

# STEERING COLUMN

## 1991 Mazda Miata

1991 STEERING  
Mazda - Steering Columns

B2200, B2600i, Miata, MPV, MX-6, Protege, RX7, 323, 626, 929

### DESCRIPTION

The steering column consists of solid steering shaft with a lower joint assembly. Miata and RX7 convertible models are equipped with Air Bag Restraint System consisting of an air bag module and clockspring connector assembly located in the steering column.

**WARNING:** Wait about 10 minutes after disabling air bag system before servicing. Air bag system voltage is maintained for about 10 minutes after system is disabled. Failure to wait 10 minutes before servicing system may cause accidental air bag deployment and possible personal injury.

### REMOVAL & INSTALLATION

#### STEERING WHEEL & HORN PAD

**CAUTION:** DO NOT strike steering shaft with a hammer as it may collapse.

Removal & Installation (B2200, B2600i, MPV & 929)

Unsnap horn pad cover. Remove steering wheel lock nut. Use a puller to remove steering wheel. To install, reverse removal procedure.

**WARNING:** Before servicing Miata and RX7 convertible models, disconnect and shield battery ground. Use caution when working around steering column as air bag could deploy.

**WARNING:** Wait about 10 minutes after disabling air bag system before servicing. Air bag system voltage is maintained for about 10 minutes after system is disabled. Failure to wait 10 minutes before servicing system may cause accidental air bag deployment and possible personal injury.

Removal & Installation (Miata & RX7)

1) On Miata and RX7 convertible models, remove air bag module. See AIR BAG RESTRAINT SYSTEM article in the ACCESSORIES/SAFETY EQUIPMENT section. For all models, remove horn cap (if equipped).

2) Remove steering wheel nut. Remove steering wheel with steering wheel puller. To install, reverse removal procedure. Tighten steering wheel nut and air bag nuts to specification. See TORQUE SPECIFICATIONS TABLE at end of article.

Removal & Installation (MX-6 & 626)

Pry ornament cap from horn pad with wide-blade screwdriver. Remove steering wheel nut. Use a puller to remove steering wheel. To install, reverse removal procedure.

Removal & Installation (Protege & 323)

Remove 2 horn pad screws from behind steering wheel. Remove horn pad. Remove steering wheel nut. Use a puller to remove steering wheel. To install, reverse removal procedure.

## COMBINATION SWITCH

Removal (Miata & RX7 Convertible)

See STEERING WHEEL & HORN PAD under REMOVAL & INSTALLATION.

Remove steering wheel. Remove column covers. Remove screws and remove combination switch with clockspring connector assembly.

Installation

1) Install combination switch and clockspring assembly.

Before installing steering wheel, center clockspring. To center clockspring, set front wheels straight ahead. Turn clockspring connector clockwise until it stops. DO NOT force it.

2) Return connector 2 3/4 turns (counterclockwise). Rotate clockspring connector further (if necessary) to align marks on connector and outer housing. See Fig. 1.

3) Install steering wheel. Tighten steering wheel nut to specification. See TORQUE SPECIFICATIONS TABLE at end of article. Install air bag module. See AIR BAG article in the ACCESSORIES/SAFETY EQUIPMENT section.

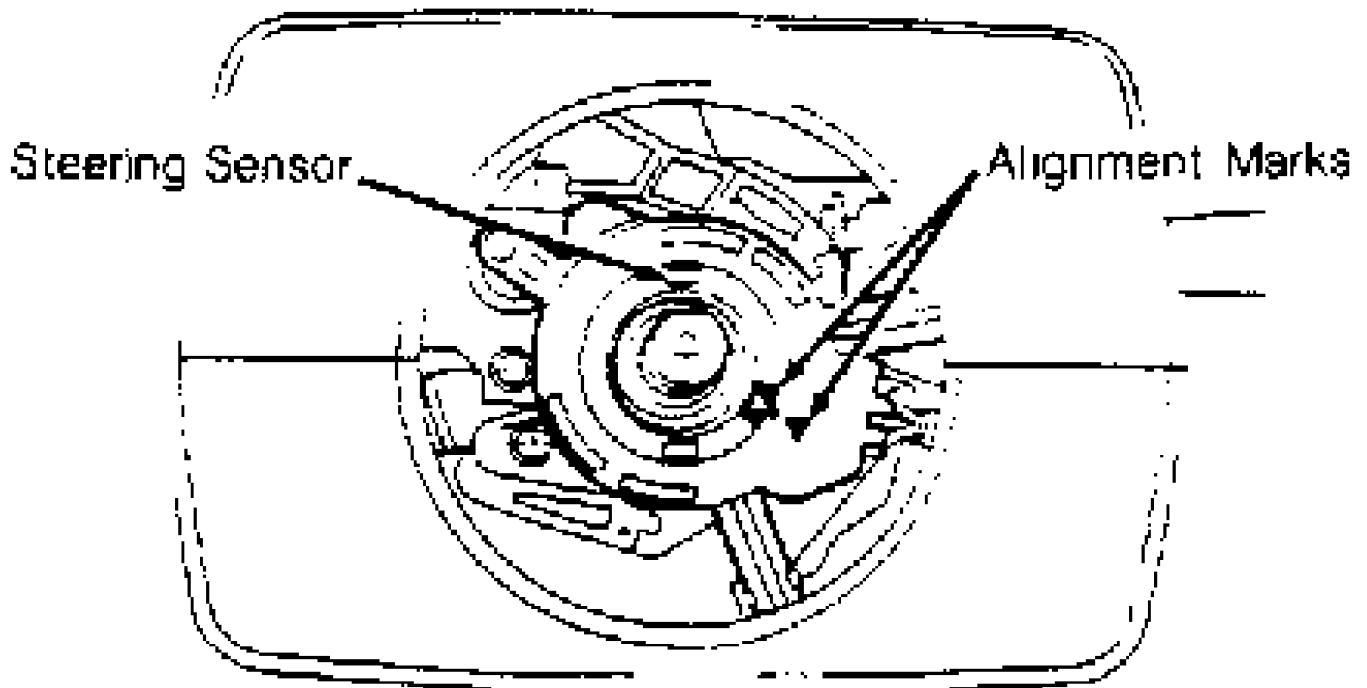


Fig. 1: Aligning Clockspring Connector Alignment Marks  
Courtesy of Mazda Motors Corp.

Removal & Installation (All Others)

Remove steering wheel. See STEERING WHEEL & HORN PAD under REMOVAL & INSTALLATION. Remove steering column covers. Disconnect combination switch connectors. Remove combination switch. To install, reverse removal procedure.

## IGNITION SWITCH & STEERING LOCK

Removal & Installation (All Models)

1) Remove steering wheel and combination switch. See STEERING WHEEL & HORN PAD and COMBINATION SWITCH.

2) Remove ignition switch connectors. Remove ignition switch-to-steering lock screw. Remove ignition switch.

3) With a hammer and chisel, make a groove on steering lock

assembly shear screws. Remove 2 shear screws with screwdriver. Remove ignition switch/steering lock assembly. To install, reverse removal procedure. Tighten NEW shear screws until head breaks off.

## STEERING COLUMN

**CAUTION:** Excessive pressure or impact to mainshaft during service may cause column to collapse.

Removal & Installation (B2200, B2600i, Miata, Protege, RX7, 323 & 929)

1) Remove steering wheel and combination switch. See STEERING WHEEL & HORN PAD and COMBINATION SWITCH under REMOVAL & INSTALLATION. See Figs. 2-8. Remove steering lock assembly. See IGNITION SWITCH & STEERING LOCK under REMOVAL & INSTALLATION.

2) Remove lower panel and air duct (if necessary). Remove steering column-to-intermediate shaft "U" joint bolt. Remove steering column-to-firewall nuts. Remove lower joint dust cover (if equipped). Remove steering column upper bracket bolts. Remove steering column.

3) To install, reverse removal procedure. Tighten bolts to specification. See TORQUE SPECIFICATIONS TABLE at end of article.

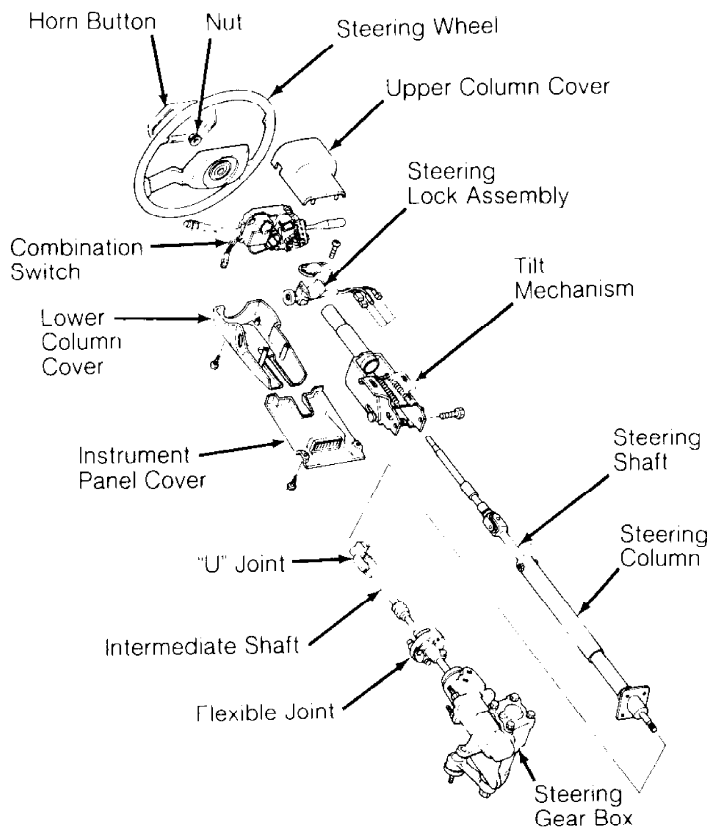


Fig. 2: Exploded View of Tilt Steering Column (B2200 & B2600i)  
Courtesy of Mazda Motors Corp.

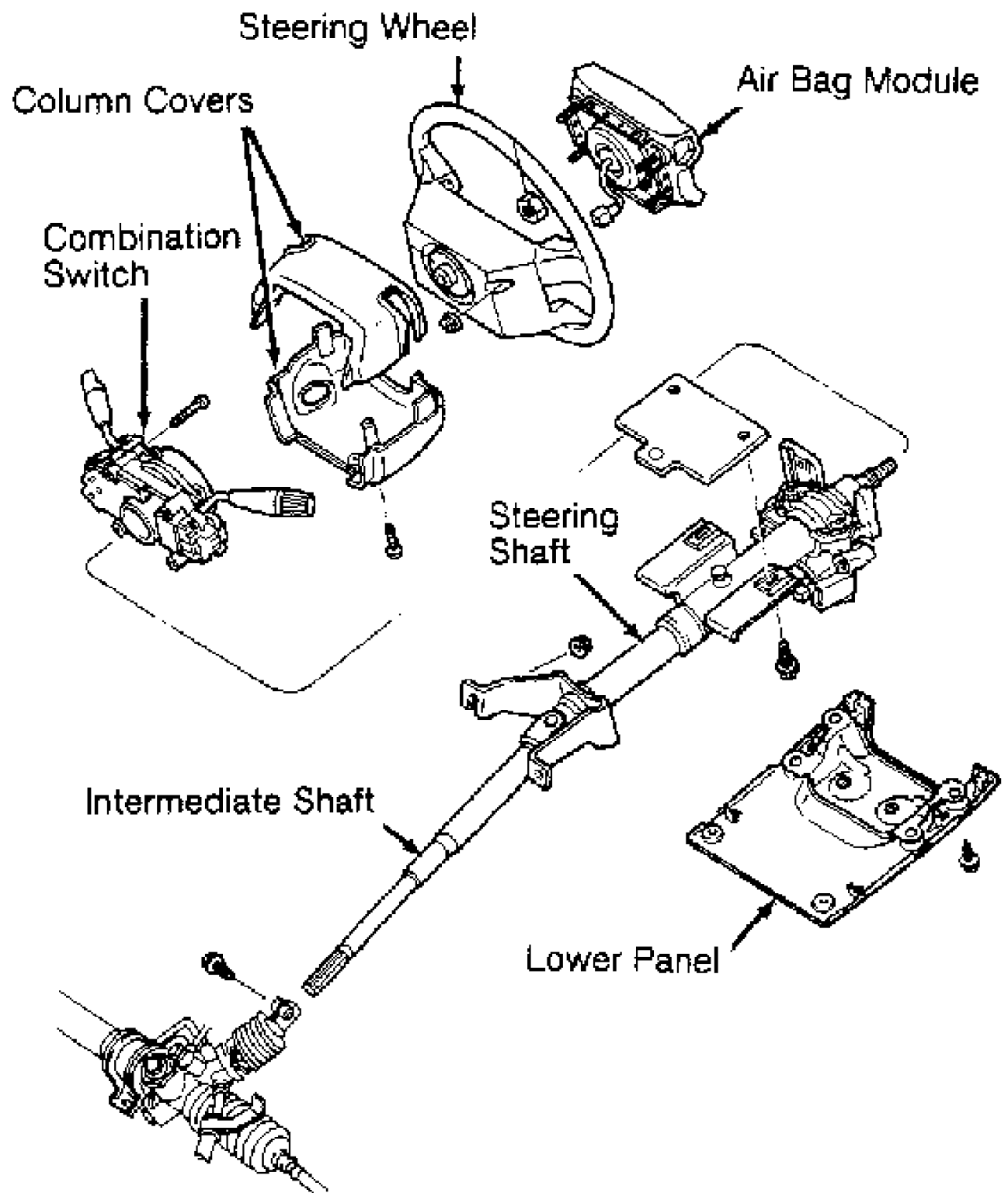


Fig. 3: Exploded View of Steering Column (Miata)  
Courtesy of Mazda Motors Corp.

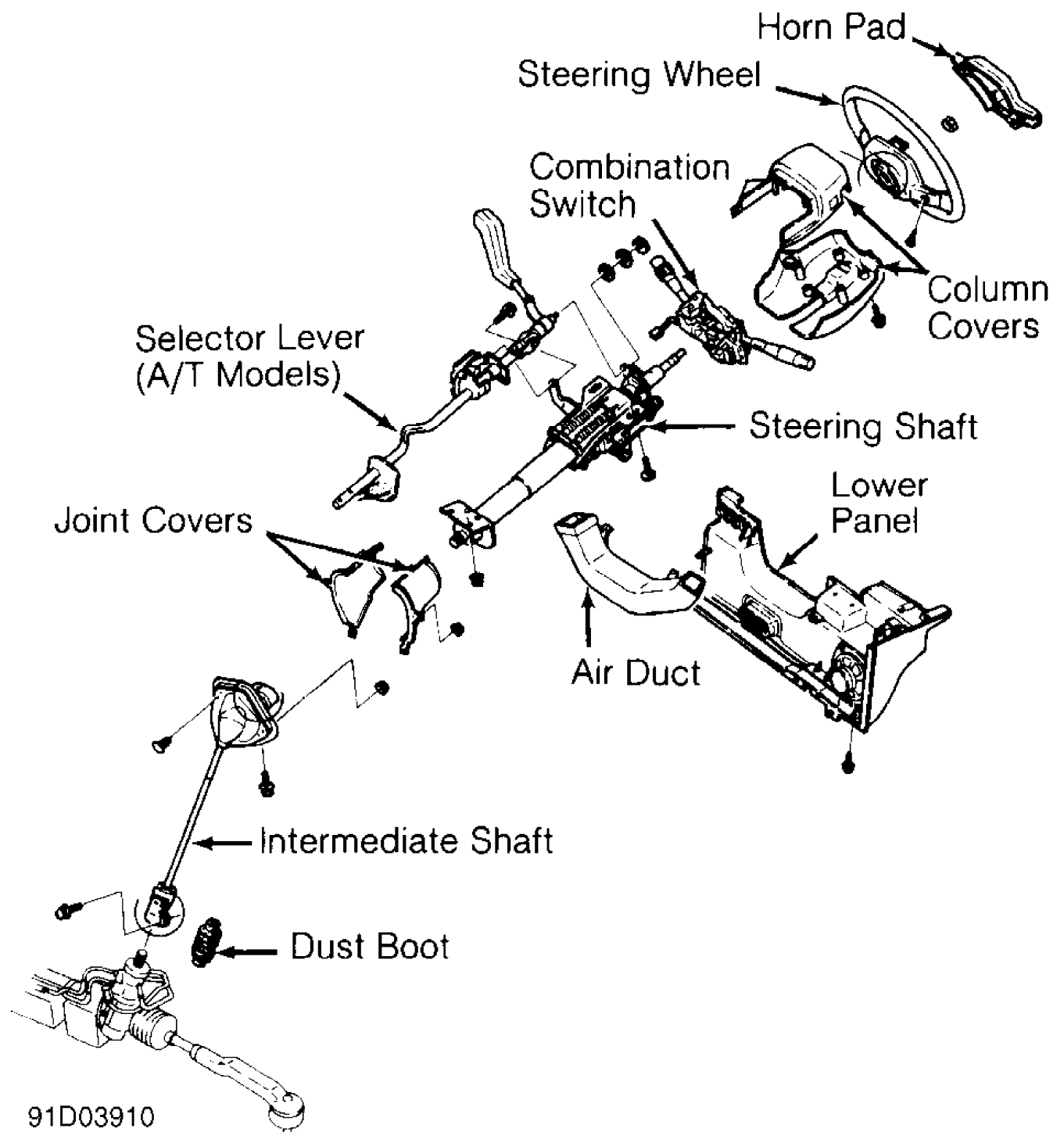


Fig. 4: Exploded View of Steering Column (MPV)  
 Courtesy of Mazda Motors Corp.

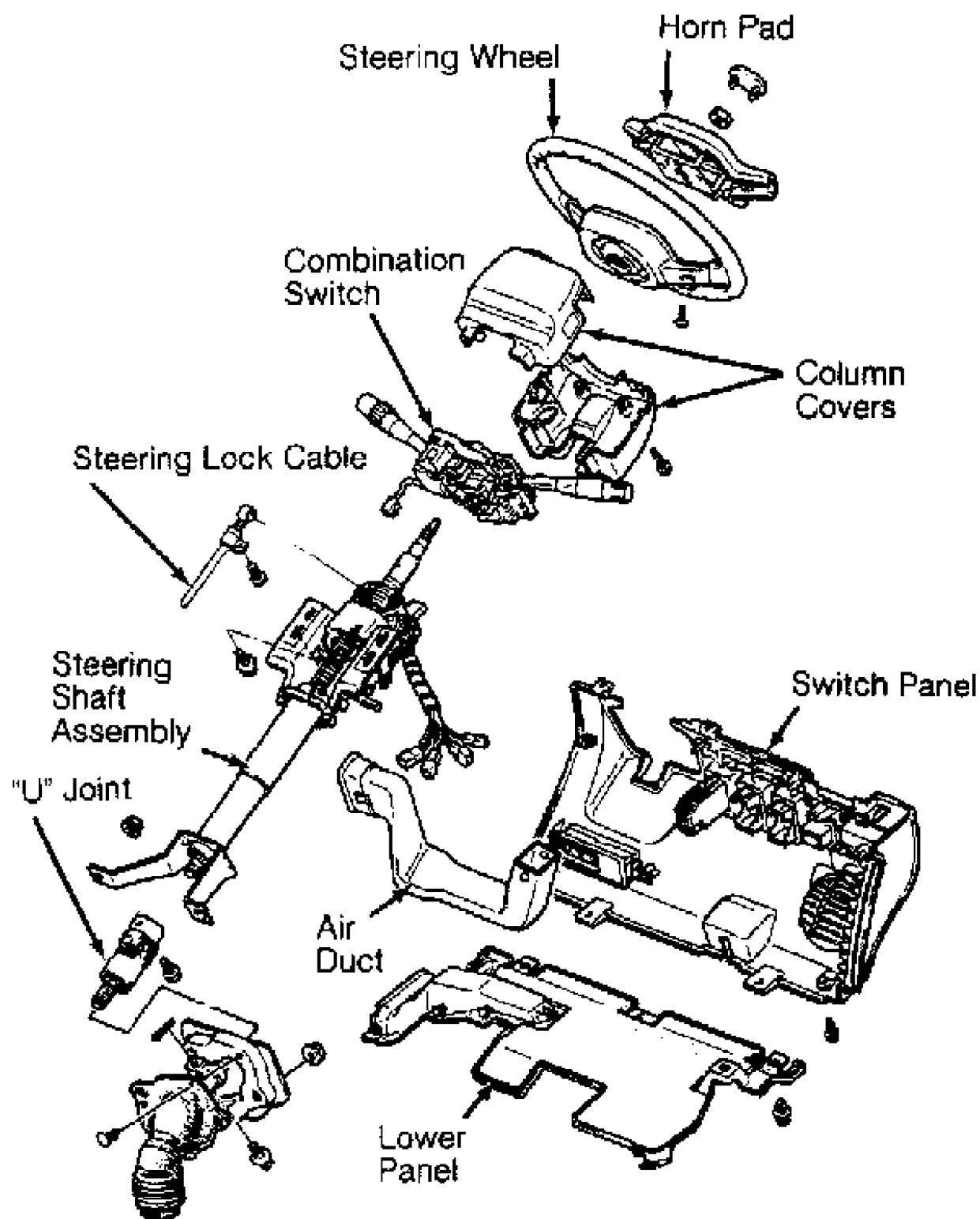
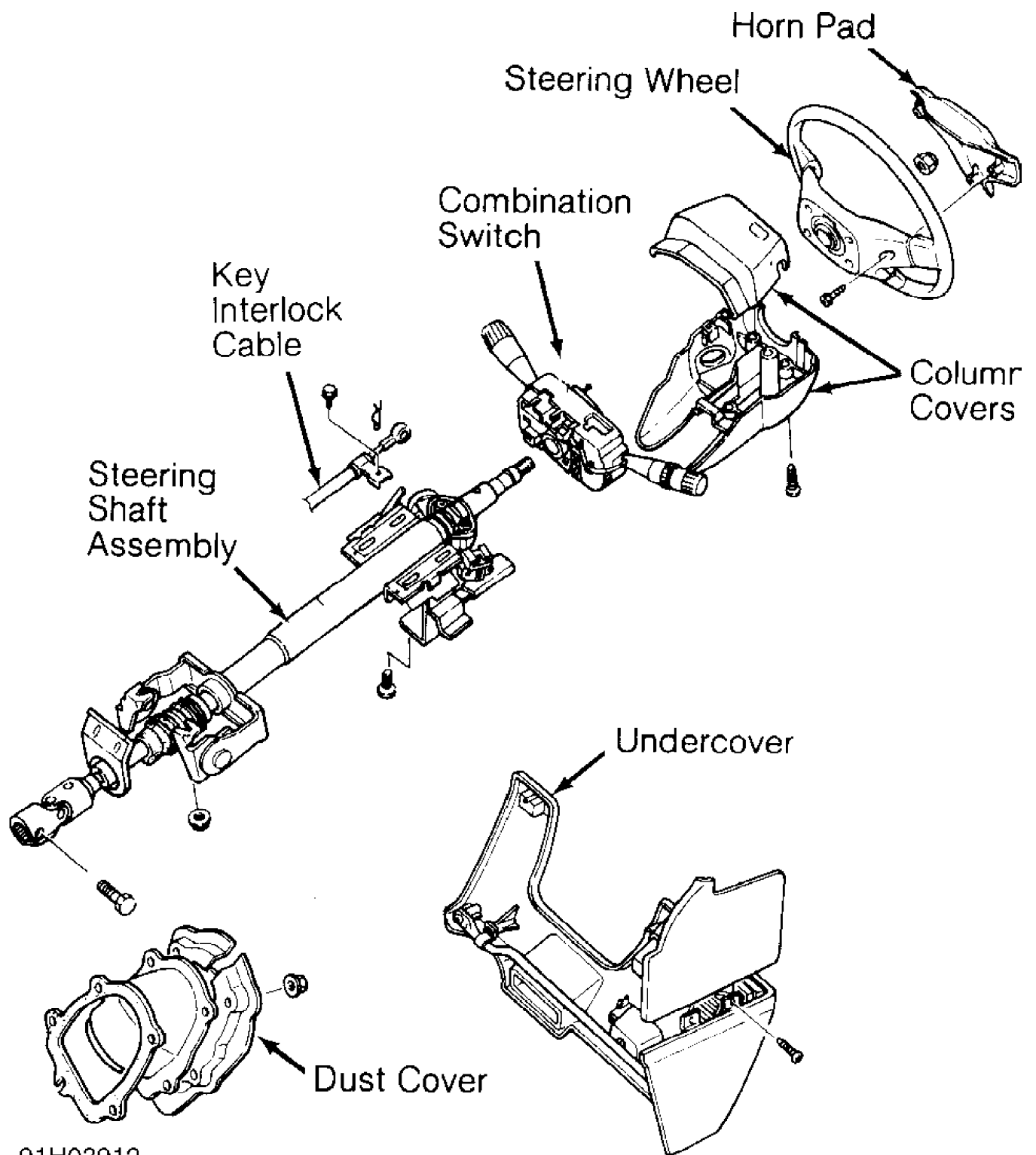


Fig. 5: Exploded View of Steering Column (MX-6 & 626)  
Courtesy of Mazda Motors Corp.



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Fig. 6: Exploded View of Steering Column (Protege & 323)  
Courtesy of Mazda Motors Corp.

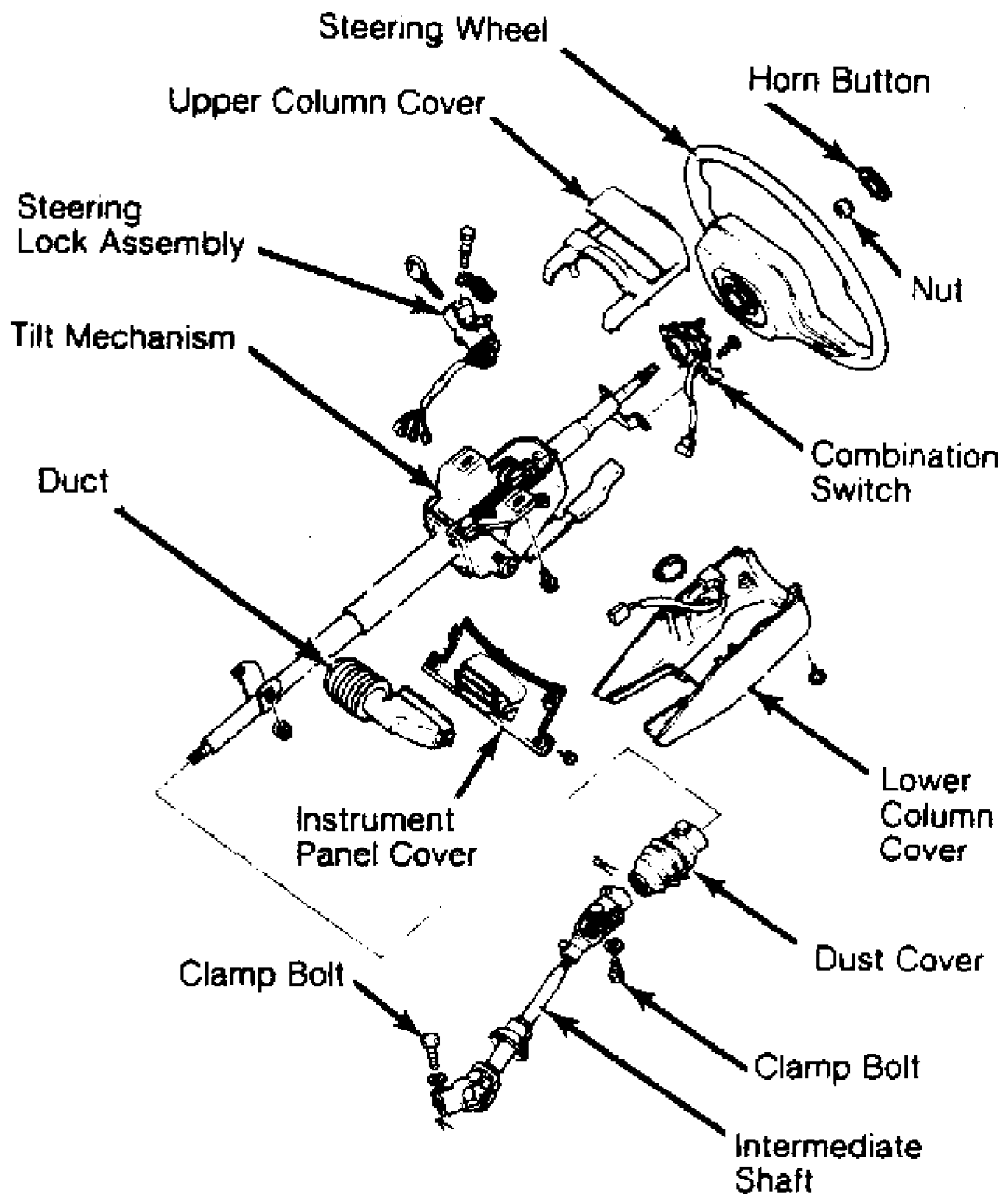


Fig. 7: Exploded View of Steering Column (RX7)  
Courtesy of Mazda Motors Corp.



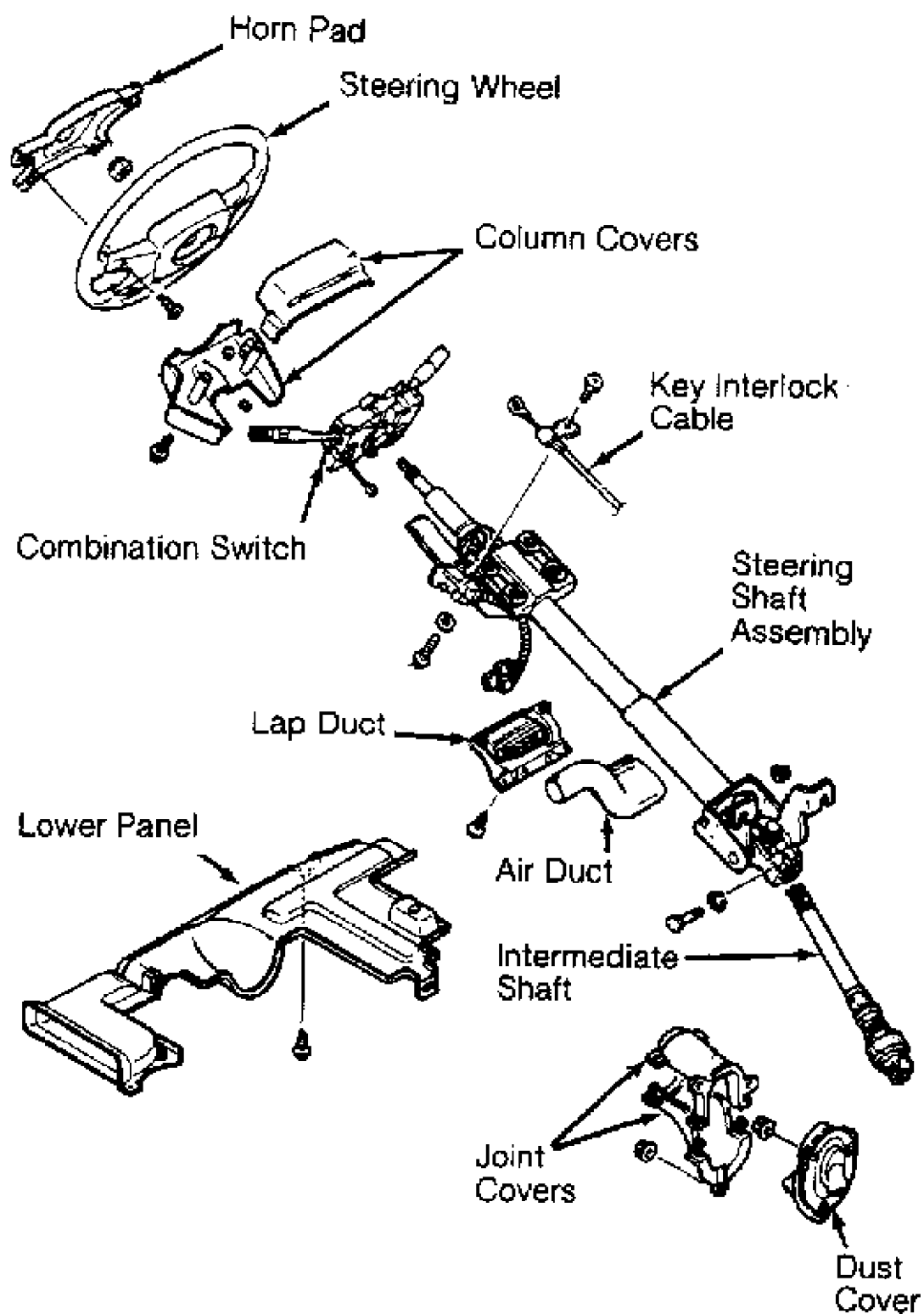


Fig. 8: Exploded View of Steering Column (929)  
 Courtesy of Mazda Motors Corp.

Removal & Installation (MPV, MX-6 & 626)

1) Remove steering wheel and combination switch. See STEERING

WHEEL & HORN PAD and COMBINATION SWITCH under REMOVAL & INSTALLATION. Remove steering lock assembly. See IGNITION SWITCH & STEERING LOCK under REMOVAL & INSTALLATION.

2) Remove lower dash panel and A/C duct. Remove lower column cover and steering shaft-to-intermediate shaft "U" joint bolt. On MPV with A/T, remove shift lever mechanism.

3) On all models, separate steering shaft from intermediate shaft. Remove steering column upper bracket bolts. Remove steering column. To install, reverse removal procedure. Tighten bolts to specification. See TORQUE SPECIFICATIONS TABLE at end of article.

## OVERHAUL

### STEERING COLUMN

NOTE: Steering shaft dimension for 929 is not available from manufacturer.

#### Disassembly

Remove wiring and switches. Clamp column in vise. Turn steering shaft to remove. With a hammer and chisel, make a groove in steering lock assembly shear screws. Remove shear screws. Remove steering lock.

#### Inspection

Check all components for damage or wear. Check steering shaft for bends, damage or sheared plastic pins. Check bearings for excessive play. Replace parts as necessary. Measure length of steering shaft. See Fig. 9.

#### Reassembly

To reassemble, reverse disassembly procedure. Grease steering shaft, bushings and bearings. Always use NEW shear screws.

#### STEERING SHAFT DIMENSIONS TABLE (1)

Application	Length - In. (mm)
B2200 & B2600i .....	32.69-32.99 (830.0-835.6)
Miata .....	22.09-23.02 (561.1-584.7)
MPV .....	24.05-24.17 (611.0-614.0)
MX-6 & 626 .....	24.00-24.05 (609.6-611.1)
Protege & 323 .....	23.86-23.94 (606.0-608.0)
RX7 .....	32.05-32.17 (814.0-817.0)
929 .....	(2)

(1) - See Fig. 9 for measuring points.

(2) - Information is not available.

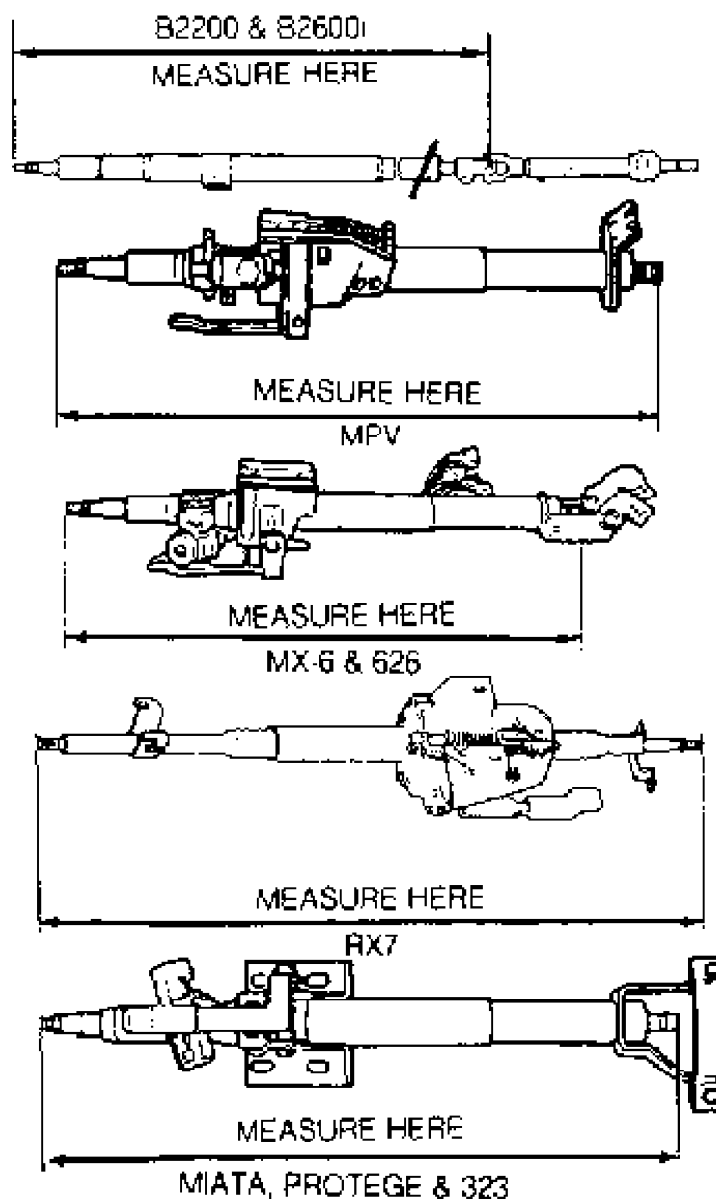


Fig. 9: Measuring Steering Shaft Dimensions (Except 929)  
 Courtesy of Mazda Motors Corp.

## TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application	Ft. Lbs. (N.m)
Column Bracket Bolts/Nuts .....	12-17 (16-23)
Steering Shaft "U" Joint Bolts .....	13-20 (18-27)
Steering Wheel Nut .....	29-36 (39-49)
	INCH Lbs. (N.m)
Tilt Lever Adjusting Nut .....	16-25 (1.8-2.8)