

# TOROUG CONVERTER

- . REMARKABLY SIMPLE
- . RUGGED-DEPENDABLE
- EASY TO INSTALL-NO EXTRAS TO BUY
- . SHIFTS GEARS AUTOMATICALLY
- . GEARS TO LOW UNDER LOADS
- . BELT TENSION SELF COMPENSATING

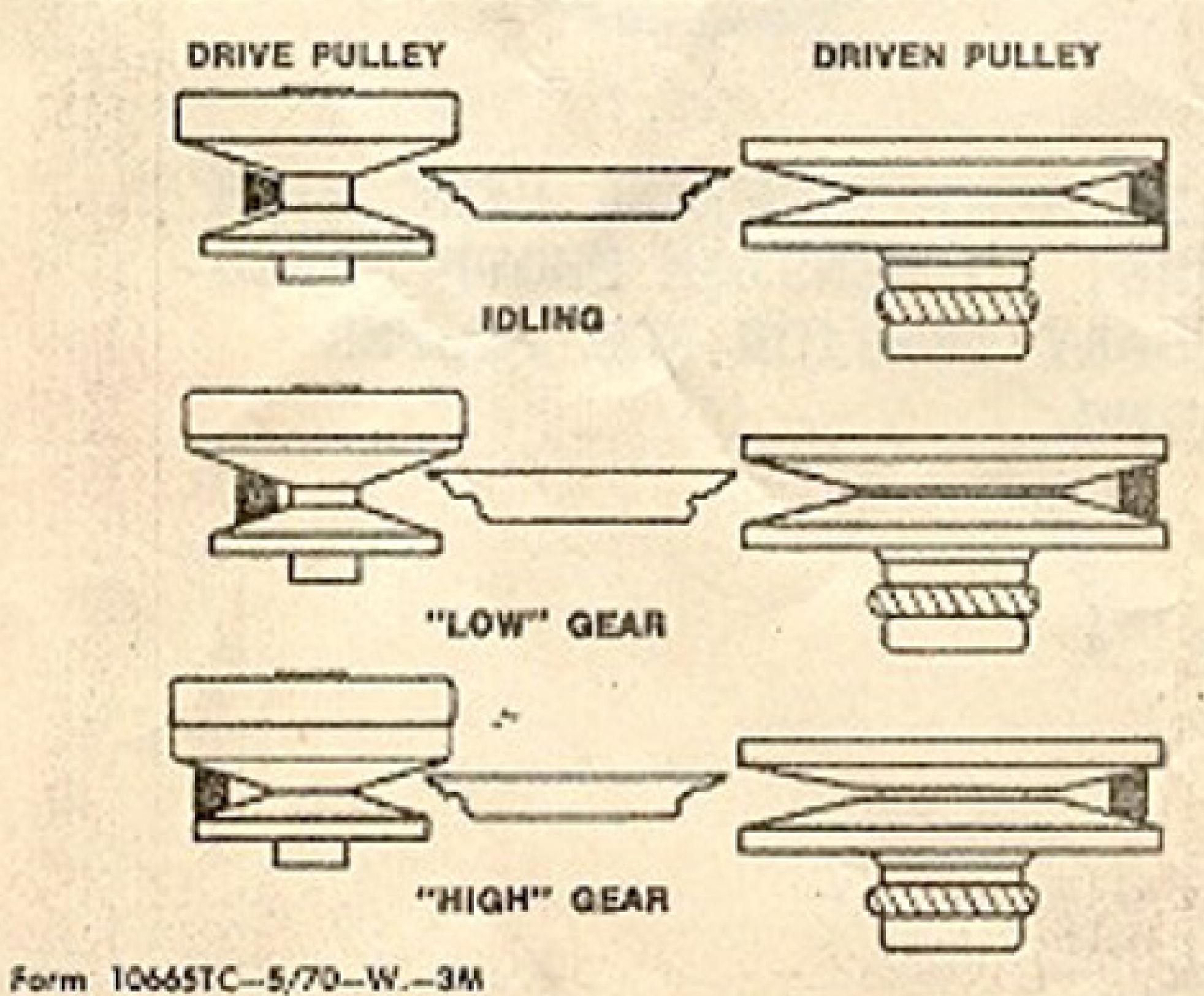
The new V-Plex Variable Speed Torque Converter, with its own built-in clutch, has the characteristics of an automatic clutch and transmission. It adjusts to changes in speeds and loads by smoothly shifting drive ratios in infinitely variable ranges between "low" and "high" gears. For example, an increase in load will down shift the unit from "high" toward "low" until the engine regains its former speed. Clutch is regulated by a factory pre-set governor to achieve easy, uniform engagement free from jolts or jerks. And the

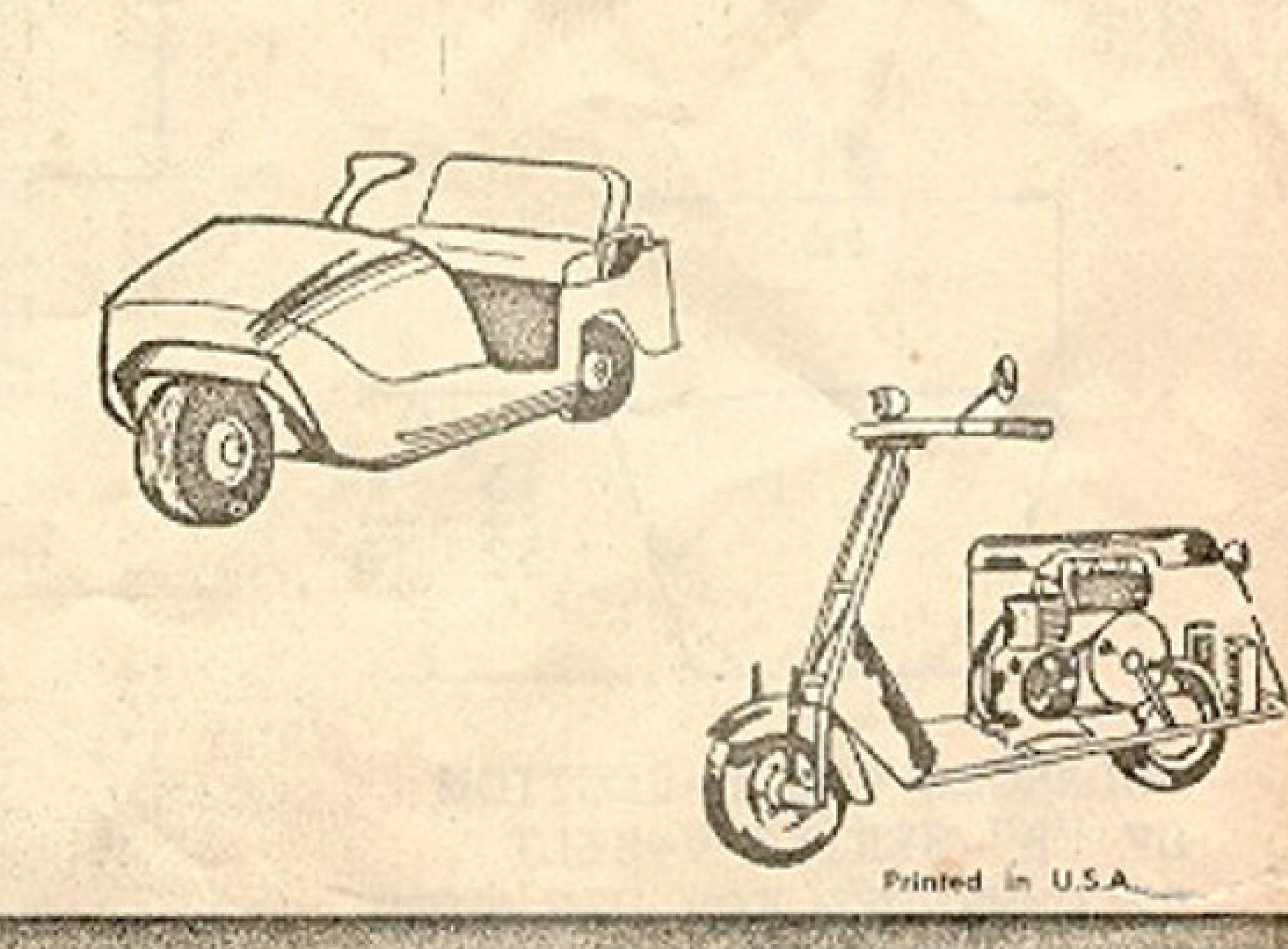
belt does not run under excess tension.

In addition to being highly efficient, the unit is extremely rugged due to its uncomplicated design. The factory pre-set control mechanism has only 3 parts compared to as many as 50 in other makes. The complete V-Plex Torque Converter features only 32 parts while other units have from 125 to 150.

The unit never needs adjustment—will perform smoothly and reliably under heavy day-to-day operation with virtually no attention.

### BELT SHIFTS THROUGH OPERATING RANGE AUTOMATICALLY AND WITH VELVET SMOOTHNESS.



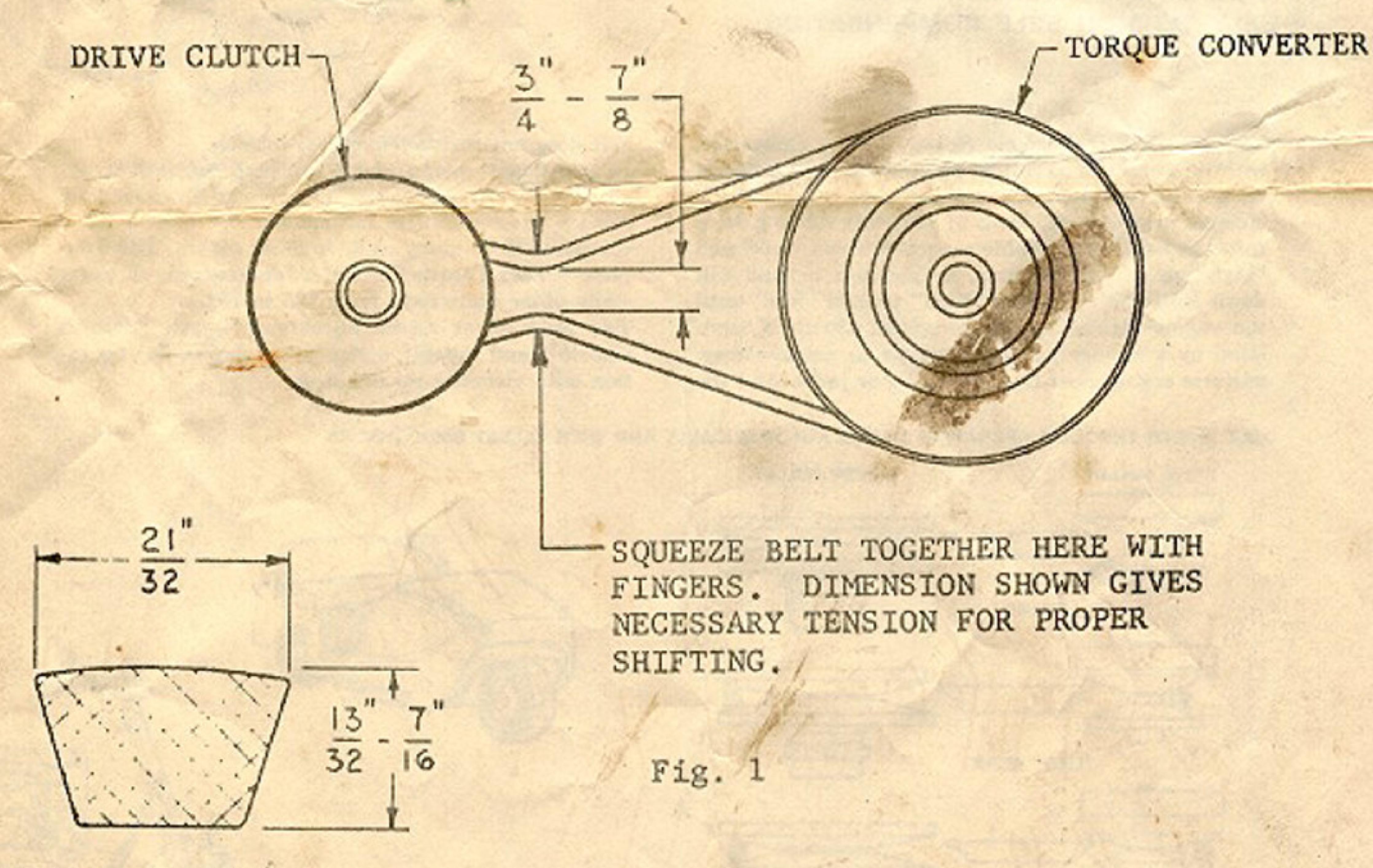




## Maintenance and Service Information V-Plex Torque Converter

# A. Belt Adjustment:

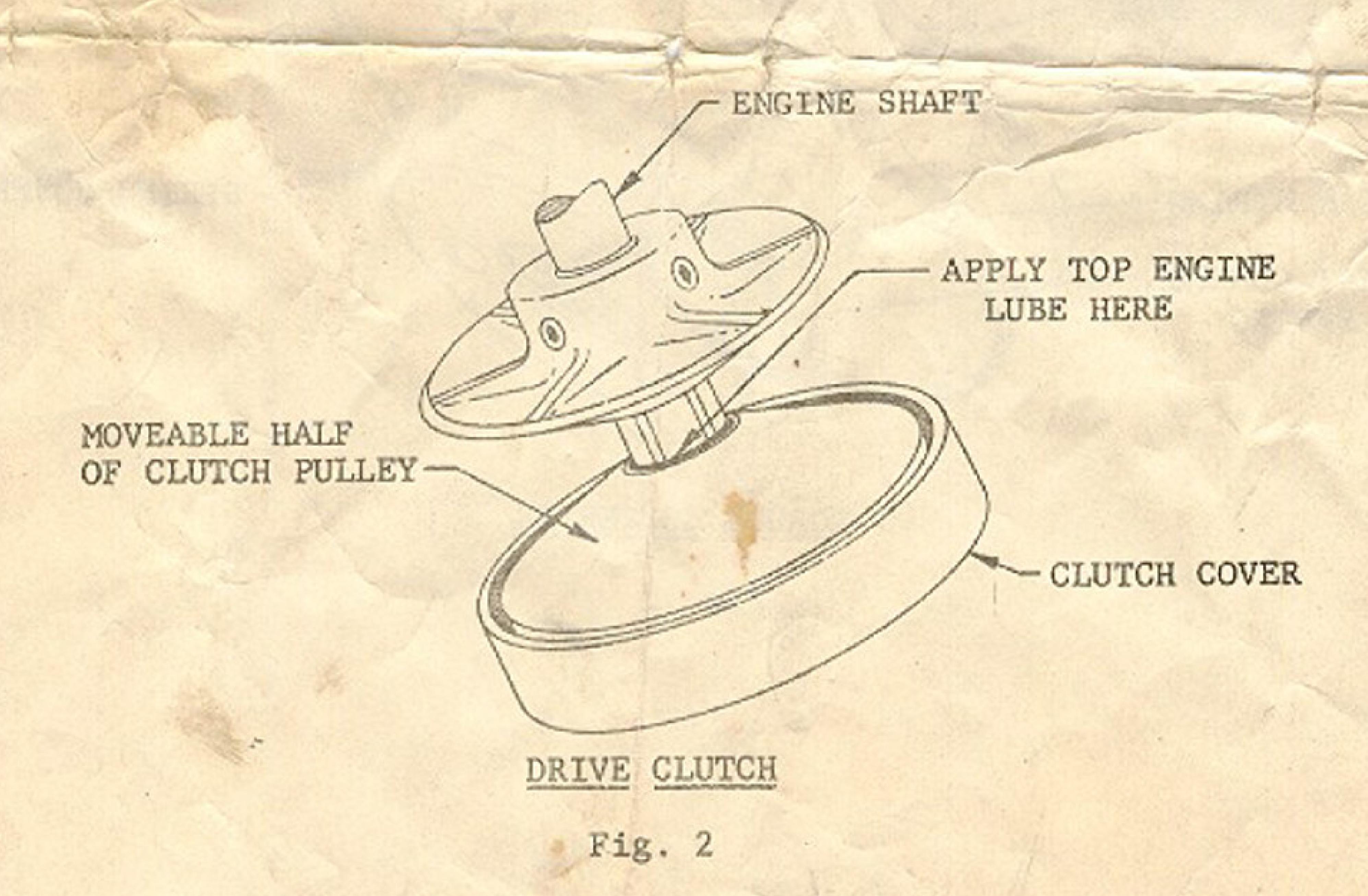
 Correct belt adjustment is very important to the successful operation of the torque converter.
 See Fig. 1 for proper adjustment. The belt tension should be checked at regular intervals and adjusted to the dimension shown in Fig. 1 This adjustment can be obtained by loosening the cap screws holding the engine to its mounting plate and sliding the engine either forward or backward until the desired adjustment is obtained. Tighten the cap screws.



ENLARGED CROSS-SECTION
OF "B" SERIES V-BELT
RECOMMENDED FOR USE WITH
V-PLEX TORQUE CONVERTER

### B. Lubrication:

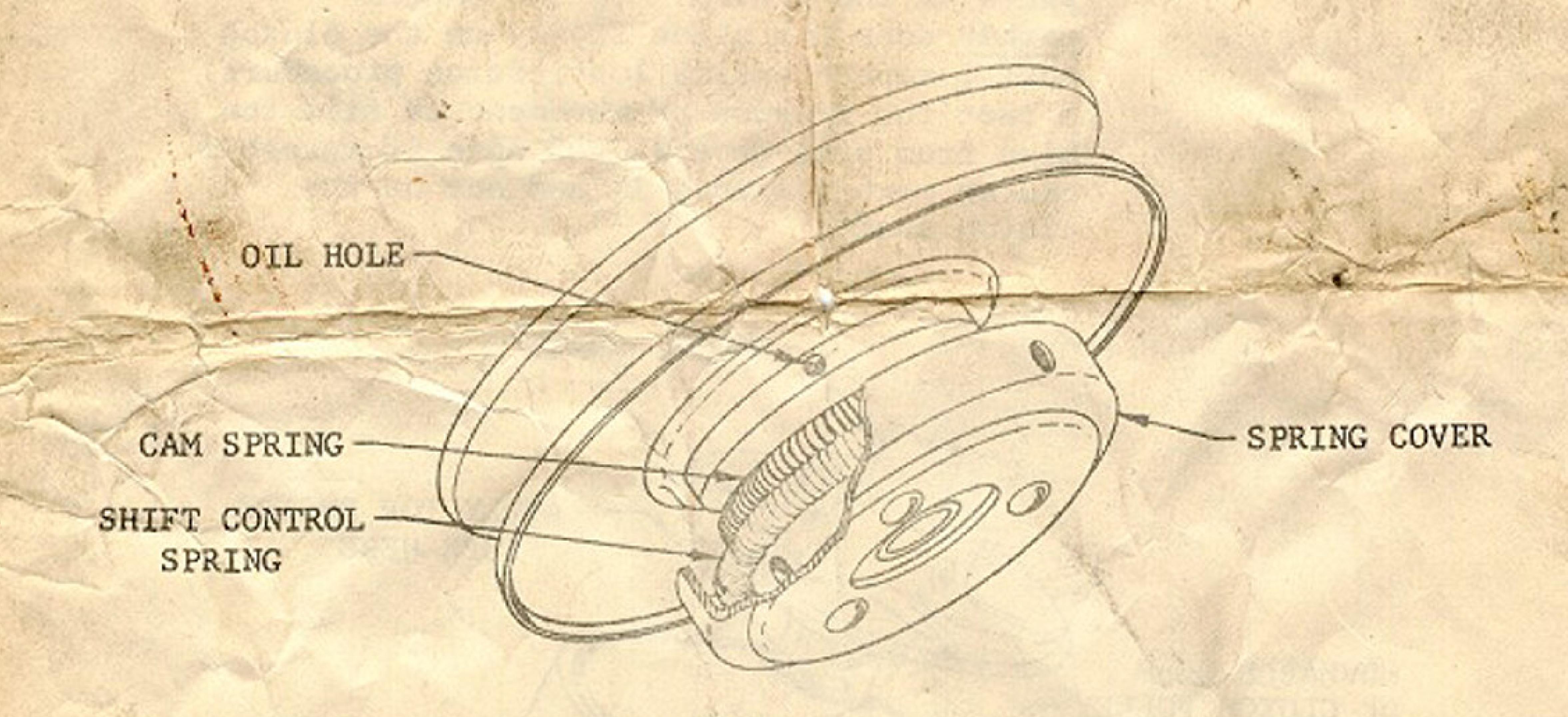
- 1. Interval: Every 25 hours of operating, sooner if conditions are dusty on at time of belt replacement.
  - 2. Type Lubricant: Use a light engine oil, 3 in 1 or a quality top engine lube.
  - 3. Procedure: The clutch pulley can best be lubricated by leaning the bike over with clutch side down and placing 5 or 6 drops of lubricant around the clutch shaft. See Fig. 2 . Stand bike upright, start engine and accelerate until clutch closes. Stop engine and by hand push the moveable part of clutch back into cover. Start engine and repeat the operation 3 or 4 times to cleanse and lubricate the moving parts of the clutch. If the clutch member does not slide freely on the clutch shaft, repeat entire lubrication procedure. A test for freedom of movement is tilt the bike from side to side and note if moveable clutch member slides in and out on the clutch shaft.



The Torque Converter: An oil hole is provided for lubricating this assembly. See Fig. 3.

Rotate the converter until the hole is visible and then place 3 of 4 drops of lubricant into it. Allow time for the oil to run down onto the converter shart. Three or four drops of lubricant should also be placed on the springs.

CAUTION - Do not over lubricate either the drive clutch or ste converter. Excess oil will cause belt slippage. Wipe off any lubricant on the clutch surfaces that come in contact with the belt.



TORQUE CONVERTER

Fig. 3