



# STEVENS

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## MODEL V-34 GEARCASE LEAKAGE TESTER (VACUUM) Operating Instructions

The V-34 was designed to check gearcases for leaks around seals, O-rings, etc. The unit consists of:

- A hand pump for pulling vacuum in the gearcase.
- A zero to 30 inch gauge to establish a known amount of vacuum in the gearcase. (Some older units have a compound gauge which is also used on the S-34. The pressure side of the gauge serves no function on the V-34 and can be ignored.)
- Hose and fitting necessary to connect the tester to a gearcase. This fitting is made of relatively soft aluminum so that gearcase threads cannot be easily damaged.

### TO CHECK GEARCASE

Refer to engine service manual. If manual is not available, the following procedures may be used; however, engine manufacturer's instructions may differ and are preferred.

1. **The V-34 should never be used when a gearcase is filled with lube. If lubricant is pulled into the tester, the valve may malfunction and will not be covered by the tester warranty.**
2. Remove the upper vent plug and seal washer.
3. Thread fitting at end of tester hose into the upper hole. **Hand tighten** to prevent air leak at this point. If leaks occur here, replace O-Ring on fitting.
4. Draw as much vacuum as possible (7-10 inches on most gearcases) and observe reading on gauge.
5. Allow unit to stand a couple of minutes and again observe gauge. If vacuum remains constant, turn engine over by hand and work gearshift several times. Check vacuum again; if constant, the gearcase and seals are in good condition.

Should vacuum drop, visual inspection of seals may indicate point of leakage.