

# ENGINE REBUILDING SPECIFICATIONS

| Component  | US                | Metric            |                  |
|--|-------------------|-------------------|------------------|
| <b>Bore x Stroke</b>                               |                   |                   |                  |
| 2.5L   | 3.70 x 3.60 in.   | 93.9 x 91.4 mm    |                  |
| 3.0L   | 3.50 x 3.15 in.   | 88.9 x 80.0 mm    |                  |
| 3.0L SHO   | 3.50 x 3.15 in.   | 88.9 x 80.0 mm    |                  |
| 3.2L SHO   | 3.62 x 3.15 in.   | 91.9 x 80.0 mm    |                  |
| 3.8L   | 3.81 x 3.39 in.   | 96.8 x 86.1 mm    |                  |
| <b>Camshaft End Play</b>                           |                   |                   |                  |
| 2.5L   |                   |                   |                  |
| <b>Camshaft Journal-to-Bearing Clearance</b>       |                   |                   |                  |
| 2.5L   | 0.0010-0.0030 in. | 0.0254-0.0762 mm  |                  |
| 3.0L   | 0.0010-0.0030 in. | 0.0254-0.0762 mm  |                  |
| 3.0L/3.2L SHO                                      | 0.0010-0.0026 in. | 0.0254-0.0660 mm  |                  |
| 3.8L   | 0.0010-0.0030 in. | 0.0254-0.0762 mm  |                  |
| <b>Camshaft Journal Diameter</b>                   |                   |                   |                  |
| 2.5L   | 2.0060-2.0080 in. | 20.095-51.003 mm  |                  |
| 3.0L   | 2.0074-2.0084 in. | 50.988-51.013 mm  |                  |
| 3.0L/3.2L SHO                                      | 1.2189-1.2195 in. | 30.960-30.975 mm  |                  |
| 3.8L   | 2.0505-2.0515 in. | 52.082-52.108 mm  |                  |
| <b>Camshaft Lobe Lift</b>                          |                   |                   |                  |
| 2.5L   |                   |                   |                  |
|  | Intake            | 0.249 in.         | 6.324 mm         |
|  | Exhaust           | 0.239 in.         | 6.070 mm         |
| 3.0L   |                   |                   |                  |
|  | 1986-91           |                   |                  |
|  | Intake            | 0.260 in.         | 6.604 mm         |
|  | Exhaust           | 0.260 in.         | 6.604 mm         |
|  | 1992-95           |                   |                  |
|  | Intake            | 0.2550-0.2600 in. | 6.477-6.604 mm   |
|  | Exhaust           | 0.2550-0.2600 in. | 6.477-6.604 mm   |
| 3.0L SHO   |                   |                   |                  |
|  | Intake            | 0.3550 in.        | 9.017 mm         |
|  | Exhaust           | 0.3150 in.        | 8.001 mm         |
| 3.2L SHO   |                   |                   |                  |
|  | Intake            | 0.3150 in.        | 8.001 mm         |
|  | Exhaust           | 0.3150 in.        | 8.001 mm         |
| 3.8L   |                   |                   |                  |
|  | Intake            | 0.2400-0.2450 in. | 6.096-6.223 mm   |
|  | Exhaust           | 0.2540-0.2590 in. | 6.452-6.579 mm   |
| <b>Connecting Rod Oil Clearance</b>                |                   |                   |                  |
| 2.5L   | 0.0008-0.0014 in. | 0.0203-0.0355 mm  |                  |
| 3.0L   | 0.0010-0.0014 in. | 0.0254-0.0355 mm  |                  |
| 3.0L/3.2L SHO                                      | 0.0009-0.0022 in. | 0.0229-0.0559 mm  |                  |
| 3.8L   | 0.0010-0.0014 in. | 0.0254-0.0355 mm  |                  |
| <b>Connecting Rod-to-Crankshaft Side Clearance</b> |                   |                   |                  |
| 2.5L   | 0.0035-0.0105 in. | 0.0889-0.2667 mm  |                  |
| 3.0L   | 0.0060-0.0140 in. | 0.1524-0.3556 mm  |                  |
| 3.0L SHO   |                   |                   |                  |
|  | 1989-92           | 0.0063-0.0123 in. | 0.1600-0.3124 mm |
|  | 1993-95           | 0.0063-0.0138 in. | 0.1600-0.3505 mm |
| 3.2L SHO   | 0.0063-0.0138 in. | 0.1600-0.3505 mm  |                  |
| 3.8L   | 0.0047-0.0140 in. | 0.1194-0.3556 mm  |                  |