VOLKSWAGEN DASHER

DESCRIPTION

Volkswagen Dasher is front wheel drive with independent strut type front suspension. Axles are supported by lower control arms, vertically mounted strut assemblies, and a stabilizer bar. Strut assemblies consist of double action shock absorbers with coil springs mounted over the outside. The top part of strut is attached to the inner fender panel and the lower portion is attached directly to steering knuckle. Tie rods are connected to supports under coil springs. Stabilizer bar is connected to lower control arms at each end and to crossmember below engine.

ADJUSTMENT

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See Wheel Alignment Specifications & Procedures in WHEEL ALIGNMENT Section.

WHEEL BEARING ADJUSTMENT

Front wheel bearings are pressed into bearing housing and no adjustment is required.

BALL JOINT CHECKING

1) Raise and support front of vehicle and turn steering wheel to one side. Install suitable levering tool so that ball joint spring may be compressed.

2) With spring compressed, position a vernier caliper with lower jaw on ball joint stud and upper jaw on top of clamping bolt for ball joint stud. Note reading.

3) Slowly release tension from spring and note travel of caliper. This reading indicates ball joint play. If play exceeds .040" (1 mm) for new ball joints or .100" (2.5 mm) for used ball joints, replace ball joint.

REMOVAL & INSTALLATION

STRUT & COIL SPRING ASSEMBLY

Removal – **1)** Loosen axle nut and wheel lugs. Raise and support vehicle; remove wheel and tire. Remove brake hose clips, disconnect brake caliper and move out of way.

2) Loosen bolt holding suspension ball joint stud in bottom of strut assembly. Using suitable tool, remove tie rod end from mounting under coil spring seat. Disconnect stabilizer bar from lower control arm.

3) Force lower control arm down until ball joint stud is removed from suspension strut. Remove axle nut. Support axle drive shaft, then pull strut outward and off of axle drive shaft. Remove both upper mounting nuts. Guide strut from vehicle.

Disassembly – **1)** Place strut in a vise and install coil spring compressor. Tighten compressor until pressure is taken off upper retainer. Remove upper collar mounting nut. Take off upper mounting hardware. Release spring compressor and remove coil spring.

2) Hold shock absorber cartridge center shaft with suitable tool. Loosen and remove threaded cap nut. If shock absorber cartridge will not easily pull front strut tube, thread a nut on center shaft and tap until corrosion breaks free.

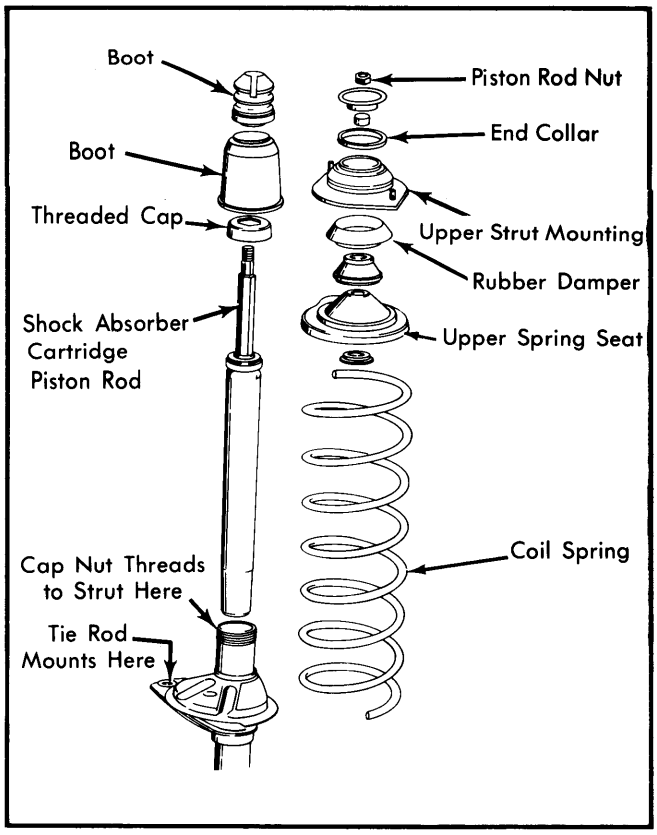

Fig. 1 Exploded View of Front Suspension Strut

Reassembly – To reassemble, reverse disassembly procedure, noting the following: Coil springs may be replaced individually, but paint stripe color of replacement spring must match stripe color of original spring.

Installation – To install, reverse removal procedure and note the following. When assembling ball joint to lower control arm always use a new bolt and nut. Face bolt head toward front of vehicle.

WHEEL BEARINGS

Removal – **1)** Remove strut assembly from vehicle as previously described. Using a press, press wheel hub out of bearing.

NOTE – *Wheel bearing is destroyed in pressing out hub. Once either the wheel hub or bearing has been removed from suspension strut, a new bearing must be installed.*

2) Remove 2 circlips inside bearing housing (one at each end of bearing). Using a press tool, apply pressure to bearing outer race. Press out bearing toward outboard end of bearing housing.

Installation – To install, reverse removal procedure.

VOLKSWAGEN DASHER (Cont.)

LOWER CONTROL ARM

Removal – 1) Raise vehicle so that front wheel and suspension are not supported.

2) Disconnect stabilizer bar at control arm and subframe. Slide stabilizer bar out of vehicle.

3) Loosen ball joint clamp bolt. Force lower control arm down until ball joint stud is removed from suspension strut. Remove bolts mounting control arm to subframe. Guide arm from vehicle.

Bushing Replacement – 1) Check bushing in control arm for signs of excessive wear or damage. If bushings are bad they can be replaced.

2) Support wide points on control arm. Press bushings from each side of control arm.

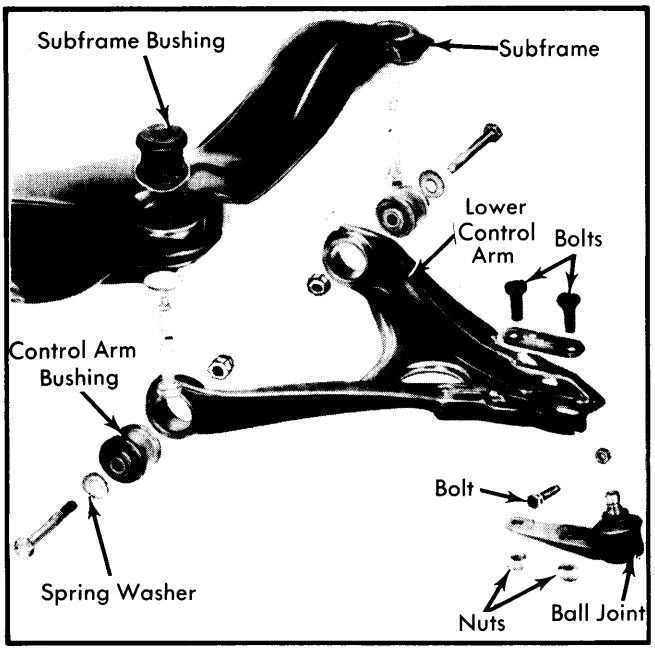

Fig. 2 Exploded View of Lower Control Arm

3) Select new bushings. Lightly coat each bushing with brake paste. Press bushing into position in control arm. Make sure bushing does not twist when pressing into place. Use bushing guide if necessary.

Installation – Reverse removal procedure and note: Use water pump pliers to compress clamps around bushing when trying to start bolts. Check front wheel alignment.

STABILIZER BAR

Removal – 1) Raise vehicle and suitably support with safety stands. Remove brackets mounting stabilizer bar to lower control arm .

2) Loosen and remove "U" brackets mounting stabilizer bar to subframe. Guide stabilizer bar from vehicle. Inspect rubber bushings for damage or excessive wear and replace as necessay.

Installation – To install, reverse removal procedure. Install with end sections pointing down. Drive vehicle around the block before fully tightening clamp bolts.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N·m)
Axle Nut	
18mm Nut	145 (197)
20mm Nut	175 (238)
Ball Joint-to-Suspension Strut	36 (49)
Ball Joint-to-Lower Control Arm	47 (64)
Lower Control Arm-to-Subframe	50 (68)
Piston Rod Nut	43 (58)
Stabilizer Bar-to-Lower Control Arm	7 (10)
stabilizer Bar-to-Subframe	18 (24)
Shock Absorber Cap Nut	108 (147)
Tie Rod Castle Nut	29 (39)
Upper Strut Assembly-to-Body	18 (24)