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This file was not scanned to deprive Mazda of any money – it was scanned due to the rareness of the original manuals and the overwhelming need of the RX-7 owner to have this information so that they can accurately troubleshoot problems. Perhaps if Mazda's dealerships could support the Rotary Engine it wouldn't be so necessary for the owners to do so.



Many thanks to Scott89t2 and www.1300cc.com for scanning this file.

1989 Mazda RX-7 Factory Service Manual

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PROPELLER SHAFT

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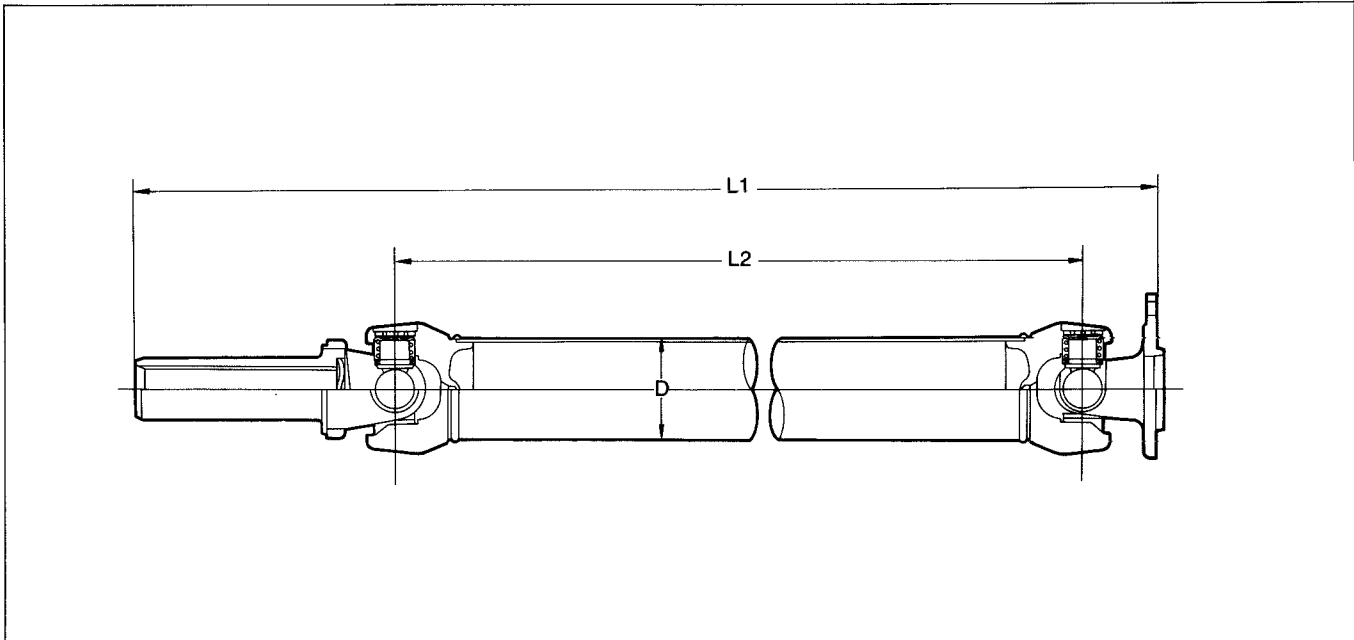


L OUTLINE, TROUBLESHOOTING GUIDE, PROPELLER SHAFT

OUTLINE

SPECIFICATIONS

Model		Non-Turbo		Turbo		
		M/T	A/T	M/T	A/T	
Length	mm (in)	L1	967 (38.07)	913 (35.94)	966 (38.03)	—
		L2	782 (30.79)	733 (28.86)	774 (30.47)	—
Outer diameter	mm (in)	D	57 (2.24)	57 (2.24)	75 (2.95)	—



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TROUBLESHOOTING GUIDE

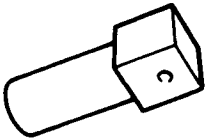
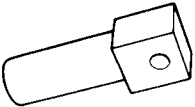
Problem	Possible Cause	Action	Page
Vibration	Worn universal joint	Replace	L-3
	Bent propeller shaft	Replace	L-3
	Worn slip yoke splines	Replace	L-3
	Runout of propeller shaft	Replace	L-3
Abnormal noise	Worn or damaged universal joint	Replace	L-3
	Worn slip yoke splines	Replace	L-3

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PROPELLER SHAFT

PREPARATION

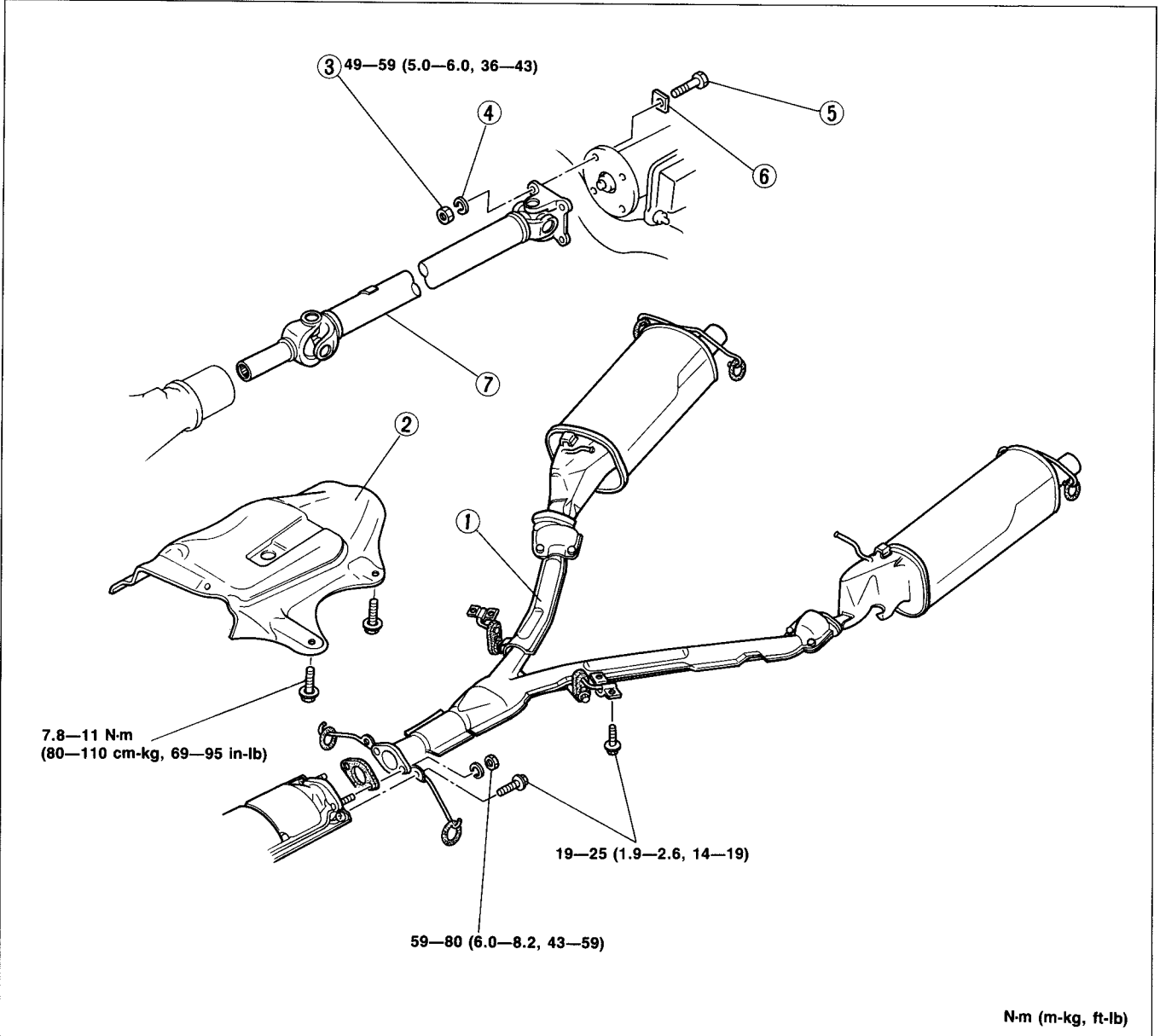
SST

49 S120 440 Holder, main shaft (Turbo, Non-Turbo A/T)		49 0259 440 Holder, main shaft (Non-Turbo M/T)	
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REMOVAL, INSPECTION, AND INSTALLATION

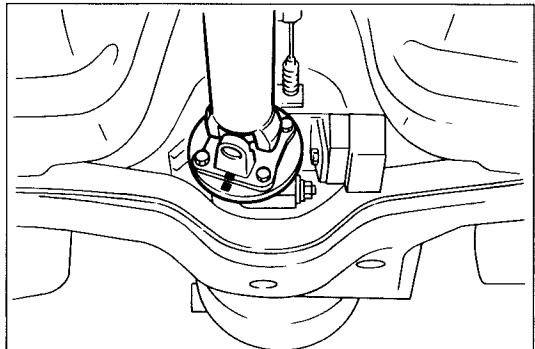
Remove in the order shown in the figure, referring to **Removal Note**.
 Inspect all parts and repair or replace as necessary.
 Install in the reverse order of removal, referring to **Installation Note**.



N-m (m-kg, ft-lb)

97UOLX-005

- | | | |
|-------------------|-------------------|------------------------------|
| 1. Exhaust pipe | 4. Lock washer | 7. Propeller shaft |
| 2. Heat insulator | 5. Bolt | Removal page L- 3 |
| 3. Nut | 6. Balance washer | Inspection page L- 4 |
| | | Installation page L- 4 |

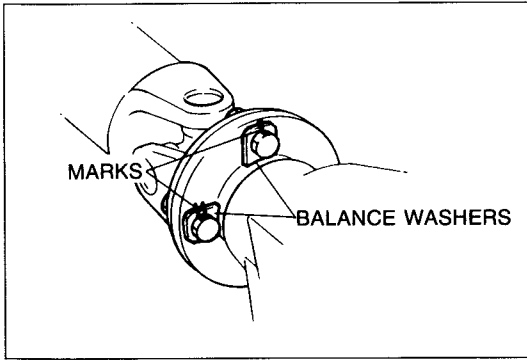


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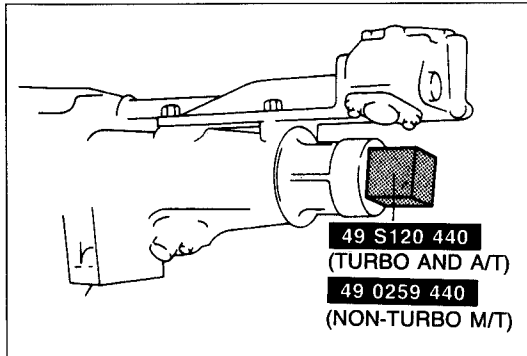
Removal Note
Propeller shaft

1. Before removing the propeller shaft, mark the flanges for correct reassembly.

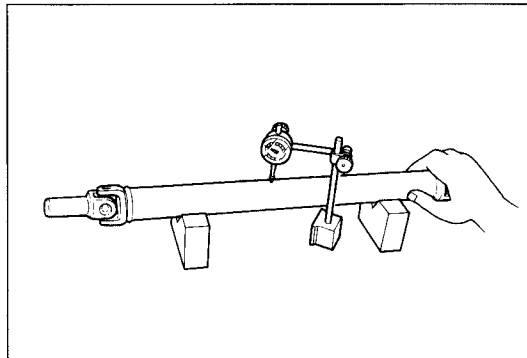
L PROPELLER SHAFT



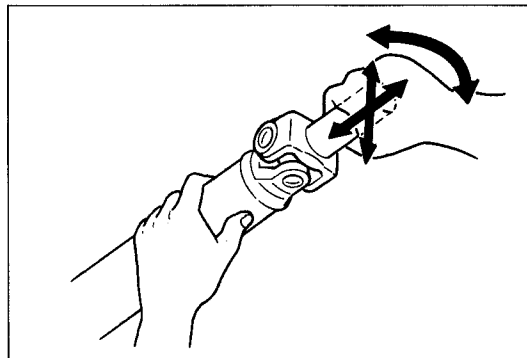
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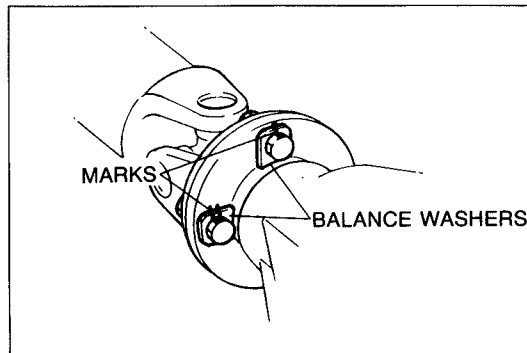
97U0LX-013



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97U0LX-008



97U0LX-009

2. Mark the balance washers for correct reassembly.

3. When the propeller shaft is removed from the extension housing, immediately install the **SST** to prevent oil leakage.

INSPECTION

Propeller shaft

1. Measure the propeller shaft runout with a dial indicator. Replace the propeller shaft if runout is excessive.

Maximum runout: 0.4mm (0.016 in)

2. Move the universal joints in the direction shown and check for universal joint play.

If there is play, replace the propeller shaft.

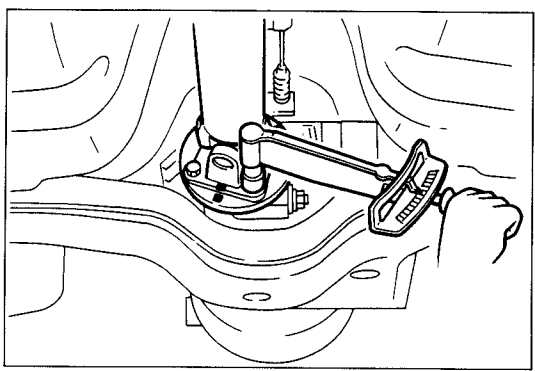
3. Check operation of the universal joint.

If the universal joint has excessive resistance, replace the propeller shaft.

Installation Note

Propeller shaft

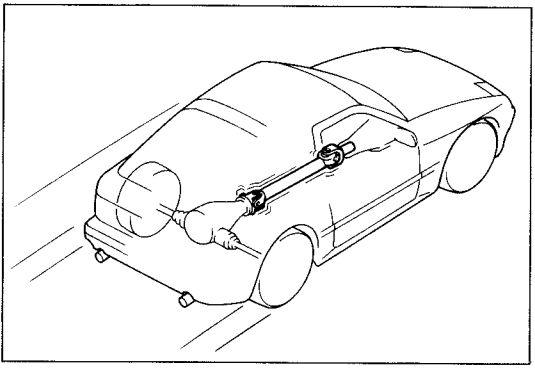
1. Align the marks, and install the balance washers.



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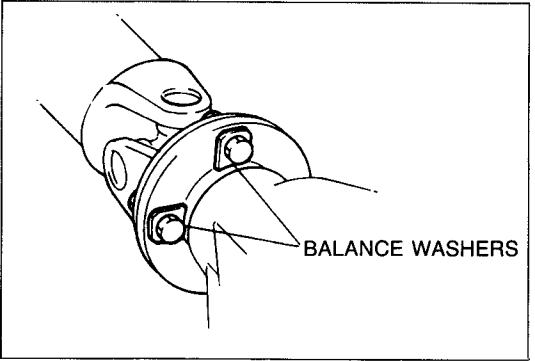
2. Align the marks, and install the propeller shaft.

Tightening torque:
49—59 N·m (5.0—6.0 m·kg, 36—43 ft·lb)



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3. Check that there is no abnormal noise or vibration when driving the vehicle.



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4. If noise or vibration occurs from the propeller shaft, install or change balance washers on the flange. (Install the washers **90°** to each other if more than one is used.)

Washer weight g (oz)

2.2 (0.08)	3.4 (0.12)	4.5 (0.16)
5.6 (0.20)		