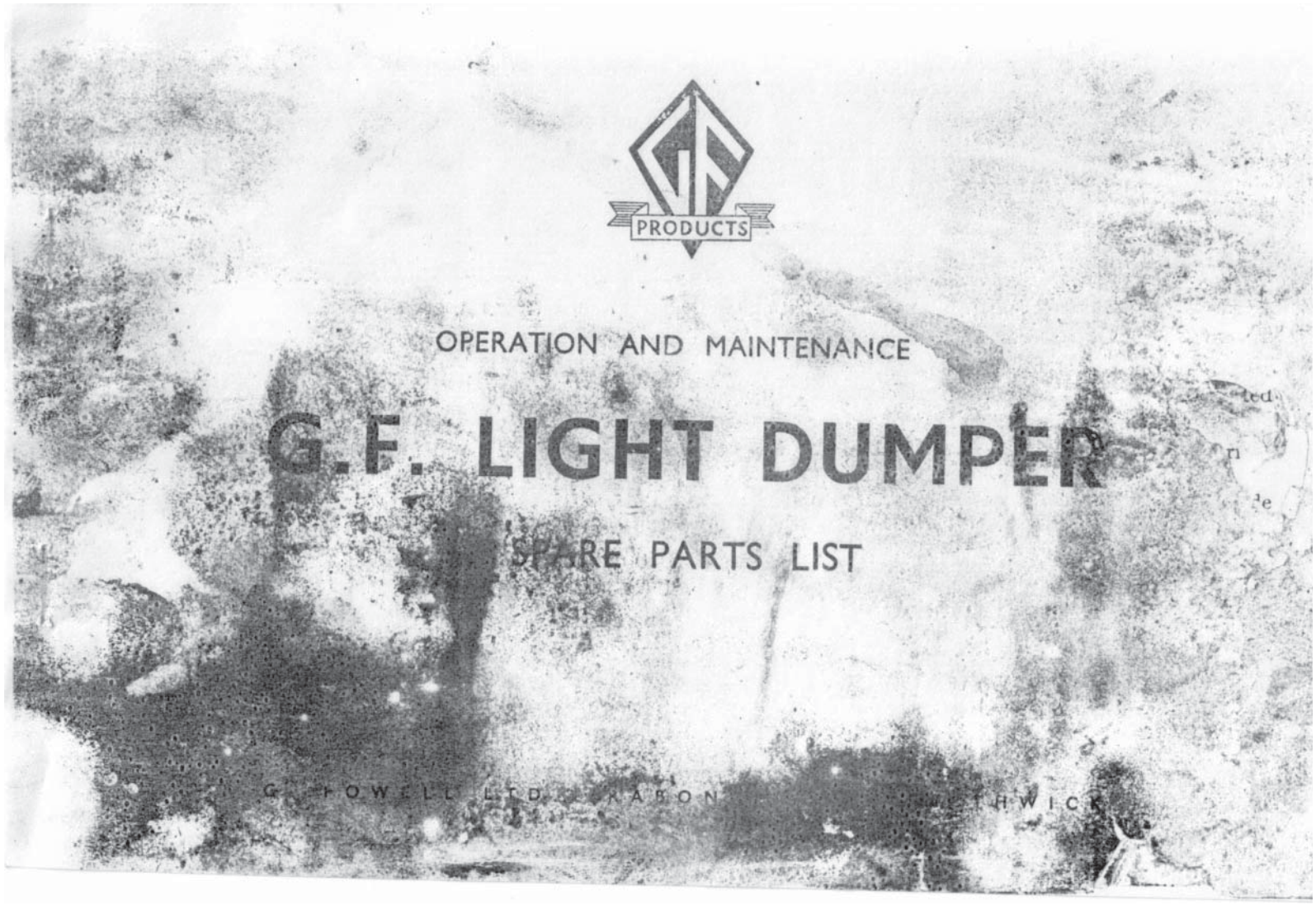

PRODUCTS
OPERATION AND MAINTENANCE
G.F. LIGHT DUMPER
SPARE PARTS LIST

HOW TO ORDER SPARES

Spares are grouped under reference numbers depending upon their location on the dumper, and whether they are ancillary to the part described. Thus, if the bolts and washers that hold the tipping bar were required they would be described as 2 Bolts and Washers 1″ × $\frac{3}{8}$″ dia., ancillary to F.C.7.

OPERATION AND MAINTENANCE

THE ENGINE.

Full instructions on how to operate the Engine by which the G.F. Light Dumper is driven, are given in the maker's booklet. The following additional operations are recommended before the engine is actually used.

(a) Fill up the air cleaner with oil to the level of the beading.

(b) See that the fuel is strained and clean as it is poured into the tank.

(c) Fill the sump with the grade of lubricating oil recommended by the makers up to the level shown by the dipstick.

(d) Make certain the gear lever is in the neutral position.

The mixture control is set by the makers so that the engine will receive the correct fuel mixture, and should not be altered under any circumstances. In addition the engine speed is controlled by a governor which is set to the correct speed, and no attempt should be made to accelerate the engine beyond the limit allowed by the governor.

To stop engine press small green button at side of magneto as shown on page 3.

THE DUMPER.

Forward and reverse travel is obtained through a gearbox at the right of the engine, giving one forward and one reverse speed. The gear lever is clearly shown on the General Arrangement on page 3, and is very easily moved to the correct position. There is no orthodox clutch, the drive to the gearbox being a belt transmission with a jockey pulley to increase and decrease the tension, controlled by a combined brake and clutch lever operated by the right foot.

Before using, the following routine should be carried out :

(a) Unscrew the filler plug on the right hand side of the gearbox, and fill to the level of the socket with Shell Spirax C Gear Oil S.A.E. 140. This fills both gearbox and back axle.

(b) Fill up the steering box with Shell Spirax C Gear Oil S.A.E. 140. The filler plug is at the back of the box.

(c) Check the tyre pressures : that for the front and rear tubes should be 40 lbs. per sq. inch.

HOW TO DRIVE AND OPERATE THE DUMPER.

First start the engine, as explained in the Engine Manual, and after all points listed above have been attended to, increase the engine speed with the throttle lever,

depress the foot lever to its fullest extent and engage the forward gear by moving the gear lever on the right, to the forward position. To reverse, draw the gear lever to the rear position.

Slowly release the foot lever, thereby bringing the jockey pulley into contact with the driving belt, and the dumper will move in the required direction.

To change gear depress the foot lever to the fullest extent and when stationary move the gear lever to the new position ; in other words, repeat the movements made when starting. The machine automatically brakes itself when gear changes are made because the footbrake and jockey pulley are both operated by the same foot pedal.

To stop the dumper, depress the foot pedal and return the gear lever into the neutral position.

When it is intended to leave the machine stationary the pawl at the side of the gearbox should be dropped down to engage in the rack when the foot pedal is fully depressed. This will keep it fully braked.

The hopper can be automatically tipped to release its load by smartly depressing the foot pedal on the left of the steering column. To return the hopper to the horizontal, pull downwards on the handle on the left side of the hopper, which will then swing downwards and automatically clip itself in position.

MAINTENANCE.

Full instructions for maintaining the engine at full efficiency are given in the Petter Instruction Book supplied with each dumper. It is advisable to have the engine overhauled periodically by a skilled mechanic and any major troubles should be referred either to the engine makers or to our own Service Department. The maintenance routine for the rest of the machine is extremely simple, and can be carried out weekly in a few minutes.

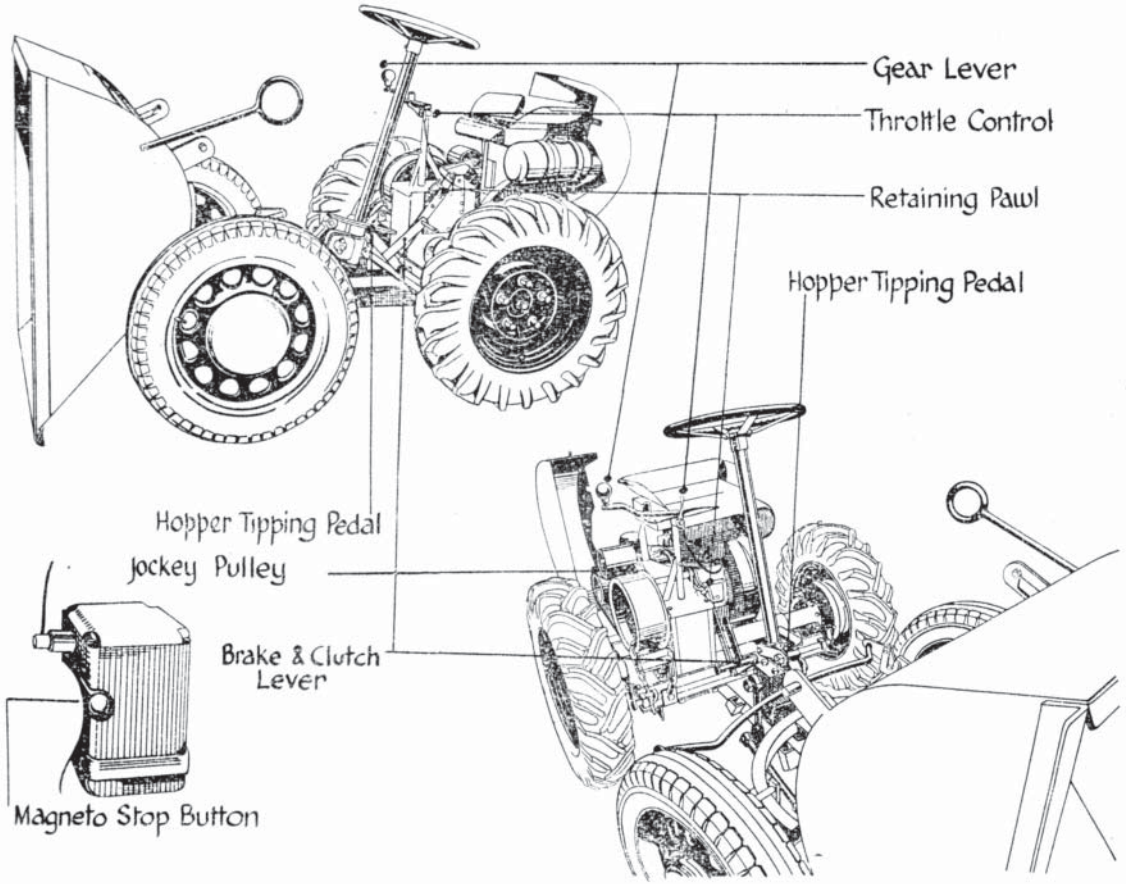
At least once a week and more frequently under bad conditions the dumper should be cleaned down thoroughly, and all accumulated deposits of mud, concrete, plaster, etc., should be removed. It is extremely important that this be done, for although the dumper will continue to work with a thick coating of dirt on the wheels and over the foot pedals, etc., it is obvious that it will not continue to work at peak efficiency if left in such a state. Furthermore, the abrasive action of cement and grit will soon cause excessive wear in open bearing surfaces.

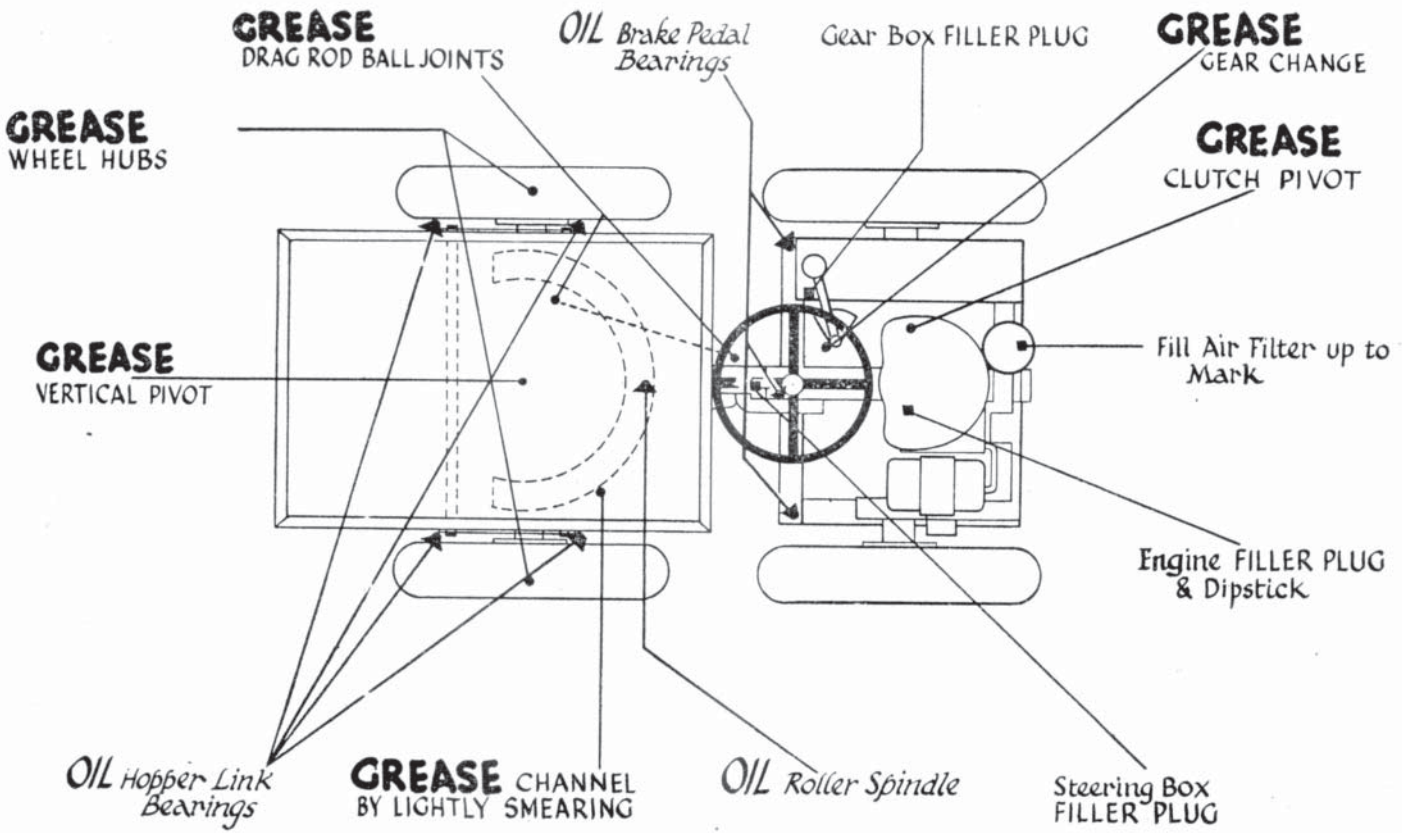
After having cleaned the dumper the following maintenance should be undertaken :

(a) Check oil level in the engine **daily.**
(b) Grease the dumper with the grease gun provided at all the greasing points shown on the chart on page 4.
(c) Check oil level in steering box.
(d) Check oil level in the gearbox.
(e) Oil at all oiling points shown on the chart on Page 4.
(f) Wipe over any moving surfaces such as brake adjusters, track rods, etc., with an oily rag to ensure easy removal of dirt at next cleaning down.

At six-monthly intervals, or more frequently if the dumper is subjected to very heavy work, the entire machine should be serviced and checked by one of our own skilled service mechanics.

GENERAL ARRANGEMENT



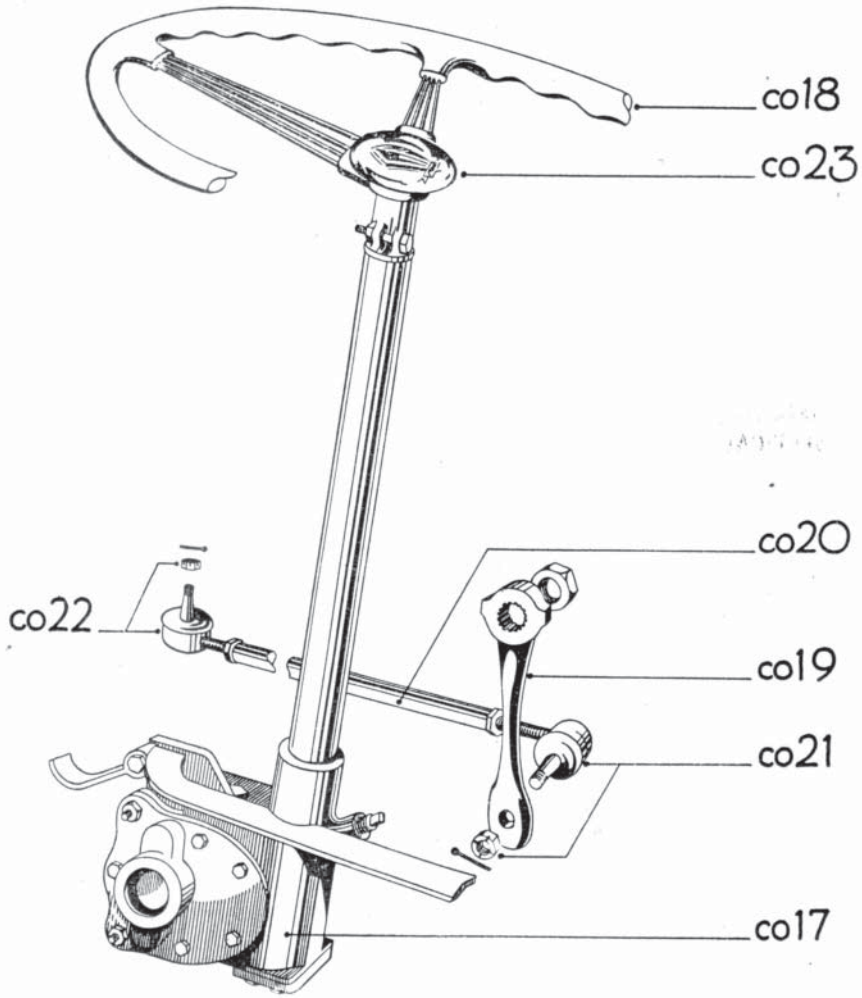


OILING & GREASING CHART

SPARE PARTS

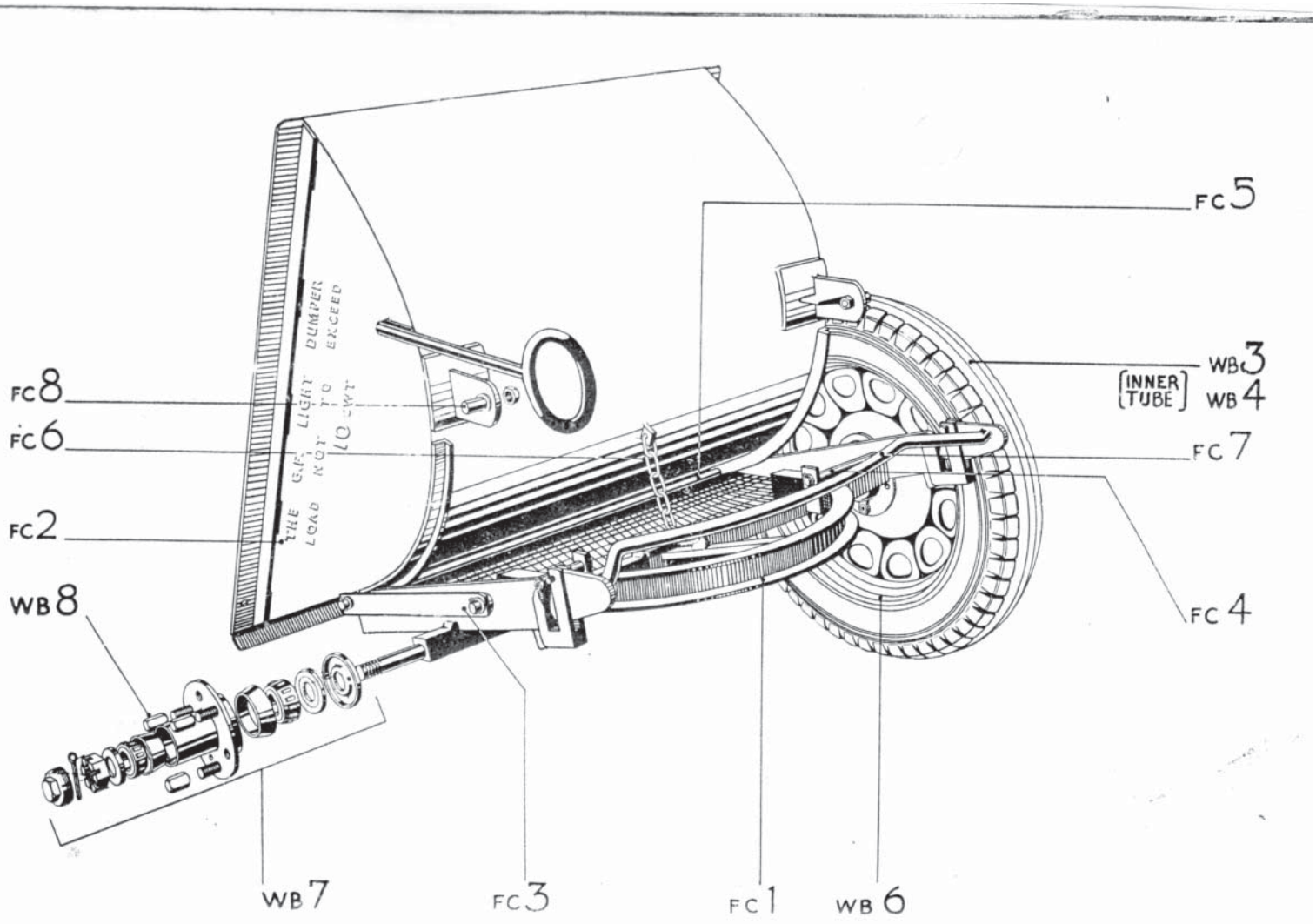
STEERING COLUMN

Part No.	No. off	ITEM
CO.17	1	Steering Box and Column
CO.18	1	Steering Hand Wheel (Ancillary $1\frac{1}{4}$" × $\frac{5}{16}$" Nut and Bolt. Washer)
CO.19	1	Steering Drop Arm
CO.20	1	Steering Drag Rod. R.H. and L.H. thread
CO.21		Steering Ball Joints and Nuts, R.H. thread (Ancillary, Split Pin 1" × $\frac{3}{32}$" dia.)
CO.22		Steering Ball Joints and Nuts, L.H. thread (Ancillary Split Pin 1" × $\frac{3}{32}$" dia.)
CO.23		G.F. Chrome Plate



FORECARRIAGE AND FRONT WHEELS

Part No.	No. off	ITEM	ANCILLARY
F.C.1	1	Forecarriage complete	Nut, Split Pin, Dust Cap
F.C.2	1	Hopper	
F.C.3	2	Hopper Links	
F.C.4	2	„ Link Pivot	4 — $\frac{3}{4}$″ Washers. 4 — 2″ × $\frac{5}{16}$″ Split Pin
F.C.5	1	„ Pivot Bar	2 — $\frac{3}{4}$″ Washers. 2 — 2″ × $\frac{3}{16}$″ „ „
F.C.6	1	15 Link Chain	2 — 1″ × $\frac{3}{8}$″ Bolts, Nuts and Washers
F.C.7	1	Tipping Bar	2 — 1″ × $\frac{3}{8}$″ „ „ „ „
F.C.8	2	Hopper Catch Pin	1 — $\frac{3}{4}$″ B.S.F. Nut and Washer
W.B.3	2	Front Covers, Forecarriage	
W.B.4	2	„ Inner Tubes, „	
W.B.6	2	„ Wheels	
W.B.7	2	„ Hubs complete, Forecarriage	
W.B.8	6	„ Wheel Nuts, Forecarriage	
F.C.		Timkin Taper Bearing Small	
F.C.		„ „ „ Large	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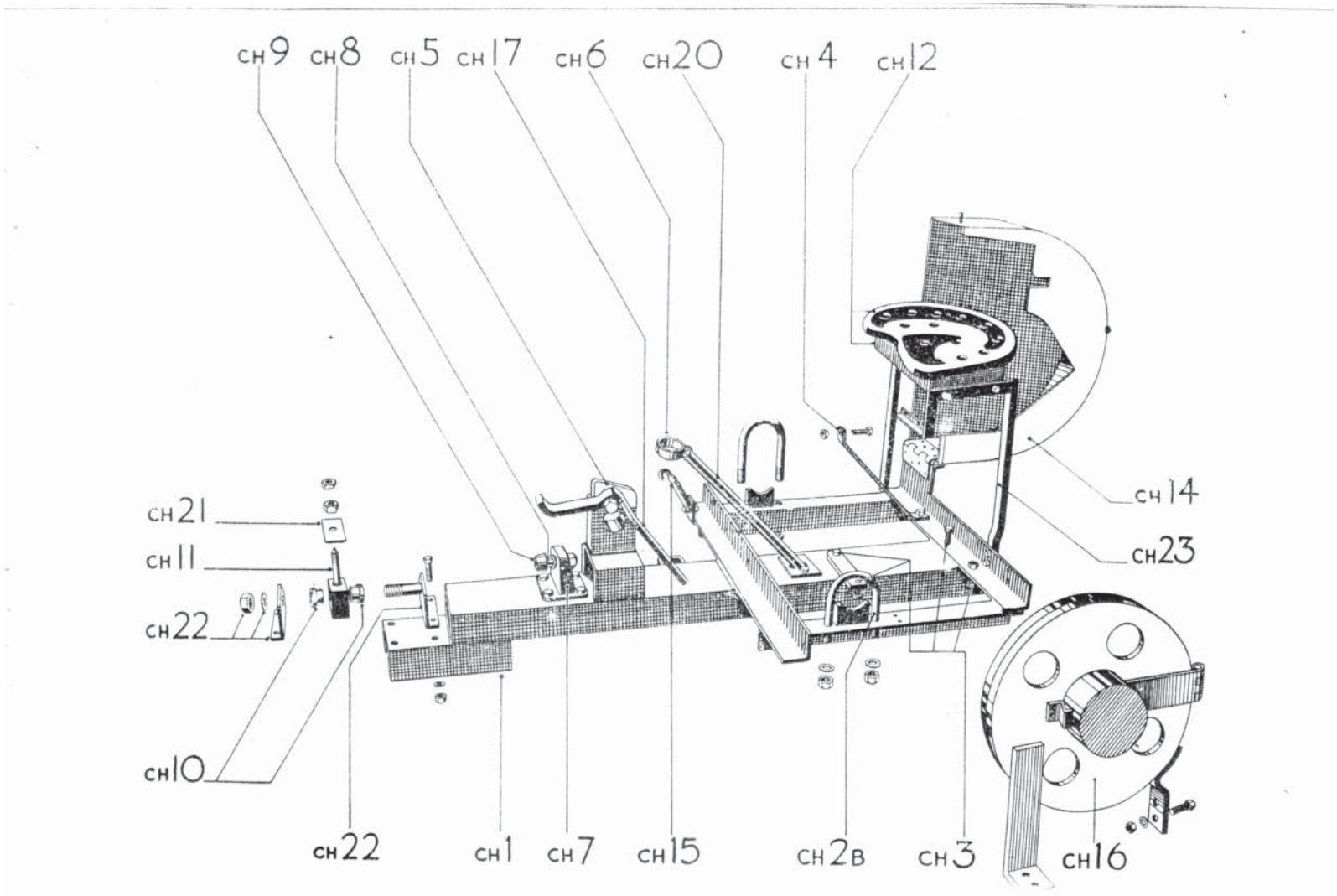
FC 3
FC 1
WB 6
THE G.E. LIGHT DUMPER
LOAD NOT TO EXCEED
10 CWT

SPARE PARTS

CHASSIS

Part No.	No. off	ITEM	ANCILLARY
C.H. 1	1	Chassis Main Frame	1 — 4″ × ¾″ dia. Bolt
C.H. 2	2	" U " Bolts, ¾″ dia.	4 — ¾″ dia. Nuts and Washers
C.H. 3	4	2 — 1¾″ × ½″ B.S.F. and 2 — 2″ × ½″ B.S.F. Bolts, Nuts and Washers, Engine Mounting	
C.H. 4	1	Gearbox stay	1 — ¾″ × ½″ Set pin and Washer 1 — 1¼″ × ½″ dia. Bolt, Nut and Washer
C.H. 5	1	Top half Steering Box Clamp	2 — 2½″ × ½″ dia. Bolts, Nuts and Washers
C.H. 6	1	Steering Column Clip	2 — 1″ × ⅜″ dia. Bolts, Nuts and Washers
C.H. 7	1	Steady Roller Bracket	4 — 1¼″ × ½″ dia. Bolts, Nuts and Washers
C.H. 8	1	" " Pin	1 — ¾″ Nut and Washer
C.H. 9	1	Steady Roller	
C.H.10	2	Harrisflex Bearings	
C.H.11	1	Front Vertical Pivot	1 — ¾″ Nut and Locknut
C.H.12	1	Seat and Tool Box combined	1 — 1″ × ⅜″ dia. Nut, Bolt and Washer
C.H.13	1	Tool Box Lock	
C.H.14	1	Belt Guard	4 — ¾″ × ¼″ dia. Nut, Bolt and Washer
C.H.15	1	Guard Spring Clip	1 — 1″ × ½″ dia. Nut, Bolt and Washer
C.H.16	1	Flywheel Guard complete	4 — 5/16″ × ¾″ dia. Bolts, Nuts and Washers
C.H.17	1	Tipping Pedal	1 — 2¾″ × ¾″ dia. Whitworth Bolt and Nut
C.H.18	1	Name and Instruction Plate	
C.H.19	2	Square Holed Washer	
C.H.20	1	Steering Column Stay	2 — 1″ × ⅜″ dia. Bolts, Nuts and Washers
C.H.21	1	Grease Plate	
C.H.22	1	Horizontal Pivot and Bracket	1 — ¾″ dia. B.S.F. Nut and Locking Washer 4 — 1″ × ½″ dia. Bolts, Nuts and Washers
C.H.23		Seat and Tool Box Bracket	4 — ¾″ × 5/16″ dia. Bolts, Nuts and Washers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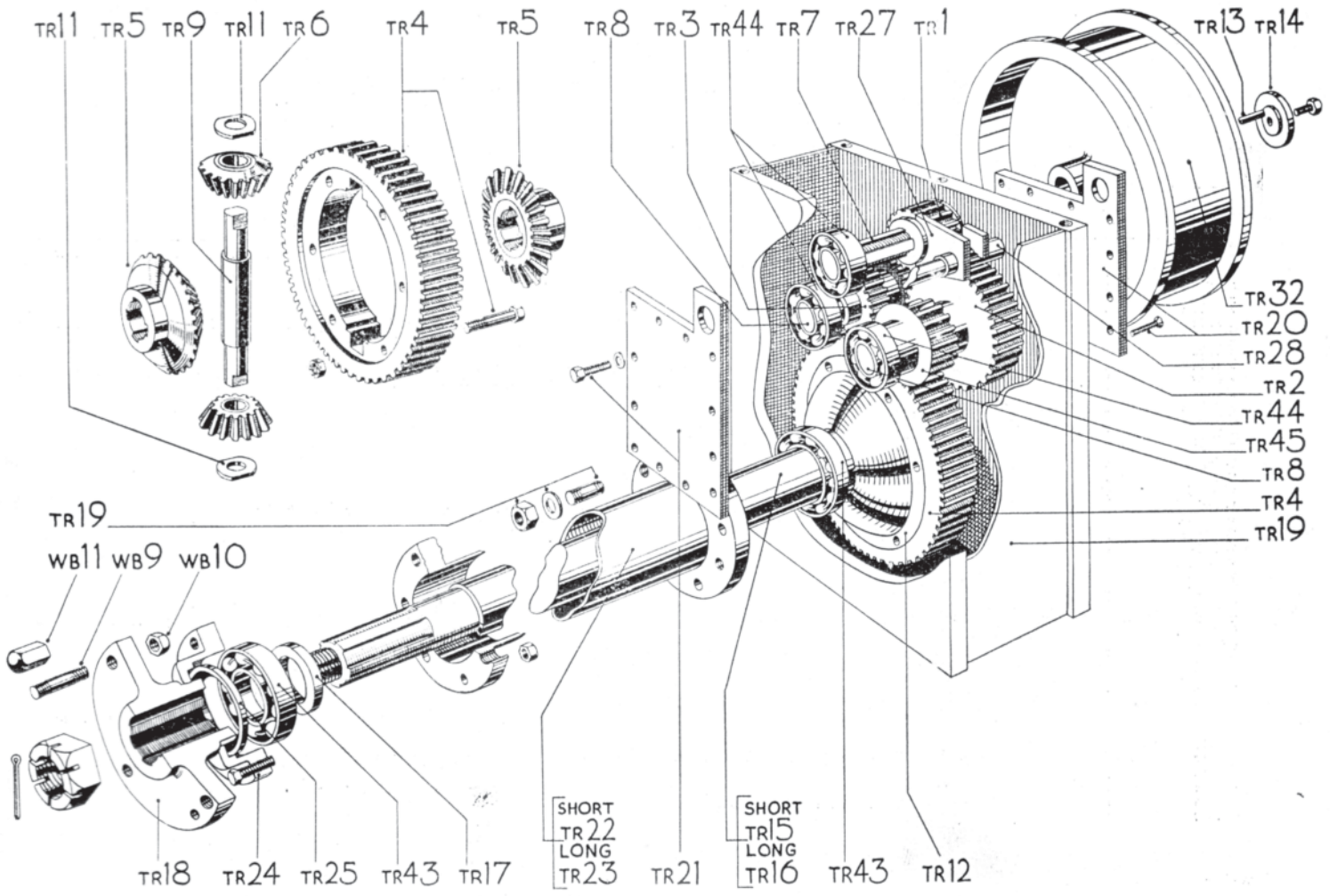
CH3
CH16

SPARE PARTS

GEARBOX

Part No.	No. off	ITEM	ANCILLARY
T.R. 1	1	1st Motion Pinion	
T.R. 2	1	2nd Motion Cluster	
T.R. 3	1	Reverse Motion Cluster	
T.R. 4	1	Final Drive Wheel	6 — 2″ × $\frac{5}{16}$″ dia. Bolts and Castle Nuts
T.R. 5	2	Diff. Bevel Wheel	
T.R. 6	2	Diff. Pinion and Phosphor Bronze Bush	
T.R. 7	1	1st Motion Spindle	$\frac{3}{8}$″ B.S.F. Set Screw, $\frac{3}{4}$″ long
T.R. 8	2	2nd and Rev. Motion Spindles	
T.R. 9	1	Diff. Spindle	
T.R.11	2	Diff. Pinion Washer, Phosphor Bronze	
T.R.12	2	Diff. Case (half)	
T.R.13	1	1st Motion Spindle Key	
T.R.14	1	" " Washer	
T.R.15	1	Final Drive, Half Shaft, Short	1″ dia. B.S.F. Nut, 1 Split Pin, $\frac{1}{16}$″ dia., 2″ long
T.R.16	1	" " " " Long	1″ dia. B.S.F. Nut, 1 Split Pin, $\frac{1}{16}$″ dia., 2″ long
T.R.17	2	" " " " Collar	
T.R.18	2	Rear Wheel Hub	
T.R.19	1	Gearbox Casing	12 — $\frac{1}{2}$″ B.S.F. Studs, $1\frac{3}{4}$″ long. 12 — $\frac{1}{2}$ B.S.F. Nuts. 12 — $\frac{1}{2}$″ S. Washers. $\frac{1}{4}$″ B.S.F. Plug (Oil Drain)
T.R.20	1	Gear Oil Retaining Plate, R.H. Pins	8 — $\frac{5}{16}$″ × $\frac{1}{4}$″ Set Pins and L. Washers. 4 — Csk. Set Pins
T.R.21	1	" " " " L.H. Pins	12 — $\frac{5}{16}$″ × $\frac{1}{4}$″ Set Pins and L. Washers
T.R.22	1	Half Shaft Casing, Short	
T.R.23	1	" " " " Long	
T.R.24	2	Wheel Bearing Housing	12 — $\frac{1}{2}$″ B.S.F. Bolts, $1\frac{1}{8}$″ long. 12 — $\frac{1}{2}$″ B.S.F. Nuts. 12 — $\frac{1}{2}$″ S. Washers
T.R.25	2	Rear Hub Oil Seal	
T.R.27	1	Gear Selector	
T.R.28	1	Gear Selector Spindle	
T.R.29	1	Engine Belt Pulley	
T.R.32	1	Belt Gear Box Pulley	
T.R.42	1	Engine Complete	
T.R.43	4	Bearings, Ball, $1\frac{3}{8}$″ × 3″ × $\frac{11}{16}$″	
T.R.44	6	" " $\frac{5}{8}$″ × $2\frac{1}{4}$″ × $\frac{11}{16}$″	
T.R.45	1	Oil Throwing Washer on 2nd Motion Cluster	
T.R.46	1	Filler Bend and Plug	
T.R.47	2	Tank Clips	
T.R.48	1	Tank Bracket	
W.B. 9	10	Rear Wheel Bolts	
W.B.10	10	" " Locknuts	
W.B.11	10	" " Nuts	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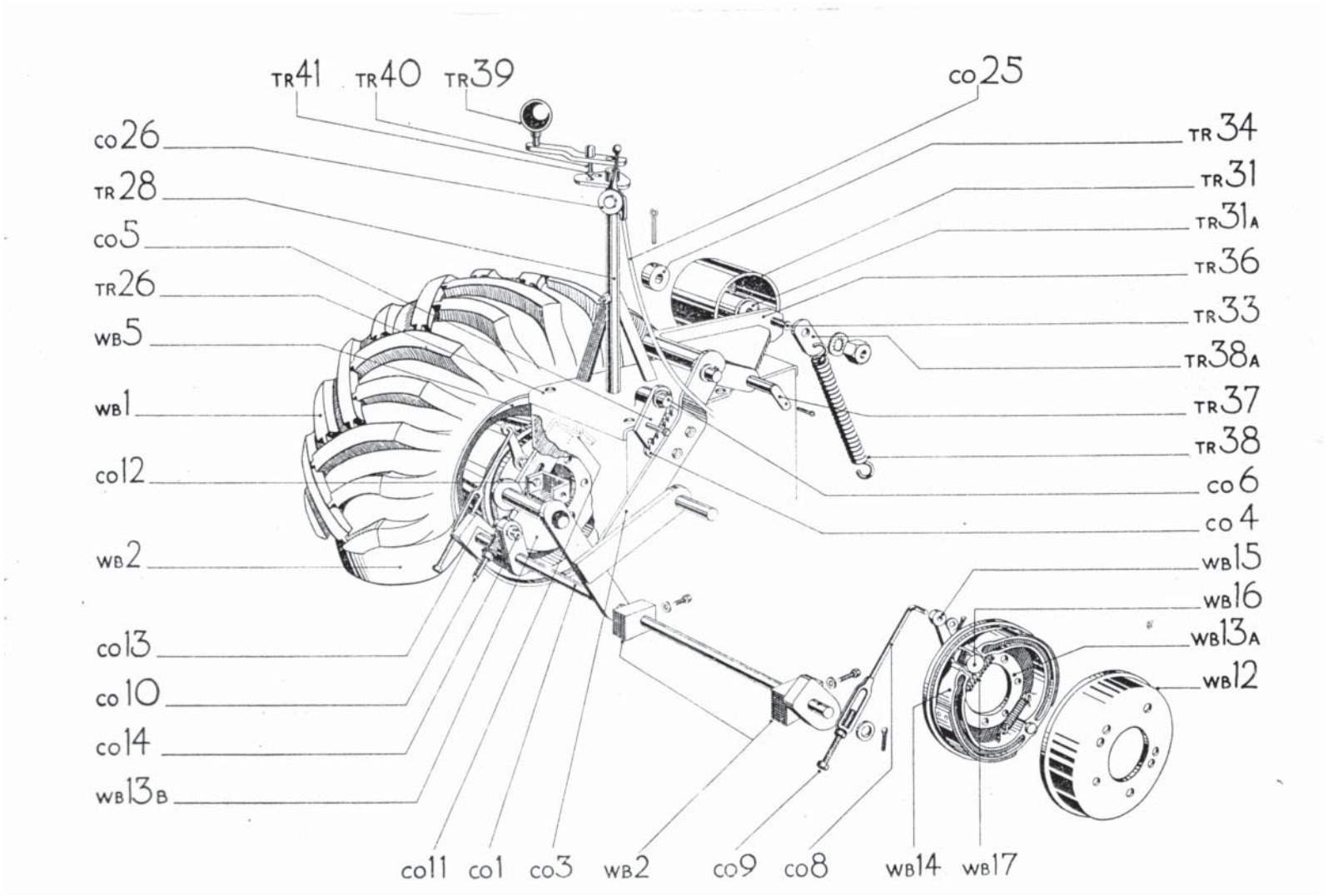
TR16
TR43
TR12

WHEELS and BRAKES

Part No.	No. off	ITEMS	ANCILLARY
T.R.26	1	Gearbox Lid	8 — 5/16" B.S.F. Set Screws, 1/2" long. 1 Zerk Nipple. 1 — 1/2" Washer and Split Pin, 1" × 1/16" dia.
T.R.30	1	Engine Belt Pulley Key	
T.R.31	1	Belt Jockey Pulley	
T.R.31A	2	Compo. Bearings, No. OTF.101	
T.R.33	1	Jockey Pulley Spindle	7/16" dia. × 5/8" long M.S. Snug Pin. 1/2" B.S.F. Nut. 1/2" S. Washer
T.R.34	1	" " Washer	1/16" dia. × 1 1/2" long Split Pin
T.R.35	1	Driving Belt	
T.R.36	1	Clutch Lever	1 Zerk Nipple
T.R.37	1	" " Pivot	1 Split Pin, 1" × 1/16"
T.R.38	1	Clutch Spring	
T.R.38A	1	" " Keep	
T.R.39	1	Gear Change Knob	
T.R.40	1	" " Spring	
T.R.41	1	" " Pawl	
W.B. 1	2	Rear Covers	
W.B. 2	2	" Inner Tubes	
W.B. 5	2	" Wheels	
W.B.12	2	Brake Drums	4 Set Screws, Csk. Head, 1/4" long, 1/8" dia.
W.B.13A	1	" Backing Plate, L.H.	
W.B.13B	1	" " " R.H.	
W.B.14	4	" Shoes	
W.B.15	2	" Levers	
W.B.16	2	" " Cam	
W.B.17	4	" Pull Off Springs	
C.O. 1	1	" Shaft and Pedal	3 — 1" × 3/32" dia. Split Pin. 3 — 1/8" Washers.
C.O. 2	3	" " Bearings	3 — 1/4" B.S.F. Set Screws, 3/8" long. 3 — 1/4" Locking Washers
C.O. 3	1	Clutch Link	
C.O. 4	1	" " Ratchet Plate, Fixing to Link	2 C.S. Set Screws, 1 1/4" long and Nuts
C.O. 5	1	" " Pawl	
C.O. 7	1	" " Bracket	
C.O. 8	2	Brake Rods	2 — 5/16" Washers. 2 — Split Pins, 1" × 1/16" dia.
C.O. 9	2	" " Pins and Nuts	
C.O.10	1	Clutch Brake	2 — 5/16" Nuts. 1 — 1" × 3/8" B.S.F. Bolt and Nut. 4 — 1/4" × 3/8" Rivets
C.O.11	1	" " Lining	
C.O.12	1	" " Bracket	1 — 3/4" × 3/8" Set Pin and L. Washer
C.O.13	1	" " Spring	
C.O.14	1	" " Pin	1 — 1/8" Washer and 1" × 3/32" dia. Split Pin
C.O.25	1	Throttle Control Cable complete	
C.O.26	1	" " Lever complete	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CO8
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WB17

SPARE PARTS

TOOLS & MISCELLANEOUS

Part No.	No. off	ITEM	ANCILLARY
T.O. 1	1	Starting Handle	
T.O. 2	1	Wheel Brace	
T.O. 3	1	$\frac{1}{4}$" × $\frac{3}{16}$" Whit. Open Ended Spanner	
T.O. 4	1	$\frac{1}{4}$" × $\frac{5}{16}$" B.S.F. " " "	
T.O. 6	1	$\frac{3}{4}$" × $\frac{5}{8}$" " " " "	
T.O. 7	1	$\frac{7}{16}$" × $\frac{5}{16}$" Box Spanner and Bar	
T.O. 8	1	Screwdriver	
T.O. 9	1	Instruction Book	
T.O.10	1	Grease Gun	

All correspondence relating to spares, repairs and maintenance should be sent to :

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WEST BROMWICH ROAD

WALSALL

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GEORGE FOWELL LTD., RABONE LANE, SMETHWICK.

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