AUTOMOBILES PEUGEOT

SOCIETE ANONYME AU CAPITAL DE 800.000.000 F REGIE PAR LES ARTICLES 118 A 150 DE LA LOI SUR LES SOCIETES COMMERCIALES R. C. PARIS B 552 144 503 - SIRET U52 144503 00059

DIRECTION DES PIECES DETACHEES

BOITE POSTALE Nº 16
92250 LA GARENNE-COLOMBES (France)

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ADRESSE TELEGR. : TELEX 620186 PEUJOTO A GARCO

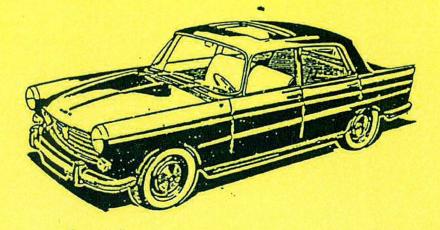
TELEPHONE 780-71-57

ILLUSTRATED DOCUMENTATION

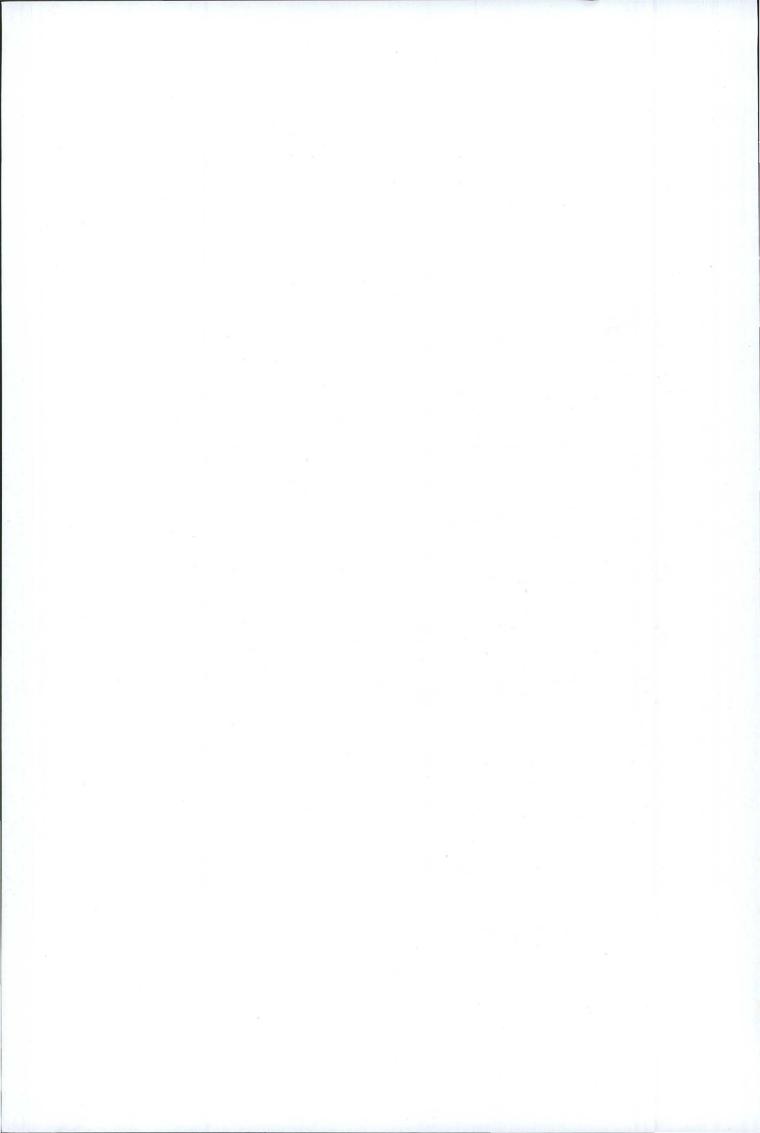


Manual Repair

2



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GROEPSINDELING

- 1. MOTOR
- 2. KOPPELING
- 3. VERSNELLINGSBAK / DIFFERENTIEEL
- 4. AANDRIJVING
- 5. ACHTERBRUG / ACHTERTREIN
- 6. VOORTREIN
- 7. STUURINRICHTING
- 8. REMMEN
- 9. VERING
- 10. WIELEN EN BANDEN
- 11. CARROSSERIE EN RICHTBLOK
- 12. ELEKTRISCHE INSTALLATIE
- 13. CARROSSERIE / BEKLEDING / LAKWERK
- 14. SMERING EN ONDERHOUD
- 15. GEREEDSCHAPPEN EN ALGEMEEN



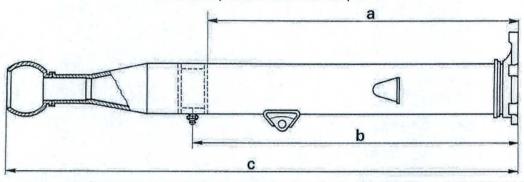
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IDENTIFICATION AND CHARACTERISTICS	
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REMOVAL AND REFITTING	02 01
REMOVAL AND REFITTING OF THE CENTRAL BEARING	
Tools to be used Removal of the central bearing Refitting of the central bearing	03 01 03 02 03 03

PEUGEOT



TORQUE TUBE

404 Saloons, Convertibles and Coupés



		Med	mm	
	Different fittings	g	Ь	c
1 -	Up to n°: 404 : 4 135 627 404 J : 4 504 833	859	885.5	1,751.5
	For differential of 95,25 mm between centres (centre to centre distance) with 31 mm diameter propeller shaft P.N.: 2820.36			
2 -	404 from n° 4 135 628 to n° 5 045 497 404 J from n° 4 504 834 to n° 4 529 909 404 KF from beginning n° 4 551 335 of n° 4 495 819 404 C.KF series n° 4 590 865 404/8 n° 6 900 001 (beginning of series)	894.5	925.5	1,751.5
	Grease nipple position changed due to the fitting of a 37 mm diameter propeller shaft P.N.: 2820.39			
3 -	As from numbers: 404 (TW) : 5 045 498 404 (TH) : 5 100 001 404 J : 4 529 910 404 KF : 4 551 336 : 8 200 001 404 D : 4 600 001 404 C : 4 495 820 404 C.KF : 4 590 866 404 ZF : 8 250 001	890.5	921.5	1,747.5
	Length decreased by 4 mm due to the fitting of a differential of 101.6 mm between centres in place of 95.25 mm P.N.: 2820.45 or 2820.51			

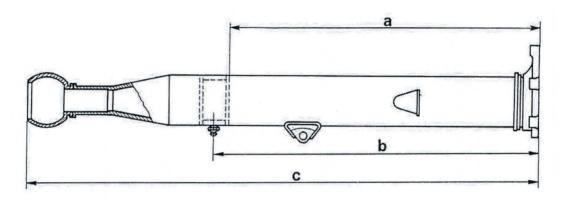
INTERCHANGEABILITY:

The torque tubes of the 3 fittings are not interchangeable.



TORQUE TUBE

404 Family Cars, Breaks and Station Wagons



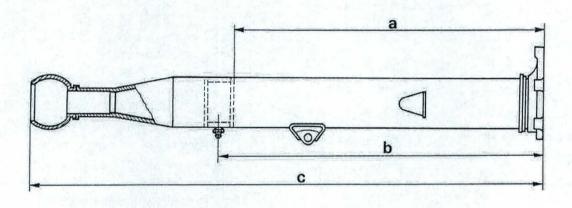
		Measurements in mm		
Different fittings	a	Ь	с	
1 - Up to n°: 404 L (TW) : 4 898 217 404 L (TH)	988	1,019	1,937	
For worm and wheel axle with oil thrower bush. P.N.: 2820.46				
2 - As from n°: 404 L (TW) : 4 898 401 404 L (TH)	933	964	1,827	
Tube of modified length and shape, due to the fitting of a hypoid axle and the removal of the oil thrower bush.				
P.N.: 2820.48				

INTERCHANGEABILITY:

The torque tubes of the 2 fittings are not interchangeable.



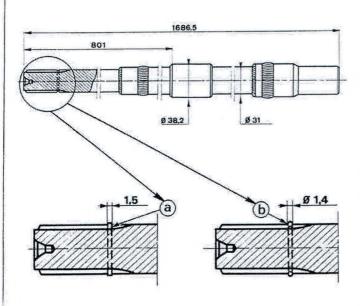
TORQUE TUBE 404 Light Lorry and Cab-platform



Fitting	Measurements in mm			
	•	b	c.	
From beginning of series :				
404 U8				
404 U10				
404 U8D				
404 U10D				
The tube for the hypoid axle differs mainly from that of the 404 L and U6 in :				
- The overall length				
The position of the triangle arm support.				
P.N.: 2820.52				
			l'	

PEUGEOT





P.N. 2801.34

PROPELLER SHAFT

404 Saloons, Convertibles and Coupés

Up to no:

404 - 4 135 627 **404 J -** 4 504 833

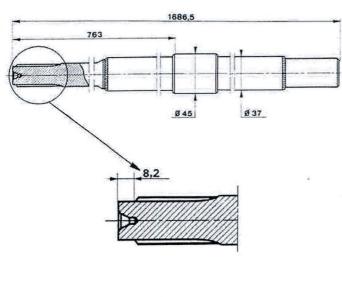
Shaft of 31 mm diameter with central bearing carrier of 38.2 mm diameter

Including:

- up to no :

404 - 4 055 689 **404 J -** 4 502 026

- A spring clip of rectangular section a.
 - 404 from nº 4 055 690 to nº 4 135 627
- 404 J from n° 4 502 027 to n° 4 504 833
- A spring clip of circular section b.



P.N. 2801.36

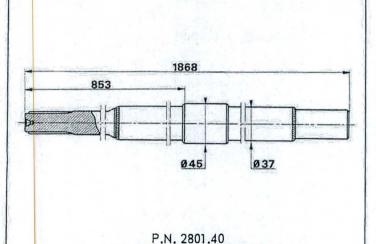
- Shaft of 37 mm diameter with central bearing carrier of 45 mm diameter.
- Without spring clip and a smooth section of 8.2 mm at the front end.

This shaft must be fitted with a universal joint fitted with a spring clip in the rear yoke.

INTERCHANGEABILITY:

The two types of propeller shaft are not interchangeable.





PROPELLER SHAFT

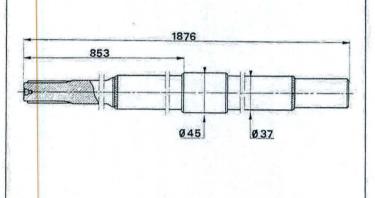
404 Family Cars, Breaks and Station Wagons 1st fitting

404 Associated vehicles with 4 imes 19 worm and wheel axle.

Up to serial no:

404 L (TW) - 4 898 217 404 U6 - 4 761 054 404 L (TH) 370 404 U6A (TW) - 1 930 490 404 L Break 404 LD - 4 979 008 404 U6D - 4 909 454

- Shaft of 1,868 mm length.



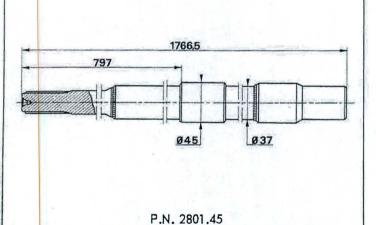
P.N. 2801.44

2nd fitting

404 Diesel Associated vehicles with 5 \times 21 worm and wheel axle.

404 LD from n° 4 980 001 to n° 4 983 681 404 U6D from n° 4 909 501 to n° 4 914 068

- Shaft of 1,876 mm length.



3rd fitting

404 Associated vehicles with hypoid axle

As from no:

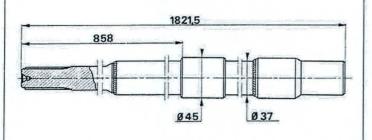
404 L (TW) - 4 898 401 404 U6 - 4 761 301 404 L (TH) 34 879 401 404 U6A (TW) - 1 930 601 404 L Break 404 U6A (TH) - 1 927 901 404 LD - 4 983 801 404 U6D - 4 914 201

- Shaft of 1,766.5 mm length

INTERCHANGEABILITY

The propeller shafts of the three fittings are not interchangeable.





P.N. 2801.46

PROPELLER SHAFT

404 Light lorries and Cab-platforms

From beginning of series:

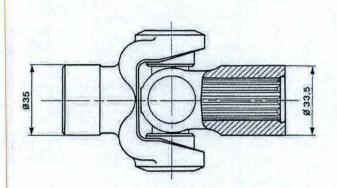
404 U8

404 U8D 404 U10

404 U10D

- Shaft of 1821.5 mm length





P.N. 2619.11

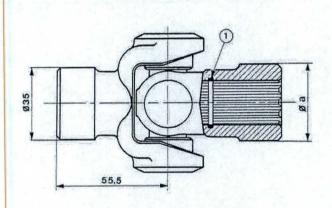
UNIVERSAL JOINT

All 404 models with C3 gearbox

Up to no:

404 - 4 135 627 404 J - 4 504 833

Must be fitted with a propeller shaft equippec with a spring clip.



As from no:

404 - 4 135 628 404 J - 4 504 834

From beginning of series:

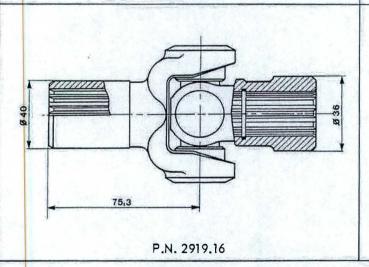
404 KF 404/8 404 D 404 L, LD

404 C-C.KF 404 U6, U6A, U6D

 Universal joint with spring clip 1 in the rear yoke.

diameter a	P.N.
33,5 mm	2619.12
36 mm	2619,14

The Spare Parts Department only deliver the universal joint P.N. 2619.14 which is interchangeable with joint P.N. 2619.12.



All 404 models with BA7 gearbox

From beginning of series:

404/8

404 U8 and U8D 404 U10 and U10D

As from no:

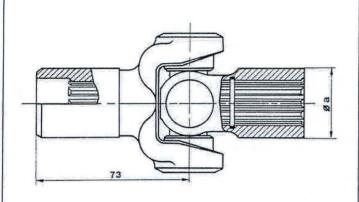
404 TW - 5 085 001 404 L (TW) - 4 941 601 404 TH - 5 415 001 404 L(TH) - 6 826 001 404 C - 4 670 201 404 LD - 4 986 701 404 D - 4 629 001 404 U6 - 4 774 001 404 KF - 8 243 001 404 U6A - 1 932 301 404 C.KF - 6 801 501 404 U6D - 4 917 501

INTERCHANGEABILITY -

The three types of universal joint are not interchangeable.

PEUGEOT





UNIVERSAL JOINT

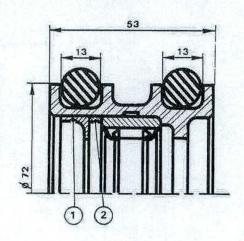
404 Saloons with ZF gearbox

Particularities in comparison with C3 gearbox universal joint.

Shape of the front yoke different (length of $73\,\mathrm{mm}$ in place of $55.5\,\mathrm{mm}$).

Up to no:	diameter a	P.N.
404 ZF - 8 251 022	33.5 mm	2619.13
As from n° 404 ZF - 8 251 023	36 mm	2619.15

- The two types of universal joint are interchangeable.



P.N. 2806.02

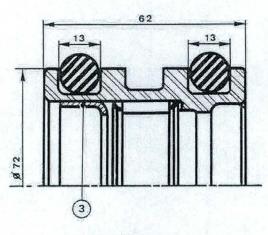
CENTRAL PROPELLER SHAFT BEARING

1: - 404 Saloons - Convertibles - Coupés

Up to no :

404 : 4 135 627 **404 J** : 4 504 833

- For 31 mm diameter shaft.
- With Nadella 38.2 \times 52 \times 18 bearing retained by a cup 1 and spacer 2.



P.N. 2806.06

As from no :

404 : 4 135 628

404 J . 4 504 834

404 KF

404 C and C.KF

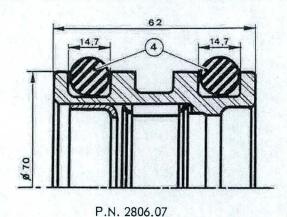
404 D

404 ZF

404/8

beginning of series

- For 37 mm diameter shaft.
- With 45 \times 52 \times 16 needle roller bearing retained by a cup 3 and a spacer.



11. - 404 Associated vehicles

404 L and LD 404 U6 and U6D

404 U8 and U8D

404 U10 and U10D

beginning of series

- For 37 mm diameter shaft.
- Identical to that of the 404 Saloons except for the outer diameter and the rubber lining housings 4.

INTERCHANGEABILITY:

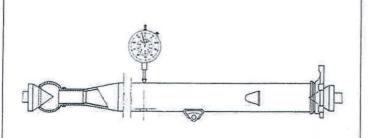
The central bearings of the three fittings are not interchangeable.

PEUGEOT

PROPELLER SHAFT REMOVAL - REFITTING







REMOVAL

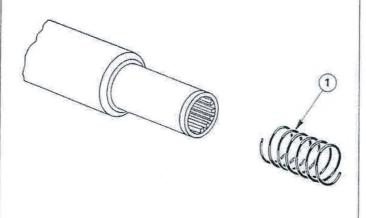
 Remove the torque tube and the propeller shaft by moving the rear axle backwards (see class 5, page 02 02).

Checking

- Place the torque tube or the propeller shaft between two points.
- Check the out of true with a dial indicator to the right of the tube grease nipple, and on the shaft central bearing housing.

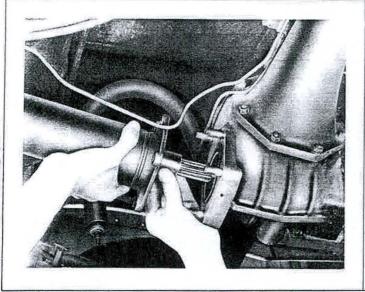
Maximum out of true :

- torque tube : 2 mm
- propeller shaft : 0.2 mm



REFITTING

- Grease the splines and central bearing surface of the propeller shaft.
- Place the spring 1 in the rear part of the shaft and fit this to the worm gear or drive pinion of the rear axle.
- Coat the bearing face of the torque tube with Hermetite.
- Fit the tube to the rear axle.
- Tighten the bolts :
 - 10 mm diameter, to 25 ft.lbs (3.5 m.kg)
 - 12 mm diameter, to 40 ft.lbs (5.5 m.kg)
- Refit the triangle arms to the torque tube.
- Grease the thrust sphere.
- Assemble the two parts of the cover and the oil seal on the thrust sphere.
- Refit the rear axle in the reverse order of removal (see class 5, page 02 03)
- Grease the central bearing of the torque tube and the thrust sphere.



PEUGEOT

PROPELLER SHAFT REMOVAL - REFITTING OF THE CENTRAL BEARING

AZ N M L K P

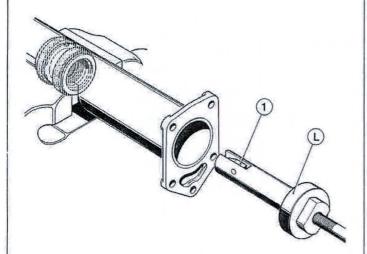
TOOLS TO BE USED

8.0403 U

- Apparatus for removal and refitting of the torque tube central bearing including :
- AZ Impact puller
 - K Extractor in position
 - L Refitting thrust plate
 - M Plate
 - N Sliding adjuster ring
 - P Guide bush.

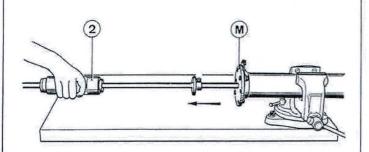


PROPELLER SHAFT REMOVAL OF THE CENTRAL BEARING



- Clamp the torque tube in a vice.
- Remove the grease nipple.
- Insert the apparatus 8.0403 U into the tube (holding it in such a way that the extractor I remains horizontal) until the thrust plate L is in contact with the bearing.
- Secure the plate M to the tube.
- Tap with the heavy «handle» to advance the bearing a few centimetres to release it.

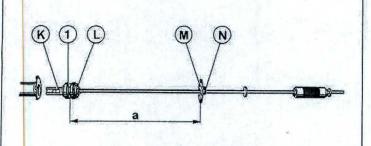
N.B. - This «releasing» operation is very important as, due to the small contact surface of the extractor on the bearing cage, there is a risk of breaking the cage whilst extracting it.



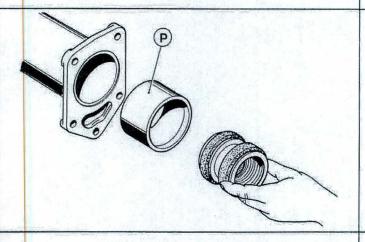
- Rotate the apparatus half a turn to bring the extractor into the vertical position.
- Withdraw the bearing using the «handle» 2 until the cage is in contact with the plate M.
- Remove the plate and withdraw the bearing.
- Clean, examine and replace any parts which are defective.

PROPELLER SHAFT REFITTING THE CENTRAL BEARING

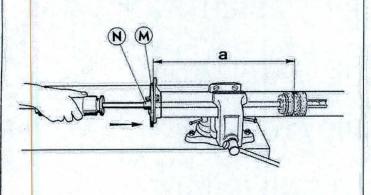




- Clamp the torque tube in a vice.
- Prepare the apparatus 8.0403 U:
- Screw in the extractor K until the threaded rod is in contact with the thick part of the extractor arm thereby locking it.
- Tighten the thrust plate L firmly against the extractor.
- Place the bearing 1 on the extractor K.
- Measure the distance between the grease nipple and the securing flange on the torque tube.
- Find the same distance a between the lubrication groove on the bearing 1 and the thrust plate M.
- Bring the adjuster ring **N** against the plate **M** and tighten the locking screw.



- Grease the interior of the torque tube with engine oil.
- Immerse the bearing in engine oil and then insert the bearing into the tube using the guide bush **P** and, if necessary, a mallet.



- Engage the apparatus in the bearing.
- Secure the plate M to the torque tube.
- Tap the apparatus, using the «handle» until adjuster ring N is in contact with the plate M.
- Check, through the grease nipple hole that the bearing is in the correct position.
- Refit the grease nipple.

GROEPSINDELING

- 1. MOTOR
- KOPPELING
- 3. VERSNELLINGSBAK / DIFFERENTIEEL
- 4. AANDRIJVING
- 5. ACHTERBRUG / ACHTERTREIN
- 6. VOORTREIN
- 7. STUURINRICHTING
- 8. REMMEN
- 9. VERING
- 10. WIELEN EN BANDEN
- 11. CARROSSERIE EN RICHTBLOK
- 12. ELEKTRISCHE INSTALLATIE
- 13. CARROSSERIE / BEKLEDING / LAKWERK
- 14. SMERING EN ONDERHOUD
- 15. GEREEDSCHAPPEN EN ALGEMEEN



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GEAR SETS 404 Saloons, Convertibles and Coupés WORM AND WHEEL REAR AXLE

TYPES	Gear Set	Identification according to the Serial N° written on the part		Gear Set	
		Worm	Crown wheel	Part Nº	
404 up to serial N° : 4 071 371 404 J up to serial N° : 4 502 735	5 × 21	841.006	841.003(1)	3242.24(1)	
404 from N°: 4 071 372 to N°: 5 045 497 404 J from N°: 4 502 736 to N°: 4 529 909 404 SL up to serial N°: 4 414 913 404 KF up to serial N°: 4 551 335 404 C up to serial N°: 4 495 819 404 C.KFup to serial N°: 4 590 865	5 × 25	841.006	841.051(2)	3242.18	
404 (TW) from N°: 5 045 498 to N°: 5 069 812 404 (TH) from N°: 5 100 001 to N°: 5 306 431 404 SL from N°: 4 414 914 to N°: 5 136 029 404 J from N°: 4 529 910 to end of series 404 J.SL up to serial N°: 4 535 278 404 KF from N°: 4 551 336 to N°: 4 570 000 404 D up to serial N°: 4 605 178 404 C from N°: 4 495 820 to N°: 4 498 352 404 C.KF from N°: 4 590 866 to N°: 4 594 000 All 404 DA's	5 × 21(3)	841.074	841.078	3242,31	
404 SL from N° : 5 136 030 to N° : 5 140 409 404 J.SL from N° : 4 535 279 to N° : 4 535 458 404 KF from N° : 4 570 001 to N° : 4 578 362 404 D from N° : 4 605 179 to N° : 4 608 776 404 C from N° : 4 498 353 to N° : 4 498 414 404 C.KF from N° : 4 594 001 to N° : 4 595 522	5 × 21	841.074	841.097(4)	3242,29	
404 (TW) as from serial N° : 5 069 813 404 (TH) as from serial N° : 5 306 432 404 SL as from serial N° : 5 140 410 404 J.SL as from serial N° : 4 535 459 404 KF as from serial N° : 4 578 363 404 ZF as from serial N° : 8 250 001 404 D as from serial N° : 4 608 777 404 C as from serial N° : 4 498 415 404 C.KF as from serial N° : 4 595 523	5 × 21	841.074	841.097	3242.41(5)	

- I Wheel of 36 mm width bolts of 10 mm diameter (Our Spare Parts Department supply as a replacement part, a wheel of 39 mm width with bolts of 10 mm diameter).
- 2 Wheel of 39 mm width with bolts of 11 mm diameter.
- 3 Gear Set of 5×21 with a wide centre to centre distance (101.6 mm in place of 95.25 mm) with bolts of 12 mm diameter and of 62 mm long.
- 4 Wheel of 43 mm width further to the installation of the differential as on Associated Vehicles.
- 5 Gear Set with bolts of 12 mm diameter, 70 mm long in place of 62 mm, further to the installation of ribbed differential shells, 4 mm thicker.

PEUGEOT



GEAR SETS 404 Associated Vehicles WORM AND WHEEL REAR AXLE

	TYPES	Gear TYPES	Gear	Identification according to the Serial N° written on the part.		Gear Set	
		Set	Worm	Wheel	Part N° :		
404 L (TW) 404 L (TH) 404 L Break 404 U6 404 U6A 404 LD 404 U6D	up to serial N°: 4 854 646 up to serial N°: 4 857 892 up to serial N°: 4 857 979 up to serial N°: 4 745 143 up to serial N°: 1 924 027 up to serial N°: 4 980 000 up to serial N°: 4 909 443	4 × 19	841.024	841.019	3242,28		
404 L (TH) 404 L Break 404 U6 404 U6A(TW) 404 U6A(TH)	from N° 4 854 647 to N° 4 898 217 from N° 4 857 893) from N° 4 857 980) to N° 4 879 370 from N° 4 745 144 to N° 4 761 054 from N° 1 924 028 to N° 1 925 000 from N° 1 930 001 to N° 1 930 490 from N° 1 925 001 to N° 1 927 784 from N° 4 909 444 to N° 4 909 500	4 × 19	841.024	841.019	3242.42(1)		
404 LD	from N° 4 980 001 to N° 4 980 786	5 × 21(2)	841.074	841.097	3242.39		
	from N° 4 980 787 to N° 4 983 681 from N° 4 909 501 to N° 4 914 068	5 × 21 (2)	841.074	841.097	3242.41(1)		

Gear Set with bolts of 12 mm diameter, 70 mm length, in place of 62 mm, further to the installation of ribbed differential shells 4 mm thicker.
 Gear Set of 5 × 21 in place of 4 × 19 on Diesel Station Wagons and Family Saloons further to the installation of the XD 88 engine.

HYPOID REAR	AXLE	Ξ
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TYPES	TYPES Gear Set	Identification according to the serial N° written on the part		Gear Set
		Drive pinion	Crown wheel	Part N° :
404 L (TW) as from serial N°: 4 898 401 404 L (TH) as from serial N°: 4 879 401 404 L Break as from serial N°: 4 761 301 404 U6A (TW) as from serial N°: 1 930 601 404 U6A(TH) as from serial N°: 1 927 901	8 × 37	841.107	841.209	3242.43
404 LD as from serial Nº : 4 983 801 404 U6D as from serial Nº : 4 914 201	9 × 38	841.147	841.147	3242.44
404 U8 as from serial N° ; 7 010 001 404 U8D as from serial N° : 7 040 001 404 U10 as from serial N° : 7 060 001 404 U10D as from serial N° : 7 080 001	8 × 39	841.255	841,254	3242.46

REAR AXLE



SPEED IN 4 th GEAR PER 1.000 r.p.m. WORM AND WHEEL AXLE

TYPES	Gear Set	Speedometer Drive Gear Set	Tyre Size	Speed per 1,000 r.p.m.	
404 404 KF 404 C and KF 404 D	5 × 21	8 × 17 8 × 16(1) 10 × 21(2)	165 × 380	28.450	
404	4 × 19	8 × 19 8 × 18(3)	165 × 380	25.200	
404 LD 404 U6D	5 × 21(4)	8 × 17	165 × 380	28.450	

- 1 Speedometer drive gear set of 8 × 16 in place of 8 × 17 on convertibles manufactured between the following serial numbers:

 404 C from N°: 4 495 013 to N°: 4 495 279

 404 C.KF from N°: 4 590 001 to N°: 4 590 051
- 2 Speedometer drive gear set of 10 imes 21 on cars equipped with the BA 7 Gearbox.
- 3 Speedometer drive gear set of 8 imes 18 in place of 8 imes 19 on cars equipped with tyres of 185 imes 380.
- 4 Gear Set of 5 \times 21 in place of 4 \times 19 and speedometer drive gear set of 8 \times 17 in place of 8 \times 19 further to the installation of the XD 88 Engine.

HYPOID REAR AXLE

TYPES	TYPES Gear Set		Tyre Size	Speed per 1.000	
404 L Family Saloon Break 404 U6 404 U6A	8 × 37	8 × 18 10 × 23(5)	165 × 380	25.895	
404 LD 404 U6D	9 × 38	8 × 17 10 × 21	165 × 380	28.410	
404 U8 404 U8D 404 U10 404 U10D	8 × 39	10 × 23	17 × 380	25.800	

- ${f 5}$ Speedometer drive gear set of 10 imes 23 in place of 8 imes 18 further to the installation of the BA 7 Gearbox.
- $\pmb{6}$ Speedometer drive gear set of 10 \times 21 in place of 8 \times 17 further to the installation of the BA 7 Gearbox.



CAPACITY OF WORM AND WHEEL TYPE REAR AXLE

404 Saloons, Convertibles and Coupés

TYPE OF VEHICLE	TYPE OF REAR AXLE	CAPACITY
- 404 Saloons, Convertibles and Coupés with Carburettor and Fuel Injection Engine. Up to serial N°: 404 - 5 045 497 404 J - 4 529 909 404 SL - 4 414 913 404 KF - 4 551 335 404 C - 4 495 819 404 C.KF - 4 590 865	Worm and Wheel rear axle with closed housing in light alloy (without ribs) - with a centre to centre distance of 95.25 mm	2,45 Pints (1,400 I.) Esso Gear Oil V.T.
- 404 Saloons, Convertibles and Coupés 404 (TW) from N° 5 045 498 to N° 5 069 812 404 (TH) from N° 5 100 001 to N° 5 306 431 404 SL from N° 4 414 914 to N° 5 136 029 404 J from N° 4 529 to end of series 404 J.SL from N° 4 529 910 to N° 4 535 278 404 KF from N° 4 551 336 to N° 4 570 000 404 C from N° 4 495 820 to N° 4 498 352 404 C.KF from N° 4 590 866 to N° 4 594 000 404 D up to N° 4 605 178 404 DA up to N° 3 060 687 (end of series)	Worm and Wheel rear axle with closed housing in light alloy (without ribs) - with a wide centre to centre distance of 101.6 mm	3.12 Pints (1.700 I) Esso Gear Oil V.T.
- 404 Saloons, Convertibles and Coupés As from serial N°: 404 (TW) - 5 069 813 404 (TH) - 5 306 432 404 SL - 5 136 030 404 J.SL - 4 535 279 404 ZF - 8 250 001 404 KF - 4 570 001 404 C - 4 498 353 404 C.KF - 4 594 001 404 D - 4 605 179	Worm and Wheel rear axle with ribbed, closed housing. - with a wide centre to centre distance of 101.6 mm - differential as on Associated Vehicles.	2.45 Pints (1.400 I.) Esso Gear Oil V.T.



CAPACITY OF THE WORM AND WHEEL TYPE AXLE 404 Associated Vehicles

I - WORM AND WHEEL TYPE AXLE

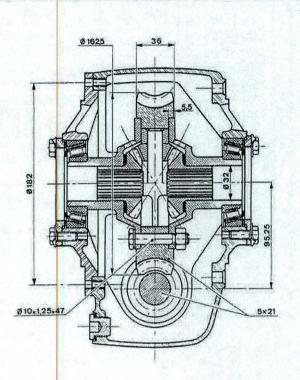
TYPE OF VEHICLE	TYPE OF REAR AXLE	2.80 Pints (1.600 l.) Esso Gear Oil V.T.		
404 Family Saloons and Station Wagons Up to serial N°: 404 L - 4 855 312 404 L Break - 4 855 131 404 U6 - 4 742 040 404 U6A - 1 923 771 404 LD - 4 979 999 404 U6D - 4 909 026	Worm and Wheel rear axle with closed housing in light alloy (without ribs) - Gear Set 4 × 19			
404 Family Saloons and Station Wagons 404 L (TW) from N° 4 854 055 to N° 4 898 217 404 L (TH) from N° 4 855 313 to N° 404 L Break from N° 4 855 132 to N° 404 U6 from N° 4 742 041 to N° 4 761 054 404 U6A(TW) from N° 1 923 772 to N° 1 925 000 404 U6A(TW) from N° 1 930 001 to N° 1 930 490 404 U6A(TH) from N° 1 925 001 to N° 1 927 784 404 U6D from N° 4 909 027 to N° 4 909 500	Rear Axle with worm and wheel unit with closed, ribbed housing Gear Set 4 × 19	2.45 Pints (1.400 l.) Esso Gear Oil V.T.		
404 Diesel Family Saloons and Station Wagons 404 LD from N° 4 980 001 to N° 4 983 681 404 U6D from N° 4 909 501 to N° 4 914 068	Rear Axle with worm and wheel unit with closed, ribbed housing. Gear Set 5 × 21	2.45 Pints (1.400 l.) Esso Gear Oil V.T.		

HYPOID REAR AXLE

TYPE OF VEHICLE	TYPE OF REAR AXLE	2.45 Pints (1.400 I.) Esso Gear Oil G.P. 90						
404 Petrol Engine Family Saloons and Station Wagons As from serial N°: 404 L(TW) - 4 898 401 404 L(TH) -4 879 401 404 L Break	Hypoid Rear Axle Gear Set 8 × 37							
404 Diesel Engine Family Saloons and Station Wagons As from Serial N°: 404 LD - 4 983 801 404 U6D - 4 914 201	Hypoid Rear Axle Gear Set 9 × 38	2.45 Pints (1.400 l.) Esso Gear Oil G.P. 90						
404 Diesel and Petrol Engine Light Lorries and Cab Platforms. As from serial N°: 404 U8 - 7 010 001 404 U8D - 7 040 001 404 U10 - 7 060 001 404 U10D - 7 080 001	Hypoid Rear Axle Gear Set 8 × 39	2.45 Pints (1.400 l.) Esso Gear Oil G.P. 90						



REAR AXLE HOUSINGS ASSEMBLY - 95.25 mm CENTRE TO CENTRE DISTANCE 404 Saloons, Convertibles and Coupés



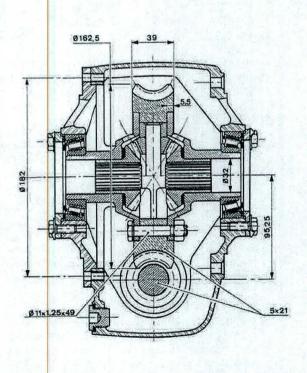
Up to serial No :

404 - 4 071 371 404 J - 4 502 735

- Housing and cover with drilling holes for the rear axle right hand tube securing studs, of 182 mm diameter.
- Gear Set 5×21 with 95.25 mm centre to centre distance with :
- Wheel of 162.5 mm diameter and 36 mm in width
- Bolts of $10 \times 125 \times 47$
- Differential as that fitted on the 403 Saloons.
 shells drilled with 10.25 diameter holes.

NOTE - This housing assembly is no longer supplied by the Spare Parts Department.

The Spare Parts Department deliver for this type of rear axle a wheel (39 mm in width) equipped with assembling bolts of 10 mm diameter.



404 from N° 4 071 373 to N° 5 045 497 **404** J from N° 4 502 736 to N° 4 529 909

404 SL up to Serial Nº 4 414 913

Up to Serial Nº :

404 KF - 4 551 335

404 C - 4 495 819

404 C.KF - 4 590 865

404/8 - 6 900 001 beginning of series.

Similar to the former model but with:

- Wheel of 39 mm width
- Bolts of $11 \times 125 \times 49$

404/8: Bolts of $11 \times 125 \times 52$ unlocked.

differential shells drilled, with 11.25 mm diameter holes.

INTERCHANGEABILITY

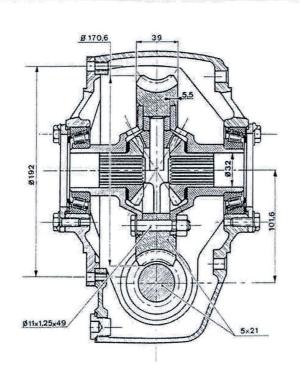
 This housing assembly can be installed to replace the one of the first fitting.
 Consequently the housing assembly part num-

ber has not been altered.

 However the wheels, differential shells, and assembly bolts of both fittings, are not separately interchangeable.



REAR AXLE HOUSING ASSEMBLY - 101.6 mm CENTRE TO CENTRE DISTANCE 404 Saloons, Convertibles and Coupés

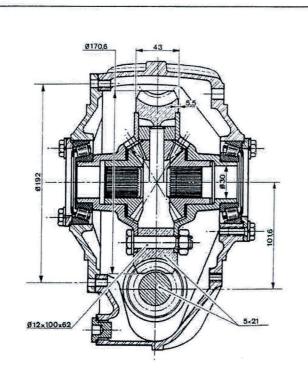


404 (TW)	trom N° 5 045 498 to N° 5 069 812
404 (TH)	from N° 5 100 001 to N° 5 306 431
404 SL	from N° 4 414 914 to N° 5 136 029
404 J	from N° 4 529 910 to end of series
404 J.SL	from N° 4 529 910 to N° 4 535 278
404 KF	from N° 4 551 336 to N° 4 570 000
404 C	from N° 4 495 820 to N° 4 498 352
404 C.KF	from N° 4 590 866 to N° 4 594 000
404 D	up to Serial Nº 4 605 178
404 DA	up to Serial No 3 060 687 (end of serie

- Housing and cover with rear axle right hand tube stud drilling diameter of 192 mm.
- Gear Set 5×21 , wide centre to centre distance (101.6 mm) with a wheel of 170.6 mm diameter and 39 mm width.
- Bolts of $11 \times 125 \times 49$
- 403 Saloons differential.

INTERCHANGEABILITY

This housing assembly may be fitted to replace the former housing on condition that the rear axle right hand tube and torque tube are replaced.



404 SL	from No	5	136	030	1.	k In	_	140	100
404 USA	from No	5	133	860) to	No	Э	140	409
404 J.SL	from No	4	535	279	to	No	4	535	458
404 KF	from No	4	570	001	to	No	4	578	362
404 D	from No	4	605	179	to	No	4	608	776
404 C	from No	4	498	353	to	No	4	498	414
404 C.KF	from No	4	594	001	to	N٥	4	595	522

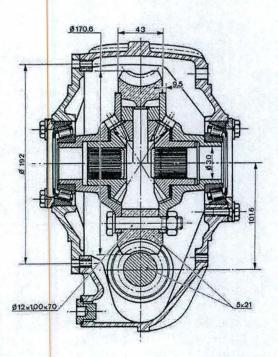
- Ribbed cover and housing
- Gear Set 5×21 wide centre to centre distance (101.6 mm) with a wheel of 170.6 mm diameter and 43 mm width.
- Bolts of $12 \times 100 \times 62$
- Complete differential of the 404 Associated Vehicles necessitating the fitting of axle shafts of a greater diameter.

NOTE - This housing is common to that fitted on the 404 Diesel Engine Family Saloons included within the following serial numbers : $404\ LD$ from N° 4 980 001 to N° 4 980 786

INTERCHANGEABILITY

This housing assembly may be fitted on vehicles equipped with a rear axle having a wide centre to centre distance providing the axle shafts are replaced.





As from Serial Numbers :

404 (TW) - 5 069 813 - 5 306 432 404 (TH) -5 140 410 404 SL - 4 535 459 404 J.SL - 8 250 001 404 ZF 404 KF - 4 578 363 404 D - 4 608 777 404 C 404 C - 4 498 415 404 C.KF - 4 595 523

Identical to the former model but with:

- differential shells 4 mm thicker
- unlocked differential bolts: diameter 12 and a length of 70 mm in place of 62 mm.

NOTE - This housing assembly is identical to that fitted on the 404 Diesel Engine Family Saloons and Station Wagons included between the following Serial Numbers:

404 LD from N° 4 980 787 to N° 4 983 681 404 U6D from N° 4 909 501 to N° 4 914 068

INTERCHANGEABILITY.

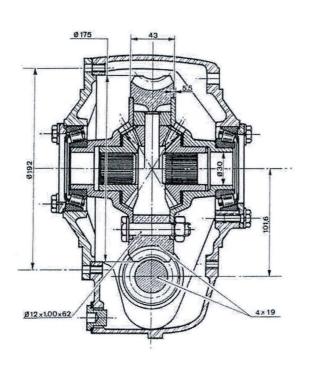
- The housing assembly is interchangeable under the same conditions as for the former housing.
- The differential shells and the assembling bolts are not separately interchangeable.

REAR AXLE

IDENTIFICATION - CHARACTERISTICS



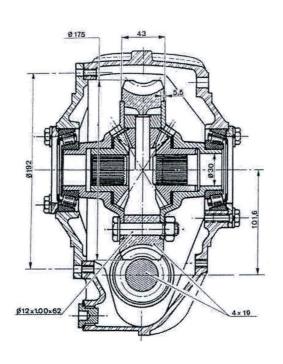
REAR AXLE HOUSING ASSEMBLY - 101.6 mm CENTRE TO CENTRE DISTANCE 404 Associated Vehicles with Gear Set 4×19



Up to Serial Numbers :

404 L - 4 855 312 404 LD - 4 980 000 404 U6 - 4 742 040 404 U6D - 4 909 026 404 U6A - 1 923 771

- Unribbed housing and cover.
- Gear Set 4×19 with 101.6 mm centre to centre distance with :
 - wheel of 175 diameter and 43 mm width.
 - worm of 252.5 mm length.
 - bolts of $12 \times 100 \times 62$.
- Complete differential common to that fitted on the 403 Associated Vehicles with closed housing.



404 L (TW) from N° 4 854 055 to N° 4 854 646 **404 L (TH)** from N° 4 855 313 to N° 4 857 892

404 L Break up to Serial No 4 857 979

404 U6 from N° 4 742 041 to N° 4 745 143

404 U6A from N° 1 923 772 to N° 1 924 027

404 U6D from N° 4 909 027 to N° 4 909 443

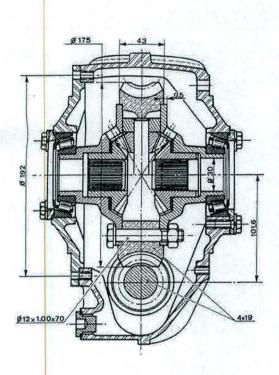
- Identical to the former model but with ribbed cover and housing.

INTERCHANGEABILITY

The ribbed housing and cover may be fitted on all PEUGEOT models equipped with a differential with wide centre to centre distance of 101.6 mm.

CHICHO





404 L (TW) { from N° 4 854 647 to N° 4 855 000 from N° 4 895 001 to N° 4 898 217 404 L (TH) from N° 4 857 893 to N° 4 879 370 from N° 4 857 980 to N° 4 879 370 from N° 4 745 144 to N° 4 761 054 404 U6A (TW) { from N° 1 924 028 to N° 1 925 000 from N° 1 930 001 to N° 1 930 490 404 U6A (TH) from N° 1 925 001 to N° 1 927 784 404 U6D from N° 4 909 444 to N° 4 909 500

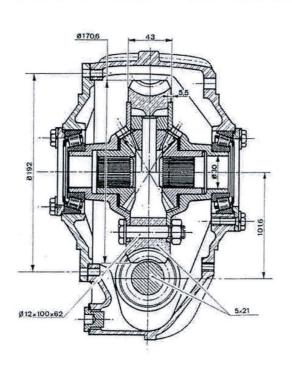
- Identical to the former model but with :
 - differential shells 4 mm thicker.
 - unlocked differential bolts 12 mm in diameter and 70 mm long, in place of 62 mm.

INTERCHANGEABILITY

This housing assembly, incorporating thicker differential shells, may be fitted on 404 Associated Vehicles of all types equipped with a gear set of 4×19 .



REAR AXLE HOUSING ASSEMBLY - 101.6 mm CENTRE TO CENTRE DISTANCE 404 Associated Vehicles with Gear Set of 5×21



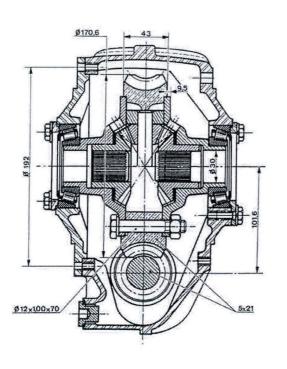
404 LD from No 4 980 001 to No 4 980 786

- Ribbed housing and cover.
- Gear Set of 5×21 , wide centre to centre distance, (101.6 mm) with :
 - Wheel of 170.6 mm diameter and 43 mm width
 - Worm of 244.5 mm length necessitating the fitting of a propellor shaft 1 876 mm long, in place of 1 868 mm.
- bolts of 12×100 and 62 mm long.
- -- Complete differential common to that fitted on the 402 Associated Vehicles with closed housing.

NOTE - This housing assembly is common to that of the 404; 404 SL; 404 D; 404 C; (see class 5 page 01 07)

INTERCHANGEABILITY

It is not advisable to fit the gear set equipping the 404 LD fitted with an XD 88 engine, on the 404 Associated Vehicles fitted with an XD 85 engine in view of the low starting torque which would result from such a fitting.



404 LD from N° 4 980 787 to N° 4 983 681 404 U6D from N° 4 909 501 to N° 4 914 068

Identical to the former model but with:

- differential shells 4 mm thicker
- unlocked differential bolts of 12 \times 100 and 70 mm long in place of 62 mm.

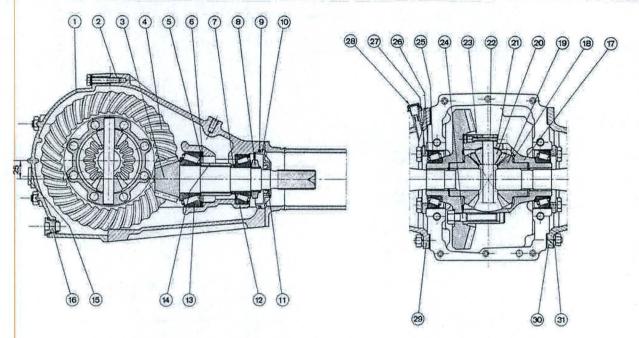
NOTE - This housing assembly is common to that fitted on the 404 Saloons and 404 C.

INTERCHANGEABILITY

This housing assembly may be fitted to replace the former model but cannot be installed on 404 LD and 404 U6D models equipped with an XD 85 engine.

PELICEOT



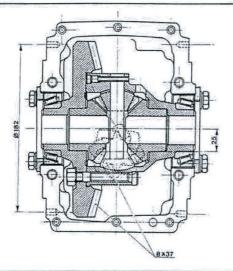


- 1 and 2 Rear Axle Cover and housing
- 3 and 4 Gearset (drive pinion and crown wheel)
- Meshing distance adjusting shims 62 mm diameter thickness 75.8 mm and from 0.05 mm to 0.5 mm increments
- 6 Drive pinion, rear bearing thrust washer, thickness 1.5 ± 0.05 mm
- Washers for the drive pinion bearings pre-load setting, thickness from 3/100 ths to 3/100 ths and from 6.04 to 7.33 mm
- 8 Tightening nut
- 9 «O» Seal ring
- Seal ring support
- 11 Seal ring of $28 \times 45 \times 8$ mm
- 12 Pinion front bearing
- 13 Pinion rear bearing
- 14 Spacer
- 15 Filler plug
- 16 Drain plug
- 17 Differential case
- 18 Sun gear friction washer (dimpled)
- 19 Sun gear 16 teeth
- 20 Planet pinion 10 teeth
- 21 Planet pinion friction washer
- 22 Planet shaft
- «Mecanindus» pin diameter 5 × 35 mm
- 24 Differential bolt, diameter 11 mm, 72 mm long with nut
- 25 Differential bearings
- Differential adjusting shims diameter 67 × 77.6 mm thickness from 0.05 to 1 mm.
- Differential bearing thrust plate
- Pressure relief hole protection
- 30 Rear Axle right tube
- Rear Axle tube gaskets (Left hand side and right hand side).



REAR AXLE ASSEMBLIES - 25 mm CENTRE TO CENTRE DISTANCE

404 Associated Vehicles with hypoid rear axle

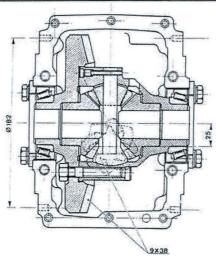


Petrol Engine Family Saloons and Station Wagons

As from Serial numbers :

404 L (TW) - 4 898 401 404 L (TH) - 4 879 401 404 L Break - 4 761 301 404 U6A (TW) - 1 930 601 404 U6A (TH) - 1 927 901

Gear Set 8×37

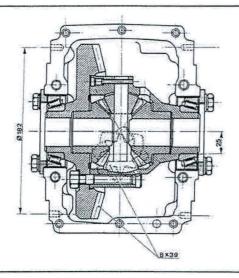


Diesel Engine Family Saloons and Station Wagons

As from Serial numbers :

404 LD - 4 983 801 **404 U6D** - 4 914 201

Gear Set 9×38



Petrol and Diesel Engines Light Lorries and Cab platforms

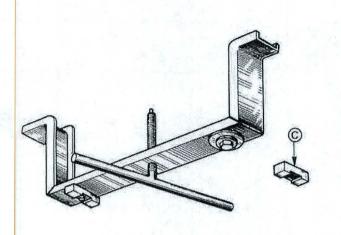
As from Serial numbers :

404 U8 - 7 010 001 404 U8D - 7 040 001 404 U10 - 7 060 001 404 U10D - 7 080 001

Gear Set 8×39

REAR AXLE REMOVAL and REFITTING



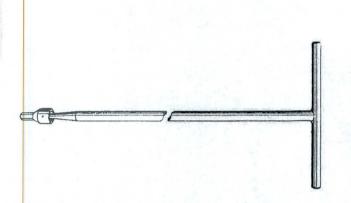


TOOLS TO BE USED

8.0103 Z

Engine/Gearbox support base.

C - Block for backing under the housing.



8.0406

Torque tube, ball joint nut spanner



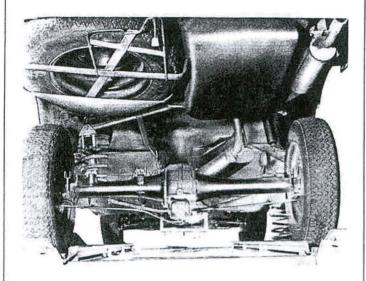
8.0801

Brake shoe adjusting spanner

12125

REAR AXLE

REMOVAL and REFITTING



REMOVAL

- Separate the following from the rear axle :
 - the shock absorbers
 - the stabilizing rod from the rear axle left hand tube

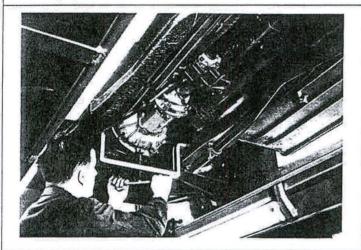
404 Thermostable Brakes

- Remove the compensator spring from the stabilizing rod

IMPORTANT

The nut securing the nipple to the spring rod must never be slackened in order not to alter the spring tension.

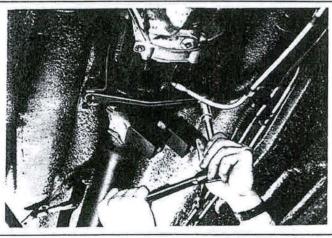
- Separate the rear anti-roll bar from the connecting links (as from the 1967 models)
- Disconnect :
- the hand brake cables from the floor
- the flexible hose (plug the end of the brake line, master cylinder side)
- Disconnect the rear brake control lever, the rear brake cables, the control cable and disengage the lever towards the rear
- Raise the body from the rear in order to remove the helical springs.



- Remove

- the exhaust pipe to manifold clamp securing nuts.
- the collar bolt on the gearbox rear housing

Position the engine support base 8.0103 Z with block C backing against the clutch housing.



- Unscrew

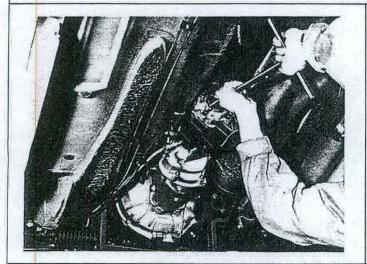
- the engine upper rear support securing screw
- the two lower nuts
- Disengage the engine rear support by progressively unscrewing the support base screw, to lower the rear of the gearbox by about 45 mm.

IMPORTANT

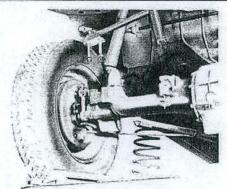
Ensure that the lower sump does not rest against the steering gear housing.

REAR AXLE REMOVAL and REFITTING

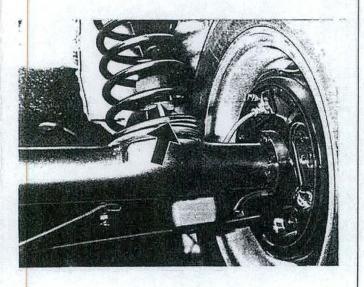




- Remove the 4 assembling screws of the torque tube ball joint cover using spanner 8.0406



- Holding the torque tube end pull the rear axle rearwards and recover the engine rear support
- Raise the rear of the body enough to allow for removal of the rear axle and the wheel assem-
- Disengage the rear axle.



REFITTING

AND AND LINES

Refitting is a reversal of the removal procedure

- Bleed and adjust the brakes
- Ensure that the piping system has no leaks
- Fill the rear axle using Esso Gear Oil V.T.
- Capacity (see class 5, page 01 04 and 01 05) drain at 600 miles (1.000 km) and then at the regular service intervals.

Particular Precautions

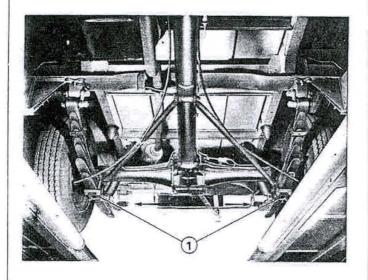
- The rear engine support should be free from grease, oil and paint, the presence of which would affect its service life.
- Never use trichlorethylene to clean it
- When refitting coat each side with «Hermetite»
- When installing the helical springs the end of the bottom coil should be facing the rear.
- Replace the Nylstop nuts securing the rear shock absorbers.

NOTE - Wheel nuts tightening torque :

43 ft.lbs (6 m.kg) for the Saloon Cars 58 ft.lbs (8 m.kg) for Associated Vehicles.



REAR AXLE REMOVAL and REFITTING

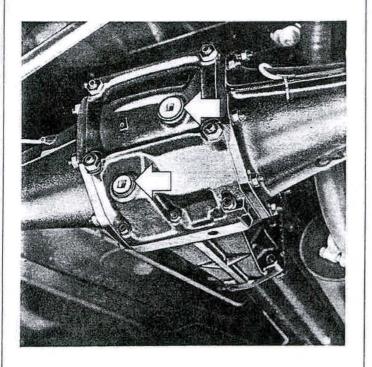


404 Light Lorries

Particularities

- Hold the body using a hoist chain
- Remove the spring clamps 1
- Slacken the front shackle bolts
- Remove the rear shackle lower bolts

Refitting is a reversal of the removal procedure.

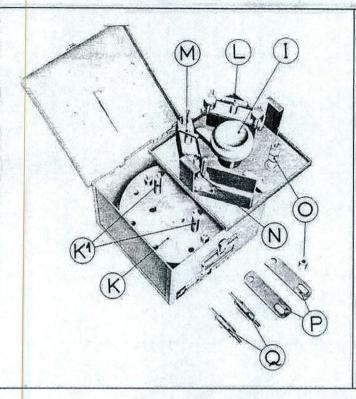


HYPOID AXLE

- Fill using Esso Gear Oil GP 90
- Capacity: (see page 01 05)
- Drain : at 600 miles (1.000 km) and then at the regular service intervals.

WORM AND WHEEL REAR AXLE DISMANTLING-RE-ASSEMBLY AND ADJUSTMENTS





TOOLS TO BE USED

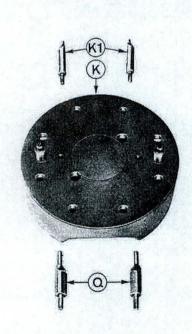
8.0505 Z

Tools kit, closed housing type rear axle

- I Bearing outer race installing drift
- K Base, Crown wheel position adjusting, equipped with K1 adjusting feelers
- K1 Adjusting feelers
- L Base locking clamp
- M Bearing backing clamp
- N Depth gauge
- O Spacers (4)
- P Front stop holding plates (2)
- Q Adjusting shims

RECOMMENDED TOOLS

Description	Make	
Puller	Facom U 53	



USE OF THE BASE AND ADJUSTING PINS

REAR AXLE 95.25 centre to centre distance Gear Set 5×21

REAR AXLE 101.6 centre to centre distance Gear Set 5×21 and 4×19 Smooth housing Crown wheel of 36 mm in width Crown wheel of 39 mm in width

Use:

- base 8.0505 K
- adjusting feelers K1

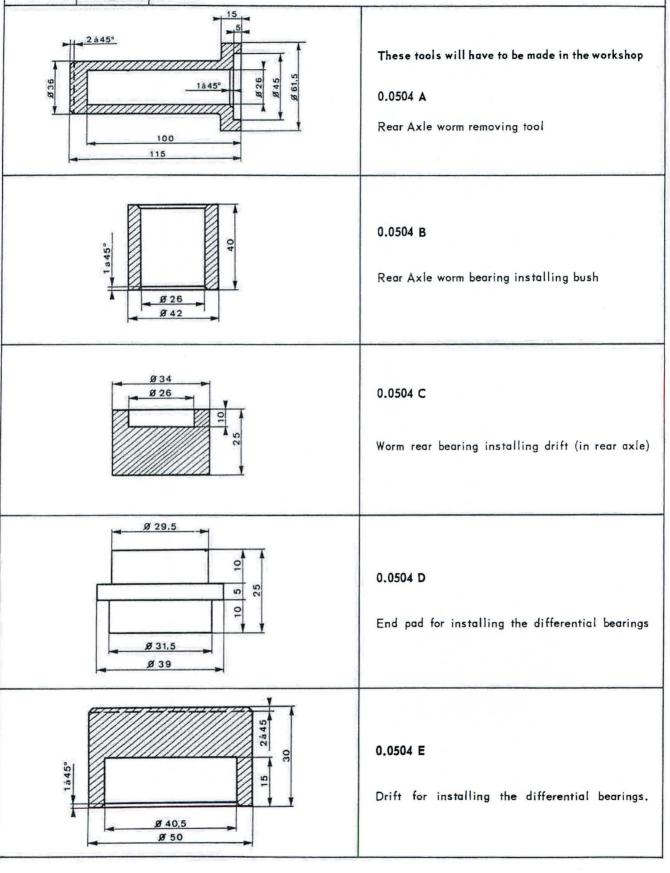
REAR AXLE 101.6 centre to centre distance Gear Set 5×21 and 4×19 Smooth housing Ribbed housing Crown wheel of 43 mm width

Use :

- base 8.0505 K
- adjusting pins Q.

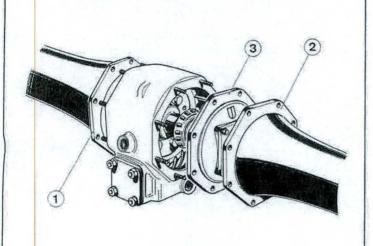


WORM AND WHEEL REAR AXLE DISMANTLING-RE-ASSEMBLY AND ADJUSTMENT



WORM AND WHEEL REAR AXLE DISMANTLING



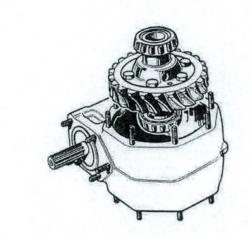


PRELIMINARY OPERATIONS

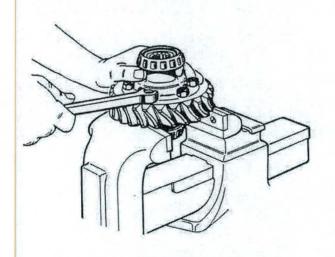
- Drain the rear axle
- Clean the rear axle assembly
- Remove :
- the torque tube
- the propeller shaft
- the rear axle shafts (see class 5, page 05 03)
- the brake plates

DISMANTLING

- To remove the rear axle left hand tube 1 pull it out whilst tapping gently with a mallet
- Remove the right hand tube 2 using the same procedure
- Remove the rear axle cover 3



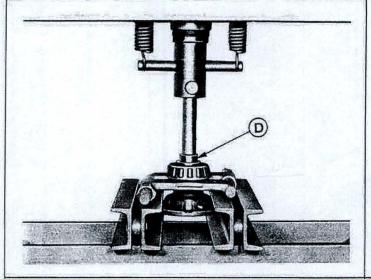
- Place the housing on its left face and remove the differential
- Remove the bearing holding plates as well as the adjusting shims from the housing and the cover.



- Slacken the nuts and pull the differential apart.



WORM AND WHEEL REAR AXLE DISMANTLING

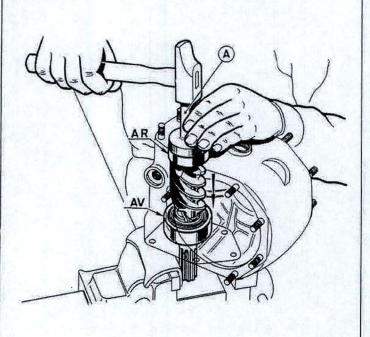


- Remove the differential bearings from the shells using either :
 - an end pad 0.0504 D
- a universal puller

or

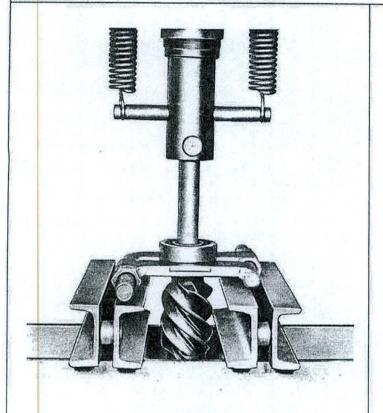
- an end pad D
- a puller (Facom U 53)
- a press

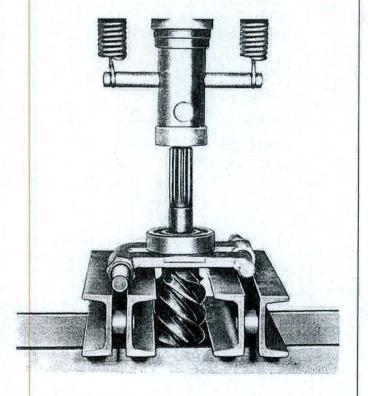
NOTE - Ensure that pressure is only exerted on the bearing inner races.



- Remove
- the front safety device of the worm (front thrust and «AD» seal)
- the worm rear plug
- Remove the rear axle worm according to the following procedure :
- Dip the housing and the cover in boiling water
- When adequately heated hold the housing in a vice fitted with lead jaws and sufficiently open to allow for removal of the worm front bearing
- Tap on the worm rear end using drift 0.0504 A
- Remove the worm and its bearing
- Using drift 1, remove the differential bearing outer races from the housing and from the cover after having marked their position if the bearings are already installed.

WORM AND WHEEL REAR AXLE DISMANTLING



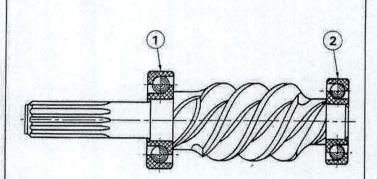


- Remove the worm rear bearing by exerting pressure on the bearing inner race
- Use :
 - puller (Facom U 53)
 - a press

Use the same procedure to remove the front bearing.



WORM AND WHEEL REAR AXLE RE-ASSEMBLY - ADJUSTMENT

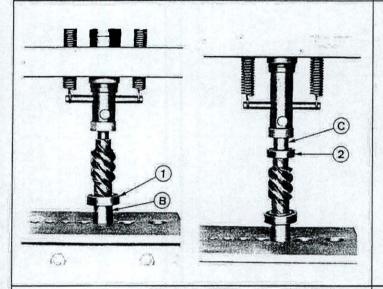


PRELIMINARY CONDITIONS

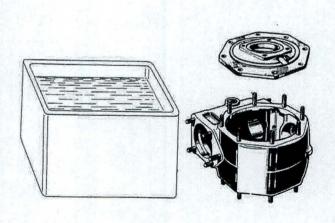
All parts should be perfectly clean and dry

Preparation of the worm

- Coat the worm bearing surface with Molykote
- At the front; fit roller bearing 1 30 \times 72 \times 19 observing the correct direction of fitment (refer to the drawing opposite)
- At the rear, fit roller bearing 2 $25 \times 62 \times 17$ observing the correct direction of fitment.



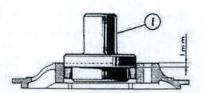
NOTE - These operations should be carried out using the press and as a last resort the bearings can be removed by tapping on them. Whatever the removal method adopted pressure should only be applied on the inner race through the intermediary of tube 0.0504 B for the front bearing 1 and drift 0.0504 C for the rear bearing 2.



 Dip the housing and the cover in boiling water until the temperature reaches 90°C approximately.

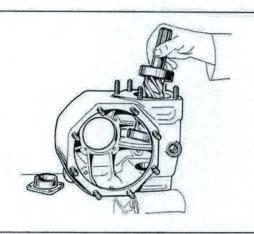
WORM AND WHEEL REAR AXLE RE-ASSEMBLY - ADJUSTMENT



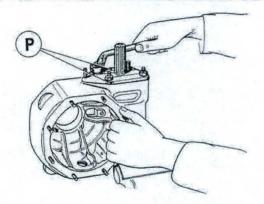


- Fit the differential bearing outer races in the housing and the cover at 1 mm from the outer face using drift 1.

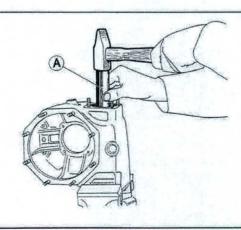
NOTE - At installation observe the marking of the outer races which should be refitted with the original roller cages.



- Hold the housing vertically in a vice fitted with lead jaws.
- Fit the worm into the housing through the front.



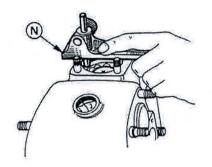
- Hold the worm in its recess
- Install the front thrust without its rubber ring and hold it in place using holding plates P



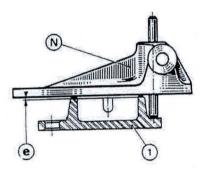
- Turn the housing upside down and gently tap the bearing outer race using drift 0.0504 A to ensure correct positioning towards the front.
- Allow the housing to cool down and make sure the worm rotates freely without any play.



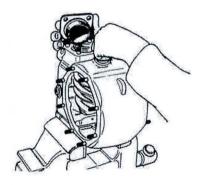
WORM AND WHEEL REAR AXLE RE-ASSEMBLY - ADJUSTMENT



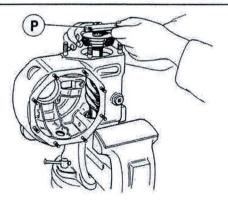
- Using depth gauge **N**, determine the thickness of the shims to be installed.
- Place the gauge across the rear axle rear machined surface and insert the feeler so that it comes into contact with the bearing outer race. Lock the feeler.



- Apply gauge N on the rear cap 1 of the worm, to determine, with accuracy the thickness of shims C
- Add a shim of 0.05 or one of 0.075 mm to obtain a worm bearing pre-loading of 0.04 to 0.08 mm.



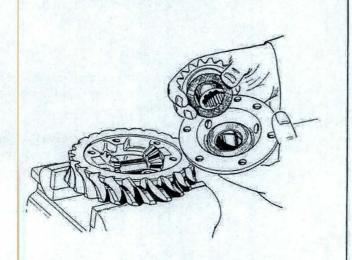
- Install the shims
- Smear the bearing surface with Hermetite and fit the rear cover (do not use a gasket) with the notch facing the right.
- A slight resistance should be felt when rotating the worm.



- Turn the housing upside down in the vice (drawing opposite) and remove holding plates
 P and the thrust.
- Install a new AD seal
- Install a new oil seal on the thrust and fit the latter at the front of the worm with the notch positioned horizontally to the left.

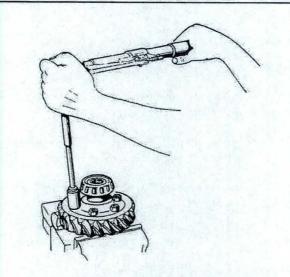
WORM AND WHEEL REAR AXLE RE-ASSEMBLY - ADJUSTMENT





ASSEMBLY OF THE DIFFERENTIAL

- Install the sun gears in the shells and insert the «Celoron» washers
- Replace the washers if they show any signs of wear
- Place a shell into the crown wheel and align the 8 mm holes with the bushing face.
- Install the planet gears with the bushings and the shaft.
- Fit the second shell using the same procedure as for the first one.



- Hold this assembly together using 6 new bolts
- The bolt heads should face the marking on the crown wheel
- Tighten using a torque wrench tightening torques to be applied:

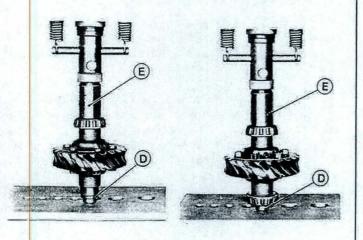
10 mm diameter bolts 42 ft.lbs (5.75 m.kg)

11 mm diameter bolts 51 ft.lbs (7 m.kg)

12 mm diameter bolts 62 ft.lbs (8.5 m.kg)

 Having tightened the bolts the differential should rotate freely.

NOTE - Punching of the bolts should only take place on the bolts where allowed for.



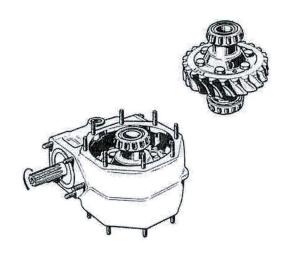
BEARINGS FITTINGS

- The bearings should be installed using a press and the following tools :
 - a drift 0.0504 E
 - an end pad 0.0504 D
- Ensure that the bearings are properly matched with their outer ring.

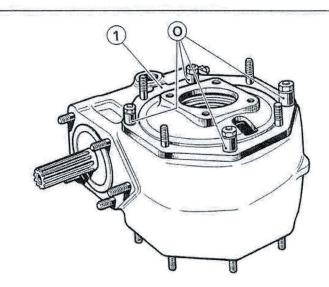
PEUGEOT



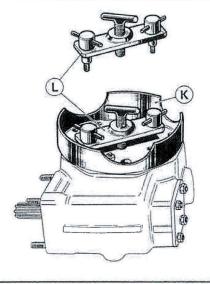
WORM AND WHEEL REAR AXLE RE-ASSEMBLY - ADJUSTMENT



- Place the differential into the housing with the marked face of the crown wheel pointing to the right (cover side)
- Ensure correct positioning of the crown wheel by rotating it through the intermediary of the worm.



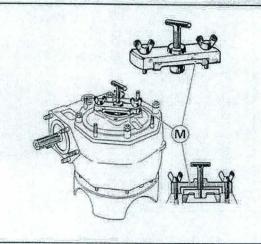
- Install the cover with the paper gasket smeared with Hermetite.
- Place the oil passage holes vertically with emboss 1 facing the draining plug.
- Install spacers 0 to obtain a correct tightening.



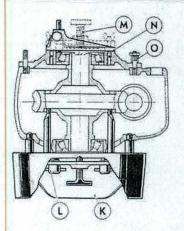
- Turn the assembly upside down
- Align both differential shell holes with the housing holes
- Position hole **K** with the feelers corresponding to the type of rear axle used (see page 03 01)
- Ensure that the feelers come into contact with the crown wheel
- Securing this assembly on the housing using clamp $\boldsymbol{\mathsf{L}}$

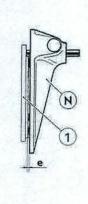
WORM AND WHEEL REAR AXLE RE-ASSEMBLY - ADJUSTMENT



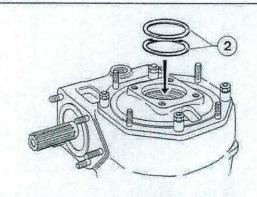


- Turn assembly over using tool K as a support
- Install clamp M without applying too much pressure on the outer race of the differential bearing.
- . The crown wheel is now in place

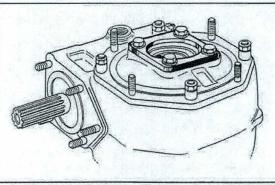




- Install gauge N and bring the feeler into contact with the outer race of the bearing.
- Using gauge N and thrust plate 1 determine the thickness of shims e
- Add a shim of 0.1 mm to the value obtained.



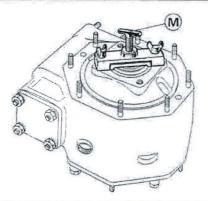
Remove clamp M and install adjusting shims 2 previously determined



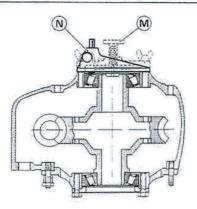
- Install thrust plate
- Tighten the nuts equipped with onduflex washers to 9 ft.lbs (1.25 m.kg)



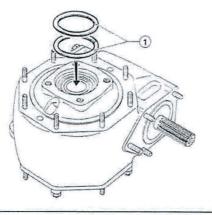
WORM AND WHEEL REAR AXLE RE-ASSEMBLY - ADJUSTMENT



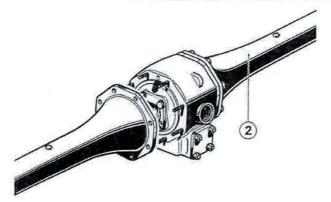
- Turn the assembly upside down so that it rests on the cover
- Remove clamp L and tool K
- Install clamp M without applying too much pressure



- Position gauge **N** according to the drawing opposite and bring the feeler into contact with the outer race of the bearing
- The thickness of the shims to be installed should be determined in the same way as for the right hand side.
- Add 0.2 mm shims for the differential bearing pre-loading.

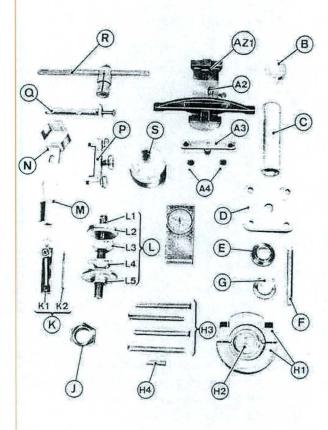


Remove clamp M and install adjusting shims 1 previously determined.



- Install thrust plate using the same procedure as for the right hand side.
- Tighten the bolts to **9 ft.lbs** (1.25 m.kg)

 Having carried out the rear axle adjustment proceed as follows:
- Install the rear axle right hand tube 2 after having removed spacers 0.
- Install a gasket and tighten the nuts to 13 ft.lbs (1.75 m.kg)
- Proceed with the final re-assembly of the rear axle in the reverse order to dismantling.



TOOLS TO BE USED

8.0520 Z

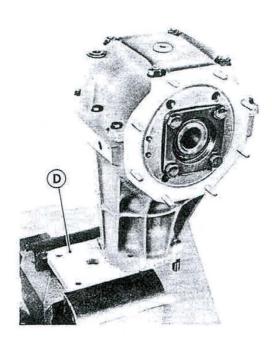
Tool chest for adjusting the differential.

- **AZ** Apparatus for measuring the meshing distance, including:
 - AZ1 bridge
 - A2 feeler
 - A3 bridge clamp
 - A4 spacers
- B Differential bearing fitting tool.
- C Drive pinion rear bearing fitting tool.
- D Support plate
- E Drive pinion oil seal protector sleeve.
- F Punch
- G Drive pinion oil seal fitting tool.
- H Differential bearing extractor consisting of :
 - H1 Extractor clamps
 - H2 Press pad
 - H3 Extractor support rods
 - H4 Adaptor for tightening clamp screws
- J Measuring nut
- K Micrometer consisting of :
 - K1 Dial indicator holder
 - K2 Dial indicator extension rod
- L Apparatus for removing and refitting the drive pinion bearing outer races including:
 - L1 bolt
 - L2 thrust plate, front
 - L3 extractor, front
 - L4 extractor, rear
 - L5 thrust plate, rear
- M Drive pinion holding socket
- N Drive pinion nut box spanner
- P Differential bearing thrust clamp
- Q Dial indicator mounting including :
- R Backlash measuring tool
- \$ Drive pinion rear bearing extractor clamps
 - Dial indicator

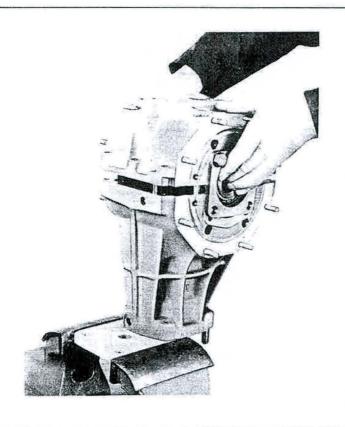
N.B. - The dial indicator is not delivered with this tool chest, but a space is provided for storing it and it can be ordered separately.



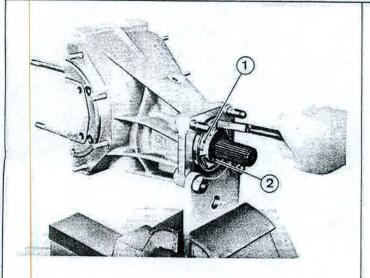
HYPOID REAR AXLE



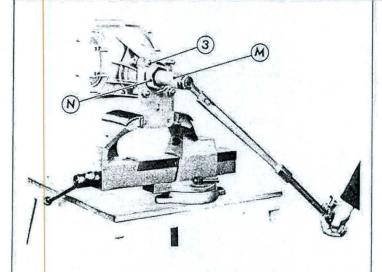
- Remove rear axle assembly from vehicle.
- Drain rear axle oil.
- Clean assembly.
- Remove torque tube and propeller shaft.
- Remove both rear axle tubes.
- Install support plate **D** on front housing by means of the 2 lower attachment studs of the connecting torque tube using 2 nuts.
- Fit clamp assembly vertically in vice fitted with lead jaws.



- Slacken all bolts and assembling nuts of the 2 half housings.
- Remove :
 - the front attachment screws of the differential bearing side plates.
 - the 6 assembling screws of the half housings
 - the 4 nuts of the rear housing
- Remove the rear housing differential assembly and place same, reverse side up, on the work bench. (Should the need arise, use a mallet to separate both half housings).

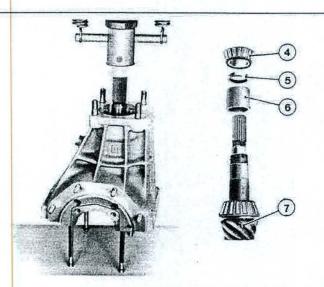


- Clamp front housing horizontally in vice.
- Remove the rear axle closing cap 1 using a pair of universal pliers.
- Remove the «O» seal ring and the oil seal 2.



- Install pinion nut socket N on drive pinion nut and secure end of socket on stud 3 by means of a nut.
- Using drive pinion holding tool M slacken nut without unlocking same.

(Turn wrench clockwise),



- Remove :
 - drive pinion holding tool M and pinion nut socket N.
 - drive pinion nut.
 - support plate D.
- Drive the drive pinion out through the interior of the housing using a press if necessary.

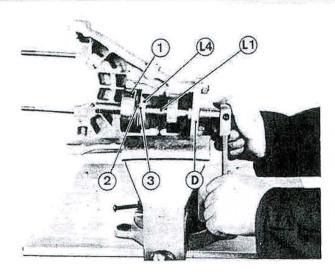
(Do not hammer)

- Recover :
- the front bearing 4
- the adjusting spacer 5
- long spacer 6
- drive pinion and rear bearing 7.

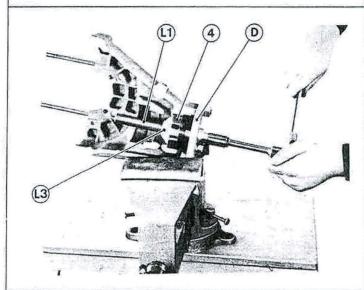
EUGEOT



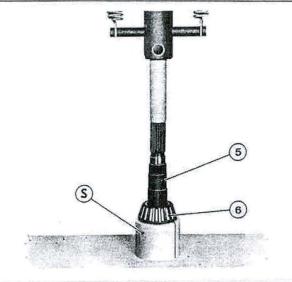
HYPOID REAR AXLE DISMANTLING



- Remove drive pinion bearing rear outer race 1 using :
 - Screw L1
 - Extractor L4
- Support plate D
- Turn screw anti-clockwise to remove race.
- Recover :
 - adjustment shims 2
- thrust washer 3



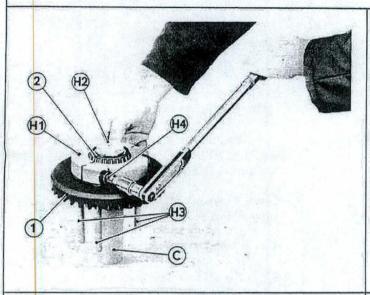
- Remove drive pinion front bearing outer race 4 using :
 - Screw L1
- Extractor L3
- Support plate D
- Turn screw clockwise to remove race



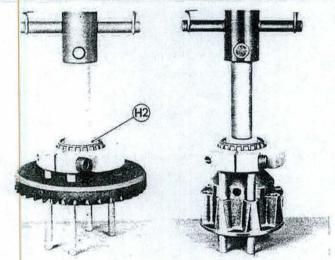
- Remove rear bearing 6 of drive pinion 5 using:
 - Two half shells \$
- A press.

HYPOID REAR AXLE DISMANTLING

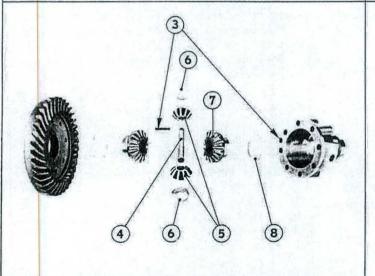




- Remove the 8 assembling bolts of the differential.
- Remove the differential from the crown wheel 1
- Recover the left hand side sun gear and its thrust washer.
- Place crown wheel on tool C
- Insert the 4 extractor clamp support rods H3 into four diametrically opposed holes of the crown wheel.
- Fit the extractor clamps **H1** around the bearing **2**.
- Tighten the «Allen» screws to 14.5 ft.lbs (2 m.kg) using socket H4.



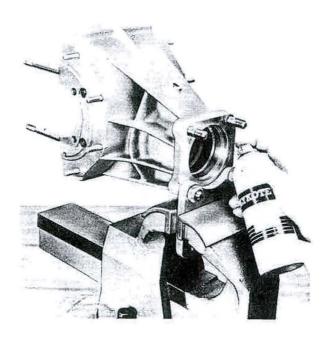
- Place press pad H2 on the crown wheel in the centre of the bearing.
- Using a press, remove the crown wheel.
- Use the same procedure to remove right hand side bearing of the differential case.



- Remove planet gear shaft lock pin 3 using a drift of 5 mm.
- Then remove :
- planet gear shaft 4
- planet gears 5
- spherical washers 6
- Sun gear right hand side 7
- thrust washer 8



HYPOID REAR AXLE RE-ASSEMBLY - ADJUSTMENT



PREPARATION

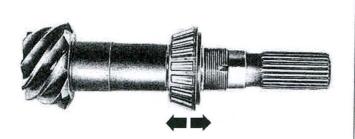
- Clean and blow dry all parts of the rear axle assembly mechanism.

UNDER NO CIRCUMSTANCES SHOULD EMERY CLOTH OR SHARP TOOLS BE USED TO CLEAN THE HOUSINGS.

- Spray Molycote 321 into the housings of the drive pinion bearings.
- Do not heat the housing.

Every time the gear set (crown wheel and drive pinion) is replaced it is mandatory that the following parts are also renewed.

- differential bearings
- drive pinion bearings
- Onduflex washers
- drive pinion nut
- differential assembling bolts
- drive pinion oil seal
- "O" rings and oil seals of the differential bearing thrust plates.
- rear axle tubes paper gaskets



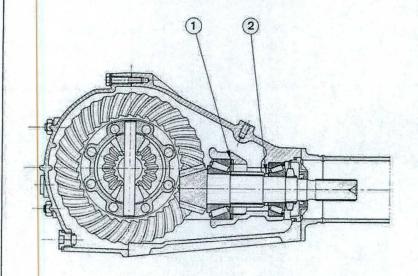
- Ensure that the front bearing is installed without exerting undue pressure on the rear end of the drive pinion shaft.
- In case difficulties are experienced in fitting the bearing onto the drive pinion, polish the shaft bearing surface using a fine abrasive until the bearing just slides as a free fit onto the shaft.

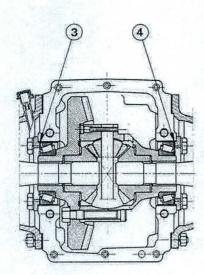


- Smooth out front end of pinion with a fine stone in order to remove any existing burrs.

The front end of the pinion will serve as contact point during the various adjustments to be carried out.

DIFFERENT ADJUSTMENTS TO BE CARRIED OUT

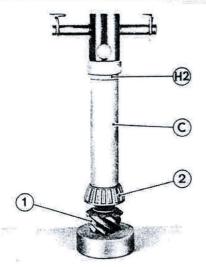




- 1 Meshing distance adjustment (Class 5, page 03 58 to 62)
- 2 Drive pinion bearings pre-load adjustment (Class 5, page 03 58 to 63)
- 3 Backlash adjustment (Class 5, page 03 67 to 69)
- 4 Differential bearings pre-load adjustment (Class 5, page 03 70 to 72)

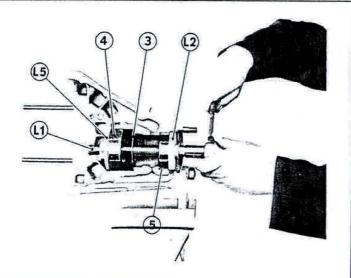


HYPOID REAR AXLE RE-ASSEMBLY - ADJUSTMENT



Mounting of the rear bearing

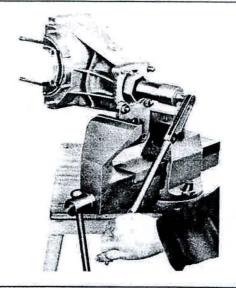
- Assemble the following parts on the press bench as follows :
- drive pinion 1
- Rear bearing 2
- drive pinion bearing fitting tool C
- end pad H2
- Using the press, drive bearing down until it abuts.



- Clamp differential housing in the vice
- Install thrust washer 3 in the housing.
- Install the outer bearing races 4 and 5 back to back into the housing using the bolt L1, thrust plate L2 and the nut L5.
- Tighten and apply firmly the prescribed torque.

Tightening torque 101.5 ft.lbs (14 m.kg)

Oil the bearings with ESSO EXTRA MOTOR
 OIL 20 W 30/40 with the exclusion of any other lubricant.



ADJUSTMENT OF THE DRIVE PINION

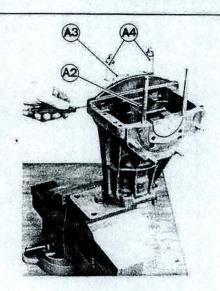
- MESHING DISTANCE
- BEARINGS PRE-LOAD
- Install drive pinion fitted with the following into the housing :
- Rear bearing
- Long spacer
- Front bearing (hand fitting)
- Nut J

Tightening torque 7.25 ft.lbs (1 m.kg)

- Rotate drive pinion ten turns in both directions.
- Repeat operation until nut J can no longer be tightened under 7.25 ft.lbs (1 m.kg).

DIFFERENTIAL RE-ASSEMBLY - ADJUSTMENT

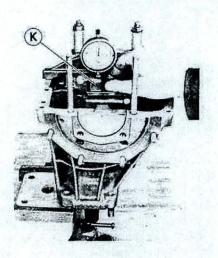




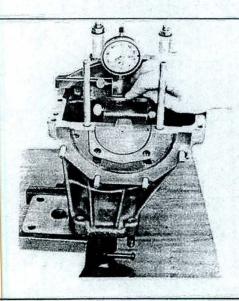
 Install apparatus AZ for measuring meshing distance into the housing and hold the same in position by means of bridge clamp A3, spacers A4 and two nuts.

Tightening torque 7.25 ft.lbs (1 m.kg)

- Equalize play between bridge pads and housing face, on both sides, using feeler gauges.
- Free feeler A2 and ensure that it is in contact with the rear face of the drive pinion.



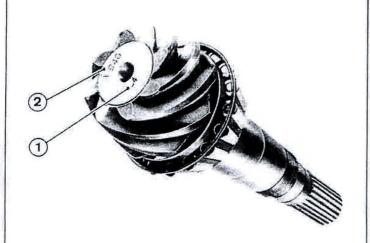
- Place dial indicator in holder K.
- Position the latter so that dial indicator feeler guide rests on upper surface of feeler A2.
- Adjust height of dial indicator in the holder so that the small hand is set to «3», for example.
- Turn dial face to bring «O» in front of the big hand.



- Slide support K to bring dial indicator feeler into contact with the machined surface of the apparatus AZ.
- The displacement as shown by dial indicator hands indicates the depth of feeler A2. Write down the value obtained.



HYPOID REAR AXLE REASSEMBLY AND ADJUSTMENT



Two reference marks are to be found on the drive pinion rear face.

The first one indicates the MESHING DISTANCE (1) and comprises:

A number from 0 to 20 and, up to 10, this number can bear the sign - (minus).

The other reference mark to be found on the pinion is for the MESH SET (2).

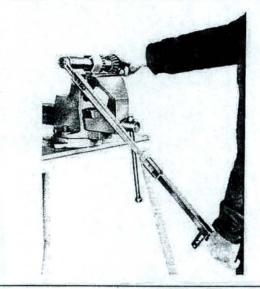
This number is preceded by a letter and the same reference mark also appears on the crown wheel.

ADJUSTMENT TABLE

Corresponding	
guide Nº.	
20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	- Write down reference marked on drive pinion. - Refer to table opposite to find the corresponding guide number. - Compare dial indicator reading with guide number. - The difference represents in hundredths of millimeters brought to the nearest figure of 0.05, the thickness of the shim to be installed between the rear bearing outer cup and the thrust washer (1st adjustment). i.e.: - Dial indicator figure obtained 67 - Reference mark on pinion - 4: - Corresponding guide number 26 - 26 41 In this instance the thickness of the shim to be fitted is 0.40 mm.
45 46 47 48 49 50	- Remove device AZ and pinion.
	21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48

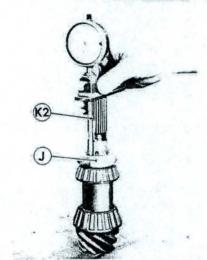
HYPOID REAR AXLE REASSEMBLY AND ADJUSTMENT



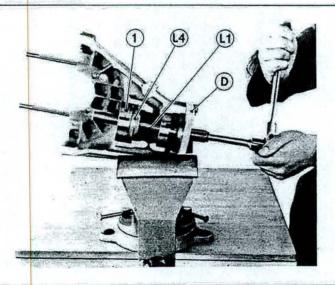


- Place drive pinion vertically on the work bench,
- Draw a coloured mark on all the length of one spline of the drive pinion.
- Install the following on drive pinion :
 - the long spacer,
 - the front bearing fitted reverse side,
 - nut J.

Tightening torque 28 m.kg (203 ft.lbs)



- Screw dial indicator end on extension K2 which in turn should be secured to dial indicator.
- Place micrometer K on front face of drive pinion and make sure that extension tool K2 faces the marked spline and that the extension rests on the machined face of nut J.
- Move dial indicator into its support to bring small hand needle to «1» and main hand needle to «0», for example.
- Remove micrometer and to avoid change of reading keep micrometer in a safe place.

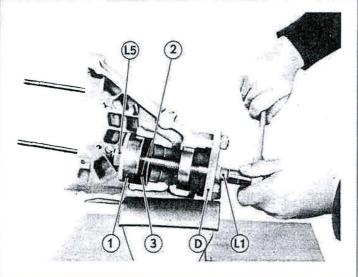


- Remove rear bearing outer race, 1 using :
 - bolt L1,
 - Extractor L4
 - Support plate D

EUGEOT

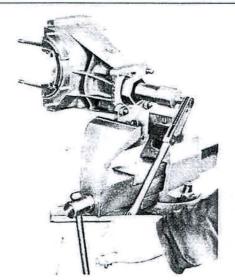


HYPOID REAR AXLE RE-ASSEMBLY - ADJUSTMENT



- Install the following in bottom of bearing housing:
 - thrust washer 2
 - adjustment shims 3 previously selected (1st adjustment, page 03 60).
- Re-install the outer bearing race 1 using :
 - bolt L1
- thrust plate L5,
- support plate D
- Apply final torque firmly.

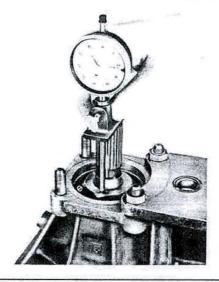
Tightening torque 101.5 ft.lbs (14 m.kg).



- Remove nut J and the front bearing.
- Re-install drive pinion in the housing, with :
 - long spacer,
 - front bearing,
 - nut J

Tightening torque 7.25 ft.lbs (1 m.kg)

- Rotate drive pinion ten turns in both directions.
- Repeat above operation until nut can no longer be tightened under 7.25 ft.lbs (1 m.kg).



- With the same spline (coloured mark) as reference mark take another reading between end of shaft and nut J using the micrometer previously set to 1 and 0 (class 5 page 03 61).
- Note the reading on the dial indicator.
- Find the difference between both figures.
- Substract 0.06 mm.
- The number thus obtained corresponds to the thickness of the shim to be installed between the front bearing and the long spacer (2nd adjustment).

HYPOID REAR AXLE REASSEMBLY AND ADJUSTMENT



	Thic	kness	
6.04	6.37	6.70	7.03
6.07	6.40	6.73	7.06
6.10	6.43	6.76	7.09
6.13	6.46	7.79	7.12
6.16	6.49	6.82	7.15
6.19	6.52	6.85	7.18
6.22	6.55	6.88	7.21
6.25	6.58	6.91	7.24
5.28	6.61	6.94	7.27
6.31	6.64	6.97	7.30
5.34	6.67	7.00	7.33

- Take from the shims available (from 0.03 to 0.03 mm increments), the one of which the thickness is nearest to the thickness obtained by the measurements.

i.e. :

- Measurement taken outside the housing: 1.0

- Measurement taken inside the housing: 7.86

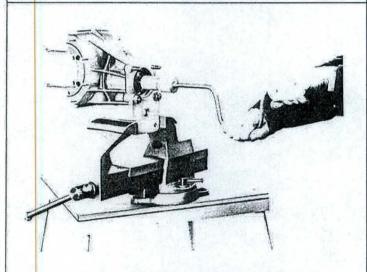
- Difference : 6.86 - 0.06

6.80 mm

U.BO IIIII

- The shim to be installed in this instance must have a thickness of 6.80 mm.

- As a shim of this thickness is not available use the 6.79 one.

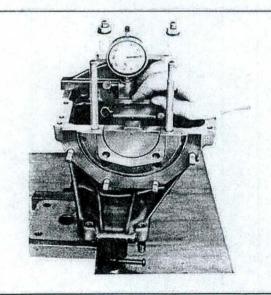


- Install pinion into the housing (final installation), using:
 - The long spacer,
 - The adjustment spacer previously obtained,
 - A new nut.

Tightening torque 28 m.kg (203 ft.lbs)

 Using a hand crank turn pinion fast to ensure proper settlement of bearings.

(From now on it is difficult to turn the pinion by hand).



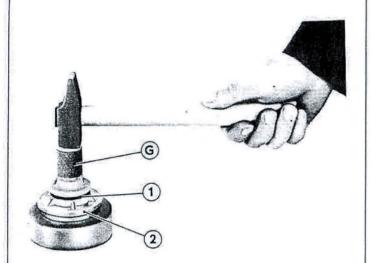
CHECK:

- · Place differential housing vertically in vice.
- Install tool A as indicated, page (13).
- Using micrometer as indicated page (13), measure the travel of feeler pin (A2). This travel should correspond to the guide number.

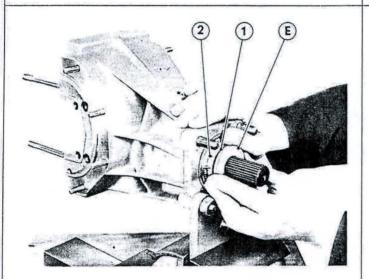
Tolerance + 0.05 mm - 0.03



HYPOID REAR AXLE REASSEMBLY AND ADJUSTMENT



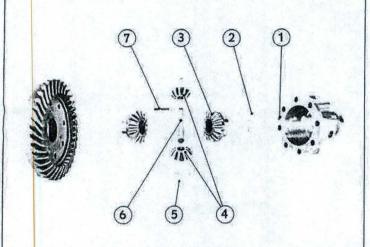
- Remove the apparatus AZ.
- Using tool **F** lock the pinion nut in the 4 notches provided.
- Install oil seal ring 1 in cover 2 by means of oil seal fitting tool **G.** Tap carefully until oil seal abuts.
- Install «O» ring on cover 2.
- Apply tallow to oil seal and «O» ring.



- Fit protecting ring E into recess of oil seal 1.
- Fit cover 2.
- Free protecting ring by turning it while holding the cover 2 in position.

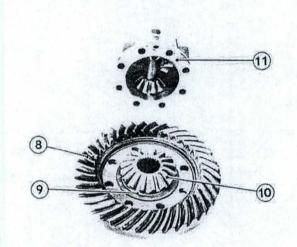
HYPOID REAR AXLE RE-ASSEMBLY - ADJUSTMENT





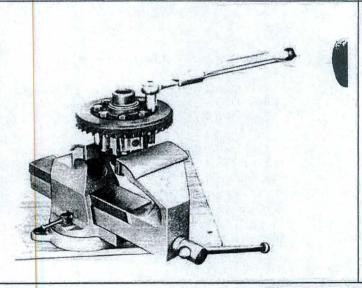
DIFFERENTIAL ASSEMBLY

- Apply oil to all parts before installation.
- Install in the differential planetary gear housing
 1 a new dimpled washer 2. The dimples should
 be directed towards the sun gear 3.
- Install right hand side sun gear 3.
- Install :
- planet gears 4 with their spherical dimpled washers 5.
- planet gear shaft 6 with pin holes aligned.
- fit a new Mecanindus pin 7 flush with surface of differential gear housing.



- Lay crown wheel 8 flat on the work bench.
- Install in the following order :
- the dimpled washer 9,
- the sun gear 10 and the differential planetery gear housing assembled 11,
- the 8 assembling bolts,
- install the nuts and hand tighten same,

N.B. Do not use washers

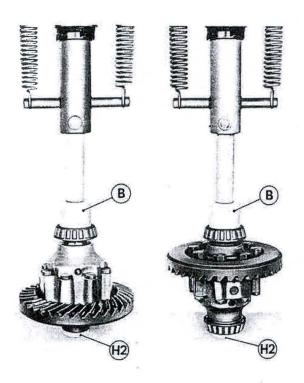


- Clamp differential gear assembly in vice fitted with lead jaws.
- Cross tighten all 8 nuts.

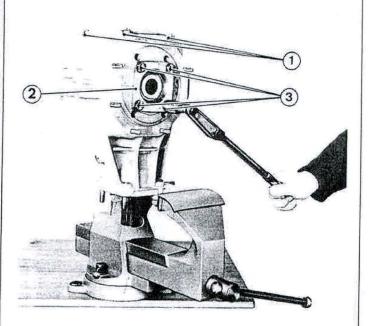
Tightening torque 51 ft.lbs (7 m.kg)



HYPOID REAR AXLE REASSEMBLY AND ADJUSTMENT



- Remove grease from new bearings and install same, using:
 - a press,
 - fitting tool B,
 - end pad H2,
- Oil bearings with plenty of Esso Extra Motor Oil 20W/30/40. No other lubricant should be used.

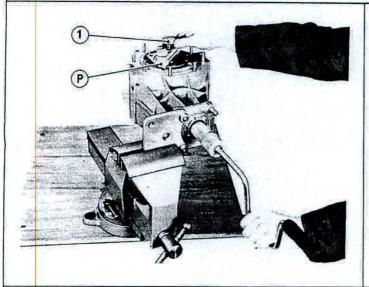


ASSEMBLING THE REAR AXLE MECHANISM

- Clamp housing vertically in vice.
- Apply «Perfect Seal» to machined surface of housing.
- Apply oil to housing bearing recesses.
- Install crown wheel differential assembly.
- Install rear cover by means of 4 nuts 1 equipped with new Onduflex washers and tighten to 0.8 m.kg. (5.8 ft.lbs).
- Install bearing side plate 2 left hand side without shims. Fit the 4 bolts with new onduflex washers 3.

Tightening torque 0.8 m.kg. (5.8 ft.lbs)

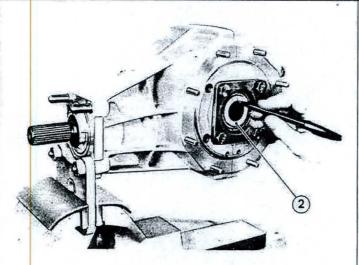
- Slacken nuts 1 and hand tighten them.



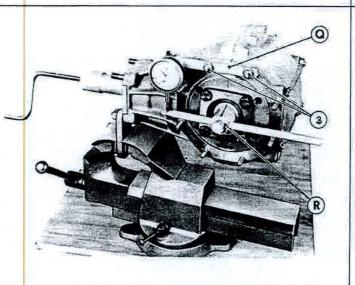
BACKLASH ADJUSTMENT

- Clamp housing horizontally in vice with right hand side facing upwards.
- Install clamp P.
- Tighten clamp P by means of control screw 1 to bring the differential as far down as possible, hand tighten. (Do not use an auxiliary tool and do not apply too much force).
- Rotate differential five turns in both directions.
- Tap on housing with a mallet for proper settlement of assembly.
- Re-check tightness of clamp P.
- Tighten rear cover nuts.

Tightening torque 5.8 ft.lbs (0.8 m.kg)



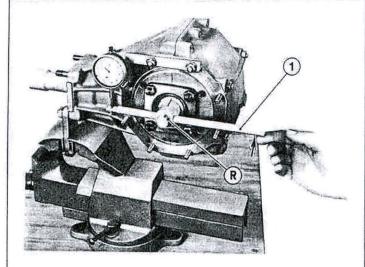
- Refit assembly in vice as shown per drawing opposite.
- Clean end 2 of crown wheel plate by means of a cloth dipped in trichlorethylene.
- Draw a radial mark on end 2.



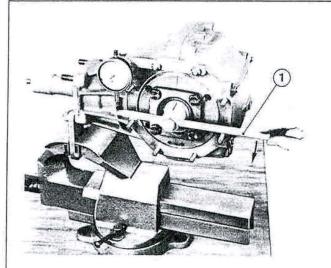
- Install backlash measuring tool R horizontally making sure that reference mark is in line with position «4» of the device.
- Lock central screw.
- Install support **Q** equipped with dial indicator.
- Adjust dial indicator support by means of the positioning holes so as dial indicator feeler rests between the two marks that can be found on the left hand arm of the tool.
- Tighten both nuts 4.



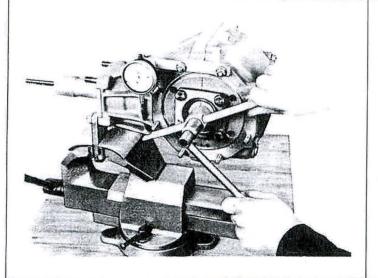
HYPOID REAR AXLE RE-ASSEMBLY - ADJUSTMENT



- Turn drive pinion with care, anticlockwise, to set dial indicator small hand needle to «5».
- Adjust dial indicator face to «O» holding the knurled arm 1 upwards.



- Press down lever 1 gently just enough to make it abut clockwise.
- In this position the dial indicator indicates the backlash between drive pinion and crown wheel.
- Note this reading.



- Repeat this operation at three different points, using the other three gaps in the tool R lined up with the groove in the crown wheel used for the first reading.
- Note each reading, making sure that each time dial indicator has been set to "5" and "0".
- Turn tool R anti-clockwise for each adjustment position.

HYPOID REAR AXLE REASSEMBLY AND ADJUSTMENT



BACKLASH READINGS		
Positions	Readings	
1		
2		
3		
4		

- WRITE DOWN THE TWO EXTREME READINGS OBTAINED.
- IF THE DIFFERENCE BETWEEN MAXIMUM AND MINIMUM READING EXCEEDS 0.10 mm CHECK FOR DIRT OR BURRS ON TEETH, which may be the cause of the faulty assembly.
- ELIMINATE THE FAULT and recheck the measurements.

DIFFERENTIAL ADJUSTMENT SHIMS

Thicknesses available :

0.05 mm

0.10 mm

0.20 mm

0.40 mm

0.50 mm

1. mm

DETERMINATION OF ADJUSTMENT SHIMS

- Subtract 0.10 mm from a minimum backlash reading.
- THE NUMBER OBTAINED SHOULD BE ROUN-DED TO THE NEAREST 0.05 mm AND THIS NUMBER CORRESPONDS TO THE THICKNESS OF THE SHIMS TO BE INSTALLED ON THE LEFT HAND SIDE (3rd adjustment).

MINIMUM BACKLASH

: 0.97 mm

THICKNESS OF SHIM TO BE USED: 0.97 mm

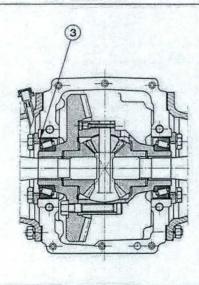
- 0.10 mm

= 0.87 mm

Which gives

: 0.85 mm

of shim

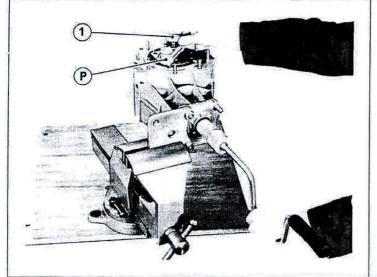


- Remove backlash measuring tool R, dial indicator and left hand side plate.
- Slacken central screw of tool P.
- Check thickness of shims with micrometer and then install them.
- Re-install left hand side plate by means of 4 screws fitted with new onduflex washers.

Tightening torque 0.8 m.kg. (5.8 ft.lbs)

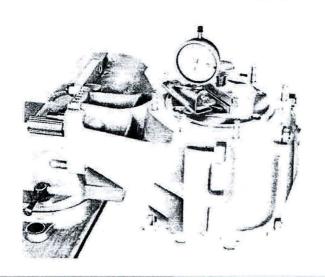


HYPOID REAR AXLE REASSEMBLY AND ADJUSTMENT

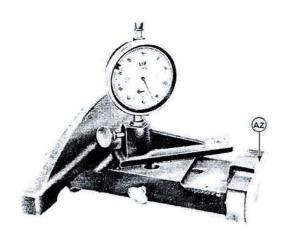


BEARINGS PRE-LOAD ADJUSTMENT

- Re-install housing horizontally in vice (as per drawing opposite).
- HAND TIGHTEN firmly central screw (1) of clamp **P** while turning drive pinion.



- Place micrometer KZ on a flat surface of front differential housing (right-hand side) with dial indicator long feeler K3 resting on outer bearing race.
- Make sure that micrometer does not rest on both housings (Only on the front or the rear).
- Adjust dial indicator setting so as to obtain «1» and «0», for example.



- Place micrometer on machined surface of tool AZ used as measuring surface.
- The displacement of the dial indicator needles represents the depth of the bearing in the housing and 0.25 mm should be added.
- Write down the number obtained.

Ex.: Measurement in the housing 1.00

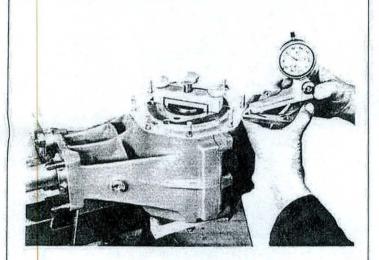
Measurement on machined surface 2.32

Difference 1.32
+ 0.25

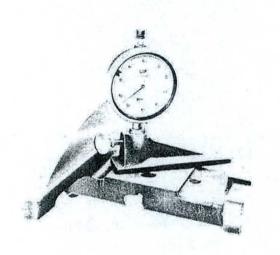
Number to remember: 1.57 mm

HYPOID REAR AXLE RE-ASSEMBLY - ADJUSTMENT





- Place micrometer on right-hand side plate with dial indicator feeler on outside machined surface of plate.
- Adjust dial indicator height so as to obtain a reading of «1» and «0» for example.

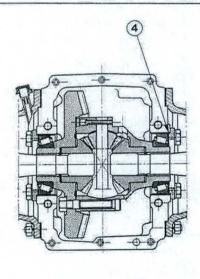


- Place micrometer on machined surface of tool AZ used as a measuring surface.
- The displacement of the dial indicator needles represents the height of the collar on plate.

i.e. : Measurement on plate 1.00

Measurement on measuring surface 2.54

Height of collar: 1.54 mm



Compare:

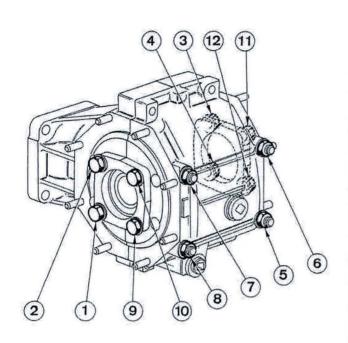
- Number obtained when measurement on housing was carried out.
- the height of the collar.
- THE DIFFERENCE ROUNDED TO THE NEAREST 0.05 mm REPRESENTS THE THICKNESS OF THE SHIMS TO BE INSTALLED BETWEEN BEARING AND SIDE PLATE (4th adjustment).

i.e. : Number obtained with first

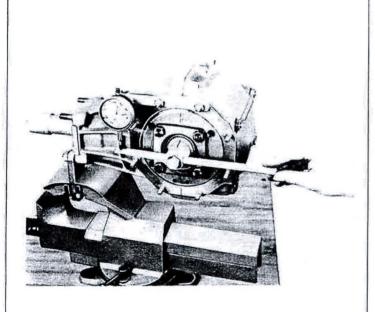
. Homber obldified with his	
measurement	1.57
Height of collar	1.54
Thickness of shims to be used	0.03
which means	0.05 mm

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HYPOID REAR AXLE REASSEMBLY AND ADJUSTMENT



- Install the right-hand side plate and install previously selected shims and hold plate in position by means of 4 screws fitted with Onduflex washers. Tightening torque: 5.8 ft.lbs (0.8 m.kg).
- Proceed to final tightening of the 8 screws and 4 assembling nuts in the sequence indicated below. Tightening torque: 25 ft.lbs (3.5 m.kg).
- Slacken the four assembling nuts.
- Tap with a mallet on cover until the latter flushes on housing (check on the faces of rear axle tubes left on right-hand side).
- -'Re-tighten the 4 assembling nuts in the same sequence as before. Tightening torque: 25 ft.lbs (3.5 m.kg).
- Rotate drive pinion several times in both directions.



BACKLASH CHECKING

Check the 4 positions according to procedure indicated on page 22. The value of the backlash should be equal to $0.20^{+0.05}$ mm $_{-0.02}$ mm

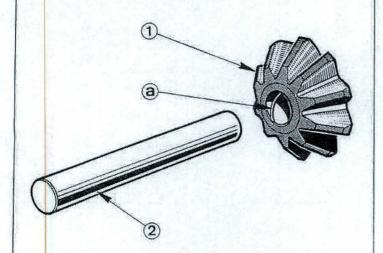
IMPORTANT

In no case should the minimum value be less than 0.18 mm.

- Install the 6 assembling bolts equipped with new Onduflex washers.
 Tightening torque: 7.25 ft.lbs (1 m.kg).
- Refit the rear axle tubes with paper gasket and attachment nuts.
 Tightening torque: 13.5 ft.lbs (1.8 m.kg).
- Install the propeller shaft and torque tube with attachment nuts.
 Tightening torque: 40 ft.lbs (5.5 m.kg).
- Refit the other rear axle parts and reinstall the assembly on car (see class 5, page 02 01 to 02 04).

WORM AND WHEEL REAR AXLE DIFFERENTIAL GEARSET

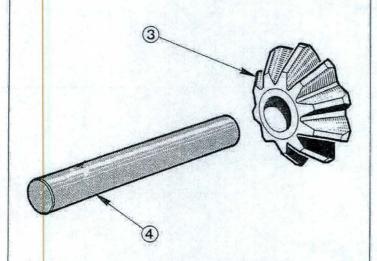




PLANET GEARS AND SPINDLES

1st Fitting

- Planet gear 1 with lubrication groove a.
- Planet gear spindle 2 non «parkolubricated».



2nd Fitting

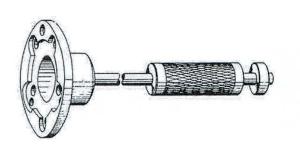
- Planet gear 3 without lubrication groove.
- Planet gear spindle 4 «parkolubricated» of a brown colour.

INTERCHANGEABILITY

- The planet gears of the 2nd fitting should not be fitted with a spindle of the 1st fitting, due to the risk of seizure.
- However the «parkolubricated» spindle of the 2nd fitting may be installed to replace that of the 1st fitting.

REAR AXLE REAR AXLE SHAFTS AND TUBES





TOOLS TO BE USED

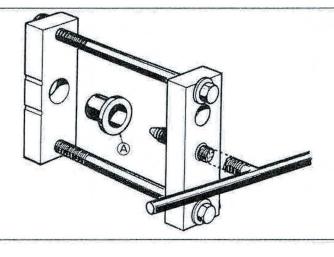
8.0601

Wheel shaft puller.



8.0507 Z

Puller for outer wheel shaft bearing and hoop ring.



8.0517 Z

Apparatus for installing the wheel shaft bearing hoop.

A - Bush



8.0513

Puller, wheel shaft, oil thrower bush for Saloon cars.



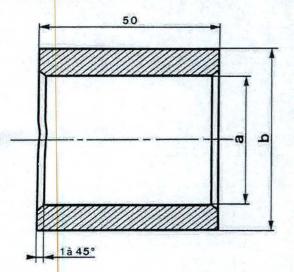
8.0514

Puller, wheel shaft, oil thrower bush for Associated vehicles.

PEUGEOT



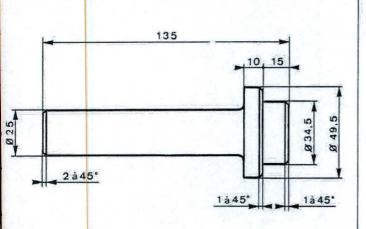
REAR AXLE REAR AXLE SHAFTS AND TUBES



These tools must be made in the workshop

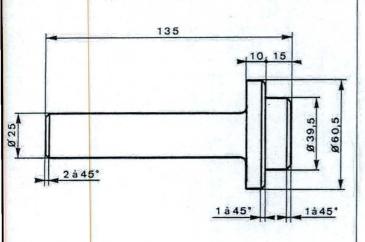
TYPES	dimensio		
	a	ь	Tool nº
Saloons	35.5	50	0.0503 A
Associated vehicles	40.5	55	0.0503 B

Bearing, installing ring, or axle shafts hoop installing bush



0.0507 A

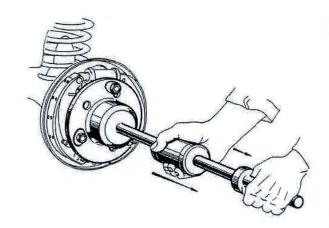
Drift for installing the oil thrower bush into axle tubes of the Saloon cars.



0.0507 B

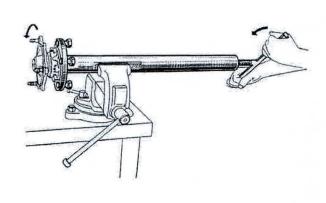
Drift for installing the oil thrower bushes into the axle tubes of the Associated vehicles.

REAR AXLE REAR AXLE SHAFTS AND TUBES



REMOVAL

- Raise the car from the rear and chock under the axle tubes.
- Remove the wheel.
- Remove the brake drum.
- Disconnect the bearing attachment clamp from the axle tube.
- Remove the axle shaft using puller 8.0601.

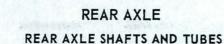


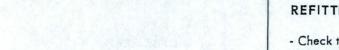
DISMANTLING

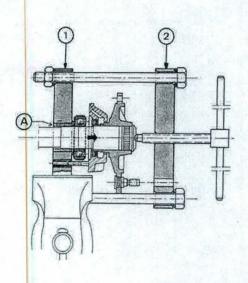
- Apply pressure on the hoop bush and cut with a chisel until it rotates on the shaft.
- Remove it by hand.
- Secure puller **8.0507 Z** on the bearing clamp and bring puller screw into contact with the axle shaft centering.
- Hold the assembly in a vice on the reinforcements provided.
- Withdraw the clamp, the seal ring and the bearing.
- **N.B.** In order to avoid damaging the puller bolt, the wheel shaft should rotate at the same time as the bolt.

EUGEOT









REFITTING

- Check the correct surface of the bearing clamp.
- The oil seal must be replaced at each dismantling.
- The bearing and the hoop ring are installed separately, either using tool 8.0517 Z or a press.

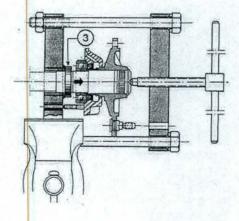
WITH TOOL 8.0517 Z

Installing the bearing

- Install the clamp equipped with the seal ring on the axle shaft.
- Lubricate and engage the bearing onto the
- Position tool 8.0517 Z equipped with bush A for the Saloons.

IMPORTANT

- Clamps 1 and 2 should be absolutely parallel.
- Progressively tighten until the bearing abuts on the rear hub.
- Remove the apparatus.

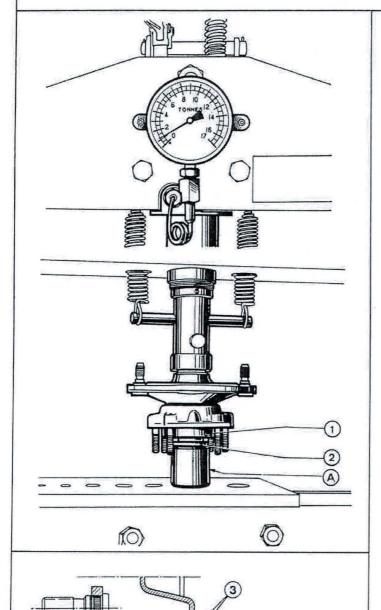


Installing the hoop bush

- Engage the hoop bush 3 on the axle shaft with the machined face pointing towards the bearing.
- Install the apparatus taking the same precautions as before.
- Progressively tighten to make the bush abut on the bearing outer face.

REAR AXLE REAR AXLE SHAFTS AND TUBES





ON THE PRESS

- The bearing and the bush must be fitted separately.
- Use the ring **0.0503 A** for Saloons and **0.0503 B** for Associated vehicles, to fit:
 - the bearing
 - the hoop bush.
- Fit the hoop bush with the machined face towards the bearing.
- Force to be applied when fitting the hoop bush: 700 to 3.000 kg.

N.B. - Reject all bushes which can be fitted at a pressure of less than 700 kg.

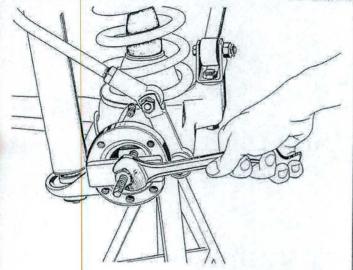
- Ensure that the bush is well down on the bearing.



- In all cases fit a new paper gasket 3 smeared with Hermetite, on both sides of the brake plate.
- Position the oil drain hole in the flange in line with the hole 4 in the axle tube.
- Then proceed in the reverse of removal.



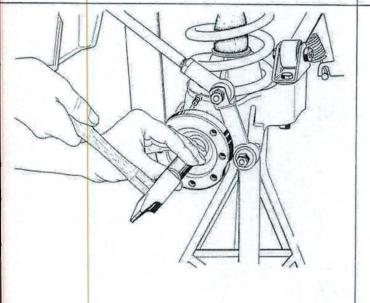
REAR AXLE REAR AXLE SHAFTS AND TUBES



AXLE TUBES

- Withdraw the oil thrower bushes using the puller:

8.0513 for Saloons 8.0514 for Associated vehicles



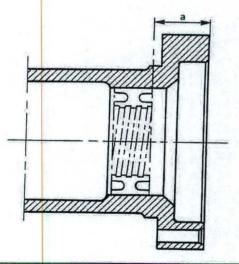
- Refit the oil thrower bushes using the drift :

0.0507 A for Saloons
0.0507 B for Associated vehicles

- The position of the bush, when in place, in relation to the tube machined face, distance a is:

a = 35 mm for Saloons

b = 32 mm for Associated vehicles



IMPORTANT

- The bush, marked with spherical notch or a hole on the outer face (left hand thread) is fitted in the left hand tube.
- The bush without any marking (right hand thread) is fitted in the right hand tube.

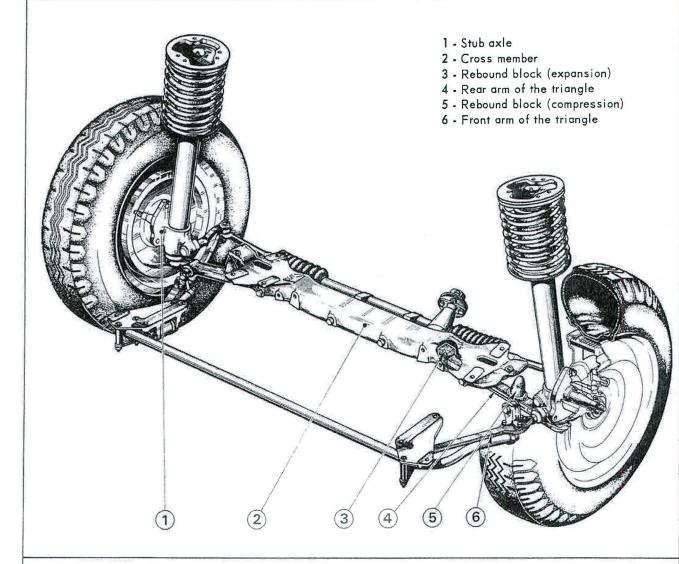
GROEPSINDELING

- 1. MOTOR
- KOPPELING
- 3. VERSNELLINGSBAK / DIFFERENTIEEL
- 4. AANDRIJVING
- 5. ACHTERBRUG / ACHTERTREIN
- 6. VOORTREIN
- 7. STUURINRICHTING
- 8. REMMEN
- 9. VERING
- 10. WIELEN EN BANDEN
- 11. CARROSSERIE EN RICHTBLOK
- 12. ELEKTRISCHE INSTALLATIE
- 13. CARROSSERIE / BEKLEDING / LAKWERK
- 14. SMERING EN ONDERHOUD
- 15. GEREEDSCHAPPEN EN ALGEMEEN



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Tools to be used	06 0
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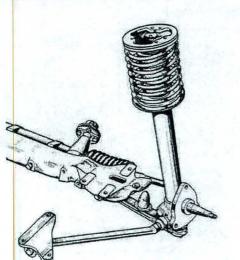
CHA	DA	CTE	TOICT	ICS	404	ALI	MODELS	
CHA	KA	CIE	(121	102	- 404	ALL	MUDELS	

Castor angle	2°± 30'					
Camber angle	0°30' ± 45'					
Swivel pin inclination	90	50 ' ± 30'				
	404 - 404 C	UNDER LOAD- 404 L-404 U				
Theorical inner steering angle	43°30'	42°				
Theorical outer steering angle	34°	33°30'				
	Inner wheel	Outer wheel				
Charling the standing coults	20°	18° 30'				
Checking the steering angles	21°30′	20°				

Toe-in

2 ± 1 mm





NORMAL SUSPENSION

404 Saloons

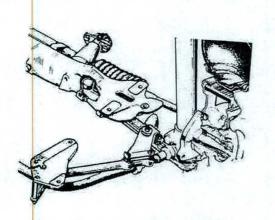
Up to serial numbers:
404 - 4 234 333
404 J - 4 506 712
From beginning of series:
404/8 - 6 900 001

404 Station Wagons

From beginning of series \$\\\ 404 U6 - 4 700 001 \\\ 404 U6D - 4 900 001

404 Light lorries

From beginning of series 8
404 U8 - 7 010 001
404 U8D - 7 040 001
404 U10 - 7 060 001
404 U10D - 7 080 001

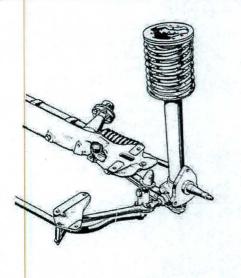


HIGH FLEXIBILITY SUSPENSION

1st fitting

Convertibles

Up to serial numbers : **404 C** - 4 495 418 **404 C.KF** - 4 590 110



2nd fitting

All L.H.D. 404 models, except 404/8, Station Wagons and Light lorries

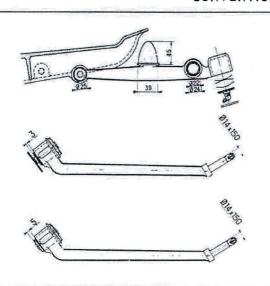
As from serial numbers :

404 - 4 260 001 404 J - 4 525 001 404 KF - 4 550 052 404 C - 4 495 419 404 C.KF - 4 590 111 404 D - 4 600 001 404 L - 4 825 001 404 LD - 4 975 001

404 U6A - 1 928 001



CONVENTIONAL SUSPENSION



TRIANGLE ARMS AND FRONT CROSS MEMBER

1st Fitting

Up to serial numbers : 404 - 4 211 714 404 J - 4 506 349

Cross member: without facing for rebound stop : without rebound stop (expansion) Rear arm

Front arm

Up to serial numbers :

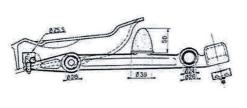
404 - 4 145 984 **404 J** - 4 505 086

with silentbloc protruding 3 mm and rubber washer.

Up to serial numbers :

404 - 4 211 714 **404 J** - 4 506 349

with silentbloc protruding 5 mm.



2nd Fitting

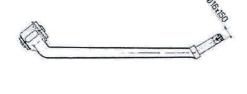
404 from no 4 211 715 to no 4 234 333 404 J from n° 4 506 350 to n° 4 506 712 404 U6 from nº 4 700 001 to nº 4 704 137 404 U6D from nº 4 900 001 to nº 4 900 806

Cross member :

with facing for rebound stop

with cylindrical rebound stop (expansion)

reinforced (16 mm diameter extremity)



3rd Fitting

As from serial numbers :

404 U6 - 4 704 138 **404 U6D - 4** 900 807

From beginning of series:

404/8 - 6 900 001

404 U8 - 7 010 001

404 U8D - 7 040.001

404 U10 - 7 060 001

404 U10D - 7 080 001



enlarged extremities: 80 mm in place of 70 mm.

Square rebound stop (expansion)

Reinforced rebound stop (compression)

Identical to that of the 2nd fitting.

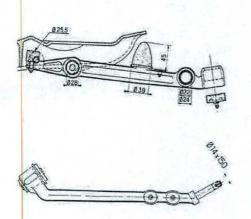
Front engine support mounting bolt shortened by 5 mm.





IDENTIFICATION - CHARACTERISTICS

HIGH FLEXIBILITY SUSPENSION



TRIANGLE REAR ARMS AND FRONT CROSS MEMBER

1st Fitting

Up to serial numbers : 404 C - 4 495 418

404 C.KF - 4 590 110

Cross member :

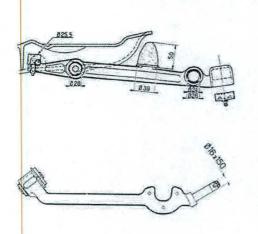
with facing for rebound stop.

Rear arm:

with threaded hole for anti-roll bar link fitting.

Front arm :

with two threaded holes for anti-roll bar link fitting.



2nd Fitting

404		from r	10	4	260	001	to	nº	4	299	190	
404	J	from r	10	4	525	001	to	пº	4	525	563	
404	KF	from r	10	4	550	052	to	nº	4	550	832	
404	C	from r	10	4	495	419	to	nº	4	495	777	
404	C.KF	from r	10	4	590	111	to	nº	4	590	776	
404	L	from r	10	4	825	001	to	nº	4	826	697	
404	LD	from r	10	4	975	001	to	no	4	975	272	

Cross member :

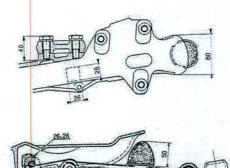
Identical to that of the first fitting.

Rear arm:

Threaded hole removed: Articone reinforced.

Front arm :

Reinforced, with mounting for the anti-roll bar link fitting.



3rd Fitting

As from serial numbers :

404 J - 4 299 191 404 C.KF - 4 590 777 404 J - 4 525 564 404 D - 4 600 001 404 KF - 4 550 833 404 L - 4 826 698 404 C - 4 495 778 404 LD - 4 975 273

Cross member:

Extremities enlarged: 80 mm in place of 70 mm.

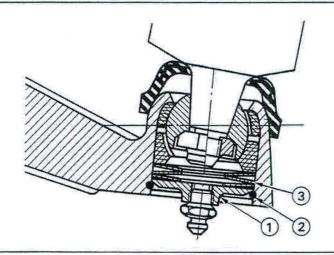
Rear arm :

Square rebound stop (expansion)
Reinforced rebound stop (compression)

Front arm .

Identical to that of the second fitting Front engine mounting shorter by 5 mm.



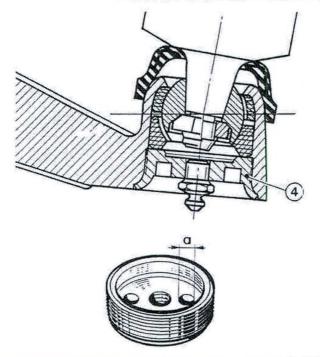


CLOSING OF THE LOWER BALL JOINT SOCKET

1st Fitting

Sealing washer 1 retained by the spring clip 2.

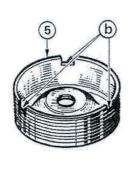
The Belleville washers 3 ensuring the adjustment of the ball joint.

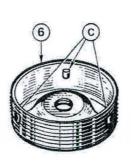


2nd Fitting

Sealing with a cutaway nut 4 ensuring the adjustment of the ball joint.

1st model: holes (a) of 5 mm diameter 2nd model: holes (a) of 7.5 mm diameter.





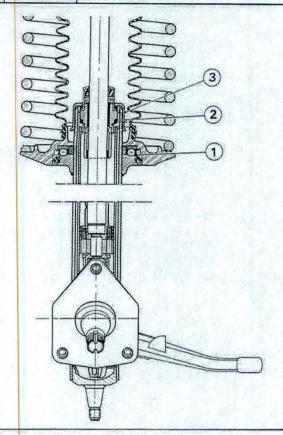
3rd Fitting

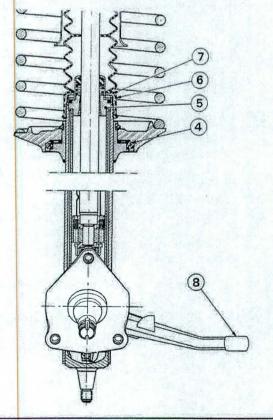
Sealing with a nut ensuring the adjustment of the ball joint.

1st model : 5 with three notches b 2nd model : 6 with three inner shoulders c.

- The 4 types of nut are interchangeable.







STEERING SWIVELS

1st Fitting

Up to serial numbers :

- 1 Ball-bearing
- 2 Shock absorber with swivel bearing
- 3 Sealing or closing nut, P.N. 5346.09 with collar having 4 notches.

2nd Fitting

As from serial numbers :

From beginning of series:

404/8 - 6 900 001 404 U10 - 7 060 001 404 U8 - 7 010 001 404 U10D - 7 080 001 404 U8D - 7 040 001

- 4 Needle roller bearing
- 5 Shock absorber with rigid bearing
- 6 Simplified rod protector
- 7 Sealing or closing nut, P.N. 5346.10, with 2 upper notches.

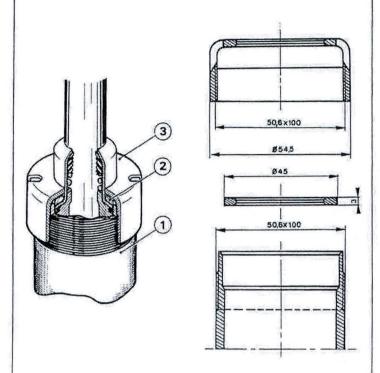
3rd Fitting

As from serial numbers :

404 (TW) - 5 064 972 404 L (TW) - 4 897 516 404 (TH) - 5 251 287 404 L (TH) - 4 873 222 404 J - 5 536 897 404 L Break - 4 873 113 404 KF - 8 211 210 404 LD - 4 982 799 404 C - 4 499 033 404 U6 - 4 756 704 404 C.KF - 4 598 057 404 U6A - 1 927 086 404 D - 4 615 905 404 U6D - 4 912 739

8 - Track arm raised by 5 mm.





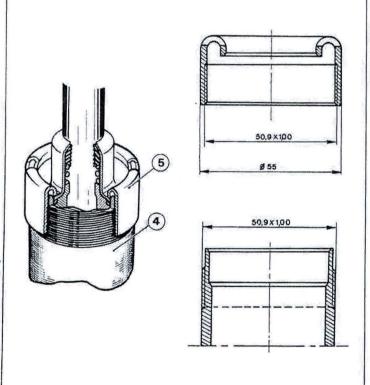
THREADING OF THE FRONT SHOCK ABSORBER SEALING NUT

1st Fitting

Up to serial numbers :

404 (TW) - 5 075 000 404 L (TW) - 4 940 000 404 (TH) - 5 311 000 404 L (TH) - 4 884 001 404 ZF - 8 251 300 404 L Break - 4 884 000 404 KF - 8 224 862 404 U6 - 4 763 174 404 C - 4 499 500 404 U6A - 1 928 100 404 C.KF - 4 599 271 404 LD - 4 984 114 404 D - 4 619 852 404 U6D - 4 914 547

- 1 Steering swivel
- 2 Thrust washer
- 3 Sealing nut, P.N. 5346.10
- Diameter of the threading of the sealing nut : 50.6 mm.



2nd Fitting

As from serial numbers :

 404 (TW)
 - 5 075 001
 404 L (TW)
 - 4 940 001

 404 (TH)
 - 5 311 001
 404 L (TH)
 - 4 884 002

 404 ZF
 - 8 251 301
 404 L Break
 - 4 884 001

 404 KF
 - 8 224 863
 404 U6
 - 4 763 175

 404 C
 - 4 499 501
 404 U6A
 - 1 928 101

 404 C.KF
 - 4 599 272
 404 LD
 - 4 984 115

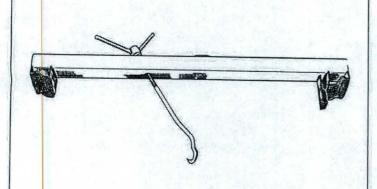
 404 D
 - 4 619 853
 404 U6D
 - 4 914 548

- 4 Steering swivel
- 5 Sealing nut, P.N. 5046.13.
 - Diameter of the threading of the sealing nut: 50.9 mm.
 - the sealing nuts of the two fittings are not interchangeable.

PEUGEOT

FRONT AXLE REMOVAL AND REFITTING OF THE FRONT CROSS MEMBER

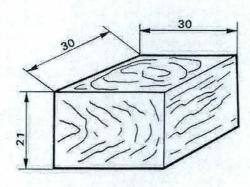




TOOLS TO BE USED

8.0116 Y

Engine support crossbar.



These tools must be produced in the workshop.

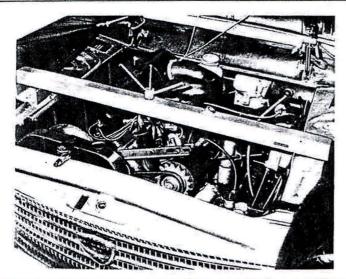
0.0604

2 wooden spacers to interpose between the rebound block and the face on the crossmember.

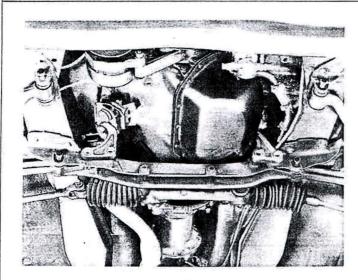
12126

FRONT AXLE

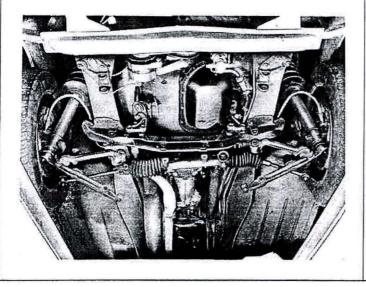
FRONT CROSS MEMBER - REMOVAL



- Position the vehicle over a pit or on a car lift.
- Disconnect the battery.
- Place the engine support crossbar 8.0116 Y, equipped with its rod, in position.
- Insert the hook in the cylinder block suspension eye, under the coil, and tighten the wing nut, until the engine is supported.



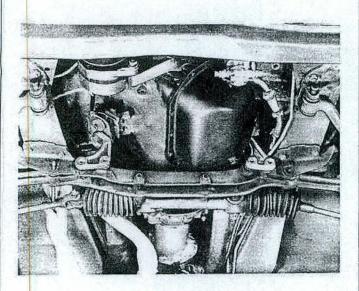
- Remove the engine securing bolts from the front supports.
- Remove the anti-roll bar.
- Remove the nuts from the front and rear suspension and pivots.
- Drift out the pivots until they are flush with the flanches.
- Using a chain hoist, maintain the front of the vehicle in position.
- Remove completely the pivots using a drift.



- Raise the vehicle until the front wheels are clear and chock the vehicle.
- Disengage the front and rear arms from the flanges and the cross member.
- Raise the engine slightly by tightening the support crossbar wing nut.
- Domovo
- the two bolts securing the steering box to the cross member.
- the bolts securing the brake hose.
- the six bolts securing the cross member to the sidemembers.
- Remove the cross member.

FRONT AXLE FRONT CROSS MEMBER - REFITTING

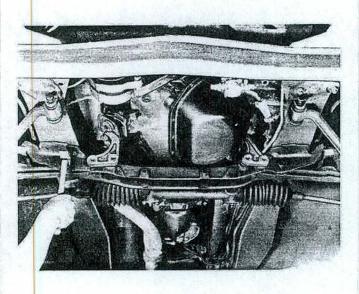




- Position the cross member; tighten the bolts to 40 ft.lbs (5.5 m.kg).
- Secure the brake hose.
- Secure the steering box; tighten the bolts to 29 ft.lbs (4 m.kg).

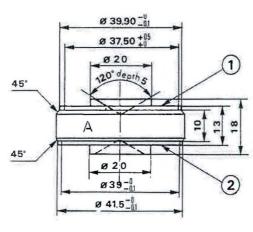
IMPORTANT

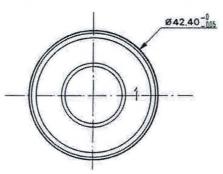
- Fit the front and rear arms of the triangles using **new pivots** (with the heads facing the front of the vehicle).
- To effect this operation :
 - place the front and rear arms of the triangles in position.
 - insert the pivots of the front arms, up to the splines.
 - using a rod, centre the rear arm flexible bushes, whilst lowering the car onto its wheels.
 - insert the pivots of the rear arms, up to the splines.



- Before completely engaging the pivots, place the spacers 0.0604 of 21 mm between the rebound blocks and the cross member faces.
- Push down on the front of the vehicle until the spacers 0.0604 are clamped between the rebound blocks and the cross member. The flexible bushes are in the neutral position at this moment.
- Drift the pivots in using a hammer.
- Tighten the nuts :
 - front arm, on the yoke : 58 ft.lbs (8 m.kg).
- rear arm, on the cross member: 62 ft.lbs (8.5 m.kg).
- Pin the pivots.
- Lower the engine and secure the front supports, tighten the bolts to 40 ft.lbs (5.5 m.kg).
- Refit the anti-roll bar;
 - tighten:
- the link to the yoke : 33 ft.lbs (4.5 m.kg)
- the bearing securing bolts: 9 ft.lbs (1.25 m.kg)
- Thread a Pal lock nut onto the pivot of the
- Remove the engine support crossbar and refit the accessories.







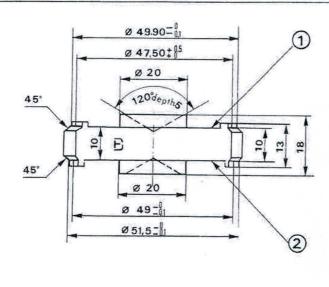
TOOLS TO BE USED

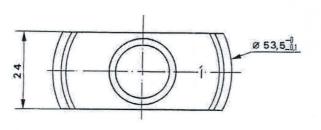
These tools must be produced in the workshop.

0.0601 A

Plate for removing the outer wheel bearing outer race.

- 1 Face to be used for the 1st fitting outer race.
- 2 Face to be used for the 2nd fitting outer race.

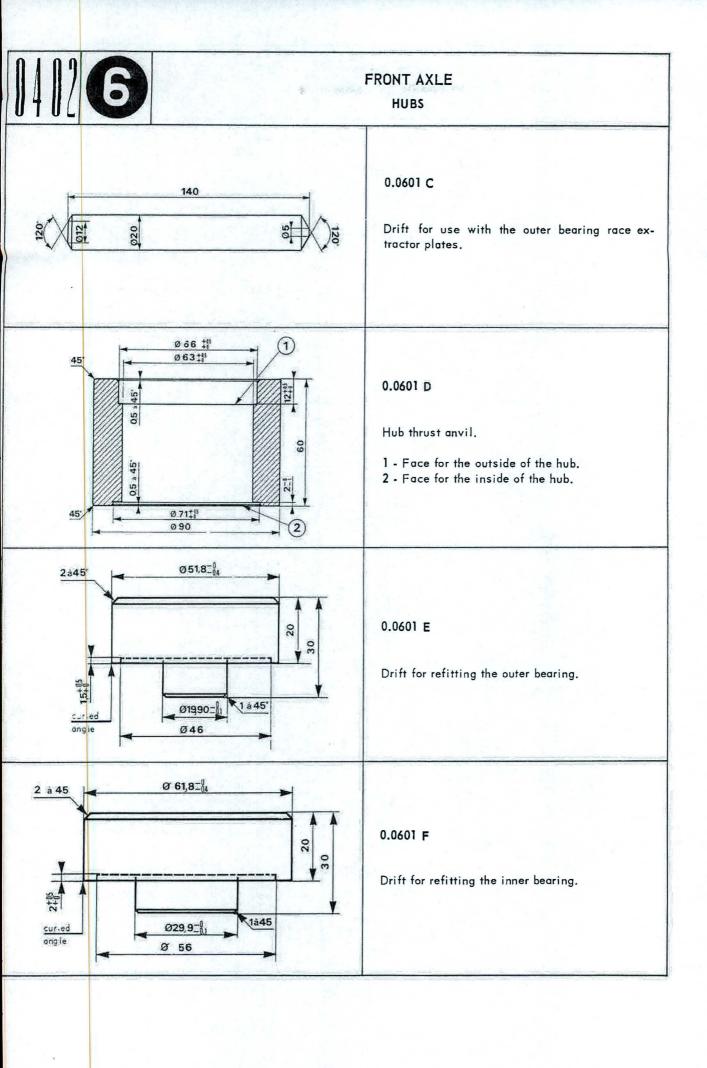




0.0601 B

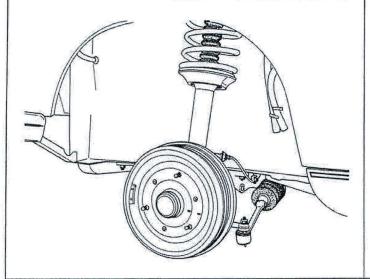
Plate for removing the inner wheel bearing outer race.

- 1 Face to be used for the 1st fitting outer race.
- 2 Face to be used for the 2nd fitting outer race.
- $\it N.B.$ The figures 1 and 2 should be marked on the corresponding faces.



HUBS

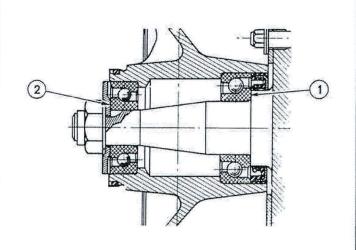




I - DRUM BRAKES

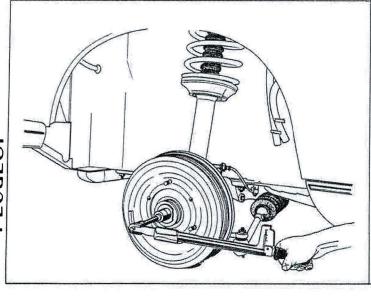
REMOVAL

- Raise the front of the vehicle.
- Chock the car under the cross member.
- Remove the wheel and the drum after marking their relative position.
- Remove the hub.



REFITTING

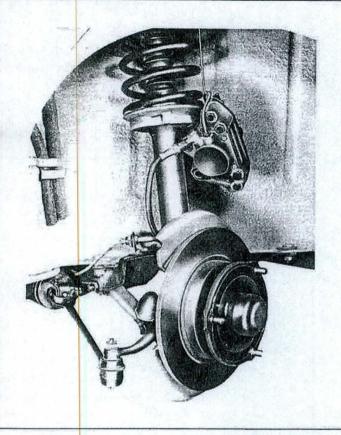
- Position the hub on the stub axle, with the inner bearing 1 well down on the shoulder on stub axle.
- Fit the washer with the shoulder 2 against the bearing inner race.
- Fit a new nut, pre-tighten to 22 ft.lbs (3 m.kg) and then loosen it.



- Tighten the nut finally to 7.25 ft.lbs (1 m.kg)
- Lock the nut carefully in the two notches provided.
- Fit the wheel bearing cap, packed with Esso Multipurpose Grease H.
- Fit the brake drum and the wheel following the marks made during removal.
- Tighten the wheel nuts with a torque wranch : Saloons : 43.5 ft.lbs (6 m.kg)

Associated vehicles: 58 ft.lbs (8 m.kg).

PELICEOT

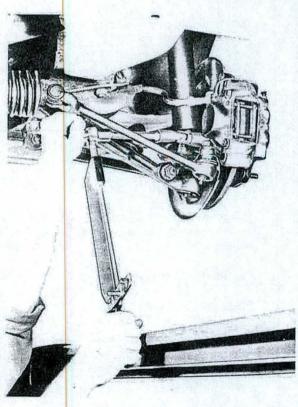


II - DISC BRAKES

REMOVAL

- Raise the front of the vehicle.
- Chock the vehicle under the cross member.
- Remove the wheel after marking its position.
- Remove the bolts securing the caliper and hang this from the suspension spring using a hook, without disconnecting the brake hose.
- Remove the hub.

N.B. - It is not necessary to remove the disc to replace the bearings.

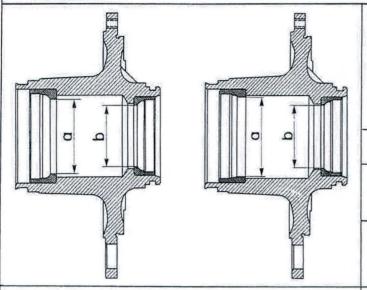


REFITTING

- Reposition the hub on the stub axle.
- Clean the brake disc (if necessary, remove the grease with a cloth soaked in trichlorethylene).
- Refit the brake caliper.
- Tighten the bolts to 51 ft.lbs (7 m.kg).

N.B. - Replace the bearings in the same manner as for 404 fitted with drum brakes.



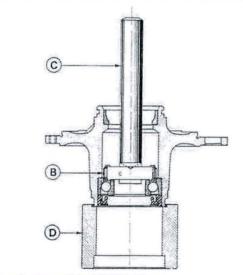


DISMANTLING

In order to use the plates $0.0601~\text{\AA}$ and B it is necessary to identify the outer races of the bearings.

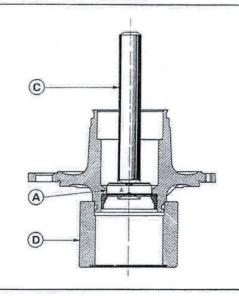
- Illinoident and the second s						
	Inner bearing	Outer bearing				
1st fitting	a = 50.3	ь = 40				
2nd fitting	a = 51.7	b = 41.6				

N.B. - The 2nd fitting bearings are fitted to vehicles as from April 1962.



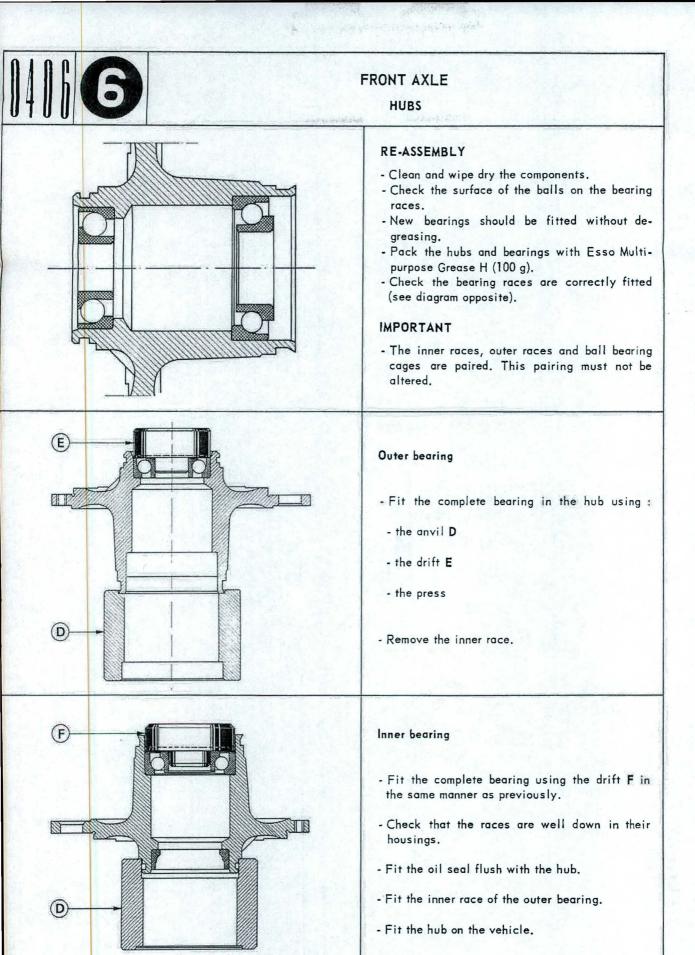
Inner bearing

- Remove excess grease from the hub.
- Insert the plate **B** in the hub with the face 1 or 2 against the outer race depending on the fitting.
- Place the hub on the thrust anvil ${\bf D}$ on the larger diameter side.
- Remove the bearing and its oil seal, using the drift **C**, on the press.

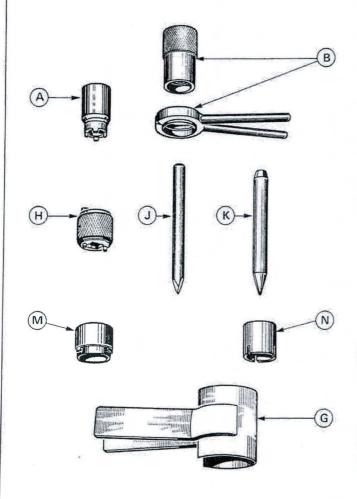


Outer bearing

- Insert the plate ${\bf A}$ in the hub with the face 1 or 2 against the outer race, depending on the fitting.
- Turn the anvil D over.
- Place the hub on the anvil.
- Remove the bearing, using the drift **C**, on the press.







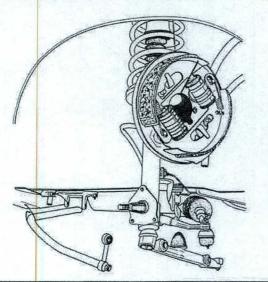
TOOLS TO BE USED

Tool Chest 8.0902 V

- A Castled socket for lower ball joint securing nut.
- B Lower ball joint housing snap ring fitting apparatus (1st fitting).
- H Pin socket for lower ball joint securing nut.
- J Unstaking tool.
- K Staking tool.
- M Lower ball joint housing nut socket with 3 shoulders.
- N Lower ball joint housing nut socket with 3 notches.
- G Support clamp.



FRONT AXLE TRIANGLE ARMS



REMOVAL

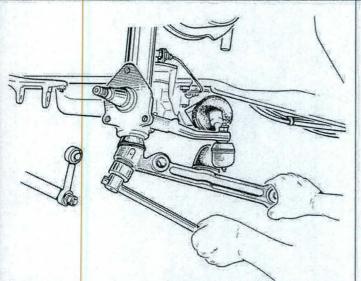
- Position the car over a pit or on a car lift.
- Disconnect the anti-roll bar link, if fitted, and remove the bush.
- Remove the front and rear arm pivots (see class 6, page 02 02).
- Disconnect the front and rear arms.
- Raise and chock the car.
- Remove the front wheel, marking its position on the hub.

Drum brakes

- Remove the hub/drum assembly.
- Remove the 3 Allen screws securing the brake plate.
- Release the brake plate

Disc brakes

- Also remove the brake caliper from its support

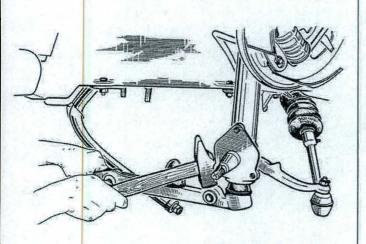


1st Fitting

- Remove the snap ring using a pin punch in the hole provided.
- Recover the sealing washer and the Belleville washers.

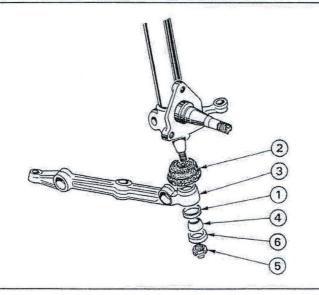
2nd Fitting

- Unlock the nut using the tool J.
- Remove the nut using the corresponding socket:
- H Pin socket for cutaway nut.
- M Socket with 3 shoulders.
- N Socket with 3 notches.



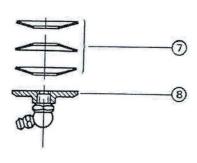
- Remove the nut on the ball joint using the spanner 8.0902 A.
- Hold the rear arm and give it a sharp blow, as close as possible to the ball joint housing, to disengage the ball joint from its cone.
- Recover the lower half-bearing, the ball head and the upper half-bearing.
- Withdraw the rubber protector from the stub-
- Replace the flexible bushings if necessary.





REFITTING

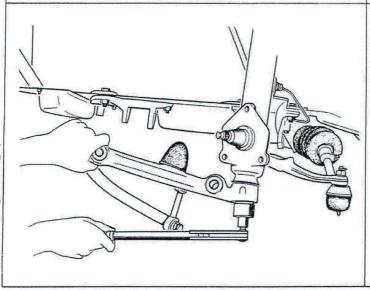
- Clean the components.
- Check the thread on the end of the cone on the shock absorber body.
- Replace all worn parts.
- Position the green upper half-bearing 1 (8 mm thick) in the triangle arm.
- Fit, in order, on the ball joint cone :
- the rubber protector 2
- the ball head 4
- a new nut 5 and tighten this to 33 ft.lbs (4.5 m.kg). Lock it carefully in the notches provided.
- the white lower half-bearing 6 (10 mm thick).



1st Fitting

- Then fit 3 new Belleville washers 7 in the correct direction of fitment.
- Fit the sealing washer 8 and a new snap ring using the apparatus 8.0902 B.
- Grease the ball joint housing.

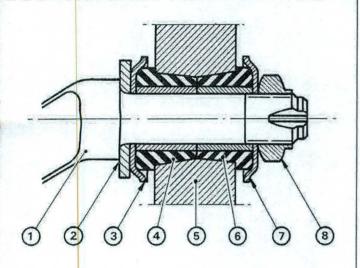
N.B. - To facilitate removal of the snap ring, position one of the ends opposite the hole provided in the triangle arm.



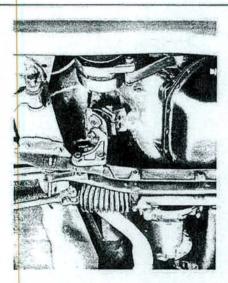
2nd Fitting

- Fit a new nut, using the corresponding socket H, M or N.
- Hold, the arm so that the ball joint housing is on the axis of the shock absorber and tighten the nut to 5.5 ft.lbs (0.75 m.kg).
- Lock the nut, using the tool K, in the grooves provided.
- Fit the grease nipple and grease the ball joint.





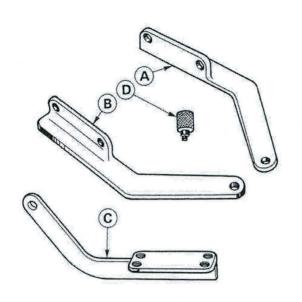
- Fit, in order, on the front arm 1:
 - the thrust washer 2
 - the cup 3
 - the half-bush 4
- Insert this assembly in the rear arm 5.
- Fit, in order, on the cylindrical part of the front arm 1:
- the second half-bush 6
- the rear cup 7
- -a new nut 3 and hand tighten this temporarily.



- Refit the brake plate or the brake caliper support and tighten the Allen screws to 43.5 ft.lbs (6 m.kg).
- Lock the screws by flattening the threads.
- Refit the hub/drum or hub/disc assembly (see class 6, page 04 03).
- Refit the brake caliper where necessary and tighten the bolts to 51 ft.lbs (7 m.kg).
- Refit the wheel respecting the reference marks.
- Refit the front and rear arms using new pivots (see class 6, page 02 03).
- Tighten the bush nut to 25 ft.lbs (3.5 m.kg) and lock it in the grooves provided.

FRONT AXLE STUB AXLES





TOOLS TO BE USED

8.0605 Z

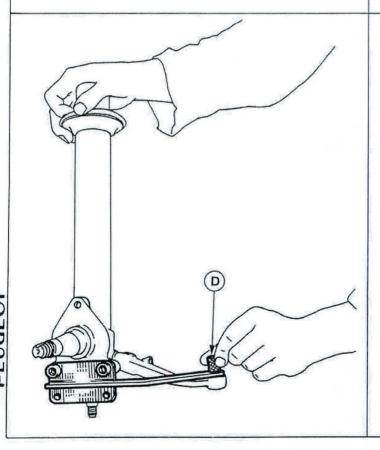
STUB AXLES FIRST FITTING

- A Checking gauge for track arm on right hand stub axle.
- B Checking gauge for track arm on left hand stub axle.

STUB AXLES SECOND FITTING

(with track arm raised by 5 mm : see class 6, page 01 06).

- C Checking gauge for left and right hand track arms.
- D Eccentric knurled pin.



CHECKING THE TRACK ARMS

- Secure the checking gauge to the corresponding stub axle.
- Check the horizontal parallelism of the checking gauge and the eye of the track arm.
- Insert the eccentric pin D in the gauge.
- Rotate the pin to engage the lower part in the conical hole in the track arm.

N.B. - Replace all stub axles which do not meet the above mentioned requirements.

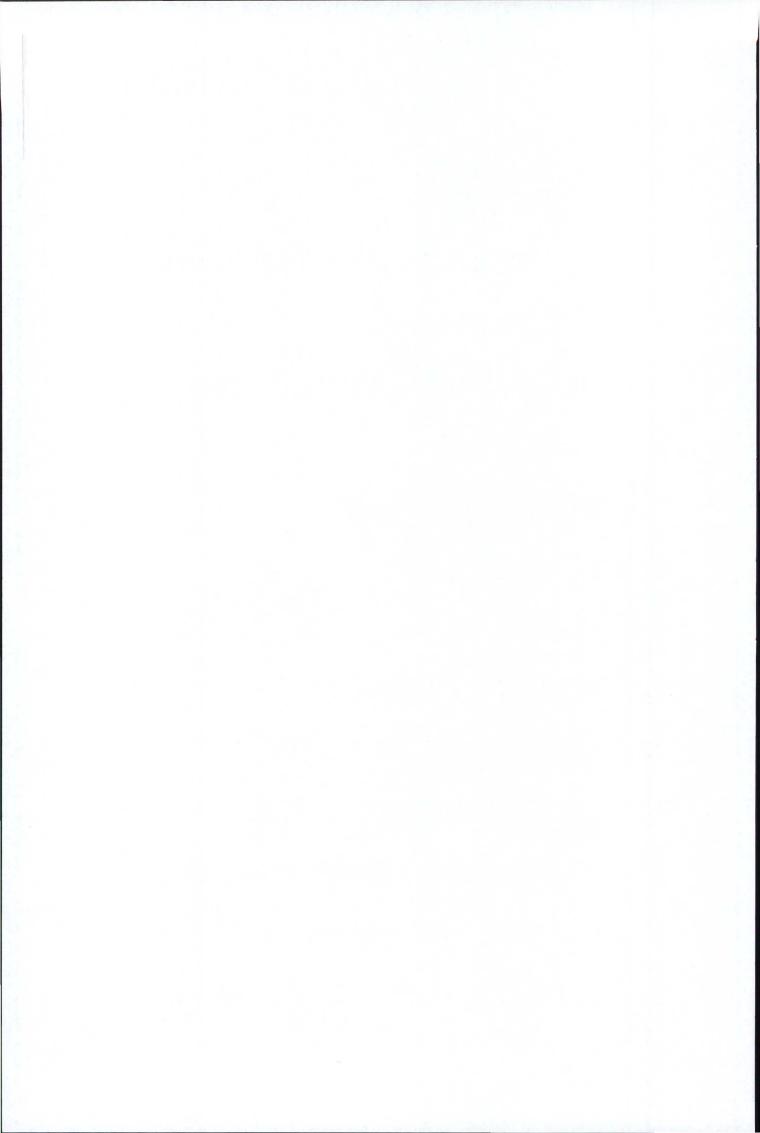
- For dismantling and reassembly of the stub axle (see class 9).

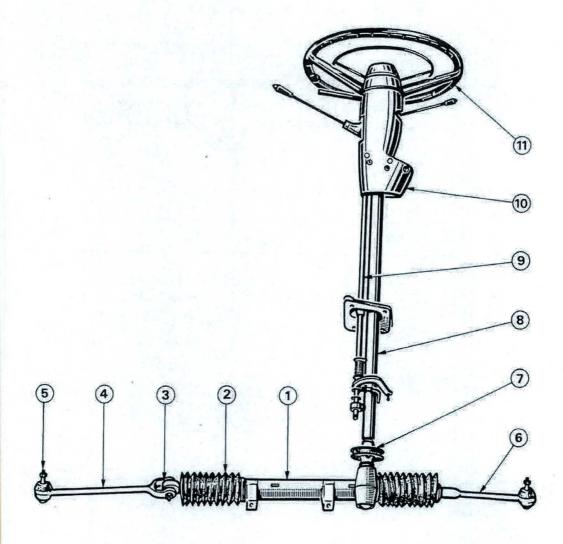
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GROEPSINDELING

- 1. MOTOR
- 2. KOPPELING
- 3. VERSNELLINGSBAK / DIFFERENTIEEL
- 4. AANDRIJVING
- 5. ACHTERBRUG / ACHTERTREIN
- 6. VOORTREIN
- 7. STUURINRICHTING
- 8. REMMEN
- 9. VERING
- 10. WIELEN EN BANDEN
- 11. CARROSSERIE EN RICHTBLOK
- 12. ELEKTRISCHE INSTALLATIE
- 13. CARROSSERIE / BEKLEDING / LAKWERK
- 14. SMERING EN ONDERHOUD
- 15. GEREEDSCHAPPEN EN ALGEMEEN







- 1 Steering gear housing or steering box.
- 2 Rack rubber boots.
- 3 Rack eye.
- 4 Right hand track rod.
- 5 Ball joint.
- 6 Left hand track rod.
- 7 Flector.
- 8 Steering Column.
- 9 Gear change control rod.
- 10 Shells.
- 11 Steering wheel.

4.41

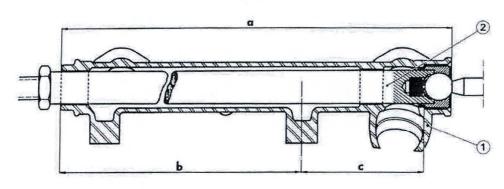
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STEERING GEAR IDENTIFICATION - CHARACTERISTICS

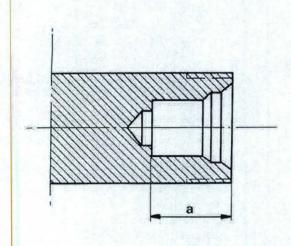
STEERING GEAR BOX ASSEMBLY



	1st FITTING	2nd FITTING	3rd FITTING		
		404 from N° 4 025 423 to N° 4 304 274	As from serial Nº		
		404 J from N° 4 501 173 to N° 4 525 630	404 4 304 275		
			404 J 4 525 631		
	Up to serial Nº :	*	404 KF 4 551 031		
			404 C 4 495 796		
Vehicle Types	404 4 025 422	Up to serial N°	404 C.KF 4 590 830		
venicle Types	404 J 4 501 172		404 D 4 600 001		
	10,2,30,112	404 KF 4 551 030	404/8 : beginning of		
		404 C 4 495 795	the series and all ty-		
		404 C.KF 4 590 829	pes of 404.		
	4	404 C.RF 4 370 627	Associated Vehicles		
			The state of the s		
			as from the beginning		
			of the series.		
1 - Housing					
a	352 r	mm	355 mm		
Ь .	220 r	nm	223 mm		
c	109 r	nm	112 mm		
	0.5		l		
2 - Rack	25 teeth	30 teeth			
Pinion	6 teeth	8 te	eth I		
Ratio	1 to 20	1 to	18.6		
Number of steering		_			
wheel turns from	4	3.	75		
lock to lock.					
Turning radius	4.82 m	nm	4.92 mm		
Maximum turning			7,72 11111		
angle.					
angie. - Inner wheel	44° 20	N .	10. 001		
- Inner wheel - Outer wheel.	1	,	43° 30'		
- Outer wheel.	35°		34°		

STEERING GEAR IDENTIFICATION - CHARACTERISTICS





DRILLING OF THE RACK

Up to serial No

404 4 019 542 404 J 4 500 792

a = 22.5 mm

- Install
 - 1 set of «Belleville» washers and one adjusting shim if any P.N. 3839.02.

As from serial No

404 4 019 543 404 J 4 500 793

404 all models and 404 Associated Vehicles since the beginning of the series.

a = 23 mm

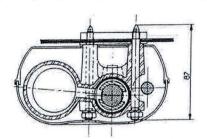
- Install
 - One adjustment washer e = 0.5 mm P.N. 3837.05.
 - One set of «Belleville» washers and one adjusting shim if any P.N. 3839.02.

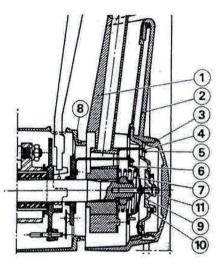
PEUGEOT

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STEERING GEAR IDENTIFICATION - CHARACTERISTICS





STEERING COLUMN

1st Fitting

Up to serial no

404 4 262 348

404 SL 4 262 020

404 J 4 525 037

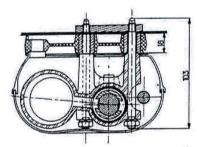
Without a spacer between the dashboard and the steering column.

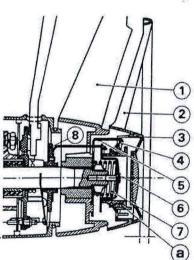
Gear change control rod.

L: 100 mm

Description

- 1 Steering wheel.
- 2 Horn Push.
- 3 Horn Push trim.
- 4 Horn push retaining ring.
- 5 Assembling plate.
- 6 Cup with guide.
- 7 Return spring.
- 8 Plunger plate with a caliper.
- 9 Adjusting screw support.
- 10 Support retaining ring.
- 11 Horn Adjusting screw.





2nd Fitting

As from serial No

404 4 262 349

404 SL 4 262 021

404 J 4 525 038

404 KF 4 550 052

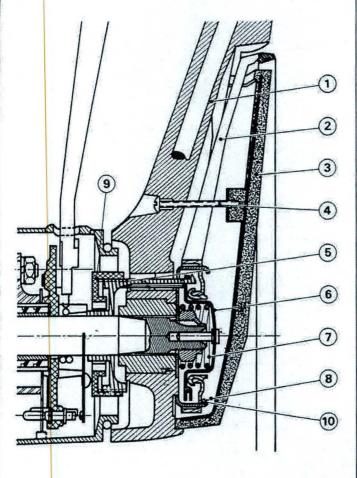
Associated Vehicles, all models

Spacer of 18 mm between the dashboard and the steering column necessitating the replacement of the gear change control rod.

Gear change control rod: L: 105 mm

Description

- 1 Steering wheel.
- 2 Horn push with rilsan adjusting ring a.
- 3 Horn push trim.
- 4 Horn push retaining ring.
- 5 Assembling plate.
- 6 Cup with guide.
- 7 Return spring.
- 8 Plunger plate with a caliper.



3rd FITTING

As from serial No

404	(TW)	5	085	001
404	(TH)	5	415	001
404	KF	8	243	001
404	С	4	670	201
404	C.KF	6	.801	501
404	ZF	8	256	601
404	D	4	629	001
404	L (TW)	4	941	601
404	L (TH)	6	826	001
404	LD	4	986	701

Spacer of 23 mm between the dashboard and the steering column.

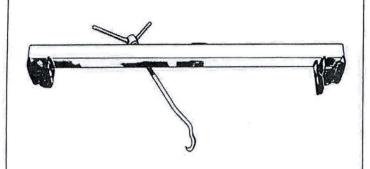
Unadjustable gear change control rod.

Description

- 1 Steering wheel.
- 2 Horn push.
- 3 Moulded padding.
- 4 Padding securing screw.
- 5 Coupler with adjusting screw.
- 6 Cup with guide.
- 7 Spring.
- 8 Assembling plate.
- 9 Adjusting nut.
- 10 Cup retaining ring.

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STEERING GEAR REMOVAL - REFITTING



TOOLS TO BE USED

8.0116 Y

Engine support apparatus



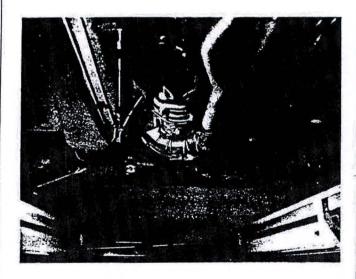
8.0703 X

Steering gear tool chest

E - Ball joint puller

RECOMMENDED TOOLS

Description	Make
Front axle checking apparatus.	- Muller BEM 665 F or C - V.L.C. Optoflex



REMOVAL

- Place the car over a pit or on a car lift.
- Disconnect the battery
- Separate :
- the steering column from the flector by removing the upper collar securing bolt.
- the track rods using ball joint extractor E.
- Slacken both housing securing bolts.
- Remove the steering gear assembly.

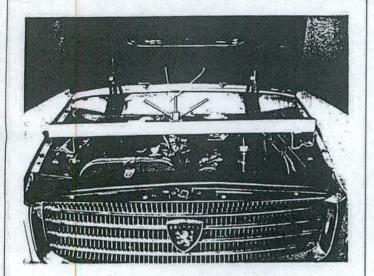
PEUGEOT

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12127

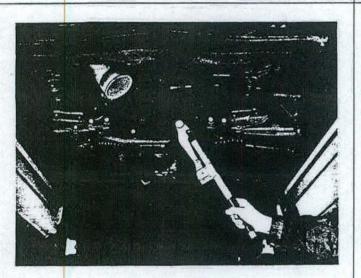
STEERING GEAR REMOVAL - REFITTING



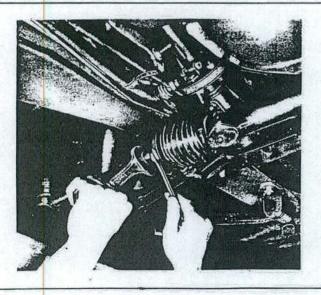
REFITTING

- Disconnect engine front mountings.
- Using the support apparatus, raise the engine to allow for the passage of the torque wrench.

NOTE: This operation can be avoided if a Facom torque wrench 5213, with a fork wrench, is used.



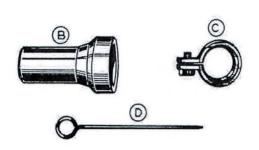
- Install the steering box and tighten the bolts to 29 ft.lbs (4 m.kg)
- Secure the engine front mountings and tighten the nuts to 29 ft.lbs (4 m.kg)
- Connect the steering column and the flector collar using a new bolt and washer, tightening torque 7.25 ft.lbs (1 m.kg). Lock by spreading the protruding end of the bolt.
- Connect the track rods to the track arms. Ensure that the pin hole is perpendicular to the track rod axis. Tighten the ball joint nuts to 31 ft.lbs (4.25 m.kg) and fit the pin.
- Correctly position the right hand track rod yoke and tighten the eye lock nut.



- Tighten the right hand rod yoke shaft to 40 ft.lbs (5.5 m.kg) and fit the pin.
- Adjust front wheel toe-in to 2 mm ± 1 through the left hand track rod ball joint (1 ball joint rotation = 3 mm at the wheel rim). Tighten the lock nut on the rod.
- Secure the rubber boots onto the rack.
- Ensure that the tyres do not touch the side members by turning the steering wheel lock to lock,
- Lubricate the steering gear assembly.
- Road test the car to check the alignment of the steering wheel. The alignment can be corrected by removing the steering wheel. (see class 7, page 08 01).

STEERING GEAR DISMANTLING - RE-ASSEMBLY



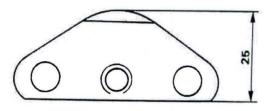


TOOLS TO BE USED

8.0703 X

Steering gear tool chest

- B Ball joint socket.
- C Ball joint adjustment clamp.
- D Ball joint cap centering rod.



This tool is to be made in the workshop

0.0702

Rack plunger adjusting plate (plate P.N. 4064.04 altered).

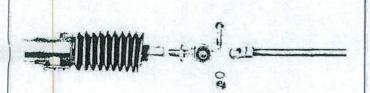
CHICHE

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STEERING GEAR DISMANTLING



Remove :

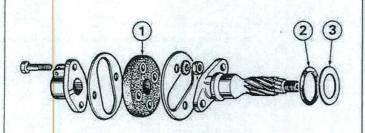
- right hand track rod after having unscrewed and withdrawn its shaft.
- the rubber boot clamps

Slacken the lock nuts and remove the following:

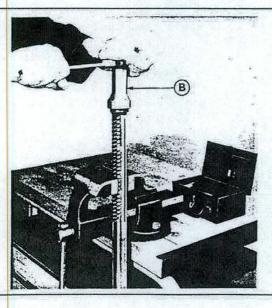
- the rack eye
- the left hand track rod

Remove :

- the rubber boots
- the steering box closing cup
- the pinion securing nut
- both rack plungers and recover the thrust spacer and the adjusting shims through the pinion side.
- the rack control pinion.

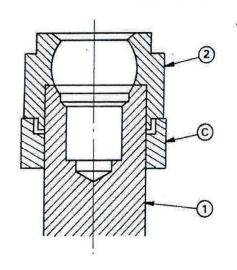


- Remove the rack
- Remove the following from the pinion :
 - flector 1.
- rubber thrust, if any.
- seal ring 2.
- shimming washer 3.
- Remove from the housing :
 - the circlip.
 - the bearing.



- . Hold the rack in a vice fitted with lead jaws.
- . Unscrew the ball joint housing using socket B.
- Remove :
 - the ball joint
 - the cap
 - the «Belleville» washers or the spring which will have to be replaced at refitting by «Belleville» washers.

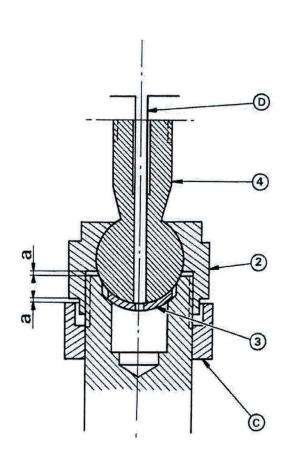




- Use clean and faultless parts (free from defects or impact).
- Lubricate the parts as they are installed using Esso Multipurpose Grease H.

ADJUSTMENT OF THE RACK BALL JOINT

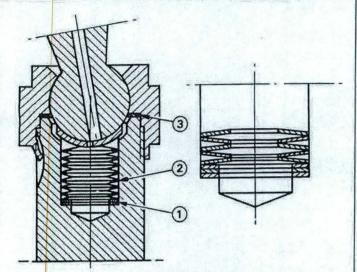
- Install adjusting clamp C on the rack 1.
- Engage the **new** ball joint housing 2 and tighten it to 33 ft.lbs (4.5 m.kg) using socket B.
- Hold the housing with clamp **C** and tighten the latter.



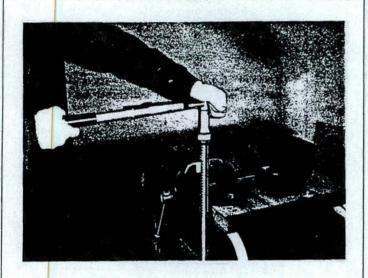
- Remove the ball head housing but do not move the clamp which indicates the maximum tightening position.
- Install ball head cap 3 into the rack.
- Fit ball head cap 4, inserting rod D in its recess to ensure proper centering of the cap.
- Engage housing 2, remove rod D and continue tightening until the ball head can no longer move into its recess.
- Using a set of shims, determine distance a between housing 2 and adjusting clamp C.
- Add 0.05 mm to the reading obtained in order to determine the thickness of the adjusting shim to be installed between the rack and the bottom of the housing to obtain an axial play of $0.05 \text{ mm} \pm 0.02 \text{ mm}$.
- Thickness of the adjusting shims : 0.10 0.15 0.20 0.50 mm.
- Slacken the housing, remove the ball head, the cap and adjusting clamp C.

EUGEOT

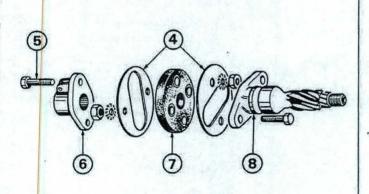




- Check the drilling depth in the rack and fit the following:
 - 0.5 mm adjusting shim if the drilling measures 23 mm.
 - adjustment washers 1 if available in the bag.
 - «Belleville» washers 2 as indicated on drawing opposite.
- Install adjusting washer 3 previously determined.
- Install the ball head and the cap centered by rod **D**.



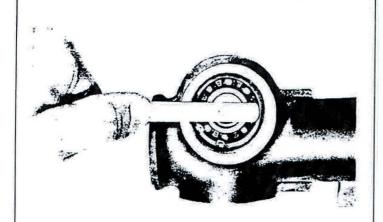
- Engage the new ball head housing used for adjustment and tighten it to 33 ft.lbs (4.5 m.kg) using socket B and lock the housing.



FLECTOR REPLACEMENT

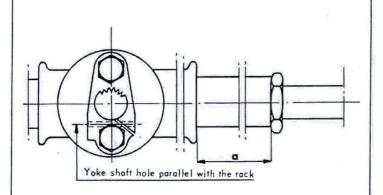
- Align the side plate holes 4 perpendicularly with regard to each other and on either side of the flector 7.
- The bearing surfaces of pinion clamp 8 and flector clamp 6 will be in contact with the flector through the side plate holes.
- Use four bolts 5, new washers and nuts with the bolt heads facing the pinion and collar clamps.
- Tighten the nuts to 11 ft.lbs (1.5 m.kg)
- Lock the bolts by spreading the threads using a cold chisel.





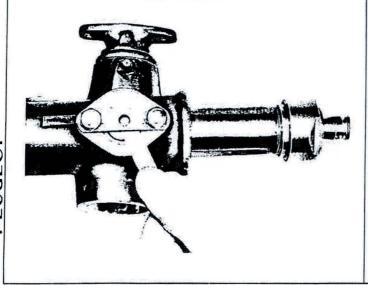
- Install the following in the steering gear box:
- the pinion bearing
- the new circlip

Ensure that the bearing axial play is nil.



- Engage the rack into the housing and position it on the pinion side according to the type of housing used (see class 7, page 01 01).

 a = 98 mm 1st and 2nd fitting
- a = 95 mm 3rd fitting.
- Engage the pinion fitted with its «0» seal ring and the anti-squeal spacer so that once in place the yoke shaft hole is parallel with the rack, slot facing downwards.
- Tighten the pinion **new** nut to 18 ft.lbs (2.5 m.kg) and lock the nut.
- Install a new housing closing cup coated with grease.



PLUNGER PLAY ADJUSTMENT

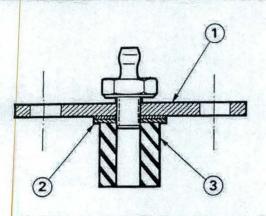
- Hold the housing in a vice in such a way that the plunger recess faces upwards.
- Insert the plunger and its nylon spacer in the recess, without the spring.
- The control clamp 0.0702 should be installed for adjustment of the plunger.
- Determine the minimum play between the spacer and the control clamp using a set of shims.
- This check should be carried out on the total travel of the rack.
- Remove the control clamp, the plunger and the spacer.

FILGEOT

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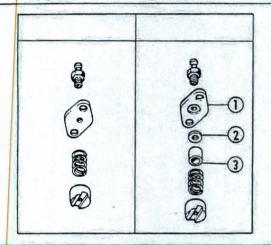




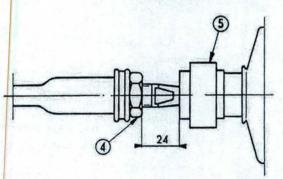
 The thickness of the shims 2 to be installed between spacer 3 and clamp 1 will be equal to the minimum play previously determined, less 0.1 mm.

Thickness of the adjusting shims: 0.10 - 0.20 - 0.50 mm

- On clamp 1 fit the adjusting shims 2 previously determined and centre them on the grease nipple threaded part protruding from the clamp.
- Engage, on this part of the nipple, nylon spacer 3 which will hold the spacers.

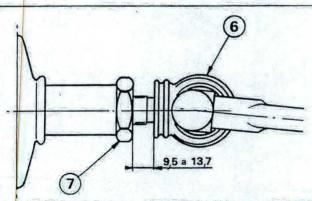


- Install the rack plungers according to the drawing opposite and tighten the clamp screws.
- Turn the steering wheel in both directions from lock to lock and ensure that there is no hard spot.
- Secure the rubber boots onto the housing and replace them if necessary.



 On the ball joint end; tighten lock nut 4 and the left hand track rod to obtain a distance of 24 mm between the housing of the ball head 5 and the lock nut, the track rod being in the axis of the rack.

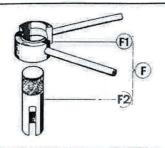
Do not tighten the lock nut at this time.



- Tighten the rack eye 6 to obtain a thread protrusion of 9.5 to 13.7 mm, the lock nut 7 being backed against the rack.
- Do not tighten the lock nut.
- Install the right hand track rod, the ball head cone facing upwards.
- Do not tighten the shaft.

STEERING GEAR TRACK ROD BALL JOINTS



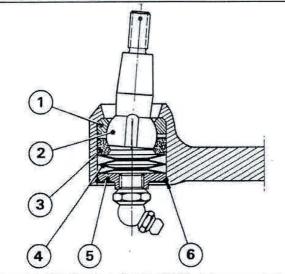


TOOLS TO BE USED

8.0703 X

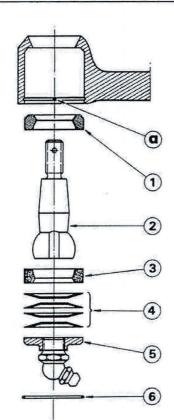
Steering Gear Tool Chest

F - Tool for positioning the track rod ball joint.



DISMANTLING

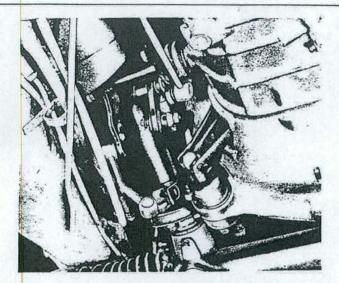
- Hold the track rod in a vice.
- Remove the retaining ring 6 from the ball joint cover through hole a using a punch.
- Remove :
 - the ball joint cover 5.
 - the «Belleville» washers 4.
- the lower nylon half cup 3.
- the ball joint 2.
- the upper steel half cup 1.



RE-ASSEMBLY

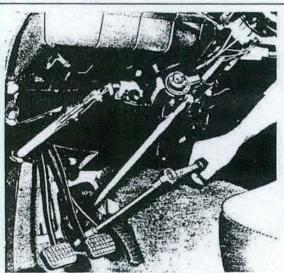
- Place the steel half cup 1 into the bottom of the housing.
- Install the following:
 - the ball head 2 with lubrication flat
 - the nylon half cup
 - the four new «Belleville» washers 4 observing the correct direction of fitment.
 - the ball joint cover 5
- Apply pressure on the «Belleville» washers and install new retaining ring 6 using tool F.
- Correctly position the ball head (the pin hole axis should be perpendicular to the track rod shaft).
- Lubricate the ball joint housing.

6-69

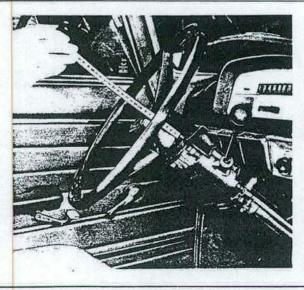


REMOVAL

- Disconnect the battery.
- Uncouple :
 - the steering column from the flector clamp
 - * the gear change control rod
 - the speed selector control rod



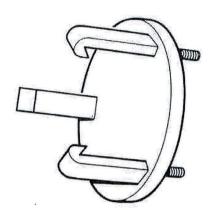
- Unfasten the left hand mat.
- Remove the sound proof cardboard which surrounds the steering column tube.
- Remove the screws securing the steering column tube gasket holding plate.
- Remove the lower shell
- Disconnect :
- the ignition starting switch or anti-theft lock leads
- the horn and direction indicator switch
- the lighting switch
- Remove the bearing nuts
- Remove the steering column.



- In the event of replacing the bushings in the steering column tube, the upper bushing should be fitted flat with the tube.
- The lower bushing should be inserted 20 mm inside the tube.

REFITTING

- Refitting is a reversal of the removal procedure.
- Replace the bolt and the assembling washer column/flector.
- Tighten the nut to 7.25 ft.lbs (1 m.kg) and lock it by spreading the protruding end of the bolt.
- The clearance between the shells and the steering wheel should be of 4 mm.
- Check the adjustment of the horn push and the gear change control rods.



TOOLS TO BE USED

8.0703 X

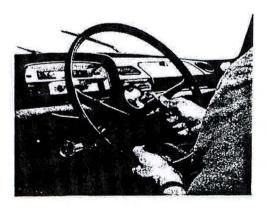
Steering Gear Tool Chest

AZ - Steering wheel puller



REMOVAL

- Disconnect the battery
- Separate the steering column from the flector clamp.
- Remove :
- the horn control unit
- the steering wheel securing nut
- the horn push assembling plate
- the steering column lower shell and raise the steering wheel 5 6 cm.
- Disengage the horn push plate by a rotating movement in order to free the steering wheel hub passage holes.
- Engage the three arms of the puller AZ below the steering wheel.



- Install the puller plate AZ, plate backing perpendicularly against the steering column end.
- Progressively tighten the spoke securing nuts until the steering wheel becomes loose.
- Remove the steering wheel and the puller.

FUGEOT

PEUGEOT

File this document in the binder:

404 Workshop Manual

	W.M.	W.F.	W.F.	W.S.	W.S.	Rec.	Rec.	S.S.	Parts
Date									
Sign,									

8

144 December 1978

8 - BRAKES

404 U10 and UXD brake linings.

As from serial numbers:

404 UXD - 9 846 285 **404 U10** - 9 525 647

the 404 U10 et UXD are equipped with FERODO 4Z brake linings inplace of TEXTAR linings as fitted to vehicles in the following blocks of serial numbers:

404 UXD from 8 593 692 to 8 594 068 from 8 594 791 to 9 845 420 from 9 845 861 to 9 846 284 from 9 449 725 to 9 450 226 from 9 451 678 to 9 523 415 from 9 524 541 to 9 525 602 from 9 525 623 to 9 525 646

Interchangeability

Parts Dept. will supply FERODO 4Z linings only.

When changing brake linings on vehicles in the above blocks of serial numbers it is necessary to replace the TEXTAR linings with 8 FERODO 4Z linings.

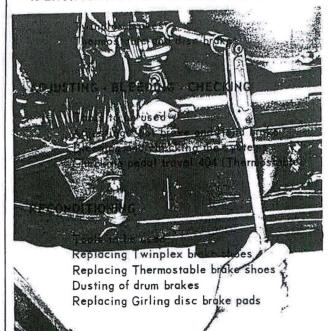
Part numbers of FERODO 4Z LININGS

POSITION	LININGS	SHOES WITH LININGS
FRONT	4 245.26(1)	4 235.27
REAR Leading	4 239.38	4 237.01
REAR Trailing	4 240.29	4 236.52

(1) Set of 4 linings plus rivets.

Printed in France

IDENTIFICATION AND CHARACTERISTICS



Identification of front Thermostable brake shoes

01 01 01 02

REFFITTING

- -Connect the steering column to the flector clamp.

 02 02
- Install a new bolt and a new washer02 04
- Tighten the nut to 7.25 ft.lbs (1 m.kg) and lock by spreading the protruding end of the bolt.
- Align the front wheels using the by Moller apparatus.

 03 01

 03 01

 03 03

 03 03

 03 06

 03 11

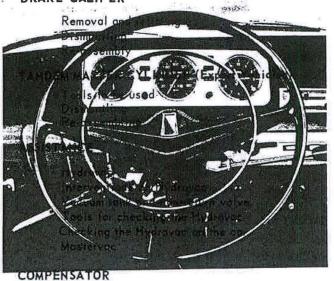
05 01

DRUMS - DISCS

Machining of the drums Replacing a disc

AKE SHOES

BRAKE CALIPER



Identification Adjusting 06 01 06 02 -- Install the horn push plate on the steering

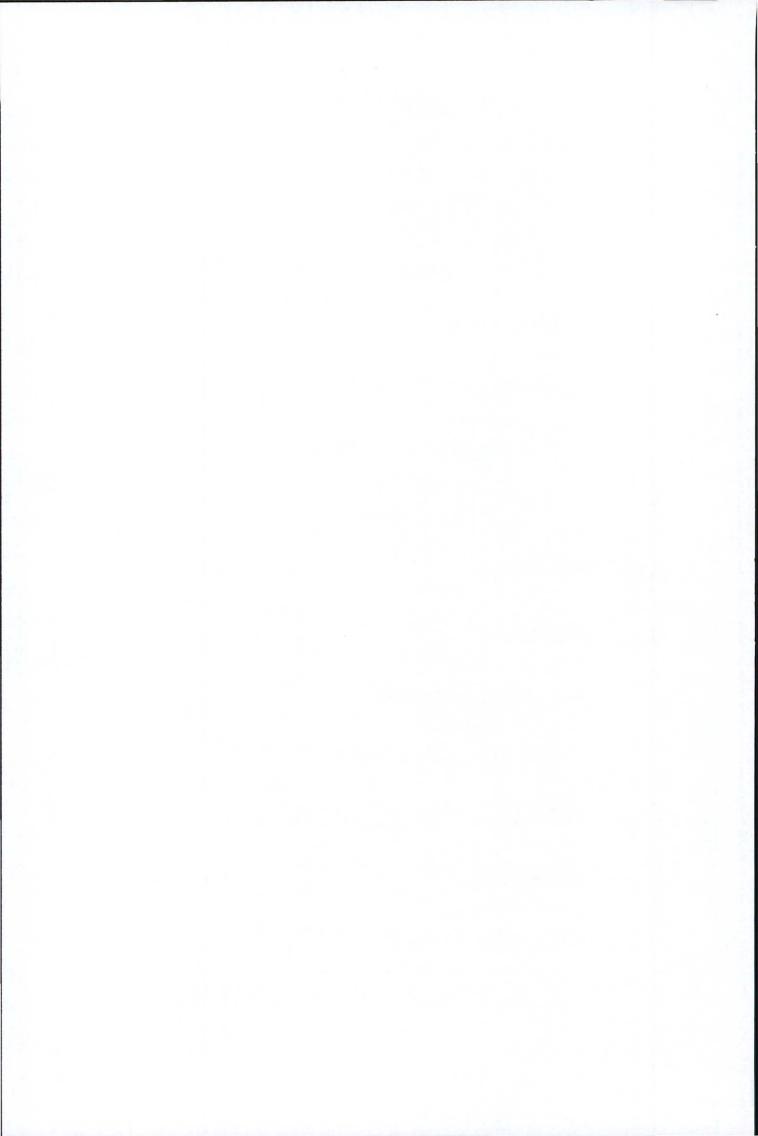
- column.
- Install the steering wheel with the spekes on a horizontal plane. 07 03
- Fit the horn push assembling plate
- Engage a new nut to secure the steeping wheel, tighten it to 33 ft.lbs (4.5 m.kg) and 8100m lock.
- Refit the horn control unit.
- Check and adjust the horn push 0 control if necessary.
- Re-install the steering column lower of hell as well as the shells retaining ring. 1011

11 01 11 02

GROEPSINDELING

- 1. MOTOR
- 2. KOPPELING
- 3. VERSNELLINGSBAK / DIFFERENTIEEL
- 4. AANDRIJVING
- 5. ACHTERBRUG / ACHTERTREIN
- 6. VOORTREIN
- 7. STUURINRICHTING
- 8. REMMEN
- 9. VERING
- 10. WIELEN EN BANDEN
- 11. CARROSSERIE EN RICHTBLOK
- 12. ELEKTRISCHE INSTALLATIE
- 13. CARROSSERIE / BEKLEDING / LAKWERK
- 14. SMERING EN ONDERHOUD
- 15. GEREEDSCHAPPEN EN ALGEMEEN





BRAKES **IDENTIFICATION - CHARACTERISTICS**



REMINDER OF THE DIFFERENT FITTINGS OF TWINPLEX BRAKES

1 - 404 Saloons, Convertibles and Coupés

т	ypes	Master Cylinder	Wheel cylinder diameter		Diameter and width of drums		Serial Numbers	
moovent		dia, in mm.	Front	Rear	Front	Rear	Jerral Hombers	
404 404		22	1"1/8	l"	255×50	255×35	From beginning of series	
404 404		22	1"1/4 1"1/8]"	255×50	255×35	As from serial numbers : 404 - 4 012 424 404 J - 4 500 313	
404 404 404	J	22	30	1"	255×60	255×35	As from serial numbers : 404 - 4 108 665 404 J - 4 504 086 404 DA - 3 060 001	
404 J, D KF,	A, D, C,	22	1"1/8	1"	280×65	255×35	As from serial numbers : 404 - 4 388 566 404 KF - 4 550 001 404 J - 4 526 884 404 C - 4 495 001 404 DA - 3 060 543 404 C.KF - 4 590 001 404 D - 4 600 001	
404 J, D 404/ (R.H	8	22	30 (1)	1" (1)	280×65	255×45	As from serial numbers : 404 - 5 057 594 404 D - 4 609 343 404 J - 4 530 002 404/8 (R.H.D) : (beginning of series).	

11 - 404 Associated Vehicles

404 L, LD, U6, U6D, U6A	1"	30	1"1/8	280×65	280×50	From beginning of series
404 L, LD, U6, U6D, U8, U8D, U10, U10D	1"	30 (1)	1"1/8 (1)	280×65	280×50	As from serial numbers : 404 L - 4 854 910
404 U6A(2)	7.	30	1"1/8	280×65	280×50	As from serial numbers : 404 U6A - 1 932 385 404 U6A.ZF - 7 100 101

^{(1) -} Wheel cylinders for *ARMCO * brake lines of 3.34 mm × 4.76 mm in place of 4.85 mm × 6.35 mm (2) - Twin system brakes with tandem master cylinder on 404 U6A - USA.



BRAKES IDENTIFICATION - CHARACTERISTICS

REMINDER TABLE OF THE DIFFERENT FITTINGS OF THERMOSTABLE AND DISC BRAKES

A - THERMOSTABLE BRAKES

1 - 404 Saloons, Convertibles and Coupés

Types	Master cylinder	Wheel cylinder diameter		Diameter and width of drums		Serial Numbers	
Types	diameter	Front	Rear	Front	Rear		
404 J.KF C. C.KF	1"1/4	1"3/8	16	280×65	255×45	As from serial numbers : 404 - 5 100 001 404 C - 4 498 001(1) 404 J - 4 535 001 404 C.KF - 4 594 001(1) 404 KF - 4 570 001 404 ZF - 8 250 001	
404 J, KF, ZF	1"1/4	1"3/8	19 (2)	280×65	255×45	As from serial numbers : 404 - 5 265 262 404 KF - 8 211 872 404 SL - 5 260 846 404 ZF - 8 250 127 404 J - 4 537 045	

II - 404 Associated Vehicles

404 L Break	1"1/4	1"3/8	17.5	280×65	280×50	As from serial number : 404 L - 4 855 001	
404 L Break	1*1/4	1"3/8	20.6(2)	280×65	280×50	As from serial number : 404 L - 4 879 401	

(1) - Addition of a brake limiter on the rear wheels
As from serial numbers: 404 C - 4 498 433

404 C.KF - 4 595 631

(2) - Addition of an automatic load actuated braking compensator for rear wheels.

B - DISC BRAKES

404/8 Saloons and 404 USA, models

Types	Master cylinder	Wheel cylinder diameter		Disc dia-	Drum and	Serial Number
	dia, in mm.	Front	Rear	mm front	mm, rear	
404/8	19	2 of 34 1 of 48	20.6	277	255×45	As from serial number: 404/8 - 6 900 001 (beginning of series)
404 USA (3)	19	2 of 34 1 of 48	20.6	277	255×45	As from serial numbers : 404 USA - 8 325 001 404 ZF(USA) - 8 327 501

(3) - Twin-system brakes with tandem master cylinder on 404 USA models.

BRAKES ADJUSTING - BLEEDING - CHECKING





TOOLS TO BE USED

8.0801

Brake shoe adjusting spanner

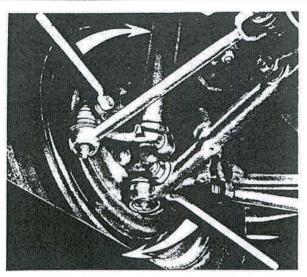
RECOMMENDED TOOLS

Description	Make
ARC 50 Checking apparatus	SALZER and Co
M2 ARC 50 Testometre or Testarc 50	SALZER and Co



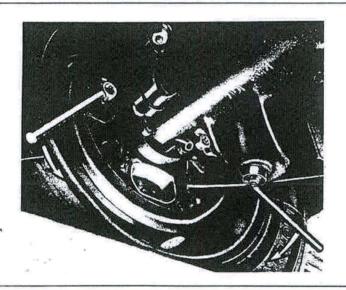
BRAKES

ADJUSTING



ADJUSTING DRUM BRAKE SHOES Front Brakes

- Raise the car until the front wheels turn freely.
- Always turn the wheels in the direction of forward movement of the car whilst adjusting.
- Using the spanner 8.0801 turn one of adjusting squares, in the direction of forward movement of the wheels, until it locks.
- Then turn the square back slowly until there is no longer friction between the drum and the shoe.
- Carry out the same operation on the other adjusting square on the same brake plate.
- Proceed in the same manner for the other front wheel.

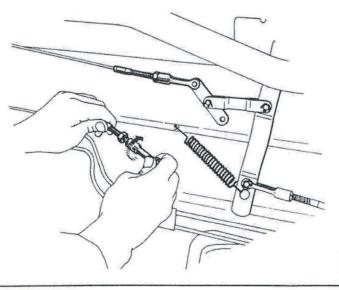


Rear Brakes

Turn the front adjusting square on the brake plate in the direction of forward movement of the wheel and the rear adjusting square in the opposite direction, taking the same precautions as for the front.

Master Cylinder Control

Never alter the setting of the control, which is effected by the manufacturer.

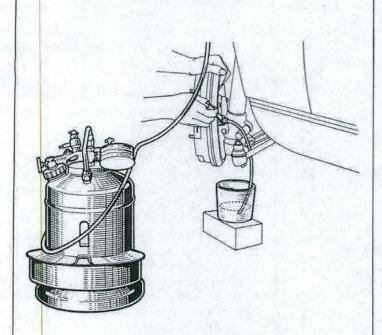


Adjusting the Hand Brake

- Raise the rear of the car
- Slacken the lock nuts on the yokes and withdraw the pivots.
- Screw the yokes onto each threaded cable end one or two turns.
- Refit the yoke pivots without the split pins.
- Check that the shoes do not rub on the drums.
- Fit the split pins and tighten the lock nuts.

BRAKES BLEEDING - CHECKING



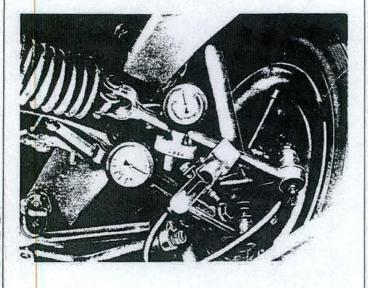


- Drain the brake system every 12.000 miles (20.000 km) or every year.
- Only use Lockheed 55 brake fluid.

Bleeding the brake system.

- Bleed the brakes using, where possible, the ARC 50 apparatus, until all the air trapped in the brake lines is released (set the release valve at 31.2 lbs sq. ins (2.2 kg cm2).

NOTE: On 404 models equipped with a braking compensator, the bleeding must not be carried out with the rear wheels suspended (car raised by bodywork) as in this position the flow of fluid to the rear brakes might be blocked.



Checking the operation and sealing of the brake system

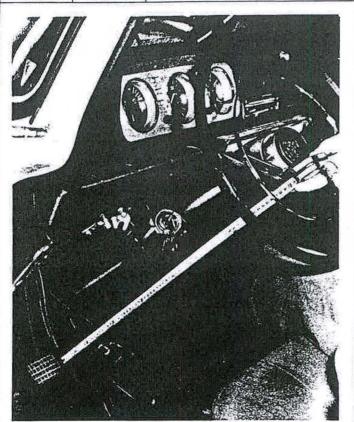
- Connect the union of the Testometre M2 or Testarc in place of the bleed screw.
- Check :
 - the residual pressure which must be between 7.1 and 21.3 lbs.sq.ins (0.5 and 1.5 kg cm2). This pressure enables the checking of operation of the master cylinder or the slave cylinder on 404 models with Thermostable brakes.
 - the sealing of the rigid lines; hoses and unions under a pressure of 853.2 to 1137.6 lbs.sq.ins (60 to 80 kg cm2) (run the engine at idling speed for cars with assisted brakes). Use a pedal press or an assistant to operate the brake pedal.

NOTE: The wheel cylinders on disc brakes are not subject to residual pressure.

IMPORTANT: After each intervention on the brake system the vehicle must be road tested.



BRAKES CHECKING

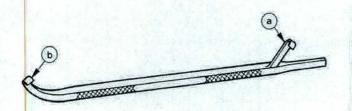


Checking the brake pedal travel on 404 models with Thermostable brakes

- The brake pedal travel must be checked every 6.000 miles (10.000 km) using the following method:
- start the engine
- accelerate a number of times to obtain maximum vacuum in the Hydrovac, and leave the engine idling.
- measure the position of the pedal at rest.
- press progressively on the pedal until saturation point of the Hydrovac, this requires a greater pressure on the pedal app: 176 lbs (80kg) in place of 44 lbs (20kg).
- hold the brake pedal in this position and measure its height from the floor.
- check in this manner the brake pedal travel, which must not exceed 60 mm.
- if the travel exceeds 60 mm adjust the brakes; if after adjustment the travel still exceeds 60 mm, bleed the system using the ARC 50 apparatus.

BRAKES RE CONDITIONING





TOOLS TO BE USED

8.0802

Hook for Thermostable brake return springs

RECOMMENDED TOOLS

Description	Make
Tools for brakes	Ferodo

PEUGEO

4.40

404 Workshop Manual - Ref. 1272 E



BRAKES RE CONDITIONING

PARTICULAR PRECAUTIONS

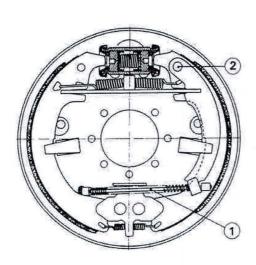
When replacing the brake shoes or pads for any reason whatsoever, the operation should be effected on both wheels on the same axle.

Any modification of original parts is forbidden; in particular the removal of the linings from the shoes or pads.

At each re-conditioning:

-

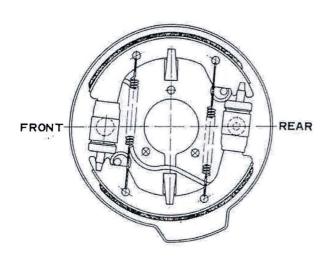
- Check the wheel cylinders, master cylinder and the hydraulic fluid lines systematically : replace if necessary.
- Tighten the wheel cylinder securing bolts to 11 ft.lbs (1.5 m.kg). Cleaning of the cylinders, pistons and cups must be effected with alcohol or clean brake fluid.



REPLACING BRAKE SHOES

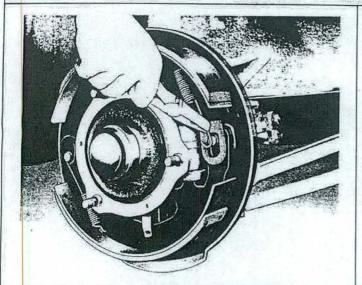
REAR BRAKES : «H.C.S.F.»

- Remove the wheels and drums after marking them.
- The removal and refitting of the brake shoes is easily effected with special Ferodo pliers.
- Check and if necessary grease the hand brake cables 1 as well as the lever pivots 2 of the secondary brake shoe.
- Clean the brake plates and drums and reassemble in the reverse order to removal.



FRONT BRAKES TWINPLEX

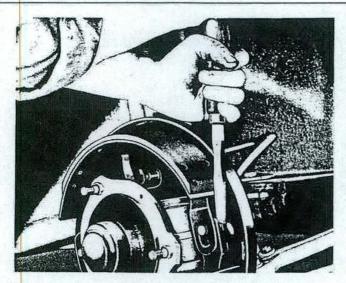
- Remove the wheels and the drums after marking them.
- Use the special Ferodo pliers to remove and refit the brake shoe return springs.
- Clean the plates and drums and refit in the reverse order to removal.



FRONT BRAKES THERMOSTABLE

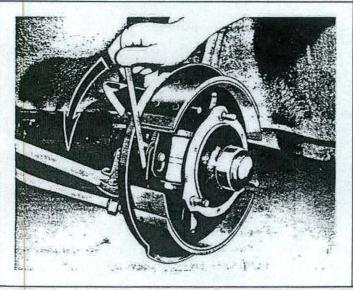
REMOVING THE BRAKE SHOES

- Remove the front wheels and drums, after marking them.
- Remove the outer springs using a pair of pliers.



Right Hand Front Brake

- Remove the two inner springs using a screwdriver; place the blade on the lip of the spring hook and tap the handle of the screw-driver.
- Remove the lateral springs and the brake shoes.



Left Hand Front Brake

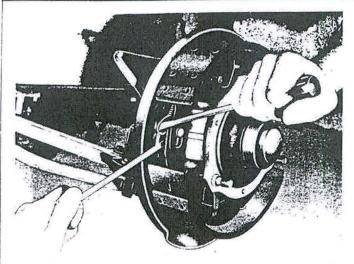
Remove the two inner springs using the tool 8.0802 proceeding as follows:

- Pass the hook a of the tool under the spring wire.
- Push the tool in the direction indicated by the arrow, without forcing it.

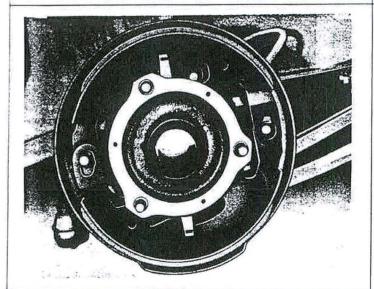
PEUGEOT



BRAKES RE CONDITIONING



- Spring hook then disengages from fixed point.
- Hold tool in the above position.
- Insert a screwdriver between spring hook and fixed point, and remove spring.
- Remove lateral springs and brake shoes.

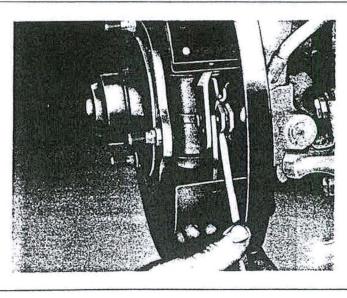


REFITTING THE BRAKE SHOES.

 Position both brake shoes against brake plate and secure with lateral springs.

The offset end of the brake shoe should be located outside the brake plate and turned as follows:

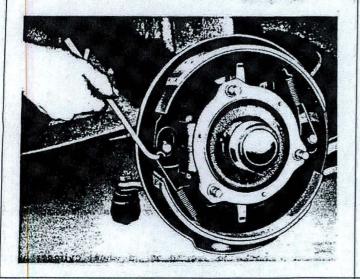
- Towards the front for the upper brake shoe.
- Towards the rear for the lower brake shoe.



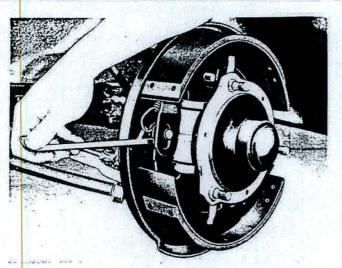
RH Front brake

- Install both inner springs; use tool 8.0802 and proceed as follows:
- Position springs between brake shoes and brake plate and engage the small hook of each spring in the corresponding holes of the brake shoes, or on the hooking point.
- Engage tool hook b under the fixed point and catch the spring hook with the hook of the tool.
- Rotate tool around fixed point while pulling to secure spring.
- Remove tool.
- The larger hooks of the inner springs may be closed slightly if necessary.

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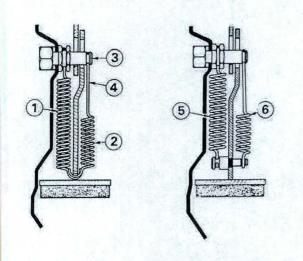


Position the outer springs using the tool
 8.0802 by pulling; the hook b being placed in the spring hook.



Left Hand Front Brake

- Position the inner springs using the tool 8.0802 proceeding as follows:
- Engage the springs between the brake shoes and plate and hook the small spring hook in the hole provided in the brake shoe or on the hooking point.
- Pass the hook a through the spring hook and turn the tool round the fixed point to hook on the spring.
- Remove the tool
- Close the large hooks of the inner springs slightly, if necessary.
- Position the outer springs using the tool
 8.0802 in the same manner as for the right hand side.



BRAKE SHOE RETURN SPRINGS

1st Fitting

- All the inner springs 1 are identical.
- The Left hand and Right hand outer springs 2 are different, due to the positioning of the spring hook on the fixed point, 3.

This fitting enables the avoiding of contact of the stem 4 of the spring with the cap of the wheel cylinder.

2nd Fitting

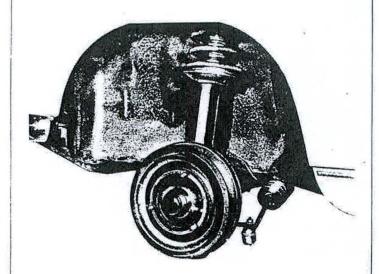
- All the springs differ from those of the 1st fitting.
- *- The inner springs 5 are identical.
- The outer springs 6 are also identical.

PEUGEOT



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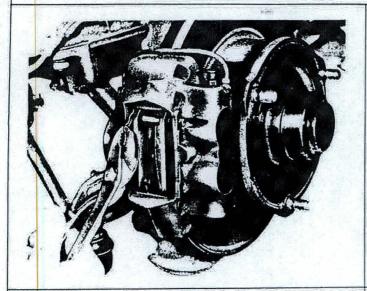
BRAKES RE CONDITIONING



DUSTING OF THE BRAKE DRUMS

(every 6.000 miles - 10.000 km)

- Remove the wheels after marking their position on the hubs.
- Mark and remove the brake drums
- Dust out the plates and drums with compressed air.
- Check the sealing of the wheel cylinder by turning the rubber caps to ensure that there is no trace of seepage.
- Replace the cylinders if necessary.
- Refit the drums and the wheels following the marks made whilst removing.
- Tighten the wheel nuts to 43.5 ft.lbs (6 m.kg).



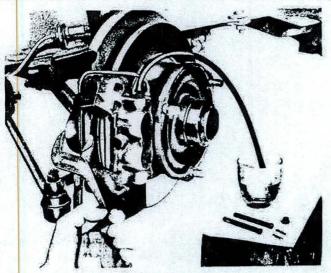
GIRLING DISC BRAKES, FRONT

Replacing the brake pads

The front brake pads must be replaced when the thickness of the linings reaches 2 mm.

The brake pads are delivered in sets of four by the Spare Parts Department.

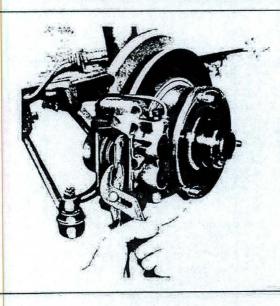
- Dry clean the brake calipers carefully, taking care not to damage or move the rubber piston protectors.
- Remove the brake pad retaining rod split pins and withdraw the rods towards the inside of the calipers.



- Connect a tube to the bleed screw on the caliper with the end of the tube in a transparant container with a small quantity of brake fluid in it.
- Slacken the bleed screw one turn.
- Using a pair of pliers, pressing on the edge of the caliper and the worn pad, push the inner piston into its housing.
- In the same manner, push the two outer pistons into their housing.

A certain amount of fluid will be pumped out of the system by the displacement of the pistons.

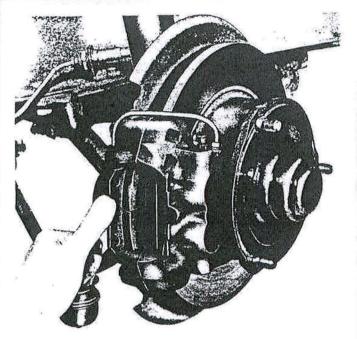
- Tighten the bleed screw and remove the tube.



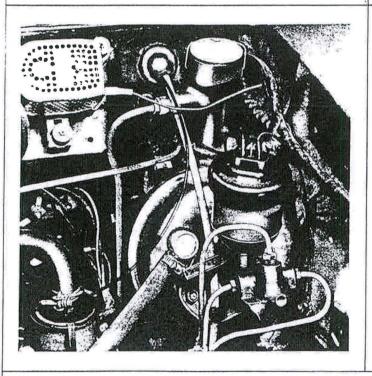
- Remove the worn brake pads.
- Check that the wheel cylinders do not leak
- Check the condition of the disc; which should not have any deep score marks as this would cause premature wear of the new brake pads.
- Check also the warp of the disc which must, under no circumstances, exceed 0.07 mm as this will provoke excessive judder when the brakes are applied.
- Clean the disc (if necessary remove all traces of grease using a cloth dipped in trichlorethylene).



BRAKES RE CONDITIONING



- Install the new brake pads, on both sides of the disc.
- Insert the pad retaining rods, from the inside of the caliper towards the outside.
- Insert the split pins, taking care not to pierce the rubber protector on the inner piston. When inserting the split pin, its straight side, which goes through the rod, must slide across the rubber protector and the side which «grips» should be above the rod.
- Proceed in the same manner for the brake pads of the other front caliper.



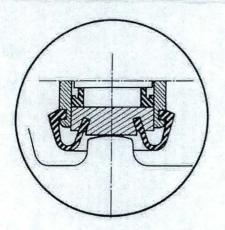
- After installing the four pads, check that the bleed screws are tight.
- Operate the brake pedal a number of times, until a strong resistance is felt. This indicates that the pistons are bearing correctly on the pads and the pads on the disc.
- Top up the master cylinder fluid level if necessary, using Lockheed 55 fluid.

IMPORTANT

- After each intervention on the braking system, the vehicle must be road tested.
- After fitting new parts (brake shoes, drums, pads or discs) it is essential, and the customer must be thus advised, to «bed down» the brakes for 1.800 miles (3.000 km) approx, because immediate intense use of the brakes might cause braking instability at a later date.

BRAKES LINED BRAKE SHOES





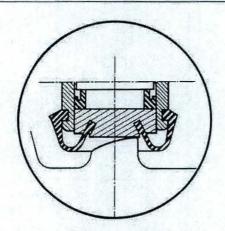
THERMOSTABLE BRAKE SHOES - FRONT

1st Fitting

Up to serial numbers :

404	- 5 125 643	404 C.KF	- 4 595 061
404 SL	- 5 124 753	404 L	4 856 166
404 J	- 4 535 204	404 L Break	4 855 830
404 KF	- 4 575 240	404 U6A	- beginning
404 C	- 4 498 307		of series

- Brake shoes with rounded thrust tongues.

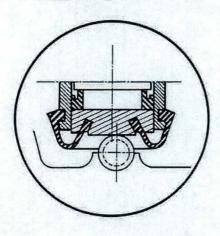


2nd Fitting

Up to serial numbers :

404	- 5 247 918	404 C.KF - 4 597	974
404 SL	- 5 246 673	404 L - 4 872	767
404 J	- 4 536 857	404 L Break - 4 872	505
404 KF	- 8 210 395	404 U6A - 1 927	009
404 C	- 4 499 019		

 Brake shoes with modified thrust tongues improving the progressiveness of braking in reverse gear.



3rd Fitting

As from serial numbers :

404	- 5 247 9	19 404	C.KF -	4 597 975
404 SL	- 5 246 6	74 404	L .	4 872 768
404 J	- 4 536 8	358 404	L' Break -	4 872 506
404 KF	- 8 210 3	196 404	U6A -	1 927 010
404 C	- 4 499 0	20 404		beginning
				of series

 Brake shoes with removable rollers on the thrust tongues, to diminish the friction thus avoiding an increase in brake pedal travel after braking when moving backwards,

Also, the thrust face of the pistons is hardened by high frequency tempering.

INTERCHANGEABILITY :

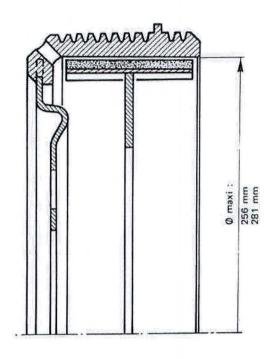
- The three types of brake shoes are interchangeable, on condition that both front brakes are fitted with four shoes of the same type.
- The fitting of different brake shoes on the same car, which could lead to brake drag, must be avoided.

PEUGEOT

6-69

BRAKES DRUMS - DISCS





MACHINING OF THE DRUMS

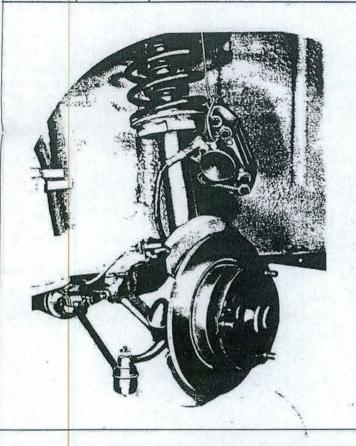
- The maximum diameter of the drums after machining should be :
 - 256 mm for drums of 255 mm original diameter
 - 281 mm for drums of 280 mm original diameter
- That is 1 mm More than the original diameter
- Maximum out of true = 0.15 mm
- Maximum taper = 0.20 mm

NOTE: The surface condition of the braking track also influences the life of the linings.

Consequently, the final machining should be effected with a stone; to obtain the smoothest possible surface.

PEUGEOT

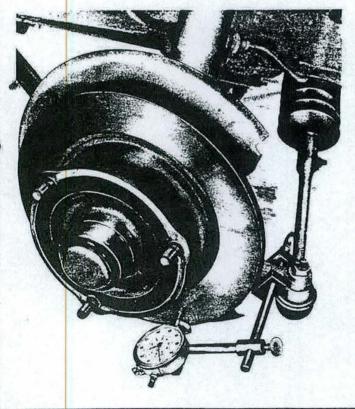
DRUMS - DISCS



REPLACING A DISC

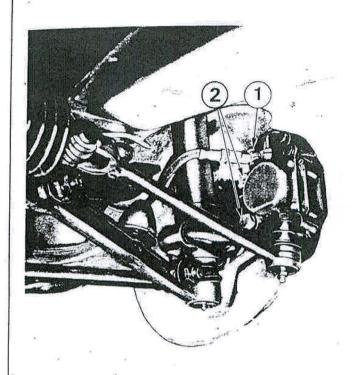
REMOVAL

- Raise the front of the car.
- Chock it under the cross member
- Remove the wheel after marking its position
- Remove the caliper securing bolts and hang the caliper, using a hook, from the suspension spring, without disconnecting the flexible brake hose.
- Remove the hub/disc assembly
- Remove the three bolts securing the disc to the hub and separate the two parts.



REFITTING

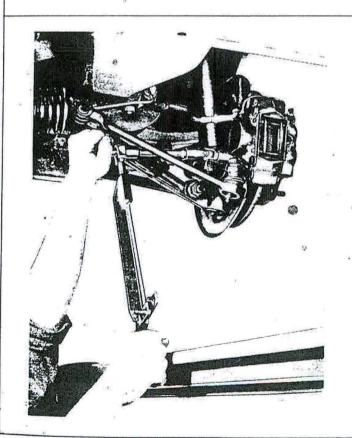
- Assemble the disc and the hub
- Use new Blocfor washers and tighten the tree bolts to 40 ft.lbs (5.5 m.kg).
- Place the hub/disc assembly on the stub axle
- Check the warp of the disc with a dial indicator secure its support to the connecting track arm so that the feeler is approximately 23 mm from the outer edge of the disc.
- The warp of the disc under these conditions must not exceed 0.07 mm; if it does, remove the disc and turn it through 1/3 of a turn in relation to the hub.
- Clean the brake disc (if necessary remove the grease with a cloth soaked in trichlorethylene).
- Refit the caliper
- Use new washers and tighten the caliper bolts to 51 ft.lbs (7 m.kg)
- Refit the wheel.



REMOVAL

- Raise the front of the car.
- Chock it under the cross member.
- Remove the wheel after marking its position.
- Disconnect the union 1 of the brake hose on **
 the caliper.
- Remove the two securing bolts $\overset{\mbox{\scriptsize 0}}{2}$ of the caliper.



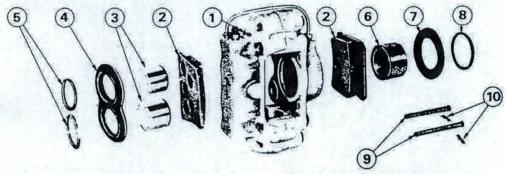


REFITTING

- Refit the brake caliper
- Fit two new washers and tighten the caliper bolts to 51 ft.lbs (7 m.kg)
- Reconnect the brake hose to the caliper after fitting new copper seals on both sides of the adjustable union.
- Position the union so that its axis is at 45° in relation to the axis of the car.
- Tighten the union bolt to 16 ft.lbs (2.25 m.kg)
- Bleed the system
- Refit the wheel



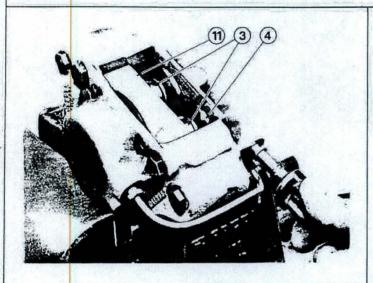
BRAKES 3 PISTON GIRLING CALIPER



- 1 Caliper in two pieces
- 2 Pads with ABEX NS 414 type linings
- 3 34 mm diameter pistons, outer side
- 4 Piston protector
- 5 Piston sealing rings

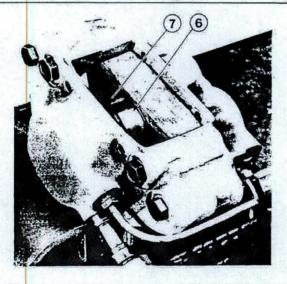
- 6 48 mm diameter piston, inner side
- 7 Piston protector
- 8 Piston . sealing ring
- 9 Retaining rods
- 10 Split pins

IMPORTANT: The two pieces of the caliper must never be separated



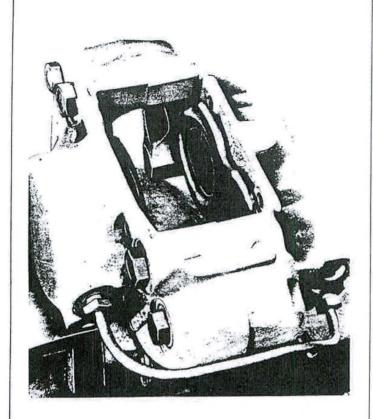
DISMANTLING

- Clamp the caliper in a vice fitted with lead jaws
- Remove :
- the split pins
- the retaining rods
- the pads
- the bleed screw
- Place between the pistons, a wooden block 11 of 60×78 mm, 25 mm thick.
- Disengage the pistons 3 from their cylinders by blowing compressed air through the bleed screw hole.
- Remove the pistons 3 and the protector 4.



- Disengage the piston 6 from its cylinder by blowing compressed air through the fluid feed hole.
- Remove the piston 6 and the protector 7.
- Remove the piston sealing rings.

BRAKES 3 PISTON GIRLING CALIPER



RE-ASSEMBLY

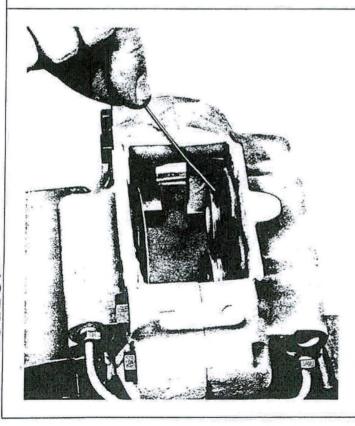
IMPORTANT

The cylinders and pistons must have no score marks likely to cause leakage.

The caliper must be carefully cleaned with alcohol or clean brake fluid with the exclusion of all other products.

Before re-assembly dip the pistons and the sealing rings in **Lockheed 55** fluid.

- Place a **new** sealing ring in the grooves provided in the cylinders.
- Engage the lower lip of the piston protector in the upper groove on the cylinders.
- Place in the cylinders the two pistons of 34 mm diameter and the piston of 48 mm diameter, taking care not to «pinch» the protectors.



- Insert the upper lip of the protectors in the groove on the piston using a hook if necessary.

- Refit :

- the linings*
- the retaining rods with their heads on the inner side.
- the spring clips, taking care not to puncture the protectors (when inserting the split pins, their straight sides which go through the rods, must slide across the protectors and the side which «grips» should be above the rod.
- the bleed screw

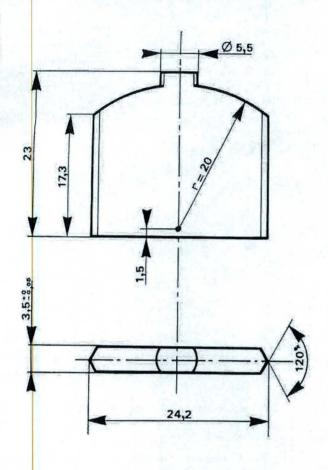
* IMPORTANT

The brake pads must be replaced when their thickness reaches 2 mm.

EUGEOT

BRAKES TANDEM MASTER-CYLINDER EXPORT VEHICLES





TOOLS TO BE USED

This tool must be made in the workshop 0.0804

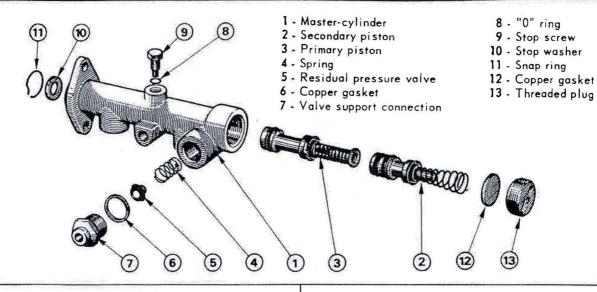
Flat key for cylinder plug

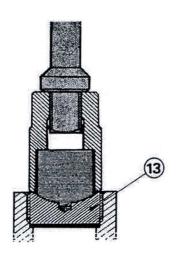
Tool Steel Hardened at 830° C. in oil Stress relieved at 200° C

EUGEOT

8 111

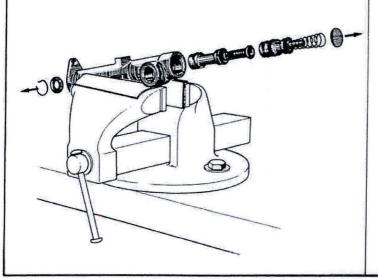
BRAKES TANDEM MASTER-CYLINDER-EXPORT VEHICLES





REMOVAL

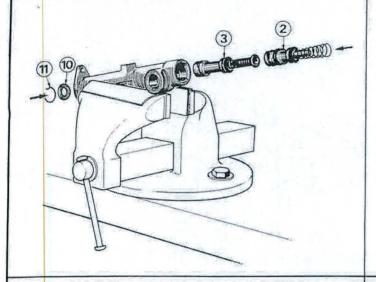
- Remove the stop screw and fasten the mastercylinder vertically in a vice fitted with protective jaws.
- Insert the special flat key 0.0804 in the slot of the threaded plug 13. Use a socket of 21 mm (12 sided).
- Make sure that the edge of the key is in good contact with the master-cylinder plug and the upper section of the key resting against the bottom of the socket (if needed, insert flat washers).
- · Unlock and remove the threaded plug.



- Remove the copper gasket.
- Remove the secondary piston with spring.
- Remove the primary piston by pushing it with a wooden mandrel.
- Remove the snap ring and the stop washer of the primary piston.
- Remove the valve support connection and the residual pressure valve.

BRAKES TANDEM MASTER-CYLINDER-EXPORT VEHICLES

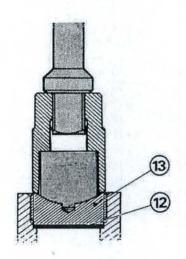




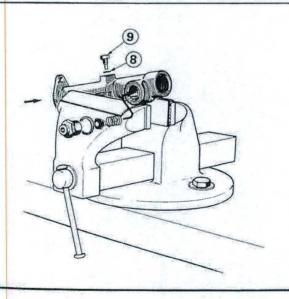
REASSEMBLY

Important:

- The cylinder, carefully cleaned with alcohol, must not have any scratches, nor traces of oxidation.
- Properly position stop washer 10 and snap ring 11.
- Lubricate the inside of the cylinder and the repair kit parts with brake fluid.
- Insert the primary piston 3 and then the secondary piston 2 with the usual precautions.
 Orientate the springs towards the front of the cylinder.



- Fit the new copper gasket 12.
- Re-screw the threaded plug 13 of the cylinder with the aid of the special key and the 21 mm socket.
- When tightening, take the same precautions as for removal.
- Tightening torque 72.5 ft. lbs (10 m.kg)



- Position the 2 pistons app. 5 mm inside the cylinder.
- Insert the stop screw 8 with new «O» ring 9 and tighten
- Tightening torque 7.25 ft, lbs (1 m.kg)
- Place the residual pressure valve in the valve support connection, the rubber facing the connection seat.
- place the spring on the valve, with open end facing the valve.
- refit this assembly with new "O" ring into main body.
- Tightening torque 22 ft.lbs (3 m.kg)

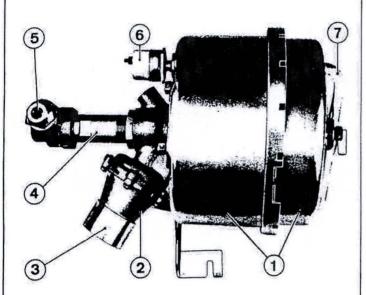
EUGEOT

12-69

404 Workshop Manual - Ref. 1272 E

BRAKES ASSISTANCE.





- 1 Vacuum cylinder
- 2 Control valve
- 3 Air intake filter
- 4 Hydraulic slave cylinder
- 5 Residual pressure valve support
- 6 Vacuum oil pressure switch
- 7 Transfer tube.

HYDROVAC

Fitted to 404 models with Thermostable brakes as from serial numbers:

404	- 5 100 001	404 C.KF	- 4 594 001
404 KF	- 4 570 001	404 J	- 4 535 001
404 C	- 4 498 001	404 ZF	- 8 250 001

- Practical assistance ratio: 7/1

Main modified parts

- Brake plates, wheel cylinders and brake shoes front and rear.
- Drums and wheels
- Master cylinder and its push rod
- Brake lines
- Housing support, pedals
- Inlet manifold
- Hand brake cable
- Instrument panel

Maintenance

This apparatus requires no particular maintenance apart from the replacement of the air intake filter 3 which must be effected every 9.000 miles (15.000 km) or more frequently if the vehicle is used in very dusty areas.

Checking

See class 8 page 10 04.

PEUGEOT



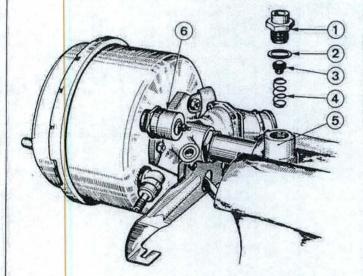
BRAKES ASSISTANCE

HYDROVAC

Replacing a residual pressure valve

REMOVAL

- Remove the vacuum tank
- Remove the Hydrovac
- Clamp the end piece 5 in a vice fitted with lead jaws
- Unscrew union 1
- Withdraw the valve assembly 3 and the spring 4
- Clean the union 1 with alcohol and dry with an air line.



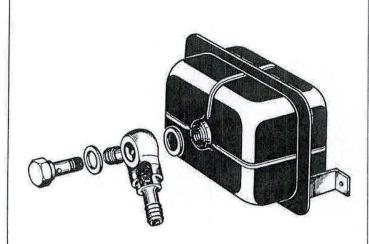
REFITTING

- Obtain the new parts required P.N. 4543.06
- Position :
 - the spring 4
 - the valve assembly 3 (rubber part facing upwards)
 - the seal 2
- Screw in the union 1 and tighten to 94.5 ft.lbs (13 m.kg)
- Refit the Hydrovac and its accessories
- Bleed and adjust the brakes
- Check the residual pressure using the Testometre ARC 50.M2 (from 7.1 to 21.3 lbs.sq.in. 0.5 to 1.5 kg cm2).

Replacing the vacuum oil pressure switch 6

PARTICULAR PRECAUTIONS

- When refitting, coat the threads with a sealing compound of Plastex type.
- Tightening torque: 14.5 ft.lbs (2 m.kg)



VACUUM TANK

Non-return valve

To avoid the risks of the valve seizing in very cold weather, the use of Silicone SI 200 Fluid of 50 Cts viscosity is recommended.

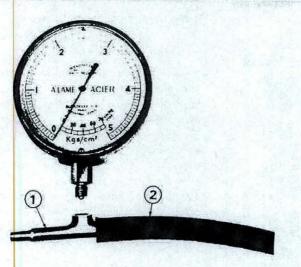
Method

- Remove the non-return valve holder.
- Raise the valve using a blunt object to free it from its seat.
- Pour 2 or 3 drops of SI 200 fluid onto the valve and release it.
- Refit the valve-holder using new gaskets.

Do not spill the fluid onto the rubber hoses as they will soften and become easily detachable.



BRAKES ASSISTANCE



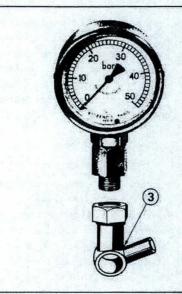
CHECKING THE HYDROVAC ON THE CAR

TOOLS TO BE USED

Vacuum gauge

Minimum measuring capacity:

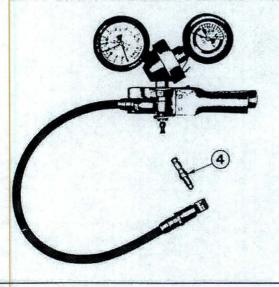
- from 0 to 70 cm Hg of Vacuum.
- 1 union to be made in the workshop depending on the type of gauge.
- 2 rubber vacuum hose.



Hydraulic pressure gauge

Minimum graduated capacity:

- from 0 to 355.5 lbs.sq.in (0 to 25 kg/cm2).
- 3 union P.N. 4609.06 to be modified according to the type of gauge.



Arc Testometre or Testarc

Factory fitted to the ARC 50 of C2C or C3C type tester.

Sold separately by Salzer and Co.

4 - ARC 50 union bolt : No. 8.

BRAKES ASSISTANCE







CHECKING THE HYDROVAC ON THE CAR

1 - Checking the vacuum system

- Connect the vacuum gauge between the vacuum tank and the Hydrovac.
- Start the engine to obtain a vacuum of more than 500 mm Hg.
- Bring the vacuum reading down to 500 mm Hg by operating the brake pedal lightly a few times.
- Stop the engine
- The drop in vacuum must not exceed 25 mm Hg after 30 seconds; if it does, check for leakage at the non-return valve, at the various hoses and at the unions on the Hydrovac.

2 - Checking the residual pressure

- Connect the Testometre M2 or Testarc union to one of the front wheel cylinders, depress the brake pedal then release it.
- The pressure should be stable and between 7.1 and 21.3 lbs.sq.in. (0.5 and 1.5 kg/cm²).
- If leakage is apparent, replace the residual pressure valve.

Checking the pressure emitted by the Hydrovac.

- Remove the vacuum tank securing nuts and move the tank forwards.
- Connect the hydraulic pressure gauge to the master cylinder outlet using the special union.
- Obtain a vacuum of 500 mm Hg.
- For a given pressure at the Hydrovac outlet, an input pressure at the gauge, corresponding to those given below, should be obtained.

INPUT PRESSURE	OUTLET PRESSURE
78.2 to 106.6 lbs.sq.in	568.8 lbs.sq.in
(5.5 to 7.5 kg/cm2)	(40 kg/cm2)
142 to 184.8 lb.sq.in.	1.123.4 lbs.sq.in
(10 to 13 kg/cm2)	(79 kg/cm2)

Input and outlet pressures must be within the limits given in the table, other-wise the Hydrovac must be replaced.

MASTERVAC

Fitted to 404/8 and 404 USA models equipped with disc brakes at the front, as from serial numbers :

404/8 - 6 900 001 404 USA - 8 325 001 404 USA/ZF - 8 327 501

- Practical assistance ratio: 1.8/1

Identification

- Protrusion of the control rod a
- Master cylinder mounting between centre distance b

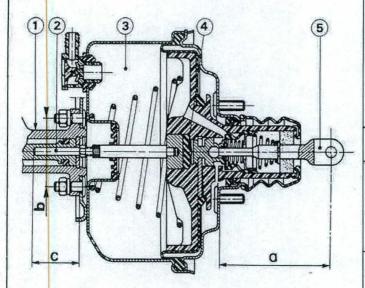
	Distance a	Distance b
204	i84 mm ± 1.5	50 mm
404/8	126.5 mm ± 1.5	50 mm
404 USA	130.5 mm ± 1.5	60 mm

Maintenance

This apparatus requires no particular maintenance.

IMPORTANT

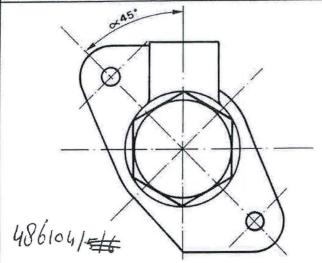
- The Mastervac is delivered by the Spare Parts Department with the master cylinder push rod 2 pre-set at the factory, to a protrusion distance of c. This setting must never be altered.
- Never pull the rod 2, in order not to disengage
 it from the reaction disc 4 which could fall
 into the Mastervac cylinder from where it
 could not be replaced in its original position.



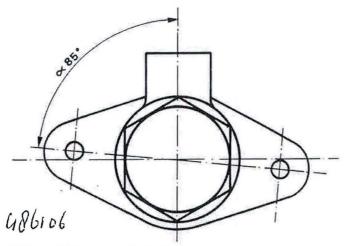
- 1 Master cylinder
- 2 Push rod
- 3 Mastervac
- 4 Reaction disc
- 5 Control rod

BRAKES COMPENSATOR

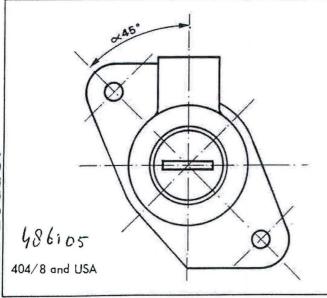




404 Saloons with Thermostable brakes



404 L with Thermostable brakes



BRAKING COMPENSATOR

Fitted to Saloons; Family cars and Breaks, as from serial numbers

404	- 5 265 262	404 L	- 4 879 401
404 SL	- 5 265 846	404 U6A	- 1 927 901
404 J	- 4 537 045	404/8	- beginning
404 KF	- 8 211 872		of series
404 SL.KF	- 8 212 062	404 USA	- 8 325 001
404 ZF	- 8 250 127	404 ZF(USA	3) - 8 327 501

Identification

1 - 404 Saloons with Thermostable Brakes

- with hexagonal sealing plug, and adjusting shims.
- angle ∝= 45°

2 - 404 Family Cars and Breaks with Thermostable brakes

- with hexagonal sealing plug and adjusting shims
- angle ∝ = 85°

3 - 404/8 and USA with disc brakes

- with hexagonal sealing plug and adjusting shims
- -angle $\alpha = 45^{\circ}$

Maintenance

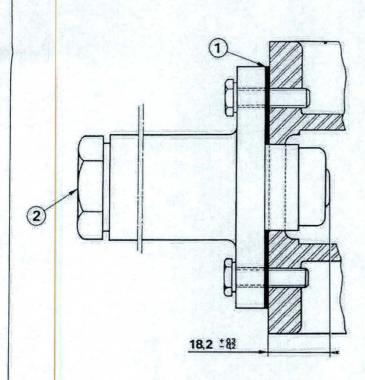
The compensator requires no maintenance.

Particular precautions for bleeding the Hydraulic system.

Bleeding of the rear system must not be effected with the rear wheels «hanging» (car raised by the bodywork) as in this position the flow of fluid in the rear system may be obstructed.



BRAKES COMPENSATOR



Adjusting the Compensator

404 Saloons, Family Cars and Breaks with Thermostable Brakes

To obtain efficient operation of the compensator, it is imperative that the protrusion of the piston is between 18 and 18.5 mm when the rear brake system valve is seated.

For reasons of tolerances in machining this setting is obtained by positioning shims 1 between the compensator flange and its support.

This protrusion of the piston not being measurable during repair, the thickness of shims required is indicated in tenths of a mm on the sealing plug 2.

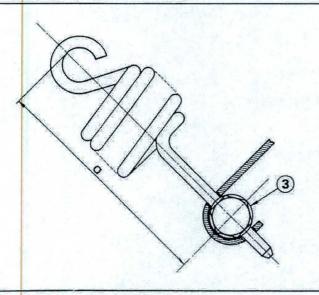
These shims exist on 2 thicknesses:

- 0.5 mm P.N. 4875.01
- 1 mm P.N. 4875.02

Consequently, when replacing the compensator one or more shims should be fitted depending on the number marked on the new compensator.

Number marked on the plug	0	5	10	15	20
Thickness of shims to be fitted (in mm)	none	0.5	1	1.5	2

NOTE: The 404/8 and USA with disc brakes are equipped with compensator pre-set with a special rear plug. Consequently, when replacing the compensator no adjustment is required.



Adjusting the tension of the control spring

The position of the spring securing nipple 3 is set at the factory to obtain a length of:

- 107.5 mm under a calibration of 8 kg for Saloons
- 95.5 mm under a calibration of 8 kg for Family Cars and Breaks.

This setting being unobtainable when repairing, the nipple securing nut on the spring stem must never be slackened.

Consequently, the Spare Parts Department only deliver the spring with the nipple pre-set under Ref: P.N. 4877.04 and the parts of the assembly are not available separately.

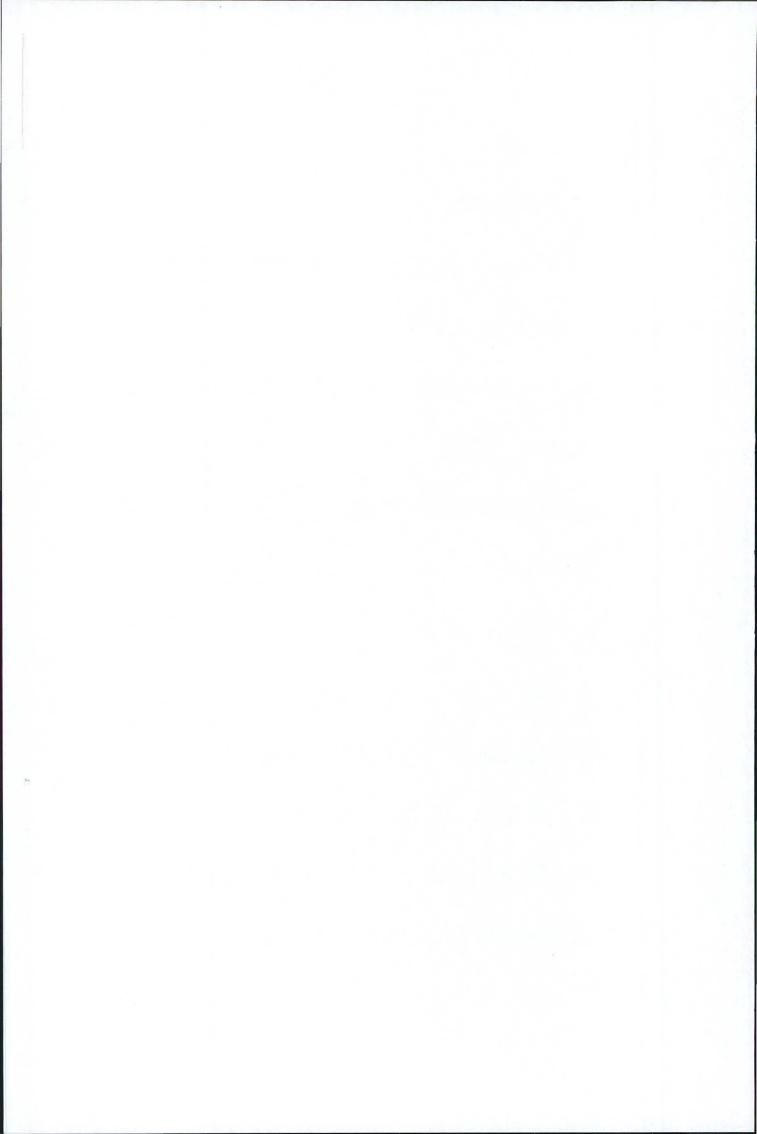
SUSPENSION

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GROEPSINDELING

- 1. MOTOR
- KOPPELING
- 3. VERSNELLINGSBAK / DIFFERENTIEEL
- 4. AANDRIJVING
- 5. ACHTERBRUG / ACHTERTREIN
- 6. VOORTREIN
- 7. STUURINRICHTING
- 8. REMMEN
- 9. VERING
- 10. WIELEN EN BANDEN
- 11. CARROSSERIE EN RICHTBLOK
- 12. ELEKTRISCHE INSTALLATIE
- 13. CARROSSERIE / BEKLEDING / LAKWERK
- 14. SMERING EN ONDERHOUD
- 15. GEREEDSCHAPPEN EN ALGEMEEN





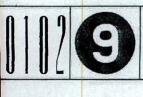
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FRONT SPRINGS CONVENTIONAL SUSPENSION

	CONVENTIONAL SUSPENSION							
	TYPE	Flexibility in mm for 100 kg	outer diameter in mm at base	Free Height in mm	Height in mm under a load of 318 kg	Reference Marks	P.N.	
	Saloons Up to serial numbers : 404 - 4 234 333 404 J - 4 506 712	44	143	316 to 327	184 to 187	1 yellow and 1 blue or 1 red	5001.41	
	404/8 L.H.D. and R.H.D. From beginning of series			327 to 338	187 to 192	1 white and 1 red or 1 white	5001.42	
	Saloons 404 R.H.D. Saloons 404 L.H.D. «Argentine» Station Wagon Up to serial Numbers: 404 U6 - 4 738 854 404 U6D - 4 908 381	34	143.25	281.5 to 292.5	179.5 to 184.5	1 yellow and 1 green	5001,43*	
	404 U6A - 1 923 439 Family Car «Africa» Up to serial Numbers: 404 L - 4 852 163 404 LD - 4 980 058			1	184.5 to 189.5	1 blue and 1 green	5001.44	
	Station Wagons As from serial numbers: 404 U6 - 4 738 855 404 U6D - 4 908 382 404 U6A - 1 923 440 Family Cars and Breaks « Africa » As from serial Numbers:	34	143.25	300	187 to 192	2 blues	5001.55	
	404 L - 4 852 164 404 LD - 4 980 059 Light Lorries From beginning of series : 404 U8 - 7 010 001 404 U8D - 7 040 001 404 U10 - 7 060 001 404 U10D - 7 080 001		143.23	300	192 to 197	2 yellows	5001.56	

^{*} These parts are no longer suppl...d by the Spare Parts Department



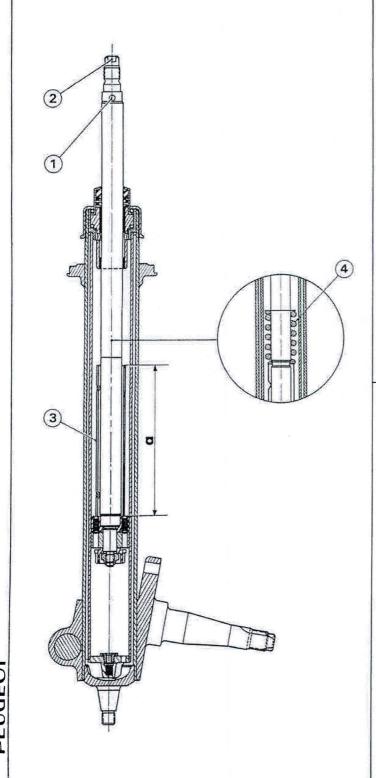


FRONT SPRINGS HIGH FLEXIBILITY SUSPENSION

TYPE	Flexibility in mm for 100 kg	Outer Diameter in mm at base	Free Height in mm	Height in mm under a load of 318 kg	Reference Marks	P.N.
Up to serial numbers : 404 (L.H.D. and R.H.D.) 4 442 214 404 J (L.H.D. and R.H.D.) 4 528 596 404 KF 4 559 382	90		442.5 to 457.5	198 to 203	2 whites	5001.45*
404 C 4 497 226 404 C.KF 4 592 428 404 L (R.H.D.) 4 842 516 404 LD (L.H.D. and R.H.D.)4 976 387	80		457.5 to 472.5	203 to 208	1 red	5001.46
Up to serial numbers :	100	162	496.5 to 511.5	188.5 to 193.5	2 blue	5001.47
404 SL : 4 440 829 404 L : 4 843 901	100	102	511.5 to 526.5	193.5 to 198.5	2 yellow	5001.48
Since the beginning of series : 404 D : 4 600 001 404 DA : 3 060 001	65	162.5	411.5 to 426.5	215 to 220	l blue	5001.49
As from serial number : 404 LD : 4 976 398			426.5 to 441.5	220 to 225	1 yellow	5001.50
As from serial numbers: 404 (L.H.D. and R.H.D.) 4 442 215 404 SL	30 01 97 83 85 27 29 02	162.35	459.25 to 474.25	199 to 204	l white and I yellow	5001.51
404 C 4 497 227 404 C.KF 4 592 429 404) (L.H.D. and R.H.D.) 4 843 902 404 U6A 1 928 101			474.25 to 489.25	204 to 209	1 white and 1 blue	5001.52



FRONT SHOCK ABSORBERS



Up to serial numbers :

404 - 4 016 996 **404** J - 4 500 607

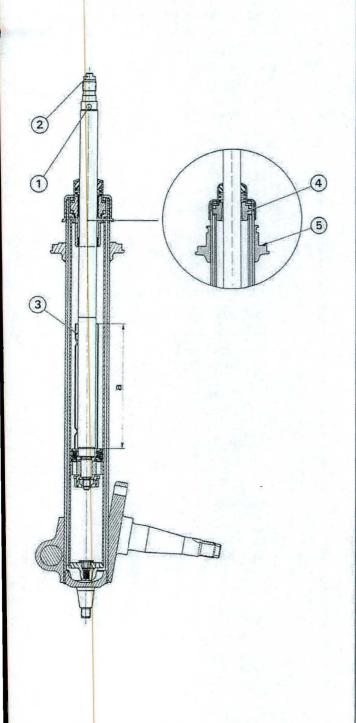
- 1 Air pressure release hole perpendicular to the flat.
- 2 Upper flat
- 3 Thrust washer a = 140.5 mm

404 - from N° 4 016 997 to N° 4 234 333 **404** J - from N° 4 500 608 to N° 4 506 712

- 1 Air pressure release hole perpendicular to the flat.
- 2 Upper flat
- 3 Spacer a = 108.75
- 4 Thrust spring.



FRONT SHOCK ABSORBERS



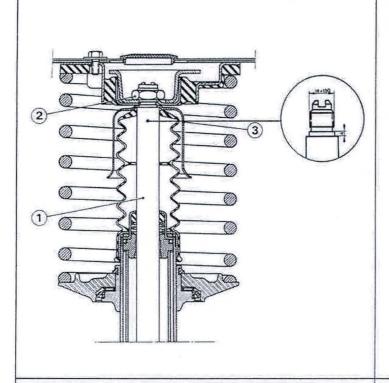
```
from nº 4 260 001 to nº 5 047 268
* 404
* 404 J
            from nº 4 525 001 to nº 4 529 915
* 404 KF
            from n° 4 550 001 to n° 4 570 595
* 404 D
            from n° 4 600 001 to n° 4 605 479
* 404 C
            from no 4 490 001 to no 4 497 653
* 404 C.KF from no 4 590 001 to no 4 594 063
* 404 L
            from no 4 825 001 to no 4 851 758
* 404 LD
            from nº 4 975 001 to nº 4 980 000
 404 U6
            from n° 4 700 001 to n° 4 737 899
 404 U6D
            from no 4 900 001 to no 4 908 257
 404 U6A
            up to serial number
                                   1 923 363
```

- Air pressure release hole parallel to the flat.
- 2 Upper flat
- 3 Thrust spacer a = 141.5 mm

```
TW 5 065 743
      from n° 5 047 269 to n°
404
                               TH 5 263 945
404 J
            from n° 4 529 916 to n° 4 537 076
404 KF
            from nº 4 570 596 to nº 8 215 315
404 D
            from nº 4 605 480 to nº 4 616 890
404 C
            from nº 4 497 654 to nº 4 499 093
404 C.KF
            from nº 4 594 064 to nº 4 598 325
404 L
            from nº 4 851 759 to nº 4 875 059
404 LD
            from no 4 980 001 to no 4 983 135
404 U6
            from n° 4 737 900 to n° 4 758 099
404 U6D
            from n° 4 908 258 to n° 4 913 133
404 U6A
            from nº 1 923 364 to nº 1 927 379
404 ZF
            since beginning of series 8 250 140
404 L Break since beginning of series 4 874 880
```

- 1 Air pressure release hole perpendicular to the flat
- 2 Upper flat
- 3 Thrust spacer a = 155 mm
- 4 Rod upper bearing
- 5 Needle bearing
- * Introduction in series of the high flexibility suspension.





404 (TW) from n° 5 065 744 to n° 5 075 000
404 (TH) from n° 5 263 946 to n° 5 331 000
404 J from n° 4 537 077 to n° 4 537 191
404 KF from n° 8 215 316 to n° 8 224 862
404 D from n° 4 616 891 to n° 4 619 852
404 ZF from n° 8 250 141 to n° 8 251 300

As from serial numbers :

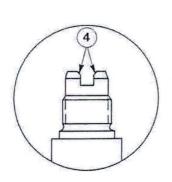
: 4 499 094 404 C 404 C.KF : 4 598 326 404 L : 4 875 060 404 L (Break) : 4 874 881 404 LD : 4 983 136 404 U6 : 4 758 100 404 U6D : 4 913 134 404 U6A : 1 927 379

404 U8 & U8D 404 U10 & U10D } since the beginning of series

1 - The rod incorporates a holding slot and a thread of 14 \times 150 diameter in place of 16 \times 150

2 - Collar nut of 21 mm across flats

3 - Deflector



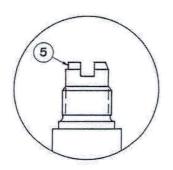
As from serial numbers :

404 (TW) : 5 075 001 404 (TH) : 5 311 001 404 SL : 5 311 006 404 D : 4 619 853 404 KF : 8 224 863 404 ZF : 8 251 301

Installation for suspension equipped with front and rear anti-roll bar

4 - Slot with chamfer edges on the shock absorber rod.

NOTE: The thread diameter of the shock absorber closing nut is of 50.9 mm in place of 50.6 mm.



Since the beginning of series

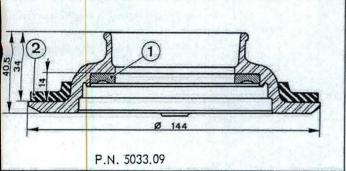
404/8:6 900 001

5 - One single flat parallel to the rod.

FUGEO



FRONT SPRINGS LOWER SEATING CUP 404 WITH CONVENTIONAL SUSPENSION



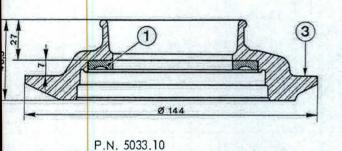
404 Saloons with L.H.D.

Up to serial numbers :

404 : 4 022 807 404 J : 4 501 029

- 1 Ball bearing upper track
- 2 Spring lower rubber seating cup

NOTE: This cup is not supplied by the Spare Parts Department.

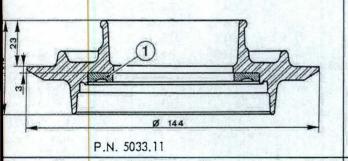


404 Saloons with L.H.D.

404 : from n° 4 022 808 to n° 4 234 333 404 J : from n° 4 501 030 to n° 4 506 712

3 - Without spring lower seating cup

INTERCHANGEABILITY: This cup may be fitted to replace the former one on condition that the modification is carried out on both sides of a given car and that the rubber seating cups are removed.



404 Saloons R.H.D.

Up to serial numbers :

404 : 4 234 333 **404 J** : 4 506 712

404 Station Wagons and Family Cars «Africa»

Up to serial numbers :

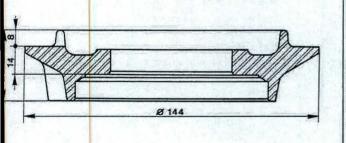
 404 U6
 4 737 899

 404 U6D
 4 908 257

 404 U6A
 1 923 363

 404 L «Africa»
 4 851 758

 404 LD «Africa»
 4 980 000



P.N. 5033.16

404 Station Wagons and Family Cars «Africa»

As from serial numbers :

404 U6 4 737 900 404 U6D 4 908 258 404 U6A 1 923 364 404 L «Africa» 4 851 759 404 LD «Africa» 4 980 001

Light Lorries 404

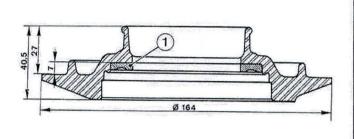
404 U8 & U8D Since beginning 404 U10 & U10D of the series.

404/8 Saloons

404/8 - since the beginning of the series - Cups without ball bearing upper track INTERCHANGEABILITY: This cup, which must be fitted with a ball bearing, is not interchangeable with the former models.



FRONT LOWER SPRINGS SEATING CUP 404 WITH HIGH FLEXIBILITY SUSPENSION



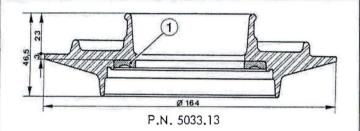
P.N. 5033.12

404 Saloons; Convertibles and Coupés (L.H.D. and R.H.D.)

Up to serial numbers :

404	5 047 268
404 SL	5 100 022
404 J	4 529 915
404 KF	4 570 595
404 D	4 605 479
404 C	4 497 653
ADA C KE	4 594 064

1 - Ball bearing upper track

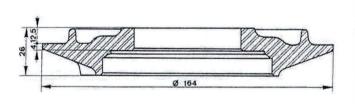


404 Family Car (except "Africa" type)

Up to serial numbers :

404 L 4 851 758 **404 LD** 4 980 000

- of a modified form.



P.N. 5033.14

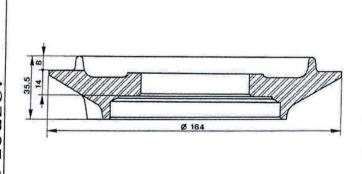
404 Saloons, Convertibles and coupés (L.H.D. and R.H.D.) - As from serial numbers :

404	5 047 269
404 SL	5 100 023
404 J	4 529 916
404 D	4 605 480
404 C	4 497 654

404 KF : from n° 4 570 596 to n° 8 209 499 **404 C.KF** : from n° 4 594 065 to n° 4 597 911

- Cups without ball bearing upper track

INTERCHANGEABILITY: This cup which must be fitted with a ball bearing is not interchangeable with the former models.



P.N. 5033.15

404 Family Cars and Breaks (except "Africa" type

As from serial numbers :

404 L : 4 851 759 **404 LD** : 4 980 001

404 L (Break) : 4 855 001 (beginning of series

404 Saloons, Convertibles and Coupés Fuel Injection engine

As from serial numbers :

404 KF : 8 209 500 **404 C.KF** : 4 597 912

- Cup without ball bearing lower track.

INTERCHANGEABILITY: May be fitted on 404 Fuel Injection Engine to replace the former cup provided the modification is carried out on both sides of a given car.

FRONT SUSPENSION REMOVAL





TOOLS TO BE USED

Tool Chest nº 8.0703 X

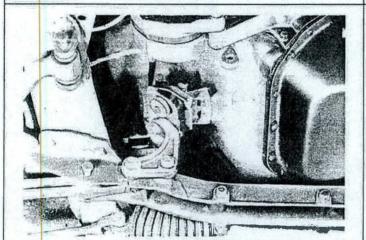
E - Ball joint extractor.



This tool is to be made in the workshop

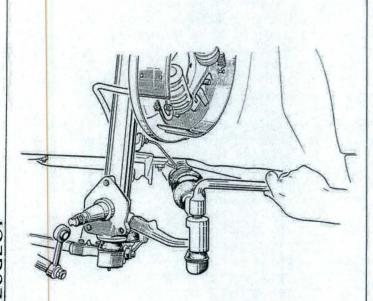
0.0604

 Wooden block to be placed between rebound block and cross member stop.



REMOVING THE SUSPENSION ELEMENT

- Place the vehicle on a pit or on a car lift.
- Slacken the front wheel
- Remove the anti-roll bar bushing
- Uncouple the anti-roll bar from the connecting link
- Slacken the front and rear suspension shaft nuts
- Drive the shafts out until they flush with the cross member and the front clamp.
- Raise the car from the front using a chain hoist
- Remove the front and rear suspension shafts using a drift.



- Raise the car from the front and choke
- Remove :
 - the wheel and mark its position in relation to the hub.

Drum brakes

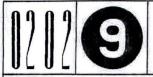
- the hub/drum brake
- the brake plate using a 10 mm or 8 mm Allen extension since October 1967.

Disc brakes

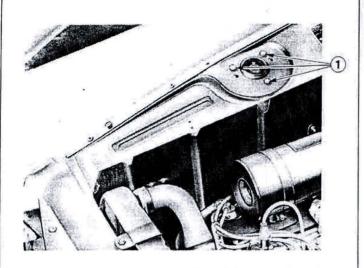
- the brake caliper
- the hub/brake disc
- the caliper support and the disc shield using an Allen extension of 8 mm.

NOTE: If no work is required on the brakes, it is not necessary to disconnect the flexible hose. (Do not spill any grease on the brake linings)

- Uncouple the connecting rod ball joint using ball joint extractor 8.0703 X
- Remove the three upper bolts securing the suspension assembly to the wing valance and hold the assembly in position.
- Remove the suspension element and the triangle arms.



FRONT SUSPENSION REFITTING

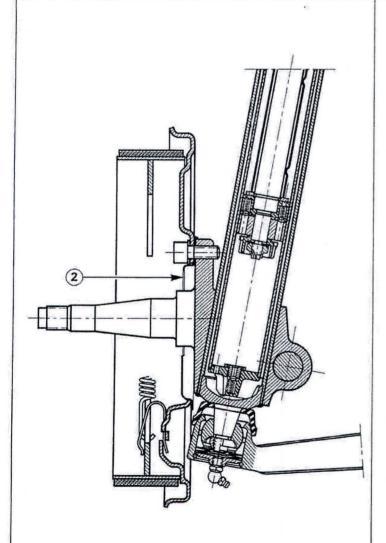


REFITTING A SUSPENSION ELEMENT

- Place the suspension element under the wing valance.
- Position the safety cup water drain hole towards the engine.
- Secure the suspension element to the wing valance using three **new** bolts 1 equipped with double teeth washers.

Tightening torque: 9 ft.lbs (1.25 m.kg)

 Block the wing valance centre hole using a special plug.



- Place the front and rear triangle arms in po-
- Insert a **new** front triangle arm pivot, with the head facing the front, up to the splining.

Drum brakes

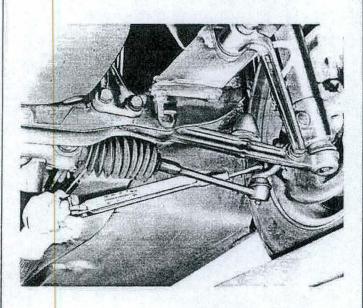
 Install the brake plate with the grease trap 2 placed between the brake plate and the steering knuckle.

Disc brakes

- Install the disc shield and the caliper support.
- Use new bolts and washers
- Tighten to 40 ft.lbs (5.5 m.kg) using an Allen socket of 10 mm for drum brakes and one of 8 mm for disc and drum brakes fitted as from October 1967.
- Lock the three bolts by punch marking the
- Install the hub/drum or hub/disc
- Tighten the steering knuckle nut to 22 ft.lbs (3 m.kg) then slacken and apply the final torque 7.25 ft.lbs (1 m.kg)
- Carefully lock the nut in the notches provided.
- Fit the hub cap smeared with Esso Multipurpose Grease H.
- Install the brake disc caliper and tighten the securing nuts to 51 ft.lbs (7 m.kg) for Girling brake caliper and 40 ft.lbs (5.5 m.kg) for Bendix brake caliper.
- Refit the wheel according to the positioning mark made at dismantling.



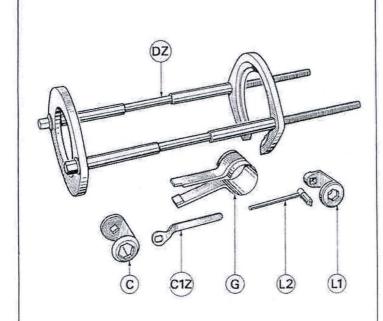
- With the vehicle resting on its wheels, centre the rear arm silentbloc bushes using a spigot.
- Insert the pivot from the front until it is correctly centred.
- Place the 21 mm block 0.0604 between the rebound block and the cross member thrust stop.
- Load the vehicle at the front until the block is held between the rebound block and the thrust stop. The silentbloc bushes are now in a neutral position.
- Drive in the front and rear arm pivots.
- Tighten the nuts :
- - front arm on yoke 58 ft.lbs (8 m.kg)
- rear arm to cross member 62 ft.lbs (8.5 m.kg)
- Pin the pivots.



- Couple the track rod with the track arm
 - tighten the nut to 31 ft.lbs (4.25 m.kg)
 - pin it
- Couple the anti-roll bar with the connecting
 - tighten the nut to 33 ft.lbs (4.5 m.kg)
 - fit and secure a «Pal» lock nut
- Install the anti-roll bar bushing and tighten the bolts to 9 ft.lbs (1.25 m.kg)
- Tighten the wheel nuts to 43.5 ft.lbs (6 m.kg) for Saloon cars and 58 ft.lbs (8 m.kg) for Associated vehicles.
- Bleed the brakes (if the flexible hose was disconnected at the removal of the brake plate)
- Check and adjust the parallelism if necessary Toe in 2 mm \pm 1.

FRONT SUSPENSION DISMANTLING





TOOLS TO BE USED

For dismantling and refitting

Tool Chest Nº 8.0902 V

Shock absorber rod nut wrench (1st fitting)

C1Z - Shock absorber rod holding clamp.

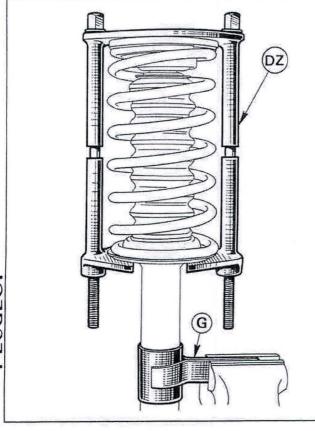
DZ - Spring compressor

G - Clamp

L - Shock absorberrod nut wrench (2nd fitting)

L1 - Nut wrench

L2 - Shock absorber rod holding socket.



DISMANTLING A SUSPENSION ELEMENT

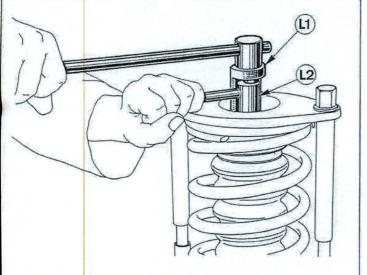
- Place clamp G on the steering knuckle body.

- Hold the element in a vice using clamp G.

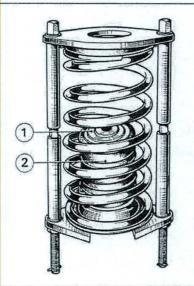
- Compress the spring using apparatus DZ.

DELIGEOT

FRONT SUSPENSION DISMANTLING

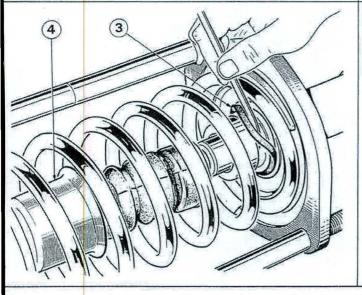


- Slacken and remove the rod nut using the combination wrench i.e.
 - C and C1Z for the 1st fitting
 - L1 and L2 for the 2nd fitting
- Remove the rubber boot lower securing collar if necessary.



1st Fitting

- Remove compressor **DZ** and then the following parts:
- safety or seating cup
- shock absorber upper support
- · suspension spring
- cup 1
- rubber boot 2
- spring lower thrust cup.
- Remove the ball bearing and its seal.

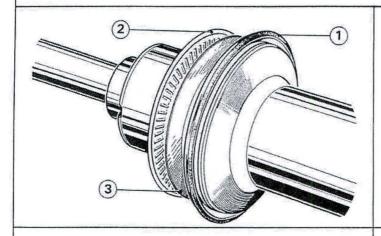


2nd Fitting

- Remove :
- the rubber boot from the shock absorber nut
- the upper seal ring 3 using a bent scriber
- Remove apparatus DZ and then the following parts held between its clamps
 - the safety or seating cup
 - the shock absorber upper support
 - the upper deflector 4
 - the rubber boot
 - the suspension spring
 - the upper seal ring
 - the spring lower seating cup.
- * Remove the needle thrust bearing and its seal.

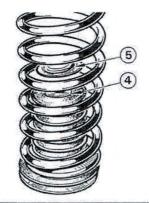
FRONT SUSPENSION RE-ASSEMBLY





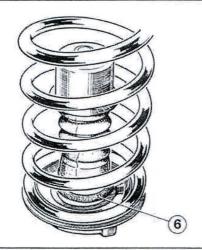
RE-ASSEMBLY OF A SUSPENSION ELEMENT

- Using Esso Multipurpose Grease H, lubricate the needle thrust bearing or the ball cage.
- Fit the following parts in the order indicated below :
 - thrust 1 rubber seal
 - needle bearing 2 with its washer 3 facing the steering knuckle or the ball cage and its seal for the 1st fitting shock absorbers.



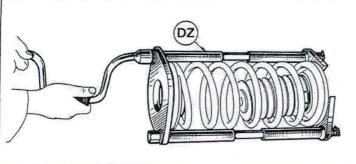
1st fitting

- Engage upper attachment cup 4 into the rubber boot.
- For handling purposes secure attachment cup
 4 and cup 5 using Bostik or Dynadère glue.
- Using the clamp secure the rubber boot to the spring lower seating cup.
- Place the spring on the lower seating cup.



2nd fitting

- Place the spring on the lower seating cup.
- Place the following inside the spring.
- the upper seal ring of cup 6
- the rubber boot
- the upper deflector.

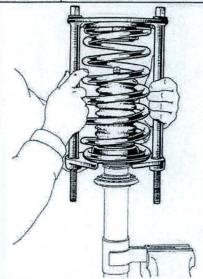


- Place the shock absorber upper support on the spring.
- Place the safety cup with its notch in the groove support.
- Compress this assembly using apparatus DZ.

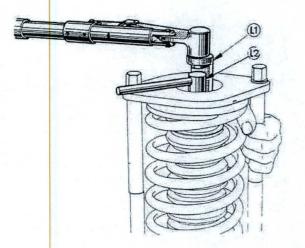


FRONT SUSPENSION

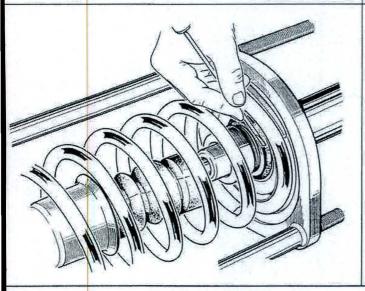
RE-ASSEMBLY



- Centre the spring assembly correctly on the shock absorber.
- Avoid applying pressure on the rod in order not to push it downwards,
- When the lower spring seating rests on the bearing, the shock absorbers rod thread should appear through the safety cup.



- Engage a new nut and using combination wrench C and C1Z for the 1st fitting or L1 and L2 for the 2nd fitting. Tighten to 40 ft.lbs (5.5 m.kg) for Elbe nut dia. 16×150 and to 33 ft.lbs (4.5 m.kg) for collar nut dia. 14×150
- Lock the lock nut in the countersunk of the shock absorber rod.
- Remove apparatus DZ.



Particularities of the 2nd fitting

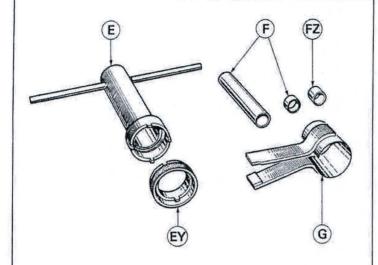
- Place the upper seal ring of the cup on the shock absorber body.
- Engage the rubber boot on the shock absorber nut.

NOTE: For the arms removal refer to class 6 page 06 01.

FRONT SUSPENSION FRONT SHOCK ABSORBERS



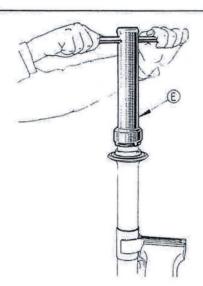




TOOLS TO BE USED

Tool Chest Nº 8,0902 V

- E Shock absorber closing nut wrench (1st fitting).
- **EY -** Shock absorber closing nut socket (2nd fitting) used with wrench **E**.
- F Spacer { 1 of 175 mm 1 of 15 mm
- FZ Spacer 25 mm
- G Clamp



DISMANTLING

- Remove and take apart the suspension element
- Place clamp G on the steering swivel body
- Hold the assembly by means of the clamp secured in a vice.
- Remove the shock absorber body closing nut using the corresponding wrench, i.e.
- E nut wrench (1st fitting)
- EY socket (2nd fitting) and nut wrench E.



 Pull the piston rod slowly so that oil does not splash and then remove rod/piston assembly.

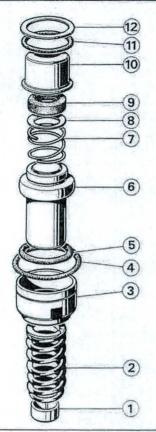
Remove the steering swivel body from clamp G.

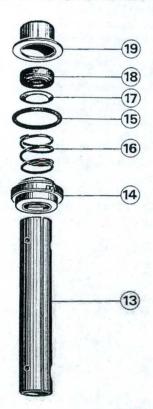
- Drain the cylinder and the shock absorber body.
- After draining is accomplished, remove cylinder/ shock absorber valve support assembly.

CHULIN



FRONT SUSPENSION FRONT SHOCK ABSORBERS





RE-ASSEMBLY

Either of the following cases may be encountered:

- 1 New shock absorber body and steering swivel assembly and shock absorber recovered from a dismantled element.
- 2 Shock absorber and steering swivel assembly recovered from a dismantled element and new shock absorber mechanism.

Particular precautions to be taken for case Nº 1

- a Ensure that the shock absorber rod is not bent, any rod showing scratches or signs of bending should be replaced. Replace all rubber seals on the shock absorber mechanism and lightly smear them with tallow before installation.
- **b** Install thrust bearing seal on the shock absorber body.
- Use the rod and piston assembly as supplied by the Spare Parts Department (case n° 2) or after all the seals are replaced (case n° 1).
- Install the following on the shock absorber body.

with a swivel bearing

- rod spacer 1
- spring 2 (if fitted)
- spacer of cylinder 3 with its seal 4
- bearing seal 5
- bushing 6
- upper spring 7
- spring 8 thrust washer (convex face towards spring)
- rod seal 9 making sure that it is correctly positioned (a circular groove is used to indicate the bearing face of washer 8)
- support cup 10
- bearing seal 11
- nut thrust washer 12

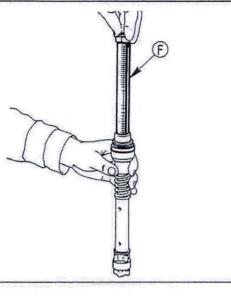
with a fixed bearing

- rod spacer 13
- bearing 14 with its seal 15
- upper spring 16
- thrust washer 17 (convex face towards spring)
- rod seal 18 making sure that it is correctly positioned (a circular groove indicates the bearing face of washer 17.
- support cup 19
- thrust washer (if fitted)

NOTE: Lightly smear the lips of the rod seal ring 18 using «Molykote».

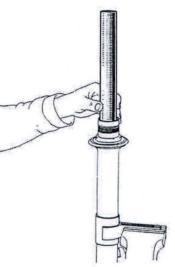
FRONT SUSPENSION FRONT SHOCK ABSORBERS



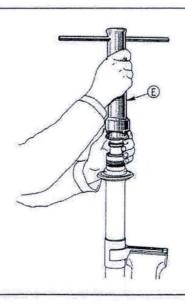


 Install in the rod previously equipped with spacer F or F + 15 mm or F + FZ according to the shock absorber type, and compress the rod seal spring by tightening the nut until the cup comes into contact with the bushing.

This precaution must be taken as it prevents the thrust washer from being distorted, when tightening the closing nut, thus causing damage to the upper seal ring.



- Thoroughly clean the inner part of the shock absorber body.
- Place clamp G on the swivel
- Install the swivel vertically in clamp **G** held in a vice.
- Insert in the shock absorber body the cylinder equipped with the valve support after careful cleaning.
- Pour 350 cm3 of Esso Oleofluid 40S into the shock absorber body.



- Insert the mechanism into the cylinder (press it home gradually to avoid any loss of oil).
- -Install the closing nut using wrench **E** and the corresponding socket. Tighten to **58 ft.lbs** (8 m.kg).
- Slacken the rod nut and remove shims F and FZ.
- Manoeuvre the shock absorber rod by hand to ensure that it slides and rotates correctly.
- When installing the spring the rod should be kept at its maximum protrusion position.

EUGEOT





REAR SPRINGS SALOONS - CONVERTIBLES AND COUPES

	TYPE	Flexibility in mm for 100 kg	Outer Diameter in mm at the base	Free Height in mm	Height in mm under a load of 318 kg	Ref. Mark	Р.N.
Up	to serial numbers : 404 (L.H.D.) 4 022 807 404 J (L.H.D.) 4 501 029	52	133	404 to 415	245 to 250	1 blue	5101.66(1)
				415 to 430	250 to 255	1 yellow	5101.67*
As	from serial numbers : 404 (L.H.D.) 4 022 808 404 J(L.H.D.) 4 501 030 404/8 (L.H.D.) 6 900 001	52	133	395 to 410	240 to 245	1 green	5101.68
				410 to 425	245 to 250	2 green	5101.660
	Saloons R.H.D. types	46	133	391.5 to 402.5	251 to 256	l blue and l red	5101.69
				402.5 to 413.5	256 to 261	1 yellow and 1 red	5101.70
	Convertibles and Coupés models	52	133	389 to 400	230 to 235	1 blue	5101.72
				400 to 411	235 to 240	1 yellow	5101.71

^{* •} This spring is no longer delivered by the Spare Parts Department



REAR SPRINGS ASSOCIATED VEHICLES 1 - HELICAL SPRINGS

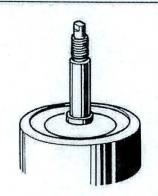
A TOTAL CONTRACTOR OF THE CONT	nonners .	and the same of th					·
TYPE	Flexibility in mm for 100 kg	Outer Diameter in mm at base	Free Height in mm	Height in m under load		Ref. Marks	P.N.
Family Cars L.H.D. All models	92	120.7	416.5 to 431.5	214.5 to 219.5	of 230 kg	1 red and 1 white	5101.73
Station Wagons U.S.A. L.H.D. As from serial n°: 404 U6A 1 928 101			431.5 to 446.5	219.5 to 224.5		1 blue and 1 yellow	5101.74
Station Wagons L.H.D. & R.D.H. All models Station Wagons «Africa» Up to serial n° 404 U6 4 748 727 Station Wagons USA up to serial N°	75	101.05	398.5 to 413.5	236 to 241	Under a load	1 red	5101.75
404 U6A 1 928 100 Family Cars R.D.H. all models Family Cars «Africa» Up to serial n°: 404 L 4 862 397 404 LD 4 981 417	/5	121.25	413.5 to 428.5	241 to 246		1 white	5101.76
Station Wagons and Family Cars «Africa» As from serial n°	50	122.25	370 to 385	221 to 226	l of 318 kg	l blue	5101.80
404 U6 4 548 728 404 L 4 862 398 404 LD 4 981 418	50	122.23	385 to 400	226 to 231	Under a load	l yellow	5101.81

II - LEAF SPRINGS

ТҮРЕ	Flexibility in mm for 100 kg	Number of leaves	Width in mm	Height in mm	Deflection	P.N.
404 U8 & U8D	17 to 31	8	50	62 ± 2	27 mm under 650 kg	5101.54
404 U10 & U10D	15 to 28	8	50	64 ± 2	27 mm under 725 kg	5101.88



REAR SHOCK ABSORBERS SALOONS



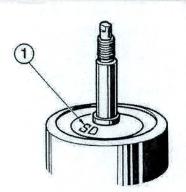
Conventional suspension fitting

Up to serial numbers :

404 - 4 234 333

404 J - 4 506 712

- Shock absorber without a reference mark.



Fitting for suspension equipped with front anti-roll bar.

As from serial numbers :

 404
 4 260 001

 404 J
 4 525 001

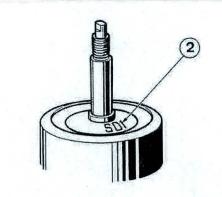
 404 D
 4 600 001

 404 KF
 4 550 001

 404 C
 4 495 001

404 C.KF 4 590 001

1 - Letters SD on bearing cap



Fitting for suspension equipped with front and rear anti-roll bars.

As from serial numbers :

 404 (TW)
 5 075 001

 404 (TH)
 5 311 001

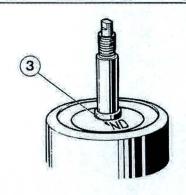
 404 SL
 5 311 006

 404 D
 4 619 853

 404 KF
 8 224 863

 404 ZF
 8 251 301

2 - Letters SD on bearing cap.



Fitting for conventional type suspension 404/8

As from serial number:

404/8 6 900 001 (beginning of series)

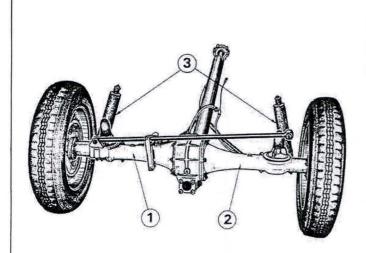
3 - Letters ND on bearing cap.

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404 SALOONS ALL MODELS



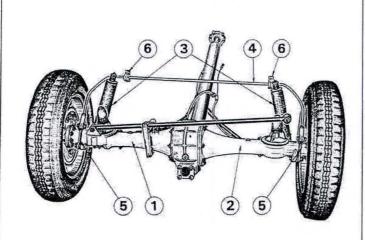
1st Fitting

Up to serial numbers :

404 (TW) 5 075 000 404 (TH) 5 311 000 404 D 4 619 852 404 KF 8 224 862 404 ZF 8 251 300

As from serial number : 404/8 6 900 001 (beginning of series)

- 1 rear axle left hand tube
- 2 rear axle right hand tube
- 3 rear shock absorber



2nd Fitting

Up to serial numbers :

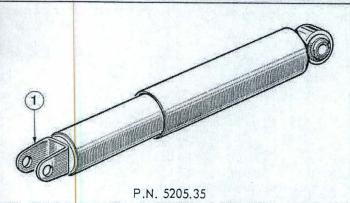
404 (TW) 5 075 001 404 (TH) 5 311 001 404 D 4 619 853 404 KF 8 224 863 404 ZF 8 251 301

- 1 rear axle left hand tube
- 2 rear axle right hand tube
- 3 rear shock absorber
- 4 anti-roll bar
- 5 connecting link
- 6 anti-roll bar bushings

NOTE - The front anti-roll bar diameter has been increased by 3 mm (diameter 23 mm in place of 20) and the front and rear shock absorbers diagram altered.



REAR SHOCK ABSORBERS ASSOCIATED VEHICLES



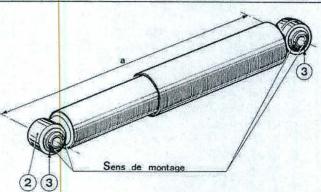
Family Saloons and Station Wagons without rear cross member

Up to serial numbers :

404 L 4 847 242 **404 U6** 4 733 115 **404 LD** 4 978 354 **404 U6D** 4 906 966

404 U6A 1 922 552

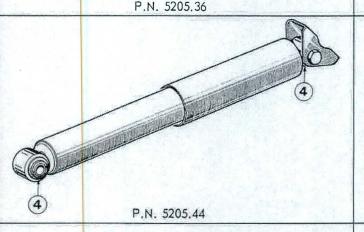
The shock absorber lower attachment is ensured by a yoke 1. Consequently the shock absorber and spring support incorporates an eye with silentbloc.



As from serial numbers :

404 L 4 847 243 404 LD 4 978 355 404 U6D 4 906 967 404 U6A 1 922 553

- The shock absorber lower attachment is ensured by an eye 2. Consequently the shock absorber and spring support incorporates a yoke.
- Dimpled silentbloc 3 P.N. 5248.12 a (compressed shock absorber) = 312 mm approximately.



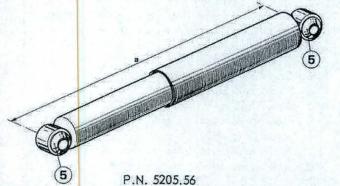
Family Saloon and Station Wagons with rear cross member

As from serial numbers :

404 L 4 852 164 **404 LD** 4 980 059 **404 U6** 4 738 855 **404 U6** 4 908 382 **404 U6** A 1 923 440

404 L Break 4 855 001 (beginning of series)

- The shock absorber only differs from the former model in that the silentblocs 4 are solid.
 P.N. 5248.04
- The shock absorber and spring support incorporates a yoke which is different from the former one.



Light Lorries

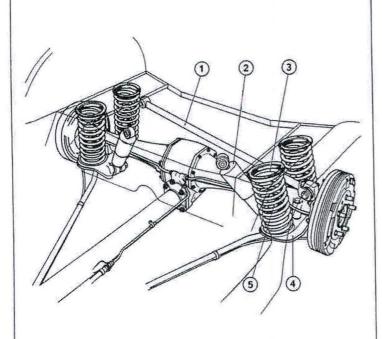
As from serial numbers :

Silentbloc 5 P.N. 5248.08

a (compressed shock absorber) = 575.5 mm approximately.



404 FAMILY SALOONS AND STATION WAGONS ALL MODELS



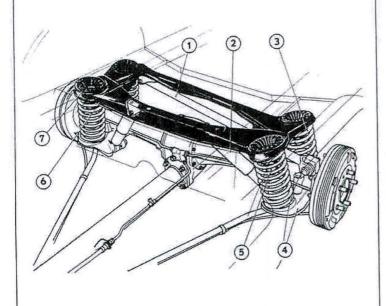
1st Fitting

Up to serial numbers :

404 L 4 852 163 404 LD 4 980 058 404 U6 4 758 854 404 U6D 4 908 381 404 U6A 1 923 439

The springs centering cups, the shock absorbers and the stabiliser bar are directly secured to the bodywork.

- 1 Stabiliser bar
- 2 Rear shock absorbers
- 3 Rear spring
- 4 Rear shock absorber and spring support
- 5 Rebound block



2nd Fitting

As from serial numbers :

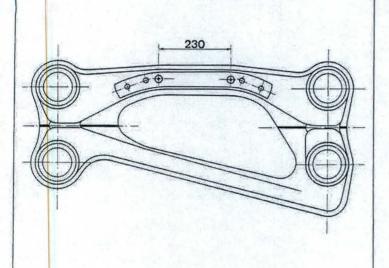
404 L	4 852 164
404 LD	4 980 059
404 U6	4 738 855
404 U6D	4 908 382
404 L (Break)	4 855 001 (beginning of series)
404 U6A	1 923 440

Fitting of a pressed sheet metal cross member placed between the floor and the rear springs on which are secured the rear shock absorbers and the stabiliser bar.

- 1 Stabiliser bar 4 mm shorter
- 2 Rear shock absorber
- 3 Rear spring
- 4 Rear shock absorber and springs support
- 5 Rebound block
- 6 Rear suspension cross member
- 7 Rear cross member rubber spacer



404 FAMILY SALOONS AND STATION WAGONS ALL MODELS



REAR CROSS MEMBER

1st Fitting

Up to serial numbers :

404 L 4 895 135 404 U6 4 767 121 404 L (Break) 4 860 740 404 U6D 4 909 876 404 LD 4 981 229 404 U6A 1 925 212

The distance between centres of the cross member corresponding shafts on the body work is of 230 mm.

- This cross member is no longer supplied by the spare parts department.

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2nd Fitting

As from serial numbers :

404 L 4 895 136 404 U6 4 747 122 404 L (Break) 4 860 741 404 U6D 4 909 877 404 LD 4 981 230 404 U6A 1 925 213

The distance between centres of the cross member attachment holes and of the corresponding shafts on the body is of 220 mm.

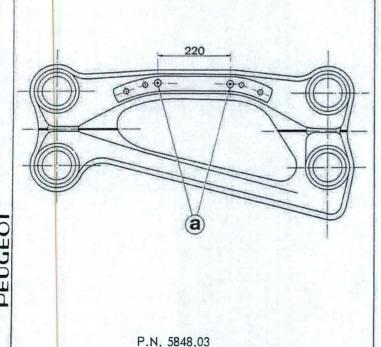
INTERCHANGEABILITY

Cross member replacement

on a car manufactured prior to the above mentioned serial numbers the holes at a should be increased to 5 mm towards the exterior.

Bodywork replacement

on a car manufactured prior to the above mentioned serial numbers the holes at a should be increased to 5 mm towards the interior.



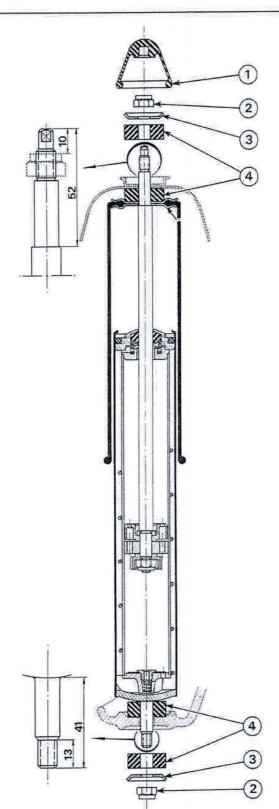
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REAR SUSPENSION REAR SHOCK ABSORBERS



SALOONS



REMOVAL

On rear floor:

- Remove cap 1
- Slacken the Nylstop nut 2 while holding the shock absorber rod by its flat part using a 5 mm wrench.
- Remove cup 3 and rubber bushing 4.

On rear axle tube :

- Slacken Nylstop nut 2
- Remove cup 3 and rubber bushing 4
- Compress and remove the shock absorber.

REFITTING

- Place on both upper and bottom stems of the shock absorber a rubber bushing 4

On rear floor:

- Hold the shock absorber in position
- Install bushing 4 and cup 3
- Engage a new Nylstop nut
- Tighten the nut to 9 ft.lbs (1.25 m.kg) holding the rod by its flat part.

On rear axle tube :

- Release the shock absorber so that the bushing comes into contact with the support
- Install bushing 4 and cup 3
- Engage a new Nylstop nut
- Tighten the nut to 9 ft.lbs (1.25 m.kg)

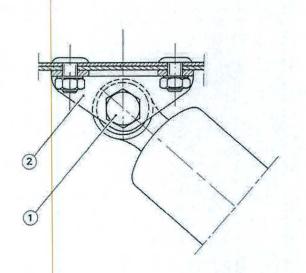
Checking

- At the shock absorber upper attachment the rod should protrude from the nut by 9.5 to 10 mm
- Fit cap 1.



REAR SUSPENSION REAR SHOCK ABSORBERS

ASSOCIATED VEHICLES



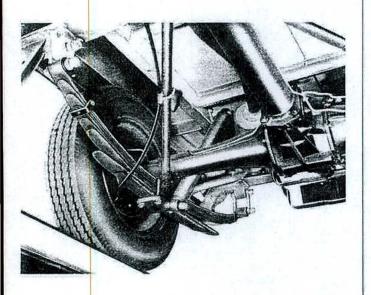
I - STATION WAGONS AND FAMILY SALOONS

REMOVAL

- Remove the shock absorber lower pivot
- Slacken the upper pivot 1 and rotate the shock absorber until it becomes perpendicular to the cross member.
- Remove the upper attachment bracket 2 from the cross member.

REFITTING

- Refitting is a reversal of the removal procedure.
- Position the shock absorber upper pivot attachment nut towards the front
- Tighten the upper attachment bracket to the cross member to 18 ft.ibs (2.5 m.kg)
- Tighten the shock absorbers pivot attachment nuts to the torques indicated below :
 - upper nuts : 40 ft.lbs (5.5 m.kg)
- lower nuts : 34 ft.lbs (4.75 m.kg)



II - LIGHT LORRIES

REMOVAL

- Remove :
 - the lock-nuts and the upper and lower pivot attachment nuts
 - the thrust washer
- Remove the shock absorbers

REFITTING

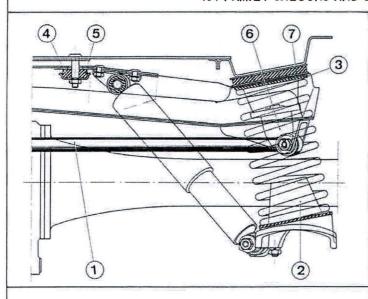
- Refitting is a reversal of the removal procedure.
- Tighten the lower and upper attachment nuts to 40 ft.lbs (5.5 m.kg)

REAR SUSPENSION REAR CROSS MEMBER



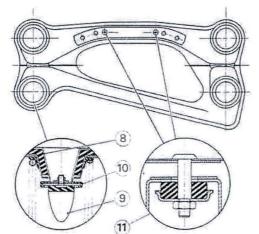


404 FAMILY SALOONS AND STATION WAGONS



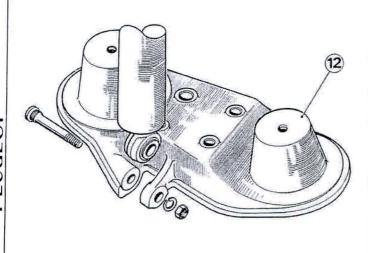
REMOVAL

- Place the car on a pit or on a car lift
- Remove the rear shock absorbers Disconnect :
- the braking compensator spring from the stabilizer bar if necessary.
- the stabilizer bar 1 from the rear axle tube and the cross member
- Raise the vehicle from the rear and remove the suspension springs 2
- Remove the Butyl thrust stops 3 from the springs.
- Slacken the nuts from the travel limiting stops 4
- Recover the cups and bushings 5
- Remove the rebound blocks 6
- Hold the cross member during this operation
- Remove the cross member
- Recover the Butyl thrust stops from the cross member 7.



REFITTING

- Place the Butyl thrust stops on the cross member.
- Bring the cross member into position and centre it on the floor using guiding cups 8.
- Tighten the rebound blocks 9 equipped with cross member rubber stops 10
- Install the travel limiting stops 11.



- Install the following on the shock absorber and spring supports 12:
 - the spring lower stops
 - the springs
 - the spring upper stops
- Re-position the vehicle on its wheels with the springs centred on the cross member
- Secure the stabilizer bar onto the cross member
- tighten the pivot nut to 43.5 ft.lbs (6 m.kg)
- tighten the pivot nut located on the rear axle tube to 40 ft.lbs (5.5 m.kg)
- pin the pivots
- Reconnect the braking compensator spring if necessary
- Refit the shock absorbers

NOTE: Tightening torque of the spring lower supports on the rear outer tube: 40 ft.lbs (5.5 m.kg).



REAR SUSPENSION REAR CROSS MEMBER

404 FAMILY SALOONS AND STATION WAGONS ALL MODELS

INTERCHANGEABILITY

The rear suspension cross member cannot be fitted on 404 Associated Vehicles manufactured prior to the following serial numbers :

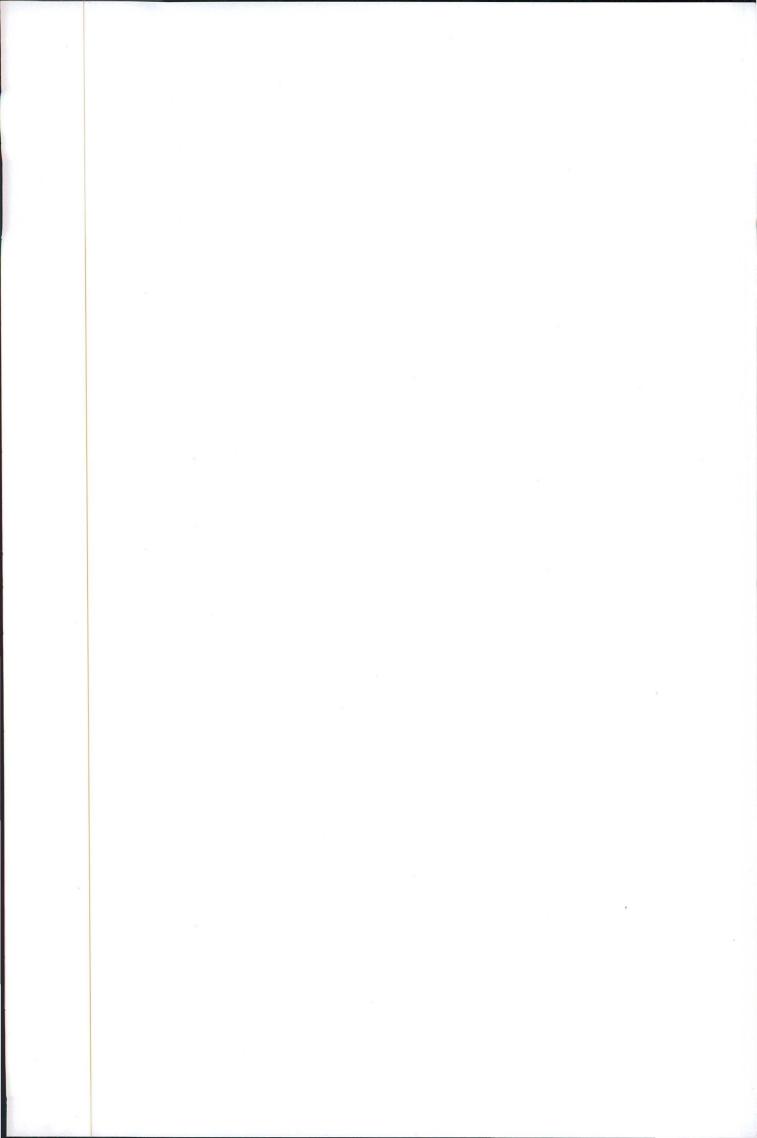
404 L - 4 852 164 404 U6 - 4 738 855 404 L (Break) - 4 855 001 404 U6D - 4 908 382 404 LD - 4 980 059 404 U6A - 1 923 440

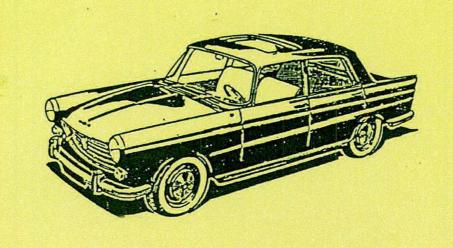
The new bodywork may be installed to replace the one of the 1st fitting on condition that the following parts are fitted:

- 1 rear suspension cross member	5148.03
- 4 cross member Butyl stops	5163.01
- 4 cross member rubber stops	5164.08
- 2 cross member retaining rings	5164.09
- 2 cross member retaining cups	5165.10
- 4 rebound blocks	5166.07
- 4 rebound block thrust stops	5164.10
- 2 shock absorber upper attachments	5267.02
- 2 shock absorber upper attachment pivots	5249.08
- 4 rear shock absorber silentblocs	5248.04
- 3 stabilizer silentblocs	5171.02
- 1 exhaust pipe	1724.22
- 1 union between the pipe and petrol tank	1564.33
or	
- 2 unions between the fuel pipe and the fuel tank	1564.34

- Replace the rear shock absorbers and the stabiliser bar dimpled silentbloc with solid silentblocs.
- Alter the petrol or diesel oil pipes.
- Tighten the rebound blocks thrust stops P.N. 5164.10 onto the former rear shock absorbers and spring supports.

NOTE: In the event of replacing a body shell on a Station Wagon of the 1st fitting, it is not necessary to replace the front springs.





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