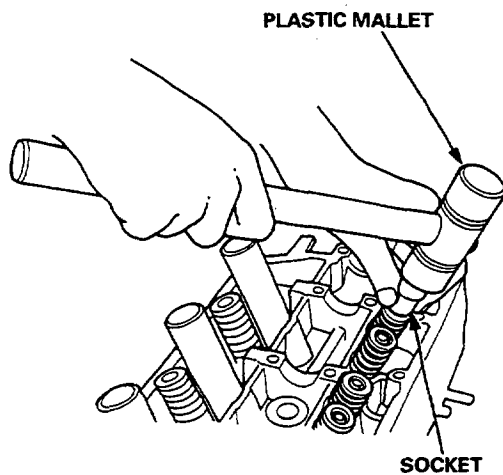


# Valves, Valve Springs and Valve Seals

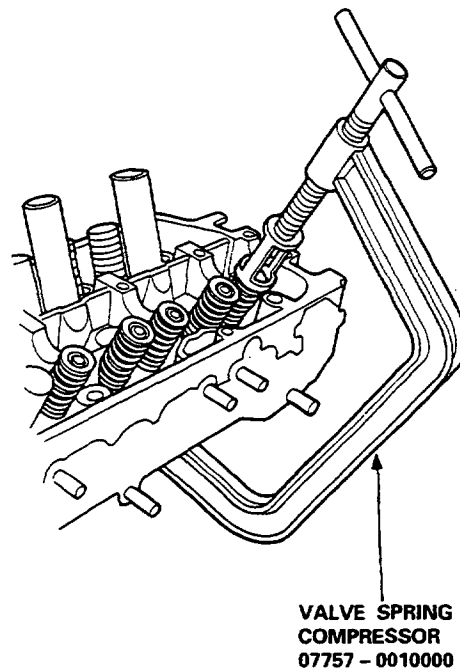
## Replacement

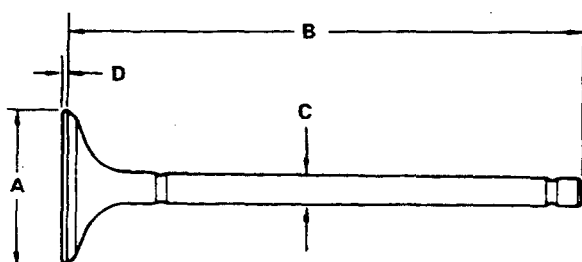
NOTE: Identify valves and valve springs as they are removed so that each item can be reinstalled in its original position.

1. Using an appropriate-sized socket and plastic mallet, lightly tap the valve retainer to loosen the valve keepers before installing the valve spring compressor.



2. Install the spring compressor. Compress the spring and remove the valve keeper.





#### D16Y2 engine:

##### Intake Valve Dimensions

- A Standard (New): 29.9 – 30.1 mm  
(1.18 – 1.19 in)  
B Standard (New): 117.42 – 117.72 mm  
(4.623 – 4.635 in)  
C Standard (New): 5.48 – 5.49 mm  
(0.2157 – 0.2161 in)  
C Service Limit: 5.45 mm (0.2146 in)  
D Standard (New): 0.85 – 1.15 mm  
(0.033 – 0.045 in)  
D Service Limit: 0.65 mm (0.026 in)

##### Exhaust Valve Dimensions

- A Standard (New): 25.9 – 26.1 mm  
(1.02 – 1.03 in)  
B Standard (New): 114.60 – 114.90 mm  
(4.512 – 4.524 in)  
C Standard (New): 5.45 – 5.46 mm  
(0.2146 – 0.2150 in)  
C Service Limit: 5.42 mm (0.2134 in)  
D Standard (New): 1.05 – 1.35 mm  
(0.041 – 0.053 in)  
D Service Limit: 0.95 mm (0.037 in)

#### D15Z3 engine:

##### Intake Valve Dimensions

- A Standard (New): 27.4 – 27.6 mm  
(1.08 – 1.09 in)  
B Standard (New): 118.82 – 119.12 mm  
(4.678 – 4.690 in)  
C Standard (New): 5.48 – 5.49 mm  
(0.2157 – 0.2161 in)  
C Service Limit: 5.45 mm (0.2146 in)  
D Standard (New): 0.85 – 1.15 mm  
(0.033 – 0.045 in)  
D Service Limit: 0.65 mm (0.026 in)

##### Exhaust Valve Dimensions

- A Standard (New): 23.4 – 23.6 mm  
(0.92 – 0.93 in)  
B Standard (New): 116.20 – 116.50 mm  
(4.575 – 4.587 in)  
C Standard (New): 5.45 – 5.46 mm  
(0.2146 – 0.2150 in)  
C Service Limit: 5.42 mm (0.2134 in)  
D Standard (New): 1.05 – 1.35 mm  
(0.041 – 0.053 in)  
D Service Limit: 0.95 mm (0.037 in)

#### D16Y3, D14A2 engines:

##### Intake Valve Dimensions

- A Standard (New): 28.9 – 29.1 mm  
(1.14 – 1.15 in)  
B Standard (New): 113.82 – 114.12 mm  
(4.481 – 4.493 in)  
C Standard (New): 5.48 – 5.49 mm  
(0.2157 – 0.2161 in)  
C Service Limit: 5.45 mm (0.2146 in)  
D Standard (New): 0.85 – 1.15 mm  
(0.033 – 0.045 in)  
D Service Limit: 0.65 mm (0.026 in)

##### Exhaust Valve Dimensions

- A Standard (New): 24.9 – 25.1 mm  
(0.98 – 0.99 in)  
B Standard (New): 117.40 – 117.70 mm  
(4.622 – 4.634 in)  
C Standard (New): 5.45 – 5.46 mm  
(0.2146 – 0.2150 in)  
C Service Limit: 5.42 mm (0.2134 in)  
D Standard (New): 1.05 – 1.35 mm  
(0.041 – 0.053 in)  
D Service Limit: 0.95 mm (0.037 in)