

TECHNICAL MANUAL

**OPERATOR'S ORGANIZATIONAL, DIRECT SUPPORT
AND GENERAL SUPPORT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS**

FOR

**DISTRIBUTOR, BITUMINOUS MATERIAL
TRUCK MOUNTED, 1500 GALLON (CCE)
E.D. ETNYRE & CO. MODEL D-60
(NSN 3895-00-090-0434)
SERIAL NUMBERS
J-4401-through J-4430
J-4801 through J-4830
J-5661 through J-5690**

HEADQUARTERS, DEPARTMENT OF THE ARMY

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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 17 June 1983

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REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Tank-Automotive Command, ATTN: DRSTA-MBP, Warren, MI 48090.

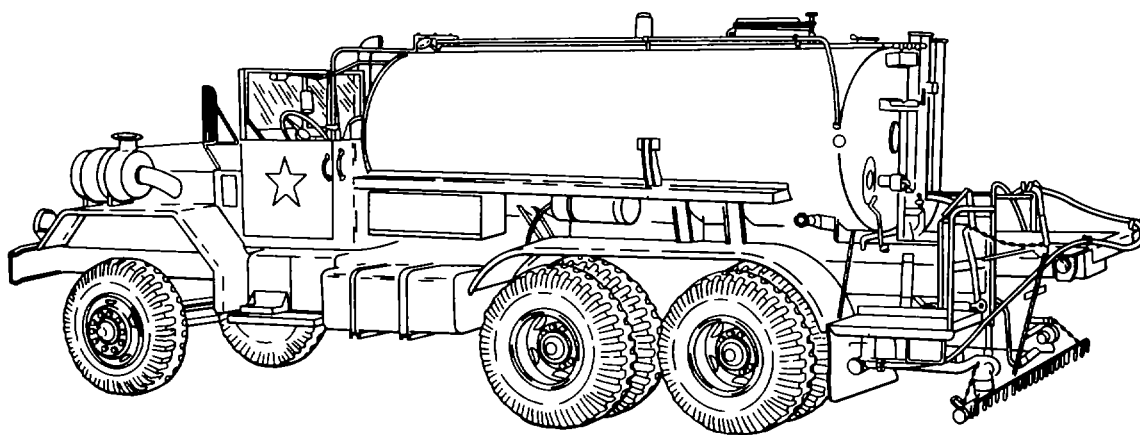
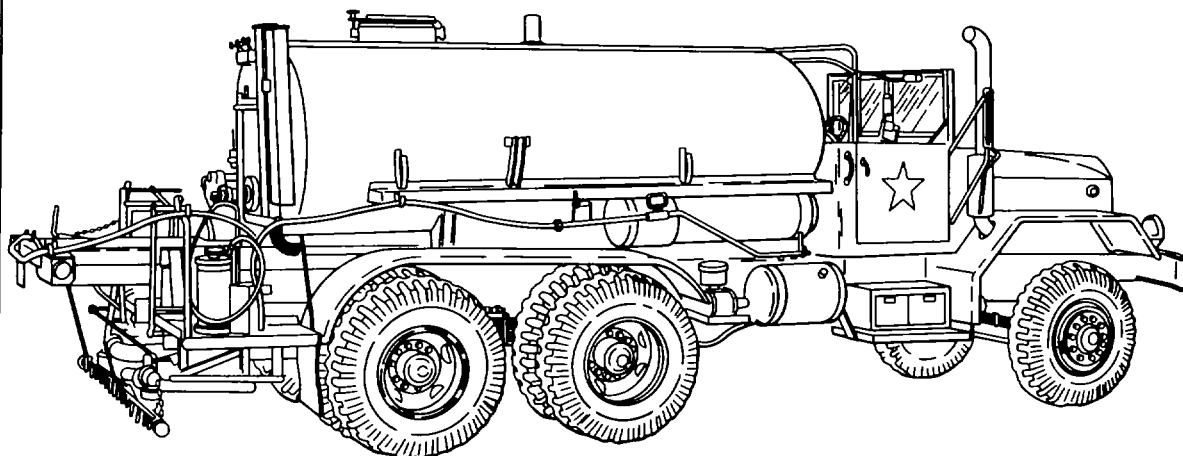
This technical manual is an authentication of the manufacturer's commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

NOTE

This technical manual is a compilation of latest data from numerous commercial booklets and supplements supplied with the D60 during a multi-year buy ending in 1976. In keeping with the manufacturer's policy for indicating deletions, partially obliterated narrative and illustrations indicate deletions from the previous issue of booklets. Manufacturer's parts list is employed in this manual.

DESCRIPTION	Page		Page
Description and Data	2	Control - Bar Turn Up	75
General Identification	3	Control - Bar Shifting	75
Spray Bars	4	Hydrostatic Unit	76
Power Controls and Components	5	TRROUBLESHOOTING.....	77
Control Valve and Operating Lever Positions	6	Asphalt Pump	77
Bituminous Material Application Chart	7	Burners	77
		Fifth Wheel	77
PREPARATION FOR OPERATION.....	8	Gauges.....	78
OPERATION		Quadrant	78
Filling from Supply Source	9	Spray Pattern	79
Heating Bitumen in Distributors	11	Spray Bar	80
Circulating in Tank	14	Valves.....	81
Circulating in Bar	15	BASIC TRANSMISSION SYSTEM	83
Spraying	16	Description	83
Shoulder Spraying	17	Operation.....	84
Draining Material in Bar Back to Tank	18	Basic Care of System	84
Hand Spraying and Pump-Off.....	19	Troubleshooting.....	85
Transferring from Supply Source to Storage	20	Pump Overhaul	89
Draining Circulating System and Spray Bar. .	21	Motor Overhaul	113
Flushing Bar, Circulating System and Tank. .	22	PARTS (Serial Numbers J-4401 thru 4430 and J4801	
Hydrostatic Drive Operation.....	23	thru 4830)	135
Recording Settings of Hydrostatic Drive	24	Model 48 Fixed Motor.....	136
Hydrostatic Motor Pressure Adjustment	5	Model 45 Variable Pump	138
Spray Bar Valve Adjustment	27	Model 45 Horsepower Control	140
Lubrication Chart	28	General Identification	142
Troubleshooting	29	Manhole - 20 Inch.....	143
INSTALLATION PROCEDURE.....	31	Subframe - TUC Bar.....	144
Preparation of Truck Chassis	31	Hydrostatic Drive - Piping and Installation	146
Mounting of Distributor on Truck Chassis	33	Drive Line - PTO to Hydraulic Pump	148
Hydraulic System Start-Up and Adjustment ..	35	Controls - Hydrostatic System	150
Operation and Inspection of Distributor		Hydraulic Universal and Tachometer Drive ...	151
Systems	35	Burners - Low Pressure.....	152
Dry Run Check Out.....	36	Blower-6600313	153
MAINTENANCE.....	56	Burners - Portable Generating	154
Asphalt Pump	56	Pump Housings	155
Burner System	57	Distributing Lines - TUC Bar	156
Burner Assembly	59	Pump P-15.	157
Portable Burner	61	Circulating System with V16 Intake Valve	158
Blower Assembly	65	TUC Spray Bar Assembly.....	160
Blower Drive and Clutch	66	Quadrant - TUC Bar - External Stacks	162
Burner Fuel Pump	67	Box-Bar Section	164
Spray Bar Assembly	69	Air Control Reservoir and Piping	165
Wiring Diagram - Electric - Air Controls	72	Air Control Box Assembly - Multiple	
Wiring Diagram - Lighting	72	Controls.....	166
Air Control Reservoir and Piping	73	TUC On and Off Air Control Installation	168
Air Control Box - Multiple Controls.....	73	Control - Bar Shifting - TUC and FC -	
On and Off Air Control Installation	74	Short Cylinder.....	169
Control - Bitumeter - Raise and Lower	74	Control - Bitumeter - Raise and Lower	170

	Page		Page
Bitumeter Assembly.....	172	Loom Bumper Assembly	194
Control - Bar Turn Up - for TUC.....	174	Identification and Clearance Lights Loom	196
Pump Tachometer	175	Part Number Index	197
Tank Gauge - Rear - with Rotating Indicator.....	176	APPENDIX A - General	A1
Smoke Stacks - External	177	APPENDIX B - Maintenance Allocation Chart (MAC)	B1
Loom Bumper Assembly.	178	APPENDIX C - Basic Issue Items List (CCE)	C1
Identification and Clearance Lights - Environmental and Loom	180	APPENDIX D - Preventive Maintenance Checks and Services (PMCS)	D1
Miscellaneous.....	181	APPENDIX E - Maintenance and Operating Supply List	E1
Fuel Tank and Lines - Top Draw	182	APPENDIX F - Prescribed Load List	F1
Miscellaneous Attachments	184	Authorized Stockage List	F2
Wiring Diagram - Lighting - Loom System	185	INDEX	I1
Wiring Diagram - Electric - Air Controls - FC and TUC Bars	186		
PARTS SUPPLEMENT (Serial Numbers J4801 thru J4830)	187		
Quadrant - TUC Bar - External Stacks	188		
Bitumeter Assembly.....	190		
Burners - Low Pressure	192		
Pump Tachometer	193		



E.D. ETNYRE & CO. Model D-6
BITUMINOUS MATERIAL DISTRIBUTOR
NSN 3895-00-090-0434

Figure 1

DESCRIPTION AND DATA

a. General. The E. D. Etnyre & Co., Inc. Bituminous Distributor, Model MIL-D60 consists of a storage tank with a low pressure heating system, and hydraulic-powered pumping unit and an adjustable spray bar for distributing bituminous material. The equipment is mounted on a truck (fig. 1) It is normally operated by a crew of two men; a driver in the truck cab and an operator stationed on the rear platform.

b. Material Storage Tank. The 1633 gallon capacity storage tank is elliptical in shape and is made of welded steel. It contains a surge plate which prevents sudden shifting of contents and also supports the heating flues. The flues are securely supported by the surge plate to eliminate vibration and allow for expansion and contraction. Insulation consisting of 2" fibrous glass material prevents loss of heat.

c. Heating System. The storage tank heating system consists of two low-pressure atomizing burners. They are mounted at the rear of the tank with ignition tiles located in the heating flues. The burners are supplied with combustion air and fuel by a combination burner blower and burner fuel pump which is operated through a clutch driven by a V-belt from the PTO drive line. A hand clutch disengages the blower when the burners are not in operation.

d. Power Unit. Hydrostatic transmission, consisting of

1. Pump Infinitely variable displacement pump with a minimum displacement of 4.5 cubic inches per revolution, axial piston type
2. Motor Fixed displacement motor with a minimum displacement of 4.83 cubic inches, axial piston type.

e. Bituminous Pump. This heavy duty gear type pump is covered by a housing and is driven by a hydrostatic transmission through a double universal joint with overload protection. The pump has a delivery capacity of 400 gallons per minute, and supplies material to the 24 foot spray bar with sufficient pressure to produce an even, fan-like spray from all nozzles at any specified rate between 0.10 gallons and 1.0 gallons per square yard.

f. Hand Spray. A hand spray gun and hose are provided for the operator to spray small areas, and areas which are inaccessible with the spray bar.

g. Burners

Manufacture Hauck Mfg. Co.

Model No. 580A

Type. Low Pressure atomizing type

h. Material Storage Tank

Capacity 1500 gal (gallons)

Overage for expansion. 9%

Manhole. 20 inch diameter

Overflow. 3 inch pipe

Tank gage Mechanical

Float Type

Thermometer Armored Pencil 600° F.

i. Spray Bar

Length of Center Section 8 foot

Length of Extensions 1 foot and 2 feet

Total 24 feet

j. Nozzles

Type Fan

Thread. 1/2" N.P.T

Slot 1/8 inch

Spacing4 inch

k. Bituminous Pump Data

Make E D Etnyre & Co., Inc.

Model P 1ST

Operating Pressure. 20 psi

Output Capacity 400 gpm

l. Burner System

Fuel Consumption

(maximum operation) 12 gal. per hr.

Fuel Consumption

(minimum operation) 1-1/2 gal. per hr.

(3/4 gal. per hr. each burner)

m. Capacities

Fuel tank, burner. 36 gal.

Material storage tank 1633 gal.

Portable burner tank 4 gal.

Hydraulic Reservoir. 20 gal

n. Dimensions and Weights- Distributor and Truck

Overall length 335 inches

Overall width 97 inches

Overall height. 116 inches

Net weight, empty 26,000 lbs

Net weight, filled. 39,000 lbs

Shipping volume. 2,181 cu/ft

Shipping tonnage 13 tons

GENERAL IDENTIFICATION

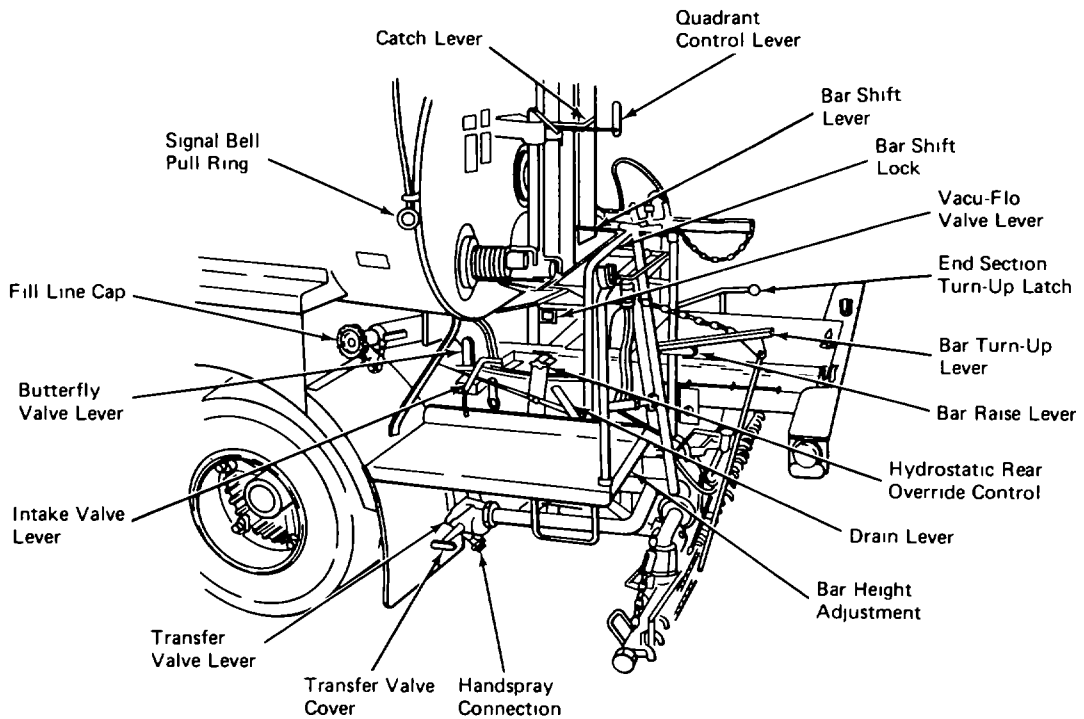
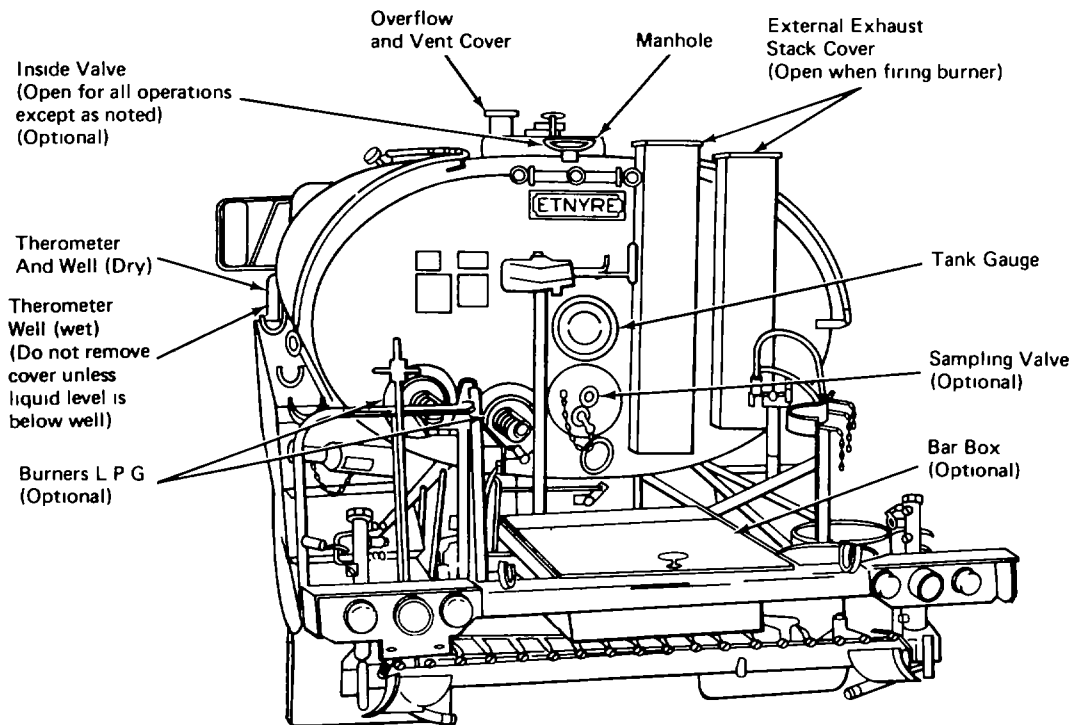


Figure 2

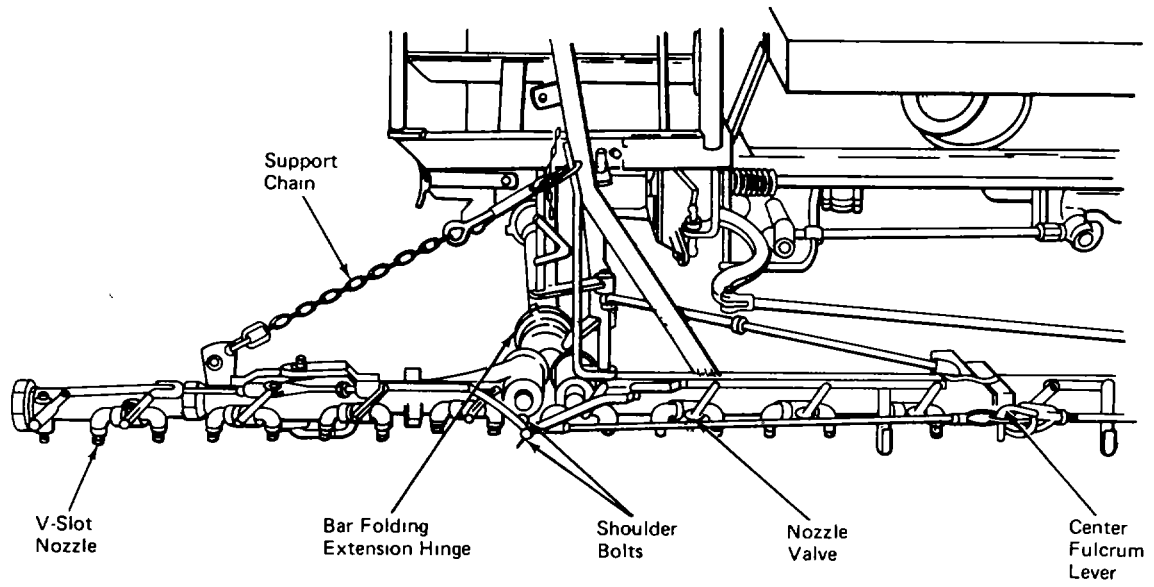


Figure 3

"TUC" SPRAY BAR

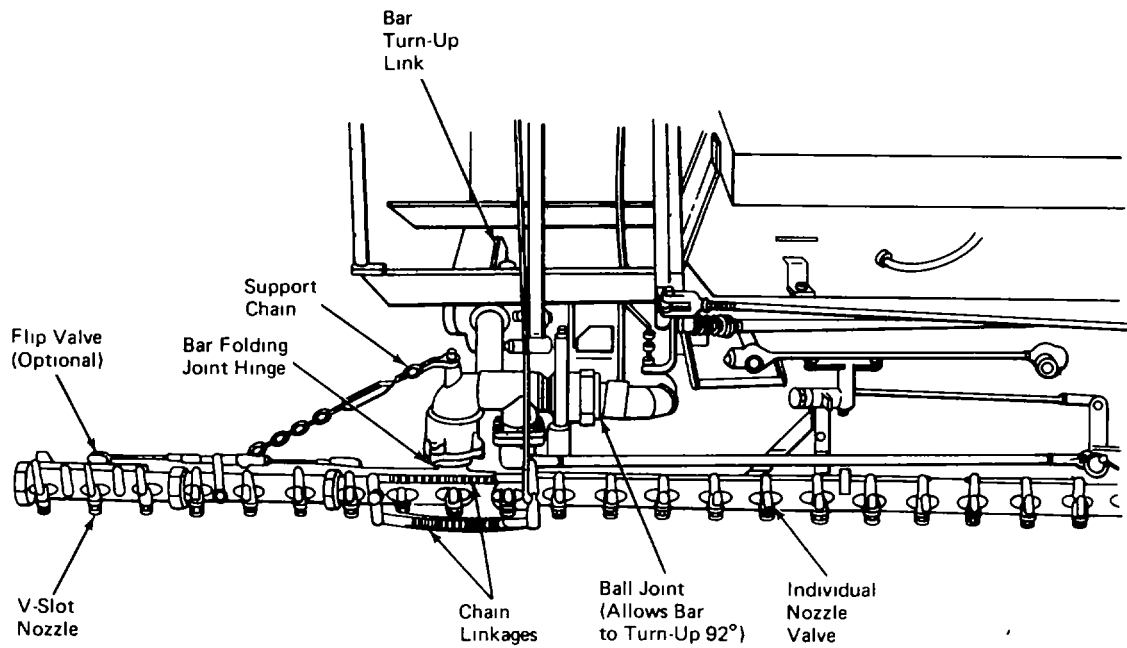


Figure 4

POWER CONTROLS AND COMPONENTS

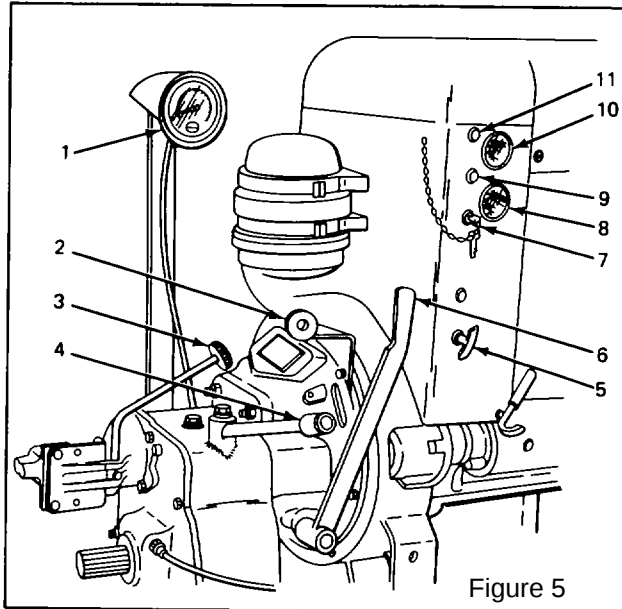


Figure 5

- | | |
|-----------------------------|-------------------------------|
| 1. Pump Tachometer (G.P.M.) | 6. Main Clutch Lever |
| 2. Governor Control | 7. Ignition Switch |
| 3. Fuel Pump and/or Blower | 8. Temperature Gauge |
| 4. Clutch Lever | 9. Starter Switch |
| 5. Gear Shift | 10. Oil Pressure Gauge |
| | 11. Generator Indicator Light |

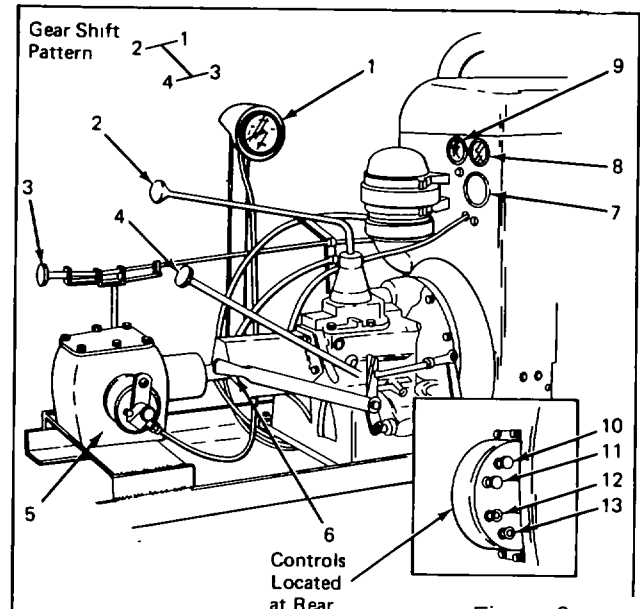


Figure 6

- | | |
|-----------------------------|------------------------------|
| 1. Pump Tachometer (G.P.M.) | 7. Generator Indicator Light |
| 2. Gear Shift | 8. Temperature Gauge |
| 3. Governor Control | 9. Oil Pressure Gauge |
| 4. Fuel Pump and/or Blower | 10. Starter Switch |
| 5. Angle Drive | 11. Ignition Switch |
| 6. Main Clutch Lever | 12. Choke |
| | 13. Throttle |

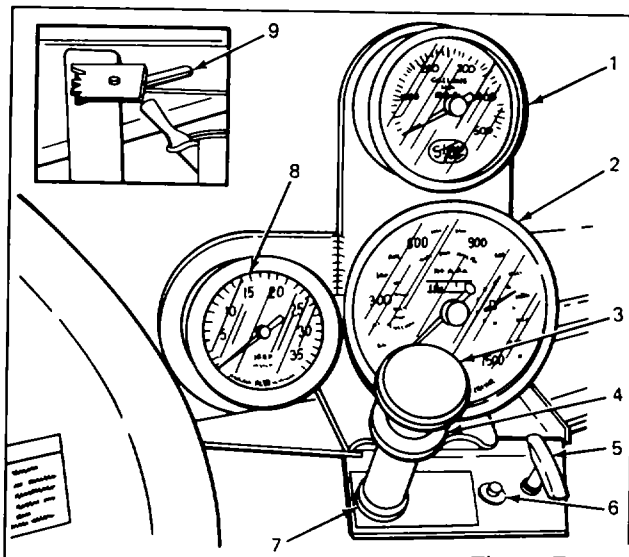


Figure 7

HYDROSTATIC CONTROLS (CAB MOUNTED)

- | | |
|-----------------------------|--------------------------------------|
| 1. Pump Tachometer (G P M) | 6. High Temperature Light |
| 2. Recording Bitometer | 7. Lock Ring |
| 3. Main Hydraulic Control | 8. P T O Tachometer R P M |
| 4. Fine Control Knob | (Automatic Transmissions Only) |
| 5. Override Control | 9. Hydrostatic Rear Override Control |

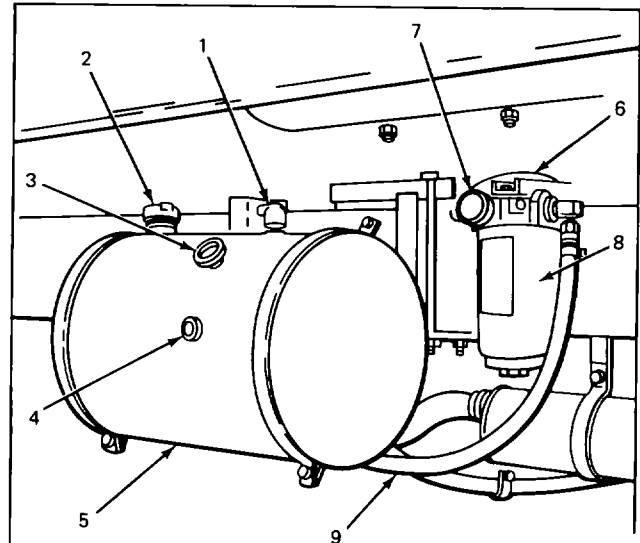


Figure 8

HYDROSTATIC RESERVOIR AND FILTER

- | | |
|------------------------------------|---------------------------------------|
| 1. Air Vent | 5. Hydraulic Reservoir |
| 2. Fill Cap | 6. Hydraulic Line Filter to Pump |
| 3. Hydraulic Oil Temperature Gauge | 7. Vacuum Gauge |
| 4. Oil Level Sight Glass | 8. Filter |
| | 9. Hydraulic Line Reservoir to Filter |