

# Front Suspension

## LANCIA

Lancia  
Except Scorpion

### DESCRIPTION

Vehicles are equipped with front wheel drive and independent hydraulic strut type shock absorbers. Axles are supported by lower control arms and vertically mounted strut assemblies. Strut assemblies have shock absorbers with coil springs mounted over outside. Top of strut is attached at fender with four studs. Bottom is attached to steering knuckle (bearing retainer housing). Tie rods are connected to steering knuckle. Stabilizer bar mounts at lower control arm and frame.

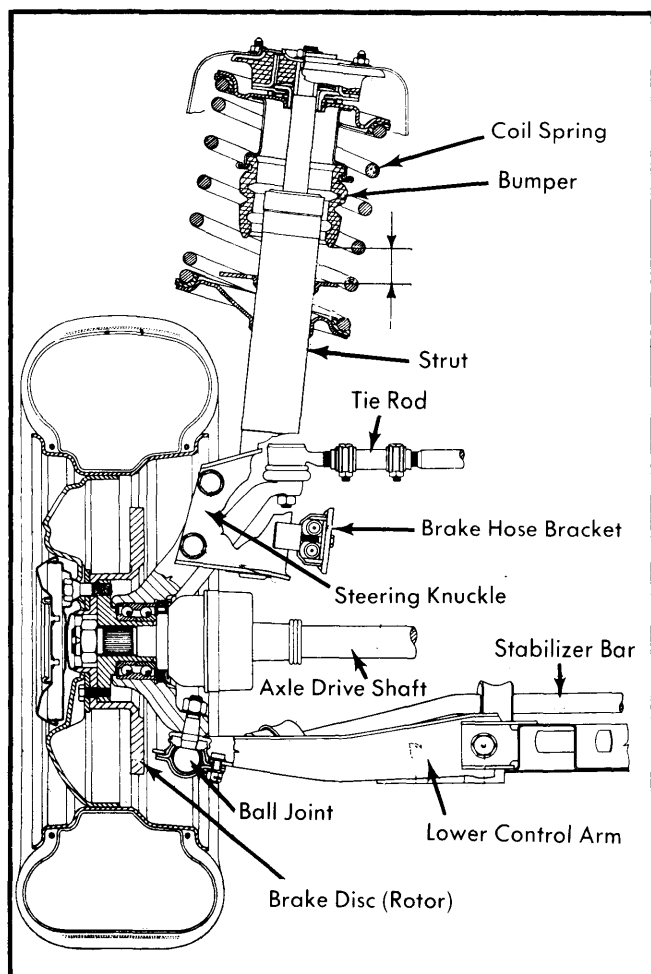


Fig. 1 Sectional View of Lancia Front Suspension Showing Component Relationship

### ADJUSTMENT

#### WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See Wheel Alignment Specifications and Procedures in WHEEL ALIGNMENT Section.

#### WHEEL BEARING ADJUSTMENT

See Wheel Bearing Adjustment in WHEEL ALIGNMENT Section.

#### BALL JOINT CHECKING

See Ball Joint Checking in WHEEL ALIGNMENT Section.

### REMOVAL & INSTALLATION

#### STRUT ASSEMBLY

**Removal** – Raise and support vehicle. Remove front wheel. Remove brake line bracket to strut base. Remove strut from mounting at steering knuckle. Remove nuts holding strut top mounting plate. Pull strut free and out fender opening.

**Disassembly** – 1) Using a coil spring compressor, collapse coil off top seat. Remove mounting nut and washer. Withdraw bumper and thrust plate. Release tension on coil. Separate base from strut and remove. Slide off coil spring, gasket, upper seat, and bumper.

2) Grip base of strut in vice. Remove retaining ring nut. Extract seals, cap and hose. Drain fluid from strut. Pull shaft assembly from strut tube. Remove buffer valve.

**Reassembly** – Reassembly buffer valve. See Fig. 2. Refill strut tube with fluid (10 ozs. for Coupe and 7 ozs. for others). Slowly insert strut assembly into tube exhausting air. Fit top cap assembly over strut shaft. This will seal tube. Make sure seals and hose fit properly. Tighten lock ring nut and stake in three places.

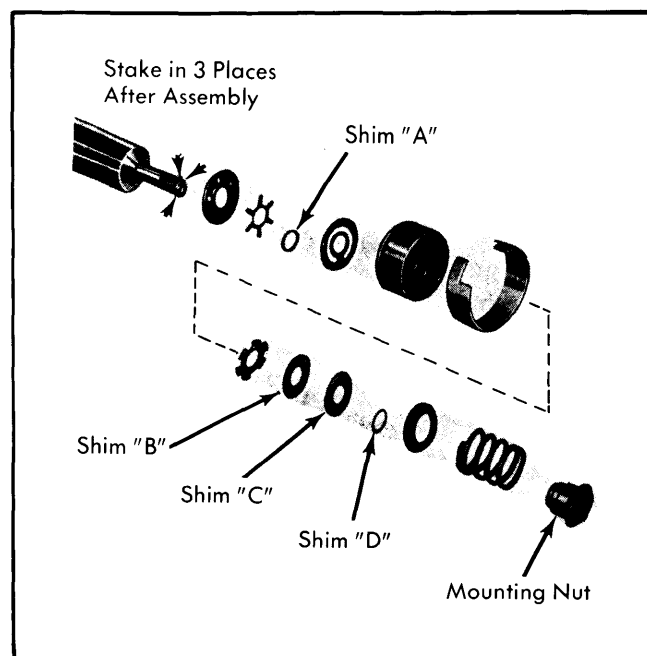


Fig. 2 Reassembly Sequence for Buffer Valve. Assemble Components Over Strut Shaft Stem. Refer to Table for Correct Shim Thickness.

**Installation** – To install strut assembly, reverse removal procedure and tighten all nuts and bolts.

## LANCIA (Cont.)

### Buffer Valve Shim Table

Application	Thickness In. (mm)
Early Coupe Models	
Shim A,C,D.....	.008 (.20)
Shim B.....	.006 (.15)
Late Coupe Models	
Shim A,D.....	.008 (.20)
Shim B.....	.004 (.10)
Shim C.....	.006 (.15)
Saloon	
Shim A.....	.020 (.50)
Shim B.....	.004 (.10)
Shim C,D.....	.008 (.20)

### LOWER CONTROL ARM

**Removal** — Raise and support vehicle. Remove wheel. Disconnect axle drive shaft. Separate stabilizer bar from control arm. Disconnect headlight aiming link from left side control arm (if equipped). Using remover tool 88042104 (or equivalent), drive ball joint from steering knuckle. Remove bolts mounting control arm to subframe and pull control arm from vehicle.

**Installation** — To install, reverse removal procedure.

### STABILIZER BAR

**Removal** — Raise and support vehicle. Remove front wheels. Remove clamps mounting stabilizer bar to lower control arms and subframe.

**Installation** — To install, reverse removal procedure.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Lower Control Arm Bolts.....	44 (6.0)
Ball Joint Mount Nuts.....	18 (2.5)
Ball Joint Nut.....	76 (10.5)
Buffer Nut.....	13 (1.8)
Strut-to-Steering Knuckle.....	31 (4.3)
Stabilizer Bar Bolts.....	17 (2.3)