

STRICTLY PRIVATE AND CONFIDENTIAL
For the use of Humber Distributors and Dealers only.

THE HUMBER HAWK

MARK III.
AND
MARK IV.

Man-hour Schedule



Issued by :
HUMBER LIMITED,
Service Department,
COVENTRY

M.H.S. 4.

May, 1950.

Foreword

This Man-hour Schedule has been issued for the guidance of Humber Distributors and Dealers.

The times given are for vehicles in reasonably good condition, and do not include cases where parts are seized or rusted due to neglect or misuse.

In the case of vehicles to which bodies other than the Company's standard products have been fitted, the necessary adjustment to man-hours must be made.

No attempt has been made to cover every possible operation, but those most commonly used are included.

The times quoted do not include road testing, and a reasonable allowance for this operation should be added where necessary.

Operation No.		Hours
SECTION 1. ENGINE		
E.1	Engine unit complete, remove and refit	12
E.2	Engine unit, remove and fit replacement unit, including changing over equipment from original unit, tuning and adjustment	15
Cost of Valve re-grind to Humber Hawk		2
<div> <div> <div>9 5 12</div> <div>1 4 0</div> <div>10 16 0</div> <div>11 8 0</div> </div> <div> <div>£11 10 0</div> <div>£10. 10. 0.</div> </div> </div> Plus cost of Material extra.		9½
(Note - In case of Hawk, should the head not move easily, an extra Charge is to be included here.)		2
g operation		4½
E.9	Each additional valve to E.8 add	½
E.10	Valve springs, remove and refit, or replace per set	5
E.11	Manifold, c/w carburettor, but less air silencer, remove and refit ...	1
E.12	Valve cover, remove and refit, including new joint	1½
E.13	Manifold drain pipe, remove and refit	¼
E.14	Sparkign plugs, remove, clean and reset and refit	½
E.15	Fan belt, remove and refit	⅓
E.16	Water pump, remove and refit or replace	1½
E.17	Timing cover, remove and refit	3¼
E.18	Timing chain, camshaft, or crankshaft wheel, remove and refit	11
E.19	Camshaft, remove and refit	11
E.20	Sump, remove, clean filter and refit	1
E.21	Oil pump, remove and refit	2
E.22	Exhaust flange joint, fit new	½
E.23	Remove cylinder head, sump, withdraw pistons, measure bores, fit graded pistons, check connecting rod alignment, and reassemble	7½

Operation No.		Hours
SECTION I. ENGINE		
E.1	Engine unit complete, remove and refit	12
E.2	Engine unit, remove and fit replacement unit, including changing over equipment from original unit, tuning and adjustment	15
E.3	Cylinder head, remove and refit including new gasket	2
E.4	Decarbonise, face valves and valve seats, tune up (additional time where heater is fitted)	9½
E.5	Adjust tappets	2
E.6	Remove and refit one tappet (refitting old valve)	4¼
E.7	Remove and refit set of tappets (refitting old valves)	6
E.8	Replace any one valve, other than during decarbonising operation (including cutting valve seat)	4½
E.9	Each additional valve to E.8 add	⅓
E.10	Valve springs, remove and refit, or replace per set	5
E.11	Manifold, c/w carburettor, but less air silencer, remove and refit ...	1
E.12	Valve cover, remove and refit, including new joint	1½
E.13	Manifold drain pipe, remove and refit	¼
E.14	Sparking plugs, remove, clean and reset and refit	½
E.15	Fan belt, remove and refit	⅓
E.16	Water pump, remove and refit or replace	1½
E.17	Timing cover, remove and refit	3¼
E.18	Timing chain, camshaft, or crankshaft wheel, remove and refit	11
E.19	Camshaft, remove and refit	11
E.20	Sump, remove, clean filter and refit	1
E.21	Oil pump, remove and refit	2
E.22	Exhaust flange joint, fit new	½
E.23	Remove cylinder head, sump, withdraw pistons, measure bores, fit graded pistons, check connecting rod alignment, and reassemble	7½

Operation No.		Hours
E.24	Cylinder head top water pipe, remove and refit	$\frac{2}{3}$
E.25	Top water hose, remove and refit	$\frac{1}{4}$
E.26	Bottom water hose, remove and refit	$\frac{1}{3}$
E.27	Petrol pump, remove and refit (R.H.D. only)	$\frac{2}{3}$
E.28	Air silencer, remove and refit	$\frac{1}{3}$
E.29	Carburettor, remove and refit	$\frac{2}{3}$
E.30	Oil relief valve, remove and refit	$\frac{1}{2}$
E.31	Oil filler, remove and refit	$1\frac{1}{2}$
E.32	Front engine bearer rubbers, remove and refit pair	1
E.33	Rear engine bearer rubbers, remove and refit	2
E.34	Replace any one connecting rod	$2\frac{1}{4}$
E.35	Replace any one big end bearing	$1\frac{2}{3}$
E.36	Replace set of big end bearings	$2\frac{1}{2}$
E.37	Gearbox unit, remove and refit	$6\frac{1}{2}$
E.38	Clutch unit, remove and refit	7
E.39	Flywheel, remove and refit	$7\frac{1}{2}$
E.40	Engine tie rod, remove and refit	$\frac{1}{3}$
SECTION 2. GEARBOX		
GB.1	Gearbox, remove and refit	$6\frac{1}{2}$
GB.2	Overhaul gearbox after removal	$5\frac{1}{2}$
GB.3	Gear change controls, remove and refit or replace	$3\frac{1}{2}$
GB.4	Adjust gear selector cable	$\frac{1}{2}$
SECTION 3. PROPELLOR SHAFT		
P.1	Propellor shaft, remove and refit	1
P.2	Overhaul universal joints after shaft removal	$2\frac{1}{4}$

Operation No.		Hours
SECTION 4. REAR AXLE		
RA.1	Rear axle complete, remove and refit (including bleed and adjust brakes)	5½
RA.2	Differential unit, remove and refit (including bleed and adjust brakes)	5
RA.3	Overhaul differential unit after removal	5
RA.4	Axle shaft, remove and refit (including bleed brakes) ... each side	1½
RA.5	Fit new oil seal to axle shaft (after shaft removal)	$\frac{2}{3}$
RA.6	Fit new oil seal to axle casing (after shaft removal)	$\frac{1}{4}$
SECTION 5. FRONT SUSPENSION		
FS.1	Front suspension unit, remove and refit, including adjusting track and camber and bleeding and adjusting brakes	5
FS.2	Overhaul front suspension unit after removal from chassis	8½
FS.3	Front hubs and bearings, remove and refit Pair	1
FS.4	Adjust hub bearings Pair	$\frac{1}{2}$
FS.5	Adjust track and camber of front road wheels	2
FS.6	Fit new swivel pins and bushes, including checking brake and camber	6
FS.7	Fit new coil spring to front suspension each side	1½
FS.8	Top link, remove and refit each side	1¼
FS.9	Bottom link, remove and refit each side	1
FS.10	Stub axle, remove and refit each side	3
FS.11	Stub axle carrier, remove and refit each side	3
FS.12	Check track	$\frac{1}{4}$
FS.13	Adjust track	$\frac{1}{2}$
FS.14	Check camber	$\frac{1}{2}$
FS.15	Adjust camber	1½

Operation No.		Hours
SECTION 6. BRAKE AND CONTROLS		
B.1	Remove brake shoes and fit relined set, including adjusting and bleeding brakes	4½
B.2	Remove road wheels and brake drums, blow out dust from shoes and mechanism, re-assemble and adjust	3
B.3	Bleed system and adjust brakes	1¼
B.4	Handbrake lever, remove and refit only	1
B.5	Master cylinder, remove and refit	1½
B.6	Handbrake cable, remove and refit	1½
B.7	Fit new set of brake hoses, bleed and adjust brakes	2½
SECTION 7. STEERING AND CONTROLS		
S.1	Steering column controls, remove and refit	1¼
S.2	Steering wheel, remove and refit, including controls	1¾
S.3	Steering unit, remove and refit, including S.1 and S.2	6½
S.4	Steering drop arm, remove and refit	1
S.5	Steering cross tube O.S., N.S., or centre, remove and refit	1
S.6	Fit new ball joints to steering cross tubes (after removal of tubes) set of 6	¾
S.7	Idle lever, remove and refit, including check track	1
SECTION 8. ELECTRICAL EQUIPMENT		
EE.1	Starter motor, remove and refit	1
EE.2	Dynamo, remove and refit	¾
EE.3	Coil, remove and refit	¼
EE.4	Distributor, remove and refit	¾
EE.5	H.T. leads, remove and refit	½
EE.6	Oil pressure unit, remove and refit	¼

Operation No.		Hours
EE.7	Speedometer, remove and refit	1 $\frac{1}{4}$
EE.8	Oil or ignition warning light bulb, remove and refit	5 mins.
EE.9	Thermometer gauge, remove and refit	1
EE.10	Petrol gauge facia unit, remove and refit	1 $\frac{1}{2}$
EE.11	Petrol gauge tank unit, remove and refit (calibration additional) ...	$\frac{2}{3}$
EE.12	Headlamp, remove and refit	$\frac{3}{4}$
EE.13	Tail lamp, remove and refit	$\frac{1}{2}$
EE.14	Number plate lamp, remove and refit	$\frac{1}{2}$
EE.15	Tail lamp glass, remove and refit	$\frac{1}{4}$
EE.16	Number plate lamp glass, remove and refit	$\frac{1}{4}$
EE.17	Roof lamp, remove and refit	$\frac{1}{2}$
EE.18	Battery, remove and refit, grease terminals	$\frac{1}{3}$
EE.19	Control box, remove and refit	1
EE.20	Lighting switch, remove and refit	1 $\frac{1}{2}$
EE.21	Ignition lock, remove and refit	2
EE.22	Starter panel switch, remove and refit	1
EE.23	Brake stop light switch, remove and refit	$\frac{3}{4}$
EE.24	Panel light switch, remove and refit	$\frac{1}{2}$
EE.25	Screen wiper motor unit, remove and refit	$\frac{3}{4}$
EE.26	Screen wiper arm, remove and refit	5 mins.
EE.27	Screen wiper wheel boxes, remove and refit	3 $\frac{1}{2}$
EE.28	Screen wiper switch, remove and refit	$\frac{1}{2}$
EE.29	Trafficator, remove and refit	1
EE.30	Cable harness chassis, remove and refit	8
EE.31	Horn, remove and refit	$\frac{3}{4}$
EE.32	Replace inner cable, windscreen wiper drive	1
EE.33	Speedometer cable, remove and refit	1

Operation No.		Hours
SECTION 9. CHASSIS		
CH.1	Rear road spring, remove and refit	1½
CH.2	Front shock absorber, remove and refit	¾
CH.3	Rear shock absorber, remove and refit	¾
CH.4	Top up shock absorber after removal	¼
CH.5	Rear axle rebound strap, remove and refit	½
CH.6	Radiator block, remove and refit	2
CH.7	Radiator carrier mounting bracket, remove and refit	2½
CH.8	Petrol tank, remove and refit	1½
CH.9	Petrol pipe, pump to carburettor, remove and refit	5 mins.
CH.10	Petrol pipe, tank to pump, remove and refit	1
CH.11	Adjust hang of exhaust system	½
CH.12	Remove complete exhaust system and refit	2
CH.13	Exhaust silencer front, remove and refit	1½
CH.14	Exhaust tail pipe and silencer, remove and refit	¾
CH.15	Exhaust down pipe, remove and refit	¾
SECTION 10. BODY MOUNTING		
BM.1	Bonnet panel assembly, remove and refit	1
BM.2	Bonnet prop, remove and refit	¼
BM.3	Radiator grille, remove and refit	1½
BM.4	Wing grille, remove and refit each	1
BM.5	Front wing, remove and refit	2½
BM.6	Front bumper c/w number plate, remove and refit	1
BM.7	Rear bumper, remove and refit	¾

Operation No.		Hours
SECTION II. BODY FITTINGS (SALOON)		
BF.1	Front or rear door complete, remove and rehang and adjust	1½
BF.2	Door hinge, remove and refit front each rear each	¾ 1½
BF.3	Front door lock, remove and refit	1¾
BF.4	Front door glass, remove and refit	1¼
BF.5	Front door ventilator, remove and refit	3
BF.6	Front window regulator, remove and refit	1½
BF.7	Rear door lock, remove and refit	1¼
BF.8	Rear door glass, remove and refit	1¼
BF.9	Rear window regulator, remove and refit	1½
BF.10	Windscreen, remove and refit	10
BF.11	Windscreen rubber, fit new (after glass removal)	¼
BF.12	Sliding roof panel, remove and refit	1
BF.13	Backlight glass, remove and refit	1½
BF.14	Trunk lid assembly, remove and refit	1½
BF.15	Trunk compartment weatherstrip, fit new	1
BF.16	Trunk lid hinge, remove and refit each	⅔
BF.17	Door check link, remove and refit each	1
BF.18	Exterior door handle, remove and refit	1
BF.19	Interior door handle, remove and refit	5 mins.
BF.20	Facia panel, remove and refit (less instruments)	¾
SECTION 12. LUBRICATION		
L.1	Apply lubricant to all pressure nipples	½
L.2	Change engine oil	⅓
L.3	Drain gear-box and refill	⅓
L.4	Drain rear axle and refill	⅓
L.5	Check oil levels in engine, gear-box, rear axle and steering box ...	½

RATE PER HOUR

No. of Hours Worked	4/-	4/6	5/-	5/6	6/-	6/6	7/-	7/6	8/-	8/6	9/-	9/6	10/-	10/6	11/-	11/6	12/-	12/6
$\frac{1}{4}$	1/-	1/1 $\frac{1}{2}$	1/3	1/4 $\frac{1}{2}$	1/6	1/7 $\frac{1}{2}$	1/9	1/10 $\frac{1}{2}$	2/-	2/1 $\frac{1}{2}$	2/3	2/4 $\frac{1}{2}$	2/6	2/7 $\frac{1}{2}$	2/9	2/10 $\frac{1}{2}$	3/-	3/1 $\frac{1}{2}$
$\frac{1}{2}$	2/-	2/3	2/6	2/9	3/-	3/3	3/6	3/9	4/-	4/3	4/6	4/9	5/-	5/3	5/6	5/9	6/-	6/3
$\frac{3}{4}$	3/-	3/4 $\frac{1}{2}$	3/9	4/1 $\frac{1}{2}$	4/6	4/10 $\frac{1}{2}$	5/3	5/7 $\frac{1}{2}$	6/-	6/4 $\frac{1}{2}$	6/9	7/1 $\frac{1}{2}$	7/6	7/10 $\frac{1}{2}$	8/3	8/7 $\frac{1}{2}$	9/-	9/4 $\frac{1}{2}$
1	4/-	4/6	5/-	5/6	6/-	6/6	7/-	7/6	8/-	8/6	9/-	9/6	10/-	10/6	11/-	11/6	12/-	12/6
2	8/-	9/-	10/-	11/-	12/-	13/-	14/-	15/-	16/-	17/-	18/-	19/-	20/-	21/-	22/-	23/-	24/-	25/-
3	12/-	13/6	15/-	16/6	18/-	19/6	21/-	22/6	24/-	25/6	27/-	28/6	30/-	31/6	33/-	34/6	36/-	37/6
4	16/-	18/-	20/-	22/-	24/-	26/-	28/-	30/-	32/-	34/-	36/-	38/-	40/-	42/-	44/-	46/-	48/-	50/-
5	20/-	22/6	25/-	27/6	30/-	32/6	35/-	37/6	40/-	42/6	45/-	47/6	50/-	52/6	55/-	57/6	60/-	62/6
6	24/-	27/-	30/-	33/-	36/-	39/-	42/-	45/-	48/-	51/-	54/-	57/-	60/-	63/-	66/-	69/-	72/-	75/-
7	28/-	31/6	35/-	38/6	42/-	45/6	49/-	52/6	56/-	59/6	63/-	66/6	70/-	73/6	77/-	80/6	84/-	87/6
8	32/-	36/-	40/-	44/-	48/-	52/-	56/-	60/-	64/-	68/-	72/-	76/-	80/-	84/-	88/-	92/-	96/-	100/-
9	36/-	40/6	45/-	49/6	54/-	58/6	63/-	67/6	72/-	76/6	81/-	85/6	90/-	94/6	99/-	103/6	108/-	112/6
10	40/-	45/-	50/-	55/-	60/-	65/-	70/-	75/-	80/-	85/-	90/-	95/-	100/-	105/-	110/-	115/-	120/-	125/-
11	44/-	49/6	55/-	60/6	66/-	71/6	77/-	82/6	88/-	93/6	99/-	104/6	110/-	115/6	121/-	126/6	132/-	137/6
12	48/-	54/-	60/-	66/-	72/-	78/-	84/-	90/-	96/-	102/-	108/-	114/-	120/-	126/6	132/-	138/-	144/-	150/-
13	52/-	58/6	65/-	71/6	78/-	84/6	91/-	97/6	104/-	110/6	117/-	123/6	130/-	136/6	143/-	149/6	156/-	162/6
14	56/-	63/-	70/-	77/-	84/-	91/-	98/-	105/-	112/-	119/6	126/-	133/-	140/-	147/-	154/-	161/-	168/-	175/-
15	60/-	67/6	75/-	82/6	90/-	97/6	105/-	112/6	120/-	127/6	135/-	142/6	150/-	157/6	165/-	172/6	180/-	187/6
16	64/-	72/-	80/-	88/-	96/-	104/-	112/-	120/-	128/-	136/-	144/-	152/-	160/-	168/-	176/-	184/-	192/-	200/-
17	68/-	76/6	85/-	93/6	102/-	110/6	119/-	127/6	136/-	144/6	153/-	161/6	170/-	178/6	187/-	195/6	204/-	212/6
18	72/-	81/-	90/-	99/-	108/-	117/-	126/-	135/-	144/-	153/-	162/-	171/-	180/-	189/-	198/-	207/-	216/-	225/-
19	76/-	85/6	95/-	104/6	114/-	123/6	133/-	142/6	152/-	161/6	171/-	180/6	190/-	199/6	209/-	218/6	228/-	237/6
20	80/-	90/-	100/-	110/-	120/-	130/-	140/-	150/-	160/-	170/-	180/-	190/-	200/-	210/-	220/-	230/-	240/-	250/-

