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MANUAL PREVIEW

Galion

Service Manual

104HB, 118A, B, C,

104A, B, C

160, T500 & T600

Volume 1 of 2

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GA-S-104HB+

Service Manual

SMG-104HB

Shop

Manual



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104HB

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MOTOR GRADER

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SERIAL NUMBERS 104HB - 07619 thru 10693

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[®]

Shop Manual Set SMG-104HB

Covers Model 104-HB

S/N All Serial Numbers

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Contains the sections listed below:

1	A-01.20	ROSS POWER STEERING GEAR (G-R-C)
2	A-03.00	STEERING HYDRAULIC SYSTEMS (G)
3	A-09.00	VERTICAL STEERING SHAFT ASSEMBLY (G)
4	D-12.10	HAND SHIFTED TRANSMISSION (MODEL A-352) (G)
5	E-02.01	HYDRAULIC CONTROL VALVES (G)
6	E-02.10	HYDRAULIC CONTROL VALVE ASSEMBLY (G)
7	E-04.00	SIDE SHIFT & CIRCLE REVERSE HYDRAULIC MOTOR (G)
8	E-04.10	CIRCLE REVERSE (SIDE SHIFT) HYDRAULIC MOTOR (G)
9	E-06.03	STEERING FLOW REGULATOR & RELIEF VALVE ASSEMBLY P/N 72900 & P/N 93333 (G)
10	E-08.10	GRADER HYDRAULIC SYSTEM (G)
11	E-09.00	PRESSURE BEYOND END CAP USED WITH SNOW WING INSTALLATION (G)
12	E-17.00	HYDRAULIC TROUBLESHOOTING (G)
13	E-30.00	HYDRAULIC OIL SWIVEL BLOCK (2-WAY & 4-WAY) (G)
14	EX-01.00	HYDRAULIC TANDEM PUMP (G)
15	F-01.00	CIRCLE REVERSE CASE (TAPERED SHAFT) (G)
16	F-01.10	CIRCLE REVERSE GEAR CASE (G)
17	F-02.00	SIDE SHIFT CASE (G)
18	F-09.00	TANDEM DRIVE WITH DOUBLE STRAND CHAIN AND SPLINED AXLES (G)
19	F-09.10	TANDEM CASE, SINGLE RED., DOUBLE STRAND CHAIN (WITH TAPERED AXLES) (G-P)
20	G-04.00	INDEPENDENT DRIVE AXLE (G-P)
21	G-10.00	FRONT AXLE ASSEMBLY (G-P)
22	H-01.00	CIRCLE ADJUSTMENT (THREE SHOE) (G)
23	I-03.00	TWO PLATE OIL CLUTCH (G)
24	J-01.00	LUBRICATION SPECIFICATIONS (G-R-C)
25	K-01.10	REBUILD & ADJUSTMENT OF SELF-ADJUSTING BRAKES (G-P)
26	K-02.00	WAGNER POWER MASTER CYLINDER USED WITH FOUR WHEEL SERVICE BRAKES (G-C)
27	L-01.00	WIRING DIAGRAMS (G)
28	L-10.00	TROUBLESHOOTING & REMOVAL OF CRANKING MOTORS (M-P-G-R-C)
29	L-11.00	TROUBLESHOOTING & REMOVAL OF ALTERNATORS (M-G-P-R-C)
30	N-01.10	PRE-DELIVERY PROCEDURES (G) (NOT INCLUDED - LISTED FOR REFERENCE ONLY)
31	Y-01.00	GENERAL TORQUE VALUES (G-R-P-C-M)

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Position lever shaft in position with stud roller in center of cam.

If lever shaft is shim adjusted, proceed to Step 57 on page 20.

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If lever shaft is screw-adjusted, place adjusting screw in pocket of lever shaft.

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53

Install adjusting screw lock nut.

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After the transmission has been removed from machine, place in fixture or suitable position for service.

If transfer case removal is necessary while transmission is in grader, it is imperative that two nuts (1) located INSIDE the clutch bell housing be removed before transfer case and clutch bell housing can be separated. Engine removal is necessary to gain access to these nuts. (1)



5

Disconnect oil lines and linkage.

Remove three retaining capscrews from clutch and stop brake control valve assembly.



6

Remove valve assembly.



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TWO-WAY BLOCK DISASSEMBLY

Clean off all dirt and oil from swivel block (1, Figure 5).

Note locations and positions of all elbows and connectors (2 thru 5) and remove from swivel block (1). Remove O-rings from elbows and connectors if necessary.

NOTE: Due to the number of units that use this swivel block, some elbows and connectors may vary from what is shown here.



Figure 5

Remove snap ring (1, Figure 6) washer (2) and body (3) from pin assembly (4).

NOTE: Use of a suitable puller may be required to remove body (3) from pin assembly (4).

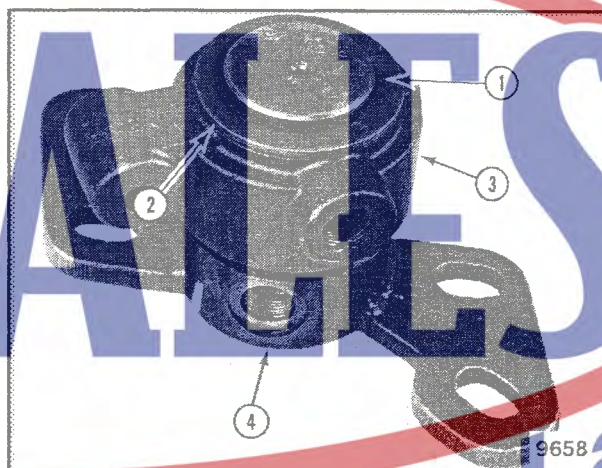


Figure 6

Remove three seal rings (1, Figure 7) and two plugs (2) from pin (3). Replace O-rings on plugs if necessary.



Figure 7

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REMOVAL

Identify alternator left and right hand electrical plug leads (1). Remove electrical plug by inserting screwdriver between alternator housing and plug and forcing tab toward plug and pulling plug straight up. Also remove and tape terminal end of alternator battery lead (2) to prevent accidental grounding.



Figure 12

Loosen alternator adjustment screw (1) and remove drive belts. Do not remove adjustment screw yet. First remove lower pivoting screw, washer, and nut (2). Support alternator with one hand while removing adjustment screw and washers.



Figure 13

NOTE: To insure minimum equipment downtime, it is recommended that the faulty or suspected alternator be replaced with a new or rebuilt unit. The removed alternator then can be serviced after the equipment has been returned to normal operation.

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