

Service Manual

Rear-Entry
Simple Stow™
built on the
Toyota Sienna
Hybrid

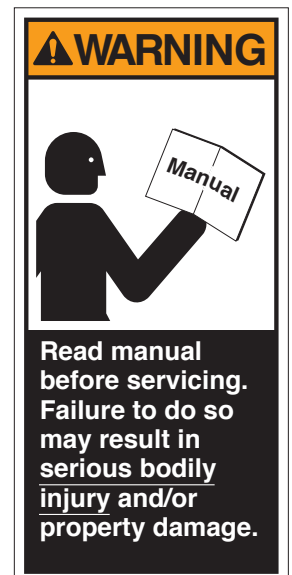


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INTRODUCTION

Introduction

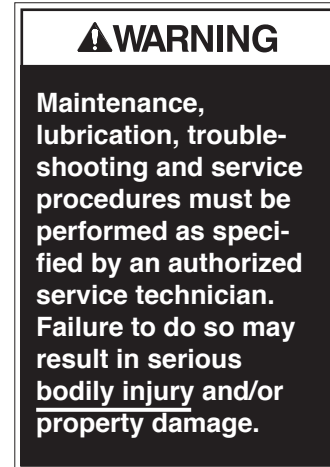
BraunAbility® wheelchair accessible vehicles are designed to provide years of pleasure and mobility independence. Familiarity with proper operation and maintenance procedures will help ensure safe, trouble-free operation.

Safety precautions, maintenance and troubleshooting details are provided. If equipped with electrical systems - wiring diagrams and electrical schematics are provided to aid in troubleshooting. A Repair Parts section with exploded views and corresponding parts lists is also provided.

Warranty and Return Authorization

Refer to the Limited Warranty Booklet for detailed terms and provisions. When processing any warranty claims (parts, repairs, etc.), all requests must be processed through the BraunAbility® Aftersales department. A Return Material Authorization (RMA) number will be issued for processing returns and/or authorizing credit.

The last eight digits of the vehicle identification number (VIN) must be provided when filing a warranty claim or ordering parts.



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SAFETY PRECAUTIONS

Safety Precautions

⚠️ WARNING

Read this manual, maintenance booklet, operator's manual and supplements before performing operation, maintenance or service procedures. Failure to do so may result in serious bodily injury and/or property damage.

- ⚠️ WARNING** Maintenance and service procedures must be performed only by authorized service personnel.
- ⚠️ WARNING** Perform maintenance and lubrication procedures exactly as outlined in the Maintenance and Lubrication Schedule contained in this manual.
- ⚠️ WARNING** Perform troubleshooting and service procedures as outlined in this manual and/or service bulletins supplied with replacement parts.
- ⚠️ WARNING** Replacement parts must be BraunAbility authorized parts.
- ⚠️ WARNING** Do not use accessory devices not authorized by BraunAbility.

- ⚠️ WARNING** Keep clear of area in which ramp operates.
- ⚠️ WARNING** Never modify (alter) a BraunAbility lowered floor wheelchair accessible vehicle.
- ⚠️ WARNING** Failure to follow these safety precautions may result in serious bodily injury and/or property damage.

Safety Precautions - Hybrid System

⚠️ WARNING

Be sure to obey all precautions and warnings listed in this manual and in the Toyota Sienna HV Owner's Manual. Failure to do so may result in serious bodily injury and/or property damage.

- ⚠️ WARNING** Maintenance and service procedures must be performed only by authorized service personnel with BraunAbility Hybrid Technologies Training.
- ⚠️ WARNING** Maintenance and service procedures should not be performed without Hybrid Vehicle Electric Service Safety PPE (Personal Protective Equipment).

See Page 4 for information on BraunAbility Hybrid Technologies Training and recommended PPE service equipment.

Safety Precautions - Hybrid System

Hybrid System Features

Your vehicle is a hybrid vehicle. It has characteristics different from conventional vehicles. Be sure you are closely familiar with the characteristics of your vehicle and operate it with care.

The hybrid system combines the use of a gasoline engine and an electric motor (traction motor) according to driving conditions, improving fuel efficiency and reducing exhaust emissions.

Hybrid System Precautions

Be sure to obey all precautions and warnings listed on the vehicle, in this manual and in the Toyota Sienna HV Owner's Manual.

Take care when handling the hybrid system, as it is a high voltage system (about 650V at maximum) as well as contains parts that become extremely hot when the hybrid system is operating. Obey the warning labels attached to the vehicle.

The OEM hybrid system has not been affected by the conversion process. Please refer to the Toyota Sienna HV Owner's Manual for hybrid system precautions, notices, warnings and hybrid battery air intake vent maintenance.

WARNING

■ High Voltage Precaution

This vehicle has high voltage DC and AC systems as well as a 12 volt system. DC and AC high voltage is very dangerous and can cause severe burns and electric shock that may result in death or serious injury.

SAFETY PRECAUTIONS

BraunAbility Technician Hybrid Technologies Training

BraunAbility Hybrid Technologies Training

Service technicians should be familiar with the hybrid vehicle systems, lowered floor configuration and any specialized driving equipment (driving controls). Extra care must be taken to avoid bodily injury and/or property damage.

Only a BraunAbility® certified dealer with BraunAbility Hybrid Technologies Training can perform maintenance and service procedures, or recommend a qualified service facility. If in doubt, call 1-800-488-0359. A BraunAbility® Customer Care representative will direct you to an authorized service center.

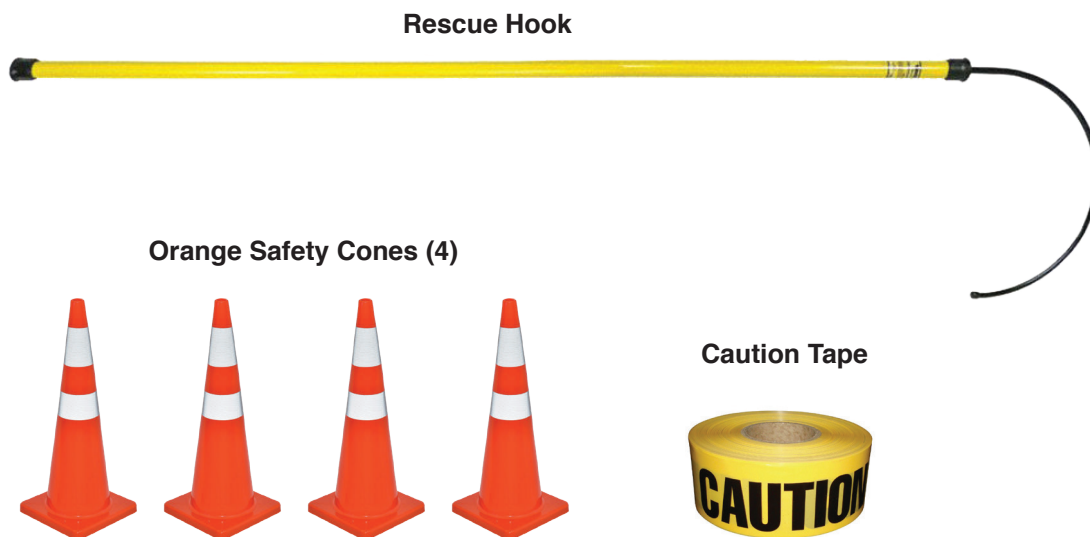
⚠ WARNING

Maintenance and lubrication procedures must be performed by authorized & certified service personnel as specified in this manual and maintenance booklet. Failure to do so may result in serious bodily injury and/or property damage.

BraunAbility Hybrid System Equipment List

Service technicians, along with training, will also require specialized equipment. Required and recommended equipment lists are provided on the following pages.

REQUIRED - BraunAbility Hybrid System Equipment List



Note: Images are provided as examples and not brand specific. However equipment should meet class and category specifications.

REQUIRED - BraunAbility Hybrid System Equipment List

Insulated Pliers



Insulated Screwdriver Set



Insulated Socket Set



Insulated Torque Wrench



Insulated Ratchet



CAT III Multimeter Leads



Class 0 - High Voltage Gloves with Over Gloves (2 Pairs)



CAT III Multimeter



Note: Images are provided as examples and not brand specific. However equipment should meet class and category specifications.

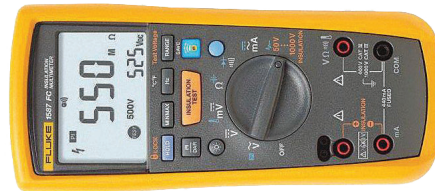
SAFETY PRECAUTIONS

RECOMMENDED - BraunAbility Hybrid System Equipment List

Glove Liners



CAT III Multimeter with Insulation Tester (Megohm-meter)



Toyota TIS Subscription & Compatible J2534 Device



Note: Images are provided as examples and not brand specific.
However equipment should meet class and category specifications.

Towing and Transporting

Towing with a Lowered Floor Vehicle

Use of a lowered floor vehicle for towing is prohibited.

Transporting a Lowered Floor Vehicle

BraunAbility lowered floor vehicles should be transported on a trailer rather than towed with one set of wheels suspended and the other set of wheels remaining in road contact.



Trailer Transport

Maintenance

BraunAbility® wheelchair accessible vehicles are designed to provide years of pleasure and mobility independence. Regular preventive maintenance procedures will ensure trouble-free operation and increase the service life of your vehicle, as well as enhancing safety. Review this maintenance section with your sales representative.

Consumer Maintenance

As a consumer, general preventive maintenance cleaning and visual inspection procedures should be a part of your routine. Keeping the wheelchair accessible door and lowered floor opening clean is one of the most effective preventive maintenance practices the consumer can exercise. Inspect and clean often.

Rear Entry Vehicles

Keep the ramp/lowered floor seal and opening free of debris, ice and snow.

Pay close attention to the wheelchair accessible power door, kneel and ramp functions (as equipped). Inspect wheelchair tiedowns, occupant restraint belts and associated hardware.

If there is any sign of damage, wear, abnormal condition or improper operation, discontinue use immediately. Contact your sales representative or call 1-800-488-0359. One of our BraunAbility® Customer Care representatives will direct you to an authorized service center.

Preventive maintenance procedures performed by the consumer do not take the place of the procedures outlined in the following maintenance schedule and dealer scheduled maintenance in the Maintenance Guidelines and Service Log Booklet.



Dealer Scheduled Maintenance

Maintenance of the wheelchair accessible systems and equipment is vital to function and reliability. Mobility equipment maintenance should be performed in conjunction with the maintenance scheduled by the vehicle OEM manufacturer.

Have OEM and BraunAbility® maintenance procedures performed according to recommended oil change intervals, or at 5,000 mile/8,000 km/6 month intervals (whichever comes first). A detailed maintenance schedule is provided in this manual that will closely correspond with the OEM maintenance schedule. Keep track of scheduled maintenance and service procedures in the Maintenance Guidelines and Service Log Booklet.

BraunAbility® lowered floor wheelchair accessible vehicles must be maintained and serviced by authorized service representatives who have attended the Mobility Service Excellence training program (MSE certified).

Service technicians should be familiar with the lowered floor configuration and any specialized driving equipment (driving controls). Extra care must be taken to avoid possible damage.

Your BraunAbility® certified dealer can perform maintenance and service procedures, or recommend a qualified service facility. If in doubt, call 1-800-488-0359. A BraunAbility® Customer Care representative will direct you to an authorized service center.

⚠ WARNING

Maintenance and lubrication procedures must be performed by authorized service personnel as specified in this manual and maintenance booklet. Failure to do so may result in serious bodily injury and/or property damage.

Maintenance**Maintenance and Service Log**

Keep a record of scheduled maintenance and service. Document date, mileage and description of maintenance or service procedures performed in the maintenance and service log booklet. Recording this information provides verification that maintenance has been performed as scheduled. Failure to do so may void your BraunAbility® mobility warranty.

Maintenance procedures will vary according to the specific lowered floor and ramp configuration. Maintenance intervals may vary according to frequency of use and conditions. Exposure to severe conditions (weather, environment, heavy usage, etc.) may require inspection and maintenance procedures to be performed more often.

MAINTENANCE

Maintenance and Lubrication Schedule

General preventive maintenance cleaning and visual inspection procedures should be performed weekly. Inspection, lubrication and maintenance procedures outlined in the 5,000 mile/8,000 km/6 month and 30,000 mile/48,000 km/3 year intervals sections should be performed by an MSE certified technician to correspond with the Maintenance Guidelines and Service Log Booklet.

These intervals are a general guideline and will vary according to frequency of use and conditions. Exposure to severe conditions (weather, environment,

heavy usage, etc.) may require inspection and maintenance procedures to be performed more often than specified.

Clean specified components and the surrounding area before applying lubricants. When replacing lubricated components, be sure to lubricate during installation procedures.

A “dri-film” style of light oil should be applied where Light Oil is called out (goes on wet and then dries). Lubricants of this type are available that do not attract dust and other debris.

Use of improper lubricants can attract dirt or other contaminants which could result in wear or damage to components. Avoid lubricants that can leave stains.

Discontinue use immediately if maintenance and lubrication procedures are not properly performed, or if there is any sign of wear, damage, improper operation or any abnormal condition. Contact your sales representative or call 1-800-946-7513. A BraunAbility Aftersales representative will direct you to an authorized service technician who will inspect your vehicle.

Preventive Maintenance	Ramp/lowered floor seal and opening	Clean / sweep area of debris, ice and snow
Weekly		

General Maintenance	Tailgate Assembly	
5,000 Miles or 6 Month Intervals (8,000 km)	Operation	Open and Close tailgate assembly. Replace or correct as needed.
	Tailgate Hinges	Clean, lubricate with light oil. Tighten, replace, or correct as needed.
	Tailgate Latches, Release Handle, and Release Cables	Clean, inspect, and ensure positive securement. Tighten, replace, or correct as needed.
	Tailgate Strikers	Clean and inspect, look for excessive wear or bending, and damaged or missing hardware. Replace if needed.
	Tailgate Weather-strip	Clean and inspect for tears. Replace as needed.
	Tailgate Counterbalance Assembly	Clean and inspect for wear. Inspect cable for wear or frays. Inspect pulleys for excessive play. Inspect spring for proper tension. Adjust as necessary.

Maintenance and Lubrication Schedule

<p>Continued</p>	<p>Simple Stow[®] Ramp Assembly</p>	
<p>5,000 Miles or 6 Month Intervals (8,000 km)</p>	Slide Tracks	Clean, lubricate, and inspect. Ensure tracks are clean and free of dirt and debris. Lubricate with light oil or silicone grease. Inspect rails for damage and loose or missing hardware. Tighten or replace as needed.
	Ramp Slide Bushings/Pivots	Inspect for excessive wear. Check for loose or missing hardware. Tighten or replace as needed.
	Vertical Locks	Inspect for wear and ensure proper engagement with ramp in vertical position. Inspect mounting bolts. Tighten or replace as necessary.
	Ramp Hinge	Clean and lubricate with light oil. Inspect mounting hardware. Replace or tighten as necessary.
	<p>Undercarriage & Ground Effects</p>	
	Inspect	Tighten, replace, or correct as needed.
	<p>Wheelchair Tiedown and Occupant Restraint System</p>	
Q'Straint Wheelchair tiedown and occupant restraint system components	Inspect strap and belt assemblies frequently. Any damage such as strap/belt cuts, fraying or malfunctioning call for replacement of the entire strap/belt assembly. If there is any sign of damage, wear, abnormal condition or improper operation of straps, belts, strap/belt hardware (hooks, latch plate, receptacle), discontinue use and replace immediately. Contact BraunAbility Customer Care.	
Wheelchair tiedown / occupant restraint system tiedown powers switch release	Follow all inspection and maintenance instructions supplied in the Q'Straint Securement System Use and Care manual. Severe conditions (weather, environment, heavy usage, etc.) may require more frequent inspections. Exposure to severe conditions will dramatically reduce the life of the system. Check Operation. Refer to Q'Straint Securement System Use and Care manual	

<p>30,000 Miles or 3 Year Intervals (48,000 km)</p>	<p>Repeat all previously listed preventative, inspection, lubrication and maintenance procedures at 5,000 Miles or 6 month intervals.</p>
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TROUBLESHOOTING

Troubleshooting Diagnosis Chart

WARNING

Troubleshooting and repair procedures must be performed as specified by an authorized service technician only. Failure to do so may result in serious bodily injury and/or property damage.

Operation should be discontinued immediately if a problem occurs. Repairs should not be attempted by the consumer. Contact your sales representative or call 1-800-488-0359. A BraunAbility Customer Care representative will direct you to an authorized service technician who will inspect your vehicle.

The cause of the problem can be determined by locating the function and related symptom in

the Troubleshooting Diagnosis Chart. The specific cause and remedy can then be determined by process of elimination. A Repair Parts section with exploded views and corresponding parts lists is also provided.

Correct the problem if possible. If the problem continues, contact BraunAbility Customer Care at 1-800-488-0359.

FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
1.00 REAR HATCH	1.10 Faulty Operation	1.11 Misalignment, deformation, wear or other damage to latch striker	Realign, tighten, replace damaged parts or otherwise correct as needed
		1.12 Door ajar light illuminated, hatch latch striker out of adjustment	Adjust striker for positive engagement
		1.13 Obstruction in hatch opening/path	Remove obstruction
		1.14 Ramp/tailgate assembly obstructing hatch	Correct
		1.15 Mechanical binding	Correct
	1.20 Does Not Hold Open	1.21 See 1.15	
		1.22 OEM gas struts weak or damaged	Replace
2.00 TAILGATE	2.10 Faulty Operation	2.11 Obstruction in ramp/tailgate lowered floor seal and opening	Remove obstruction
		2.12 Misalignment, deformation, wear or other damage to latch striker	Realign, tighten, replace damaged parts or otherwise correct as needed
		2.13 See 1.15	

FUNCTION	SYMPTOM	POSSIBLE CAUSE	REMEDY
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3.00 RAMP HORIZONTAL DEPLOY /STOW	3.10 Faulty Horizontal Deploy /Stow Operation	3.11 Misalignment or damage to: • Ramp rail(s) • Upper ramp locks	Realign, tighten, replace damaged parts or otherwise correct as needed
		3.12 Mechanical binding	Correct
		3.13 Ramp rail obstruction	Remove obstruction

4.00 RAMP VERTICAL STOW	4.10 Faulty Vertical Stow Operation	4.11 Upper ramp locks loose, misaligned, missing or damaged	Realign, tighten, replace damaged parts or otherwise correct as needed
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5.00 ENTRANCE LIGHTS	5.10 No ON Operation	5.11 Door not open	Open door
		5.12 Faulty light	Replace
5.13 Entrance light harness disconnected or damaged		Connect, repair or replace	
5.14 OEM dome light off at instrument panel		Turn light to on position	
	5.20 No OFF Operation	5.21 Door not closed	Close door
		5.22 See 5.13	
		5.23 See 1.12	

6.00 Wheelchair Tiedowns	6.10 Retractors Do Not Release	6.11 Faulty retractor	Replace retractor
	6.20 S-Hook or Webbing Missing	6.21 Cut-off during an emergency	Replace retractor/webbing
	6.30 Webbing Difficult to Pull Out	6.31 Webbing is twisted	Straighten webbing
		6.32 Webbing is frayed or cut	Replace retractor/webbing
6.33 Retractor is worn, damaged		Replace retractor	
	6.40 Webbing will not Self Retract	6.41 Retractor clock spring is worn, damaged	Replace retractor

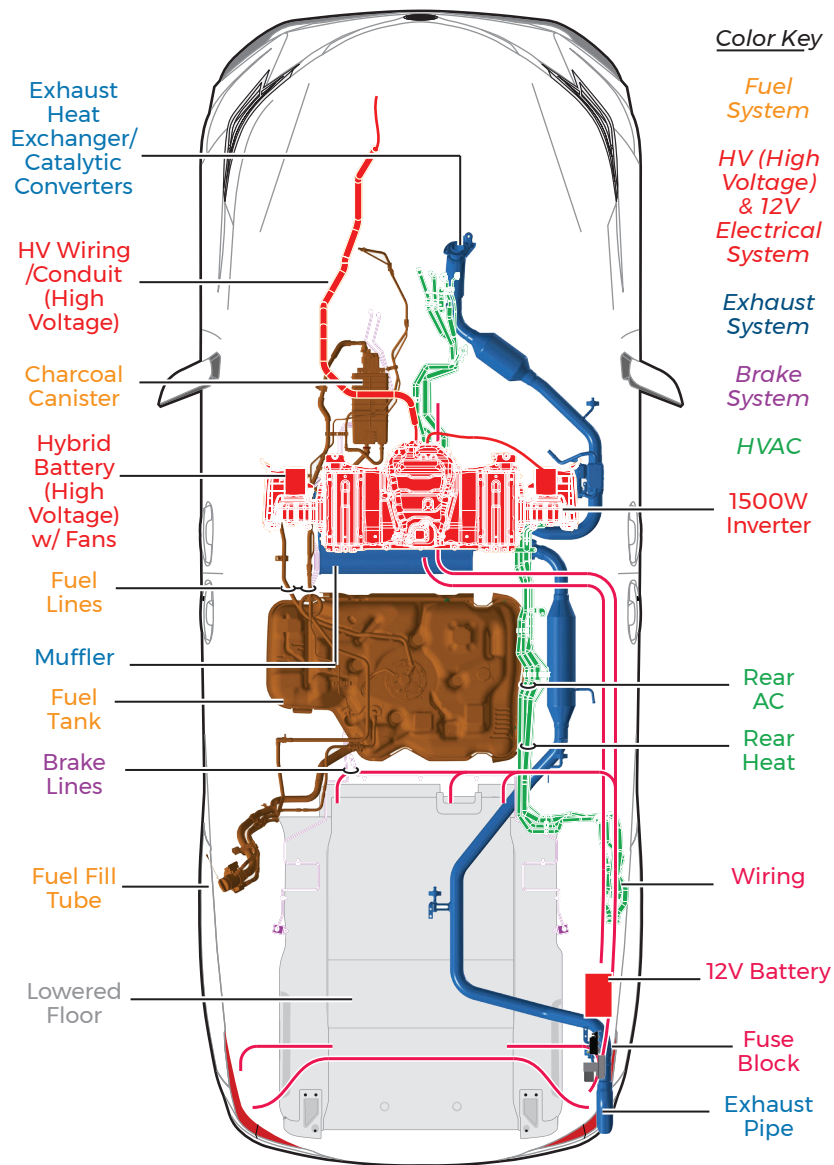
BELOW FLOOR OBSTRUCTIONS

Toyota Hybrid Rear Entry - Below Floor Obstructions

When installing an electrical tie-down, power seat or other aftermarket electrical device, obstructions below the floor must be avoided. Obstructions include HV (high voltage) components/wiring, 12V wiring, fuel system, brake lines, etc. Installers must be aware of these obstructions.

Refer to the illustration on the following page when installing aftermarket equipment to avoid contacting or damaging vital components under the floor. Drilling or cutting into such obstructions may result in potential hazards as well as property damage.

Note: Some wiring harnesses shown may not be present. Avoid all harness locations.



⚠️ WARNING

Check for obstructions such as wires, gas lines, exhaust, etc. before drilling or cutting through floor. Failure to do so may result in serious bodily injury and/or property damage.

⚠️ WARNING

■ High Voltage Precautions

This vehicle has high voltage DC and AC systems as well as a 12 volt system. DC and AC high voltage is very dangerous and can cause severe burns and electric shock that may result in death or serious injury.

Auxiliary Power Supply

⚠ CAUTION

Do not connect auxiliary devices to vehicle battery. Doing so may result in damage to electrical system and/or electronic components.

Auxiliary Power Supply: Do not connect auxiliary devices directly to the vehicle battery. Doing so may result in damage to electrical system and/or electronic components.

Two fuse blocks are provided as an auxiliary power source for dealer-installed auxiliary electrical device(s). Fuse block details and specifications are provided below.

Below Floor Obstructions:

When installing aftermarket equipment, obstructions below the floor must be avoided. Obstructions include wiring, fuel system, brake lines, etc. Installers must be aware of these obstructions.

Refer to the illustration on previous page to avoid contacting or damaging vital components under the floor.

⚠ WARNING



Risk of electrical fire! Install and electrically terminate auxiliary electrical device as specified by device manufacturer.

Fuse Block Electrical Assembly

Fuse Blocks: Two fuse blocks are provided for use as an auxiliary power source (one ignition fuse block and one battery fuse block).

The battery fuse block provides power at all times (independent of the vehicle ignition). The ignition fuse block supplies power only when the vehicle ignition is on.

The installer is responsible for supplying the correct gauge wire and fuse for the particular device to be attached to the fuse block (as specified by the manufacturer of the device).

Ignition Fuse Block: The total maximum load must not exceed 30 amperes.

Battery Fuse Block: The total maximum load must not exceed 40 amperes.

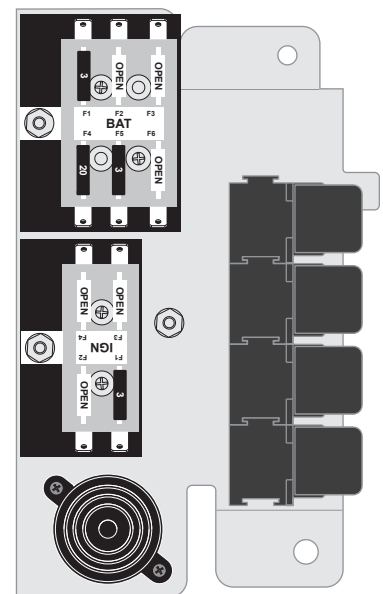
Ignition & Battery Load: The total combined maximum load must not exceed 50 amperes.

Note: If installing an auxiliary electrical device that requires more than a 30 ampere ignition or 40 ampere battery power source (50 ampere combined), an alternative power source must be provided.

Fuse Block Access: The fuse blocks are located behind the passenger side rear access panel.

Note: The fuse blocks are part of an electrical assembly. The box contains the fuse blocks, back-up alarm relay, ignition relay and a ground stud. There is also a relay and buzzer provision for electric tie-down retractors.

Fuse Block Electrical Assembly

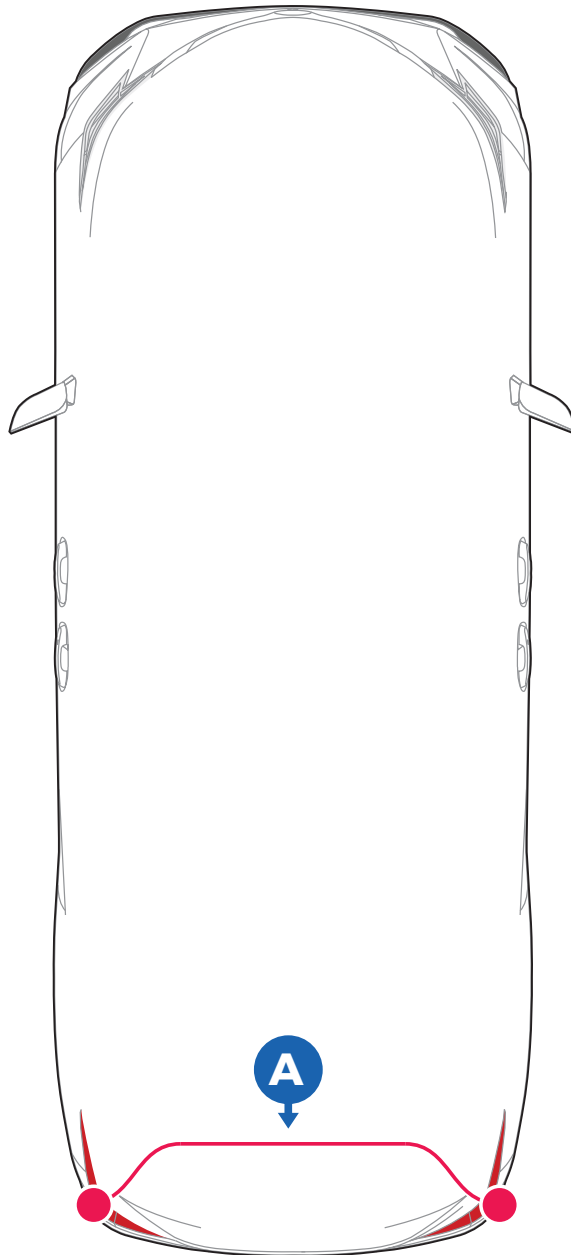


WIRING DIAGRAMS - EXTENSION HARNESS

Toyota Hybrid Rear Entry - Extension Harness - Location Diagram

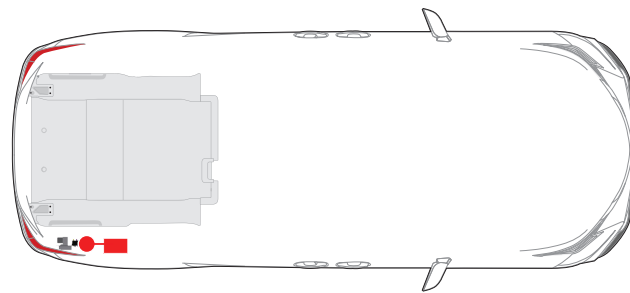
Extension Harness

To accommodate the dropped floor and relocated components in the wheelchair accessible vehicle an OEM harness has been extended. This extension harness is equipped with OEM connectors. The OEM circuit function is a direct “pass-thru” and not effected by the extension harness. To troubleshoot the extension harness use the OEM documentation.



PART #	DESCRIPTION	
514242A	HARN TOYOTA 2021 TAXI EXTENSION	A

LOCATION KEY

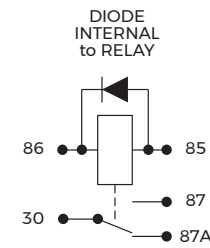


DRAWING NOTES

1. All connector call outs are in respect to the terminal insertion view.
2. All wires are 18 Gauge, unless noted (Color ID field).

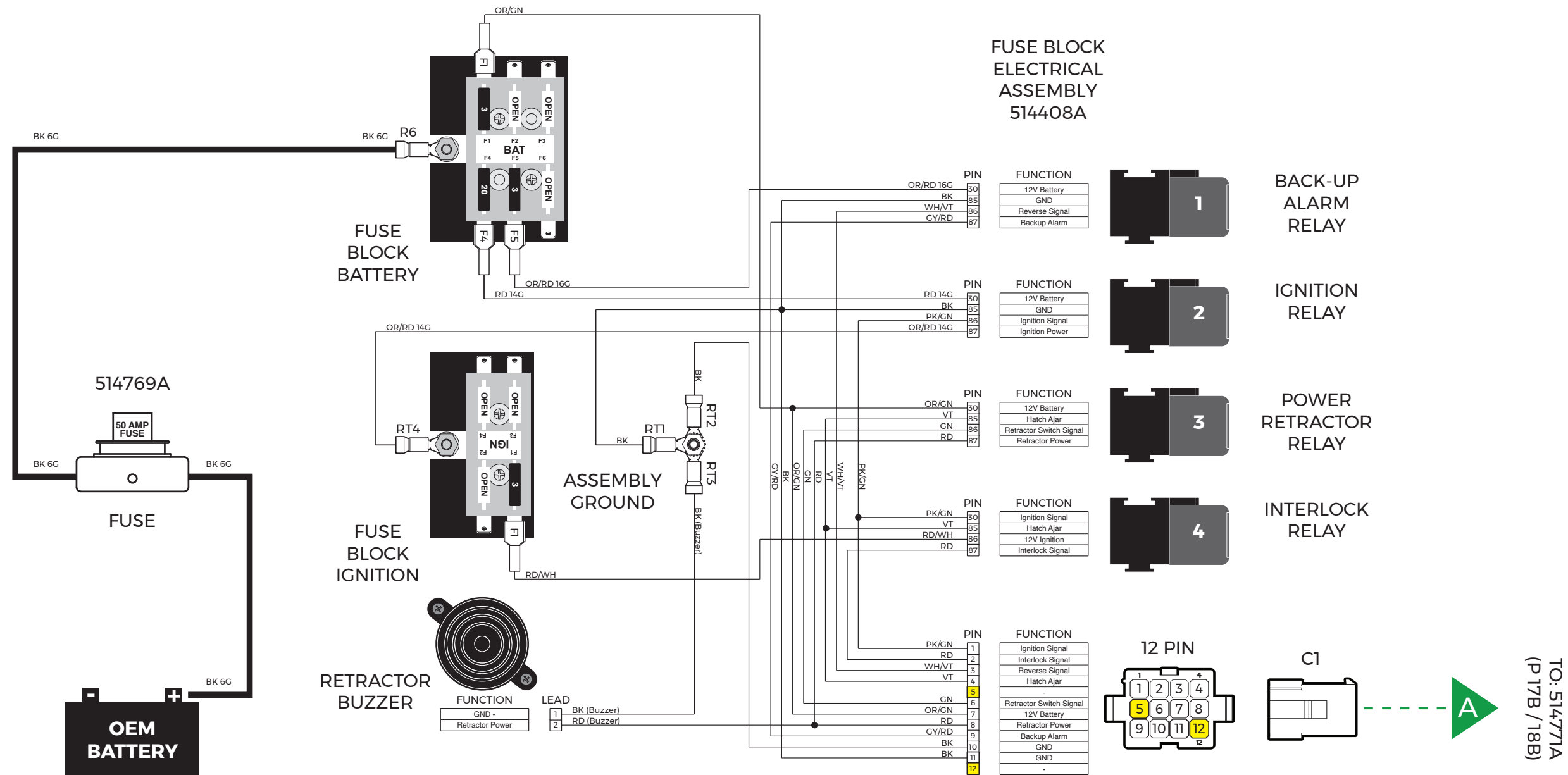
= Empty Cavity

RELAY KEY



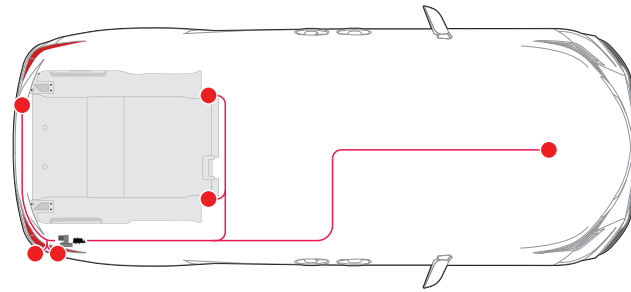
WIRE COLOR CODE

ABR.	COLOR
BK	BLACK
GN	GREEN
GY	GREY
OR	ORANGE
PK	PINK
RD	RED
VT	VIOLET
WH	WHITE



WIRING DIAGRAM - CONVERSION SYSTEMS

LOCATION KEY



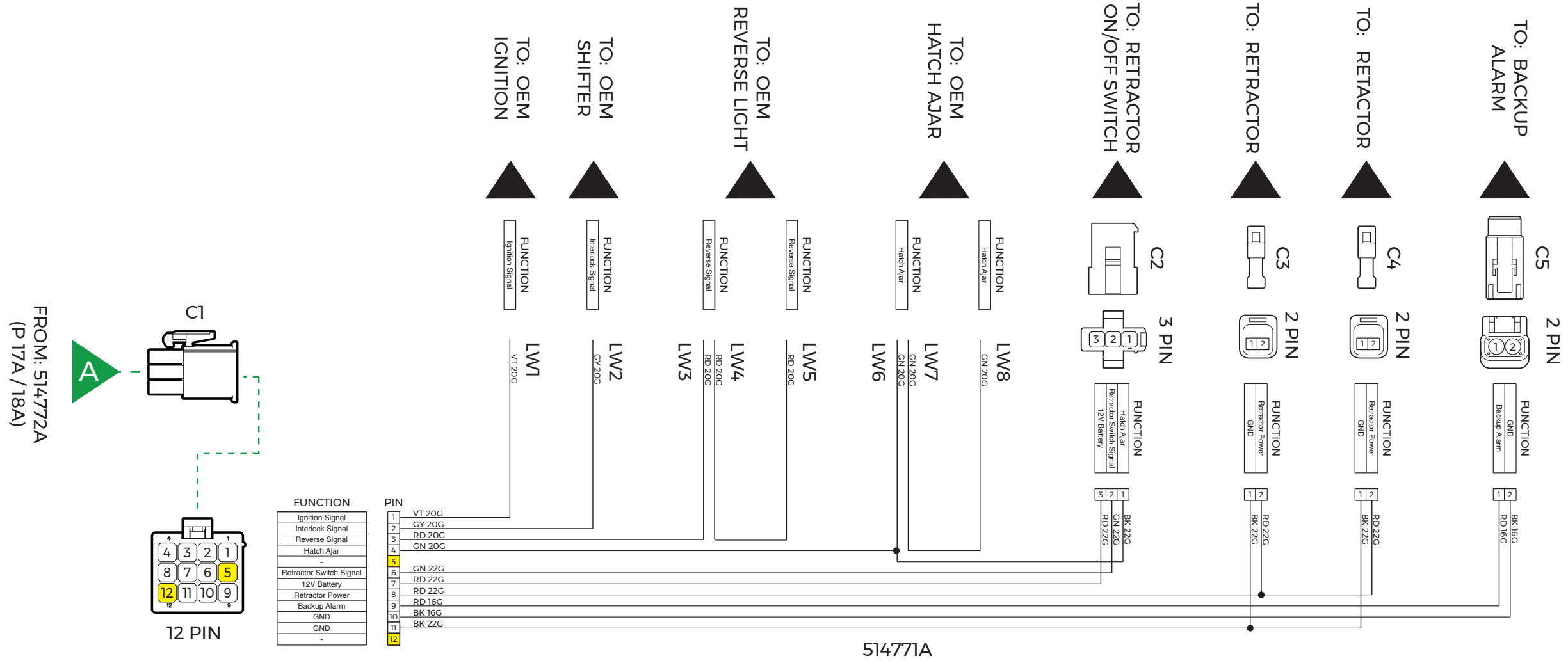
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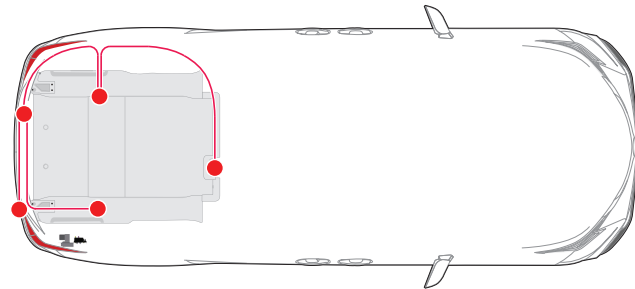
= Empty Cavity

WIRE COLOR CODE

ABR.	COLOR
BK	BLACK
GN	GREEN
CY	GREY
OR	ORANGE
PK	PINK
RD	RED
VT	VIOLET
WH	WHITE



LOCATION KEY



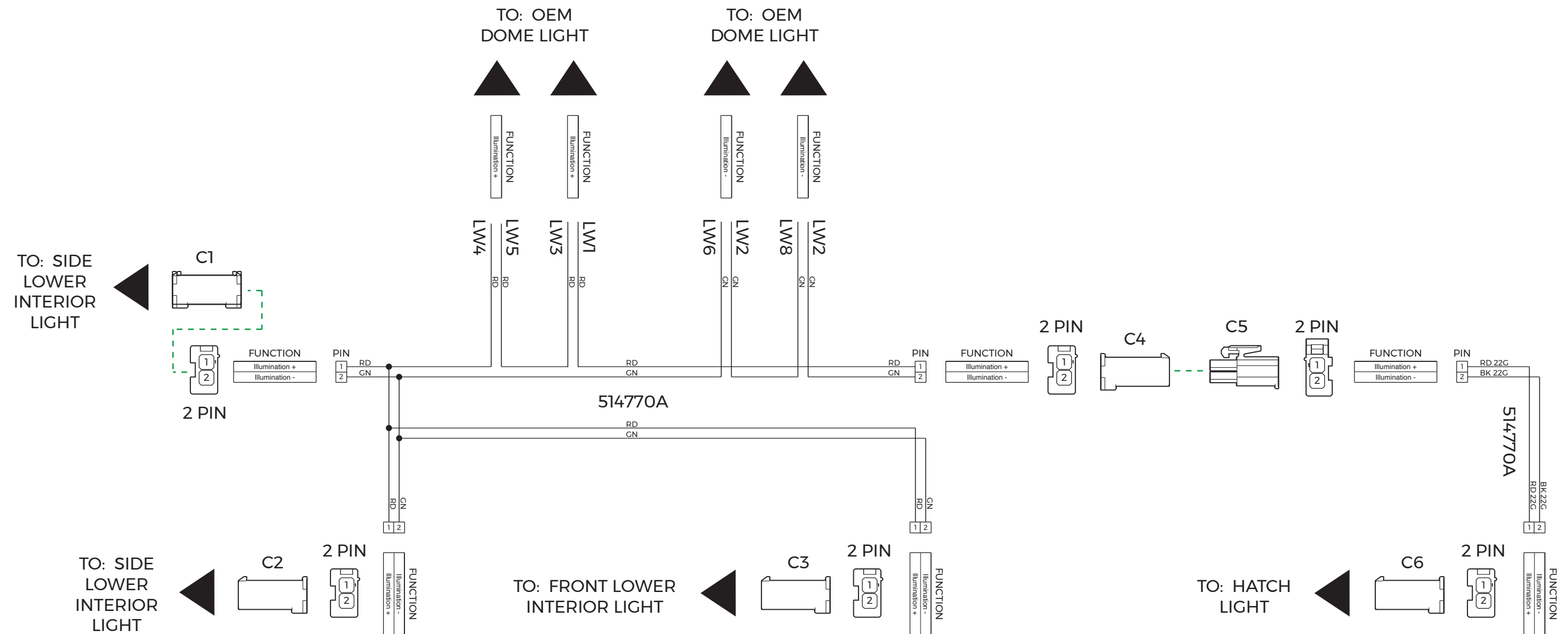
DRAWING NOTES

1. All connector call outs are in respect to the terminal insertion view.
2. All wires are 20 Gauge, unless noted (Color ID field).

= Empty Cavity

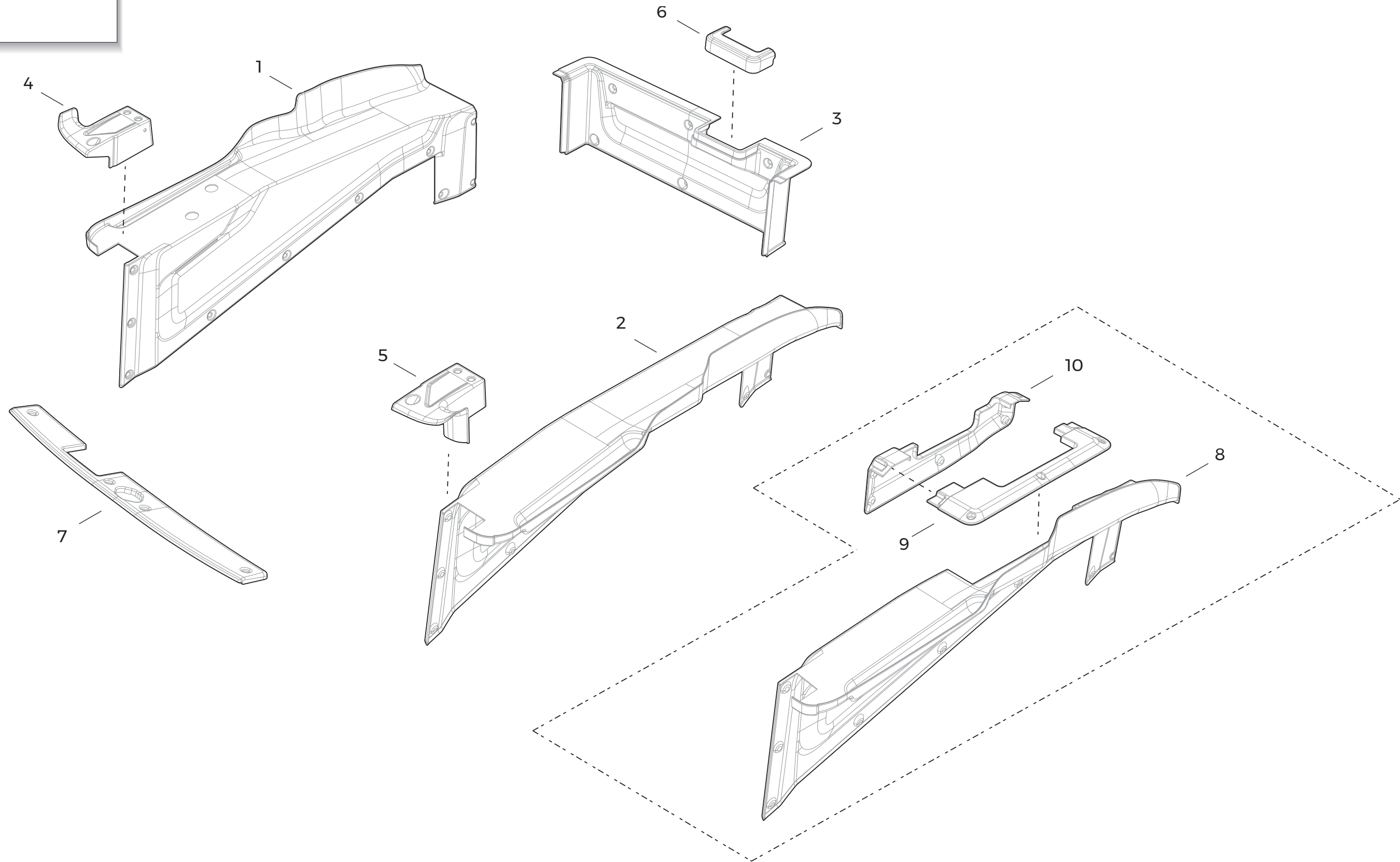
WIRE COLOR CODE

ABR.	COLOR
BK	BLACK
GN	GREEN
GY	GREY
OR	ORANGE
PK	PINK
RD	RED
VT	VIOLET
WH	WHITE



Unfold for:
Wiring Diagram
Interior Lighting

EXPLODED VIEW - INTERIOR PANELS



Part List - Interior Panels

ITEM	QTY.	DESCRIPTION	PART NUMBER
1	1	PANEL-LOWERED FLOOR SIDE-DRV / TOYOTA TAXI RE	514978BLG
2	1	PANEL-LOWERED FLOOR SIDE-PASS / TOYOTA TAXI RE	514979BLG
3	1	PANEL-FRONT VERTICAL-8 PASS / TOYOTA TAXI RE	514980BLG
4	1	PANEL-REAR TRIM CAP-DRV / TOYOTA TAXI RE	514981BLG
5	1	PANEL-REAR TRIM CAP-PASS / TOYOTA TAXI RE	514982BLG
6	1	PANEL-SEAT TRACK CAP-8 PASS / TOYOTA TAXI RE	514985BLG
7	1	PANEL-TAILGATE THRESHOLD SILL-TOYOTA TAXI RE	514760

Part List - Interior Panels - Optional 3rd Row Seat

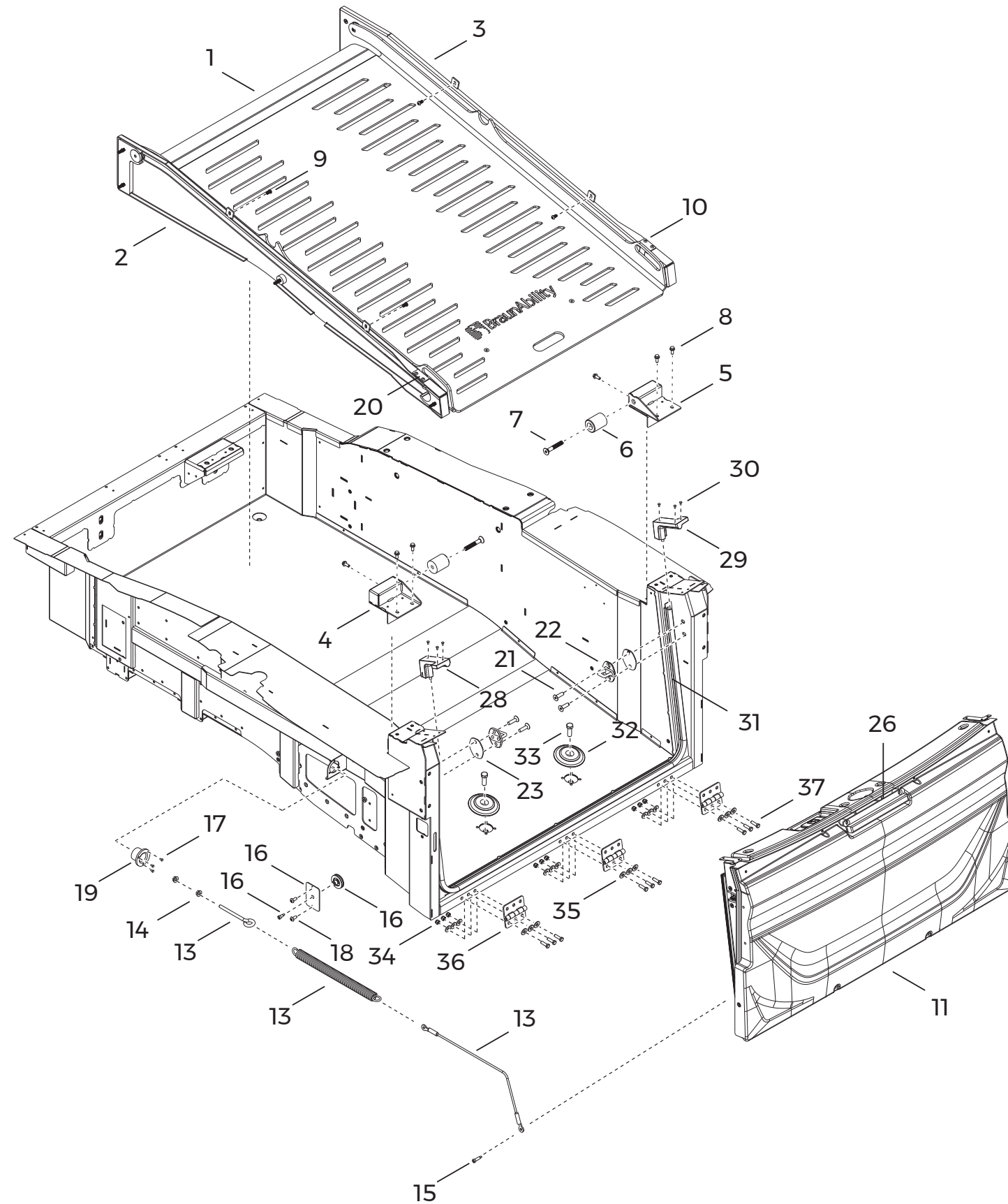
ITEM	QTY.	DESCRIPTION	PART NUMBER
8	1	PANEL-LOWER FLOOR SIDE-PASS-FOR 3RD SEAT / TOY	514979BLG-CUT
9	1	PANEL-3RD ROW SEAT SHROUD-TOP / TOYOTA TAXI RE	514983BLG
10	1	PANEL-3RD ROW SEAT SHROUD-SIDE / TOYOTA TAXI RE	514984BLG

EXPLODED VIEWS

Part List - Simple Stow Ramp Overall Assembly

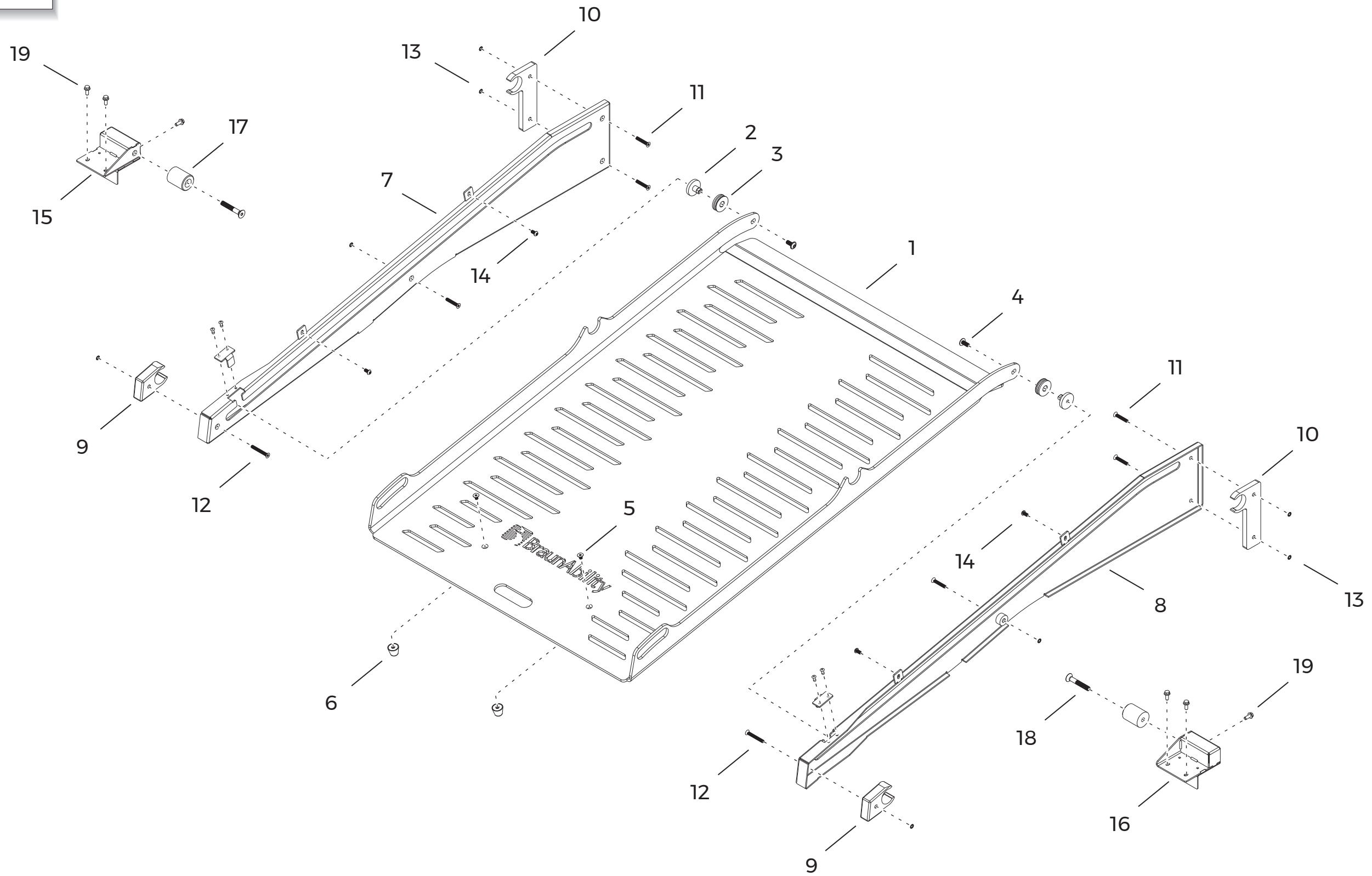
ITEM	QTY.	DESCRIPTION	PART NUMBER
1	1	TOYOTA SS RAMP ASSEMBLY	514053A
2	1	TOYOTA SS RAIL ASSEMBLY - DRIVER	514065A
3	1	TOYOTA SS RAIL ASSEMBLY - PASSENGER	514066A
4	1	WMT TOYOTA SS UPPER LOCK - DRIVER	514062WBK
5	1	WMT TOYOTA SS UPPER LOCK - PASSENGER	514064WBK
6	2	VOYAGER SIMPLE STOW UPPER LOCK	512981
7	2	SCREW 3/8-16 X 2.5 INCH FHCS BLACK ZINC	513528
8	6	BOLT 1/4-20 X 5/8 FLANGE HD GR 8.2 ZINC	508644
9	4	SCREW 1/4-20 X 1/2 BUTTON HEAD TORX MAGNICOAT	507237
10	4	RIVET POP SD 66BS 3/16" .25 / .38 AUTO BLACK	14993
11	1	TAILGATE ASSEMBLY - TOYOTA RE TAXI	513990A
* 12	1	WMT STRIKER NUT PLATE	514346WDS
13	1	ASSY - RAMP SPRING-SIMPLE STOW - RU / RE	513855A
14	2	NUT 5/16 18 SERRATED FLANGE AUTO BLACK	25131
15	1	SHLDER BOLT 1/4" DIA.X3/4" 10-32 THRD-HS 416 SS RE	503681
16	1	ASSY - RAMP CABLE PULLEY - RU / VOYAGER RE	512545A
17	3	RIVET - POP SD 68 BS - 3/16 X .376-.500 STEEL	32501
18	2	BOLT - 1/4-20 X .75 INCH- GRD8 - HEX FLANGE	513051
19	1	RU COUNTER BALANCE SPRING GUIDE RU2017RE	503159
20	2	RAIL COVER	512587BK
21	4	SCREW M8 X 1.25 X 25MM FULL FLAT HEAD TORX MAG	502165
22	2	STRIKER TAILGATE LATCH / KIEKERT	501878
23	2	SHIM PLATE-STRIKER RU2017RE	502426
* 24	1	WELDMENT-NUT PLATE-TAILGATE STRIKER-LH	503590W
* 25	1	WELDMENT-NUT PLATE-TAILGATE STRIKER-RH	503591W
26	1	ASSY TAILGATE STOP - TOYOTA RE TAXI	514350A
* 27	2	SCREW 1/4-20 X 1.5 INCH FHCS TORX BK ZINC	512684
28	1	ASSY MOLDED SEAL-TOP RAMP-LH w/ INSERT PLATE	514694A
29	1	ASSY MOLDED SEAL-TOP RAMP-LH w/ INSERT PLATE	514695A
30	6	SCREW-#6-32 X 3/8 PHPH /BLK OXIDE SS	31891
31	1	TAILGATE WEATHER SEAL TOYOTA RE TAXI	VPM11951R072
32	2	FLOOR MOUNT SLIDE-N-CLICK - Q'STRAIT PUCK	34557
33	2	SCREW 3/8-16 x 3/4 HHCS GR8 LOW PROFILE HEAD ZN	514765
34	9	NUT-5/16-18 NYLOCK AUTO-BLACK	25639BK
35	18	WASHER 5/16 FLAT USS MAGNI BLK	504337
36	3	ASSEMBLY RAMP HINGE BLACK POWDER COAT	VPM10134PBK
37	9	BOLT 5/16-18 X 1 IN. GR8 MAGNI BLK HHCS	504336

* not shown



Unfold for:
Exploded View
Simple Stow Ramp
Overall Assembly

EXPLODED VIEW - SIMPLE STOW RAMP ASSEMBLY



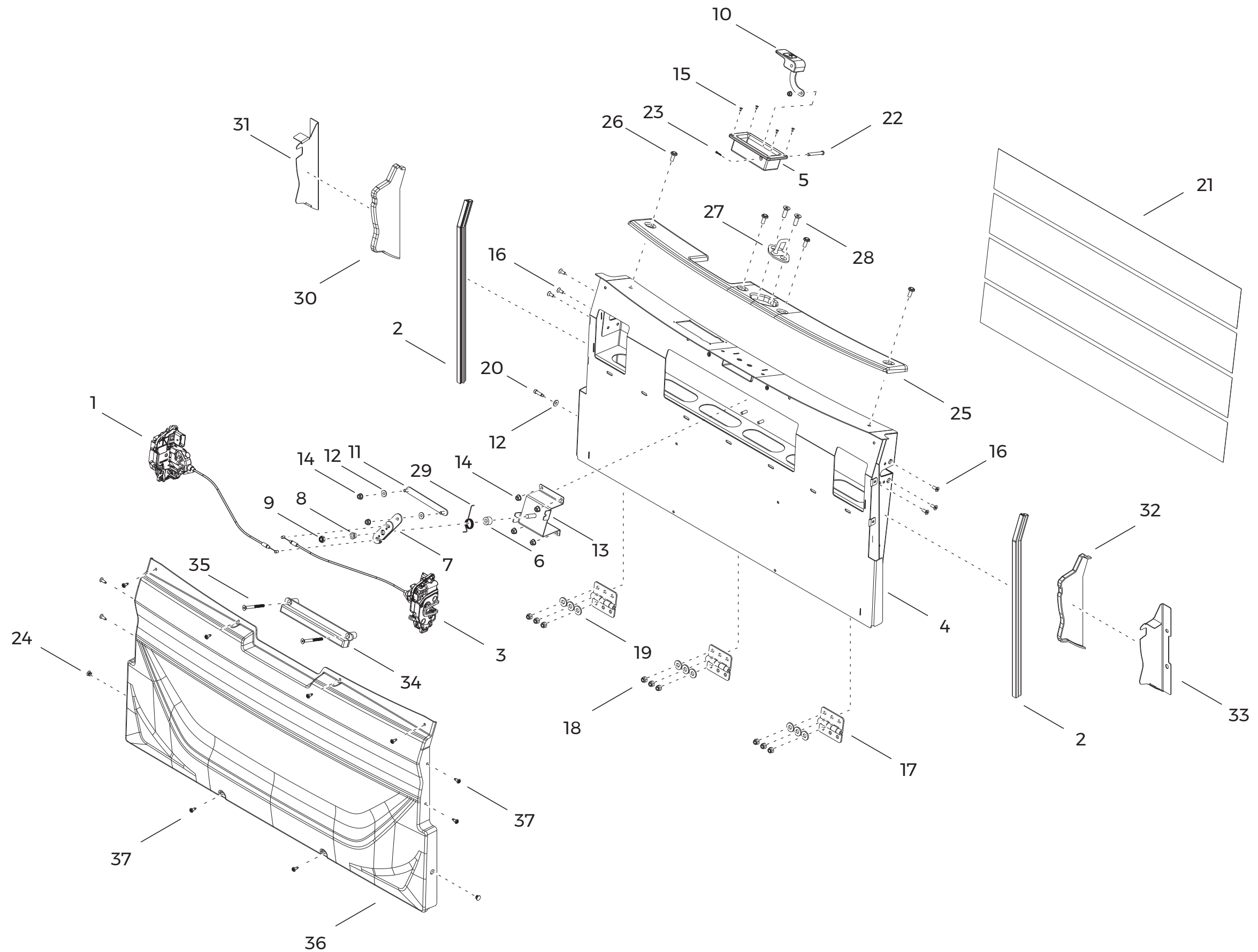
Part List - Simple Stow Ramp Assembly

ITEM	QTY.	DESCRIPTION	PART NUMBER
1	1	TOYOTA SIMPLE STOW RAMP	514052DS
2	2	SLIDE PIN	500873
3	2	ONE PIECE SLIDE BUSHING	501361
4	2	SCREW 5/16-18 x 3/4 FBHCS ZINC PLATED	510856
5	2	SCREW FLAT HEAD HEX DRIVE 316 STAINLESS STEEL	514463
6	2	BUMPER THREADED LOAD-RATED	514462
7	1	WMT TOYOTA SS RAIL WMT - DRIVER	514056WBK
8	1	WMT TOYOTA SS RAIL WMT - PASSENGER	514058WBK
9	2	REAR STOW LOCK	512588
10	2	FRONT RAMP LOCK	512589
11	6	SCREW 1/4-20 X 1.5 INCH FHCS TORX BK ZINC / ALY STL	512684
12	2	SCREW 1/4-20 X 2 INCH FHCS TORX BK ZINC / ALY STL	512685
13	8	RING RETAINING SELF LOCKING PUSH ON 1/4 INCH	513645
14	4	SCREW 1/4-20 X 1/2 BUTTON HEAD TORX MAGNICOAT	507237
15	1	WMT TOYOTA SS UPPER LOCK - DRIVER	514062WBK
16	1	WMT TOYOTA SS UPPER LOCK - PASSENGER	514064WBK
17	2	VOYAGER SIMPLE STOW UPPER LOCK	512981
18	2	SCREW 3/8-16 X 2.5 INCH FHCS BK ZINC / ALLOY STEEL	513528
19	6	BOLT 1/4-20 X 5/8 FLANGE HD GR 8.2 ZINC	508644

EXPLODED VIEWS

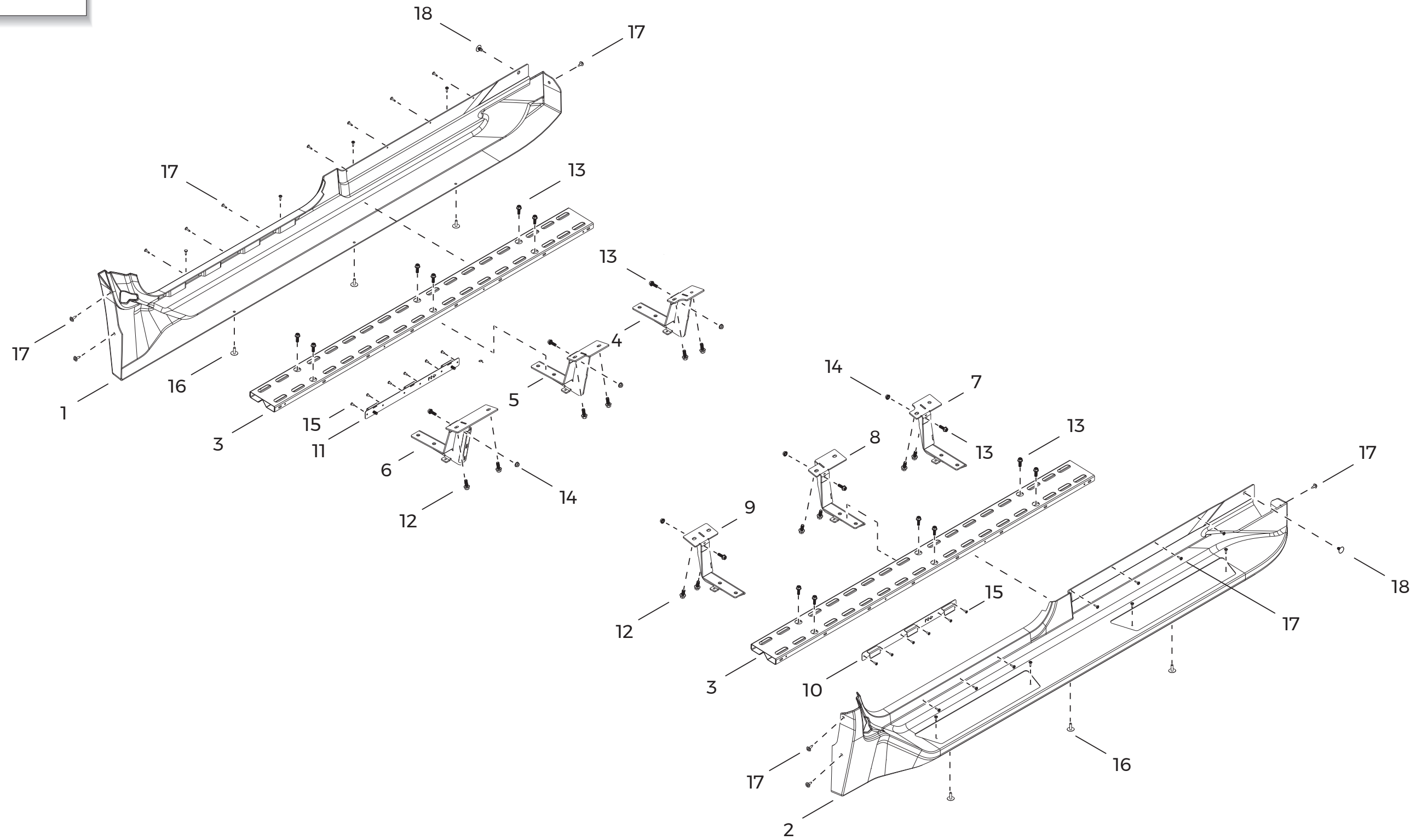
Part List - Tailgate Assembly & Bumper End Caps

ITEM	QTY.	DESCRIPTION	PART NUMBER
1	1	LATCH TAILGATE LH / KIEKERT	501876
2	2	RETRO FIT RAMP SEAL	VPM11951R021.25
3	1	LATCH TAILGATE RH / KIEKERT	501877
4	1	WMT-TAILGATE - TOYOTA RE TAXI	513991WDS
5	1	HANDLE POCKET-MOLDED w/ INSERT RU2017RE	502540A
6	1	3/8" SPACER STANDOFF	VPM14360
7	1	WELDMENT-CABLE ACTUATOR RU2017RE	503360W
8	1	SLEEVE BEARING-NYLON 3/8 ID X 1/2 OD X 3/8 L	503632
9	1	NUT-3/8-16 THIN NYLOCK RU2017RE	503631
10	1	RELEASE HANDLE-MOLDED w/ INSERT RU2017RE	502534A
11	1	LINK-RELEASE MECHANISM - TOYOTA RE TAXI	514098ABK
12	3	NYLON THRUST BEARING (FLIP BENCH)	VPM11786
13	1	BRACKET-RELEASE MECHANISM WMT - TOY RE TAXI	514342WBK
14	6	NUT 1/4-20 NYLOCK FLANGE HEX NUT	VPM11874
15	4	1/8" RIVET - BLACK	VPM11919
16	6	SCREW-M6 X 1.0 X 16mm FLAT HEAD TORX CLS 10.9 BK	502275
17	3	ASSEMBLY RAMP HINGE BLACK POWDER COAT	VPM10134PBK
18	9	NUT-5/16-18 NYLOCK AUTO-BLACK	25639BK
19	9	WASHER 5/16 FLAT	10063
20	1	SHOULDER BOLT 1/4" DIA. X 3/4" L 10-32 THRD-HS 416	503681
21	4	ANTISKID TAPE - 33.5" X 5 INCH	35843
22	1	CLEVIS PIN - 1/4" x 2-1/8" - ZINC PLATED RU2017RE	504033
23	1	PIN COTTER 3/32 X 1/2	41-4210-0
24	2	FASTENER-PANEL PLUG 0.5 H/0.35 P X .325	33378
25	1	PANEL-TAILGATE THRESHOLD SILL-TOYOTA TAXI RE	514760
26	4	RIVET PUSH IN 8MM	30063
27	1	TOYOTA STRIKER ASSEMBLY	OEM
28	2	SCREW M8 X 1.25 X 25MM THRD FLAT HEAD TORX MC	502165
29	1	SPRING RELEASE MECHANISM TORSION	502490
30	1	BUMPER FASCIA END CAP / DRIVER	514080
31	1	REAR BUMPER FACSIA MT - DRIVER	514078
32	1	BUMPER FASCIA END CAP / PASSENGER	514081
33	1	REAR BUMPER FACSIA MT - PASSENGER	514079
34	1	ASSY TAILGATE STOP - TOYOTA RE TAXI	514350A
35	2	SCREW 1/4-20 X 2.5 INCH FHCS TORX BK ZINC	513600
36	1	PANEL-TAILGATE EXTERIOR-TOYOTA TAXI RE	514759
37	10	PUSH PIN RETAINER-6MM HOLE-12MM HEAD	503910



Unfold for:
Exploded View
Tailgate Assembly &
Bumper End Caps

EXPLODED VIEW - RUNNING BOARDS & EXTERIOR PANELS

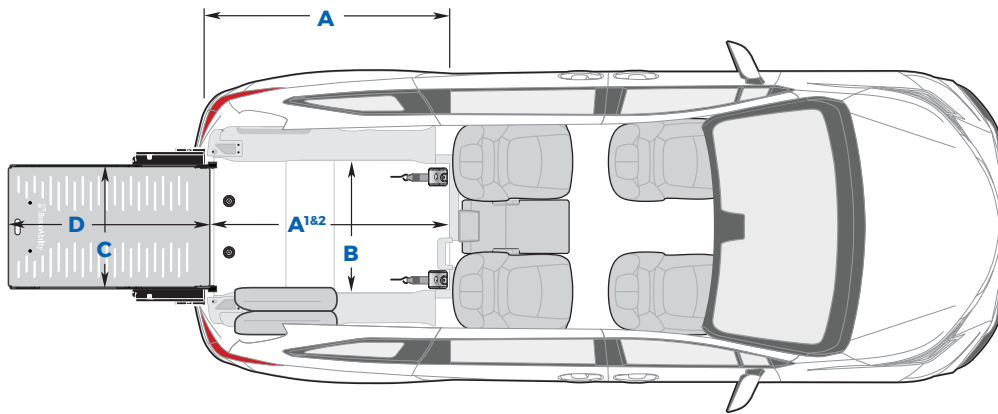


Part List - Running Boards & Exterior Panels

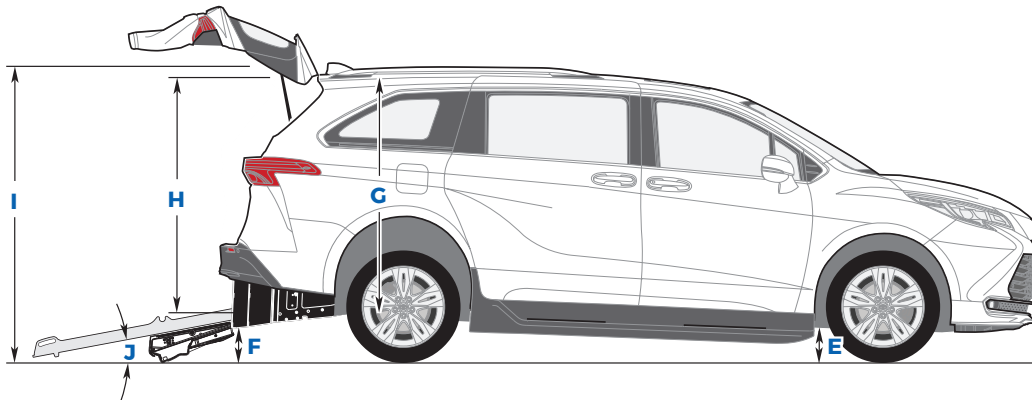
ITEM	QTY.	DESCRIPTION	PART NUMBER
1	1	ASSY-STEP FLARE-DRV-TOYOTA TAXI RE	514675A
2	1	ASSY-STEP FLARE-PASS-TOYOTA TAXI RE	514676A
3	2	RUNNING BOARD	514443WBK
4	1	LF RUNNING BOARD MT - TOYOTA RE TAXI	514437WBK
5	1	LC RUNNING BOARD MT - TOYOTA RE TAXI	514438WBK
6	1	LR RUNNING BOARD MT - TOYOTA RE TAXI	514439WBK
7	1	RF RUNNING BOARD MT - TOYOTA RE TAXI	514440WBK
8	1	RC RUNNING BOARD MT - TOYOTA RE TAXI	514441WBK
9	1	RR RUNNING BOARD MT - TOYOTA RE TAXI	514442WBK
10	1	WMT STEP FLARE MOUNT BKT - PASS	514660WBK
11	1	WMTSTEP FLARE MOUNT BKT DRIVER	514659WBK
12	12	BOLT-3/8-16 X 1" HEX FLANGE/AUTO-BK	36495BK
13	18	BOLT-FLANG-5/16-18X1" ZP GR8	38656
14	6	NUT 5/16 18 SERRATED FLANGE AUTO BLACK	25131
15	12	RIVET POP SD 64 BS 3/16" .13 / .25 AUTO BLACK	11513
16	6	FASTENER - PANEL PLUG / PUSH-IN-AUV # 12909	51266
17	26	SCREW-#8 X3/4" SDPH MOD TRUSS MAG BLACK	34091-0.75
18	2	RETAINER - BLACK NYLON - PUSH IN .375 STEM DIA	501842

DIMENSIONS

Dimensions - Toyota Taxi Hybrid - Rear Entry



Dimensions at Curb Weight



Ramp Capacity 1,000 lbs.

All dimensions are for reference only.

		Simple Stow Ramp
Lowered Floor Length	A	60"
Usable Floor Length (Ramp Stowed Vertical)	A ¹	56"
Track to Ramp Spacing	A ²	53"
Lowered Floor Width	B	33.25"
Ramp Width (Usable Clear Opening)	C	32.25"
Ramp Length	D	45"
Ground Clearance at Running Board Front (at GVWR)	E	5"
Ground Clearance at Rear Frame (at GVWR)	F	5.19"
Wheelchair Location Interior Height	G	57.5"
Entrance Height	H	56"
Overall Height (Hatch Closed)	I	78"
Ramp Angle *	J	12.8°

Due to manufacturing tolerances both with the OEM vehicle and the conversion components, all dimensions may vary slightly from those shown.

* Ramp angle may vary based on chassis trim level and other environmental factors.



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PATENTS PENDING

March 2022