

INFORMATION Redacted PURSUANT TO THE FREEDOM OF
INFORMATION ACT (FOIA), 5 U.S.C . 552(B)(6)

PE11-034

HONDA

11/29/2011

#Q2 Attachment

Summary Description of items "c" through "f"

VIN	Report Type	Type	Source No.	Model	Model year	Trim Level	Summary
5FNRL38958E [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012009-06-2900057	ODYSSEY	2008	TOURING	THE TRUNK LID SLAMMED ON CUSTOMER'S BACK. NEEDS NEW SHOCKS.
5FNRL38938E [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012011-07-0600824	ODYSSEY	2008	TOURING	THE HYDRAULIC ON THE TAILGATE GAVE IN AND DROPPED THE DOOR ON CUSTOMER'S SON. REAR TAILGATE LIFT NEEDED TO BE REPLACED.
5FNRL38998E [REDACTED]	INJURY	CLAIM	084310	ODYSSEY	2008	TOURING	ACCORDING TO THE NOTICE OF CLAIM: OUR LAW FIRM IS LEGAL COUNSEL TO MR. CHARLES WAGONER, A RESIDENT OF JACKONVILLE, FLORIDA. ON JULY 7, 2010, MR. WAGONER'S SPINE WAS SERIOUSLY INJURED WHEN THE REAR POWER LIFTGATE ON HIS 2008 HONDA ODYSSEY SUDDENLY AND UNEXPECTEDLY CAME DOWN ON HIS BACK FROM THE FULLY OPEN POSITION
5FNRL38908E [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012010-11-1800731	ODYSSEY	2008	TOURING	THE REAR LIFT GATE FAILED. REAR LIFT GATE STRUTS REPLACED.
5FNRL38649E [REDACTED]	INJURY	FIELD REPORT	3027789	ODYSSEY	2009	EX-L	TAILGATE CAME DOWN ON HER AND WOULD NOT STOP.
5FNRL38649E [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012010-07-1600318	ODYSSEY	2009	EX-L	CUSTOMER OPENED THE TAILGATE USING THE REMOTE AND PUT THE REMOTE IN HER PANTS POCKET WHILE SHE TRIED TO LOAD BOXES IN THE BACK OF THE TRUNK WHEN THE TAILGATE STARTED TO CLOSE AND HIT HER ON THE BACK OF THE HEAD AND NECK.
5FNRL38699E [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012010-06-2300337	ODYSSEY	2009	EX-L	POWER GATE/TAILGATE HAS FALLEN ON CUSTOMER.
5FNRL38619E [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012011-07-1802616	ODYSSEY	2009	EX-L	THE REAR HATCH CAME DOWN ON CUSTOMER WHEN SHE WAS LOADING THE VEHICLE. DEALERSHIP IS STATING THE REAR STRUTS NEEDS TO BE REPLACED.
5FNRL38789E [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012010-07-1200548	ODYSSEY	2009	EX-L	THE BACK TRUNK OF THE VEHICLE FELL DOWN KNOCKING HER OUT.
5FNRL38719E [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012011-05-0400665	ODYSSEY	2009	EX-L	THE BACK OF THE VEHICLE WAS OPENED, IT MADE A NOISE AND CAME DOWN VERY HARD ON CUSTOMER'S HUSBAND.

Summary Description of items "c" through "f"

VIN	Report Type	Type	Source No.	Model	Model year	Trim Level	Summary
5FNRL38759B [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012009-08-1900934	ODYSSEY	2009	EX-L	HAVING PROBLEMS WITH THE TAILGATE, GOES UP AND STARTS BEEPING, DOESN'T STAY OPEN, CLOSES ON YOU.
5FNRL38719B [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012010-02-2501293	ODYSSEY	2009	EX-L	WIFE WAS HIT IN THE HEAD BY THE TAILGATE OF THIS ODYSSEY.
5FNRL38719B [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012009-08-0300739	ODYSSEY	2009	EX-L	THE HYDRAULICS FAILED AND THE TAILGATE CAME DOWN ON CUSTOMER'S HEAD.
5FNRL38649B [REDACTED]	INJURY	CUSTOMER COMPLAINT	N032010-05-1201680	ODYSSEY	2009	EX-L	THE TRUNK'S SHOCKS LOST POWER AND THE TRUNK CAME AND SLAMMED ON CUSTOMER'S HEAD.
5FNRL38649B [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012010-05-1201700	ODYSSEY	2009	EX-L	TAILGATE FELL AND HIT CUSTOMER ON HEAD. BOTH SHOCKS REPLACED.
5FNRL38959B [REDACTED]	INJURY	CUSTOMER COMPLAINT	N012010-04-1400388	ODYSSEY	2009	TOURING	HAD THE REAR HATCH (TAILGATE) REPAIRED AFTER IT SLAMMED INTO HER BACK AND NOW THE VEHICLE MAKES A WEIRD NOISE WHEN BEING USED.

Summary Description of items "e" through "f"

Caption	Court	Docket Number	Date Served	Make	Model year	Trim Level	VIN	Summary
CHARLES WAGONER VS. AMERICAN HONDA MOTOR CO.		1155-01	1/24/2011	ODYSSEY	2008	TOURING	5FNRL38998B [REDACTED]	ACCORDING TO THE NOTICE OF CLAIM: OUR LAW FIRM IS LEGAL COUNSEL TO MR. CHARLES WAGONER, A RESIDENT OF JACKONVILLE, FLORIDA. ON JULY 7, 2010, MR. WAGONER'S SPINE WAS SERIOUSLY INJURED WHEN THE REAR POWER LIFTGATE ON HIS 2008 HONDA ODYSSEY SUDDENLY AND UNEXPECTEDLY CAME DOWN ON HIS BACK FROM THE FULLY OPEN POSITION

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#Q6 LON_Problem

Labor Operation Number	Labor Operation Number Description
414199	FRONT DAMPER STRAIGHT TIME (WITH PARTS)
416199	FRONT BUSHINGS, STABILIZER BAR STRAIGHT TIME (WITH PARTS)
417101	DAMPER/SHOCK ABSORBER ASSEMBLIES, BOTH REAR - REPLACE. INCLUDES: ALIGNMENT (EXCEPT `06 CIVIC) S/B# 09-005
417105	DAMPER/SHOCK ABSORBER ASSEMBLY, LEFT REAR - REPLACE. INCLUDES ALIGNMENT
417110	DAMPER/SHOCK ABSORBER ASSEMBLY, RIGHT REAR - REPLACE.
417199	REAR DAMPER STRAIGHT TIME (WITH PARTS)
714145	TAILLIGHT LENS OR BACKUP LIGHT LENS ON TRUNK LID/HATCH/TAILGATE, LEFT - REPLACE.
714199	BRAKE LIGHT OR HIGH-MOUNT BRAKE LIGHT STRAIGHT TIME (WITH PARTS)
715110	CEILING OR SPOT LIGHT BULB, FRONT - REPLACE.
737199	WIRE HARNESS STRAIGHT TIME (WITH PARTS)
745509	SWITCH/CIRCUIT - DIAGNOSE OR INPUT TEST.
811199	REAR BUMPER STRAIGHT TIME (WITH PARTS)
8111B1	STAY, REAR BUMPER RIGHT - REPLACE. (1)NOTE: SAME TIME FOR TWO UNITS (2)EXCLUDES: PAINTING COST
8111B4	STAY, REAR BUMPER BOTH - REPLACE. EXCLUDES: PAINTING COST
812199	HOOD AND RELEASE CABLE STRAIGHT TIME (WITH PARTS)
817199	DOOR LOCKS STRAIGHT TIME (WITH PARTS)
8171B6	TRUNK/TAILGATE/HATCH ROOF LATCH - REPLACE.
8171B7	TAILGATE LATCH AND CLOSER - REPLACE
823097	REAR COMPARTMENT PARTS ONLY
823099	REAR COMPARTMENT STRAIGHT TIME (WITHOUT PARTS)
823120	TRUNK LID/TAILGATE/STAY ASSEMBLY (BOTH) - REPLACE.
823125	TRUNK LID, TAILGATE/ STAY ASSEMBLY, LEFT - REPLACE.
823130	TRUNK LID/ TAILGATE/ STAY ASSEMBLY, RIGHT - REPLACE.
823199	REAR COMPARTMENT STRAIGHT TIME (WITH PARTS)
8231A7	TAILGATE OPENER SWITCH - REPLACE.
8231A9	TRUNK/TAILGATE/HATCH STRIKER - REPLACE.
8231B5	TRUNK/TAILGATE/HATCH OPENER ACTUATOR - REPLACE.
8231C4	TRUNK/TAILGATE/HATCH HINGE, LEFT - REPLACE.
8231G1	TRUNK/TAILGATE/HATCH HINGES, BOTH - REPLACE.
8231J8	POWER TAILGATE MOTOR - REPLACE.

Labor Operation Number	Labor Operation Number Description
8231J9	POWER TAILGATE GEAR CASE - REPLACE.
8231K8	POWER TAILGATE ARM UNIT- REPLACE.
823380	TRUNK LID, TAILGATE OR HATCH - ADJUST. S/B# 04-022
8241C2	MOULDING, LEFT REAR DOOR SASH - REPLACE.
826099	DOOR GLASS AND HARDWARD, LEFT FRONT STRAIGHT TIME (WITHOUT PARTS
838199	DOOR WEATHERSTRIP, RIGHT REAR STRAIGHT TIME (WITH PARTS)
841099	INSTRUMENT PANEL STRAIGHT TIME (WITHOUT PARTS)
8411E1	GLOVE BOX DAMPER - REPLACE.
8411F6	CONSOLE BOX - REPLACE.

Problem Code	Problem Code Description
00201	BENT
00401	DISTORTED
00504	PREMATURE WEAR AND TEAR
01101	PERMANENT SET-IN FATIGUE
01102	DETERIORATED
01701	HAIRLINE FRACTURE
01801	BROKEN
02301	SEIZED
03001	BINDING/STICKING
03214	ERRONEOUS OPERATION
03217	NOT OPERATING
05701	DETACHED
06201	LOOSE (POORLY FITTED)
07403	INTERFERENCE
07404	POOR ASSEMBLY
07405	IMPROPERLY TIGHTENED
07406	IMPROPERLY ADJUSTED
07407	INSUFFICIENT SEALING MATERIAL
07408	IMPROPERLY SEALED
07409	INSUFFICIENT GREASE/OIL
07410	INSUFFICIENT OR NOT INJECTED
08001	INCORRECT ASSEMBLY

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#Q8 QIS HMA09070801

REDACTED




Honda Manufacturing of Alabama

Issued By HMA

QUALITY IMPROVEMENT SHEET (Q.I.S.)

COUNTERMEASURE CONTROL#	RESPONSIBLE SITE AND DEPARTMENT		Rank
HMA09070801	HMA HMA PARTS QUALITY		B
INFORMATION SOURCE	Problem Definition ID	CBU Category	
TTB	PDHMA090618002	EXTERIOR	
Supplier	Affected Model		RESPONSIBLE DPT ISSUE DATE
STABILUS	HMA -ODYSSEY		7/15/2009
Market Information Issuer	Lead Quality Investigator	Investigator Team	THEME UP DATE
Joshua McClung	Shaley Parker	HMA Exterior	7/8/2009
Title			
Tailgate Open Stay Failures			
Customer Complaint			
Tailgate won't stay open.			
Dealer Repair			
Replace one or both struts.			
Finish Date	1st COUNTERMEASURE APPLICATION DATE	C/M Target Date	
3/16/2010	9/24/2009	11/11/2009	
Market Data Investigation			
Thus far for 09M Odyssey: 88 claims to date, of which 10 occurred at PDI. Avg. days to fail: 115, avg. miles to fail: 5,263, total cost: \$10,302, defect rate: 0.14%.			
Vehicles with power tailgates fail more often than those without. Also claims are much higher during warmer months and southern regions.			
Investigation Cause Analysis			
Analyzed four sets of returned parts. Three of four sets caused tailgate to fail on CBU (fourth set returned for oil leaking contention). Of failed parts, two sets returned with completely compressed right side parts (parts failed due to complete gas loss). On remaining failing set, 30mm groove/scratch was found on left side rod. Testing parts on this set individually showed left side part was causing tailgate to not hold open.			

VIEW BEFORE COUNTERMEASURE	VIEW AFTER COUNTERMEASURE
	x

Responsible Department Root Cause Analysis

Rod damage due to rod contact with the rod guide. The damaged rod then damages (wears) the seal which results in gas loss.

The C/M design applied to the following VIN's.
 A710's applied to VIN 5FNRL3H65AB [REDACTED]
 A210's applied to VIN 5FNRL3H57AB [REDACTED]

COUNTERMEASURE BY		COUNTERMEASURE CONTROL#	
11/11/2009		HMA09070801	
Recomnd Sold Product Treatment	Recomnd Stock Product Treatment	Recmd Part Stock Change	Design Change Number
NORMAL WARRANTY	NO TREATMENT	NO CHANGE	
CoreMQ Problem Definition ID		CoreMQ Problem Definition Name	
281		TG Open Stay Replacements	

C/M Title	C/M Location	C/M Type
Double spacer design change	Frame Factory	Part Modification / Drawing Change

CM Details

An additional spacer was added, changing the contact angle of the rod to the guide. The seal material was changed. The oil was changed. The rod and tube length was changed slightly to compensate for the additional spacer.

Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
9/24/2009	HMA	1	2010	ODYSSEY		

Recommended Field Action

To be determined by QA & AH

Countermeasure Effectiveness

No issues reported from AF since D/C applied. All testing by supplier and QA shows that this is an improved performance over previous design.

AH - Domestic			
Sales Division Engineer	Sold Product Treatment	Product Treatment	Part Stock Change
	NORMAL WARRANTY	INSPECTION	PARTS CENTER STOCK
Service Action Report	Service Bulletin Number	After Service Part Number	
	None	Same as original	
AH - Export			
Sales Division Engineer	Sold Product Treatment	Product Treatment	Part Stock Change
Service Action Report	Service Bulletin Number	After Service Part Number	
CH			
Sales Division Engineer	Sold Product Treatment	Product Treatment	Part Stock Change
Service Action Report	Service Bulletin Number	After Service Part Number	
Part Number List		Part Group/Subgroup List	
74820 - STAY, TAILGATE OPEN		TAILGATE / TRUNK -	

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#Q8 QIS SHJA07101201

REDACTED



Supplier

Honda Manufacturing of Alabama

Issued By HMA

QUALITY IMPROVEMENT SHEET (Q.I.S.)

COUNTERMEASURE CONTROL#	RESPONSIBLE SITE AND DEPARTMENT		Rank
SHJA07101201	HMA HMA PARTS QUALITY		B
INFORMATION SOURCE	Problem Definition ID	CBU Category	
TTB		TBD	
Supplier	Affected Model		RESPONSIBLE DPT ISSUE DATE
STABILUS	HMA-ODYSSEY		11/2/2007
Market Information Issuer	Lead Quality Investigator	Investigator Team	THEME UP DATE
Joshua McClung	Miles Akins	HMA Exterior	10/12/2007
Title			
Odyssey Tailgate Open Stay Failure			
Customer Complaint			
Customers find the tailgate will not stay up. Dealers replace the tailgate stay(s) to repair.			
Dealer Repair			
<QIS from old system. No specific Dealer Repair text exists>			
Finish Date	1st COUNTERMEASURE APPLICATION DATE	C/M Target Date	
10/9/2008	3/26/2007	11/30/2007	
Market Data Investigation			
07M since previous countermeasure (4/4/2007): 23 claims to date, defect rate: 0.043%, six 0-day claims. Avg. miles to fail: 2,236, total cost: \$2,519.			
Since countermeasure defect rate appears to be following same trend.			
Investigation Cause Analysis			
There appears to be no improvement in failure trend since the countermeasures from the last QIS were implemented. QA requests that PQ investigate failures with the supplier.			
QA has received 16 warranty parts from vehicles produced after the last c/m. Of these 16 parts, 4 units had before c/m parts. After a c/m has been implemented by the supplier, QA requests that PQ work with supplier and purchasing to determine how many parts are in HMA safety stock cages, supplier's inventory, and on order for production at HMA. QA will work with AH to determine how many before c/m parts are being used for service parts. QA will use these inventory counts to determine if it is better to use these before c/m parts or to scrap them.			

VIEW BEFORE COUNTERMEASURE	VIEW AFTER COUNTERMEASURE
x	x

Responsible Department Root Cause Analysis

There were 78 parts returned to Stabilus for this QIS for analysis.
 - 5 were found to be due to damage from the customer.
 - 8 were found to have "bullet damage" due to misassembly of the seal to the rod in Stabilus process.
 - 14 were found to have a rod defect from the raw material supplier.
 - 51 were found to have rod to piston package concentricity out of spec causing the "side loading" failures.

COUNTERMEASURE BY		COUNTERMEASURE CONTROL#	
11/30/2007		SHJA07101201	
Recomnd Sold Product Treatment	Recomnd Stock Product Treatment	Recmd Part Stock Change	Design Change Number
NORMAL WARRANTY	NO TREATMENT	NO CHANGE	
CoreMQ Problem Definition ID		CoreMQ Problem Definition Name	

C/M Title	C/M Location	C/M Type
Tach added to EC tester	Frame Factory	Other

CM Details

CM from old system

Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
11/5/2007	HMA	1	9999	UNKNOWN		Tach added to EC tester

C/M Title	C/M Location	C/M Type
Bullet chg to Delrin	Frame Factory	Other

CM Details

CM from old system

Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
5/14/2007	HMA	2	9999	UNKNOWN		Bullet chg to Delrin

C/M Title	C/M Location	C/M Type

Chg spool feed angle		Frame Factory			Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
10/11/2007	HMA	2	9999	UNKNOWN		Chg spool feed angle
C/M Title						
Chg S/U instructions		Frame Factory			Other	
CM Details						
<p>- For the torn seal due to "bullet damage", the steel "bullet" was replaced with a plastic one made of Delrin. This was applied at STMX on 4/15/07 lot # 120/07 arrived at HMA on 5/13/07.</p> <p>- For the side load scratches which due to rod to piston concentricity, the C/M was to change the S/U instructions to include the use of a gauge block to ensure proper riveting. This was applied on 03/30/07 at STMX and applied to lot# 093/07 arrived at HMA on 04/16/07. However, a hard C/M was applied to the rivetting machines of eliminating the pusher and nest to a set of grippers that hold the rod to ensure proper CC during rivetting. This was applied at STMX on 02/22/08 but due to no receipt of IPP tags, a FGV is estimated at 04/01/08. It was confirmed that after C/M lot dates were on line at this time.</p> <p>- There were two types of material defects in the rods that were found - voids and laps/seams. Both of these were due to slag getting into the material during processing at the raw material supplier. STMX installed their C/M of locking out the Eddy current reject box on 03/09/07 lot # 071/07 arrived at HMA on 03/25/07.</p> <p>- The sub-supplier replaced the forks on their forklifts from square to round to prevent handling damage on 08/10/07. They also replaced their EC head on 8/14 and re-trained their operators. They changed the material offload spool feed angle from 45 to 0 degrees on 08/17/07 to eliminate coils catching on each other. All of these supplier "improvements" were due to a change in suppliers from Mexico to US. These changes applied to Stabilus lot# 270/07 and are reported to have arrived at HMA on 10/10/07. The C/M of adjusting their EC tester at STMX was not until 12/06/07 lot# 340/07 arrived at HMA on 12/19/07.</p>						

PAGE CONTAINS BUSINESS CONFIDENTIAL INFORMATION

Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
1/4/2008	HMA	1	2008	ODYSSEY		5KBRL38768E [REDACTED]
4/1/2008	HMA	1	2008	ODYSSEY		5FNRL38468E [REDACTED]
1/2/2008	HMA	1	2008	ODYSSEY		5KBRL38858E [REDACTED]
12/20/2007	HMA	1	2008	ODYSSEY		5FNRL38618E [REDACTED]
5/14/2007	HMA	1	2007	ODYSSEY		Bullet chg to Delrin
4/1/2008	HMA	1	2008	ODYSSEY		5FNRL38618E [REDACTED]
10/11/2007	HMA	1	2007	ODYSSEY		Chg spool feed angle
12/21/2007	HMA	1	2008	ODYSSEY		5FNRL38798E [REDACTED]
4/17/2007	HMA	1	2007	ODYSSEY		Chg S/U instructions
4/1/2008	HMA	1	2008	ODYSSEY		5KBRL38238E [REDACTED]
11/5/2007	HMA	1	2008	ODYSSEY		Tach added to EC tester
4/18/2007	HMA	1	2007	ODYSSEY		5KBRL38677E [REDACTED]
4/1/2008	HMA	1	2008	ODYSSEY		CC CM grippers added
4/3/2008	HMA	1	2008	ODYSSEY		5KBRL38728E [REDACTED]
4/2/2008	HMA	1	2008	ODYSSEY		5KBRL38518B700611
4/18/2007	HMA	1	2007	ODYSSEY		5KBRL38797E [REDACTED]
1/7/2008	HMA	1	2008	ODYSSEY		5KBRL38678E [REDACTED]
4/17/2007	HMA	2	9999	UNKNOWN		Chg S/U instructions
4/1/2008	HMA	2	2008	ODYSSEY		5FNRL38708E [REDACTED]
12/20/2007	HMA	2	2008	ODYSSEY		Add pokeyoke check part
3/26/2007	HMA	2	2007	ODYSSEY		EC reject box lockout
4/1/2008	HMA	2	2008	ODYSSEY		CC CM Grippers Added

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C/M Title		C/M Location			C/M Type	
Tach added to EC tester		Frame Factory			Other	

CM Details

CM from old system

Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
11/5/2007	HMA	2	9999	UNKNOWN		Tach added to EC tester

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C/M Title		C/M Location			C/M Type	
Bullet chg to Delrin		Frame Factory			Other	

CM Details

CM from old system

Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
5/14/2007	HMA	1	9999	UNKNOWN		Bullet chg to Delrin
C/M Title						
C/M Location			C/M Type			
Chg spool feed angle			Frame Factory		Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
10/11/2007	HMA	1	9999	UNKNOWN		Chg spool feed angle
C/M Title						
C/M Location			C/M Type			
EC reject box lockout			Frame Factory		Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
3/26/2007	HMA	2	9999	UNKNOWN		EC reject box lockout
C/M Title						
C/M Location			C/M Type			
Add pokeyoke check part			Frame Factory		Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
12/20/2007	HMA	1	9999	UNKNOWN		Add pokeyoke check part
C/M Title						
C/M Location			C/M Type			
Add pokeyoke check part			Frame Factory		Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
12/20/2007	HMA	2	9999	UNKNOWN		Add pokeyoke check part
C/M Title						
C/M Location			C/M Type			
Chg S/U instructions			Frame Factory		Other	

CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
4/17/2007	HMA	1	9999	UNKNOWN		Chg S/U instructions
C/M Title		C/M Location			C/M Type	
CC CM Grippers Added		Frame Factory			Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
4/1/2008	HMA	2	9999	UNKNOWN		CC CM Grippers Added
C/M Title		C/M Location			C/M Type	
CC CM grippers added		Frame Factory			Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
4/1/2008	HMA	1	9999	UNKNOWN		CC CM grippers added
C/M Title		C/M Location			C/M Type	
EC reject box lockout		Frame Factory			Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
3/26/2007	HMA	1	9999	UNKNOWN		EC reject box lockout
C/M Title		C/M Location			C/M Type	
Containment NA		Frame Factory			Other	
CM Details						
CM from old system						
Date	Factory	Line	Year	Model	Engine/Trans	Tracking Tag
10/10/2007	HMA	1	9999	UNKNOWN		Containment NA

Recommended Field Action			
Normal warranty.			
Countermeasure Effectiveness			
Monitor warranty.			
AH - Domestic			
Sales Division Engineer	Sold Product Treatment	Product Treatment	Part Stock Change
Service Action Report	Service Bulletin Number	After Service Part Number	
AH - Export			
Sales Division Engineer	Sold Product Treatment	Product Treatment	Part Stock Change
Service Action Report	Service Bulletin Number	After Service Part Number	
CH			
Sales Division Engineer	Sold Product Treatment	Product Treatment	Part Stock Change
Service Action Report	Service Bulletin Number	After Service Part Number	
Part Number List		Part Group/Subgroup List	
74820 - STAY, TAILGATE OPEN		-	

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#Q9a

74820SHJ_ZX10M1__C47228

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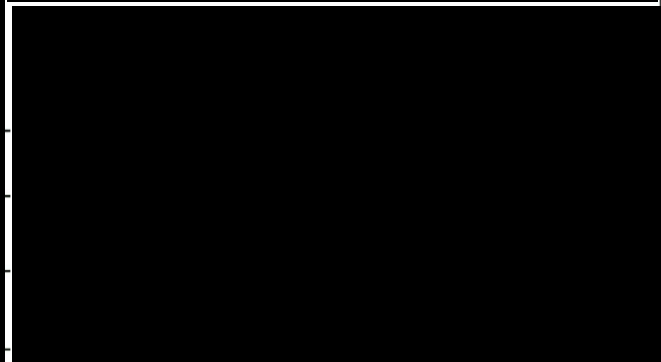
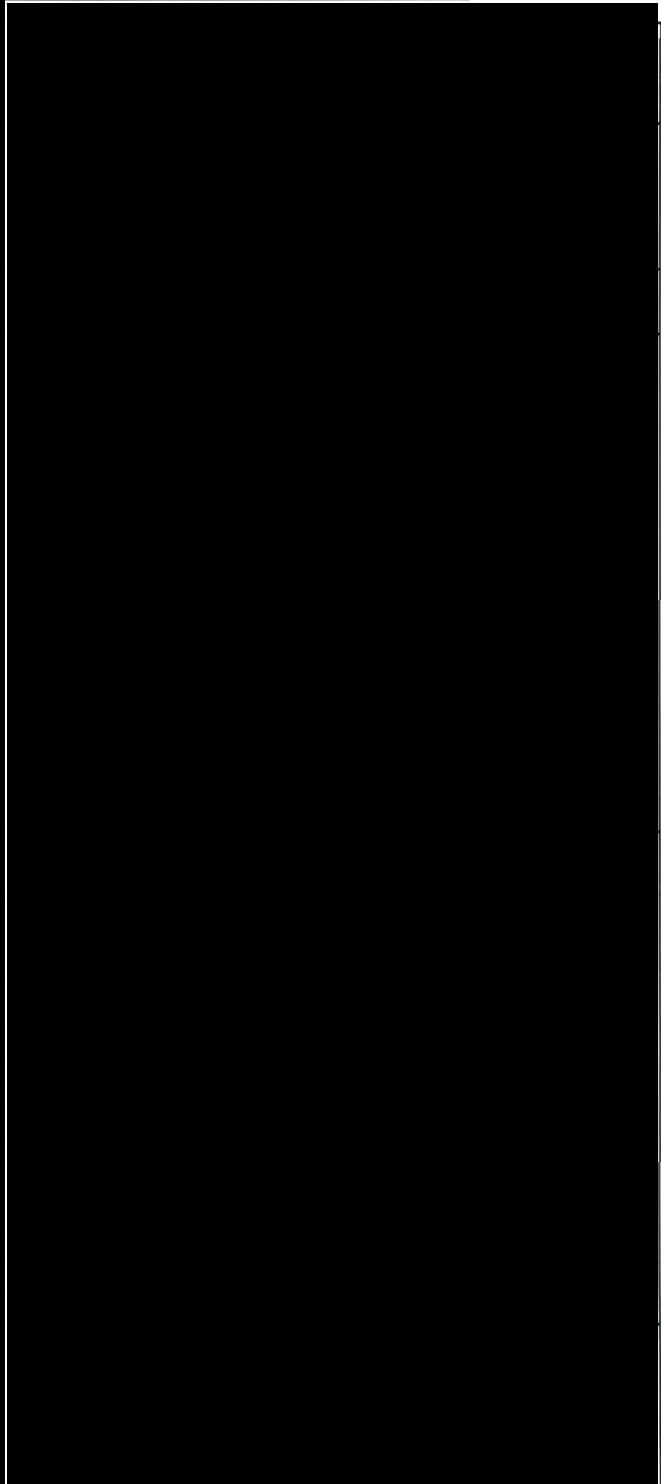
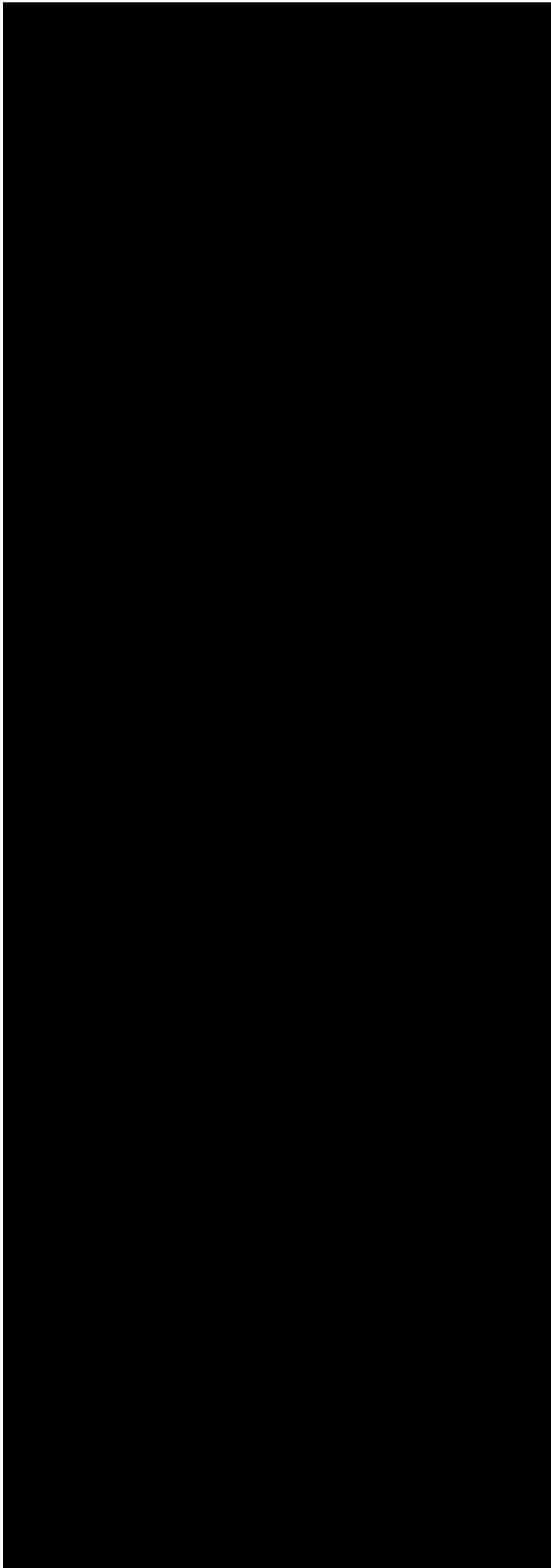
HONDA

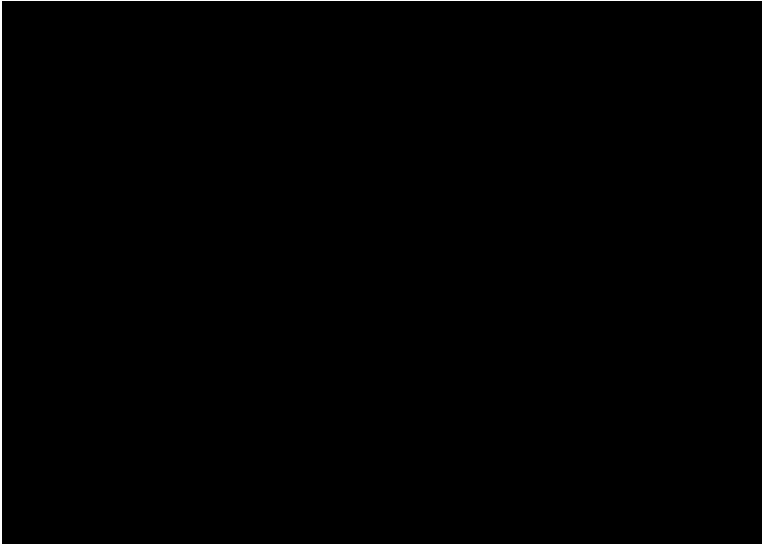
11/29/2011

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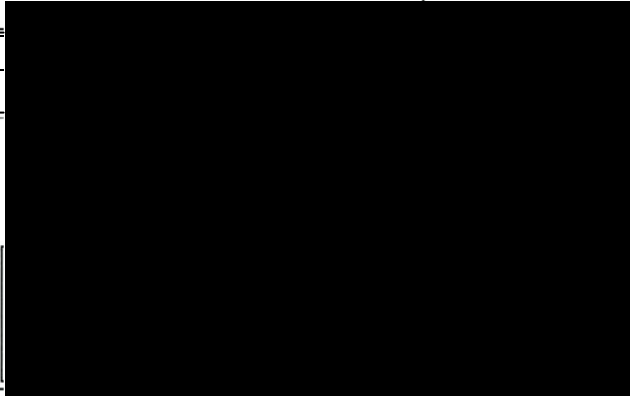
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Exterior Marketability Function



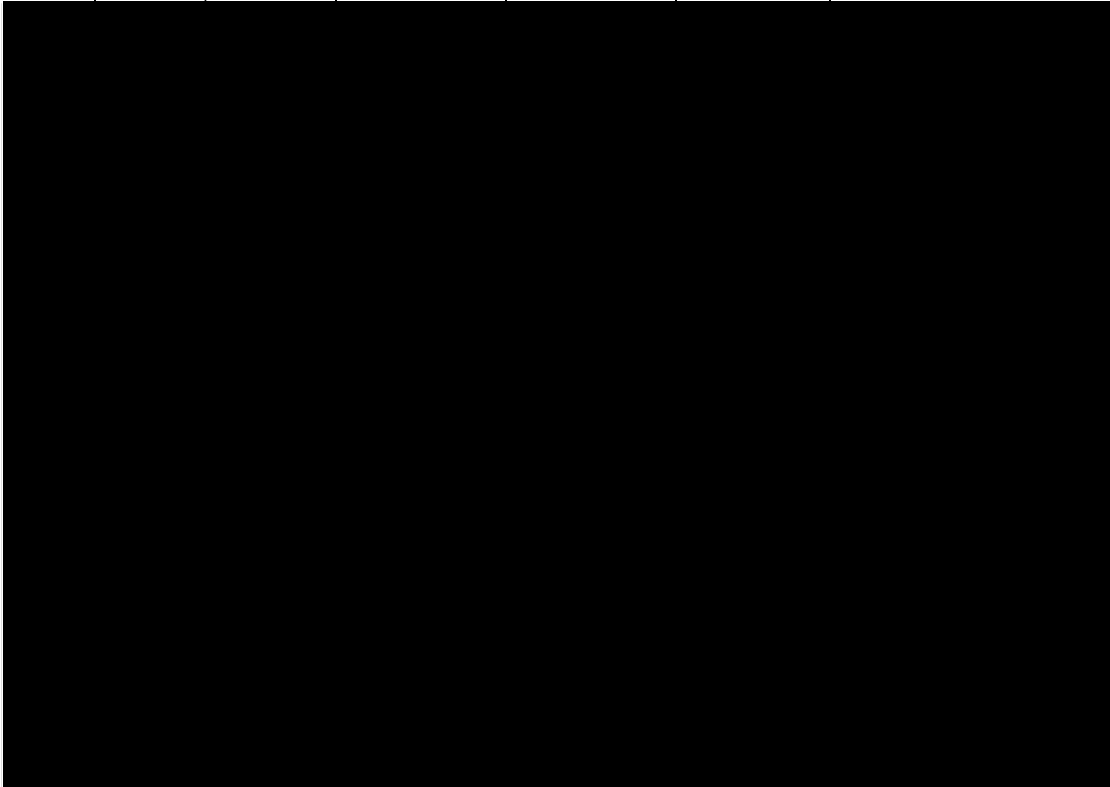


Exterior Marketability Function

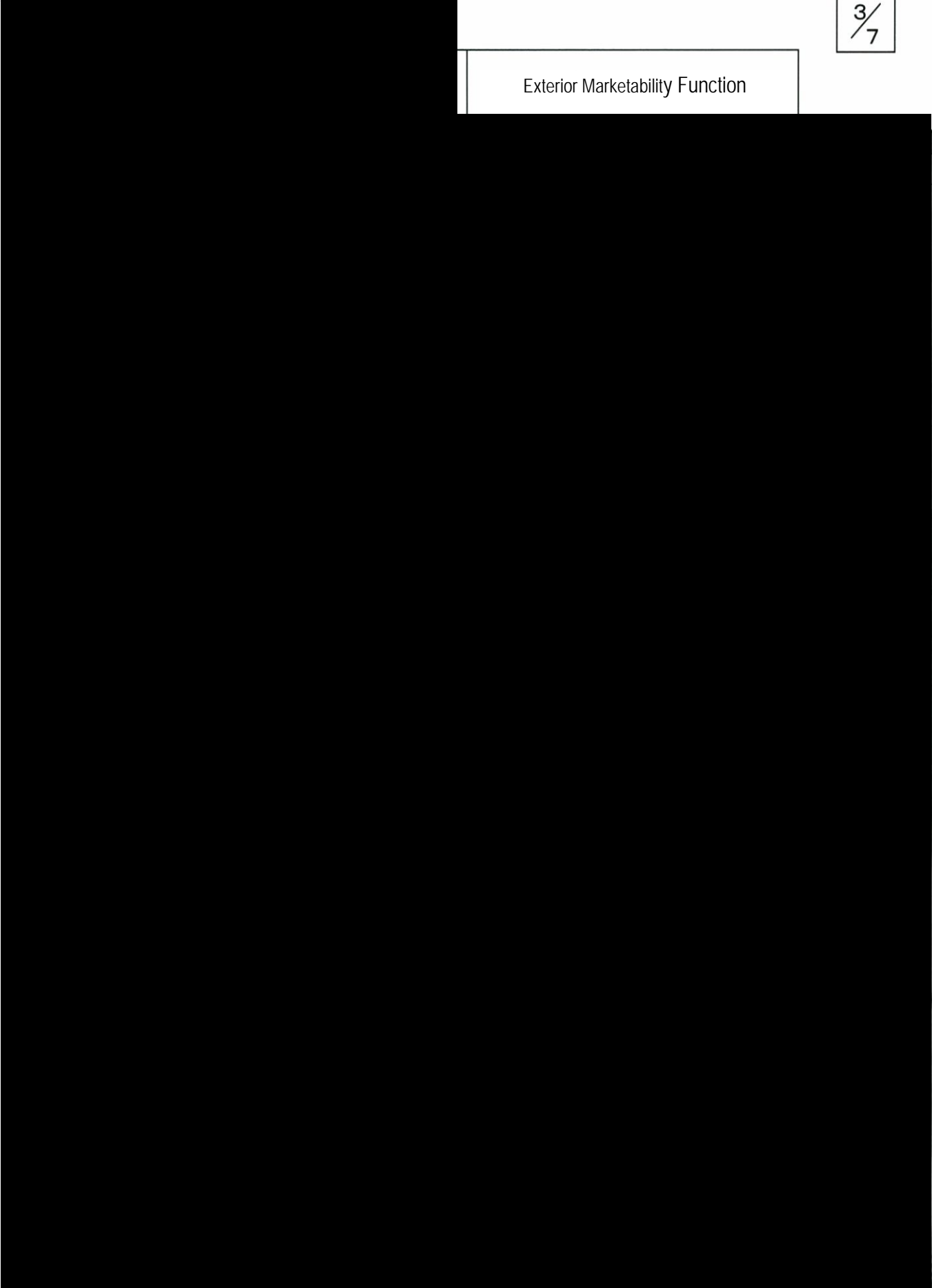


© Specification

O/Stay Tube diameter	28mm	GATE unit (wt)	36kg
O/Stay rod diameter	10mm		
O/Stay reaction force	770±15N		
O/Stay damping structure	Dynamic damping		
O/Stay oil level	3cc		



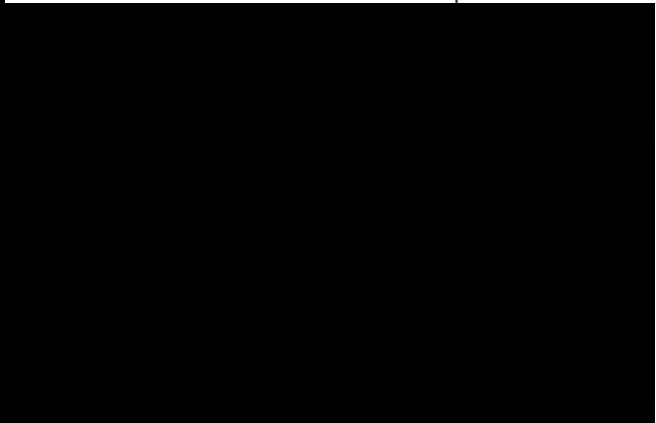
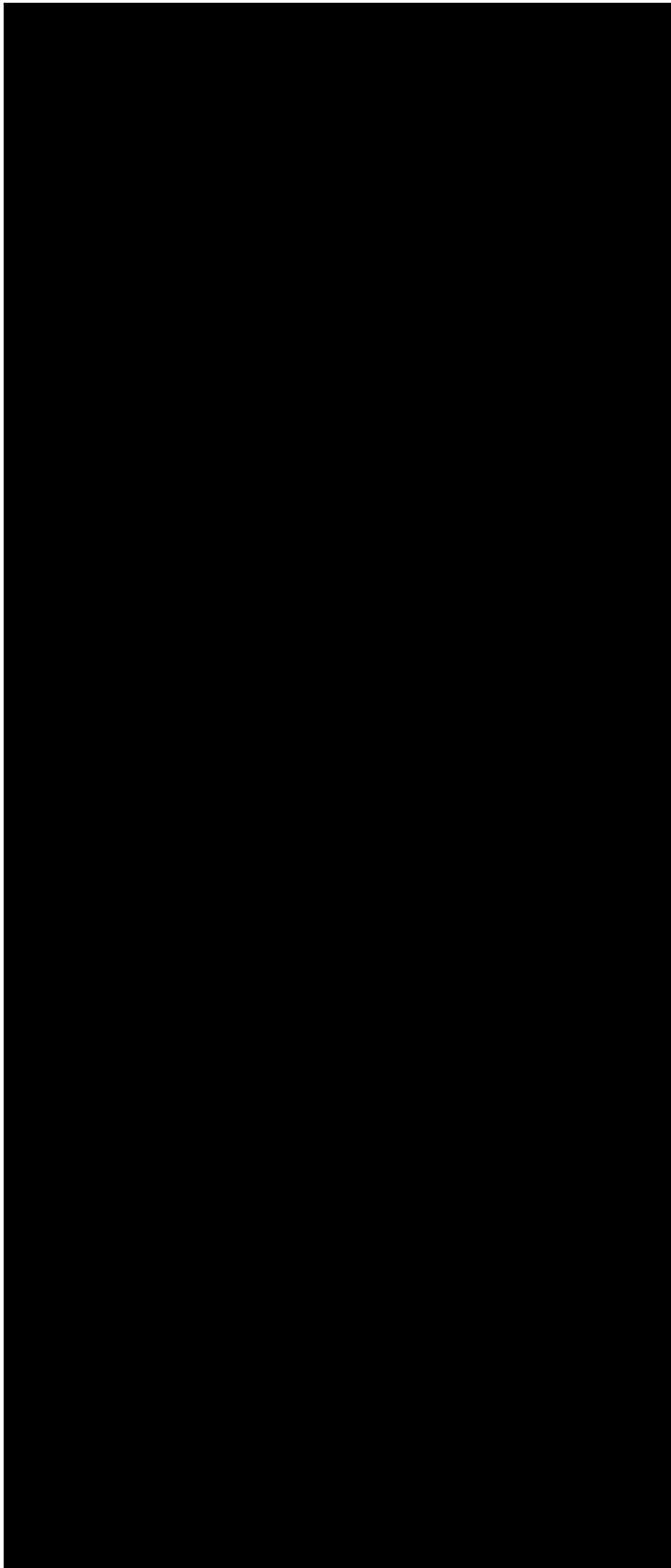
Exterior Marketability Function



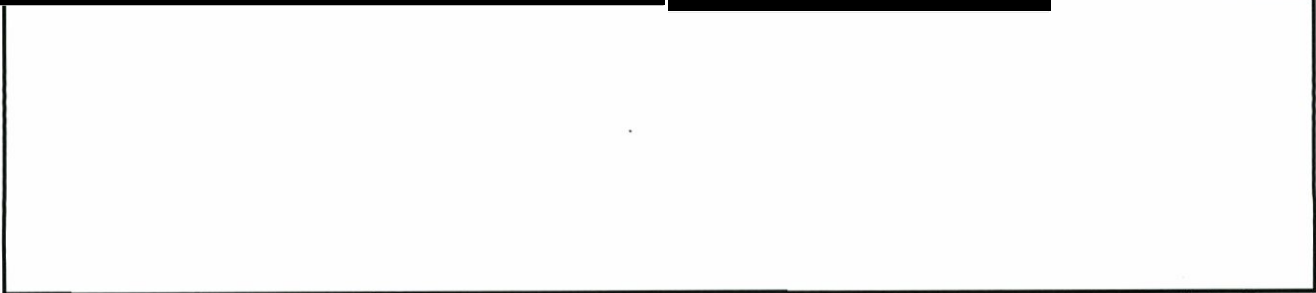
[Empty rectangular box]

ENTIRE PAGE BUSINESS CONFIDENTIAL INFORMATION

Exterior Marketability Function



	Remarks

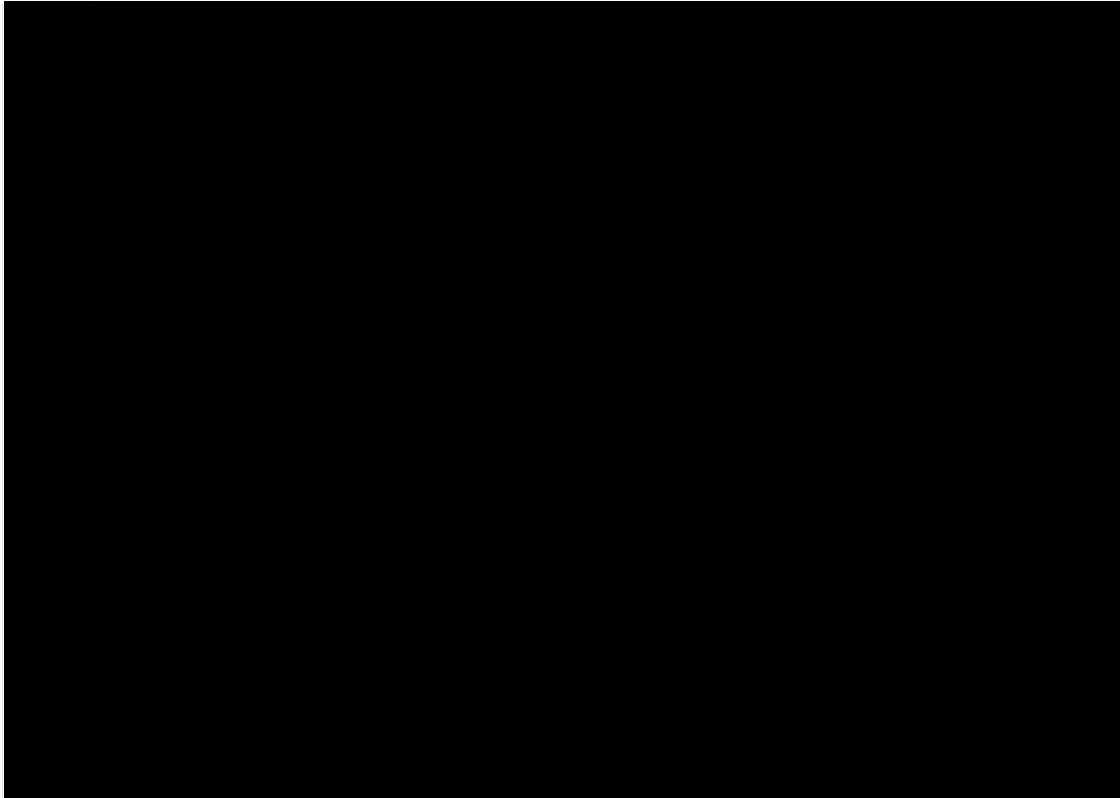




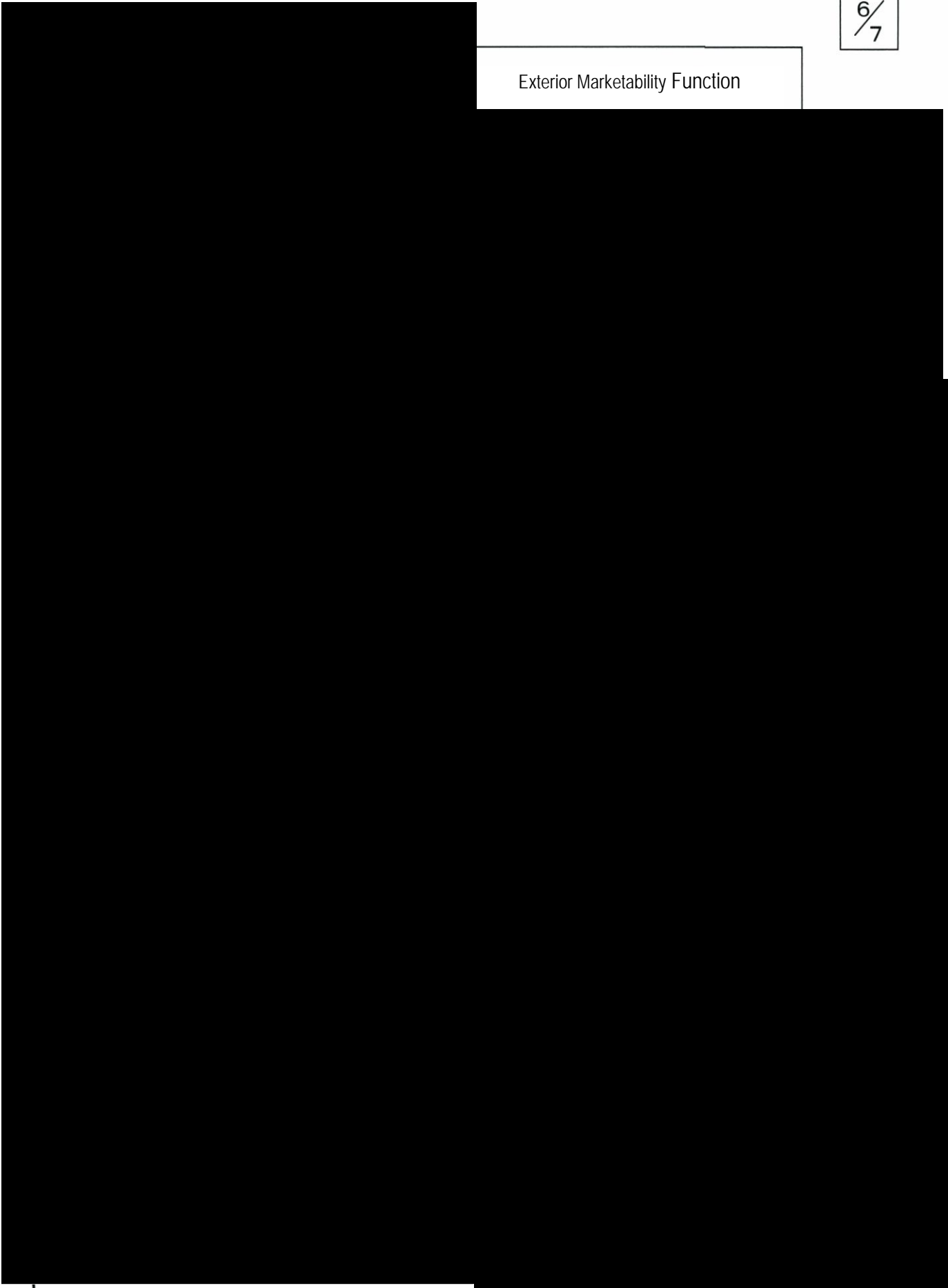
Exterior Marketability Function

©1 Specification

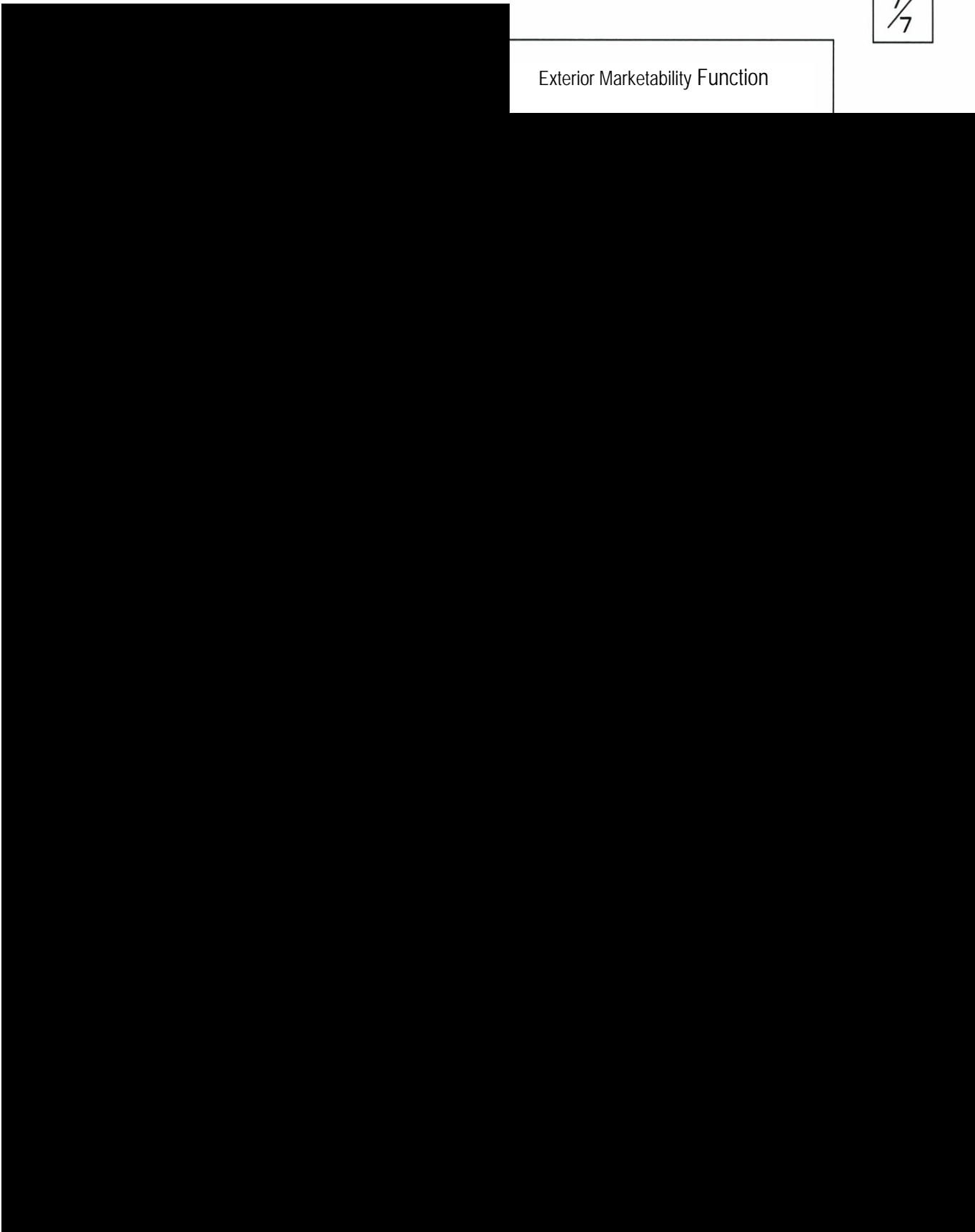
O/Stay Tube diameter	28mm	GATE unit (wt)	38.3kg
O/Stay rod diameter	10mm		
O/Stay reaction force	825±15N		
O/Stay damping structure	Dynamic damping		
O/Stay oil level	3cc		



Exterior Marketability Function



Exterior Marketability Function



PE11-034

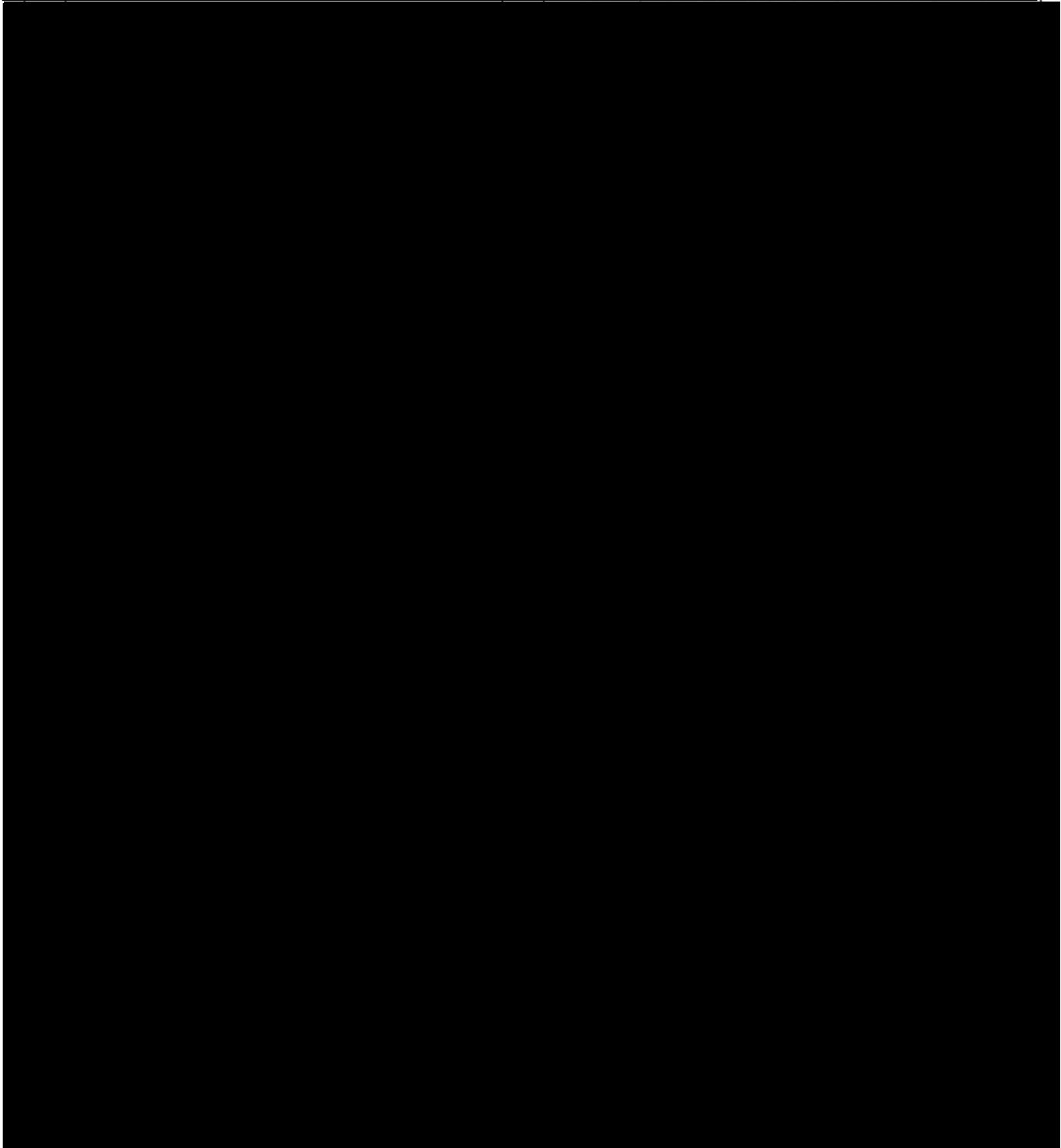
HONDA

11/29/2011

#Q9a QB08A0280022 (J)

REDACTED

外装商品性機能

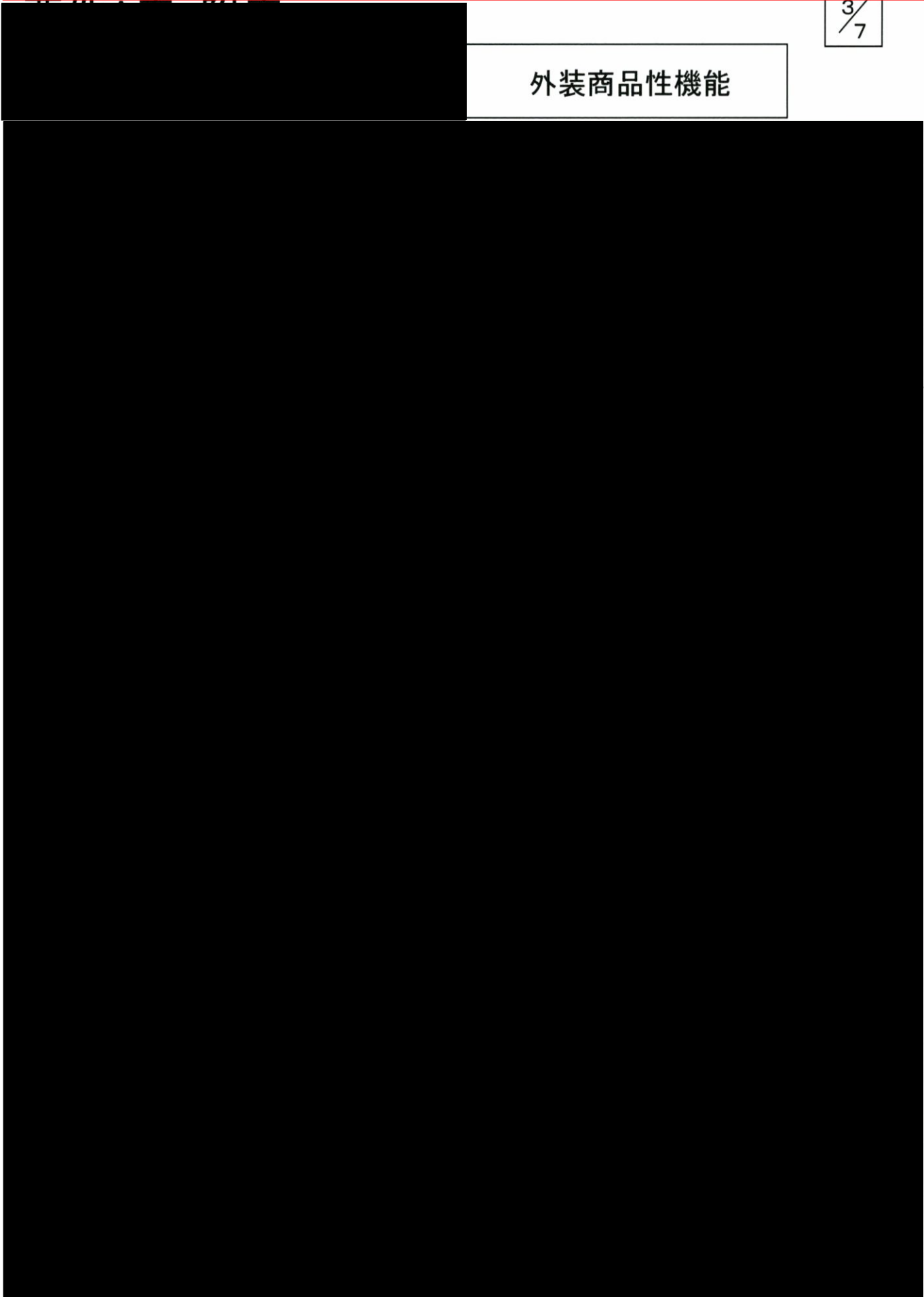


外装商品性機能

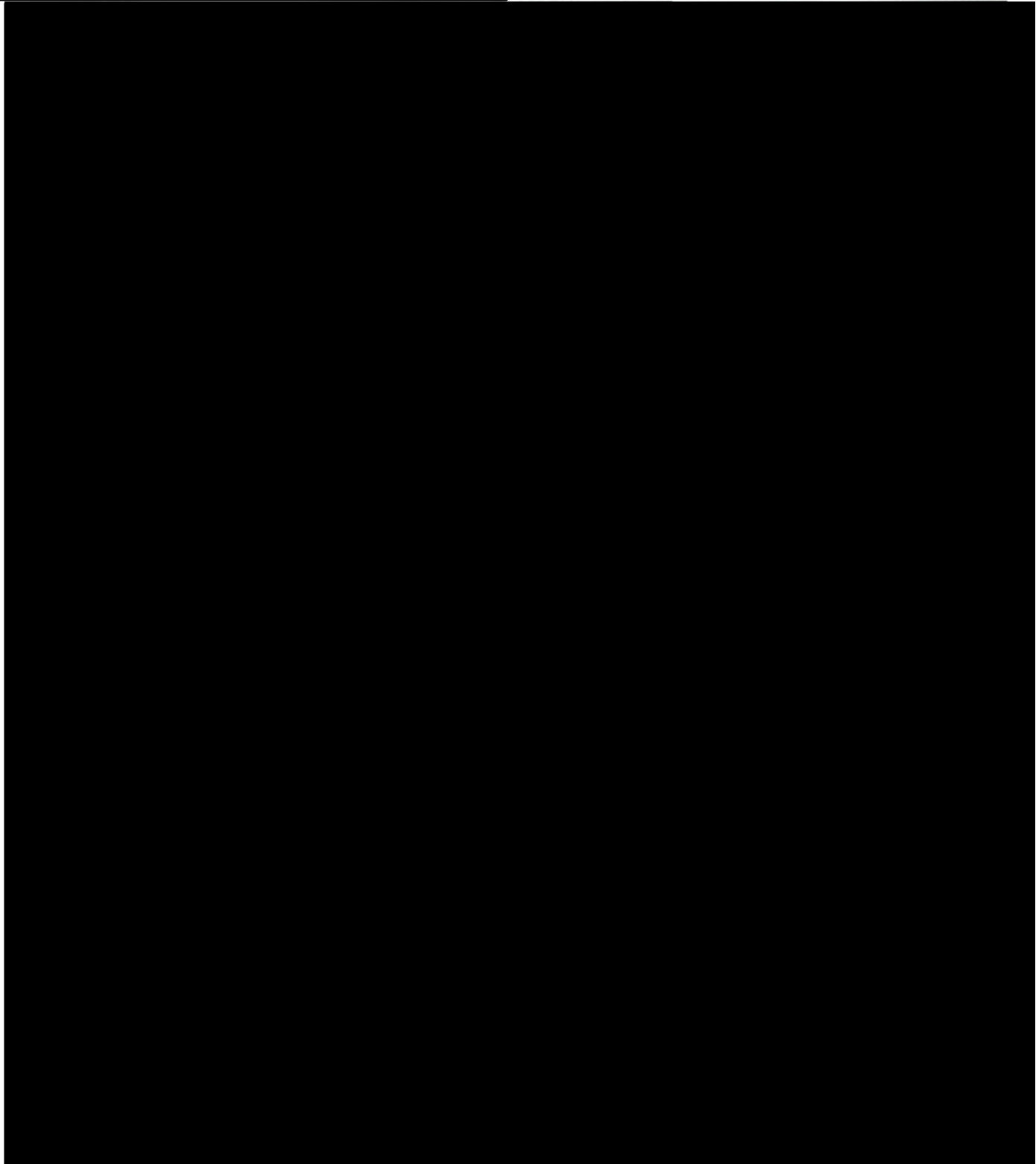
◎仕様

O/Sチューブ径	28mm	GATE単体 wt	36kg
O/Sロッド径	10mm		
O/S反力	770±15N		
O/S減衰構造	ダイミクダンポンク		
O/Sオイル量	3cc		

外装商品性機能



外装商品性機能

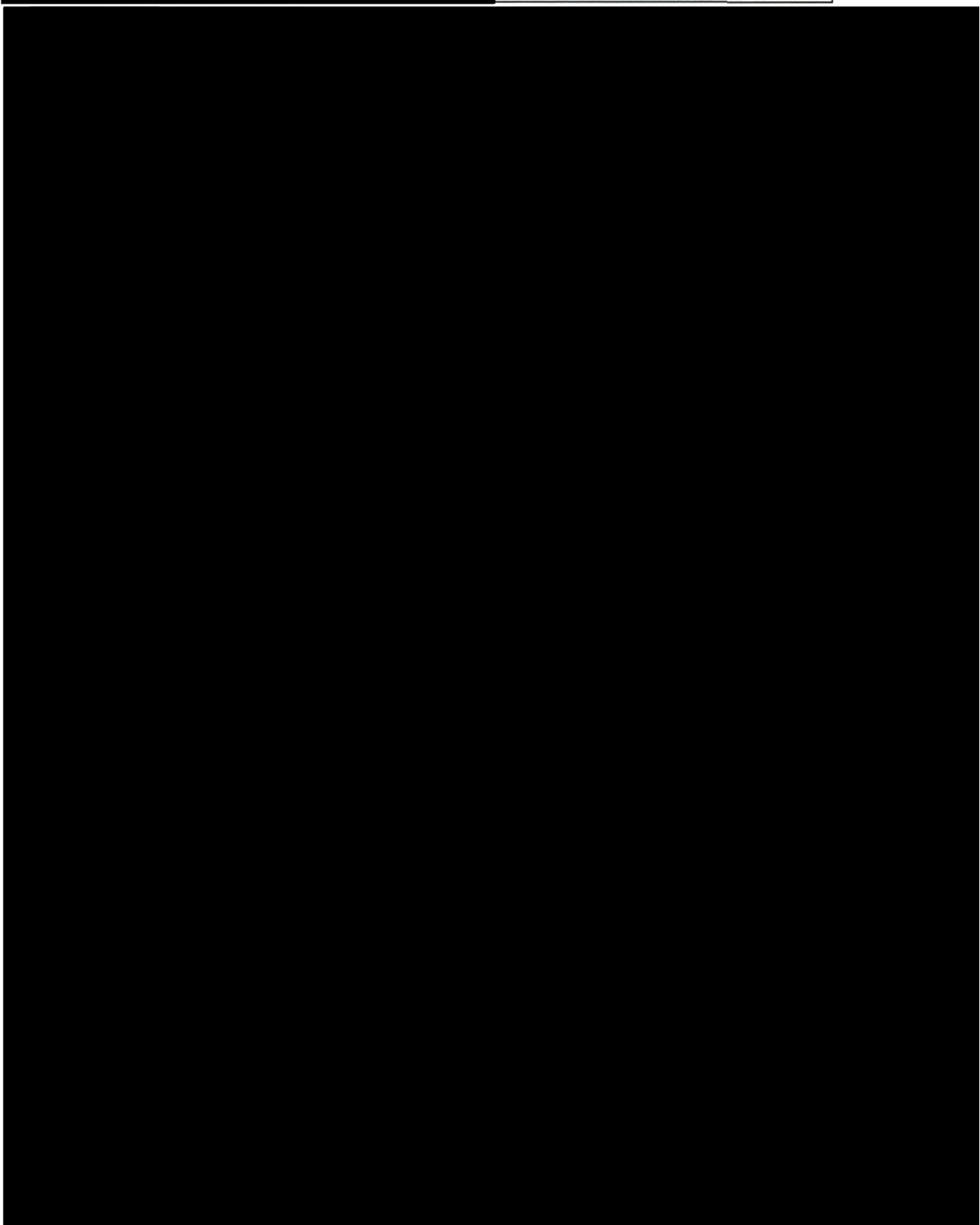


外装商品性機能

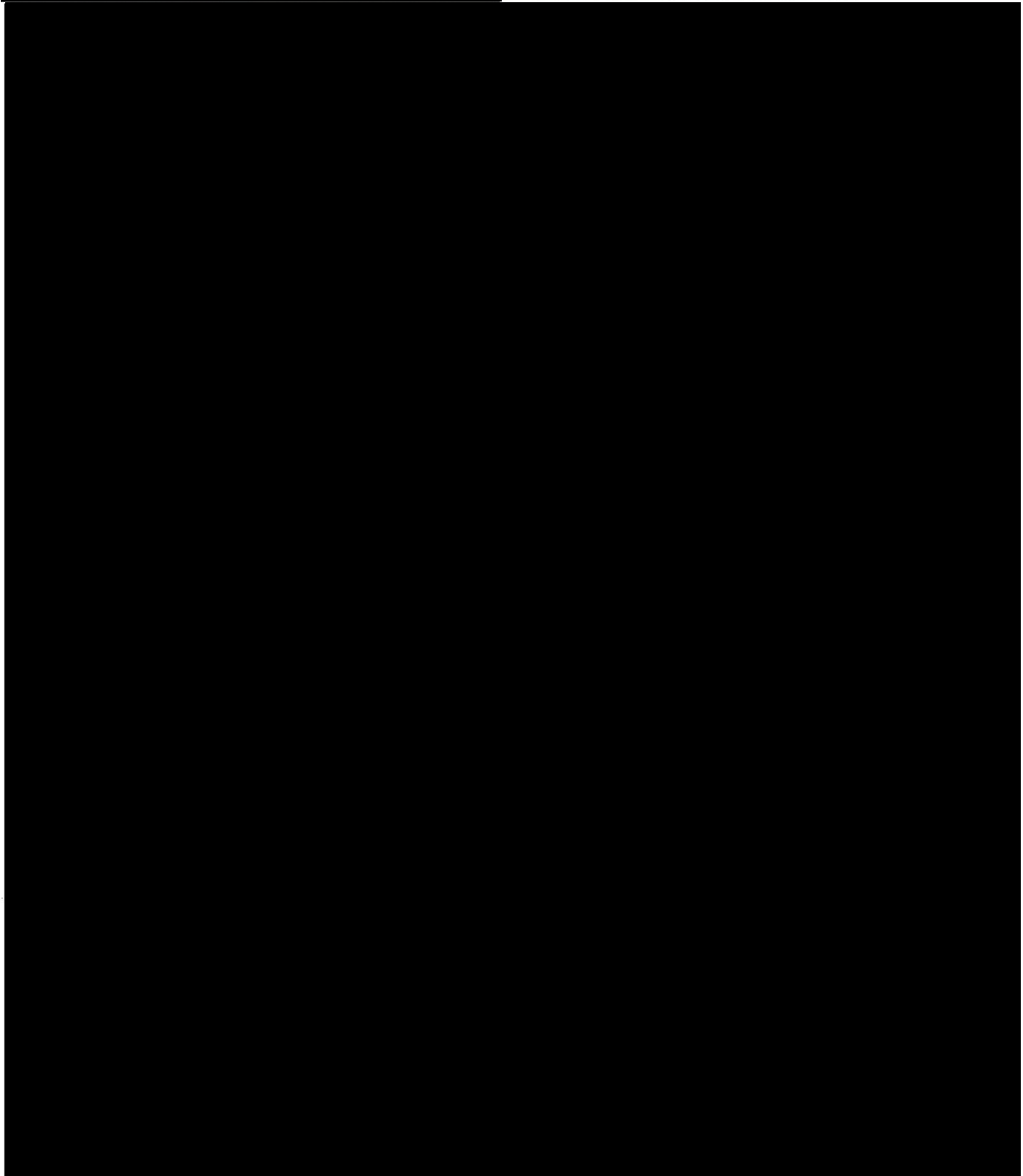
◎仕様

O/Sチューブ径	28mm	GATE単体 wt	38.3kg
O/Sロッド径	10mm		
O/S反力	825±15N		
O/S減衰構造	ダイミクダンピング		
O/Sオイル量	3cc		

外装商品性機能



外装商品性機能



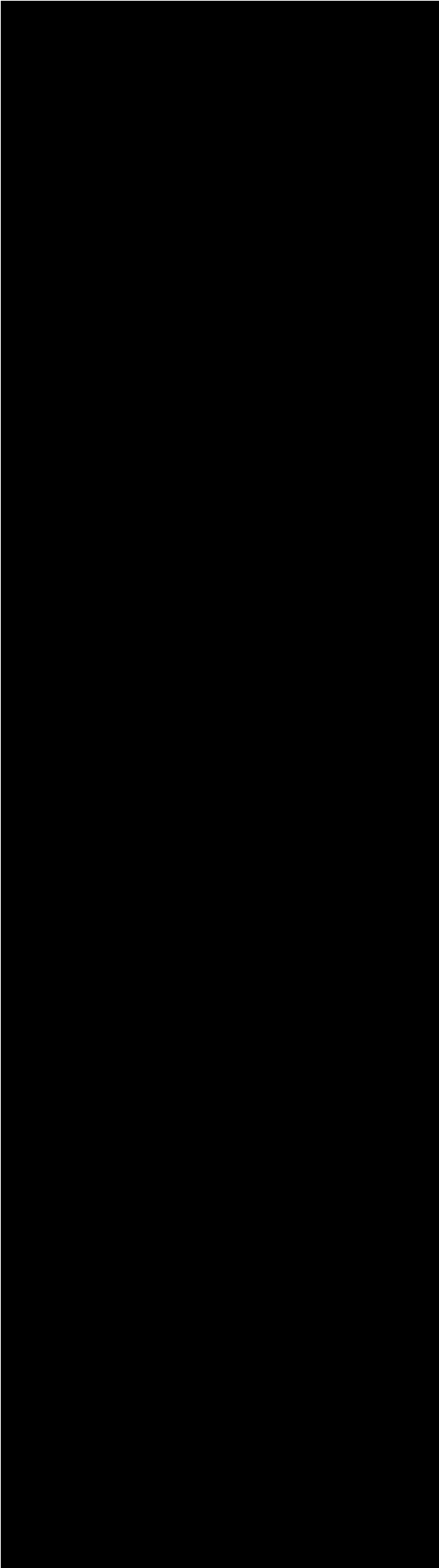
PE11-034

HONDA

11/29/2011

#Q9b QB08A0230029 (E)

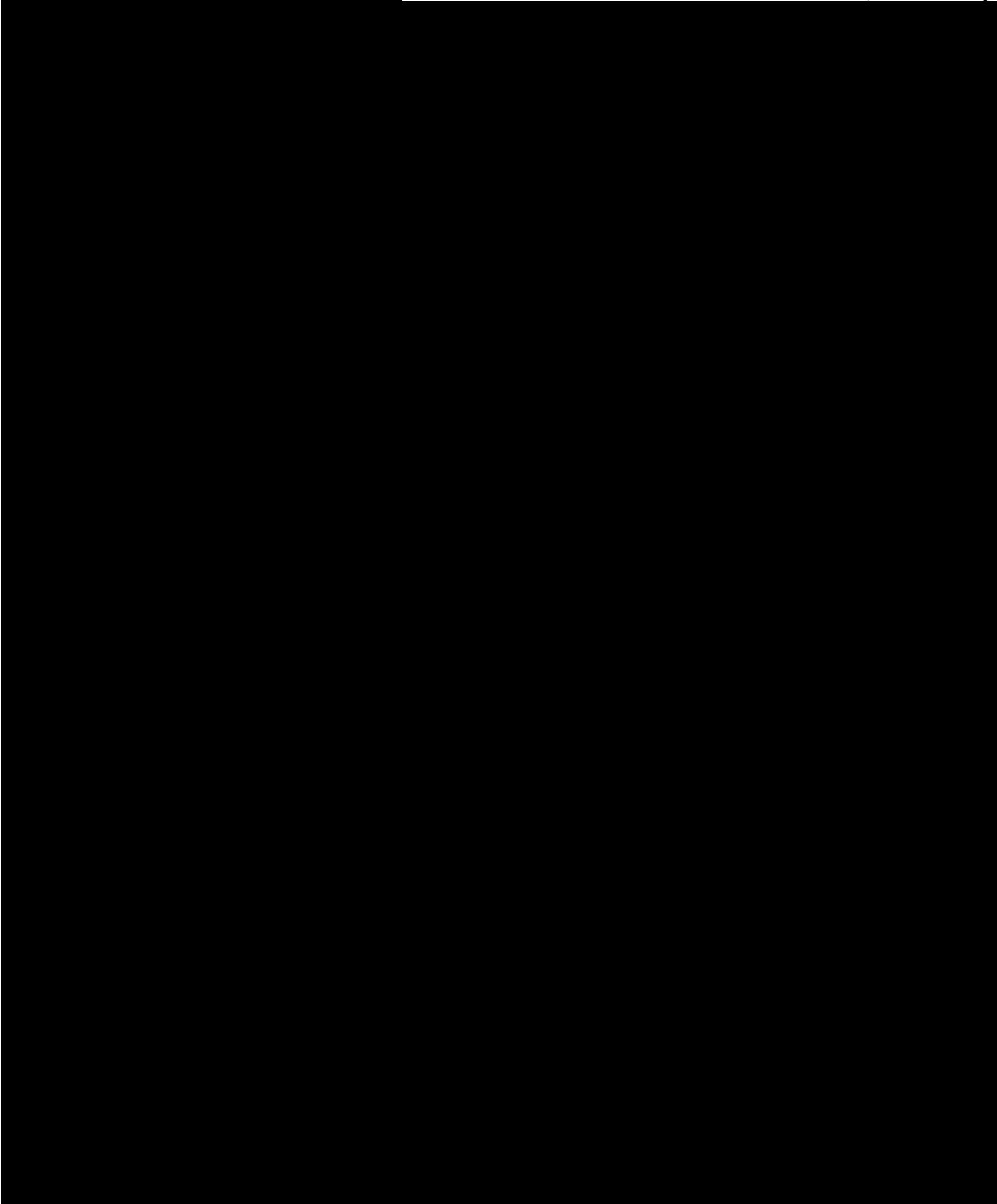
REDACTED

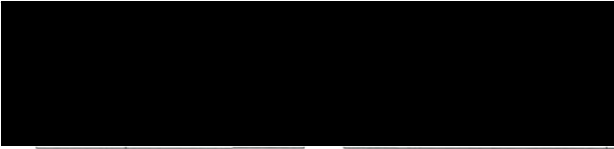


Durability Reliability of Body Strength

1
7

Requirement A	Check timing
Opening/Closing system Tailgate Tailgate Opening/Closing durability	T-STEP





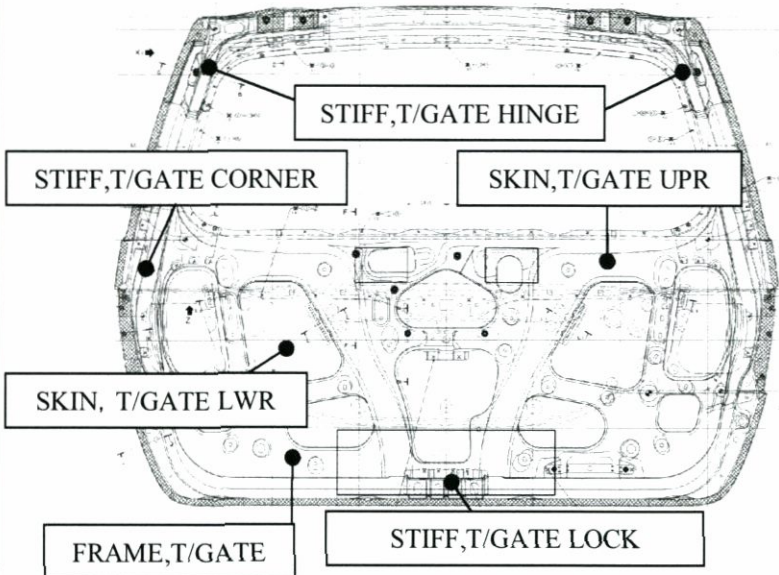
Durability Reliability of Body Strength

2
7

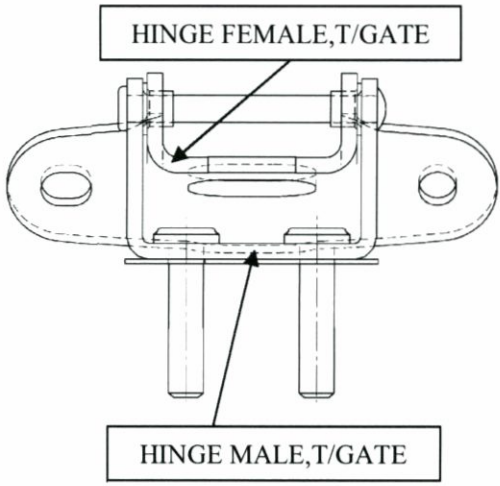
No.	Requirement A	Confirmation item
		Tailgate opening/closing durability

● Test specification

•TAIL GATE COMP



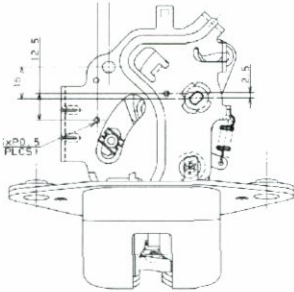
•HINGE ASSY



GATE COMP	Material	Thickness
SKIN, T/GATE UPR		t0.7
SKIN, T/ GATE LWR		t0.7
FRAME, TAIL GATE		t0.65
STIFF, T/GATE HINGE		t1.4
STIFF, T/GATE CORNER		t1.2
STIFF, T/GATE LOCK		t1.4

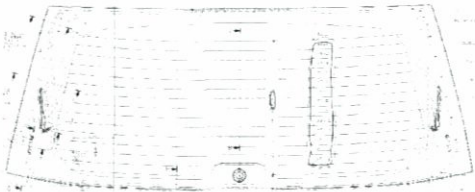
HINGE COMP	Material	Thickness
HINGE FEMAIL , T/GATE		t3.6
HINGE MAIL , T/ GATE		t3.6

•LOCK, T/GATE



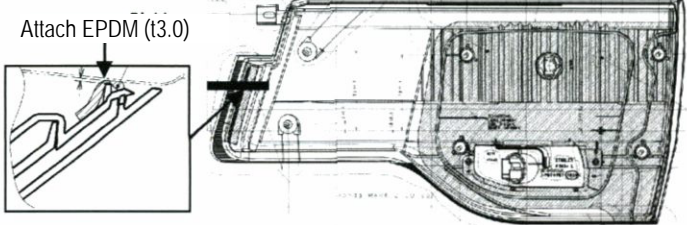
LOCK, T/GATE	Thickness
COVER PLATE	t2.3
BACK PLATE	t2.0

•RR GLASS



Thickness: t3.1

•LIGHT ASSY, LID



Durability Reliability of Body Strength

3
7

Confirmation item

Tailgate opening/closing durability

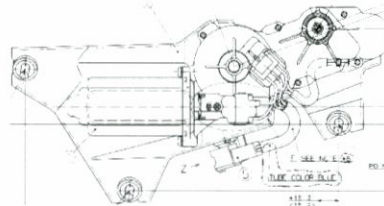
● Test specification

• **O/STAY**



Part number		74820-SHJ-A01
ROD reaction force	Max length	810±15N
	185.5mm	920N

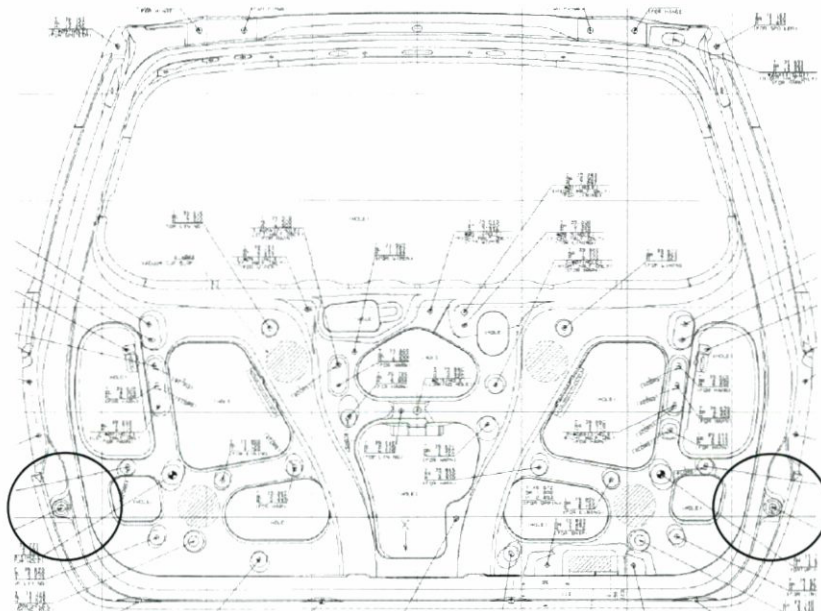
• **WIPER MOTER**



Part number	76700-SHJ-A01
Weight	1.057kg

• **STOPPER**

Installation position: 2 positions as shown below



STOPPER	
Part number	74829-S9A-A000
Hardness	[REDACTED]

• **SPOILER**



Part number	74900-SHJ-A31
Weight	2.110kg

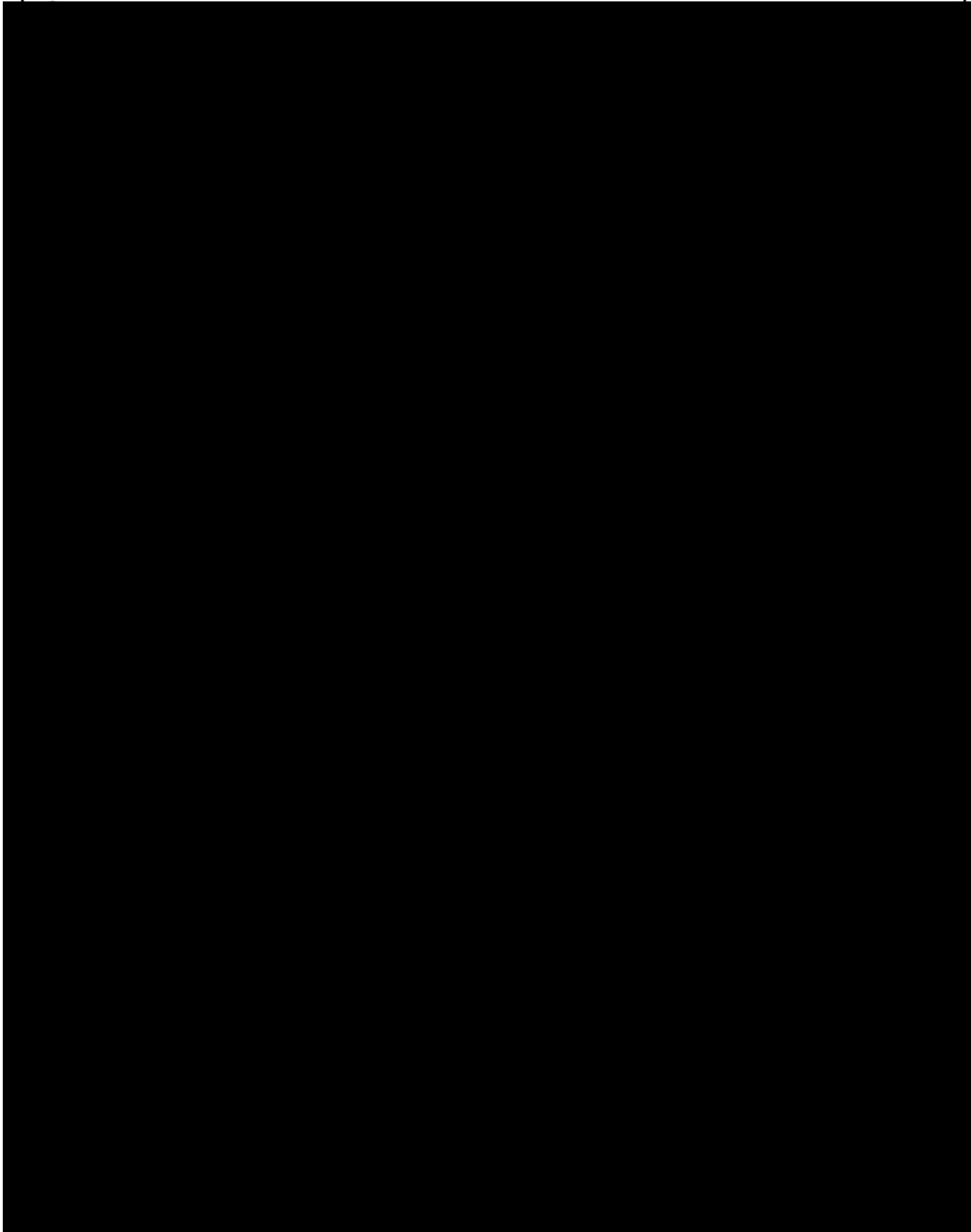
ENTIRE PAGE BUSINESS CONFIDENTIAL INFORMATION



Durability Reliability of Body Strength

4
7

Confirmation item
Tailgate opening/closing durability



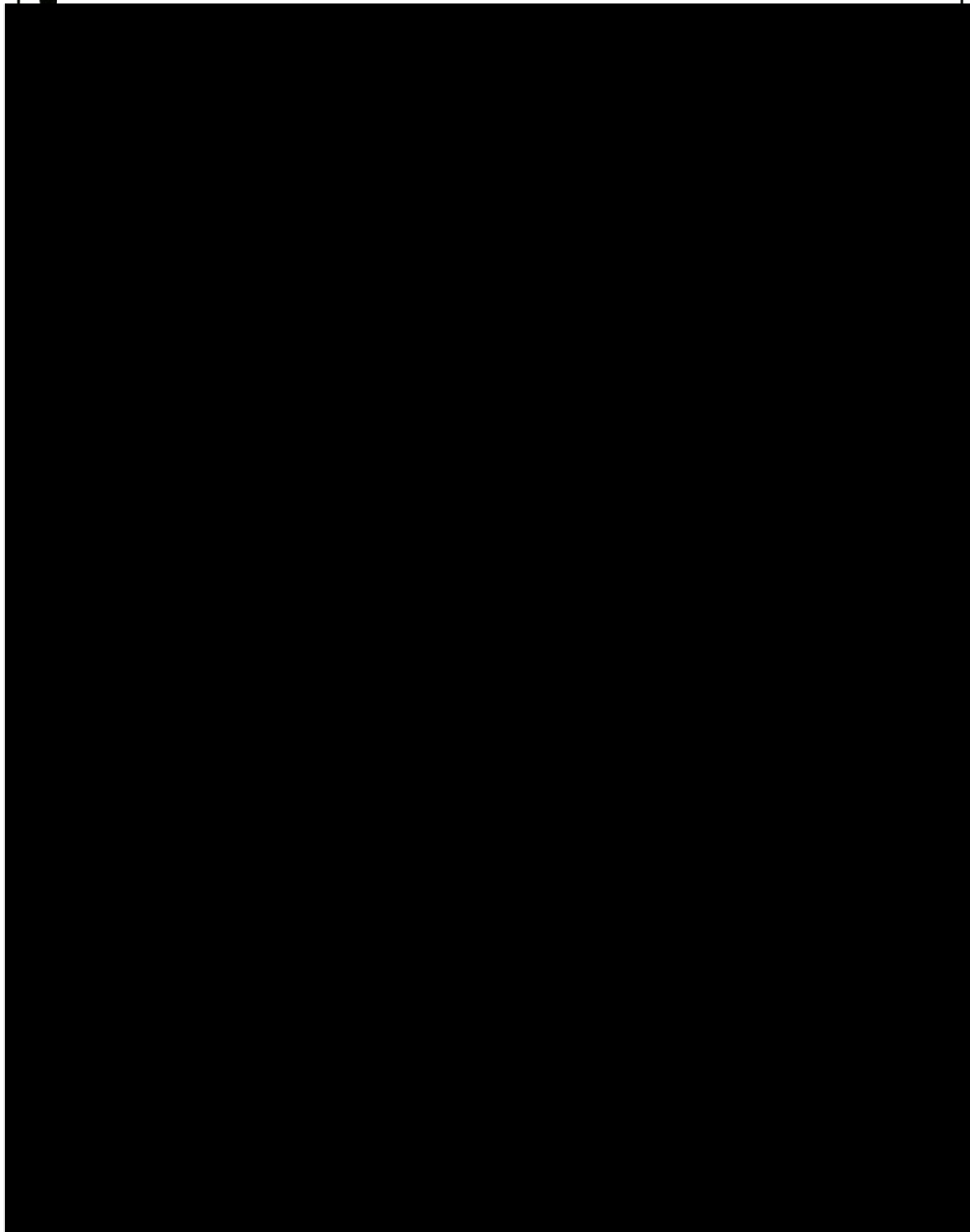
ENTIRE PAGE BUSINESS CONFIDENTIAL INFORMATION

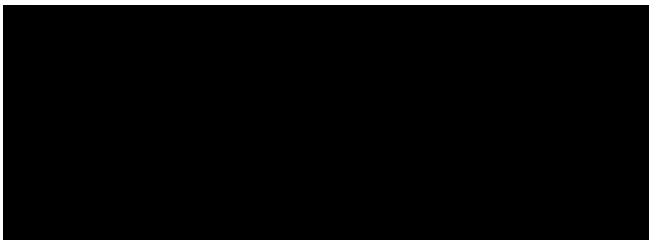


Durability Reliability of Body Strength

5
7

Confirmation item
Tailgate opening/closing durability





Durability Reliability of Body Strength

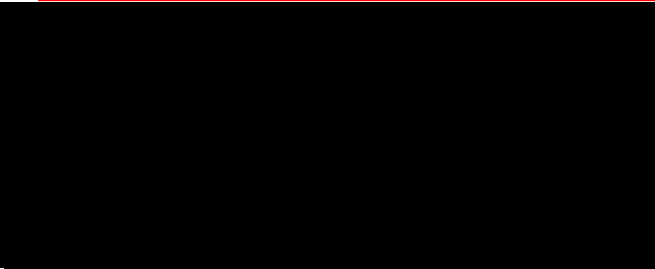
6
7

Confirmation item

Tailgate opening/closing durability



ENTIRE PAGE BUSINESS CONFIDENTIAL INFORMATION

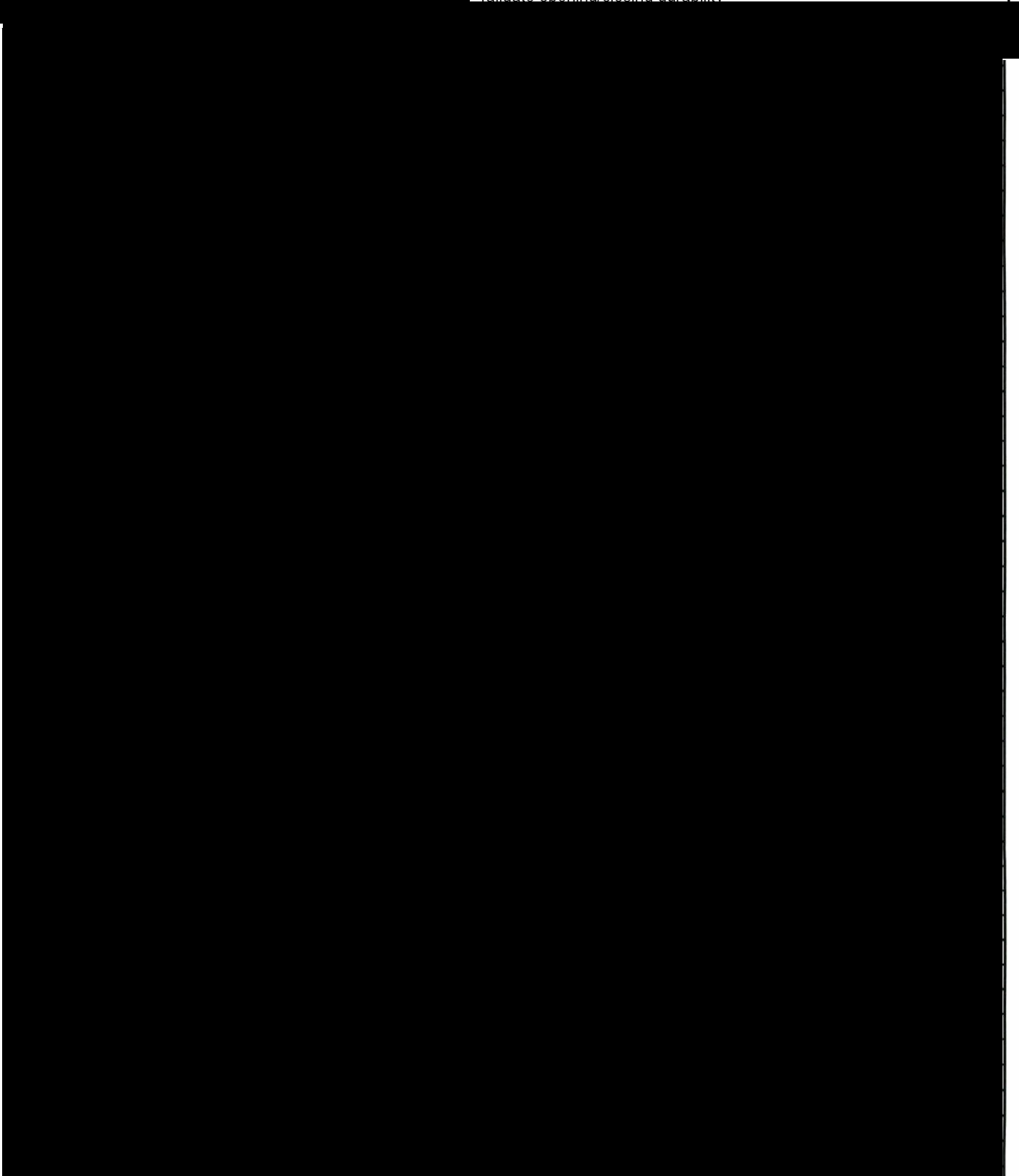


Durability Reliability of Body Strength

7
7

Confirmation item

Tailgate opening/closing durability



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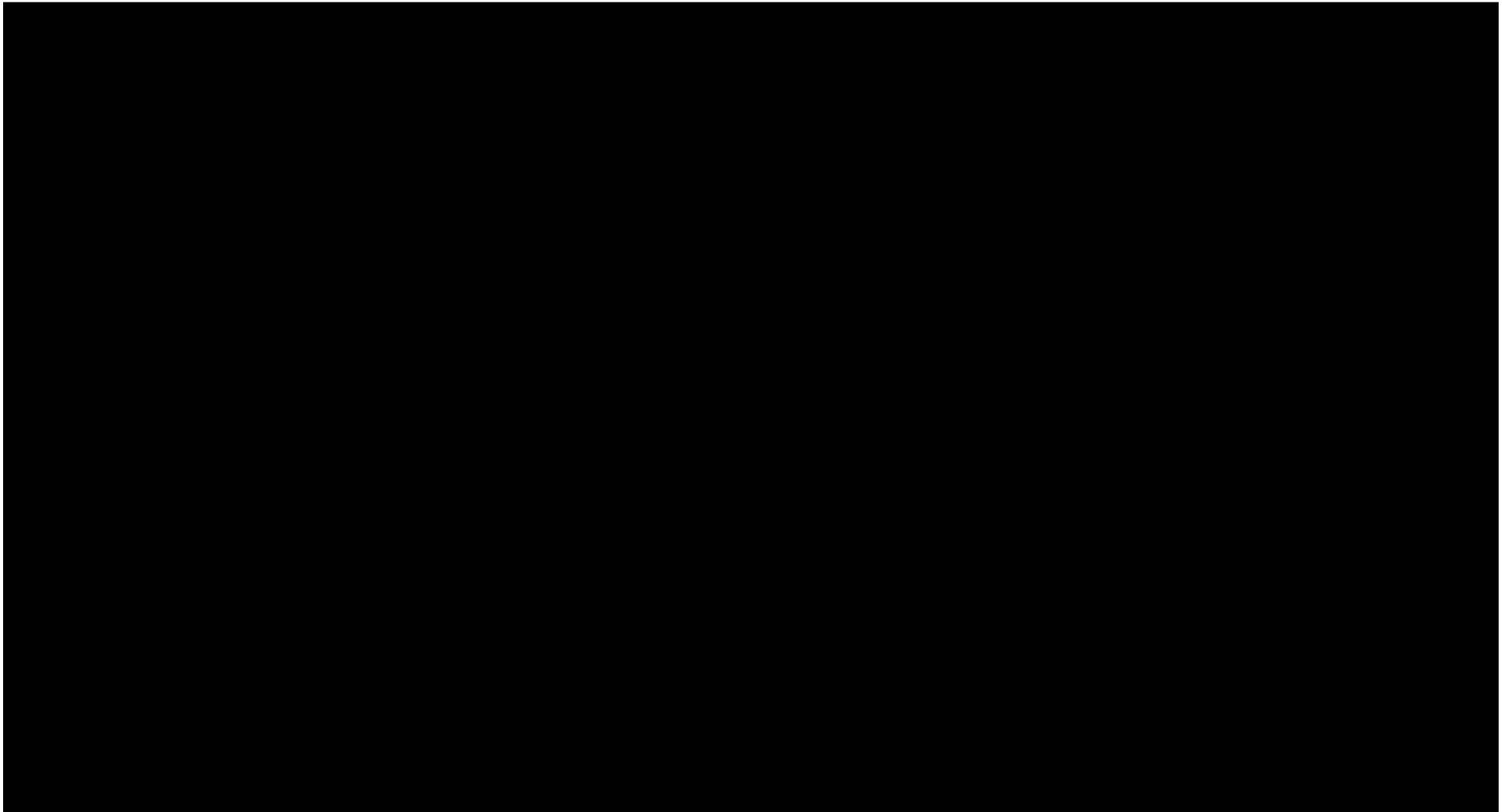
#Q10 (HMA) REDACTED

Q10

SHJ Tailgate Open Stay Design Change History (08-10M)

PTG Open stay Assy D/C history and Production units

ENTIRE SLIDE BUSINESS CONFIDENTIAL INFORMATION



1. Design Change (C47-2-2863) -History

ENTIRE SLIDE BUSINESS CONFIDENTIAL INFORMATION



1. Design Change (C47-2-2863) -D/C Issuance

DC# C4722863

MASS PRODUCTION SPEC. NOTICE

SUKIMA NO. ZMC-3016
PIC TEL: 43823

Revision No. 1/1

Dept. 2S1ボEX
Gr. TGATE

Approved By [Signature]

Prepared By 阿部 和広

Issue Date 04 SEP 07

Cont. Dept 大木

C47-2-2863

TITLE 08M US ODYSSEY TGATE O/STAY の変更

Content

1. 標題に依る

2. 以下の図面を改訂する
74820-SHJ-ZX10-M1 DWG. TGATE OPEN STAY ASSY

3. 商品性向上の為 TGATE O/STAYの反力を変更
NORMAL 仕様 F3: 810 N ⇒ 770 N
PTG 仕様 F3: 865 N ⇒ 825 N

Related Request No. SHJX-700082

Lvl	Plant	Part Number	Part Name	Model	Section Code	MBPN	SZ	RS	P
*	AX	74820SHJ ZX10M1	DWG,T/GATE OPEN STAY ASSY	----	---	-	6	03	Z
1	AX	74820SHJ A210M1	OPEN STAY ASSY,T/GATE	SHJX	F24	N	M	03	M
1	AX	74820SHJ A710M1	OPEN STAY ASSY,T/GATE	SHJX	F24	N	M	03	M
1	AX	74820SHJ A012M1	OPEN STAY ASSY,T/GATE	SHJX	F24	-	M	--	-
1	AX	74820SHJ A612M1	OPEN STAY ASSY,T/GATE	SHJX	F24	-	M	--	-
*	AX	*****	*****	****	---	-	--	--	-

Power and normal tailgate strut pressure have been changed from 08M.
テールゲートの重量変更により、08Mからダンパーの反力を低減
設変時期の関係から、実際の物適用は08Mの途中から切り替え実施

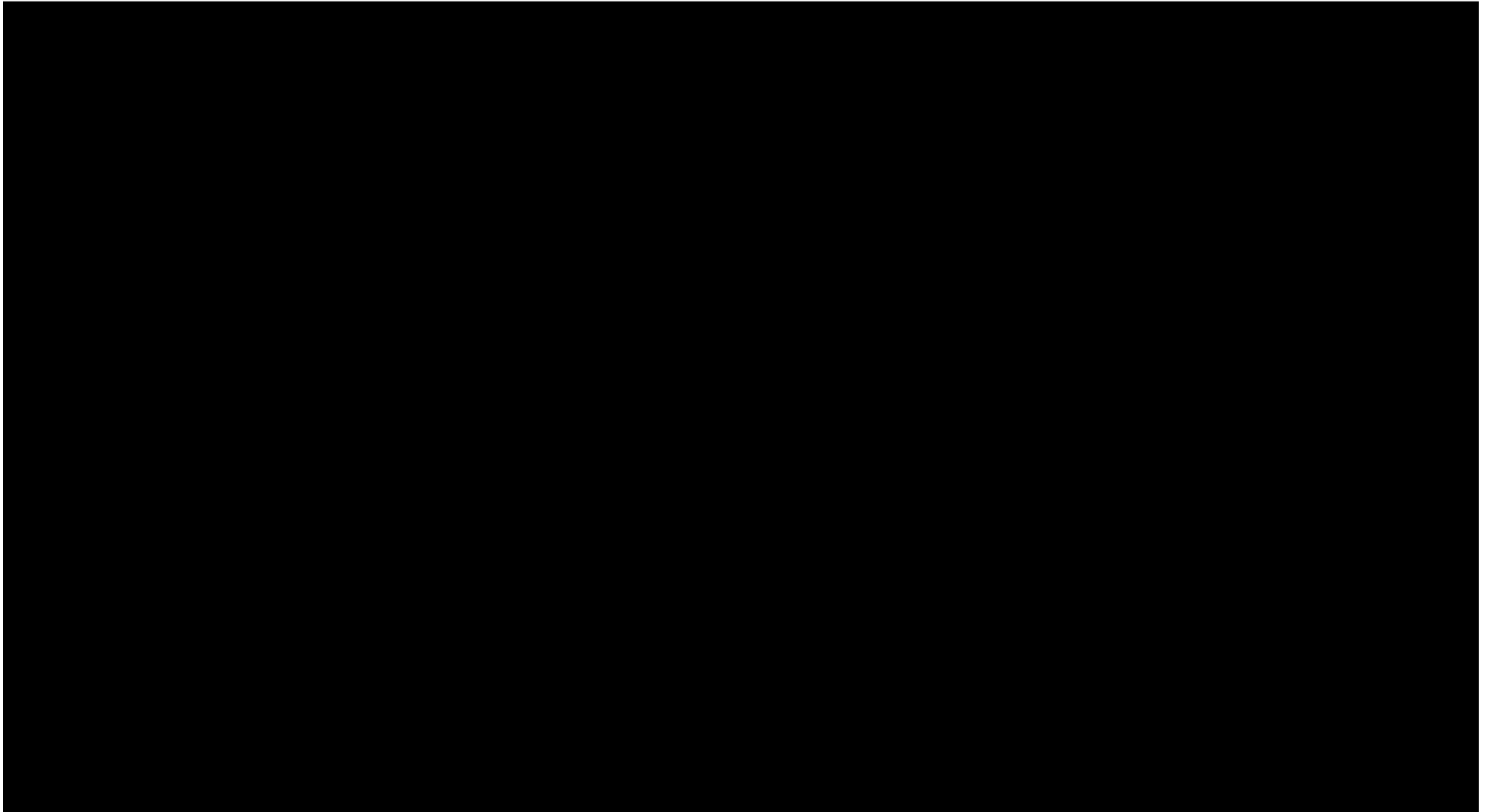
Code Comments

1	Pressure change per HGT CRF SHJX-700082. Manual pressure from 810 N to 770 N. PTG pressure from 865 N to 825 N. Applying on 10/17 by supplier so HMA does not pay ~\$100,000 expedite costs per CIE meeting with QA on 9/27/07.
2	Delete from SHJX application.

SHJ Tailgate Open Stay Design Change History (08-10M)

PTG Open stay Assy D/C history and Production units

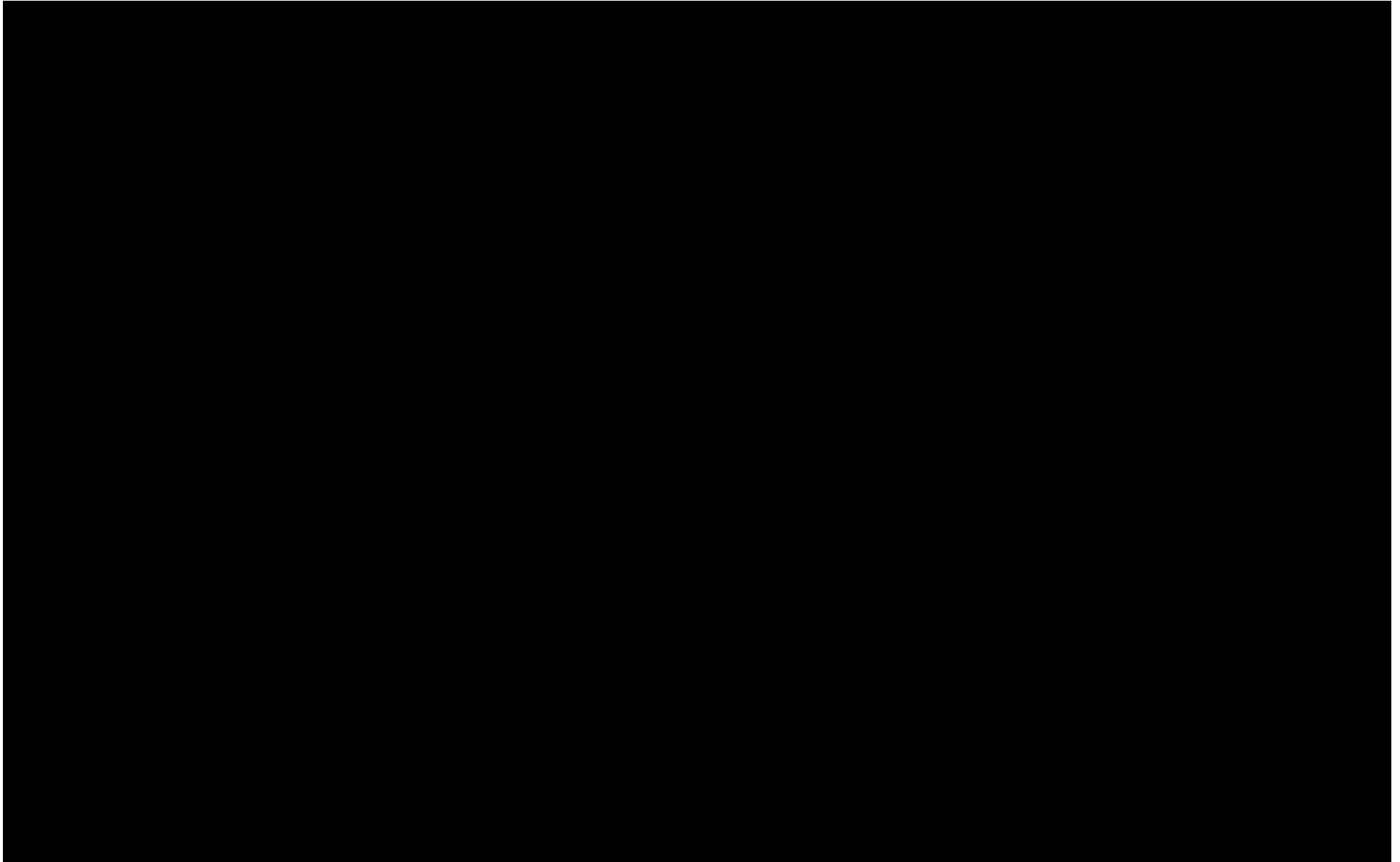
ENTIRE SLIDE BUSINESS CONFIDENTIAL INFORMATION



2. Design Change (AXA900926)

HMA MI # AXA900926

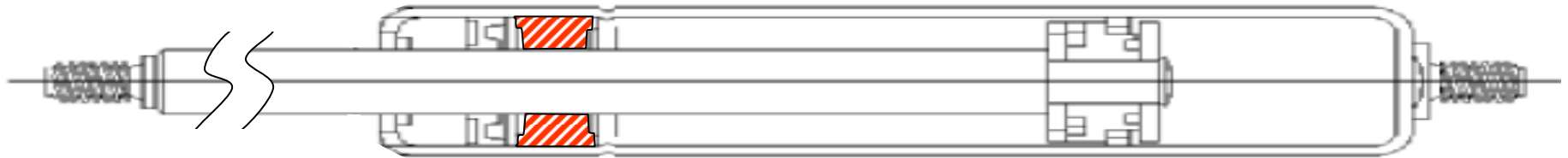
ENTIRE SLIDE BUSINESS CONFIDENTIAL INFORMATION



2. Design Change (AXA900926)

HMA MI# AXA900926

Before C/M

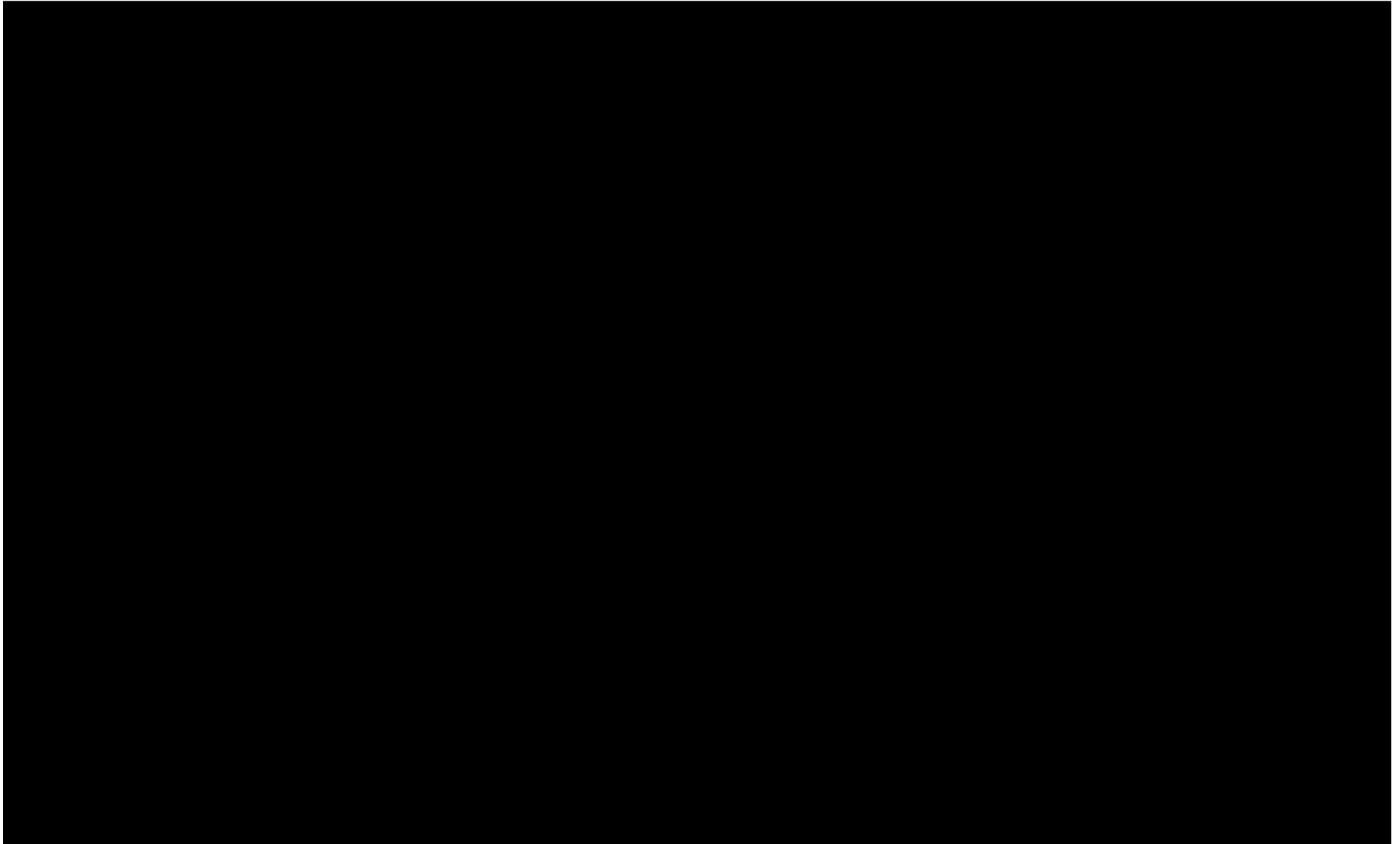


After C/M



Double spacer had been applied from 10M.

[WARRANTY SITUATION] **ENTIRE SLIDE BUSINESS CONFIDENTIAL INFORMATION**



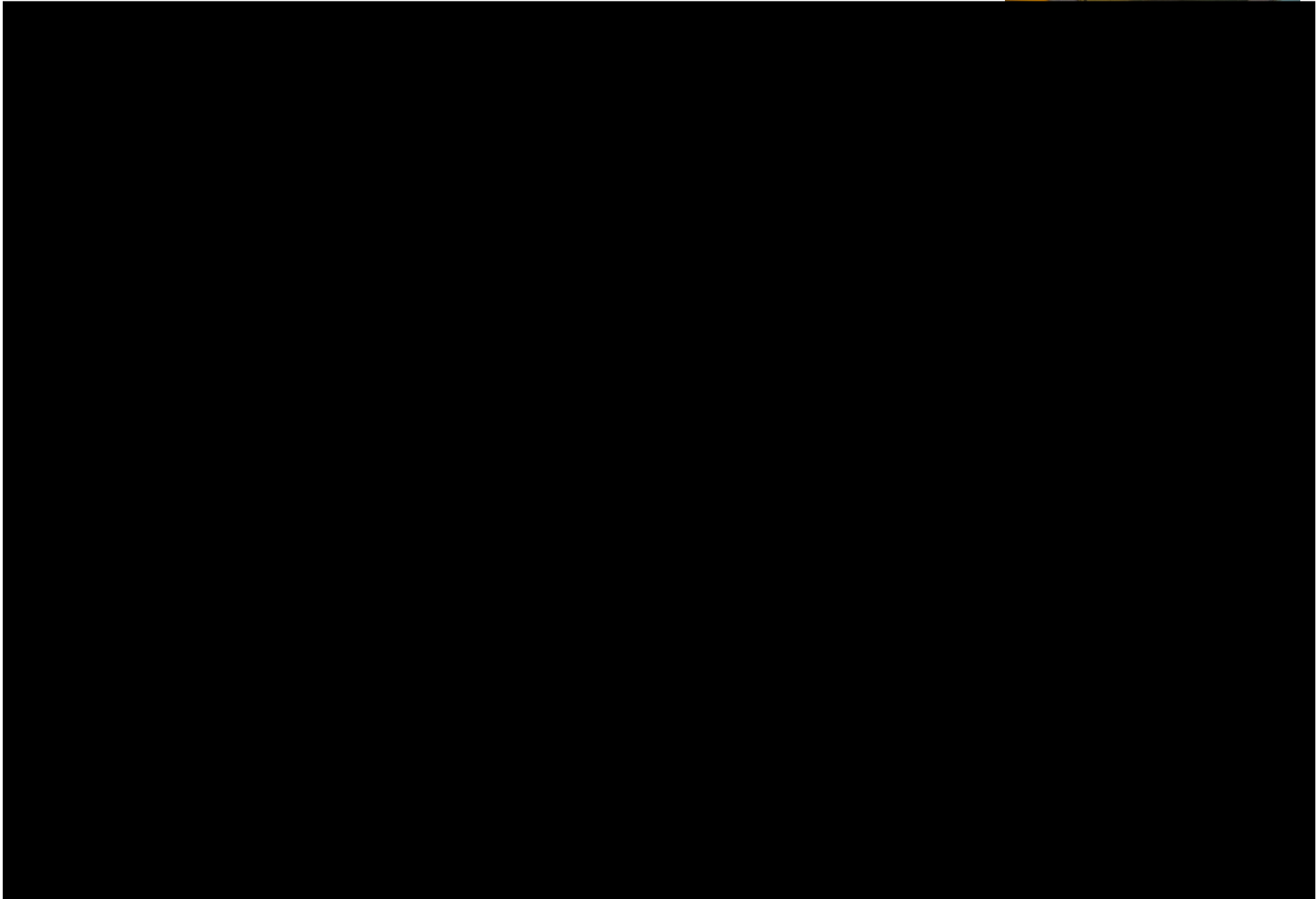
ENTIRE SLIDE BUSINESS CONFIDENTIAL INFORMATION



SHJ STABILUS OPENSTAY COUNTERMEASURE

ENTIRE SLIDE BUSINESS CONFIDENTIAL INFORMATION

QA / Exterior



SHJ STABILUS OPENSTAY COUNTERMEASURE

[NECESSARY PART CHANGES]

Honda Odyssey- Power and Manual

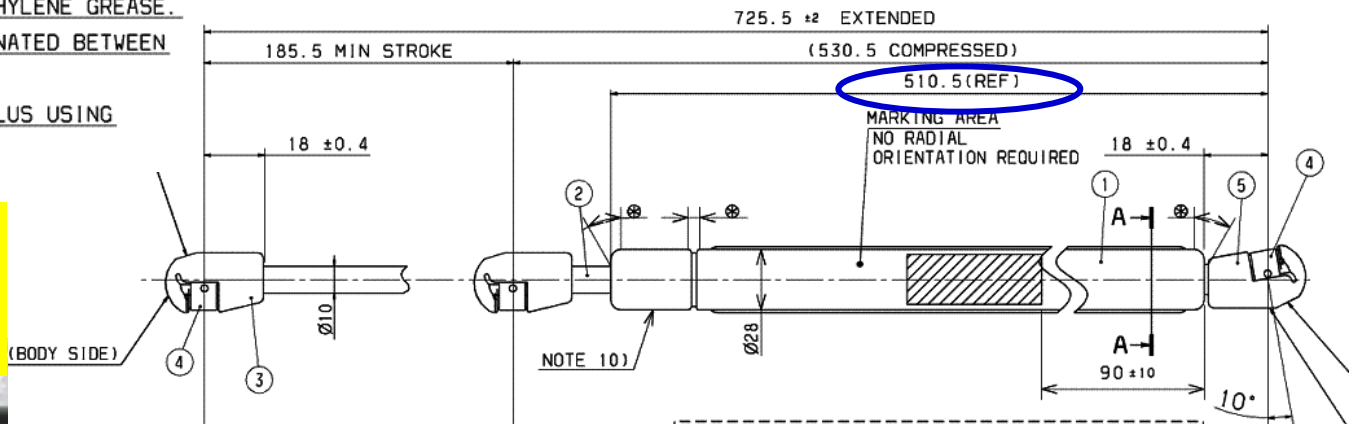
	Rod Length	Tube Length	Radial Groove Length	Seal Package Length	Oil Type to go with Alternative Seal (SKF)
Current Production TLN 8202ZB/ 8208ZI	266.0mm	492.0mm	36.0mm	32.6mm	10wt
Double Spacer TLN 019222/ 019284	273.0mm	492.6mm	64.6mm	61.0mm	60wt

- ROD LENGTH INCREASED BY 18mm
- TUBE LENGTH CHANGED BY 0.5mm
- SEAL PACKAGE LENGTH CHANGE BY 18.5mm
- OIL CHANGE

**ONLY OIL CHANGE AND TUBE CHANGE NEEDED ON DRAWING!
ISSUE CRF.**

- 10.) OIL (3cc Ref) Stat. **WN20/4**
- 11.) GREASE; APPLY 0.01 TO 0.10g OF POLYETHYLENE GREASE.
- 12.) IDENTIFICATION METHOD SHALL BE COORDINATED BETWEEN SUPPLIER AND PLANT.
- 13.) NB: TO BE VERIFIED/APPROVED BY STABILUS USING PRODUCT PART TESTING.

TUBE CRIMPING LOCATION IS ONLY VISIBLE DIFFERENCE



- MI REQUIRED FOR ADVANCED CHANGE
- CRF AND DESIGN CHANGE REQUIRED
- SLIGHT VISIBLE DIFFERENCE BETWEEN CURRENT AND C/M PARTS

SHJ STABILUS OPENSTAY COUNTERMEASURE

[PATH FORWARD]

- QA RECOMMENDS APPLYING CHANGE TO SHJ
- QA ISSUED CRF Z4F081126001 TO HGT
- QA ISSUED MI TO APPLY CHANGE UNTIL DESIGN CHANGE IS RECEIVED (STABILUS SHIPPING C/M PARTS 1 MONTH AFTER RECEIVING MI, APPROX SEPT-END)
- QA TO CONTINUE TESTING COUNTERMEASURE FOR SZA



Text Color Change

	Current	C/M
A210 (Manual)	Blue	Green
A710 (PTG)	White	Orange



PE11-034

HONDA




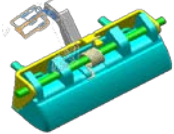
11/29/2011

#Q12 PTG for ODY 20111017

HONDA ODYSSEY tail gate falling verification





HONDA ODYSSEY OPERATION MODE







User operation	Push driver's switch	Push keyless switch	Push GATE mounted switch	Open T/GATE by Outer handle
				
Close fully	Open Instrument panel Left of stg.wheel	Open	-	Manual opening
Open fully	Close Instrument panel Left of stg.wheel	Close	Close	-
During auto operation	The operation direction is reversed.	The operation direction is reversed.	The operation direction is reversed.	Tailgate switches To manual mode

【HONDA ODYSSEY】 Driver's switch (auto opening and closing), keyless switch (auto opening and closing) and GATE mounted switch (auto closing) are operated automatically.
Manual opening and closing is always possible.



HONDA ODYSSEY normal mode

 : With motor assist

 : Without motor assist

	Full closed position	Half opened position	Full opened position
O P E N			
<div style="background-color: #ADD8E6; padding: 5px; display: inline-block;">OD1</div>	<p>Start :</p> <ul style="list-style-type: none"> ① Push driver's switch or keyless switch ② Warning chime : 『Beep』 once ③ Small light : Flash 3 times ④ Tailgate closer : Release operation ⑤ Motor assist starts 	<p>⑥ Motor assist stops at the specified position.</p>	<div style="border: 2px solid red; border-radius: 15px; padding: 10px; width: fit-content; margin: 10px auto;"> <p>Remaining open by gas damper reactive force (not motor)</p> </div>
C L O S E			
	<p>⑤ Final tailgate closer operates at the specified position.</p> <p>⑥ Motor assist stops at the specified position.</p>		<p>Start :</p> <ul style="list-style-type: none"> ① Push driver's switch or keyless switch or tailgate switch ② Warning chime : 『Beep』 once ③ Small light : Flash 3 times ④ Motor assist starts

HONDA ODYSSEY fail safe mode

 : Without motor assist
  : With motor assist



Full closed position

Motor assist stops

Detected defined amount falling within the specified time

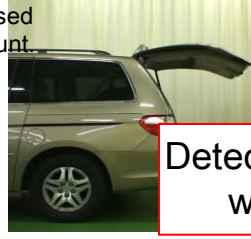
During operation of falling prevention system



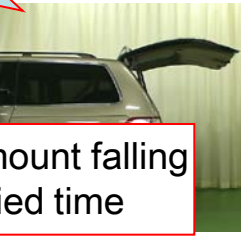
Reconfirmation of abnormality



Tailgate Raised Defined amount.



Detected defined amount falling within the specified time



Tailgate Raised Defined amount.



Tailgate falling detected, tailgate raised by motor.

Tailgate descends slowly

Detected falling and connected motor = Falling prevention system starts

Warning chime : 『BEEP』 Continued to full closed position => Different sounds as normal



Full closed position



Features of ODYSSEY POWER T/GATE Failsafe Mode

- ① Obvious different from normal operation..
- ② System confirms strut weakness by process of opening and re-raising T/G before closing.
- ③ Warning chime for failure mode is different than the warning chime for normal operation..

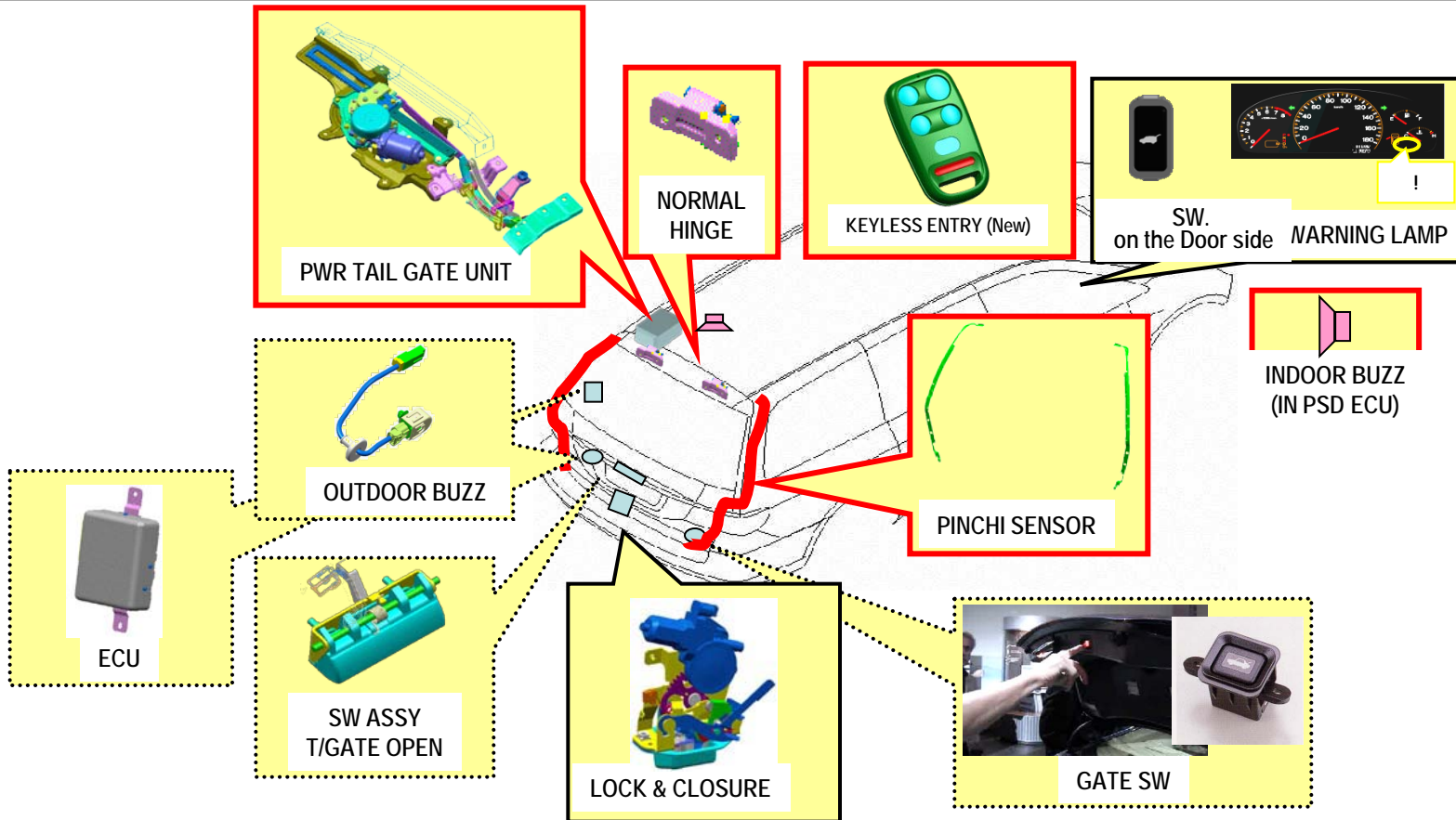
PE11-034

HONDA

11/29/2011

#Q13 Drop detection

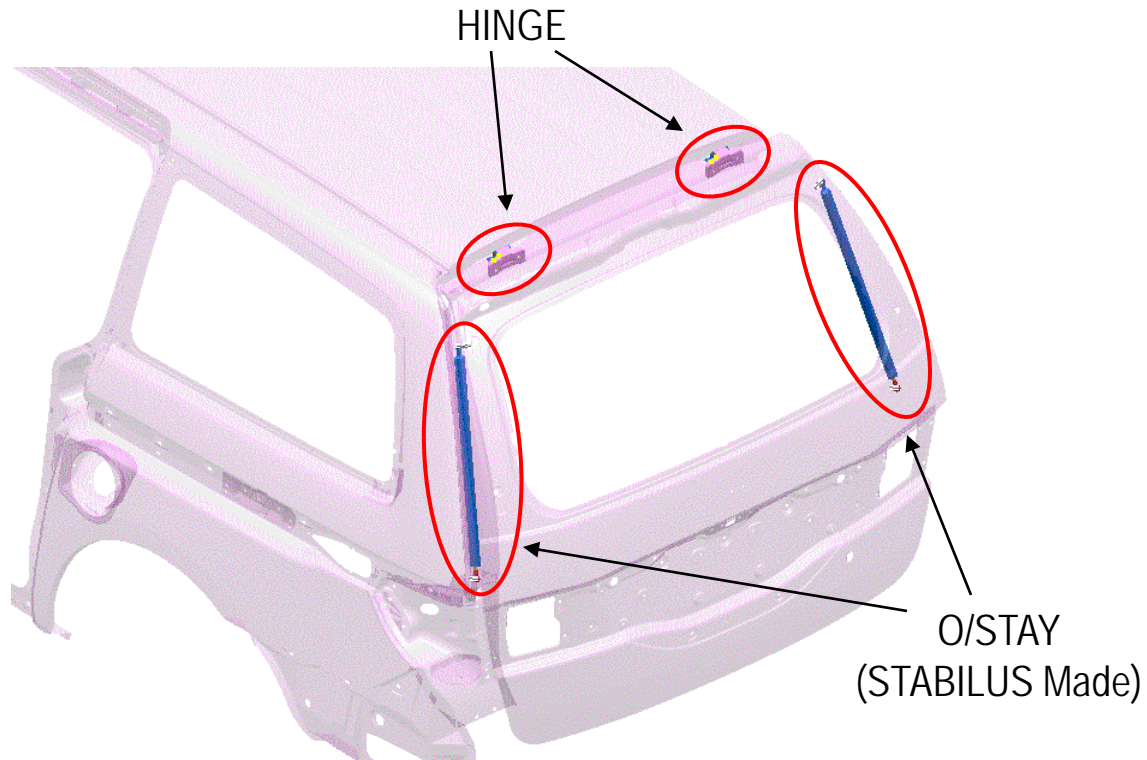
PWR Tailgate Component Formation/Layout drawing



[Main Parts/Function]

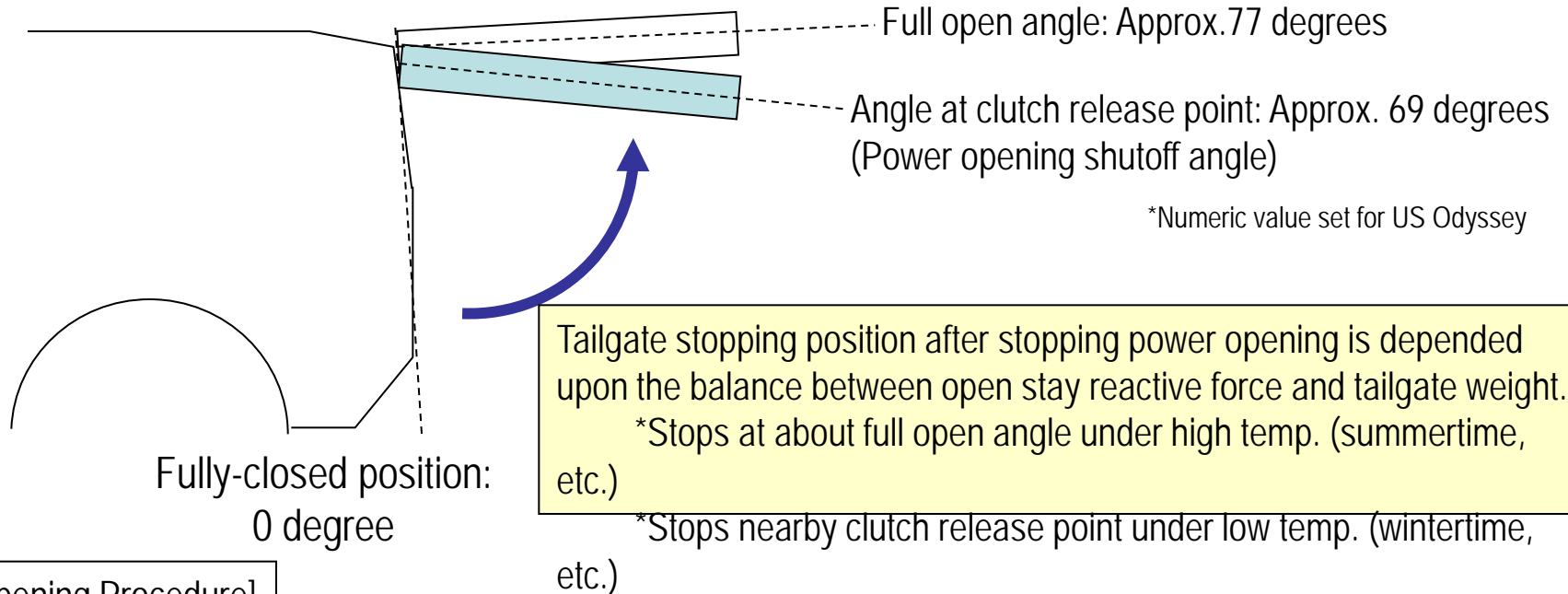
Part Name	Function
PWR TAILGATE UNIT	Unit that opens or closes tailgate itself (built-in electromagnetic clutch)
LOCK&CLOSURE	Unit that unlatches or Latches tailgate latch
BUZZ	Buzz when receiving power activation signal and unusual occurrences
PINCH SENSOR	Pinch detection sensor (pressure-sensitive type) when activating power closing
ECU	PWR tailgate system control

US ODYSSEY: Open Stay/Hinge Layout



Open stay reactive force sustains tailgate when opening tailgate.
(PWR tailgate system does not sustain tailgate)

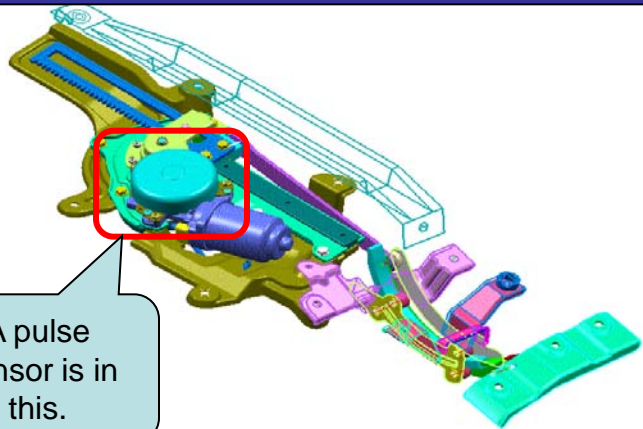
Opening/Tailgate Stop Position



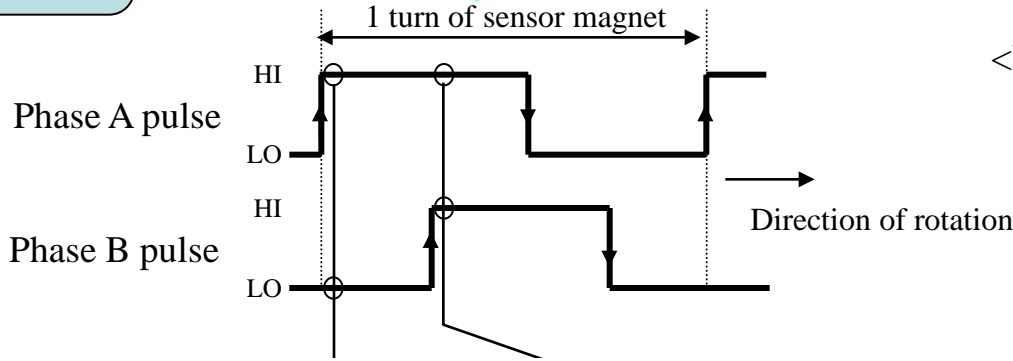
[Opening Procedure]

1. Activate Opening Device
2. Latch Releases by Lock & Closure (Unit)
3. Tailgate Opens by PWR Tailgate Unit
(Clutch ON → Motor ON)
4. Opening Stops at Clutch Release Point
(Clutch OFF → Motor OFF)

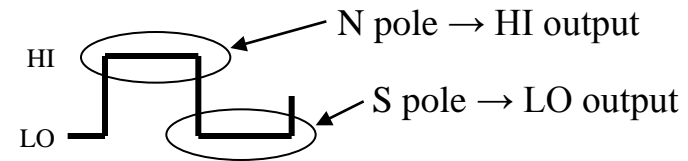
◆ How is the tailgate speed detected?



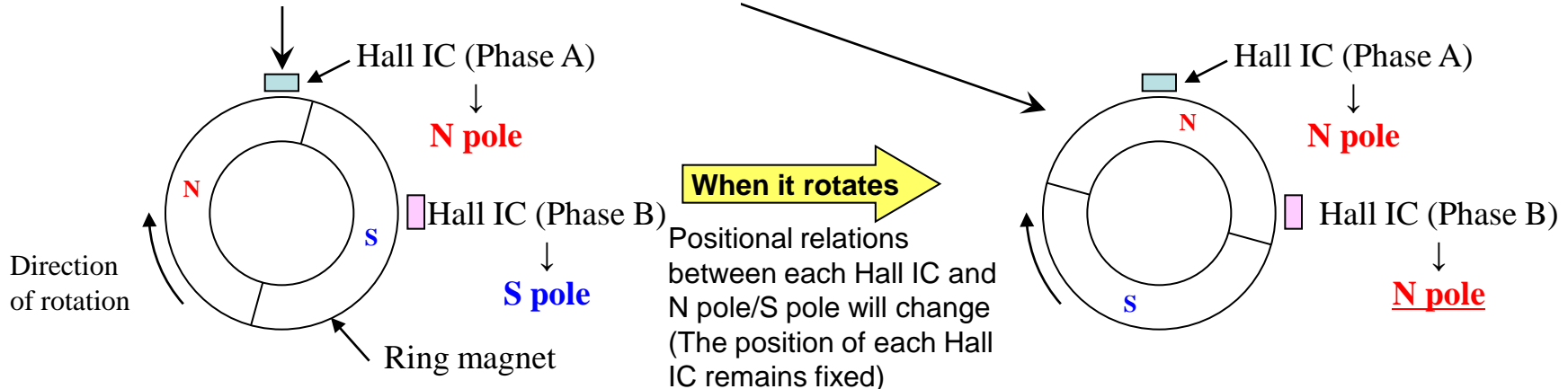
The ECU detects the speed by computing it from the pulse cycles of the pulse sensor contained in the drive unit. The pulse sensor is a ring magnet contained in the drive unit, which rotates (clockwise or counterclockwise) as interlocked with the (manual/power) tailgate opening/closing motion. Depending on its rotation (rotation of the magnet's N and S poles), magnetic force is detected and converted into voltage by the Hall IC.



<Positional relations between Hall IC and magnet>



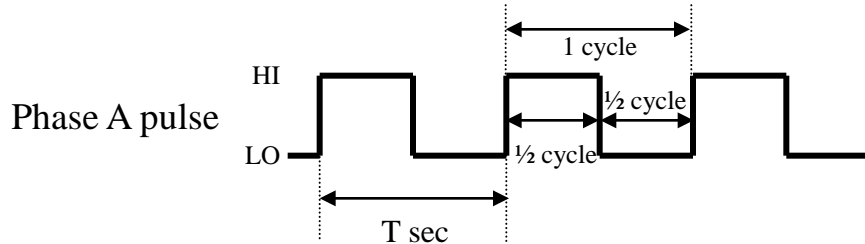
Positional relations between sensor magnet and Hall IC A/B



◆ How is the tailgate speed detected?

Tailgate speed detection

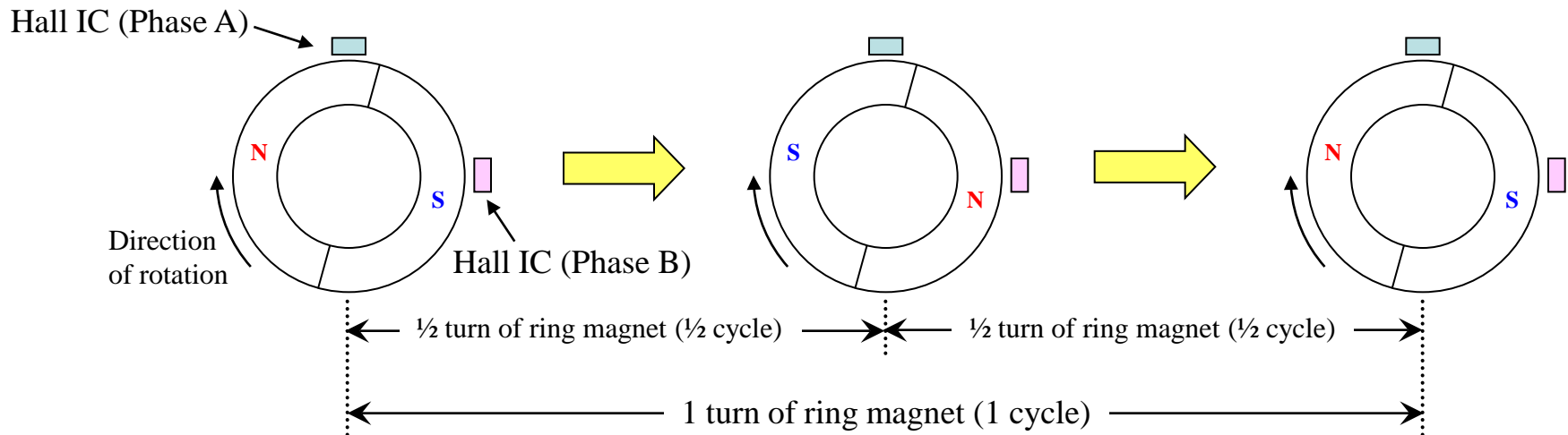
Pulse cycles are measures from which operating speed is computed.



By measuring the time (T) required for 1 cycle of phase A pulse (1 turn of sensor magnet), the speed V (mm/sec) can be computed. **(Speed = Distance / Time)**

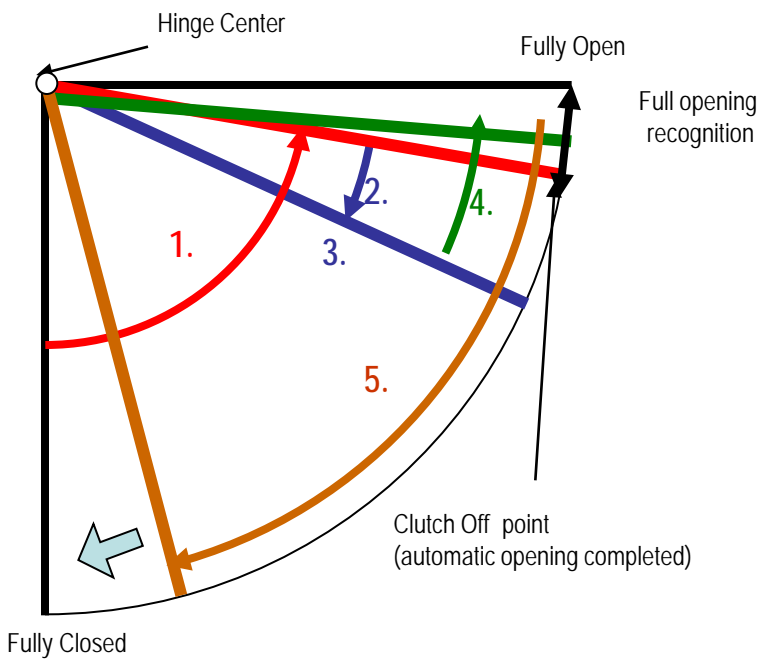
$$V = \frac{X}{T} \quad (\text{mm/sec})$$

Where, X is the amount of tailgate movement during 1 turn of ring magnet, which is a fixed value determinable by design data.



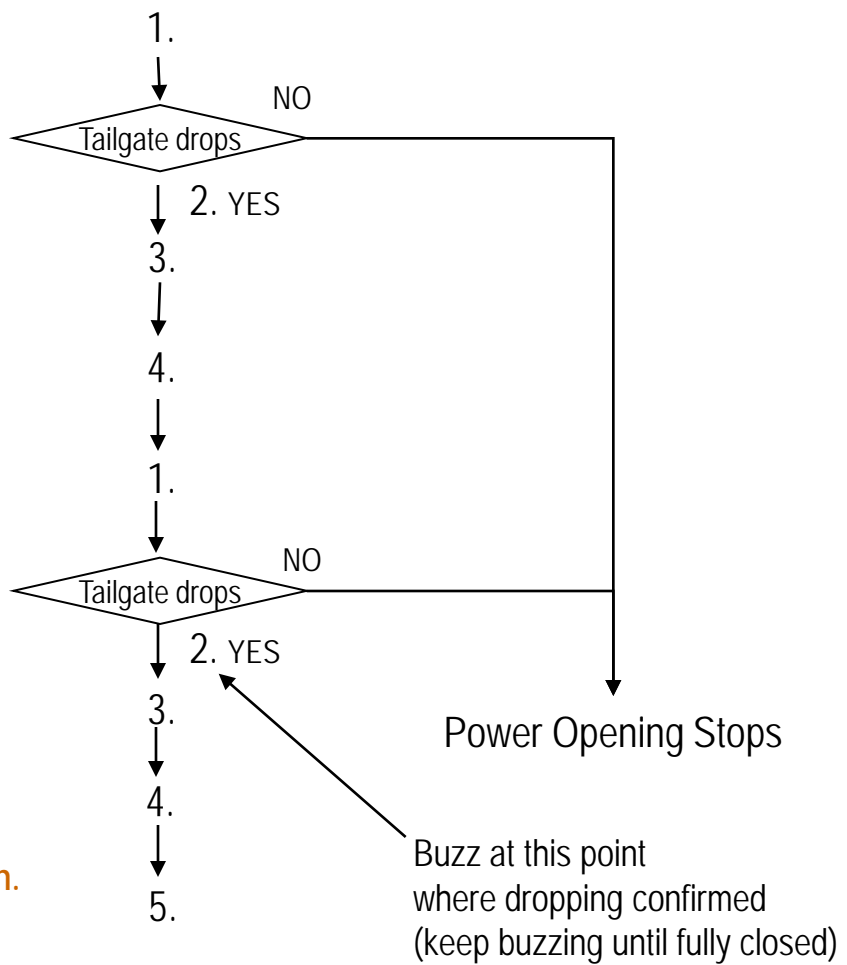
※According to the above example, 1-cycle speed is computed, but 1/2-cycle speed may be computed as well.

Drop Detection Activation



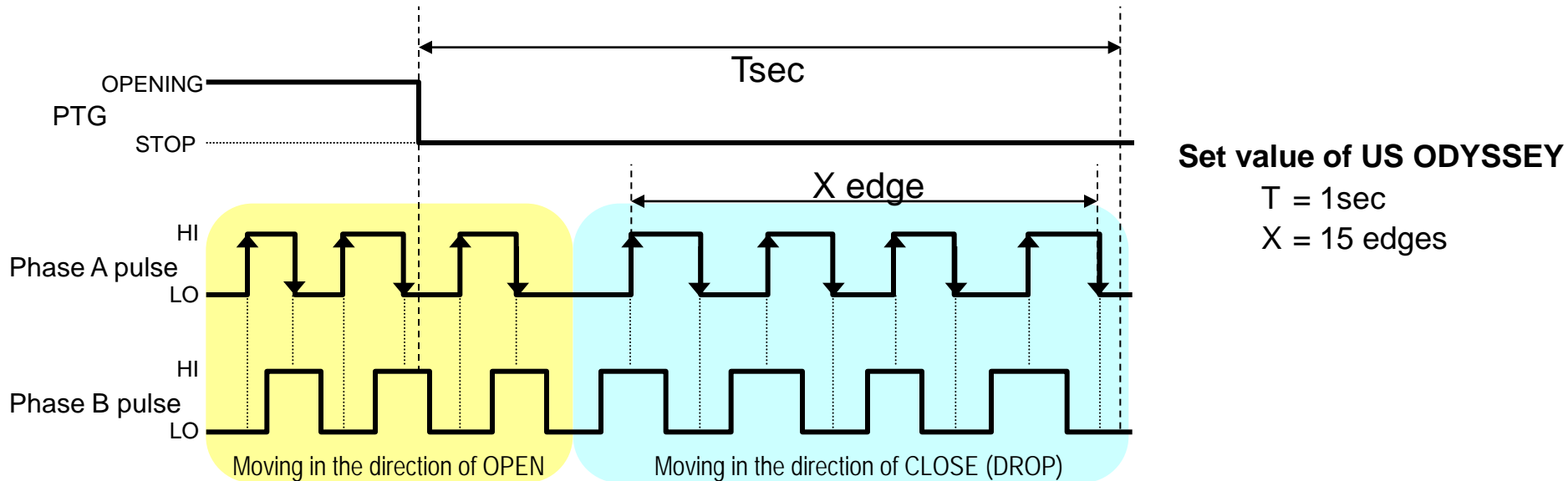
- 1. Power opening completed
- 2. Detects tailgate fall by its own weight
- 3. Prevent tailgate fall by reconnecting clutch
- 4. Power opening activation---Keep opening to the point where clutch releases or drop starts
- 5. Keep opening to the point where clutch releases or drop starts, then closing starts and stops at full open position.

Drop detection procedure



Drop Detection Mechanism

Drop of the PWR Tailgate is determined by detecting a drop of X edge within Tsec (Moving in the direction of CLOSE) from the stop of opening operation (clutch release).



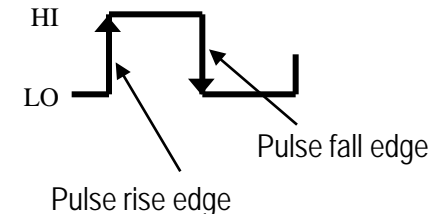
◇Opening direction determination

Phase B pulse indicating LO level when phase A pulse is at a rise edge,
or Phase B pulse indicating HI level when phase A pulse is at a fall edge

◇Closing direction determination

Phase B pulse indicating HI level when phase A pulse is at a rise edge,
or Phase B pulse indicating LO level when phase A pulse is at a fall edge

Edge: A phase where the HI changes into LO or LO changes into HI



【Supplemental information】 Honda's Sound and Optical Warning Systems

We would like to submit supplemental information on Honda's warning systems.

- ① When the gate is opened or closed automatically by operating diver's switch or keyless system (when receives operation command properly).
 - Sound warning... "Lengthy high-pitched tone" sounds for one second.
 - Optical warning... Position marker lamps flash three times, which is the same as the optical warning for the security system (lock).
- ② When the gate is closed by PTG SW (for close only) mounted on the tailgate (when receives operation command properly).
 - Sound warning... "Lengthy high-pitched tone" sounds for one second.
 - Optical warning... No warning (because the customer is operating the tailgate just under the gate).
- ③ When anti-drop system is working.
 - Sound warning... "Lengthy high-pitched tone" continuously sounds until the tailgate is closed."
(until half-latch or full close, or until the system stops working).
 - Optical warning... No warning

There are other warning sounds when pinching is detected or vehicle is driven (or tried to be driven) with the tailgate open.

A buzzer mounted inside the bumper is used for sound warning for outside the vehicle (near the tailgate), and another buzzer contained in PSD ECU (which is mounted near the rear quarter glass on passenger side) is for inside the vehicle.

For ① and ②, only the buzzer for outside the vehicle sounds, but for others, both outside and inside buzzers sound.

PE11-034

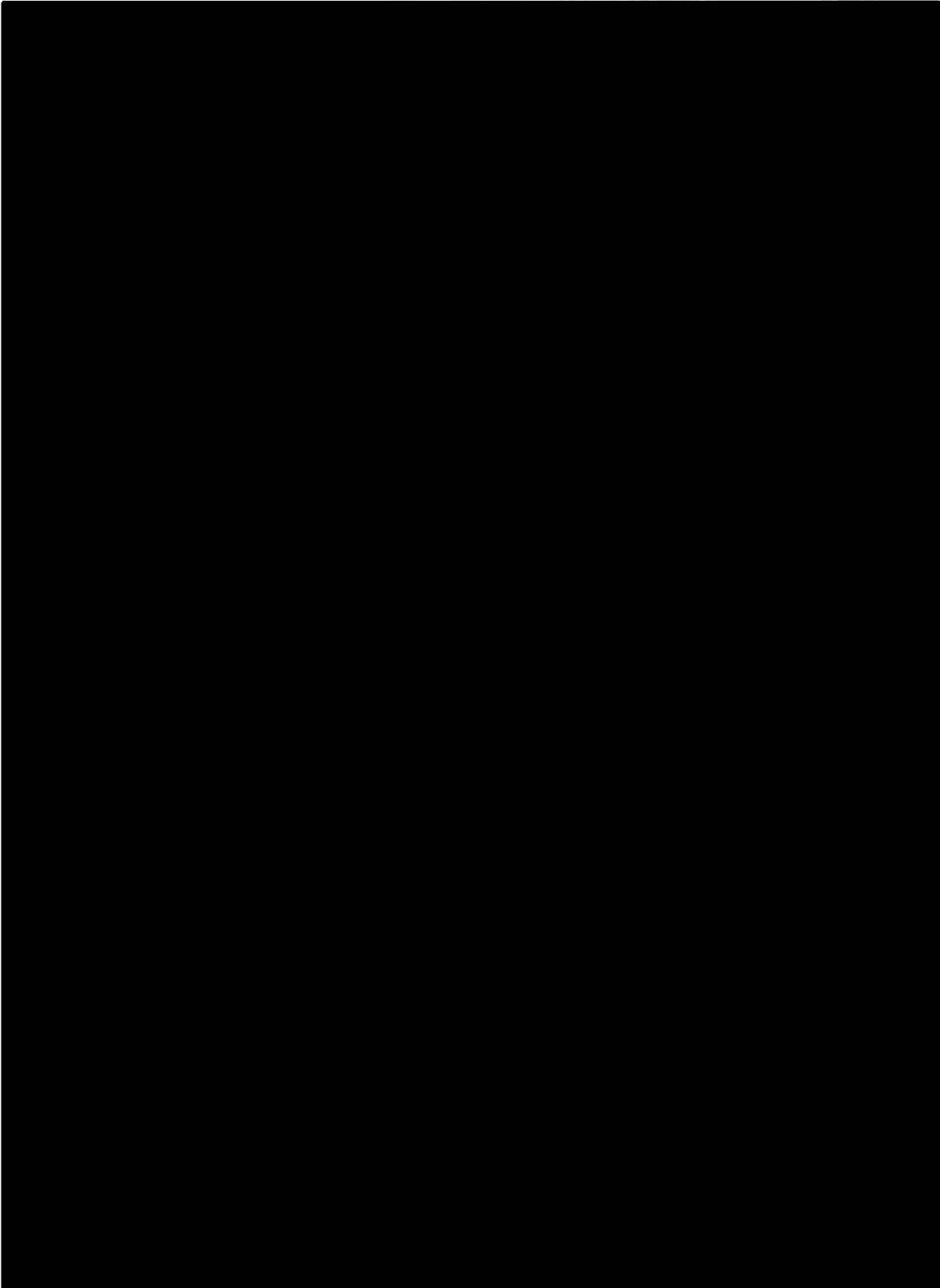
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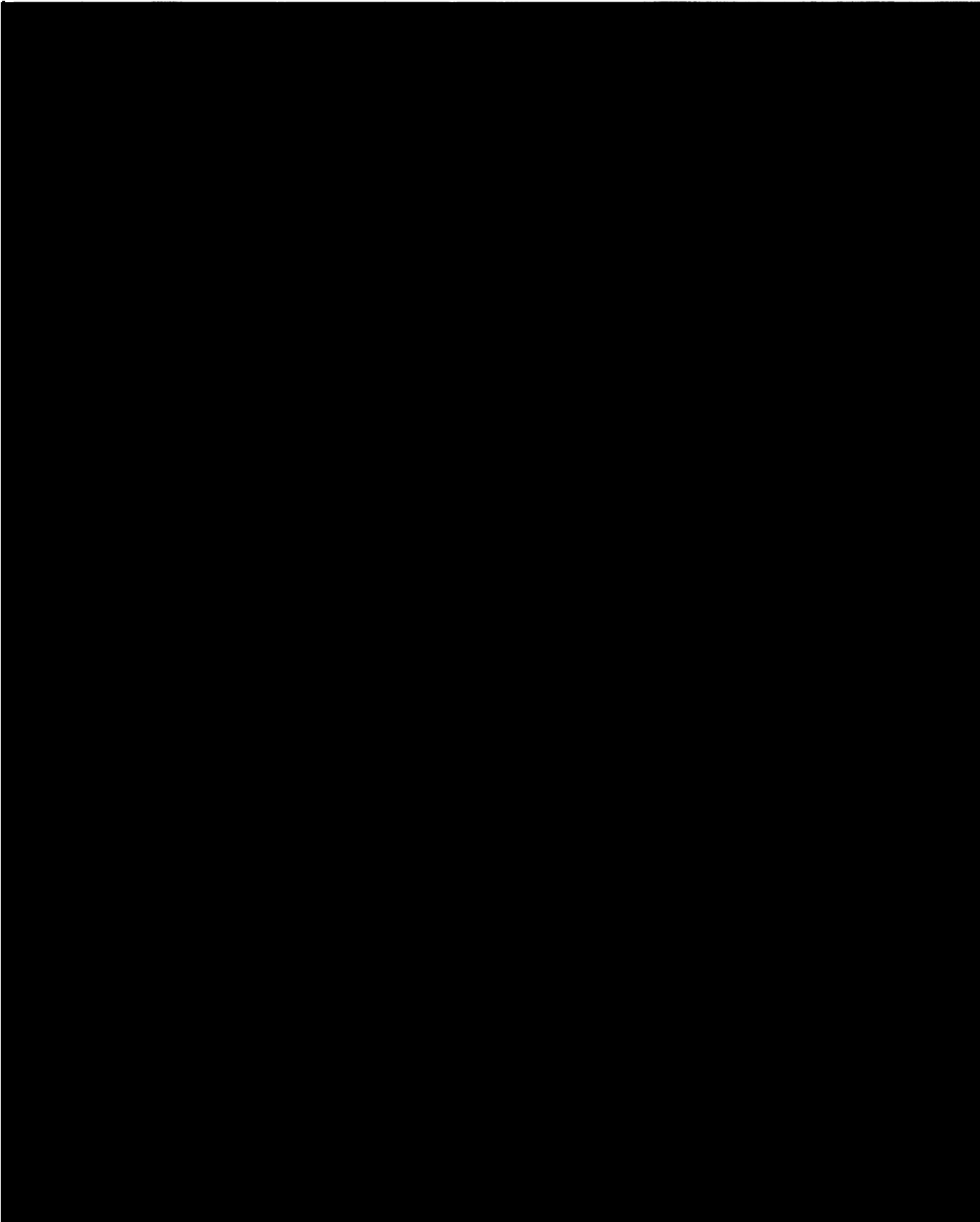
ENTIRE PAGE BUSINESS CONFIDENTIAL INFORMATION



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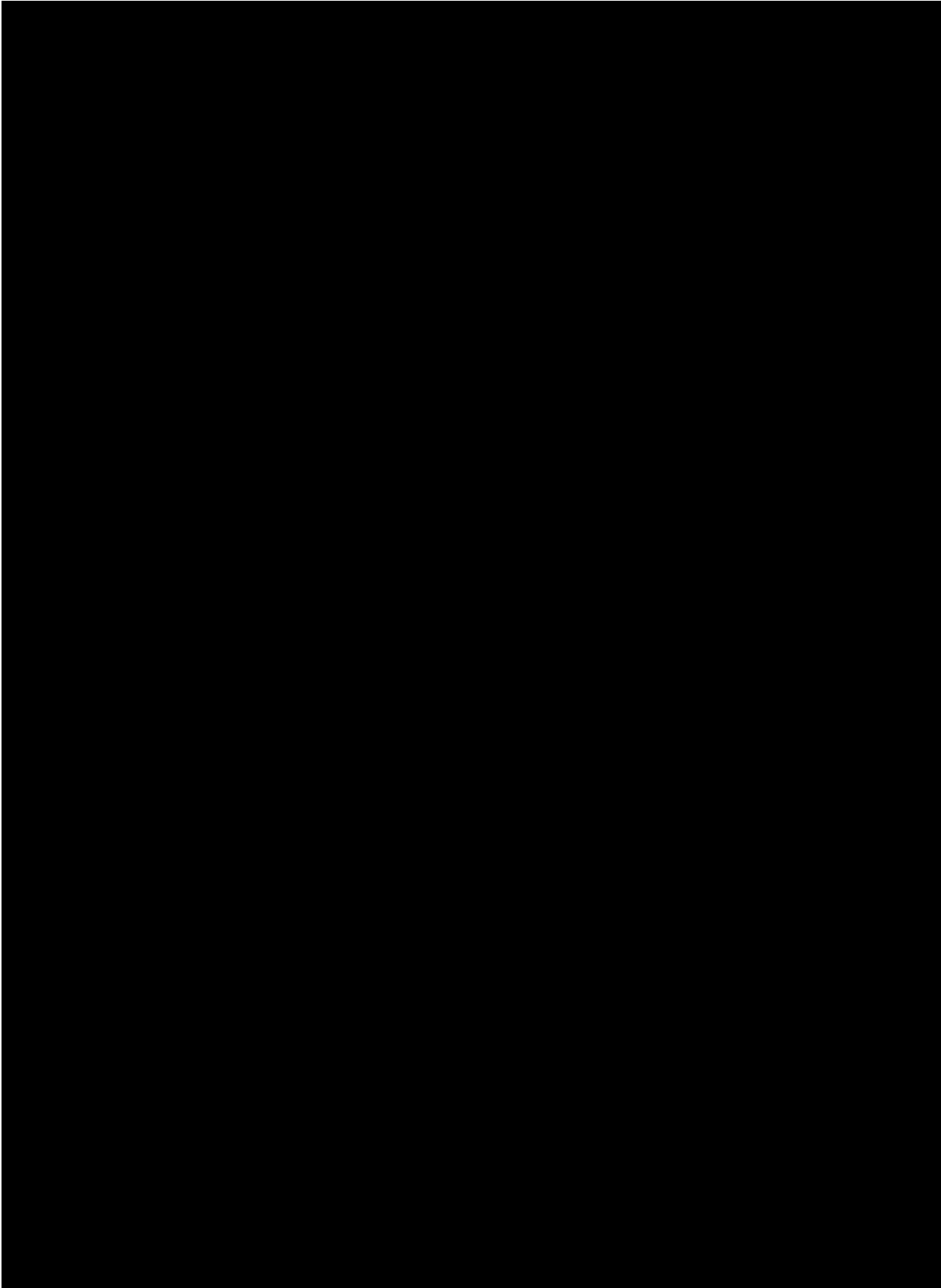
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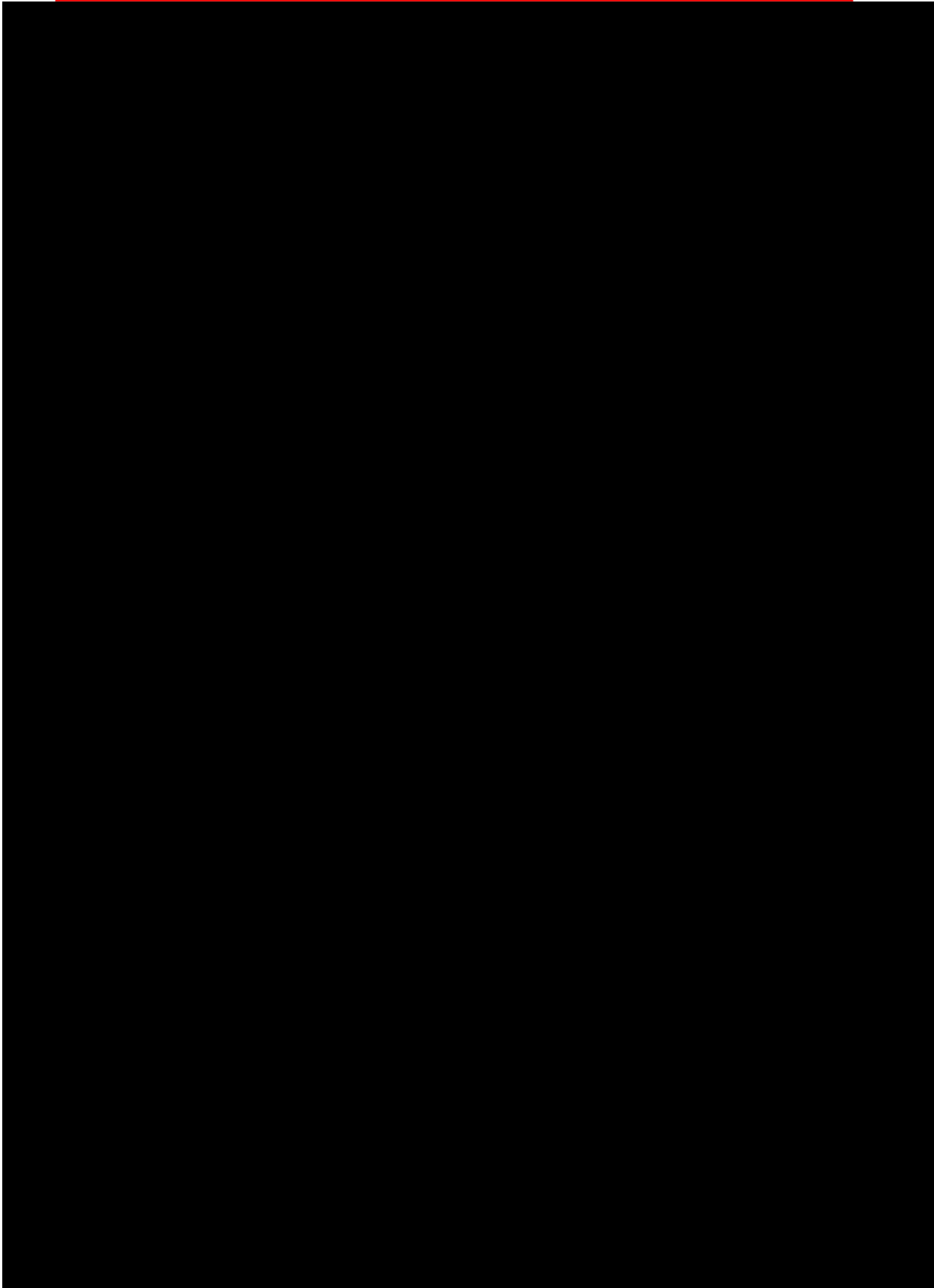


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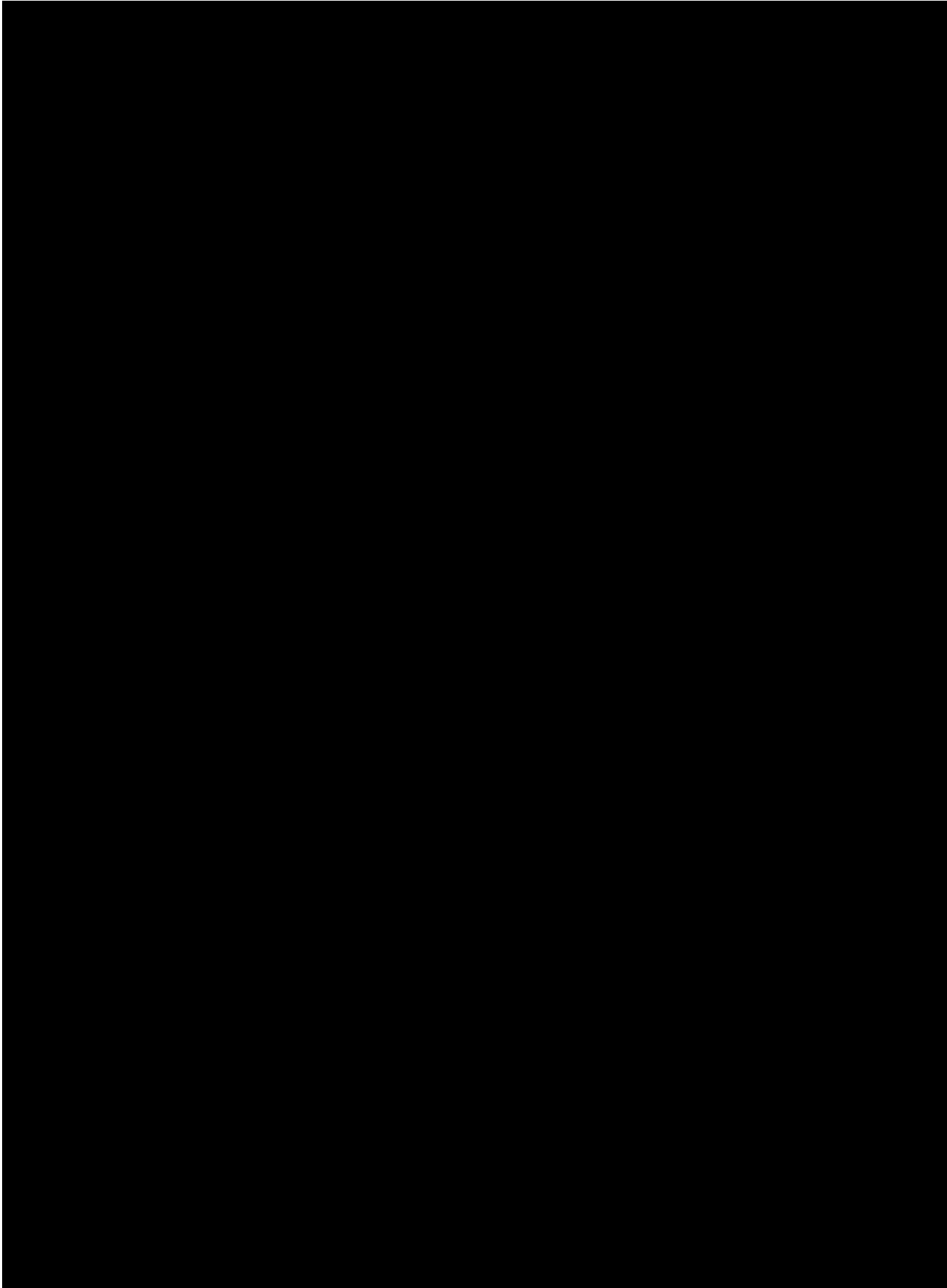
#Q15 7497ZSHJ_A630M1 (E)

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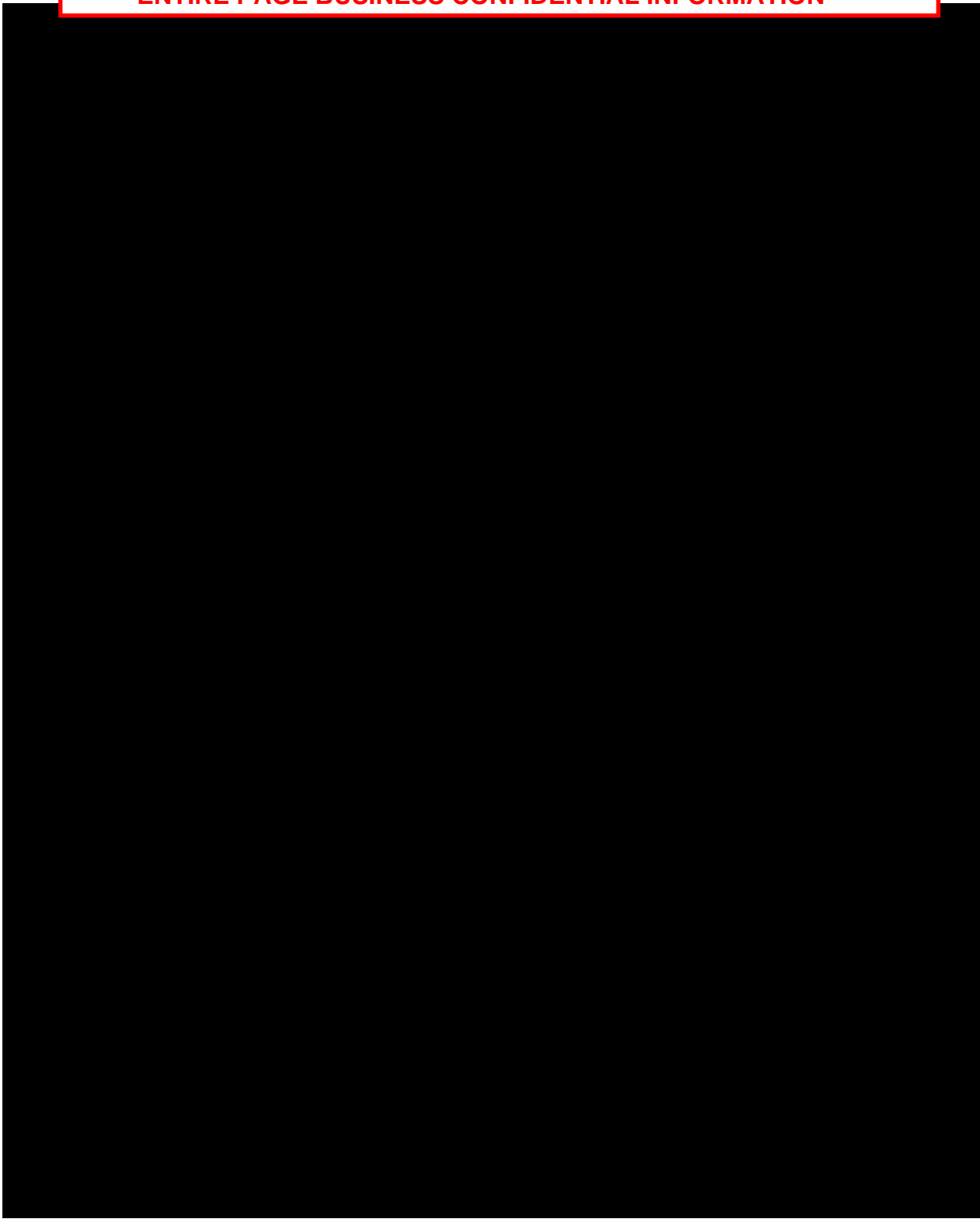
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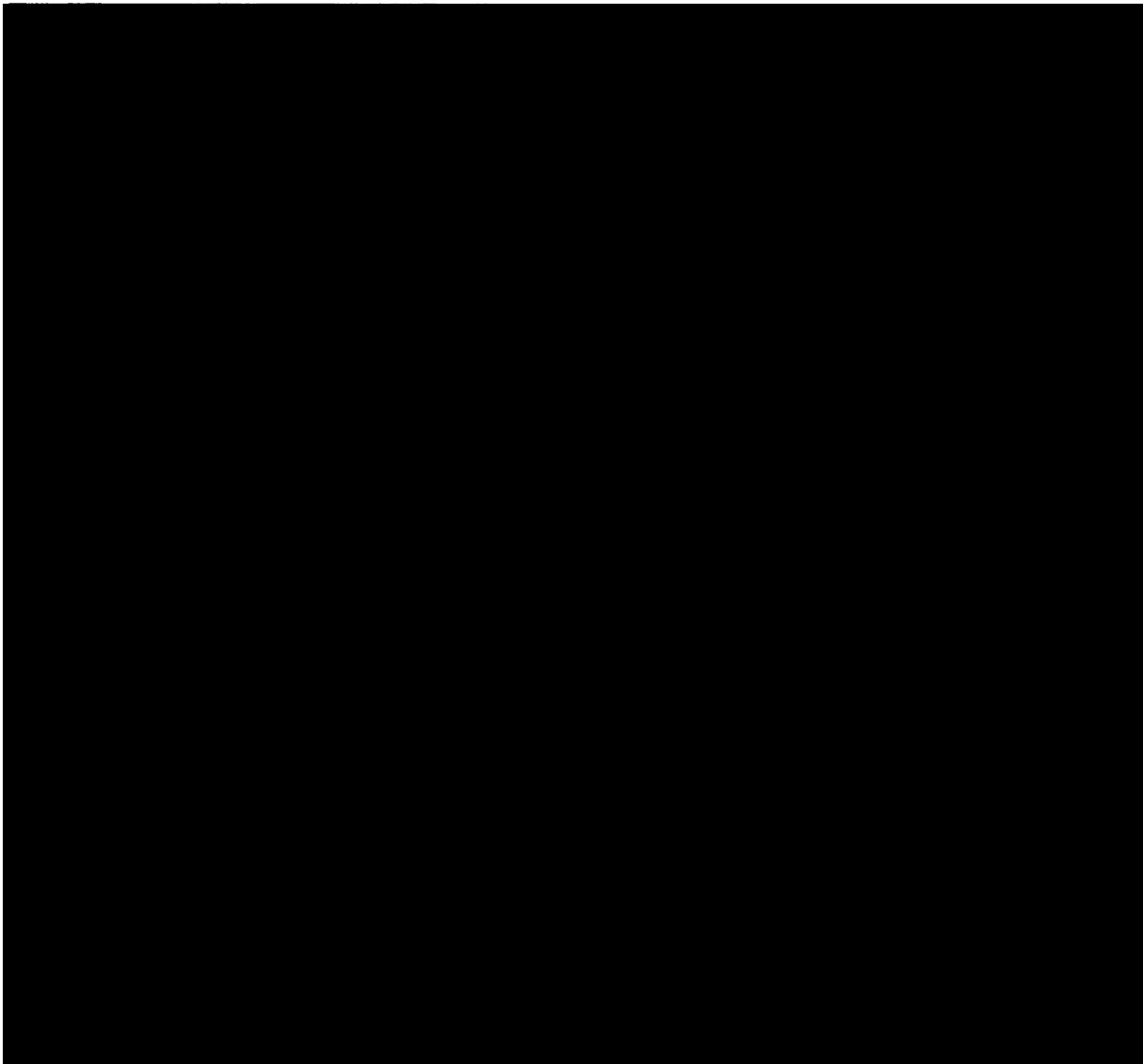
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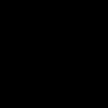
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7497Z-SHJ -A630-M1



PE11-034

HONDA

11/29/2011

#Q17 Parts Demand

Q10
 COMPONENT SALES HISTORY
 AS OF 11/17/11

PART DESCRIPTION	SERVICE PART NO.	MODEL APPLICATION	PART RELEASE DATE	CALENDAR YEAR			
				2008	2009	2010	2011 as of 11/17/11
STAY, TAILGATE OPEN	74820-SHJ-A71	2008-2010 Odyssey	Oct. 15, 2007	193	2955	7581	8114

PART DEMAND HISTORY				
	2008	2009	2010	2011
January	-	-	335	488
February	-	-	359	447
March	-	-	523	598
April	-	-	655	722
May	-	-	571	989
June	-	-	1051	1162
July	-	-	774	1034
August	-	-	891	1079
September	-	-	726	732
October	-	-	650	586
November	-	362	571	277
December	-	430	475	0

PE11-034

HONDA

11/29/2011

Honda Response SUBMITTED

REDACTED 20111122

November 22, 2011

Mr. Scott Yon, Chief
Vehicle Integrity Division
Office of Defects Investigation
U.S. DEPARTMENT OF TRANSPORTATION
National Highway Traffic Safety Administration
1200 New Jersey Ave., SE
Washington, DC 20590

Re: PE11-034
2008-2010 Honda Odyssey
Power Liftgate

Dear Mr. Yon:

In reply to your letter dated September 30, 2011, we are submitting our response regarding the allegations of failure of the liftgate struts in model year (MY) 2008 through 2010 Honda Odyssey vehicles. We will not be submitting any data for the 2008 MY Odyssey EX-L because this trim level was not equipped with a power liftgate.

1. State, by model year and model trim level (e.g., Odyssey Touring and Odyssey EX-L), the number of subject vehicles that Honda has manufactured for sale or lease in the United States. Separately, for each subject vehicle manufactured to date by Honda, state the following:
 - a) Vehicle identification number (VIN);
 - b) Make
 - c) Model Trim Level;
 - d) Model Year;
 - e) Date of manufacture;
 - f) Date warranty coverage commenced; and
 - g) The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2007, or a compatible format, entitled "PRODUCTION DATA."

Response:

The data elements "a" through "g" are provided in the file titled "PRODUCTION DATA" on the enclosed CD. There are separate tables for each model by trim level.

Model	Model Year	Trim Level	# Manufactured for Sales/Lease
Odyssey	2008	EX-L	*
		Touring	14,548
	2009	EX-L	42,419
		Touring	6,960
	2010	EX-L	65,589
Touring		11,640	

*The 2008 MY Odyssey EX-L was not equipped with a power liftgate.

2. State the number of each of the following, received by Honda, or of which Honda is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
- a) Consumer complaints, including those from fleet operators;
 - b) Field reports, including dealer field reports;
 - c) Reports involving a crash, injury, or fatality, based on claims against the manufacturer involving a death or injury, notices received by the manufacturer alleging or proving that a death or injury was caused by a possible defect in a subject vehicle, property damage claims, consumer complaints, or field reports;
 - d) Property damage claims;
 - e) Third-party arbitration proceedings where Honda is or was a party to the arbitration; and
 - f) Lawsuits, both pending and closed, in which Honda is or was a defendant or codefendant.

For subparts "a" through "f" state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "f" provide a summary description of the alleged problem and causal and contributing factors and Honda's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "e" and "f" identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

Response:

The total number of reports for items "a" through "f" are stated in the table below. See Attachment #Q2 on enclosed CD for summary description for items "c" through "f".

Note: Honda does not have any fleets or participate in fleet sales.

Model	Model Year	Trim Level	A Owner/ Fleet Reports	B Field/ Dealer Reports	C-1 Crash Reports	C-2 Injury Reports	C-3 Fatality Reports	D Property Damage	E Third-Party Arbitration	F Lawsuits
Odyssey	2008	EX-L	*	*	*	*	*	*	*	*
		Touring	15	14	0	4	0	0	0	1
	2009	EX-L	42	16	0	10	0	0	0	0
		Touring	7	2	0	1	0	0	0	0
	2010	EX-L	3	20	0	1	0	0	0	0
		Touring	0	5	0	0	0	0	0	0

*The 2008 Odyssey EX-L was not equipped with a power liftgate

We are also providing an additional table showing the breakdown of Model Year and Trim Level by Category.

Category	2008		2009			2010			Grand Total
	Touring	Total	EX-L	Touring	Total	EX-L	Touring	Total	
FALLS	10	10	25	4	29	1	0	1	40
INOP	7	7	9	2	11	8	2	10	28
LEAK	1	1	2	0	2	0	0	0	3
REPLACE	0	0	4	1	5	0	0	0	5

NOISE	0	0	2	0	2	3	0	3	5
PARTIAL	0	0	0	1	1	1	1	2	3
WON'T CLOSE	3	3	5	0	5	3	1	4	12
WON'T OPEN	8	8	11	1	12	7	1	8	28
RUST	1	1	0	0	0	0	0	0	1
Grand Total	30	30	58	9	67	23	5	28	125

Source(s): Customer Relations, Tech Line, Field Reports, Claims and Lawsuits.
 As of: Nov. 2, 2011

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:

- a) Honda's file number or other identifier used;
- b) The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
- c) Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
- d) Vehicle's VIN;
- e) Vehicle's make, model and model year;
- f) Vehicle's mileage at time of incident;
- g) Incident date;
- h) Report or claim date;
- i) Whether a crash is alleged;
- j) Whether property damage is alleged;
- k) Number of alleged injuries, if any; and
- l) Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2007, or a compatible format, entitled "REQUEST NUMBER TWO DATA."

Response:

The data elements "a" through "l" are provided in the file titled "REQUEST NUMBER TWO DATA" on the enclosed CD.

Source(s): Customer Relations, Tech Line, Field Reports, Claims and Lawsuits.
 As of: Nov. 2, 2011

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method Honda used for organizing the documents.

Response:

See Attachment #Q4 for copies of all documents on enclosed CD.

The documents are organized by category (i.e., consumer complaints, field reports, etc.) and within each category the documents are organized by model year, trim level then the last six digits of the VIN.

Source(s): Customer Relations, Tech Line, Field Reports, Claims and Lawsuits.
 As of: Nov. 2, 2011

5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Honda to date that relate to, or may relate to, the alleged defect in the subject vehicles including all claims for repairs of the subject components: warranty claims; extended warranty claims; claims for goodwill services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin (TSB) or customer satisfaction campaign. Also, state, by model and model year, a total count for all claims that relate to repairs related to any TSBs involving the subject components

Separately, for each such claim, state the following information:

- a) Honda's claim number;
- b) Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c) VIN;
- d) Repair date;
- e) Vehicle mileage at time of repair;
- f) Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g) Labor operation number;
- h) Problem code;
- i) Whether or not the repair is related to a TSB (and if so, identify the TSB number);
- j) Replacement part number(s) and description(s);
- k) Concern stated by customer;
- l) Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2007, or a compatible format, entitled "WARRANTY DATA."

Response:

The total warranty counts are provided in the table below. The data elements "a" through "l" are provided in the file titled "WARRANTY DATA" on the enclosed CD.

Model	Model Year	Trim Level	Warranty Claims	Extended Warranty	Goodwill Claims	Warranty Claims - TSB
Odyssey	2008	EX-L	*	*	*	*
		Touring	1312	0	80	0
	2009	EX-L	3405	0	120	0
		Touring	740	0	22	0
	2010	EX-L	136	0	0	0
		Touring	33/	0	0	0

*The 2008 MY Odyssey EX-L was not equipped with a power liftgate

We are also providing an additional table showing the breakdown of Model Year and Trim Level by Category.

Category	2008		2009			2010			Grand Total
	TOURING	Total	EX-L	TOURING	Total	EX-L	TOURING	Total	
Main Category									
FALL	1049	1049	2757	579	3336	81	15	96	4481
PARTIAL	55	55	187	42	229	6	1	7	291
BOUNCE	5	5	9	3	12	6	1	7	24
RECALL	2	2	2	0	2	0	0	0	4
Main Category Total	1111	1111	2955	624	3579	93	17	110	4800
Subcategory									
INOP	146	146	250	72	322	15	6	21	489
LEAK	40	40	70	18	88	8	1	9	137
OTHER	5	5	3	1	4	0	0	0	9
NOISE	16	16	34	14	48	14	7	21	85
NO DETAIL	47	47	98	17	115	3	1	4	166
SCRATCH	0	0	2	0	2	0	0	0	2
RUST	0	0	0	0	0	1	1	2	2
DOES NOT OPEN	22	22	102	14	116	2	0	2	140
DOES NOT CLOSE	5	5	11	2	13	0	0	0	18
Main Subcategory Total	281	281	570	138	708	43	16	59	1048
Grand Total	1392	1392	3525	762	4287	136	33	169	5848

Source(s): Warranty claim data.
 As of: Oct. 7, 2011

6. Describe in detail the search criteria used by Honda to identify the claims identified in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by model year, the terms of the new vehicle warranty coverage offered by Honda on the subject vehicles (i.e., the number of months and mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that Honda offered for the subject vehicles and state by model year and model trim level, the number of vehicles that are covered under each extended warranty.

Response:

Search Criteria: Using warranty data for all subject vehicles, claims were pulled based on the power liftgate strut part number. The contention text description was reviewed for each claim to identify the following symptoms: 1) failure of the liftgate strut to hold the liftgate in the open position; 2) other failure or malfunction of the liftgate strut(s) or parts therein; 3) unexpected closing of the liftgate; or 4) failure of the liftgate to remain open.

Coding and Descriptions: See Attachment #Q6

Warranty Coverage: All subject vehicles are covered by a new vehicle limited warranty for three years or 36,000 miles, whichever comes first. Under the terms of the new vehicle limited warranty, Honda will repair or replace any part that is defective in material or workmanship under normal use. This warranty covers all systems except emission

control systems, accessories, battery, or tires which have their own warranties. Honda has not issued extended warranty coverage related to the alleged defect in any of the subject vehicles.

Source(s): Warranty claim data.
As of: Oct. 7, 2011

7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that Honda has issued to any dealers, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that Honda is planning to issue within the next 120 days.

Summarize and provide a brief chronology of all actions taken by Honda leading to each of the technical service bulletins that have been issued relating to the alleged defect in the subject vehicles. Provide copies of all documents, organized in chronological order, related to the development of these bulletins.

Response:

Currently no communication is planned within the next 120 days.

As no communications or other actions have been taken by Honda, there are no copies of documents related to this request.

8. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, Honda. This includes, but is not limited to, any and all actions by the subject component manufacturer relating to the alleged defect. For each such action, provide the following information:
 - a) Action title or identifier;
 - b) The actual or planned start date;
 - c) The actual or expected end date;
 - d) Brief summary of the subject and objective of the action;
 - e) Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and
 - f) A brief summary of the findings and/or conclusions resulting from the action.

For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action. If an action is not complete, provide a detailed schedule for the work to be done, tentative findings and/or conclusions, and provide an update within 10 days of completion of the action.

Response:

The following summaries describe 2 documents included in Attachment #Q8.

Document 1 : Quality improvement sheet (QIS)

- a) **Action title or identifier:** QIS SHJA07101201; Odyssey Liftgate Open Stay Failure
- b) **The actual or planned start date:** 11/12/2007
- c) **The actual or expected end date:** 11/30/2007
- d) **Brief summary of the subject and objective of the action:** An earlier effort to

reduce the failure rate of the gas struts for the 2007 model year Odyssey had not yielded any appreciable reduction in the failure rate. This QIS requested analysis to determine whether or not it is acceptable to use the pre-countermeasure components, or to dispose of them.

- e) **Engineering group(s)/supplier(s) responsible for designing and for conducting the action:** *Honda Manufacturing of Alabama (HMA) requested that the Parts Quality department of HMA work with Stabilus (supplier) and American Honda to determine on-hand inventory and appropriate disposition of these components.*
- f) **A brief summary of the findings and/or conclusions resulting from the action:**
HMA concluded the following:
 - *The strut seals leaked due to damage occurring during strut assembly at the supplier. This was addressed by changing from a metal seal protector that was burred and causing the initial damage to a plastic seal protector that would not cause similar damage during seal installation.*
 - *Strut piston concentricity was not being maintained while in use due to an imbalance of force being leveraged through the rod to the piston at the rod guide. This was addressed by the inclusion of a second rod guide.*
 - *The method of securing the rods during the riveting process was also identified as a cause of damage on the rods. This method of nesting the rods in the riveting tool was changed to a clamping tool that could avoid the damage.*
 - *The method of identifying damage to the rod during inspection of rods prior to strut assembly was insufficient. The process was modified to adjust the Eddy current testing tool to be more sensitive to material defects in the rod surfaces.*

Document 2 : Quality improvement sheet (QIS)

- a) **Action title or identifier:** *QIS HMA09070801; Liftgate Open Stay Failures*
- b) **The actual or planned start date:** *7/8/2009*
- c) **The actual or expected end date:** *11/11/2009*
- d) **Brief summary of the subject and objective of the action:** *Analysis of market returned parts and observation that claim rates had appeared elevated during warmer months and in southern regions.*
- e) **Engineering group(s)/supplier(s) responsible for designing and for conducting the action:** *It is not specified on the document, but the analysis was completed by the HMA Market Quality department.*
- f) **A brief summary of the findings and/or conclusions resulting from the action:**
Damage to the rod of the gas struts was being caused by contact to the rod guide. The countermeasure was to apply a second spacer to the strut, improving alignment throughout rod travel and preventing scratches to the rod.

9. State all design and performance specifications, requirements, guidelines, and estimated performance characteristics developed and/or used by Honda or on its behalf (e.g., by a supplier) that were suggested, considered, and/or used in the design of the subject component as originally designed for the subject vehicles, including:

- a) The strut lifting capacity (in pound force), including lifting capability at different strut extension lengths and at different ambient temperatures, when the struts are new and as the strut lifting capacity degrades over time/usage;
- b) The design usage cycles (one cycle comprising an extension and compression) from when the strut is installed on the subject vehicles until the strut can no longer maintain the liftgate in the fully-open position; and
- c) The estimated usage rate in the field and expected amount of time a strut will be in service on a subject vehicle before the strut is no longer capable of maintaining the liftgate in the fully-open position.

Response: See Attachment #Q9

- a) *The reactive force specified on the design drawing for the strut is $F_3=825N\pm 15N$. The liftgate holding load is 68.6N with median reaction value at 20 deg C. The load is 16N with minimum reaction value at -20 deg C. The strut reactive force reduction specified on the design drawing for the 2005-2010MY Odyssey power liftgate holding strut is to remain within 10% of the values listed above after completing durability testing of [REDACTED] ⇒close cycles.
⇒ The internal Honda design requirement specifications (in Japanese and English) are title as follows:
QB08A0280022 (J) and QB08A0280022 (E)
⇒The design drawing for the liftgate strut is titled 74820SHJ_ZX10M1__C4722863*
- b) *The design specifications for the power liftgate gas strut do not include a service life for holding the liftgate in the full open position. Durability of the entire power liftgate system is confirmed by testing the complete liftgate to [REDACTED] while maintaining proper function. Proper function through durability testing means that there can be no mechanical failures of the system, and it must remain functional at the conclusion of the test. This does not include the replacement of wear parts such as the liftgate struts (comparable examples of wear parts would be windshield wiper blades, brake pads and tires), however in the case of this testing the liftgate gas struts remained functional through the [REDACTED] and completed component level testing to [REDACTED], as described in answer "a)" above.
⇒The design drawings (in Japanese and English) are titled as follows:
QB08A0230029 (J) and QB08A0230029 (E)*
- c) *Honda does not have a designed failure specification for this component. Durability of production samples are confirmed to perform properly at [REDACTED] ⇒close cycles, which corresponds to approximately [REDACTED] of typical use in the market.*

10. Describe all modifications or changes made by or on behalf of Honda (e.g., by a supplier) in the design, material composition, manufacture, quality control, supply, or installation of the subject components, from the start of production of MY2008 subject vehicles to the end of production mY2010 subject vehicles, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:

- a) The date or approximate date on which the modification or change was incorporated into vehicle production;
- b) A detailed description of the modification or change;
- c) The reason(s) for the modification or change;
- d) The part number(s) (service and engineering) of the original component;
- e) The part number(s) (service and engineering) of the modified component;
- f) Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
- g) When the modified component was made available as a service component; and
- h) Whether the modified component can be interchanged with earlier production components.

Also, provide the above information for any modification or change that Honda is aware of which may be incorporated into vehicle production within the next 120 days.

Response: See Attachment #Q10

From October 2007 through August 2010 Honda produced the 2008 through 2010 model year Honda Odyssey vehicles with power liftgates. Within this time period two design changes to the original part # 74820-SHJ-A612-M1 design were applied, identified as DC# C4722863 involving part # 74820-SHJ-A710-M1 and HMA MI# AXA900926 involving part # 74820-SHJ-A710-C1. The responses below are explained in terms of these three part numbers:

- 1) *The first design change design for the 2008 model year Honda Odyssey power liftgate gas strut was applied in October, 2007 based on DC# C4722863 involving part number 74820-SHJ-612-M1:*
 - a) **The date or approximate date on which the modification or change was incorporated into vehicle production;**
This design was applied to mass production on October 2010.
 - b) **A detailed description of the modification or change;**
This design change consisted of a reduction of the reactive force of the gas struts from 865N to 825N to accommodate the reduced overall mass of the power liftgate structure and maintain proper opening speed, and proper feel for manual operation. The reduced mass was the result of the minor model change design for the 2008 model year, including the application of lighter weight LED taillamp assemblies and other changes.
 - c) **The reason(s) for the modification or change;**
The overall design change was the result of a previously planned update of the 2005 model year Odyssey for the 2008 model year. This was driven by sales and marketing direction to maintain a competitive product in the marketplace.
 - d) **The part number(s) (service and engineering) of the original component;**
The original component is part number 74820-SHJ-A612-M1.
 - e) **The part number(s) (service and engineering) of the modified component;**
The replacement service and engineering part is identified as number 74820-SHJ-A710-M1.
 - f) **Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;**
The original unmodified component was superseded by 74820-SHJ-A710-M1 and was not withdrawn from production or sale, it was sold until supply was depleted, then replaced by 74820-SHJ-A710-M1.
 - g) **When the modified component was made available as a service component; and**
The 74820-SHJ-A710-M1 component was made available as a service component on October 15, 2007.

- h) Whether the modified component can be interchanged with earlier production components.**
The 74820-SHJ-A612-M1 and 74820-SHJ-A710-M1 components are interchangeable on 2008-2010 model year Honda Odyssey vehicles with a power liftgate with no tangible effect on performance or durability.
- 2) *The second design change to this component occurred on September 24, 2009 when a second spacer was added to prevent rod contact with the guide, which was determined to be the primary cause of rod scratching. This change is identified as HMA MI#AXA900926 involving part # 74820-SHJ-A710-C1.*
- a) The date or approximate date on which the modification or change was incorporated into vehicle production;**
This design change was applied to mass production on September 24, 2009.
- b) A detailed description of the modification or change;**
This design change consists of adding a second spacer inboard of the rod to gas cartridge seal. This can be visually identified by the position of the spacer holding groove in the gas cartridge, which is located 18.5 mm further from the end of the gas cartridge.
- c) The reason(s) for the modification or change;**
This design change was applied after determining that the primary cause of strut failures was scratches to the rod. The cause of the scratches to the rod was identified as contact with the spacer. The addition of a second spacer was applied to prevent rod contact to the spacers by maintaining proper alignment of the rod.
- d) The part number(s) (service and engineering) of the original component;**
The original part number was 74820-SHJ-A710-M1.
- e) The part number(s) (service and engineering) of the modified component;**
The modified service and engineering part number of the modified component is 74820-SHJ-A710-C1.
- f) Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;**
The original unmodified component was not withdrawn from production or sale, the supply was depleted due to sales and it was replaced with the modified component.
- g) When the modified component was made available as a service component; and**
The 74820-SHJ-A710-M1 component was made available as a service component on October 15, 2007.
- h) Whether the modified component can be interchanged with earlier production components.**
The modified component may be interchanged with earlier production components.

Also, provide the above information for any modification or change that Honda is aware of which may be incorporated into vehicle production within the next 120 days.

Production of this generation of the Honda Odyssey concluded in 2010 with the 2010 model year. A new generation Honda Odyssey was introduced in the 2011 model year using new specifications and new components for the power liftgate.

11. State the weight of the liftgate as installed on the subject vehicles. If this value varies for any reason (for example, if certain vehicle options add to or subtract from the weight of the liftgate), provide the reason(s) for the variation and the respective weight of the liftgate associated with each variation.

Response:

The weight of the power liftgate varies by model year and trim level, as reflected in the data below:

VIN	Model Year	Grade	Tailgate Weight (kgf)
5FNRL38769B [REDACTED]	2009	EXL	38.5
5FNRL38739B [REDACTED]	2009	EXL	38.0
5FNRL38759B [REDACTED]	2009	EXL	38.0
5FNRL38959B [REDACTED]	2009	Touring	38.0
5FNRL38998B [REDACTED]	2008	Touring	37.0

12. Describe in detail all aspects of the operation of the power liftgate feature in the subject vehicles, including any built-in safety features and any features designed to mitigate potential injuries from a descending or otherwise failing liftgate. Describe in detail the safety-related features that operate or activate when the struts can no longer maintain the liftgate in the open position. In your answer, include a discussion of how the safety features operate; including a description of the circumstances in which the safety features will activate and a description of how the safety features operate in each circumstance.

Response:

The power liftgate feature of the 2008-2010 Honda Odyssey (EX-L and Touring trim levels) are designed to allow the user to open the liftgate under its own power on command by pressing a control button on the instrument panel or on the remote key fob. The power liftgate is designed to close under its own power when commanded by the user by use of a control switch located at the bottom interior edge of the open power liftgate, by a control on the key fob or via the control on the instrument panel. The liftgate may be opened manually, with no power support, by using the outer release handle.

If the power liftgate is opened by motor power with insufficient gas liftgate strut support, this condition is detected by the logic of the motor and motor controller, which are programmed to detect the drop rate of an open liftgate. If the drop rate exceeds the programmed criteria, this power liftgate motor is used to re-open the liftgate before the liftgate has dropped more than approximately four inches. Should the drop rate exceed the criteria again, the liftgate will follow the same routine. If the liftgate drops at a rate exceeding the criteria a third time an audible alert sounds, and the power liftgate closes under power at a controlled rate. Should the power liftgate encounter resistance, as measured by motor torque during a powered closing operation, the liftgate will attempt to re-open.

These functions are explained in more detail in Attachment #Q12.

13. Describe in detail the operation of the power liftgate feature in the subject vehicles when equipped with struts that cannot support the liftgate in the open position. In your description, discuss how this feature operates and include nominal speed threshold (including tolerances) required to activate the power-close feature.

Response:

The operation of the power liftgate when the struts are unable to support the liftgate in the open position is described in Attachment #Q13. The liftgate drop speed threshold required for detection is 3.16 degrees per second. We are also including a video file that depicts this condition.

14. State whether the controlled (power or automatic) closing design feature of the liftgate will activate when the struts cannot support the liftgate and the operator manually opens liftgate to the fully-open position, as well as when the operator manually opens the liftgate to a position less than fully-open.

Response:

When operating with power, drop detection (automatic close operation) activates only when the liftgate drops at a speed of 3.16 degrees per second or more.

If operating manually, the controlled closing feature does not activate, however if the struts are unable to support the weight of the liftgate the user should recognize the increased effort required to raise the liftgate to any position, and the liftgate should begin closing as soon as the user has released the liftgate. We believe this condition should be readily observed by the user.

15. Describe any variation in the power liftgate operation that can be programmed in the power liftgate control module in the subject vehicles.

Response:

The software control specification was changed for the 2009 model year to reduce power consumption when the power liftgate is not in use. The change consisted of setting the ECU to transition to a partial sleep condition and disable communication between the ECU and frame-related CAN BUS when power liftgate operation is not necessary and the liftgate is in the closed position. At the same time, the ECU was set to "wake up" more quickly to return to normal operating condition when the power liftgate is required.

These changes are outlined in further detail in the attached documents (See Attachment #Q15)

Model year 2008 specifications: 7497Z-SHJ-A620-M1, issued February 23, 2007

Model year 2009 specifications: 7497Z-SHJ-A630-M1

16. Produce two of each of the following:
- Exemplar samples of each design version of the subject components;
 - Field-returned samples of the subject components exhibiting the alleged defect condition; and
 - Any kits and software changes (including patches, modifications, and reflashes) that have been released or developed, by Honda for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

Response:

- a) *Exemplar samples are being provided under separate shipment.*
- b) *Field returned samples of the subject components exhibiting the alleged defect condition are being provided under separate shipment*
- c) *No kits or software changes were applied, and therefore none are available.*

17. **State, by model year, all part numbers of the subject components that have been installed on subject vehicles as assembled by Honda. State, by model year, the service part numbers of the subject components Honda designates for installation on subject vehicles. State, by month, year, and part number, the total number of subject components sold as service parts by Honda. Identify any kits that Honda has released or developed for use in service repairs to the subject components or assembly.**

For each subject component part number, provide the supplier's name, address, and point of contact used by Honda (name, title, and telephone number). Also, identify by make, model and model year, any other vehicles of which Honda is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.

Response: *See Attachment #Q17 for parts demand.
Honda has not released or developed any kits.*

Supplier's Name:

*Stabilus
36225 Mound Road
Sterling Heights, MI 48310*

Contact:

*Susan Barker
Title: Project Manager
Phone(desk): 586-446-3943
Phone(mobile): 586-242-0141*

18. **Furnish Honda's assessment of the alleged defect in the subject vehicles, including:**
- a. **The causal or contributory factor(s);**
 - b. **The failure mechanism(s);**
 - c. **The failure mode(s);**
 - d. **The risk to motor vehicle safety that it poses; and**
 - e. **What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and**
 - f. **The VOQ reports referenced in this inquiry.**

Response:

- a. *Failure of the gas struts for the power liftgate of certain 2008-2009 model year Honda Odyssey vehicles could occur as a result of damage to the rod that results in scratching or scoring. A scratched or scored rod could result in leaking of the strut oil, and ultimately a loss of reactive force.*
- b. *Our analysis concluded that the failure mechanism was primarily related to damage to the rod as a result of misalignment caused by insufficient rod guidance throughout its stroke.*

- c. *The failure mode is a loss of reactive force in one or both of the gas struts that provide support for the liftgate motor and hold the liftgate in the opened position. Should one or both of the struts fail this would usually occur gradually and as described above in response to question 12, the fail-safe protection designed into the power liftgate will both help to prevent injury of the user and inform the user of abnormal operation by nature of the warning tone.*
- d. *Similar to our assessment of the risks associated with this condition in response to an earlier NHTSA inquiry into comparable allegations on 2005 model year Odyssey vehicles, we do not believe that this possesses an unreasonable risk to motor vehicle safety. In the event that one or both of the liftgate struts fails the power liftgate system is designed to alert the user visibly, audibly and by operating in an unfamiliar manner at predictable and controlled speeds.*
- e. *Should one or both of the gas struts in the power liftgate system of the subject vehicles of this inquiry lose reactive force, the power liftgate will fail to remain in the fully opened position. If this happens, the system is designed to detect that the liftgate has not remained open, and is programmed to re-open the liftgate by the power of the electric motor. Should the liftgate fail to remain open a second and third time, the vehicle will emit audible warning tones and close the power liftgate under power. We understand that these failsafes remain the state of the art in the auto industry.*
- f. *We have reviewed the VOQs provided by NHTSA and have determined that they do not offer sufficient information to draw any additional conclusions. Should NHTSA be able to provide any further details about the specific conditions of the failures, specifically the nature and cause of the alleged injuries, we would cooperate in further analysis of the VOQs.*

Sincerely,

AMERICAN HONDA MOTOR CO., INC.



Jay Joseph
Senior Manager
Product Regulatory Office

JWJ:nis

Attachments