

Thank you for purchasing our FKM Viton VW Pushrod Tube Seals.

Installation Instructions for FKM Pushrod Tube Seals for Volkswagen 1200cc–1600cc Air-Cooled Engines

Part Compatibility:

FKM pushrod tube seals for VW Type 1 air-cooled engines (1200cc–1600cc), including Beetle, Karmann Ghia, Bus, Type 3, and Thing (1960–1979). Fits 40HP, 1200cc, 1300cc, 1500cc, and 1600cc engines with standard pushrod tubes. Single-size seal for both ends of each tube. Part number: [Insert your part number, e.g., 311-109-335A or equivalent].

Tools and Materials Needed:

- Clean rags and degreaser (e.g., brake cleaner)
- 400-grit emery cloth
- Gloves

Safety Precautions:

- Work in a clean, well-lit area.
- Wear gloves to keep seals and surfaces clean.

Installation Steps:

1. Clean the Engine Case and Cylinder Head Bores:

• Inspect the pushrod tube bores in the engine case and cylinder heads (two per cylinder) for debris, oil, grease, or roughness.

- Wipe each bore with a clean rag and degreaser until spotless and completely dry.
- If burrs or rough spots are present, lightly smooth with 400-grit emery cloth, then reclean with degreaser to ensure a clean, dry metal surface.

2. Clean the Pushrod Tubes:

• Wipe the ends of each pushrod tube with degreaser and a clean rag to remove all oil, grease, or contaminants.

• Ensure the tube ends are dry and spotless for the FKM seals to grip properly.



3. Install FKM Seals on Pushrod Tubes:

• Inspect the FKM seals for defects.

• Do not apply oil, sealant, or any substance to the seals or tubes. The FKM seals must remain dry for a secure fit.

• Slide one FKM seal onto each end of the pushrod tube per stock orientation. Press seals on by hand until seated snugly against the tube's shoulder. Spring loaded sets include a special case side washer, install this before the FKM seal. Repeat this procedure with the washer supplied with the spring loaded tubes on the head side. 4. Install Pushrod Tubes with Seals:

• Insert each pushrod tube (with FKM seals installed on both ends) into the engine case and cylinder head bores, twisting gently to seat the seals fully without damage.

- Ensure the seals fit flush in the bores and the tube is aligned properly.
- 5. Final Check:
 - Verify tubes and seals are aligned with no gaps or misalignment.
- After engine assembly (per VW specs), idle for 5–10 minutes and check for leaks. The FKM seals should remain dry and leak-free.

Warnings:

- Dirty or oily bores or tubes will cause leaks. Clean meticulously and keep dry.
- Never use oil or sealant on FKM seals or tubes; they require clean, dry metal surfaces.
- Overforcing tubes can distort the seals. Use gentle pressure.