

INSPECTION

See [Figure 1-31](#). Measure primary chain tension through the inspection cover opening. Adjust primary chains not meeting vertical free play specifications.

1. See [Figure 1-31](#). Remove two fasteners with captive washers and primary chain inspection cover with gasket from primary cover.
2. See [Figure 1-32](#). Check primary chain tension by measuring vertical free play.
 - a. Measure vertical free play through chain inspection cover opening.
 - b. Rotate engine to move primary chain to a different position on sprockets.
 - c. Measure vertical free play several times, each time with primary chain moved so that the measurement is taken with sprockets rotated to the tightest chain position.
3. The tightest measurement taken in the previous step must be within the specifications listed in [Table 1-11](#). If necessary, adjust as described under [1.10 PRIMARY CHAIN, Adjustment](#).

NOTE

The initial primary chain vertical free play specification used at the assembly plant is 1/4-1/2 in. (6.4-12.7 mm) with a cold engine. The 1/2 in. (6.4 mm) minimum is only allowed at the absolute tightest point in the drive, as measured with specialized factory equipment. If a chain has less than 1/4 in. (6.4 mm) vertical tension (with a cold engine), adjust tension to the "field" specification of 3/8-1/2 in. (9.5-12.7 mm). The looser specification will avoid overtightening, which might otherwise occur during adjustment using "non-factory" equipment and methods.

4. See [Figure 1-31](#). Install primary chain inspection cover and **new** gasket to primary cover using two fasteners with captive washers. Tighten fasteners to 84-108 **in-lbs** (10-12 Nm).

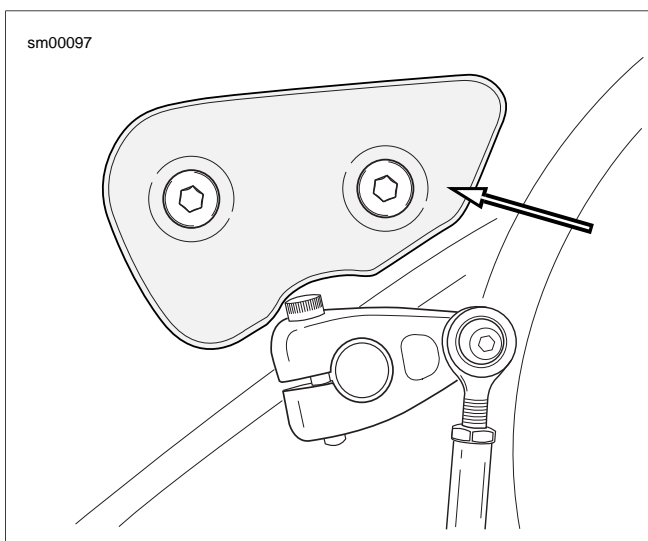


Figure 1-31. Primary Chain Inspection Cover

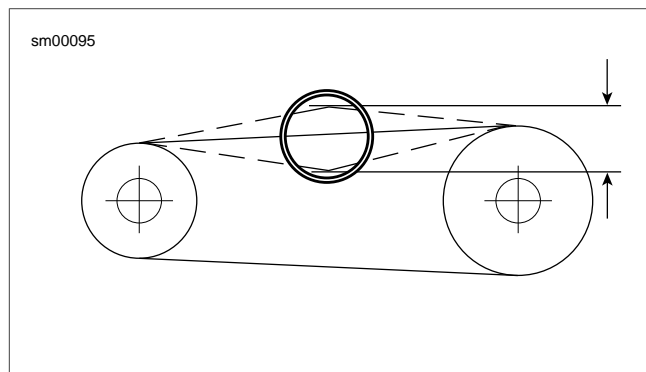


Figure 1-32. Measuring Primary Chain Free Play

Table 1-11. Primary Chain Free Play: XB Models

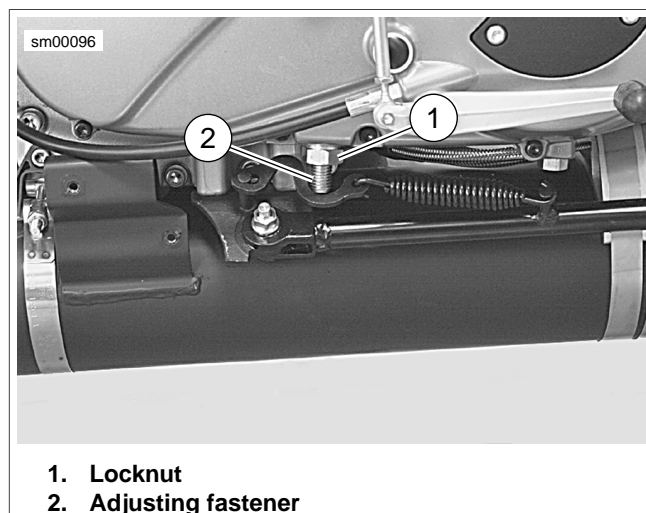
ENGINE TEMPERATURE	FREE PLAY	
Cold	3/8-1/2 in.	9.5-12.7 mm
Operating temperature	1/4-3/8 in.	6.4-9.5 mm

ADJUSTMENT

NOTE

If vertical free play cannot be set within the limits specified, then primary chain and/or chain adjuster are worn beyond adjustment limits. Replace parts as necessary. See [6.5 PRIMARY CHAIN](#).

1. See [Figure 1-33](#). Loosen locknut (1).
2. Turn adjusting fastener (2):
 - a. Clockwise (inward) to increase tension (reduce free play).
 - b. Counterclockwise (outward) to reduce tension (increase free play).
3. Tighten locknut (1) to 20-25 ft-lbs (27-34 Nm).



1. Locknut
2. Adjusting fastener

Figure 1-33. Chain Tension Adjusting Fastener (Typical)