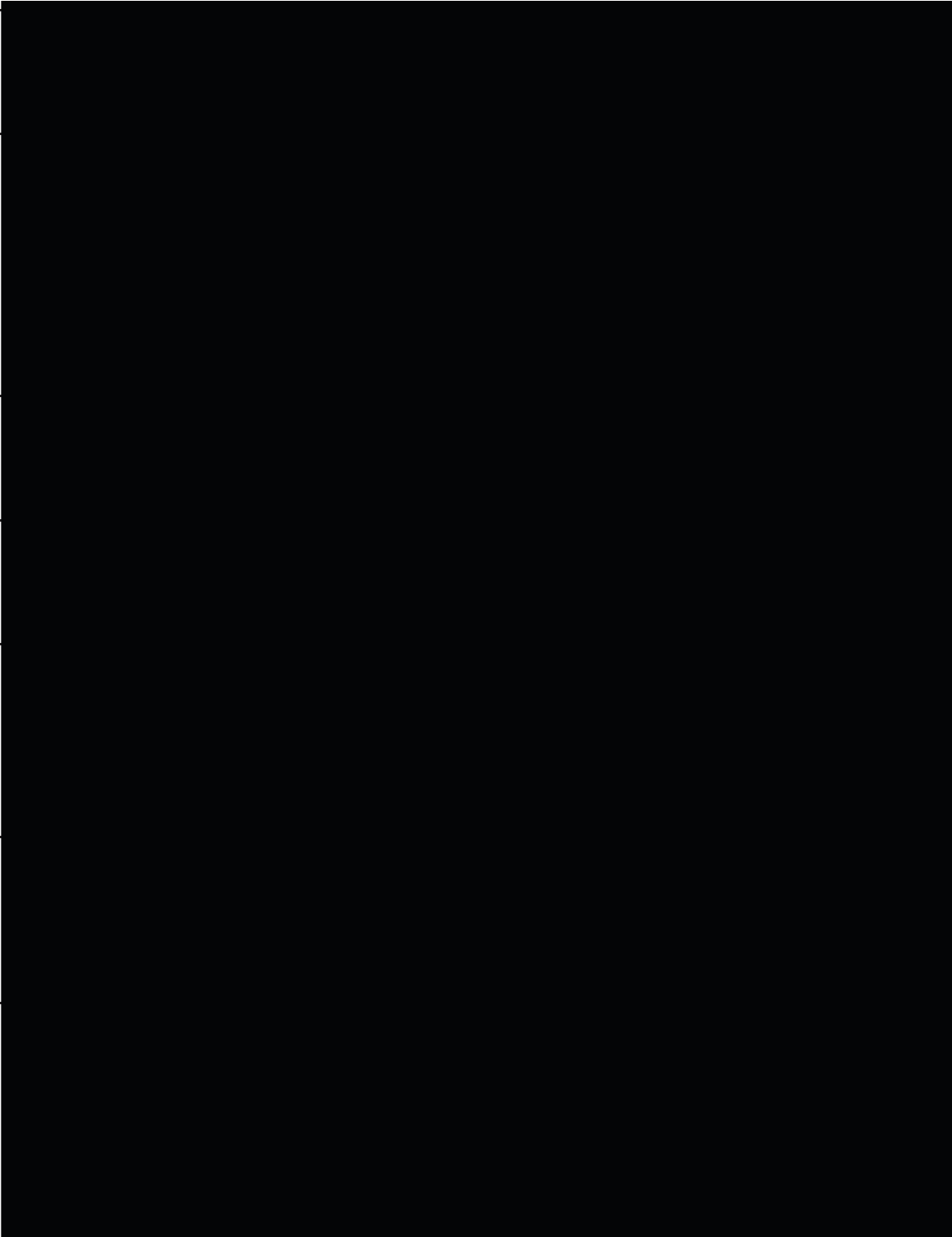
【HG-FMEA-0011】

List of Undeveloped Event C/M Method

System Name: VSA/TCS/ABS(NK11V/T/A)

△			
△2	4/3/2001	Nonaga	
△1	01.03.26	Ikeda	
	Date	Prepared	Approved





--	--	--	--	--	--

DP12-002

HONDA

8-3-2012

ATTACHMENT

Q14

14C

NK11ATV _FTA 01NOV08_J

REDACTED

F T A 報告資料

テーマ名：VSA/TCS/ABS (NK11V/T/A)

呼 称	UD
年次コード	03 MY
次 元	P2

目 次

1 . F T A 検討結果まとめ	.....	1 頁
2 . システム構成図	.....	2 9 頁
3 . システム機能及び故障リスト	.....	1 頁
4 . システム重大性の定義付け	.....	1 頁
5 . 故障モードリスト (F T A )	.....	7 3 頁
	.....	5 1 頁
6 . 否展開事象項目の刈り取り表	.....	2 頁

実施日 2001 年 4 月 2 日

L P L

代
佐々木

【HG-FMEA-0010】

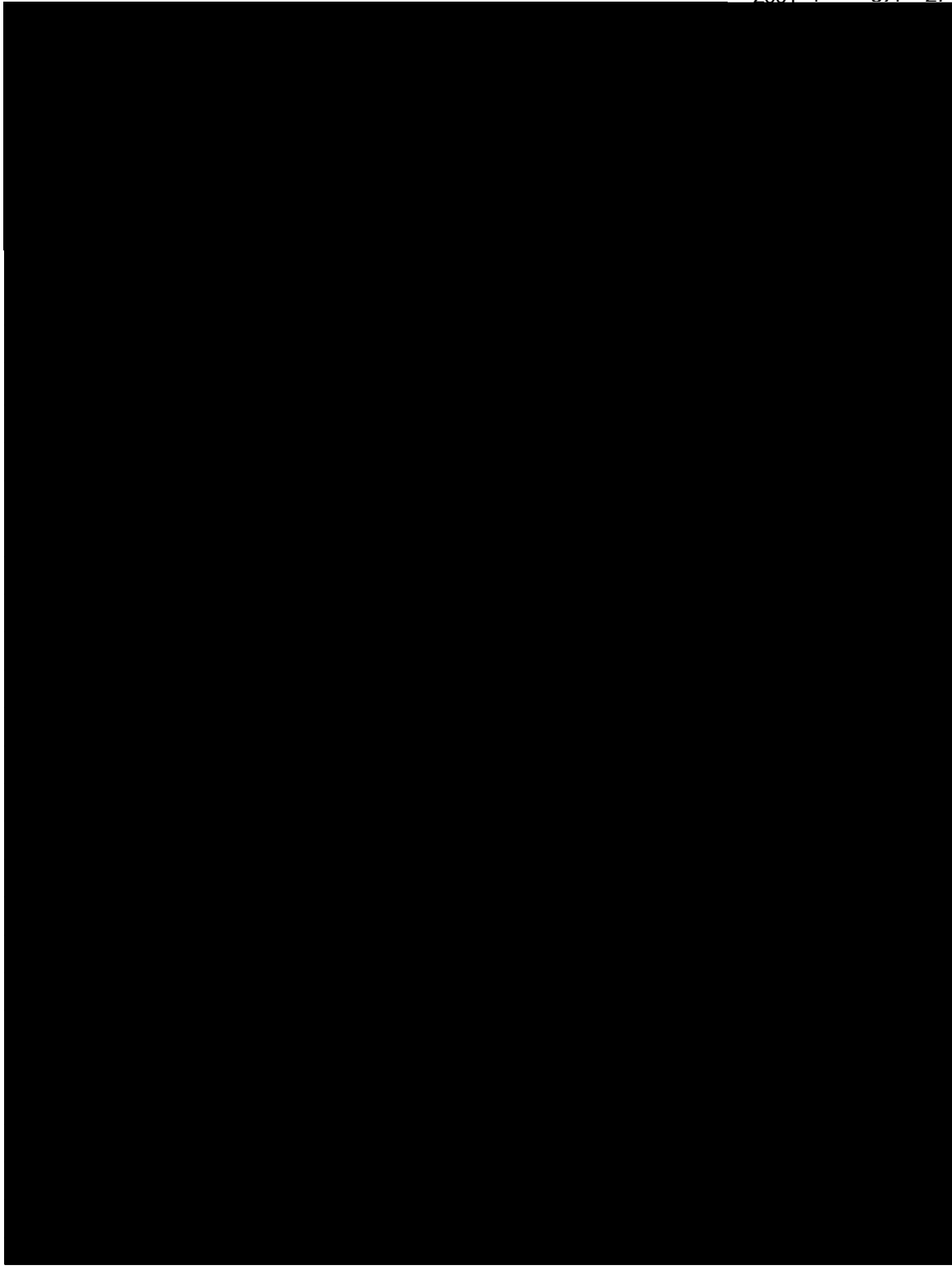
F T A 検 討 結 果 の ま と め

機種	UD
----	----

承 認
服部

<システム名> VSA/TCS/ABS (NK11V/T/A)

2001年 3月 27日

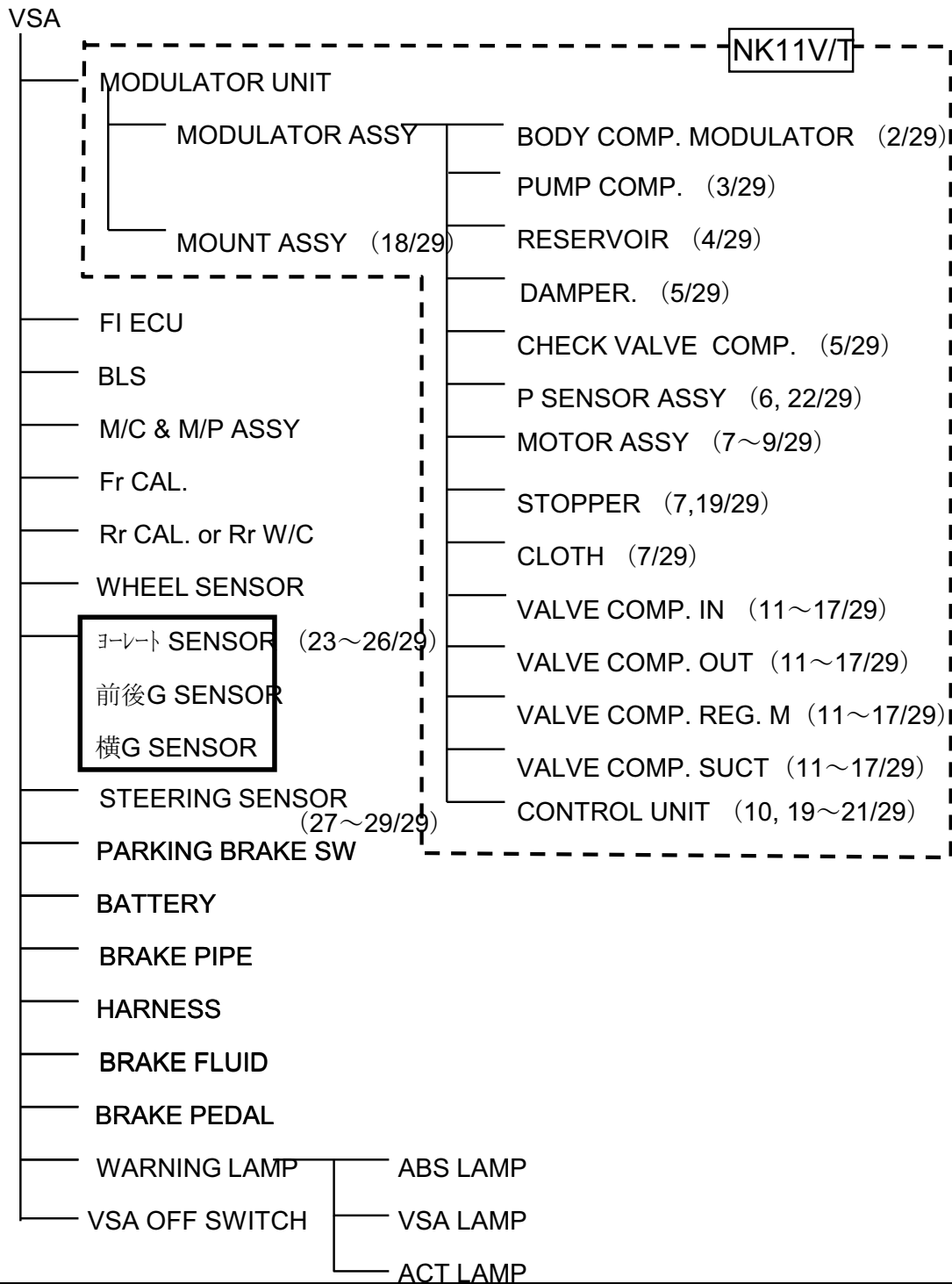


システム構成図 (1 / 29)

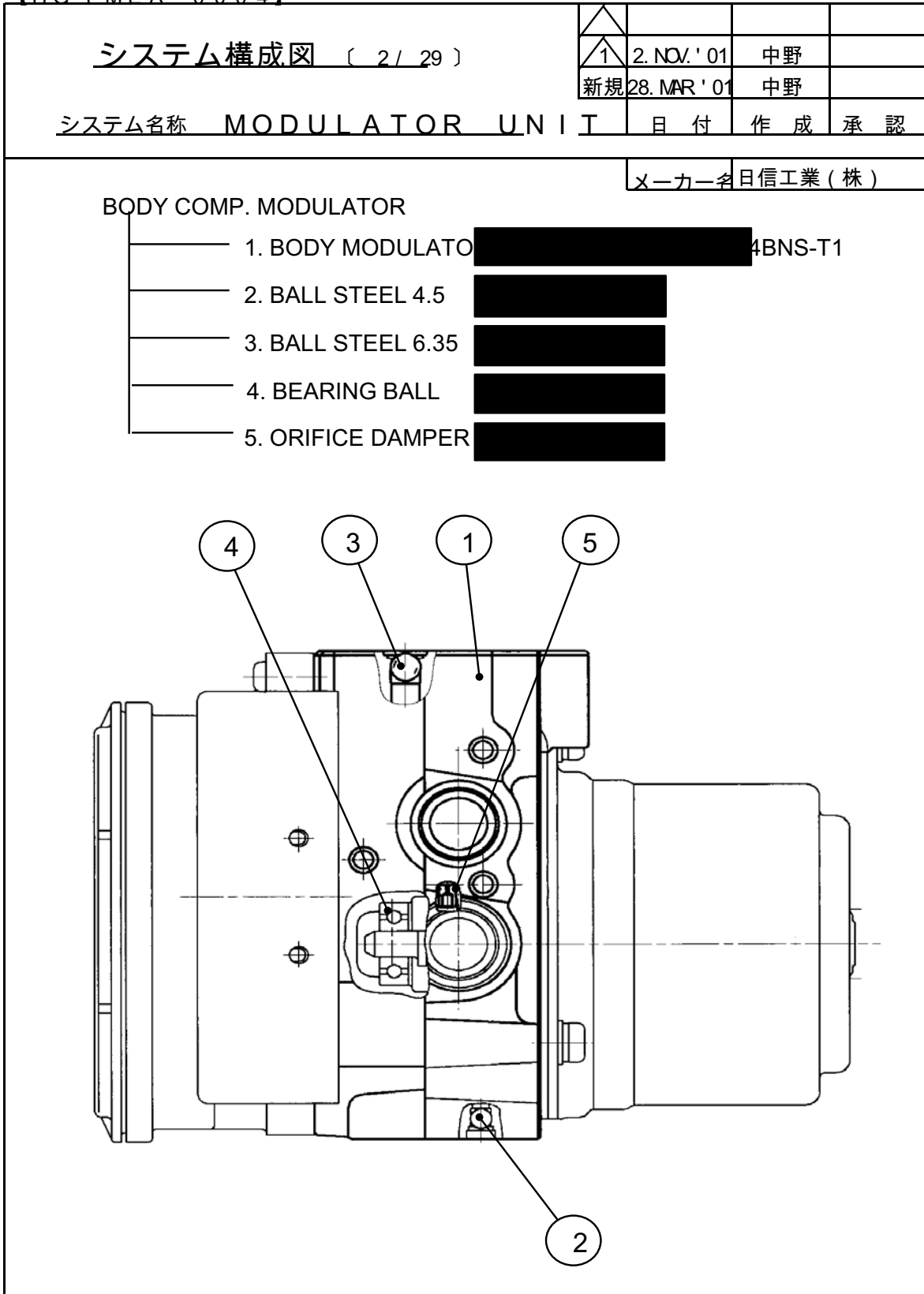
システム名称 : MODULATOR UNIT

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

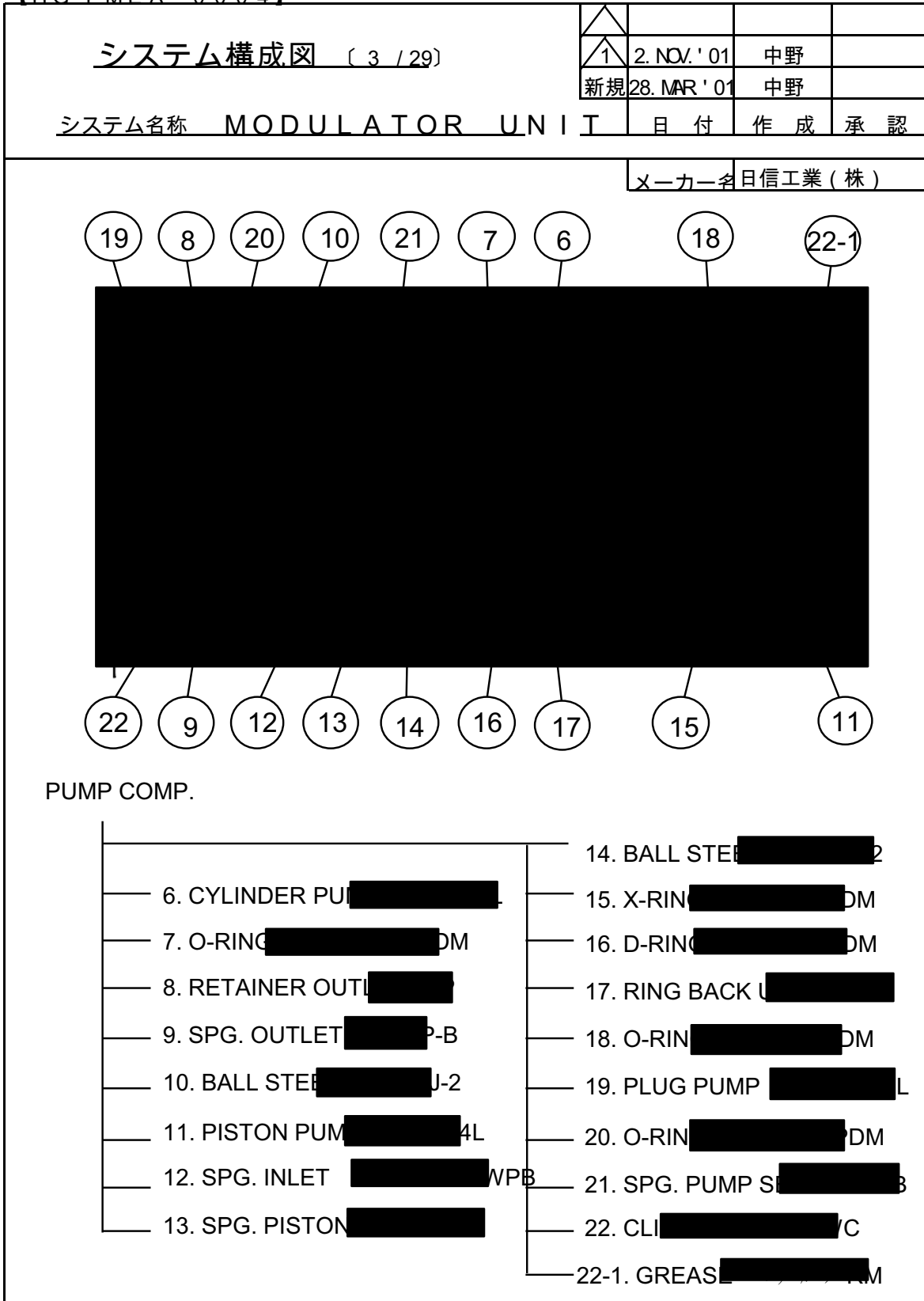
メーカー名 日信工業 (株)



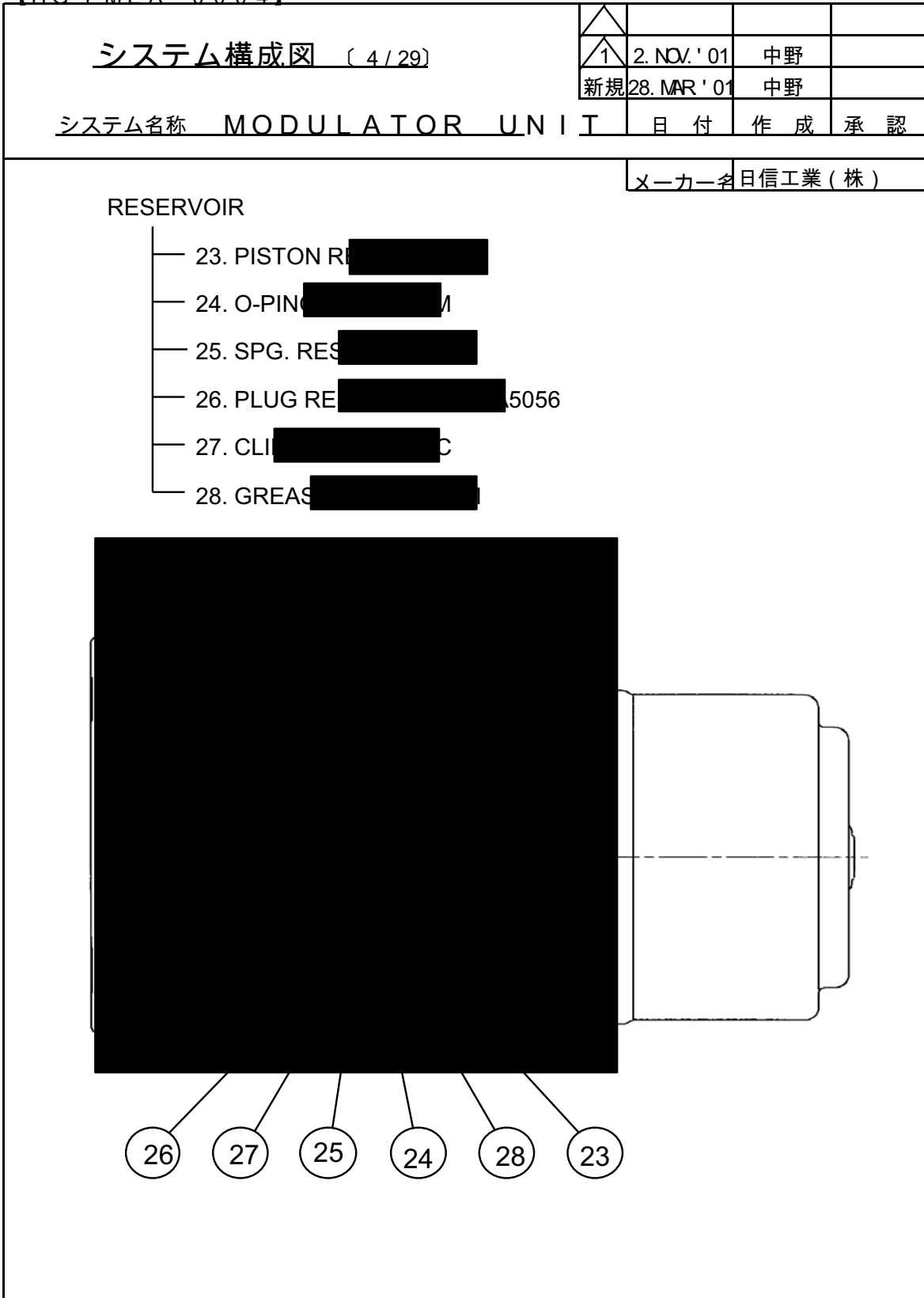
【HG-FMEA-0.0.0.4】



【HG-EMFA-0004】



【HG-EMFA-0004】



【HG-FMEA-0004】

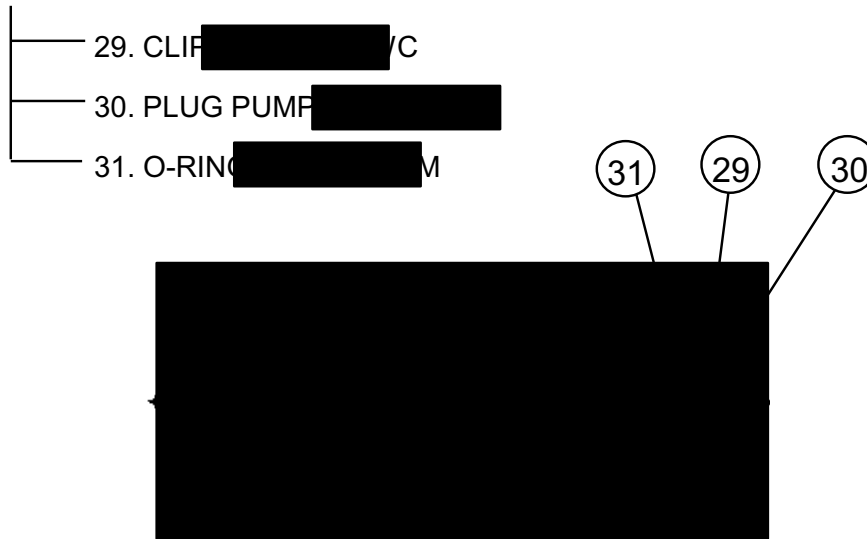
システム構成図〔5 / 29〕

システム名称： MODULATOR UNIT

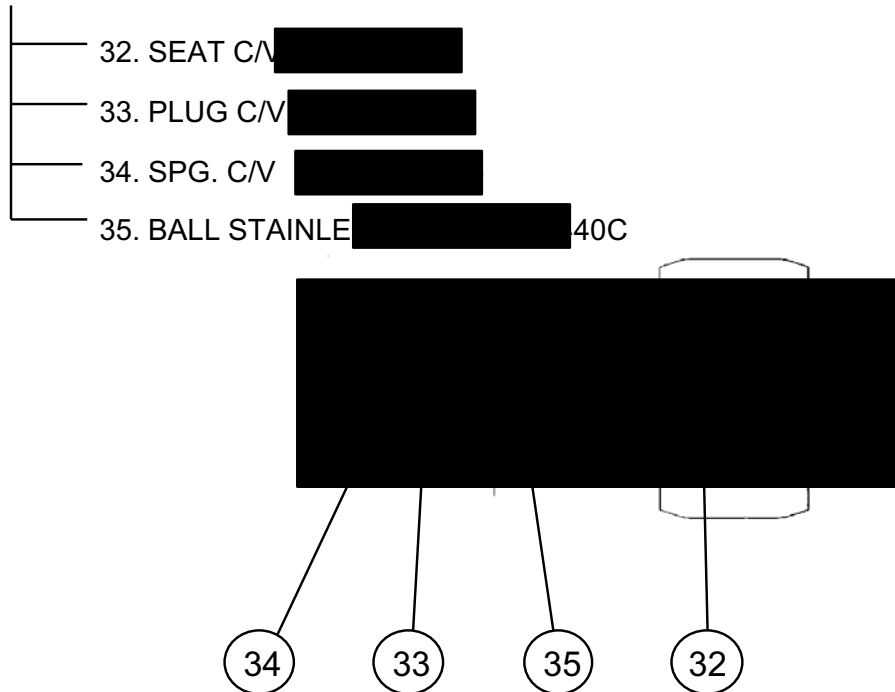
△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名 日信工業(株)

DAMPER



CHECK VALVE COMP



【HG-EMFA-0004】

<p>システム構成図 [6/29]</p>		△			
		1	2. NOV. '01	中野	
<p>システム名称 MODULATOR UNIT</p>		新規	28. MAR '01	中野	
			日付	作成	承認
				メーカー名 日信工業(株)	
<p>P SENSOR ASSY (プロジェクション溶接)</p> <ul style="list-style-type: none"> — 36. P SENSOR — 37. O-RING [REDACTED] EPDM — 38. SPG. SENSOR S [REDACTED] — 39. CLI [REDACTED] SWC 					
<p>36 39 37 38</p>					

【HG-EMFA-0004】

システム構成図 (7/29)

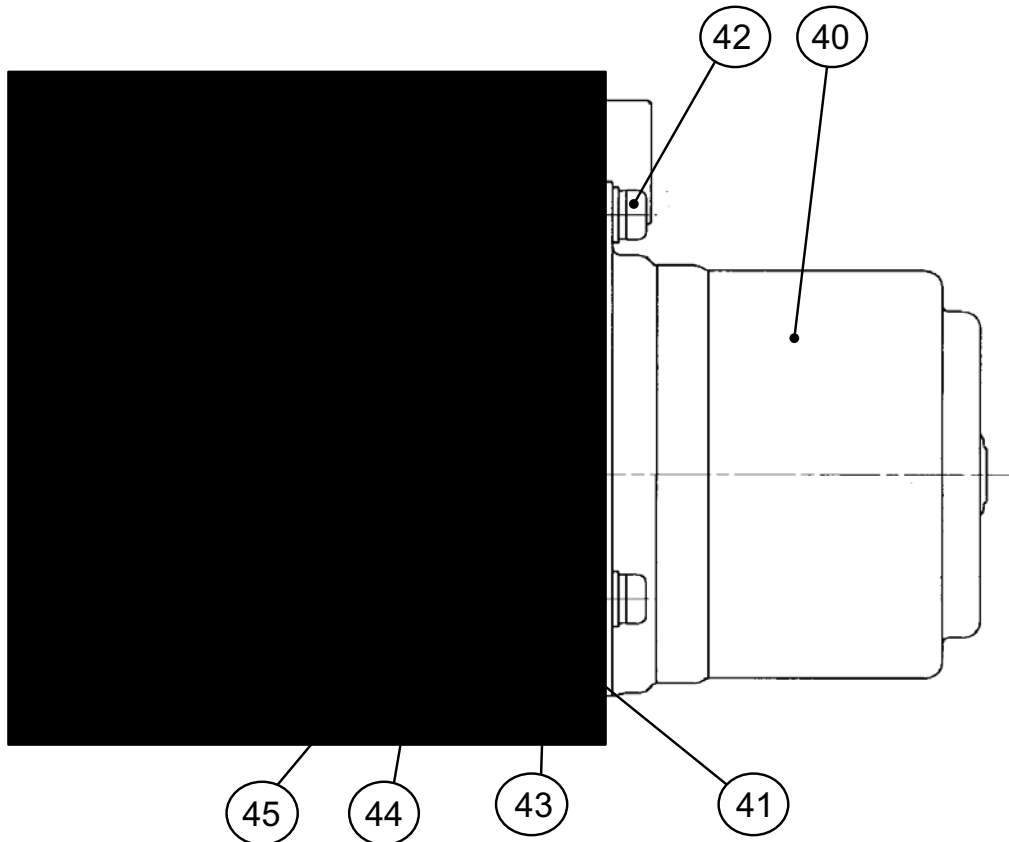
△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	

システム名称 MODULATOR UNIT 日付 作成 承認

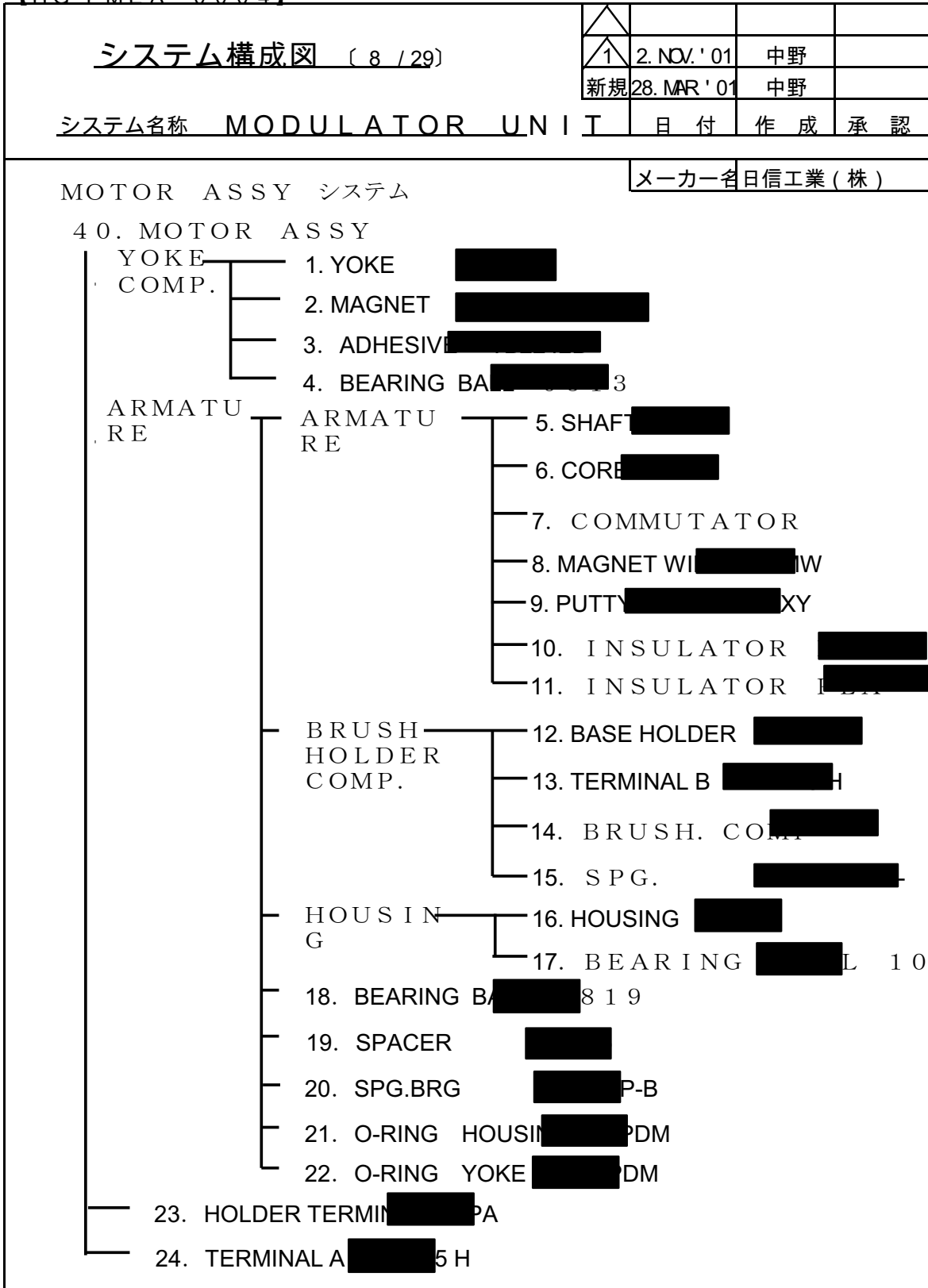
メーカー名 日信工業(株)

MOTOR ASSY

- 40. MOTOR ASSY
- 41. O-RING [REDACTED] M
- 42. SCREW & WASH [REDACTED] SCM
- 43. O-RING [REDACTED]
- 44. STOPPER [REDACTED]
- 45. CLOTH [REDACTED] TFE



【HG-EMFA-0004】



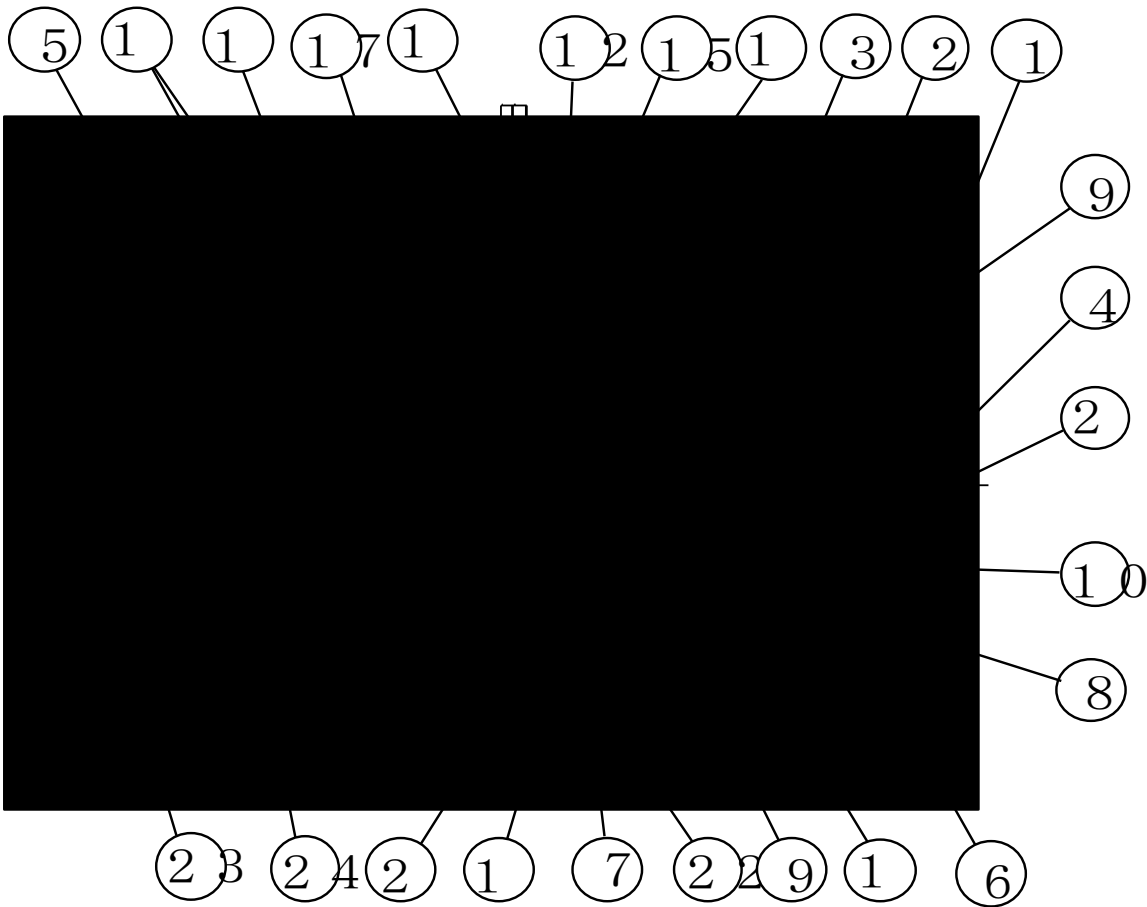
【HG-FMEA-0004】

システム構成図 (9/29)

システム名称 _____

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名 日信工業(株)



【HG-EMFA-0004】

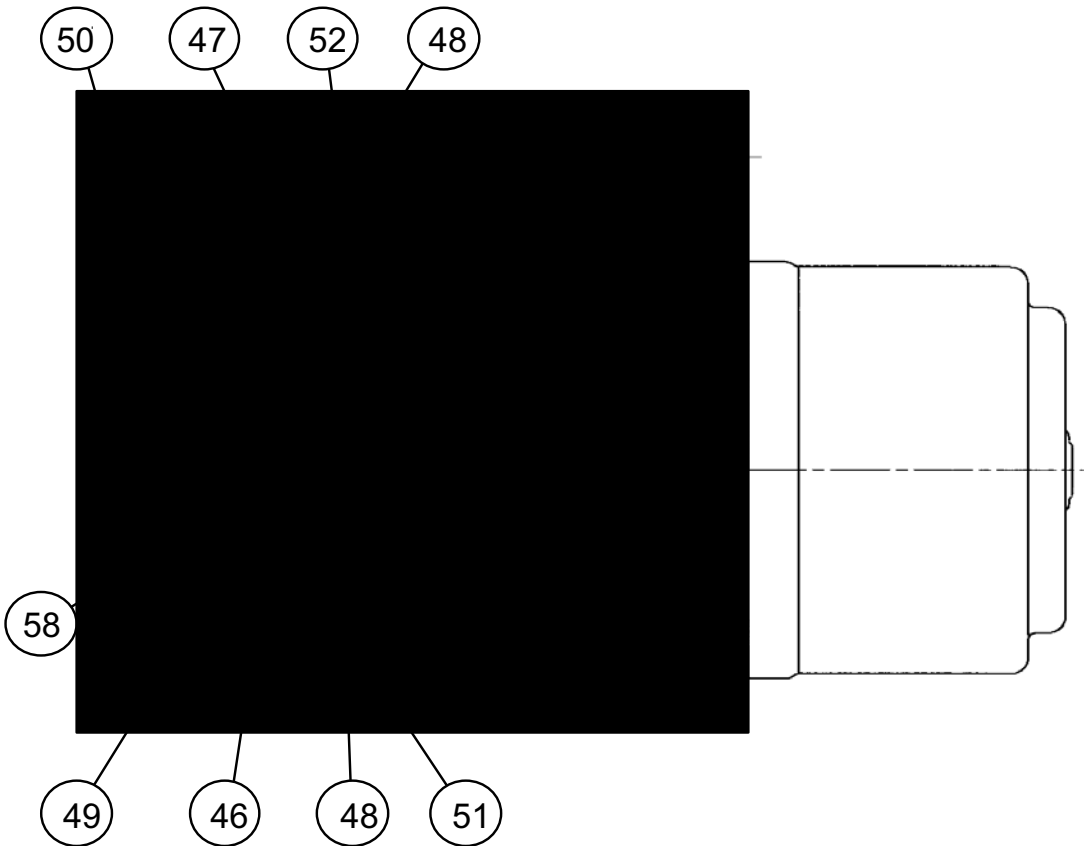
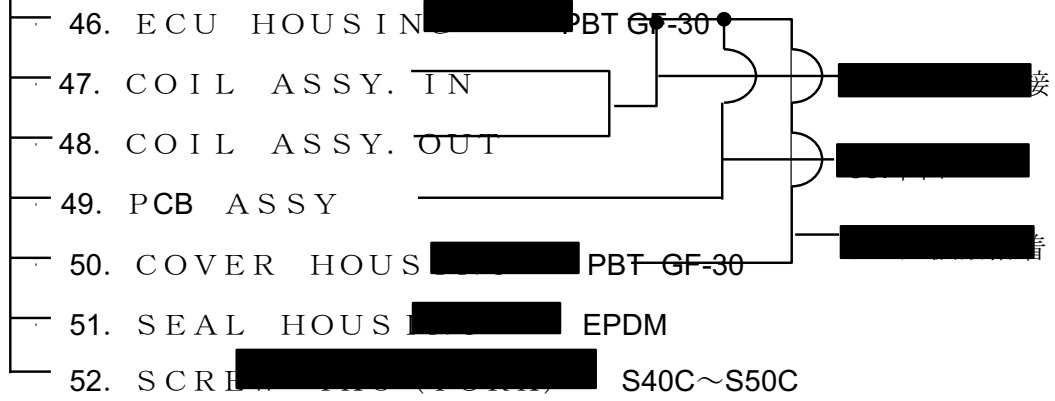
システム構成図 (10 / 29)

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

システム名称 _____

メーカー名 日信工業 (株)

CONTROL UNIT



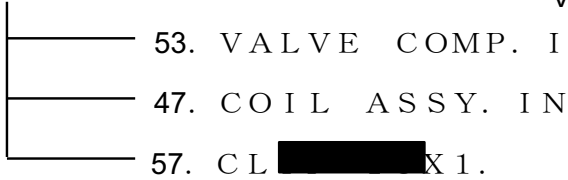
【HG-FMEA-0004】

システム構成図 (11 / 29)

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
システム名称	MODULATOR UNIT	目付	作成 承認

メーカー名

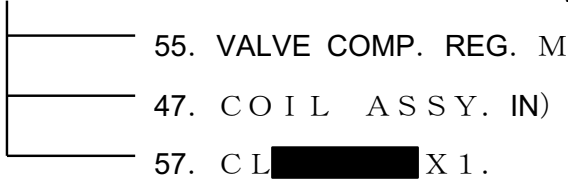
VALVE COMP. IN



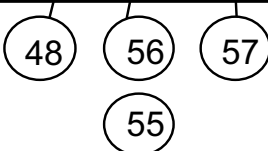
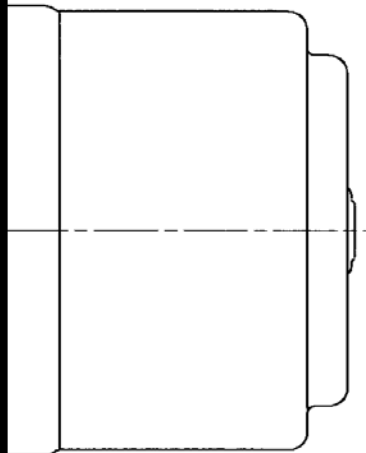
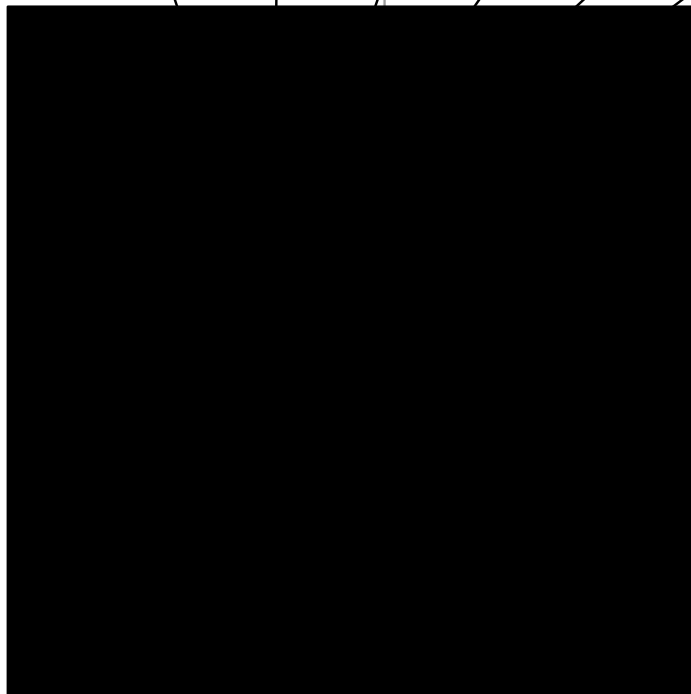
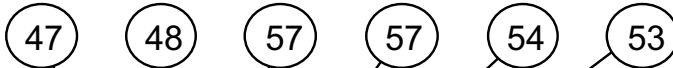
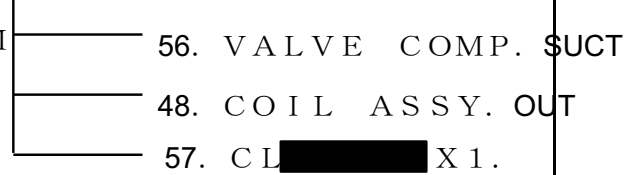
VALVE COMP. OUT



VALVE COMP. REG. M



VALVE COMP. SUCT



【HG-EMFA-0004】

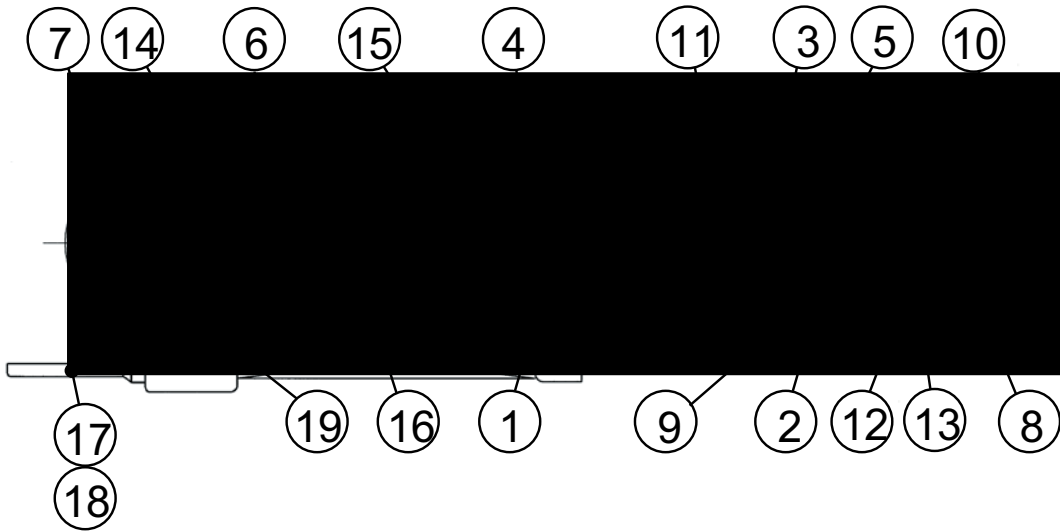
システム構成図 (12 / 29)

システム名称: MODULATOR UNIT

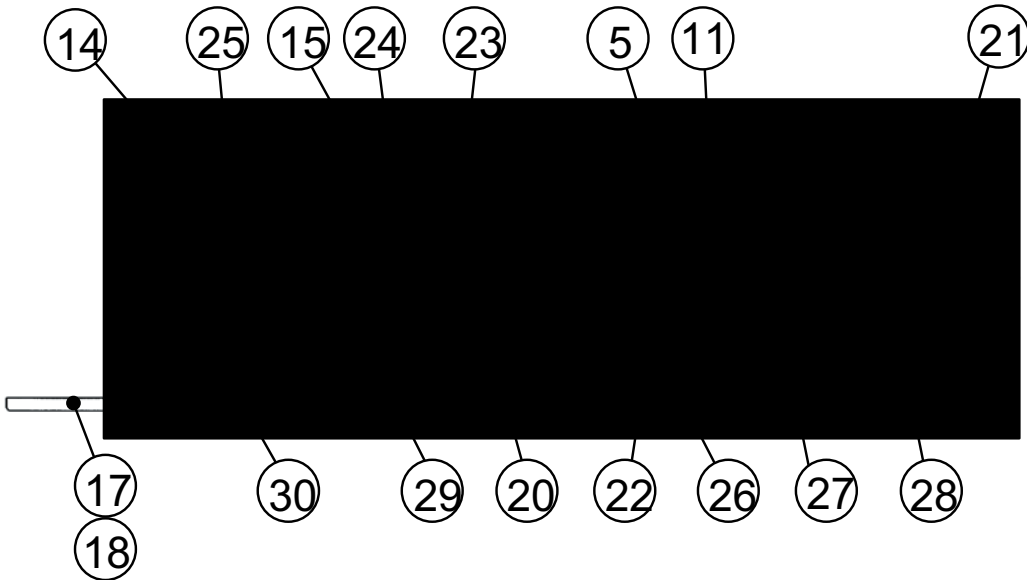
△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名

構造図: VALVE COMP (IN)



構造図: VALVE COMP (OUT)



【HG-FMEA-0004】

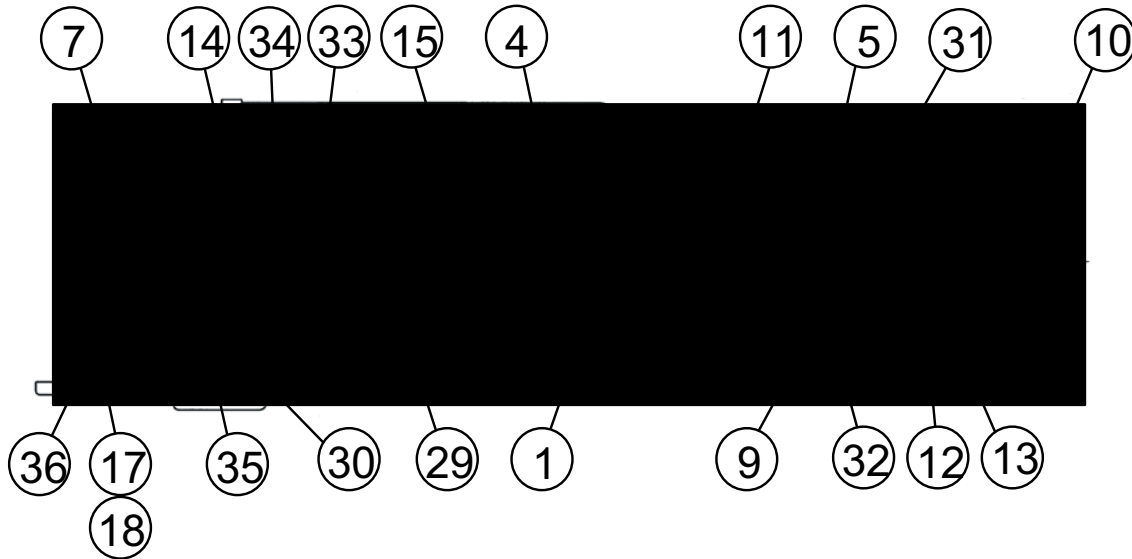
システム構成図 (13 / 29)

システム名称: MODULATOR UNIT

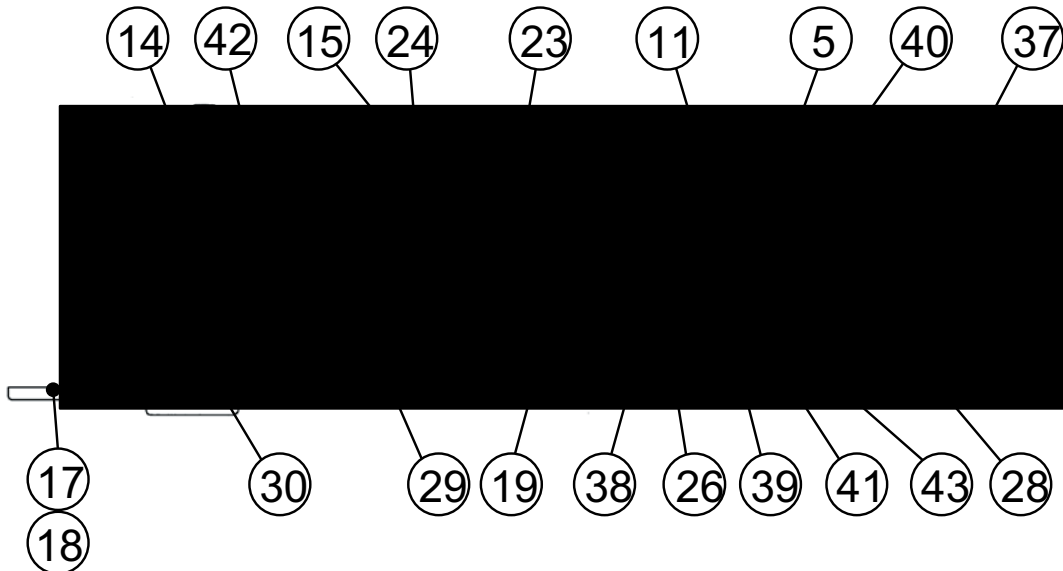
△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名

構造図: VALVE COMP (REGULATOR)



構造図: VALVE COMP (SUCTION)



【HG-FMEA-0004】

システム構成図 (14 / 29)

システム名称 MODULATOR UNIT

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名

VALVE COMP. (IN)

- 1. BODY IN [REDACTED]
- 2. SEAT 110 [REDACTED]
- 3. SPG. RET. IN 35 [REDACTED]
- 4. RETAINER BALL [REDACTED] H
- 5. BALL STAINLESS 1/16 [REDACTED]
- 6. ARMATURE IN [REDACTED]
- 7. PIPE IN [REDACTED]
- 8. ORIFICE IN [REDACTED]
- 9. FILTER SECOND [REDACTED]
- 10. FILTER IN [REDACTED]
- 11. O-RING S9 [REDACTED]
- 12. RING, BACK UP [REDACTED]
- 13. VALVE ONE WAY [REDACTED]

COIL ASSY (IN)

- 14. YOKE SOL TOP [REDACTED] 0)
- 15. YOKE SOL CAS [REDACTED] 0)
- 16. WIRE, MAGNET [REDACTED]
- 17. TERMINAL R [REDACTED] H
- 18. TERMINAL L [REDACTED] H
- 19. BOBBIN IN [REDACTED] 30)

【HG-FMEA-0004】

システム構成図 (15 / 29)

システム名称 MODULATOR UNIT

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名

VALVE COMP. (OUT)

- 20. PIPE OUT [REDACTED]
- 21. SEAT OUT [REDACTED]
- 22. ARMATURE OUT [REDACTED]
- 5. BALL STAINLESS 1/16 [REDACTED]
- 23. SPG. RET. OUT [REDACTED]
- 24. PLATE SHUT [REDACTED] H
- 25. CORE OUT [REDACTED]
- 26. PLUG OUT [REDACTED]
- 27. FILTER OUT [REDACTED]
- 11. O-RING S9 [REDACTED]
- 28. O-RING S7 [REDACTED]

COIL ASSY (OUT)

- 14. YOKE SOL TOP [REDACTED]
- 15. YOKE SOL CAS [REDACTED]
- 29. WIRE, MAGNET [REDACTED]
- 17. TERMINAL R [REDACTED] H
- 18. TERMINAL L [REDACTED] H
- 30. BOBBIN OUT [REDACTED])

【HG-EMFA-0004】

システム構成図 (16 / 29)

システム名称 MODULATOR UNIT

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名

VALVE COMP (REGULATOR)

- 1. BODY IN [REDACTED]
- 31. SEAT 110 [REDACTED]
- 32. SPG. RET. REG. 38 [REDACTED]
- 4. RETAINER BALL [REDACTED]
- 5. BALL STAINLESS 1/16 [REDACTED]
- 33. ARMATURE REG. M [REDACTED]
- 34. PIPE SLIDE [REDACTED]
- 35. SPG. REG. M [REDACTED]
- 36. STOPPER SPG. [REDACTED]
- 7. PIPE IN [REDACTED]
- 9. FILTER SECOND [REDACTED]
- 10. FILTER IN [REDACTED]
- 11. O-RING S9 [REDACTED]
- 12. RING, BACK UP [REDACTED]
- 13. VALVE ONE WAY [REDACTED]

COIL ASSY (OUT)

- 14. YOKE SOL TOP [REDACTED] (20)
- 15. YOKE SOL CA [REDACTED] (20)
- 29. WIRE, MAGNE [REDACTED] (7)
- 17. TERMINAL R [REDACTED] H
- 18. TERMINAL L [REDACTED] H
- 30. BOBBIN OUT [REDACTED] (0)

【HG-FMEA-0004】

システム構成図 (17 / 29)

システム名称 MODULATOR UNIT

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名

VALVE COMP (SUCTION)

- 19. PIPE OUT [REDACTED]
- 37. SEAT 4 [REDACTED]
- 5. BALL STAINLESS 1/16 [REDACTED]
- 38. ARMATURE SUCTION [REDACTED]
- 39. GUIDE [REDACTED]
- 40. FLOW SEAT [REDACTED]
- 41. SPG. RET SUCTION [REDACTED] B
- 23. SPG. RET. OUT [REDACTED] B
- 24. PLATE SHUT [REDACTED] H
- 42. CORE SUCTION [REDACTED]
- 26. PLUG OUT [REDACTED]
- 43. FILTER SUCTION [REDACTED]
- 11. O-RING S9 [REDACTED]
- 28. O-RING S7 [REDACTED]

COIL ASSY (OUT)

- 14. YOKE SOL TO [REDACTED] 0)
- 15. YOKE SOL CA [REDACTED] 0)
- 29. WIRE, MAGNET [REDACTED]
- 17. TERMINAL R [REDACTED] H
- 18. TERMINAL L [REDACTED]
- 30. BOBBIN OUT [REDACTED])

【HG-EMFA - 0004】

システム構成図 (18 / 29)

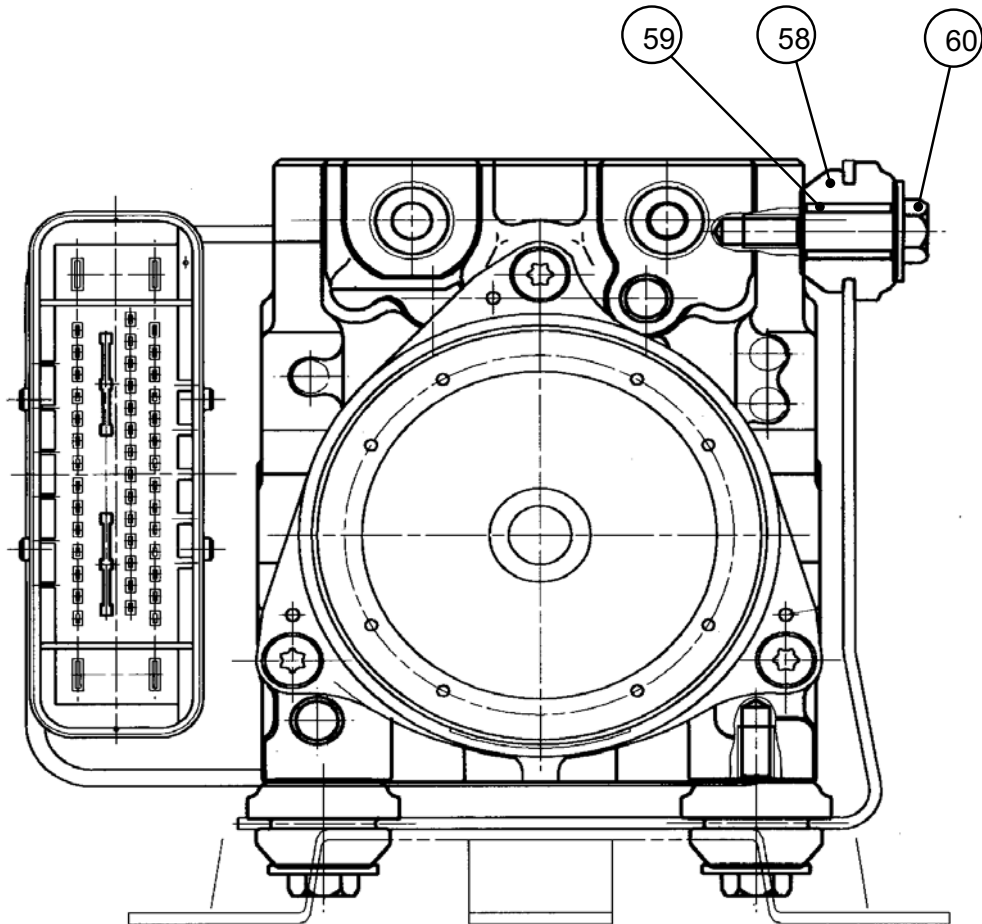
システム名称 _____

△			
1	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名 日信工業 (株)

MOUNT ASSY

- 58. RUBBER MOUN [REDACTED] DM
- 59. COLLAR [REDACTED]
- 60. BOLT WASH [REDACTED] S50C



システム構成図 (19 / 29)

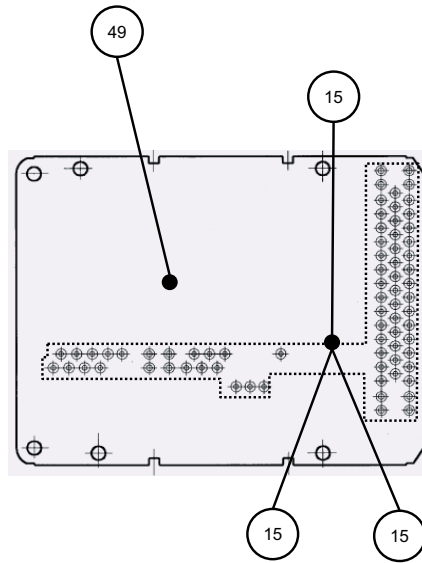
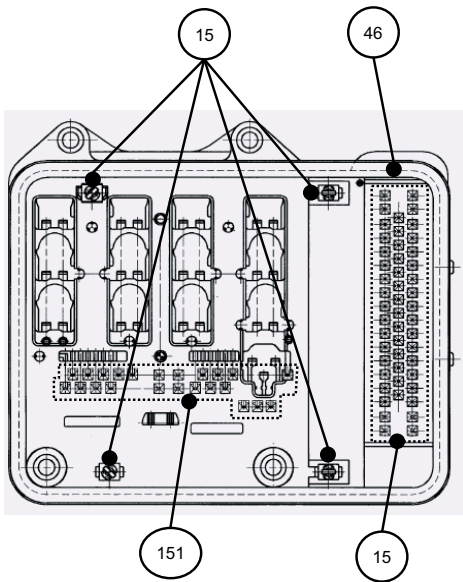
システム名称 VSA TCSコントロールユニット

△			
△			
△			
—	06. NOV. '01	林部	
	日付	作成	承認

メーカー名 株式会社日信工業

CONTROL UNIT

- 46. ECU HOUSING
- 49. PWB ASSY
- 150. CONNECTOR
- 151. INSIDE TERMINAL
- 152. SNAP FIT
- 153. SOLDER
- 154. FLUX
- 155. COATING



【HG-FMEA-0004】

システム構成図 (20 / 29)

システム名称 VSA/TCSTコントロールユニット

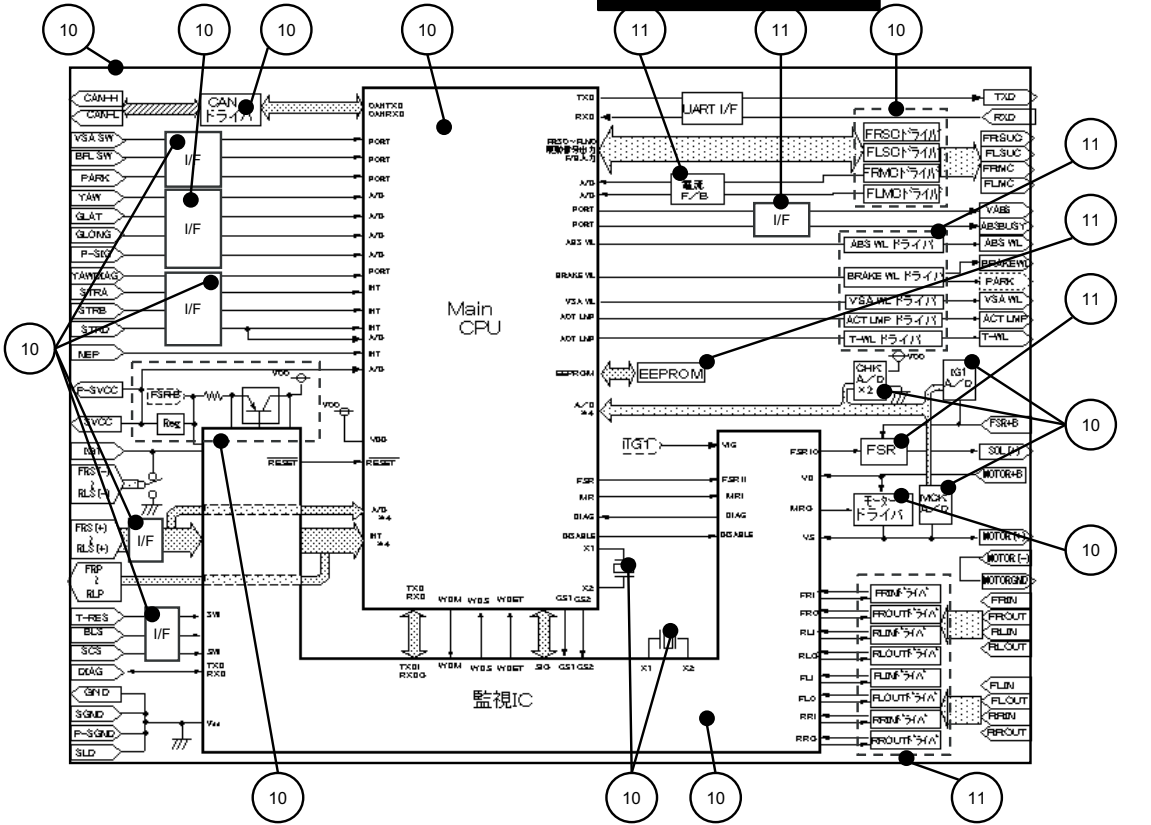
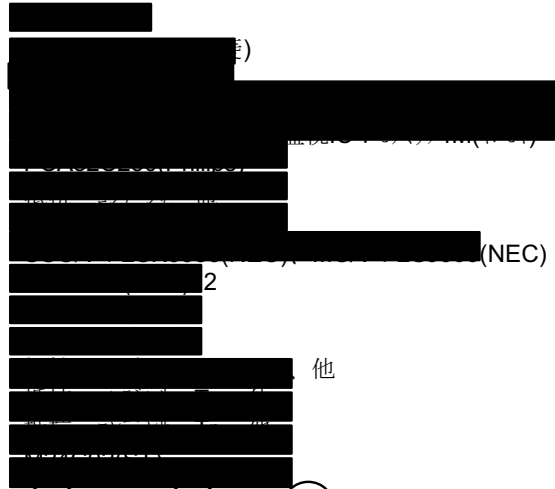
△			
△			
△	06. NOV. '01	林部	
—	26. MAR '01	林部	
	日付	作成	承認

メーカー名 ㈱日本電気、㈱ネッツ

[PWB ASSY構成図]

49. PWB ASSY

- 100. PWB
- 101. 32BITマイクロコンピュータ
- 102. 監視IC
- 103. 電源IC(SVCC、3.3V)
- 104. CLOCK(マイコン、監視IC)
- 105. FULL CAN DRIVER
- 106. A/D INPUT CIRCUIT
- 107. ON/OFF INPUT CIRCUIT
- 108. SOL DRIVER FET
- 109. MOTOR DRIVER FET
- 110. F/S RELAY DRIVER FET
- 111. SOL ON/OFF F/B CIRCUIT
- 112. SOL LINEAR F/B CIRCUIT
- 113. ON/OFF OUTPUT CIRCUIT
- 114. W/L OUTPUT CIRCUIT
- 115. 2Kbit EEPROM



【HG-FMEA-0004】

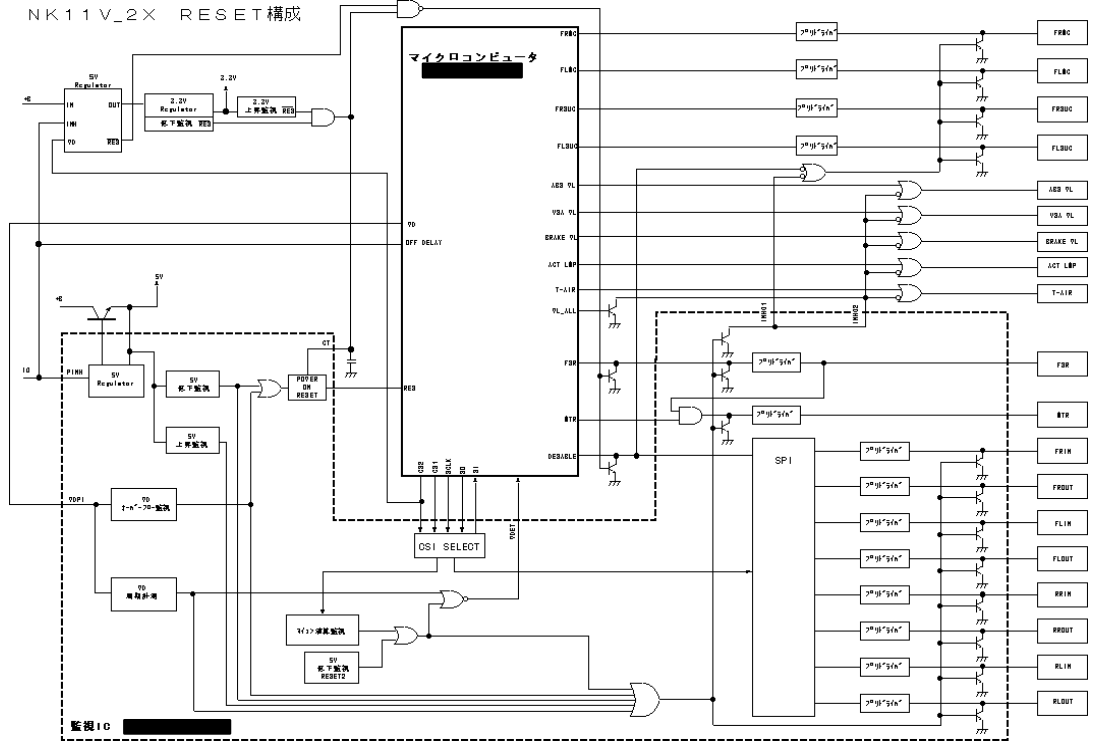
システム構成図 (21 / 29)

システム名称 VSA/TCSTコントロールユニット

△			
△			
△			
—	26. MAR '01	林部	
	日付	作成	承認

メーカー名 (株)日本電気、(株)リテック

[F/S構成図]



【HG-FMEA-0004】

システム構成区 (19 / 19)

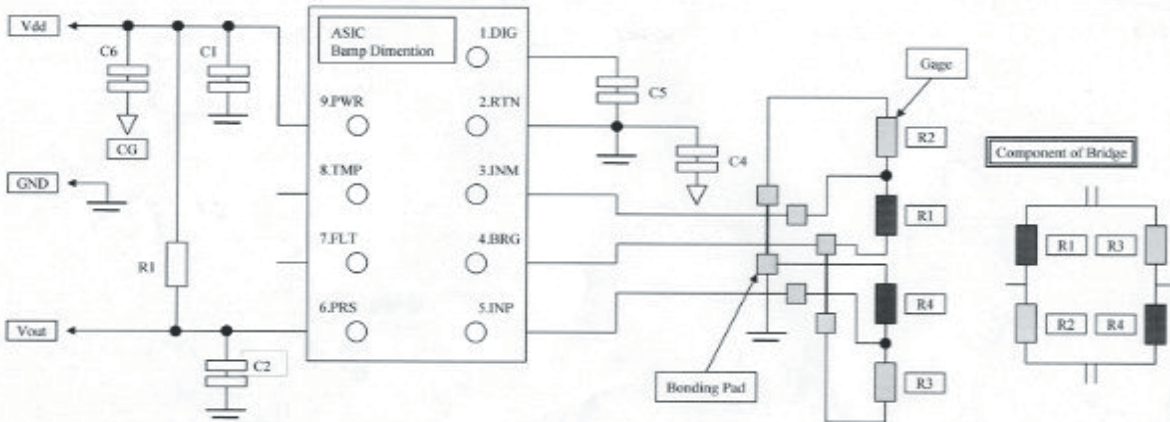
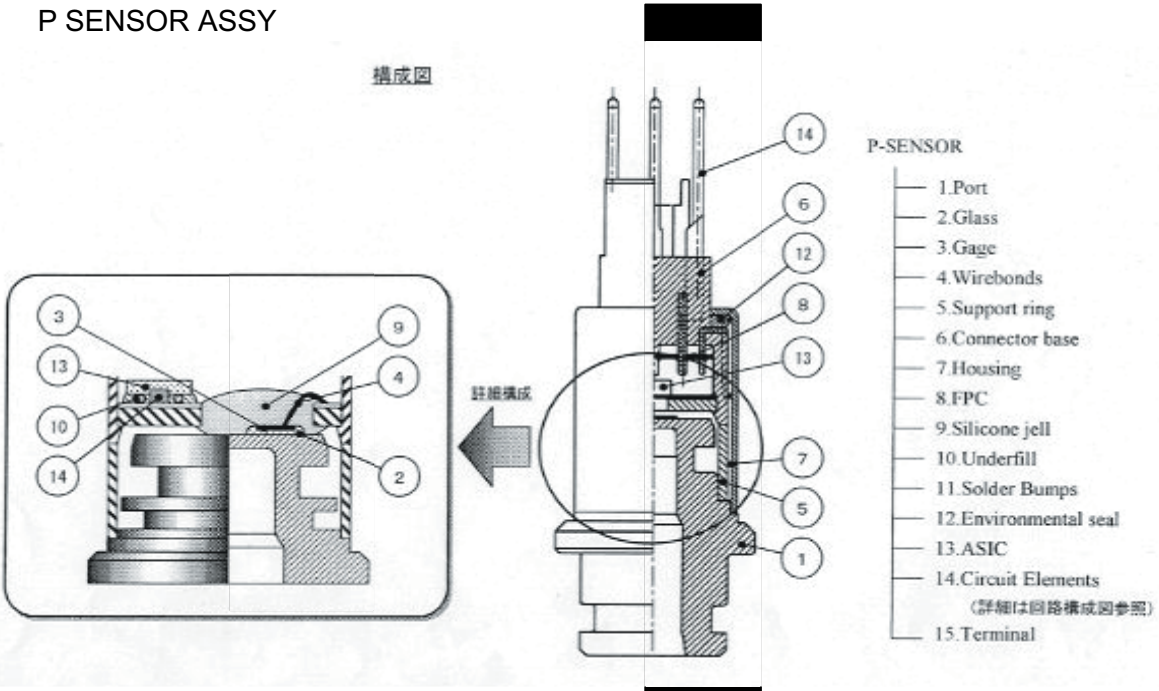
システム名称 : MODULATOR UNIT

△			
△	2. NOV. '01	中野	
新規	28. MAR '01	中野	
	日付	作成	承認

メーカー名 日信工業 (株)

P SENSOR ASSY

構成図



【HG-FMEA-0004】

システム構成図 (23 / 29)

システム名称 ヨーレート/Gセンサ

△			
△			
1	7. NOV. '01	和田	
—	26. MAR '01	和田	
	日付	作成	承認

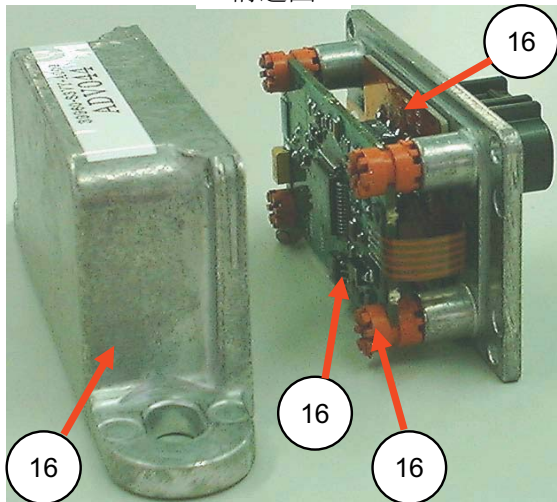
[ヨーレート/Gセンサ 構成図]

メ-カ-名 曙フ-レ-キ工業(株)

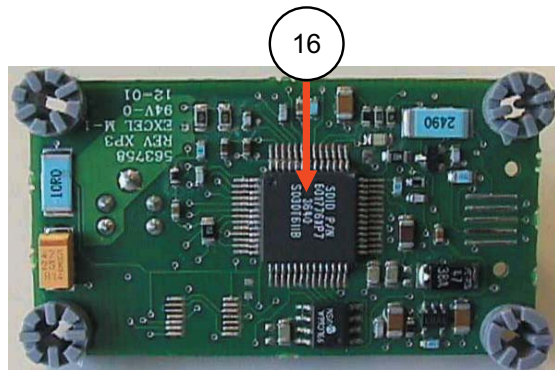
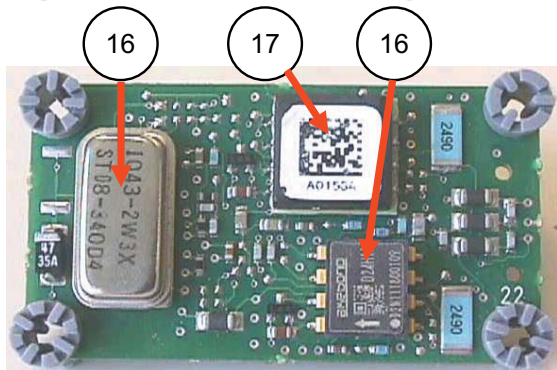
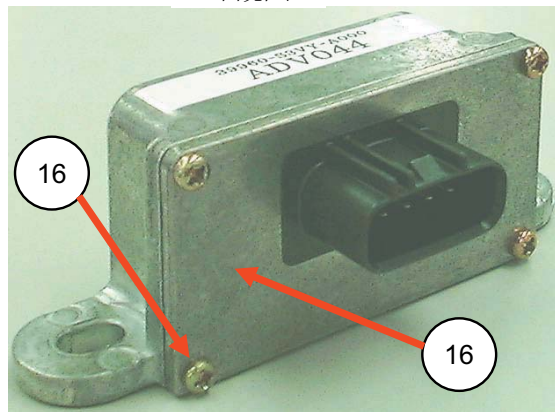
ヨーレート/Gセンサ

- 160 ハウジング
- 161 カバ-ASSY
- 162 サブ基板
 - 143 回路素子: 抵抗、コンデンサ、他
- 164 コム7*ツシ
- 165 ねじ
- 166 センサ基板
 - 167 ヨーレートセンサ(BE)
 - 168 ヨーレートセンサASI (BE)
 - 169 横Gセンサ(VD)
 - 170 前後Gセンサ(曙)
 - 171 回路素子 : 抵抗、コンデンサ、Tr.、他

< 構造図 >



< 外観図 >



【HG-FMEA-0004】

<p style="text-align: center;"><u>システム構成図</u> (24 / 29)</p> <p>システム名称 <u>ヨーレート/Gセンサ</u></p>	△				
	△				
	△	1	7. NOV. '01	和田	
	—		26. MAR '01	和田	
			日付	作成	承認
【ヨー/Gセンサブロック	メ-カ-名	曙フレイキ工業(株)			



--

【HG-FMEA-0004】

<p>システム構成図 (25 / 29)</p> <p>システム名称 ヨーレート/Gセンサ</p>	△			
	△			
	△			
	—	7. NOV. '01	和田	
	日付	作成	承認	

[ヨー/Gセンサ回路図]	メ-カ-名	曙フレイキ工業(株)
----------------	-------	------------

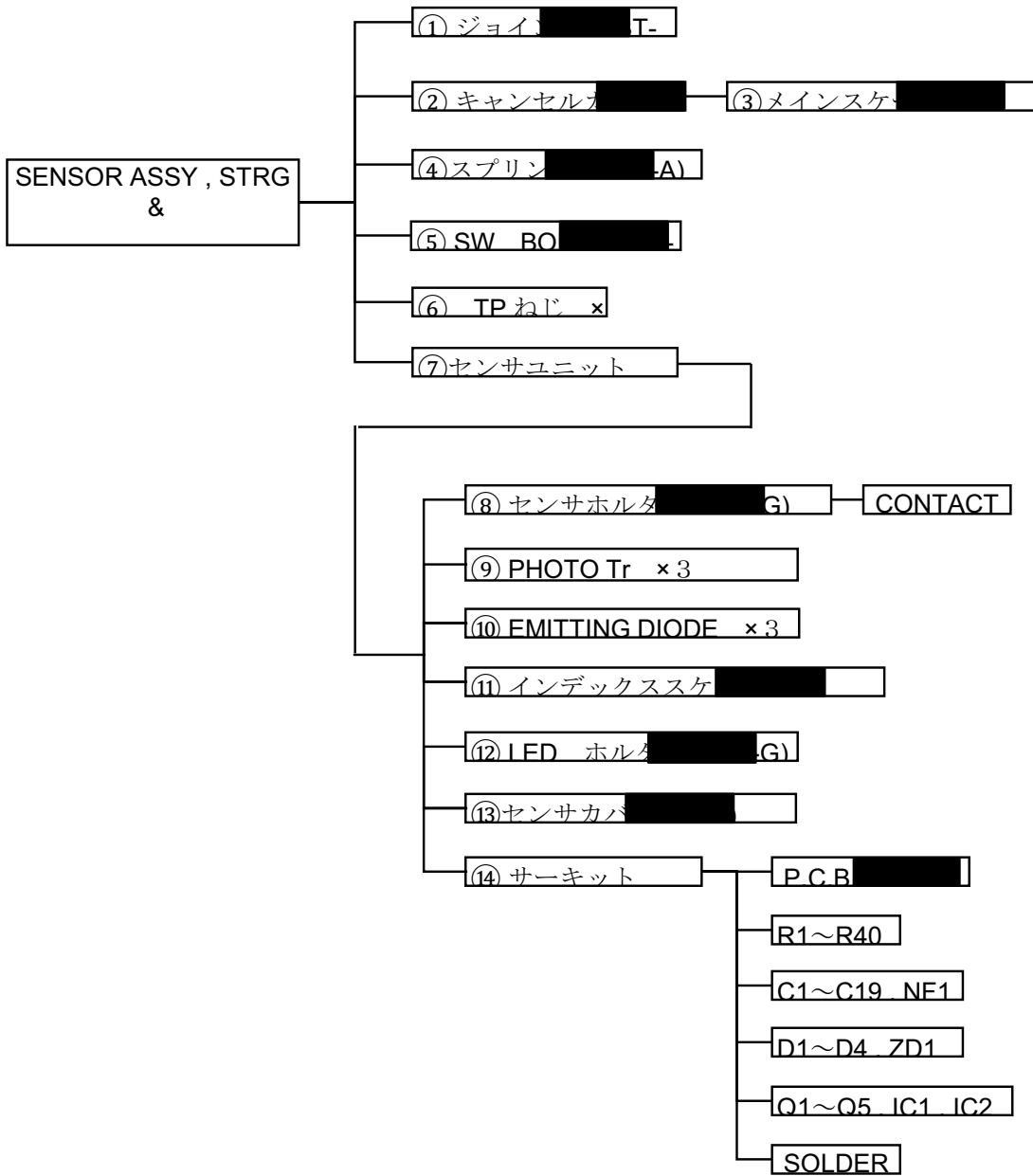


【HG-FMEA - 0004】

システム構成図 (27 / 29)

システム名称 自己診断機能付 舵角センサ (東洋電装製)

△			
△			
△			
—	01. Nov. '01	佐藤 (文)	
	日付	作成	承認



【HG-FMEA - 0004】

システム構成図 (28 / 29)

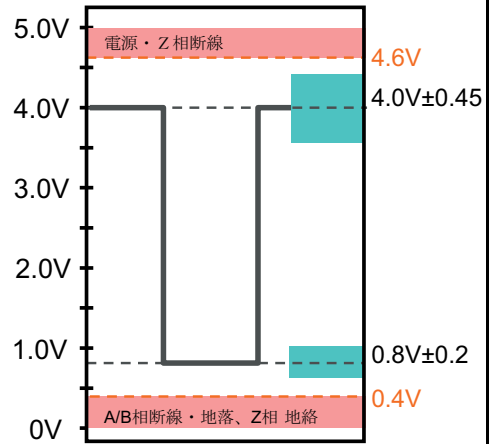
システム名称 自己診断機能付 舵角センサ (東洋電装製)

△			
△			
△			
—	01. Nov. '01	佐藤 (文)	
	日付	作成	承認

[舵角センサ回路図]

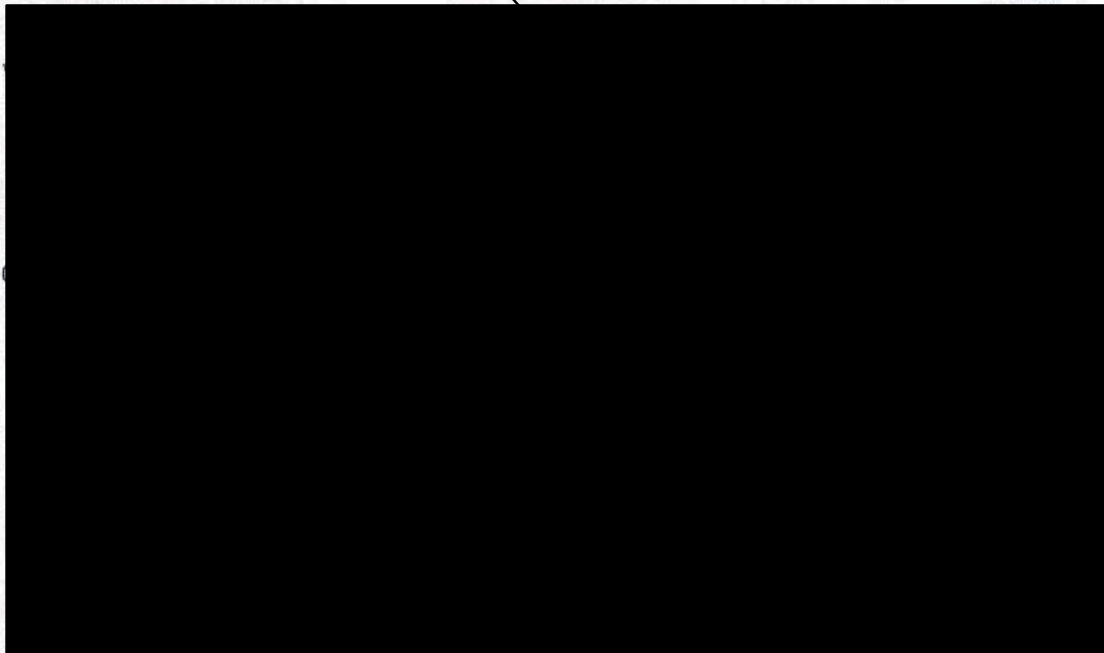
断線・地落自己診断機能追加により
停車時の異常検出が可能

Z相出力電圧特性



■ はバラツキ範囲を示す。

Z相 Hi出力電圧規制回



A・B相の断線/短絡検出回

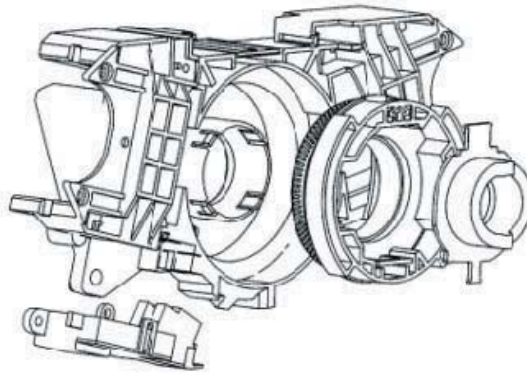
システム構成図 (29 / 29)

システム名称 自己診断機能付 舵角センサ (東洋電装製)

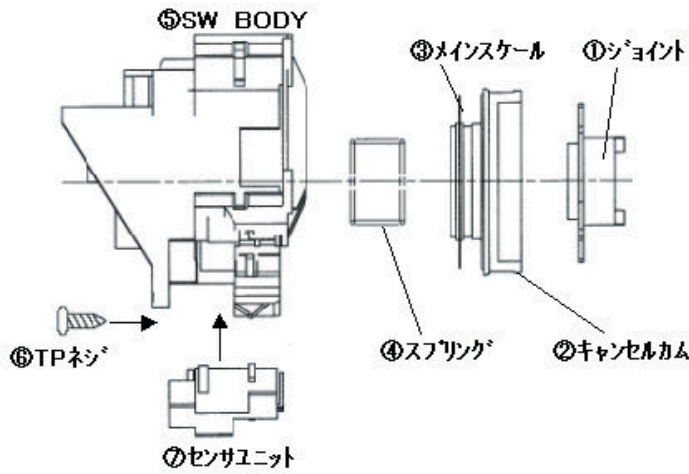
△			
△			
△			
—	01. Nov. '01	佐藤 (文)	
	日付	作成	承認

[舵角センサ構造図]

< 全体図 >



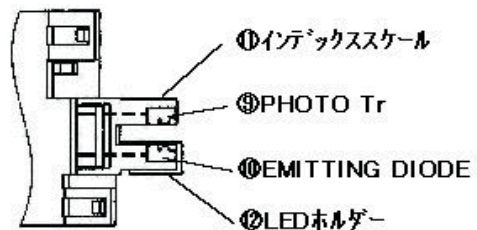
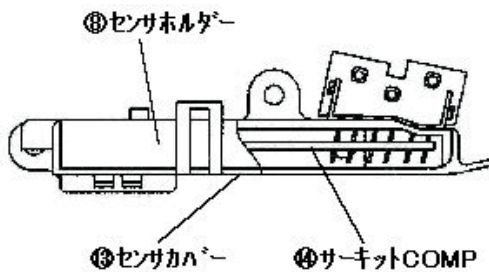
< 断面図 >



< メインスケール >



< センサー部 >



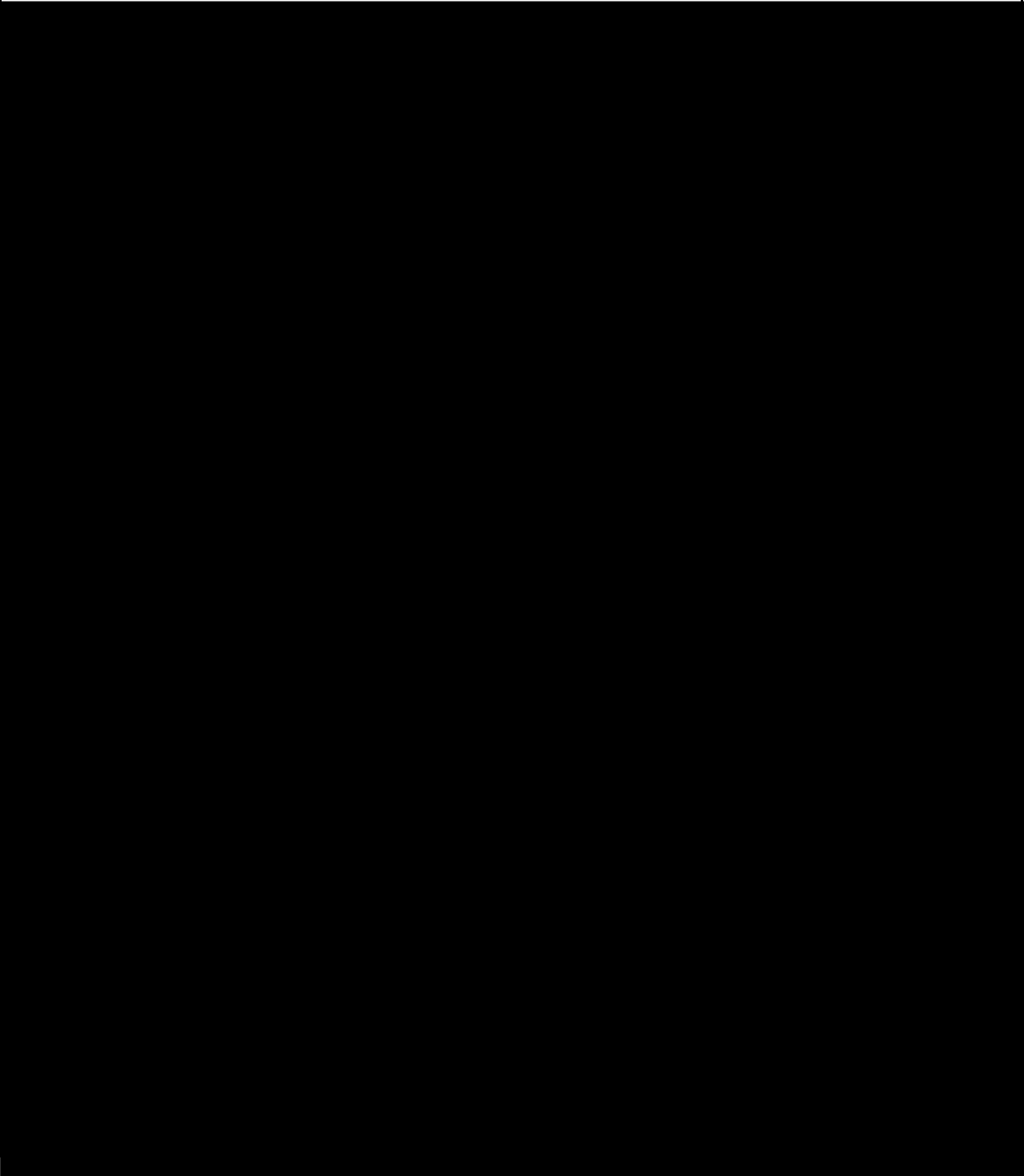
【HG-FMEA-0.0.0.8】

システム機能及び故障リスト〔1/1〕

システム名称

VSA (NK11V)

△			
△			
△	2001/ APR 2	20D	川本
	日 付	作 成	承 認

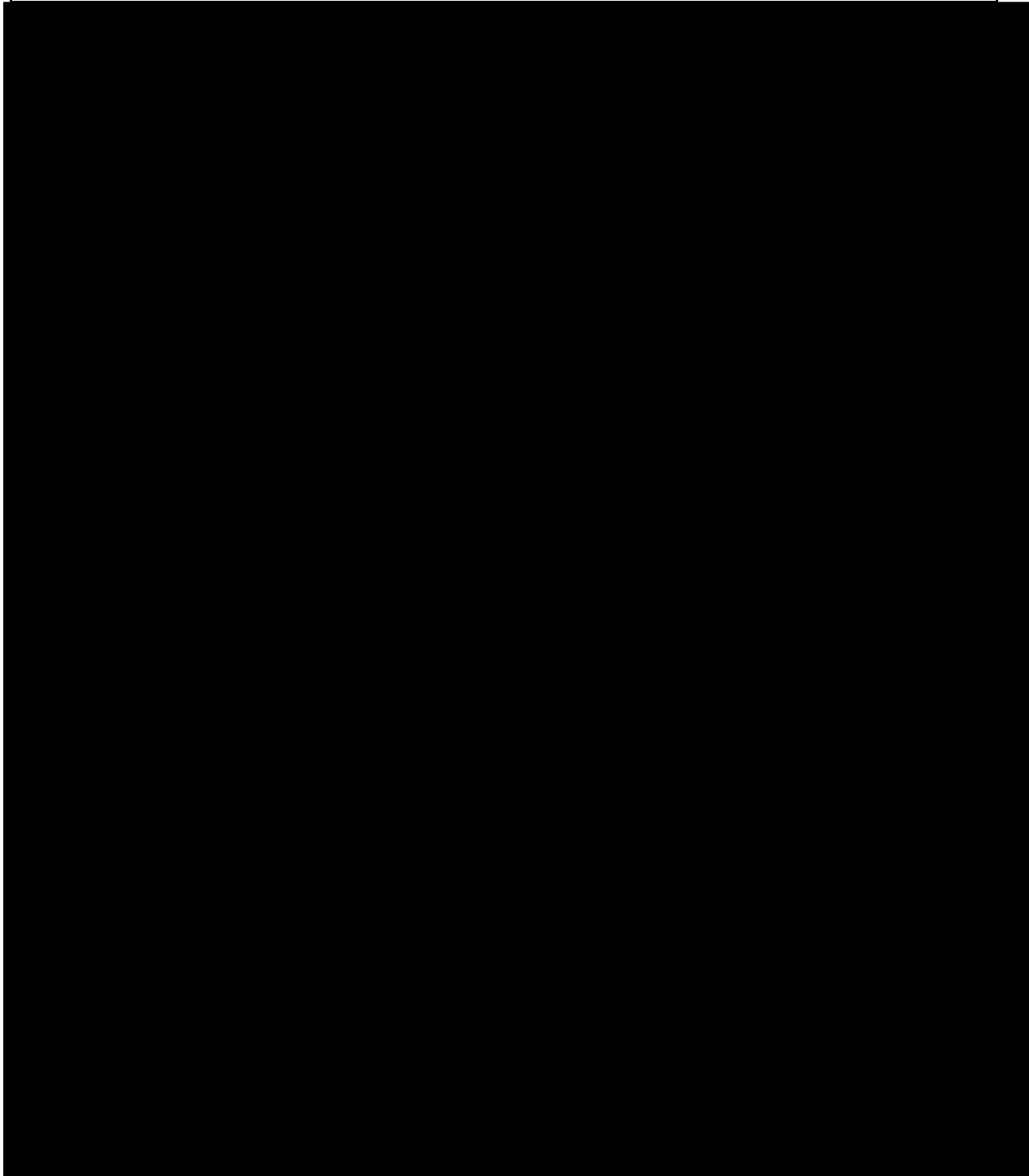


【HG-FMEA-0009】

システム重大性と定義付け〔 1 / 1

システム名称 VSA

△			
△			
△	2001/ APR 2	20D 川本	
	日 付	作 成	承 認



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

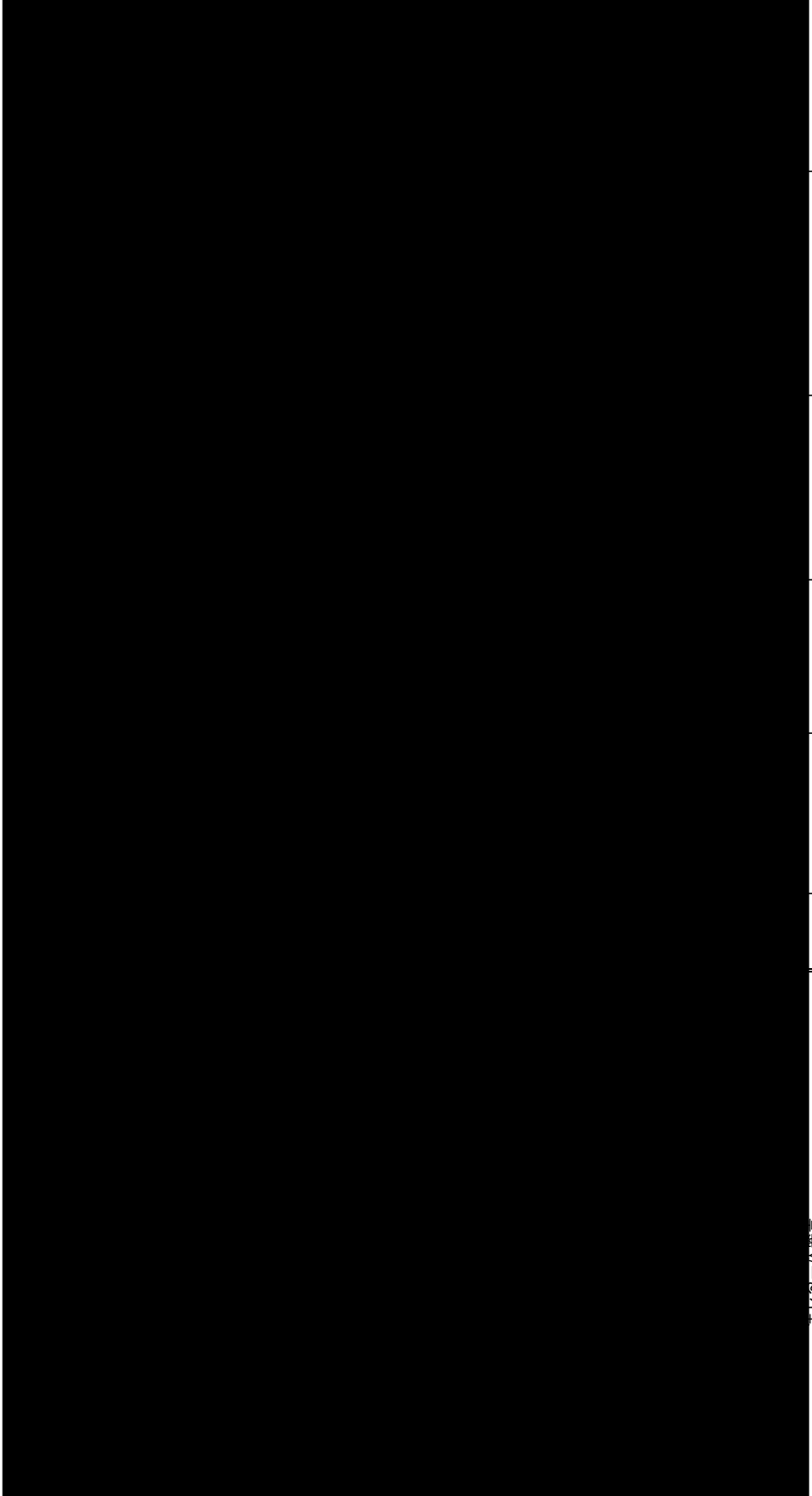
【HG-FMEA - 0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (1 / 73)
(F T A)

△					
△					
△					
△	2000/APR 2	20D	川本		
	日付	作成	承認		



【HG-FMEA-0.0.0.5】

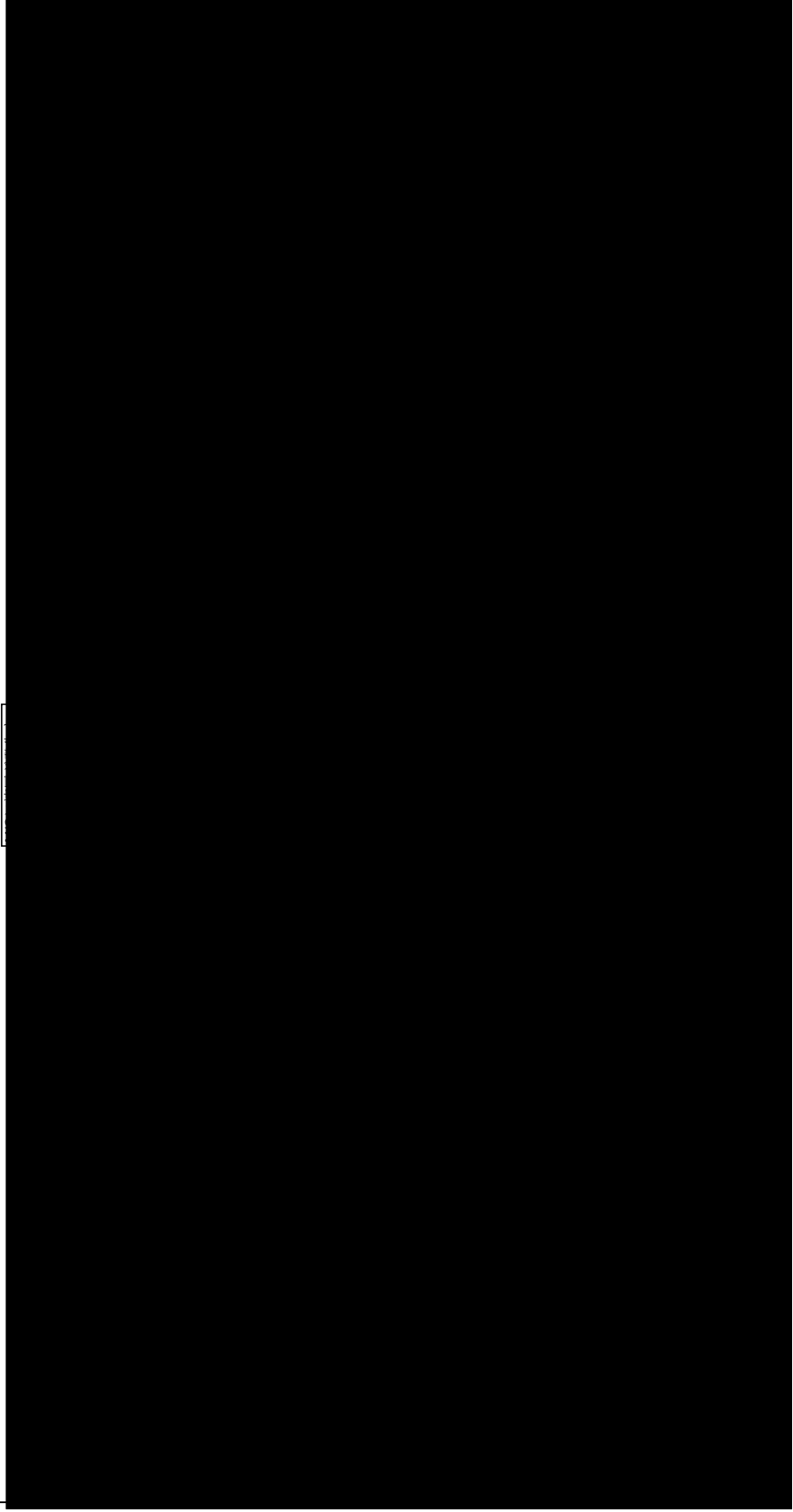
A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (2 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		

100-101



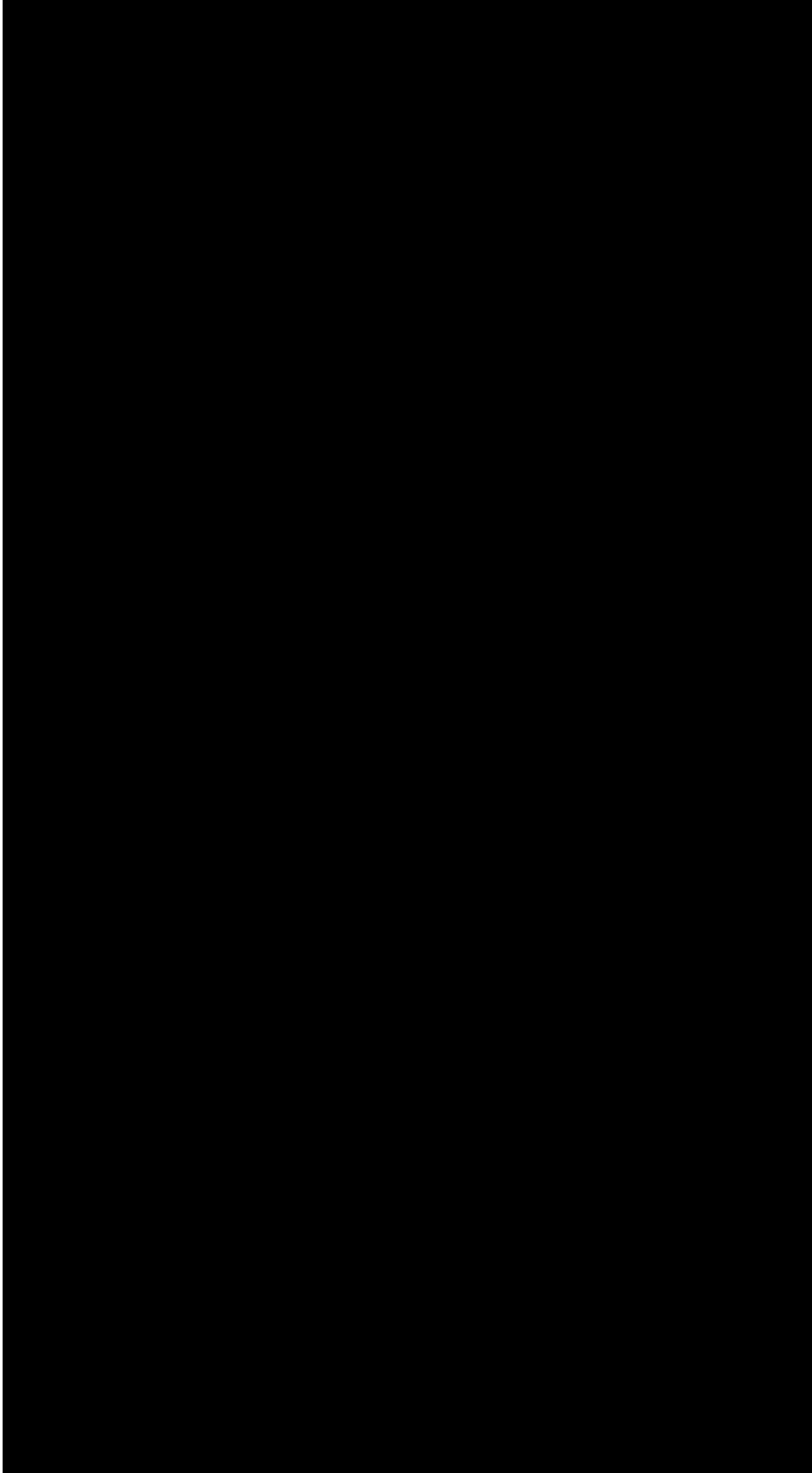
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (3 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



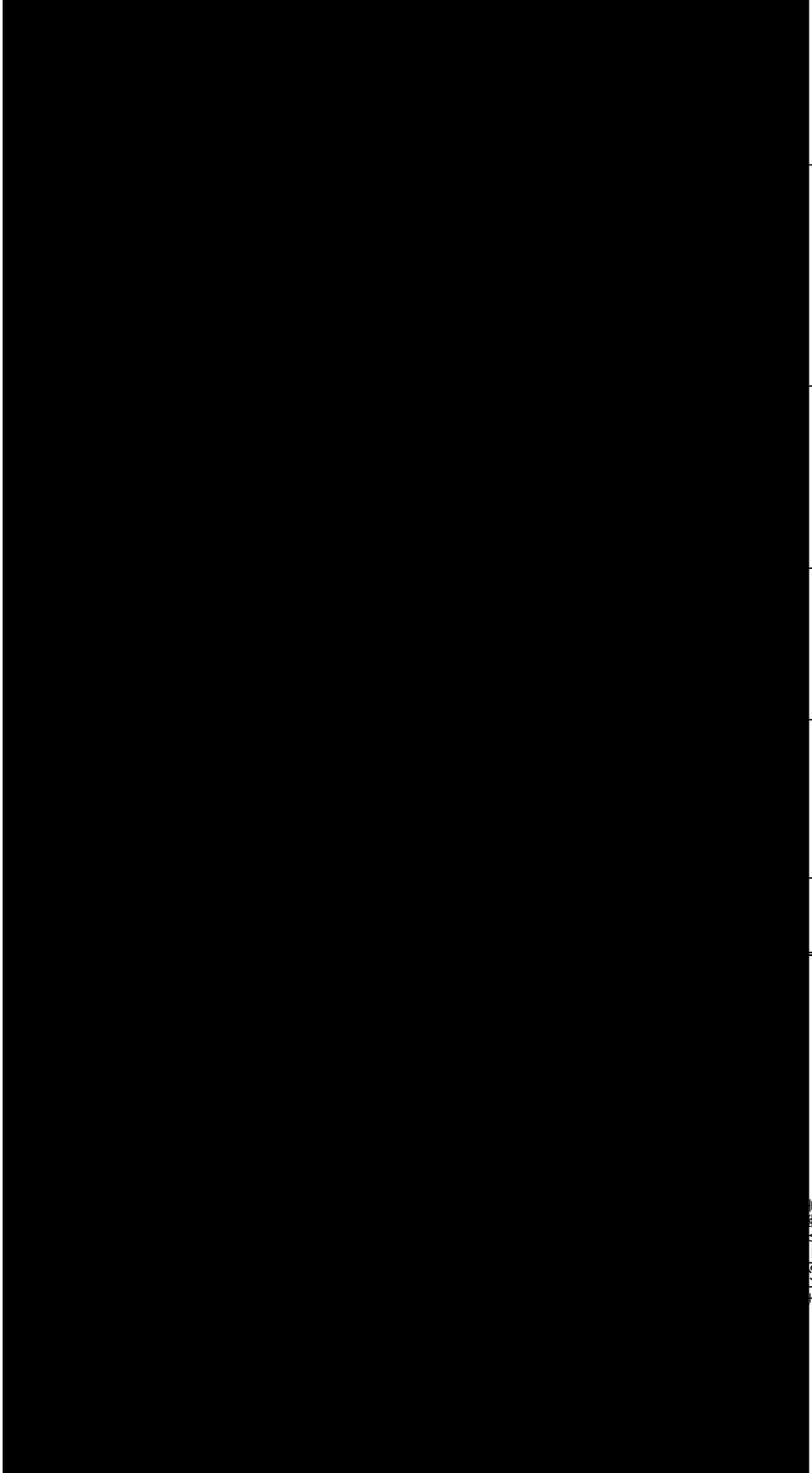
【HG-FMEA - 0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (4 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



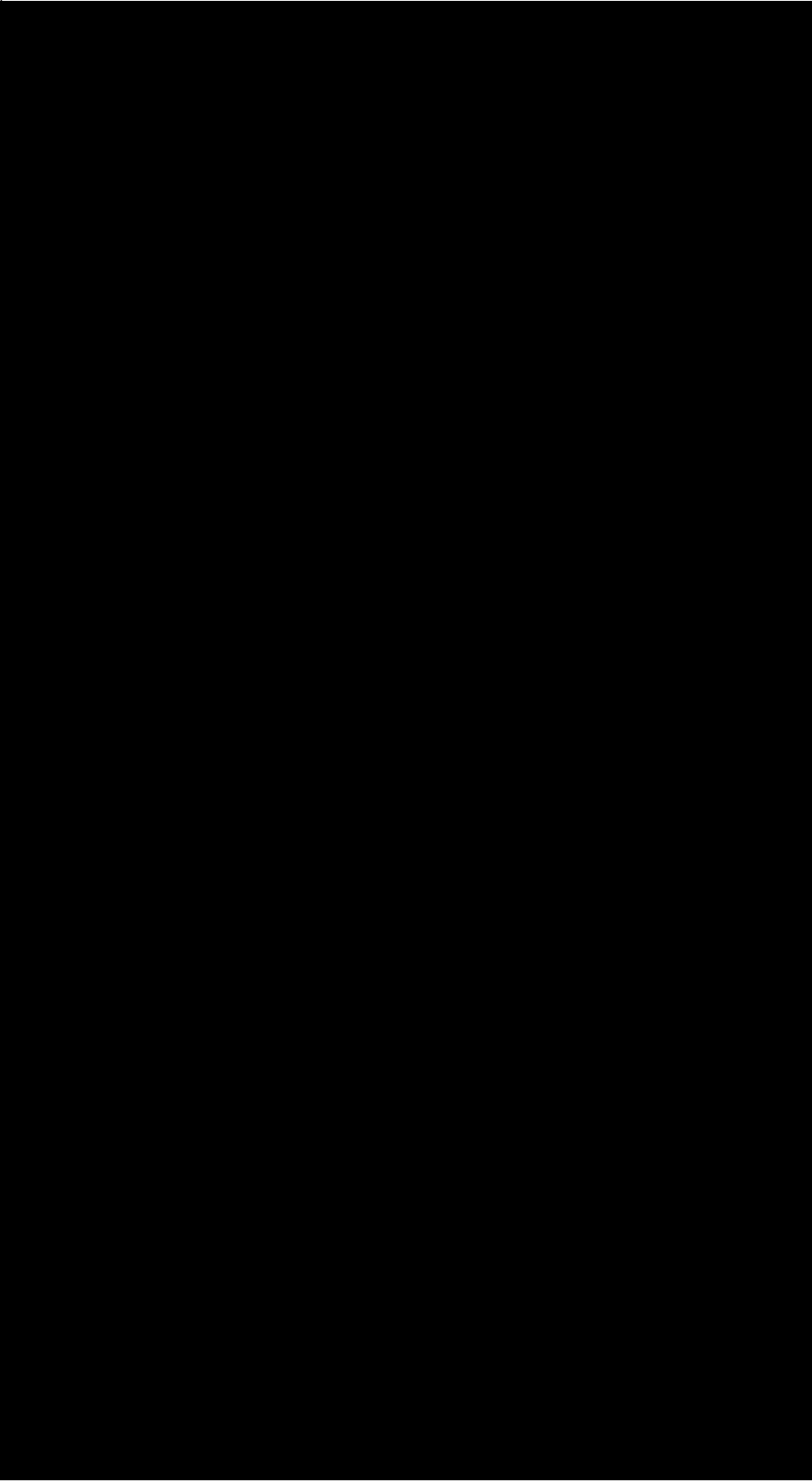
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (5/73)
(FTA)

△					
△					
△					
△	2001AFF2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

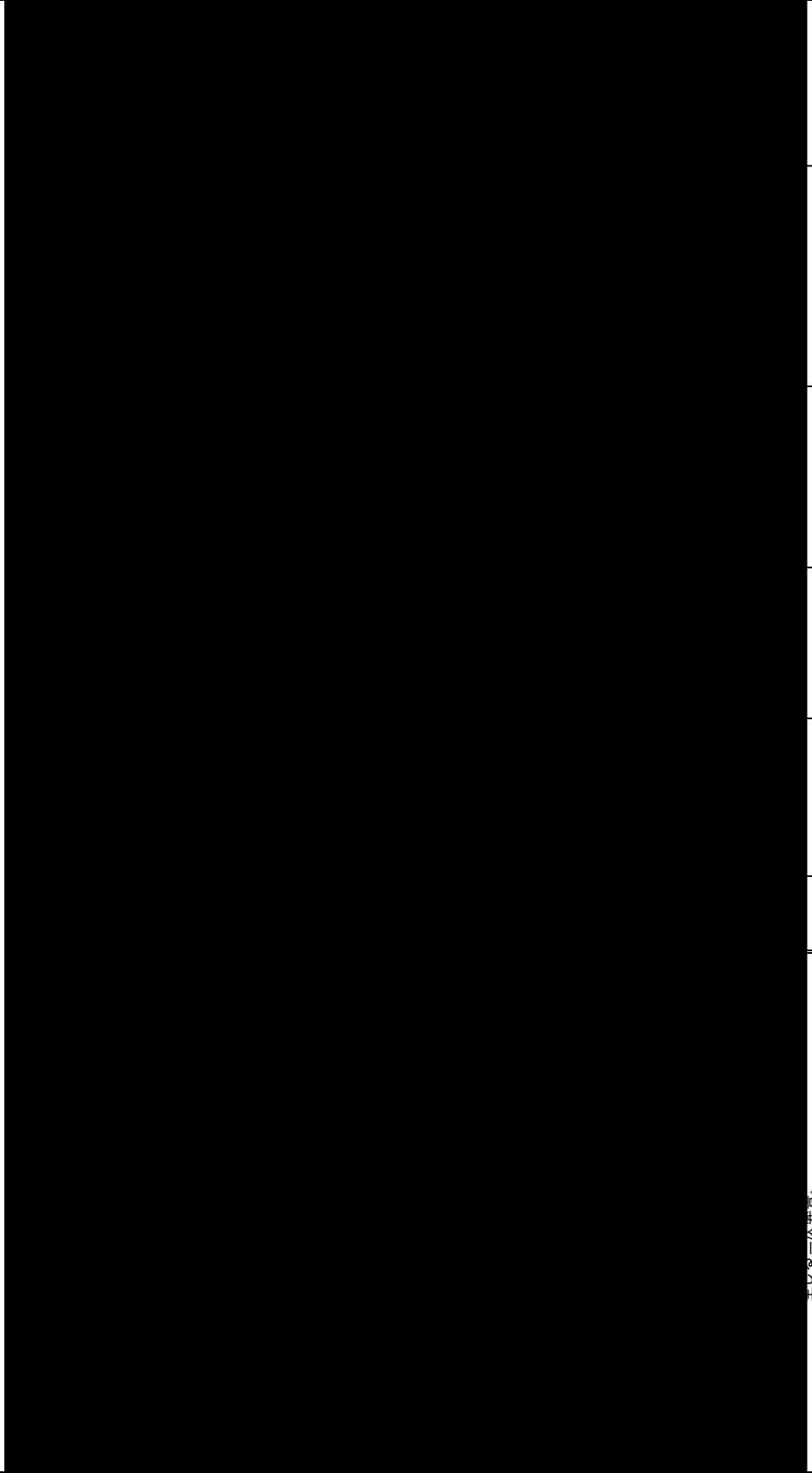
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (6 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



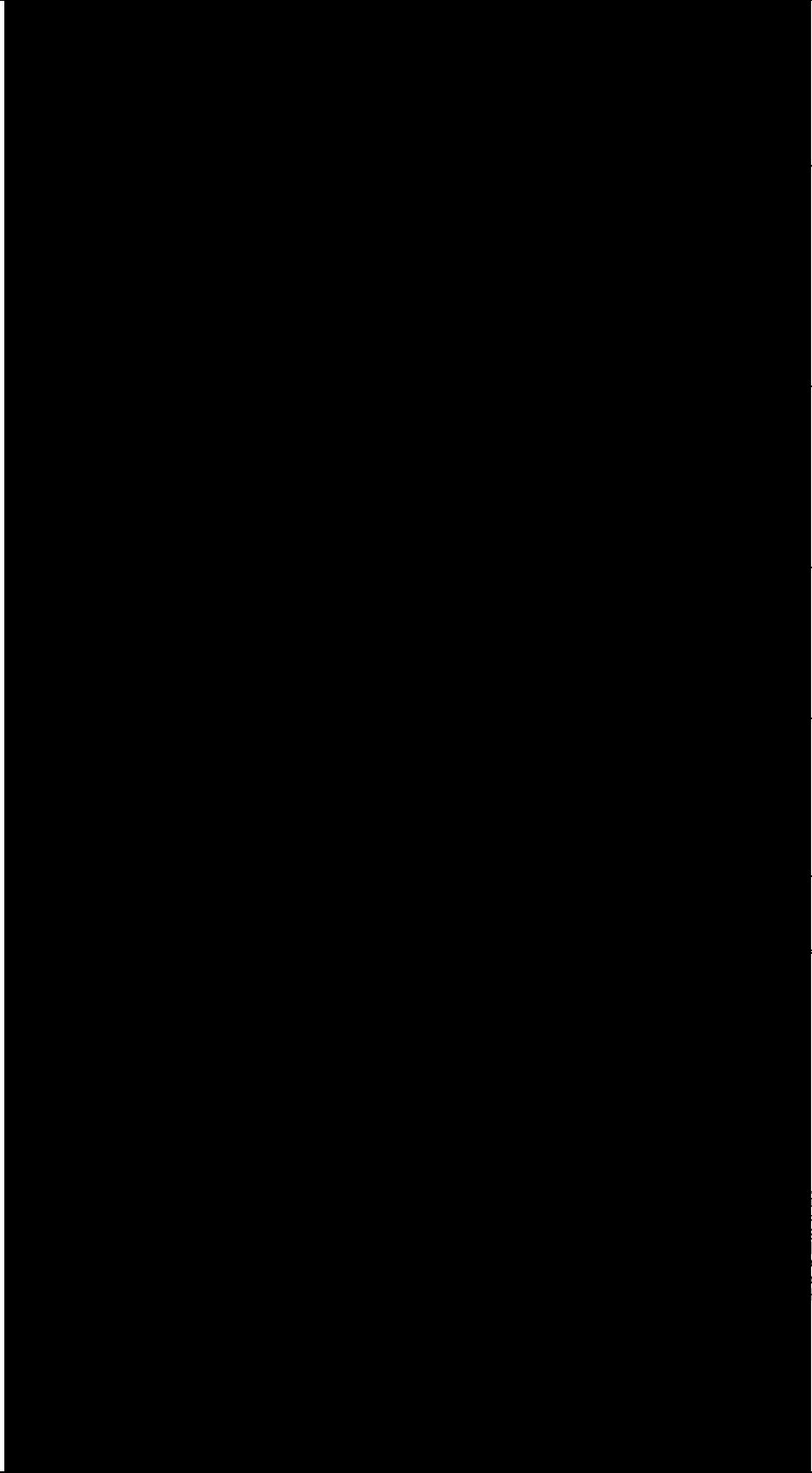
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (7/73)
(FTA)

△					
△					
△					
△	2001AFF2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

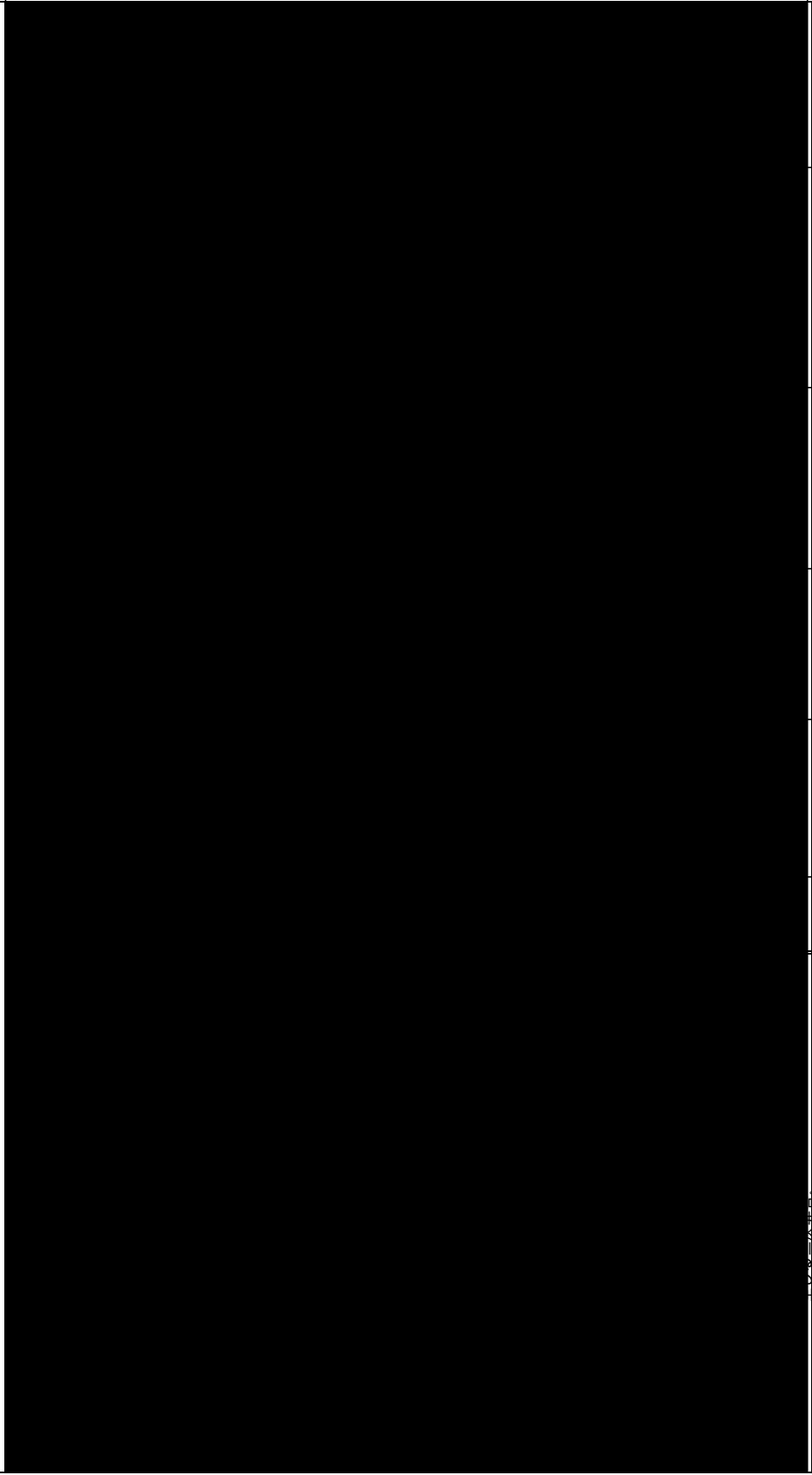
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (8 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



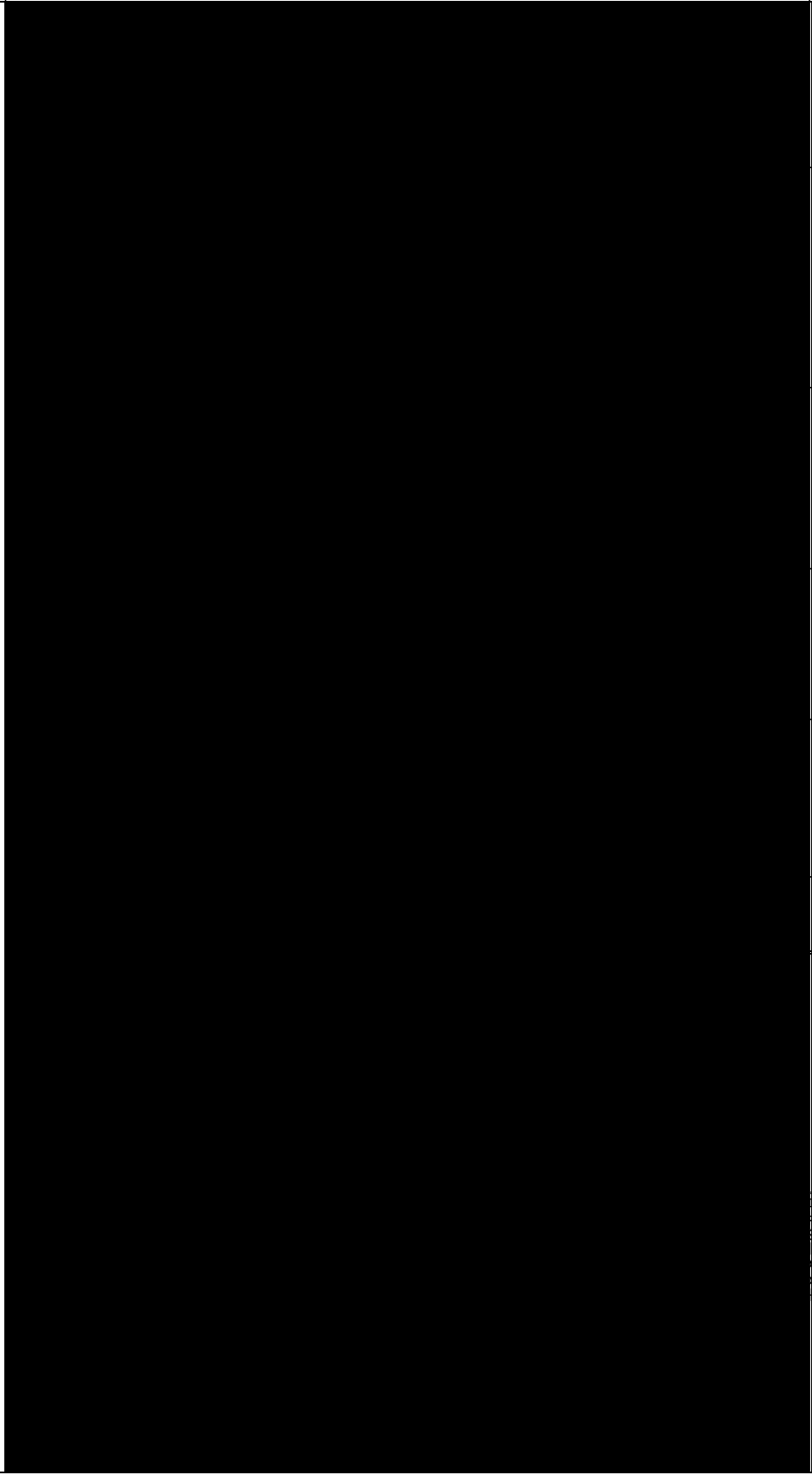
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (9 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



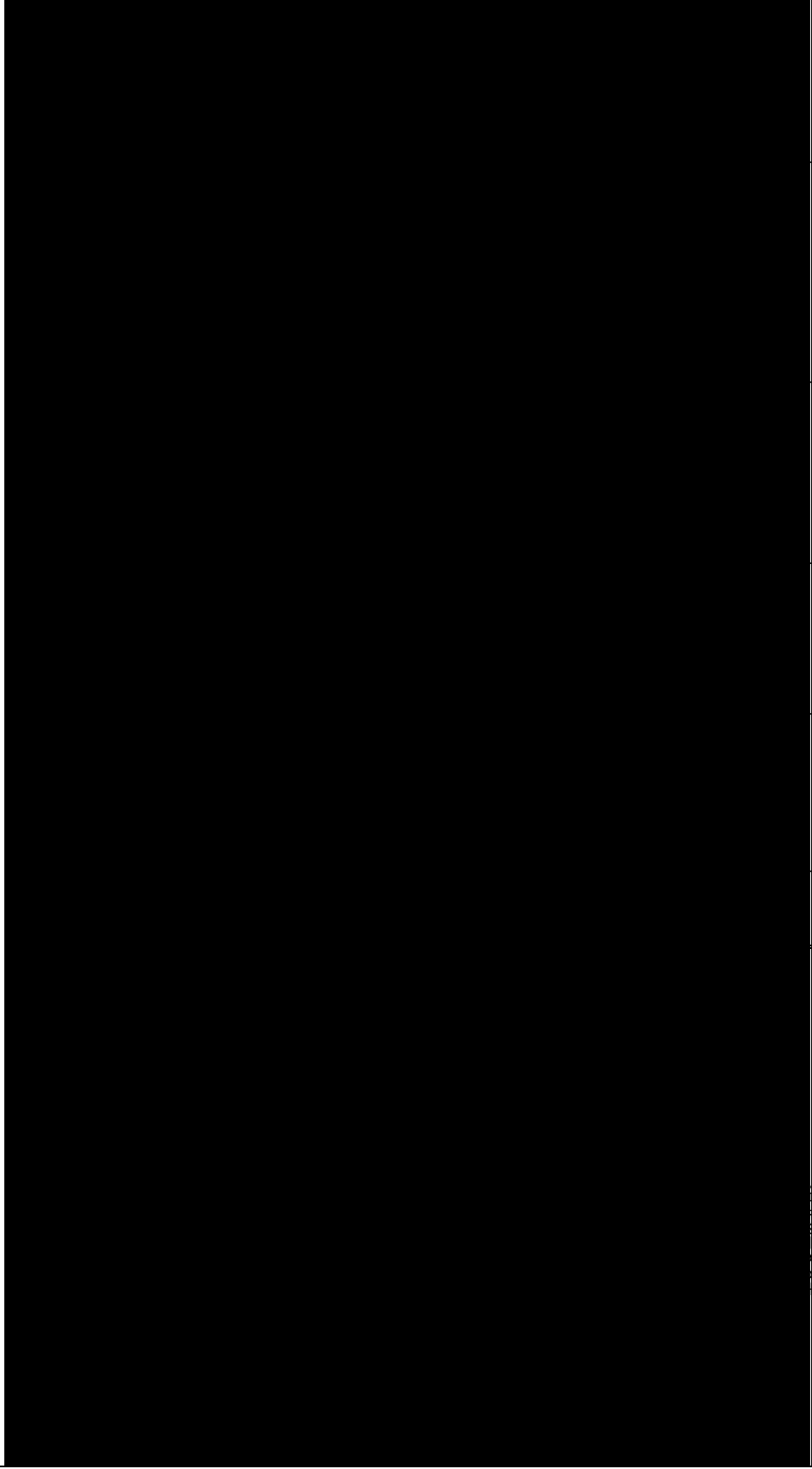
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (10/13)
(FTA)

△					
△					
△					
△	2001AFF2	20D	川本		
	日付	作成	承認		



【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (11/73)
(FTA)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

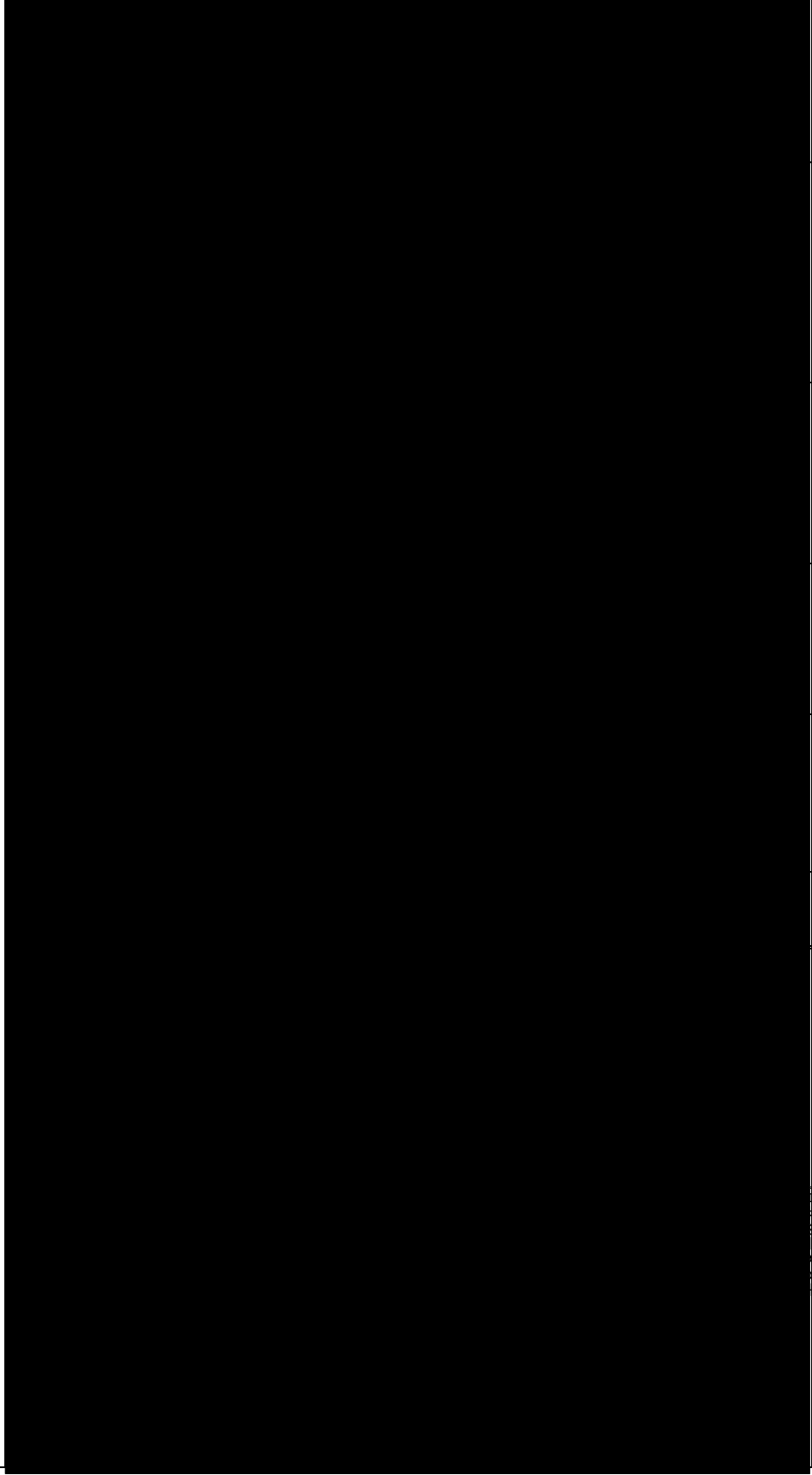
【HG-FMEA-0.0.0.5】

A	T	V
		●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (12/13)
(FTA)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

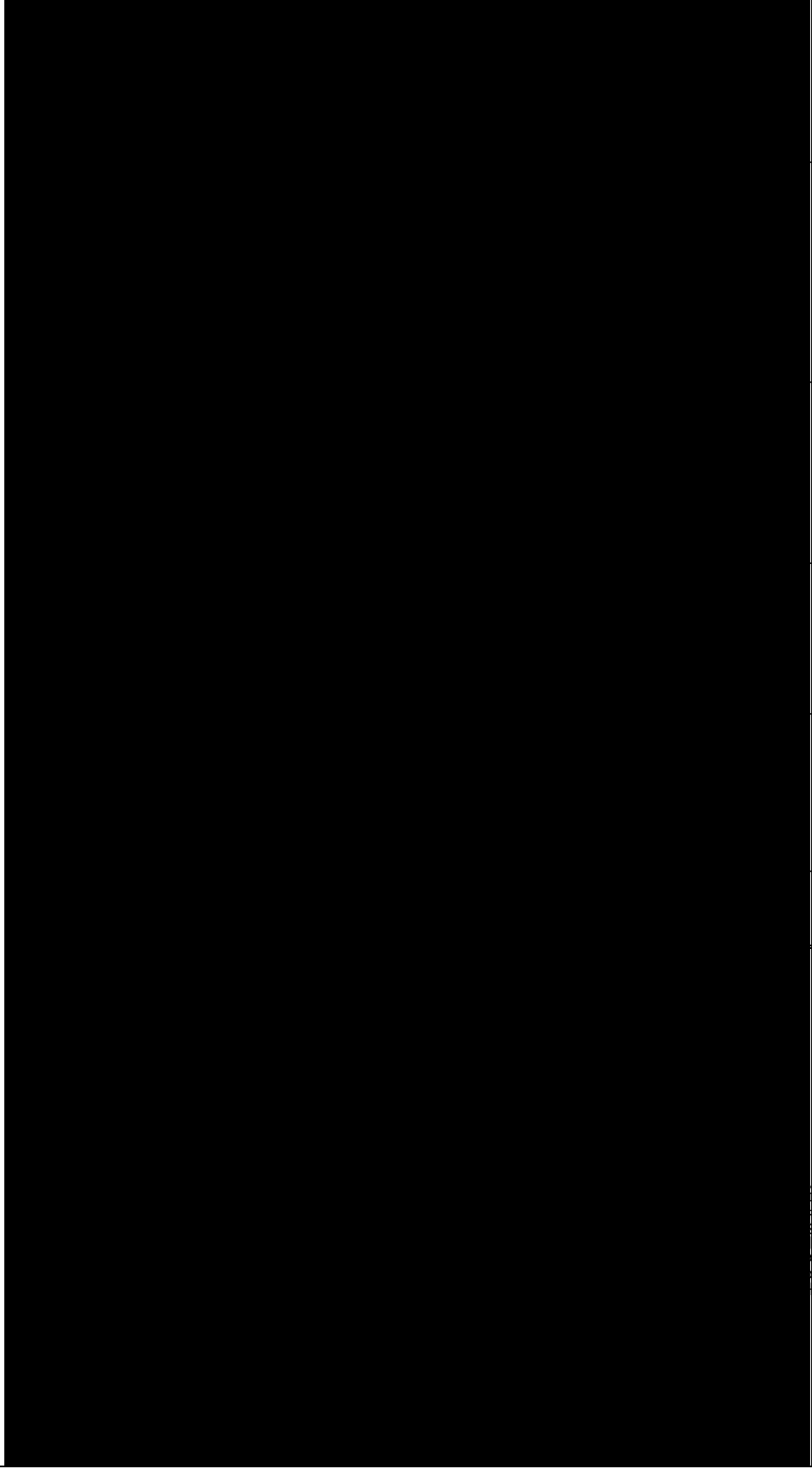
【HG-FMEA-0.0.0.5】

A	T	V
		●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (13 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

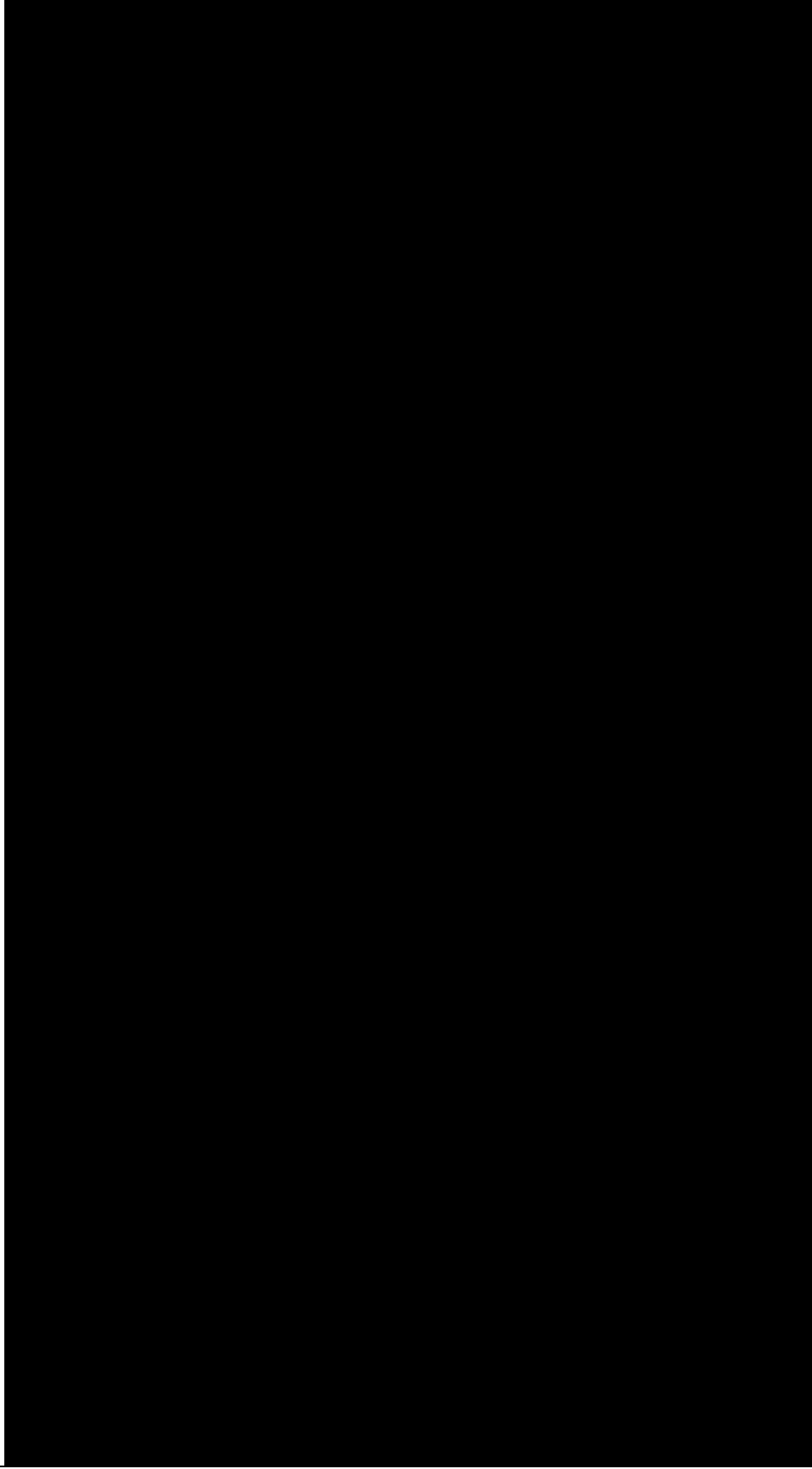
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (14 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



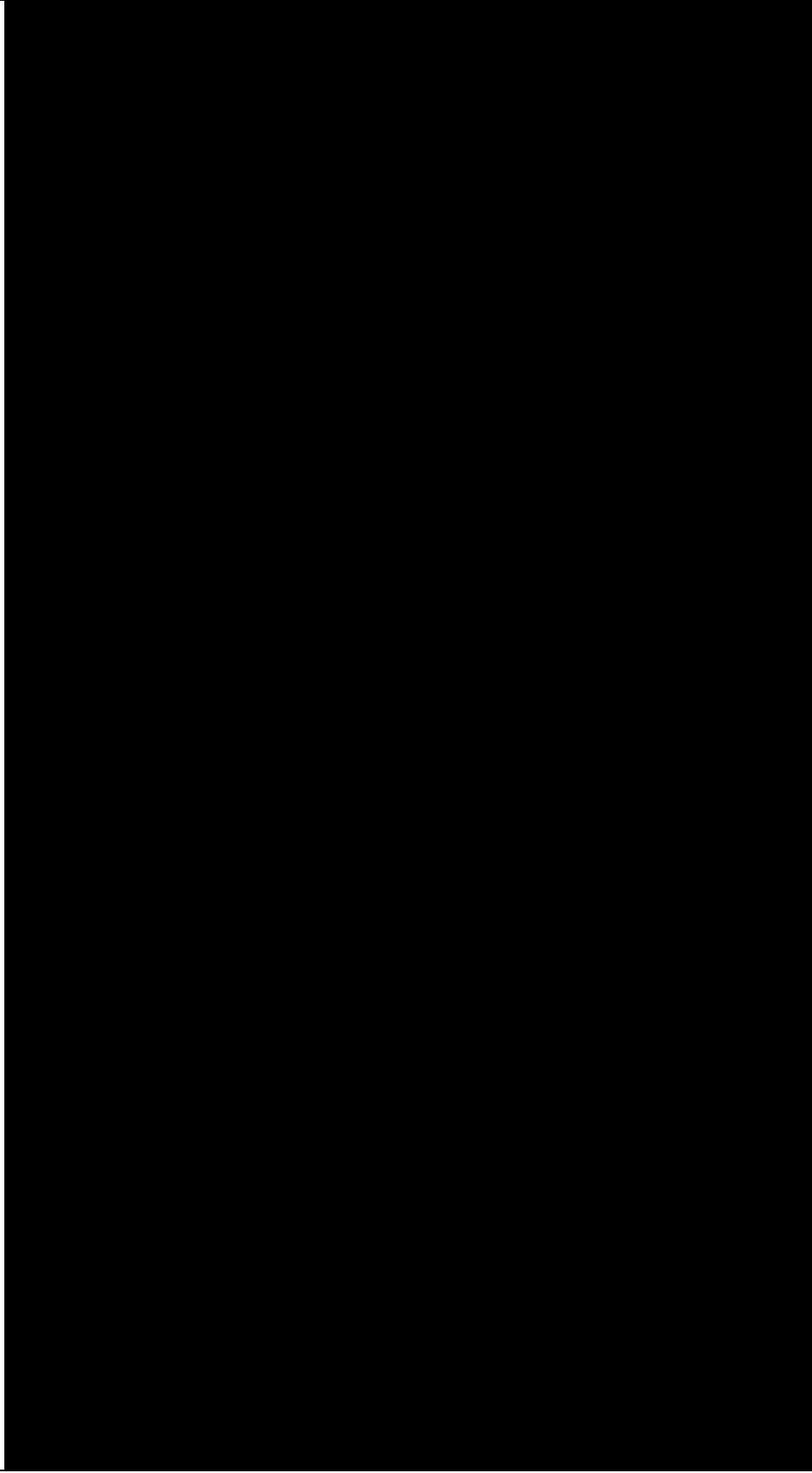
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (15/73)
(FTA)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



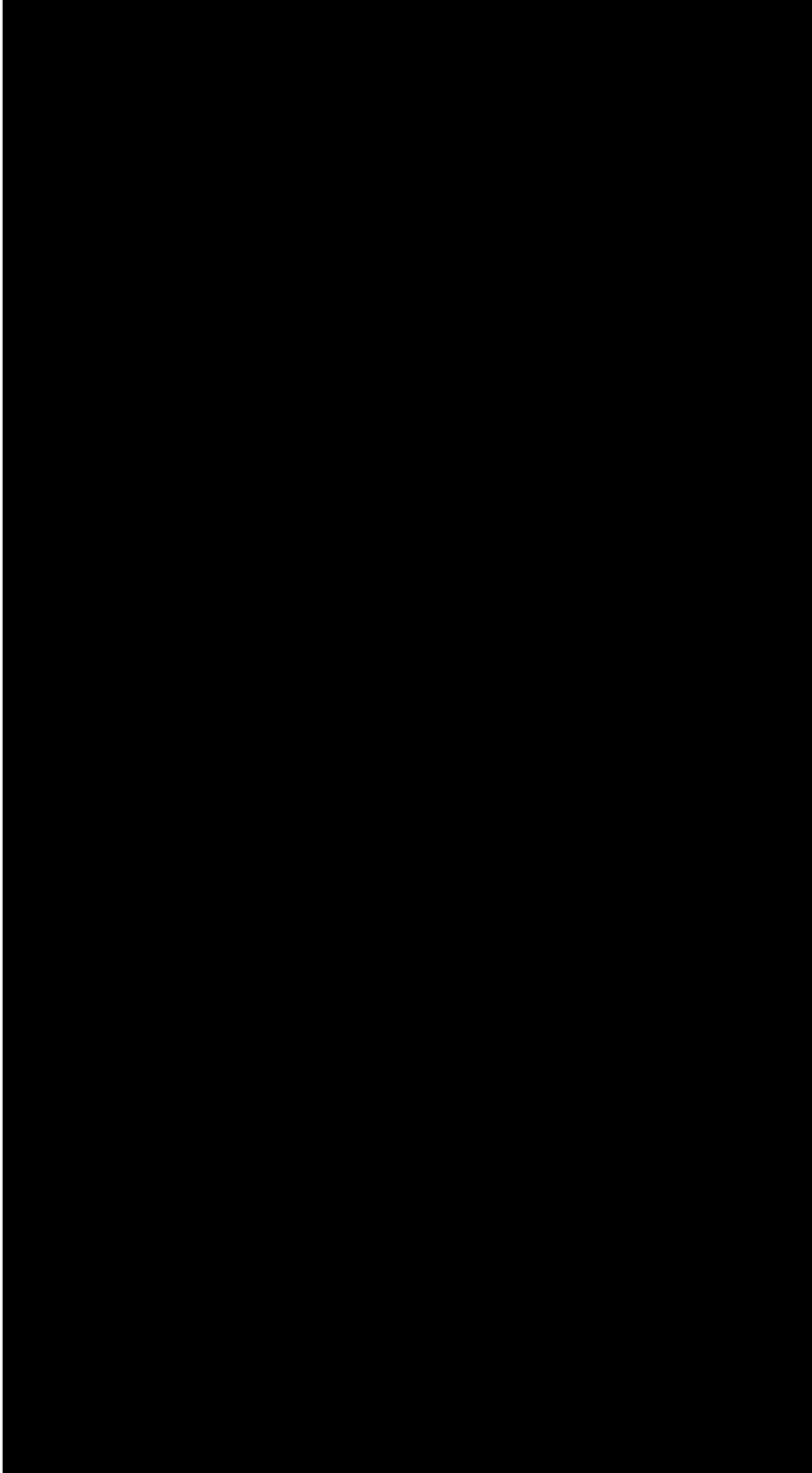
【HG-FMEA - 0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (16 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



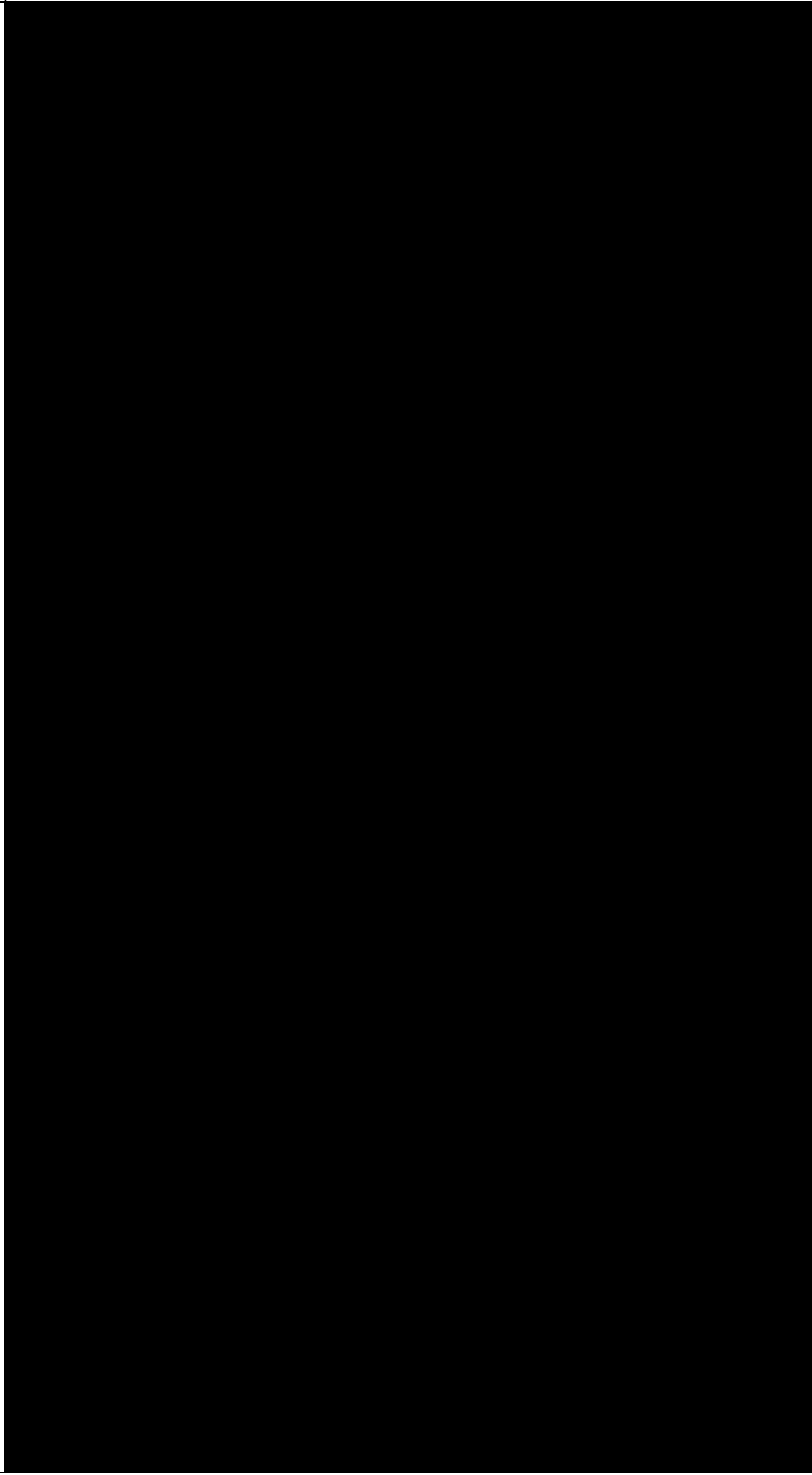
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (17 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



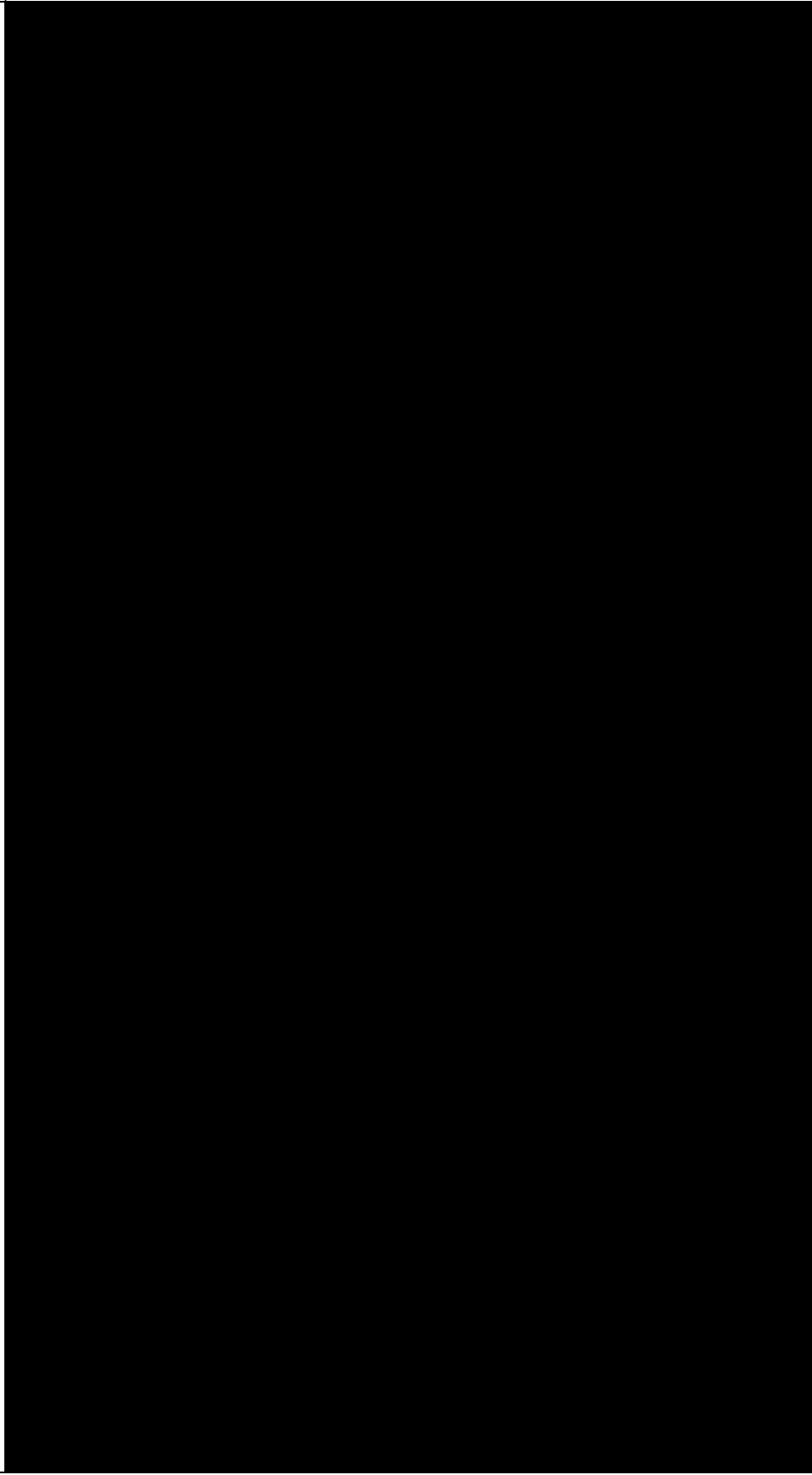
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (18 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



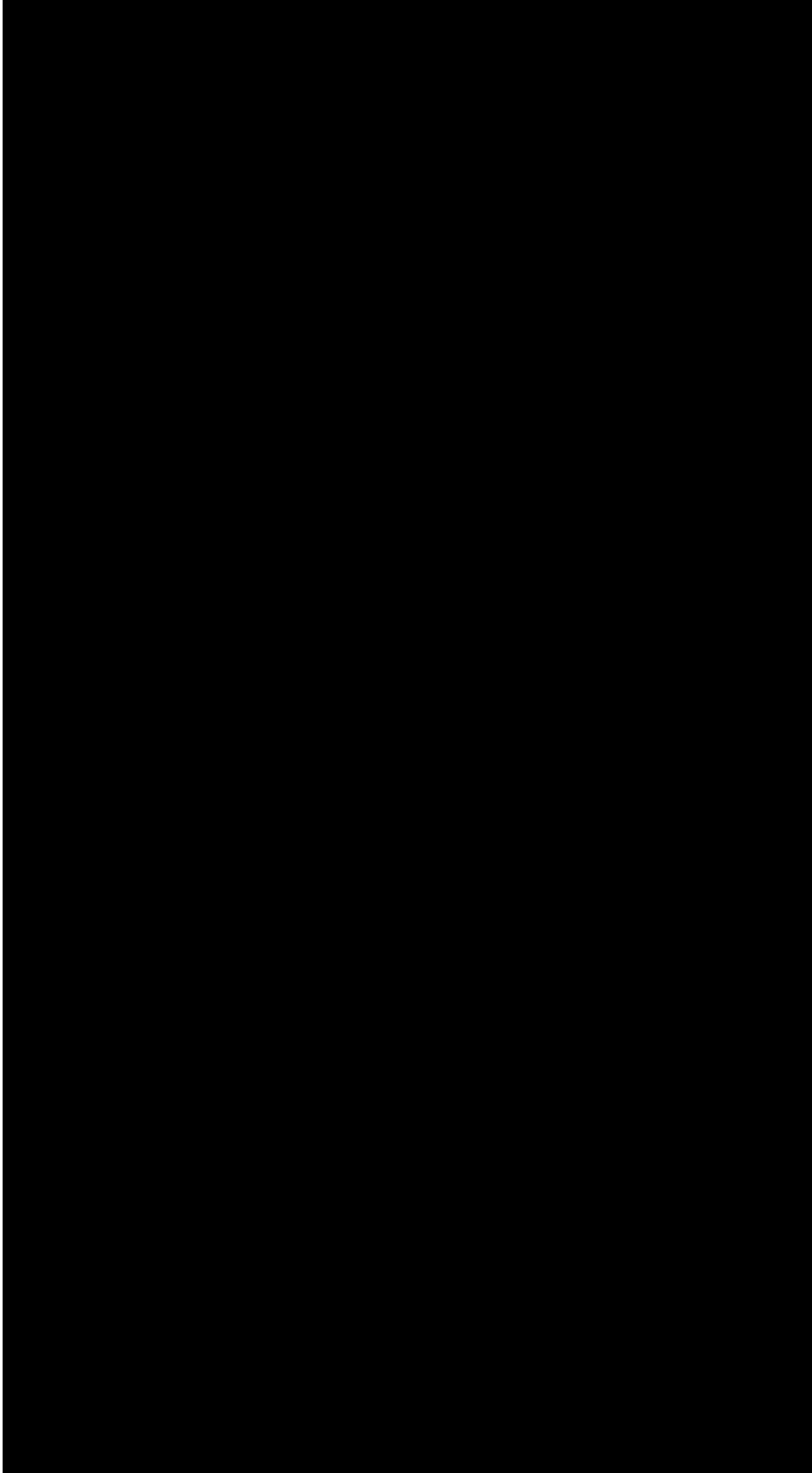
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (19/73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



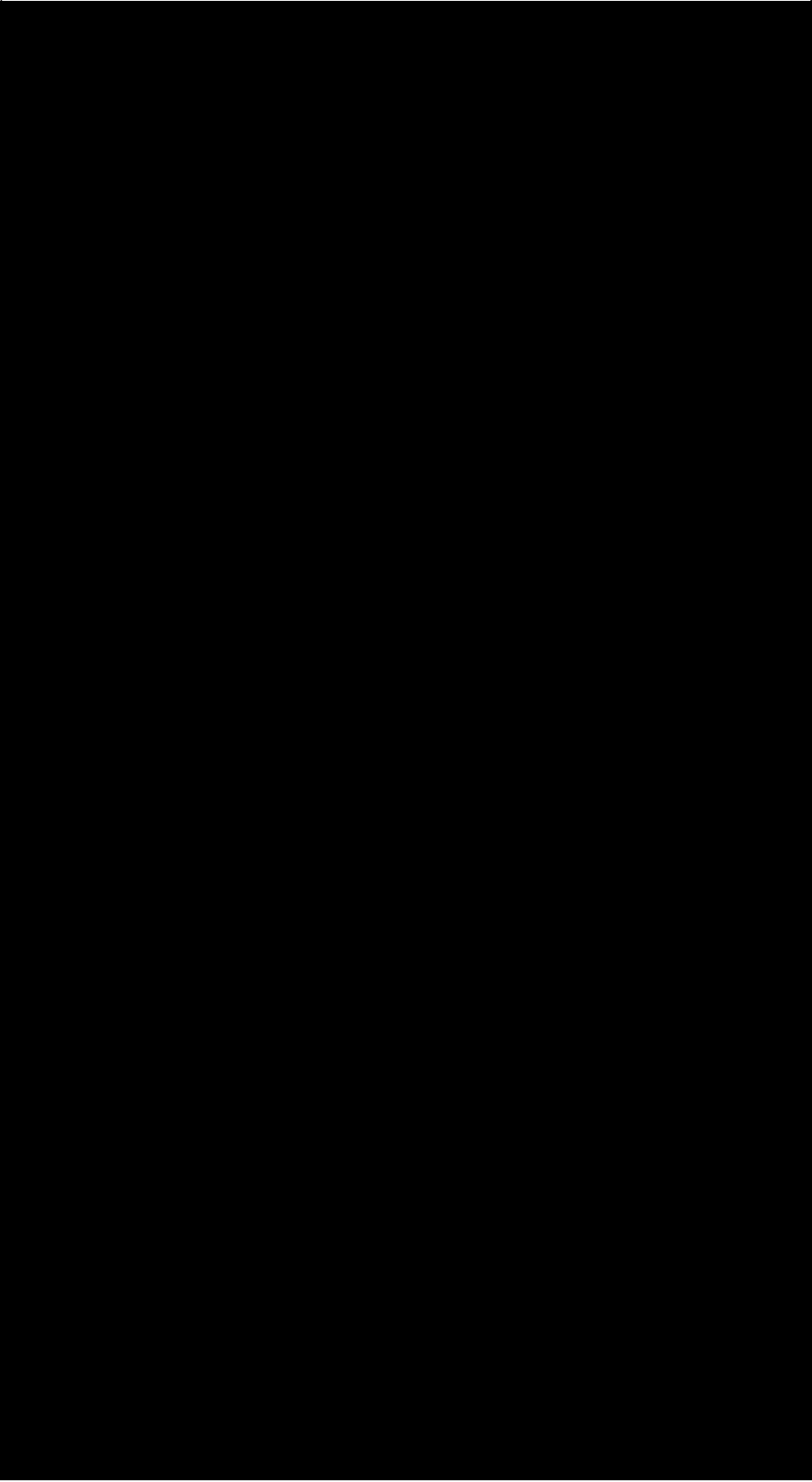
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (2017.7.3)
(F T A)

△					
△					
△					
△	2001AFF2	20D	川本		
	日付	作成	承認		



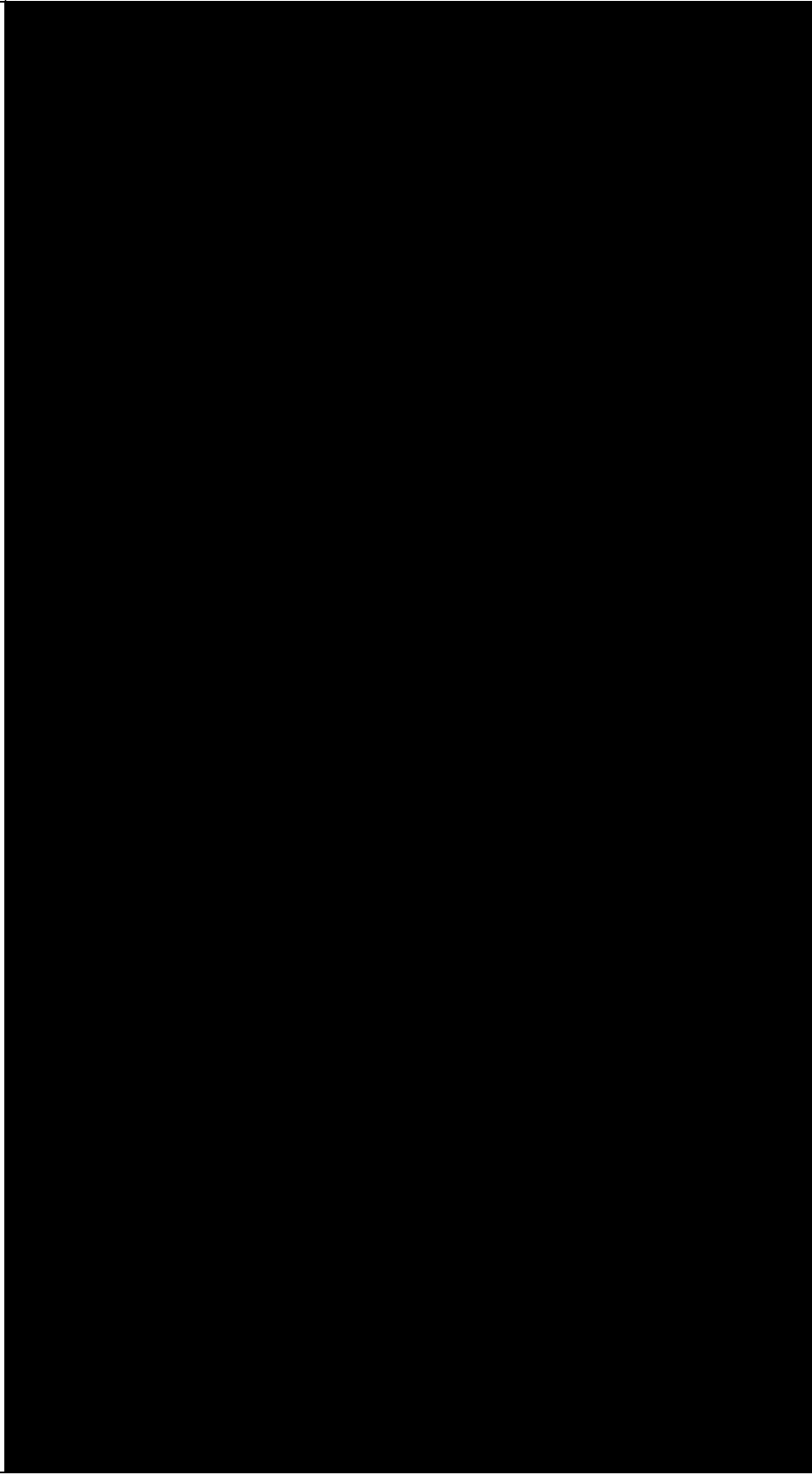
【HG-FMEA-0.0.0.5】

A	T	V
		●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (21.7.23.)
(F T A)

△					
△					
△					
△	2001AFF2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

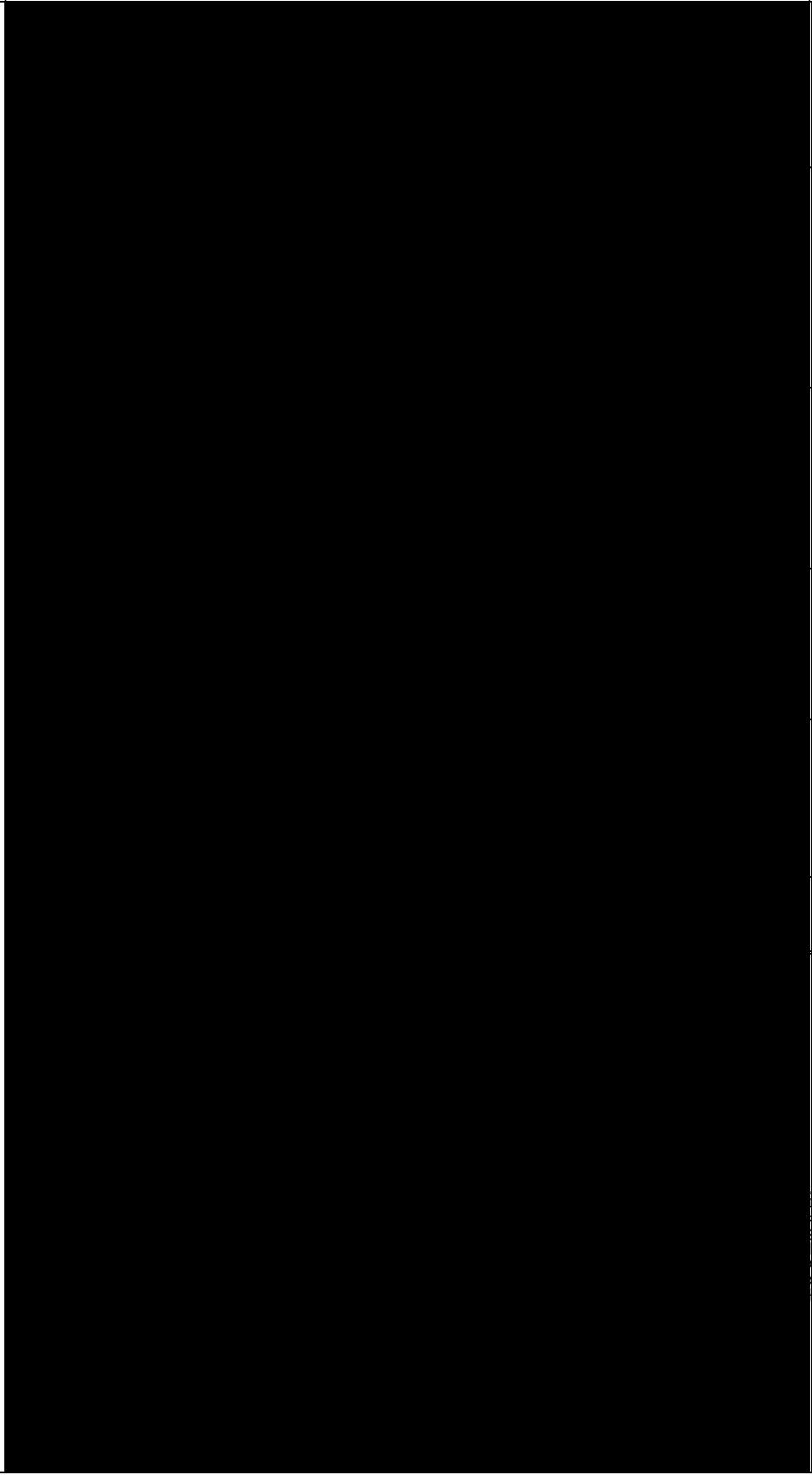
【HG-FMEA-0.0.0.5】

A	T	V
		●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (22 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



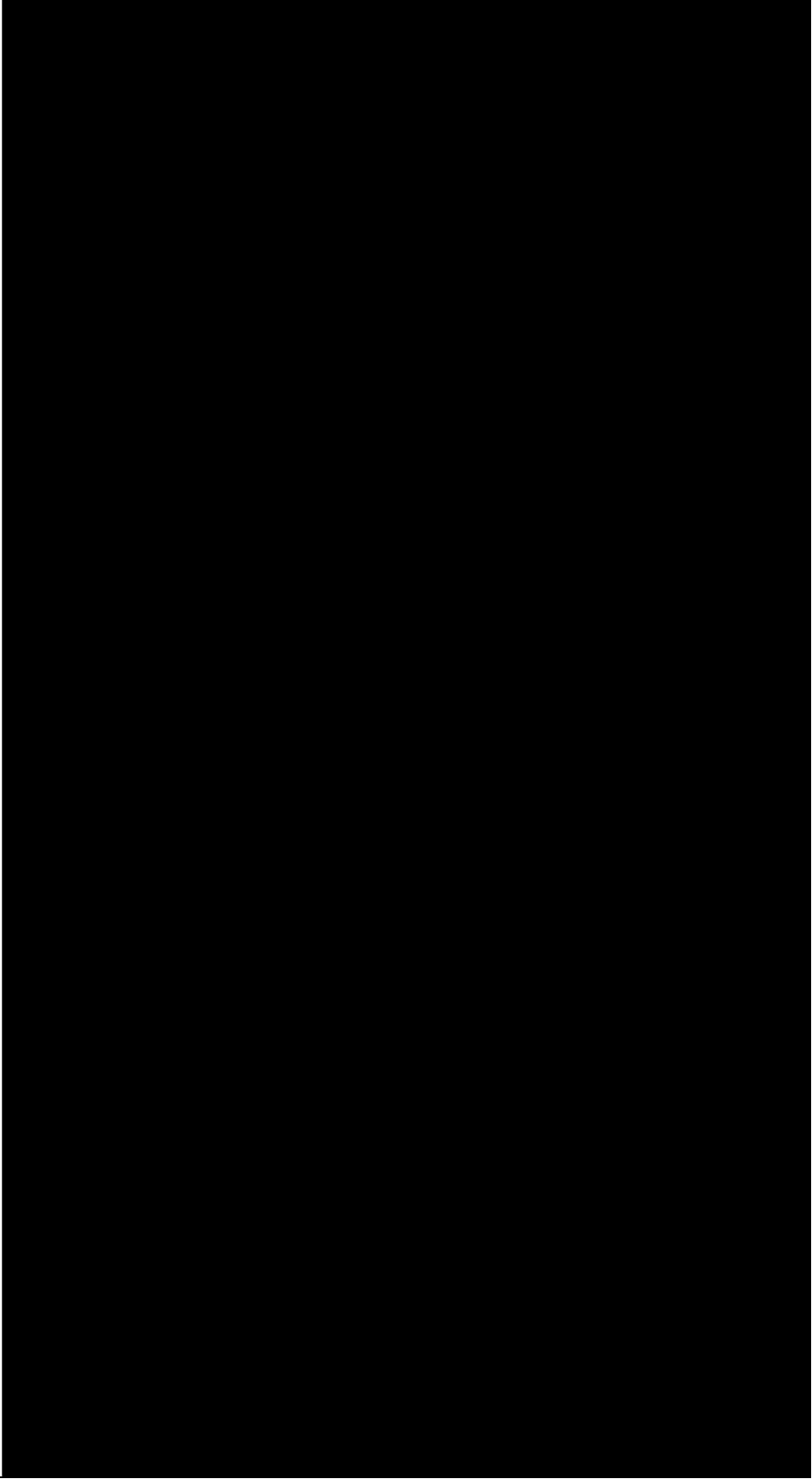
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (23/73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



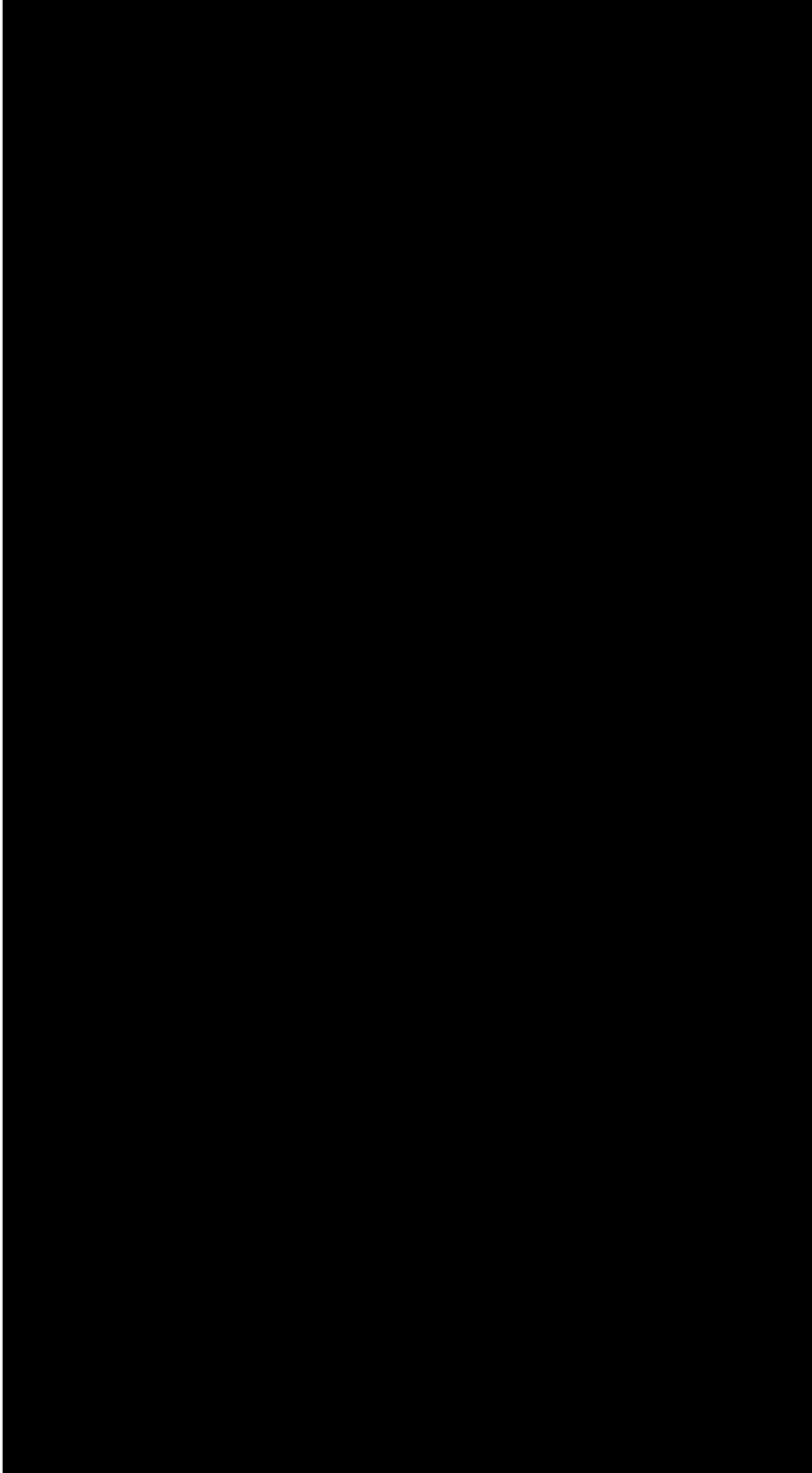
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (24 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



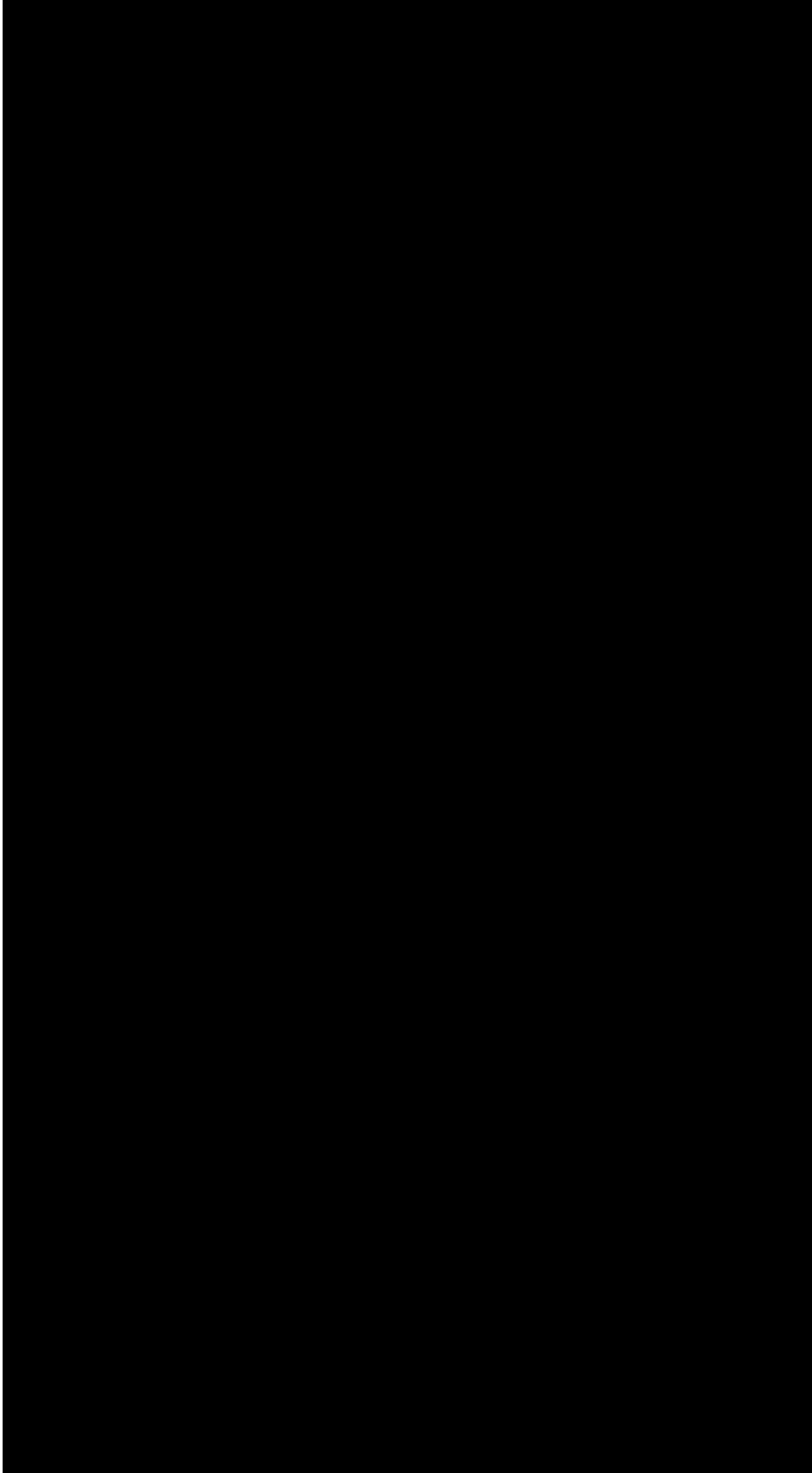
【HG-FMEA-0.0.0.5】

A	T	V	●
---	---	---	---

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (25/73)
(FTA)

△					
△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



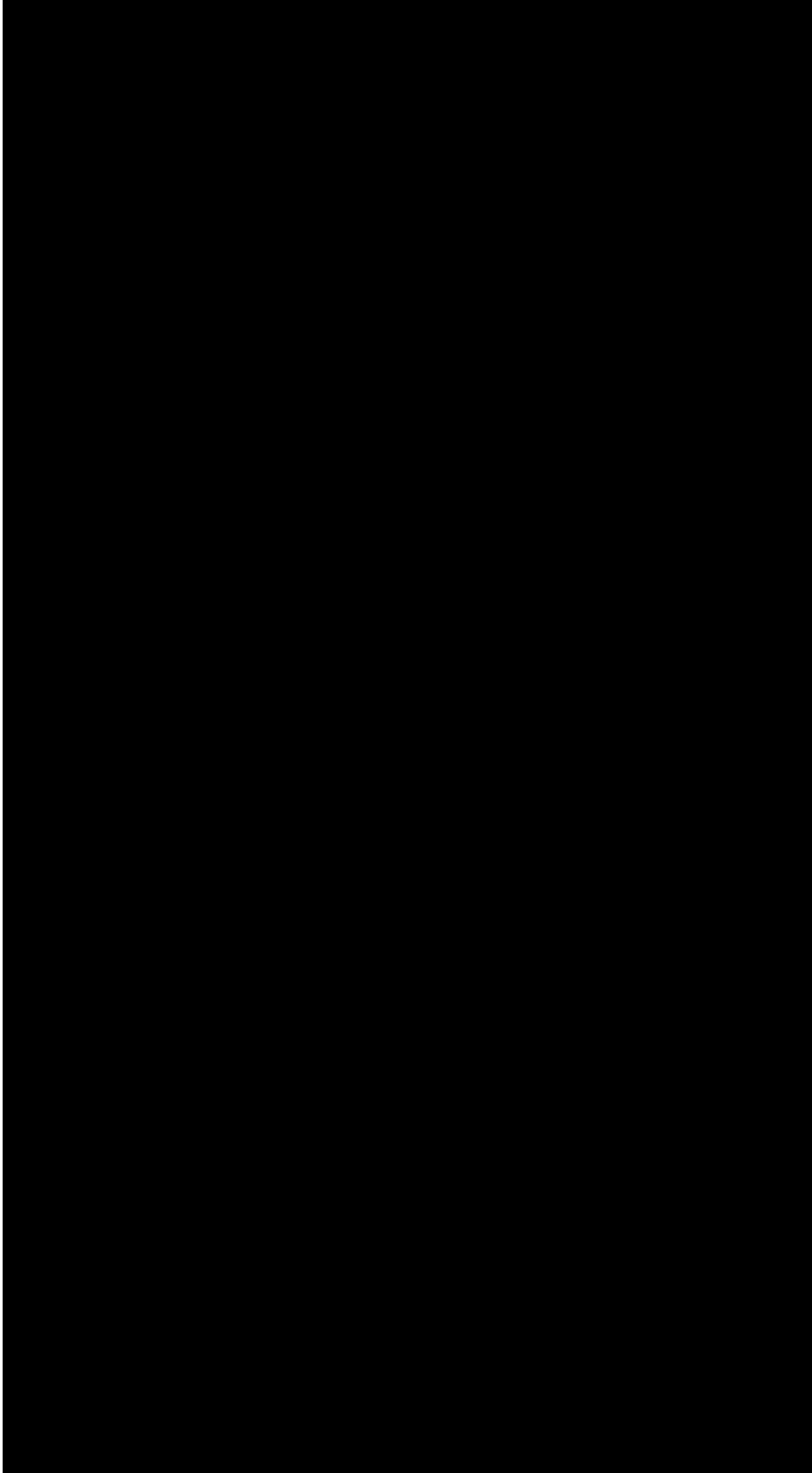
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (26/7/23)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

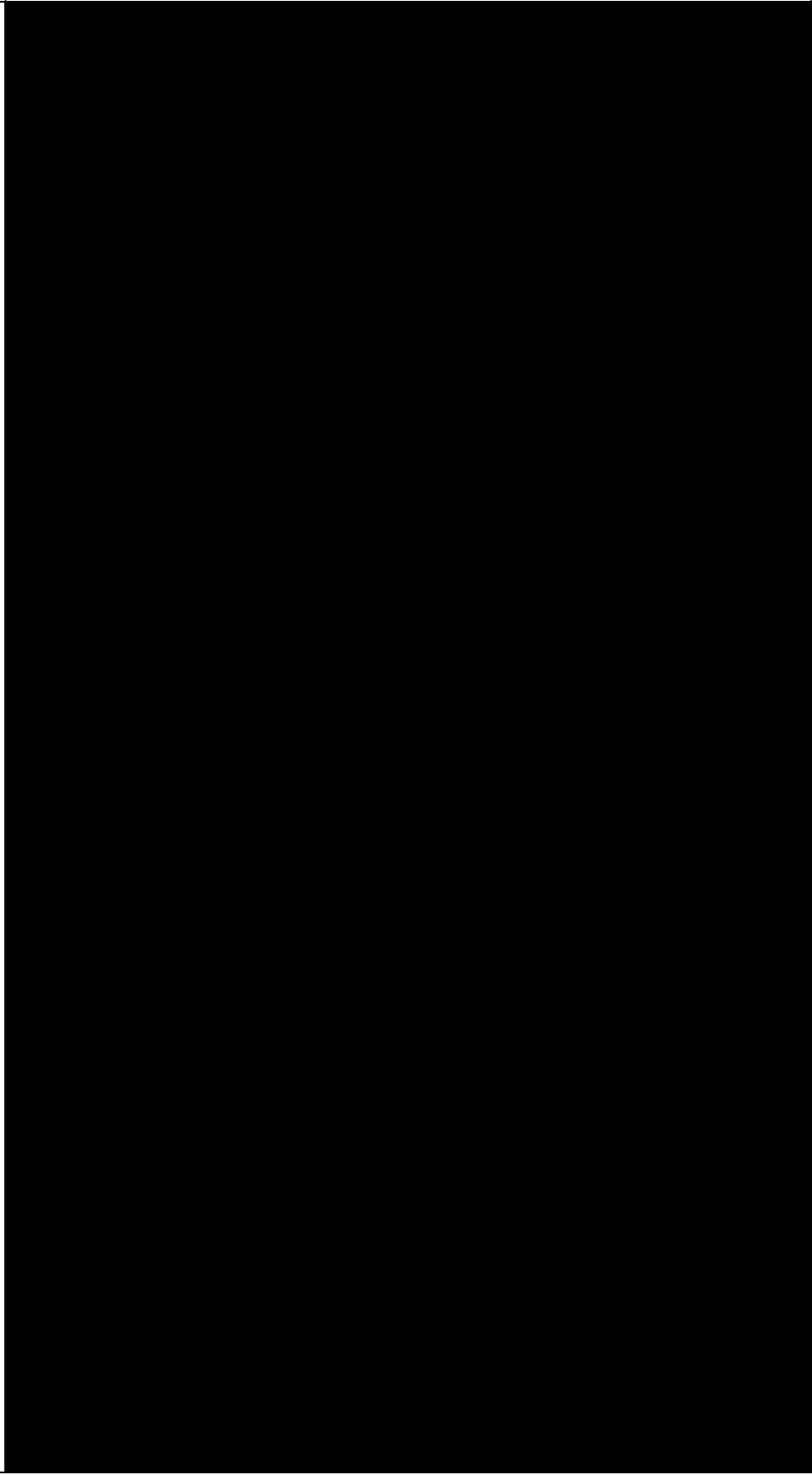
【HG-FMEA-0.0.0.5】

A	T	V
		●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (27/73)
(FTA)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

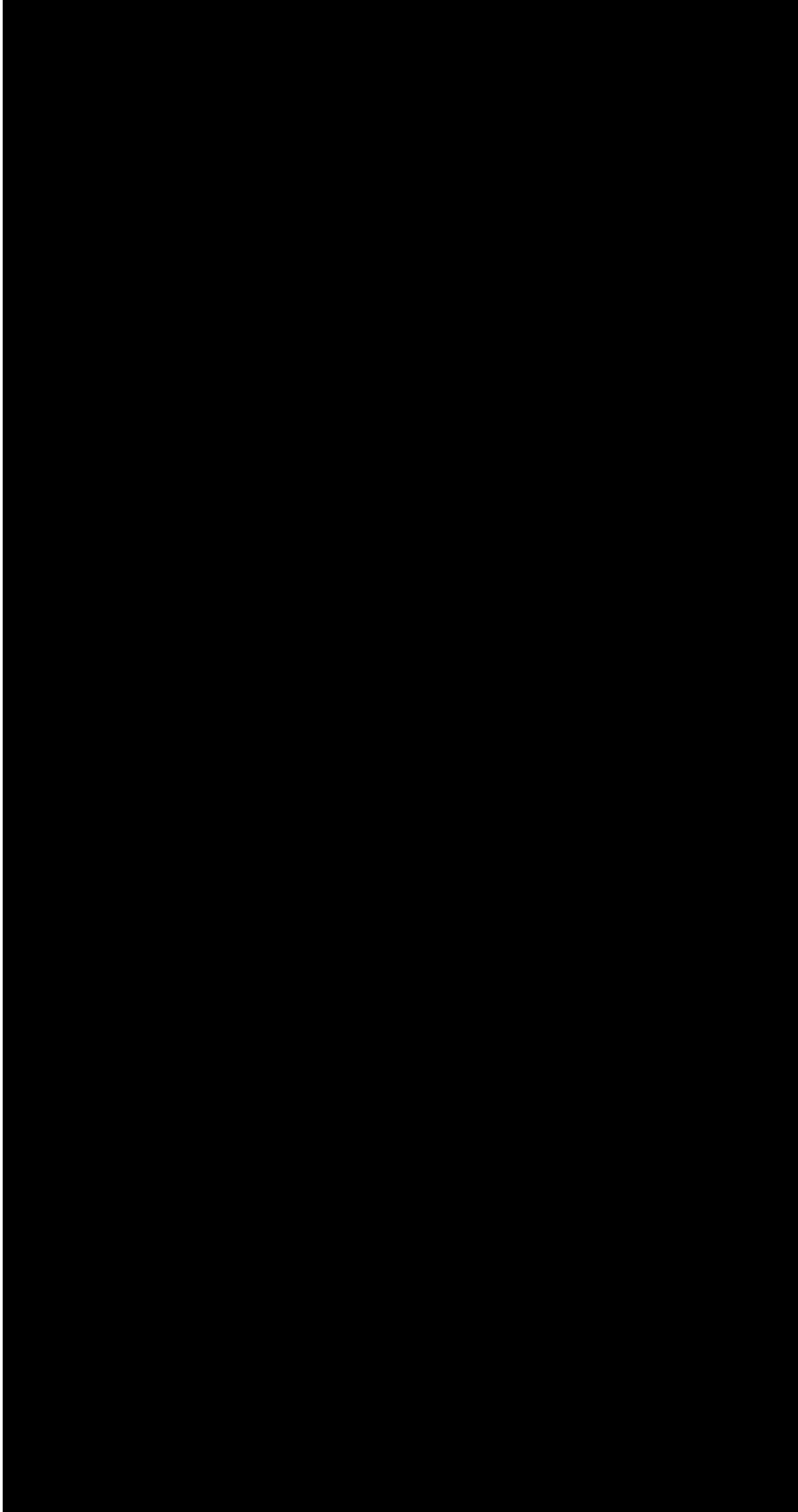
【HG-FMEA-0.0.0.5】

A	T	V
		●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (28/73)
(FTA)

△			
△			
△	2001APR	20D	川本
	日付	作成	承認



○	基本事象	△	そこから移行して	△	OR少なく共4つの共存にて成立	成立
□	通常事象					

そのシステム(コンポーネント)が付加される事に依り
生じる二次事象

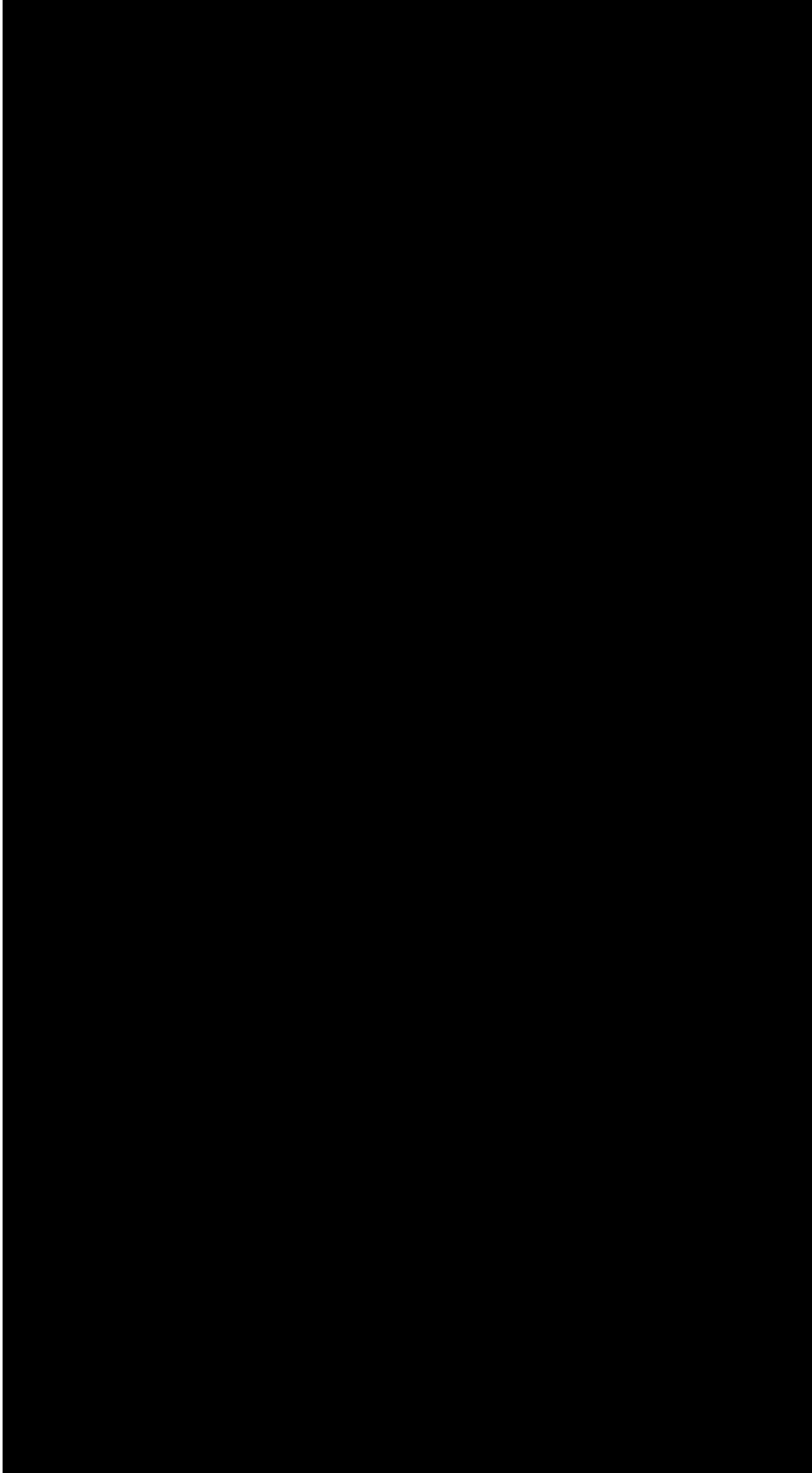
【HG-FMEA - 0.0.0.5】

A	T	V	●
---	---	---	---

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (29 / 73)
(F T A)

△					
△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



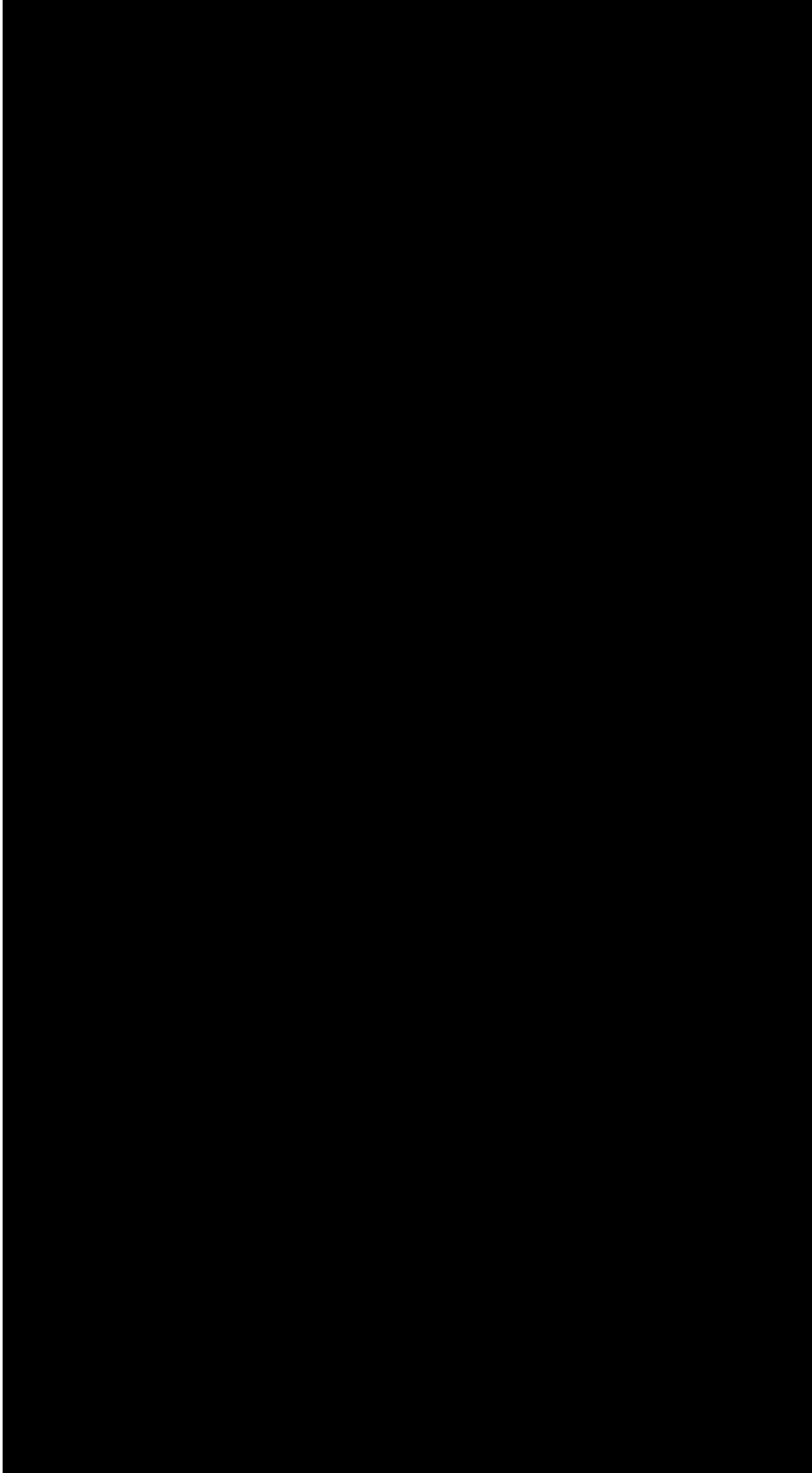
【HG-FMEA-0.0.0.5】

A	T	V	●
---	---	---	---

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (30/73)
(FTA)

△					
△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

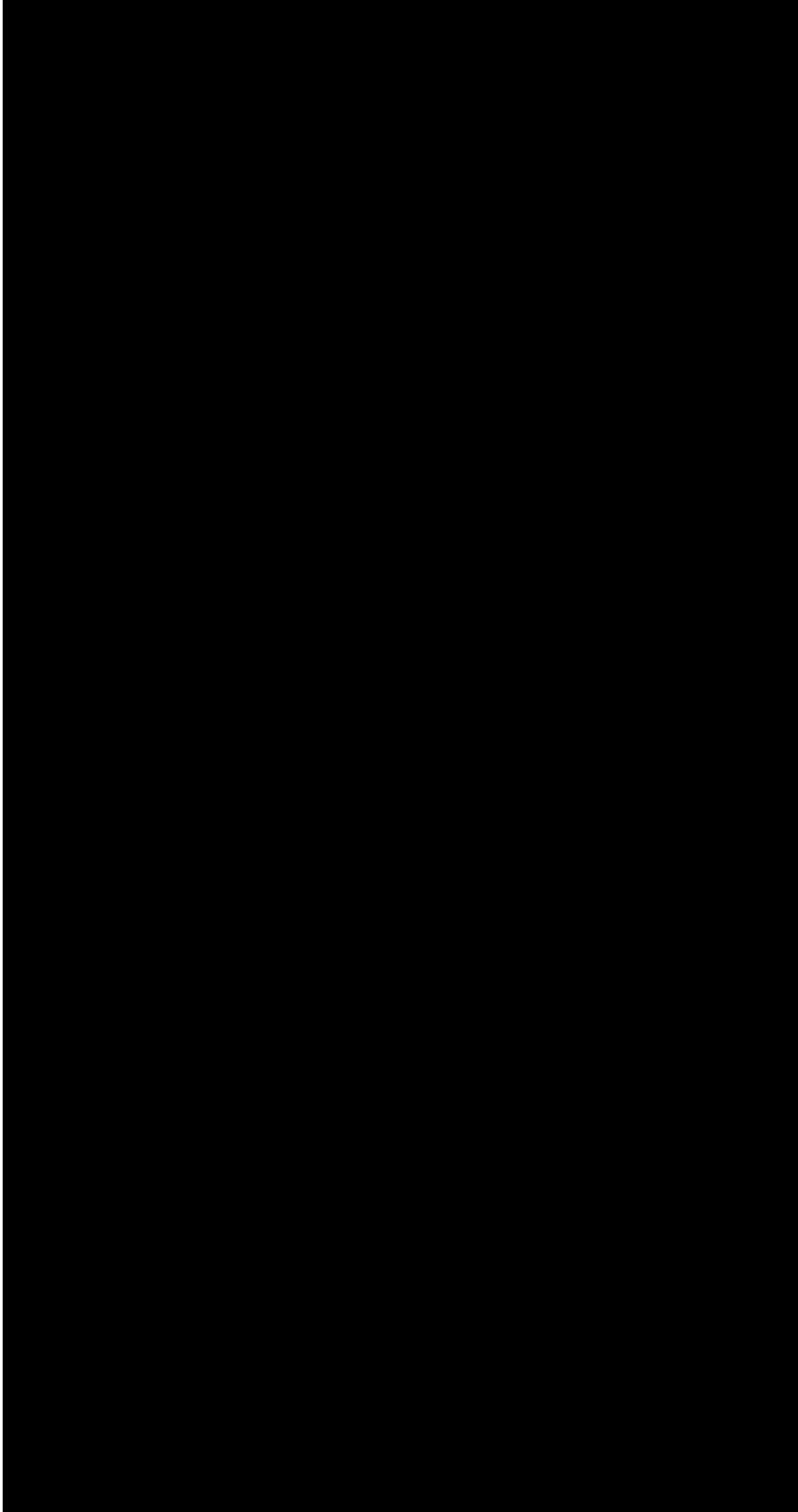
【HG-FMEA-0.0.0.5】

A	T	V	●
---	---	---	---

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (31/73)
(FTA)

△				
△				
△	2001APR	20D	川本	
	日付	作成	承認	



○	基本事象	□	通常事象	△	そこから移行して	□	OR少なく 其1つの共存にて 成立	成立
---	------	---	------	---	----------	---	-------------------	----

そのシステム (コンポーネント) が付加される事に依り
生じる二次影響

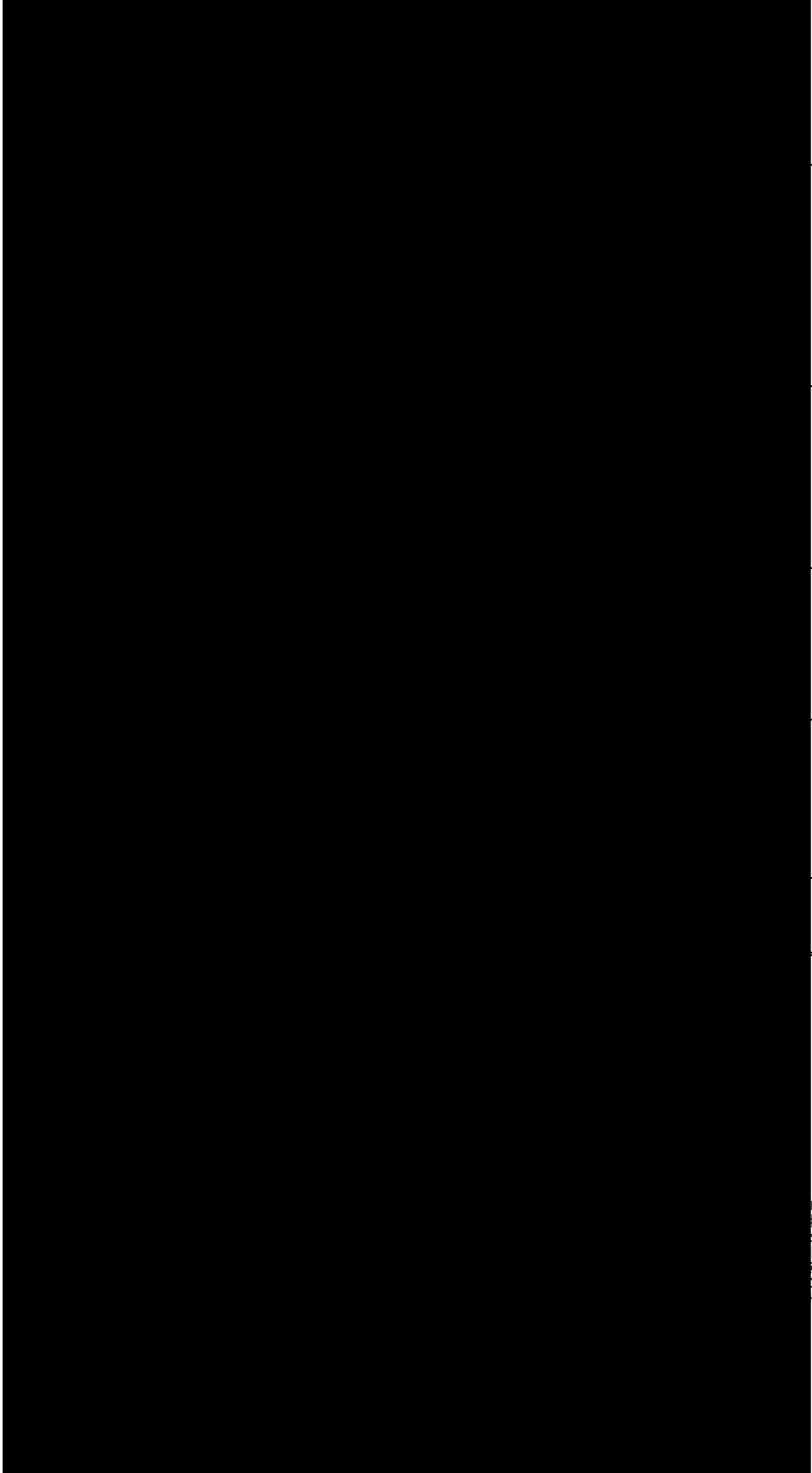
【HG-FMEA-0.0.0.5】

A	T	V	●
---	---	---	---

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (32/73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



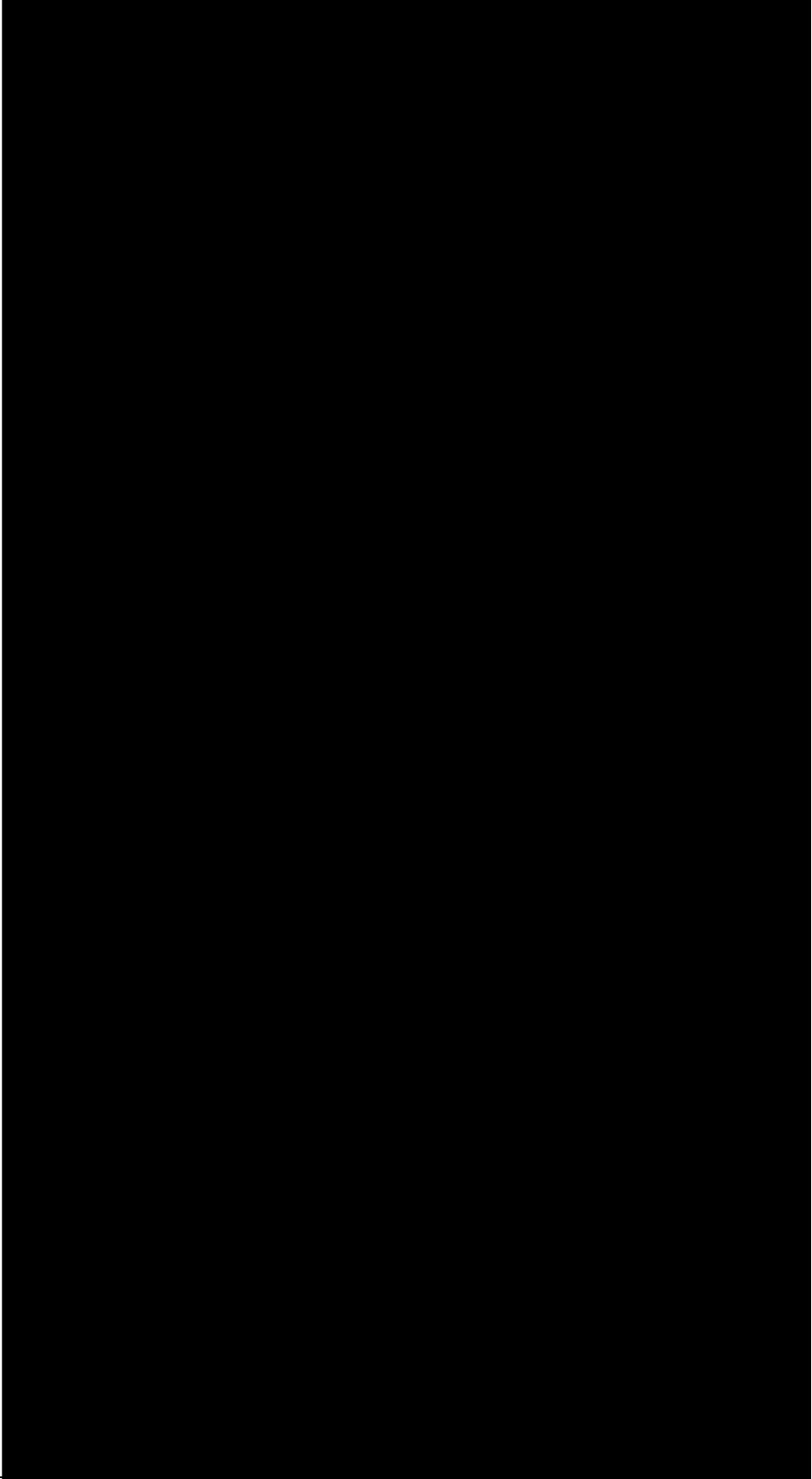
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (33 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



【HG-FMEA - 0.0.0.5】

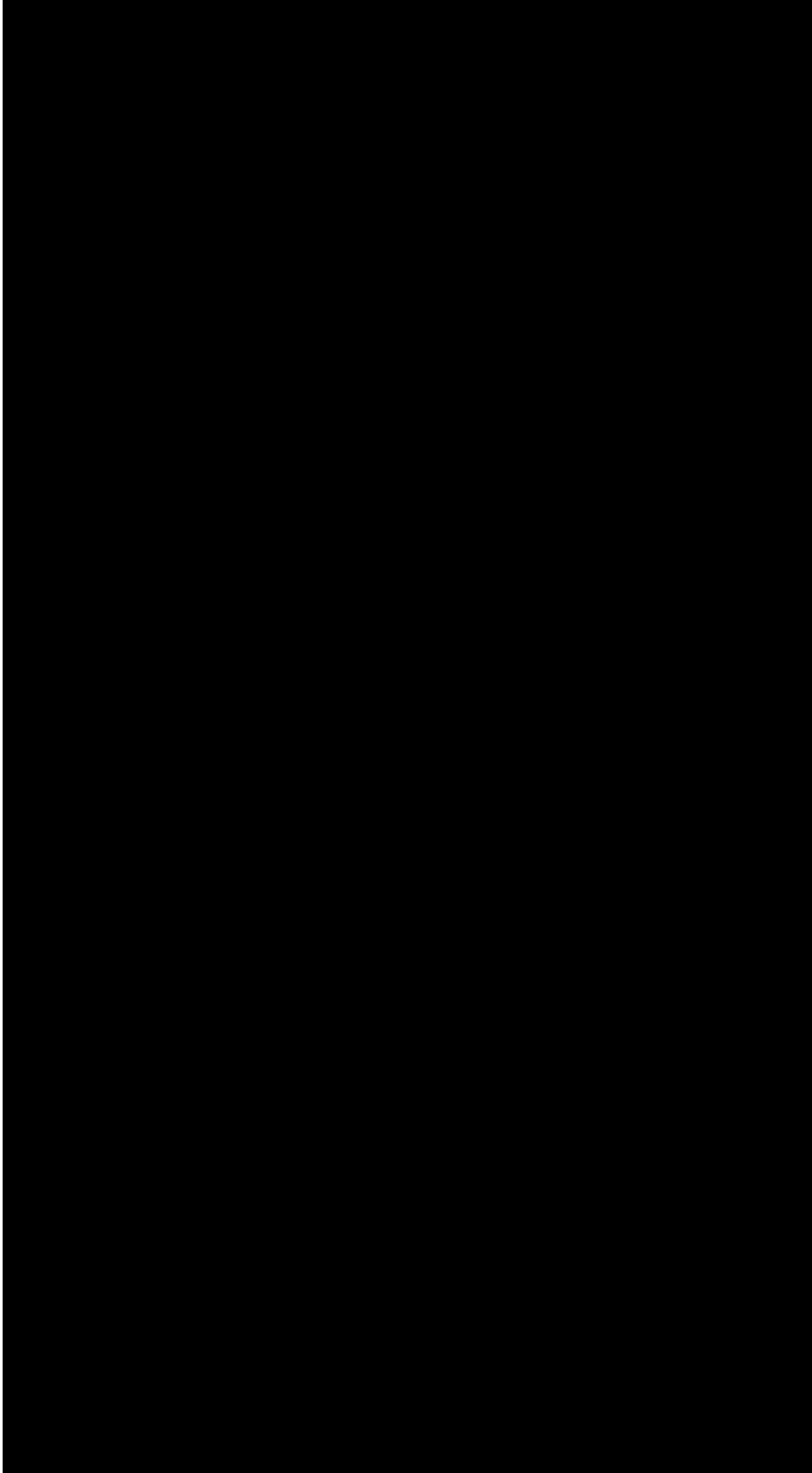
A	T	V
		●

4WDのみ該当

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (34 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



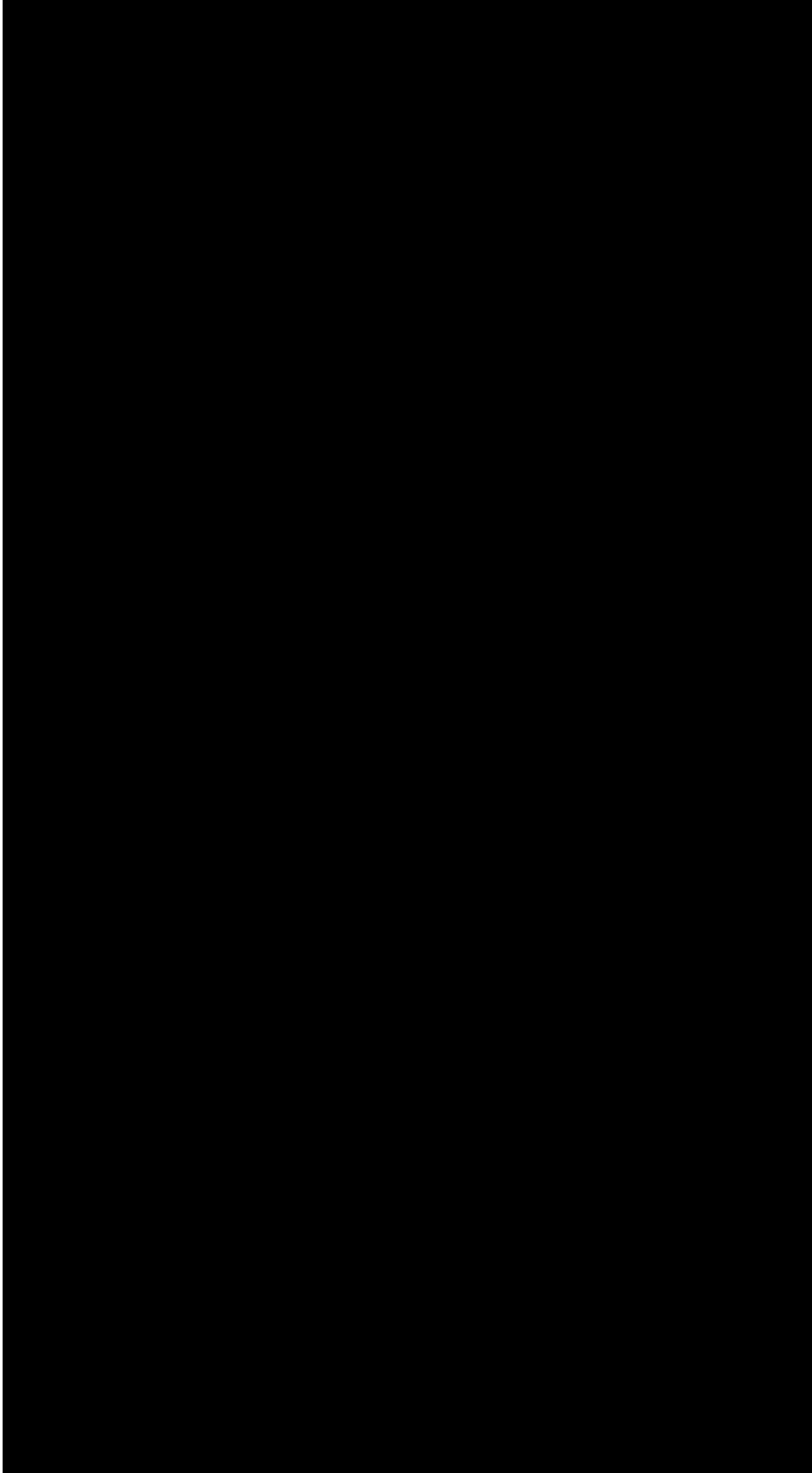
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (35 / Z3)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



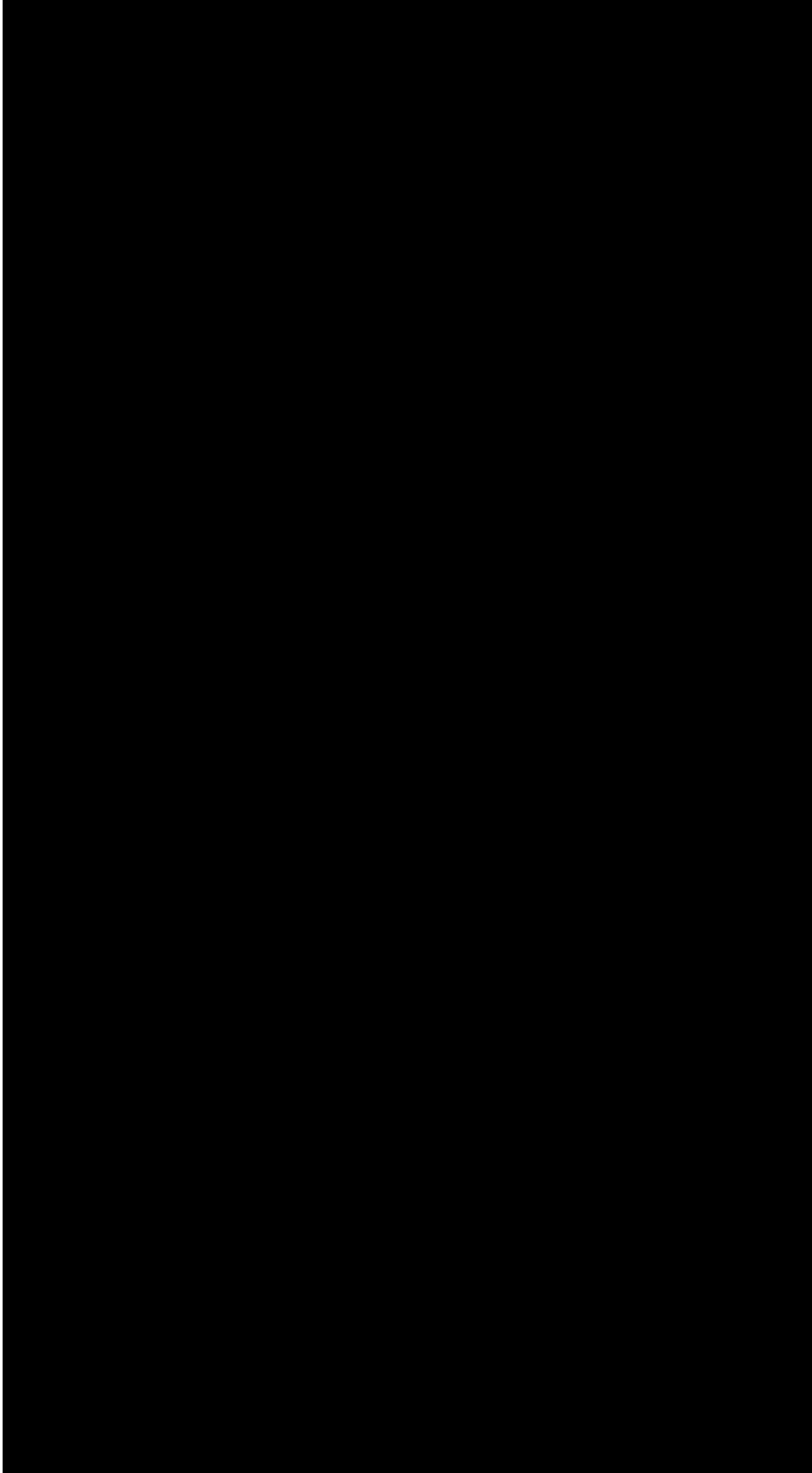
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (36 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



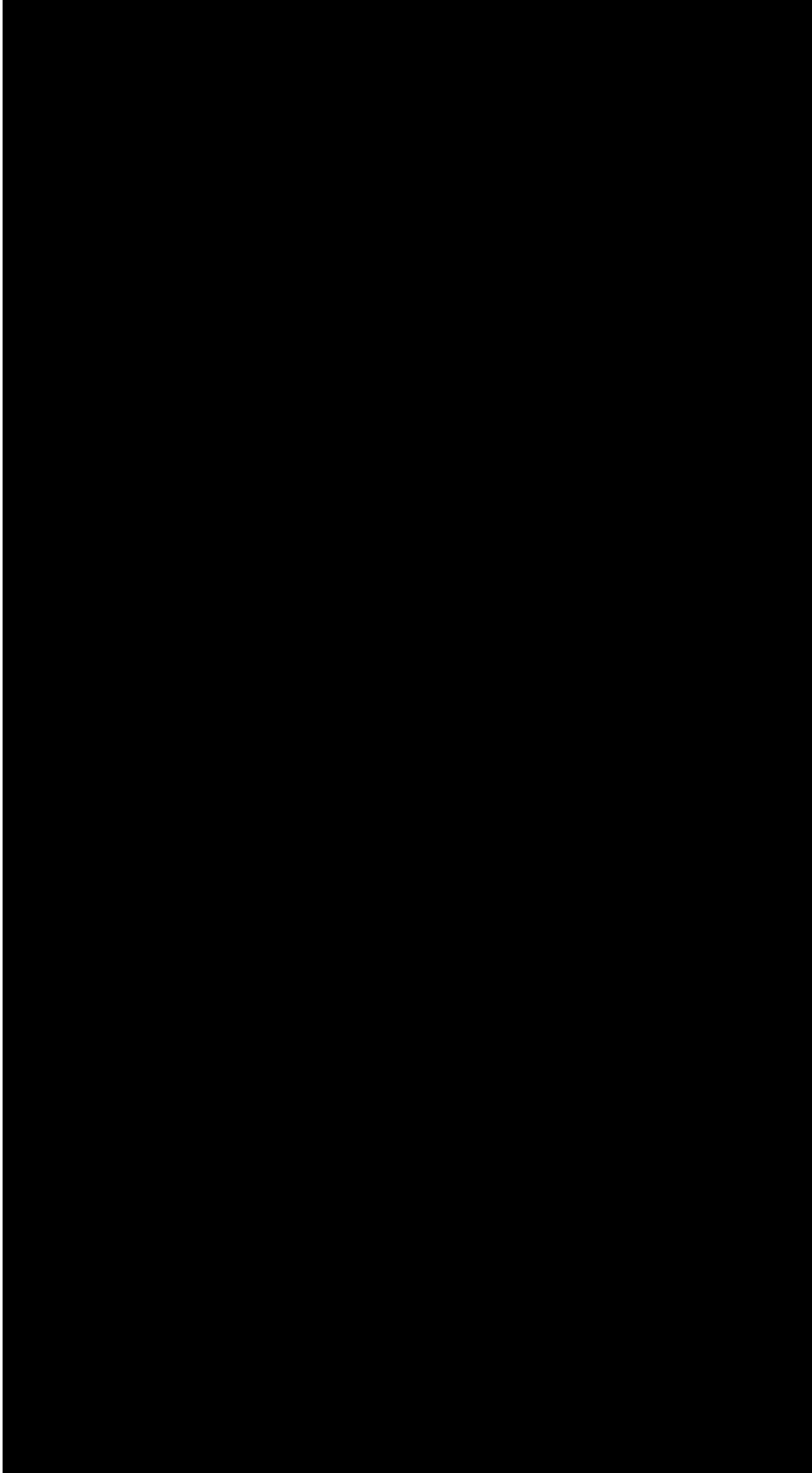
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (37 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



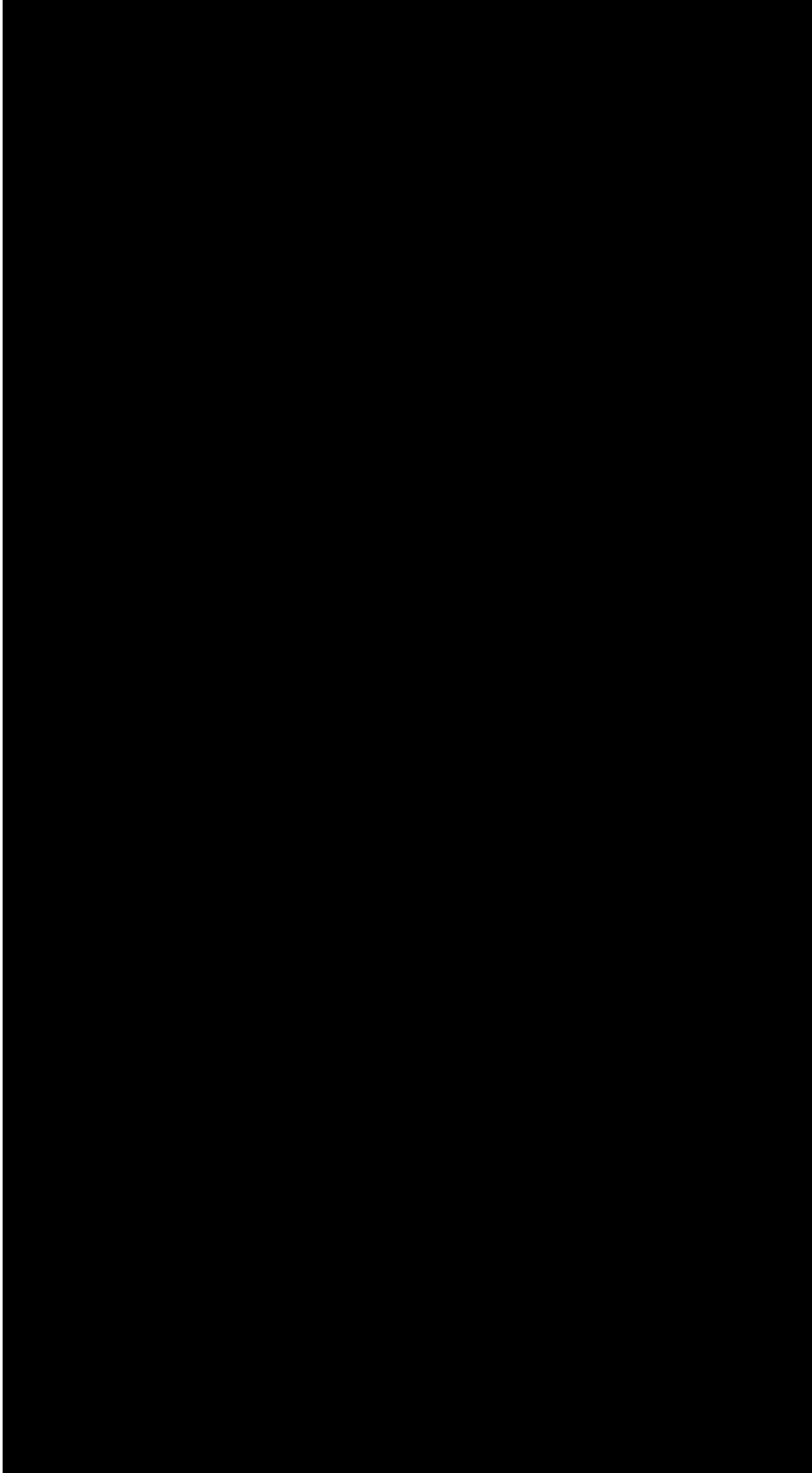
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (38 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

【HG-FMEA-0.0.0.5】

A	T	V	●
---	---	---	---

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (39 / 73)
(F T A)

△							
△							
△							
△							
△	2001APR2	20D	川本				
	日付	作成	承認				

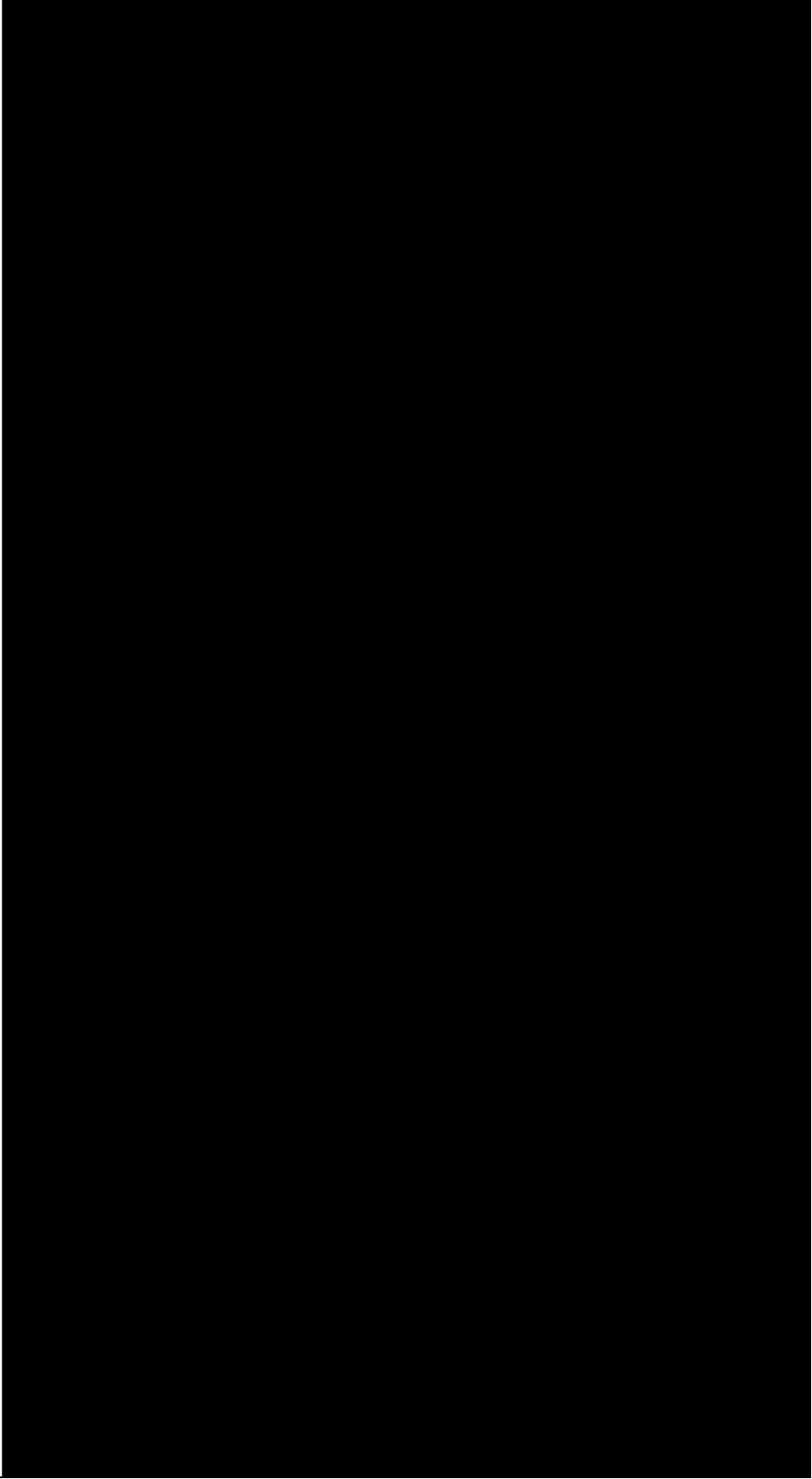
【HG-FMEA-0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (40/73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



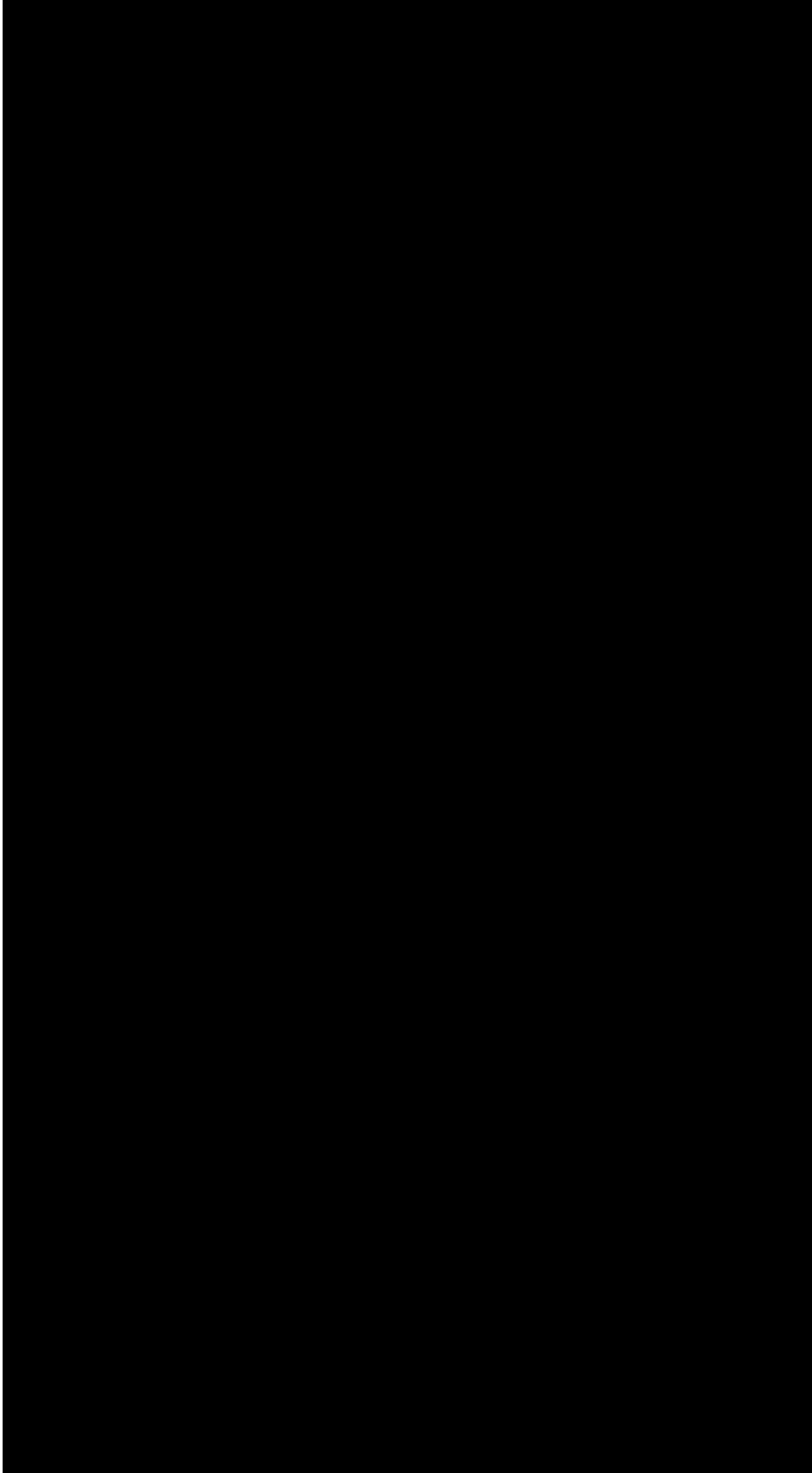
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (41/73)
(F T A)

△					
△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



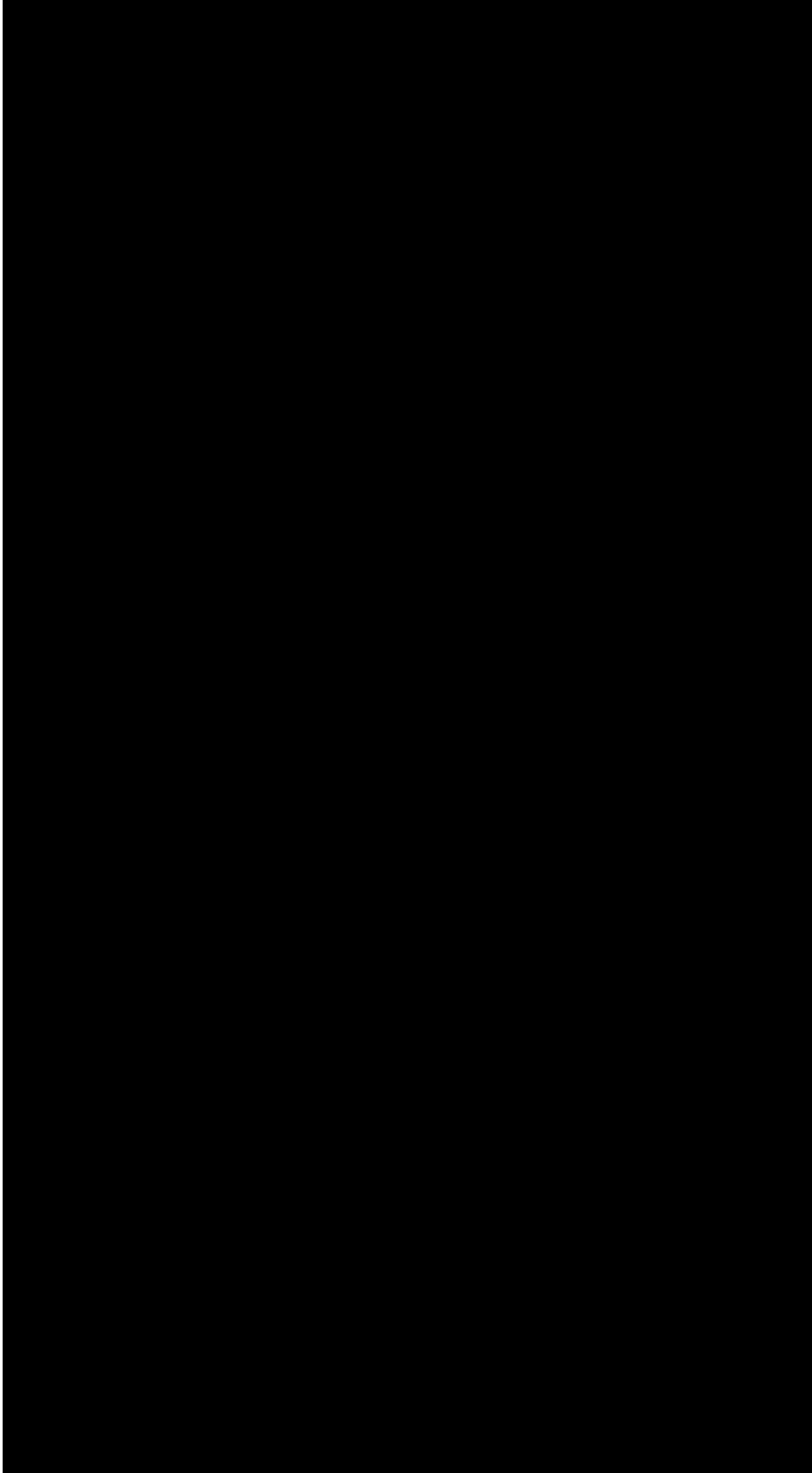
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (42 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



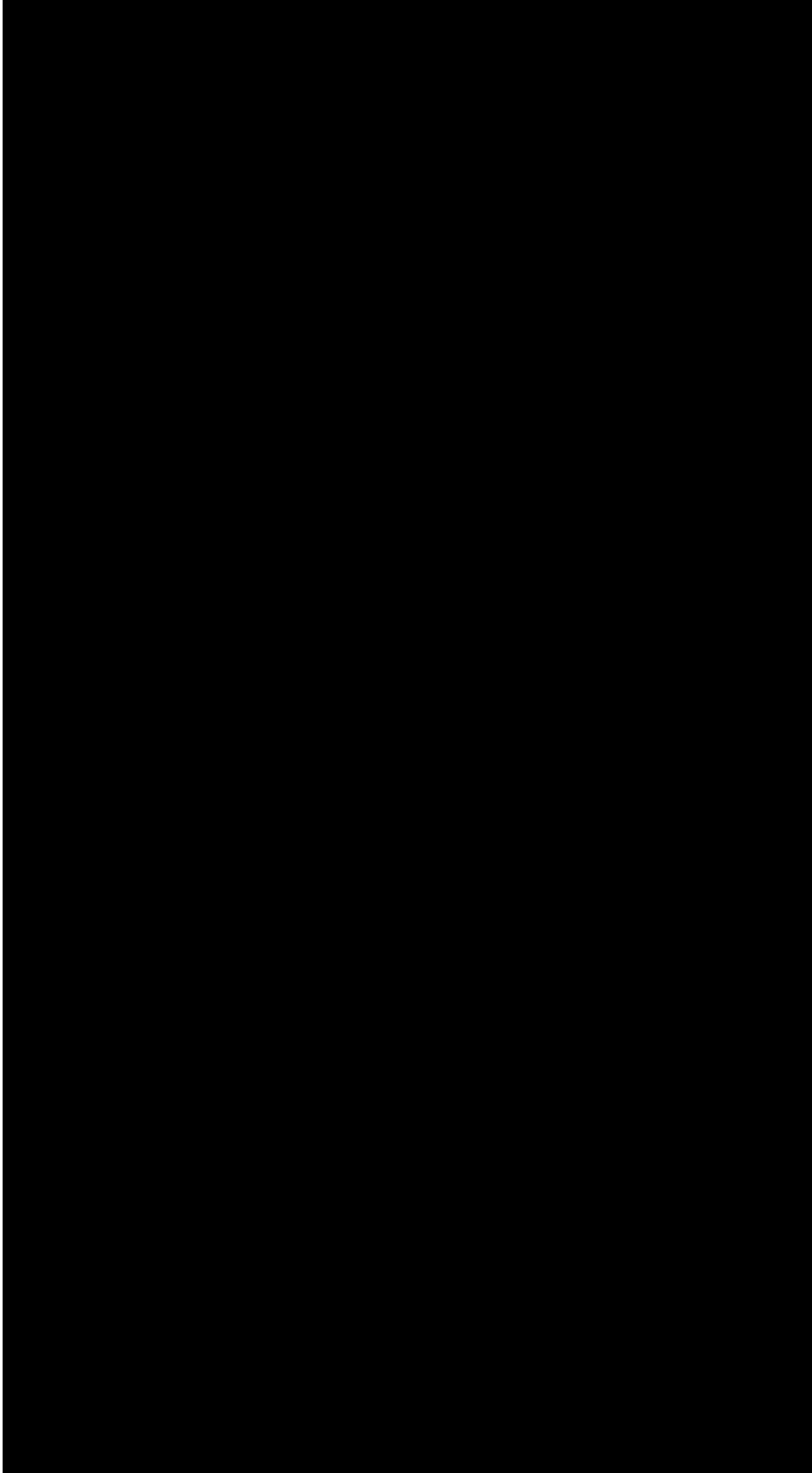
【HG-FMEA - 0.0.0.5】

A	T	V
		●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (43/73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



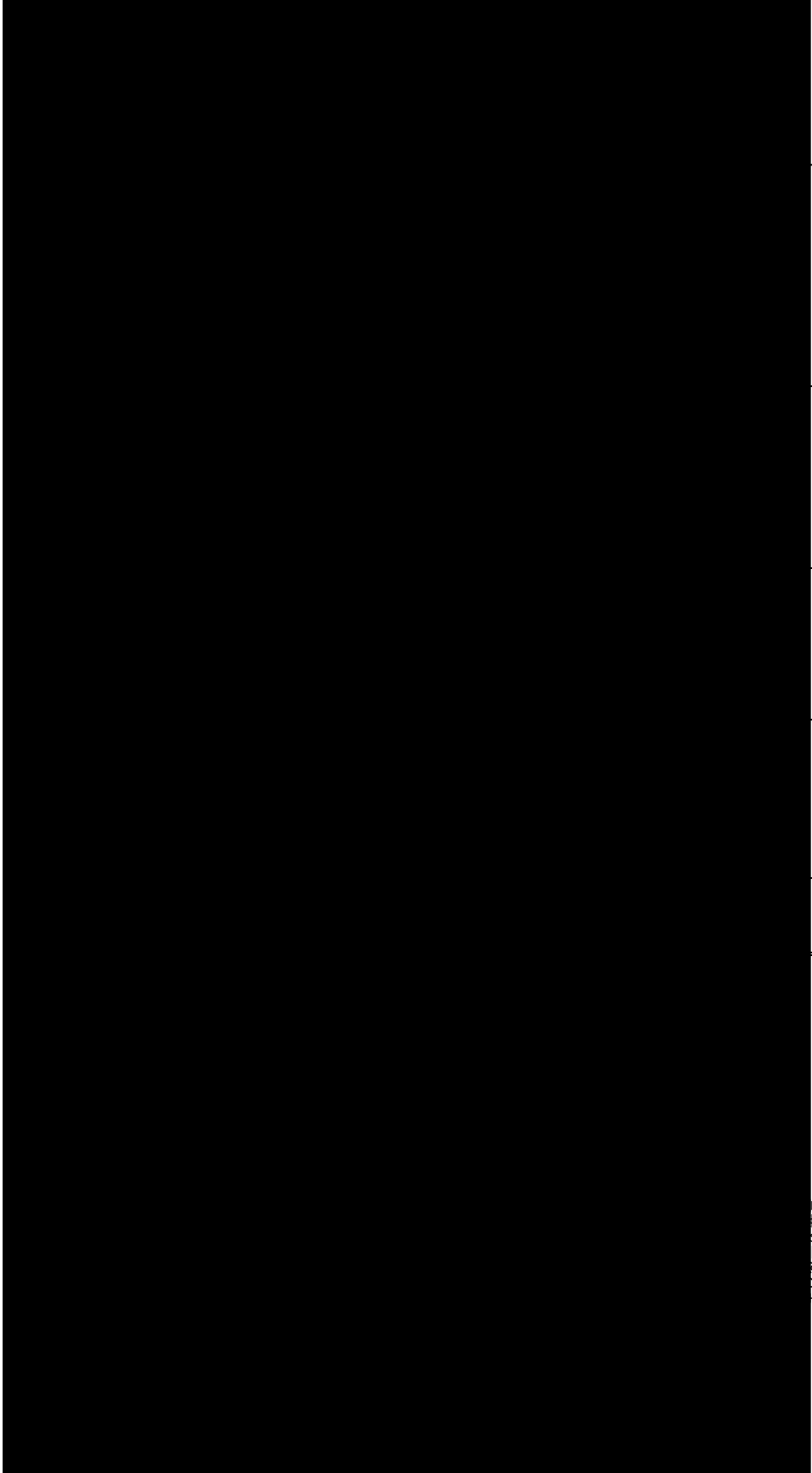
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (44 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



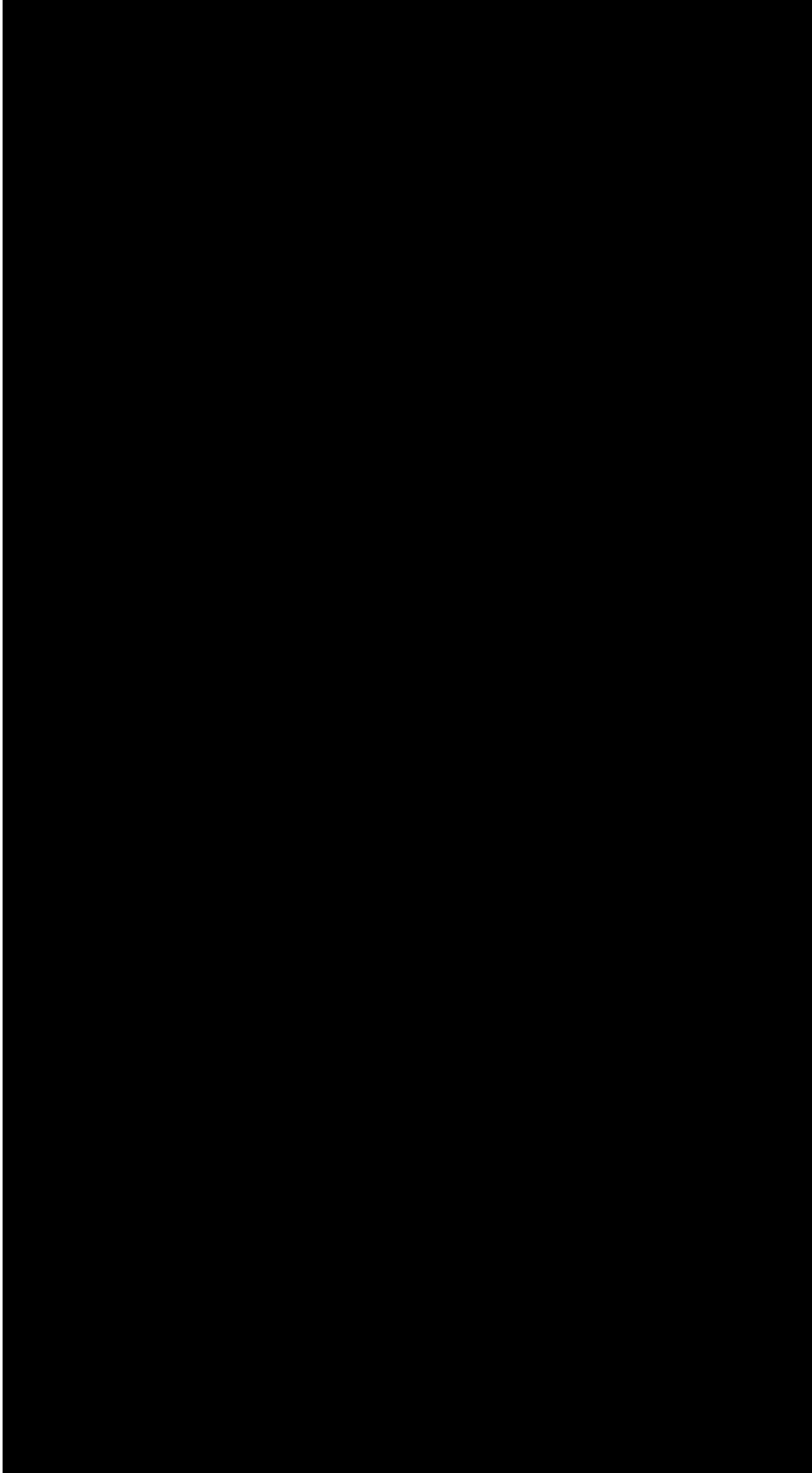
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (45 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



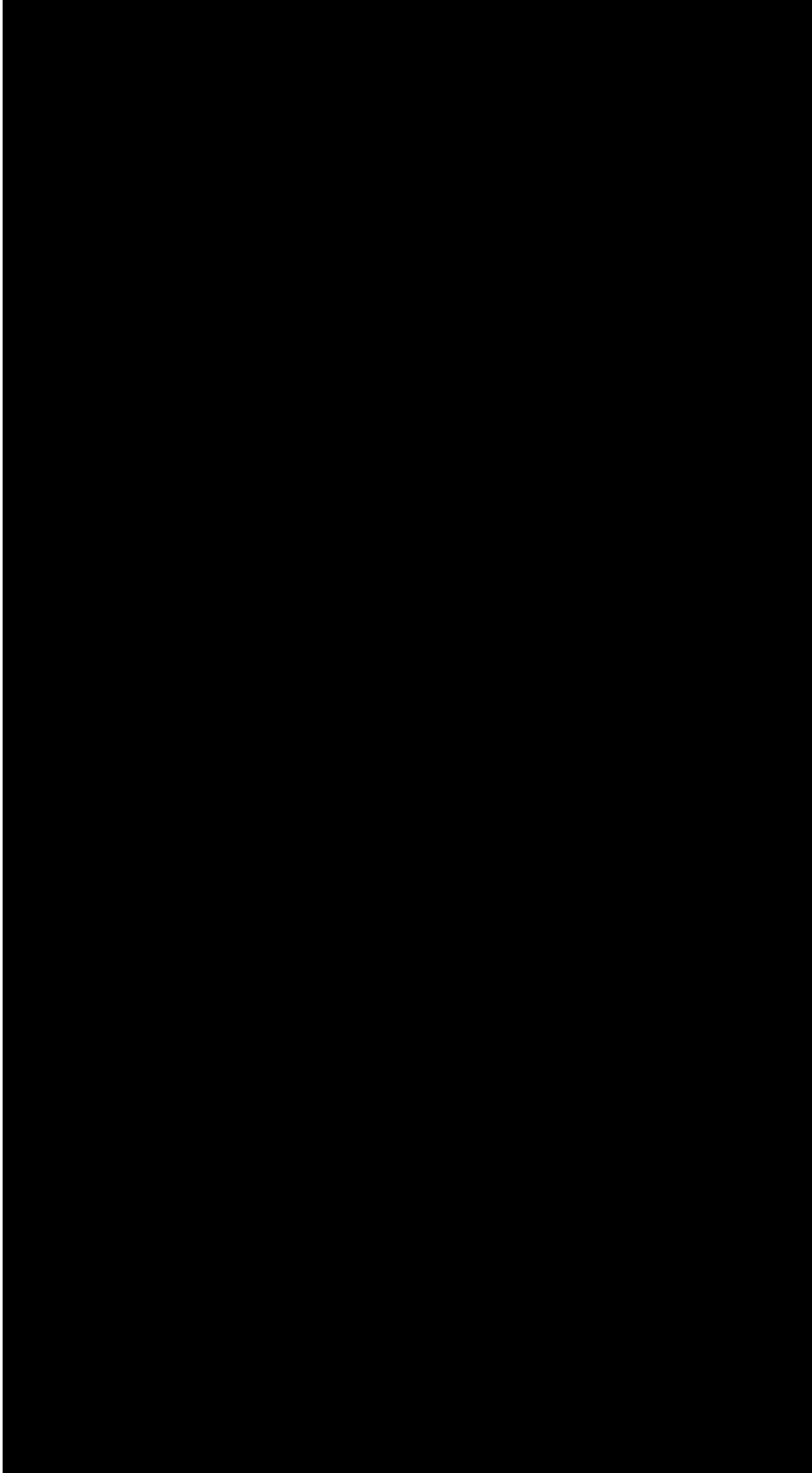
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (46 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



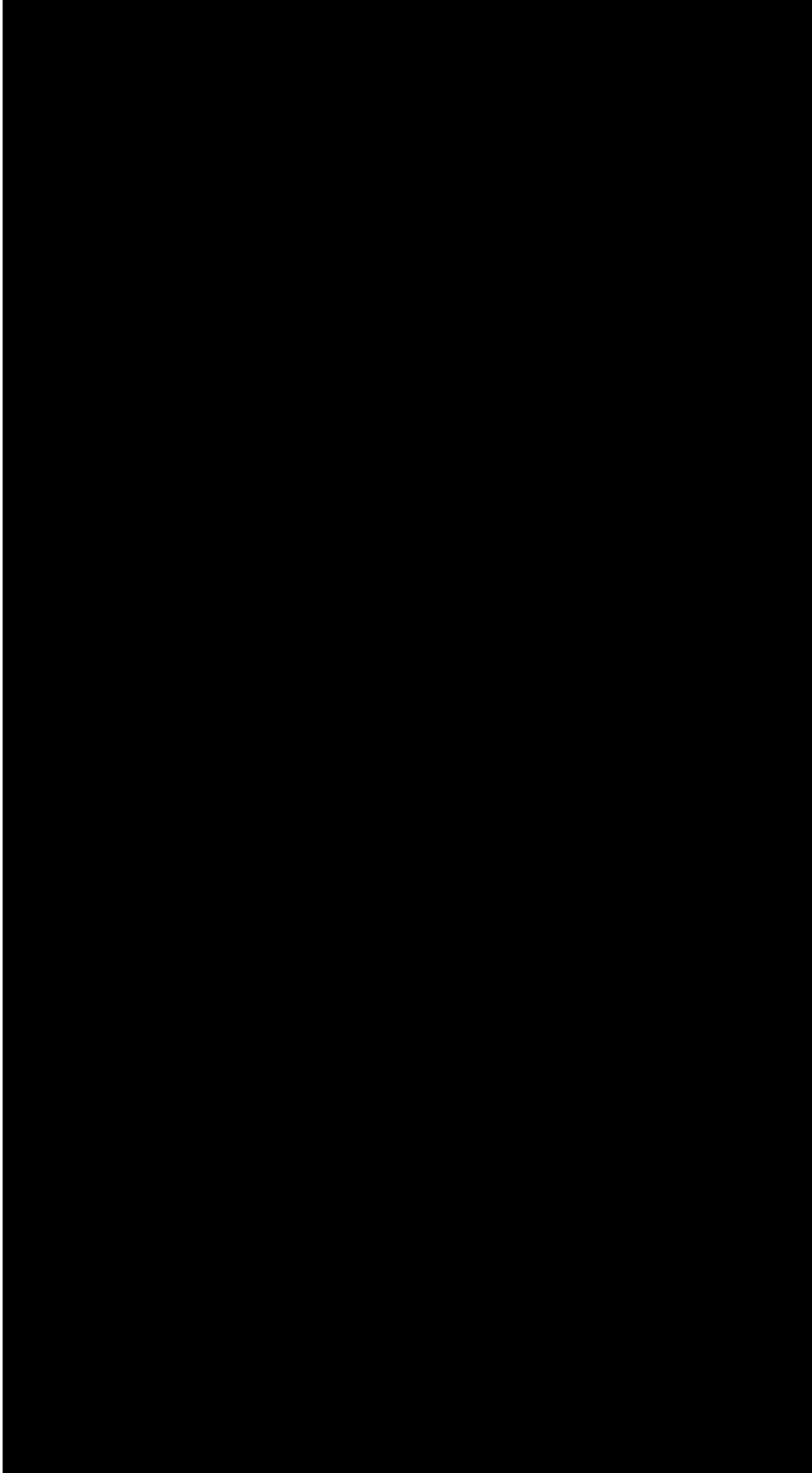
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (47 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



【HG-FMEA - 0.0.0.5】

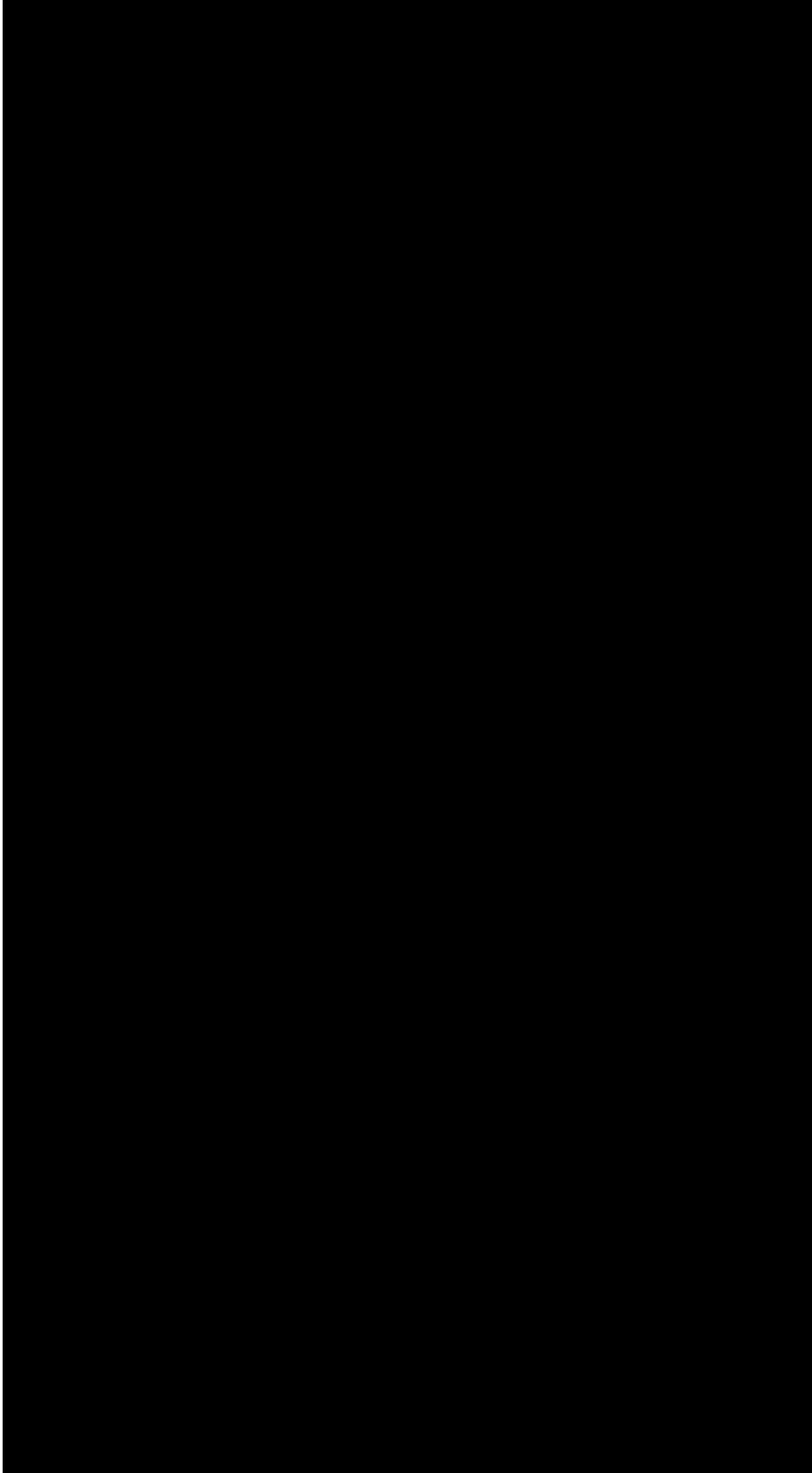
A	T	V
		●

4WDのみ

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (48 / 73)
(F T A)

△					
△					
△					
△	2001AFF2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

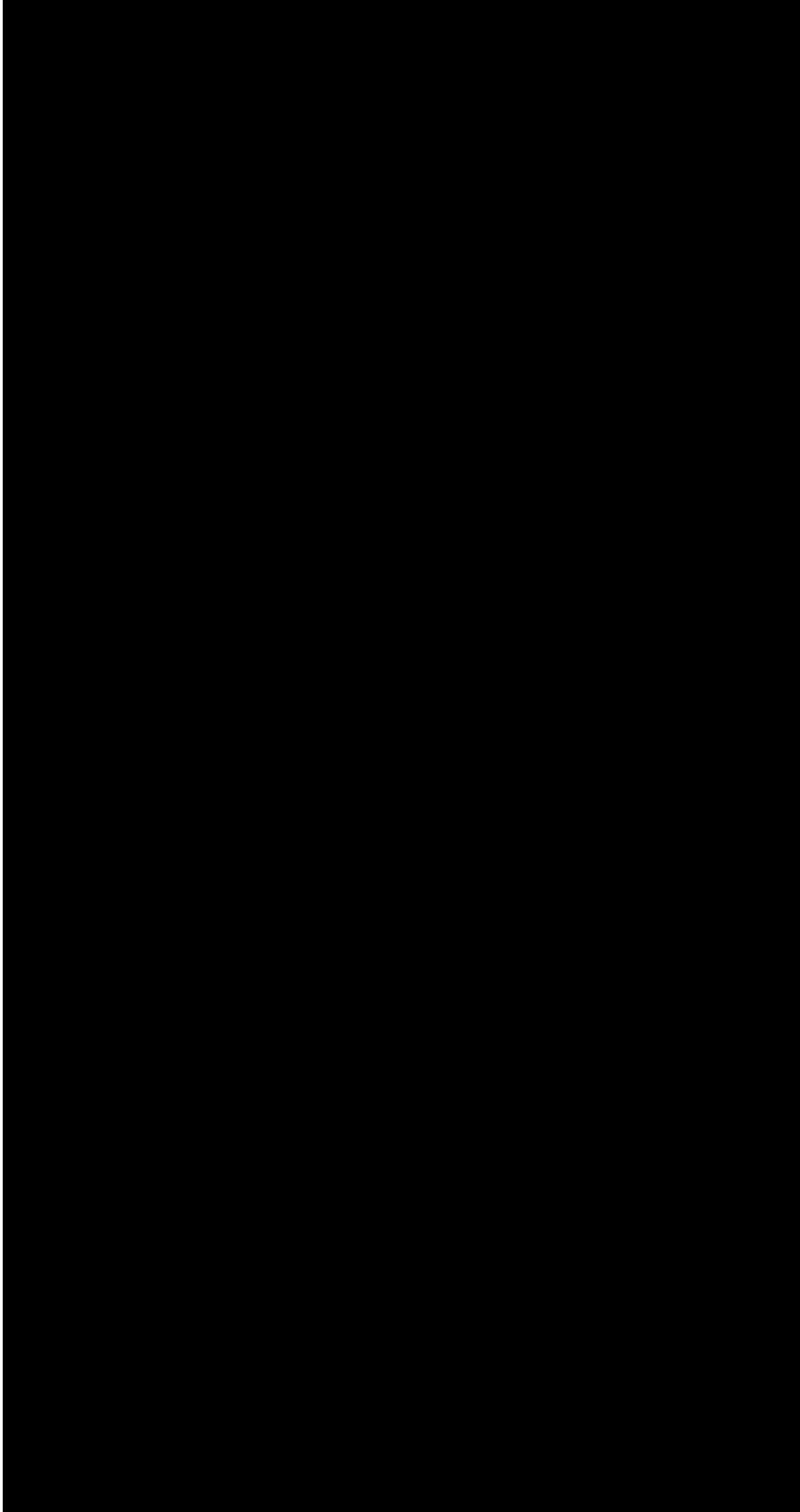
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (49 / 73)
(F T A)

△			
△			
△	2001APR	20D	川本
	日付	作成	承認



○	基本事象	△	そこから移行して	□	OR少なく 其1つの共存にて 成立
○	そのシステム (コンポーネント) が付加される事に依り 生じる二次事象	△	通常事象	□	成立

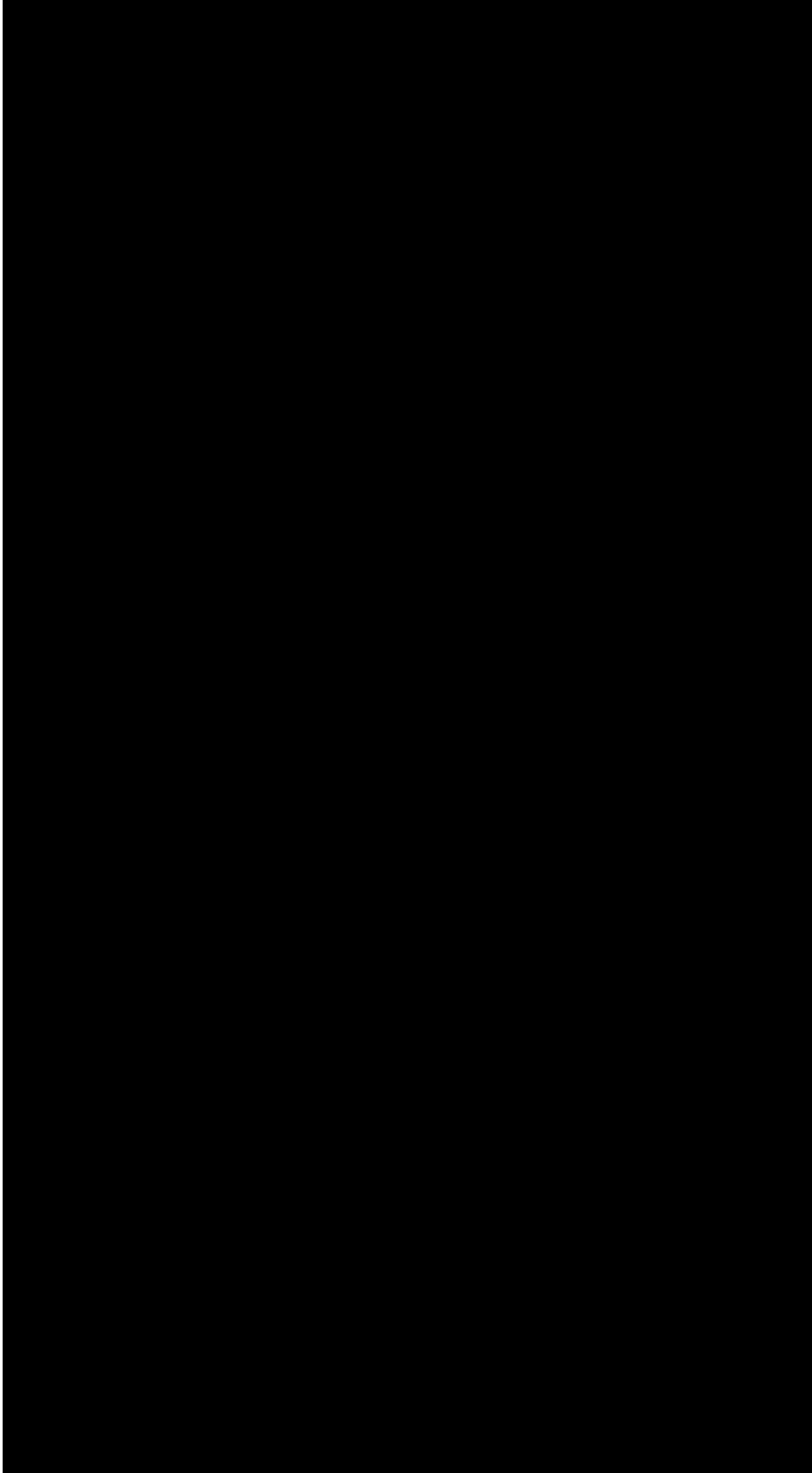
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (50/73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



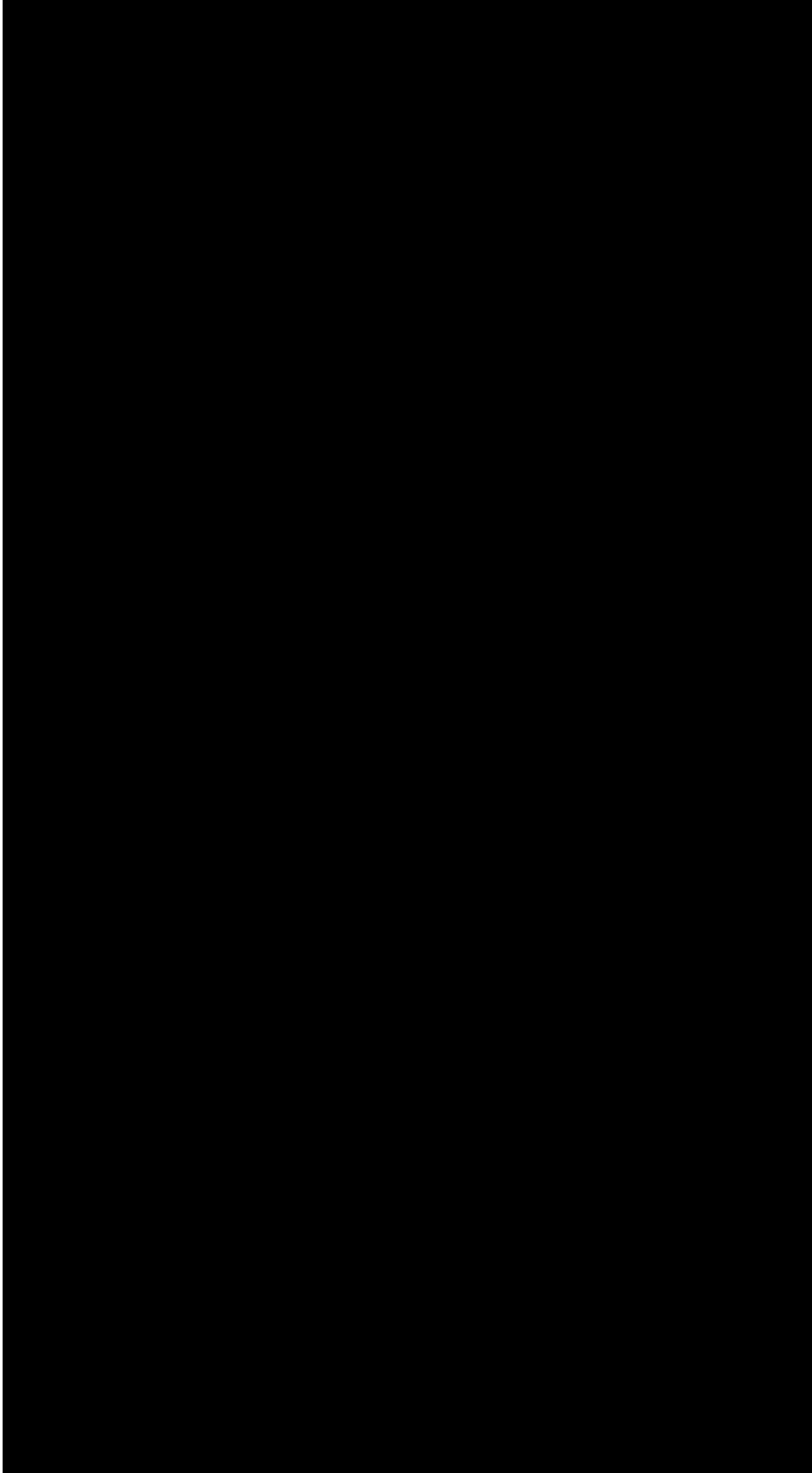
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (51/73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



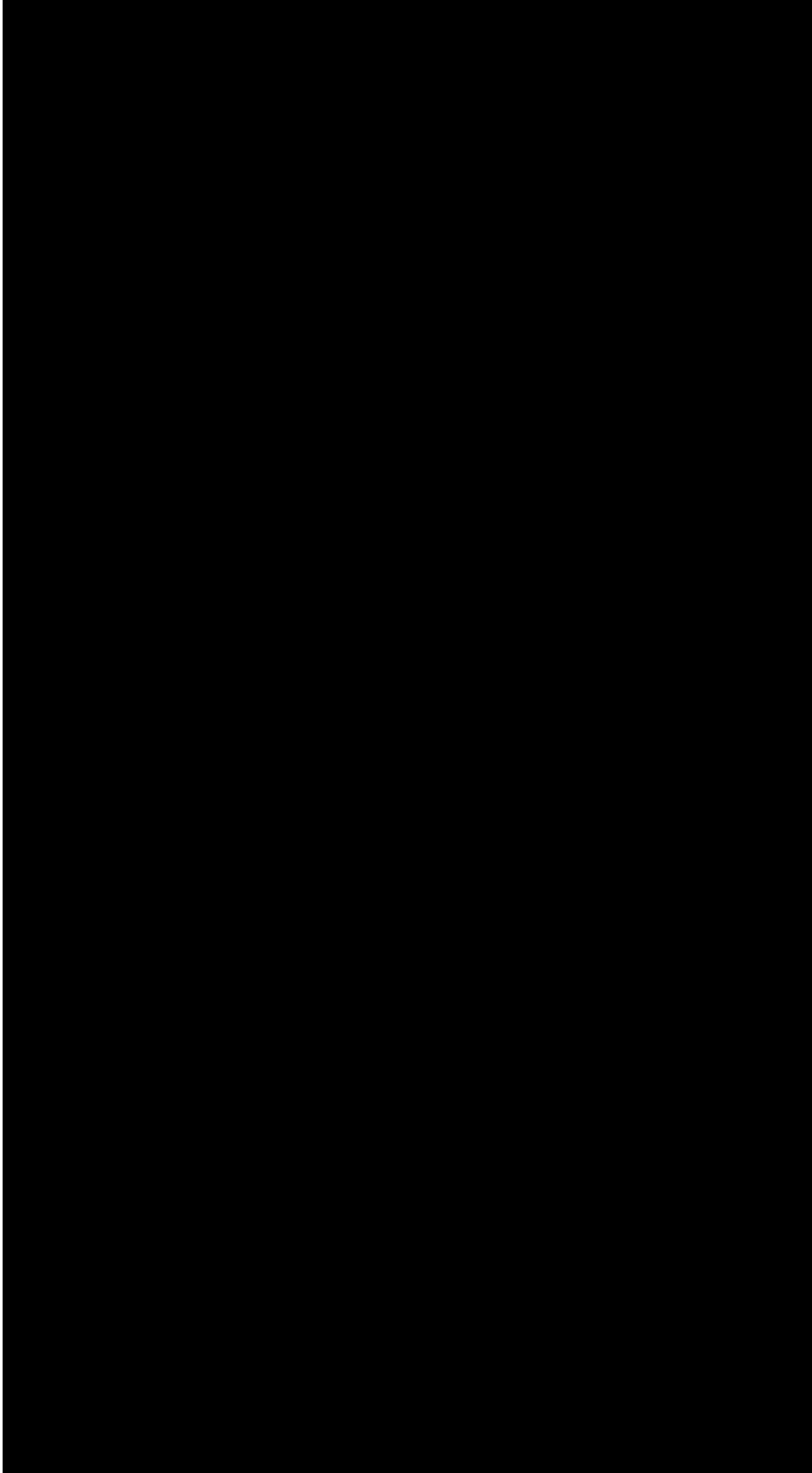
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (52/73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

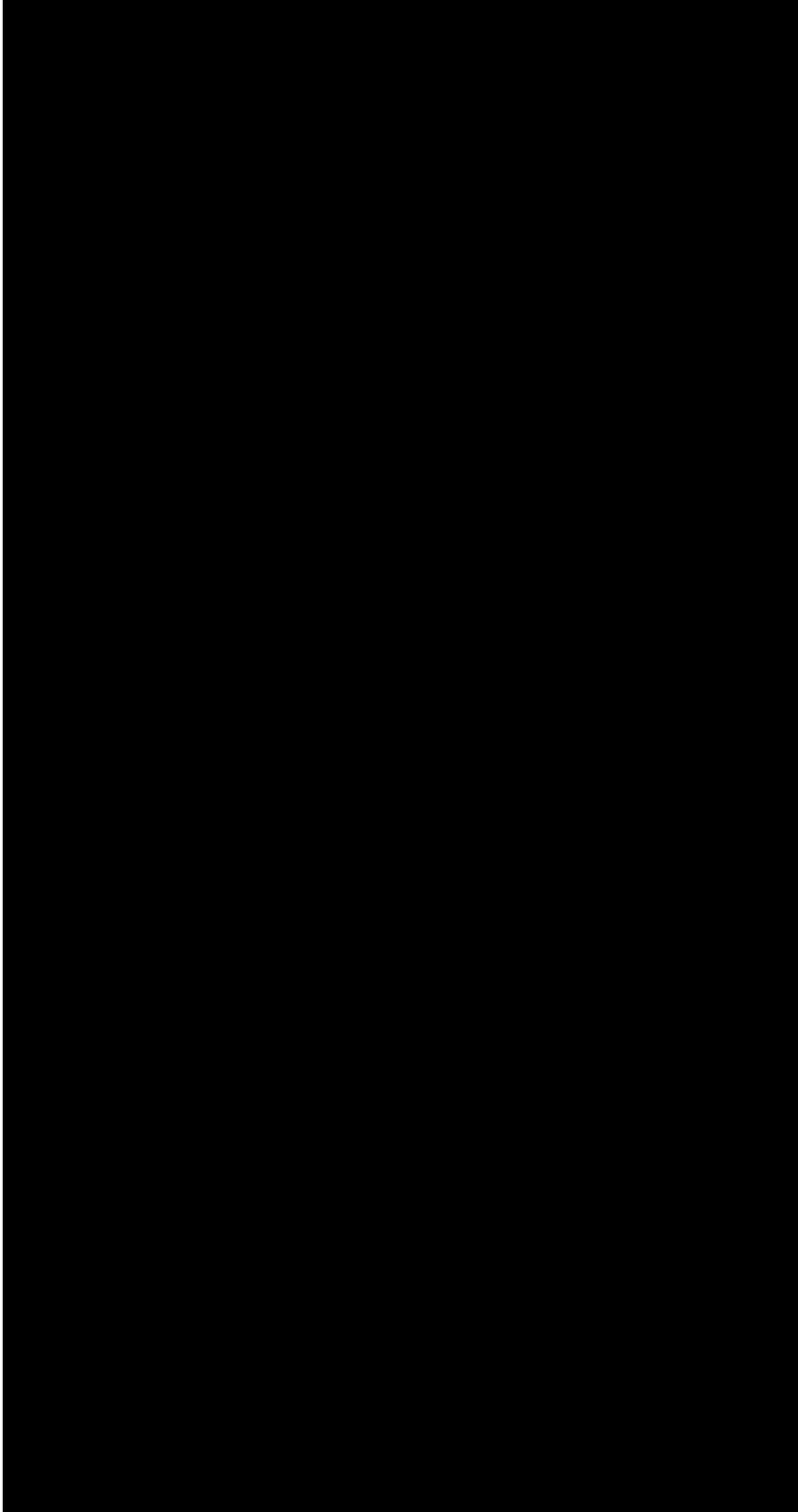
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (53/73)
(FTA)

△				
△				
△	2001APR	20D	川本	
	日付	作成	承認	



○	基本事象	□	通常事象	△	そこから移行して	▽	OR少なく 其1つの共存にて 成立
・そのシステム(コンポーネント)が付加される事に依り 生じる二次事象							

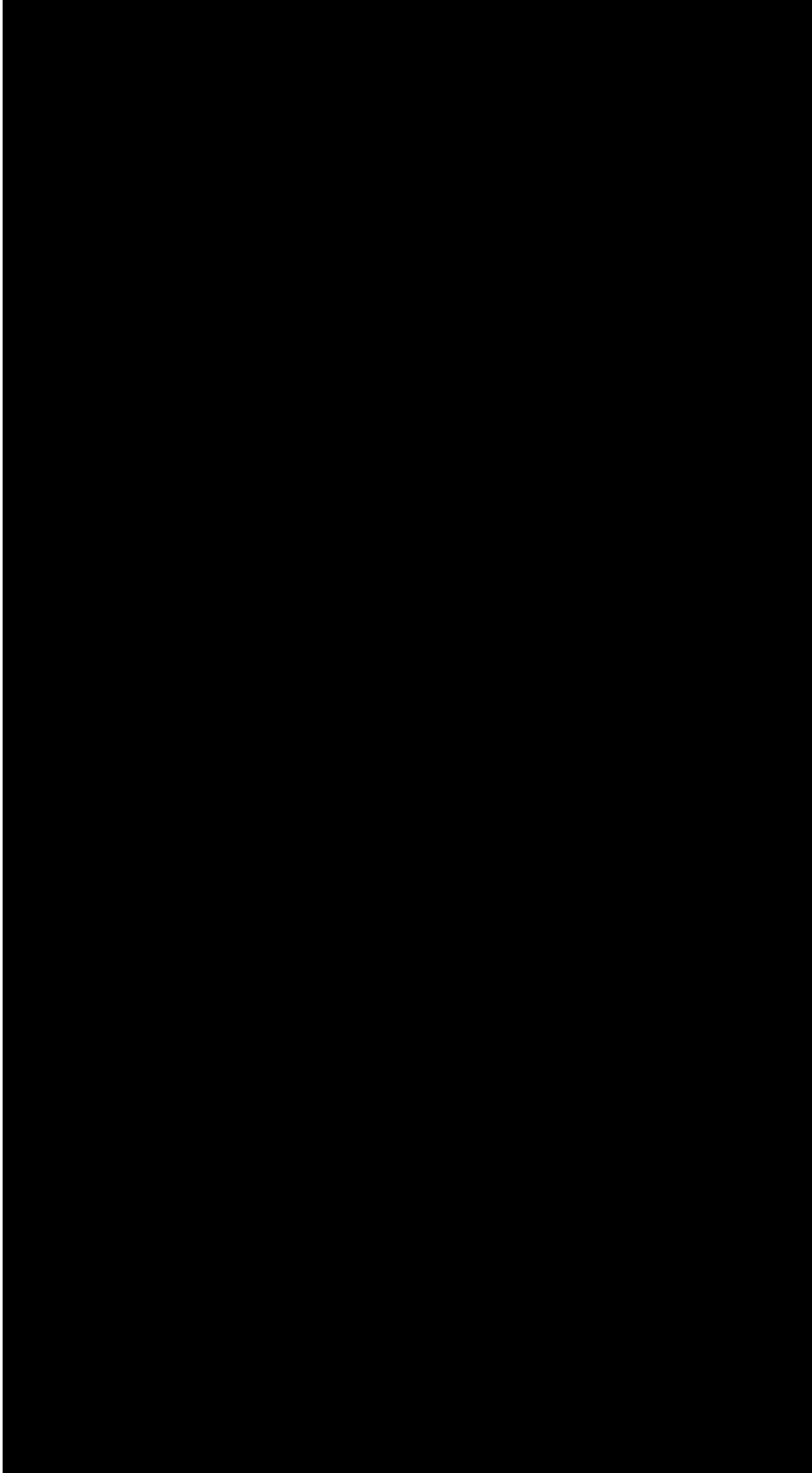
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (54 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



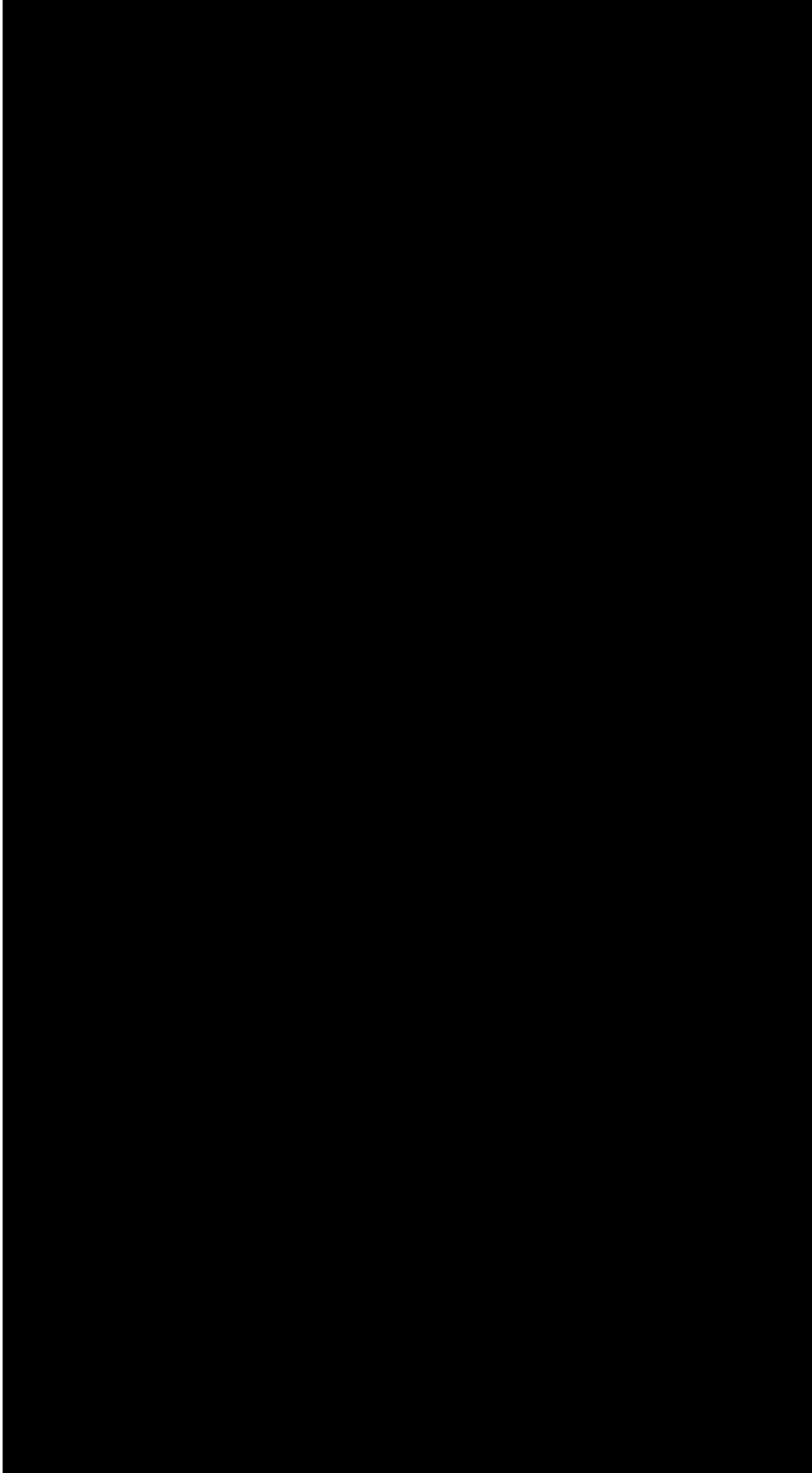
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (55 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



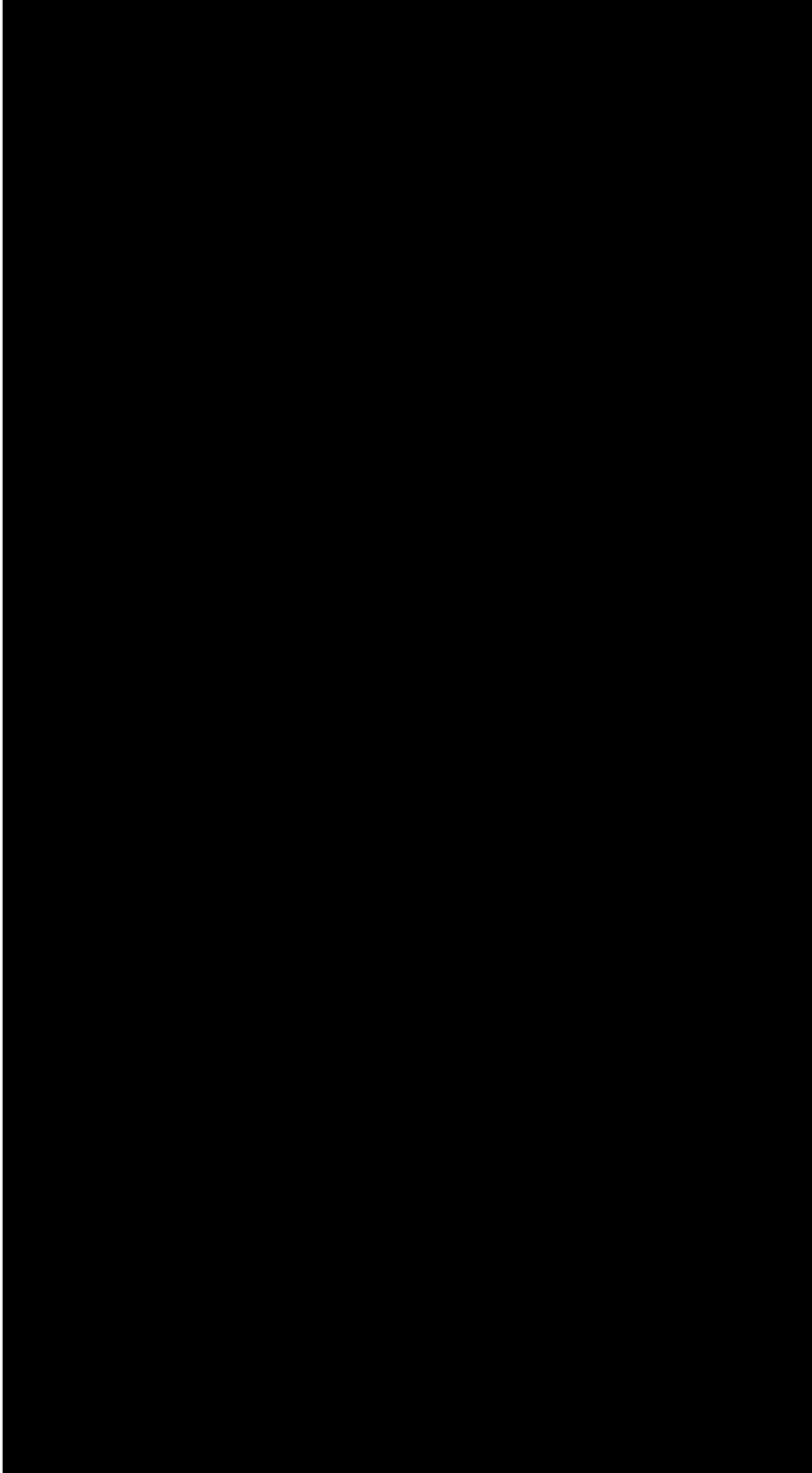
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (56 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

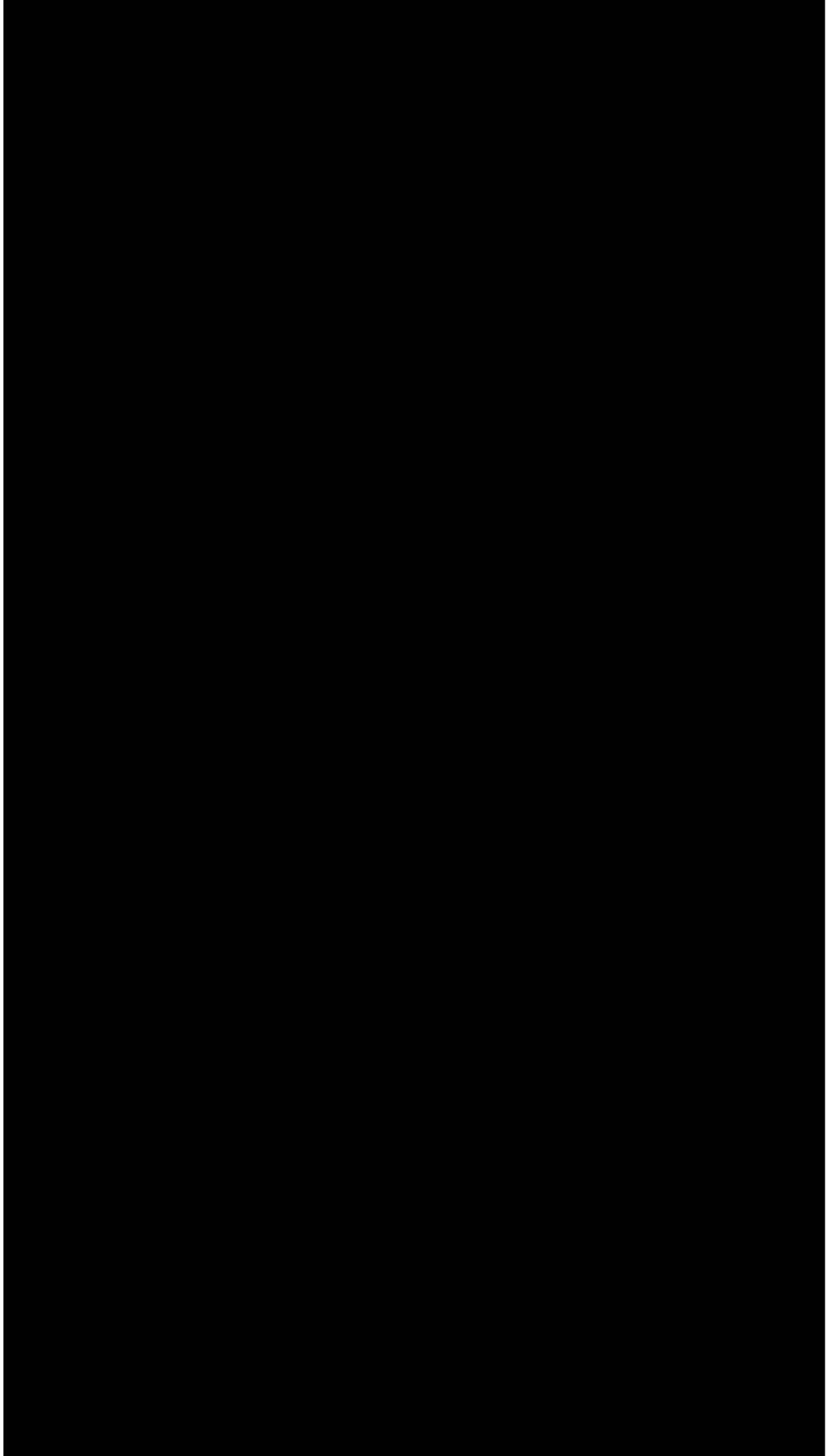
【H.G.-E.M.F.A.-0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (57 / 73)
(F T A)

△					
△					
△	2001AER2	20D	川本		
	日付	作成	承認		



ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION

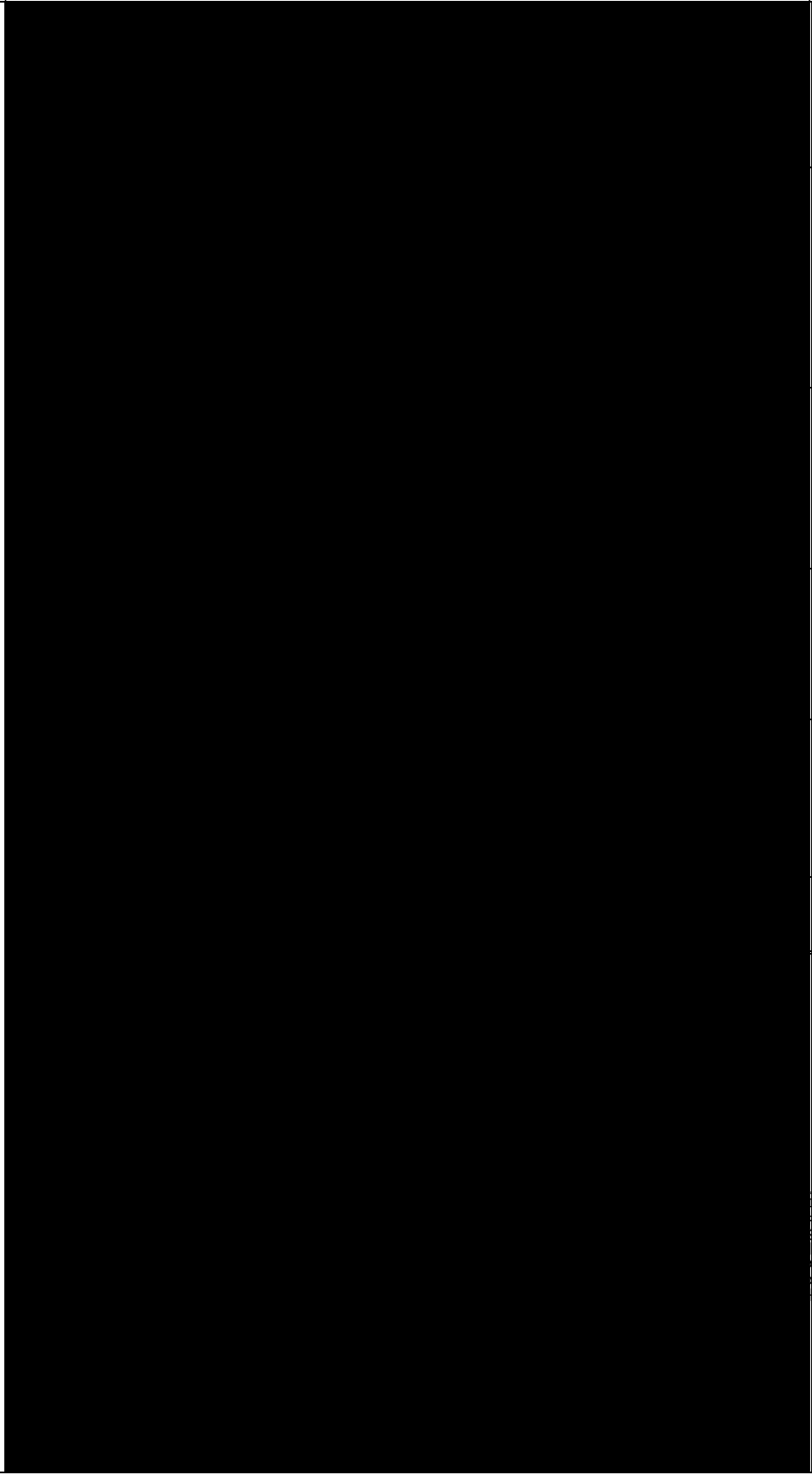
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (58 / 73)
(F T A)

△					
△					
△					
△	2001APR2	20D	川本		
	日付	作成	承認		



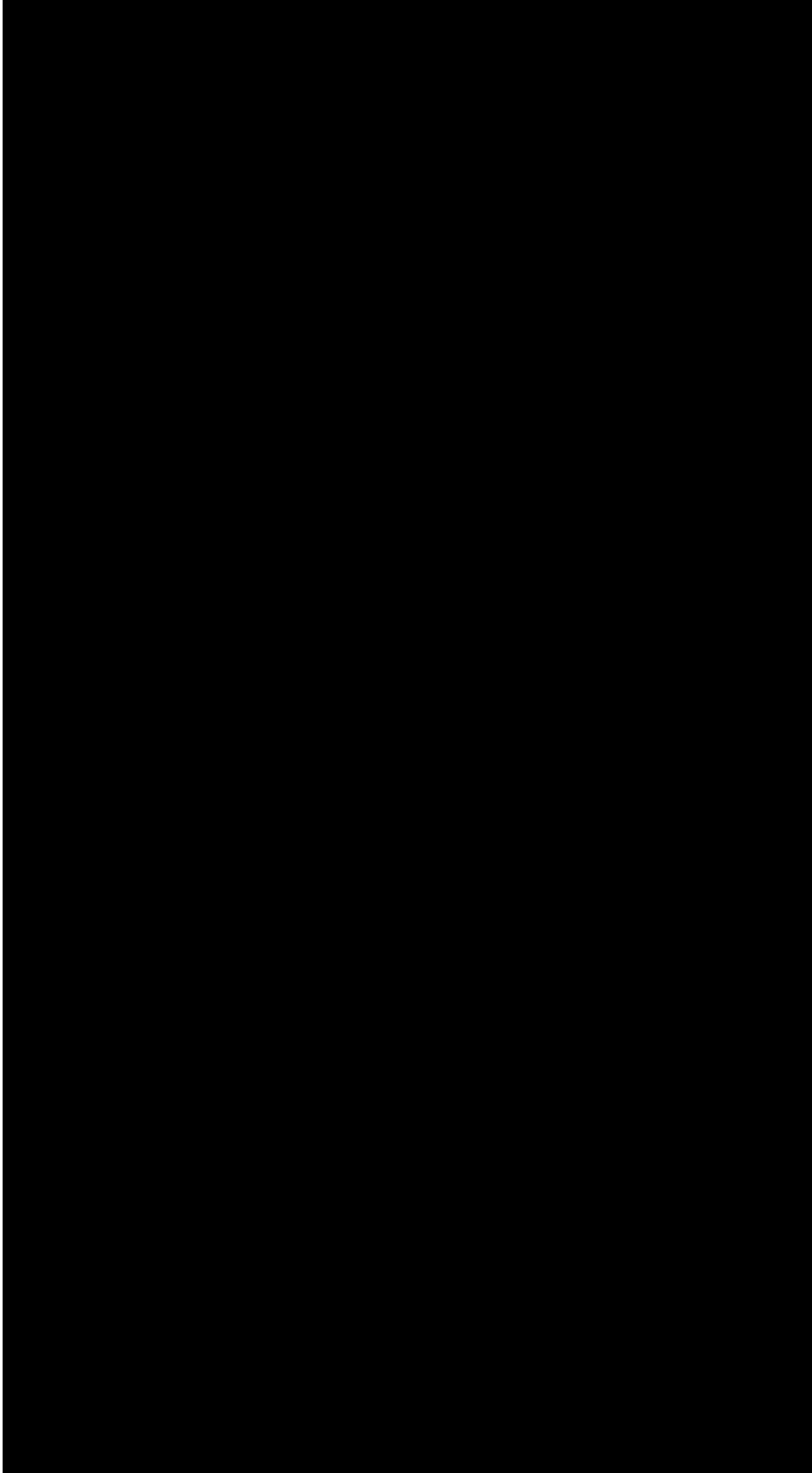
【HG-FMEA-0.0.0.5】

A	T	V	
	●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (59 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



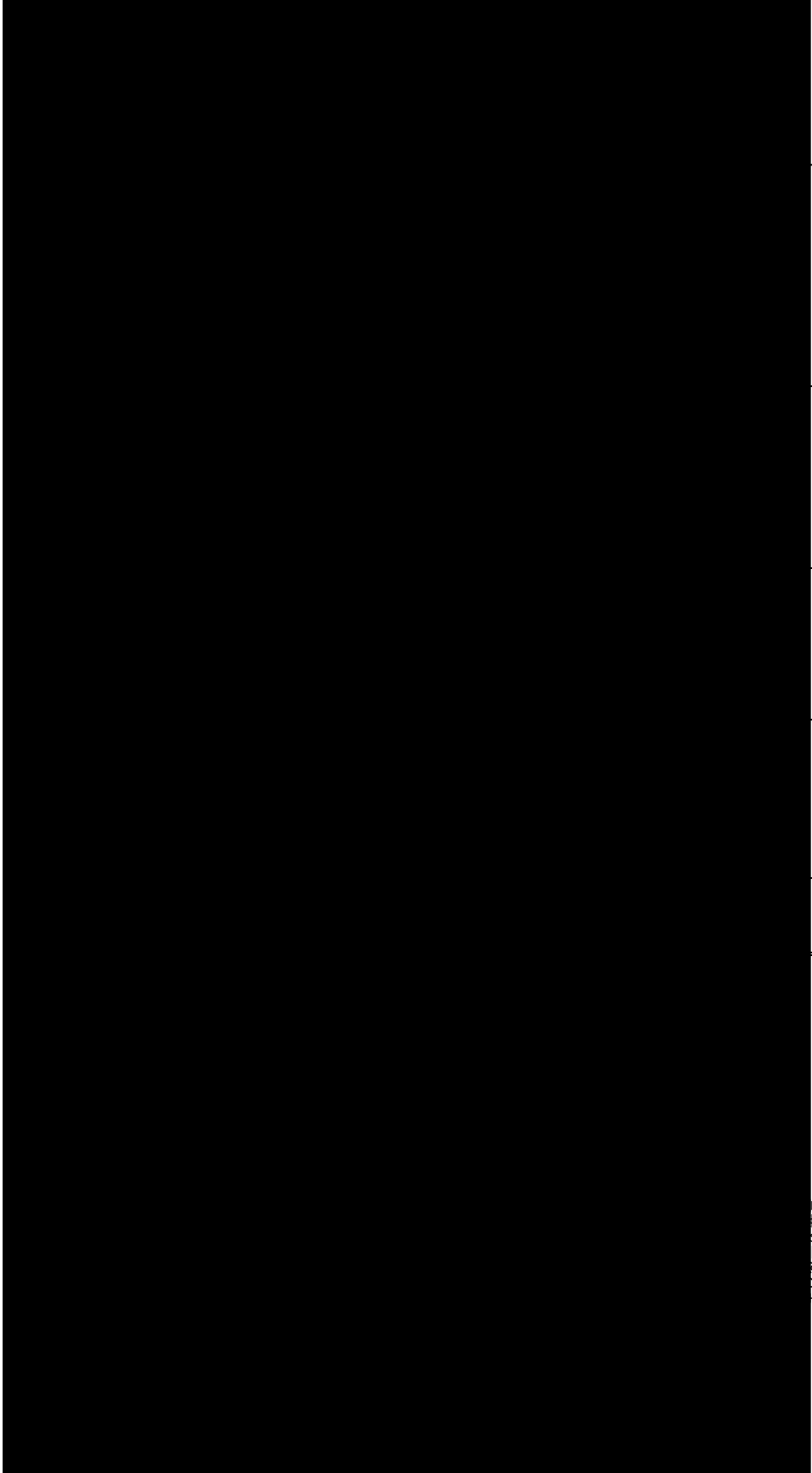
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (60 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



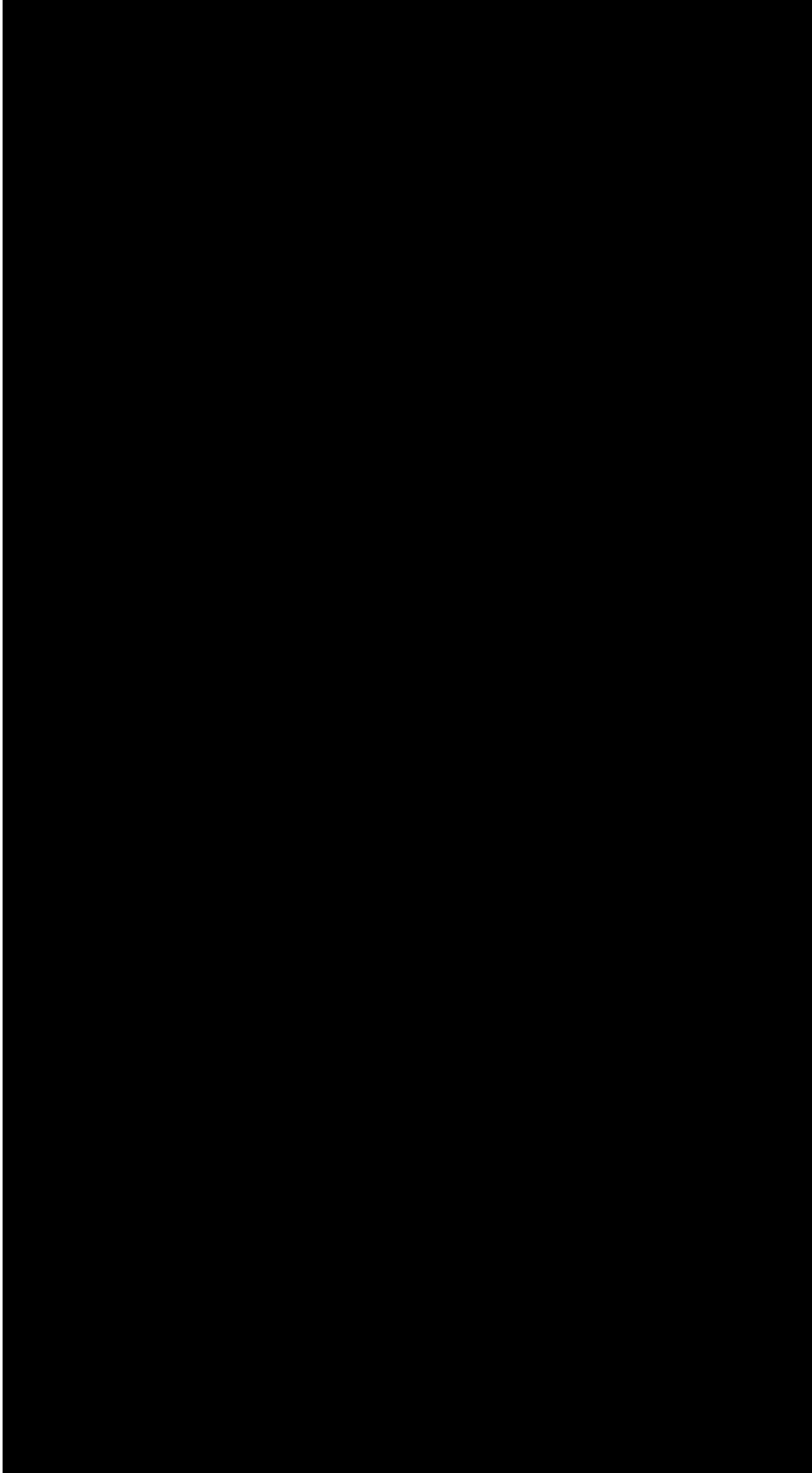
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (61 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



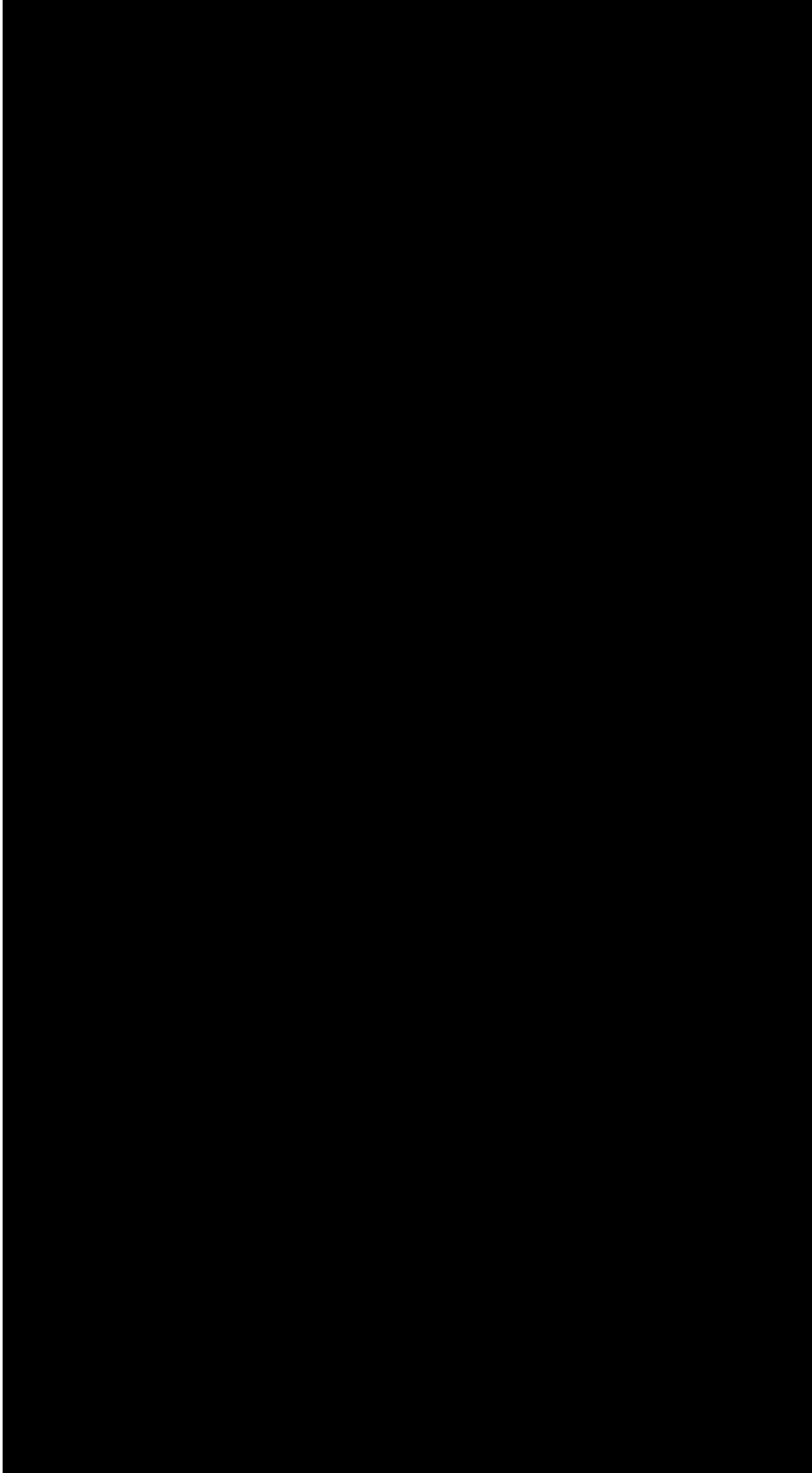
【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (62 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



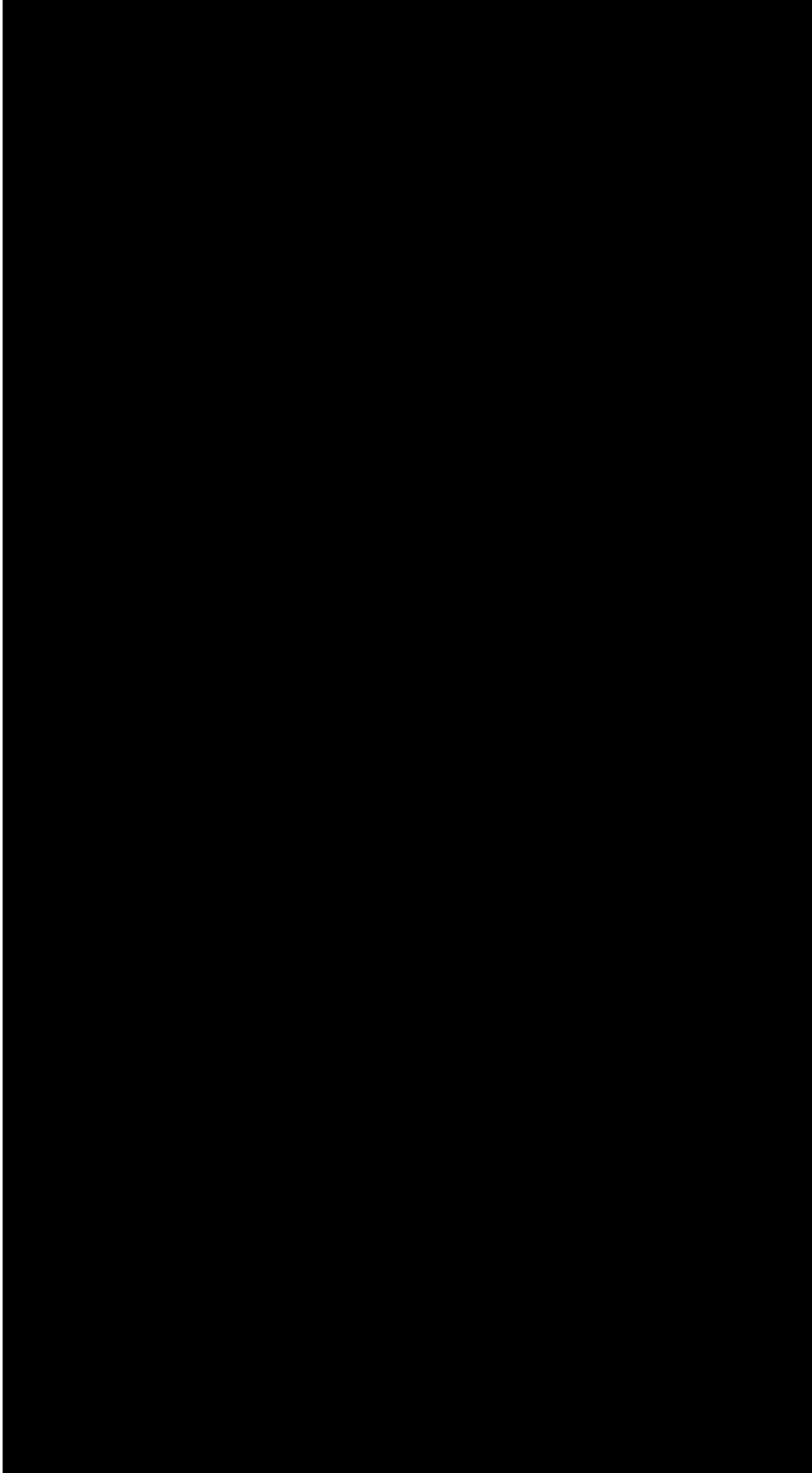
【HG-FMEA-0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (63 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



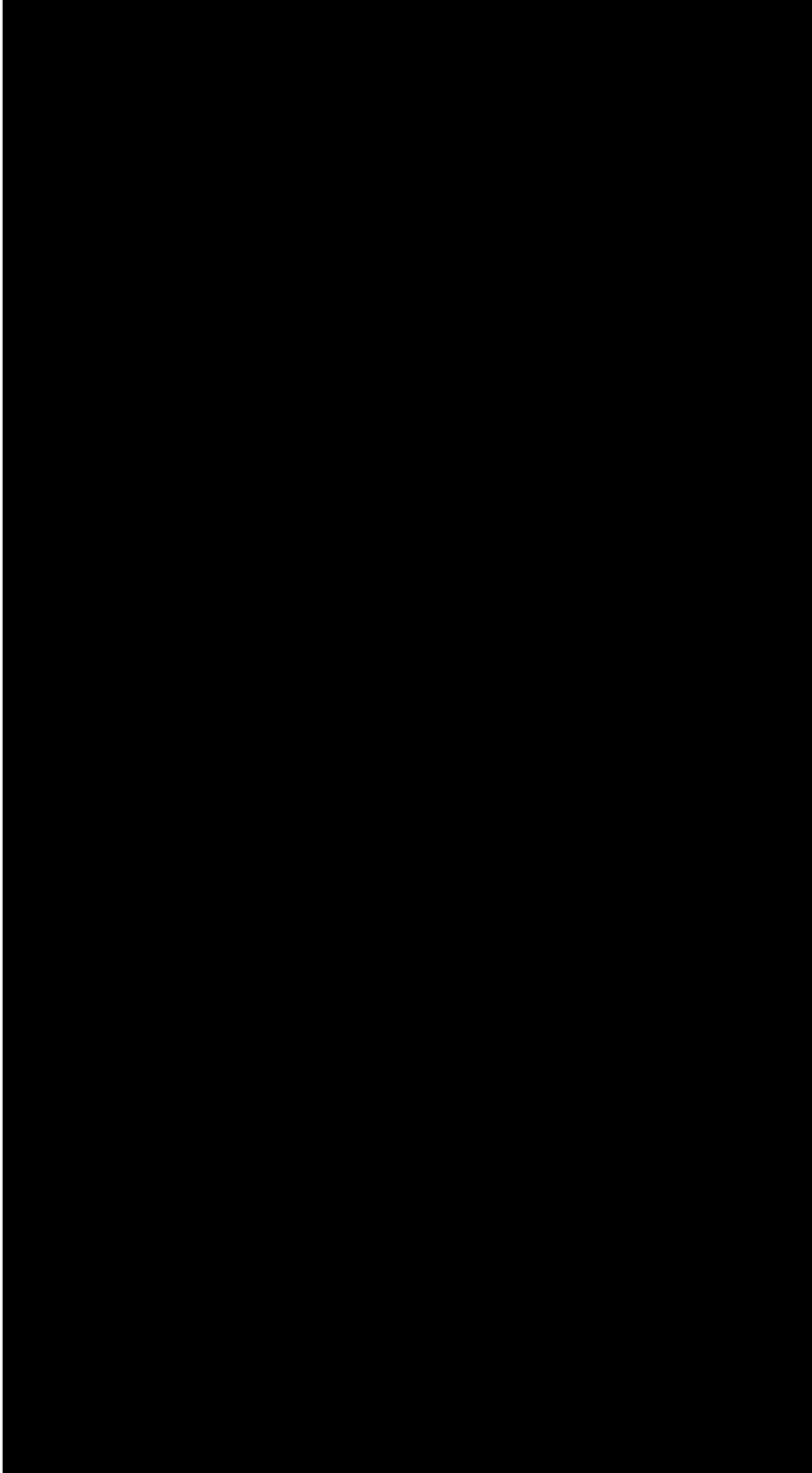
【HG-FMEA - 0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (64 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



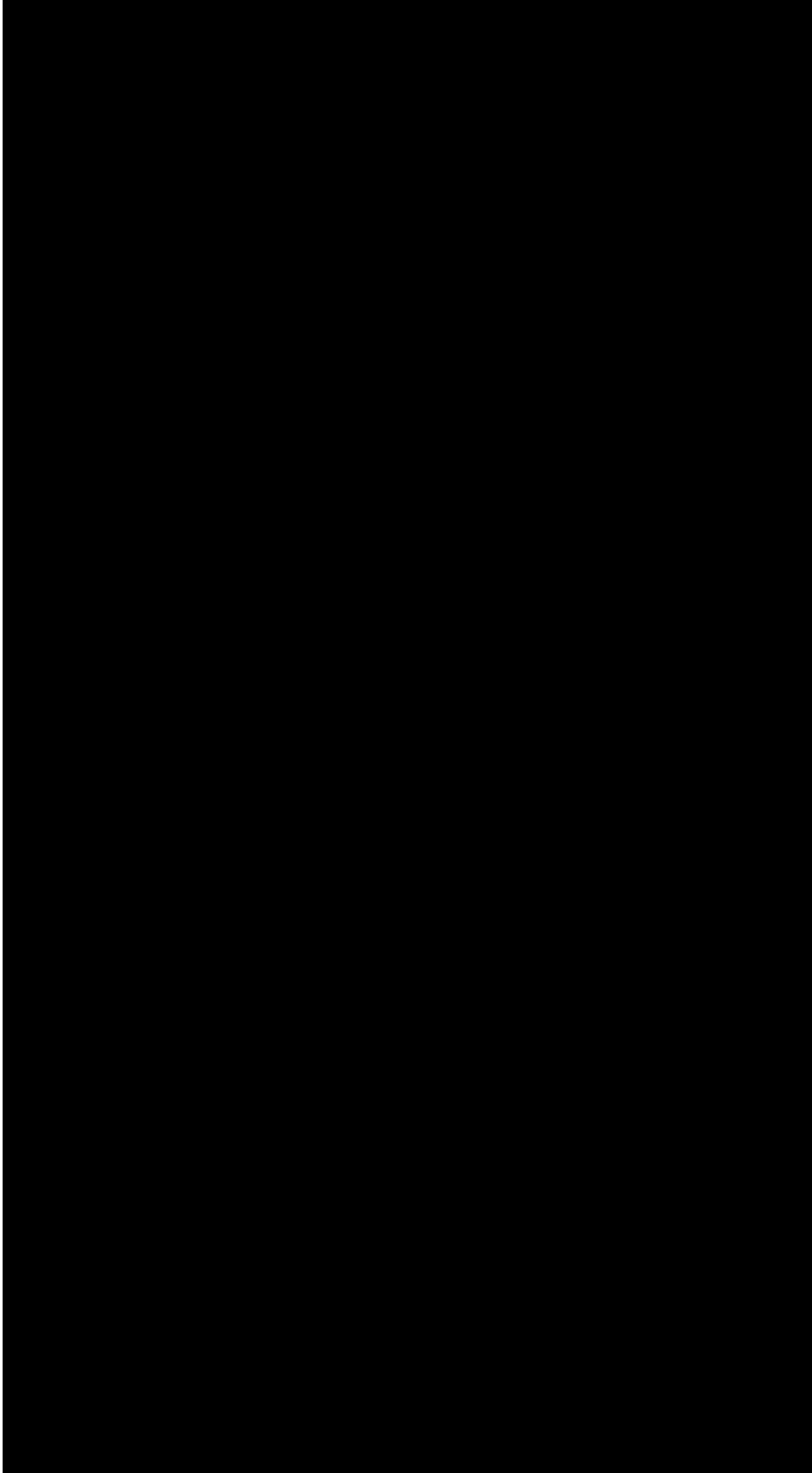
【HG-FMEA - 0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (65 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称 NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (66 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



【HG-FMEA - 0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (67 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (68 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (69 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (70 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



【HG-FMEA - 0.0.0.5】

A	T	V
	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (71 / 73)
(F T A)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



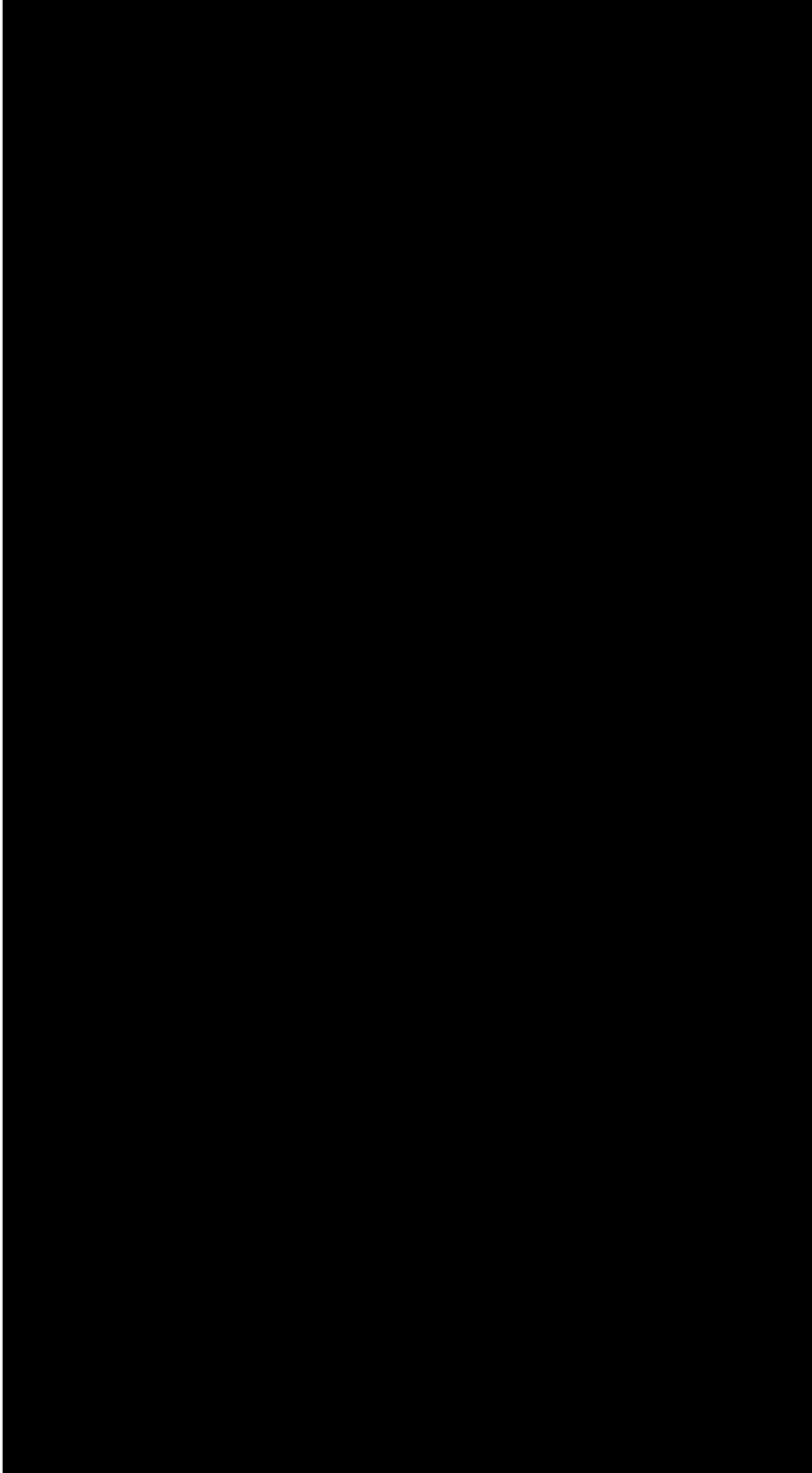
【HG-FMEA-0.0.0.5】

A	T	V
●	●	●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (72/73)
(FTA)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		



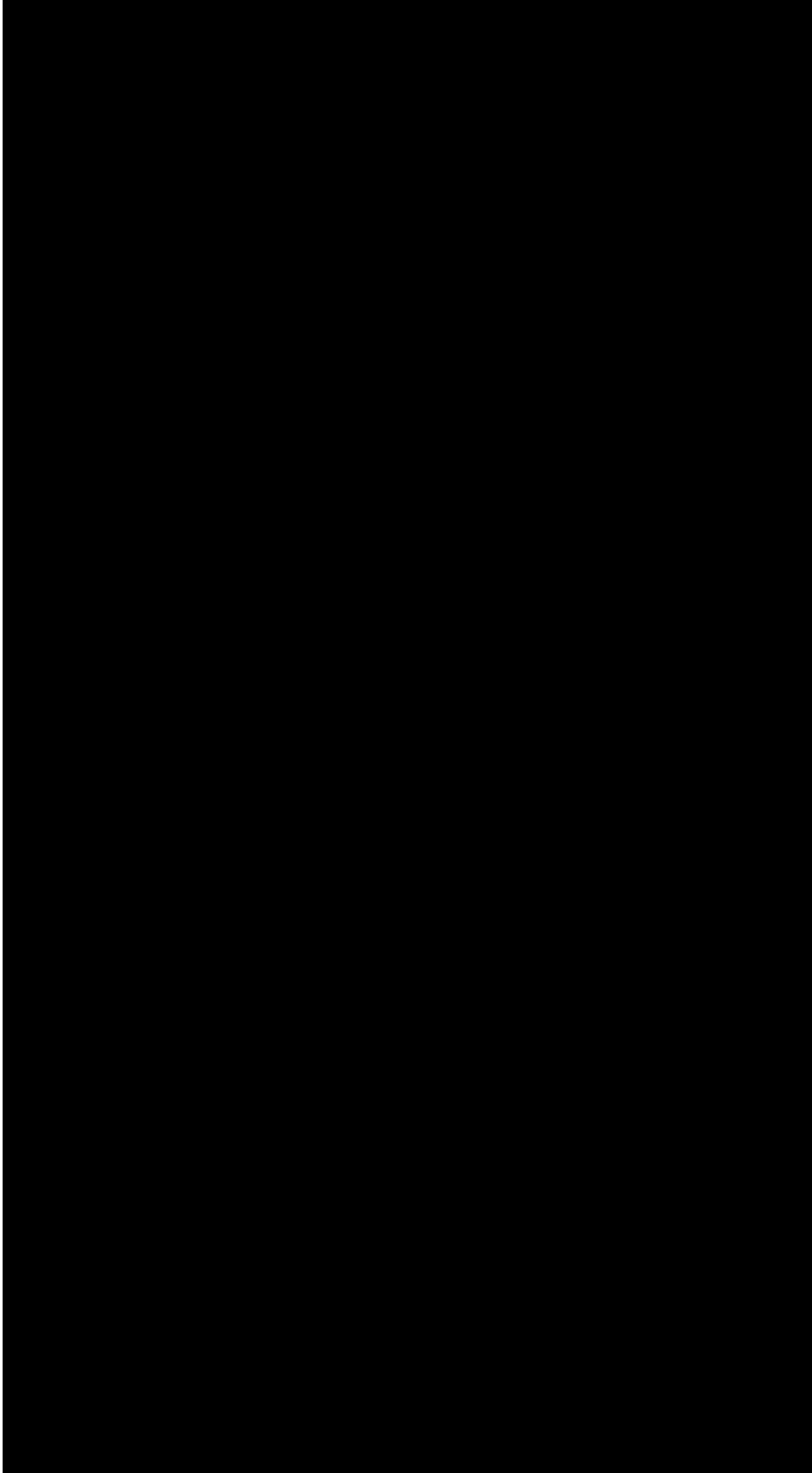
【HG-FMEA-0.0.0.5】

A	T	V	
			●

システム名称_NK11A(ABS)/T(TCS)/V(VSA)

故障モードリスト (73/73)
(FTA)

△					
△					
△	2001APR	20D	川本		
	日付	作成	承認		

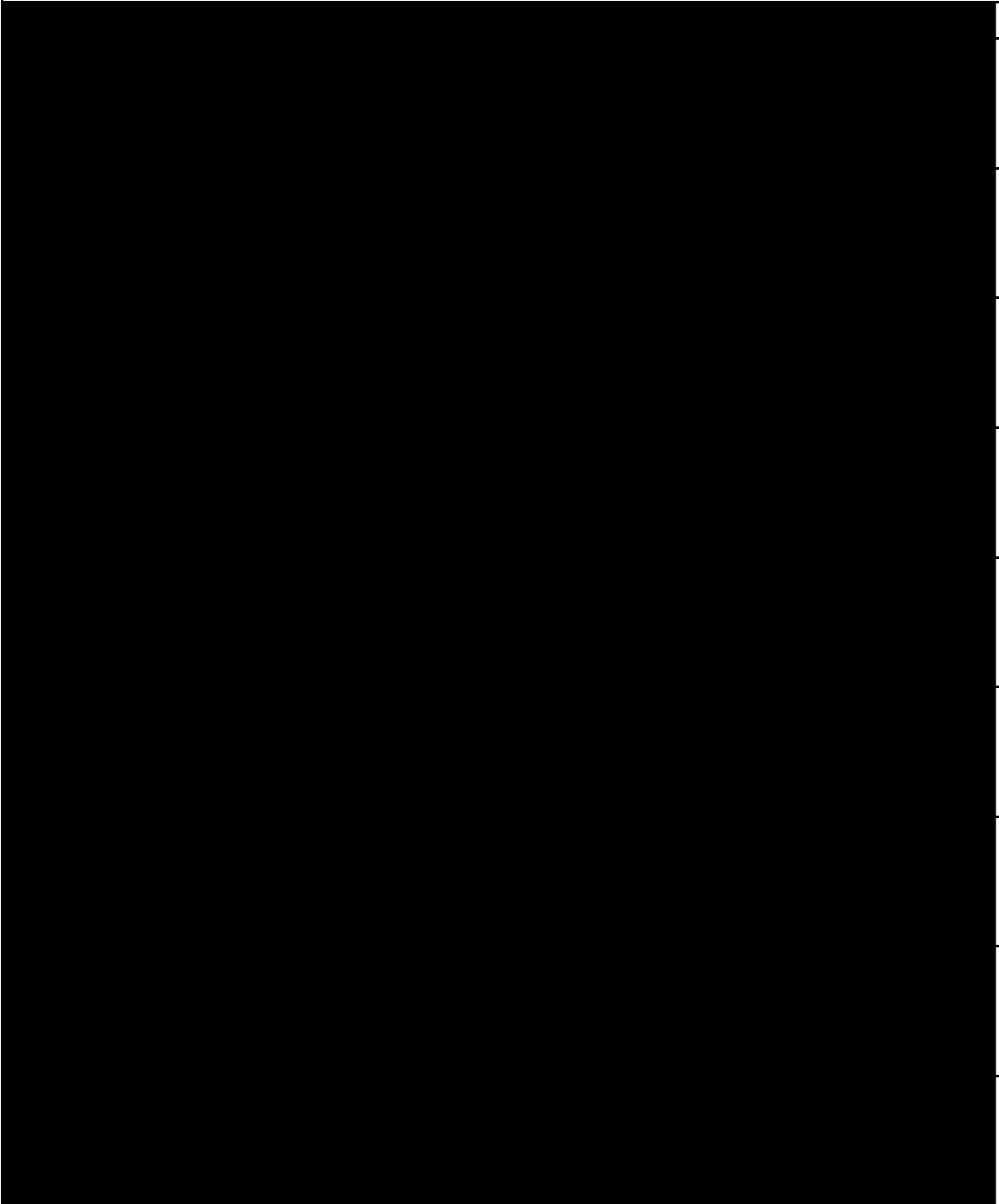


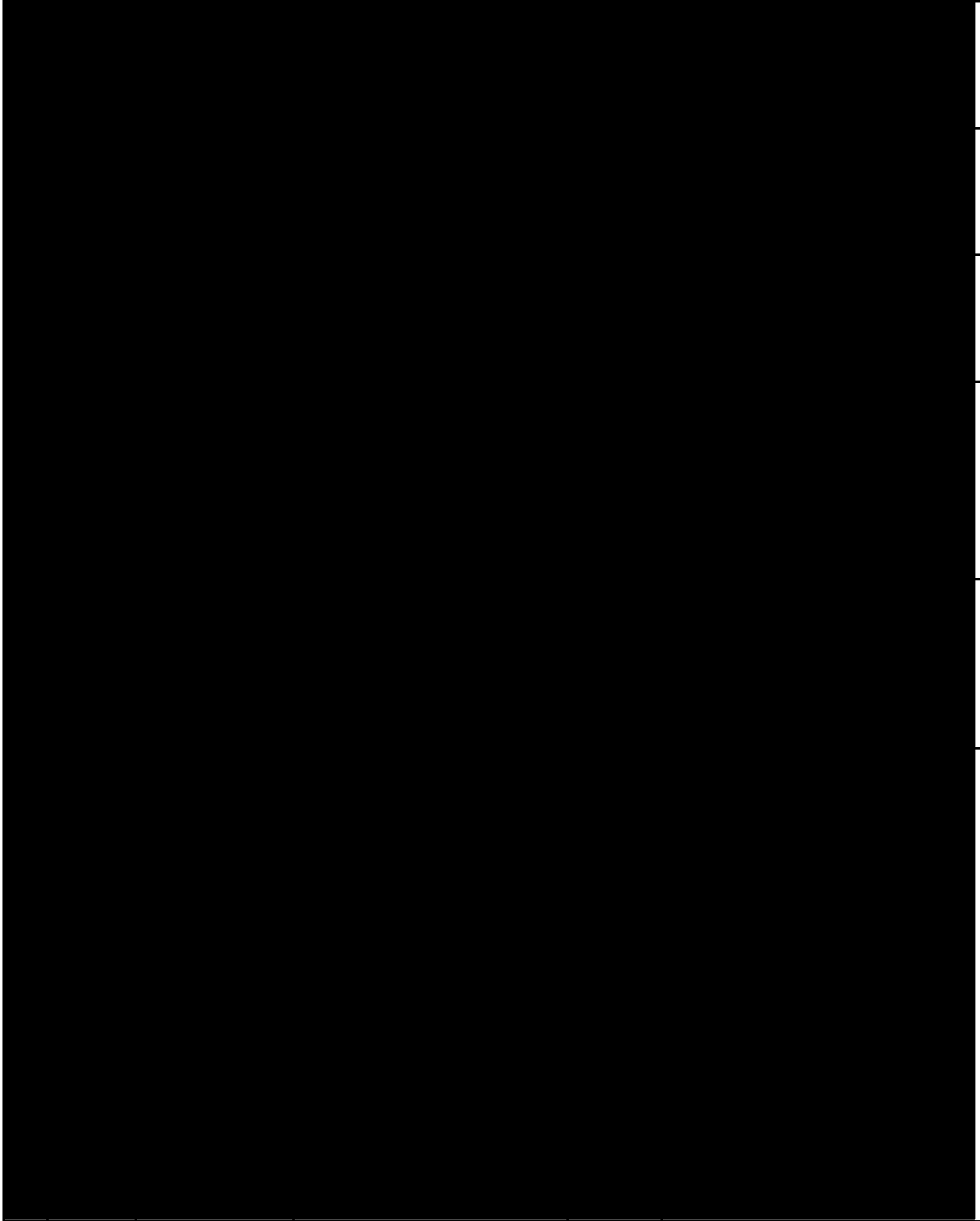
【HG-FMEA-0011】

否展開事象項目の対応手法一覧表

システム名称 VSA/TCS/ABS(NK11V/T/A)

△			
2	4/3/2001	野永	
1	01.03.26	池田	
	目付	作成	承認





DP12-002

HONDA

8-3-2012

ATTACHMENT

Q14

14C

NK11V_ECU_FMEA_020307_

E REDACTED

【HG-FMEA-0012】

Summary of FMEA verification

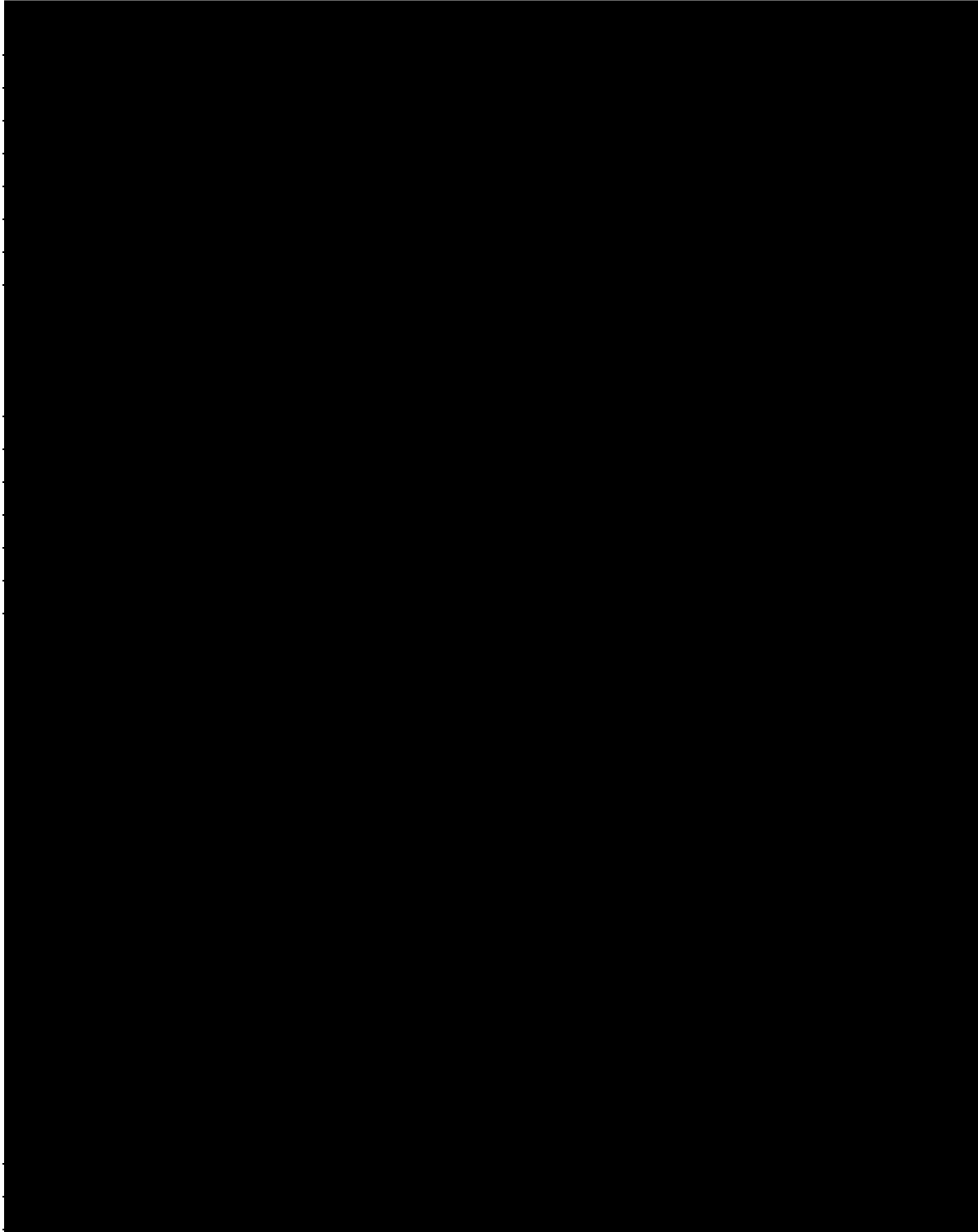
Model	SEAA
-------	------

Function approved by
Yahagi Approved

<System> VSA/TCS control unit

<Items performed>

28 Nov. '01



【HG-FMEA-0004】

System diagram [1/3]

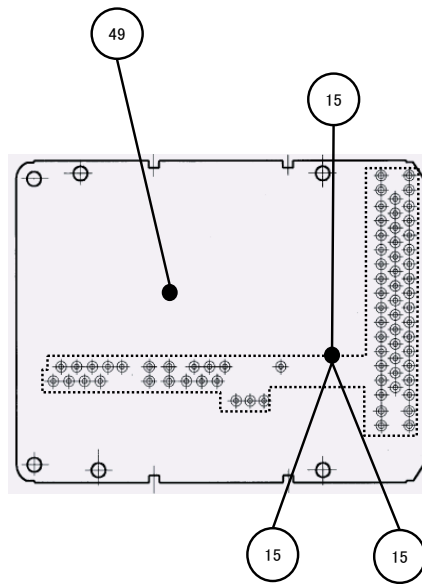
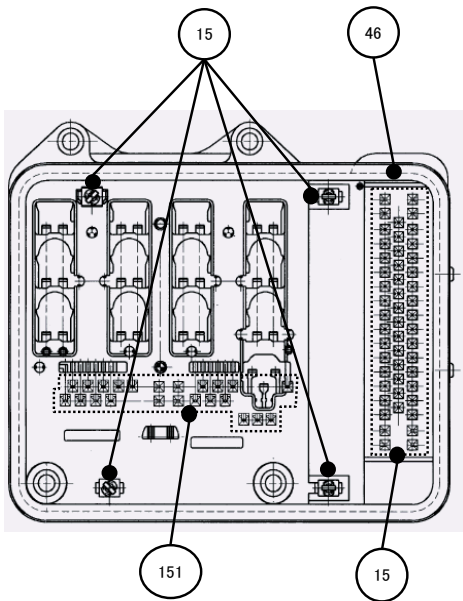
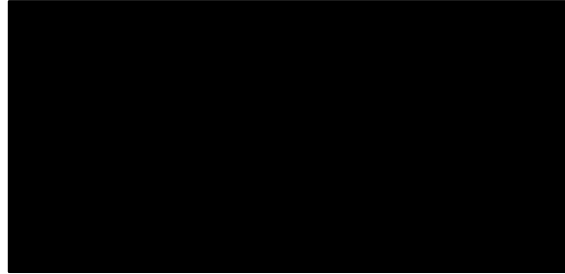
System: VSA/TCS control unit

△			
△			
△			
—	06 NOV. '01	Hayashibe	
	Date	Prepared by	Approved by

Supplier Nissin Kogyo Co., Ltd

CONTROL UNIT

- 46. ECU HOUSING
- 49. PWB ASSY
- 150. CONNECTOR TERMINAL
- 151. INSIDE TERMINAL
- 152. SNAP FIT
- 153. SOLDER
- 154. FLUX
- 155. COATING



System diagram [2/3]

System: VSA/TCS control unit

△			
△	06 NOV. '01	Hayashibe	
△	26 MAR. '01	Hayashibe	
	Date	Prepared by	Approved by

Supplier NEC, Nesstech

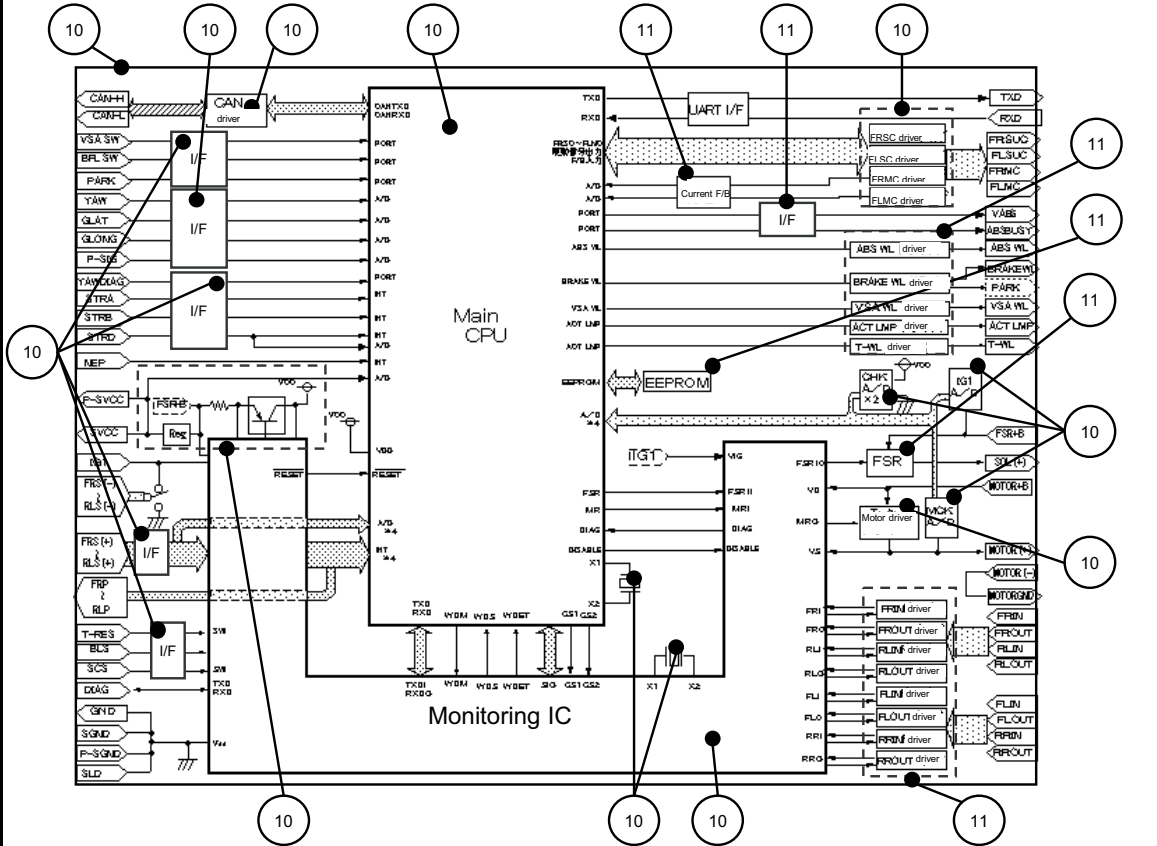
[PWB ASSY configuration]

49. PWB ASSY

- 100. PWB
- 101. 32BIT microcomputer
- 102. Monitoring IC
- 103. Power source IC (SVCC, 3.3V)
- 104. CLOCK (microcomputer, monitoring IC)
- 105. FULL CAN DRIVER
- 106. A/D INPUT CIRCUIT
- 107. ON/OFF INPUT CIRCUIT
- 108. SOL DRIVER FET
- 109. MOTOR DRIVER FET
- 110. F/S RELAY DRIVER FET
- 111. SOL ON/OFF F/B CIRCUIT
- 112. SOL LINEAR F/B CIRCUIT
- 113. ON/OFF OUTPUT CIRCUIT
- 114. W/L OUTPUT CIRCUIT
- 115. 2Kbit EEPROM

Resistor, capacitor, and others
Resistor, capacitor, Tr, and others

Capacitor, and others
Resistor, capacitor, OP AMP, and others
Resistor, capacitor, Tr, and others
Resistor, capacitor, Tr, and others



【HG-FMEA-0004】

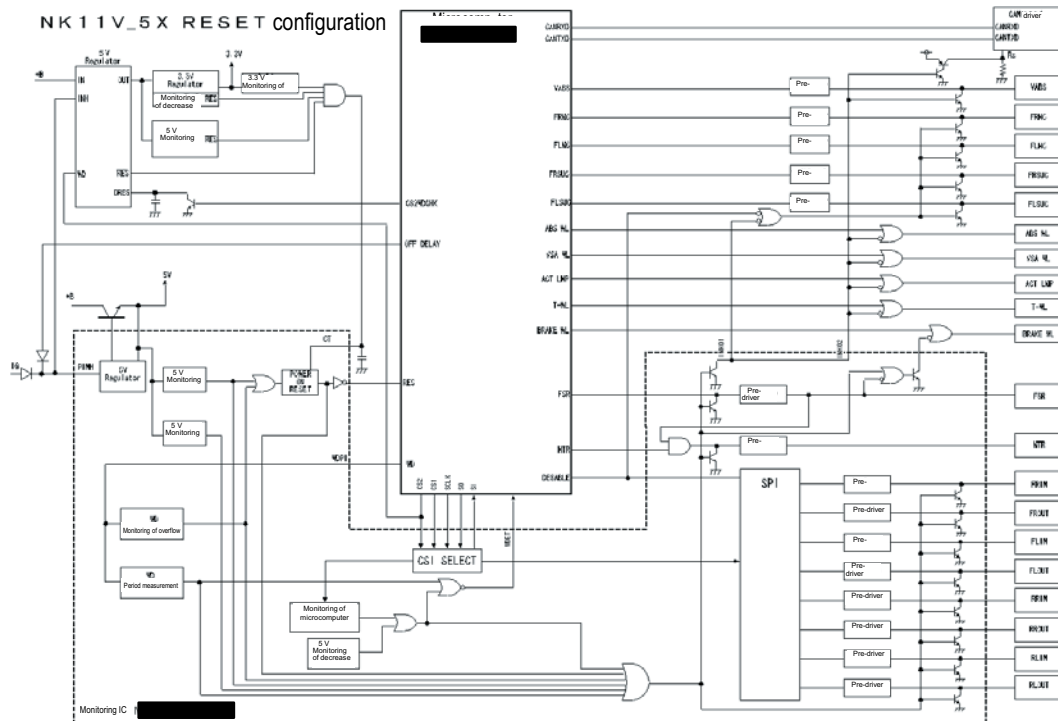
System diagram [3/3]

System: VSA/TCS control unit

△			
△			
△			
—	12. NOV. '01	Hayashibe	
	Date	Prepared by	Approved by

Supplier NEC, Nesstech

[F/S diagram]



【HG-FMEA-0004】

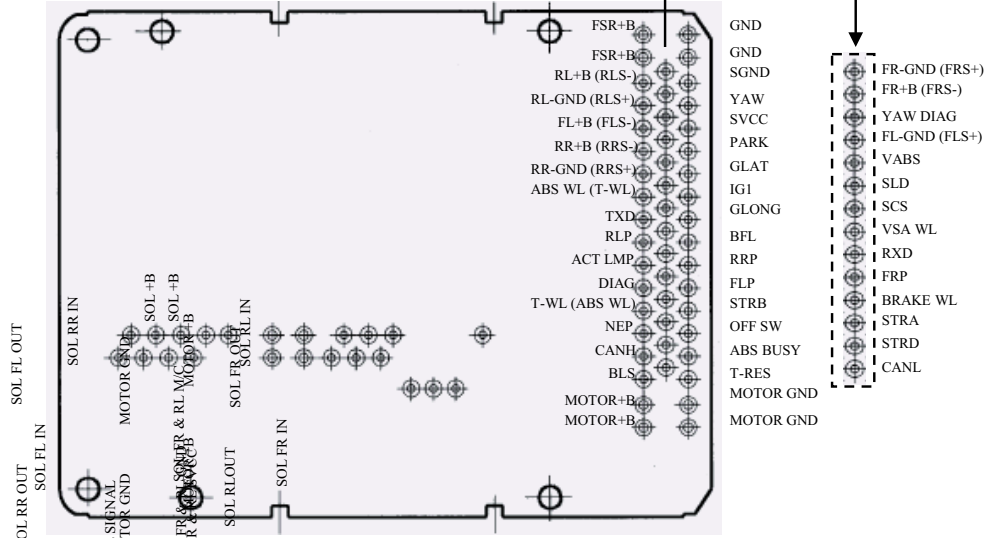
System diagram [1/1]

System: VSA/TCS control unit (connector, substrate L/O)

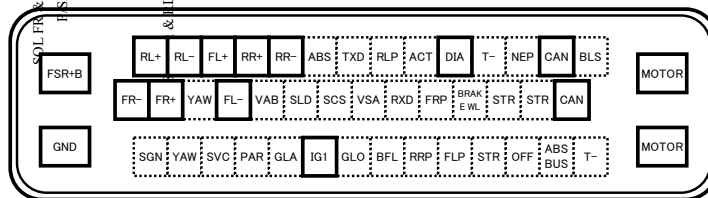
	30.Nov. '01		
	Date	Prepared by	Approved by

PIN array on ECU substrate

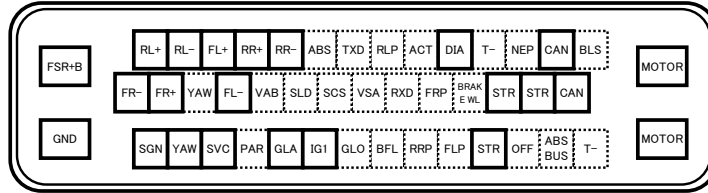
Supplier: NEC, Nesstech



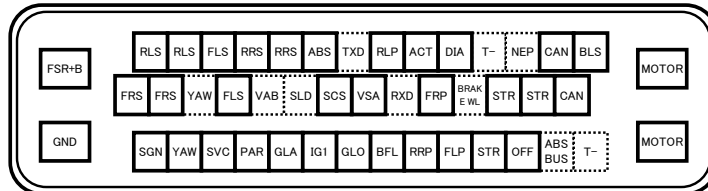
PIN array of ECU coupler viewed from the coupler fitting area



UA

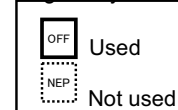


UD



GX

Legend symbols



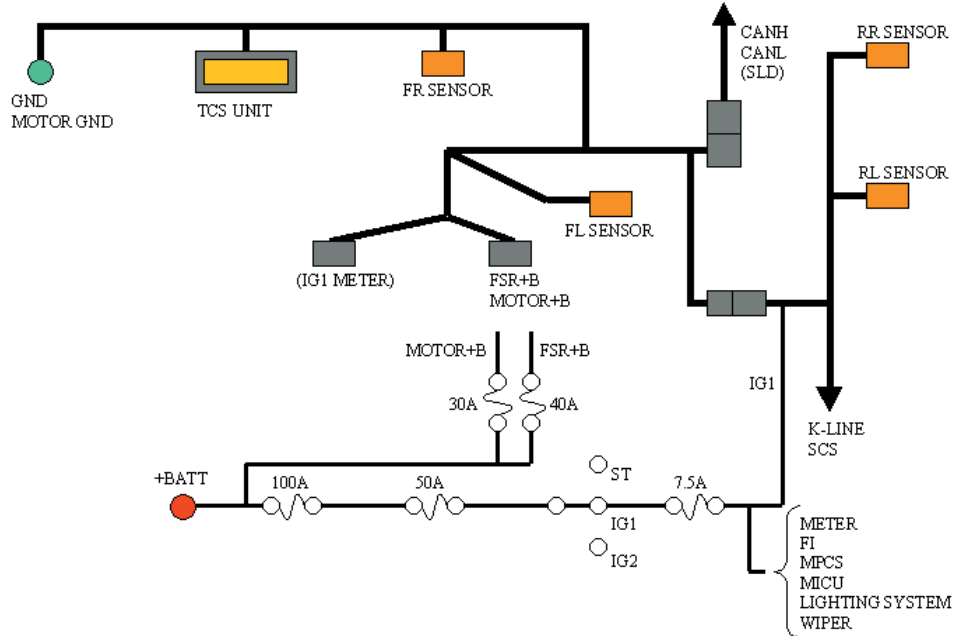
System diagram [1/1]

System: TCS control unit (UA vehicle HRN L/O)

△			
△			
△	30.Nov.' 01	Hayashibe	
	Date	Prepared by	Approved by

Supplier

【TCS】UA 4Dr D1-1 V6 AT

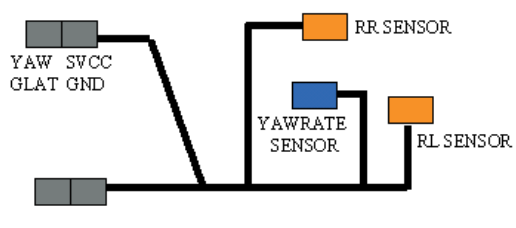
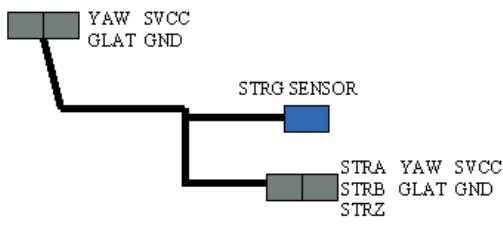
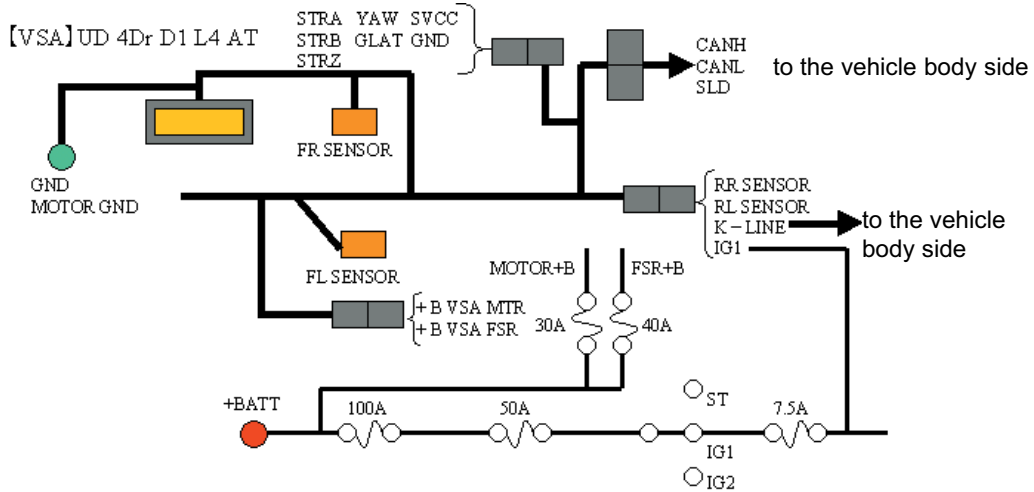


System diagram [1/1]

System: VSA control unit (UD vehicle HRN L/O)

△			
△			
△	30 Nov. '01	Hayashibe	
	Date	Prepared by	Approved by

Supplier



【HG-FMEA-0007】

Criticality matrix

System: VSA/TCS control unit

△			
△			
△	30.Nov. '01	Hayashibe	
	Date	Prepared by	Approved by

