

# **Component Procedures: Valve**

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# Component Procedures: Valve

## Parts and Labor (itype\_189)

### Parts

Qualifier	Part #	Name	Price	Note
Exhaust Valve	LF0212121F	6 - Exhaust Valve	25.67	
Intake Valve	LF0112111	7 - Intake Valve	22.68	

### Labor

Operation	Qualifier Path	Skill	Std Hrs	Wty Hrs
Resurface/Grind	All Cylinders	A	13.5	9.9
Resurface/Grind	All Cylinders > NOTE > To Knurl Valve Guide, ?	A	0.1	0.0
Resurface/Grind	All Cylinders > NOTE > To R&R Camshaft, Add >?	A	0.2	0.0
Resurface/Grind	All Cylinders > NOTE > To R&R Camshaft, Add >?	A	0.1	0.0
Resurface/Grind	All Cylinders > NOTE > To R&R Valve Guide, Ad?	A	0.2	0.0
Resurface/Grind	All Cylinders > NOTE > To Ream Valve Guide, A?	A	0.1	0.0

## Mechanical (including Torque) (itype\_28)

### Valve Specifications

#### Valve head margin thickness

##### Minimum

IN: ..... 1.62 mm (0.0637 in)

EX: ..... 1.82 mm (0.0716 in)

#### Valve length

##### Standard

IN: ..... 102.99--103.79 mm (4.055-4.086 in)

EX: ..... 104.25-105.05 mm (4.105-4.135 in)

IN: ..... 102.99 mm (4.055 in)

EX: ..... 104.25 mm (4.104 in)

#### Valve stem diameter

IN: ..... 5.470-5.485 mm (0.2154-0.2159 in)

EX: ..... 5.465-5.480 mm (0.2152-0.2157 in)

IN: ..... 5.440 mm (0.2142 in)

EX: ..... 5.435 mm (0.2140 in)

#### Valve guide

##### inner diameter

Standard ..... 5.509-5.539 mm (0.2169-0.2180 in)

#### Valve stem to guide clearance

IN: ..... 0.024-0.069 mm (0.0009-0.0027 in)

EX: ..... 0.029-0.074 mm (0.0012-0.0029 in)

Maximum ..... 0.10 mm (0.004 in)

#### Valve guide protrusion height

Standard ..... 12.2-12.8 mm (0.481-0.503 in)

#### Valve seat

##### contact width

Standard ..... 1.2-1.6 mm (0.048-0.062 in)

#### Valve protrusion height

IN: ..... 40.64-42.24 mm (1.600-1.662 in)

EX: ..... 40.50-42.10 mm (1.595-1.657 in)

#### Valve spring

##### pressing force

..... 390 Nm (39.76 kgf, 87.67lbf)

#### Valve spring standard height

..... 28.68 mm (1.129 in)

#### Valve spring out-of-square

Maximum ..... 1.95 mm (0.0767 in)