



PUSHROD TUBE SEAL KIT

FOR CONTINENTAL A-65 TO GO-300 CYLINDERS

The purpose of this kit is to replace the original OEM pushrod tubes without cylinder removal.

**** This is a FAA-PMA approved kit therefore a 337 is not required. ****

ASSEMBLY INSTRUCTIONS

If there are any questions before, during or after assembly, please call 1-423-543-6194.

1. Remove bottom spark plugs, valve covers, rocker arms and pushrods, keeping them in proper order for re-assembly. It is strongly recommended to remove intake and exhaust tubes.
2. Using a disc grinder or hacksaw, cut the pushrod tube about 3 inches down from the cylinder head end. Remove the piece left in the lifter cover & then remove the other piece in the cylinder head end by carefully wiggling and pulling towards the crankcase.
3. Remove the lifter cover and on a flat surface, use 320 or 400 grit wet or dry sandpaper, lightly polish the cover to case mating surfaces that contact the RG-530928-NI lifter cover gasket. Examine this area carefully. It must be free of nicks & scratches.
4. Remove the hydraulic plungers. Disassemble, flush and re-assemble them dry. Install plungers into the same position as removed.
Clean and dry the lifter cover and crankcase seal area.
5. Install the lifter cover gasket (RG-530928-NI) and lifter cover.
Start, but do not tighten the nuts yet as the lifter cover must remain loose to install tubes.
The RG-200SLV-1 seal adaptor sleeve must install on the lifter cover without force as that area on the lifter cover has a slight taper.
6. **THIS NEXT STEP IS MOST IMPORTANT:**
Without the bottom or top seal installed, insert the RG-200TB tube into the lifter cover & lift the tube into the cylinder hole to see if the tube will fit. It must slip in with no more than slight hand pressure. If the tube to the cylinder hole fit is too tight, remove the tube and lightly sand or file at that end of the tube to attain proper fit.
DO NOT ENLARGE HOLE IN THE CYLINDER.
7. Install the **WASHER** (30° Bevel-P/N RG-30) & orange seal (P/N RG-58116), onto the cylinder end of the pushrod tube. Push the seal firmly into the 30° washer.
Use Permatex Ultra Copper #101 RTV silicone, as per the instructions on the tube, to form a 360° seal around the tube between the seal and cylinder. Use the Permatex sparingly. This should be done only at normal room temperature and at least 15 minutes prior to the installation of the tubes.



(Assembly Instructions continued)

8. Using Dow Corning DC-4 compound or Bearing Assembly Lube. **DO NOT USE ENGINE OIL.** Lubricate the following:

- crankcase end of the pushrod tube
- inside of **black seal** (RG-536410)
- cup side of **10° washer** (RG-534609)

Then insert **black seal** (RG-534610) with the flat side of seal facing into the adaptor sleeve.

9. Take **spring** (RG-632317-30) and insert onto VSC-1 spring compressor tool, put the tube in the spring & then collapse the spring. Do not use safety wire to collapse the tube spring.

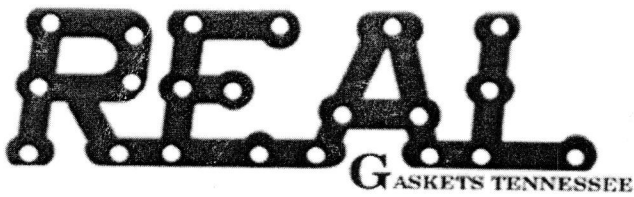
- Install **10° washer** (P/N RG-534609), the **black seal** (P/N RG-534610) & **adaptor sleeve** (RG-200 SLV-1) onto the pushrod tube and push the whole assembly up the pushrod tube to contact with the spring.
- Install the pushrod tube into the lifter cover, push the tube into the lifter cover far enough to insert the other end of the pushrod tube into the cylinder hole.
- While holding the **black seal** (RG-534610) & **10° washer** (RG-534609) firmly in the **adaptor sleeve**, push the pushrod tube firmly up into the cylinder hole to seat the RG-58116 orange seal & RG-30 washer.
- After inserting the tube into the cylinder, back the VSC-1 tool to the neutral position, then open it to the + side slightly to seat the seals. Then turn the VSC-1 back to neutral to remove the tool and release the spring. Do this on both tubes.
- **DO NOT JERK the VSC-1 tool off the compressed spring.** This will cause a leak. **Follow step above.**
- **Carefully** torque the three ¼ -28 nuts on the lifter cover to 90 to 110 IN/LBS.
- **DO NOT OVER TORQUE THESE NUTS.**
- The spring tension alone is enough to set the seal. Allow time for Permatex to cure as instructed on the Ultra Copper RTV tube before operating the engine.

10. Re-install push rods, rocker arms, valve covers, intake and exhaust to OEM specifications.

Test run the engine to temperature and inspect for leakage before re-cowling and next flight.

Again, if you have any questions on the above instructions, please call 1-800-635-7325 for clarification.

Note: Our RG-200PR pushrod tube kit is not warranted when installed using safety wire.



REAL GASKETS TENNESSEE

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**DRAWING 9807
RG-200PR PUSHROD TUBE SEAL KIT
FOR CONTINENTAL A-65 to GO-300 CYLINDERS**

PARTS LIST

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|----|---------------|---------------------|--|
| 1. | INSTRUCTIONS: | PAGE - 1 & 2 | ASSEMBLY INSTRUCTIONS |
| | | PAGE - 3 | PARTS LIST |
| | | PAGE - 4 | ASSEMBLY DRAWING |
| | | PAGE - 5 | INSTRUCTIONS FOR CONTINUED AIRWORTHINESS |
| 2. | RG-200TB | TUBE | (2) Each |
| 3. | RG-58116 | ORANGE SEAL | (2) Each |
| 4. | RG-30 | WASHER (30°) | (2) Each |
| 5. | RG-632317-30 | SPRING | (2) Each |
| 6. | RG-534609 | WASHER (10°) | (2) Each |
| 7. | RG-534610 | BLACK SEAL | (2) Each |
| 8. | RG-200SLV-1 | SLEEVE | (2) Each |
| 9. | RG-530928-NI | LIFTER COVER GASKET | (1) Each |

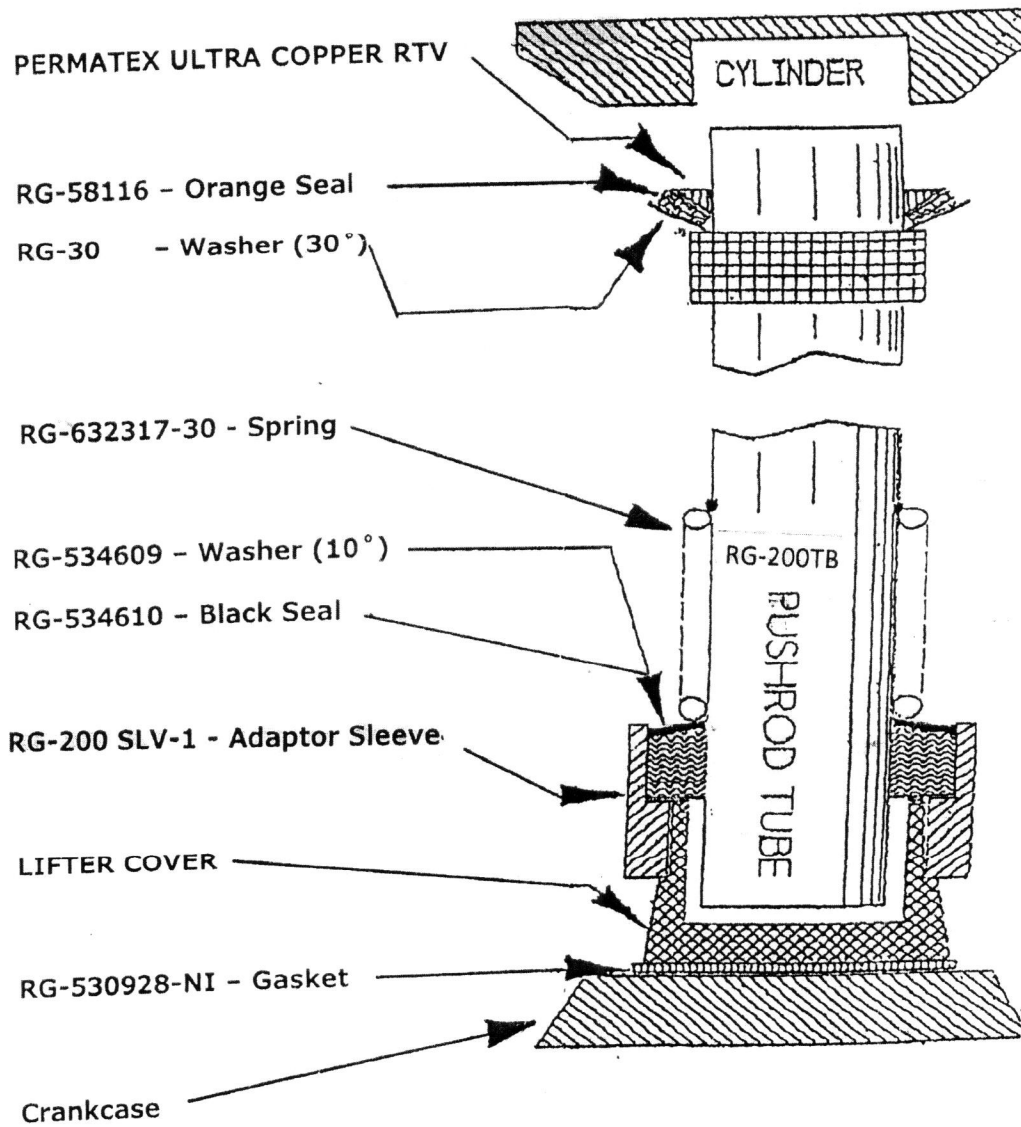
Note: OTHER ITEMS REQUIRED THAT ARE NOT SUPPLIED WITH KIT ARE:

- VSC-1 Spring Compressor Tool
- PERMATEX Ultra Copper # 101 R.T.V. Silicone
- 320 OR 400 Grit wet or dry sandpaper
- Mineral spirits
- DOW CORNING DC-4 compound or Bearing Assembly Lube

INTAKE & EXHAUST GASKETS MIGHT NEED REPLACING

**WEIGHT & BALANCE NET CHANGE
4 CYL . ENG. = + 8 OUNCES
6 CYL . ENG. = + 12 OUNCES**

DRAWING 9807





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INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

REAL GASKET CONTINENTAL ENGINE PUSHROD TUBE SEAL KIT MODIFICATION

In addition to engine runup, check and re-cowl prior to next flight as instructed on DRAWING 9807 – Page 2:

During Annual and/or 100 hour inspections, perform the following:

1. Inspect visually for any oil leaks around all pushrod upper & lower tube end seals.
2. If no leaks are found, no further action is required until next inspection.
3. If leaks are found, remove and/or replace parts as required. Reinstall per the FAA approved installation instructions. Contact Real Gaskets Tennessee for any replacement parts.

Note: If leaks are found, verify the leak originates from the pushrod tube area prior to removing and reinstalling the pushrod tubes.

DRAWING 9807
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