

PRIMARY AND SECONDARY BELT ADJUSTMENT & ALIGNMENT PROCEDURE 1980 FXB MOTORCYCLE

PRIMARY DRIVE BELT

The primary belt inner tooth surface has a thin coating of polyethelene lubricant. During initial operation, this coating will wear off as it is burnished into the belt fabric and the material will collect in the inner primary housing. This is a normal condition and not an indication of belt wear.

ALIGNMENT

Belt tension is set at the factory and should be checked every 10,000 miles. The belt is non-adjustable and may require replacement if tension measurement exceeds 1" with 10 lbs. of force applied at the midpoint of the bottom strand of the belt. (See Figure 1).

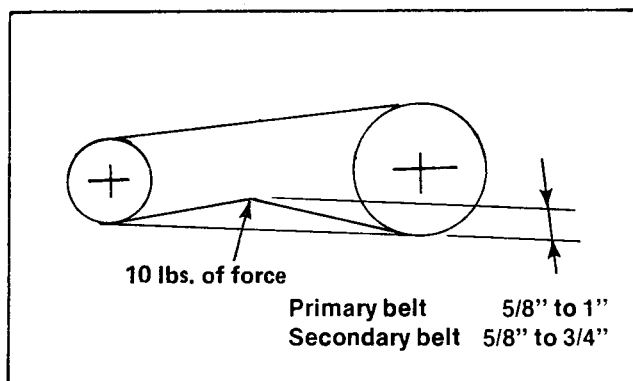


Figure 1. Belt Tension

WARNING

Before removing outer primary cover, disconnect battery cables (negative cable first) to avoid accidental start-up of vehicle and possible personal injury.

1. Remove the chain housing cover and gasket.

NOTE

Engine compensating sprocket is aligned with clutch sprocket by a selection of spacers between the compensating sprocket hub and alternator rotor hub. Reinstall same thickness of spacers as you removed, or determine the correct spacer size(s) as follows:

2. With clutch shell assembly and compensating sprocket removed (See Figure 2), determine spacer thickness as follows:

EXAMPLE (refer to Figure 2).

- A. Measure from primary housing gasket surface to alternator rotor hub surface1.750 in.
- B. Measure from primary housing gasket surface to clutch hub friction surface1.437 in.
- C. Subtract measurement (Step B) from measurement (Step A)313 in.
- D. Spacer thickness from table060 in.

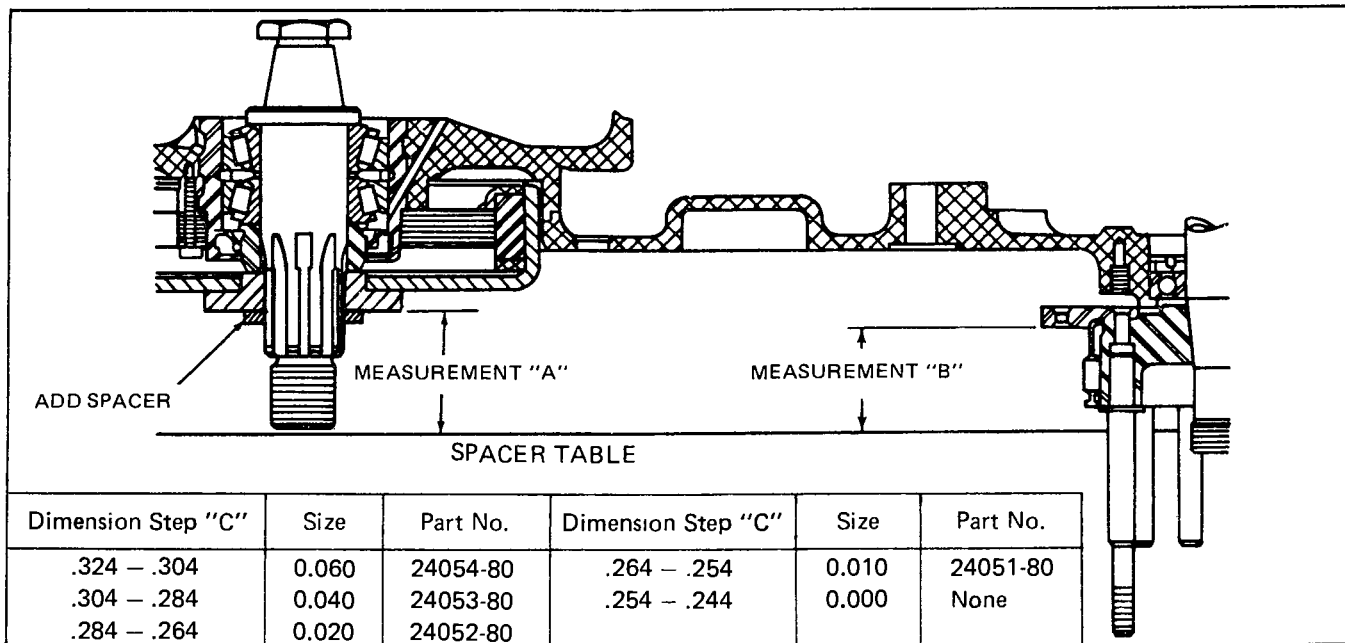


Figure 2. Primary Belt Alignment

NOTE

The compensating sprocket contains a set screw. The only purpose for this screw is to hold the outer bearing plate the proper relationship to the hub which provides accessibility to the holes required to mount the hub puller.

3. Install spacer(s) determined in procedure outlined in Step 2.
4. Reinstall compensating sprocket, lockplate and nut. Torque to 80-100 ft-lbs and fold edge of lockplate against nut flat to hold nut in place.
5. Reinstall cover.

NOTE

(See Figure 3.) The inner primary housing has one mounting slot that has been ground out to provide belt clearance. Instead of using 8 mounting bolts of the same length, the FXB uses QTY 7 of Part No. 1301 and QTY 1 of Part No. 1305. This shorter bolt must be mounted in the position shown.

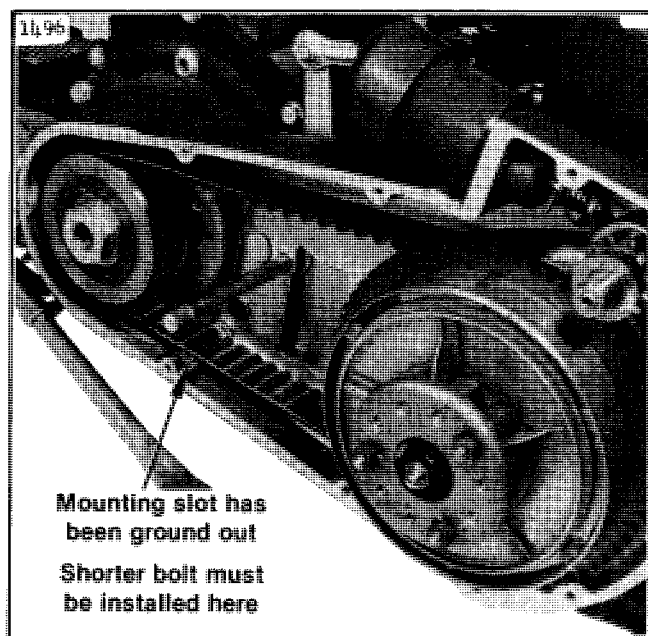


Figure 3. FXB Primary Housing

SECONDARY DRIVE BELT

The secondary belt inner tooth surface has a thin coating of polyethylene lubricant. During initial operation, this coating will wear off as it is burnished into the belt fabric. This is a normal condition and not an indication of belt wear.

ADJUSTMENT AND ALIGNMENT

Belt tension is set at the factory and should be checked after the first 500 miles and every 10,000 miles thereafter (See Figure 1). When 10 lbs of force is applied at the midpoint of the belt's bottom strand, deflection

should equal 5/8" to 3/4" with rear wheel on the ground and one rider sitting on the motorcycle.

1. (See Figure 4.) Loosen the axle nut (1). Remove the cotter pin and loosen the brake anchor nut (2). Turn adjusting nuts (3) as necessary to move axle and correctly adjust belt tension. Turn each adjuster nut (3) an equal number of turns to keep the wheel aligned. To move axle forward, loosen adjuster nuts an equal number of turns and tap lightly on ends of adjuster studs (4).

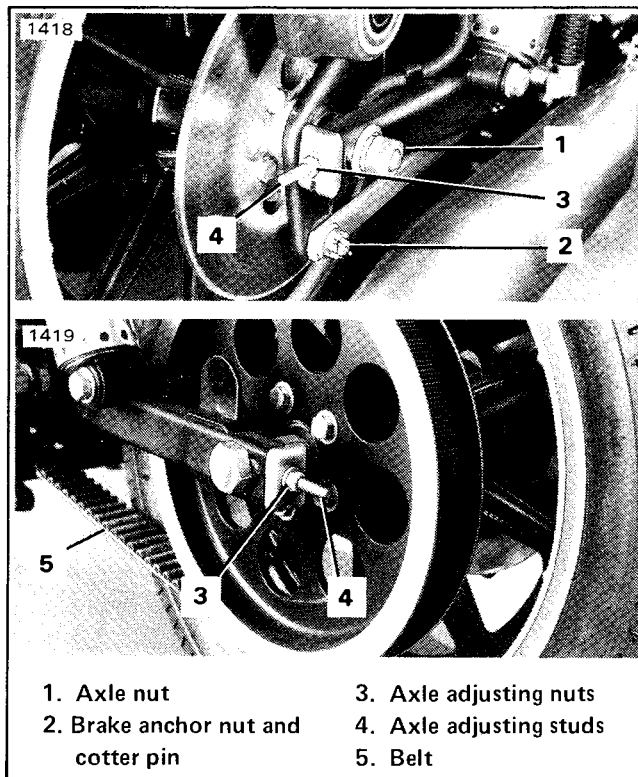


Figure 4. Secondary Belt Adjustment

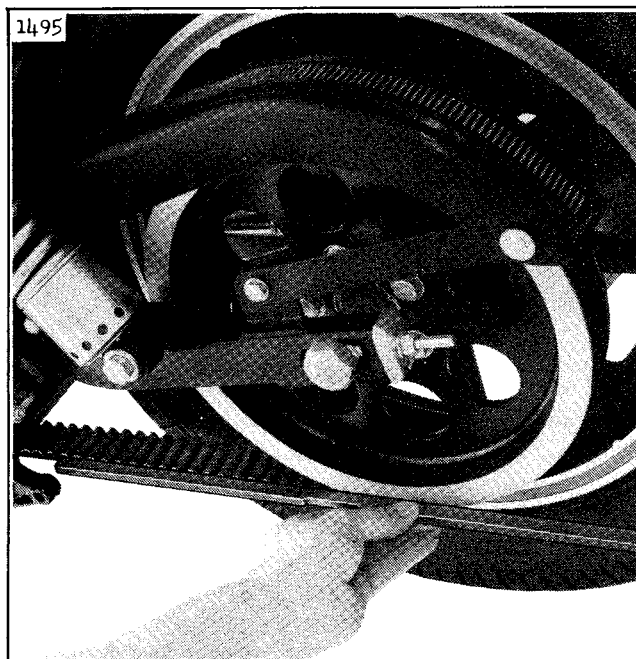


Figure 5. Secondary Belt Alignment

2. (See Figure 5.) Lay a straightedge across the side of the rear wheel sprocket near the bottom. The distance between the edge of the belt and the straightedge must be equal along the full length of the straightedge. Turn the adjuster accordingly to correct any misalignment.
3. Re-check the belt tension.
4. Tighten axle nut to 50 ft-lbs torque. Tighten the brake anchor nut finger tight and re-install new cotter pin.

HARLEY-DAVIDSON MOTOR CO., INC.

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