TECHNICAL BULLETINS

SERIES 1, 2 & 3 MODEL 42 WINGET DIESEL TRACTOR

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INTRODUCTION

This Manual is a re-print of the original manual last published some years ago and has been re-printed in response to requests from enthusiasts who continue to run examples of the Winget Series 1,2 or 3 of the Model 42 Tractors.

Unfortunately the fact that a particular part number is listed on the following pages does not necessarily indicate that the component is still available. Winget Limited no longer hold or supply parts for any of the Tractors and has no other Technical Information available.

The contents of this manual are believed to have been correct at the time of original publication and Winget Limited can accept no responsibility for any errors or omissions contained within the following pages. Nor can we accept any liability whatsoever arising from the use of this manual howsoever caused.

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Winget

SERIES I, II & III TRACTOR

SPARE PARTS BOOK

MODEL 42

SLATER & ENGLAND LTD., AGRICULTURAL MACHINERY SALES,
WINGLOE HOUSE, BRISTOL ROAD, GLOUCESTER. TEL 24228

WINGET DIESEL TRACTOR

SPARE PARTS LIST

This List Does Not Cover The Lister Engine, Spares
For Which Should Be Ordered From The

ENGINE PARTS LIST

From Your Local Winget Tractor Or Lister Dealer

WHEN ORDERING SPARES

ALWAYS QUOTE THE **TRACTOR SERIAL NUMBER**
(Which Is Stamped On A Plate Fixed To The Chassis)
If Parts For The **GEARBOX DRIVE AXLE** Are Required
Quote The **AXLE NUMBER**
(Stamped On A Plate Fixed To Gearbox Rear Cover
Visible From Rear Of Tractor Below P.T.O.)

Quote Part No. Full Description And Quantity Required. If In Doubt, Give Item No. And Page No. As Well.
Always Include Nuts, Bolts, Washers Etc. If Required.
Spares Should Be Ordered From Your Dealer.
In Case Of Emergency, You May Contact:- Slater & England Limited
Telephone Gloucester (OGL2) 20228, Ask For Tractor Stores
Give The Full And Correct Address To Which The Spares Are To Be Sent
Telephone Orders **MUST** Be Confirmed By Your Official Order By Post Immediately.

YOUR DEALER IS:-

SLATER AND ENGLAND LTD. - WINGET TRACTOR SALES
BRISTOL RD - GLOUCESTER

Winget TRACTOR

SLATER & ENGLAND LTD., AGRICULTURAL MACHINERY SALES

WINGLOS HOUSE, BRISTOL RD., GLOUCESTER—ENGLAND PHONE 20228

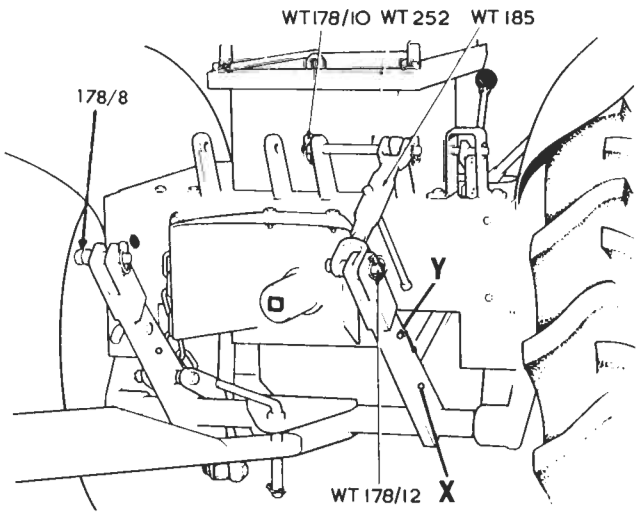
RECOMMENDED LUBRICANTS

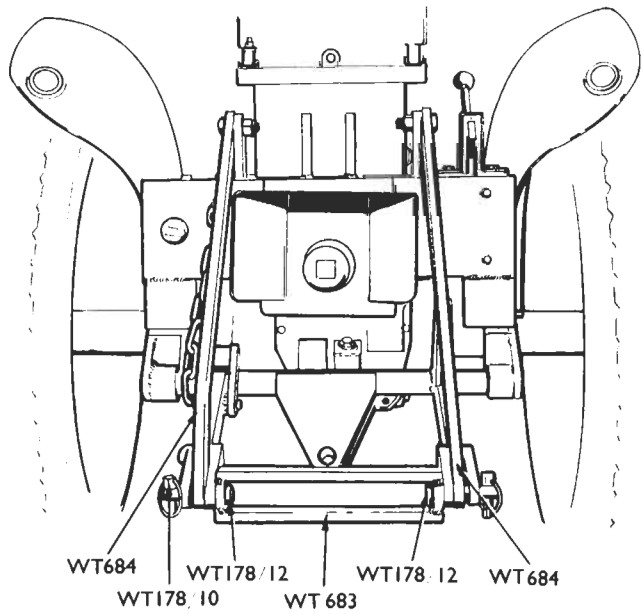
COMPANY		ENGINE—LISTER SR1	DRIVE AXLE, GEARBOX & STEERING BOX	GREASE POINTS	HYDRAULIC SYSTEM
CASTROL					
30°C	ABOVE 85°F.	AGRICASTROL HD 30/1	AGRICASTROL EP	AGRICASTROL	HYSPIN 70 OR AW.10
0 to 30°C	32° to 85°F.	AGRICASTROL HD 20/1	AGRICASTROL EP LIGHT	MULTI - USE	HYSPIN 55 OR AW.5
Below 0°C	Below 32°F.	AGRICASTROL HD 10/1	CASTROL HYPOY LIGHT	GREASE	HYSPIN 45 OR AW.5
B.P.					
30°C	Above 85°F	VANELLUS SAE 30	GEAR OIL SAE 140 EP	ENERGREASE UNIVERSAL OR	ENERGOL HL 65
0 to 30°C	32°—85°F	TRACTOR OIL UNIVERSAL OR VANELLUS SAE 20W	GEAR OIL SAE 90 EP	ENERGREASE	ENERGOL HL 50
Below 0°C	Below 32°F	VANELLUS SAE 10W	GEAR OIL SAE 80 EP	L2	ENERGOL HL 40
ESSO					
30°C	OVER 80°F	TRACTORLUBE HDX 30 OR ESSO TRACTORLUBE (UNIVERSAL)	TRACTORLUBE GEAR OIL GP 90/140	ESSO MULTI-PURPOSE GREASE H	NUTO H-54 OR TRACTORLUBE HDX 20
0 to 30°C	32°—80°F	TRACTORLUBE HDX 20 OR ESSO TRACTORLUBE (UNIVERSAL)	TRACTORLUBE GEAR OIL GP 90/140		NUTO H-44 OR TRACTORLUBE HDX 10W
Below 0°C	BELOW 32°F	TRACTORLUBE HD 10W	ESSO GEAR OIL GP 80		NUTO H-36
MOBIL					
30°C	OVER 85°F	DELVAC 1130	MOBILUBE GX 140	MOBIL GREASE M.P.	MOBIL DTE OIL LIGHT MOBIL VELOCITE OIL No. 10
0 to 30°C	32°—85°F	DELVAC 1120	MOBILUBE GX 90		
Below 0°C	BELOW 32°F	DELVAC 1110	MOBILUBE GX 80		MOBIL VELOCITE OIL No. 6
SHELL					
30°C	OVER 85°F	ROTELLA OIL 30 OR S.30 TRACTOR OIL UNIVERSAL OR	SPIRAX 140 EP	FARM GREASE UNIVERSAL OR	TELLUS OIL 27
0 to 30°C	30°—85°F	ROTELLA 20/20W OR S20/20W	SPIRAX 90 EP	RETINAX	TELLUS OIL 23
Below 0°C	UNDER 32°F	ROTELLA 10W OR S10W	SPIRAX 80 EP	A	TELLUS OIL 15

IN THE EVENT OF THE ABOVE OILS NOT BEING AVAILABLE

EQUIVALENT OILS SUPPLIED BY A REPUTABLE MANUFACTURER MAY BE USED

Winget STANDARD DRAWBAR ATTACHMENT





Standard Drawbar Attachment

Tractor Tow hitch can be arranged as illustrated or without adjustable top link for bad ground conditions to enable it to pivot. The Tractor set at 46"/117 cm. wheel centres will follow the track of the Winget Salop Trailer and these are supplied with drawbar pins.

Working

Spare Parts for Rear Linkage

Part Nos.	Description	No. Off
WT.252	Top Link Pin	1
WT.178/12	Bottom long Link Pin or Plough Link Pin	1
WT.185	Adjustable Top Link	1
WT.178/10	Lynch Pin	5
WT.178/8	Standard Bottom Link Pin	2
WT.560	Not illustrated. Standard Link and Lynch Pin Assembly	

X—for use with Rotary Cultivator or Rotary Mower

Y—for use with Rotary Mower only.

Warning

When using Front End Loader always connect Rear 3 point Linkage as per the above illustration.

Height to centre line of Drawbar is 15½".

Optional Extra Drawbar Attachment

Three point Linkage Drawbar Assembly. WT.713 Height to middle of Drawbar 11"/28 cm.

For use with trailed P.T.O. driven implements and for use with Gang Mowers.

Spare Parts

Part Nos.	Description	No. Off
WT.684	Staybar	2
WT.683	Swivel Drawbar	1
WT.178/12	Extra Long Link Pin or Plough Pin	2
WT.178/10	Lynch Pin	2

Height to centre of Drawbar in lowest position is 11½".

Height to centre of Drawbar in highest position is 15½".

SUPPLEMENT No. 3

OPTIONAL EXTRAS FOR THE WINGET TRACTOR

Part No.	Description	No. Off
WT 633	Front Headlight assembly complete	2
WT 869	Sealed Beam Unit	2
WT 870	Rubber Surround	2
WT 634	Rear Side Light Assembly complete	2
WT 655	Rear Number Plate Light Assembly complete	1
WT 721	Reflectors	2
WT 778	Mirror Head only	1
WT 197	Instrument Panel for Electrics	1
WT 201	Light Switch Surround	1
WT 865	Light Switch Assembly complete	1
WT 635	Horn	1
WT 636	Horn Button	1
WT 867	Loom for Electric Lights only including Rear Number Plate	1
WT 868	Loom for Electric Starting only	1
WT 785	Flashing Indicators including Flasher Unit Relay	4
WT 786	Switch for Flashing Indicators	1
WT 866	Ignition Switch	1
WT 774	Engine Vibration Hour Meter	1
WT 775	Vibration Hour Meter for Instrument Panel	1
WT 770	Instrument Panel for Hour Meter when Electrics not fitted	1
WT 871	Support for Hour Meter fitted to engine when Electrics are fitted	1
WT 595	Downswept Exhaust Pipe (Delete Items 35 WT 594)	1
WT 872	Clip for Silencer	1
WT 606	Silencer (Standard)	1

The following electrical parts are supplied by R.A. Lister & Co. Ltd., DURSLEY, Glos. and are available from them direct and come under their direct guarantee.

291-36961	Dynamo	1
202-12780	Dynamo Belt	1
201-12830	Engine Pulley	1
64-22781	Ameter	1
64-9266	Push Button	1
201-15120	Starter Motor	1
351-31480	Solenoid	1
64-19099	Voltage Regulator	1
201-12760	Dynamo Mounting Bracket	1
201-12770	" " "	1
270-98	Dynamo Stud	2
270-3	Dynamo Stud	2
27-413	Spring Washer	7
270-67	Set Screw	1
201-12850	Adjusting Link	1
27-85	Washer	1
270-25	Bolt	1
270-61	Bolt	1
291-3694	Set Screw	1

SUPPLEMENT NO. 4

STANDARD PARTS FOR ALL WINGET TRACTORS NOT LISTED IN THE ILLUSTRATED SECTION

Part No.	Description	No Off
	DRY STICK ON TRANSFERS (DECALS)	
WT 167-1	Hydraulic Control Lever Up-Neutral-Down	1
WT 167-2	Pull to Stop	1
WT 167-3	Diff Lock	1
WT 167-4	Decompressor	1
WT 167-5	Cold Start (Extra fuel position)	1
WT 167-6	Diesel	2 (Home)
WT 167-7	Gear Lever Positions	1
WT 167-8	F.T.O. Lever In-out	1
WT 167-9	Arrow for Rotation	1
WT 877	Complete set of 10 transfers as above	1
WT 167-10	Powered by Lister Diesel	2 (Overseas)
WT 177	Winget Name Badge Assembly	1
WT 177-1	Winget Transfer as used on implements	As required.

STANDARD TYRES ON SERIES I, II, III AGRICULTURAL
OPTIONAL ON SERIES 4, 5, 6.

750 x 20 4 ply Agricultural Tractor Rear Tyres (Track Grip) and wheels

* 400 x 15 4 ply Agricultural Tractor Front Tyres and wheels *

STANDARD TYRES ON SERIES 4, 5, 6 INDUSTRIAL
OPTIONAL ON SERIES 1, II, III

700 x 20 8 ply Industrial General Purpose Rear Tyres and wheels
(suitable for use as grassland tyre)

Standard FlatRim - Non adjustable axles.

Non-Standard Flat Rim - Adjustable axles.

* 440 x 15 4 ply Industrial General Purpose Front * Tyres and wheels
(Tyre fits standard as above agricultural rim)

OPTIONAL TYRES:-

750 x 20 XY Michelin Sand and General Purpose Rear Tyres and wheels
(Adjustable axles)

900 x 16 XS Michelin Soft Sand Rear Tyres and wheels
Thread pattern unidirectional (Fixed axles only)

For twin wheel conversion using 750 x 20 or 700 x 20 Rear Tyres and wheels with adjustable centres - WT 702 Twin wheel stud adaptors 10off

* THESE ARE IN THE PROCESS OF BEING REPLACED BY 500 x 15 FRONT TYRES AND WHEELS.*

SUPPLEMENT No. 5

INDUSTRIAL TRACTOR ONLY

PARTS EXTRA TO STANDARD AGRICULTURAL WINGET TRACTORS
SERIES I, II, III

Brakes see page 22

Delete Item 3, WT 551-1 Clevis Assembly Quantity 4
Delete Items 13 - 22
Delete Item 9 Quantity 2
Delete Item 10 Quantity 1

		Quantity
WT 704	Handbrake	1
WT 711-11	Handbrake Mounting Bolt	1
WT 723	Short Brake Rod pedal to additional compensator	1
WT 722	Handbrake Rod	1
WT 711-2	Handbrake Quadrant	1
	Quadrant Bolt & Nut 5/16 UNF x ¾ long	2
WT 709	Compensator Brake Links	4
WT 711-9	Plain Clevis	3
WT 711-10	Slotted Clevis	1
WT 724	Clevis Pin long (Handbrake to pedal)	1
WT 711-18	Clevis Pin	6
WT 707	Brake Pedal	1
WT 710	Additional Compensator	1

Front Axle - see page 18

Delete Part Nos. WT 161 RH and LH, WT 136 and WT 146, WT 160.

WT 624	RH Stub Axle Assembly	1
WT 624	LH Stub Axle Assembly	1
WT 693A	Fixed Front Axle Assembly complete	1
WT 697	Fixed Track Rod	1
WT 810	Front Axle Balance Weights as required	3

TECHNICAL BULLETIN No. 1

MOST IMPORTANT

HOW TO ACHIEVE OPTIMUM RESULTS WITH THE WINGET TRACTOR

1. Due to the design and characteristics of this 4 stroke single cylinder air cooled industrial engine, it is essential that the required power is obtained BEFORE any operation is commenced, it will then be found the engine will maintain the power output required.
2. On all P.T.O. driven implements, start work at maximum throttle and ease back the throttle dependent upon the conditions, so running the engine on the governor and not the throttle.
3. Before transporting loads up a hill, open the throttle to maximum BEFORE starting to climb and NOT whilst negotiating the hill.
4. For all drawbar work, full power (torque) at the wheels is available at just above idling speed, increased engine speed will only give more road speed but no extra power at the wheels.

TECHNICAL BULLETIN No. 2

TOPPING UP HYDRAULIC OIL TANK ON THE WINGET TRACTOR

(see page 24 of illustrated parts book)

It has been found that customers are over-filling the hydraulic oil tank with consequent spillage of oil through the air breather hole in the filter cap causing the oil in turn to drop onto the hydraulic belt, Part No. WT 8259. If the belt gets impregnated with oil it causes belt slip and the life of the belt is considerably reduced.

Please note the oil level on this tank should be at the very BOTTOM of the oil input strainer, Part No. WT 8465, so that sufficient air space is left to allow expansion of air for the front loader rams and the two stage trailer ram when exhausting.

NOTE - MOST IMPORTANT

ALL RAMS TO BE IN CLOSED STATE WHEN FILLING TANK TO RECOMMENDED LEVEL.

ONLY USE RECOMMENDED HYDRAULIC OILS AS PER THE LUBRICATION CHART UNDER THE TRACTOR SEAT. PLEASE CONSULT SLATER & ENGLAND LTD. IF NO HYDRAULIC OIL AVAILABLE IN OVERSEAS COUNTRIES. A SUITABLE ALTERNATIVE OIL WILL BE SUGGESTED AND THE PROCEDURE TO BE ADOPTED WILL BE FORWARDED.

TECHNICAL BULLETIN No. 3

FITMENT OF FRONT BEARING BUSHES AND THRUST WASHERS ON WINGET TRACTOR

(see page 18 of illustrated parts book)

Please note the above are always despatched in sealed polythene bags and should be stored with the bag unopened. The bushes and washers are oil impregnated and must be left soaking in oil for a minimum of two hours before fitting.

There are ten WT 126 Bushes in the front axle assembly and articulation joint and eight WT 209 Thrust Washers. The Bearings are a simple press fit and should then be reamed out with a 1 1/8" reamer. Limits 1.125" to 1.127" or 28.575 mm to 28.626 mm.

TECHNICAL BULLETIN No. 4

MECHANICAL TOOL LIFT ON WINGET TRACTOR

(see page 32 of illustrated parts book)

COMPLAINTS Handlift tends to slip allowing tool to sink when in raised position.

CAUSE AND REMEDY Two causes are possible. If the assembly has been excessively lubricated it is probable that the brake friction discs WT 7131 are contaminated with oil and therefore have lost their frictional property.

In extremely dry and dusty conditions it is possible for these discs to become impregnated with dust particles and develop a glazed surface, again lowering the frictional value of the disc. In each case the remedy is the same.

Remove and clean with a suitable solvent (Petrol) if oil is present and a gentle scouring on a sand paper if glazed with dust etc.

The second cause may be due to the complete absence of any lubricating medium causing the screwed ratchet wheel (item 8) Part No. WT 7118 to partially seize on the screwed shaft (item 17) Part No. WT 7119. Should this wheel be tight on the screwed shaft, the full brake effort will not be transmitted onto the brake discs.

The remedy is to dismantle, free the wheel on the screwed shaft until it is a spin fit and lubricate the thread and bearing parts of the shaft with a graphite based grease i.e. Molybdenum Disulphide grease. Do NOT over lubricate and ensure brake discs are clean.

Groove in top of Item 15 Part No. WT 7242 must always be clear of Pawl Control Lever on Item 13, Part No. WT 7124.

TECHNICAL BULLETIN No. 5

THE USE OF THE DIFF LOCK ON THE WINGET TRACTOR

(see page 22, item 26 WT 388 Diff Lock Sliding Member)

1. THE CLUTCH MUST BE DISENGAGED BEFORE OPERATING THE DIFF LOCK IF ONE WHEEL IS SPINNING AT HIGH SPEED.

2. The diff lock will only engage when there is traction differential between the wheels. Directly the traction differential ceases the diff lock will automatically disengage IF the steering is in the straight ahead position.

3. If the diff lock is still engaged at the end of a straight run and the tractor is turned the diff lock will not release. In these circumstances the tractor should be reversed and the diff lock will disengage automatically. Therefore sharp turns or slew turns must not be attempted with the diff lock engaged.

4. THE DIFF LOCK CANNOT BE MANUALLY RELEASED BY THE LEVER.

TECHNICAL BULLETIN No. 6

SEQUENCE OF WORK TO CHANGE CLUTCH PLATE ON THE WINGET TRACTOR

(see pages 2, 4, & 22 of illustrated parts book)

1. Remove engine speed rod WT 207 and stop rod WT 572 at engine end (Leave attached to bonnet).

2. Remove bonnet WT 107, 1 bolt at steering wheel end and 3 bolts at front end. (3/8" U.N.F. x 1" long mushroom head bolts and nuts)

3. Support rear end of engine and remove set pins(Item 16) (3/8" U.N.F. x 1" long bolts)-page 4 - attaching bell housing WTD 283 to engine.

4. Unbolt hydraulic pump bracket WT 8193 from chassis (if fitted) leaving hoses attached and placing belt to one side.

5. Unbolt two engine base bolts and remove (Item 41 page 2).

6. Slide engine forward still supporting rear end until free from clutch drive shaft approximately 3" (7.5 cms)

7. Position engine on chassis exposing clutch assembly.

8. Complete necessary work on clutch.

9. Reassemble in reverse order.

10. 3/8" free travel clearance required at pedal pad. (9.525 mm)

IMPORTANT: ENSURE HYDRAULIC PUMP PULLEYS ARE IN LINE AND BELT IS CORRECTLY TENSIONED BEFORE REPLACING BONNET.

TECHNICAL BULLETIN No. 7

WINGET TRACTOR - FRONT WHEEL REMOVAL (PUNCTURE REPAIR, ETC)

(see page 18 of illustrated parts book)

Jack up* tractor, remove 5/16" dia. spirol pin, Part No. WT 238/4 from wheel retaining cap WT 151 with a suitable punch.

Remove cap and outer thrust washer WT 209

Wheel WT 171 can now be pulled off complete with bearing bushes leaving inner thrust washer on spindle.

Remove tyre etc. in normal way.

Before refitting wheel check both thrust washers and replace if necessary (See Technical Bulletin No. 3).

Similarly check bearing bushes.

REPLACEMENT OR REFITTING

Apply a smear of grease to each face of the rear thrust washer and replace it on the spindle.

Smear grease on the spindle and replace wheel.

Replace outer thrust washer after greasing in wheel retaining cap which is then pushed over the wheel spindle, line up hole in cap with hole in spindle. Drive in a new 5/16" spirol pin WT 238/4 to retain the cap.

* WARNING - ONLY PLACE JACK UNDER CHASSIS AND NOT UNDER AXLE BEAM WHICH ARTICULATES.

TECHNICAL BULLETIN No. 8

HYDRAULIC BELT TENSIONING ON WINGET TRACTOR

(see pages 26 and 30)

Failure of the hydraulic lift without the relief valve WT 8450 blowing often accompanied by a whistling from the belt indicates an incorrectly tensioned belt.

Proceeds as follows:-

Remove bonnet WT 107 by unscrewing the 4 mushroom head bolts and nuts located at the front of the tractor and one at the steering wheel. Disconnect controls (and electrics).

Ensure that any oil falling on the belt is wiped off and if soaked replace belt. The cause of the oil leak must be traced (see Bulletin No. 2) Examine the belt grooves for glazed dirt particles and brush out thoroughly. If the belt is very glazed (it will appear as if metal has been ground into the belt) a new belt will probably be required in spite of the grooves appearing to be unworn especially if the tractor is fitted with a front loader. Compare groove depth with new belt.

The belt should have 1/8" (3.175 mm) movement.

To tension belt, slacken off one nut and bolt holding the pump bracket part No. WT 8446 to chassis. SLIGHTLY loosen other bolt and nut.

Slide pump and bracket sideways in chassis slots until correct tension is obtained. Retighten bolts.

Note:- Ensure both pulleys are in line and check with straight edge on pulley run.

If the suction filter is clear (see Bulletin No. 10) and the lift still does not function, examine hydraulic pump part No. 8440 for internal leakage and replace if necessary.

TECHNICAL BULLETIN No. 9 PART 1

MAINTENANCE OF 1¼" DIAMETER TOOL LIFT CYLINDER WT 8461 AND FRONT END LOADER CYLINDER WT 8490 ON THE WINGET TRACTOR

(see page 28 and refer to Bulletin No, 9 part 2)

1. To Remove Cylinder

Fully close the cylinder. Put control valve in neutral (close loader shut off valve WT 9497). Disconnect the hose (WT 8473, tool lift, WT 9475 or WT 9476 loader) and drain oil from the hose into a suitable container.

Remove the upper and lower cylinder mounting pins (WT 8178 - 9 and WT 8178 - 11 tool lift; WT 9178 - 3 and WT 9178 - 13 loader) Remove the cylinder from the tractor.

2. To Dismantle Cylinder

The piston rod is retained in the cylinder by a snap ring as shown in figure (a) of accompanying diagram. A screw driver is pushed through the port as figure (b) and the snap ring prised out of the upper grove into the lower groove.

The piston rod is then ready for removal as in figure (c).

The seals should be removed and replaced by those in the repair kit (WT 8463 tool lift or WT 9492 loader),

The repair kit comprises 1 - snap ring, 1 - '0' ring, 1 - back up washer and 1 - shaft seal,

Check piston rod for pitting or scoring as a cause of damage to the seals and replace rod if necessary.

Replace seals and reassemble ram as in (c) and (d) by pushing piston rod into cylinder and then levering snap ring into upper groove with a screw driver. Care must be taken not to damage the threads of the port during this operation.

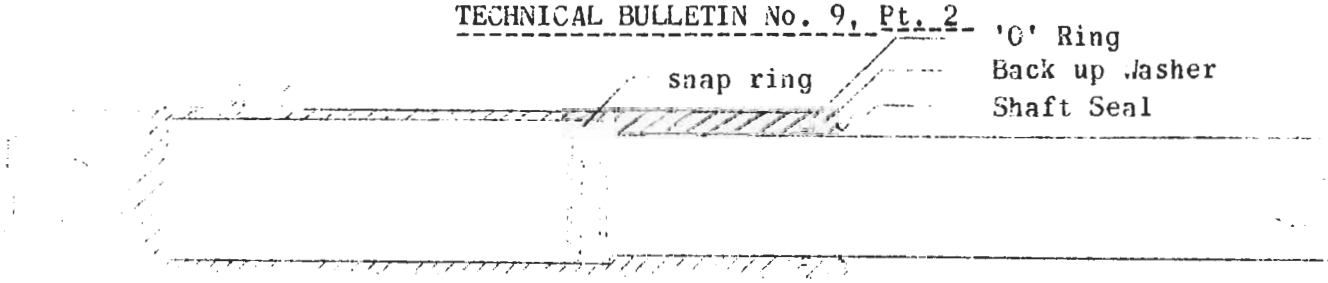
3. Venting or Bleeding Procedure.

Check oil level in tank and fill to the bottom of strainer part No. 8465 if necessary. Use only clean oil as per lubrication chart.

Start tractor, open shut-off valve for front loader and push down control valve to open cylinder 2" to 3" (4cm to 7.5 cm) and return control valve to neutral (Close shutt off valve).

Slacken hose connection until oil just dribbles out of the side of the connection. Force down tool arms by standing on them or loader by standing in bucket. This will force out any air trapped in the ram. Tighten up hose connection.

Check oil level with all cylinders CLOSED and top up with clean oil if necessary.

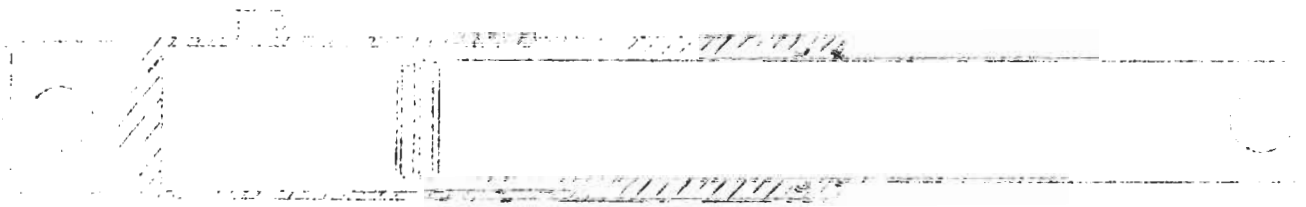


Part a. above

Normal Assembly. Snap ring in upper groove rod retained in cylinder.

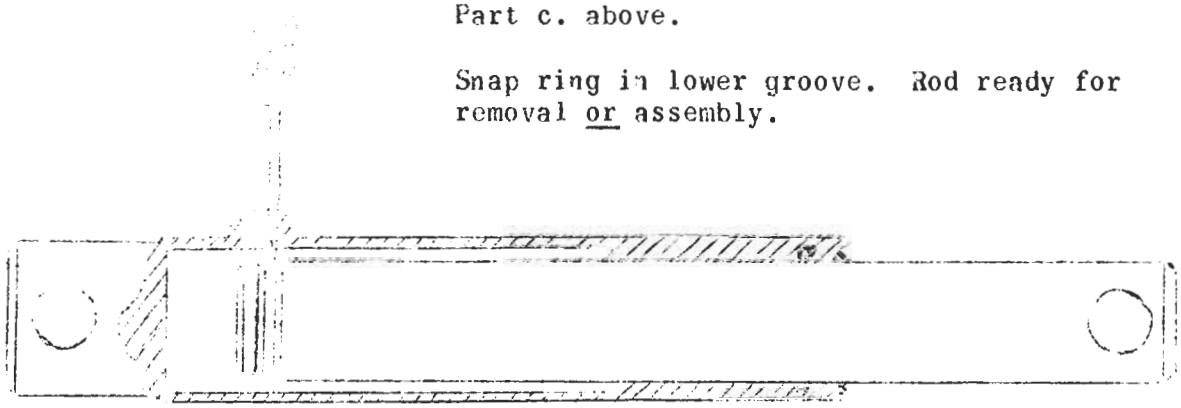
Part b. above.

Pushing snap ring into lower groove with screw driver.



Part c. above.

Snap ring in lower groove. Rod ready for removal or assembly.



Part d. above.

Assembling snap ring into upper groove with screw driver.

THE ABOVE ILLUSTRATIONS REFER TO SERVICING THE 1½" AND 1¼" DIAMETER CYLINDERS ONLY. PART NUMBERS WT 8461 AND WT 9490.

TECHNICAL BULLETIN No. 9 PART 3

MAINTENANCE OF 2" DIAMETER TOOL LIFT CYLINDER WT 870 ONLY ON WINGET TRACTOR. SERIAL Nos. 201 ONWARDS AND ON ALL INDUSTRIAL TRACTORS. (see page 28 - DO NOT REFER TO ILLUSTRATION BULLETIN 9 PART 2)

1. To Remove Cylinder

Fully close the cylinder and put the control valve in the neutral position. Disconnect the hose WT 8473 and drain oil into suitable container. Remove upper and lower mounting pins WT 8178 - 13 and 8178 - 11.

2. To Dismantle Cylinder

Unscrew end cap by tapping a small punch in the holes provided (R.H. Thread) or by using special tool. The piston complete with piston head, cup seal steel washer and nut is then exposed. Replace worn cup washer by using seal kit WT 8769 which contains the above items with the exception of the piston head. Reassemble in reverse order.

3. Venting or Bleeding Procedure

Check oil level in tank and fill to bottom of strainer WT 8465 if necessary. Use clean oil as per Lubrication Chart.

Start tractor, push down control valve to open cylinder 2" to 3" (4cm to 7.5 cm) and return control valve to neutral.

Slacken hose connection until oil just "dribbles" out of the side of the connection.

Force down tool arms by standing on them. This will force out any air trapped in the ram. Tighten up hose connection. Check oil level with cylinder closed and top up if necessary.

TECHNICAL BULLETIN No. 10

HYDRAULIC FAILURE ON THE WINGET TRACTOR CAUSED BY RELIEF VALVE BLOWING OR BLOCKED SUCTION FILTER

(see pages 24 and 30 respectively)

A. When failure of the hydraulic lift is caused by the relief valve blowing continuously proceed as follows:-

1. Remove relief valve by undoing large hexagon head located under the right hand corner of chassis under hydraulic control valve.

2. Withdraw relief cartridge, remove small circlip located in the end of cartridge and take out (a) washer (b) fine wire gauze (c) coarse wire gauze (d) support plate washer (e) spring. (NOTE CAREFULLY the order these components are removed and replace in reverse order.)

3. Rinse all parts in CLEAN paraffin or petrol.

4. Use airline to blow down the valve to remove any dirt etc. that may be present.

5. Reassemble and replace on the tractor and test.

6. If the valve keeps on blowing replace with new cartridge relief valve Part No. WT 8450.

7. If testing the line pressure this must be 1,500 p.s.i. (105.5 kgs/sq cm)

B. If the hydraulic lift is intermittent in action and the cartridge relief valve is clean, the only other possible cause is a blockage in the suction filter Item 4 page 24 WT 8466.

1. Clean by removing suction hose WT 8478 and drain off hydraulic oil from tank.

2. Unscrew drain plug, item 6 WT 8199 and take off bonded seal WT 8467. Unscrew filter and thoroughly wash and clean filter in petrol.

3. Reassemble in reverse order fitting a new bonded seal WT 8467.

WHEN REFILLING TANK WITH HYDRAULIC OIL AS PER LUBRICATION CHART ENSURE THAT ALL RAMS ARE CLOSED AND ONLY FILL THE TANK TO THE BOTTOM OF THE INLET STRAINER ITEM 2, WT 8465.

TECHNICAL BULLETIN No. 11

(see pages 11 to 14)

A. Half Shaft Removal and Replacement

1. Jack up rear of tractor and place suitable supports under chassis

2. Remove wheels complete with wheel weights if fitted by undoing wheel nuts only.

3. Unscrew axle drain plug WT 408 situated on right hand side of axle housing to drain off oil.

B. To remove Right Hand Half Shaft

1. Disconnect brake rod WT 201-1.

2. Remove brake drum WT 331.

3. Remove the two bolts holding the axle pad to the chassis.

4. Unscrew the four set bolts WT 428 holding the axle tube WT 361 flange onto the axle housing.

5. Ease back the axle tube complete with half shaft to disengage the spigot.

6. Lower backplate WT 534 end of axle tube to disengage difflock fork and withdraw.

7. Unscrew the four set screws WT 427 holding the back plate onto the axle tube and withdraw the halfshaft.

C. To remove Left Hand Half Shaft

1. Disconnect the brake rod WT 201-2.

2. Remove the brake drum.

3. Unscrew the four bolts on the backplate WT 535 and withdraw the half shaft.

D. To Reassemble

1. Work in the reverse procedure to above.

2. Refill the axle with an oil can through the level plug WT 408 at the back of the gearbox.

3. Use S.A.E. 140 capacity 8 pta.4.546 litres.

..../2

To remove Axle Gearbox Complete

1. Remove centre plate platform WT 112 from tractor.

2. Disconnect difflock control rod WT 614 from difflock lever WT 218 and remove P.T.O. shift knob WT 172-1.

3. Disconnect upper WT 8178-9 and lower WT 8178-11 ram mounting pins.

4. Remove L/H cross shaft bracket WT 187-LH and take away tool lift assembly WT 823.

5. Remove P.T.O. cover WT 211, and remove gearbox locating assembly WT 208 by undoing the four bolts.

6. Disconnect the clevis pins WT 551-1 on the short brake rods WT 201-1 RH and WT 201-2 L.H. nearest the backplates.

7. Remove four bolts holding the axle pad to the chassis including the pedal return spring anchor WT 245 on the R.H. side. BEWARE TENSION ON SPRINGS.

8. Lift chassis and slide the axle to the rear.

9. DO NOT UNDO PROP SHAFT COUPLING BOLTS , THE SPLINED SHAFT WILL SLIDE OFF THE PROP SHAFT COUPLING AS THE AXLE IS SLID TO THE REAR.

N.B. THE WHEELS ARE STILL ATTACHED TO THE AXLE.

TECHNICAL BULLETIN No. 12

BRAKE ADJUSTMENTS ON THE WINGET TRACTOR

(see page 16 and Operators Manual page 19)

1. Jack up one rear wheel until it is clear of the ground and turns freely.

2. Turn small square headed adjuster WT 766 on rear of back plate in a clockwise direction until the brakes are hard on; then turn adjuster back two clicks until the wheel turns freely.

3. Repeat this process on the other rear wheel.

BENT OR BROKEN BRAKE RODS

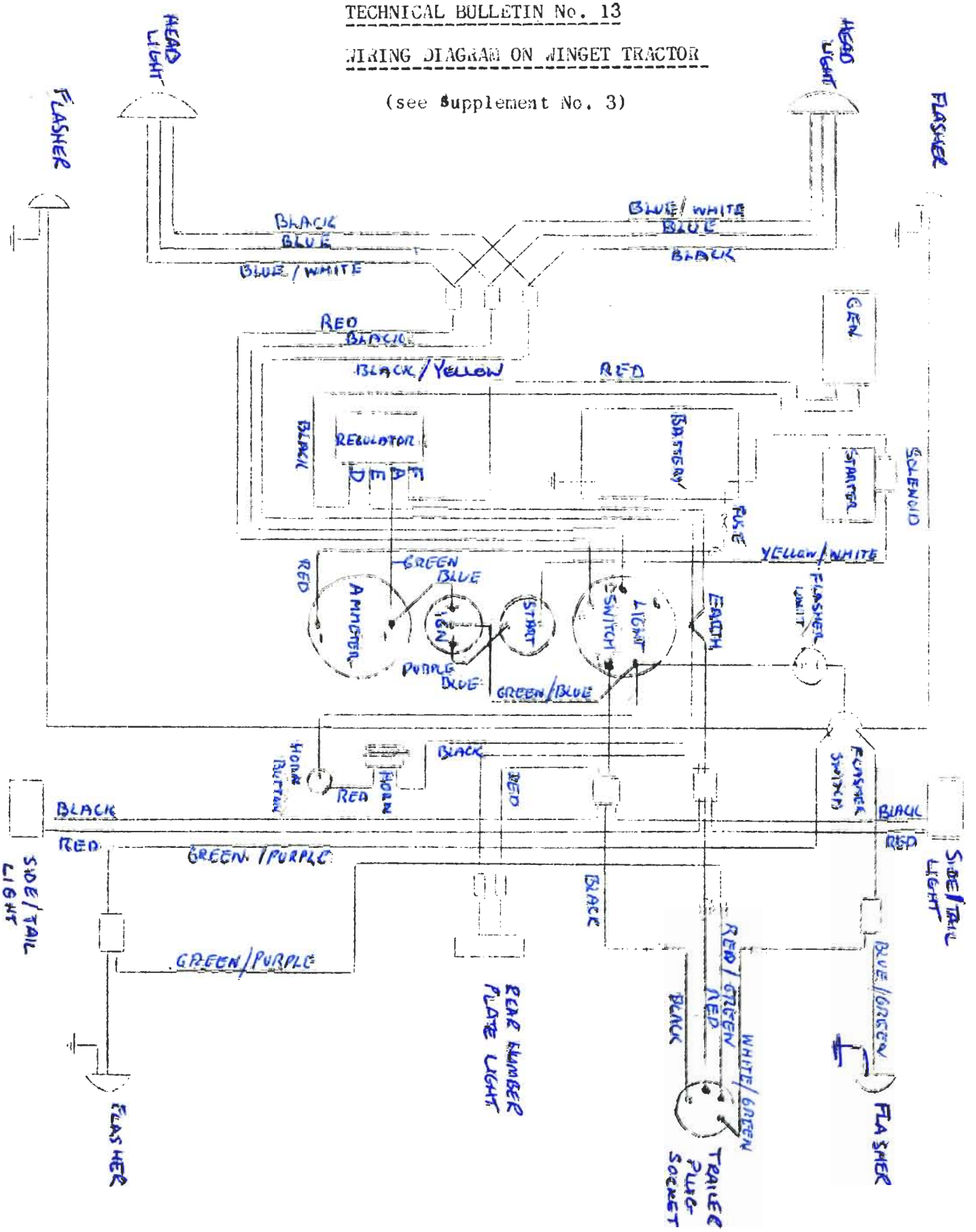
Remove pins WT 551-1 from clevis joints, replace broken or bent rod and reassemble. DO NOT ADJUST BRAKES WITH RODS DISCONNECTED OR ADJUST BRAKES BY ALTERING ROD LENGTHS.

.NB. The pin and clevis part No. WT 551-1 Item 3 on page 22 is only supplied as an ASSEMBLY. The pins are not shown on the illustration.

TECHNICAL BULLETIN No. 13

WIRING DIAGRAM ON JINGET TRACTOR

(see Supplement No. 3)



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TECHNICAL BULLETIN No.14

MODIFICATIONS & IMPROVEMENTS TO WINGET TRACTOR AXLE/GEAR BOX WT 300

(see page 12 and 14)

1. The R.H. half shaft WT 326 was subject to failure where the slot for the spirol pin WT 418 ran into the splined end of the shaft.

   Modifications:-

   a. Slot size reduced
   b. Slot does not run into broaching
   c. Push Pin WT 387 reduced in size superceded by part No. WT 813
   d. Hardening process altered.

   Applicable:-

   All spares automatically up-dated and are interchangable. All axles after L 329 and all B prefix axles have these modifications.

2. Side gears and differential cages.

   Modifications:-

   a. WT 382 diff side gears now ball peened for added strength
   b. WT 425 bolts for diff cages lengthered. ONLY use high tensile steel bolts.

   Applicable:-

   Always order WT 425 hex bolts - all spares automatically up-dated.

3. Oil leaks around the half tubes WT 360/361 at the axle casing have been found to be due to defective washers.

   Modification:-

All new axles fitted with studs and not WT 428 bolts and washers.

   Prevention:-

   Any axle can be supplied with 8 special bonded seals WT 751 up-dated using the same bolts as previously. The old washer is removed and the new one used. By undoing and doing up one bolt at a time, each half tube is modified without disturbing the gasket WT 373. The most permanent repair is made by drilling the bolt heads and wiring up all four bolts

   Applicable:-

   WT 751 item 15 obsolescent
   WT 428 bolt item 14 obsolescent
   WT 900 Stud & Nut. Now becomes item 14. No washer required.