LITRES—PINTS
OR
PINTS—LITRES

Litres to U.S. Gallons x 0·26417

LITRES—PINTS

(8 Pints = 1 Imperial Gallon)

Litres		Pints
0·5682454	1	1·7598
1·1365	2	3·5196
1·7047	3	5·2794
2·2730	4	7·0392
2·8412	5	8·7990
3·4095	6	10·5588
3·9777	7	12·3186
4·5460	8	14·0784
5·1142	9	15·8382
5·6852	10	17·5980
6·2507	11	19·3578
6·8189	12	21·1176
7·3872	13	22·8774
7·9554	14	24·6372
8·5237	15	26·3970
9·0919	16	28·1568
9·6602	17	29·9166
10·2284	18	31·6764
10·7967	19	33·4362
11·3649	20	35·1960
11·9332	21	36·9558
12·5014	22	38·7156
13·0696	23	40·4754
13·6379	24	42·2352
14·2061	25	43·9950
14·7744	26	45·7548
15·3426	27	47·5146
15·9109	28	49·2744
16·4791	29	51·0342
17·0474	30	52·7940
17·6156	31	54·5538
18·1839	32	56·3136
18·7521	33	58·0734
19·3203	34	59·8332
19·8886	35	61·5930
20·4568	36	63·3528
21·0251	37	65·1126
21·5933	38	66·8724
22·1616	39	68·6322
22·7298	40	70·3920
23·2981	41	72·1518
23·8663	42	73·9116
24·4346	43	75·6714
25·0028	44	77·4312
25·5710	45	79·1910
26·1393	46	80·9508
26·7075	47	82·7106
27·2758	48	84·4704
27·8440	49	86·2302
28·4123	50	87·9900

LITRES—PINTS

(8 Pints = 1 Imperial Gallon)

Litres			Pints
28·9805	... ...	51	89·7498
29·5488	... ...	52	91·5096
30·1170	... ...	53	93·2694
30·6853	... ...	54	95·0292
31·2535	... ...	55	96·7890
31·8217	... ...	56	98·5488
32·3900	... ...	57	100·3086
32·9582	... ...	58	102·0684
33·5265	... ...	59	103·8282
34·0947	... ...	60	105·5880
34·6630	... ...	61	107·3478
35·2312	... ...	62	109·1076
35·7995	... ...	63	110·8674
36·3677	... ...	64	112·6272
36·9360	... ...	65	114·3870
37·5042	... ...	66	116·1468
38·0724	... ...	67	117·9066
38·6407	... ...	68	119·6664
39·2089	... ...	69	121·4262
39·7772	... ...	70	123·1860
40·3454	... ...	71	124·9458
40·9137	... ...	72	126·7056
41·4819	... ...	73	128·4654
42·0502	... ...	74	130·2252
42·6184	... ...	75	131·9850
43·1867	... ...	76	133·7448
43·7549	... ...	77	135·5046
44·3231	... ...	78	137·2644
44·8914	... ...	79	139·0242
45·4596	... ...	80	140·7840
46·0279	... ...	81	142·5438
46·5961	... ...	82	144·3036
47·1644	... ...	83	146·0634
47·7326	... ...	84	147·8232
48·3009	... ...	85	149·5830
48·8691	... ...	86	151·3428
49·4373	... ...	87	153·1026
50·0056	... ...	88	154·8624
50·5738	... ...	89	156·6222
51·1421	... ...	90	158·3820
51·7103	... ...	91	160·1418
52·2786	... ...	92	161·9016
52·8468	... ...	93	163·6614
53·4151	... ...	94	165·4212
53·9833	... ...	95	167·1810
54·5516	... ...	96	168·9408
55·1198	... ...	97	170·7006
55·6880	... ...	98	172·4604
56·2563	... ...	99	174·2202
56·82454	... ...	100	175·9800

KILOGRAMMES PER SQ. CENTIMETRE— POUNDS PER SQ. INCH

OR

POUNDS PER SQ. INCH— KILOGRAMMES PER SQ. CENTIMETRE

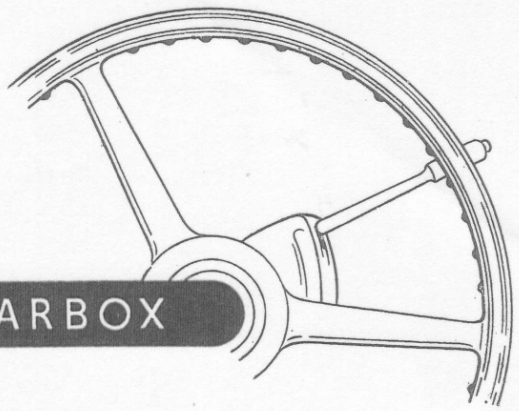
Kilogrammes to Tons (English) ÷ 1016·05

KG./SQ. CM.—LB./SQ. IN.

Kg./sq. cm.		Lb./sq. in.
0·0703	1	14·2233
0·1406	2	28·45
0·2109	3	42·67
0·2812	4	56·89
0·3515	5	71·12
0·4218	6	85·34
0·4921	7	99·56
0·5625	8	113·79
0·6328	9	128·01
0·7031	10	142·23
0·7734	11	156·46
0·8437	12	170·68
0·9140	13	184·90
0·9843	14	199·13
1·0546	15	213·35
1·1249	16	227·57
1·1952	17	241·80
1·2655	18	256·02
1·3358	19	270·24
1·4061	20	284·47
1·4764	21	298·69
1·5467	22	312·91
1·6171	23	327·14
1·6874	24	341·36
1·7577	25	355·58
1·8280	26	369·81
1·8983	27	384·03
1·9686	28	398·25
2·0389	29	412·48
2·1092	30	426·70
2·1795	31	440·92
2·2498	32	455·15
2·3201	33	469·37
2·3904	34	483·59
2·4607	35	497·82
2·5310	36	512·04
2·6014	37	526·26
2·6717	38	540·49
2·7420	39	554·71
2·8123	40	568·93
2·8826	41	583·16
2·9529	42	597·38
3·0232	43	611·60
3·0935	44	625·83
3·1638	45	640·05
3·2341	46	654·27
3·3044	47	668·50
3·3747	48	682·72
3·4450	49	696·94
3·5153	50	711·17

The AUTOMATIC GEARBOX . . .

Driving Instructions



THE AUTOMATIC GEARBOX

The Rolls-Royce Automatic Gearbox is more than just a mechanism which automatically adjusts the gear ratios according to conditions of speed and load. An overriding control is provided which enables the driver to exercise his own judgment and desires in regard to the gear ratios to be selected, and an understanding of what is possible greatly enhances the pleasure to be derived from driving the car.

No automatic mechanism, however good, has the power of anticipation, but the driver can see ahead and he has the means for overriding the automatic mechanism when desired.

If the driver so desires, he can leave everything to the automatic gearbox, and gear changes will occur at the theoretically correct moment in terms of speed and load. Obviously, however, road or traffic conditions may be such that the theoretically correct moment of gear change may be undesirable or may be unexpected or perhaps delayed, and it is for this reason that the overriding control is provided to enable the driver to enforce a gear change as and when desired.

The driver should, therefore, first familiarise himself with the approximate speeds at which the automatic changes occur. These changes are as follows:

	UP CHANGES (m.p.h.)		
	1—2	2—3	3—4
Light throttle ..	6	11	20
Full throttle ..	18	31	65

It will be noted that greater throttle opening causes the changes to be delayed progressively, therefore an up-change can be induced by the driver at any speed within these limits by easing the foot off the throttle pedal at the moment an up-change is desired. With a little practice a driver can, by judicious use of the throttle pedal, permit the automatic mechanism to make completely smooth and unobtrusive changes.

The owner-driver who wishes occasionally to indulge in a very fast get-away will obtain maximum acceleration by allowing the automatic gearbox to make full throttle changes throughout the speed range.

The automatic down-changes at light throttle will normally occur at the following speeds:

4—3	3—2	2—1
14 m.p.h.	8 m.p.h.	4 m.p.h.

The driver should recognise that the down-changes will always occur at approximately these speeds when slowing down, but it will be found that the changes occur quite smoothly, although it is well to remember that as the speed falls to 9 m.p.h. the 3—2 change will occur which involves an appreciable reduction in gear ratio, and the smoothest change will result if the throttle opening is kept to the minimum.

In traffic which enforces for any length of time speeds between 6 and 25 m.p.h., the driver can avoid the continual changes which might occur between ranges 3 and 4 by placing the hand lever in position 3. Similarly, in traffic which enforces an even slower rate of progress, the hand lever should be placed in position 2, which will avoid unnecessary changes to and from the higher ratios.

For normal cruising on the open road the hand lever should be left in position 4, but the driver will discover that the most perfect and smooth gear changes between top and third can be made with extreme ease and rapidity by moving the hand lever between ranges 3 and 4. Completely imperceptible changes can be made if the throttle is at the same time adjusted to suit. The best

changes occur at light throttle openings. The driver is encouraged to make the fullest use of this gear change in exactly the same way that he would with a normal gearbox. Overtaking other traffic can be accomplished at the desired throttle opening with the minimum amount of fuss and with the greatest ease.

For full throttle acceleration in an emergency, the driver can immediately obtain a lower gear by pressing the accelerator pedal hard down onto its stop. Full throttle down-changes are not usually required except in an emergency, and the driver will, in most cases, prefer to make full use of the hand lever.

SECOND SPEED START

It may sometimes be extremely desirable to hold the car indefinitely in 2nd gear as, for instance, when negotiating very slippery surfaces or when mountain climbing. A device has been incorporated which holds the shift valves in 2nd gear whenever the hand lever is placed in range 2. In this position, the car will start from rest in 2nd gear, and will stay in 2nd gear until the hand lever is moved to a higher range. The device is useful also when descending very steep hills and it is desired to use the engine as a brake.

When climbing or negotiating a hairpin in fixed 2nd gear, it is useful to remember that 1st gear is immediately available if suddenly required by operating the kick down valve which is obtained by pressing the throttle pedal as far as it will go. Remember also that it is possible to overrev. the engine in fixed 2nd as in this range there is no safety up-change.

PARKING LOCK

A most efficient lock is provided in the design of the gearbox. This operates when the hand lever is placed in position 'R' and the engine switched off with the car stationary. The car will not move even on the steepest gradients, but naturally it will be essential to apply the brakes firmly when it is desired to start the engine as the engine will not start up until the hand lever is moved to 'N', and no parking lock will then be available.

MANŒUVRING

The fluid coupling and low gear ratios of 1st and Reverse may sometimes make it a little difficult to judge precisely the correct engine revolutions required to move the car a few inches backwards or forwards, and it will be found that manœuvring in confined spaces is more easily accomplished if a little extra load is applied to the fluid coupling by light pressure on the brakes.

COLD STARTING

When starting from cold it should always be remembered that the automatic carburetter system will cause the engine to start up initially at a fairly fast idle speed, and therefore it is essential always to apply the brakes firmly before starting up, and especially when engaging Reverse from cold as the driver then has to pass through the forward gear ratios to obtain Reverse, and the car may move forward if the brake is not applied.

B. MROSE, DERBY