

# Nomenclature and Dimensions for Hydraulic Excavators —SAE J1193

SAE Recommended Practice  
Editorial Change February 1979

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# NOMENCLATURE AND DIMENSIONS FOR HYDRAULIC EXCAVATORS—SAE J1193

SAE Recommended Practice

Report of Off-Road Machinery Technical Committee approved April 1978. Editorial change February 1979.  
Rationale statement available.

1. **Purpose**—The purpose of this recommended practice is to establish a uniform method of providing dimensional specifications and nomenclature for mobile hydraulic excavators.

2. **Scope**—This recommended practice applies to hydraulic excavators as defined in SAE J1057.

This recommended practice includes the nomenclature peculiar to and most commonly used to describe this type of equipment. The illustrations are not intended to be descriptive of any existing machine and are used only to clarify the meaning of this recommended practice.

The numbered terms are nomenclature and apply to Figs. 1-6 as applicable.

The single letter dimensions apply to Figs. 1, 2, and 3 and are primarily to define vehicle size.

The double letter dimensions apply to Figs. 4, 5, and 6 which illustrate the functional range of the common types of hydraulic excavators.

For dimensions relative to turning radius of rubber tired vehicles, refer to SAE J695.

All dimensions are based on machines setting on a groundline that provides firm level support. Rubber tired vehicles are on manufacturers specified tires inflated to specified pressure, crawler track shoes do not penetrate groundline.

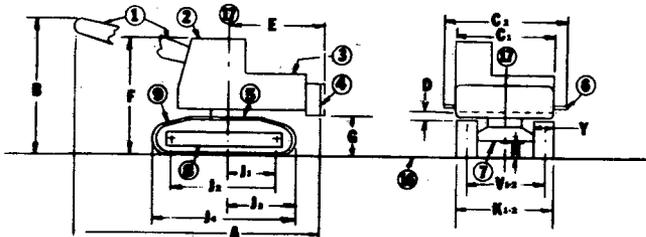


FIG. 1—CRAWLER MOUNTED

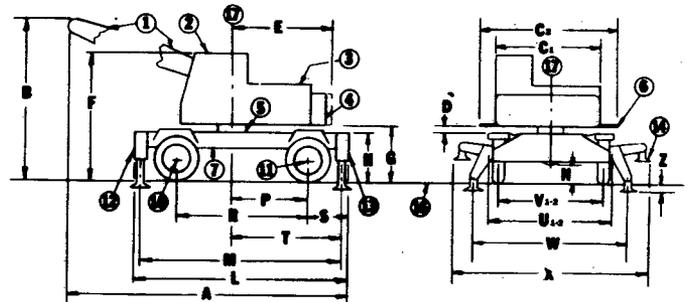


FIG. 2—WHEEL MOUNTED, SINGLE OPERATOR STATION

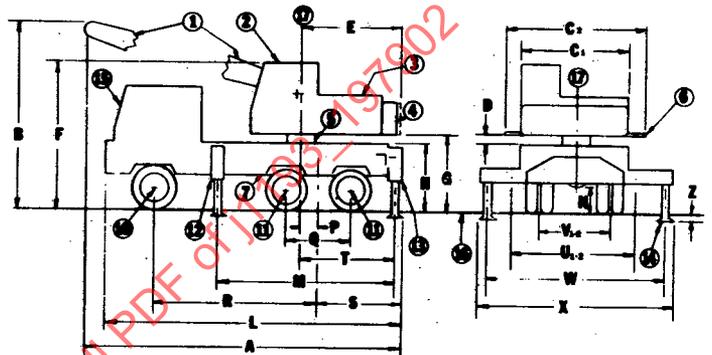


FIG. 3—WHEEL MOUNTED, SEPARATE OPERATOR AND TRANSPORT STATIONS

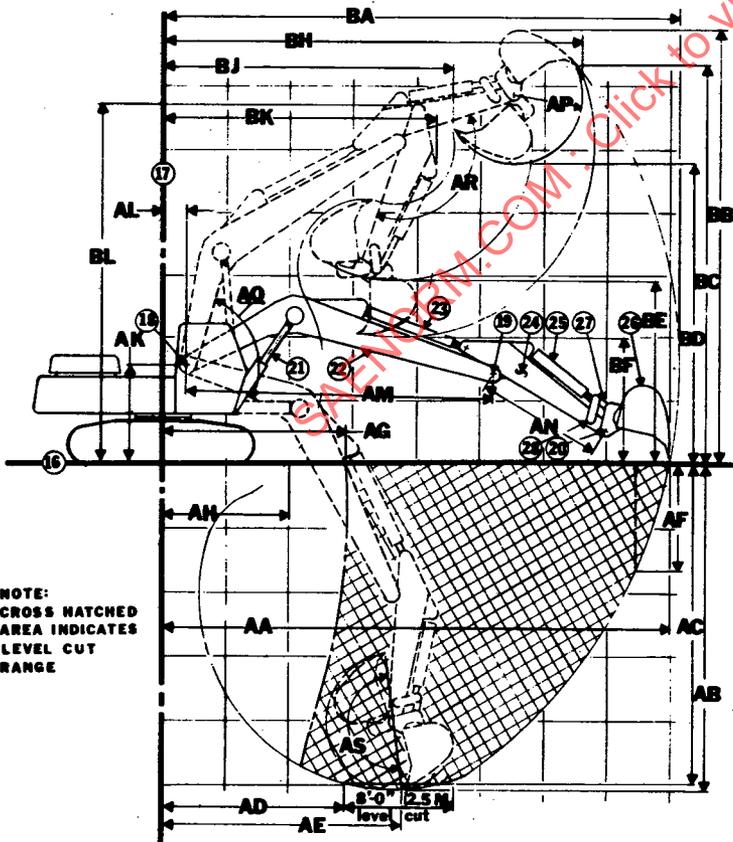


FIG. 4—HOE TYPE EXCAVATOR

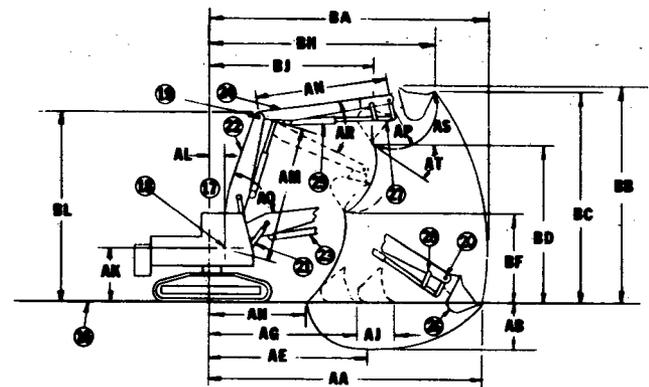


FIG. 5—SHOVEL TYPE EXCAVATOR