

# Front Suspension

## 1974 IHC COIL SPRING TYPE

International Harvester (1974)

**NOTE** — Some models use other units. See IHC Leaf Spring Type in this Section.

### DESCRIPTION

Independent type front suspension consisting of upper and lower control arms, with steering knuckle mounted between by means of ball joints. Upper and lower control arms are mounted to frame by bolts and rubber bushings. Coil springs are mounted between lower control arms, and formed seats in crossmember. Double-action, hydraulic shock absorbers are mounted to the frame at the top, and to the lower control arms at the bottom. A stabilizer bar is transversely mounted to frame side rails and is connected to wheel stop brackets bolted to lower control arms.

### ADJUSTMENT

#### WHEEL ALIGNMENT SPECIFICATIONS & PROCEDURES

See *Wheel Alignment Specifications & Procedures* in *WHEEL ALIGNMENT* Section.

#### WHEEL BEARING ADJUSTMENT

See *Wheel Bearing Adjustment* in *WHEEL ALIGNMENT* Section.

#### BALL JOINT CHECKING

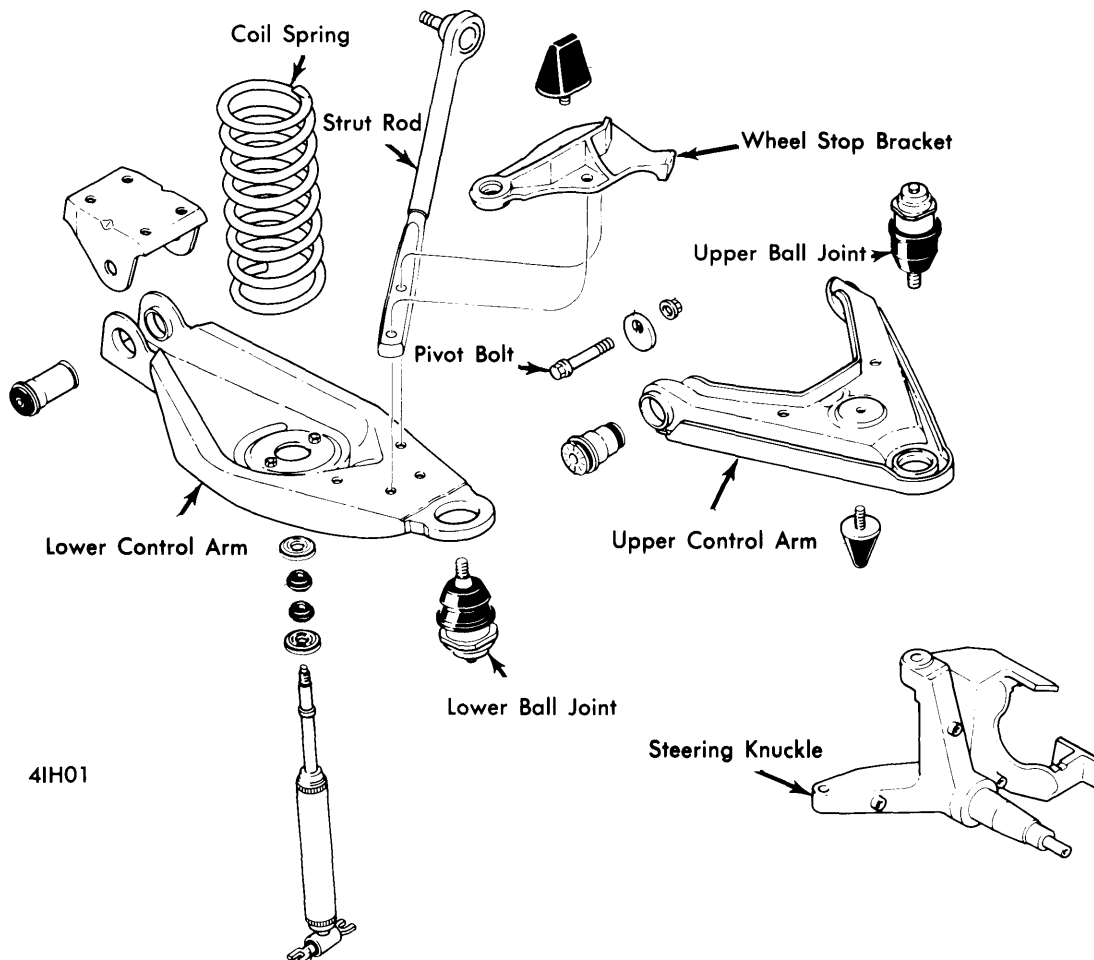
See *Ball Joint Checking* in *WHEEL ALIGNMENT* Section.

### REMOVAL & INSTALLATION

#### COIL SPRINGS

**Removal** — 1) Raise and support vehicle under frame, and remove wheel. Remove caliper (see appropriate article in *BRAKE SYSTEMS* Section), and remove hub and disc assembly from vehicle. Remove brake shield from steering knuckle, and remove shock absorber. Disconnect stabilizer bar from wheel stop bracket, then remove stop bracket from lower control arm.

2) Using suitable spring compressor tool (SE-2491), compress spring until unseated from lower control arm. Remove cotter pin from upper and lower ball joint studs, then loosen nut on lower ball joint stud slightly. Using suitable separator tool (SE-2493), apply light pressure between ball joint studs and tap on steering knuckle to loosen lower stud in knuckle. Tighten nut on



**FRONT SUSPENSION COMPONENTS**

## 1974 IHC COIL SPRING TYPE (Cont.)

upper ball joint stud and install cotter pin. Remove nut from lower ball joint stud and separate lower control arm from steering knuckle. Remove coil spring from vehicle.

**Installation** — To install, reverse removal procedure. Pump brake pedal several times to seat disc pads against brake disc, and check wheel alignment.

### STEERING KNUCKLE

**Removal** — 1) Raise and support vehicle under frame, and remove wheel. Remove caliper (see appropriate article in BRAKE SYSTEMS Section), and remove hub and disc assembly from vehicle. Remove brake shield from steering knuckle, remove shock absorber, and disconnect steering center link from steering knuckle.

2) Using suitable spring compressor tool (SE-2491), compress spring until unseated from lower control arm. Remove cotter pin from upper and lower ball joint studs, then loosen nuts on ball joint studs slightly. Using separator tool (SE-2493), apply light pressure between ball joint studs and tap on steering knuckle to loosen studs in knuckle. Remove nuts from upper and lower ball joint studs, and remove steering knuckle from vehicle.

**Installation** — To install, transfer wheel stop screw to new steering knuckle, then reverse removal procedure.

### LOWER CONTROL ARM

**Removal** — Raise and support vehicle under frame, and remove wheel. Remove coil spring. See *Coil Spring Removal*. Remove lower control arm-to-frame attaching bolt and remove control arm from vehicle.

**Installation** — To install, reverse removal procedure, making sure coil spring is fully seated in lower control arm. Tighten control arm-to-frame bolt completely after weight of vehicle is supported by suspension.

### UPPER CONTROL ARM

**Removal** — Raise and support vehicle under frame, and remove wheel. Remove shock absorber from vehicle. Using suitable spring compressor tool (SE-2491), compress spring until unseated from lower control arm. Position suitable jack under lower control arm ball joint, and raise jack until it is just

touching ball joint. Remove cotter pin from upper ball joint stud and loosen nut slightly. Using suitable separator tool (SE-2493), apply light pressure between ball joint studs and tap on steering knuckle to loosen stud in knuckle. Remove upper ball joint nut and lift upper control arm from knuckle. Remove upper control arm-to-frame attaching bolts, and remove control arm from vehicle.

**Installation** — To install, reverse removal procedure, making sure alignment adjusting cams are in 6 o'clock position when installed. Check wheel alignment.

### BALL JOINTS

**Removal & Installation** — Lower ball joint should be pressed from control arm after control arm is removed from vehicle. Upper ball joint may be pressed from control arm while control arm is attached to vehicle at frame only. To install, press new ball joint into control arm and reinstall control arm on vehicle.

### STABILIZER BAR

**Removal & Installation** — Raise and support vehicle under frame. Remove stabilizer bar-to-frame retaining clamps, and remove stabilizer bar-to-lower control arm links. Remove stabilizer bar from vehicle. To install, reverse removal procedure, and tighten all nuts and bolts.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Lower Ball Joint	
100 Models.....	80-90
200 Models.....	90-100
Lower Control Arm Pivot Bolt.....	190-210
Strut Bar Mounting Bolts.....	70-80
Shock Absorber Mounting Nuts	
Upper.....	20-25
Lower.....	15-20
Upper Ball Joint	
100 Models.....	70-80
200 Models.....	80-90
Upper Control Arm Pivot Bolts.....	65-75