

This file is available for free download at <http://www.iluvmyrx7.com>

This file is fully text-searchable – select Edit and Find and type in what you’re looking for. This file is intended more for online viewing than printing out so some graphics may not print 100% legibly, you can zoom in on them if you need to.



www.iluvmyrx7.com

STEERING COLUMN

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:20PM

ARTICLE BEGINNING

1983 STEERING
Mazda - Steering Columns

GLC Wagon, RX7

DESCRIPTION

Steering columns used on these models incorporate a collapsible steering shaft.

REMOVAL & INSTALLATION

STEERING COLUMN

Removal

1) Disconnect battery ground cable. Remove horn cap. Remove steering wheel with steering wheel puller. See Mazda in Steering Wheel & Column Switches article in this section. Remove steering column covers. Disconnect combination switch coupler and remove switch.

NOTE: Do not hammer or exert extreme pressure on steering column, as damage to collapsible section may result.

2) Remove lock assembly. Remove steering column mounting bolts. Remove steering column jacket.

3) Disconnect center link from pitman arm using puller (49-0118-850C). Remove pitman arm from sector shaft using puller (49-0223-695E).

4) Remove steering gear housing attaching bolts. Remove steering gear housing assembly through engine compartment. See Fig. 1.

Inspection

Check all components for damage or wear. Check steering shaft for bend or damage.

Installation

To install, reverse removal procedures. Make sure there is clearance between column cover and steering wheel.

STEERING COLUMN

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:20PM

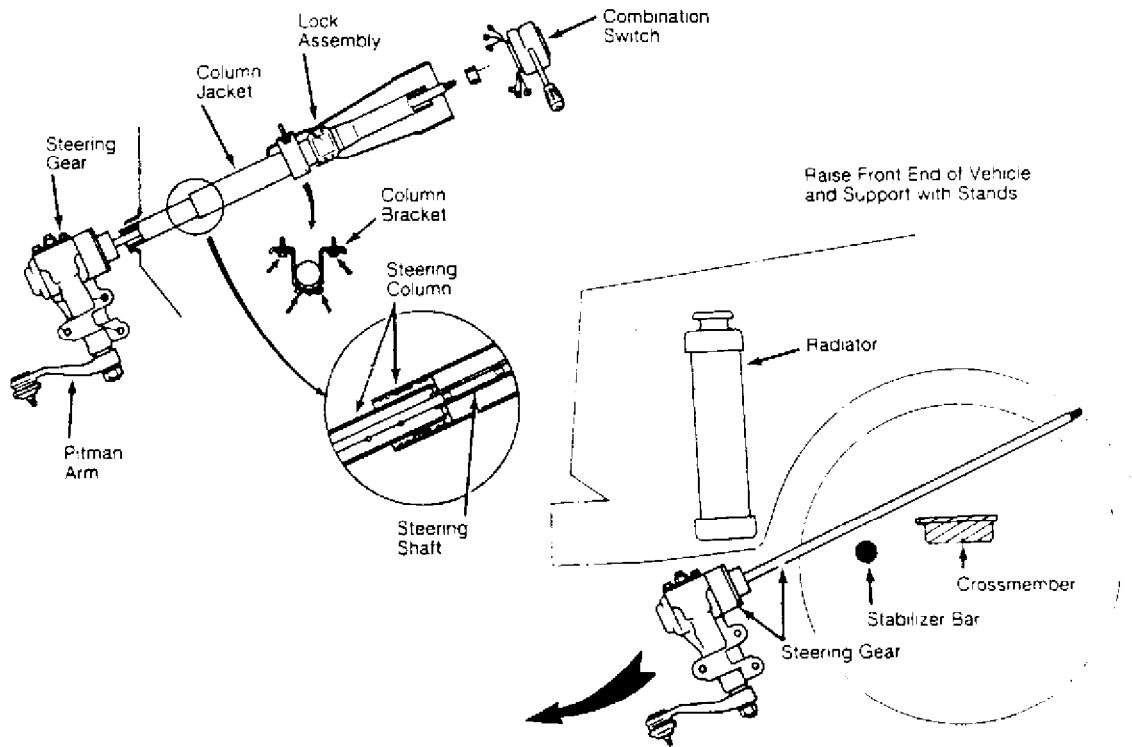


Fig. 1: GLC Wagon Steering Column
RX7 steering column is similar.

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application	Ft. Lbs. (N.m)
Column Bracket Bolts	12-17 (16-23)
Steering Wheel Nut	29-36 (40-50)
Steering Gear Housing to Frame	32-40 (44-55)
Pitman Arm to Sector Shaft	58-87 (80-120)
Pitman Arm to Center Link	22-33 (30-45)

END OF ARTICLE

STEERING COLUMN SWITCHES

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:20PM

ARTICLE BEGINNING

1983 STEERING

Mazda - Steering Wheel & Column Switches

626, GLC (FWD Sedan & RWD Wagon), Pickup, RX7

REMOVAL & INSTALLATION

STEERING WHEEL & COMBINATION SWITCH

Removal

1) Disconnect battery ground cable. Pull off horn cap. Place front wheels in straight-ahead position. Index mark column shaft and steering wheel.

2) Remove steering column shrouding. Disconnect electrical connectors. To disconnect electrical connections on RX7, remove air duct at base of steering column.

3) On all models, remove steering shaft stop ring, cancel cam and spring. Remove retaining screws and combination switch assembly.

NOTE: Wiper switch can be removed with combination switch or separated from it.

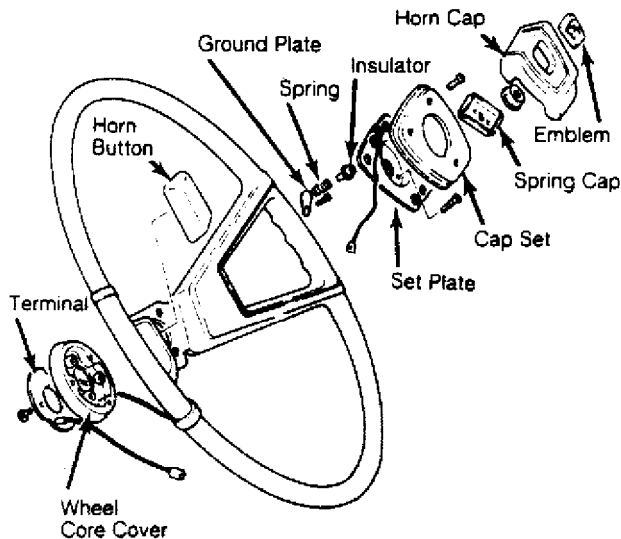


Fig. 1: Typical Mazda Steering Wheel Assembly

Installation

To install, reverse removal procedures.

IGNITION SWITCH

Removal

1) Remove steering wheel as previously outlined. Remove

STEERING COLUMN SWITCHES

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:20PM

column shrouding. Remove combination switch. Disconnect electrical connector.

2) Remove screw attaching switch contact housing to steering lock body and slide out contact housing. See Fig. 2.

Installation

To install, reverse removal procedure.

STEERING LOCK

Removal

Remove steering wheel, column shrouding and combination switch. File slot in bolt attaching steering lock body to column shaft (in order to remove bolt with screwdriver) and remove bolt. Remove steering lock.

Installation

To install, reverse removal procedure and tighten new shear bolts until heads break off.

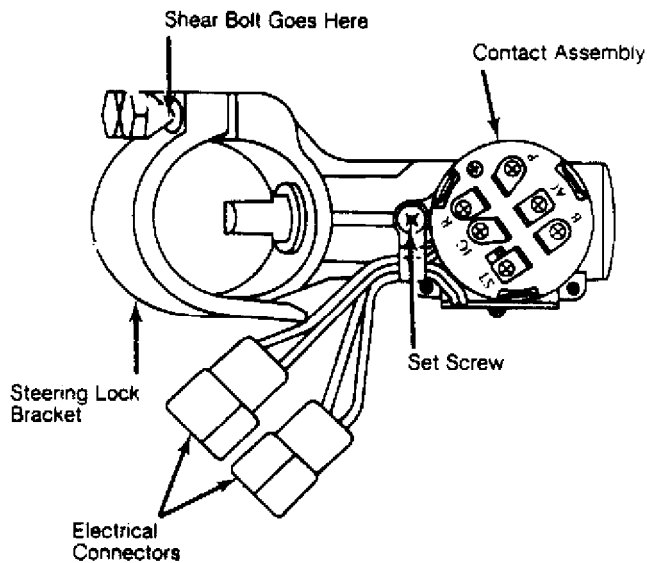


Fig. 2: Exploded View of Ignition Switch (Exc. Pickups)

END OF ARTICLE

STEERING GEAR - MANUAL

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:20PM

ARTICLE BEGINNING

1983 STEERING

Mazda - Recirculating Ball

B2000 & B2200 Pickups, GLC Wagon, RX7

DESCRIPTION

Steering gear is a recirculating ball type with a variable ratio, depending on turning angle of sector shaft. The worm gear and steering shaft are an integral (non-separable) unit.

Steering linkage is basically the same for all models, having a non-adjustable center link, 2 adjustable tie rods, an idler arm assembly, and pitman arm.

ADJUSTMENT

NOTE: Adjustments are performed during assembly portion of overhaul. See OVERHAUL procedure in this article.

REMOVAL & INSTALLATION

STEERING GEAR

Removal (B2000 & B2200 Pickups)

1) Remove steering wheel and column, See STEERING COLUMN SWITCHES article. Remove air cleaner and brake master cylinder. On column shift models remove the lower bracket from the selection rod and shift rod.

2) Raise front end and disconnect center link from pitman arm using appropriate puller. Remove bolts and nuts holding steering gear to frame and remove steering gear.

STEERING GEAR - MANUAL

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:20PM

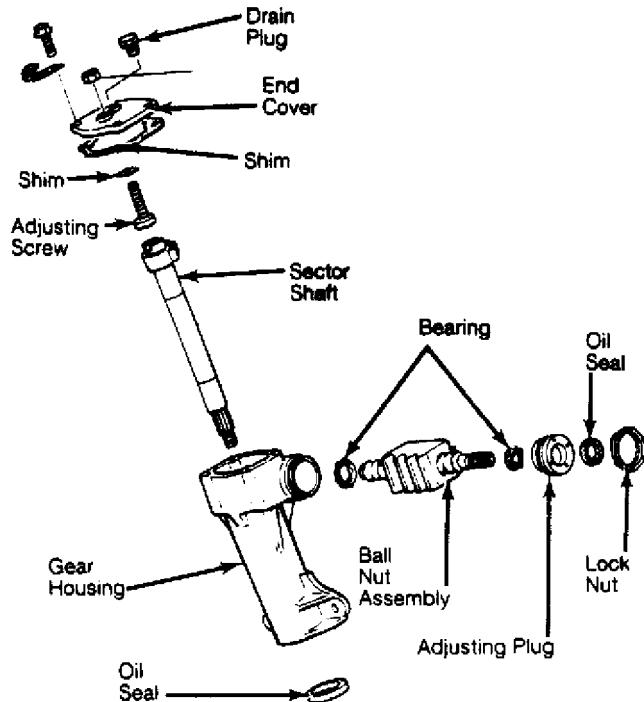


Fig. 1: Exploded View of Steering Gear Assembly (Pickups)

Removal (GLC Wagon)

1) Disconnect negative battery cable. Remove steering wheel and switches. See STEERING COLUMN SWITCHES article. Remove bolts holding column to dash. Loosen dust cover screws, any other column bolts and pull column jacket off shaft.

2) With vehicle raised, disconnect center link from pitman arm with puller. Drop exhaust system. Remove steering gear mounting bolts and pull gear forward after raising vehicle.

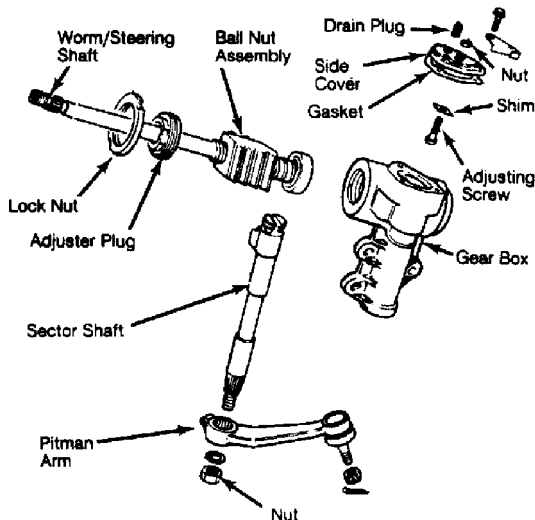


Fig. 2: Exploded View of Steering Gear Assembly (GLC Wagon and RX7)

Removal (RX7)

STEERING GEAR - MANUAL

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:20PM

1) Disconnect negative battery cable. Remove steering wheel and switches. See STEERING COLUMN SWITCHES. Remove hood, steering column covers and air duct.

Disconnect couplers of combination switch and remove the switch assembly.

2) Raise and support front of vehicle. Disconnect pitman arm and center link. Remove nuts and bolts retaining steering gear housing to body. Remove steering gear assembly from vehicle through engine compartment.

Installation (All Models)

To install, reverse removal procedure, ensuring any shims which were removed are installed in original positions.

NOTE: To avoid damage to steering column components, do not apply bending or striking forces to steering shaft or column.

STEERING LINKAGE

Steering linkage may be removed as an assembly or as individual components. Whenever tie rod setting is disturbed, toe-in must be reset. See WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES article.

OVERHAUL

DISASSEMBLY

Steering Gear

1) On all models, drain gear oil from housing. Remove pitman arm from sector shaft, if not removed previously. Remove sector shaft adjusting screw lock nut. Remove side cover attaching bolts and remove side cover by turning adjusting screw clockwise.

2) Remove sector shaft adjusting screw and shim from sector shaft. Remove sector shaft carefully to avoid damage to oil seal.

3) On B2000 and B2200 models, remove lock ring, adjusting plug with oil seal, outer bearing, worm ball nut assembly and inner bearing.

4) On GLC Wagon and RX7 models, remove ball nut/worm gear adjusting plug lock nut. Then remove adjusting plug and withdraw ball nut, worm gear and steering shaft assembly from gear housing.

INSPECTION

1) Check the action of ball nut assembly on the worm gear. If movement is not smooth for full length of travel, replace worm and ball nut assembly. Worm and ball nut are not serviced separately.

2) Check worm bearings and cups, sector shaft gear surface, and oil seal. Check clearance between sector shaft and housing bore. Clearance should be .004" (.1 mm) or less. If any component is defective, replace it.

STEERING GEAR - MANUAL

Article Text (p. 4)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:20PM

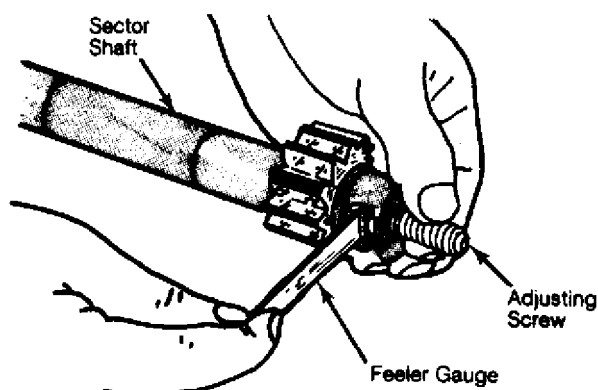


Fig. 3: Checking Sector Shaft Adjusting Screw End Clearance

REASSEMBLY & ADJUSTMENT

Steering Gear

Replace oil seals if necessary. Insert worm gear, ball nut assembly into gear housing. Check preload of worm ball nut.

Worm Bearing Preload

1) Check preload (without sector shaft) with a spring scale and 3.9" (10 cm) attachment, preload reading should be .44-1.10 lbs. (.2-.5 kg).

2) Loosen lock nut and tighten or loosen adjusting screw if preload is not to specifications. Tighten lock nut securely.

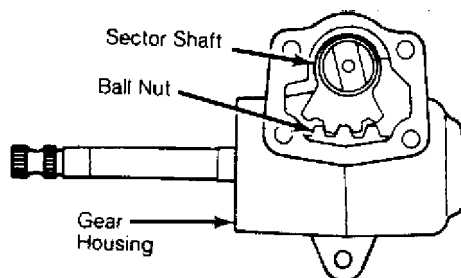


Fig. 4: Aligning Sector Shaft to Ball Nut

Sector Shaft End Play

1) Check clearance between sector shaft adjusting screw and sector shaft. Insert shim so that final clearance will be .004" (.1 mm) or less. Insert sector shaft with ball nut. See Fig. 4.

2) Insert adjusting screw and shim in sector shaft. Place side cover and gasket over adjusting screw and turn adjusting screw until cover is in place, then install cover bolts.

Steering Gear Backlash

1) Install pitman arm to sector shaft. Install and tighten retaining nut. Measure pitman arm backlash. If necessary, turn sector adjusting screw until zero backlash is obtained.

2) Tighten adjusting screw lock nut, taking care not to disturb backlash adjustment.

3) Check worm shaft rotating torque. Attach an INCH lb.

STEERING GEAR - MANUAL

Article Text (p. 5)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:20PM

torque wrench to steering shaft upper end. If not to specifications, adjust as necessary. See Final Worm Bearing Preload table. Fill gear housing with lubricant (API GL-4 SAE 90).

FINAL WORM BEARING PRELOAD TABLE

Application	INCH Lbs. (N.m)
B2000 & B2200	5.2-7.8 (.57-.86)
RX7	1.3-2.7 (.14-.30)
GLC Wagon	5.2-10.4 (.6-1.2)

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application	Ft. Lbs. (N.m)
Pitman Arm-to-Sector Shaft	
GLC Wagon, B2000 & B2200	58-87 (80-120)
RX7	108-130 (150-180)
Tie Rod Lock Nut	
B2000 & B2200	22-33 (30-45)
GLC Wagon & RX7	51-58 (70-80)

END OF ARTICLE

SUSPENSION - FRONT

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:20PM

ARTICLE BEGINNING

1983 SUSPENSION

Mazda - Suspension - Front

RX7

DESCRIPTION

Mazda uses independent front suspension with MacPherson type struts. Strut assemblies mount between lower control arms and upper fender panels. Strut assemblies consist of inner shock absorbers and coil springs surrounding outside of strut tube housing.

The steering knuckle is connected to lower control arm and strut. Lower control arms pivot at crossmember and are connected by ball joints to steering knuckle. Some models are equipped with a stabilizer bar. Strut rods are installed to maintain alignment and stability.

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES in WHEEL ALIGNMENT section.

WHEEL BEARING ADJUSTMENT

1) Raise and support vehicle. Remove brake caliper and hang out of the way. Remove brake caliper adapter. Remove grease cap, cotter pin and nut lock. Tighten spindle nut to 18-22 ft. lbs. (24-30 N.m).

2) Turn hub a few times to seat bearings. Loosen nut. Install one wheel bolt and attach spring scale. Gradually tighten spindle nut until a preload reading of 1.0-1.4 lbs. (.45-.64 kg) is obtained.

BALL JOINT CHECKING

1) Disconnect strut assembly and tie rod end from steering knuckle arm. Check ball joint dust boot for cracks or other damage. Rotate ball joint stud several times to settle ball joint.

2) Attach spring scale to tie rod hole. Support knuckle with finger and measure torque required to turn ball joint. If scale reading is less than 1 lbs. (0.5 kg), replace ball joint and lower control arm as an assembly.

REMOVAL & INSTALLATION

WHEEL BEARING

SUSPENSION - FRONT

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:20PM

Removal

1) Raise and support vehicle. Remove wheel assembly. Remove brake caliper and hang out of the way. Remove brake caliper adapter. Remove grease cap, cotter pin, nut lock and spindle nut.

2) Remove washer and outer wheel bearing. Remove hub/rotor assembly. Remove grease seal and inner wheel bearing. Remove wheel bearing outer races, if required.

Installation

To install, reverse removal procedures. Adjust wheel bearings. See WHEEL BEARING ADJUSTMENT in this article.

LOWER CONTROL ARM

Removal

Raise and support vehicle. Remove wheel assembly. Remove bolts attaching steering knuckle arm to strut assembly. Disconnect tie rod end. Disconnect stabilizer bar. Disconnect strut rod on. Remove steering knuckle arm. Remove lower control arm pivot bolt and remove lower control arm.

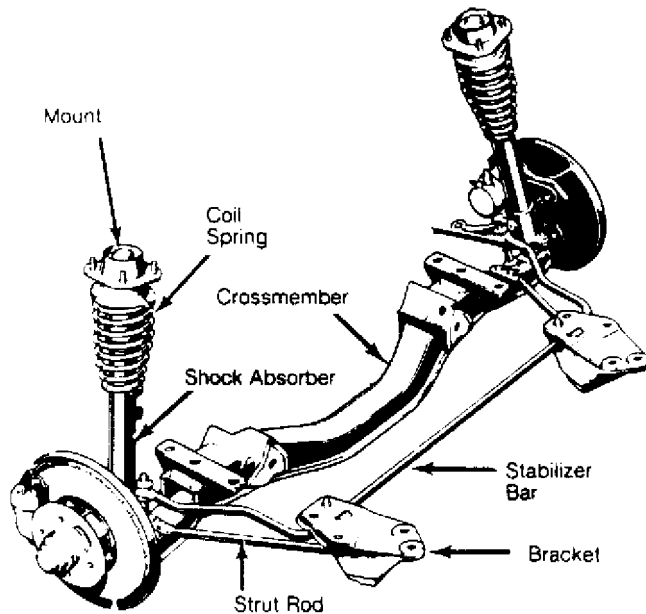


Fig. 1: Front Suspension

Installation

To install, reverse removal procedure. Tighten lower control arm pivot bolt to specified torque with vehicle resting on ground.

STRUT ASSEMBLY

Removal

NOTE: Note position of triangle on top of strut assembly before removing strut assembly on.

SUSPENSION - FRONT

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:20PM

1) Raise and support vehicle. Remove wheel assembly. Remove brake caliper and hang out of the way. Remove grease cap, cotter pin, nut lock and spindle nut. Remove washer and outer wheel bearing. Remove hub/rotor assembly.

2) Remove backing plate. Disconnect brake line from strut assembly. Remove bolts attaching steering knuckle arm to strut assembly. Remove nuts attaching strut assembly and remove strut.

Disassembly

1) Clamp strut in vise. Compress coil spring. Remove cap, lock nut and washer from top of piston rod. Remove strut assembly mount, thrust bearing and spring seat. Remove coil spring, dust boot and damper.

2) Remove cap nut and seal. Pry "O" ring from piston guide rod. Pull piston rod and pressure tube assembly out of strut tube. Remove strut from vise and drain fluid, if used.

NOTE: Do not remove piston rod, guide or base valve from pressure tube. Service as a complete assembly only.

Inspection

Check strut tube for cracks or damage. Check rubber parts for deterioration or damage. Inspect coil spring for signs of fatigue or damage. Replace parts as needed.

Reassembly

1) Clamp strut in vise. Insert pressure tube and piston rod assembly into strut tube. Fill strut tube with shock absorber fluid, if used. See STRUT RESERVOIR VOLUME table in this article.

2) Fit pilot (49 0259 590) over threads of piston rod. Apply grease to lip of oil seal and insert cap nut through pilot onto piston rod. Tighten cap nut and pull out piston rod. Seat piston and torque cap nut. Install coil spring and remaining hardware in reverse order of disassembly.

Installation

1) To install, reverse removal procedures. Place triangle in its original position. Adjust wheel bearings. See WHEEL BEARING ADJUSTMENT in this article. Measure the distance between level ground and headlights on.

2) The difference between headlights should not exceed 0.59" (15mm). If height is not within specifications, adjust the difference by inserting adjusting plates between mount and front suspension tower. Do not use more than two adjusting plates on one side.

STRUT RESERVOIR VOLUME TABLE

Application Ounces (cc)

RX7 7.61 (225)

Application Ounces (cc)

SUSPENSION - FRONT

Article Text (p. 4)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:20PM

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application	Ft. Lbs. (N.m)
Backing Plate-to-Steering Knuckle	25-33 (34-45)
Ball Joint-to-Steering Knuckle	43-51 (58-69)
Brake Caliper Adapter-to-Strut	25-33 (34-45)
Brake Caliper Bolts	33-40 (45-54)
Lower Control Arm-to-Frame	29-40 (39-54)
Stabilizer Bar Brackets	27-34 (37-46)
Strut Assembly Cap Nut	
w/Oil Filled Strut	36-43 (49-58)
w/Cartridge Type Damper	58-108 (79-146)
Strut Assembly-to-Body	17-22 (23-30)
Strut Assembly Lock Nut	47-59 (64-80)
Strut Assembly-to-Steering Knuckle	43-51 (58-69)
Strut Rod-to-Frame	80-108 (108-146)
Strut Rod-to-Lower Control Arm	40-50 (54-68)
Tie Rod-to-Knuckle	22-33 (30-45)

END OF ARTICLE

SUSPENSION - REAR

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:21PM

ARTICLE BEGINNING

1983 SUSPENSION
Mazda Rear Suspension

RX7

DESCRIPTION

The RX7 rear suspension consists of upper and lower control links, vertically mounted shock absorbers and coil springs. A 3-piece Watts linkage is used to control side-to-side movement. A stabilizer bar is installed in some models.

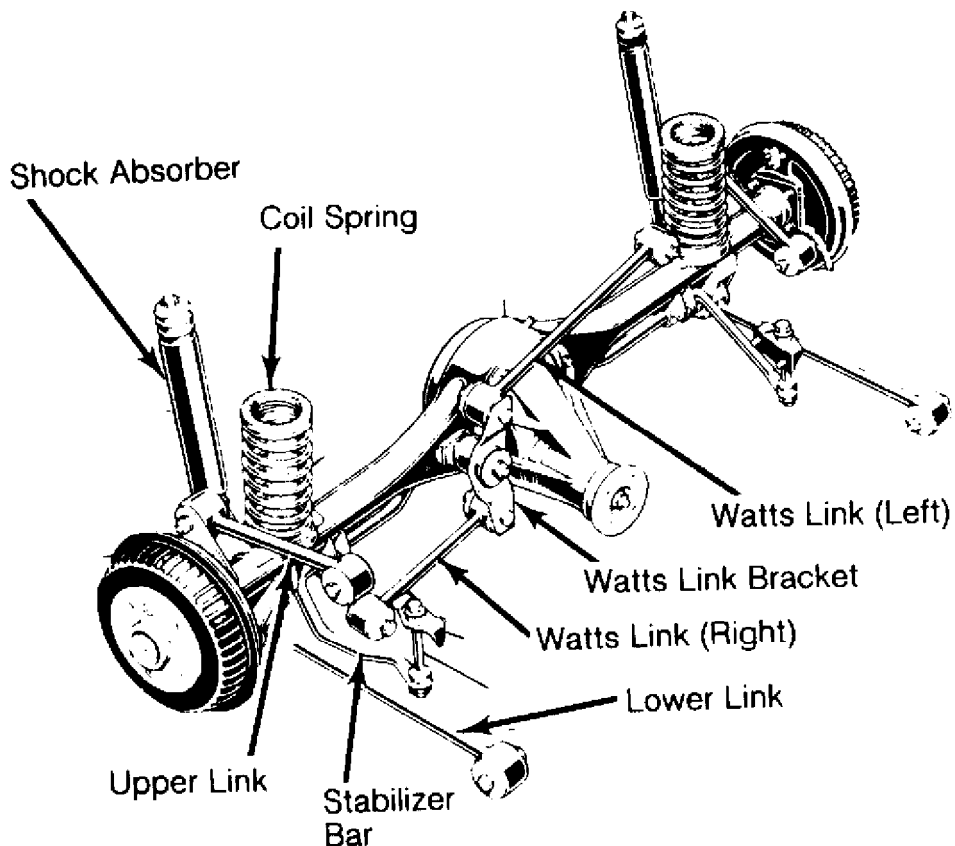


Fig. 1: RX7 Rear Suspension Assembly

REMOVAL & INSTALLATION

COIL SPRING

Removal (RX7)

Raise vehicle and support lower link brackets (front side). Remove wheel assemblies. Support rear axle housing. Disconnect shock absorber lower end. Disconnect upper and lower link pivot bolts at axle housing. Disconnect front end of stabilizer bar, if used.

SUSPENSION - REAR

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:21PM

Disconnect Watt links at axle housing. Slowly lower rear axle and remove coil springs.

Installation

To install, reverse removal procedures. Install coil spring with painted mark pointing toward rear of vehicle. Install left hand shock absorber lower end attaching bolt with head pointing toward center of vehicle. Tighten hardware to specified torque with vehicle resting on floor.

SHOCK ABSORBER

Removal (RX7)

Raise vehicle and support lower link bracket (front side). Remove wheel assembly. Remove side trim in luggage compartment and disconnect shock absorber upper end. Disconnect shock absorber lower end and remove shock absorber.

Installation

To install, reverse removal procedures. Install left hand shock absorber lower end attaching bolt with head pointing toward center of vehicle.

UPPER/LOWER LINKS & WATT LINKS

Removal (RX7)

Raise vehicle and support lower link bracket (front side). Support rear axle if Watt links are being removed. Remove wheel assemblies. Remove link attaching hardware and remove links.

Installation

To install, reverse removal procedures. Install Watt link with painted mark near hub and facing front of vehicle. Install upper link rear bolt with head pointing toward center of Vehicle. Tighten hardware to specified torque with vehicle resting on floor.

STABILIZER BAR

Removal (RX7)

Raise vehicle and support lower link bracket (front side) Remove wheel assemblies. Remove stabilizer bar attaching hardware and remove stabilizer bar.

Installation

To install, reverse removal procedures. Tighten hardware to specified torque with vehicle resting on floor.

TORQUE SPECIFICATIONS

TORQUE SPECIFICATIONS TABLE

Application Ft. Lbs. (N.m)

SUSPENSION - REAR

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:21PM

Shock Absorber Bolt (Lower End) 47-59 (64-80)
Stabilizer Bar Brackets 27-38 (37-52)
Upper/Lower Link Bolts 56-76 (76-103)
Watt Link-to-Body/Bracket 47-59 (64-80)
Watt Link Bracket-to-Axle 56-76 (76-103)
AA

END OF ARTICLE

JACKING & HOISTING

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:21PM

ARTICLE BEGINNING

1983 Jacking & Hoisting
MAZDA

NOTE: These illustrations are not intended to represent exact structure of each vehicle's frame, underbody or body outline. They are presented only to give the mechanic some point of reference.

FRAME & UNDERBODY

The following illustrations indicate areas (parts) of the underbody and frame which may be used to raise and support the vehicle, using either floor jack or hoist. These points are indicated by shaded areas on the frame. See Fig. 1: Sample Illustration.

OUTERBODY

Those points designated on the outline of the body were specifically designed to facilitate the use of the vehicle's own jack. These jacking points are indicated by circular dots on the outline of the body. See Fig. 1: Sample Illustration. If floor jack or hoist is employed, extreme care should be exercised to avoid damaging the outer body shell.

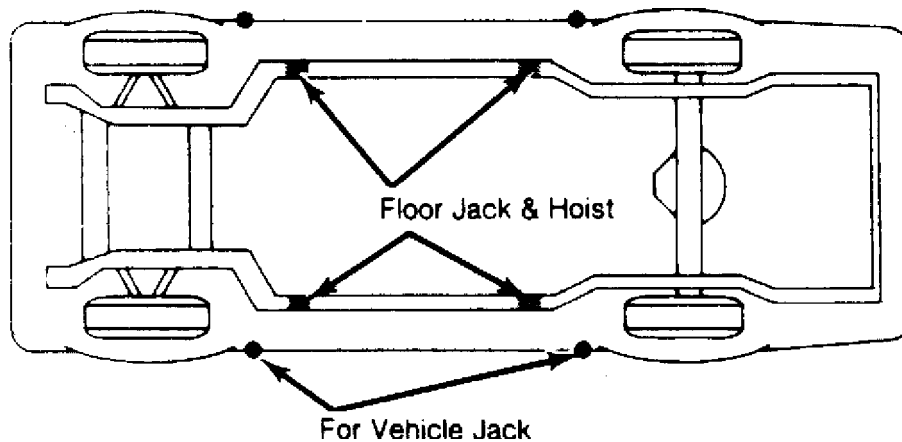
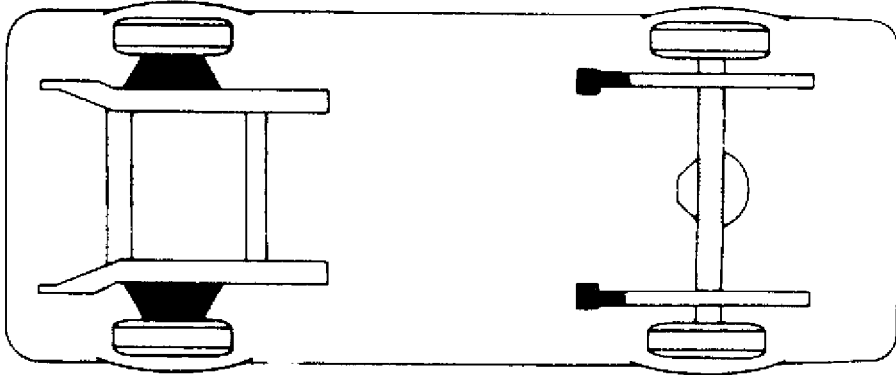
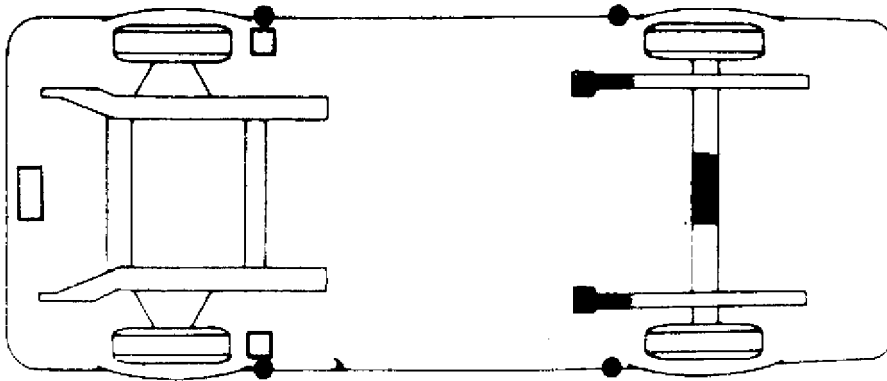


Fig. 1: Floor Jack, Floor Hoist & Vehicle Jack



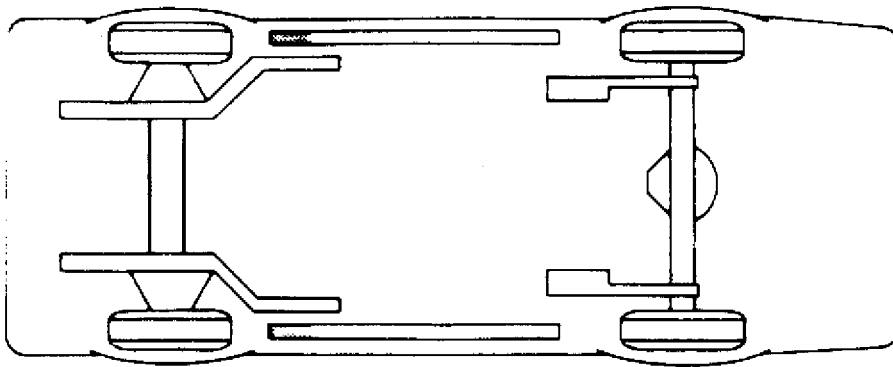
Mazda B2000 & B2200

Fig. 2: B2000 & B2200 Lifting Points



Mazda GLC & 626

Fig. 3: GLC & 626 Lifting Points



Mazda GLC Wagon

Fig. 4: GLC Wagon Lifting Points

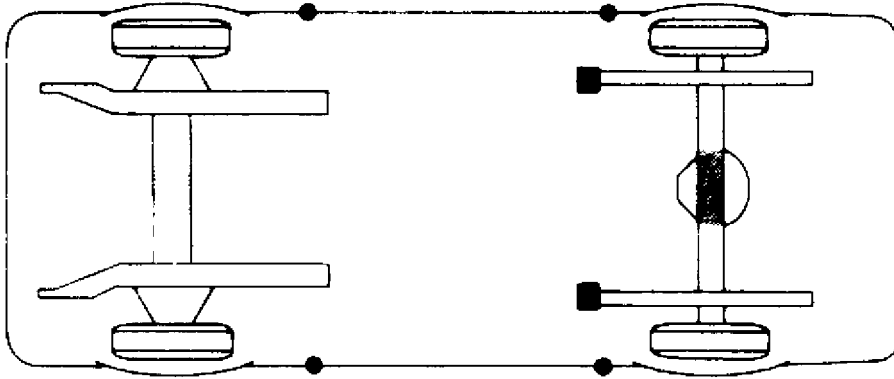
JACKING & HOISTING

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:21PM



Mazda RX7

Fig. 5: RX7 Lifting Points

END OF ARTICLE

PRE-ALIGNMENT CHECKS

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:21PM

ARTICLE BEGINNING

Wheel Alignment

PRE-ALIGNMENT INSPECTION PROCEDURES

PRE-ALIGNMENT CHECKS

Before making wheel alignment adjustment, perform the following checks:

1) Tires should be equal in size and runout must not be excessive. Tires and wheels should be in balance, and inflated to manufacturer's specifications.

2) Wheel bearings must be properly adjusted. Steering linkage and suspension must not have excessive looseness. Check for wear in tie rod ends and ball joints.

3) Steering gear box must not have excessive play. Check and adjust to manufacturer's specifications.

4) Vehicle must be at curb height with full fuel load and spare tire in vehicle. No extra load should be on vehicle.

5) Vehicle must be level with floor and with suspension settled. Jounce front and rear of vehicle several times and allow it to settle to normal curb height.

6) If steering wheel is not centered with front wheels in straight-ahead position, correct by shortening one tie rod adjusting sleeve and lengthening opposite sleeve equal amounts.

7) Ensure wheel lug nuts are tightened to torque specifications.

END OF ARTICLE

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

Article Text

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC
Sunday, August 26, 2001 08:21PM

ARTICLE BEGINNING

1983 Wheel Alignment
MAZDA

ADJUSTMENT

TIRE INFLATION (COLD)

Before attempting to check or adjust wheel alignment, make sure tires are properly inflated. Refer to manufacturer's specifications given in owner's manual.

CASTER

GLC

Caster is not adjustable. If caster is not to specifications, inspect suspension for excessive wear or damage. Replace components as necessary.

RX7 & 626

1) Caster and camber angles are adjusted together by changing position of strut support. Remove 4 nuts attaching strut support to fender apron.

2) Raise front of vehicle and support with jack stands. Press strut downward and change position of support according to Table and Fig. 1.

3) Tighten strut support mounting nuts. Lower vehicle and recheck caster and camber.

MacPHEARSON STRUT SUPPORT TABLE

Strut Position	Caster	Camber
A 0°	0°	0°
B 90°	1/2°	0°
C 180°	1/2°	1/2°
D 270°	0°	1/2°

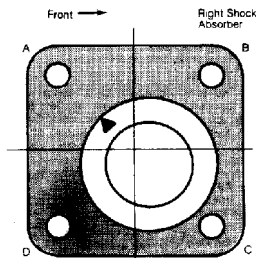


Fig. 1: RX7 & 626 Caster & Camber Adjustment Using MacPhearson Strut Support

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

Article Text (p. 2)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:21PM

Pickups

Change shims between upper control arm shaft and support bracket or turn upper control arm shaft until specifications are obtained.

CAMBER

NOTE: On GLC wagon, camber is not adjustable. If camber is not within specifications, inspect suspension for excessive wear or damage. Replace components as necessary.

GLC

- 1) Raise front end, support with jack stands and open hood.
- 2) Remove 2 mounting nuts holding strut support to fender apron. Push mounting block down, turn 180° and tighten mounting nuts. Note a triangular shaped mark on mounting block. Rotating mark away from engine changes camber to the negative side and opposite direction the opposite happens. Check camber angle.

RX7 & 626

NOTE: See procedure given under RX7 & 626 Caster adjustment.

Pickups

Change shims between upper arm shaft and support bracket until specifications for camber are within limits.

TOE-IN

626 (Front)

Loosen lock nuts and turn tie rods equal amounts. Both tie rods are right-threaded, to increase turn right tie rod toward front of vehicle and to decrease turn left one toward rear of vehicle by the same amount. One full turn equals .24" (6 mm). If boot is twisted or dented, loosen band and straighten boot.

All Other Models (Front)

- 1) Raise front of vehicle. Turn wheels by hand and mark a line in center of each tire tread. Place vehicle in straight-ahead position and lower vehicle to ground.
- 2) Measure distance between marked lines at both front and rear of wheel. Make sure measurements are made equal distances from ground.
- 3) Loosen lock nuts and turn tie rods until adjustment is correct. Tighten lock nuts with bolts horizontal and below rod. This procedure will prevent interference with center link.

GLC FWD & 626 (Rear)

- 1) Release emergency brake. Mark front and back of tire at same height as center of wheel. Mark center lower section of crossmember. Points marked on tires and crossmember form a triangle and are reference points for adjusting rear toe-in.

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

Article Text (p. 3)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:21PM

2) Turn spacer (star wheel) to make the points from rear of tire to center of crossmember equal. See Fig. 2. Turn both right and left spacers the same amount to adjust toe-in.

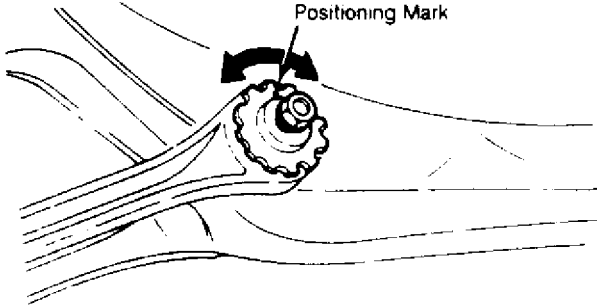


Fig. 2: GLC & 626 Star Wheel Adjustment

3) On GLC only, check parallelism of body and rear wheel. Use existing mark on rear of tire and hole on each side member. Measure from hole on one side to tire on the other. Repeat using other hole and tire. If measurements are not equal, loosen 2 crossmember mounting nuts on each side. Move crossmember so measurement is within .2" (5 mm).

WHEEL ALIGNMENT

WHEEL ALIGNMENT SPECIFICATIONS TABLE

XX

Application

Mazda

B2000 & B2200 Pickups

Caster (Degrees)	.....	1
Camber (Degrees)	.....	+1/3 to 1 1/4
Toe-in (Inches)	.....	0 to 1/64
Toe-Out on Turns (Degrees)		
Inner	.....	.....
Outer	.....	.....

GLC

Caster (Degrees)	.....	+2 +/- 2/3 (1)
Camber (Degrees)	.....	+1 +/- 1/2
Toe-in (Inches)	.....	0 +/- 1/8 (2)
Toe-Out on Turns (Degrees)		
Inner	.....	.....
Outer	.....	.....

GLC Wagon

Caster (Degrees)	.....	+1 to 2 1/3 (1)
Camber (Degrees)	.....	+1/4 to 1 1/4 (1)
Toe-in (Inches)	.....	0 to 9/32
Toe-Out on Turns (Degrees)		
Inner	.....	.....
Outer	.....	.....

RX7

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

Article Text (p. 4)

1983 Mazda RX7

For www.iluvmyrx7.com

Copyright © 1998 Mitchell Repair Information Company, LLC

Sunday, August 26, 2001 08:21PM

Caster (Degrees)	.....	+3 2/3	+/-	1/2	(3)
Camber (Degrees)	.....	+1	+/-	1/2	
Toe-in (Inches)	.....	0	to	9/32	
Toe-Out on Turns (Degrees)					
Inner	.....			
Outer	.....			

626

Caster (Degrees)	.....	+1 2/3	+/-	2/3	
Camber (Degrees)	.....	+1/3	+/-	1/2	
Toe-in (Inches)	.....	+1/8	+/-	1/8	(4)
Toe-Out on Turns (Degrees)					
Inner	.....			
Outer	.....			

- (1) - Not adjustable.
- (2) - Same for rear.
- (3) - Left side only, right side specifications are 4 1/6 +/- 1/2.
- (4) - Rear specifications are 0 +/- 1/8.

AA

END OF ARTICLE