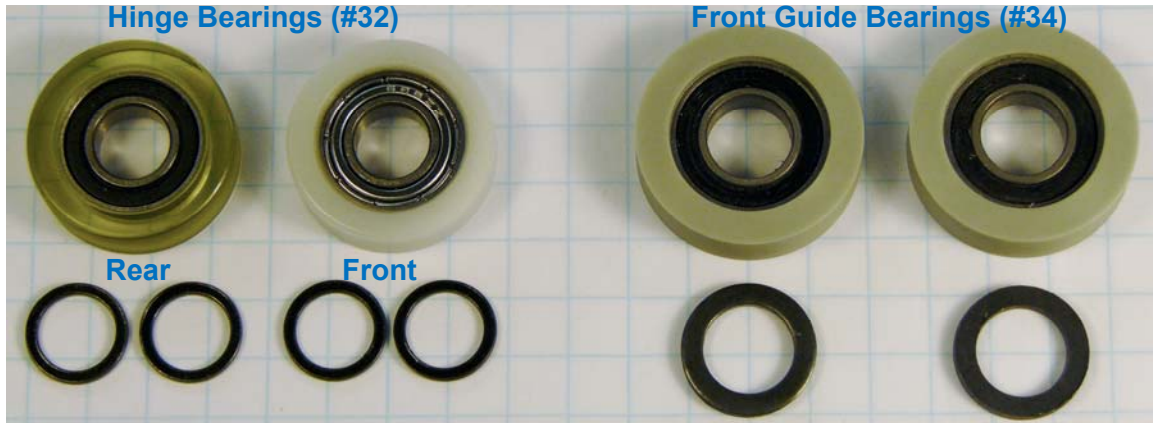


## Quiet Guide-Bearing Kit for Vanagon Sliding Doors



This **Quiet Guide-Bearing Kit** consists of 4 bearings and their associated spacing washers. The kit replaces the steel guide bearings in your 1985-1991 (including some 1984's) Vanagon.

- Two bearings for the sliding door rear hinge mechanism: an amber-colored urethane-covered bearing (#32 in *Sliding Door Diagram*, below), and a tough white acetal-covered bearing (also #32).
- Two bearings for the sliding door front top and front bottom guides: both grey-colored urethane-covered bearings (#34).

Why three bearing types? Each of these bearings has been specifically engineered for the duty and characteristics of the bearing's location. A single bearing type would not be as good.

This **Quiet Guide-Bearing Kit** can be used along with additional items to further quiet your door. Available from suppliers such as *GoWesty* or *Van Café* these items are: two Delrin quiet vertical *load* bearings (#17 grooved bearing & #30 rounded-edge bearing), and the door stop cushion (#10 in *Sliding Door Cover Diagram*, below).

None of these bearings will correct problems with a misaligned, rusty, and/or debris incusted sliding door! You may need to thoroughly clean and properly align your door prior to installation of these parts.

Note, *Spark of Imagination, Inc.* is not affiliated with either *GoWesty* or *Van Café*. The above note is for information only, not an endorsement.



Engineered and Built in the USA, with US and imported components.

### Installation Instructions

1. Remove the sliding door rail cover (#5). There are online videos showing how to do this step.
2. Slide the door about half-way back, until the grooved load bearing lines up with the circular notch above the rail. Squat down, and use your knee to help lift the door with your right hand, while using your left hand to pivot out the grooved bearing through the notch. Drop the door slightly (so the rear guide bearings clear the track), pivot the door away from the Vanagon, and then temporarily rest the rear bottom edge of the door on top of an upside-down 5 gallon paint bucket (or similar stable support).
3. With a friend's help holding the front of the door, now slide the door to the back of the van until it stops, then pivot the door on the front guides, until the bottom guide is free. Now you can remove the entire door from the Vanagon, and set it down horizontally on a padded table/work surface.
4. This is the time to clean: the rear rail, the rear guide bearing slot, the front upper guide slot, and the front bottom guide slot.
  - a. Feel the rail; is it pitted? Rusty? Deformed? Sometimes the pressure of the rear load bearing (#17, the grooved bearing that rides the rail) will deform the metal to make the top of the rail have a "T" profile; this deformed metal can be carefully cut away with a utility knife or de-burring tool. If the rear rail is rusty, pitted, etc.; clean, sand, prime, and paint the rail. Once the paint is dry, lubricate the rail with a spray *dry lubricant* (like RZ-50, or similar). DO NOT USE A WET LUBE as it will collect dirt from your continued Vanagon adventures.
  - b. Clean the rear guide bearing slot. This is where the two horizontal guide bearings (#32) run. You may have to use a solvent and a toothbrush to remove the years of gunk and solidified grease.
  - c. Clean the upper front guide bearing slot (above the door opening), again use a solvent and a toothbrush.
  - d. Clean the lower front slot where the front load bearing (#30) (this bearing has rounded edges, like a little tire) and the lower front guide bearing slot. Compressed air is useful to blow out debris as you use the solvent and toothbrush. Clean way back into the depths of this lower front slot.
  - e. Dry lube all of the guide slots.
5. Using snap-ring pliers, remove and set aside the snap rings (#33) from rear hinge assembly.
6. This is the time to inspect, clean, and lubricate the rear hinge assembly, making sure the arm (#13) pivots freely and smoothly inside the hinge plate (#22).
7. Apply a bit of penetrating lubricant (like PB Blaster) and remove the old bearings (#32) from the rear hinge assembly posts. A small bearing puller may be required. Clean the bearing posts, sand them with fine sandpaper, and lubricate them with spray dry lubricant. Test the bearing fit. All the bearings should slip onto their posts with minimal effort.
8. Slip one small spacing washer over the bearing post on the end of the swing arm (#20) of the rear hinge assembly. Slide the *white* acetal bearing (#32) onto the post. *Never* press on the outer race (the urethane or acetal) of the bearing! If you need a small force to install the bearing on its post, *only press on the inner metal race of the bearing*; a small socket (just large enough to slip over the post) from a socket wrench set, works well. Place another small spacing washer on top of it, sandwiching the bearing between two spacing washers. Re-install the snap ring.
9. The *amber-colored* urethane-covered bearing (#32) installs similarly onto the pivot post of the rear hinge assembly.
10. Using snap-ring pliers, remove and set aside the snap rings (#35) from the top front guide bearing, and the bottom front guide bearing.
11. Clean, sand, and lubricate the bearing posts as described above.
12. Slip one large spacing washer over the bearing post on the top front guide. Slide a grey-colored urethane-covered bearing (#34) onto the post. Re-install the snap ring (#35).
13. Slip one large spacing washer over the bearing post on the bottom front guide. Slide a grey-colored urethane-covered bearing (#34) onto the post. Re-install the snap ring (#35).
14. Put the door back: With a friend's help lifting the door, hold the door about 90° from the van. Slip the top front guide bearing under and up, into the rear of the top guide slot, *making sure that you do not impact the urethane outer race of the bearing as it slips in to the slot*. Slip the bottom front guide bearing into the rear of the bottom guide slot, again do not impact the urethane outer race of the bearing. Pivot the door on these now inserted front guides, bringing the rear of the door almost parallel to the van. Slide the door about halfway toward the front of the van, and temporarily rest the rear bottom edge of the door on your support bucket.
15. Squat down, and use your knee to help lift the rear bottom edge of the door with your right hand, while using your left hand to guide the 2 rear guide bearings up into the track (amber bearing to the rear, white bearing to the front). Pivot the grooved bearing through the notch, and set the grooved bearing onto the rail. Test the door for smooth operation.
16. Spray some Dry Lube on the Sliding Door Cover Beading (#8) and the metal lip of the Sliding Door Cover (#5) that slips into the cover beading; this will make reinstallation (and future removal) of the Sliding Door Cover. Replace the sliding door rail cover.

