

Our reference: 22 - 170593

Date: 25/04/2022

INVOICE NO. INV-170593

Lim Lee Tiang
c/o Garage 13 Pte Ltd
8 Kaki Bukit Ave 4
#03-46 Premier@KB
Singapore 415875

Registration No. SML2377H

We enclose our fee note for your kind attention, which remains payable irrespective of the outcome of this case.

S/No.	Description of Services Provided	Qty	Amount
1	Being vehicle damage assessment report, inspection, photographs, transport and miscellaneous.	1	\$ 1,103.00
Total amount			<u>\$ 1,103.00</u>

Please kindly cross all cheques made payable to "Impact Analysis Consulting Pte Ltd".

We thank you in anticipation for your prompt payment.



L. L. Tan (Ms)
Principal Consultant

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c/o Garage 13 Pte Ltd
8 Kaki Bukit Ave 4
#03-46 Premier@KB
Singapore 415875

Dear Sirs

RE: Road Traffic Accident on 08-04-2022
Lim Lee Tiang

In accordance with your instructions received in this office on 11-04-2022, we made arrangements to examine the vehicle on 11-04-2022 at above-mentioned address. The following data was recorded:

Vehicle details

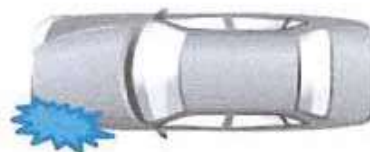
Make	Toyota	Registration	SML2377H
Model	Alphard	Chassis	AGH300213228
Colour	Black	Gearbox	Auto
Odometer	84832km	Paintwork	Fair
Steering	In order	Brakes	In order
Condition	Fair		

Tyre Depths

Front left	235/50R18	85% Grelander
Front right	235/50R18	85% Grelander
Rear left	235/50R18	85% Yokohama
Rear right	235/50R18	85% Neuton

Status	REPAIRABLE
Magnitude	Medium
Legal status	Unroadworthy

Impact Direction & Area of Damage:



Following our examination of the accident damage, we have calculated repair times and method, which are detailed on page 2 & 3. We would recommend a sum of \$17,300.00 and 13 working days for repair, which is sufficiently lower than the pre accident value to render the vehicle an economically and physically reliable proposition.

Subsidiaries of Impact Analysis:

• Impact Analysis Consultant • IABN Pte Ltd • Impact Analysis Solution Pte Ltd
www.iaconsultingsg.com

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Section A: Damaged Parts Assessment

Part's Description	Qty	Condition As inspected	Repairer's Estimate	Our Adjustment
List Items :				
Front bumper	1	crushed	1926.80	1926.80
Front bumper side retainer @\$85.00	2	broken.nec	170.00	170.00
Front bumper side chrome garnish assy lh	1	grazed.cracked	485.40	485.40
Front bumper foglamp garnish lh	1	deformed	92.30	92.30
Front bumper foglamp lh	1	cracked	299.50	299.50
Front bumper reinforcement	1	bent	388.90	388.90
Front bumper sponge	1	torn	139.50	139.50
Front bumper tow cover	1	deformed	38.90	38.90
Front bumper under cover (absorber)	1	deformed	236.80	236.80
Front bumper number plate holder	1	deformed	78.00	78.00
Front bumper lower grille	1	deformed	218.00	218.00
Front bumper sensor @\$328.20	2	malfunction	656.40	656.40
Front bumper sensor bracket @\$24.00	2	broken.nec	48.00	48.00
Headlamp @\$3889.40	2	lh crushed rh fractured	7778.80	7778.80
Headlamp chrome moulding lower lh	1	cracked	118.00	118.00
Headlamp ECU lh	1	malfunction	444.68	444.68
Center grille assy	1	grazed.torn	1849.70	1849.70
Center grille logo	1	necessary	85.00	85.00
Bonnet	1	buckled	1310.00	1310.00
Bonnet hinge @\$84.00	2	shifted.bent	168.00	168.00
Bonnet lock	1	bent	166.50	166.50
Bonnet outer chrome moulding	1	grazed.dented	268.00	268.00
Radiator side garnish lh	1	deformed	84.10	84.10
Front support panel side assy lh	1	distorted	465.20	465.20
Front support panel top garnish	1	deformed	226.00	226.00
Radar sensor	1	check.serviceable	860.60	0.00
Resonator box hose	1	deformed	156.00	156.00
Washer tank	1	deep cut	144.00	144.00
Front windscreen pillar moulding lh	1	deformed	116.80	116.80

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Front fender lh	1	crushed	890.20	890.20
Front fender outer garnish lower lh	1	deformed	56.20	56.20
Front fender inner gap filler garnish lh	1	deformed	82.30	82.30
Front fender inner bracket lh	1	buckled	98.60	98.60
Front fender inner shield lh	1	torn	224.60	224.60
Front door lh - dented	1	repair.respray	2458.90	0.00
Front door side mirror lh	1	repair	1120.00	0.00
Front knuckle arm lh	1	warped	599.70	599.70
Front knuckle arm bearing lh	1	necessary	162.90	162.90
Front knuckle arm hub lh	1	necessary	282.90	282.90
Front lower arm lh	1	bent	492.90	492.90
Front linkage lh	1	bent	98.10	98.10
Front tie rod lh	1	bent	156.70	156.70
Front shock absorber lh	1	bent	626.30	626.30
Sub- Total cost			26370.18	21930.68
Percentage discount :			25%	
Sub-Total costs for parts			19777.64	16448.01

Special Nett Items:

Front tyre lh	1	cut.compressed	350.00	297.50
Front rim lh	1	dented.bent	862.20	862.20
Front fender inner shield clip lh	1	necessary	30.00	30.00
Front number plate with casing	1	dented.bent	50.00	50.00
Front bumper clips	set	necessary	55.00	55.00
Bonnet insulation clips	set	necessary	40.00	40.00
Sub-Total costs for parts			1387.20	1334.70

Parts Repair

Front wheel house lh - bent	1	repair.respray	0.00	0.00
Front windscreen pillar lh	1	repair.respray	0.00	0.00
Sub- Total costs			0.00	0.00
Total costs for parts			21164.84	17782.71

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Section B: Labour Cost Calculation

	Hourly rate	Manhr. Req.	Total
To dismantle, replace, cut, weld, knock out dents to straighten accident parts as-mentioned on the 'Parts Repair' column inclusive of replacement parts.	\$ 45.00	32	\$ 1,440.00
Putty & Spray painting to adjacent panels. Job allowance. Paint / material.	Sub-contract work.		\$ 1,520.00
Apply rust proofing on the adjacent panels.	Sub-contract work.		\$ 100.00
Remove / replace aircon condenser and refill aircon gas	\$ 45.00	2.5	\$ 112.50
Remove and replace front undercarriage work lh	\$ 45.00	5	\$ 225.00
Specialist charges - Wheel alignment	-	-	\$ 90.00
Remove and refix front parking sensor & conduct distance safety setting	\$ 45.00	1.7	\$ 76.50
Specialist charges - Check/Diagnostic and reprogramming	-	-	\$ 250.00
Wiring / bulb checking (inclusive of re-focus / re-adjust on angle of light intensity.)	\$ 45.00	1	\$ 45.00
Total labour cost			\$ 3,859.00

Manhour rate and the number of manhours required for each repairing task are formulated based on individual workshop's operating cost and in-house@ IA Research Guidelines respectively.

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Section C: Summary Table of Total Repair Cost

Description		Cost
Damaged Parts Assessment (See section A)		\$17,782.71
Labour Cost Calculation (See section B)		\$3,859.00
Total cost		\$21,641.71
Lump sum repair		\$4,328.34
Further discount	20%	
Total Repair Cost		\$17,300.00

We would recommend a sum of \$17,300.00 and 13 working days for repair.
No further items will be approved without our expressed written agreement. Any significant additional items will be subject to a supplementary report.


Mechanical Engineer, Accident Expert Witness, Licensed Appraiser (Automobile)
B.Eng. (Hons, NUS)
Diploma.Mechanical Engineering
NTC-2 Automovite Technology
Sr.MIES, Institution of Engineers, Singapore (#20100091)
MATAI, Maryland Association of Traffic Accident Investigators
IAARS, International Association of Accident Reconstruction Specialists
PMC of Singapore Business Advisors & Consultants Council
ACTA certified Trainer, Singapore
Enterprise Singapore - Recognised Certification for Management Consultants
IMI Professional Certificate In Vehicle Accident Damage Assessment (UK)

Subsidiaries of Impact Analysis:

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www.iaconsultingsg.com



TOYOTA MOTOR CORPORATION JAPAN
MODEL DATA 80W-FFXSK-C
ENGINE 2AR-FE 2493 cc
TYPE No. AG-00-0213228
COLOR TRIM PLANT OPTION
DATE DEL KT15-01A 392















