



INSTALLATION INSTRUCTIONS S1231 INSTALLATION KIT #61005 FOR 2016 MERCEDES METRIS PASSENGER VAN, REAR ENTRY INSTALLATION

- Be certain that these supplemental instructions are read and understood completely before installation is attempted. You should also refer to the Service/Owner Manual for additional installation instructions and safety precautions.
- Check contents of this kit and notify Ricon immediately of any missing parts. Claims for damages that have occurred during shipping must be made to the shipper.
- Public use vehicle manufacturers are responsible for complying with the lift lighting requirements in Federal Motor Vehicle Safety Standard No. 404, Platform Lift Installations in Motor Vehicles (49 CFR 571.404).

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- Under no circumstances is maintenance, repair, or adjustment of the product to be performed without the presence of an individual capable of giving aid.
- This lift is driven with hydraulic pressure generated by a hydraulic pump system. The fluid is highly pressurized and possibly very hot. Use extreme caution when doing maintenance and repairs. DO NOT disconnect hoses or fittings when lift is in motion.
- Give immediate attention to all injuries, and administer first-aid, or seek medical attention as necessary.
- Protective eye shields and clothing should be worn during maintenance, repair, and adjustment of the lift.
- Work in a properly ventilated area.
- Check for hidden obstructions before drilling and cutting. Avoid interference with wiring, fuel tank, fuel lines, hydraulic lines, subfloor members, etc.
- Read and understand all instructions before attempting to operate the product.
- Read and understand all instructions before attempting to perform maintenance, repairs, or adjustments to the product.
- Read and comply with warning labels attached to lift.
- Refer to S-Series Service Manual for part numbers of replacement parts mentioned here.

I. INTRODUCTION

The following instructions are intended to cover installation of kit P/N 61005 to accommodate an S1231-VG00101100 lift at the rear entrance of a 2016 Metris Passenger Van. This kit can be used for lifts up to 800lb rated load.

A. TOOLS REQUIRED

Drill with 7/16" drill bit, 8in or longer
1/4" Drill bit, 8in or longer
Torx Wrench/driver set
Torque Wrench capable of 28 ft.-lbs.
9/16" socket w/socket wrench
Recommended: Drill Stand/guide

B. PARTS REQUIRED

Kit P/N: RI61005

NOTE: BELOW IS A GUIDELINE TO HELP DETERMINE IF KIT 61005 IS APPLICABLE TO YOUR LIFT INSTALLATION.

APPLICABLE LIFTS	LIFTS NOT APPLICABLE
S1231-VG00101100	SXX32
	SXX06
	SXX40
	S11XX
	S12XX
	KXXX
	S20XX

NOTE: INTERLOCK – THE MERCEDES BENZ PSM (PROGRAMMABLE SPECIAL MODULE) ED5 OPTION IS REQUIRED FOR PROPER OPERATION OF VEHICLE OUTFITTED WITH A RICON LIFT TO ENSURE VEHICLE LOCK OUT DURING OPERATION AND POWER SYSTEM SHUTDOWN WHILE STOWED.

II. LIFT INSTALLATION

A. MECHANICAL INSTALLATION

1. PLATE INSTALLATION INTO VAN

⚠ WARNING!
CHECK FOR HIDDEN OBSTRUCTIONS BELOW FLOOR BEFORE DRILLING OR CUTTING.

NOTE: Remove power to the vehicle battery prior to commencing installation.

- Remove the spare tire and exhaust hanger from the underside of the vehicle.
- Refer to **FIG [1]**. Open the rear tailgate and locate the cargo anchors on either side of the rear cargo area. Remove the anchors using a T30 torx driver.

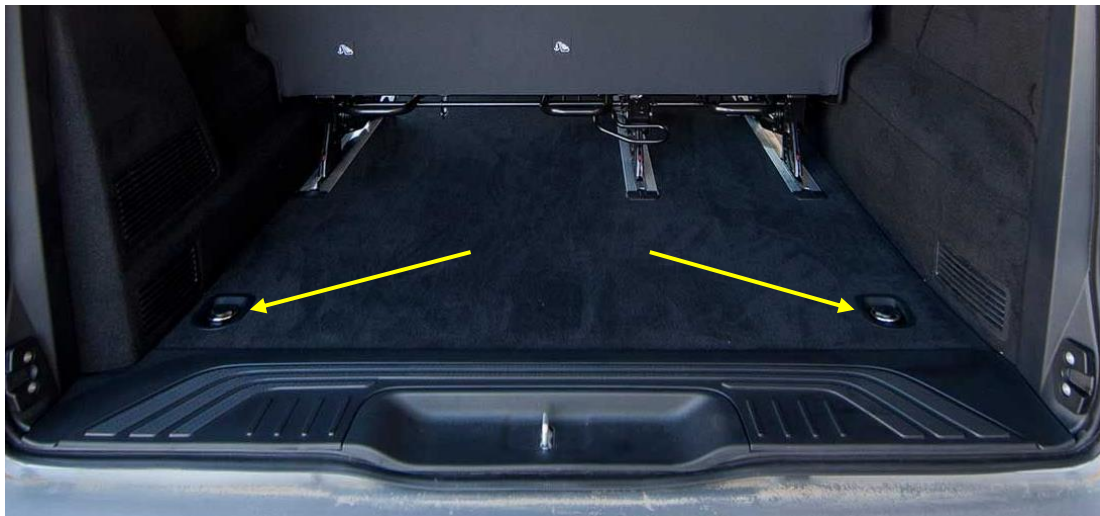


FIG [1]: CARGO ANCHORS

- c. **Ref FIG [2].** Place the paper template P/N 61006 over the vehicle flooring making sure to place the “REAR” label towards the rear of the vehicle.

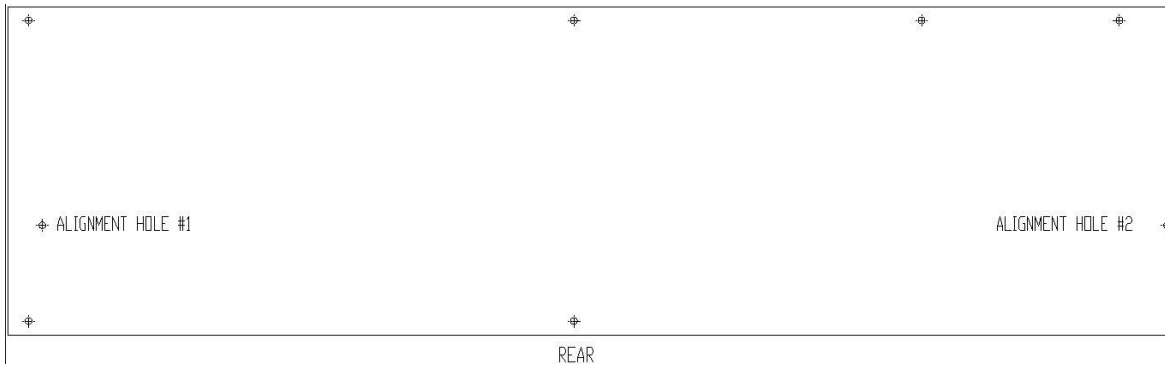


FIG [2]: PAPER TEMPLATE 61006

- d. **Ref FIG [2].** Center the alignment hole on the left labeled “Alignment Hole #1” to the hole in the removed cargo anchor on the left. Place a 1/4” drill bit (or equivalent sized rod) through the alignment hole in the template, into the anchor bolt hole making sure the rod is perpendicular to the floor.
- e. **Ref FIG [2].** Center the alignment hole on the right labeled “Alignment Hole #2” to the hole in the removed cargo anchor on the right. Place a 1/4” drill bit (or equivalent sized rod) through the alignment hole in the template, into the anchor bolt hole making sure the rod is perpendicular to the flooring.

NOTE: USE OF A DRILL GUIDE IS RECOMMENDED TO KEEP THE DRILL BIT PERPENDICULAR TO THE FLOOR WHEN DRILLING.

- f. Using the 1/4” drill bit, drill a pilot hole through the holes marked on the template (QTY: 6), making sure the drill bit exits through to the underside of the vehicle.
- g. Remove the paper template from the vehicle and discard.
- h. Using the 7/16” drill bit, drill through the pilot holes, making sure the drill exits the underside of the vehicle.
- i. Refer to **FIG [3]**. Remove the plastic trim at the entrance of the rear cargo area by pulling up on the center portion, and removing the remaining trim using a T15 Torx driver.



FIG [3]: REAR TRIM REMOVAL

- j. Refer to **FIG [4]**. Lift the flooring material and place the Base Support Bracket P/N 60900 under the front portion of the vehicle flooring, making sure the shorter side is pointing towards the inside of the van.

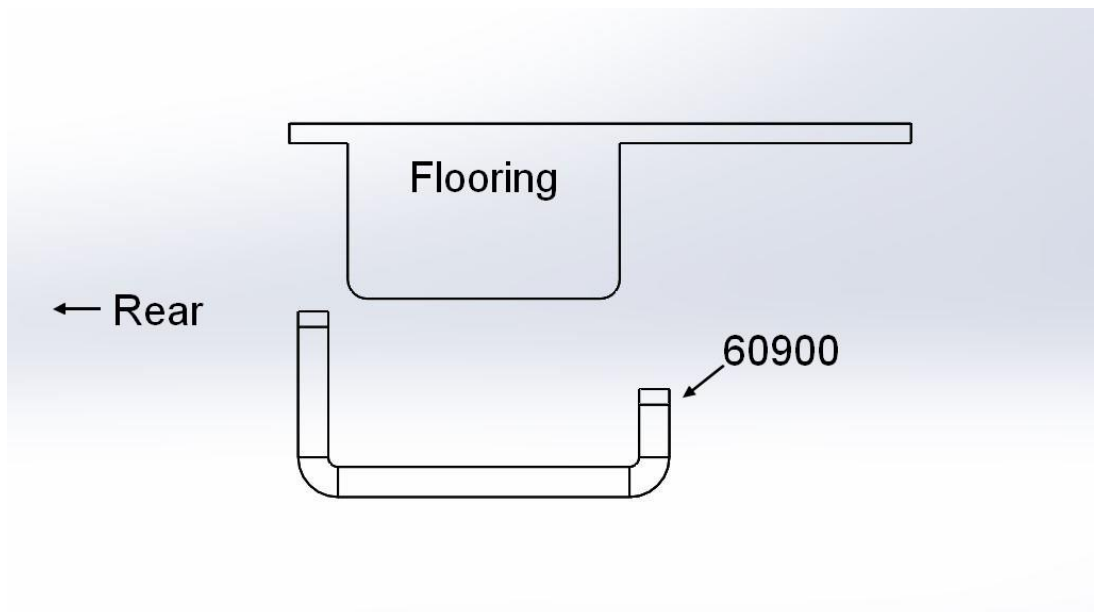


FIG [4]: BASE SUPPORT BRACKET INSTALLATION

- k. Align the holes on Base Support Bracket P/N 60900 with the holes drilled through the flooring material.
- l. Re-install the plastic trim at the entrance of the rear cargo area.
- m. Carefully install the lift into the vehicle using a hoist or forklift and position the lift so that the holes in the baseplate align with the holes in the vehicle floor.
- n. Ref to **FIG [5]**. Install Baseplate Shim P/N 61003 under the front portion of the lift's baseplate, ensuring the widest portion of the shim point towards the rear of the vehicle.

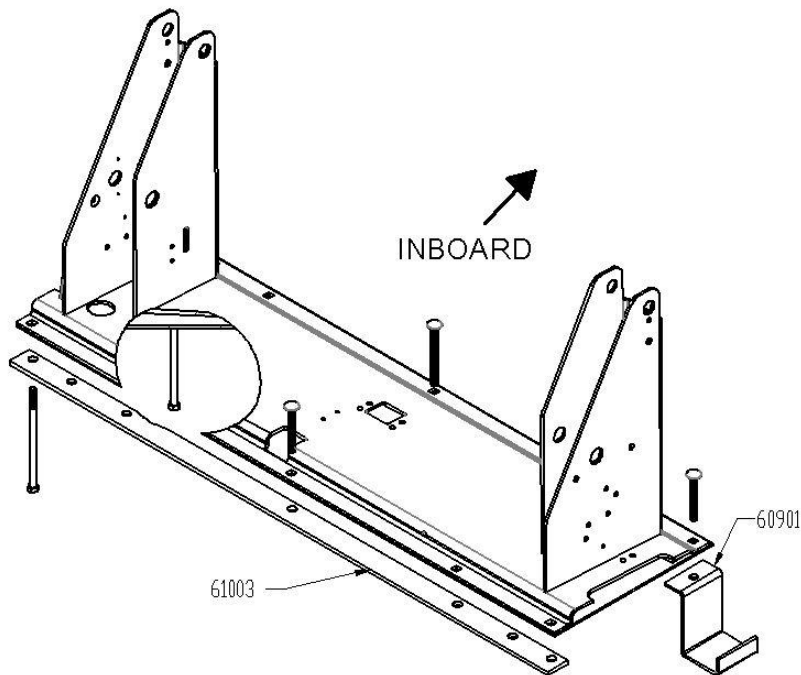


FIG [5]: INSTALLATION DETAILS

- o. Ref to **FIG [5-6]**. Install the 4" and 3" carriage bolts through the baseplate as shown.

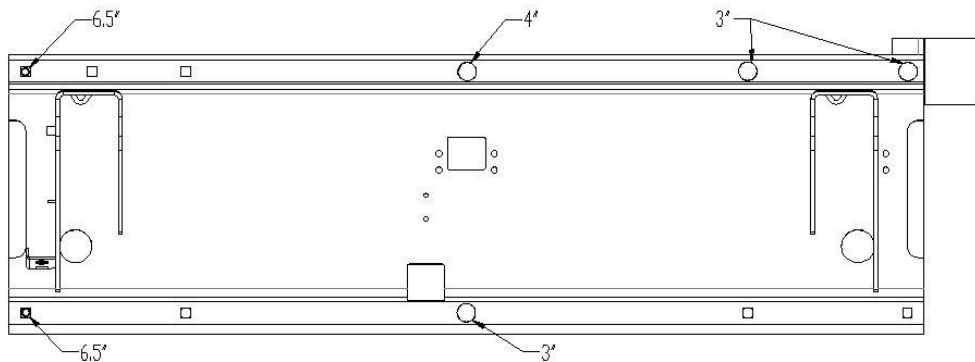


FIG [6]: BOLT LOCATIONS

- p. Ref to **FIG [5 - 6]**. Move to the underside of the vehicle. Install and hand tighten the fastening hardware on the inboard right corner of the baseplate in the following order; Rear support bracket P/N 60901, flat washer, split washer, and 3/8-16 nut.
- q. Install and hand tighten the remaining fastening hardware on the carriage bolts in the following order; Square plate 11056, Flat Washer, Lock Washer, and 3/8-16 nut.
- r. Ref to **FIG [7]**. Install a hex bolt at the inboard left corner of the base plate from underneath the vehicle, using plate 58763 to cover the hole in the frame.

Note: A/C line bracket may need be loosened to allow the installation of the hex bolt.



FIG [7] Hex Bolt reference

- s. While holding the hex bolt, have someone install a flat washer, split washer, and 3/16 nut on the hex bolt and hand tighten.
- t. Install the remaining hex bolt in the same manner described in the previous steps.
- u. Tightening installation bolts requires special care to keep baseplate assembly from warping when secured to vehicle floor. If baseplate assembly warps, the vertical arms will not be parallel. Corrections can be made by shimming at appropriate locations. To help prevent warping, tighten the six carriage bolts using a torque wrench to 28 ft. lbs.

NOTE: VERTICAL ARMS MUST BE PARALLEL FOR PROPER OPERATION. ADJUST BOLTS AS REQUIRED.

- v. Complete the installation by installing power, interlocks, etc.



III. SAFETY CHECKLIST FOR VEHICLE MANUFACTURER: S/K-SERIES MODELS

This checklist is intended to verify safe operation of Ricon FMVSS 403 and 404 compliant wheelchair lifts.
All items must comply for the wheelchair lift to be considered compliant.

COMPLIANT	NON-COMPLIANT	SAFETY ITEM
		Wheelchair lift and vehicle properly interlocked (lift cannot be powered unless vehicle interlocks are activated, and interlocks cannot be disengaged unless lift is fully stowed).
		Threshold warning device functioning properly (audible warning and visual warning is activated if threshold area is entered when platform is at least one inch below vehicle floor level).
		Main power switch enables and disables the lift control system.
		Control pendant illuminated when the lift is powered and pendant power turned on.
		Inboard rollstop does not rise from floor level with 25 pounds, or more, at center of barrier.
		Platform unable to raise more than 3" above ground if the restraint belt is not engaged.
		Platform lighting functional when lift is powered.
		Platform does not stow if a weight of 50 pounds, or more, is present on platform.
		Manual back-up operation fully functional (see operator manual for directions).

A. RATED LOAD CAPACITY OF INSTALLATION BY LIFT MODEL

MODEL	RATED LOAD CAPACITY, MAX
S1231-VG00101100	800 POUNDS (363KG)

NOTES