

## Installation

1. Check front fork height. Use the measurement method. See 2.19 FRONT FORK.
2. If wheel is installed, raise vehicle to remove weight from front wheel.
3. See Figure 2-71. Place upper fork bracket with handlebar over ends of forks and onto upper steering stem.

### NOTE

If necessary, use a plastic deadblow hammer to tap the fork bracket onto the upper steering stem.

### NOTE

Verify that fork bracket is tightly mated down onto upper dust shield and evenly positioned on both forks.

4. Hold upper fork bracket down tight against upper dust shield. Tighten pinch screw (1) to 22-26 ft-lbs (29.8-35.2 Nm).
5. Verify that upper fork bracket is evenly positioned on both forks. Tighten upper fork pinch screws (2) to 14-18 ft-lbs (19.0-24.4 Nm).
6. Connect left and right handlebar switch connectors, ignition switch, TGS connector, upper fork bracket ground connector and heated hand grip connectors if equipped.
7. See Figure 2-72 and Figure 2-73. Secure lines and wiring to handlebar risers with **new** cable straps.
8. Secure brake lines to retainer on lower fork bracket.
9. Assemble motorcycle:
  - a. **Road King Models:** Install headlamp nacelle. See 2.42 HEADLAMP NACELLE: ROAD KING MODELS.
  - b. **Fairing Models:** Install Inner and outer fairings. See 2.39 INNER FAIRING.

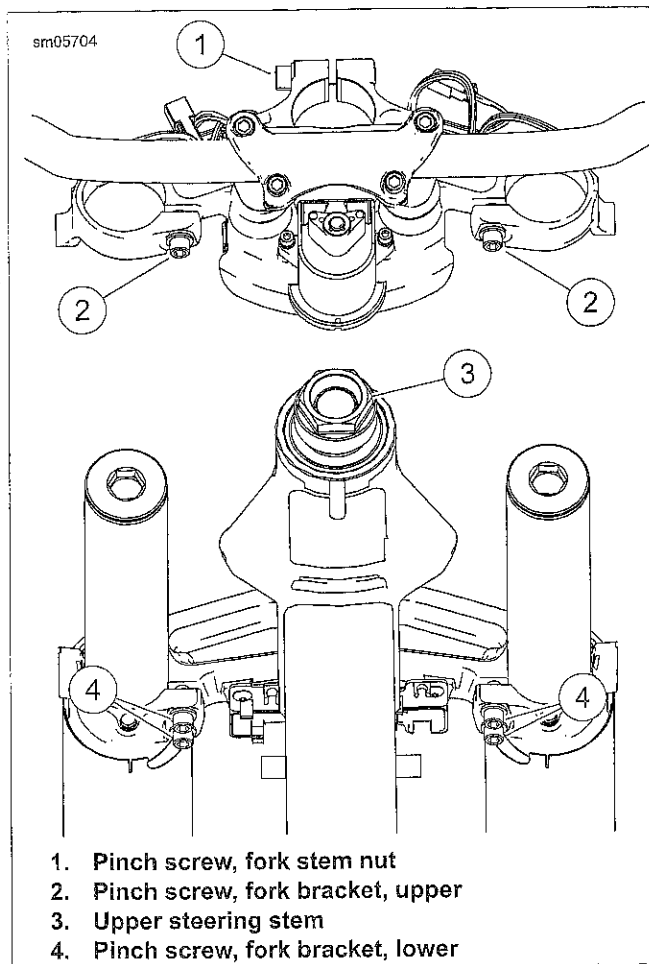


Figure 2-71. Fork Stem and Brackets

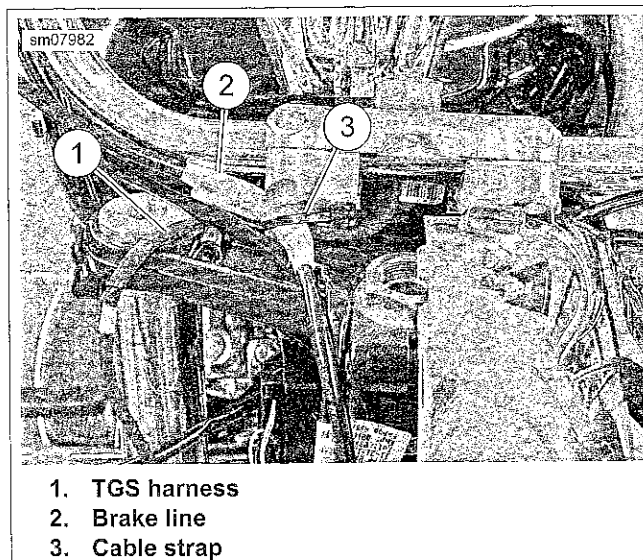


Figure 2-72. Capture Brake Line and TGS harness (FLHR/C)

## NOTES

- Always install **new** bearings. Replace both bearings any-time either requires replacement.
  - Install both bearing cups at the same time.
1. Inspect the bores in the steering head. Remove any paint, rust or burrs.
  2. See Figure 2-70. Install **new** bearing cups using components from WHEEL BEARING INSTALLER (Part No. B-50119):
    - a. Use installer B-50119-3 on the upper cup, installer B-50119-4 on the lower cup, screw, washer, bearing and nut.
    - b. Install until both cups are seated in bore.

### NOTE

Upper dust shield has a larger OD than the lower dust shield.

3. See Figure 2-69. Install upper (2) and lower (7) dust shields. Press bearing cones onto upper and lower stems.

## Installation

4. Lubricate upper steering stem threads with SPECIAL PURPOSE GREASE. Apply a coat of SPECIAL PURPOSE GREASE on bearing rollers and cups.
5. Install lower stem/fork bracket into steering head.
6. Hold lower stem/fork bracket (8) up against lower bearing cup (5). Install upper stem (1) hand-tight.

### NOTE

The upper fork bracket acts as a fork stop. Place wooden block between lower fork bracket and frame to avoid damage.

7. Tighten upper steering stem (1) to 35 ft-lbs (47.5 Nm).
8. Loosen upper steering stem 90-100 degrees. Tighten to specification. Refer to Table 2-15.

Table 2-15. Steering Stem Torque

MODEL	TORQUE
Fairing models	60-65 in-lbs (6.8-7.3 Nm)
Road King	110-115 in-lbs (12.4-13.0 Nm)
Trike	110-115 in-lbs (12.4-13.0 Nm)

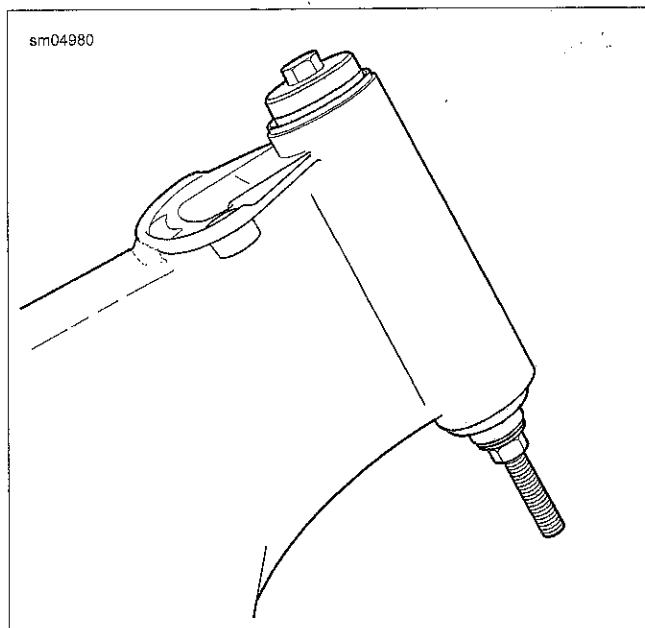


Figure 2-70. Install Steering Head Bearing Cups

9. Install front forks in lower fork bracket. Use the measurement method to adjust height. See 2.19 FRONT FORK.
10. Install upper fork bracket and handlebar. Do not tighten fork stem pinch screw. See 2.20 STEERING HEAD BEARINGS, Upper Fork Bracket.
11. Install inner fairing or headlamp nacelle.
12. Adjust swing-back. See 1.20 STEERING HEAD BEARINGS.

## UPPER FORK BRACKET

FASTENER	TORQUE VALUE	
Upper steering stem pinch screw	22-26 ft-lbs	29.8-35.2 Nm
Fork bracket, upper, pinch screws	14-18 ft-lbs	19.0-24.4 Nm

## Removal

1. Disassemble motorcycle:
  - a. **Road King models:** Remove headlamp nacelle. See 2.42 HEADLAMP NACELLE: ROAD KING MODELS.
  - b. **Fairing models:** Remove inner fairing. See 2.39 INNER FAIRING.
2. Disconnect left and right handlebar switch connectors, ignition switch, TGS connector, upper fork bracket ground connector and heated hand grip connectors if equipped.
3. See Figure 2-71. Loosen pinch screw (1).
4. Loosen pinch screws (2). Do not loosen pinch screws (4).
5. Cut cable straps securing lines and wiring to the handlebar risers.
6. Lift off upper fork bracket and handlebar as an assembly. Carefully lay on protected fuel tank.

## STEERING STEM REMOVAL

### Removal

1. Disassemble motorcycle:
  - a. **Road King Models:** Remove headlamp nacelle. See 2.42 HEADLAMP NACELLE: ROAD KING MODELS.
  - b. **Fairing Models:** Remove the inner fairing assembly. See 2.39 INNER FAIRING.
2. Remove front forks. See 2.19 FRONT FORK.
3. Release brake lines from lower fork bracket.

**NOTE**

Leave hand controls and switches assembled to handlebar.

4. Remove upper fork bracket with handlebar attached. Secure assembly with elastic cords on a well-padded fuel tank. See 2.20 STEERING HEAD BEARINGS, Upper Fork Bracket.
5. See Figure 2-69. Remove upper steering stem (1).
6. Remove lower steering stem/fork bracket (8).

### Disassembly

**NOTE**

Removal of the bearings will destroy them. Always install **new** bearings upon assembly.

1. Remove bearing cones (3, 6) from upper stem and lower stem.

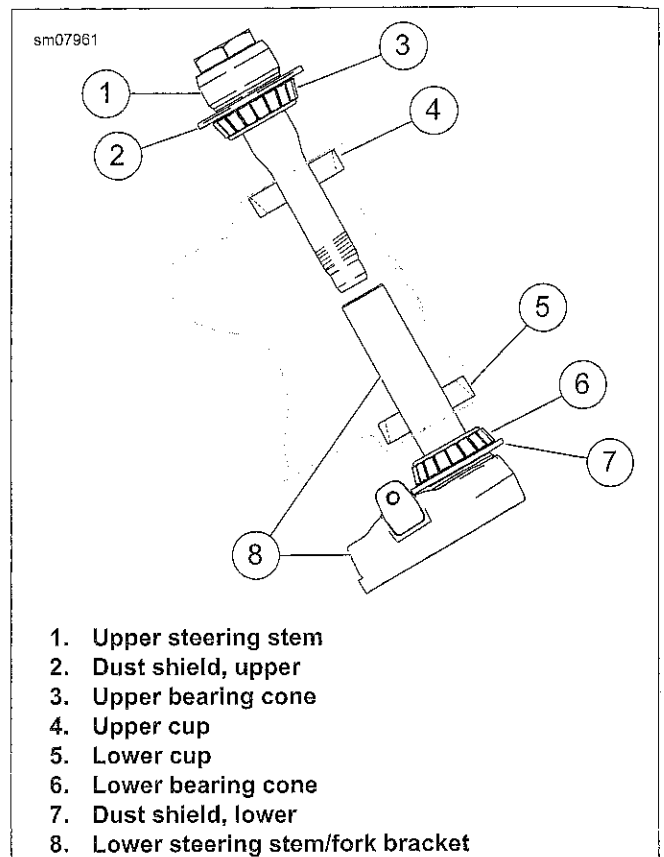
**NOTE**

Internal reliefs in steering head allow punch access to the bearing cups.

2. Drive both bearing cups (4, 5) out of steering head.

**NOTE**

Always replace both bearings if either requires replacement.



1. Upper steering stem
2. Dust shield, upper
3. Upper bearing cone
4. Upper cup
5. Lower cup
6. Lower bearing cone
7. Dust shield, lower
8. Lower steering stem/fork bracket

Figure 2-69. Steering Stem Bearings

## STEERING STEM INSTALLATION

PART NUMBER	TOOL NAME
B-50119	WHEEL BEARING INSTALLER

FASTENER	TORQUE VALUE	
Upper steering stem, 1st torque	35 ft-lbs	47.5 Nm
Upper steering stem, final torque: Fairing models	60-65 in-lbs	6.8-7.3 Nm
Upper steering stem, final torque: Road King models	110-115 in-lbs	12.4-13.0 Nm
Upper steering stem, final torque: Trike models	110-115 in-lbs	12.4-13.0 Nm

### Assembly



Properly seat bearing cups in steering head bore. Improper seating can loosen fork stem bearings adversely affecting stability and handling, which could result in death or serious injury. (00302a)