

FRONT SUSPENSION BALLJOINT INSPECTION JOB AID

This table indicates the specifications for balljoint deflections as illustrated in the charts on the reverse side

Vehicle	Model Year	BALLJOINT	MEASUREMENT	DEFLECTION inches (mm)	REFERENCE DIAGRAM
Aviator	2003 - 2005	Front Lower	Between Lower Control Arm and Knuckle	0-0.032 in (0-0.8mm)	A
Aviator	2003 - 2005	Front Upper	Between Upper Control Arm and Knuckle	0-0.008 in (0-0.2mm)	C
Crown Victoria Grand Marquis Town Car	1998 - 2002	Front Lower	Between Lower Control Arm and Knuckle	0-0.012 in (0-0.3mm)	B -- but a jackstand must be placed under the lower control arm to "load the suspension"
Crown Victoria Grand Marquis Town Car	1998 - 2002	Front Upper	Between Upper Control Arm and Knuckle	0-0.008 in (0-0.2mm)	C -- but a jackstand must be placed under the lower control arm to "load the suspension"
Crown Victoria Grand Marquis Town Car	2003 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.016 in (0-0.4mm)	A
Crown Victoria Grand Marquis Town Car	2003 - 2006	Front Upper	Between Upper Control Arm and Knuckle	0-0.008 in (0-0.2mm)	C
Escape Focus Mariner	2000 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.008 in (0-0.2mm)	D
Escort	1998 - 2004	Front Lower	Between Lower Control Arm and Knuckle	0-0.008 in (0-0.2mm)	D
Expedition Explorer Explorer Sport Explorer Sport Trac F150 Mountaineer Navigator Ranger	1998 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.032 in (0-0.8mm)	A
Expedition Explorer Explorer Sport Explorer Sport Trac F150 Mountaineer Navigator Ranger	1998 - 2006	Front Upper	Between Upper Control Arm and Knuckle	0-0.008 in (0-0.2mm)	C
E-Series F-Series Super Duty Excursion	1998 - 2006	Front Lower	At Lower Balljoint Between Axle/Twin I Beam and Spindle/Knuckle	0-0.040 in (0-1.0mm)	E
E-Series F-Series Super Duty Excursion	1998 - 2006	Front Upper	At Upper Balljoint Between Axle/Twin I Beam and Spindle/Knuckle	0-0.024 in (0-0.6mm)	F
Ford 500 Freestyle	2005 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.008 in (0-0.2mm)	D
Ford GT	2005 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.008 in (0-0.2mm)	A
Ford GT	2005 - 2006	Front Upper	Between Upper Control Arm and Knuckle	0-0.008 in (0-0.2mm)	C
Freestar Monterey	2004 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.008 in (0-0.2mm)	D
Fusion Milan Zephyr	2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.016 in (0-0.4mm)	See Service Manual for Details
Fusion Milan Zephyr	2006	Front Upper	Between Upper Control Arm and Knuckle	0-0.008 in (0-0.2mm)	C
Lincoln LS Thunderbird	2001 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.008 in (0-0.2mm)	A
Lincoln LS Thunderbird	2001 - 2006	Front Upper	Between Upper Control Arm and Knuckle	0-0.008 in (0-0.2mm)	C
Mustang	1998 - 2004	Front Lower	Between Lower Control Arm and Knuckle	0-0.012 in (0-0.3mm)	B -- but a jackstand must be placed under the lower control arm to "load the suspension"
Mustang	2005 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.012 in (0-0.3mm)	D
Sable Taurus	1998 - 2006	Front Lower	Between Lower Control Arm and Knuckle	0-0.032 in (0-0.8mm)	D
Windstar	1998 - 2003	Front Lower	Between Lower Control Arm and Knuckle	0-0.016 in (0-0.4mm)	D

The descriptions and specifications contained in this document were in effect at the time this document was approved for printing. Ford Motor Company reserves the right to discontinue models at any time, or change specifications or design without notice, and without incurring any obligation. This chart is for OEM Components only and may not apply to Motorcraft specifications.

FRONT SUSPENSION BALLJOINT INSPECTION JOB AID

DIAGNOSIS

- IMPORTANT -

Check for wheel bearing play before checking for ball joint deflection

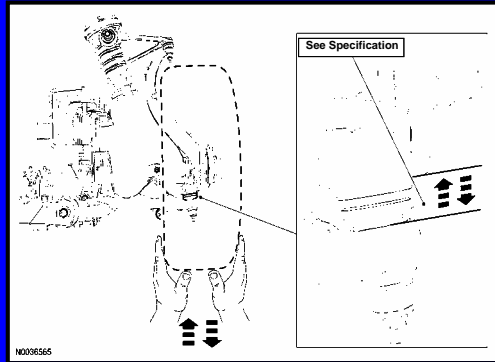
Align the dial indicator as close as possible to the ball joint centerline to minimize error

Use Hand Force Only. The use of tools or equipment can cause damage and relative movement that may not exist when using hand force only.

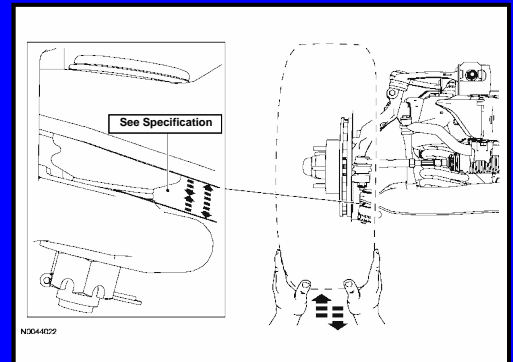
If procedures are not followed correctly, it is possible to get a false measurement resulting in unnecessary replacement

Note: For Types A and B, the hand force applied in an up/down motion at the tire must overcome the weight of the tire/wheel assembly

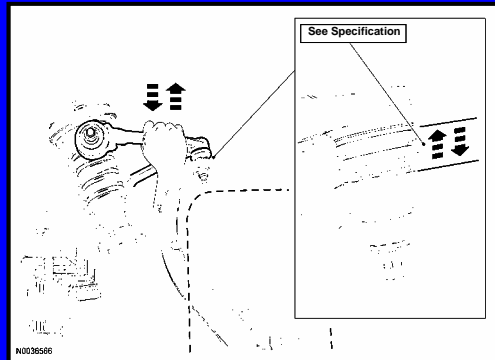
Note: For Types E and F, the hand force applied in an inboard / outboard motion at the tire must be at the 6 and 12 O'Clock Positions and also overcome the weight of the tire/wheel assembly



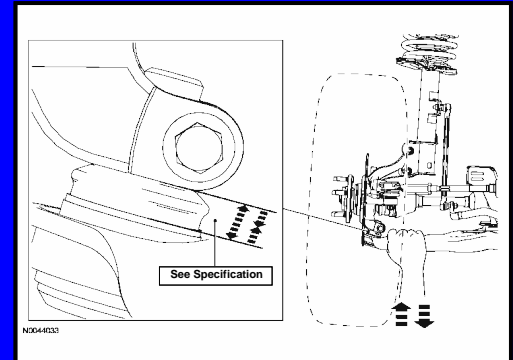
Type A: SLA Lower Balljoint (Spring on Shock)



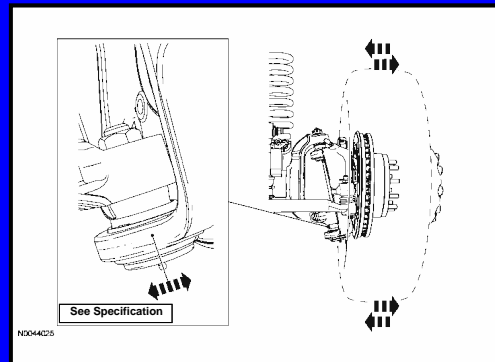
Type B: SLA Lower Balljoint (Spring on Arm)



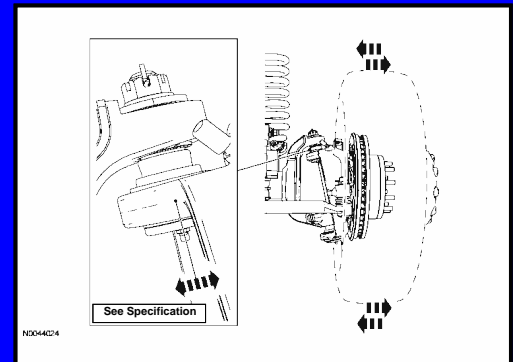
Type C: SLA Upper Balljoint



Type D: MacPherson Strut Inspection using Lower Control Arm (Coil Spring on Strut)



Type E: Twin Eye Beam / Monobeam Suspension: Lower Balljoint



Type F: Twin Eye Beam / Monobeam Suspension: Upper Balljoint

Note: The descriptions and specifications contained in this document were in effect at the time this document was approved for printing. Ford Motor Company reserves the right to discontinue models at any time, or change specifications or design without notice, and without incurring any obligation.