Wheel Alignment

1962-72 JAGUAR SPECIFICATIONS & ADJUSTMENTS

TIRE INFLATION (COLD)

Before attempting to check or adjust wheel alignment, ensure that tires are properly inflated.

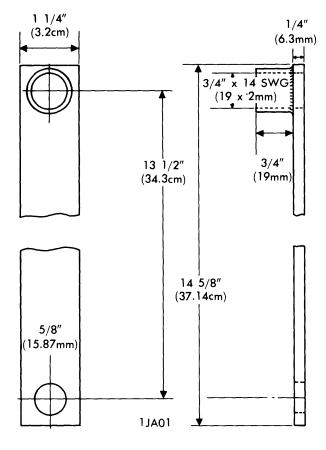
Tire Pressure Specifications (psi)

Model Identification	Front	Rear	
Mk II	28	28	
3.8 Early Models	28	25	
Late Models			
Mk 10	30	30	
XJ6	25	26	
XKE 3.8	23	25	
XKE 4.2	32	32	
XKE III V12	24	28	
420 & 420G	30	30	

RIDING HEIGHT

Mk II, 3.8 & Mk 10 Front — Vehicle should be in unloaded condition with full tank of gas.

Mk II Rear — Vehicle should be in unloaded condition with full tank of gas.



FRONT SUSPENSION SETTING LINKS

3.8, 420 Series, Mk 10, XKE 3.8, XKE 4.2 & XJ6 Rear — Set rear riding height using two setting links (Churchill No. J25). Hook link into lower hole of rear mounting and depress the body until other end of tool can be slid over the hub carrier fulcrum nut.

420 & 420G Front — Place block (3 3/8" high) between upper wishbone (adjacent to bump stop rebound rubber) and bracket welded to bottom of turret. Load vehicle until wishbone is resting on block.

XJ6 Front – Vehicle should be loaded with weights equivalent to four persons and have a full tank of gas.

XKE III V12 Front — With full tank of gas in vehicle, set block (6.125" high) under center of front sub-frame lower crossmember. Load vehicle with weights until crossmember contacts block.

XKE III V12 Rear – Measure distance between lower surface of rear crossmember and ground. If not within specifications $(7.90'' \pm .25'')$, check all bushings and bearing points of rear suspension. If no defects discovered, replace rear road springs.

XKE 3.8 & XKE 4.2 Front — Set links which fit over the top and bottom shock absorber mountings to hold vehicle in midladden condition (see illustration for link dimensions).

CASTER

Mk II, 3.8, Mk 10, 420 Series & XJ6 — If caster is not within specifications, loosen bolts securing upper wishbone member. To adjust, shims are located at upper wishbone ball joint. To increase caster, move shims from the rear side to front side of wishbone member. To decrease, move shims from front to rear. NOTE — A total of 8 shims must be used at all time exc. XJ6 which has total of 4 shims. Tighten bolts and recheck caster angle.

XKE III V12, XKE 3.8 & XKE 4.2 — If caster is not within specifications, loosen lock nuts on fulcrum shaft and wishbone clamping bolts. Rotate fulcrum shaft until caster is within specifications. Tighten wishbone clamping bolts. Remove test block and load to allow full weight of vehicle to rest on front suspension. Tighten fulcrum shaft lock nuts. NOTE — Undue torsional loading of rubber bushings will occur if weight of vehicle is not on front suspension. Recheck caster.

CAMBER

Mk II, 420 Series, 3.8, Mk 10 & XJ6 Front — If camber is not within specifications, support lower wishbone at outer mounting point and remove bolts securing upper wishbone bracket. To increase camber, remove equal amount of shims from front and rear bolts. To decrease camber, add equal amount of shims to both bolts. Install and tighten bolts. Remove support and check camber angle. NOTE — Always change shims in equal amounts so caster will not be affected.

XKE III V12, XKE 3.8 & XKE 4.2 Front — If camber is not within specifications, loosen bolts securing front and rear fulcrum shaft mounting brackets to sub-frame. To increase camber, add shims in equal amounts to front and rear mounting brackets. To decrease, remove shims in equal amounts. Tighten bolts and recheck camber angle.

All Models Rear (Exc. XKE III V12) — If rear camber is not within specifications, raise vehicle and remove wheel. Remove nut and washer securing forward road spring and shock absorber to wishbone mounting pin. Drift mounting pin through wishbone until assembly is free from pin. Remove nut and bolt

Wheel Alignment

1962-72 JAGUAR SPECIFICATIONS & ADJUSTMENTS (Cont.)

securing top of road spring and shock absorber to cross beam and remove assembly. Loosen nuts securing half shaft to brake disc and pull hub and half shaft away from shims enough to clear disc mounting studs. Remove or add shims as necessary to adjust camber to specifications. Reverse removal procedure and recheck camber.

XKE III V12 Rear — If rear camber is not within specifications, raise vehicle, remove wheel and use stands to support body. Remove lower wishbone outer fulcrum grease nipple. Remove nuts securing half shaft to brake disc and separate half shaft from disc. Add or remove shims to set camber to specifications. Reverse removal procedure and recheck camber angle.

TOE-IN

Mk II, 3.8 & 420 Series (Standard Steering) — Place front wheels in straight ahead position and check toe-in measurement. Move vehicle ahead so front wheels rotate 180° and take second reading. Take average of two readings to determine toe-in. If not within specifications, loosen clamp bolt at each end of center tie rod. Rotate rod, setting toe-in to specifications. Tighten clamp bolts and recheck toe-in.

XJ6, Mk 10, XKE III V12, 420 Series (Power Steering) & XKE 3.8 & 4.2 — Place front wheels in straight ahead position and check toe-in measurement. Move vehicle ahead so front wheels rotate 180° and take second reading. Take average of two readings to determine toe-in. If not within specifications, loosen lock nuts on side tie rod. To adjust toe-in, turn side tie rods by equal amounts to set toe-in to specifications. Tighten lock nuts and recheck toe-in.

WHEEL ALIGNMENT SPECIFICATIONS								
Man - Manual Steering Axis	Steering	Caster (Degrees)	Camber (Degrees)	Toe-In (Inches)	Toe-Out On Turns			
	Inclin.				Inner	Outer		
Mk II	3°30′	0°±30′	+30′±30′	0 to 1/16				
3.8	3°30′	0°±15′	+45'±15'	1/16 to 1/8				
420 & 420G	3°30′	0°±30′	+30'±30'	0 to 1/8				
Mk 10	3°45′	0°±30′	+30'±30'	0 to 1/8				
XJ6	1°30′	$+2^{\circ}15'\pm15'$	$+30'\pm15'$	1/16 to 1/8				
XKE III V12		+2°30′±30′	0°±15′	1/16 to 1/8]		
XKE 3.8 & 4.2	4°	+2°±30′	+15′±30′	1/16 to 1/8				
All Models Rear			$-45' \pm 15'$					