HYDRAULIC SYSTEM

HYDRAULIC SPECIFICATIONS

Specifications

System Relief Pressure	1892 – 1963 psi (133 – 138 kg/cm2)
Main Pump	Transmission mounted gear pump
Main Pump Gear Ratio	0.929
Main Pump Displacement	0.606 cu. in./rev (9.93 cc/rev)
Main Pump Output	6.3 gpm (24 l/m) at 2600 rpm
Maximum Flow - flow divider to 3pt valve/aux valve	4.3 gpm (16.5 l/m)
Maximum Flow – flow divider to steering orbit roll	2.0 gpm (7.5 l/m
Suction Screen	150 mesh
Hydraulic/Transmission Filter	10 micron
Hydraulic/Transmission Filter Bypass	14.22 psi (1kg/cm2)
HST Charge Pressure	71 psi +/- 14 psi (5kg/cm2 +/- 1 kg/cm2)
HST Hi Pressure Relief (late)	2625 +/- 71 psi (184 +/- 5 kgf/cm2)
HST Hi Pressure Relief (early)	2550 +/- 213 psi (179 +/- 15 kgf/cm2)
HST Case Pressure	Less than 14.2 psi
Steering System Type	Hydrostatic
Steering Pump	Common with main pump
Steering Relief Pressure	1138 – 1209 psi (80 – 85 kg/cm2)
Steering Orbit Roll Displacement	3.05 cu.in./rev (50 cc/rev)
PTO Clutch Pressure	185 – 228 psi (13 – 16 kg/cm2
PTO Relief Pressure	71 psi (5 kg/cm2)
Three Point Lift Capacity	1191 lbs (540 kg) measured at ball ends

FIG. 1: Hydraulic System Diagram

1. Suction screen
2. Main pump
3. Suction screen 80 mesh
4. Control valve assembly
5. Main relief valve
6. Flow divider
7. 3 point valve
8. Auxillary valve / Loader valve
9. Slow return valve
10. 3 point lift cylinder
11. Steering cylinder
12. Orbit roll
13. PTO relief valve
14. Transmission/Hydraulic Bypass Filter
15. HST Low Pressure Relief (Charge Pressure)
16. HST Hi Pressure Relief
17. HST
18. PTO valve
19. PTO clutch

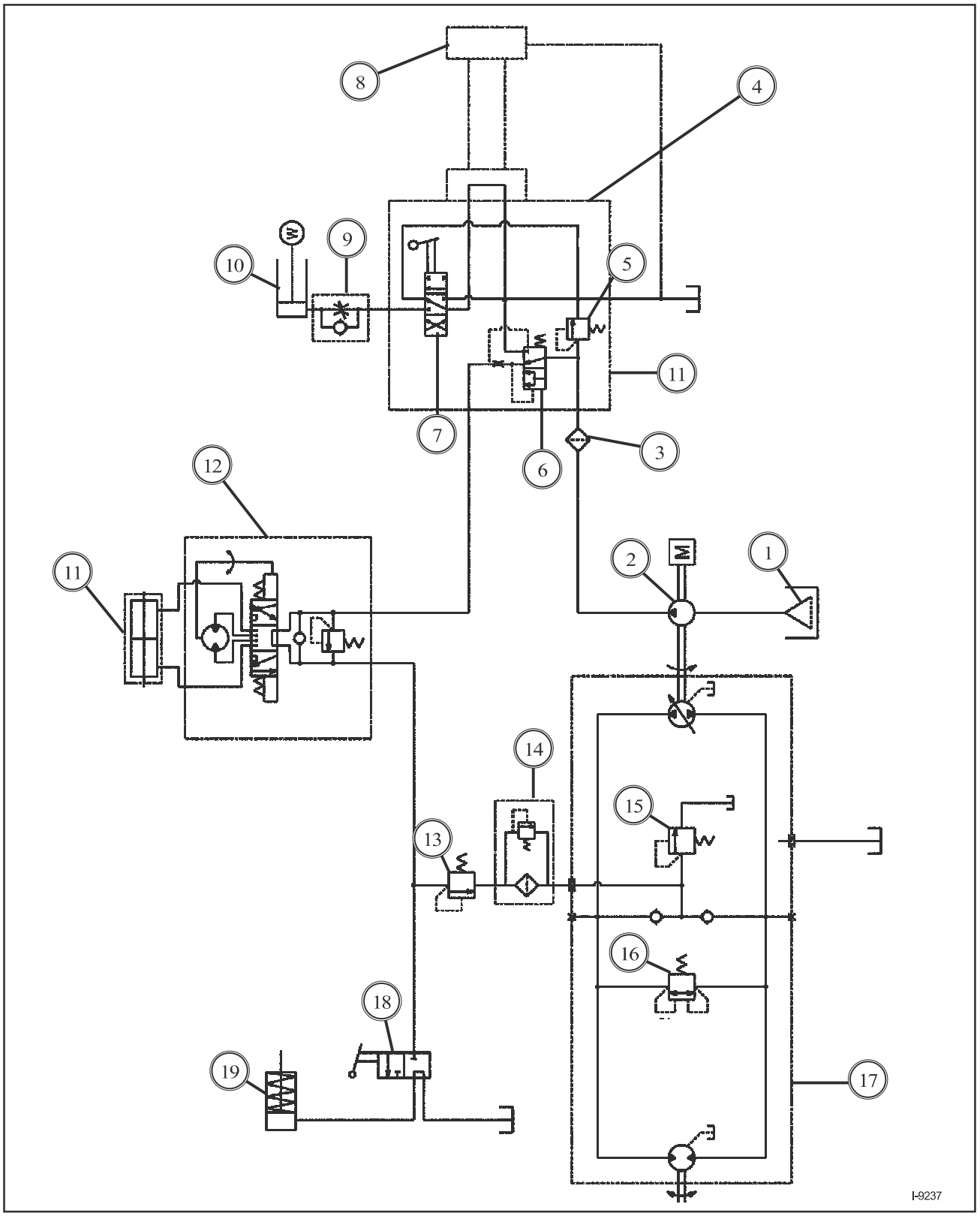

FIG. 1

COMPONENTS AND TEST PORTS

FIGS. 2 and 3: Major Components

1. Screen
2. Pump
3. Test Port - Pump Pressure
4. Main Control Valve
5. Auxilliary Hydraulic Manifold
6. Test Port - Hydraulic Outlet Pressure
7. Slow Return Valve
8. Suction Line Assembly

NOTE: If the tractor is equipped with auxilliary hydraulics, flow and pressure to the auxilliary circuit can be measured at the lines coming from the hydraulic manifold (5) instead of the test port (6).

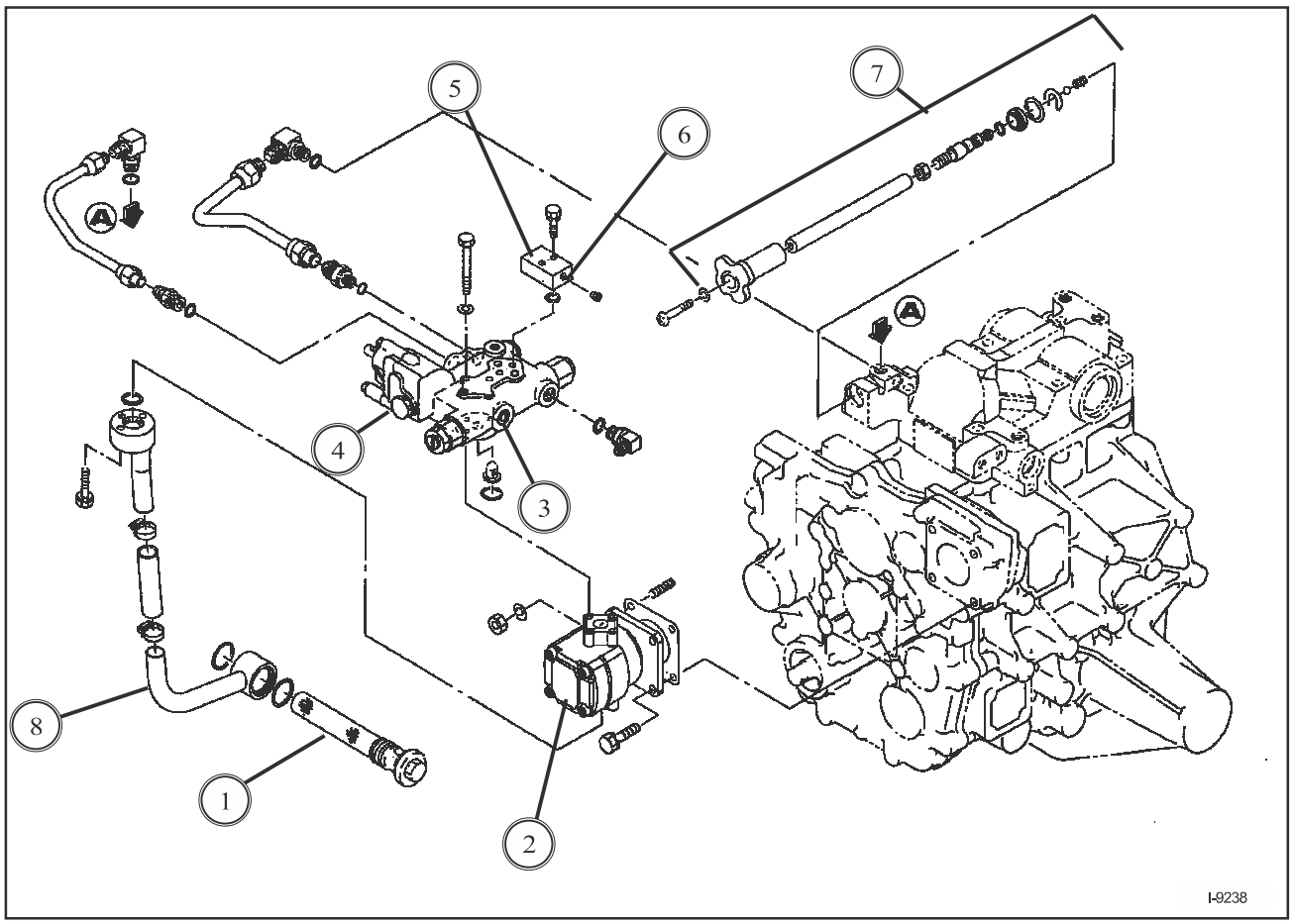

FIG. 2