

CHEVETTE & T1000

DESCRIPTION

Ball joint independent front suspension with long and short control arms. Coil spring mounts between lower control arm and suspension crossmember. Shock absorber mounts between top of upper control arm and inner fender panel.

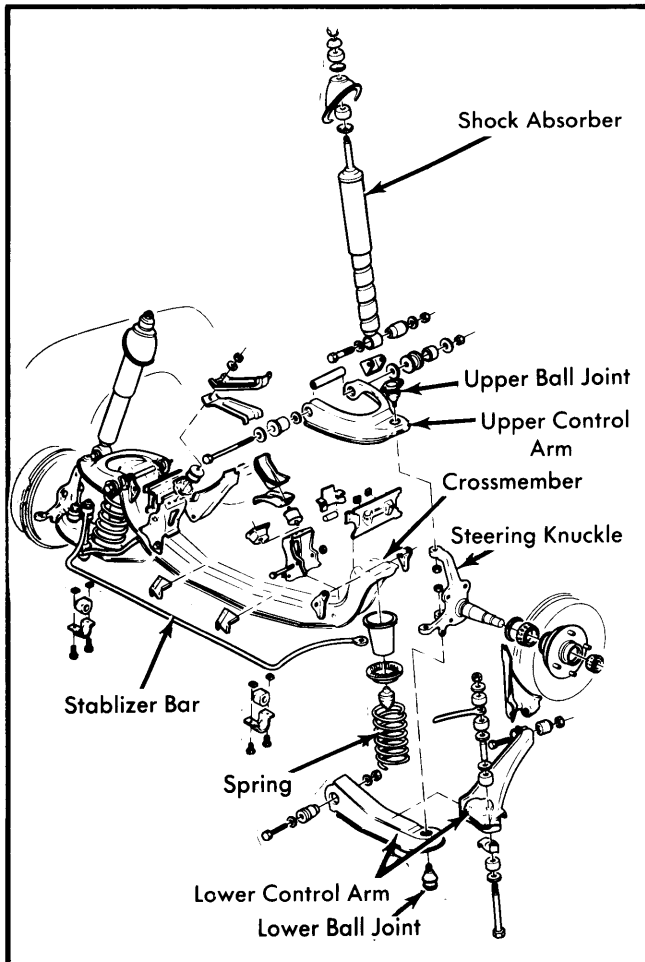


Fig. 1 Exploded View of Chevette & T1000 Front Suspension Assembly

ADJUSTMENT

CASTER & CAMBER

See *Caster and Camber Adjustments and Specifications* in *WHEEL ALIGNMENT* Section.

RIDING HEIGHT

See *Riding Height Adjustments and Specifications* in *WHEEL ALIGNMENT* Section.

FRONT WHEEL BEARINGS

Raise and support vehicle at lower control arms. Remove hub cap, dust cap and cotter pin. Tighten spindle nut to 12 ft. lbs. while spinning wheel by hand. Back off nut until just loose, hand tighten until snug. Back off enough to insert cotter pin

(about $\frac{1}{2}$ hex flat or $\frac{1}{12}$ turn). Adjustment should provide .001-.005" end play. Install cotter pin, dust cap and hub cap.

BALL JOINT CHECKING

See *Ball Joint Checking* in *WHEEL ALIGNMENT* Section.

REMOVAL & INSTALLATION

UPPER & LOWER BALL JOINTS

Removal — 1) Raise vehicle on hoist and remove tire and wheel. Support lower control arm with floor jack. Loosen ball stud nut, but do not remove.

2) Install remover tool (J-26407) with cup end over ball stud nut. Turn threaded end of tool until ball stud is free of steering knuckle. Remove tool and nut from ball stud and remove ball joint.

Installation — 1) Install bolts and nuts attaching upper ball joint to control arm, then mate stud to steering knuckle; or mate lower ball stud through lower control arm and into steering knuckle.

NOTE — Ball joints use a special nut which must be discarded whenever loosened and removed. On reassembly, use a standard nut to draw ball joint into position, then remove that nut and install a new special nut.

2) Tighten ball joint stud nut. Install tire and wheel and lower vehicle.

LOWER CONTROL ARM & SPRING

Removal — 1) Raise vehicle at frame and remove wheel and tire. Disconnect stabilizer bar from lower control arm and tie rod from steering knuckle.

2) Support lower control arm with jack and disengage lower ball joint from knuckle. Swing knuckle assembly out of way and secure with wire. Loosen lower control arm pivot bolts.

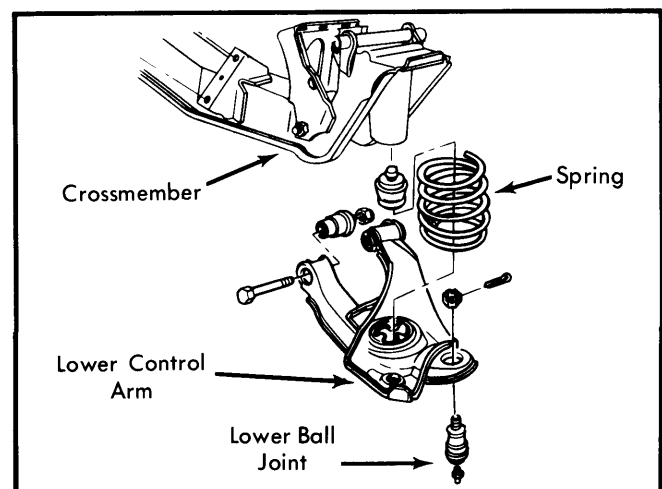


Fig. 2 View Showing Correct Positioning of Coil Spring

Front Suspension

CHEVETTE & T1000 (Cont.)

3) Install safety chain on spring and slowly lower jack. When spring is extended as far as possible, pry spring over lower control arm seat and remove spring. Remove pivot bolts and lower control arm.

Installation – To install lower control arm and spring, reverse removal procedure making sure spring is installed in position shown in illustration. If necessary, have an assistant help compress spring to slide it over raised area on lower control arm.

UPPER CONTROL ARM

Removal – Raise vehicle on hoist and remove wheel and tire assembly. Disconnect shock absorber. Support lower control arm with jack and disengage upper ball joint stud from steering knuckle. Remove control arm pivot bolts and remove control from vehicle.

Installation – To install, reverse removal procedure. Tighten pivot bolt nut with control arm in horizontal position.

STABILIZER BAR

Removal – Raise vehicle and remove stabilizer bolt and nut from lower control arm. Remove stabilizer bar bracket from body and remove bar.

Installation – To install, reverse procedure.

STEERING KNUCKLE

Removal – **1)** Raise vehicle and support lower control arm. Remove wheel and brake caliper assembly. Hang caliper by wire. Remove hub, disc and splash shield.

2) Remove both ball stud nuts and tie rod end from steering knuckle. Using remover tool, press ball studs from steering knuckle. Remove ball stud nuts and remove steering knuckle.

Installation – To install, reverse removal procedure.

SHOCK ABSORBER

Removal & Installation – Hold shock absorber upper stem and remove nut, upper retainer and rubber grommet. Raise vehicle and remove lower shock mounting nuts. Lower shock from vehicle. To install, reverse removal procedure.

WHEEL BEARING

Removal – **1)** Raise vehicle on hoist. Remove wheel and tire assembly. Remove brake caliper from disc.

2) Remove dust cap, cotter pin, spindle nut and washer. Remove hub and bearing. Do not allow bearing to fall out of hub.

3) Remove outer bearing with fingers. Remove inner bearing by prying out grease seal. Discard seal. Wash parts thoroughly in cleaning solvent.

Installation – **1)** Using an approved high temperature front wheel bearing grease, apply a thin film of grease to spindle at outer bearing seat and inner seat, shoulder, and seal seat. Put a small amount of grease inboard of each bearing cup in the hub.

2) Fill bearing cone and roller 100% full of grease. With grease thoroughly packed into bearings, place inner bearing cone and roller in the hub. Using your finger, put an additional amount of grease outboard of bearing.

3) Install a new grease seal, using a flat plate, until seal is flush with hub. Lubricate lip of seal with grease. Install hub and rotor assembly. Place outer bearing cone and roller in outer bearing cup. Install washer and nut. Install brake caliper, wheel and tire. Adjust as previously outlined.

TIGHTENING SPECIFICATIONS

| Applications | Ft. Lbs. (N·m) |
|---------------------------------------|----------------|
| Upper Ball Joint-to-Knuckle | 33 (44) |
| Upper Ball Joint-to-Control Arm | 29 (39) |
| Lower Ball Joint-to-Knuckle | 48 (65) |
| Upper Control Arm Pivot Bolts | 47 (64) |
| Lower Control Arm Pivot Bolts | 49 (66) |
| Stabilizer Bar-to-Underbody | 15 (20) |
| Stabilizer Bar-to-Control Arm | 15 (20) |
| Shock Absorber | |
| Upper Mounting | 7 (10) |
| Lower Mounting | 23 (30) |
| Brake Caliper-to-Knuckle | 70 (95) |