

GENERAL

There is no drive belt adjustment required for the Buell Firebolt. The system utilizes a fixed idler pulley that maintains the desired tension throughout suspension travel and life of the belt.

INSPECTION & CLEANING

See 1.10 DRIVE BELT.

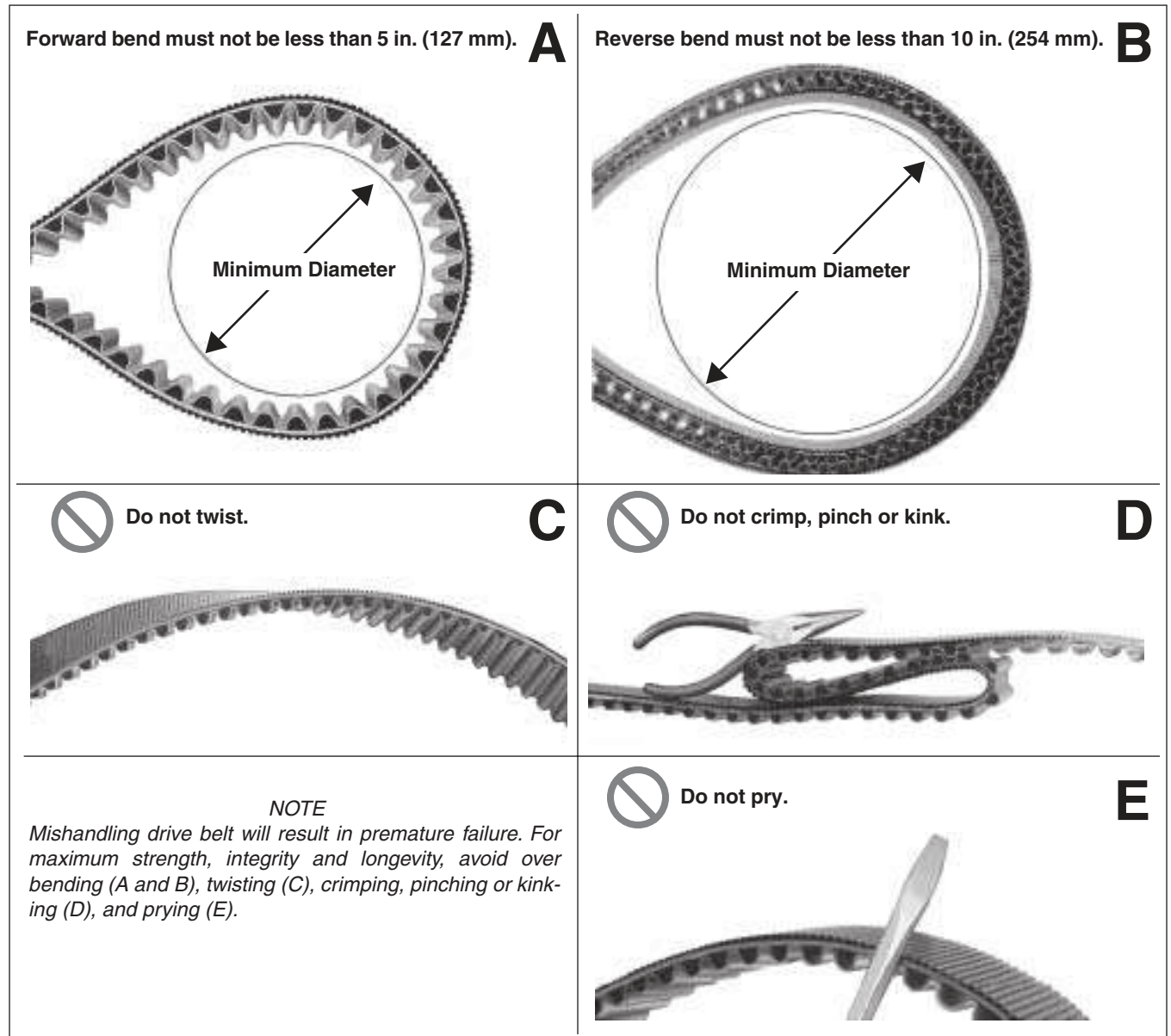


Figure 6-38. Proper Drive Belt Handling

DRIVE BELT REMOVAL

1. Place a scissor jack under jacking point and raise rear wheel off ground. For location of jacking point see [2.28 EXHAUST SYSTEM](#).
2. Remove right side rider footpeg support bracket. See [2.29 FOOTPEG, HEEL GUARD AND MOUNT](#).

NOTE

The right rear chin fairing fasteners must be removed to access the front sprocket cover.

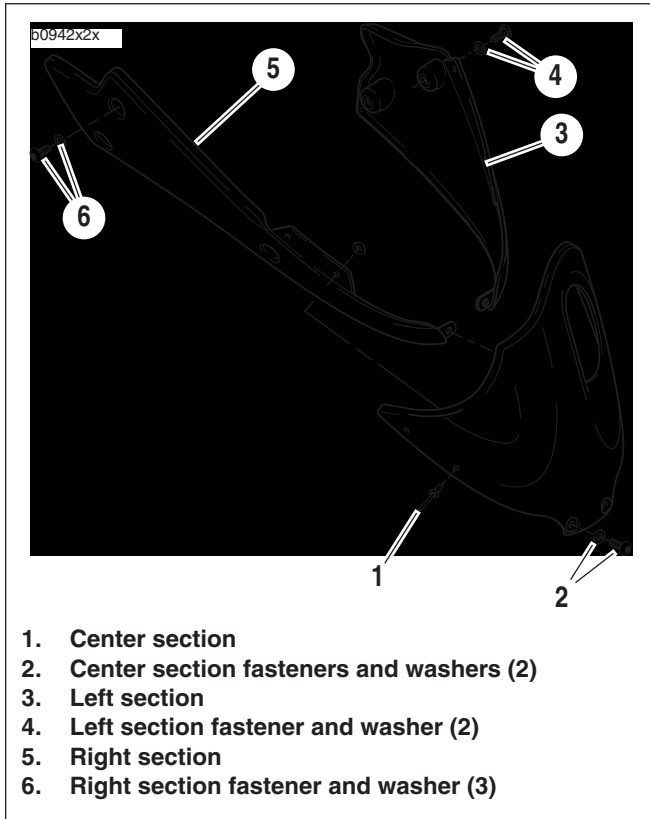


Figure 6-39. Chin Fairing Assembly

3. Remove right rear chin fairing fasteners. See [2.33 CHIN FAIRING](#).

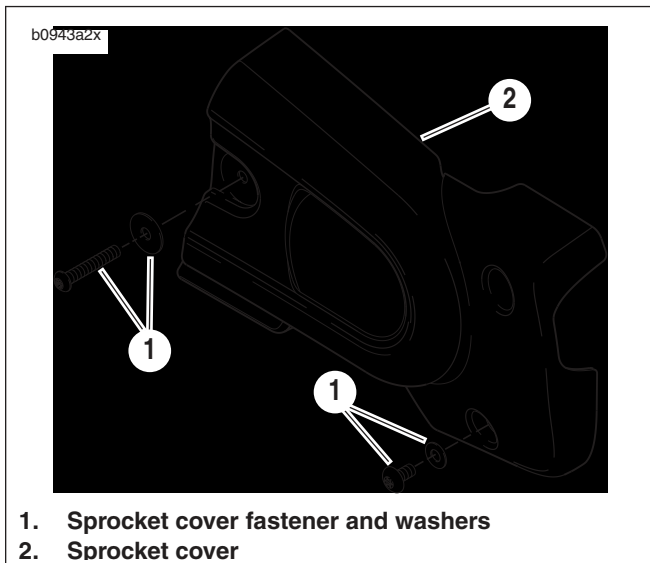


Figure 6-40. Sprocket Cover

4. See Figure 6-40. Remove sprocket cover. See [2.30](#).

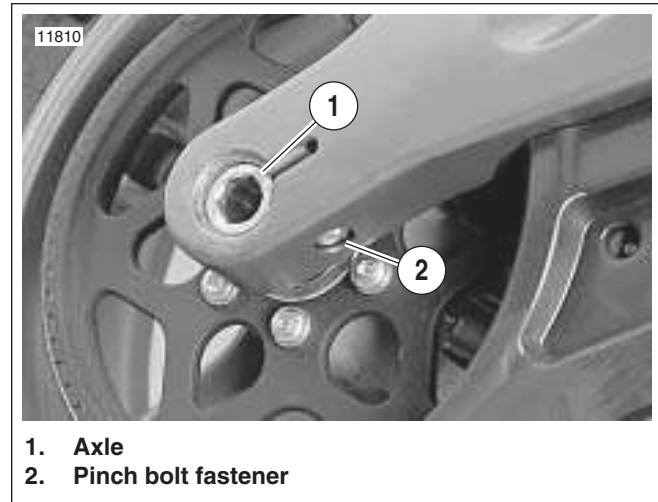


Figure 6-41. Rear Wheel Mounting, Right Side

5. See [Figure 6-41](#). Loosen rear axle pinch fastener (2).
6. Loosen rear axle (1) approximately 15 rotations to allow partial tension to be removed from rear drive system.
7. Remove idler pulley assembly by removing nuts and washers. See [IDLER PULLEY REMOVAL](#) in [6.6 DRIVE BELT SYSTEM](#).
8. Remove swingarm brace. See [2.19 SWINGARM AND BRACE](#).
9. Remove lower belt guard. See [2.32 BELT GUARDS](#).

NOTE

When removing or installing belt, do not bend or twist belt, partially slide belt onto sprocket and "roll" wheel or belt damage will occur.

10. Slide belt from sprocket and remove.

DRIVE BELT INSTALLATION

NOTE

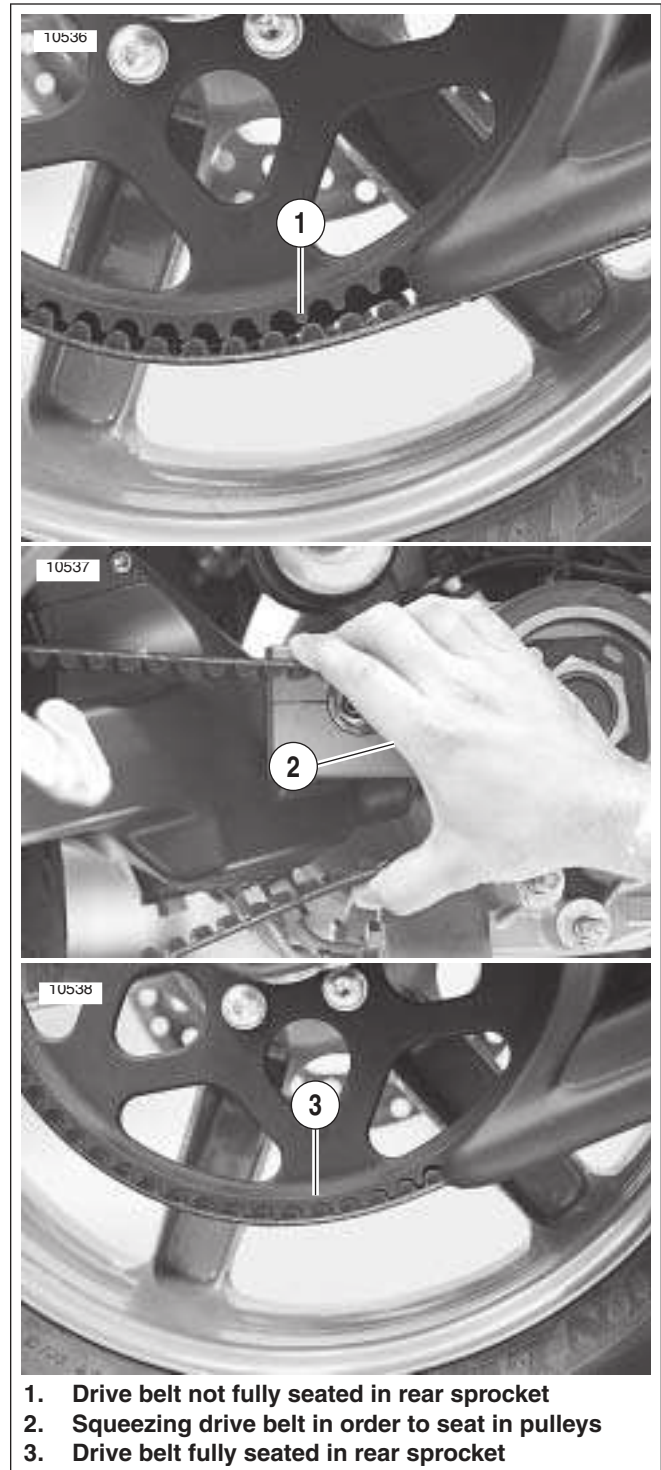
When removing or installing belt, do not bend or twist belt, partially slide belt onto sprocket and "roll" wheel or belt damage will occur.

1. Slide belt onto sprocket.
2. Install swingarm brace and tighten fasteners to 25-27 ft-lbs (34-37 Nm). See [2.19 SWINGARM AND BRACE](#).

NOTE

See [Figure 6-42](#). Occasionally the drive belt is not fully seated in rear sprocket making it difficult to install the idler pulley. It will be necessary to follow the outlined procedure in order to easily install idler pulley.

3. See [Figure 6-42](#). Grasp top and bottom of drive belt and squeeze together until belt teeth are fully seated in rear sprocket.
4. While keeping tension on lower belt, install idler pulley assembly tightening washers and nuts to 33-35 ft-lbs (45-47 Nm).
5. See [Figure 6-41](#). Tighten rear axle (1) to 23-27 ft-lbs (31.2-36.6 Nm), back off two full turns and then retighten to 48-52 ft-lbs (65.1-70.5 Nm).
6. Tighten rear axle pinch fastener (2) to 40-45 ft-lbs (54-61 Nm).
7. See [Figure 6-40](#). Install front sprocket cover. See [2.30 SPROCKET COVER](#).
8. Install chin fairing. See [2.33 CHIN FAIRING](#).
9. Install right side rider footpeg mount. See [2.29 FOOTPEG, HEEL GUARD AND MOUNT](#).
10. Install lower belt guard. See [2.32 BELT GUARDS](#).
11. Remove scissor jack from motorcycle.



1. Drive belt not fully seated in rear sprocket
2. Squeezing drive belt in order to seat in pulleys
3. Drive belt fully seated in rear sprocket

Figure 6-42. Seating Drive Belt Into Pulley Teeth

IDLER PULLEY REMOVAL

1. See [Figure 6-43](#). Loosen rear axle pinch fastener (2).
2. Unthread axle approximately 15 rotations to release tension from drive belt.
3. Remove chin fairing fasteners. See [2.33 CHIN FAIRING](#).
4. Remove front sprocket cover. See [2.30 SPROCKET COVER](#).
5. See [Figure 6-44](#). Remove idler pulley bracket nuts and washers (5) from studs (3).
6. Slide idler pulley bracket (4) off studs (3).
7. See [Figure 6-44](#). Inspect pulley by spinning wheel (1) and checking for wheel bearing wear. See [INSPECTION](#) under [1.10 DRIVE BELT](#).
8. If pulley wheel needs replacement, remove fastener (6), washer and nut (2) from idler pulley bracket (4) and discard wheel. Replace with **new** pulley wheel (1).

NOTE

The pulley wheel bearings can not be replaced separately.

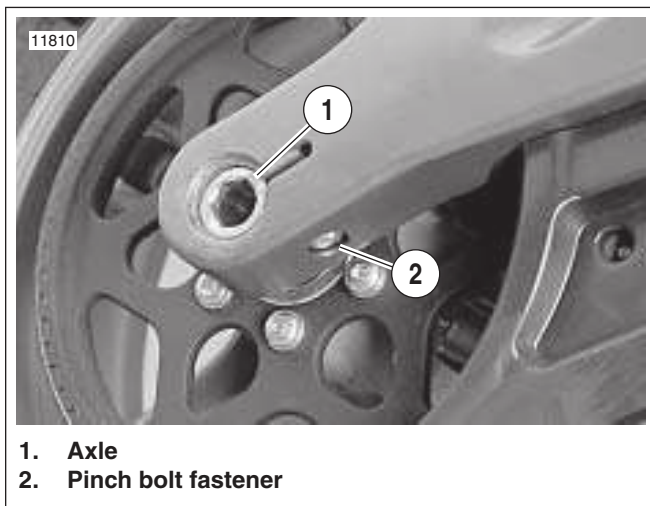


Figure 6-43. Rear Wheel Mounting, Right Side

IDLER PULLEY INSTALLATION

1. See [Figure 6-44](#). Install new or existing pulley wheel (1), if removed, and tighten washer and nut (2) wheel fastener (6) to 20-23 ft-lbs (27.1-31.2 Nm).
2. Slide idler pulley bracket (4), washer and nuts (5) on to studs (3) and tighten to 33-35 ft-lbs (45-47 Nm). sssss-See [DRIVE BELT INSTALLATION](#).
3. Install front sprocket cover. See [2.30 SPROCKET COVER](#).
4. Install chin fairing fasteners and tighten to 36-48 **in-lbs** (4-5 Nm). See [2.33 CHIN FAIRING](#).

NOTE

Never tighten rear axle with swingarm brace removed.

5. See [Figure 6-43](#). Install and tighten rear axle (1) to 23-27 ft-lbs (31.2-36.6 Nm), back off two full turns and then retighten to 48-52 ft-lbs (65.1-70.5 Nm). See [6.6 DRIVE BELT SYSTEM](#).
6. Tighten rear axle pinch fastener (2) to 40-45 ft-lbs (54-61 Nm).

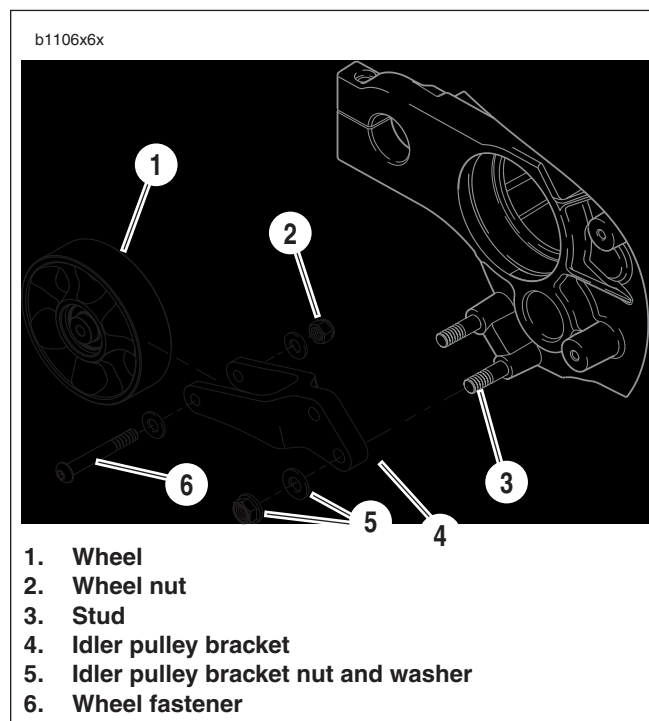


Figure 6-44. Idler Pulley Assembly