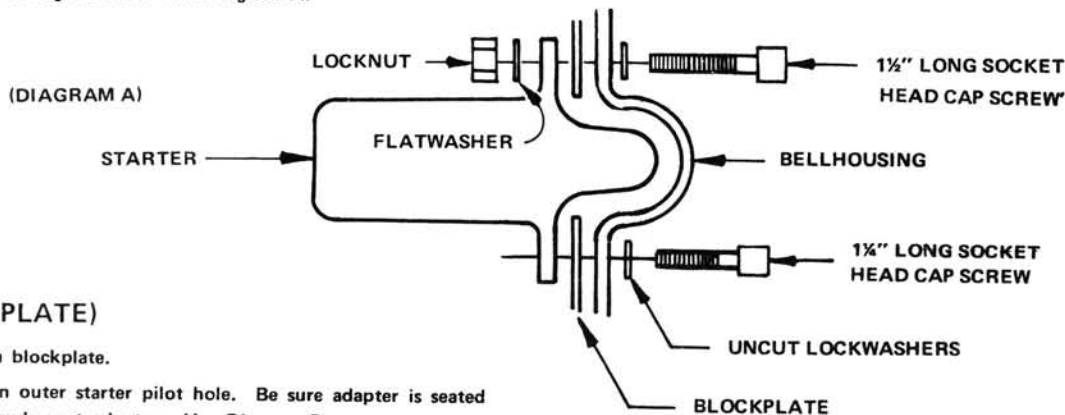


## INSTALLATION INSTRUCTIONS FOR 15300, 15310, 15320, 15330 (REPLACES 15300 & 15310)

1. Disconnect all linkage necessary to remove transmission and bellhousing. Be sure to disconnect cable from battery before removing starter.
2. Remove pressure plate and disc from flywheel.
3. Bolt Lakewood bellhousing to engine for preliminary check for alignment by mounting a magnetic base dial indicator on the flywheel so that its dial is reading directly on the transmission register bore of the bellhousing. (Make sure that the indicator stand is steady and tight to eliminate any error or fluctuation from the weight of the indicator.) While turning crank, note indicator dial. If runout exceeds .010 total, refer to back page for detailed instructions on how to install offset dowel pins for proper alignment.
4. If register bore alignment is satisfactory, remove bellhousing and flywheel.
5. Remove clutch release arm and spring clip from the stock bellhousing and install in the Lakewood unit.
6. Determine which flywheel and starter combination you are using.
  - A. Direct drive starter and 172 tooth flywheel.
  - B. Gear reduction starter and 143 tooth flywheel.
  - C. Gear reduction starter and 132 tooth flywheel.
  - D. 273"-340" Engines with gear reduction on starter (15320).

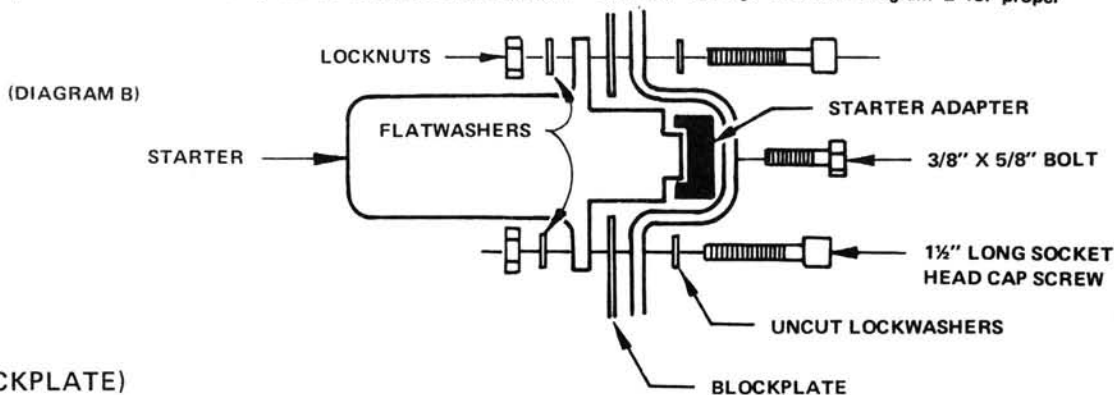
### "A" SET UP (BLOCKPLATE)

7. Discard starter nose adapter.
8. Remove knockout from blockplate (see Knockout Instruction Sheet).
9. Install blockplate on engine.
10. Install flywheel, clutch cover and disc.
11. Install Lakewood unit to your engine. Be sure to use throw-out bearing. Use Bolt Package # 635. Torque 3/8" bolts to 35 foot pounds. Torque 7/16" bolts to 40 pounds. Install maximum containment bolts using kit # 638, torque 3/8" bolts to 35 foot pounds.
12. Install starter using Bolt Package # 628. Use Diagram A.



### "B" SET UP (BLOCKPLATE)

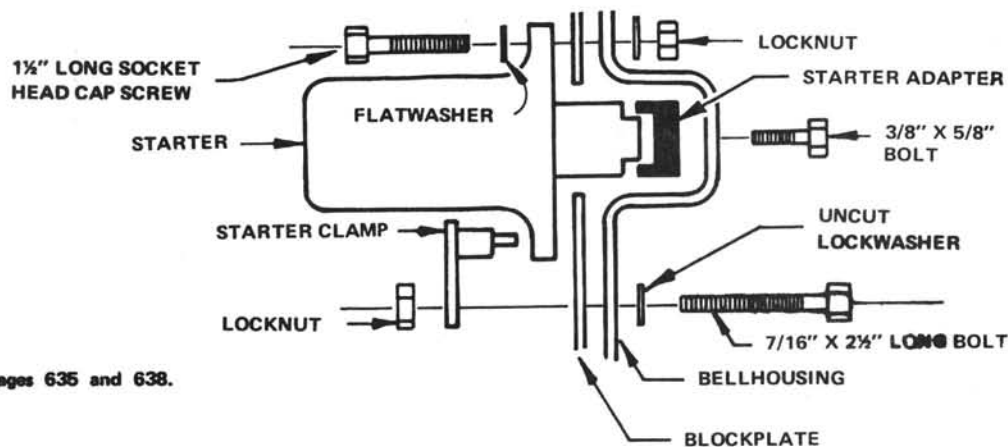
7. Remove knockout from blockplate.
8. Install starter adapter in outer starter pilot hole. Be sure adapter is seated and bolt does not protrude past adapter. Use Diagram B.
9. Install blockplate on engine.
10. Install flywheel, clutch cover and disc.
11. Install Lakewood unit to engine using Bolt Package 635 and 638.
12. Install starter carefully as the aluminum casting can be misaligned and damaged. Use Bolt Package 628 and Diagram B for proper bolt installation.



### "C" SET UP (BLOCKPLATE)

7. Install starter adapter in inner pilot hole. Be sure adapter is seated and bolt does not protrude past adapter.
8. Install blockplate on engine.
9. Install flywheel, clutch cover and disc.
10. Install Lakewood unit to your engine. Be sure to use the throw-out bearing. Use Bolt Package 635 and 638.
11. Install starter carefully as the aluminum casting can be misaligned and damaged. Using Bolt Package 628, install top bolt first. Rotate bottom of starter as close to the block as possible. Make sure holes are aligned before installing clamp bolt as per Diagram C.

(DIAGRAM C)

**"D" SET UP (BLOCKPLATE)**

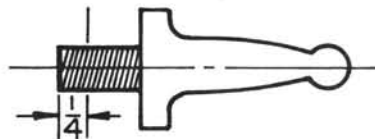
7. Install blockplate on engine.
8. Install flywheel, clutch cover and disc.
9. Install Lakewood housing using Bolt Packages 635 and 638.
10. Install starter (same as Diagram B.)

**CLUTCH LINKAGE**

On 15330, cut 1/4" from the threaded side of the pivot ball and reinstall in Lakewood housing. 15320 does not need this modification.

All Lakewood 15300 through 15320 bellhousing register bores measures 4.80. It should be noted here that if the bearing retainer on the transmission does not coincide to this diameter, a Lakewood register ring, part # 15900, is available to adapt the small 4.35 collar for proper alignment to the 4.80 bore.

After replacing the transmission and the clutch linkage, it will be necessary to check for proper adjustment.

**"CHECKING FOR RUNOUT"****INSTALLING OFFSET DOWELS TO CORRECT ALIGNMENT**

To illustrate the recommended correction procedure, assume that the total indicator reading is .016 inch, in a direction which approximates 2 o'clock on engine block. (Refer to Fig. 1) In this case, the housing is off crankshaft centerline .008 inch (one-half total indicator reading).

To correct an off-center condition, three offset dowel sets are available in matched pairs of .007, .014, and .021 offset.

When selecting dowels to be used for a particular job, take the dowel closest to one-half the total indicator reading. Refer to chart at bottom of page.

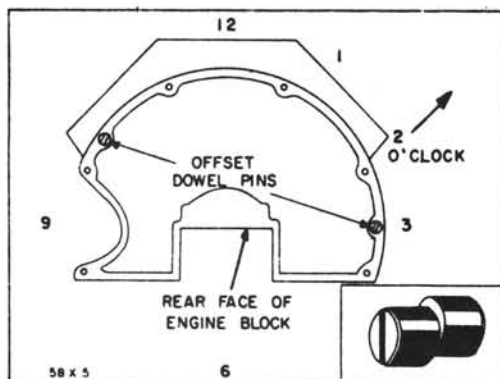
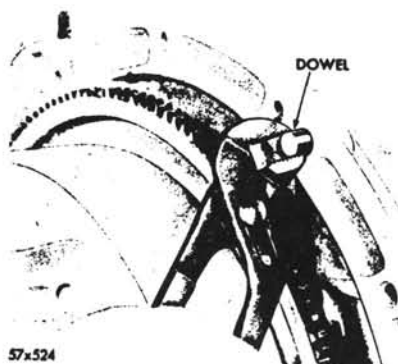
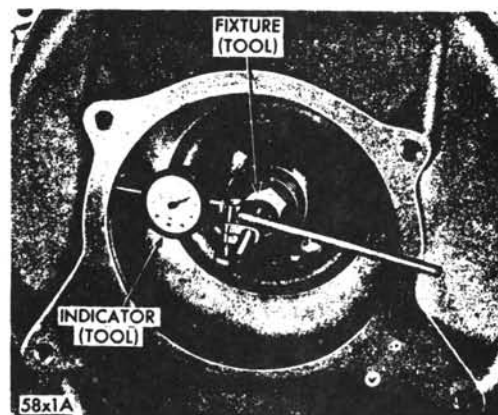
To install offset dowel pins, first remove stock pins as indicated in Fig. 2, with the slots parallel and aligned in the direction to correct the bore runout. (Slot indicates the direction of maximum dowel offset). Both dowels should be inserted into the engine block to offset shoulder depth.

In the case under consideration, using the .007 inch offset dowels (pair) will bring the runout well within the allowable limit of .005 inch, or .008 inch minus .007 inch (offset dowels) equals .001 inch runout. The dowels must be used in pairs (same part number).

Install and tighten the bellhousing bolts to specifications. Remount the dial indicator and recheck the bore runout. Small corrections can be made by loosening the housing mounting bolts and turning dowels with a screwdriver to shift the housing and bring the bore within limits.

**OFFSET DOWEL CHART**

Total Indicator Reading	One-Half Total Indicator Reading	Size Dowel To Be Used	Dowel Part Number
.012" to .020"	.006" to .010"	.007"	15950
.022" to .034"	.011" to .017"	.014"	15960
.036" to .052"	.018" to .026"	.021"	15970

**FIG. 1****FIG. 2****FIG. 3**