BRAKES

GENERAL INFORMATION

Brakes

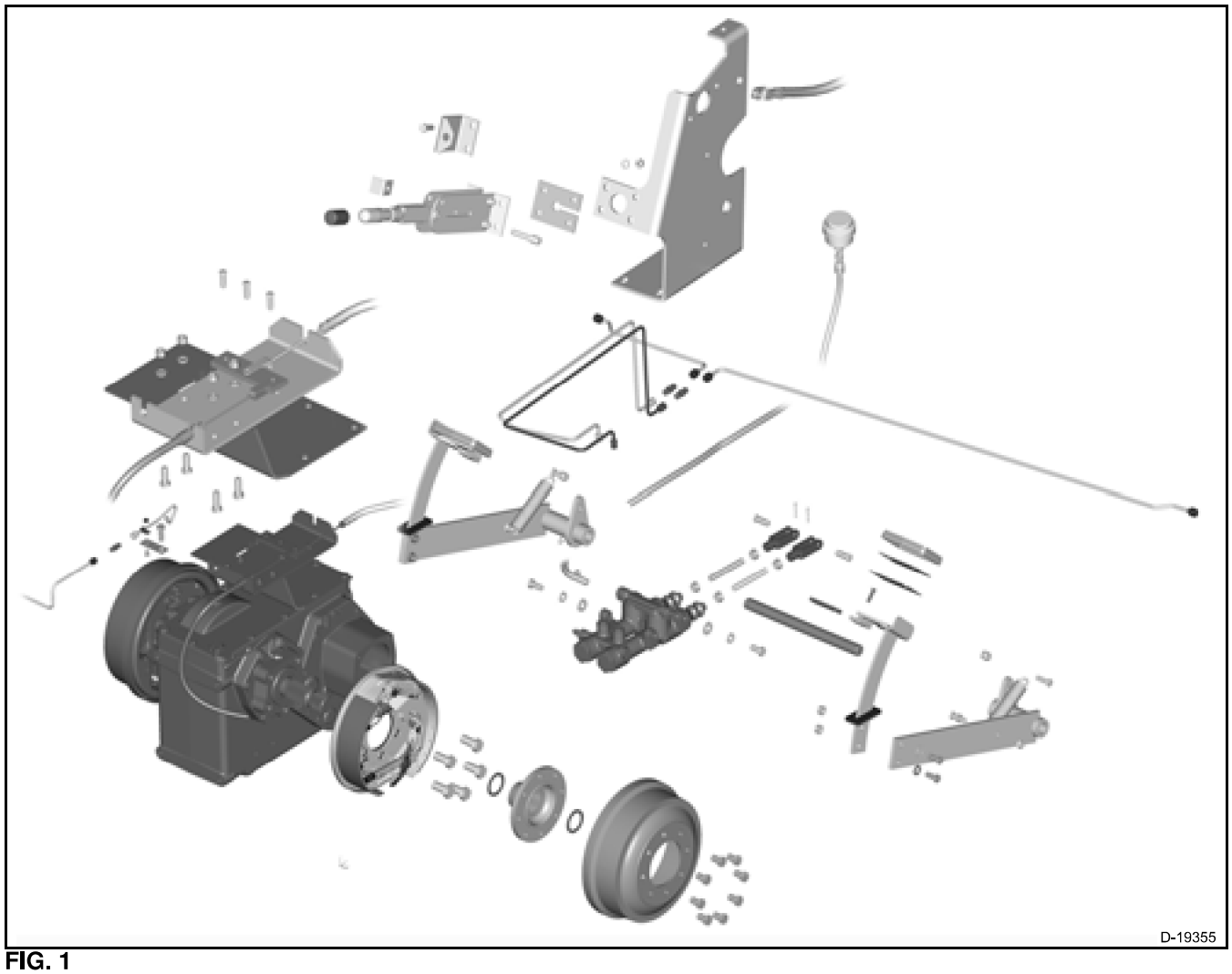

FIG. 1

FIG. 1: A hydraulic system is used to actuate the drum brakes on the combine. The system transports the power required from the pedals to the separate left-hand and right-hand brake units. Hydraulic pressure forces the friction surfaces of the braking system together.

Using the mechanical advantage of a 7.6:1 reduction through the final drives, the brake pedals, and the power pistons in the master cylinder, which are smaller than the wheel cylinder pistons, gives the low brake pedal force needed for braking.

FIG. 2: The master cylinder is located under the cab. The master cylinder is made of a remote fluid reservoir along with dual displacement piston assemblies. Dual displacement pistons provide a rapid fill. Up to 3.45 to 6.9 bar (50 to 100 psi) with a large piston. High pressure is supplied after that with a smaller piston. Right-hand and left-hand piston assemblies provide independent left-hand and right-hand braking through left-hand and right-hand brake pedals. Independent operation of either brake pedal helps turn the combine using the brakes.

A brake pedal locking strap is used to lock the pedals together. This supplies equal braking force to both brake drums at the same time for travel on roads.

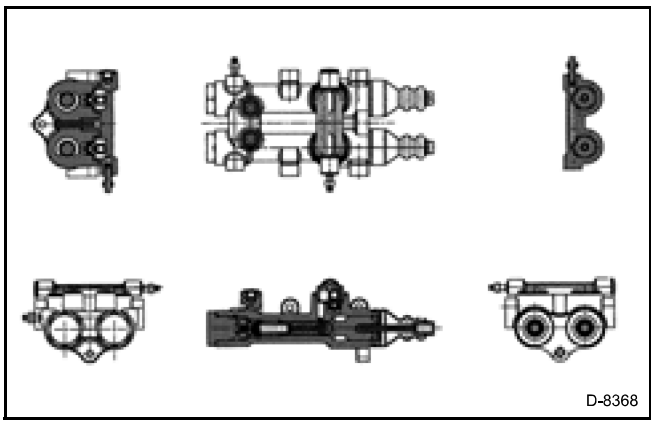

FIG. 2

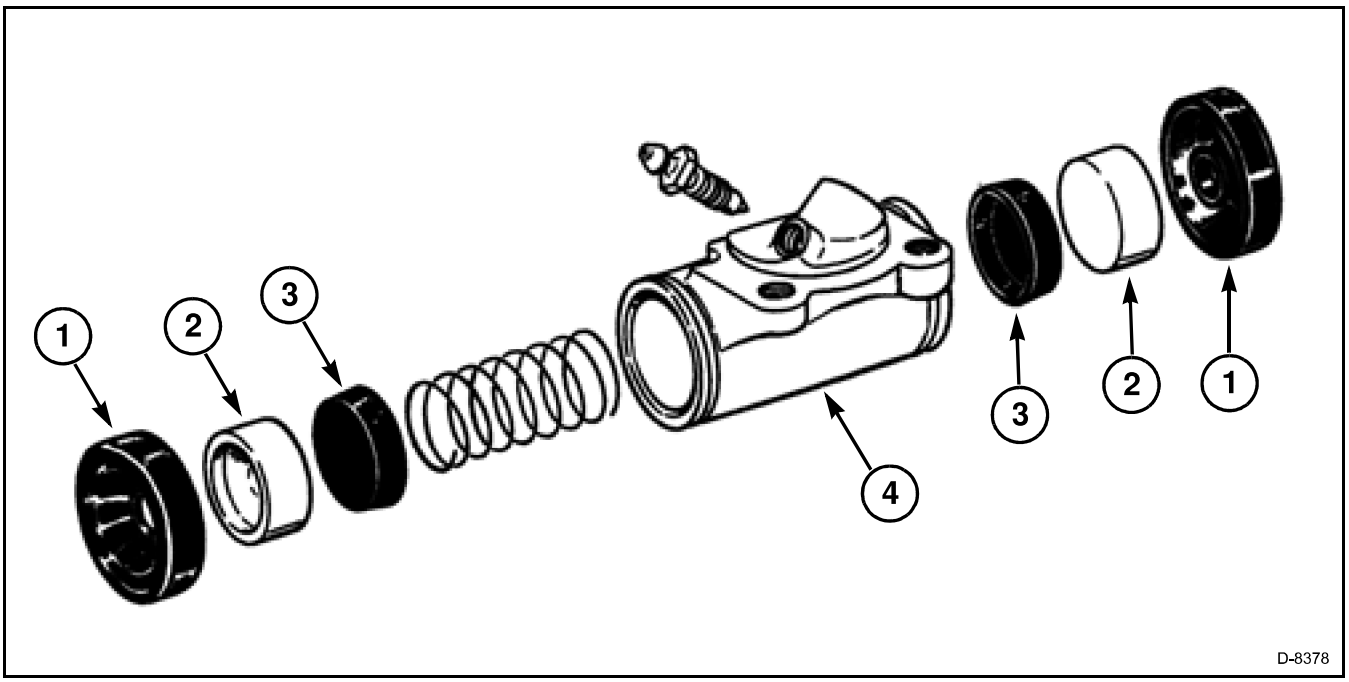

FIG. 3

FIG. 3: In the drum brake system, each wheel cylinder (4) contains two pistons (2). One piston (2) at either end, which push outward in opposite directions. This forces the brake shoe into contact with the drum. All pistons have a seal (3) to stop fluid leakage. A rubber dust boot (1) seals the outer end of the cylinder against dust and dirt.