

Front Suspension

LANCIA

Lancia

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.

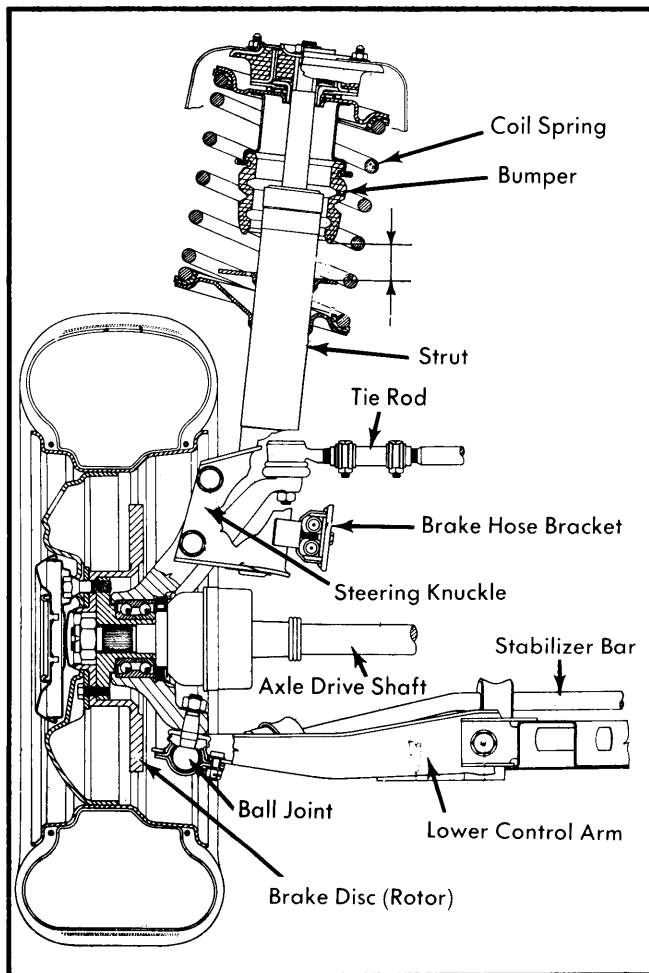


Fig. 1 Sectional View of Lancia Front Suspension Showing Component Relationship

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 — Reassemble buffer valve. See Fig. 2. Refill strut tube with fluid (10 oz. for Coupe and 7 oz. for other models). Slowly insert strut assembly into tube, exhausting air. Fit top cap assembly over strut shaft, sealing tube. Make sure seals and hose fit properly. Tighten lock ring nut and stake in 3 places.

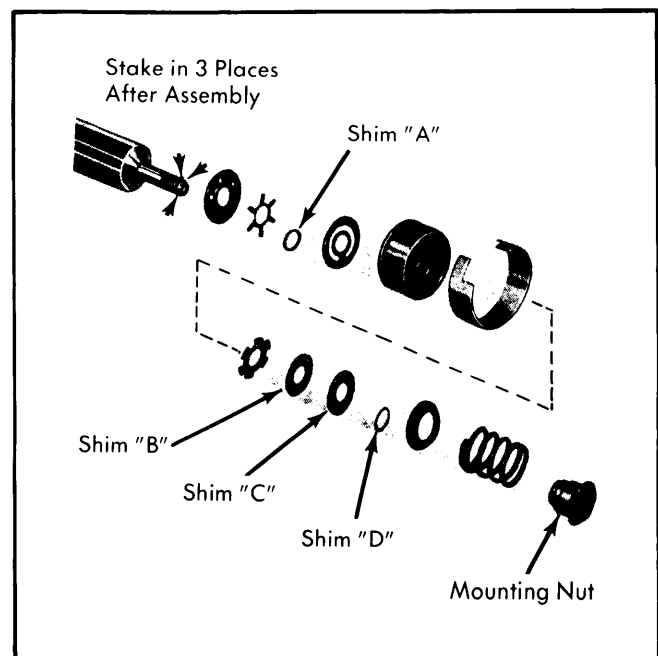


Fig. 2 Reassembly Sequence for Buffer Valve. Assemble Components Over Strut Shaft Stem. Refer to Table for Correct Shim Thickness.

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-to-Frame	43 (6.0)
Stabilizer-to-Control Arm	17 (2.3)
Ball Joint-to-Control Arm	18 (2.5)
Ball Joint Stud Nut	69 (9.5)
Strut-to-Steering Knuckle	72 (10.0)
Upper Plate-to-Strut	65 (9.0)
Strut-to-Fender Panel	13 (1.8)
Shock Absorber Ring Nut	94 (13.0)