



Revision: 1.1.2 Year: 2023 BS:EN 1756-2-2004 and A1:2009

Instruction Manual

Access[™] EA Lift / Access[™] EAB Lift

EA-1300A, EA-1480A, EA-1600A, EAB-1600A, EA-1300S, EA-1480S, EA-1600S





1. GENERAL

- 1.1. Manufacturer
- 1.2. Markings
- 1.3. Using the Manual (symbols etc)
- 1.4. Operator Responsibility
- 1.5. Health & Safety (Scooters)

2. TECHNICAL

2.1. Main Components Access™ EA & Access™ EAB 2.2. Dimensions

- Access[™] EA & Access[™] EAB
- 2.3. Technical Data (Volts, PLS Blue)

3. PRODUCT USE:

- 3.1. Intended Use
- 3.2. Improper Use

4. SAFETY DEVICES

4.1. Description of Safety Devices Access™ EA & Access™ EAB

5. STICKERS

5.1. Description of Labels & Stickers

6. LOGISTICS

- 6.1. Receipt and Inspection
- 6.2. Storing the Lift
- 6.3. Handling

7. INSTALLATION

- 7.1. Risk Assessment
- 7.2. Fitting Instructions
- 7.3. Bolting in the Base Procedure
- 7.4. Platform Frame "Horizontal" Adjustment Procedure
- 7.5. Platform Gates "Synchronizing" Procedure
- 7.6. Checking the Power Pack Oil Level
- 7.7. Pump Air Bleeding Procedure
- 7.8 Electrical Fittings
- 7.9 Electrical Circuit Protection
- 7.10. Burst Valve Test Procedure
- 7.11. Weight Test- Dynamic
- 7.12. Installation Checklist

7.13. Torque Settings

8. OPERATION

8.1. Standard Operating procedure 8.2. Manual Override

9. CLEANING

9.1. Cleaning Instructions

10. SERVICE AND MAINTENANCE

- 10.1. UK Service & Warranty
- 10.2. Loler
- 10.3. Daily Inspections
- 10.4. Weekly Inspections
- 10.5. Monthly Inspections
- 10.6. Six Monthly inspections
- 10.7. Lubrication
- 10.8. Check List

11. DISPOSAL

- 11.1. Safe Disposal
- 12. TROUBLE SHOOTING
- 12.1. Trouble Shooting

13. DIAGRAMS

13.1. Wiring Diagram- Power Pack- 3 Options13.2. Hydraulic Diagram

14. SPARE PARTS

14.1. Contents List of Spare Parts Access™ EA & EAB

14.2. Spare parts request form Access™ EA & EAB

15. NOTES



1.1 Manufacture Access[™] EA & Access[™] EAB



Passenger Lift Solutions Limited

Unit 2, Summit Crescent Ind. Est., Smethwick, West Midlands B66 1BT. U.K. Tel: +44 (0)121 552 0660

1.2 Manufacture Access™ EA & Access™ EAB

The lift device is manufactured in compliance with the relevant EC directives applicable on the date of entering the market. Considered a "medical device" pursuant to article 2, point 1), letter a), first paragraph of directive 2007/47/EC, the device carries a specific identification plate which, in addition to the specific technical data also includes the CE marking, guarantee of the compliance of the device to the directives/ standards referred to the enclosed Declaration of Conformity.

The plate, a facsimile of which is shown here, is stamped with the data indicating the specific model and unit.

NOTE: The Lift Serial number will be required for <u>ALL</u> correspondence with factory

 $\cap \mathsf{R}$





CUSTOMER NAME:	
INSTALLER NAME:	
DATE OF INSTALLATION:	
SERIAL NUMBER:	





1.3 Using the Access™ EA & Access™ EAB

This manual aims to provide users and operators with all the information they require to ensure that they are able both to use the lift appropriately and are able to manage it as autonomously and safely as possible.

Before performing any operations on the lift, users and operators must carefully read the instructions given in this publication.

In the event of doubt over the correct interpretation of the instructions, contact the PLS technical department to obtain the required clarifications.

This manual is an integral part of the lift, it must be kept safely by the purchaser and made available for use by the operators.

The contents of this manual comply with the Directive 2007/47/EC and were drafted following the guidelines given in UNI 10893:2000. They also comply with the requirements of UNI EN ISO 10535:2007 and BS EN 1789:2007 and A2:2014

Data and drawings are indicative only; with a view to the continuous development and updating of its products, the manufacturer may modify the contents without notice.

It is prohibited to disclose, edit or use this manual for any other purposes.



This symbol indicates IMPORTANT Information used by the Manufacturer and the User.



This symbol indicates areas that need routine maintenance.



This symbol indicates Operators areas of responsibility.



This symbol indicates IMPORTANT areas for the Safe operation of the Lift.



This symbol indicates that a potentially hazardous situation could occur.



This symbol indicates improper use of the lift.



1.4 Operators Responsibility Access™ EA & Access™ EAB

The operator is individually responsible for the safe use and maintenance of the lift.

They are also responsible for the lift users and their own personal safety and in the event of an accident they will be prosecuted to the full extent of the law if they are deemed negligent.

Legal action will also be taken if any unauthorised modifications are made to the lift without direct prior written authority by a PLS director.



The lift owner is the person who purchases the product, uses or oversees the use of the lift, this person is legally responsible for the lift's safe use.

The accompanying person, also known as the operator is responsible for the safe operation of the lift.

The operator must be full trained in all the operation aspects of the lift such as the transportation of people with motor deficiencies or disabilities. The operator must exhibit the following characteristics/ attributes for them to safely operate the lift:

PHYSICAL – Possess the required physical qualities/ characteristics sufficiently to ensure safe operation of lift in a safe and controlled manner. Examples include:

- Good hearing & sight
- Physically capable of performing all operational functions of lift
- Not impaired by the consumption of legal and/or illegal substances (such as alcohol and/ or drugs)

MENTAL - Possess the required mental qualities / characteristics sufficiently to ensure safe operation of lift in a safe and controlled manner. Examples include:

- · Understanding & application of the safety rules and procedures while operating the lift.
- Be constantly aware and pro-active to ensure the safety of the operator, user and nearby people.
- Have the knowledge/ skills to perform as an assistant and/ or operator in all aspects of lift operation. E.g. the safe transportation, loading and unloading of disabled and other passengers.

EMOTIONAL - Possess the required emotional qualities/ characteristics sufficiently to ensure

- safe operation of lift in a safe and controlled manner. Examples include:
- Work in a calm & safe manner while under stress so to prevent stress from impairing good judgement.
- To be emotionally stable during normal or abnormal situations

TRAINING – Possess the required training qualities sufficiently to ensure safe operation of lift in a safe and controlled manner. Examples include:

Completed operational training supervised by an experienced operator in PLS lifts in an
environment which is safe and controlled. Such supervised training should allow the
trainee to gain working experience in all operation aspects of the lift.



The lift owner is responsible for distributing and ensuring that a copy of this manual is read and fully understood by all potential lift operators before operating the lift.



No operator will use the lift if they believe it is unsafe and doing so could injury themselves or others, they MUST report their concerns directly to their manager or PLS.



1.5 Health & Safety (Scooters) Access™ EA & Access™ EAB

Safety Instructions for 'Scooters' and Large Powered Wheelchairs

Before operating tail lift:

Fully familiarize yourself with lift controls, relevant safety procedures and possible hazards, signified by warning labels or highlighted in your 'Operators Risk Assessment'.

Tail lift safety:

- Only an authorised (fully trained) operator must control the lift.
- Secure vehicle doors fully open, well clear of the lift platform.
- Keep within the stated maximum safe working load (SWL).
- Keep people away from the operating area (inside and outside of vehicle).
- Ensure that the platform is always level (horizontal, not more than 5% slope in any direction).
- NEVER leave the lift unattended at ground level if passengers are on board.
- When lift is not in use the controls should be deactivated.
- Ensure that the lift is correctly stowed after loading.

Operators ensure that:

- Lift will lower to firm, level ground.
- Scooter or powered wheelchair is not larger than lift platform in any direction.
- Tail lift is in a FULLY operational condition. Report any defects.
- Lift bridging-plate lands flat onto vehicle floor.
- Roll-off ramp is set vertically (approx. 80°), and fully operational.
- Accompany the passenger on the lift if possible, but do not overload the lift.
- You have a clear view of the lift platform before the scooter moves onto it.
- NEVER leave passengers unattended at any time.
- The passenger should not be required to operate ANY controls.

Loading & Unloading procedure:

- Explain to passenger the sequence of movements that will occur.
- Where possible the passenger should dismount scooter and board vehicle separately.
- Ensure that the lift platform and area around the lift are free from obstructions.
- Ensure that the lift platform is in the correct position before moving onto it.
- Scooter should be pushed onto the lift platform, NOT DRIVEN.
- Ensure that persons or equipment do not overhang the platform.
- Scooter breaks are applied BEFORE lift begins motion (or wheels blocked).
- All power to scooter is turned OFF.
- Operate lift platform to vehicle floor.
- Scooter is pushed off the lift platform, NOT DRIVEN.
- The scooter should be clamped to the vehicle floor using the correct equipment.
- The passenger utilises the static vehicle seats and seatbelts.

Please note: The transportation of scooters and large powered wheelchairs may require a 'NON STANDARD' tail lift size or specification. Where possible PLS can provide longer, wider platforms, higher roll-off ramps to help combat the increased hazards related to larger passenger vehicle transportation.



Technical

2.1 Main Components Access[™] EA & Access[™] EAB



Technical



2.2 Dimensions Access™ EA & Access™ EAB



Part No.	'A' Platform Length	'B' Platform Width	'C' Base Width	'D' Bridge Plate Width	'E' Stow Height	'G' Outside Arm Width	'H' Internal Arm Width	'l' Platform Opening Width	SWL (Kg)
EA-1300-815-A	1300	805	1065	790	1420	1035	845	680	400
EA-1480-815-A	1480	805	1065	790	1600	1035	845	680	400
EA-1600-815-A	1600	805	1065	790	1720	1035	845	680	400
EA-1600-915-A	1600	905	1165	890	1720	1135	945	780	500
EAB-1600-915-A	1600	905	1265	890	1720	1235	1045	780	500



Technical

2.3 Technical Data Access™ EA & Access™ EAB

The Lift is designed To Transport:



One person in a wheelchair with or without an attendant, with a size not larger than the width/ length of platform space available, or weight over the stated 'SWL' capacity



Two walking passengers. The operator should not attempt to transport more than two people at a time of increased risk of passenger discomfort. The passengers also may require extra space for mobility devices such as sticks and frames

SWL (Kg)	400		
Voltage (DC)	12V		
Pressure (Bar)	100		
Auxiliary Hand Pump	Yes		
Lift Control	3 Button		
	Handset		

Product Use



3.1 Intended Use Access™ EA & Access™ EAB

The lift is designed for installation on the loading floor of a vehicle designed for transportation of the disabled in wheelchairs, within the limits of the performances and capacities indicated in the technical characteristics.

The lift must only be used by an authorised and trained operator, known as the accompanying person, who possesses the knowledge and physical requirements to safely perform operations with disabled persons.





Anything that is not specifically referred to in chapter 3.1 is considered **IMPROPER USE**.



THE MANUFACTURER DECLINES ALL RESPONSIBILITY FOR DAMAGE CAUSED TO PERSONS OR PROPERTY OR TO THE LIFT ITSELF DUE TO ANY USE OTHER THAN THAT DESCRIBED IN THIS MANUAL.



Product Use

3.2 Improper Use Access™ EA & Access™ EAB

Anything that is not specifically referred to in chapter 3.1 is considered **IMPROPER USE**.



 $\ensuremath{\mathsf{IT}}$ IS FORBIDDEN to climb onto the lift or any of its parts and go up or down while standing.

It is advisable to always attempt to use the lift on flat/ level ground

No angle of more than 5 from level (in any direction) should be attempted



Anything that is not specifically referred to in chapter 3.1 is considered IMPROPER USE.



THE MANUFACTURER DECLINES ALL RESPONSIBILITY FOR DAMAGE CAUSED TO PERSONS OR PROPERTY OR TO THE LIFT ITSELF DUE TO ANY USE OTHER THAN THAT DESCRIBED IN THIS MANUAL. 4

Safety Devices

pls

4.1 Description of Safety Devices Access™ EA & Access™ EAB



1	Handrail	Standard
2	Roll Off Ramp	Standard
3	Bridge Plate	Standard
4	Anti-Slip Surface Cleatings	Standard
5	Arm Guards	Standard
6	Burst Valves	Standard
7	Door Safe	Optional
8	Threshold- Magic Eye Sensor	Optional
9	Emergency Release Handle	Standard



IT IS FORBIDDEN TO DISABLE, REMOVE OR TAMPER WITH THE EXISTING SAFETY SYSTEMS.



5

5.1 Description of Labels & Stickers Access™ EA & Access™ EAB



Logistics



6.1 Receipt and Inspection Access™ EA & Access™ EAB

Upon delivery of the lift, you need to perform the following inspections:

- Ensure the product delivered corresponds to the relevant documentation e.g. the order specification and the transport document.
- Examine packaging to ensure it is undamaged and all parts are intact during transportation.
- With great care, examine all devices to ensure they haven't been damaged during transportation and all parts haven't been tampered or removed.
- Ensure all documentation required for installation has been supplied.



IF THE DELIVERED DEVICE DOES NOT COMPLY WITH THESE REQUIREMENTS, NOTIFY THE MANUFACTURER IMMEDIATELY.

6.2 Storing the Lift Access™ EA & Access™ EAB

If the lift is not used, proceed as follows:

- Transport lift to an appropriate storage area, free from atmospheric agents / elements.
- Ensure all electrical / electronic devices are insulated from external environment so to prevent humidity damaging those components.
- Storage area selected **MUST** ensure temperature variation is between 5°C to 50°C fresh hold.
- Ensure all sliding parts (guides, cylinders ...) are adequately protected from dust,

rust and water damage.

Note: If a lift is to be dry stored for more than 12 months then all cylinder seals MUST be checked before operation



STORAGE OF THE LIFT IN CONDITIONS THAT DO NOT COMPLY WITH THE ABOVE DESCRIPTION SHALL NULLIFY THE WARRANTY FOR ANY PARTS TO BE REPLACED.



Logistics

6.3 Handling Access[™] EA & Access[™] EAB

All lifting and short workshop distance transportation of packages lifts must be carried out using a forklift truck.

Safe lifting can only be achieved when using suitably rated load capacity equipment (Please refer to Technical Data Table for indicated lift weight)





HANDLING STAFF MUST WEAR: SAFETY SHOES WITH STEEL TOE CAP AND NON-SLIP SOLES.



MAKE SURE THAT NO UNAUTHORISED PERSONS ARE STANDING WITHIN THE RADIUS OF ACTION OF THE LIFTING/HANDLING MEANS (FORK LIFT TRUCK, TRANSPALLET, ETC.) DURING THE LIFTING, TRANSPORT AND HANDLING OPERATIONS.

Procedures for packaging removal are explained below:

- Using a Stanley Knife with a maximum blade length of 10mm, cut along the 4 sides of the base of the packaging, remove tape and ensure waste cardboard is recycled
- For wooden crates, remove nails from top panel and those present on the side walls.





STAFF REMOVING THE PACKAGING MUST WEAR: SAFETY SHOES WITH STEEL TOE CAP AND NON-SLIP SOLES, GLOVES AND SAFETY GLASSES.





7.1 General Installation - Risk Assessment Access™ EA & Access™ EAB

Location: Passenger Lift Services Ltd Rev No:												
Operation/Activi	ity: Lift Operation											
List below the op	perations, in your	Severity	y			Lik	elih	ood			Risk	Rating
opinion, which ir	nvolve a significant	1 2	2	4	-	1	2		4	-		= S x L
hazard, risk of in	jury?	1 2	3	4	5	1	2		4	0		
Stability of lift du	uring operation	2				1	1			2		
Entrapment from	n moving parts	2			1					2		
Slips, trips and fa	alls		3			1				3		
Operating enviro	onment		3					2				6
Manual operatio	on of lift		2					1				2
Contact with haza	rdous substances		2					1				2
Fire			1					1				1
List persons at	Operators	No injury just minor damage to plant, equipment or structure Minor injury – small cut or bruise Serious – medical treatment required – doctor or small injury clinic Major – attendance at hospital accident and emergency department featilites			Rare - may occur only in exceptional circumstances. (0- 20% chance) Moderate - could occur at sometime. (41-60% chance) Likely - ndt suprised could occur several times. (61-80% chance) Certain - to be expected, will occur repeatedly. (81-100% chance)				18 ^{Overall risk} rating			
Risk rating has b	een defined taking into a	ccount t	he fo	ollov	ving	; cor	ntro	l m	easur	es	Custa	
responsibilities mair	ciude (engineering quality conti itained.	roi, specia	list eq	uipm	enti	ntorr	mati	on /	Instruc	ction,	Custo	mer
Action Plan / Cor	ntrols:-											
All lifts are suppl	ied with safety instructior	ns and sa	fe o	pera	ting	pro	ced	ure	s with	n visi	ual in	struction
for the automati	c and manual operation o	f lifts.										
Safety instructio	n is also generated and su	pplied for	or th	e use	e of	lifts	by	sco	oters	and	large	powered
wheelchairs.												
Supply and fitted	d lifts have a weight test co	ertificate	e and	l an i	nsta	allat	ion	anc	exar	nina	tion r	eport
completed by a c	competent engineer comp	olying to;	; Lifti	ng C	per	atio	ns a	and	Liftin	g Eq	uipm	ent
Regulations 1998.												
Additional controls are to be implemented and maintained by the end user, with six monthly												
Inspections carried out on an intring equipment conforming to; Lifting Operations and Lifting												
Controls are deemed adequate- proceed with the												
Has the overall risk r	rating been reduced to Low?	operation/activity					1-7					
Has the overall risk r	rating been reduced to	X cont	Consider additional controls, strict monitoring X controls required -proceed with caution			ig ot		8-20				
Medium?	Oper	ation	/ activ	ity is	NOT	to be	und	ertaken	until			
Has the overall risk r	Hostiania Uperation / activity is NOT to be undertaken until additional controls have been implemented - contact safety officer 21-30					21-30						
Can the risk be red	duced to low by introducing	addition	al pre	event	ativ	e an	d/or	r pro	tectiv	e me	easure	es? No
See Risk Assessment Action Plan for additional precautions / controls to be implemented.												

Assessment carried out by:

Position:

Date:

REMEMBER: REVIEW THE ASSESMENT IF THE CIRCUMSTANCES CHANGE SIGNIFICANTLY



7.2 General Installation Access™ EA & Access™ EAB

Fitting sequence

Please refer to the following pages for accompanying installation diagrams.

When positioning the lift into the vehicle:

- 1. Roll off ramp (wheels) must be clear of rear doors, minimum 15mm.
- 2. When the lift is powered "down" the bridge plate mechanism must be clear
- of the rear bumper or side valence.
- 3. The distance between the inside of the door aperture and the outside
- of the handrails should be equal both sides.
- 4. All manual override systems must be fully accessible.

5. The vehicle surface MUST be flat. Do not attempt to mount base plate on top of seat tracking extruded sections. Shim base plate above tracking if necessary.

If the surface is not flat, when the lift is bolted down the base could distort to the contours of the floor. This will have the effect of altering the position of the lifting arms, thus twisting the lift. THIS WILL AFFECT PRODUCT WARRANTY.

When bolting in the base:

1. Identify the vehicle floor/ structure type and use one of the three fitting options see "Bolting in the base" Procedure in section 7.3

- 2. Correctly position the lift base, then clearly mark the hole positions that are accessible.
- 3. Move the lift to a safe location.
- 4. Check under the vehicle for any obvious obstructions in the areas to be drilled.
- 5. Carefully drill pilot holes through the marked positions, ensuring the drill is kept vertical.
- 6. Check under the vehicle and ensure the pilot holes have cleared all obstructions.
- 7. Drill clearance holes suitable for the selected bolts.

8. If the floor is a laminated type, bore out the appropriate size holes to fit the correct spacers, ensure these are cut the same length as the floor depth.

9. Drill clearance holes suitable for the selected spacers where applicable.

10. Re-position the lift base and measure the total depth from the top of the lift base to the underside of the vehicle, add 50mm and select the bolt closest to this dimension.

11. Fit the Coach bolts through the lift base and then slide on the correct space, PLS universal plate and the nylock nut from below the vehicle.

12. Initially tighten the nuts so they support the lift, when all fixings have been fitted then securely tighten from the centre outwards to a sufficient torque rating.

13. After the lift has been weight tested check/ re-tighten all nylocks.





Adjusting lift:

- 1. Ensure vertical stow position is set correctly.
- 2. Ensure horizontal platform position is set correctly.
- 3. Ensure roll-off ramp end of platform lands on ground first.
- 4. Ensure platform is symmetrical (not twisted)
- 5. Ensure Platform gates are locating together correctly.

6. To correctly adjust the Platform Knuckles see Platform Gates "Synchronizing" Procedure in section 7.5

To Finish:- Weight Test Lift to current LOLER recommendation/ regulations.

- 1. Check all fitting bolts are tightened to correct torque setting.
- 2. Check all lift fastenings are tight.
- 3. Ensure all information decals are positioned correctly.
- 4. Lift serial number and SWL are visible.
- 5. Fill in weight certificate.
- 6. Fill in LOLER certificate.



7.3 Bolting in the Base Procedure Access™ EA & Access™ EAB



7

Installation



7.4 Platform Frame "Horizontal" Adjustment Procedure Access™ EA & Access™ EAB

- Undo locking nut "A" until adjustment screw "B" is free to move. To increase the distance "C" (platform end to ground) turn the adjustment screw "B" clockwise. To decrease the distance "C" (platform end to ground) turn the adjustment screw "B" anti-clockwise
- 2. Turn the adjustment screw "B" until the platform angle 92° is achieved.
- 3. The locking nut "A" <u>MUST</u> be re-tightened after any adjustment.
- 4. Lower the lift and ensure that the Roll Off Ramp Landing Roller "E" and the Roll Off Ramp "D" are in contact with the floor.

If not repeat the above procedure until correct.

Note: If the L/H & R/H bolts are not equally adjusted/set, the platform may have a side to side twist.





7

Installation



7.5 Platform Gates "Synchronizing" Procedure Access™ EA & Access™ EAB

- 1. Lower the lift so that the platform is approximately 150mm above floor level.
- Assess the tension in the Platform Knuckles. It is <u>CRITICAL</u> that there is <u>NO</u> tension, ie when a spanner is placed on the flat of the lower knuckle item "A" (highlighted as "C") and turned from side to side free movement MUST be seen/ felt, if not adjustments MUST be made. See no.5
- 3. Raise the lift so that the gates are open and approximately 75mm apart. See Enlarged view "A"
- 4. Look at the imaginary centre line "H" between the locking pin "F" and receiving boss "G" both parts MUST be concentric so that they will fully engage when the lift is in the fully lowered position as shown in the Enlarged view on "B" ensuring that the two halves of the platform are securely locked together.
- 5. If the parts are not correct then adjustments MUST be made. See no.6-18
- 6. Adjustments are made by either/ or both increasing or de-creasing the length the Platform Knuckles
- 7. De-creasing the distance between the knuckles will raise the platform ends (this will increase the 150mm clearance).
- 8. To achieve this See Enlarged view "C"
- 9. Measure and note down the distance between the knuckles.
- 10. Loosen the locking nut item "E" by turning anticlockwise.
- 11. Fully disconnect the lower knuckle item "A" by completely removing the bolt.
- 12. Wind the thread clockwise, into the upper knuckle item "B"
- 13. Wind the lower knuckle item "A" clockwise onto the thread item "D"
- 14. It is <u>CRITICAL</u> that the white line (mid point of the thread) is located mid way between the knuckles, adjust if necessary.
- 15. Measure the distance between the knuckles and note down.
- 16. When the required dimension has been achieved re-connect the lower knuckle item "A" by securely fixing the retaining bolt in position.
- 17. Turn the locking nut item "E" by turning clockwise until fully tightened, BEFORE operating the lift.
- 18. Operate the lift fully twice then repeat the whole procedure, make further adjustment if required.
- 19. To increase the 150mm clearance, Increase the distance between the knuckles.

Note: It is $\underline{\text{CRITICAL}}$ that there is $\underline{\text{NO}}$ tension in the Platform Knuckles, tension may cause severe damage.

It may be necessary to adjust BOTH sides to obtain correct alignment.





ENLARGED VIEW ON "B" (WHEN LIFT IS IN THE FULLY LOWERED POSITION) SHOWING LOCKING PIN "F" AND RECEIVING BOSS "G" PERFECTLY ALIGNED



7.6 Checking the Power Pack Oil Level Access™ EA & Access™ EAB

Before checking the Oil Level, ensure the lift is completely lowered- failure to do so could cause a false reading- and overfilling with oil WILL cause permanent damage to the pump. Wipe away any residual oil/ dirt from around the oil filler so that the level of oil can be correctly seen. If the level has dropped below the 25mm limit then remove the filler cap and top up slowly with PLS Blue oil <u>ONLY</u>, when the correct level is achieved then replace the filler cap. Operate the lift several times and then repeat the checking process.





7.7 Pump Air Bleeding Procedure Access™ EA & Access™ EAB



ENSURE LIFT IS FULLY LOWERED TO GROUND LEVEL BEFORE STARTING THE PROCEDURE

FLOOR LEVEL

ENSURE LIFT REMAINS AT GROUND LEVEL WHILE THE PROCEDURE IS CARRIED OUT



ENSURE LIFT REMAINS AT GROUND LEVEL WHILE THE PROCEDURE IS CARRIED OUT

OPEN





7.8 Electrical Fittings Access™ EA & Access™ EAB





7.9 Circuit Protection Access™ EA & Access™ EAB

<u>FUSE</u>

12V = 80A OR24V = 40A SECURING NUTS 4Nm



7

Installation



7.10 Burst Valve Test Procedure Access™ EA & Access™ EAB





7

7.11 Weight Test Access™ EA & Access™ EAB

Full Cycle Load Test





7.12 Installation Check List Access™ EA & Access™ EAB

Engi	neer Name:	
Date	:	
Cust	omer Details:	
Add	ress Contact:	
Tel N	lumber:	
Lift S	Serial Number:	
No	Item	Checked
1	Check lift to order supplied by PLS	
2	Dispose of any excess parts / materials appropriately	
3	Lift to be collected in a timely manner	
4	If lifts cannot be collected and delivered for any reason, PLS will dispatch	
	lift to the customer's premises (UK ONLY)	
5	Ensure enough time is allowed to install the lift in one full day	
6	To sign in / register with relevant manager at Coach Builders, and abide by	
	the Site's H & S Policy.	
7	Dependent on the Customer's H & S Policy, the Engineer maybe required	
	to provide a working on site risk assessment	
8	Deliver the lift (s), plus tooling and test weights	
9	To co-ordinate lift, tooling and weights to the installation bay	
10	For the given vehicle, Engineer to check correct paperwork	
11	Check vehicle is (Standard), anything other than (Standard) should be	
	reported immediately. This includes spare wheels, fuel tank, modification	
	of suspension, air conditioning unit, exhaust and all parts of exhaust	
12	Installation should commence in correlation to guidelines set out by PLS	
13	Hand control cable through door – Vehicle cable bush	
14	Door plug (Nutrik) 20mmø hole required. (If fitted through Door)	
15	Door switch 12mmø hole. One required if no cab switch?	
16	Rubber boot on battery terminals.	
17	Inside the Vehicle shims must be used to ensure Base is fitted flat.	
18	Ensure the Base is correctly bolted into place using the PLS universal	
	fitting plates secured from below the chassis-DO NOT use washers.	
19	Once lift is installed and correctly adjusted, Loler inspection certificate to	
	be completed. A full weight test to be conducted in accordance with the	
	weight certificate. (BS:EN 1756-2-2004 15 minute creep test)	
20	First weight test to be tested to 125% stated S.W.L load (I.e. 400kgs =	
	500kgs full test). Photographs are to be taken of the weight applied	
21	A final check must be made to ensure that the pump is set between	
	400kgs < 425kgs max	



7.13 Torque Settings in Nm Access™ EA & Access™ EAB

Thread Size	Tightening Torque Nm Property Class						
HTS	8.8	8.8 10.9 12.9					
M4	2.9	4.1	4.95				
M5	5.75	8.1	9.7				
M6	9.9	14.0	16.5				
M8	24.0	34.0	40.0				
M10	48.0	67.0	81.0				
M12	83.0	117.0	140.0				
M14	132.0	185.0	220.0				
M16	200.0	285.0	340.0				

Thread Size	Tightening Torque Nm Property Class					
HTS Hex Flange	8.8 10.9 12.9					
M6	9.0	14.7	16.8			
M8	20.0	35.6	41.0			
M10	40.0	70.6	81.0			

Thread Size	Tighte Pr	ning Torque Nm operty Class
Stainless Steel	A2-70	A4-80
M4	2.6	3.5
M5	5.1	6.9
M6	8.8	11.8
M8	21.4	28.7
M10	44.0	58.0
M12	74.0	100.0
M14	119.0	159.0
M16	183.0	245.0

Operation



8.1 Standard Operating Procedure Access™ EA & Access™ EAB

Ŵ

Easy Access Lift

Operating Procedure



LIFT MAY STOW USING UP BUTTON WITH NO LOAD APPLIED



Operation

8.2 Standard Override Procedure Access™ EA & Access™ EAB







Cleaning



9.1 Cleaning Instructions Access™ EA & Access™ EAB

Great care needs to be taken during the cleaning process, all cleaning is to be carried out by hand using a gentle cloth or sponge soaked in non-aggressive detergent and then rinsed with a cloth dampened with water. Ensure all moving parts are re-lubricated where necessary.



DO NOT USE AGGRESSIVE DETERGENTS. DO NOT USE WATER JETS OR HOT WATER JET CLEANERS.



Check and re-lubricate parts as described in section 10.7



UK Service & Warranty

10

10.1 Warranty Access ™ EA & Access ™ EAB

Warranty Cover & Period

The PLS Warranty covers parts and labour, and is effective for 36 months from the date of initial commission by PLS or a certified authorised engineer.

If the date of initial commission is in excess of 90 days from date of despatch, the warranty will start from the date of despatch.

Procedure:

- To qualify for this warranty, it is necessary to register the Lift and Vehicle details on line www.passengerliftservices.co.uk or via post within 45 days of the initial LOLER inspection.
- 2. An operator requiring attention to a unit will contact PLS
- 3. directly and quote the Lift serial number.
- PLS will then instruct a company engineer or an authorised approved Service Agent by issuing an official order number to affect the repair.

NB: ANY WORK CARRIED OUT WITHOUT AUTHORISATION WILL NOT BE REIMBURSED.

Conditions:

Warranty does not extend to lifts that have not been regularly serviced by a PLS engineer, or factory trained and authorised engineer. This includes the 6 monthly LOLER inspection and separate weight test, which must be current at the date of the Warranty Claim.

All previous LOLER and Weight Test Certificates must have been copied to PLS and run concurrently.

The lift must be made available during the hours of 08.30 and 17.00, Monday to Friday, excluding public holidays.

No delivery costs or travel time will be reimbursed except by prior agreement, as specified on the original Purchase Order.

- The initial Warranty period applies to original parts only.
- Replacement parts changed under warranty, and new parts

purchased, carry 12 months warranty only.

New parts that have been purchased and require a warranty repair will require either a copy of the original Purchase Order or details of the original Purchase Order number to qualify.

The serial number(s) for the component claiming warranty must match the serial number(s) recorded to the lift it was originally fitted to.

If a customer has an invoice unpaid beyond PLS terms and conditions or is in dispute customers lift will not be visited.

Warranty Exclusions:

Hydraulic Power packs that are fitted to the exterior of the vehicle only carry 12 months warranty (if cover is missing warranty void).

Hydraulic Power packs fitted to the interior of the vehicle qualify for the 24 months warranty.

The following are all excluded from warranty:

Consumable parts e.g. Fuses, Bulbs, Electrical Connectors, Bearings, Hydraulic Hoses (with the exception of manufacturing defects). Fastenings which should be checked at the service intervals. Driver misuse Accident damage. Items that are subject to the level of wear & tear which would normally involve replacement during normal service, maintenance and operating conditions.

Handsets carry 12 months warranty only.

No claim will be accepted for:

Replacement vehicle hire or loss of earnings.

The Warranty Agreement does not supersede the Suppliers liability for all components as defined in the Sale of Goods act 1982.

Months 24 to 36 of the Warranty:

The vehicle will be required to be returned to the PLS Factory for 'free of charge' warranty work.

When this is not possible, labour and travel will be charged at the current PLS hourly rate, weather it is a PLS engineer or an agent working on behalf of PLS Ltd that conducts the repair.

If an agent is used, it will be at the discretion of PLSLtd as to who will affect the repair.

Any parts sent to an agent for warranty work within the 24-36 Month period, will incur the relevant courier costs at commercial rates, and will be at the expense of the customer.

Extended Warranty:

Extended Warranty is available for months 37-60 with a written agreement of PLS Ltd, initiated BEFORE month 37 starts.

This warranty will follow the same basis as the 24-36 month period.

Extended Warranty does not include Power packs, motors, hydraulic cylinders and hoses.

Passenger Lift Solutions Limited

Unit 2, Summit Crescent Ind. Est., Smethwick, West Midlands, B66 1BT. U.K. enquiries@pls-access.co.uk • Tel: +44 (0)121 552 0660 **10** Service & Maintenance

pls

10.2 Loler Access™ EA & Access™ EAB







This lifting equipment is covered by the "Lifting Operations & Lifting Regulations Act 1998. "LOLER".

It is the lift operating company or duty holders responsibility to ensure that at regular **SIX** monthly intervals this equipment is **INSPECTED**, **SERVICED & WEIGHT TESTED** by a competent tail lift engineer.

For more information, please contact **PLS Service Department direct line:**

0121 559 0466


10

10.3 Daily Inspections Access™ EA & Access™ EAB

Lift Inspection checks are required on a DAILY basis by the lift operating company. The working life of your lift will be greatly prolonged if these steps are adhered to. This should include the following:

Daily Inspection Check List		Lift no:				
		Vehicle Reg:				
Eng	Engineer's Name: Date:					
Cus	tomer Details:					
Add	ress, Contact:					
Tel Number:						
1	1 Visually check for any leaks or damage.					
2	Check for obvious signs of damage, and notify as manager if necessary.					
3	3 Ensure that the Operation instructions are visible.					
4 Ensure the hand pump handle is present.						
5 Ensure the Handset control is working correctly and there are no signs of damage.						
6	6 Ensure the Platform is clean and dry.					
7	7 Ensure the Handrails are clean, working correctly and rust free.					
8	Ensure the Arm guards are present and undamaged.					
9	9 Ensure the Bridge Plate operates correctly and lands on the floor.					
10	Ensure the Roll-Off-Ramp operates correctly	and lands on the ground.				
11	Ensure the warning lights are operating correctly (If fitted).	ectly before using the lift				

10.4 Weekly Inspections Access™ EA & Access™ EAB

Lift Inspection checks are required on a WEEKLY basis by the lift operating company. The working life of your lift will be greatly prolonged if these steps are adhered to. This should include the following:

Weekly Inspection Check List		Lift no:				
	weekly inspection check List	Vehicle Reg:				
Eng	Engineer's Name: Date:					
Cus	Customer Details:					
Add	Address, Contact:					
Tel	Tel Number:					
1	Visually check fluid level.					
2	Visually check for any leaks or damage.					
3	Check for obvious signs of damage, and not	ify as manager if necessary.				
4	4 Ensure that the Operation instructions are visible.					
5	5 Ensure the hand Pump Handle is present.					
6 Ensure the Handset control is working correctly and there are no signs of damage.						
7 Ensure the Platform Hinges are clean/ dry and correctly lubricated using ACF-50 spray.						
8 Ensure the Platform Knuckles are clean/ dry and correctly lubricated using ACF-50 spray.						
9	Ensure the Platform Pivots are clean/ dry and correctly lubricated using Lithium Grease EP2.					
10	0 Ensure the Stow Linkages (Upper & Lower) are clean/ dry and correctly lubricated using ACF-50 spray.					
11	Ensure the Handrails are clean, working corr	rectly and rust free.				
12	12 Ensure the Handrail mechanisms are working correctly & lubricated using ACF-50 spray.					
13	Ensure the Arm guards are present and und	amaged.				
14	14 Ensure the Bridge Plate Hinge is working correctly & lubricated using ACF-50 spray.					
15	Ensure the Roll-Off-Ramps are working corr ACF-50 spray.	ectly & lubricated using				



10

10.5 Monthly Inspections Access™ EA & Access™ EAB

Regular lift maintenance is recommended at MONTHLY intervals by the lift operating company. The working life of your lift will be greatly prolonged if these steps are adhered to.

Monthly Inspection Check List		Lift no:				
		Vehicle Reg:				
Eng	Engineer's Name: Date:					
Cus	Customer Details:					
Add	ress, Contact:					
Tel	Number:		ОК			
1	Check for obvious signs of damage and repl necessary.	ace defective parts where				
2	2 Check the operation and stowing of the lift.					
3	3 Check rear Roll-Off Ramp operation and lubricate as necessary.					
4 Check Platform alignment (pin location), adjust Platform Knuckles as necessary.						
5 Ensure the Handset control is working correctly and there are no signs of damage.						
6 Check lift 'vertical' stowing position. Lift should be clear of rear doors and only lower when the down button is depressed						
7 Check Platform 'horizontal' position. Each side of the lift platform can be adjusted independently if required.						
8	Check Power Pack oil reservoir (when the lift platform is completely stowed) if necessary, top up slowly with PLS Blue oil <u>ONLY</u> to within 25mm from "max" level.					
9	When cleaning the vehicle, wash the working platform of the lift. For best results use a stiff brush and soapy water. Replace any missing 3M surface tape as necessary.					
10	Lubricate all required parts.					
11	Check the condition/ correct operation of the	Platform Knuckles.				
12	12 Ensure the Bridge plate and linkages are working correctly.					

IF IN DOUBT, CONTACT THE MANUFACTURER

10.6 Six Monthly Inspections Access™ EA & Access™ EAB

For Factory Trained Lift Engineers

As monthly safety checks plus:

Six Monthly Inspection Check List		Lift no:				
		Vehicle Reg:				
Eng	ineer's Name:	Date:				
Customer Details:						
Add	ress, Contact:					
Tel	Tel Number:					
1	Check all fixing bolts and brackets connectin	g lift onto vehicle chassis.				
2	Remove pump box cover and check hydraul damage.	ics / electrics for wear or				
3	Check lifting cylinders for leaks, change seals if necessary. Adjust/ tighten hoses if required (35 N/m of torque for hydraulic fittings).					
4	Remove outside 'arm side guard' cover. Check bridge plate gas strut operation. Check all linkages, fittings and wheels for wear. Tighten and replace if necessary.					
5	5 Check all visible hoses and fittings for leaks or damage.					
6 Check handrail fittings are tight.						
7 Check condition/security of arm side guards.						
8 Check all fittings are tight particularly the arm pins.						
9	Check bridge plate and platform hinges for c	orrect operation.				
10	Check roll-off ramp assemblies for correct operation. Pay particular attention to spring position and operation.					
11	Check vertical stow rubber for wear (located in rear corners of platform).					
12	Check condition of SWL sticker and other lift decals.					
13	Coat all electrical connections with petroleum jelly or proprietary electrical grease.					
14	14 Check hand pump operation, lubricate all pivot points. REMEMBER TO RETURN MANUAL-TAP(S) TO THEIR ORIGINAL POSITION.					
15	Perform weight test in accordance with curre	nt Loler standards.				
16	Ensure that grease points are re-greased/ lu	bricated.				

IF IN DOUBT, CONTACT THE MANUFACTURER



10

10.7 Weekly Lubrication Access™ EA & Access™ EAB

Lubrication Diagram





REF.	DESCRIPTION	TYPE	
1	Roll-Off Ramp Pivots	A	0
2	Platform Hinges	A	0
3	Arm Pivots	A	•
4	Bridge Plate Linkage (Upper)	A	•
5	Stow Linkage (Upper)	A	0
6	Bridge Plate Linkage (Lower)	A	
7	Platform Pivot	В	0
8	Platform Knuckle	A	0
9	Stow Linkage (Lower)	A	0
10	Bridge Plate Hinge	A	0
11	Handrail Pivot	A	0
	All Other Springs	A	0

TYPE	LUBRICATION SPECIFICATION
A	ACF-50
В	LITHIUM GREASE EP 2

*Lift MUST be cleaned, lubricated and maintained in accordance with current LOLER regulations

10.8 Check List Access™ EA & Access™ EAB

LOLER / SERVICE Repair Check List		Lift no:				
		Vehicle Rag:				
Eng	ineer's Name:	Date:				
Cus	tomer Details:					
Add	ress, Contact:					
Tel.	Number:		Poor	Ok	Good	
1	Roll Off Ramp (Ramp Stop) operation/ condition/ correctly fitted.					
2	Roll Off Ramp wheels, operation/ condition/ correctly fitted.					
3	Roll Off Ramp wheel rubbers "O rings", operation/ condition/ correct	v fitted.				
4	Roll Off twin springs, (2 per side) operation/ condition/ correctly fitted	<u>,</u> 1.				
5	Bridge plate Aluminium, operation/ condition/ correctly fitted.					
6	Bridge plate activation wheels/ linkages, operation/ condition/ correct	tly fitted.				
7	Bridge plate torsion spring, operation/ condition/ correctly fitted.	,				
8	Platform- correct stowing position MUST be "Past" vertical.					
9	Platform- correct horizontal position MUST be at 92° to vehicle floor.					
10	Platform Stow bearings, operation/ condition/ correctly fitted.					
	Platform operation should be smooth and controlled there should be	NO erratic/				
11	rough movement when raised or lowered.					
12	12 Platform Gates, operation/ condition/ set and correctly fitted.					
Platform Knuckles, operation/ condition/ correctly fitted. (Paint mark should be						
13	¹³ centrally located between knuckle ends)					
14	14 Platform Gate hinges, operation/ condition/ correctly fitted and lubricated.					
15	15 Gas Struts, operation/ condition/ correctly fitted.					
16	Vertical Stow bolts, operation/ condition/ set and correctly fitted.					
17	All lift arm/ cylinder pins should be flush fitting and correctly fitted wit	h blue glue.				
18	All fasteners present and tight.					
19	Arm Nipples correctly greased.					
20	All hoses and protective sleeving, condition/ correctly fitted.					
21	Hydraulic fittings in good condition/ securely tightened to 35Nm and	confirmed				
21	²¹ with paint pen.					
22	Lifting cylinders, operation/ condition/ correctly fitted.(eg No signs of corrosion,					
~~	²² leaks, or loose caps)					
23	Cleating and wear strips, condition/ correctly fitted.					
24	Up/Down hydraulic pump operation/condition (relief valve)					
25	Hand pump operation/condition/ check tightness					
26	SWL Plate correctly fitted and displayed on Base Frame					
27	Base Frame assembly, condition/ correctly fitted.					
28	Lift Number correctly stamped on S/S plates.					



Safe Disposal

11.1 Disposal Instructions Access™ EA & Access™ EAB



When disposing of the machine, please comply with the procedures imposed by the laws in force.

Generally the machine should be disassembled and identical materials grouped together these must then be disposed of in accordance with local environmental legislation.

Contact the local Authority to ensure that specific materials such as lubricants, electrical/ electronic components are disposed of correctly.



YOU MUST RETURN THE MACHINE ID PLATES AND ANY OTHER CONNECTED DOCUMENTS TO PLS WHEN THE PRODUCT HAS BEEN RECYCLED.

12 Trouble Shooting

pls

12.1 Trouble Shooting Instructions Access™ EA & Access™ EAB

Symptom	Rossible cause	Solution		
Symptom	Possible cause	30101011		
	Circuit breaker tripped/ Fuse Blown	Re-set circuit breaker (push button in) situated on vehicle or change fuse.		
Lift will not deploy	Handset button failure	Check wiring inside handset or change module		
	Lift arm spring failure	Replace damaged or stretched springs.		
	Arm linkage has seized in	Press the down button whilst pulling lift out. Note: must stand clear of platform.		
	Hose burst/ hydraulic leak	Check for leaking oil, replace all necessary components Close tap and re-stow lift		
Platform unfolds when not in use	Manual override tap left open/ down valve manual override opened	Close "red" down valve tap and re-stow lift.		
	Circuit breaker tripped	Re-set circuit breaker (push reset button in) situated near to vehicle battery		
Lift fails to nower LID	Handset button failure	Replace handset module		
Lift fails to power op	Hose burst/ hydraulic leak	Check for leaking oil, replace necessary components		
	Low oil level in reservoir drawing air into system	Top up reservoir with PLS BLUE hydraulic oil, 25mm from top "max" (when lift is completely stowed)		
	Platform structure bent	Replace damaged components.		
Platform doors do not align	Platform Knuckles not set correctly	Adjust Platform Knuckles at platform pivot. Note: when platform is down the Platform Knuckles must NOT be over tensioned. i.e. can turn via finger pressure See Platform Frame "Horizontal" Adjustment Procedure 7.3 See Platform Gates "Synchronizing" Procedure 7.4		
	Lack of lubrication	Spray all pivots and moving parts with ACF-50		
Dell off many material bins floor	Ramp damaged or bent	Replace damaged parts		
NOTE Keen fingers on DOWN		Land the lift on a more suitable surface		
Button.	Platform angle not set	Adjust stowage adjustment screws at base of platform to set level position.		
	Lift not raised to max up position	Power lift UP fully to floor height		
	Mechanism requires adjusting	Re-set and test bridge plate mechanism		
	Bridge plate is damaged	Replace damaged components		
Bridging plate not dropping to base plate	Platform angle not set	Adjust stowage adjustment screws at base of platform to set level position See Platform Frame "Horizontal" Adjustment Procedure 7.3 See Platform Gates "Synchronizing" Procedure 7.4		
	Activation spring has lost tension	Replace as necessary		
	Bridge plate hinge has jammed	Loosen and re-lubricate/ replace parts as necessary.		
Bridging plate not returning to	Mechanism has stuck in down position	Re-set, lubricate and test bridge plate mechanism		
vertical position	Gas strut has lost pressure	Replace parts as necessary.		



Diagrams



13.1 Wiring Diagram - Power Pack - 3 Options Access™ EA & Access™ EAB



13

Diagrams







Diagrams

13



Diagrams



13.2 Hydraulic Diagram Access™ EA & Access™ EAB





Spare Parts

14.1 List of Spare Parts Access™ EA & Access™ EAB



For spare parts, either, use the assembly drawings to identify the required part, then add these to the following form or contact the PLS spare parts department and talk to one of our staff.

Description:-

- 1. Base
- 2. Lite Powerpack
- 3. Handset Kit
- 4. Platform Pivots, Bridge Plate & Stow Mechanism
- 5. Front Arms
- 6. Upper Arms
- 7. Lower Arm
- 8. Arm Cylinder
- 9. Stop Roller
- 10. Platform Assembly
- 11. Gate LH
- 12. Gate RH
- 13. Bridge Plate
- 14. Handrail
- 15. Ramp LH
- 16. Ramp RH
- 17. Platform Assembly Solid
- 18. Ramp Solid
- 19. Hinge



Spare Parts



14.2 Spare Parts - Request Form Access™ EA & Access™ EAB

pls	SPARE PARTS REQUEST FORM					
FROM	Mr.					
	SPARE PARTS DEPARTMENT					
	Email: parts@pls-access.co.uk					
	DESCRIPTION	Qty				
1						

PRIORITY	URGENT	NORMAL
SHIPMENT		
PAYMENT		
DESTINATION		
SIGNATURE		DATE







Handset Kit





Front Arm





		_			_	_			
PARTS LIST	DESCRIPTION	EA Emergency Deployment Sticker	Flange Glacier Bush 18x20x12	EA Upper Arm	Switch Activation	EA Arm Tension Spring	M6 x 12 Socket Cap Head Screw	M6 Plain Washer Form A	
	PART NUMBER	ACC26608	ACC26991	EAFABARMEA527	EAFABARMEA617	EASPRARMEA244	FASBL/0613	FASWA/0601	
	QTY	-1	4	1			2	2	
	ITEM	1	2	e	4	5	9	7	
							may vary		

Note:- Fixings may vary



















Ramp LH



16 Ramp RH





	Torque Nm	AN	12
S LIST	DESCRIPTION	EA Platform Gate Hinge	M6 x 20 Torx Head CSK A2
PARTS	PART NUMBER	EAFABPLAEA665	FASBL/0634
	QTY	1	9
	ITEM	1	2







Notes

15 Notes



Passenger Lift Solutions Limited Unit 2, Summit Crescent Ind. Est., Off Roebuck Lane, Smethwick, West Midlands B66 1BT. U.K. Tel: +44 (0)121 552 0660 Fax: +44 (0)121 552 0200 E-mail: enquiries@pls-access.co.uk Web Site: www.passengerliftsolutions.co.uk