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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DEPARTMENT OF THE ARMY
WASHINGTON, DC, 17 June 1983

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)

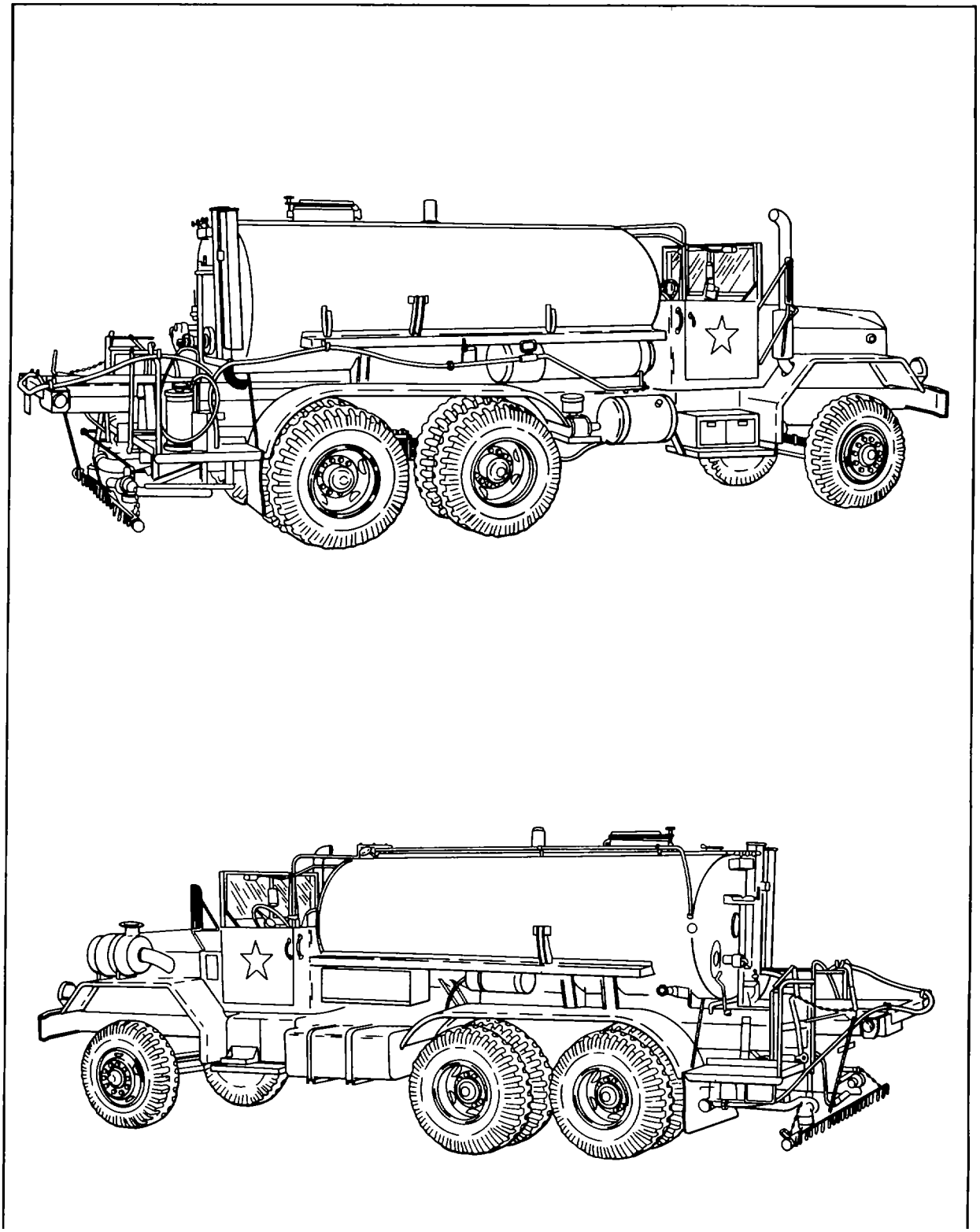
REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

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.



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 m 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 univeral 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 I 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 atom izing 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
Spacing ..... .4 inch

k. Bituminous Pump Data
Make .....E D Etnyre & Co., Inc.
Model .....P 1ST
Operating Pressure..... 20 psi
Output Capacity .....400 gpm

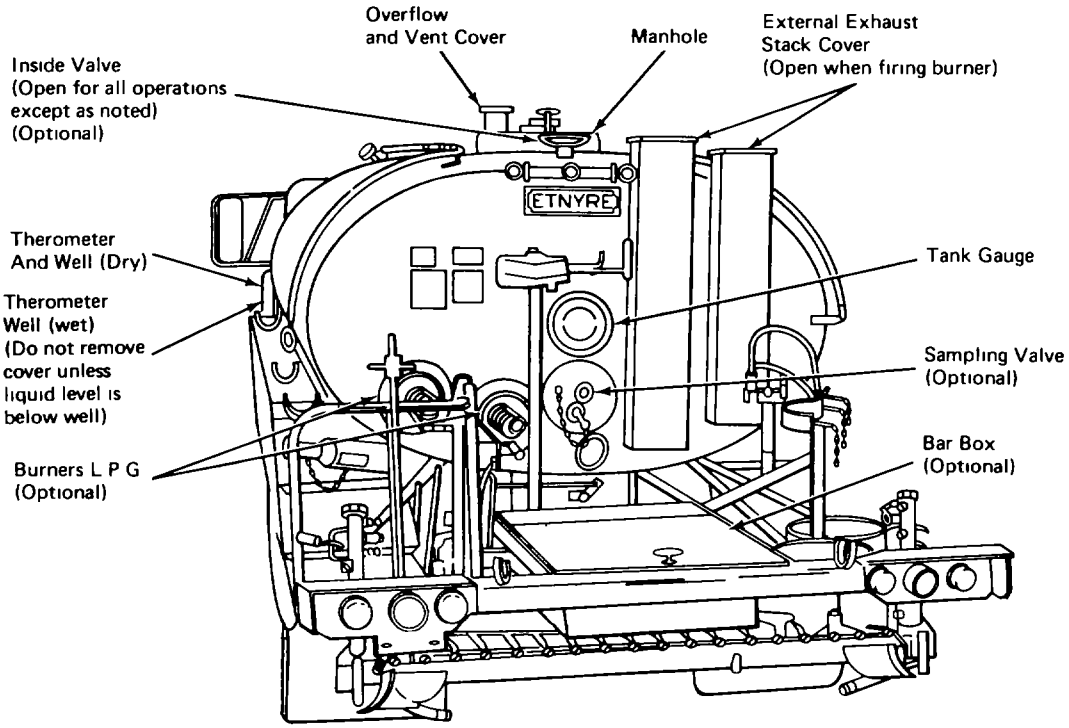
l. Burner System

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 INDENTIFICATION



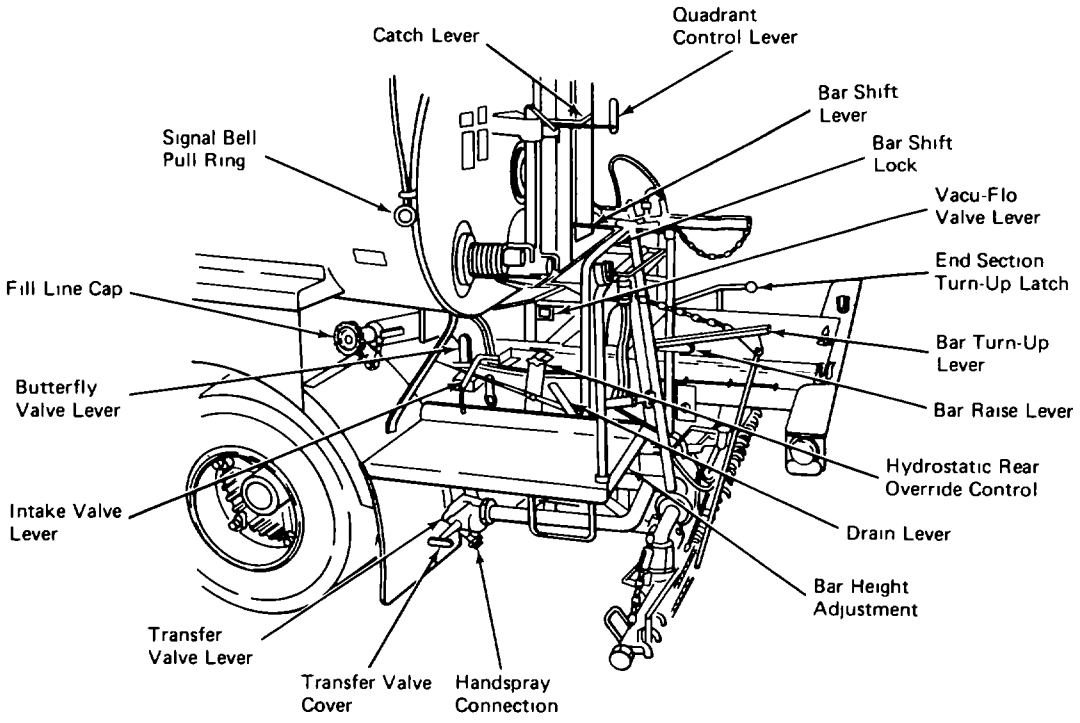


Figure 2

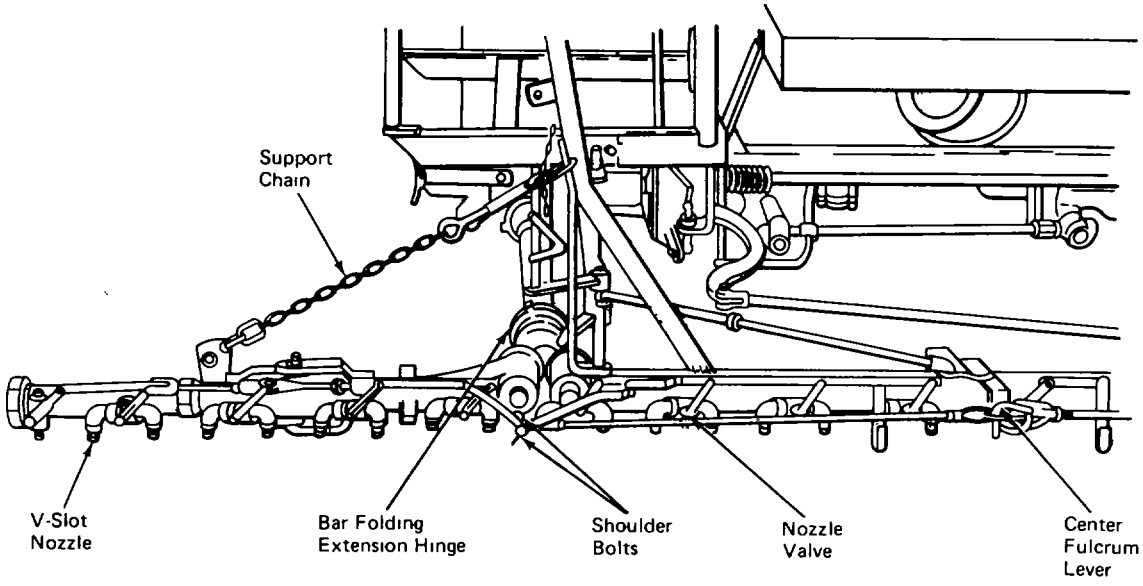


Figure 3

"TUC" SPRAY BAR

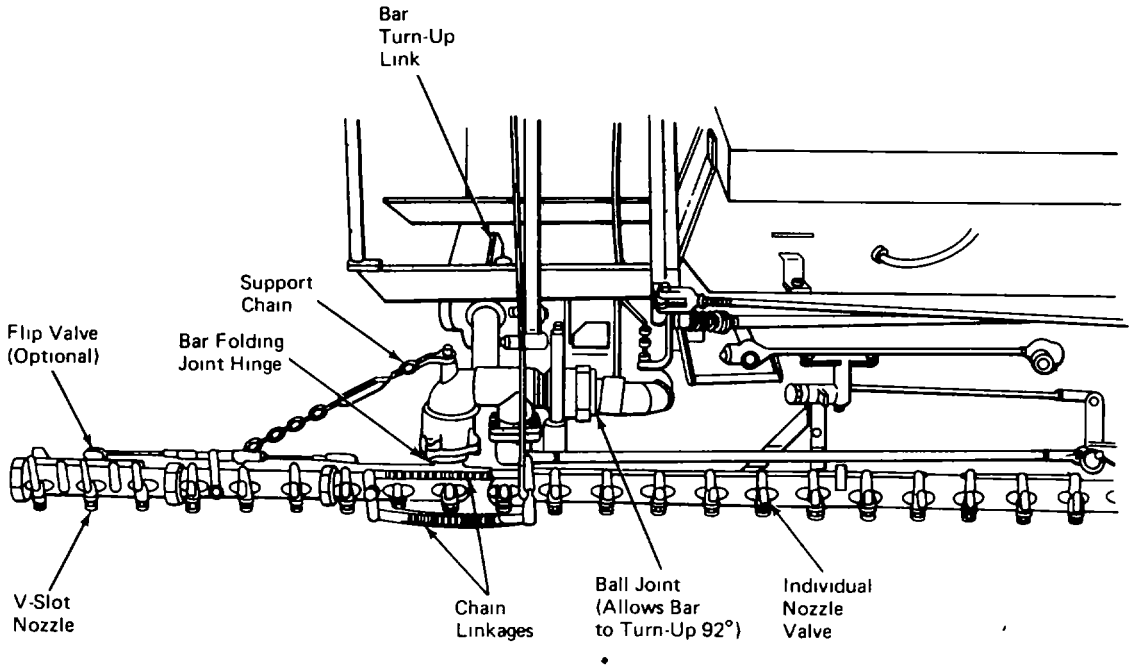


Figure 4

POWER CONTROLS AND COMPONENTS

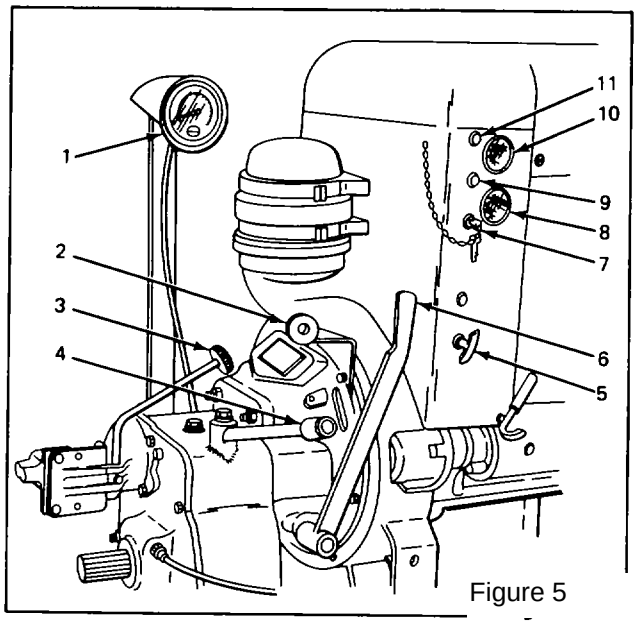


Figure 5

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

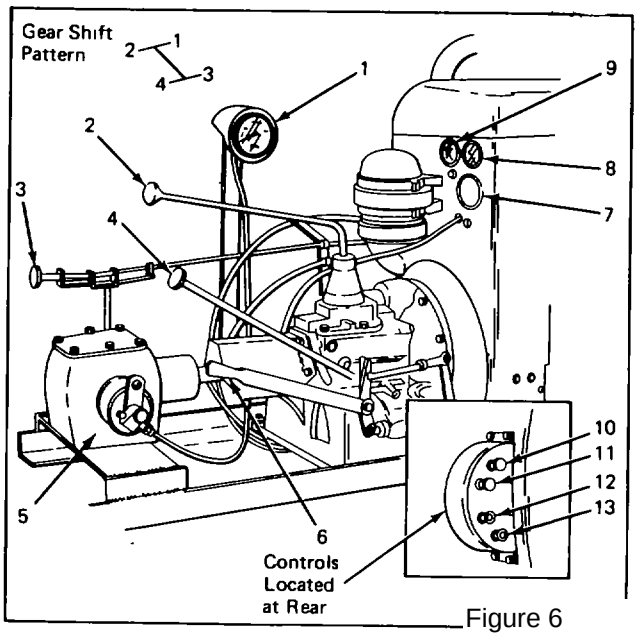


Figure 6

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

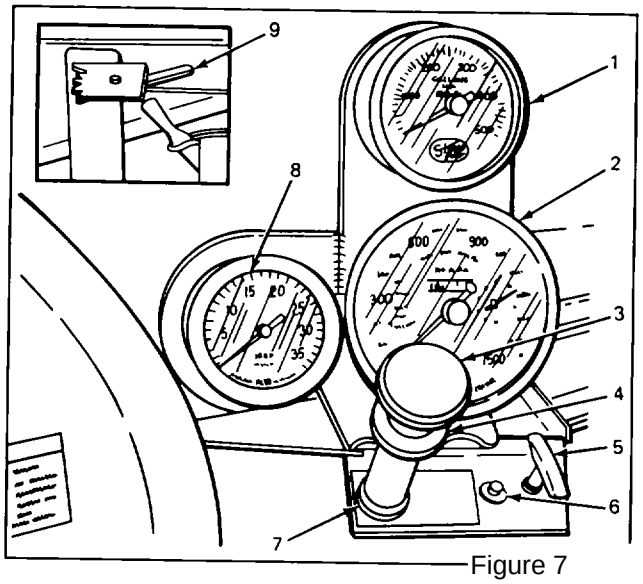


Figure 7

HYDROSTATIC CONTROLS (CAB MOUNTED)

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

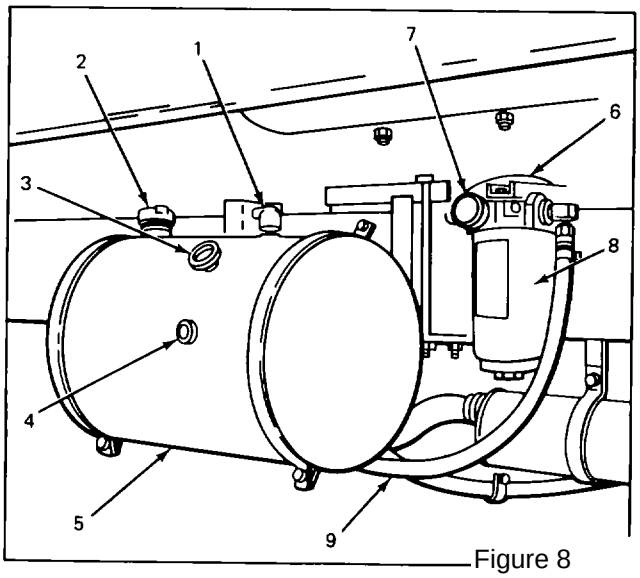


Figure 8

HYDROSTATIC RESERVOIR AND FILTER

1. Air Vent
2. Fill Cap
3. Hydraulic Oil0 Temperature Gauge
4. Oil Level Sight Glass Filter
5. Hydraulic Reservoir
6. Hydraulic Line Filter to Pump
7. Vacuum Gauge
8. Filter
9. Hydraulic Line Reservoir to