



Operator's Manual

Galion

Operator's Manual

118 Motor Grader

S/n MD14401 to MD22346

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GA-O-118 GRDR

REVISED EDITION

This edition of Manual & Parts List No. 2019 for GALION No. 118 Motor Grader has been revised to include new material covering changes and additions in specifications of this motor grader since publication of earlier editions of Manual No. 2019.

In order that this issue of manual can be used with older No. 118 Graders; Operation, Maintenance Texts and Parts Lists as in previous editions is retained.

The new material added in revision includes: Operation, Maintenance Text and Parts Listing for:

Use of G.M. 4-71 Diesel Power Unit

Replacing UD-16 with UD-525 Engine

Use of Eight Valve Hydraulic Control Valve Manifold

New mounting & Control for Snow Plow and/or Bulldozer

New Front Axle



INDEX

OPERATION SECTION

Air Cleaner - - - - -	26	Index Turret Pins - - - - -	4, 32
Attachments, Grader - - - - -	39	Instrument Panel - - - - -	4
Axle, Front - - - - -	29	International Harvester Diesel - - - - -	10-17
Ball Studs - - - - -	32	Instruments & Controls - - - - -	11
Before Starting Engine - Refer to G.M. or I.H.		Compression Release Lever - - - - -	11
Before Starting Grader - - - - -	29	Preparation for each days work - - - - -	14
Brake, Emergency or Parking - - - - -	4	Starting - - - - -	14
Brake Lever - - - - -	4	Change to Diesel Operation - - - - -	15
Brake Pedal - - - - -	4	Stopping International Diesel - - - - -	15
Brake, Hydraulic (foot) Service - - - - -	38	Operator Notes & Cautions - - - - -	12
Bulldozer - - - - -	39	Operator Service - - - - -	16
Cab, Operator's - - - - -	39	Leaning Wheels - - - - -	29
Capacities, Table of - - - - -	2	Lighting, Electric - - - - -	6, 39
Circle - - - - -	32	Lubricants, Advised & Capacities - - - - -	2
Controls, Grader - - - - -	4	Lubrication, Charts & Notes - - - - -	43
Controls, Instruments & Gauges - - - - -	4	Lubricating Oil Specifications, G.M. - - - - -	23
Clutch Pedal - - - - -	4	Lubricating Oil Specifications, I.H. - - - - -	10
Cold Weather Operation - - - - -	13, 26, 27	Manifolds - See Hydraulic Listing	
Cooling System - - - - -	26	Moldboard, Adjustment - - - - -	30, 39
Creeper - - - - -	4, 39	Moldboards, Special - - - - -	39
Diesel Fuel Specification, G.M. Engine - - - - -	22	Odometer - - - - -	6
Diesel Fuel Specification, I.H. Engine - - - - -	10	Parking Brake - - - - -	4
Diesel Fuel Storage & Handling - - - - -	28	Pins, Index Turret - - - - -	4, 32
Drawbar - - - - -	32	Scarifier - - - - -	39
Drop Gear Case (Transfer Drive) - - - - -	33	Service, G. M. Engine - - - - -	20, 21
Electric Lighting - - - - -	6, 39	Service, I. H. Engine - - - - -	16
Electrical Units - - - - -	28	Service Common to Both Engines - - - - -	26
Elevating Grader - - - - -	39	Snow Plow - - - - -	41
Emergency Brake - - - - -	4	Snow Wing - - - - -	41
Front Axle - - - - -	29	Starter, Electric - Use of - - - - -	14
Gear Shift - - - - -	4, 33	Steering, Hydraulic Booster - - - - -	30
Grading Positions - - - - -	34	Steering Wheel - - - - -	4
General Motors 4-71 Series Diesel - - 18 to 25		Storage - G. M. Engine - - - - -	28
Starting New or From Storage engine - - - - -	18	Storage - I. H. Engine - - - - -	28
Daily Starting - - - - -	19	Storage & Handling of Diesel Fuel - - - - -	28
Running Engine - - - - -	19	Specifications: See Diesel Fuel; Lubricating Oil and Hydraulic Oil	
Stopping Engine - - - - -	19	Tandem Drive - - - - -	33
Daily before Starting Service - - - - -	20	Throttle - - - - -	4
Every 8-Hour Service - - - - -	21	Tire Pressure Table - - - - -	29
Hang Rods, Telescopic - - - - -	32	Tire Pump - - - - -	41
Heater, Operator's Cab - - - - -	6	Transfer Drive - (Drop Gear Case) - - - - -	33
Hot Weather Operation - - - - -	13, 26, 27	Transmission - - - - -	33
Hour Meter - - - - -	6	Windshield Defroster - - - - -	6
Hydraulic System - - - - -	7	Windshield Wiper - - - - -	
" 6 Valve Manifold - - - - -	8	Wheels, Front - Leaning - - - - -	29
" 8 Valve Manifold - - - - -	9		
" OIL Specifications - - - - -	7		

LUBRICATING OIL SPECIFICATIONS, GENERAL MOTORS DIESEL ENGINE

The recommended lubricating oil viscosity grade is SAE 30 when operating under normal conditions at normal temperatures.

When prolonged exposure of the engine to temperatures below freezing is unavoidable, it is permissible to use the following lighter grades in order to facilitate starting.

ATMOSPHERIC TEMPERATURE	VISCOSITY GRADE
+30° to 0°F - - - - -	-SAE 20W
Below 0°F - - - - -	-SAE 10W

Always specify Heavy Duty lubricating oil. These superior oils provide better lubrication, possess more heat resistance, and counteract sludge formation more effectively than regular or premium motor oils. Heavy Duty lubricating oils hold foreign matter in suspension and, thus, allow the contaminants to be drained out of the crankcase when the oil is changed.

It is recommended that new engines be started with 100-hour oil change periods. The interval may be gradually increased, following the recommendations of the oil supplier (based on his analysis of the drained oil) until the most practical oil change interval has been determined.

To prevent dilution of the fresh refill oil supply, flushing oils or other solvents should never be used.

Heavy Duty lubricants will always appear dark colored in use due to their exceptional ability to hold fine carbon particles in suspension. Therefore, the color of the oil can no longer be used as an indicator for proper filter action. The removal of abrasive dust, metal particles, and carbon must be ensured by periodic replacement of the absorption filter elements.

Oil filter elements must be changed at every oil change.

For further discussion of lubricating oils; refer to General Motors Series 71[®] Operator's Manual.



POSITIONING MOLDBOARD FOR BANK SLOPING

* Refer to Bank Slope Photos No. 2 & 4 & to paragraph below.

* Lower moldboard to ground with blade pressure equalized so that index turret pin can be easily turned by hand; and removed.

Reverse the sloping adjustment procedure to return the moldboard to normal grading position.

Photos No. 1 to 6 inclusive show motor grader without scarifier. Bank sloping adjustment is accomplished by same method if grader is equipped with a scarifier.

Should you desire to bank slope with a steeper slope (Moldboard more Vertical), the moldboard is changed as follows:

With moldboard as shown in Photo No. 6:

Put the toe of blade against bank.* Remove right index turret pin. Raise piston rod to last hole in index turret, install pin, raise toe of moldboard.

Lengthening or shortening the telescopic (R & L) moldboard hang rods will produce various bank sloping angles. Shortening the telescopic side shift rod puts the toe of the moldboard higher.

HYDRAULIC SERVICE (foot) BRAKE

Keep master cylinder tank full of approved brake fluid and see Maintenance Section for adjustment and repair of brakes.

The hydraulic Service Brake has provisions for minor and major adjustments.

Minor adjustments compensate for lining wear.

Major adjustment becomes necessary when a minor adjustment will not provide a satisfactory brake, or when brakes have been dismantled, shoes replaced or drums have been reconditioned.

A satisfactory adjustment cannot be obtained when linings are worn to rivet heads, brake drums are scored, or worn eccentric or bell mouth.

Never replace shoes on one wheel only. It is of utmost importance that linings on both wheels have the same coefficient of friction, otherwise unequal brakes will result.



Bulldozer Attachment (Same lift used with Snow Plow)



Operator's Enclosed Cab
Electric Lights also shown