CAMS

5TH CATEGORY - HISTORIC RACING

GROUP Na

APPROVED VEHICLE SPECIFICATION

This form details the approved specification of individual vehicle models in the Na production saloon car group. To be issued with an Historic log book, cars need to comply with these specifications, the physical appearance si in the illustrations and the general historic rules as detailed in the current CAMS manual.

Make of car: MORRIS OXFORD **Model:** SERIES 2

Period of original manufacture:

CAMS Historic group: Na

Date of issue of this Document: 23/06/95

SECTION 1 - CHASSIS

1.1 CHASSIS FRAME

Description :	UNITARY CONSTRUCTION		
Manufacturer :	MORRIS	Period of manufacture:	1954-
Chassis nos. from :		to:	
Chassis no. location :	FIREWALL L/H SIDE		
Material :	MILD STEEL		
COMMENTS :	NIL		

1.2 FRONT SUSPENSION

Description :	IFS SINGLE ARMS TOP AND BOTTOM WITH TRAILING LINKS		
Spring medium :	TORSION BAR		
Damper type :	TUBULAR	Adjustable :	N/A
Anti-sway bar :	NO	Adjustable :	N/A
Suspension adjustable	NO	Method :	N/A
COMMENTS :	RIDE HEIGHT AND SPRING RATE FREE		

1.3 REAR SUSPENSION

Description :	LIVE AXLE		
Spring medium :	SEMI ELLIPTIC LEAF		
Damper type :	TUBULAR	Adjustable :	NO
Anti-sway bar :	YES	Adjustable :	NO
Suspension adjustable	NO	Method :	N/A
COMMENTS :	RIDE HEIGHT AND SPRING RATE FREE FORE AND AFT LOCATION ALLOWED		

1.4 STEERING

Type :	RACK AND PINION	Make :	BMC
COMMENTS :	NIL		

1.5 BRAKES

	Front	Rear
Type :	DRUM	DRUM
Dimensions :	9"	9"
Material of drum :	CAST IRON	CAST IRON
No. cyls per wheel :	2 (2LS)	1(SINGLE LS)
Actuation :	HYDRAULIC	HYDRAULIC
Drum; Make :	LOCKHEED	LOCKHEED

Master cyl make ;	LOCKHEED	Type :	SINGLE
Adjustable bias :	NO		
Servo fitted :	NO		
COMMENTS :	TANDEM M/CYL ALLOWED SERVO ALLOWED		

SECTION 2 - ENGINE

2.1 ENGINE

Make :	MORRIS				
Model :	OXFORD (BMC B SERIES)				
No. cylinders :	4		Configuration :	IN LINE	FOUR stroke.
Cylinder block , materia	CAST IRON				
Bore ; original :	73	mm	Max. allowed :	74.5	mm
Stroke ; original :	89	mm	Max allowed :	89	mm
Capacity ; original ;	1489	CC	Max. allowed :	1554	CC
Cooling method :	WATER				
Identifying marks :					
COMMENTS :	NIL				

2.2 CYLINDER HEAD

Make :	MORRIS					
No. valves per cyl :	2		Inlet :	1	Exhaust	1
No of ports, total :	5		Inlet :	2	Exhaust	3
No camshafts :	1	Location :		BLOCK	Drive :	CHAIN
Valve actuation :	OHV					
Spark plugs per cyl. :	1					
Identifying marks :						
COMMENTS :	NIL					

2.3 LUBRICATION

Method :	WET SUMP		
Oil cooler standard :	NO	Location :	N/A
COMMENTS :	OIL COOLER ALLOWED		

2.4 IGNITION SYSTEM

Type :	DISTRIBUTER AND COIL	Make :	LUCAS
COMMENTS :	NIL		

2.5 FUEL SYSTEM

Carburettor ; Make :	SU	Model :	H2	No. :	1
Size :	1.25"				
Fuel injection ; Make :	NO	Type :	N/A		
Supercharged :	NO	Type :	N/A		
Make :	N/A	Drive :	N/A		
COMMENTS :	2 x H TYPE SU CARBURETTORS ALLOWED THROAT SIZE UNRESTRICTED				

SECTION 3 - TRANSMISSION

3.1 CLUTCH

Make :	BORG AND BECK	Type :	A.6-G	Dia. :	8"
No. of plates :	1				
Actuation :	HYDRAULIC				
COMMENTS :	NIL				

3.2 TRANSMISSION

Make :	MORRIS	Model :	BMC B SERIES
Case material :	AL. ALLOY		
No. forward speeds :	4	Gearchange Type :	COLUMN CHANGE
Gearbox location :	BEHIND ENGINE		
Identifying marks :			
COMMENTS :	RATIOS FREE		

3.3 FINAL DRIVE

Make :	MORRIS	Model :	BMC B SERIES
Wheel drive method :	REAR		
Ratio :	4.875:1		
Differential :	FREE	Model :	BMC B SERIES
COMMENTS :	RATIOS FREE		

3.4 TRANSMISSION SHAFTS (EXPOSED)

No.	1	Location :	TAILSHAFT
Description :	TUBULAR		
COMMENTS	NIL		

3.5 WHEELS AND TYRES

Wheel , type :	DISC	Material :	STEEL	
Fixture method :	BOLT ON	No. studs :	4	
		Front		Rear
Wheel dia. & rim width ;	original :	15 x 4"		15 x 4"
	Allowed :	15 x 5"		15 x 5"
Tyre section ;	original :	550 x 15"		550 x 15"
	Allowed :	185 x 15"		185 x 15"
Aspect ratio, minimum :	65%			
COMMENTS :	NIL			

SECTION 4 - GENERAL

4.1 FUEL SYSTEM

Tank location :	FRONT OF BOOT	Capacity, litres :	48
Fuel pump; type :	ELECTRICAL	Make :	SU
COMMENTS :	NIL		

4.2 ELECTRICAL SYSTEM

Voltage :	12
Battery; location :	ENGINE BAY
COMMENTS :	NIL

4.3 BODYWORK

Type :	SALOON	Material :	STEEL
No. of seats :	4	No. doors :	4
COMMENTS :	NIL		

4.4 DIMENSIONS

Track; front ;	1360	mm	Track, rear :	1346	mm
Wheelbase;	2464	mm	Overall length :	4343	mm
Dry weight :	1198	kg			
COMMENTS :	NIL				

4.5 SAFETY EQUIPMENT

Fire Extinguisher :	REQUIRED
Seat belt :	REQUIRED
Roll bar :	REQUIRED
Electrical cut off switch :	RECOMMENDED
Safety fuel tank :	RECOMMENDED
COMMENTS :	NIL

modern MOTOR ROAD TEST

Series III Oxford blends improved performance with above-average comfort for its price range, reports Bill Daly

NEW, LIVELIER OXFORD

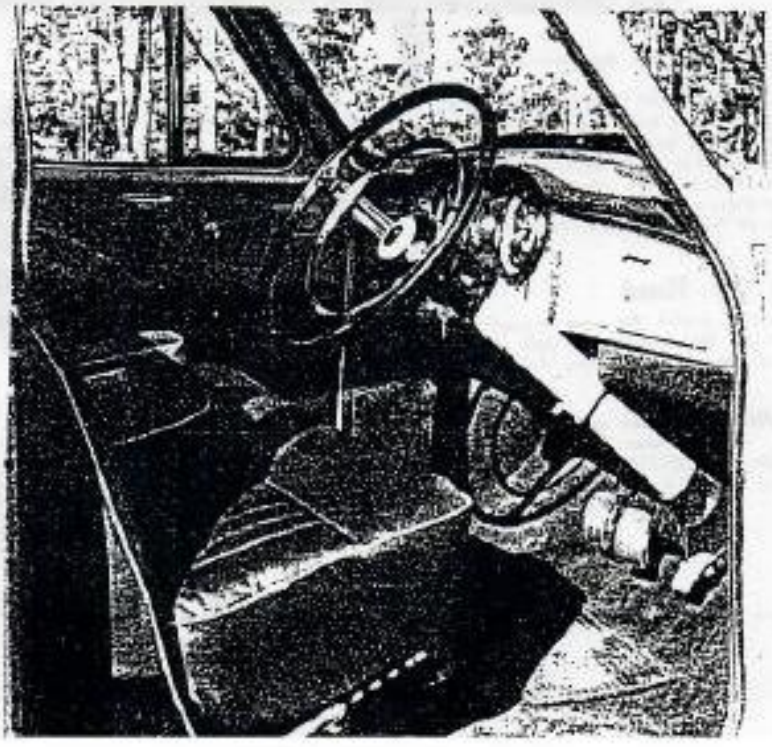
THE moment I relaxed into the deep, well-sprung upholstery of the front seat, surveyed the generously instrumented panel and tried the well-positioned steering wheel and pedals of the new Morris Oxford Series III, I became aware of a degree of driver-comfort above the average for a car in this price class.

When I returned the car to B.M.C., two days and 250 miles later, that first impression had increased rather than diminished.

In addition to the solid comfort of a well-planned body, this latest Oxford gets livelier acceleration from a boosted compression ratio (now 8.3 instead of 7.2 to 1).

This has raised engine output from 50 b.h.p. at 4200 r.p.m. to 55 at 4400; maximum torque still occurs at 2400 revs, but is up from 74 to 78 ft./lb.

Only other mechanical change is a full-flow oil filter instead of the previous bypass unit.



***INSIDE** steering wheel, re-designed dash with rubber padding are main cockpit changes; the seats have centre armrests.*

Main external changes are a redesigned boot-line with raised tailfins, hooded headlights, and flutes on the sides of the bonnet, which has now lost its central air-scoop. Grille shape remains the same.

Inside, each bench seat has been given a folding armrest, and new safety features include a dished steering wheel and sponge-rubber padding on the dash.

The dash has been brought closer to the front seat, and the central instrument panel raised to give the driver a better view of the instruments. The panel has a clock in the middle; the speedo. on the right, incorporates both total mileage and trip recorders, while the left-hand dial contains an ammeter, and gauges for fuel, oil pressure and water temperature. Not just little red and green lights, but genuine honest-to-goodness gauges that tell you exactly what's going on under the bonnet.

There's a glovebox on each side of the panel and provision for fitting a car heater, available at extra cost. The steering-column gear lever is well positioned; so are the various knobs and switches.

Completing the "office" picture are small ashtrays built into the interior door trim of both front doors, and a roof-light that comes on automatically when either front door is opened. This light can also be controlled by a small switch on the driver's door pillar.

On the Road

In city traffic the new Oxford left little to be desired: it was quiet, well-mannered and nippy; but steering action at low speeds felt somewhat heavy. This impression was heightened by the fact that the car was still very new and a little stiff in the steering column. It had a feeling of "solid" comfort about it that was not entirely imaginary, as it tipped the scales at 22¼cwt. with a full petrol tank when run over the weighbridge.

Third gear was found most useful in the city, where I struck few opportunities to use top gear. On our short, sharp test hill the Oxford cleared the crest comfortably in third gear after tackling it at a steady 31 m.p.h. in top at the base.

(Continued on page 78)

MAIN SPECIFICATIONS

ENGINE: 4-cylinder, o.h.v.; bore 73.025mm., stroke 89mm., capacity 1489 c.c.; compression ratio 8.3 to 1; R.A.C. rating 13.22 h.p., maximum b.h.p. 55 at 4400 r.p.m; road speed at 1000 r.p.m. in top gear 15.1 m.p.h.; SU semi-downdraught carburettor, electric fuel pump, 12v. ignition.

TRANSMISSION: Single dry-plate clutch, hydraulically actuated; 4-speed gearbox synchromeshed on top three; ratios, 4.875, 7.266, 11.715, and 19.23 to 1; reverse, 25.15 to 1; hypoid bevel final drive, 4.875 to 1 ratio.

SUSPENSION: Front independent, by long torsion bars; semi-elliptics at rear; telescopic hydraulic shock-absorbers all round.

STEERING: Rack-and-pinion, 3 turns lock-to-lock; turning circle, 35ft. 11in. left, 35ft. 6in. right.

WHEELS: Discs; 5.50 x 15in. tyres.

BRAKES: Lockheed hydraulic, 9in. diameter; 165 sq. in. lining area.

CONSTRUCTION: Unitary.

DIMENSIONS: Wheelbase 97in.; track, front 53½in., rear 53in.; length 14ft. 3in., width 5ft. 5in., height 4ft. 3in.; ground clearance 6¼in.

KERB WEIGHT as tested: 22¼ cwt.

FUEL TANK: 12 gallons.

PERFORMANCE ON TEST

CONDITIONS: Fine, cool, no wind; dry bitumen and dirt roads; two occupants, premium fuel.

MAXIMUM SPEED: 75.8 m.p.h.

FLYING quarter-mile: 75.5 m.p.h.

STANDING quarter-mile: 23.6s.

ACCELERATION through gears: 0-20, 3.0s.; 0-30, 6.6s.; 0-40, 11.2s.; 0-50, 18s.; 0-60, 28.6s.; 0-70, 47.5s.

ACCELERATION in top and third gears (third in brackets): 10-20, 6.0s. (3.2s.); 10-30, 5.6s. (3.1s.); 30-40, 5.6s. (4.4s.); 40-50, 7.2s. (6.0s.); 50-60, 9.5s. (—).

ACCELERATION in second gear: 10-20, 2.2s.; 20-30, 3.0s.

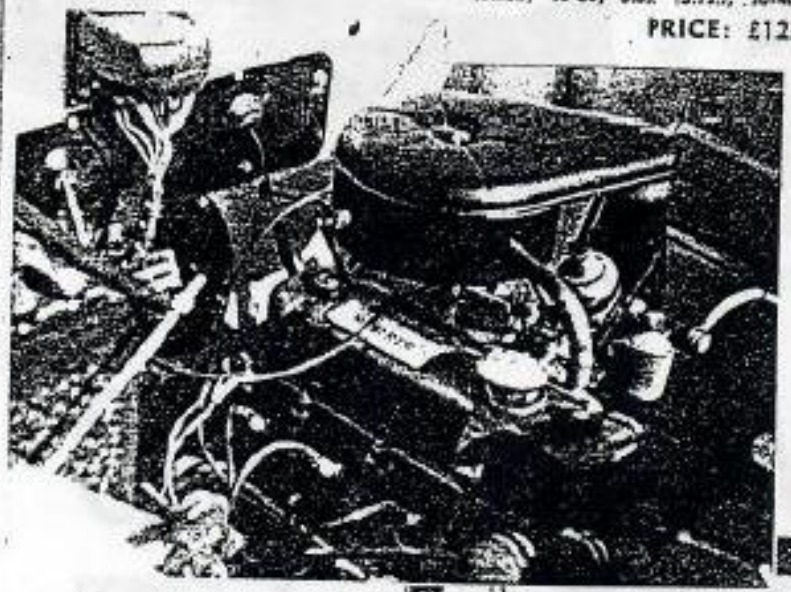
MAXIMUM SPEEDS in indirect gears: 1st, 25 m.p.h.; 2nd, 38; 3rd, 58.

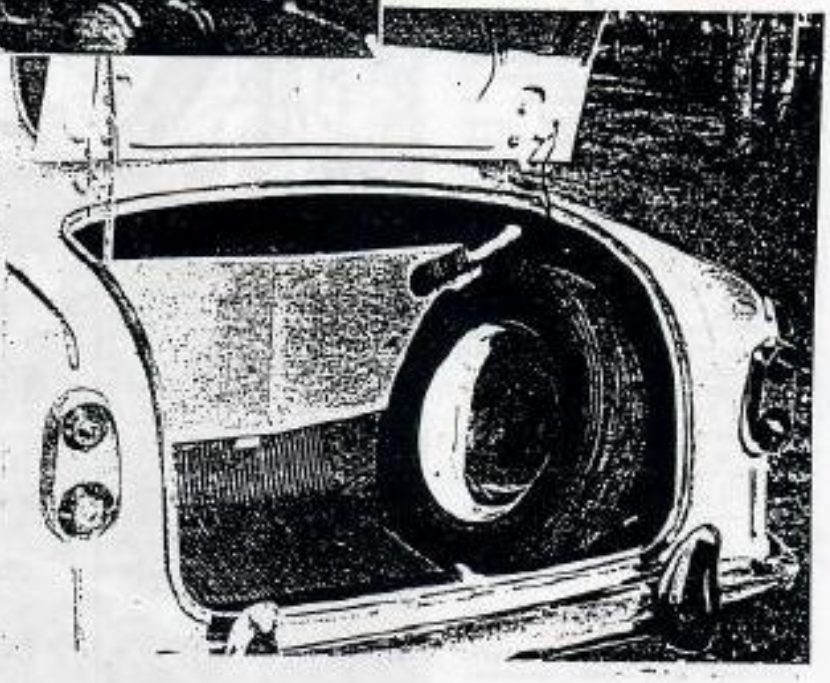
BRAKING: 40ft. 2in. to stop from 30 m.p.h.

CONSUMPTION: 26.7 m.p.g. overall.

SPEEDOMETER: Correct at 20 m.p.h., 1 m.p.h. fast at 30, 5 m.p.h. fast at 60, 7 m.p.h. fast at 75.

PRICE: £1230 including tax





ABOVE: Engine now has 8.3 to 1 compression, full-flow oil filter. RIGHT: Restyled boot can hold 16 cu. ft. of luggage.

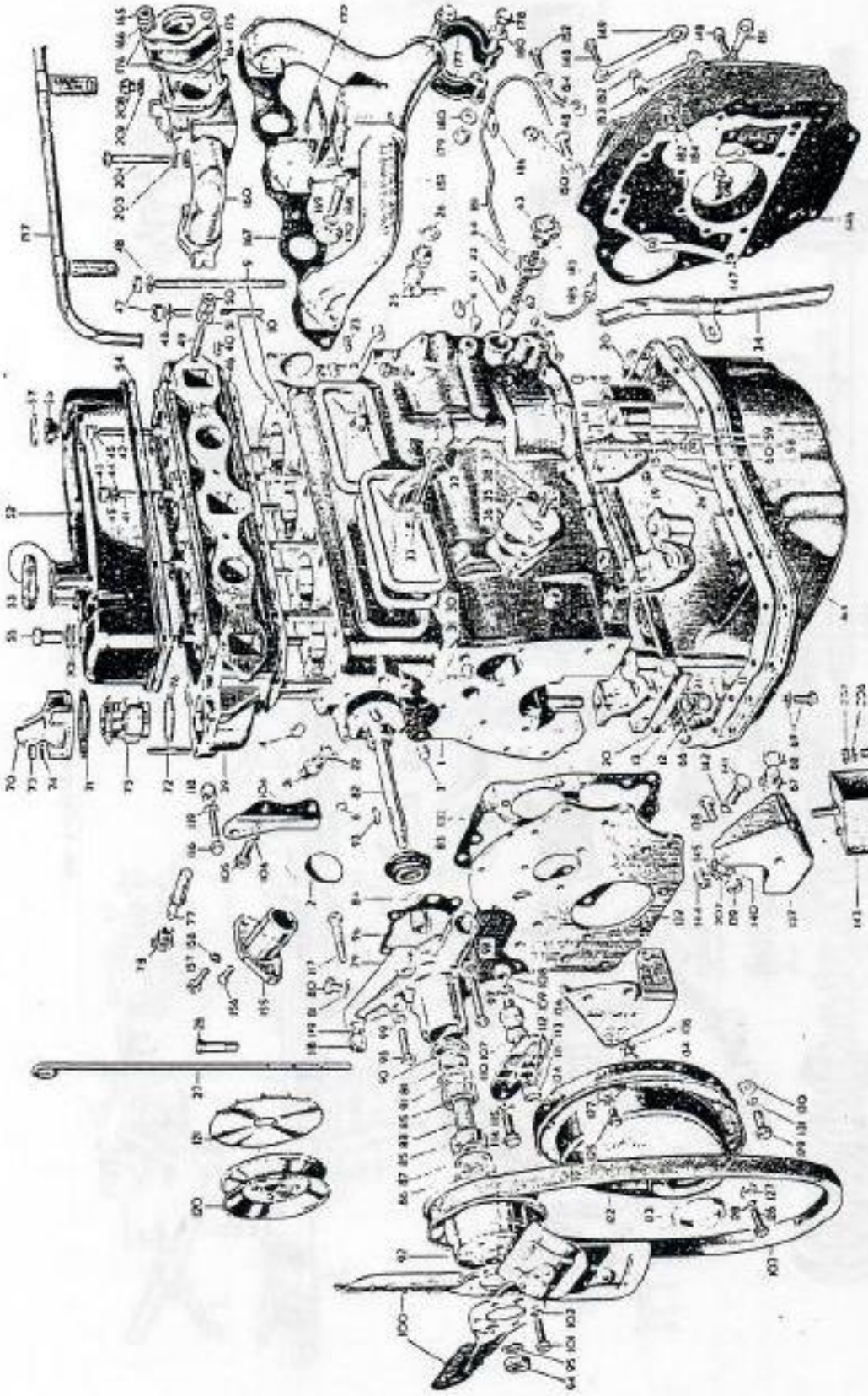


FIG. 1.—The engine components. (See page 8 for key).

5—(Gearbox)

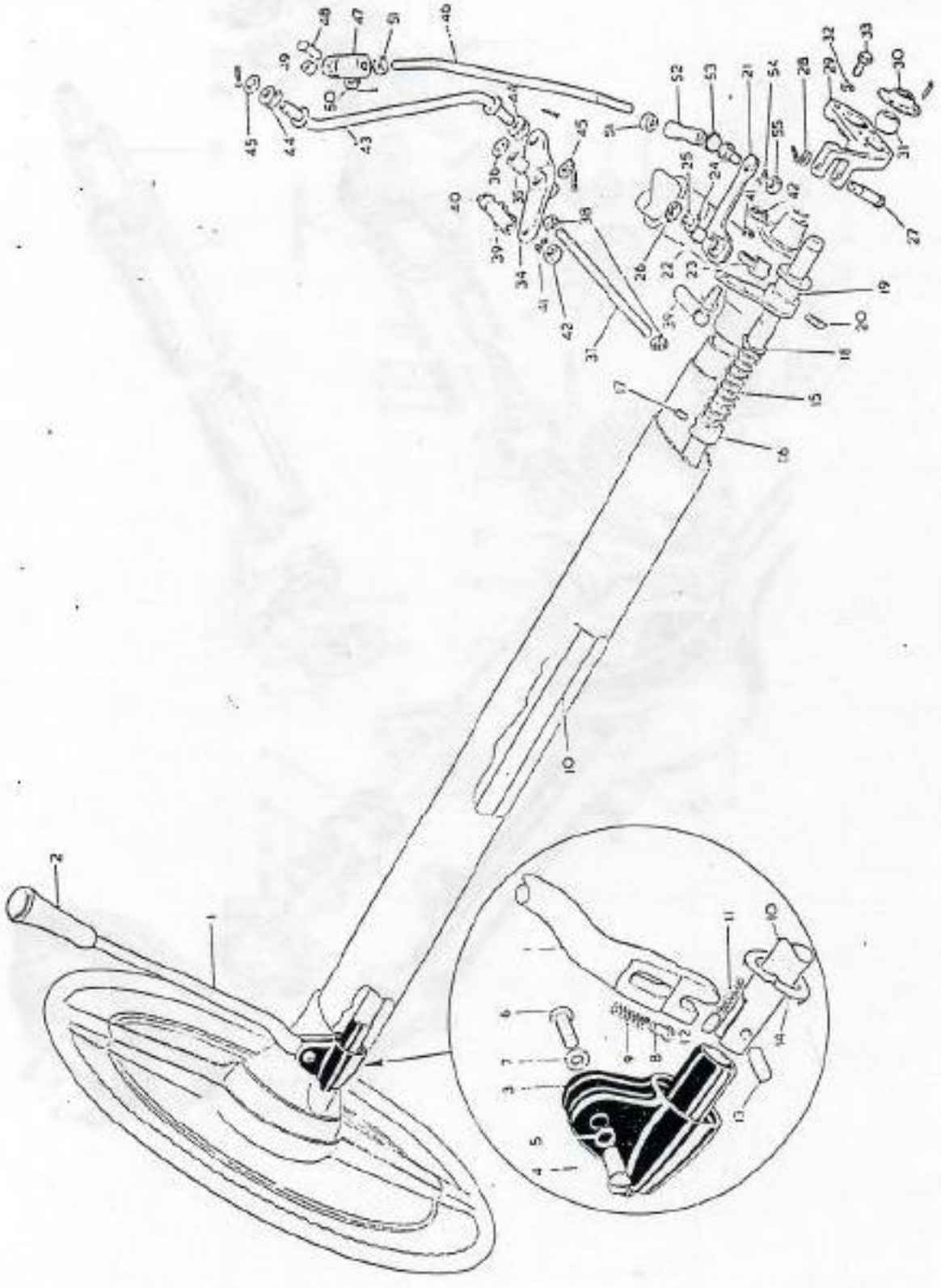


FIG. 3—The gear change linkage. (See page 6 for key).

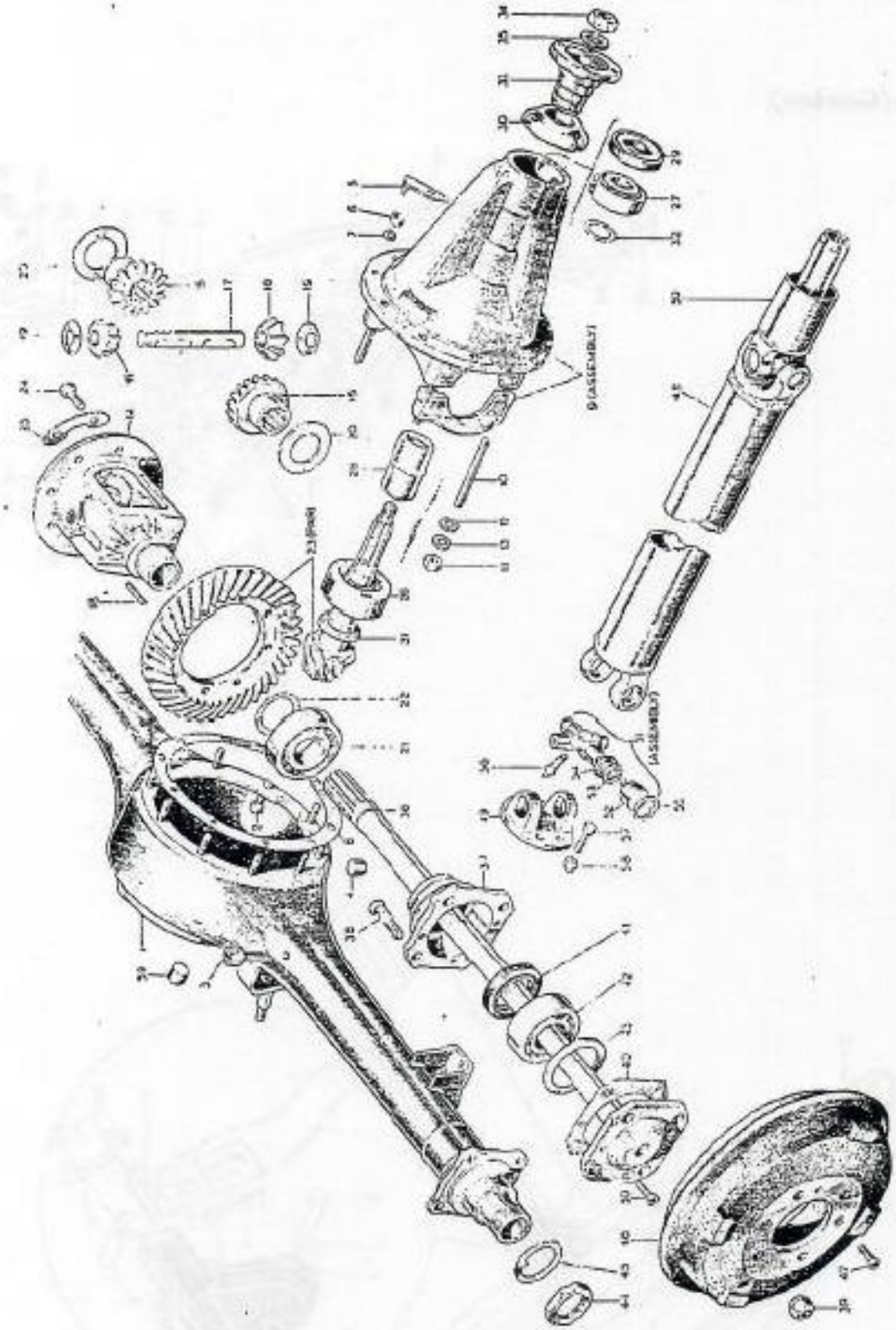


FIG. 1.—Rear axle components. (Key to components on page 3).

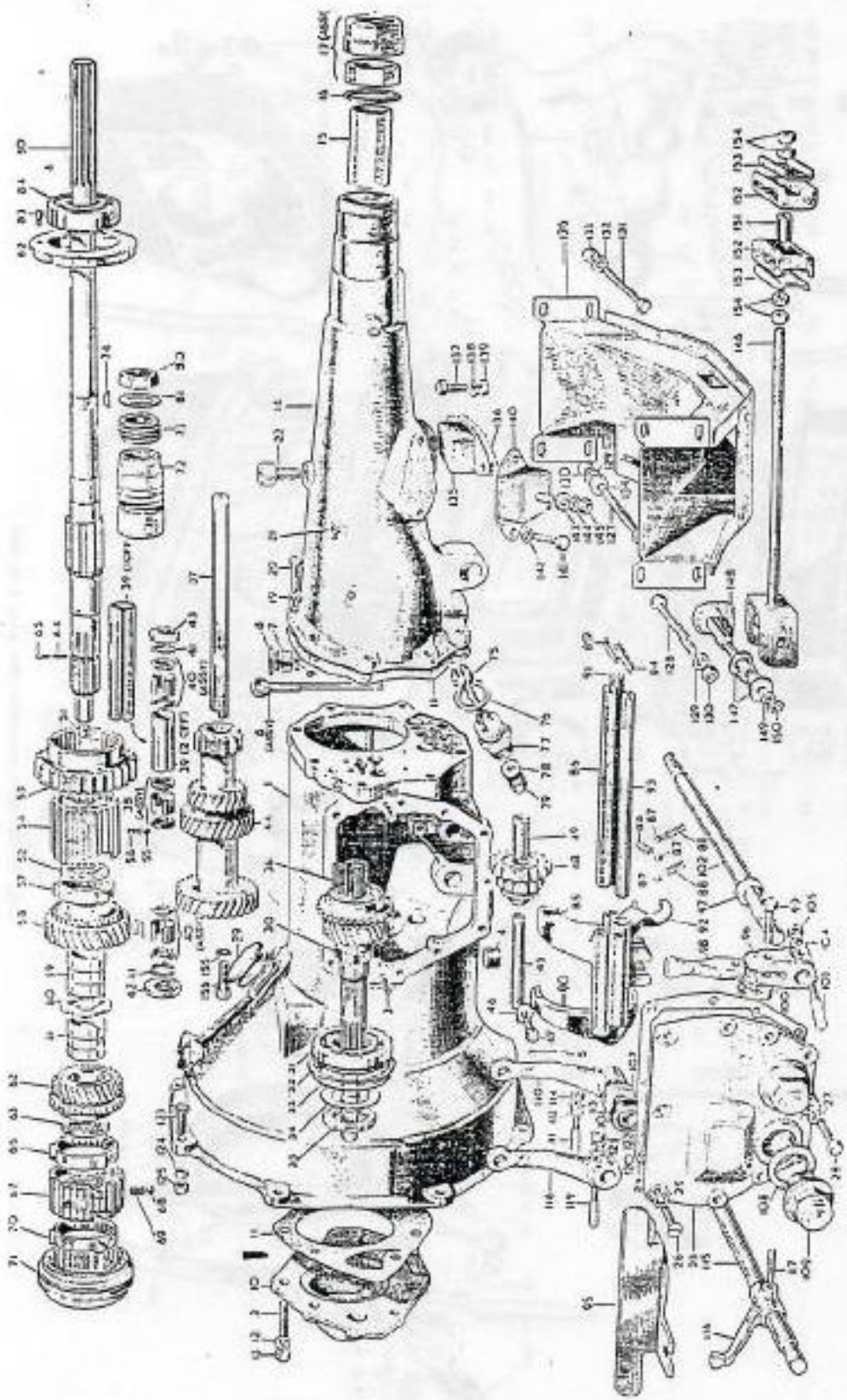


FIG. 1.—The gearbox components. (See also page 3 for key).

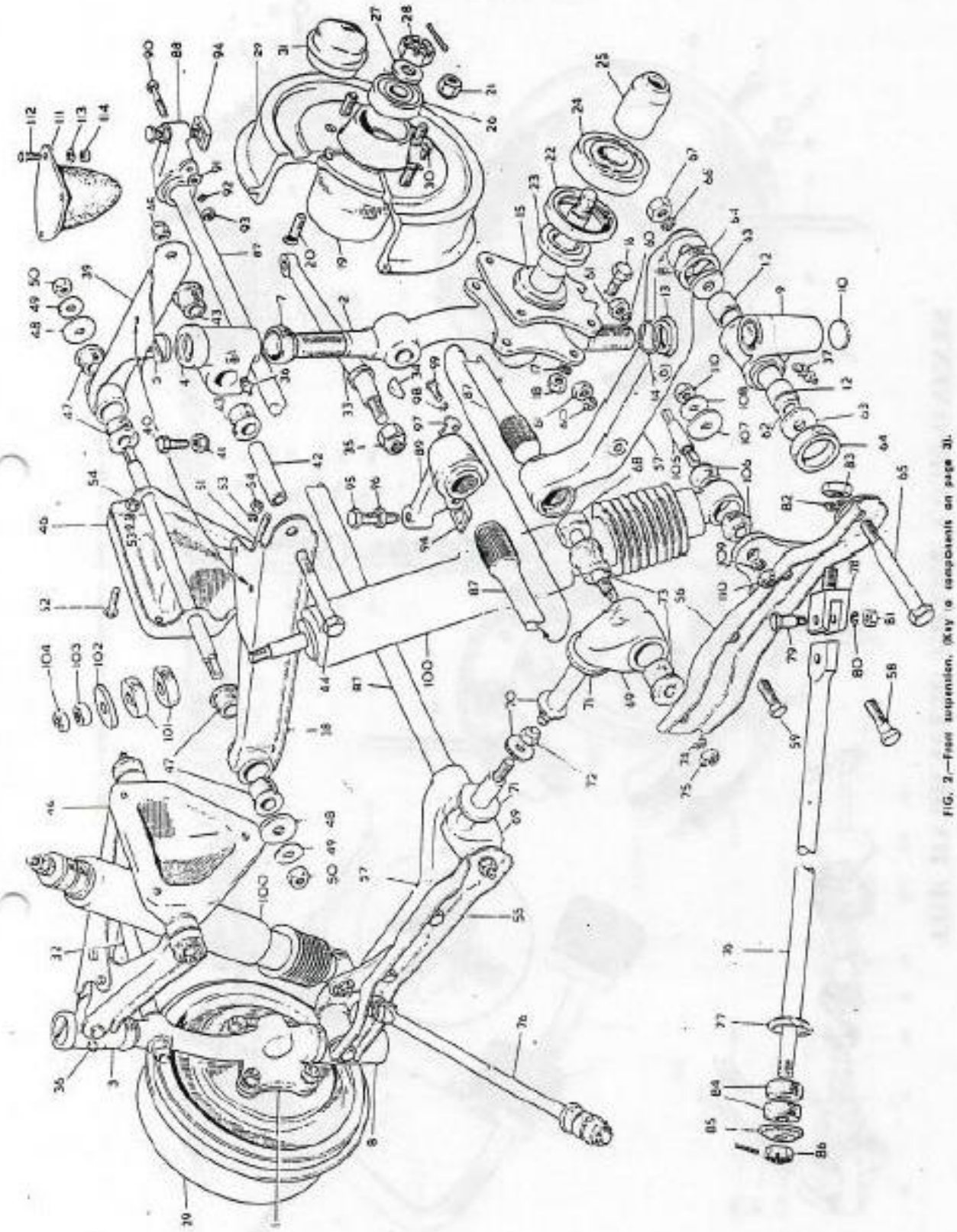


FIG. 2—Front suspension. (Key to components on page 31.

THE HYDRAULIC BRAKE COMPONENTS

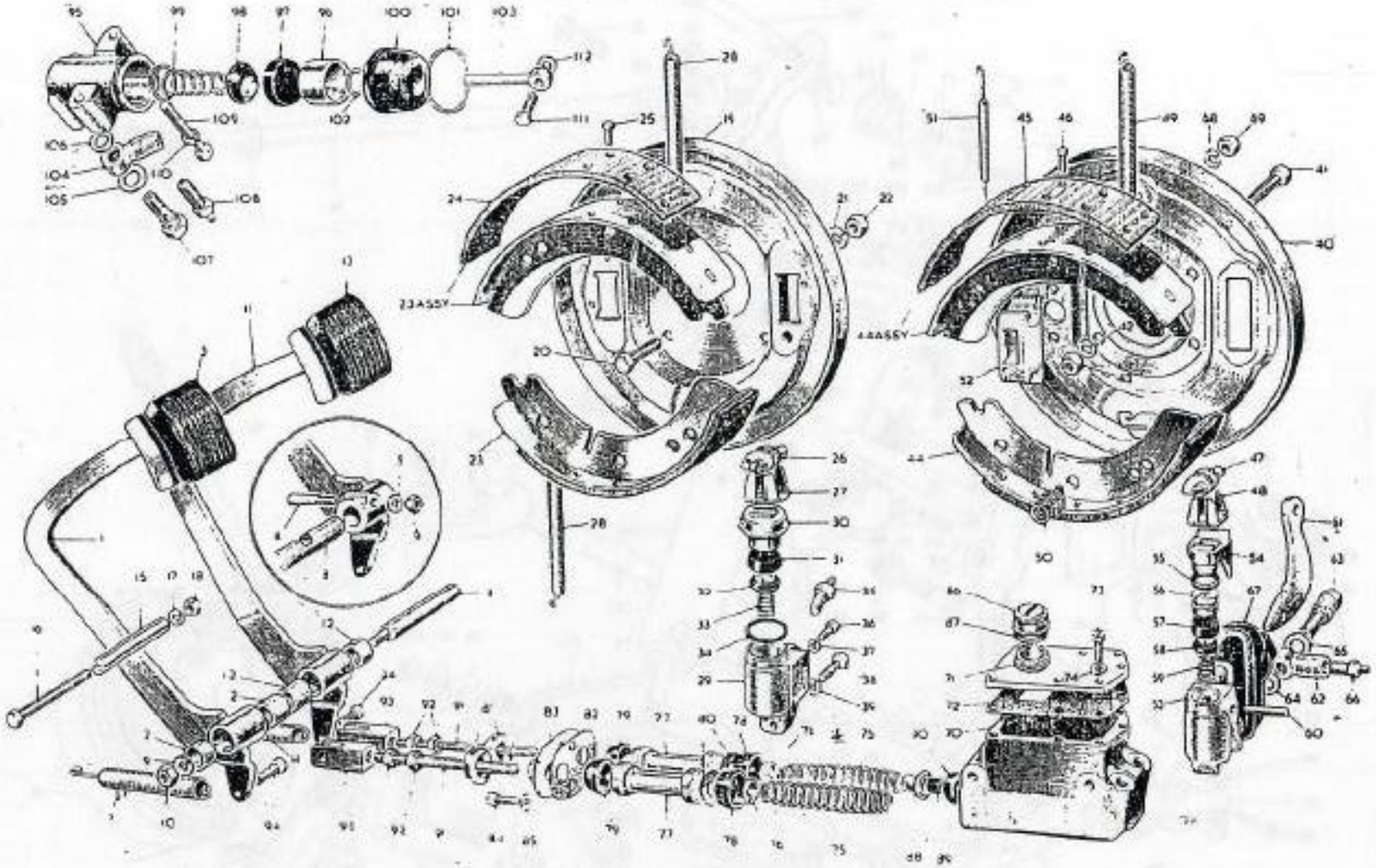
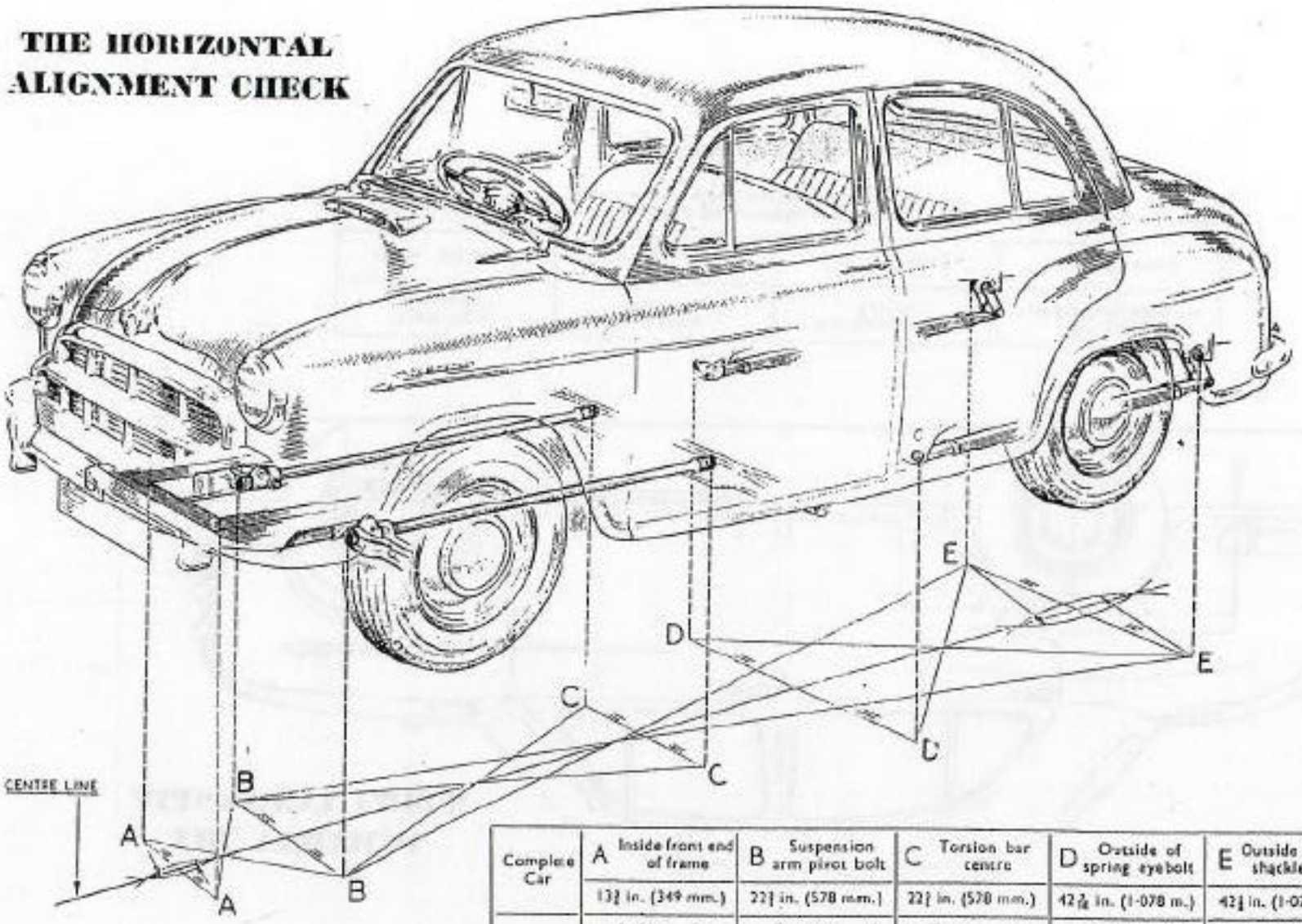


FIG. 3—Hydraulic brake components. (See page 4 for key).

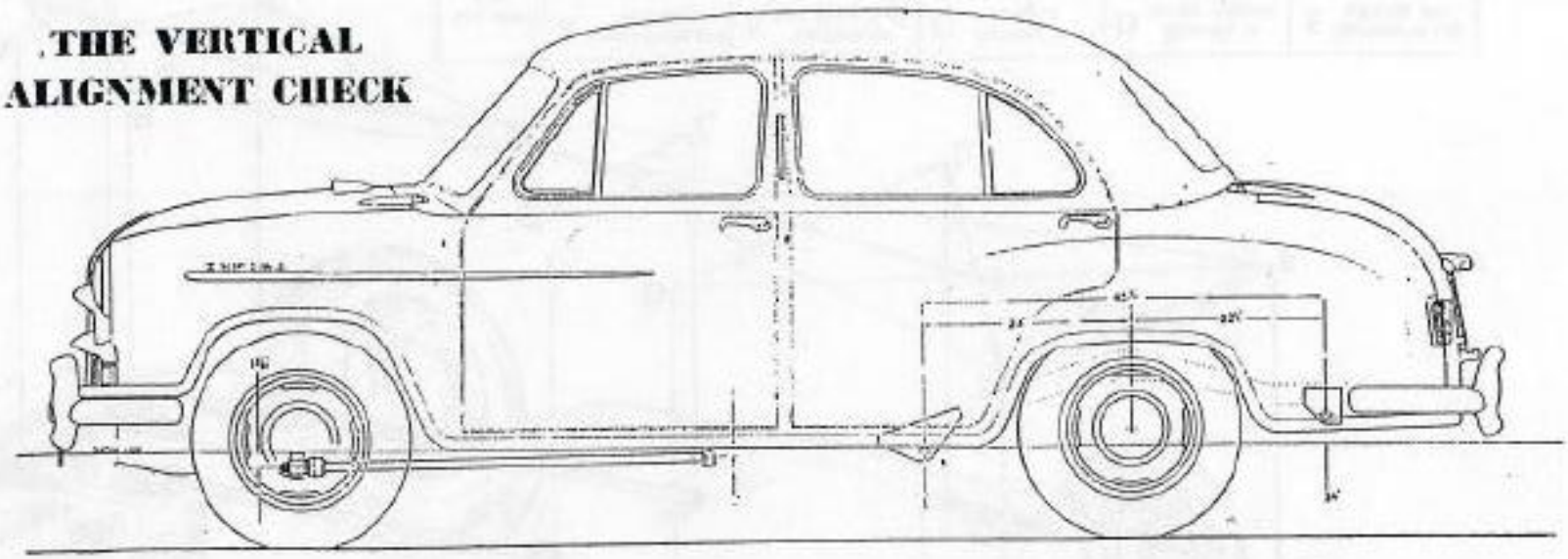
THE HORIZONTAL ALIGNMENT CHECK



Complete Car	A Inside front end of frame	B Suspension arm pivot bolt	C Torsion bar centre	D Outside of spring eyebolt	E Outside of top shackle pin
	13⅞ in. (349 mm.)	22⅛ in. (578 mm.)	22⅛ in. (578 mm.)	42⅛ in. (1·078 m.)	42¼ in. (1·070 m.)
Stripped Body	A Inside front end of frame	B Outside of eyebolt hole	C Torsion bar hole in member	D Inside face of spring bracket	E Outside face of bush tube
	13⅞ in. (349 mm.)	20⅛ in. (520 mm.)	22⅛ in. (578 mm.)	36⅛ in. (935 mm.)	40 ⅜ in. (1·033 m.)

FIG. 11.—The horizontal alignment check.

THE VERTICAL ALIGNMENT CHECK



Front End of Torsion Bar	Rear End of Torsion Bar	Rear Spring From Eyebolt	Rear Spring Rear End Top Shackle Pin
1 $\frac{5}{32}$ in. (47 mm.)	1 in. (25 mm.)	$\frac{1}{2}$ in. (13 mm.)	3$\frac{1}{4}$ in. (82 mm.)

It is important to remember that the vertical measurements given for this check are dimensions relative to each other and not their actual height from ground level.

FIG. 12.—The vertical alignment check.