PORSCHE 928

DESCRIPTION

Front suspension is an independent type strut suspension. It consists of a strut assembly, surrounded by a coil spring. This assembly is connected at top to inner fender panel and at bottom to lower control arm. Lower control arm connects at outer end to steering knuckle through a ball joint. At inner end of the "T" shaped control arm, 2 bushings connect arm to frame member. An upper control arm is attached by ball joint to steering knuckle and by pivot shaft to frame member. A stabilizer bar is connected via a link to lower mounting of strut assembly.

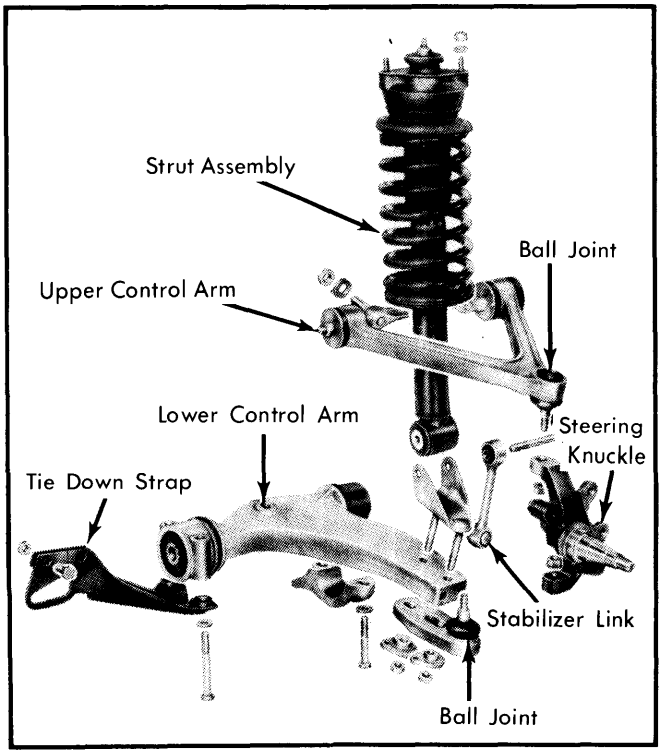

Fig. 1 Exploded View of Porsche 928 Front Suspension Assembly

ADJUSTMENTS

WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See Wheel Alignment Specifications and Procedures in WHEEL ALIGNMENT section.

WHEEL BEARING ADJUSTMENT

Tighten spindle nut while rotating wheel to seat bearings. Back off nut until thrust washer can be moved sideways with light pressure from a screwdriver. Spindle nut should be tight enough to prevent any wheel hub axial play. Tighten pinch bolt, making sure that spindle nut does not change position.

BALL JOINT CHECKING

Check ball joint and seal for signs of abnormal or excessive wear, damage or play. If any is found, replace ball joint.

REMOVAL & INSTALLATION

STRUT ASSEMBLY & UPPER CONTROL ARM

Removal – **1)** Remove 3 self-locking nuts securing top of strut assembly to inner fender panel in engine compartment. Raise and support vehicle. Remove front wheel.

2) Unscrew flange locknut and use suitable tool to separate upper control arm ball joint from steering knuckle. Remove self-locking nuts holding upper control arm pivot shaft to body (access in engine compartment).

3) Remove strut lower mounting bolt and maneuver strut assembly and upper control arm out of vehicle.

Disassembly – **1)** Place strut assembly in vise and attach coil spring compressor. Apply enough tension to coil spring to allow removal of top self-locking nut, washer and mounting plate.

2) Release spring compressor. Remove upper spring retainer, coil spring and components from piston rod.

3) Mark position of lower spring retainer to shock absorber for proper reassembly reference.

Reassembly – **1)** Reassemble strut assembly components in reverse order of disassembly. If replacing coil spring, be sure proper weight class springs are used.

2) If replacing lower spring retainer, coil spring or shock absorber, position of spring retainer to shock absorber must be determined. Install assembly in vehicle by attaching upper retainers. Position upper end of spring against upper retainer stop. Position lower retainer and turn until against stop. Mark position.

3) Remove strut assembly back to vise and complete reassembly.

Installation – To install, reverse removal procedure.

WHEEL BEARINGS

Removal – **1)** Raise and support vehicle. Remove wheel. Remove grease cap, loosen spindle nut pinch bolt and remove spindle nut. Remove thrust washer and outer wheel bearing.

2) Remove brake caliper and wire out of way. Remove hub and rotor assembly. Pry out inner grease seal and remove inner bearing. Remove hub-to-rotor retaining bolts and separate hub from rotor. Heat wheel hub to 250-300°F (120-150°C) and press out inner and outer bearing races.

Installation – Reverse removal procedures to install. Wheel hub must be heated as in removal before installing bearing races. Always replace wheel bearings and races in matched sets. Adjust wheel bearings.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N·m)
Upper Control Arm-to-Body	101 (137)
Lower Control Arm-to-Body	
Front	61 (83)
Rear	87 (118)
Stabilizer Bar-to-Body	33 (45)
Stabilizer Link Nut	61 (83)
Ball Joints-to-Knuckle	61 (83)

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