WINGET

OPERATION, MAINTENANCE & SPARE PARTS

750R REVERSING DRUM MIXER

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WINGET

REVERSING DRUM MIXER

750R

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Construction Equipment Division

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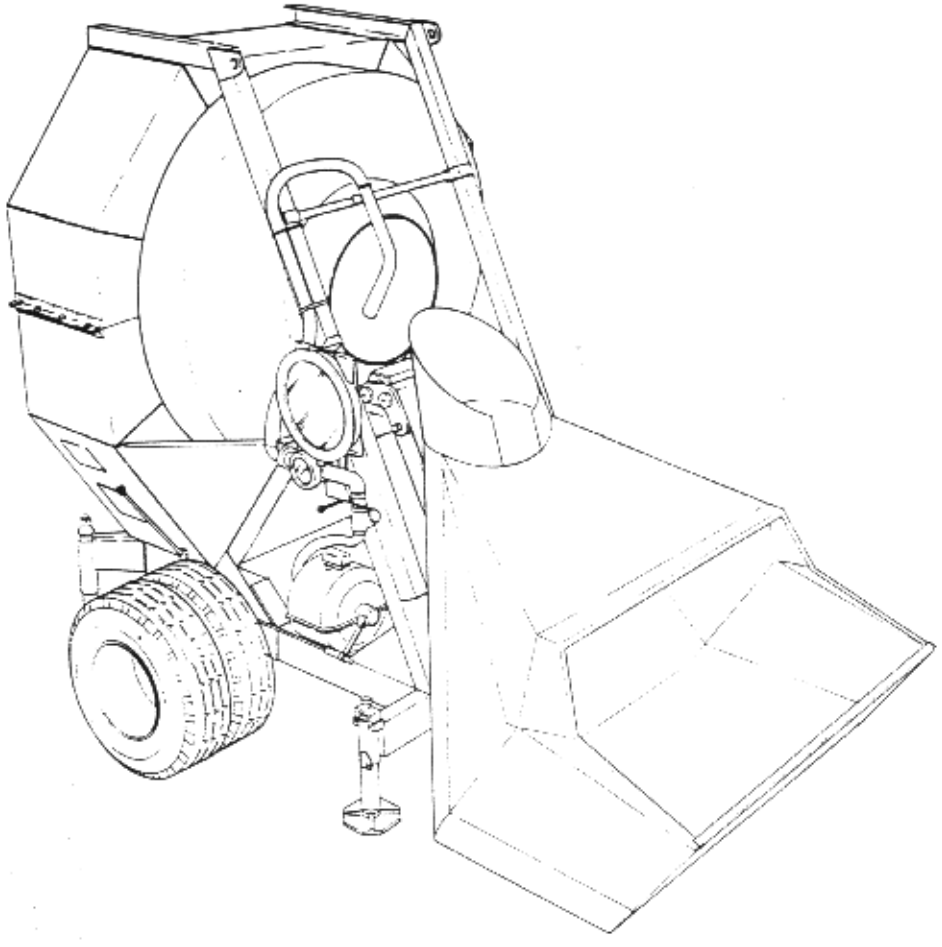

750R

Spare Parts, Operation & Maintenance Manual

Introduction

The operating instructions and maintenance recommendations contained in this book will enable you to become familiar with your mixer to obtain the best results in the shortest possible time.

The life and trouble free running of your machine depends largely on the care it receives. It is your responsibility to ensure that the maintenance instructions outlined in this book are carried out.

When replacements are required, it is essential that only genuine parts are used and that any repair or servicing work carried out is by competent mechanics.

Winget Ltd.

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GUARANTEE

The Company will supply free of charge to any destination in the British Isles named in the tender, or F.O.B.British Port in the case of goods situated abroad, any part or parts which, under normal use and service, appears, to the Company's satisfaction, to have been at the time of delivery defective indesign, workmanship or material, or at its discretion, the Company will repair such parts, provided it is notified thereof within twelve months or 2,000 working hours from the data of delivery (whichever shall be the earlier) or, where the Company is responsible for erection, within twelve months from the data on which the customer is notified that any plant or machinery is ready for starting up provided that:

a) Written notice is given to the Company within seven days of the discovery of the defect.

b) Unless otherwise agreed, the alleged defective part or parts are returned to the Company's works, carriage paid, and its inspection establishes the claim. Replaced parts shall become the property of the Company.

c) No part which is not of the Company's manufacture has been fittad, otherwise than by it or on its behalf, with its writtan approval.

d) No unauthorised alteration or modification has been made to the machine or component the subject of the claim.

In no case shall the Company be responsible for the cost of fitting replacement parts.

Machine parts or components sold by the Company but not of its manufacture are subject to the Guarantee contained herein or such guarantee as is provided by the makers thereof where such guarantee is less than the Guarantee herein contained.

The obligation to repair or replace defective goods herein shall constitute the sole and total liability of the Company whether arising under contract negligence or otherwise for such defective goods or for any loss, damage or injury to any person or any property arising from the defective goods.

This Guarantee is extracted from the Company's standard conditions of sale.

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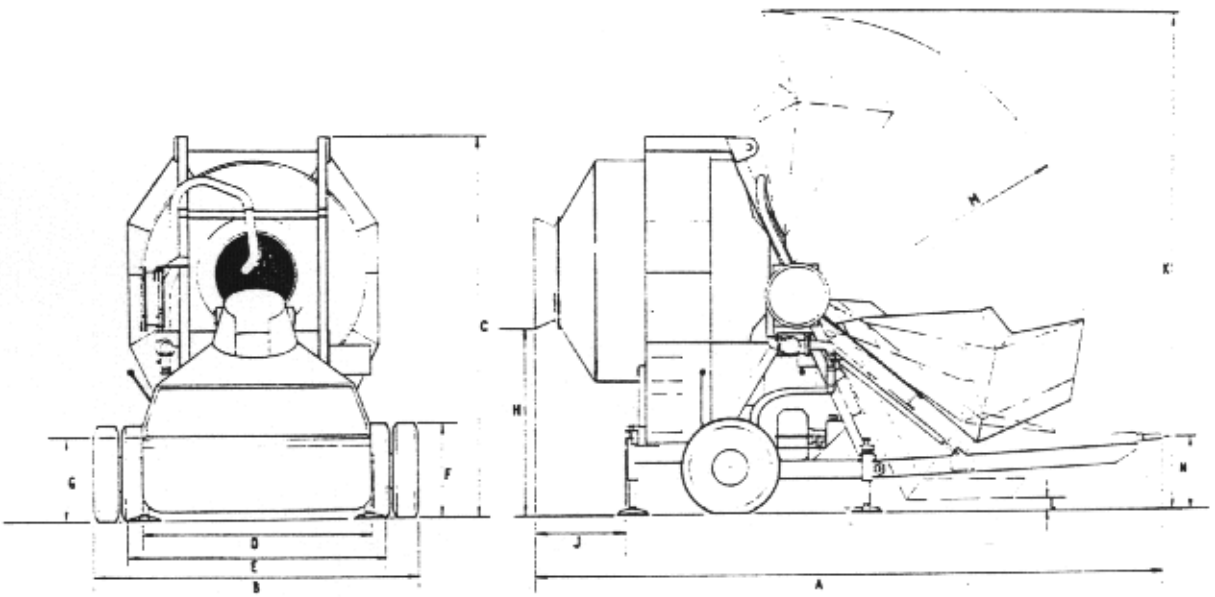

DIMENSIONAL DIAGRAM

A	5147 16'-10"	5515 18'-1"
B	2465 8'-1"	2465 8'-1"
C	3099 10'-2"	3099 10'-2"
D	1880 6'-2"	1880 6'-2"
E	2120 6'-11½"	2120 6'-11½"
F	777 2'-6½"	777 2'-6½"
G	663 2'-2"	663 2'-2"

H	1542 5'-½"	1542 5'-½"
J	460 1'-6"	828 2'-8½"
K	3800 12'-5½"	4100 13'-5½"
L	65 2½"	65 2½"
M	2150 7'-6"	2475 8'-1½"
N	608 - 862 2'-0" - 2'-10"	608 - 862 2'-0" - 2'-10"

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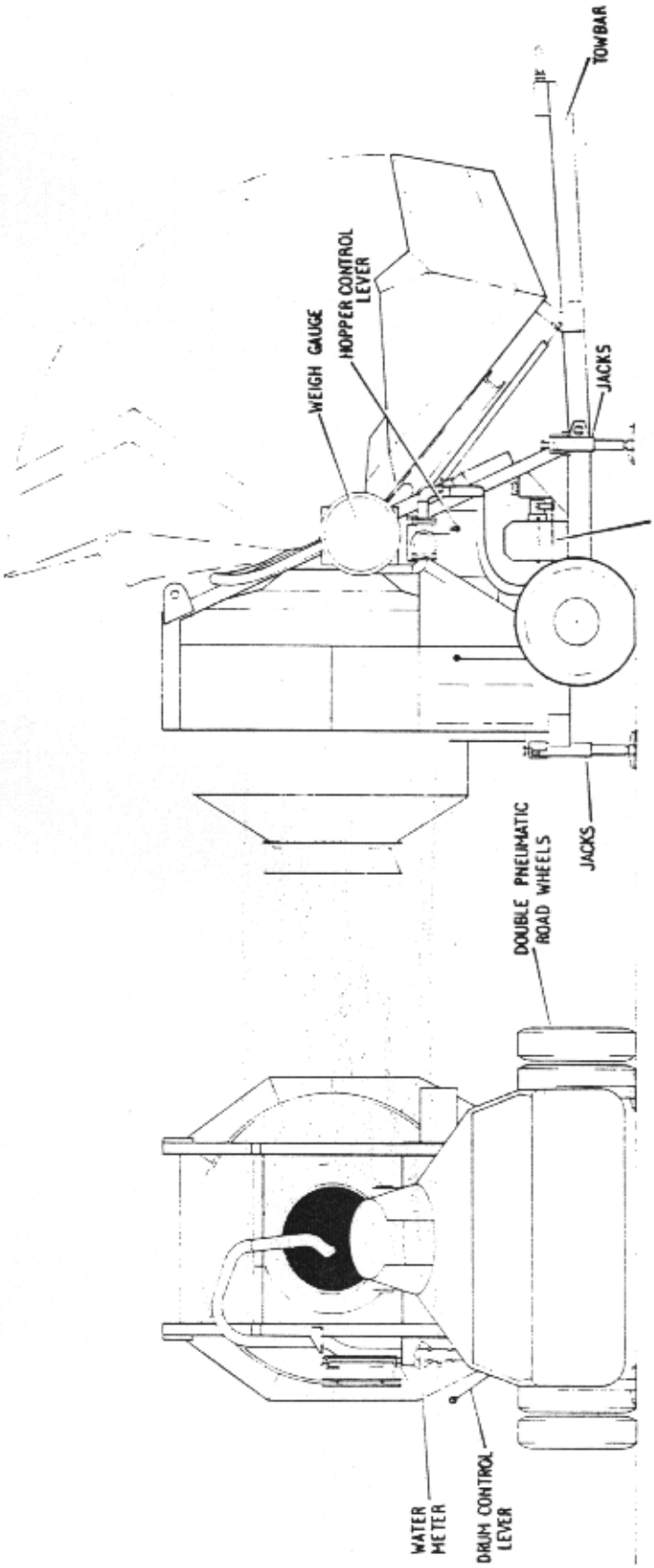


GENERAL ARRANGEMENT

TRANSPORTATION OF MIXER

When in transit the hopper of your mixer rests on a wooden block bolted to the tie bar bracket which is situated on the towbar. To prepare your mixer for transportation the hopper must first be raised and secured with safety chain. Then the towbar must be brought into position of location centrally in hopper end of mainframe and the towbar attachment pin inserted, fixed with nut and towbar washer. Next add a nut and locknut to the end of each tie bar and screw on as far as possible. Now locate the tie bars in position on the drum housing supports and fix loosely with hex head bolts, binx nuts and plain washers. Place the spherical washer and spherical seating onto the unfixed ends of the tie bars, behind the nuts and locknuts already positioned. Now raise the towbar and insert both tie bars through the holes in the tie bar bracket. Add the second set of spherical washers and seatings to the tie bars under the bracket, screw on nut and locknut until required towing height is attained. Then screw down nuts and locknuts above bracket hard against seatings and washers until towbar is locked firmly into position and tighten fixings for tie bars at drum housing supports. Now lower the hopper so it rests against wooden block on the tie bar bracket. Raise all four jacks and release hand brake. Your mixer is now ready for transportation.

TYRE PRESSURE

Check pneumatic tyre pressure regularly and set at 4.22 Kg./Cm^2 (60 p.s.i.).

INSTALLING YOUR MIXER ON SITE

a) Site your mixer on reasonably level ground. Lower all four jacks and apply hand brake. Check, using a spirit level, along and across the weighing links to ensure your mixer is perfectly level. It is necessary that the mixer be level if accurate weighing is to be achieved.

b) Study carefully the Engine Instructions Handbook, before any attempt is made to use the mixer. Check the amount of fuel in fuel tank and especially the level of the lubricating oil in the engine sump. The covers of this machine provide ample ventilation, so keep them in place (see section "Tilted Drive Unit"). If water pump is fitted ensure water supply is connected before starting engine. Pump must NOT be run dry.

c) Make sure drum control lever is positioned midway between Mix and Discharge. Start engine and raise hopper by means of hopper control lever. When hopper is fully raised secure with safety chain situated on near side drum housing support. Remove the tie bars and towbar by reversing procedure described previously (Transportation of Mixer). When tow gear is removed release safety chain and lower hopper.

d) There must be at least 65mm (2.1/2") clearance between the ground and base of hopper when the loadcell striker is resting on the loadcell striker guide.

e) Check level of hydraulic oil in header tank whilst hopper is down. Oil should be visible, but no more than 12mm (1/2") up from bottom of filler.

f) Do NOT walk, stand or lean under raised hopper unless it is securely chained.

DRIVE UNIT

If a diesel engine is fitted to your mixer, read carefully the Manufacturers Operating and Maintenance Manual, a copy of which is supplied with this machine.

If an electric drive is used, the motor must be connected to run in an anti-clockwise direction when viewed from control side of mixer.

When starting up the power unit, the drum control lever must be midway between Mix and Discharge positions.

MIXER CONTROLS

The hydraulic control valve for operating the hopper is located on the left-hand side of the mixer looking from the direction of the hopper.

To raise the hopper move the control lever upwards as far as possible and hold it there until hopper is fully up. Loaded hopper must not be dropped onto load-cell as this will cause damage to the weighing mechanism. Do NOT hold control in raise position with the hopper up for more than a few seconds or overheating and loss of efficiency will result.

To lower hopper push the control lever downwards, releasing the lever will check the descent of the hopper as necessary.

DRUM OPERATION

The control lever must be positioned midway between Mix and Discharge positions, for engine starting. The control lever locks in the two extreme positions, being moved fully towards loading and discharge ends of mixer for mix and discharge respectively. These two positions are clearly marked on the mixer.

BATCH WEIGHER

The weigher gauge is mounted on the left-hand side of the mixer when facing the hopper and is connected by hydraulic piping to the loadcell mounted on the front/centre of Mainframe.

Hydraulic circuit is primed and sealed on leaving the Works, and on no account should it be tampered with.

The gauge is calibrated from 0-1200 Kgs. (0-2600 lbs.) and 0-1800 Kgs. (0-4000 lbs.) for 500R and 750R respectively. This gives accurate indication of batch weights. The adjustable coloured pointers mounted on the rim of the gauge can be set by the Operator, to the aggregate proportions required. A protective covering is provided for the gauge box to prevent damage when not in use. It is important that the mixer is standing firm and level and that there is at least 65mm (2.1/2") between the ground and base of hopper at all times. If aggregate is allowed to build up around the weigh links an inaccurate gauge reading will be obtained.

NORMAL OPERATION

Set the pointers on the gauge to the aggregate proportions you require, with the engine running lower the hopper slowly onto the loadcell. Hold the control lever fully down for a few seconds until the gauge pointer begins to move to 'zero' then release. The hopper is now ready to load.

If you cannot obtain a 'zero' reading adjust the gauge as shown in the following paragraph.

TO 'ZERO' THE WEIGH GAUGE

With the mixer engine running proceed as follows:-

a) Lower the hopper onto the loadcell as previously described.

b) Check the hopper is clear of the ground.

c) Taking care not to stand on any part of the hopper or weigh links, adjust knurled knob on side of gauge and set the pointer to 'zero'.

d) Repeat raising and lowering the hopper for three or four times to check that you have obtained a consistent 'zero'.

BEFORE STARTING UP

a) Read carefully the Engine Manufacturer's Handbook supplied with the Mixer. Check the level of fuel in tank and especially the level of oil in engine sump.

The covers of this machine provide ample ventilation so keep them closed.

b) With hopper down check level of hydraulic oil in header tank.

c) Connect the water supply to bottom of 'Y' type strainer or if pump is fitted to the hose connector under the pump at base of mainframe.

d) Check that drum control lever is situated midway between Mix and Discharge positions.

CHARGING

Set drum control lever to mix position and the water flow meter to 'zero'. Materials should be loaded into hopper in the following order:-

1) Gravel
2) Cement
3) Sand

Raise the hopper and at the same time open the valve allowing the water to flow through the meter. It is necessary that all materials enter the mixing drum simultaneously. When the correct amount of water has registered on the meter shut off the valve, lower hopper and load for next batch.

Never allow machine to be overloaded.

DISCHARGING

Allow at least 1.1/2 minutes from the instant at which dry materials entered the drum. Discharge may now commence by moving the drum control lever smoothly from charge to discharge position.

WHEN MIXING IS FINISHED

a) Empty and clean out mixing drum with plenty of water.

b) Clean out hopper.

c) Disconnect water supply and drain off whole water system.

d) Raise hopper and fix safety chain.

e) Stop engine or electric motor.

f) Wash down outside of motor.

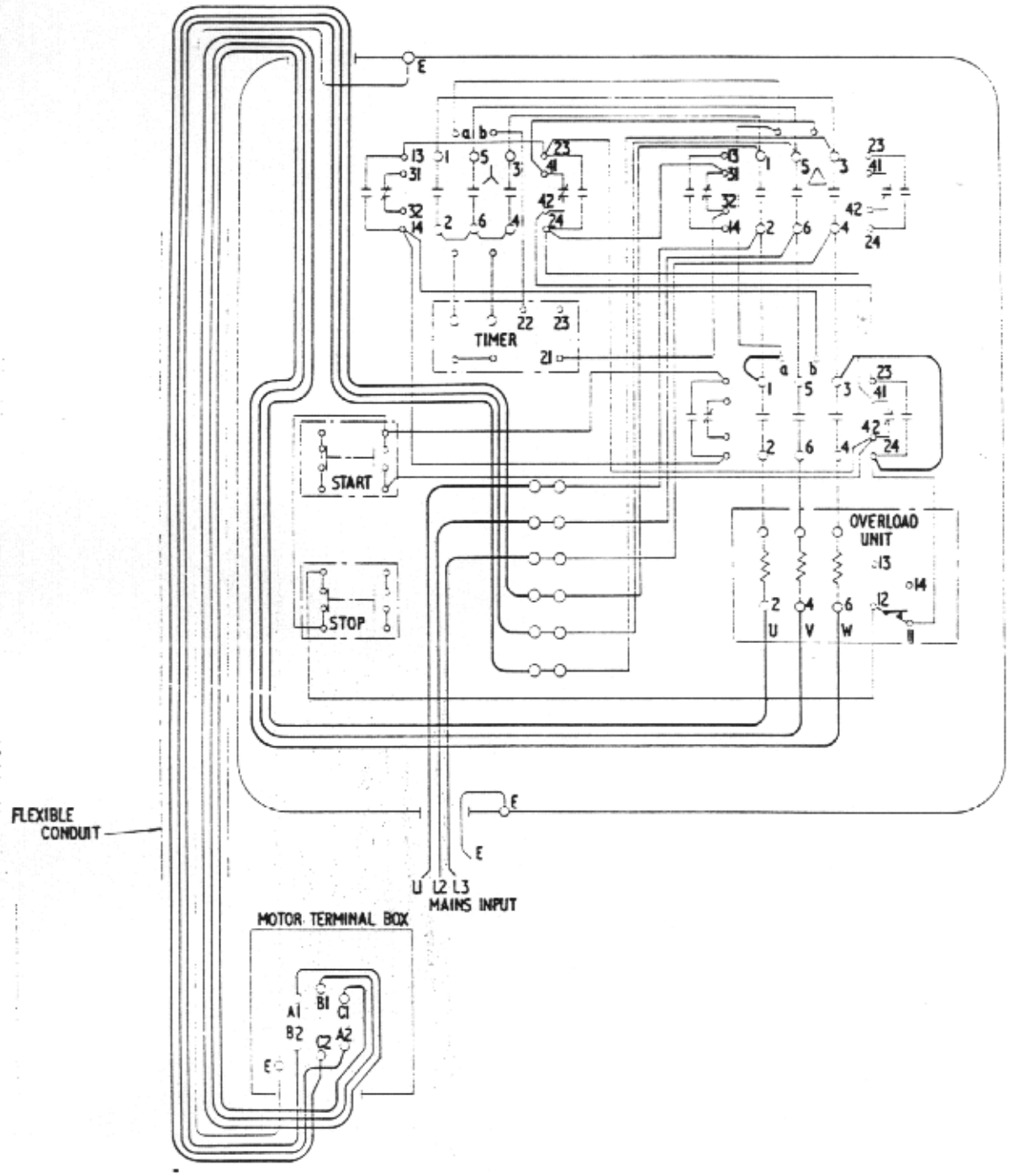
g) Grease machine for next days work.

ELECTRICS

500R - Mains input is connected into starter through 1" inlet in bottom left-hand side of starter, using 4mm cable.

750R - Mains input is connected into starter through 1.1/2" inlet in bottom left-hand side of starting, using 6mm cable.

NOTE: If there is an electrical failure it is essential that it is dealt with by a competent Electrician.



750R Wiring Diagram

LUBRICATION

GENERAL

All shafts and bearings needing daily attention are lubricated through drilled shafts and special grease ways, by fitting grease nipples. The lubrication diagrams will give you the location of these grease nipples, grease using gun charged with a good quality medium grease (Shell Alvania R.A).

It is essential that Operator's do not allow grease or oil used for servicing to become contaminated with sand or cement dust. At weekly intervals a little engine oil should be applied to pin joints on clutch lever linkage etc.

TRANSMISSION

Keep the oil level in the gearbox up to the top of level pipe. Add clean oil either through the level pipe or plug on top of the gearbox. Clean round these points before removing plugs.

Shell Vitrea 41 or any good quality SAE 30 oil may be used in the gearbox. The level in the chain case must be kept to level of filler plug, on the side of the case. Use any good quality SAE 30 oil. Lubricators are fitted to propellor shaft and should be greased as indicated on servicing schedule.

DRUM CLUTCH ADJUSTMENT

When the drum clutch shows a tendancy to slip, adjust as follows:-

Set drum control lever to 'MIX' position and rotate nut, behind small sliding gland, so that the gland protrudes 3mm (1/8") beyond clevis pin assembly, then lock into position with locknut provided. Repeat this operation with drum control lever in 'DISCHARGE' position, to allow 3mm (1/8") of long sliding gland to protrude beyond end of clevis pin assembly. Lock into position with locknut provided.

ADJUSTMENT TO DRIVE CHAIN

On no account must chain be over-tightened, undue tightness will cause excessive strain, vibrations and considerable wear. The chain is adjusted by slackening the bolts holding the adjustable bearing bracket and turning adjusting screw until chain reaches required tension. Access to make adjustments is obtained by removing cover. Re-tighten bracket bolts and locknut on adjusting screw. The chain tension can be inspected through the aperture in the chain cover, first removing inspection cover plate.

ADJUSTMENT OF DRUM EDGE ROLLERS

These should be set to allow up to 1.5mm (1/16") total clearance from drum track. It is essential the rollers should not be set light, as this would result in overloading of the bearings. Fixing screws must be wire locked after fixing.

HYDRAULIC SYSTEM HEADER TANK

Ensure that the hopper is fully down and the engine stopped. Top up as necessary with oil of recommended grade, do not mix different grades of oil and clean around filler cap before removal. This is located inside the mainframe opposite the engine. Once a week check that the oil level in the tank is visible, but no more than 12mm (1/2") up from bottom of the filter.

FILLING FILTER REMOVAL

The tank is provided with a cylindrical filter for hydraulic oil when filling or topping up the system. This filter is combined with a breather unit which is incorporated in the filter cap. The filter should be removed once every three months for inspection. This can be carried out without draining the tank as follows:-

a) Clean the top of the tank and remove the filter cap breather unit.

b) Unscrew the six self-tapping screws securing the filter to the tank.

c) Remove filter. Cover the opening with a clean rag whilst filter is removed.

d) Thoroughly clean the filter in petrol, and air dry well before re-assembly.

e) Remove rag and replace filter and self-tapping screws.

f) Top up with oil if necessary and replace cap/breather unit.

CLEANING BREATHER UNIT

The breather in the cap on top of the filling filter should be washed in petrol every month and air dried thoroughly before refitting. Keep opening in tank covered with clean rag while cleaning breather unit.

CLEANING SUCTION FILTER

The suction filter is located at the bottom of the hydraulic tank, this should be removed and cleaned in petrol only when carrying out a complete machine overhaul.

DISMANTLING SYSTEM

Do not remove or expose any part of hydraulic gear in the event of a breakdown unless instructed to do so. Remember you have a 'Winget Service Depot' near you which is always ready and willing to help.

RECOMMENDED OILS

The capacity of the system is approximately 41 litres (9 gallons) and is filled at the Works with Shell Tellus 29 for use in temperatures up to 90°F or Tellus 33 for use in temperatures over 90°F. The particular grade used is shown on a label attached to the top of the header tank.

BATCH WEIGHER

To ensure maximum efficiency, keep the weighing mechanism as clean as possible, avoid build-up of materials around link pivots. Do not allow aggregate to accumulate on the ground under the hopper.

SPECIAL NOTE:

ON NO ACCOUNT MUST THE LOADCELL BE DISCONNECTED FROM THE WEIGH DIAL. NO RESPONSIBILITY WILL BE TAKEN IF THE LEAD SEALS WHICH ARE ATTACHED TO THE PIPE UNIONS ARE BROKEN.

LUBRICATION

Grease nipples provided are shown in lubrication diagram. The greasing of these points should be part of your daily service.

DRIVE ALIGNMENT

Alignment of motor dirve shaft and reversing box must be within 0.4mm (1/64").

GENERAL MAINTENANCE

Keep the mixer clean.

Check the tightness of all bolts, nuts, keys, etc. from time to time. Especially during the first few weeks of operation.

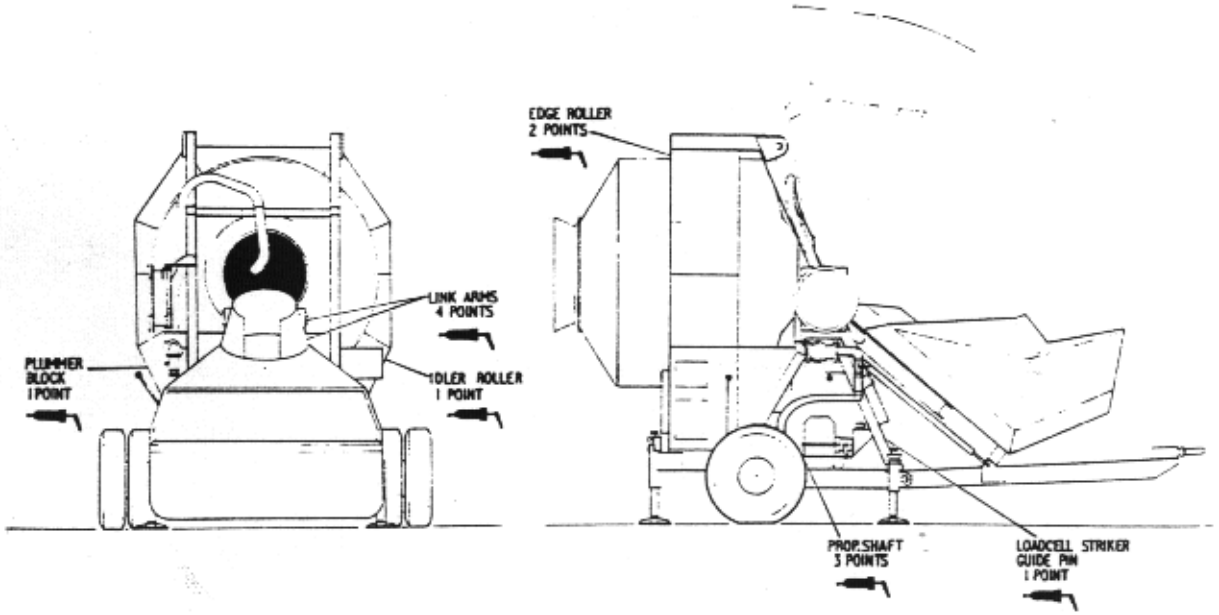
Particular attention must be paid to the engine fixing bolts.

Clean top of header tank before removing filler cap or filter. Add oil of recommended grade only, through the filter provided.

Disconnect and drain water system after use.

Lubricate all working parts each night ready for next days working.

Remove Export packing blocks (if fitted) from jack feet before using machine.



LUBRICATION DIAGRAM

SERVICING SCHEDULE	
DAILY	
MIXER	Lubricate daily through grease nipples using a good quality medium grease. Alvania Grease RA is used at Works - See Lubrication Diagram. Thoroughly clean out drum when mixing is finished with water and gravel. Wash out hopper and hose down mixer. Keep access doors and panels closed.
ENGINE SUMP LUBRICATION FUEL TANK	See Engine Handbook

NOTE: IT IS IN THE USERS OWN INTEREST TO MAINTAIN ENGINE AIR, LUBRICATING OIL AND FUEL FILTERS AT THE MANUFACTURER'S RECOMMENDED INTERVALS. TOPPING UP WITH CLEAN OIL AND FUEL FROM CLEAN CONTAINERS AS NECESSARY. RUNNING THE ENGINE WITH DEFECTIVE AIR OR OIL FILTERS WILL RESULT IN RAPID WEAR, HIGH RUNNING COSTS AND LOSS OF RELIABILITY.

WEEKLY	
DRIVE CHAIN	Check tension, adjust if necessary as described in previous text. Check and top up chain case using Shell Vitrea 41.
HYDRAULIC HEADER TANK	Clean top of tank - Remove filler cap and check level Check with hopper down and engine stopped.
GENERAL	Apply a little engine oil to pin joints and axle pivots etc. Check two screws on hydraulic valve (hopper)
MONTHLY	
BREATHER FILTER ON HYDRAULIC TANK	Remove breather filter and rinse in clean petrol, air dry thoroughly before refitting. Cover hole with clean rag whilst filter is withdrawn.
THREE MONTHLY	
GEAR RING AND ROLLER TRACK	Lubricate with Shell Cardium 'D' compound.
HYDRAULIC HEADER TANK FILTER	Remove clean and inspect (see tex "Cleaning Suction Filter").
SIX MONTHLY	
BREATHER FILTER ON HYDRAULIC TANK	Renew breather filter.
GEARBOX	Drain and refill with recommended oil.

EQUIVALENT GRADES OF OIL				
APPLICATION		Reversing Box	Enclosed Drive Chain	Open Gears and Roller Track
	Shell B.P. Esso Mobil Castrol	Vitrea 41 Energol CS150 Esstic 65 Mobilgear 629 Magna XH	Vitrea 41 Energol CS150 Esstic 65 Mobilgear 629 Magna XH	Cardium Fluid D Energol BL450/2 Surret N850 Mobil Tac E Grippa 605
APPLICATION		Hydraulic Systems Up To 90°F	Hydraulic Systems Above 90°F	Grease Points
	Shell B.P. Esso Mobil Castrol	Tellus Oil 29 Energol HLP 80 Nuto H44 Mobil D.T.E. 25 Hyspin AWS 32	Tellus Oil 33 Energol HLP 100 Nuto H54 Mobil D.T.E. 26 Hyspin AWS 68	Alvania Grease RA Energrease LS2 Beacon 2 Mobilplex 47 Spheerol APT 2

NOTE: In the above we list the lubricant specifications as recommended by various companies. These are intended as a guide only and should your site conditions be in any way abnormal your local oil Supplier should be consulted.

Spares

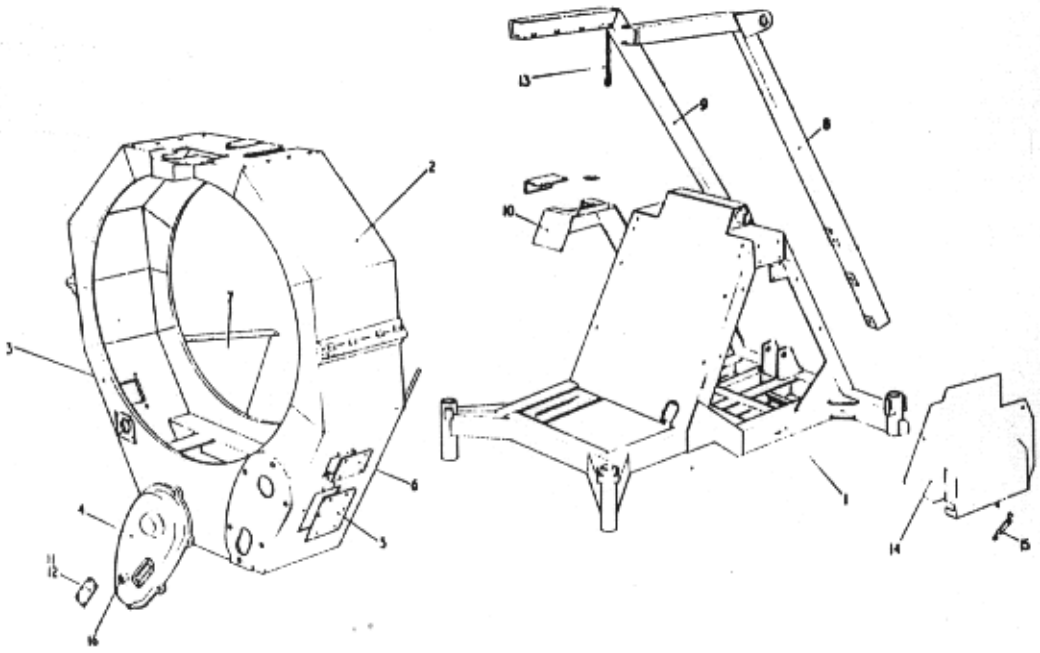
Please note that a number of components are described as being c/w screws, nuts and washers, this is no longer the case and all fixings should be ordered separately if required. Imperial fixings may no longer be available and the nearest metric equivalent will be supplied.

SPARES GROUPS

GROUP	DESCRIPTION
A1	Mainframe and Guards
B1	Portability
B2	Hand Brake Assembly
B3	Wheel Assembly
C1	750R Drum
C2	500R Drum
C3	Final Drum Drive
C4	Drum Controls
C5	Drum Edge Roller
C6	Drum and Gearbox
D1	Reversing Box
E1	Cradle Hopper and Weigh Gear Assembly
F1	Basic Hydraulics
F2	Hydraulic Tank
F3	Hopper Ram Assembly
G1	Water System
H1	Electric Drive 500R and 750R
H2	Diesel Drive 500R
	Fastenings (Nuts, Bolts, Screws and Washers)

NOTE: Fastenings in List of Parts are given identification numbers prefixed with the letter 'Y'. To obtain code numbers for these fastenings, section 'Y' at the back of this Manual should be referred to.

Ref	Description	Part Nº	Qty
1	Mainframe	555 5187 00	1
2	Drum Housing (Upper)	555 5006 00	1
	Complete with Y45, Y115, Y71		8
3	Drum Housing (Lower)	555 5005 00	1
4	Chain Cover	555 5011 00	1
	Complete with Y39 & Y113		6
5	Cover Plate (Lower)	555 1312 00	2
	Complete with Y36 & Y112		8
6	Cover Plate (Upper)	555 1313 00	2
	Complete with Y36 & Y112		8
7	Filler Plates	555 5038 00	1LH
			1RH
8	Drum Housing Support (L.H)	555 5165 00	1
	Complete with Y46, Y115,		4
	Y138, Y14, Y71		4
	Y115, Y129,		4
	Y7, Y71 & Y115		2
9	Drum Housing Support (R.H)		1
	Complete with Y46, Y115,		4
	Y138, Y14, Y71		4
	Y115, Y129,		4
	Y7, Y71 & Y115		2
10	Fuel Tank Cover	555 5098 00	1
	Complete with Y44, Y70, Y114		5
11	Inspection Cover	555 1147 00	1
	Complete with Y37 & Y112		4
12	Inspection Cover Gasket	555 1681 00	1
13	Hopper Safety Chain	502 9285 00	1
	Complete with Y103 & Y255		1
14	Control Side Cover	555 5391 00	1
15	Bonnet Clip	221 1010 00	1
16	Plug	241 7030 00	1



When Ordering Always Quote :— Machine Nº, Part Nº, Description and Quantity

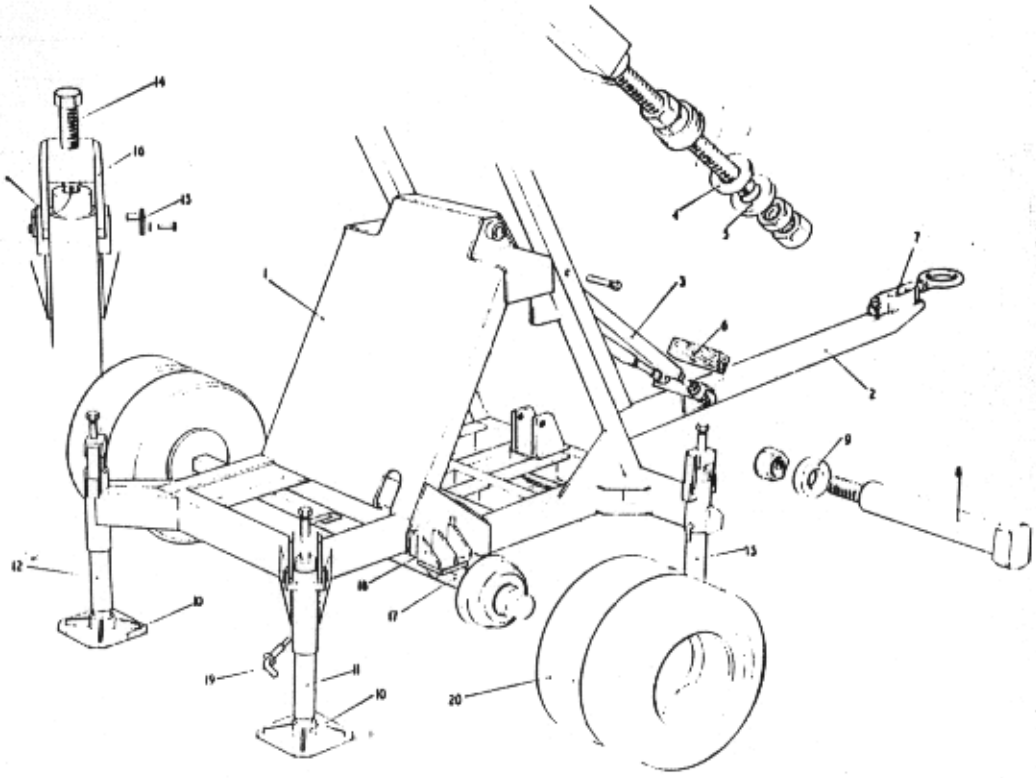
Winget Spares

Publication NºS94

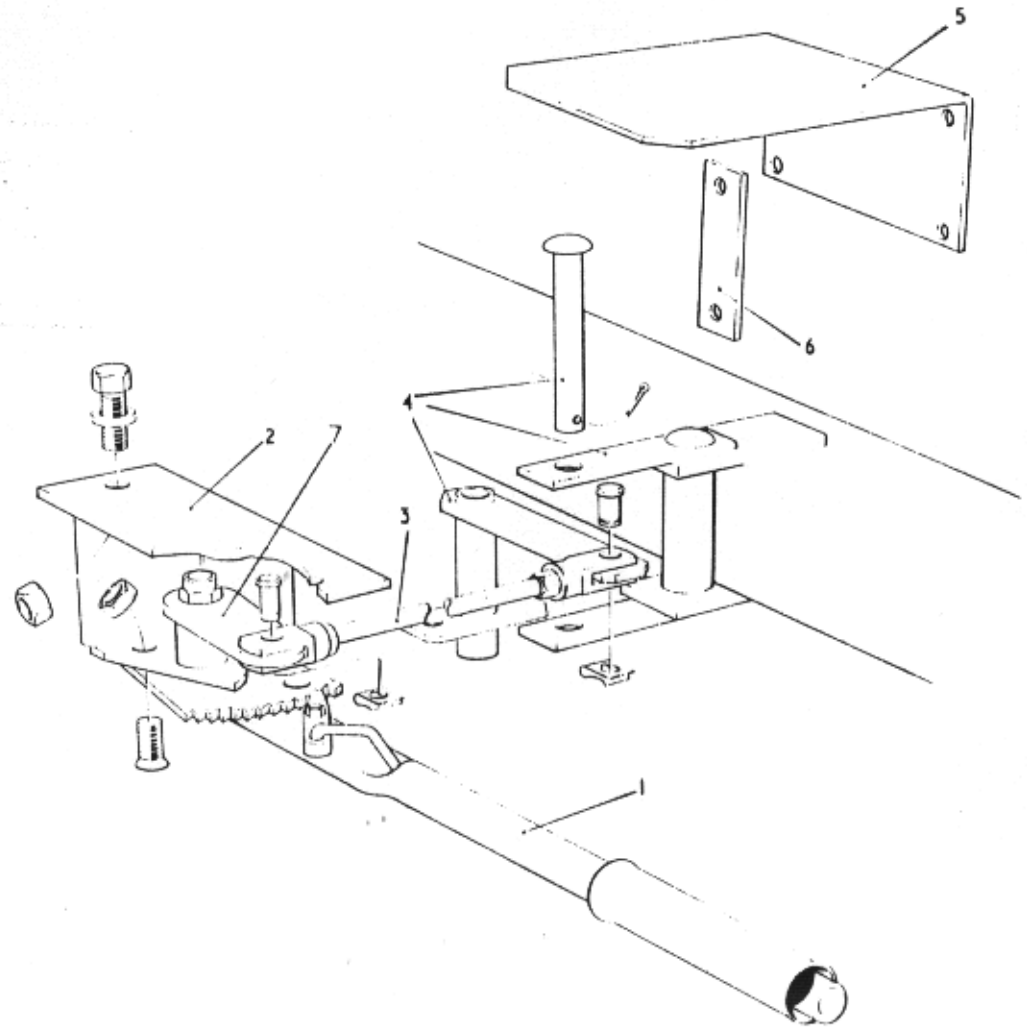
When Ordering Always Quote :— Machine Nº, Part Nº, Description and Quantity

Ref	Description	Part Nº	Qty
1	Mainframe	555 5187 00	1
2	Towbar	555 5154 00	1
3	Tie Bar	555 5159 00	2
	Complete with Y74 & Y91		4
	Y20, Y104 & Y130		2
4	Spherical Washer	464 8120 00	4
5	Spherical Seating	422 6030 00	4
6	Wooden Block	555 5169 00	1
	Complete with Y6 & Y101		4
7	Towing Eye	462 5510 00	1
	Complete with Y19 & Y103		4
8	Towbar Attachment Pin	555 5158 00	1
	Complete with Y104		1
9	Towbar Washer	555 5231 00	1
10	Jack Foot	555 5208 00	4
	Complete with Y18 & Y103		4
11	Rear Jack Let (L.H)	555 5203 00	1
12	Rear Jack Leg (R.H)	555 5204 00	1
13	Front Jack Leg	555 5205 00	2
14	Jack Bolt	555 5182 00	4
	Complete with Split Pin	353 3204 25	4
15	Adjuster Head Pin	555 5183 00	4
	Complete with Y36 & Y112		4
16	Adjuster Head	555 5184 00	4
*17	Axle Complete with Hub	555 5143 00	1
18	Axle Mounting Bracket	555 5157 00	2
	Complete with Y51 & Y103		16
19	Jack Pin	555 5191 00	4
20	Double Wheel, Tyres, Tubes and Brakes complete	019 1510 18	2

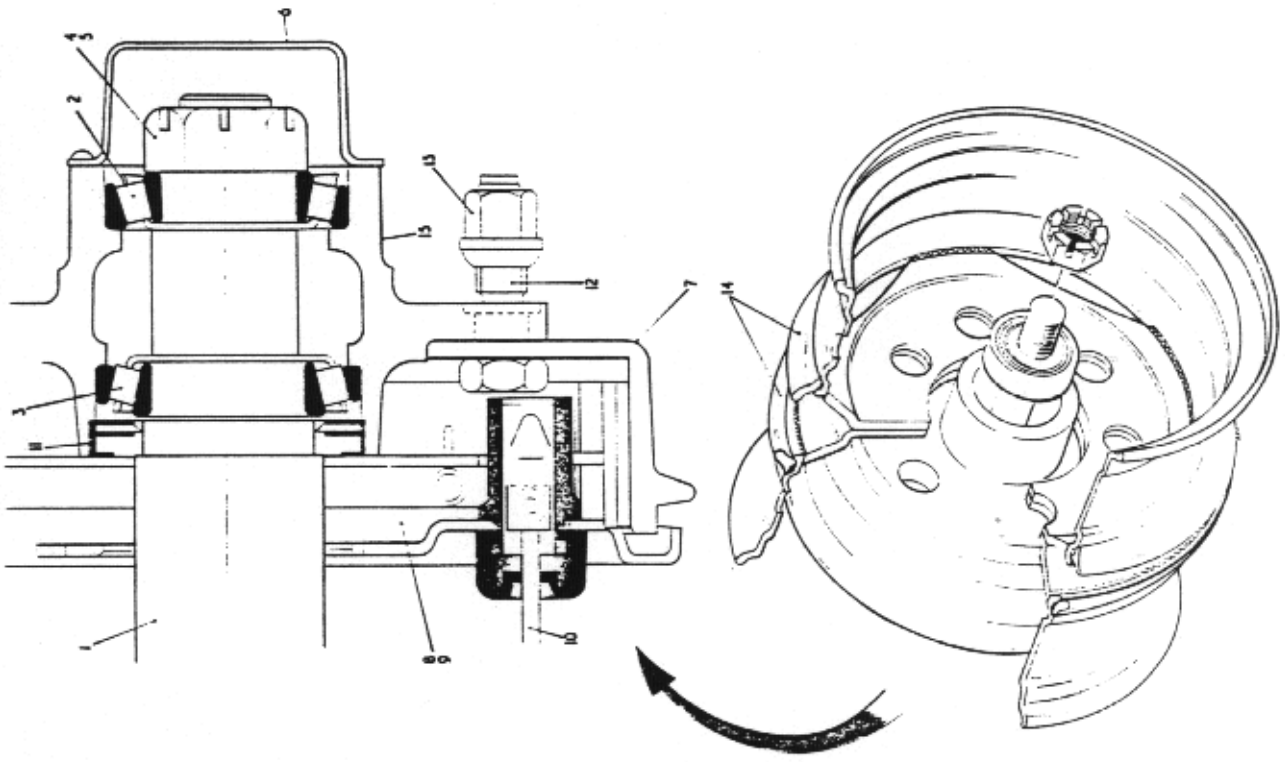
* See B3 for Breakdown of Wheels, Brakes and Axles



Ref	Description	Part No	Qty
1	Hand Brake Handle Assembly	205 2320 00	1
2	Hand Brake Bracket	555 5172 00	1
	Complete with Y7, Y102, Y138		2
	Y210 & Y100		2
3	Hand Brake Rod	555 5171 00	1
	Complete with Y88		2
	Spring Fix Clevis	224 4100 00	2
	Spring Fix Clevis Pin	353 8080 00	2
	Spring Fix Bayonet Clip	132 8300 00	2
4	Compensator Assembly	111 1120 00	1
5	Compensator Cover	555 5297 00	1
6	Compensator Cover Keep Plate	555 5298 00	2
	Complete with Y24, Y69 &		4
	Y113		
7	Control Lever	555 5664 00	1



When Ordering Always Quote :— Machine No, Part No, Description and Quantity

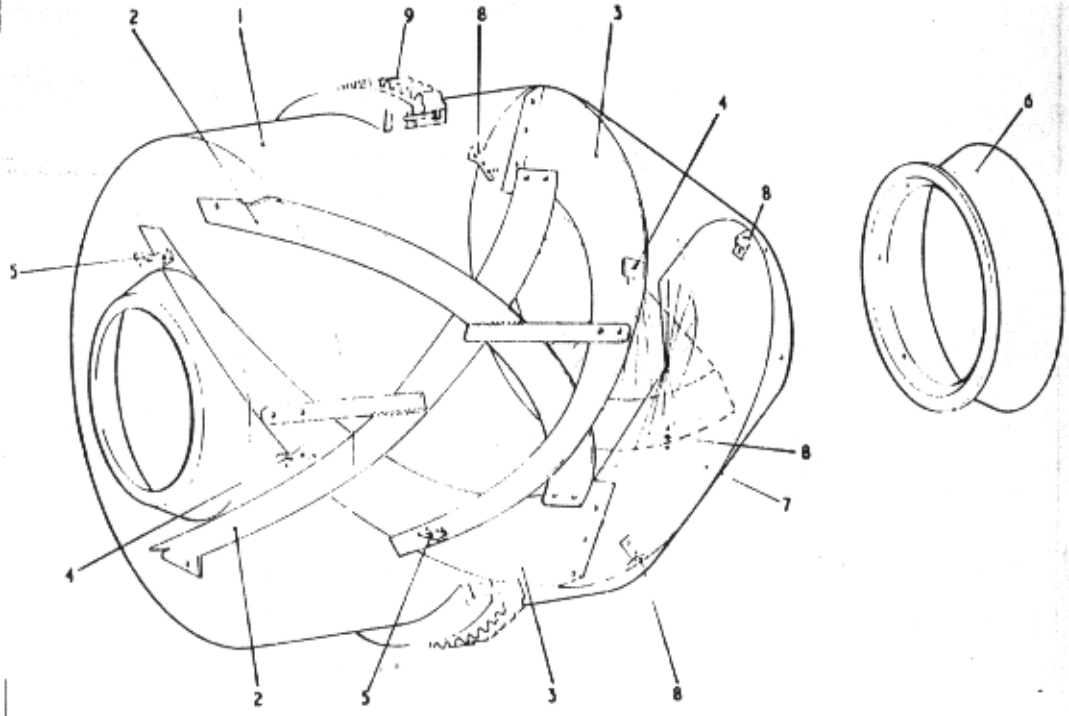


Ref	Description	Part Nº	Qty
1	Axle	019 1510 01	1
2	Front Bearing	019 1510 02	2
3	Rear Bearing	019 1510 03	2
4	Axle Nut	019 1510 04	2
5	Cotter Pin	019 1510 05	2
6	Hub Cap	019 1510 06	2
	Complete with Washers Screws	019 1510 06	
7	Brake Drum	019 1510 07	2
8	L.H. Brake Assembly	019 1510 08	1
9	R.H. Brake Assembly	019 1510 09	1
10	Brake Rods	019 1510 10	2
11	Oil Seal	019 1510 11	2
12	Wheel Stud	019 1510 12	12
13	Wheel Nut	019 1510 13	12
14	Wheel Pressing	019 1510 14	4
15	Hub	019 1510 15	2
16	Tyre (not illustrated)	019 1510 16	4
17	Tube (not illustrated)	019 1510 17	4

When Ordering Always Quote :— Machine Nº, Part Nº, Description and Quantity

Ref	Description	Part Nº	Qty
1	Mixing Drum	555 5365 00	1
2	Mixing Blades	555 5054 00	2
	Complete with Y47, Y71, Y115		4
	Y129, Y46, Y71		4
	Y115, Y129,		4
	Y180, Y71,		2
	Y115 & Y129		2
3	Mix Discharge Blade	555 5052 00	2
4	Mix Discharge Blade Cleat	555 5056 00	2
	Complete with Y181, Y71,		2
	Y115, Y129,		2
	Y47, Y71,		2
	Y115 & Y129		2
*5	Mix Discharge Blade Cleat (Small End)	555 5055 00	2
	Complete with Y170, Y71,		2
	Y115, Y129,		2
	Y47, Y71,		2
	Y115 & Y129		2
*6	Discharge Drum Mouth	555 5004 00	1
	Complete with Y180, Y71,		6
	Y115 & Y129		
*7	Discharge Blade	555 5256 00	2
	Complete with Y46, Y71,		6
	Y115 & Y129		
*8	Mix Discharge Blade and Spiral Cleat	555 5057 00	4
	Complete with Y181, Y71,Y115		4
	Y129, Y47, Y71		8
	Y115		8
	Y129		4
*9	Gear Ring	555 5028 00	1
	Complete with Y153 & Y115		12
10	Drum Assembly complete (Less Gear Ring)	555 5403 00	1

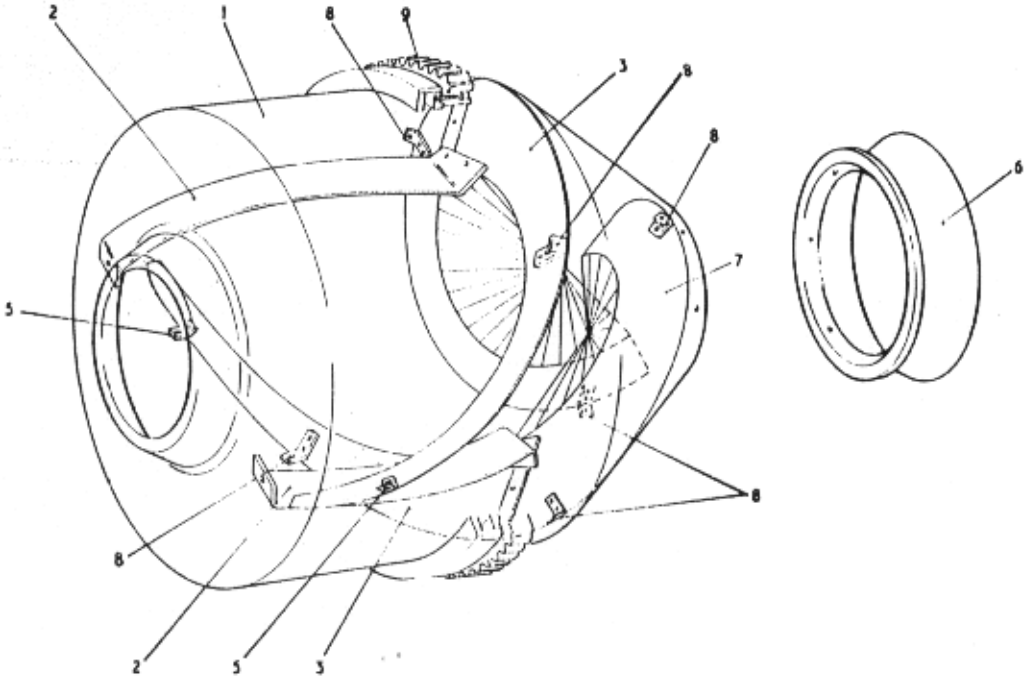
* Also listed in Section C2

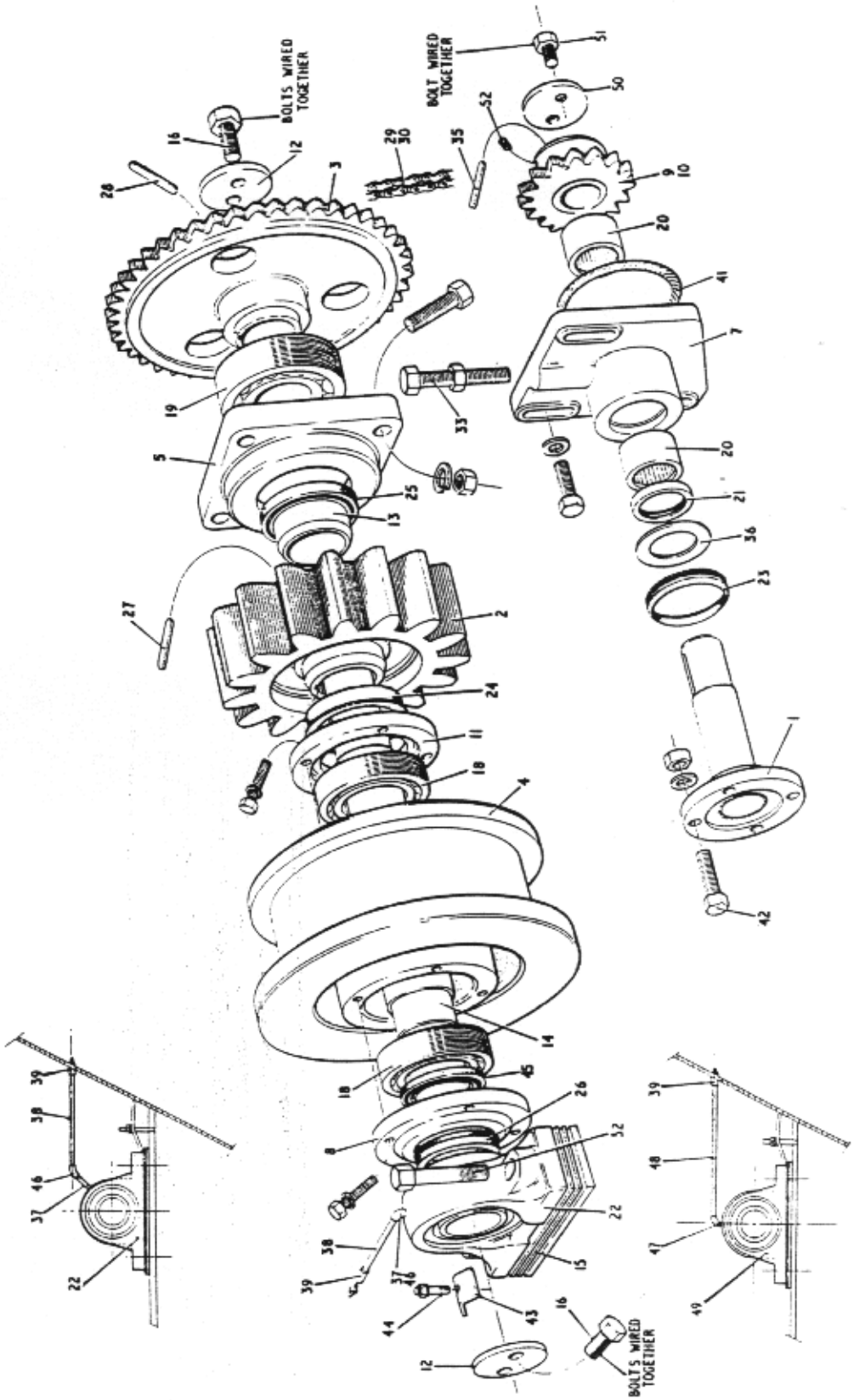


When Ordering Always Quote :— Machine No, Part No, Description and Quantity

Ref	Description	Part No	Qty
1	Mixing Drum	555 5364 00	1
2	Mixing Blades	555 5240 00	2
	Complete with Y46, Y71, Y115		2
	Y129, Y180,		2
	Y71, Y115, Y129		2
3	Mix Discharge Blade	555 5238 00	2
4			
*5	Mix Discharge Blade Cleat		
	(Small End)	555 5055 00	2
	Complete with Y170, Y71,		2
	Y115, Y129,		2
	Y47, Y71,		2
	Y115 & Y129		2
*6	Discharge Drum Mouth	555 5004 00	1
	Complete with Y180, Y71,		6
	Y115 & Y129		6
*7	Discharge Blade	555 5256 00	2
	Complete with Y46, Y71,		6
	Y115 & Y129		6
*8	Mix/Discharge Blade and		
	Discharge Spiral Cleat	555 5057 00	6
	Complete with Y181, Y71,		6
	Y115 & Y129		6
	Y47, Y71,		12
	Y115 & Y129		12
*9	Gear Ring	555 5028 00	1
	Complete with Y153 & Y115		12
10	Drum Assembly complete		
	(Less Gear Ring)	555 5402 00	1

* Also listed in Section C1





When Ordering Always Quote :— Machine No. Part No. Description and Quantity

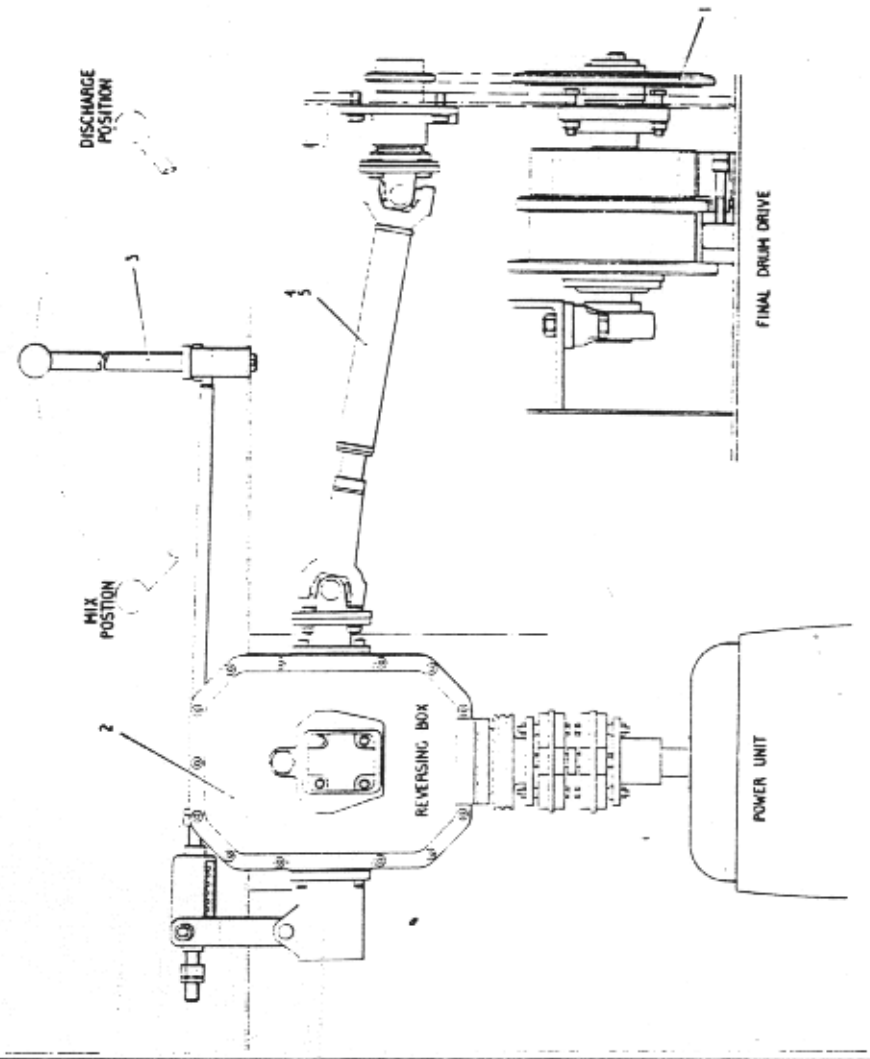
Ref	Description	Part No	Qty
1	Drive Shaft and Flange	555 5634 00	1
2	Drum Drive Pinion	555 5023 00	1
3	Chain Wheel	555 5012 00	1
*4	Idler Roller	555 5014 00	1
5	Pinion Shaft Bearing Carrier	555 5013 00	1
	Complete with Y9, Y71, Y115 & Y129		4
6			
7	Adjustable Bearing Bracket	555 5015 00	1
	Complete with Y231, Y71 & Y115		4
*8	Cast Cover	555 5020 00	1
	Complete with Y44 & Y114		4
9	Special Sprocket (12T Diesel)	555 5635 00	1
10	Sprocket (Electric)	555 5628 00	1
11	Steel Cover	555 5019 00	1
	Complete with Y44 & Y114		4
12	End Plate	555 5037 00	2
13	Drive Shaft Spacer	555 5022 00	1
14	Drum Drive Shaft	555 5025 00	1
* 15	Packing	555 5021 00	1SET
16	Special Screw	555 5041 00	4
17			
* 18	Ball Bearing	109 4750 00	2
19	Ball Bearing	100 6630 00	1
20	Needle Bearing	113 1350 00	2
21	Oil Seal	417 3030 00	1
22	Plummer Block (SKF Type)	351 2600 00	1
23	'V' Ring Seal	417 7830 00	1
24	'V' Ring Seal	417 7950 00	1
25	Oil Seal	417 3060 00	1
* 26	'V' Ring Seal	417 7830 00	1
27	Parallel Key (Rod Ends)	304 7180 63	1
28	Parallel Key (Rod Ends)	304 7180 63	1
29	Roller Chain (Diesel)	134 1080 53	1
30	Roller Chain (Electric)	134 1080 54	1
31			
32	Y71, Y72 & Y118		2SETS
33	Y49 & Y89		2SETS
34			
35	Parallel Key	304 7114 40	1
36	Drum Drive Thrust Washer	555 5035 00	1

Ref	Description	Part No	Qty
37	Greaser Tube (Short)	555 5273 00	1
38	Greaser Tube	555 5040 00	1
39	Socket	244 2010 00	1
40			
41	'O' Ring	555 5229 00	1
42	Special Bolt for Propellor Shaft	555 1772 00	8
	Complete with Binx Nut	330 3607 00	8
	Plain Washer	463 3070 00	8
*43	Stop Bar	555 5010 00	1
44	Y230, Y70, Y114 & Y128		1SET
*45	Oil Seal	417 3050 00	1
46	Elbow	240 7660 00	1
47	Elbow	240 7010 00	1
48	Greaser Tube	555 5563 00	1
49	Plummer Block ('FYH' Type)	115 8521 20	1
50	Sprocket Retaining Plate	555 5630 00	1
51	Sprocket Retaining Plate Bolt	555 5631 00	2
52	Y246		1

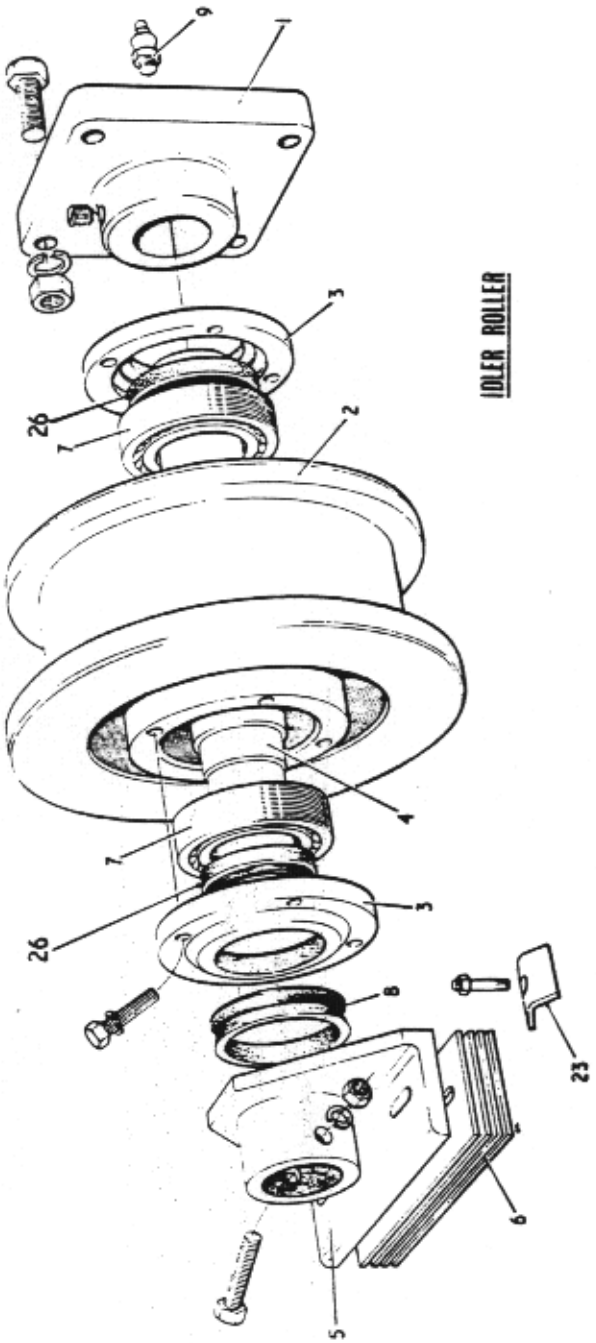
* These items are also listed in Section C5.

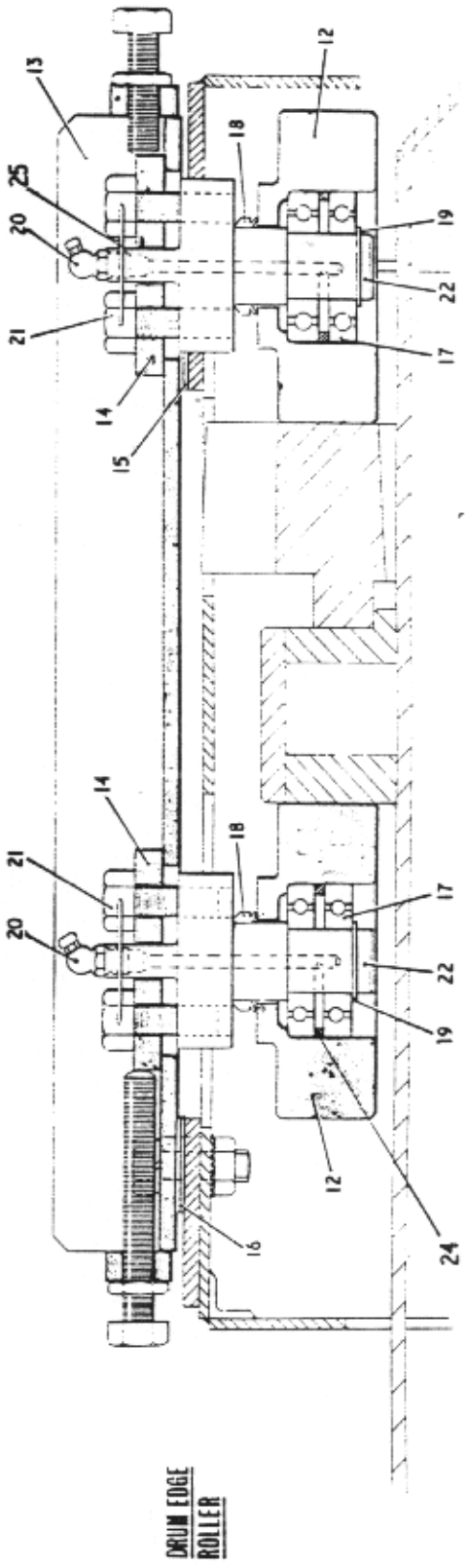
Refs. 37, 38 & 46 for use with Ref. 22

Refs. 47 & 48 for use with Ref. 49



Ref	Description	Part Nº	Qty
1	Final Drum Drive Assembly (See Section)	555 5228 00	
2	Reversing Box Assembly (See Section)	555 5278 00	
3	Drum and Gearbox Control Assembly (See Section)	555 5236 00	1
4	Hardy Spicer Prop. Shaft	-412 8140 00-	1
5	Hardy Spicer Spares Kit	412 8140 01	1


IDLER ROLLER


DRUM EDGE ROLLER

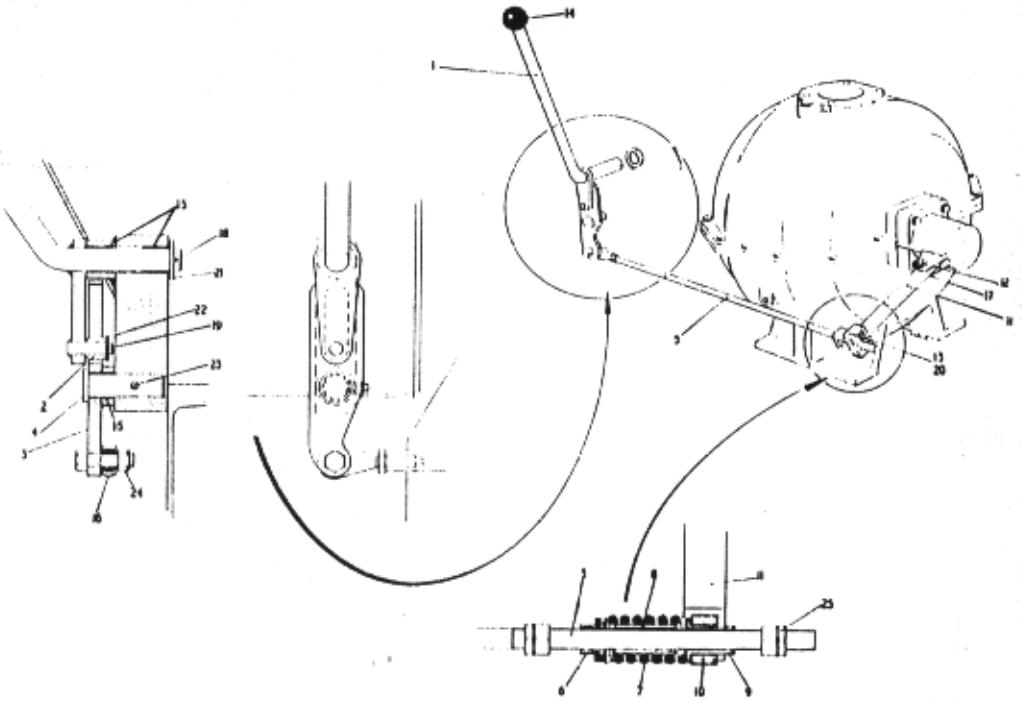
Ref	Description	Part Nº	Qty
1	Idler Shaft Carrier	555 5027 00	1
	Complete with Y8, Y71 & Y115		4
	Y246		1
*2	Idler Roller	555 5014 00	1
*3	Cast Cover	555 5020 00	2
	Complete with Y44 & Y114		8
4	Idler Roller Shaft	555 5024 00	1
	Complete with Straight Grease Nipple	333 1020 20	1
5	Securing Bracket	555 5026 00	1
	Complete with Y15, Y72 & Y116		2
	Y13, Y71 & Y115		1
*6	Packing	555 5021 00	1
*7	Ball Bearing	109 4750 00	2
*8	'V' Ring Seal	417 7830 00	1
9			
10			
11			
12	Edge Roller	555 5029 00	2
13	Edge Roller Carrier	555 5031 00	1
	Complete with Y47, Y115 & Y129		4
	Y48 & Y89		1
	Y50 & Y89		1
14	Edge Roller Locking Plate	555 5034 00	2
15	Packer (Small)	555 5033 00	4
16	Packer (Large)	555 5032 00	2
17	Ball Bearing	102 9350 10	4
18	'V' Ring Seal	417 7450 00	2
19	Circlip	142 3280 00	2
20	Grease Nipple 135°	333 7730 00	2
21	Edge Roller Locking Plate Bolt	555 5042 00	4
22	Edge Roller Shaft	555 5030 00	2
* 23	Stop Bar	555 5010 00	1
	Complete with Y230, Y70, Y114 & Y128		1
24	Bearing Spacer	555 5035	2
25	Locking Wire 1.5mm dia x 200mm lg		2
* 26	Oil Seal	417 3050 00	2

* Items also listed in Section C3

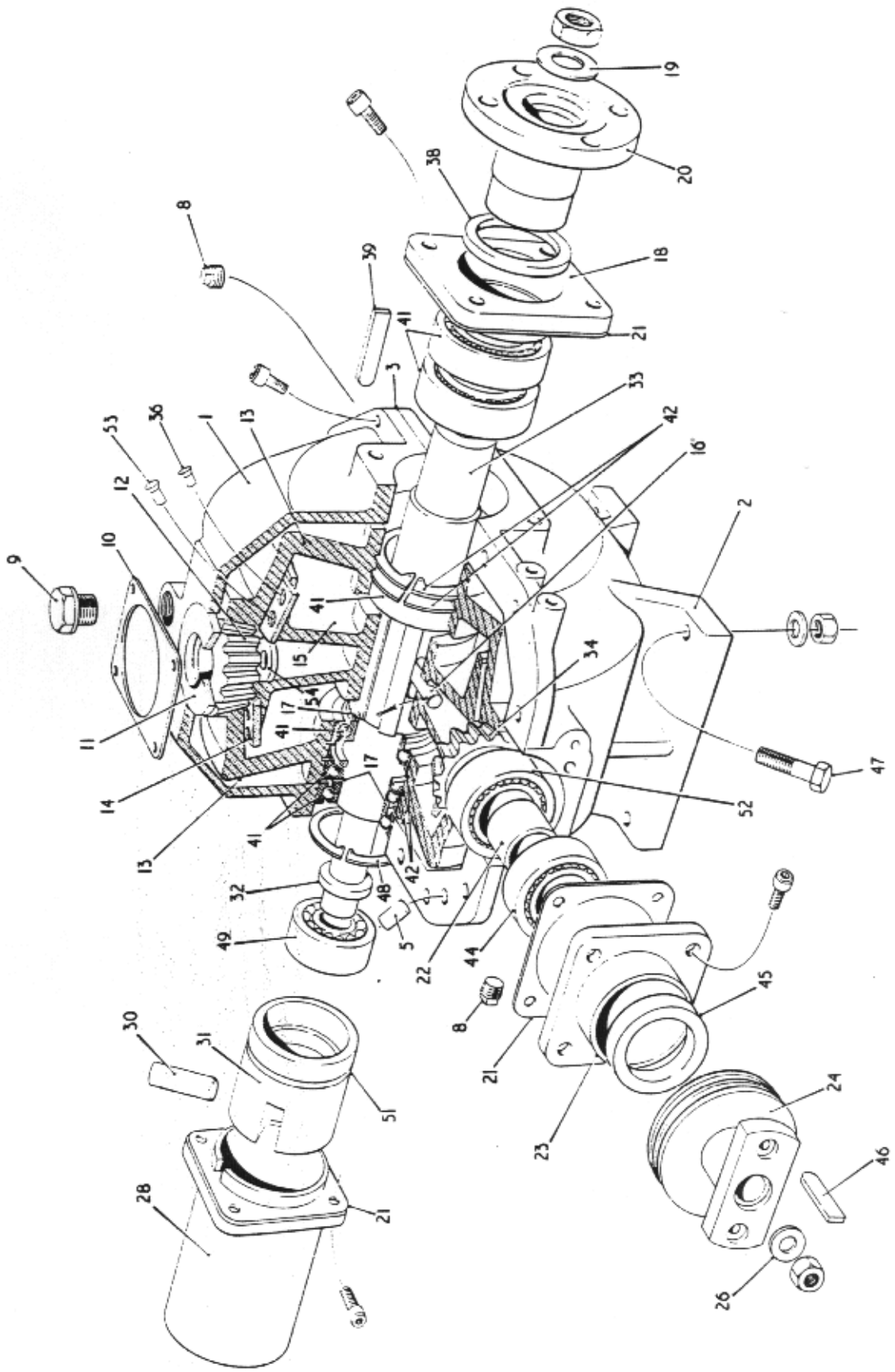
Ref	Description	Part Nº	Qty

C5

Ref	Description	Part Nº	Qty
1	Hand Lever	555 1103 00	1
2	Roller	555 1113 00	1
3	Slotted Link	555 1101 00	1
4	Slotted Link Pivot Pin	555 1107 00	1
5	Connecting Rod	555 5170 00	1
6	Slide Gland (Short)	555 5167 00	1
7	Compression Spring	555 1114 00	1
8	Sleeve	555 5168 00	1
9	Sliding Gland (Long)	555 5166 00	1
10	Clevis Pin Block	555 1105 00	1
11	Operating Lever	555 5079 00	1
12	Pivot Pin	555 5080 00	1
13	Clevis Pin	555 5235 00	2
14	Hand Knob	307 1200 00	1
15	Bush	112 8000 02	3
16	Rod End	383 2510 00	1
17	Circlip	142 3110 00	2
18	Split Pin	353 3061 20	1
19	Split Pin	353 3031 20	1
20	Split Pin	353 3204 38	2
21	Plain Washer	463 3140 00	1
22	Plain Washer	463 3080 00	1
23	Hex Hd. Bolt (Y2)		1
24	Hex Hd. Bolt	460 350 814	1
	Complete with Binx Nut	330 3608 00	1
25	Hex Nut and Locknut (Y73 & Y90)		2
26	Locknut (Y88)		1



When Ordering Always Quote :— Machine Nº, Part Nº, Description and Quantity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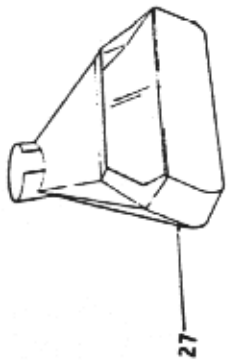
Ref	Description	Part No	Qty
1	Reversing Box (Upper Half)	555 5043 00	1
	Complete with Y151		13
2	Reversing Box (Lower Half)	555 5044 00	1
	Complete with Y16, Y139 & Y103		4
3	Reversing Box Gasket	555 5045 00	1
4			
5	Dowels	353 2210 25	2
6			
7			
8	Plugs	241 7040 00	2
9	Filler Plug	511 1009 00	1
10	Pump Shims	555 5275 00	1SET
11	Locating Ring	555 5274 00	1
12	Pump Drive Pinion	555 5276 00	1
13	Bevel Gear Wheel and Clutch Cone	555 5266 00	2
14	Clutch Linings	555 5071 00	2
15	Clutch Cone	555 5063 00	1
16	Operating Pin	555 5072 00	1
	Complete with Split Pin	353 3202 74	2
17	Thrust Washer	555 5060 00	4
18	Bearing Retainer	555 5061 00	1
	Complete with Y152		4
19	Output Flange Retaining Washer	555 5074 00	1
20	Output Flange	555 5066 00	1
	Complete with Y103		1
21	Shims	555 5077 00	3SETS
22	Bearing Spacer	555 5075 00	1
23	Bearing Housing	555 5064 00	1
	Complete with Y151		4
24	Drive Flange (Diesel)	555 5051 00	1
	Drive Flange (Electric)	555 5047 00	1
	Complete with Y103		1SET
25			
26	Drive Flange Retaining Washer	555 5073 00	1
27			
28	Plunger Guide	555 5065 00	1
	Complete with Y152		4
29			
30	Plunger Operating Pin	555 5078 00	1
31	Operating Plunger	555 5067 00	1
32	Operating Shaft	555 5058 00	1
33	Clutch Shaft	555 5070 00	1
	Complete with Y103		1
34	Bevel Pinion	555 5267 00	1
	Complete with Y103		1
35			
36	Brass Rivet	380 2051 20	20
37			
38	Oil Seal	417 3040 00	1
39	Parallel Key (RD one end)	304 7112 50	1
40			
41	Ball Bearing	121 2100 00	6
42	Internal Circlip	132 3901 00	4
43			
44	Ball Bearing	109 4350 00	1
45	Oil Seal	417 0720 50	1
46	Parallel Key (RD one end)	304 7110 40	1
47	Y16, Y139 & Y103		4
48	Internal Circlip	132 3620 00	1
49	Ball Bearing	121 2060 00	2
50			
51	'O' Ring	391 8745 30	1
52	Ball Bearing	102 9350 00	1
53	Brass Semi-Tubular Rivet	380 2161 60	20
54	Pump Retaining Washer	555 5277 00	1
	Complete with Y39 & Y113		1
55	Reversing Box Complete	555 5278 00	1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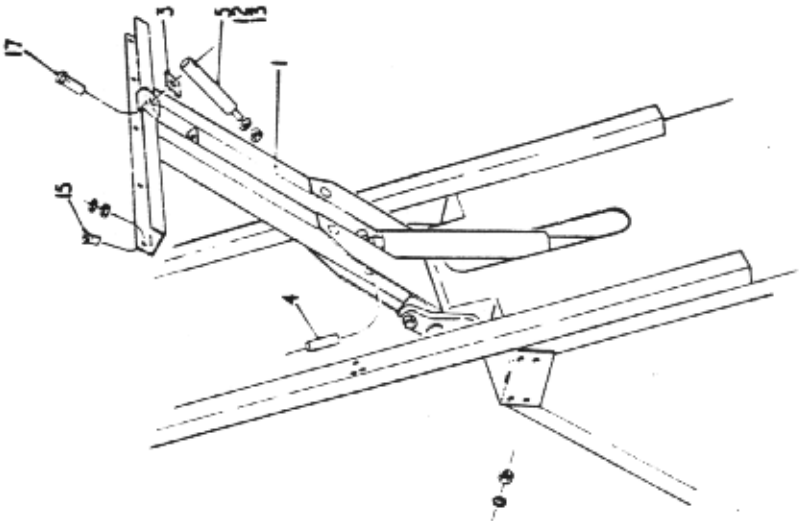
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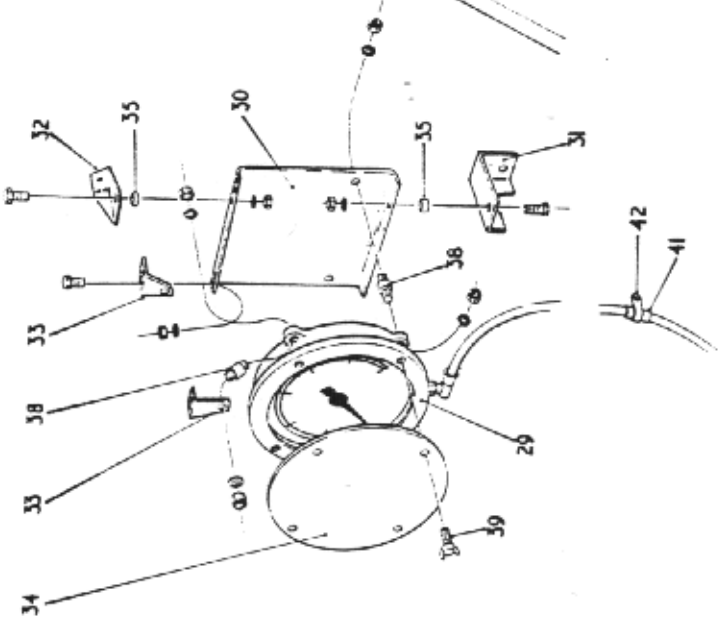
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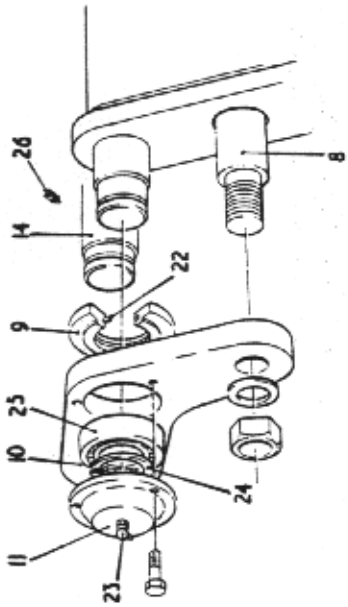
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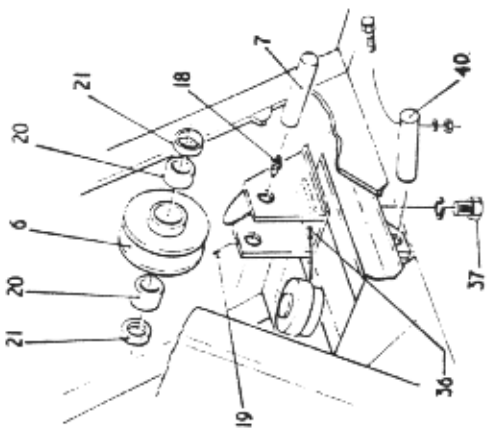
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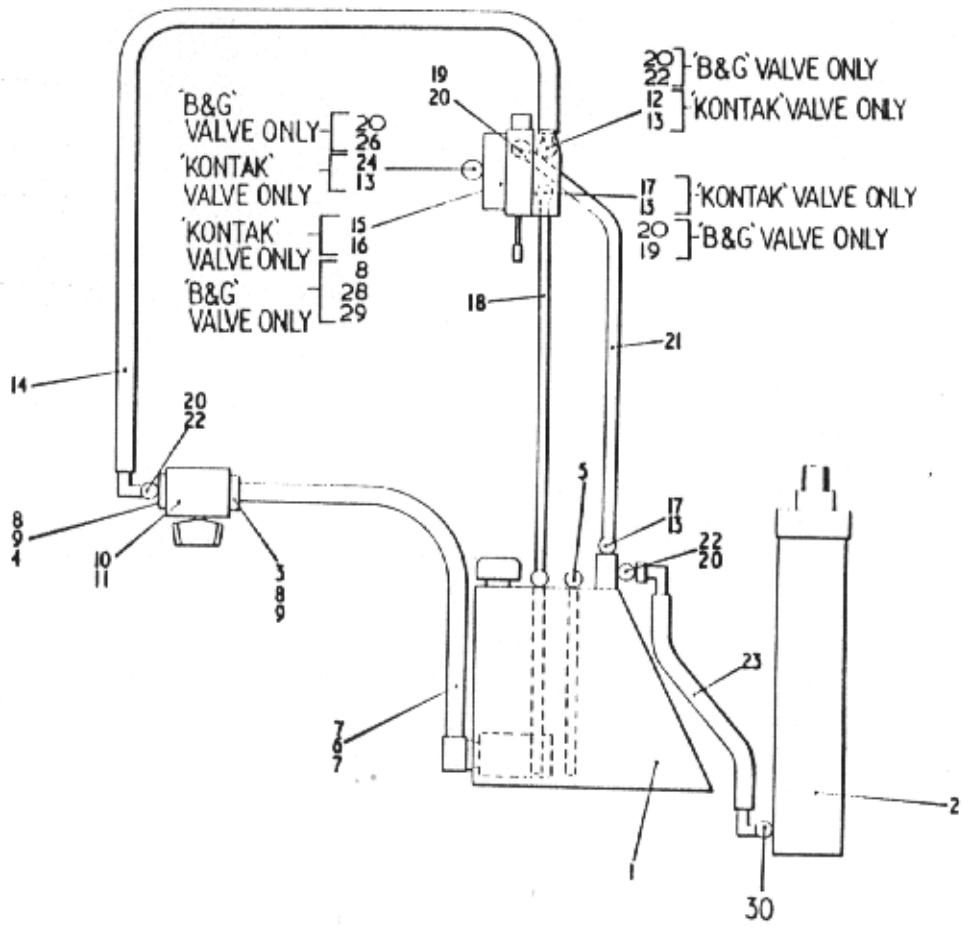
Ref	Description	Part No	Qty
1	Hopper Cradle	555 5122 00	1
2			
3	Loadcell Striker Packer	555 5237 00	1SET
4	Hopper Ram Pin (Upper)	555 5092 00	1
	Complete with Y5, Y70 & Y114		1
5	Loadcell Striker	555 5091 00	1
	Complete with Y73 & Y117		1
6	Loadcell Striker Guide	555 5153 00	1
7	Loadcell Striker Guide Pin0	555 5199 00	1
8	Link Shaft	555 5114 00	1
	Complete with Y76 & Y131		2
9	Seal Housing	555 5113 00	4
10	Link Arm	555 5115 00	1PR.
11	Bearing Cap	555 5112 00	4
	Complete with Y3 & Y114		12
12	Spherical Seating	422 6040 00	1
13	Spherical Washer	464 8130 00	1
14	Hopper Cradle Shaft	555 5116 00	1
15	Y160, Y72 & Y92		11
16			
17	Y49, Y129 & Y115		1
18	Straight Grease Nipple	333 1100 00	1
19	Y250		1
20	Needle Roller Bearing	113 1350 00	2
21	Seal	417 7005 00	2
22	'O' Ring	391 8645 30	4
23	Grease Nipple	333 6010 10	2
23	Grease Nipple	333 6010 10	2
24	External Circlip	142 3270 00	4
25	Needle Roller Bearing	113 1630 00	4
26	Y201		2
27	Hopper - 500R & 750R	555 5292 00	1
28			
29	Weigh Dial and Loadcell complete -		
	750R	555 5265 75	1
30	Gauge Mounting Bracket	555 5181 00	1
	Complete with Y7, Y71 & Y115		2
31	Meter Mounting Bracket	555 5286 00	2

Ref	Description	Part No	Qty
32	Upper Mounting Bracket	555 5179 00	1
	Complete with Y42 & Y114		3
33	Corner Bracket	555 5180 00	1LH
			1RH
	Complete with Y43, Y70 & Y114		4
34	Dial Cover	555 5253 00	1
35	Spacer	555 5190 00	2
36	Loadcell Packers	512 1183 00	1SET
37	Hex Head Screw	418 3508 10	1
	Complete with Spring Washer	464 3080 00	1
38	Flexible Mounting	105 3430 00	4
39	Thumb Screws	407 3150 40	4
	Complete with Y113		4
40	Ram Pivot Pin	555 5209 00	1
	Complete with Y4, Y70 & Y114		1
41	Hose Guard	555 1701 00	1
42	Cable Clip	143 2160 00	1
43	Cable Clip	143 2220 00	1
	Complete with Y190, Y67 & Y111		2

NOTE: On Machine not fitted with Item 24, Part No. of Item 11 should read 555 5508 00

E1

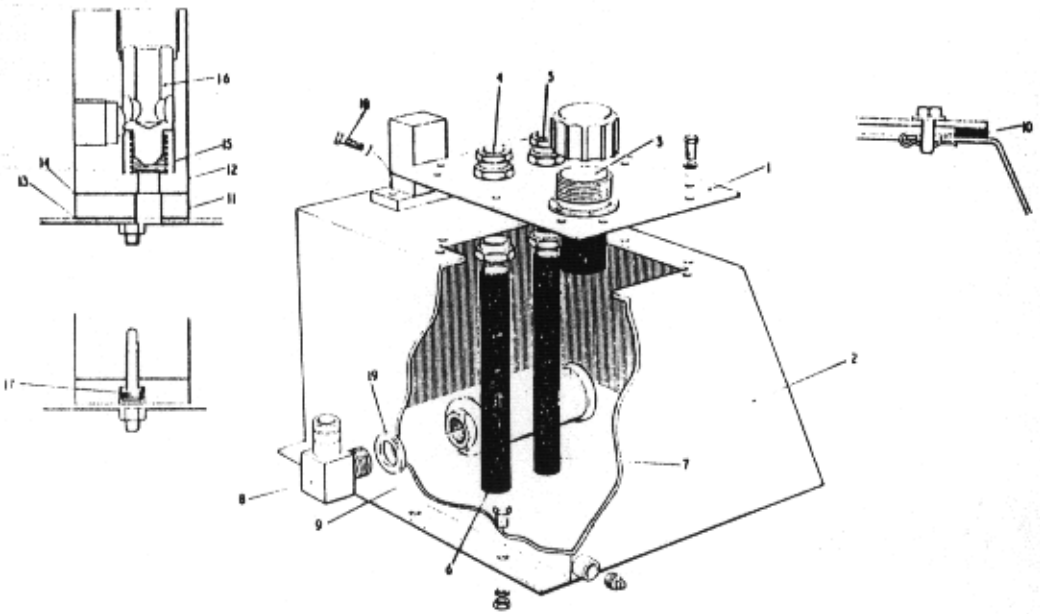
Ref	Description	Part Nº	Qty
1	Hydraulic Tank Assembly	555 5283 00	1
2	Hopper Ram Assembly	555 5245 00	1
3	Pump Inlet Connector	555 5280 00	1
4	Pump Outlet Connector	555 5279 00	1
5	Blanking Bar	555 1368 00	1
6	Oil Resistant Hose	260 9080 10	1
7	Hose Clamp	143 7030 00	1
8	Y150		4
9	'0' Ring	391 8246 24	2
10	Adan Pump (Diesel)	361 1390 00	1
	Adan Pump (Electric)		
11	Y154		4
12	Stud Adaptor	446 6600 00	1
13	Bonded Seal	417 8060 00	4
14	Pump to Control Valve Hose	555 5389 00	1
15	Control Valve	451 4310 00	1
16	Y4, Y70 & Y114		3
17	Parallel Male Stud Coupling	446 4440 00	2
18	Tank to Control Valve Hydraulic Pipe	555 5395 00	2
19	Parallel Male Stud Coupling	446 3590 00	1
20	Bonded Seal	417 8060 00	6
21	Control Valve to Bleed Valve Pipe	555 5396 00	1
22	Stud Adaptor	446 6620 00	3
23	Tank to Ram Hose	555 5388 00	1
24	Brass Collared Plug	360 1020 00	1
25	Socket Hd. Capscrew	404 7505 14	2
26	Collared Plug	360 4004 00	1
27	Control Valve Packer	535 2515 00	1
28	Control Valve	451 4415 00	1
29	Y40, Y113		2
30	Ram Restrictor complete	555 2469 00	1



When Ordering Always Quote :— Machine Nº, Part Nº, Description and Quantity

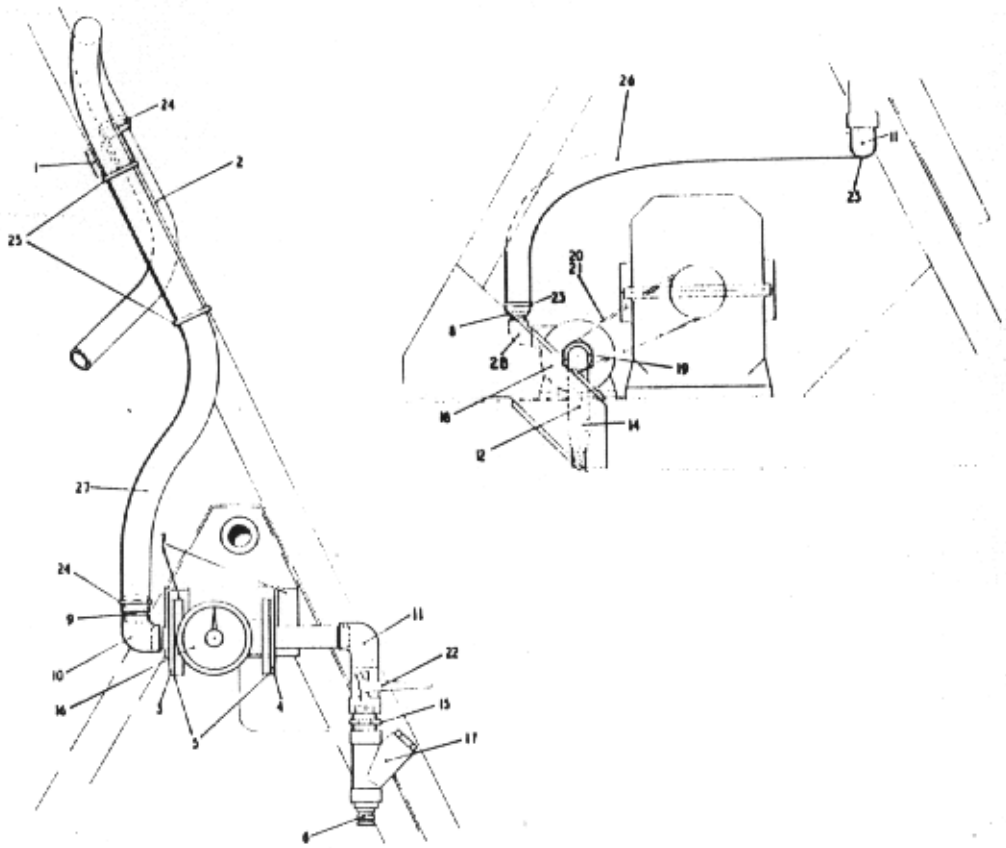
When Ordering Always Quote :— Machine Nº, Part Nº, Description and Quantity

Ref	Description	Part Nº	Qty
1	Hydraulic Tank Cover	555 5247 00	1
	Complete with Captive Nut	332 7250 00	10
	Selon Washer	417 7440 00	10
	Y38		10
2	Hydraulic Tank	555 5117 00	1
	Complete with Taper Plug	360 2080 02	1
	Y43, Y70 & Y114		3
3	Filler Breather Unit	220 2460 00	1
4	Bulkhead Connector	221 3050 00	1
5	Bulkhead Connector	221 3060 00	1
6	Bright Steel Hydraulic Tube	521 1200 00	1
7	Bright Steel Hydraulic Tube	521 1000 00	1
8	Strainer Connection	555 1361 00	1
9	Filter	220 5140 00	1
10	Self-Adhesive Gasket	254 9100 00	1
11	Adaptor Plate	555 5108 00	1
12	Bleed Valve Block	555 5109 00	1
13	Adaptor Plate Gasket	555 5107 00	1
14	Bleed Valve Joint	555 5106 00	1
15	Bleed Valve Spring	555 5123 00	1
16	Bleed Valve Plunger	555 5110 00	1
17	Y149		2
18	Y1 complete with		2
	Selon Washers	417 7440 00	2
19	Bonded Seal	417 8080 00	1



Ref	Description	Part Nº	Qty
1	Ram Cylinder Bracket	555 5087 00	1
2	Ram Shroud	555 5088 00	1
3	Ram Cylinder Packer	555 5095 00	3
4	Spherical Seating	555 5097 00	1
5	Spherical Washer	555 5096 00	1
6	Ram Cylinder Washer	555 5094 00	1
7	Y75		1
8	Split Pin	353 3203 56	1
9	Hydraulic Nipple	333 6010 10	1
10	Hopper Ram Complete	555 5102 00	1
11	Tube Assembly L2155	272 1290 00	1
12	Rod L2158	272 1290 01	1
13	Insert L2159	272 1290 02	1
14	Piston Head L2160	272 1290 03	1
15	Front Cap L2161	272 1290 04	1
16	Back Up Plate L2162	272 1290 05	1
17	Self-Locking Nut L2163	272 1290 06	1
18	Piston Seal Assembly L2164	272 1290 07	1
19	'O' Ring L2122	272 1290 08	1
20	Wiper L2700	272 1290 09	1
21	Bush	112 8180 00	2

Ref	Description	Part No	Qty
1	Water Pipe Support	555 5185 00	1
	Complete with Y42 & Y114		4
2	Water Pipe	555 5186 00	1
	Complete with Y43, Y70 & Y114		2
3	Output Flange	555 5177 00	1
	Complete with Y15, Y72 & Y116		4
4	Input Flange	555 5289 00	1
	Complete with Y15, Y72 & Y116		4
5	Rubber Joints	514 1902 00	2
6	Insert for Valve	555 1764 00	1
7	Mounting Bracket	555 5286 00	2
	Complete with Y75, Y115 & Y41		4
8	Pump Outlet Adaptor	640 4737 00	1
9	Pipe Adaptor	640 4205 00	1
10	Female Equal Elbow	241 1120 00	1
11	Male/Female Equal Elbow	240 7120 00	2
12	90° Bend	240 2100 00	1
13	Hex Nut	330 5200 00	1
14	Brass Hose Connector	130 3202 00	1
15	Hex Equal Nipple	243 9120 00	1
16	Flow Meter	202 3210 00	1
17	'Y' Type Strainer	409 2550 00	1
18	Pump	365 2370 00	1
	Complete with Y21, Y101 & Y128		2
19	Pulley	371 1710 00	1
20	Wedge Belt (Diesel Drive)	397 4909 00	1
21	Wedge Belt (Electric Drive)	397 4909 40	1
22	Valve	450 1511 00	1
23	Hose Clip	143 1580 00	2
24	Hose Clip	132 8660 00	2
25	Aluminium Strap and Buckle	124 1081 60	2
26	Hose	260 8240 00	1
27	Hose	260 8320 00	1
28	Male Female Equal Elbow	240 7080 00	1



When Ordering Always Quote :— Machine No, Part No, Description and Quantity

Winget Spares

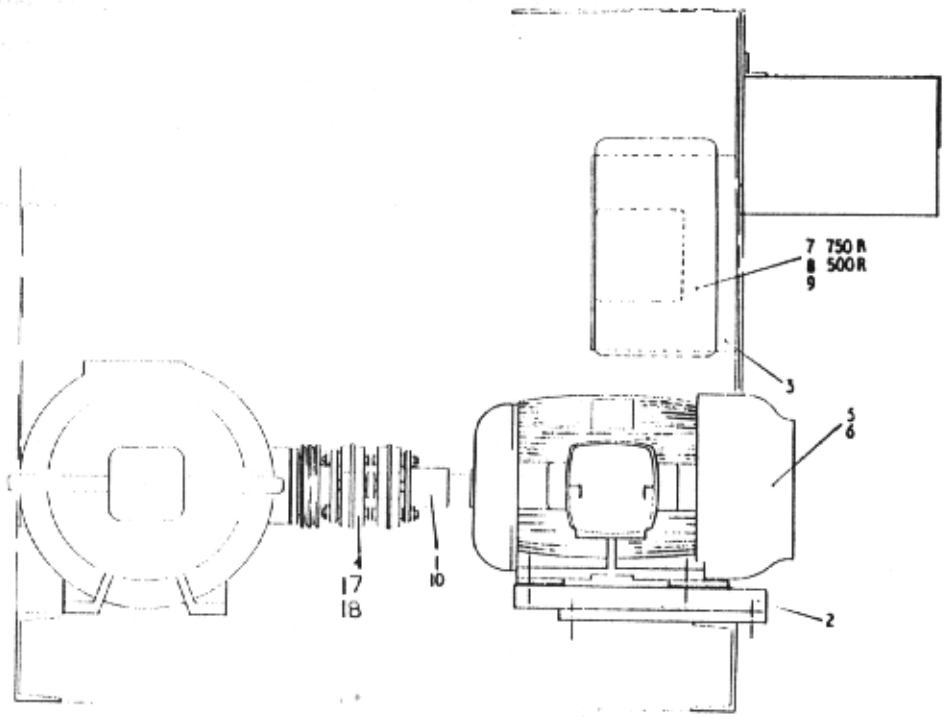
Publication NºS94

When Ordering Always Quote :— Machine Nº, Part Nº, Description and Quantity

Ref	Description	Part Nº	Qty
1	Drive Flange	555 5099 00	1
	Complete with Y200		1
2	Motor Mounting	555 5082 00	1LH 1RH
	Complete with Y9, Y71, Y115 & Y138		4
3	Starter Mounting Bracket	555 5262 00	1
	Complete with Y220, Y70 & Y114		4
+4	Coupling	220 7080 00	1
5	Electric Motor 750R	202 4260 00	1
	Complete with Y22, Y71 & Y115		4
6	Electric Motor 500R	202 4240 00	1
	Complete with Y22, Y71 & Y115		4
7	Starter 750R	208 3016 00	1
	Complete with Y38, Y68 & Y112		4
8	Starter 500R	208 3015 00	1
	Complete with Y38, Y68 & Y112		4
9	Protective Caps	205 6260 00	2
10	Parallel Key	304 7212 08	1
*11	Reducing Socket 1¼" male x 25mm female	131 5100 80	1
*12	Reducing Socket 1½" male x 25mm female (750R)	131 5120 80	1
*13	Conduit Locknut 1½" (750R)	133 3120 40	1
*14	Brass Bush 1½" (750R)	131 3120 00	1
*15	Conduit Locknut 25mm (500R)	133 2750 00	1
*16	Brass Bush 25mm (500R)	131 3750 00	1
*17	Centre Plate	555 5661 00	1
*18	Long Stud	555 5662 00	2

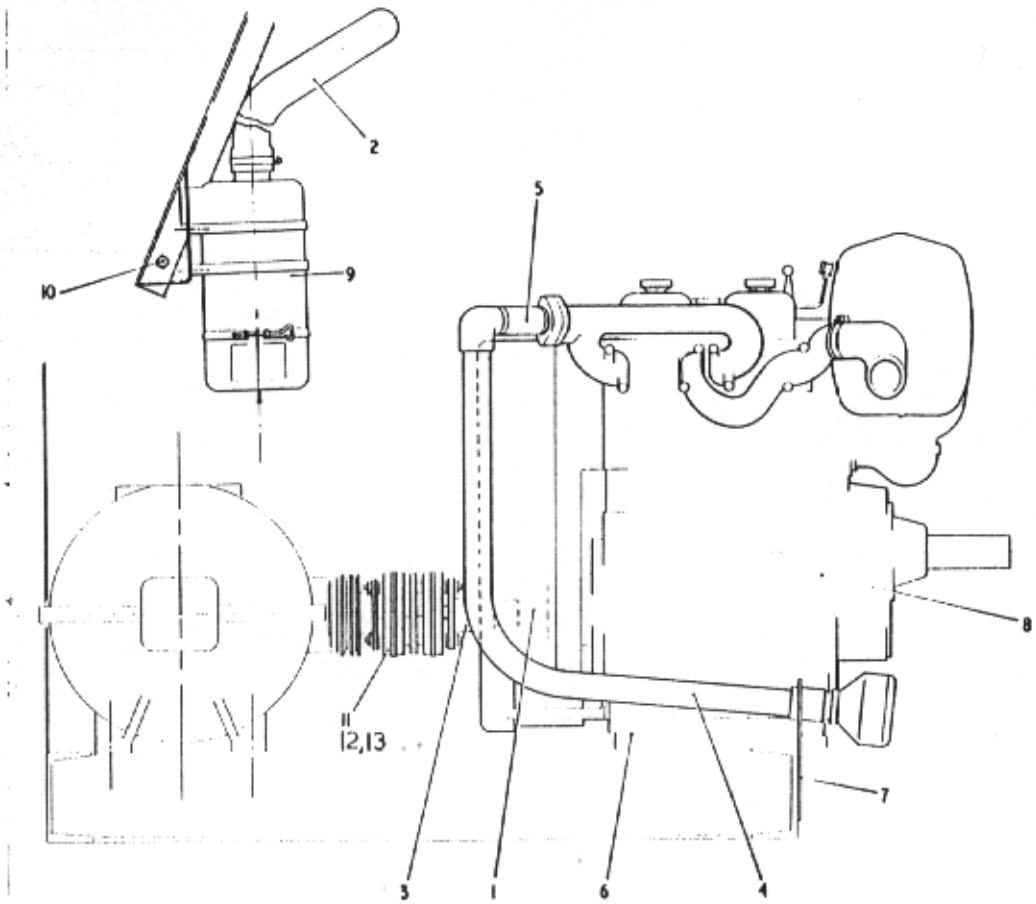
* These Items are not illustrated

\+ Item also listed in Section H2



Ref	Description	Part Nº	Qty
1	Crankshaft Extension	555 5296 00	1
2	Moulded Rubber Inlet Pipe	555 5390 00	1
	Complete with Clips	132 1200 30	2
3	Drive Flange	555 5099 00	1
	Complete with Parallel Key	304 7212 08	1
	Y200		1
4	Exhaust Pipe	555 5299 00	1
	Complete with Socket	241 9120 00	1
5	Extension Piece	555 5387 00	1
	Complete with Elbow	240 7610 00	1
6	Engine Packers	555 5398 00	1SET
7	Exhaust Pipe Clip	555 5399 00	1
	Complete with Y43, Y70 & Y114		2
8	Petter Drive Unit		1
	Complete with Y25, Y138 & Y102		2
	Y25 & Y102		2
9	Air Cleaner	220 2370 00	1
	Complete with Split Pin	353 3203 25	1
	Y39, Y69 & Y113		4
10	Y44, Y70 & Y114		5
+11	Coupling	220 7080 00	1
*12	Centre Plate	555 5661 00	1
*13	Long Stud	555 5662 00	2

+ This Item also listed in Section H1



When Ordering Always Quote :— Machine Nº, Part Nº, Description and Quantity

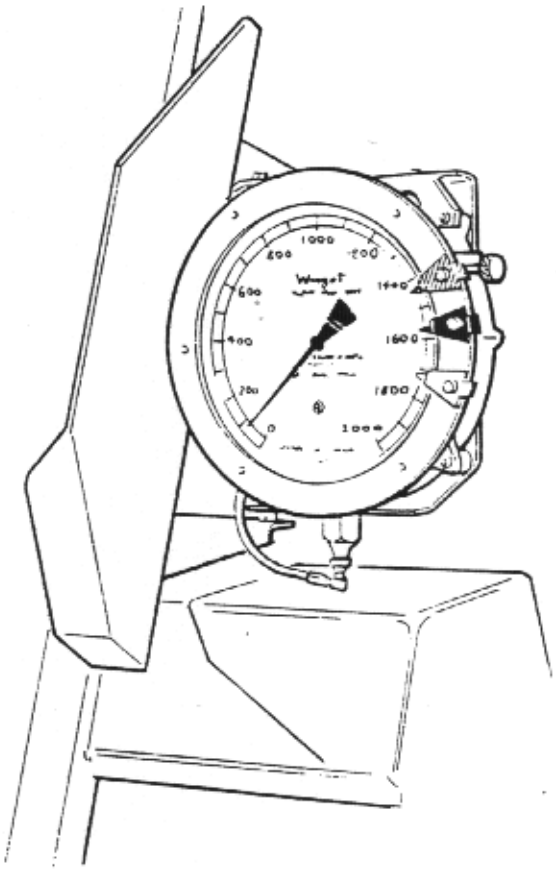
REF Nº	PART Nº
	HEX. HD. BOLTS
Y1	460 0060 25
Y2	460 0080 50
Y3	460 0100 60
Y4	460 0100 70
Y5	460 0100 80
Y6	460 0101 00
Y7	460 0120 40
Y8	460 0120 45
Y9	460 0120 55
Y10	460 0120 60
Y11	460 0120 70
Y12	460 0120 80
Y13	460 0121 00
Y14	460 0121 10
Y15	460 0160 55
Y16	460 0160 55
Y17	460 0160 75
Y18	460 0160 90
Y19	460 0161 10
Y20	460 0241 80
Y21	460 0100 35
Y22	460 0120 50
Y23	460 0160 35
Y24	460 0080 90
Y25	460 0120 80
Y26	460 0120 65
	HEX. HD. SCREWS
Y36	405 6060 12
Y37	405 6060 15
Y38	405 6060 16
Y39	405 6080 20
Y40	405 6080 25
Y41	405 6080 35
Y42	405 6100 20
Y43	405 6100 25
Y44	405 6100 30
Y45	405 6120 30
Y46	405 6120 35
Y47	405 6120 40
Y48	405 6120 50
Y49	405 6120 70
Y50	405 6121 00
Y51	405 6120 40

REF Nº	PART Nº
	HEX. HD. NUTS
Y67	330 1204 00
Y68	330 1206 00
Y69	330 1208 00
Y70	330 1210 00
Y71	330 1212 00
Y72	330 1216 00
Y73	330 1220 00
Y74	330 1224 00
Y75	330 1230 00
Y76	330 1235 00
	LOCKNUTS
Y88	330 6080 00
Y89	330 6120 00
Y90	330 6200 00
Y91	330 6240 00
Y92	330 6160 00
	BINX NUTS
Y100	330 1208 00
Y101	330 1310 00
Y102	330 1312 00
Y103	330 1316 00
Y104	330 1324 00
	SPRING WASHERS
Y111	464 3540 00
Y112	464 3560 00
Y113	464 3580 00
Y114	464 3600 00
Y115	464 3620 00
Y116	464 3660 00
Y117	464 3700 00

REF Nº	PART Nº
	PLAIN WASHERS
Y127	463 3308 00
Y128	463 3310 00
Y129	463 3312 00
Y130	463 3324 00
Y131	463 3336 00
	TAPER WASHERS
Y138	465 2212 00
Y139	465 2216 00
	SKT. HD. CAPSCREWS
Y149	404 5560 16
Y150	404 5580 20
Y151	404 5600 25
Y152	404 5600 30
Y153	404 5621 00
Y154	404 5580 35
	C'SK HD. BOLTS
Y160	300 3660 50

REF Nº	PART Nº	REF Nº	PART Nº	REF Nº	PART Nº
	C'SK HD. SCREWS		'A' STUD		
Y170	400 0120 40	Y230	411 4110 75		
Y171	400 0160 50	Y231	411 4112 45		
	RD. HD. SCREWS		STEEL SHOULDERED THUMB SCREW		
Y180	402 3612 35				
Y181	402 3612 40	Y240	407 3158 40		
	CHEESE HD. SCREWS		CUP PT. SKT. SCREW		
Y190	407 2704 12	Y246	403 7512 12		
	SKT. SETSCCEWS		1/2 DOG PT. SKT. SETSCREWS		
Y200	403 7610 10				
Y201	403 7612 16	Y250	403 7710 10		
	C'SK HD. M/C SCREWS		HEAVY BLACK PLAIN WASHERS		
Y210	400 0080 20				
		Y256	463 4116 00		
	SLOTTED C'SK HD. M/C SCREWS				
Y220	400 0100 25				

Winget
LIMITED



Loadcell & Gauge

Operation, Maintenance & Spare Parts Manual

Winget

LIST OF CONTENTS

GENERAL

The loadcell and gauge is a hydraulic method of recording pressure exerted on the loadcell button, by the batch in the weigh hopper.

The weigher gauge is mounted in a box on the side of the mixer and connected by a hydraulic pipe to the loadcell situated under the weigh hopper.

The gauge calibration differs to the mixer on which it is fitted, the adjustable coloured pointers mounted on the rim of the gauge can be set by the operator, to the aggregate proportions required. A protective lid is provided for the gauge box to prevent damage when not in use. The loadcells are of the 10 sq. in. (64.5 sq. cm.) type and a load/pressure ratio of 10:1 The loadcell and gauge is a closed circuit and any leakage from anywhere in the system will cause incorrect reading.

A screw is provided for zeroing the weigh gauge needle to take into account temperatures and variations in the weight of the hopper due to build-up of materials. Ensure that at all times there is a minimum of 2 in. or 50 mm. clearance between the hopper bottom and the ground.

WEIGH GAUGE

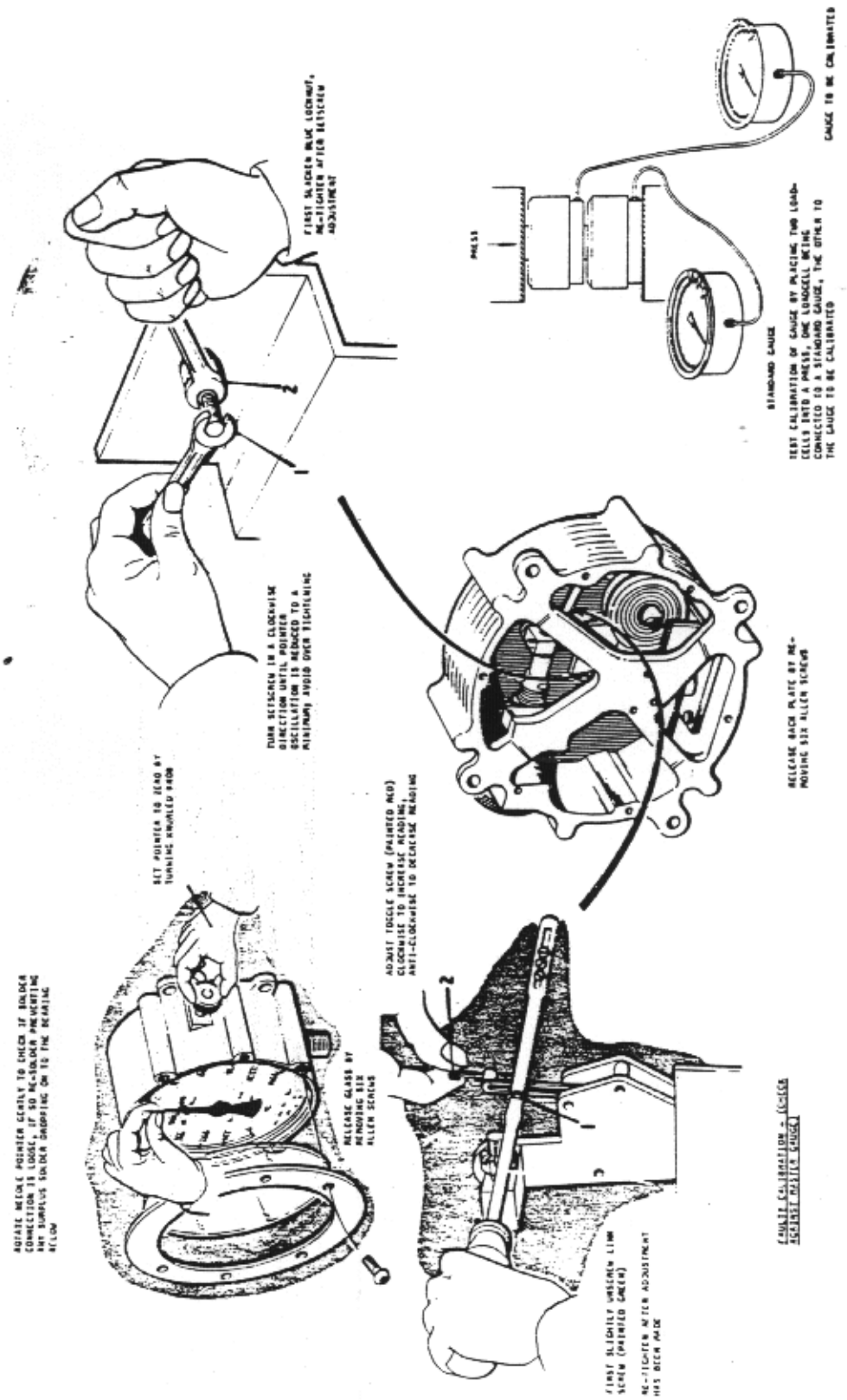
If by any chance a loaded hopper is dropped on to the loadcell by accident, causing undue shock to the gauge, this could loosen the pointer needle which is soldered on to its spindle. If this happens, remove the gauge from the loadcell pipe and release the front glass. Rotate the needle pointer gently to check if the solder connection has become loose. As shown in Fig. 1. If so, re-solder carefully. To ensure correct position for re-soldering pointer screw the zeroing knob hard home. Then solder the pointer, using a good quality flux, in a position equal to 50 lbs below the zero. Open up hole in pointer to 7/64" dia. prior to soldering. Make sure that surplus solder does not run into small bearing behind the needle pointer.

If the gauge needle pointer should oscillate unduly, first remove the back plate, by removing six Allen screws. For identification purposes, the only parts requiring adjustment for oscillation are painted blue. Loosen the blue locknut (1), as shown in Fig. 1, and turn the hexagon headed screw (2) below in a clockwise direction, until the pointer oscillation is reduced to a minimum. At the same time avoid excessive tightening of the hexagon headed screw. A known weight should now be added to ensure that application of the damper has not affected weight reading. If the reading has been affected, this will indicate that the hexagon headed screw has been tightened down too far, so it should be released slightly until the reading becomes accurate. Remove the weights and check the pointer returns to zero. Re-tighten the blue locknut and refit back plate.

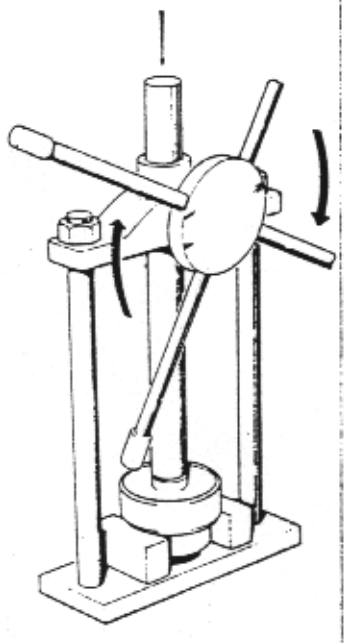
NOTE

The damper must not be applied too tightly, for this may cause movement wear and affect the calibration of the pointer.

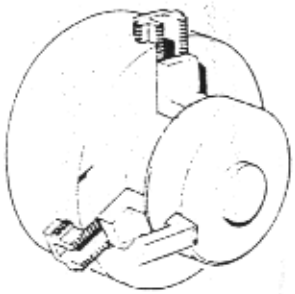
Gauge Adjustment - Fig. 1



Parting Loadcell by Press - Fig. 2



Parting Loadcell by Lathe - Fig. 3



CALIBRATION

If the calibration is found to be inaccurate, the pointer should be adjusted against a master gauge, as shown in Fig. 1. For identification purposes, the only parts requiring adjustment for calibration are painted red and green. First, slightly loosen link screw (1) painted green, then adjust knurled toggle screw (2) painted red, by hand. Turn clock-wise to accelerate the reading and anti-clockwise to decrease reading. This should be done on a gauge test rig or equivalent. After correct adjustment has been made, retighten link screw (1). Other screws must not be interfered with

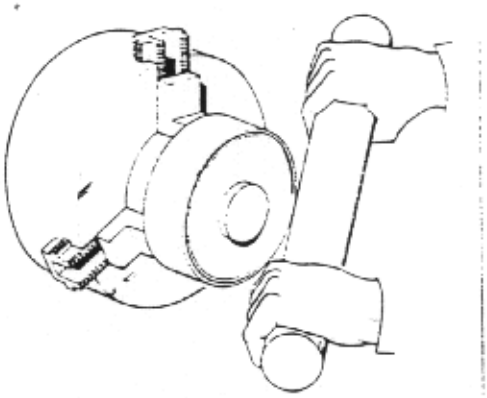
LOADCELL REPAIR

The loadcell itself can be made inoperative if a loaded hopper is dropped by accident on to it, or if aggregate were tipped from a dumper directly into the hopper. Both could cause the top half to turn over at an angle. This means that at least one "O" ring has been damaged. When this happens, the loadcell must be disconnected from the gauge and removed from the machine and the damaged rings replaced. There are two methods used for opening the loadcell. Firstly, by a press. Block up the loadcell on the base of the press using packing under the floating sleeve, this is to ensure that the body will move downwards, thus breaking the seals when pressure is applied to the loadcell button. Secondly, the diameter of the floating sleeve can be turned down on a lathe so as to reduce the thickness to approx. .010 in (.25 mm.) at which stage the rims of the floating sleeve may be broken away releasing the sealing rings and inner parts. Renew sealing rings and floating sleeve, then reassemble, clamp the body of the loadcell in the lathe and rotate at slow speed. By using a steel bar gradually roll the rims of the floating sleeve, thus resealing the loadcell.

It is necessary when parting the Loadcell in the press, to ensure that the Floating Sleeve has been packed sufficiently to move downwards when pressure is applied to the Loadcell Button thus breaking the seals.

Alternatively the Floating Sleeve may be turned off in the lathe. First clamp the body of the Load-cell in the chuck and by taking light cuts, reduce the diameter by 0.100 ins. or 2.50 mm. At this stage it should be possible to split the outer skin releasing t the inner parts.

Resealing the Loadcell - with all aprts assembled in position apply a coating of Goodyear "Pliobond" around the outside edge of sealing rings. Now clamp the Loadcell body in the chuck and gradually roll both edges of the floating sleeve thus locking the inner Parts in position.

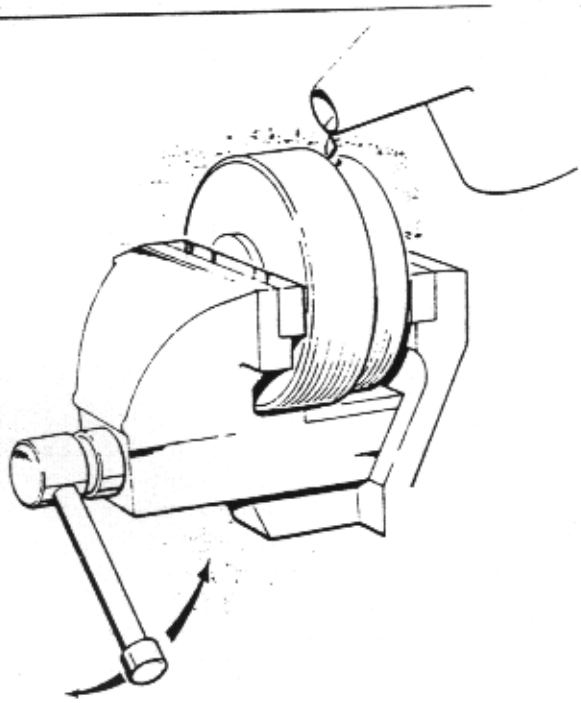


Resealing Loadcell - Fig. 4

REFILLING LOADCELL

The most efficient way of filling a loadcell and gauge, is by using a vacuum pump unit. This is normal practice. However, where this special equipment is not available, the operation can in some instances be carried out by hand. If care is taken, and the following procedure adopted: Place the loadcell in the vice with the button on one jaw, and the inlet for oil upwards, fill the loadcell with Wakefield Girling Brake and Clutch Fluid (crimson) and at the same time slightly compress the vice not more than 1/16 in. or 1.60 mm; and let it return. Repeat this procedure several times. This will remove air bubbles. There is however a simple gauge and loadcell refilling device available from main distributors or direct from Winget Rochester.

N.B. It must be remembered that when the loadcell is in use on the machine, the total amount of compression is less than 1/16 in. or 1.6 mm. Therefore, when compressing this in the vice, it must be remembered to under no circumstances exceed 1/16 in. or 1.6mm, otherwise damage to the 'O' ring seals may occur. It is advised before completely filling the loadcell to remove it from the vice, hold it in your hand with the button downwards, give a series of taps on the base of the loadcell with the other hand, as shown in Fig. 6. This will remove all remaining air locks. Replace the loadcell in the vice and compress a few more times. Continue filling to the point of overflow. Remove from the vice and place to one side with the oil filling end upwards.

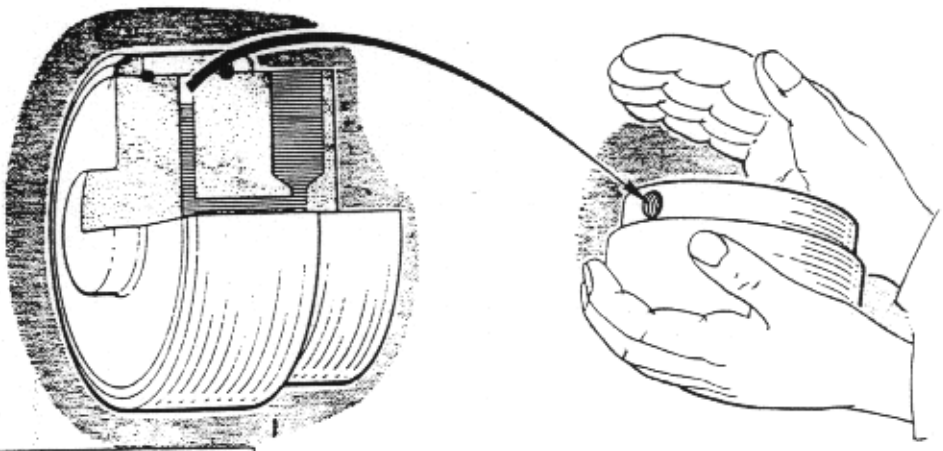


Refilling Loadcell - Fig. 5

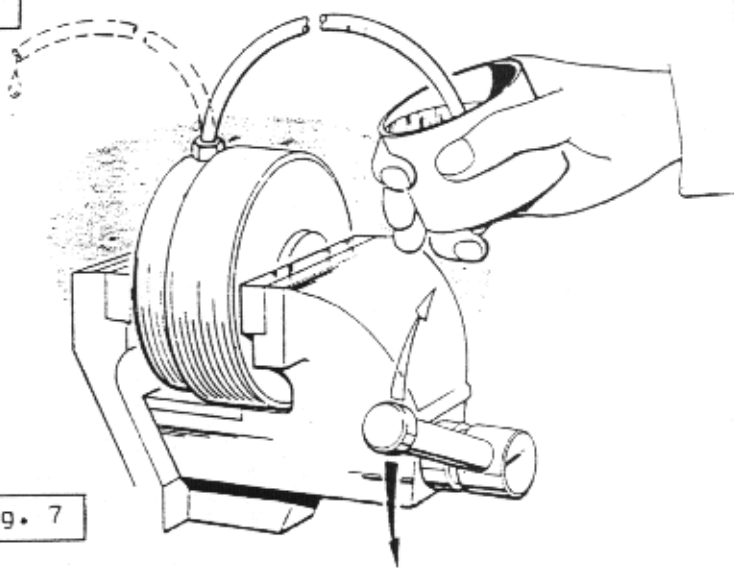
Air bubbles may still be present in fluid. To remove secure Loadcell in vice with union hold upwards. Fill with oil. Move vice handle compressing Loadcell not more than 1/16", then release. Repeat this process several times.

During the Loadcell Filling Operation an air lock usually occurs in the fluid chamber. This will cause inaccurate weigh dial readings if allowed to remain. To release Air lock place Loadcell in hand and give a series of light taps with the other hand.

Once again it is important to remove all air from pipe. Screw the vice up until fluid protrudes from end of pipe. Placing the pipe end in an improvised cup filled with fluid, release pressure on Loadcell and the fluid will be drawn up the tube. Ensure that the tube is kept upright until fitted to gauge, so that fluid will not run out.



Releasing Air from Loadcell - Fig.6



Removing Air from Pipe - Fig. 7

GAUGE

Due to a vacuum the gauge will invariably hold its quota of oil, but in any case, lay the gauge on its face and fix a right-angle adaptor to the oil inlet and fill with Wakefield Girling Brake and Clutch Fluid (crimson), shown in Fig. 8 open the bleed screw situated on the middle coil of the Bowden Tube shown in Fig. 1. The weight of the fluid will expel any trace of air. Care should be taken to avoid oil dripping onto the back of the dial face. Ensure that the bleed screw is correctly tightened.

TUBE

The tube requires more careful attention to make sure that all air is extruded from the tube when being filled with oil. One method of dealing with this is to first screw the end of the tube to the loadcell, again holding the loadcell in the vice as shown in Fig. 7. Screw the vice up until oil reaches the top of the tube. Place the pipe and in an improvised cup filled with fluid. Release pressure on the loadcell and the fluid will be drawn up the tube. Ensure that the tube is kept upright until fitted to gauge. Then join the top end of the tube to the gauge making sure that both unions on the gauge and tube are full of oil.

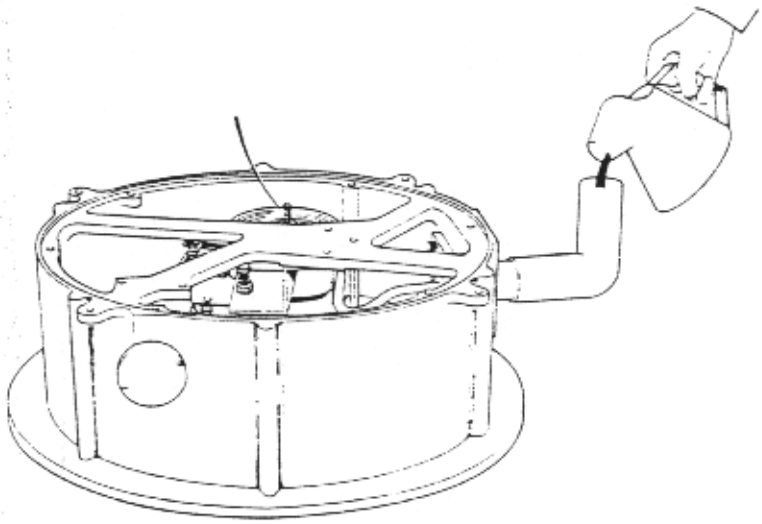
REFITTING

When the filling operation is complete check the calibration of the gauge, if this is satisfactory, the gauge and loadcell may be refitted to the machine and tested with known weights, provided the adjusting screws in the gauge which control calibration have not been moved, the gauge should register correctly. A zeroing knob is provided on the side of the gauge, as shown in Fig. 1, this should be adjusted with the hopper empty and down on the loadcell. Check there is a clearance between the hopper and ground before zeroing.

Open Bleed Screw on middle coil of Bourbon Tube. Re-tighten after Air is expelled.

Care should be taken to avoid oil dripping onto back of dial face.

With right angle adaptor fitted, proceed to fill with Girling Brake Fluid (crimson).



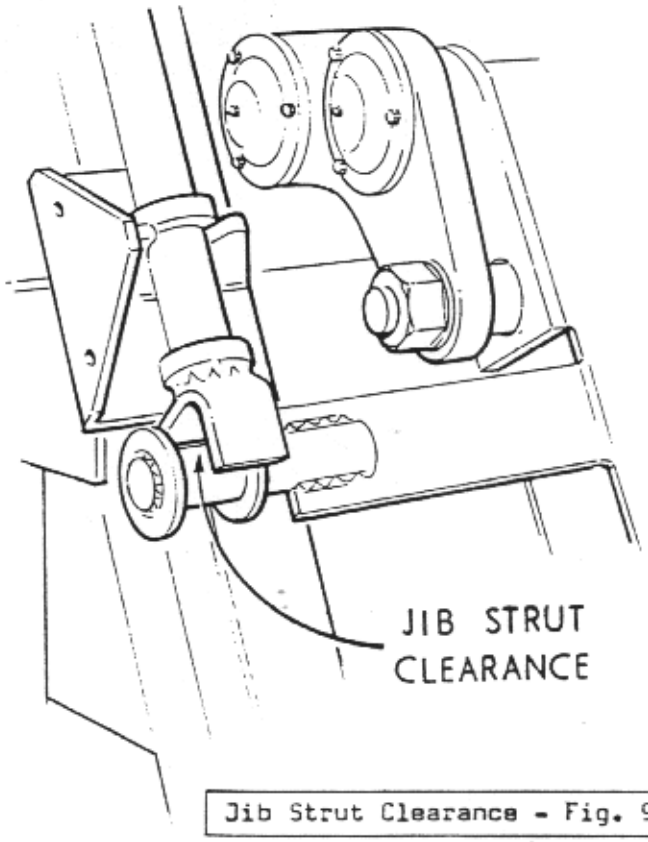
Refilling Gauge - Fig 8

SETTING UP OF WEIGH MECHANISM

All reference numbers given below can be found in Spare Parts section of this manual.

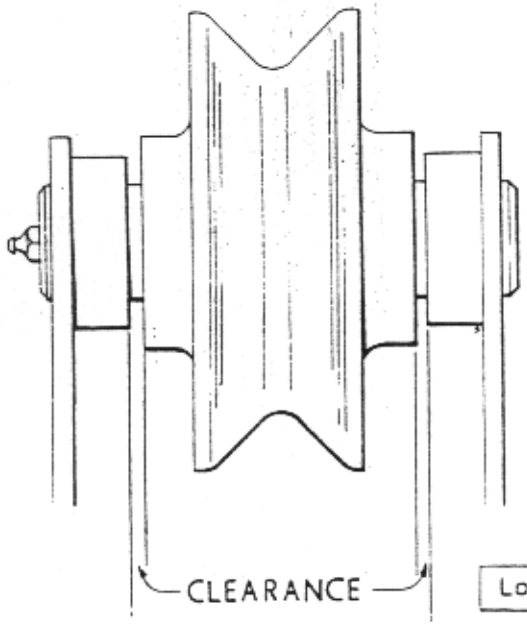
Assuming the loadcell and gauge are completely accurate, the following should now be checked. Obvious faults such as grout and fine aggregate around mechanism and base of hopper one assumes would be checked and cleaned before investigating the finer points.

1. Check that when hopper is in the down position the jib struts (Group G1. Ref. 7) are clear of the horizontal hopper bars either side and do not foul the welded washers, see Fig. 9. (This paragraph not applicable to 500R & 750R m/cs)



Jib Strut Clearance - Fig. 9

(Not applicable)

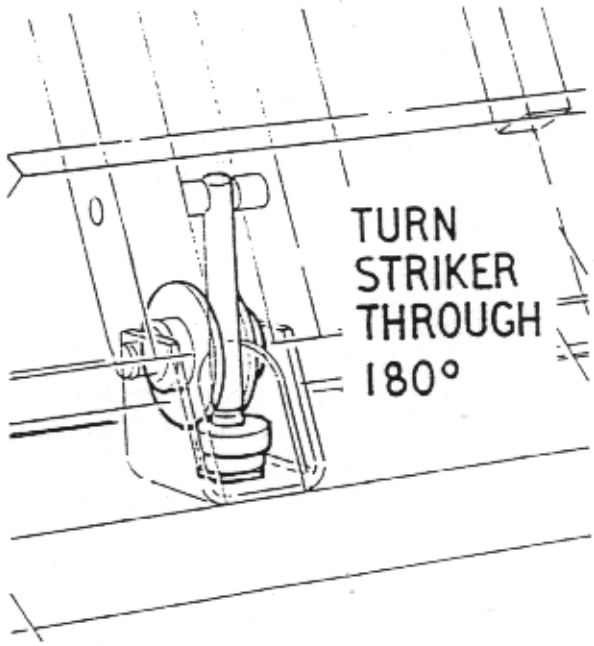


2. When loadcell striker (Group E1 Ref. 5) is resting on the loadcell. Check that the loadcell striker guide (Group E1. Ref. 6) does not touch either side of its housing, see Fig. 10 (look from inside of engine compartments to check this) if it does, slacken off hex nuts either end of the link shaft (Group E1. Ref. 8) and correct by moving hopper over away from offending side. Retighten hex nuts and check clearance again after raising and lowering hopper several times.

Loadcell Striker Guide Clearance - Fig. 10

3. Check loadcell striker guide (Group E1. Ref. 6) rotates freely, if it does not, it may be simply due to lack of lubrication. If so lubricate loadcell striker guide pin (Group E1. Ref. 7) through grease nipple provided. If loadcell striker guide still does not rotate freely inspect needle roller bearings (Group E1. Ref. 20) and seals (Group E1. Ref. 21) and replace if necessary.

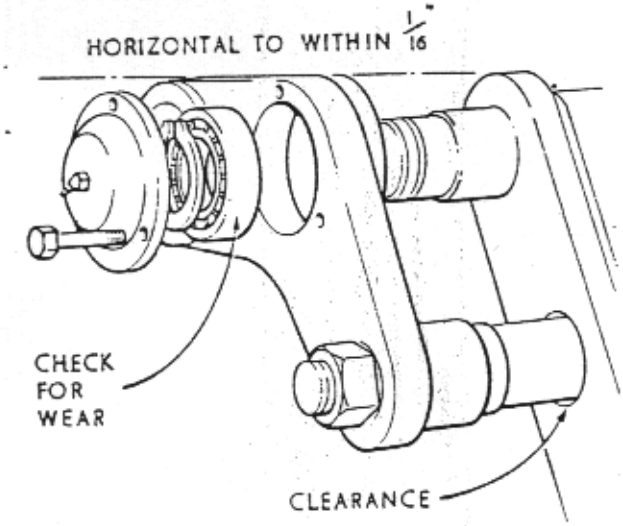
4. Check loadcell striker (Group E1. Ref. 5) has not developed flat spots where it hits the loadcell striker guide (Group E1. Ref. 6) as this may cause inaccurate batch weighing. Either turn loadcell striker around 180° and use on undamaged side or replace.



Damage to Loadcell Striker - Fig. 11

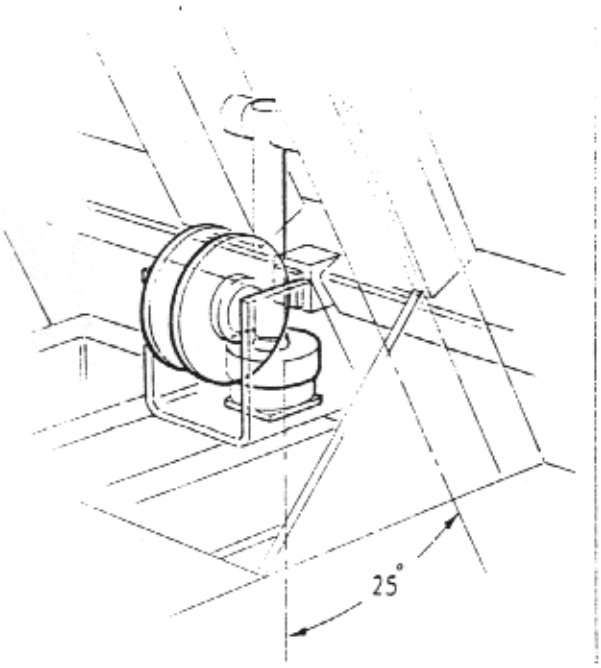
5. Incorrect amount of packing under loadcell will cause inaccurate batch weighing. The following checks must be made.

a) Check top edge of both link arms (Group E1.Ref.10) are horizontal within 1/16" (2mm) see Fig.12, if not adjust loadcell packing - (Group E1. Ref. 36).
b) Check link shaft (Group E1. Ref.8) is clear of holes in hopper cradle (Group E1. Ref.1) either end See Fig. 12 (inspect from both inside and outside engine compartment). Correct by adjusting loadcell packing.
c) Check link arm needle roller bearings (Group E1. Ref.25) for excessive wear. These may need replacing to ensure complete accuracy of weigh mechanism.
d) When lowering hopper, loadcell striker (Group E1. Ref. 5) must make contact with loadcell striker guide (Group E1. Ref.6) before coming to rest on the loadcell, if it does not reduce packing under loadcell and recheck level of link arms.
e) To increase gauge reading at low load's increase packing under loadcell.



Inaccuracy of Link - Fig. 12

Correct Angle of Loadcell - Fig. 13



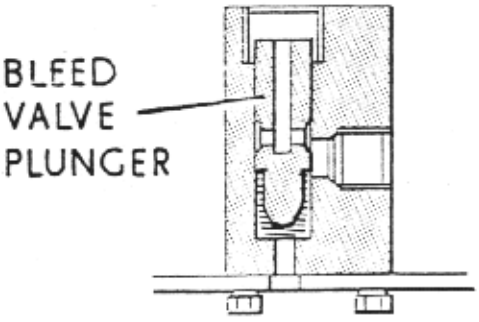
6. Check loadcell striker (Group E. Ref.5) is at the correct angle of 25° to hopper cradle, see Fig. 13 (Group E1. Ref.1). Adjustment can be made by altering loadcell striker packing (Group E1. Ref.3) until correct angle is obtained.

   To increase gauge reading at high load's increase loadcell striker packing.

7. If gauge is sluggish, or fails to move up to zero from pre-set allowance. Check SAE of hydraulic oil. SAE 10 oil for temperatures up to 60°F (16°C). SAE 20 oil for temperatures between 60°F and 90°F (16°C) and (32°C). SAE 30 oil for temperatures above 90°F (32°C). Top up system as necessary using an oil of correct grade as noted above. Do not mix different brands of oil. The bleed valve plunger (Group F2. Ref.16) will not open if incorrect grade is used, see Fig.14. Also check bleed valve plunger opens fully.

After all previous checks have been made use known weights evenly distributed in hopper to check correct gauge reading progressively through its range.

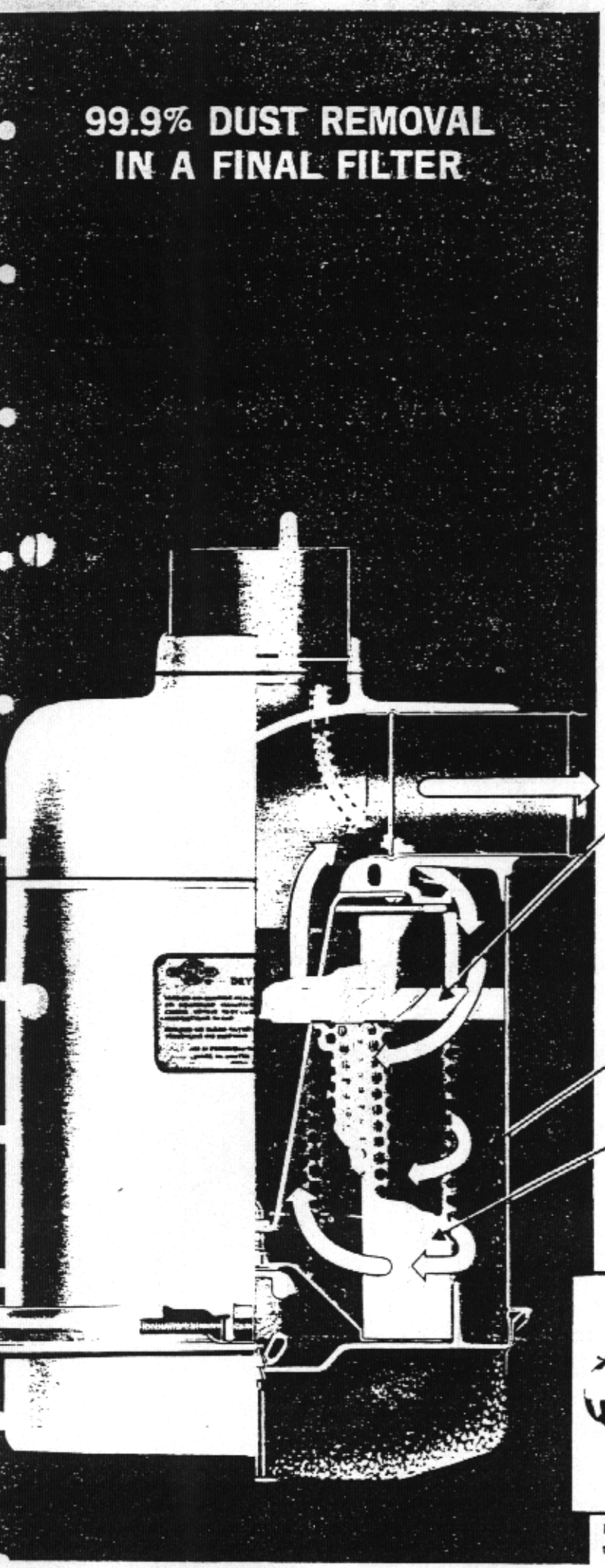
Bleed Valve - Fig. 14



Ref	Description	Part No	Qty
1	Hose	260 3010 88	1
2	Weigh Gauge (See Group E1)		1
3	Loadcell Patent Plate Attachment	511 1372 00	1
4	Gauge Adaptor	555 1828 00	1
5	Loadcell Body	513 2653 00	1
6	Platen	513 2654 00	1
7	Sealing Ring	513 2655 00	2
8	Floating Sleeve	513 2656 00	1
9	Locking Pin	513 2657 00	1
	Complete with Lead Seal on Wire	020 1580 00	1
10	Split Pin	353 3047 00	1
11	Bonded Seal	417 8020 00	2
12	Bonded Seal	417 8580 00	1
13	'O' Ring	391 3510 00	2
14	Loadcell Adaptor	555 1827 00	1
15	Steel Ball	101 1041 00	1
16	Setscrew	403 7606 10	1
	The following parts are also available as spares for the Gauge, but are not illustrated:-		
17	Movements Complete	253 8170 01	1
18	Dampener Adjusting Unit Complete	253 8170 03	1
19	Zero Adjusting Unit Complete	253 8170 04	1
20	Endbit Bleeder Screws	253 8170 05	1
21	Pointer Assemblies Complete	253 8190 00	1
22	Rim Screws	253 8190 01	6
23	Backplate	253 8190 02	1
24	Backplate Gasket	253 8190 03	1
25	Backplate Screws	253 8190 04	6
26	Window	253 8190 05	1
27	Window Gasket	253 8190 06	1
28	Adjusting Rod	253 8190 07	1
29	Dial (750R)	253 8190 21	1
29	Dial (500R)	253 8190 08	1
30	Mark Setter - 1 blue 1 red 1 green	253 8170 55	1 set
31			
32			
33			
34			

Ref	Description	Part No	Qty
35	Rubber Ring	253 8190 19	1
36	Coiled Tube Assembly (750R)	253 8080 01	1
36	Coiled Tube Assembly (500R)	253 8100 01	1

99.9% DUST REMOVAL IN A FINAL FILTER



DESIGN AND PERFORMANCE ADVANTAGES

REDUCED ENGINE WEAR The high efficiency of the Cyclopac will provide long engine life under operating conditions where dust is the principal cause of engine wear.

WEIGHT SAVING DESIGN Simplicity of design eliminates unnecessary weight.

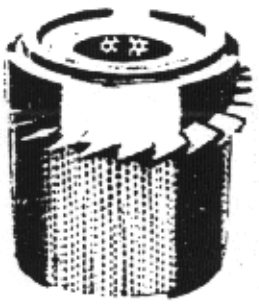
SERVICEABLE DURALIFE FILTER The Duralife paper filter normally requires only infrequent attention. When service is required, the filter need not be replaced. It can be renewed by back-flowing with compressed air or washing in water and Cooper-Kleen Filter Element Cleaner. This feature of Duralife multiplies the usable life of the filter and cuts maintenance costs substantially.

ALL WEATHER OPERATION The Cyclopac is not affected by adverse weather conditions.

INTERCHANGEABILITY Models are available to be used interchangeably with centre tube inlet oil bath air cleaners. Field conversion is easily accomplished.

FLEXIBILITY Cleaner can be mounted either vertically or horizontally to simplify installation, reduce ducting, and often improve the overall appearance of the unit on which it is installed.

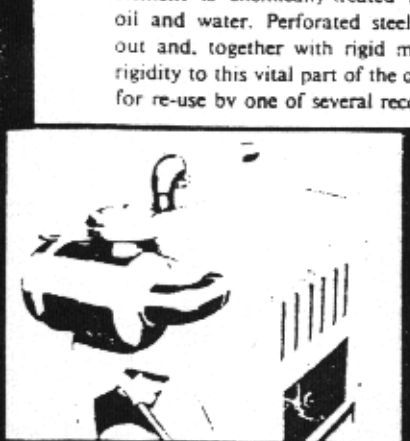
CONSTRUCTION AND OPERATION



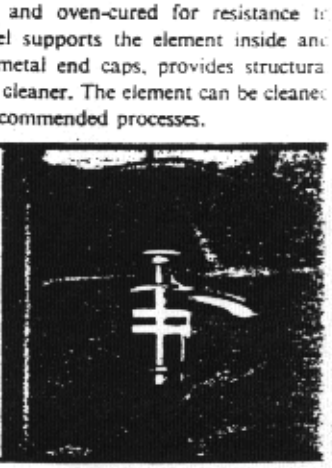
PRE-CLEANER The illustration shows a fin which gives high-speed rotation to the intake air, and separates a large portion of the dust from the air by centrifugal action. The *plastic fin, the element*, and the *gasket* are vital parts of the cleaner and are designed into a single replaceable assembly. This design feature assures continued high performance of the cleaner.

EJECTED DUST The dust is swept through a slot in the baffle and collected in the dust cup. On a horizontal installation, the slot in the baffle is located at the top. The cleaner performs equally well in all positions.

DURALIFE ELEMENT The small portion of the dust remaining in the pre-cleaned air is removed by the Duralife element. The element is chemically-treated and oven-cured for resistance to oil and water. Perforated steel supports the element inside and out and, together with rigid metal end caps, provides structural rigidity to this vital part of the cleaner. The element can be cleaned for re-use by one of several recommended processes.



FWG CYCLOPAC installed horizontally on power unit.

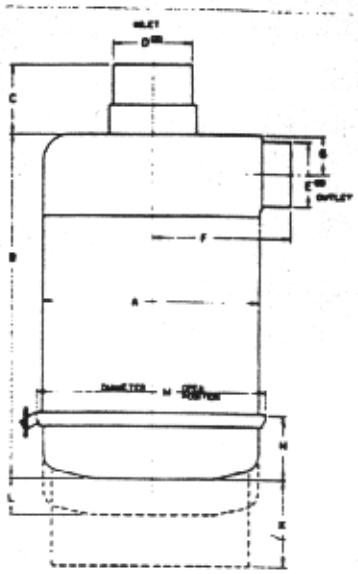


FWA CYCLOPAC installed vertically on over-highway truck

SPECIFICATIONS

Cyclopac FW Series

AIR CLEANERS



FWA and FWG cleaners can be mounted either horizontally or vertically.

FWA

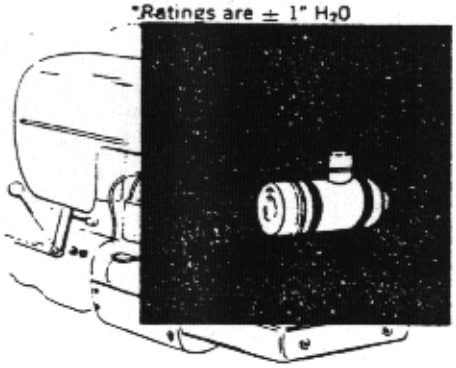
Air Cleaner Model	* Air Flow Rating At 8" H_2O	A	B	C	D	E	F	G	H	K	L	M	Approx. Wt. Lbs.
DA 128	80	5¼	14 3/32	1⅞	2	2	4	1 5/16	3 5/16	8½	1⅜	6⅛	6
DA 127	110	6½	17 3/32	2 1/16	2½	2½	4½	1 29/32	3½	8 1/32	1⅜	7⅜	8
DA 129	190	8	18 3/32	2 1/16	3	3	6 1/16	2 5/16	3½	9 1/32	1⅜	8⅞	10½
DA 131	290	10 7/16	18½	3¼	3½	4	7 1/16	2½	4	7 5/16	1½	11 1/16	20
DA 141	385	11 1/16	19¼	3¼	4½	4	7 1/16	2⅜	4	7 5/16	1½	13⅜	28

*Ratings are ± 1" H_2O

FWG

Air Cleaner Model	* Air Flow Rating At 8" H_2O	A	B	C	D	E	F	G	H	K	L	M	Approx. Wt. Lbs.
DA 121	95	5¼	12 7/32	1⅝	2	2	4	1½	3 7/32	8 17/32	1⅜	6⅛	4½
DA 122	140	6½	13 3/32	1 1/16	2½	2½	4½	1½	3½	8 1/32	1⅜	7⅜	6½
DA 123	250	8	14 3/32	1 1/16	3	3	6 1/16	1½	3½	9⅛	1⅜	8⅞	9½
DA 130	330	10 1/16	16 7/32	1½	4	4	7½	2 1/16	4	7 5/32	1½	11 1/16	17
DA 140	450	11 1/16	17 23/32	3 1/32	5	5	8 23/32	4 1/16	4	10 3/32	1½	13⅜	29
DA 150	730	14	21 1/16	2½	6	6	10⅛	5 5/32	4	13⅛	1	15 1/16	40½

*Ratings are ± 1" H_2O



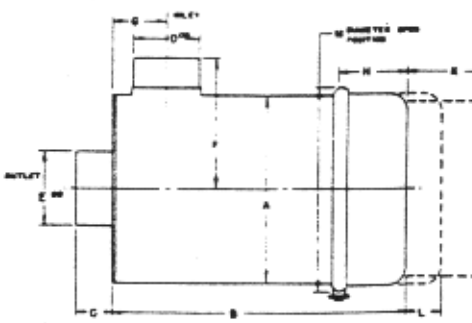
FWG CYCLOPAC installed horizontally on farm tractor.

COOPER-KLEEN FILTER CLEANER

Detergent with carbon dissolving additive. Mix with water. Cleans any washable paper filter.

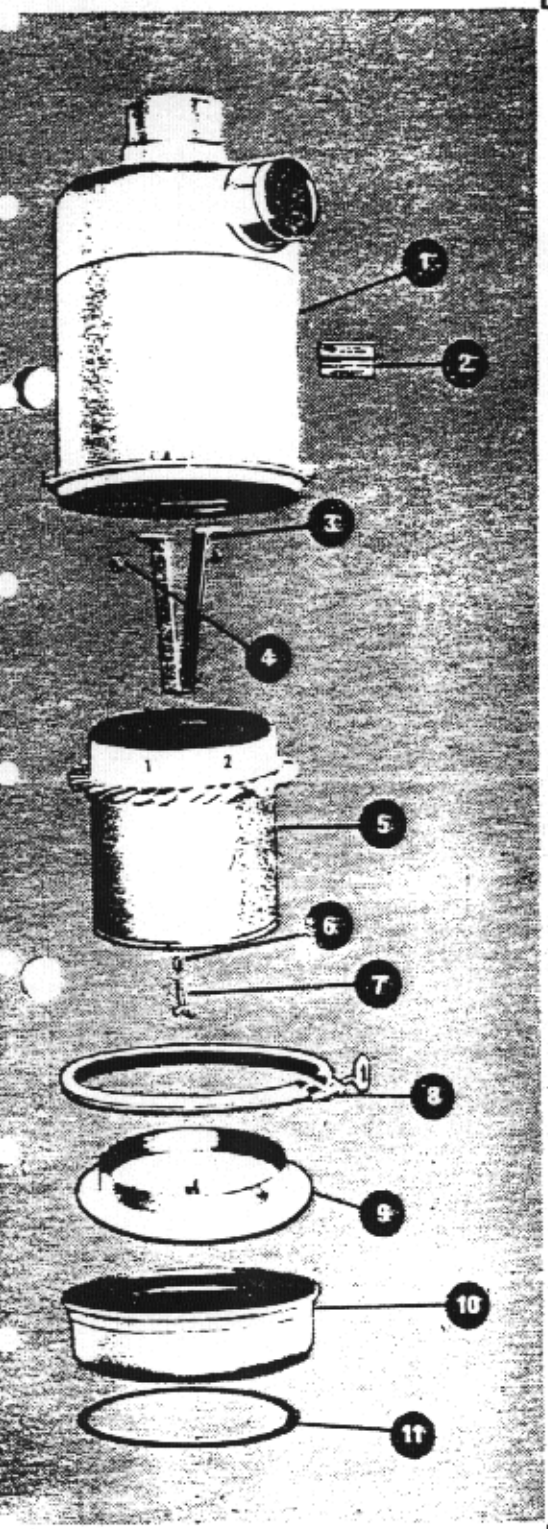
RESTRICTION INDICATOR

Signal locks in view when filter element requires servicing. Mount on dash or cleaner ducting. (See separate leaflet.)



Cyclopac

AIR CLEANER SERVICE PARTS



FWA

	DA 128	DA 127	DA 129	DA 131	DA 141			
1 Body Assy.	DU 807	DU 798	DU 817	DU 898	DU 1236			
2 Instruction Transfer	DU 669A	DU 669A	DU 669A	DU 669A	DU 669A			
3 Yoke	*	*	*	*	*			
4 Lockwasher Screw	*	*	*	*	*			
5 Element Assy	DU 644	DU 750	DU 770	DU 879	DU 1233			
6 Gasket Washer	DU 658	DU 658	DU 658	DU 260	DU 260			
7 Wing Nut	DU 657	DU 657	DU 657	DU 257	DU 257			
8 Clamp Assy.	DU 665	DU 749	DU 420	DU 882	DU 481			
9 Baffle	DU 641	DU 747	DU 766	DU 880	DU 1207			
10 Cup Assy.	DU 666	DU 748	DU 769	DU 881	DU 1208			
11 Cup Gasket	None	None	None	DU 876	DU 314			

* Not a Service Part.

FWG

	DA 121	DA 122	DA 123	DA 138	DA 148	DA 158	
1 Body Assy.	DU 667	DU 753	DU 773	DU 877	DU 1205	DU 1517	
2 Instruction Transfer	DU 669A	DU 669A	DU 669A	DU 669A	DU 669A	DU 669A	
3 Yoke	*	*	*	*	*	*	
4 Lockw'her Screw	*	*	*	*	*	*	
5 Element Assy.	DU 664	DU 750	DU 770	DU 879	DU 1206	DU 1518	
6 Gasket Washer	DU 658	DU 658	DU 658	DU 260	DU 658	DU 658	
7 Wing Nut	DU 657	DU 657	DU 657	DU 257	DU 657	DU 657	
8 Clamp Assy.	DU 665	DU 749	DU 420	DU 882	DU 481	DU 977	
9 Baffle	DU 641	DU 747	DU 766	DU 880	DU 1207	DU 1519	
10 Cup Assy.	DU 666	DU 748	DU 769	DU 881	DU 1208	DU 1520	
11 Cup Gasket	None	None	None	DU 876	DU 314	DU 223	

* Not Service Part.

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