

# Stud Girdle Installation Instructions Big Block Chevy Dart 308, 320, 340, 360, 370, PRO1, Iron Eagle

#### Step 1:

For best results, it is necessary to check the stud girdle for fit before final installation. The stud girdle is designed to fit only Dart 308, 320, 340, 360, 370, Pro1, and Iron Eagle cylinder heads. The application is stamped on the stud girdle.

The bolts holding the girdle together face the exhaust side of the head. Possible problems for incorrect fit could be bent rocker arm studs or push rod guide plates not fitting flat on head surface causing the studs to bend when they are torqued into place. Also, the adjustment nut diameter must be between .748"-.751".

Check rocker arm studs for run out, screw the stud into the heads down to the guide plate, but leave them loose. Screw adjustment nuts about ½ inch down on studs. Spread girdle apart as far as possible. Place girdle over adjuster nuts approximately 2-7/8" (308, 320, 340, 360, and 370 heads) or 2-5/8" (Pro1 and Iron Eagle heads) from the top of the girdle to the bare valve cover surface. Squeeze girdle closed by hand with a rocking motion. The girdle will seek its correct level approximately 2-7/8" (308, 320, 340, 360, and 370 heads) or 2-5/8" (Pro1 and Iron Eagle heads) (+/- 1/16") from the top of the girdle to the bare valve cover surface. The gap between the girdle halves should be about .080" in the center and .015" on the ends when the level is correct. Tighten the girdle bolt slightly (center bolts first). Note the height from the valve cover gasket surface to top of stud girdle. Remove the girdle and torque the studs into place. Install the girdle again, it should fit as well as before.

#### Step 2:

The stud girdle is boxed with bolts and washers installed. Bolts should be removed and lightly oiled (engine oil is recommeded). Replace bolts and washers (flat side of washer to bolt head). Install adjuster nuts; long nut to intake valve, short nut to exhaust. Set valve lash, then tighten the set screw. Recheck lash. **DO NOT** torque adjuster nuts after screw has been set! This will cause undue stress on the adjuster nut and is a primary cause of adjuster nut failure.

Spread girdle apart as far as possible. Place over adjuster nuts and rest on top of rocker arms. Squeeze girdle closed by hand and pull it away from the head with a rocking motion. The girdle will seek its correct level approximately 2-7/8" (308, 320, 340, 360, and 370 heads) or 2-5/8" (Pro1 and Iron Eagle heads) (+/- 1/16") from the top of the girdle to the bare valve cover surface. Tighten the girdle bolts slightly (center bolts first).

#### Step 3:

Rotate engine by hand and check clearance between rocker arm and stud girdle on both the push rod side and the valve spring side of the rocker arm. Minimum clearance should be .075". The head of the adjuster nut should protrude above the top of the girdle enough so that a box end wrench will fit properly. Torque center bolts to a maximum of 30-35 ft. lbs. End bolts use less torque, only 10-15 ft. lbs. Excessive torque of the end bolts will break or bend the ends of the girdle!

Recheck the valve settings and adjust if needed by loosening the appropriate attaching bolt just enough to allow the adjuster nut to turn. Re-torque adjuster nut set screw last.

The stud girdle is designed to hold the adjuster nuts snugly. Adjuster nut size is important and should be between .748"-.751". Adjuster nuts set screws are recommended but not absolutely necessary if the adjuster nuts are the proper size.

Valve covers must be of deep design for proper clearance. Moroso stamped aluminum valve covers have ample clearance. Most die cast valve covers will work but may have to be modified for some applications.

### **Parts List:**

2 ea. Stud Girdles 2 ea. Short end bolts 3/8-16 x 1-1/4 SHCS

2 ea. Long end bolts 3/8-16 x 2-1/4 SHCS 8 ea. Center bolts 3/8-16 x 2-1/2 SHCS

12 ea. Stainless Washers 3/8-A/N

## **Adjuster Nuts:**

8 ea. Intake nuts #717 (2-1-2" long) 8 ea. Exhaust nuts #716 (2" long)

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