# SERVICE BULLETIN

July 14, 1981



## MODIFYING NON-ADJUSTABLE FXB INNER PRIMARY

#### General

M-836

Recently the FXB inner primary case was modified, in production, to allow approximately 1/16 in. adjustment to the primary belt. This improvement was explained in SERVICE BULLETIN M-819.

Early style inner primary cases can be modified, to allow the same adjustment a new case would allow.

Use the following procedure for modifying an early style primary case, to allow belt adjustment,

## **Removing Primary Case**

#### WARNING

To avoid accidental start-up of vehicle and possible personal injury, disconnect the battery cables (negative cable first) before performing any of the following procedures.

- 1. Remove primary cover, discard gasket.
- See Figure 1. Bend lock tabs away from nut and remove compensating sprocket shaft nut.

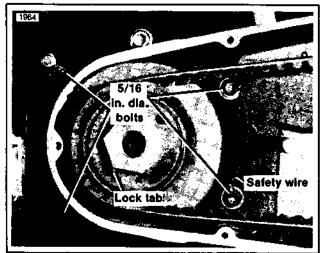


Figure 1, Inner Primary Mounting

 Remove clutch and engine sprocket assemblies.
 Refer to current SERVICE MANUAL, Part No. 99482-81, for clutch removal procedure.

- See Figure 1. Cut and remove safety wire. Remove four 5/16 in. dia. bolts securing Inner primary to crankcase.
- Remove starter housing and solenoid from inner primary. Refer to current SERVICE MANUAL, Part No. 99482-81, for detailed information.
- Remove two 3/8-24 in. locknuts, two 3/8-24 in., 12-point flanged bolts and washers securing inner primary to transmission. Note hardware locations for reassembly.

## Modifying Inner Primary

- See Figure 2. With a round file remove approximately 1/16 in. material from each side of original mounting holes, to form slots.
- See Figure 2. Locate approximate center point of existing boss and center punch. Drlll a 1/4 in. diameter pilot hole and enlarge to 9/16 in. diameter.
- See Figure 3. Using a suitable machine tool, remove step in pilot bore to allow clearance for belt adjustment.
- Remove all metal filings and chips from primary case.

# Reassembly and Adjustment

- Install starter, starter housing and solenoid on inner primary.
- Loosely install four 5/16 in. bolts that secure inner primary to crankcase. Install bolts with drilled heads inside case.
- Replace locknuts and bolts that secure inner primary to transmission. Tighten to 24 ft-lbs torque.
- Install clutch and engine sprocket assemblies.
  Refer to current SERVICE MANUAL, Part No. 99482-81, for installation procedures.

ROUTING:		SALES MANAGER	PARTS MANAGER	CHIEF MECHANIC	MECHANIC NO. 1	MECHANIC NO. 2	MECHANIC NO. 3	 RETURN THIS TO:
INITIAL	ľ —							
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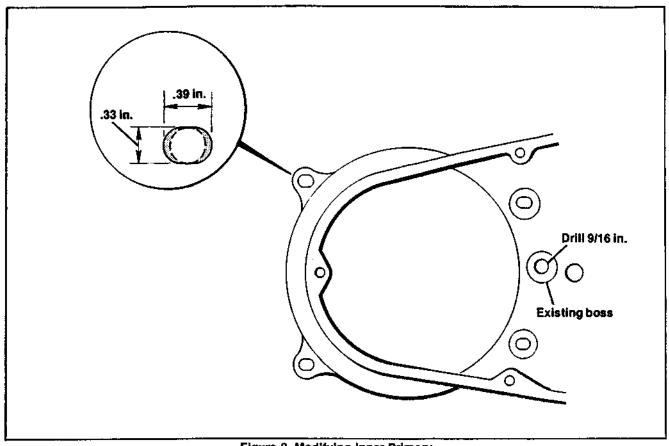


Figure 2. Modifying Inner Primary

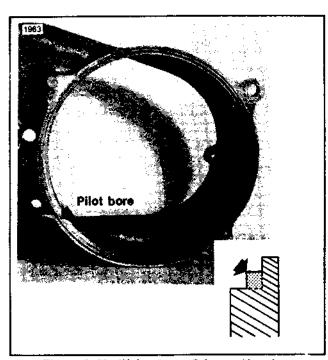


Figure 3. Modifying Inner Primary Housing

Loosen four nuts securing transmission to trans mission mounting plate and bolt securing transmission to frame tab

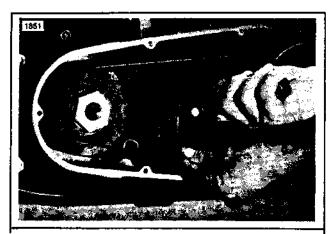
- See Figure 4. Loosen two nuts securing starter motor.
- 7 See Figure 5. Carefully insert a screwdriver, or similar tool, through hole in housing. Pry against crankcase to increase tension on belt.

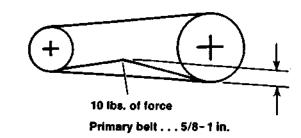


Figure 4. Starter Motor Frame

Check belt free play; increase or decrease belt tension, as necessary, until free play is within specifications shown. Insufficient free play will result in clutch drag; excess free play will be felt as "PLAY" in the drive train, with accompanying noise.

Hold screwdriver in place to maintain correct tension and tighten two inside bolts to 19 ft-lbs torque. Tighten two outside bolts to 19 ft-lbs torque.





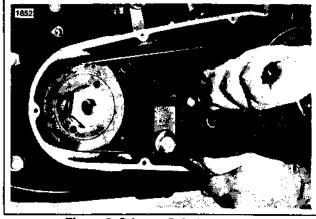


Figure 5. Primary Belt Adjustment

See Figure 1. Install a new safety wire through inside bolts.

## CAUTION

Operation of vehicle without a safety wire could cause severe damage within primary case.

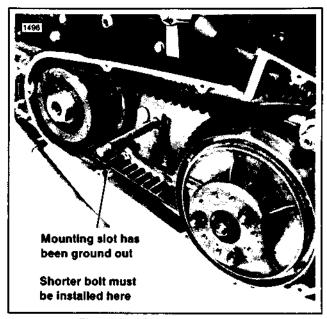


Figure 6. FXB Primary Housing

- Tighten four nuts securing transmission to mounting plate to 18-22 ft-lbs torque. Tighten bolt securing transmission to frame tab to 18-22 ft-lbs torque.
- See Figure 4. Tighten two nuts decuring starter motor.
- 11. Reinstall primary cover and new gasket.

#### NOTE

See Figure 6. The inner primary housing has one mounting slot that has been ground out to provide belt clearance. Instead of using eight mounting screws of the same length, the FXB uses seven long screws and one short screw. This shorter screw must be mounted in the position shown.

- Perform the following adjustments per instruction in the current SERVICE MANUAL, Part No. 99482-81.
  - A. Adjust rear brake pedal free play.
  - B. Adjust and align secondary drive belt.
  - C. Adjust clutch cable.
  - D. Adjust shifter linkage.

#### WARNING

All adjustments must be checked before vehicle is operated to avoid possible damage to vehicle and possible personal injury.

13. Reinstall battery cables, positive cable first.

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