



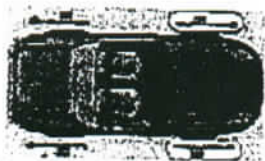








PEOPLES AUTO TRADING  
BLK 3007 UBI ROAD 1 #01-400  
TEL 6741 4646



COMPUTERIZED ALIGNMENT SPECIALISTS

CUSTOMER	BLUWEL	DATE	Mar 29, 2017 9:30:26 AM
LICENSE NO.	SJN 6 S		
MILEAGE	76782		
REFERENCE	CUSTOM	MODEL	LEXUS GS300 (S190)

Front Wheel	SPECS	DIAGNOSIS	ADJUSTMEN
	min prv max Δ	L total R Δ	L total R Δ
TOTAL TOE	-1.00 0.00 1.00	2.40	0.00
PARTIAL TOE	-0.50 0.00 0.50	3.30 -0.80	0.00 0.00
SET BACK	---	0°00"	0°00"
CAMBER	-1°02" -0°18" 0°26"	-0°42" -1°14" 0°30"	-0°42" -1°14" 0°30"
CASTER	6°28" 7°28" 8°28"	6°44" 6°34" 0°10"	6°44" 6°34" 0°10"
KING-PIN	---	9°22" 9°16" 0°04"	9°22" 9°16" 0°04"
INCL ANGLE	---	8°38" 8°00"	8°38" 8°00"
Toe-out on turns	---	---	---
STEERING IN	---	---	---
STEERING OUT	---	---	---

Rear Wheel	SPECS	DIAGNOSIS	ADJUSTMEI
	min prv max Δ	L total R Δ	L total R Δ
TOTAL TOE	0.00 1.00 2.10	8.20	1.60
PARTIAL TOE	0.00 0.50 1.00	2.20 6.00	0.80 0.80
SET BACK	---	-0°08"	-0°08"
CAMBER	-1°14" -0°30" 0°14"	-0°40" -1°26" 0°46"	-0°46" -1°34" 0°48"
THRUST ANGLE	-0°08" 0.00 0°08"	-0°18"	0°00"

alignment out

**KOAYS**

UTN: 20160526H

Accident  
Reconstruction

Private Limited

1 Sophia Road #03-10 Peace Centre Singapore 228149

■ Tel: (65) 6369 9462

■ Fax: (65) 6648 8254

■ Mobile: (65) 9451 2866

■ E-mail: koays.a@gmail.com

■ Website: KoaysAccidentReconstruction.com

Your reference: M1701354

24 April 2017

Our Reference: S235-1804R-RJ SJN6S

Tokio Marine Insurance Singapore Ltd

20 McCallum Street

#09-01 Tokio Marine Centre

Singapore 069046

Tel: 65926414

Fax: 62212101

**VEHICLE ACCIDENT DAMAGE RE-INSPECTION ASSESSOR REPORT**Accident involving SJN6S and XD8265U on 16/03/2017**1. REFERENCE**

<i>Claim type</i>	Third Party	<i>TP Vehicle</i>	<b>SJN6S</b>
<i>Accident date</i>	16-Mar-2017	<i>OD Vehicle</i>	<b>XD8265U</b>
<i>Inspected at</i>	Bluwel Auto, 1 Kaki Bukit Ave 6, #01-28, S417883 Tel: 67452088 (Sally)	<i>Assignment date</i>	18-Apr-2017
		<i>Assigned by</i>	Alvin/Fiona
		<i>Re-inspection date</i>	20-Apr-2017 (9.30am)

**2. VEHICLE PARTICULARS**

<i>Registration No.</i>	SJN6S	<i>Odometer reading</i>	77,279
<i>Make/Model</i>	Lexus GS300	<i>Odometer previous</i>	76,777
<i>Chassis number</i>	JTHBH96S705052824	<i>Regn. Year</i>	13-Jun-2007
		<i>Colour</i>	Black

**3. POINT OF IMPACT/ ZONE OF DAMAGE**

Side swipe of a light nature to the rear rhs fender

**4. METHODOLOGY**

The author has personally conducted a pre-repair inspection on 23 Mar 2017, and a resurvey with parts dismantled during repair on the same day, as well as a post repair inspection on 29 Mar 2017. This re-inspection was assigned as a verification of previous surveys/re-surveys.

**5. COLLISION ANALYSIS brief**

- The author has read the accident reports from both OD and TP drivers, and examined accident photographs available (9 ea from OD, 7 ea from TP).
- Physical inspections were also carried thrice on TP - (1) 23 Mar 2017 for pre-repair inspection, (2) again on 23 Mar 2017 for re-survey with parts removed during inspection, and (3) 29 Mar 2017 for post-repair inspection.
- Based on calculations, the lateral speed damage to TP's rear fender is calculated to be 7km/h delta-V. This is considered minor, as the impact just exceeded the threshold of body panel damage, i.e. 4 km/h delta-V.





- d) The maximum impact force to TP's fender was calculated to be 475 kgf. It would be impossible for any undercarriage parts to have any induced damage arising from such a low impact force.
- e) During inspection with parts removed on 23 Mar 2017, it is noted that the repairer opted to remove several unaffected rhs undercarriage parts for photos - for e.g. the knuckle, shock absorber, trailing arm mount, lower link etc
- f) Grease was observed to be leaking from the upper arm rubber boot, however, this is noted to be inconsistent with the accident. It is likely that the rubber boot deteriorated due to wear and tear (vehicle is 9.7 years old during the point of inspection)

## **6. RECOMMENDATIONS**

- a) Recommended cost of repairs (lump sum): **\$2,200.00**
- b) Recommended downtime to repair: **3 work days**

*Note: 3rd Party's surveyor's recommended sum was \$6,800.00 and 7 working days.*

**Melvin Lum** DipEng LAE(P) NAPARS AAI  
Assessor Engineer & Accident Investigator

**Kelvin Koay** BSc(Engg)Hons CEng ACTAR #978  
Assessor Engineer, Accredited Accident Recon., USA

### ASSESSMENT OF SPARE-PARTS, MATERIAL & LABOUR

Your Reference: M1701354

Vehicle Number: SJN6S

Our Reference: S235-1804R-RJ SJN6S

SPARE PARTS, MATERIAL & LABOUR Description						QTY pc/set	OUR Assessment	TP's Estimate (\$)	OUR Estimate (\$)
<b>1. SPARE PARTS:</b>									
Rear windscreen moulding						1	nec	144.80	144.80
Rear bumper						1	lug torn	841.67	841.67
Rear fender						1	dented	928.52	928.52
Rear wheel hub with bearing						1	na; see CA	627.80	0.00
Rear shock absorber						1	na; see CA	714.50	0.00
Rear knuckle arm						1	na; see CA	724.55	0.00
Rear control arm						1	na; see CA	182.50	0.00
Rear lower arm						1	na; see CA	374.80	0.00
Rear stay arm						1	na; see CA	197.20	0.00
Rear top arm						1	na; see CA	186.96	0.00
								<b>4,923.30</b>	<b>1,914.99</b>
% less:				10%	10%			492.33	191.50
<b>SUB-TOTAL (1)</b>								<b>4,430.97</b>	<b>1,723.49</b>
Rear windscreen sealant						1	nec	50.00	50.00
Rear tyre (Depreciation)						1	na; in any case found reused	252.00	0.00
Rear sport rim						1	repair will suffice	1,691.85	0.00
								<b>1,993.85</b>	<b>50.00</b>
% less:				0%	0%			0.00	0.00
<b>SUB-TOTAL (2)</b>								<b>1,993.85</b>	<b>50.00</b>
<b>2. LABOUR &amp; MATERIAL:</b>									
To disconnect & reconnect, check electrical wiring, harness wires, sockets, replace damaged parts								30.00	0.00
To remove & refit rear cushion seats, radio speaker board, interior upholstery to facilitate the repairs								140.00	80.00
To remove & refit rear bumper sensor								80.00	20.00
To remove & refit rear undercarriage							not necessary	200.00	0.00
To check & readjust (computerized) all wheel alignment								120.00	120.00
To remove & replace the above damaged parts, straighten, knock out, realign & repair including cut & weld body panels. To readjust to the original position using power tools						2		750.00	400.00
To spray paint on the replaced & repaired parts, prepare spray such as masking tape the unaffected areas with paper, cleaning & sanding of surfaces, final polishing & waxing are also available						2		750.00	400.00

SPARE PARTS, MATERIAL & LABOUR Description	QTY pc/set	OUR Assessment	TP's Estimate (\$)	OUR Estimate (\$)
To apply undercoating on the repaired & replaced panels for rust protection			60.00	0.00
SUB-TOTAL (3)			2,130.00	1,020.00
GRAND TOTAL (1)+(2)+(3)			8,554.82	2,793.49

### 3. SUMMARY

- a) Repairs cost : **\$2,200.00** lump sum  
b) Number of days for the repairs : **3 work days**

#### LEGEND

- na not affected/ applicable  
bod benefit of doubt given  
CA Collision Analysis

0.8

*Note: 3rd Party's surveyor's recommended sum was \$6,800.00 and 7 working days.*



**SJN6S [XD8265U] - Submitted by: Koays Accident Reconstruction Pte Ltd (HQ)**



1/13: Rear View Left



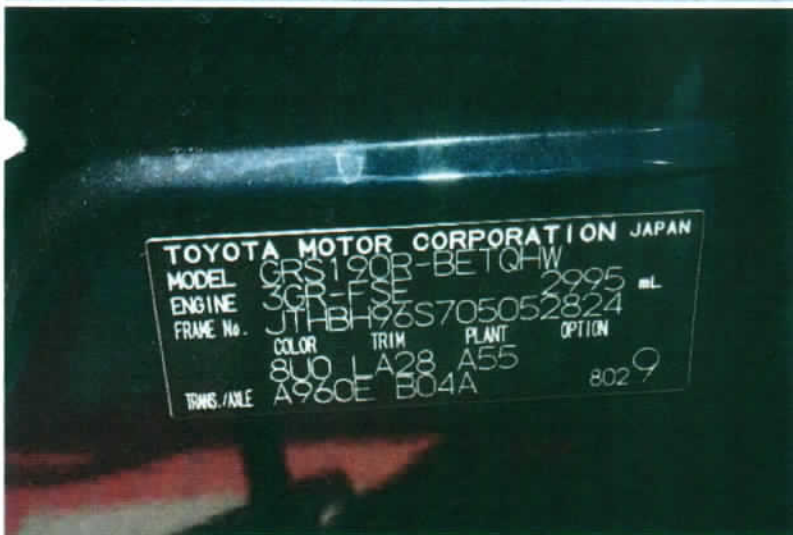
2/13: Rear View



3/13: Rear View Right

**SJN6S [XD8265U] - Submitted by: Koays Accident Reconstruction Pte Ltd (HQ)**

4/13: Photographs of Damaged Parts



5/13: Chassis Number



6/13: WIP

**SJN6S [XD8265U] - Submitted by: Koays Accident Reconstruction Pte Ltd (HQ)**



7/13: WIP



8/13: Finishing Photo



9/13: Finishing Photo



**SJN6S [XD8265U] - Submitted by: Koays Accident Reconstruction Pte Ltd (HQ)**



10/13: Reinspection Photo



11/13: Reinspection Photo



12/13: Reinspection Photo

SJN6S [XD8265U] - Submitted by: Koays Accident Reconstruction Pte Ltd (HQ)



13/13: Reinspection Photo

Reference No. : 91/LAW/80/203/UEB  
Policy Type: OD/TP/TP RES/TL/EVA

SJN 6 S  
Typist

(1) Office Assign Form

(1) Office Assign Form		Y-Date	N-Date	Y-Date	N-Date
C	Reference No.	✓			
C	Customer Code	✓			
N	Assign From	✓			
C	Assign Date	✓			
C	Veh No (Inspected)	✓			
C	Veh No (Insured)	✓			
C	D.O.A	✓			
C	Policy No				
C	Claim No	✓			
C	Insurance Authorisation (CA /REV/REP)				
C	Report Type	✓			
C	Weekend Charges				
N	Survey held at/Repairer	✓			
C	Excess				


(1) Assignment Form

Key Assignment Form		Date		Page	
C	Vehicle No				
C	Regn Month/Year				
N	Vehicle Type				
N	Make & Model				
C	Engine Capacity. (C.C)				
N	Colour				
C	Odometer. (Sp.Reading)				
C	Chassis No				
N	General Condition				
N	Steering				
N	Brake				
N	Modification (Modi)				
C	Tyre Size				
N	Tyre Make				
C	Tyre Balance				
C	Date of Inspection				
N	Survey held				
N	Des.of Damages				

C	Damaged Vehicle Photographs Uploaded
1	0
2	0
3	0
4	0
5	0
6	0
7	0
8	0
9	0
10	0
11	0
12	0
13	0
14	0
15	0
16	0
17	0
18	0
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84	0
85	0
86	0
87	0
88	0
89	0
90	0
91	0
92	0
93	0
94	0
95	0
96	0
97	0
98	0
99	0
100	0

N	ALL Parts condition
C	Market Value for OD cases
C	Estimate Repair Cost for PRI (RSI, TMI, MSIG)
C	Days of repair
C	Finalised Amount
C	Re-inspection Cases to Finalize within 5 Days

C Resurvey photo Uploaded

	07/2/18
Case Handler	Date

21/05/2014