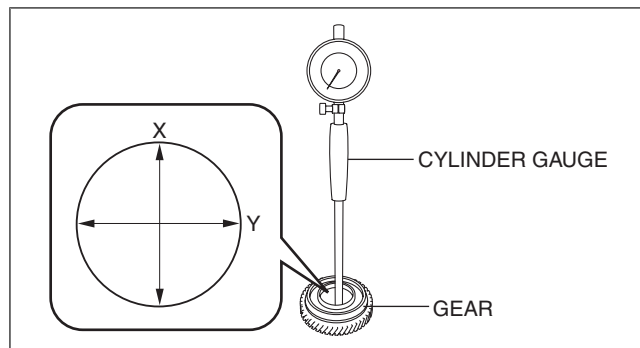


## SECONDARY SHAFT COMPONENT INSPECTION

id051500169200

### Gear Inspection

1. Inspect the gears for damage, wear, or loss.
  - If there is any malfunction, replace the gear.
2. Inspect the gears and synchronizer rings for damage and wear on contact surfaces.
  - If there is any malfunction, replace the gear.
3. Measure the inner diameter of the gear using a cylinder gauge in X and Y directions as shown in the figure.
  - If it exceeds the maximum specification, replace the gear.



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### Inner diameter of gear

Measurement location	Specification (mm {in})	Maximum (mm {in})
Secondary 1st gear	41.512 {1.6343}	41.525 {1.6348}
Secondary 2nd gear	46.534 {1.8320}	46.544 {1.8324}

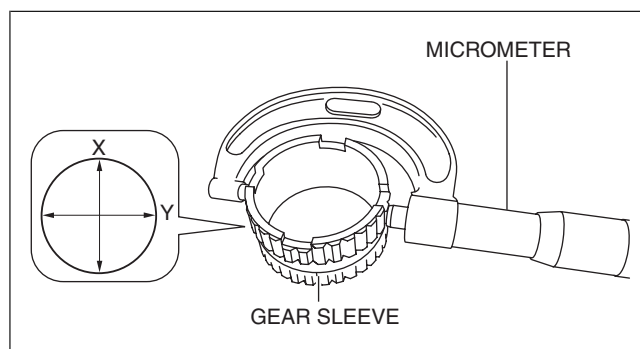
### Gear sleeve inspection

1. Measure the outer diameter of the gear sleeve using the micrometer in X and Y directions as shown in the figure.
  - If it is less than the minimum specification, replace the gear sleeve.

#### Outer diameter of gear sleeve

**Specification: 46.444 mm {1.8285 in}**

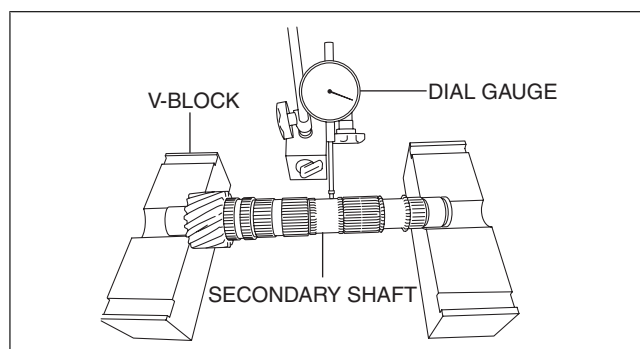
**Minimum: 46.434 mm {1.8281 in}**



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### Secondary Shaft Inspection

1. Inspect the spline for damage and wear.
  - If there is any malfunction, replace the secondary shaft.
2. Inspect the gear area for damage, wear, and loss.
  - If there is any malfunction, replace the secondary shaft.
3. Measure the lateral runout of the secondary shaft.
  - (1) Set the secondary shaft on V-blocks so that the V-blocks support the secondary shaft journal as shown in the figure.
  - (2) Measure the lateral runout of the secondary shaft at the position shown in the figure using a dial gauge.
    - If it exceeds the maximum specification, replace the secondary shaft.

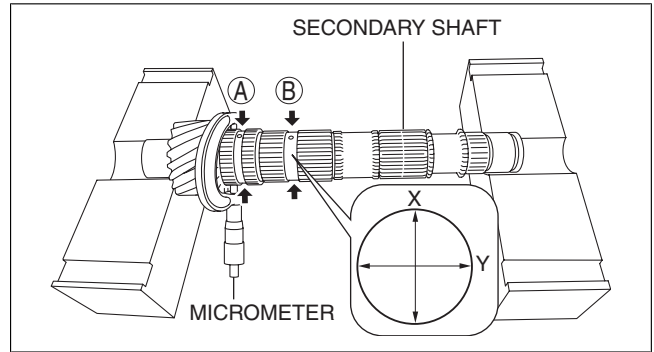


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#### Lateral runout of secondary shaft

**Maximum: 0.05 mm {0.002 in}**

4. Measure the outer diameter of the secondary shaft at the position shown in the figure using a micrometer. Measurement positions total four and are in the X and Y directions, at two points (A and B) as shown in the figure.
  - If it is less than the minimum specification, replace the secondary shaft.



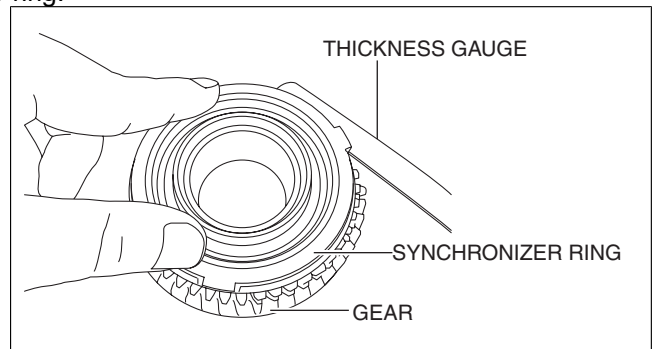
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#### Outer diameter of secondary shaft

Measurement location	Specification (mm {in})	Minimum (mm {in})
A: Secondary 1st gear assembly part	41.457 {1.6322}	41.445 {1.6317}
B: Secondary 2nd gear assembly part	39.276 {1.5463}	39.266 {1.5459}

#### Synchronizer Ring Inspection

1. Inspect the teeth of the synchronizer ring for damage, wear, or loss.
  - If there is any malfunction, replace the synchronizer ring.
2. Inspect the taper surface for wear or loss.
  - If there is any malfunction, replace the synchronizer ring.
3. While holding the synchronizer ring and gear with your fingers as shown in the figure, measure the clearance of the synchronizer ring and gear side surface around the entire circumference using a thickness gauge.
  - If it is less than the minimum specification, replace the synchronizer ring.



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#### Clearance between synchronizer ring and gear

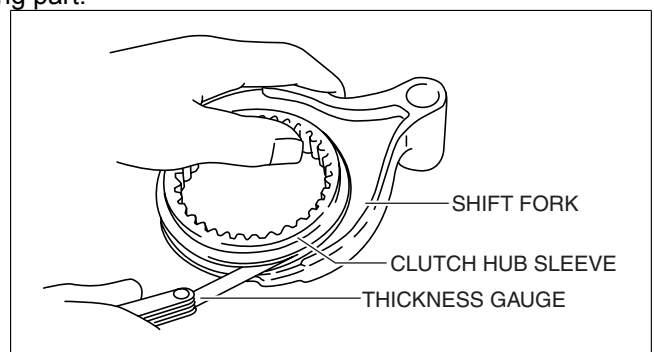
Measurement location	Specification (mm {in})	Minimum (mm {in})
Synchronizer ring (1GR)	0.94 {0.037}	0.55 {0.022}
Synchronizer ring (2GR)	0.94 {0.037}	0.55 {0.022}

#### Clutch Hub Component Inspection

1. Inspect the clutch hub sleeve and clutch hub operation.
  - If there is any malfunction, replace the malfunctioning part.
2. Inspect the spline for damage, wear or loss.
  - If there is any malfunction, replace the malfunctioning part.
3. While holding the clutch hub sleeve and shift fork together with your hand as shown in the figure, measure the clearance between the shift fork and clutch hub sleeve groove using a thickness gauge.
  - If it exceeds the maximum specification, replace the clutch hub sleeve and shift fork as a set.

#### Clearance between shift fork and clutch hub sleeve groove

**Specification: 0.225 mm {0.00886 in}**  
**Maximum: 0.40 mm {0.016 in}**



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