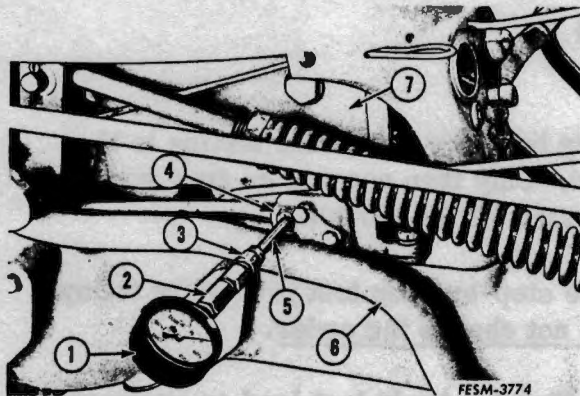


# TROUBLE SHOOTING TEST PROCEDURE

## General

In all trouble shooting tests of the Touch-Control system it is necessary to ascertain the pressure in the pump manifold. For this, the use of hydraulic gauge, FES 1-2 (1), and pressure snubber, FES 94-6 (2), is recommended. They should be installed in place of the upper pipe plug (1/8 inch) in the hydraulic manifold rear flange (4). A 1/4" - 1/8" reducer pipe coupling (3) and a 1/8" pipe nipple (5), long enough to clear the exhaust pipe (6), will be needed to install the hydraulic gauge and snubber in the 1/8-inch pipe plug hole.



1. Hydraulic gauge, FES 1-2
2. Pressure snubber, FES 94-6
3. 1/4" - 1/8" reducer pipe coupling
4. Hydraulic manifold rear flange
5. 1/8" pipe nipple
6. Exhaust pipe
7. Cylinder block

In checking pressure, it should be understood that high pressure in the pump manifold is normal only during movement of the rockshaft and that the pressure varies with the load. (Maximum pressure at high idle will not exceed 1100-1500 pounds per square inch, because at some point in that pressure range the safety valve will open.) When the rockshaft movement is completed normal low pressure is restored. Normal low pressure is governed by the pressure regulator valve, and low pressures are not a factor in the troubleshooting test procedure.

If and when improper adjustment, overload, or faulty operation of the pressure regulator valve causes the pressure to remain high, the temperature of the oil rises rapidly. Continued operation with unrelieved high pressure and high temperature causes failure of gaskets and seals in the block and the pump. Abnormally high pressure in the system is indicated by continued laboring of the tractor engine, a higher sound level in the pump, and a steady rise in the temperature of the hydraulic fluid.

To analyze a failure of the Touch-Control system, tests must be made before the units are removed from the tractor and a load must be provided which will approximate the weight of an implement.

**NOTE:** Complete all the steps of the test procedure in every case. Do not be satisfied if one of the intermediate steps discloses an "intermittent" condition. The