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Component Nomenclature - Skidder - Grapple — SAE J1111

SAE STANDARD
APPROVED MAY 1975

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SOCIETY OF AUTOMOTIVE ENGINEERS, INC.
400 COMMONWEALTH DRIVE, WARRENDALE, PA. 15096



Report of Construction and Industrial Machinery Committee approved May 1975.

1. SCOPE - This standard includes names of major components and parts particular to this type of machine, limited to being used to apply to rubber-tired articulated skidders.

Illustrations used here are not intended to include all existing commercial vehicles,

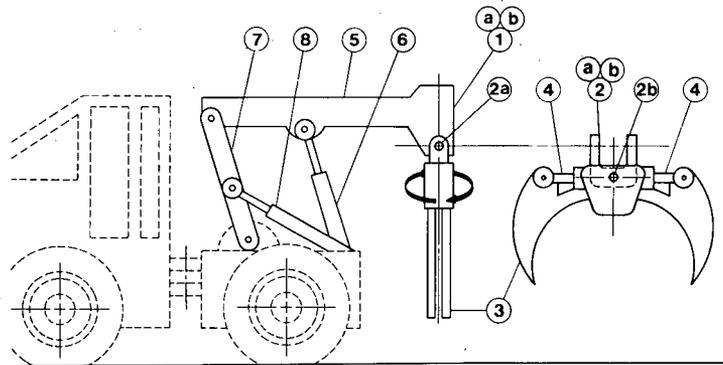


FIG. 1

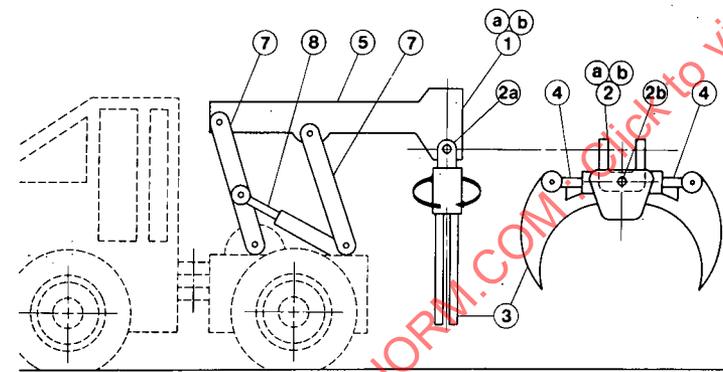


FIG. 2

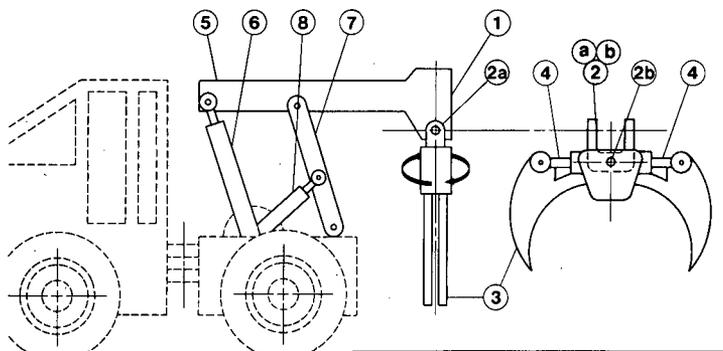


FIG. 3

or to be exactly descriptive of any particular machine. They have been drawn to describe the principles to be used in applying this standard.

2. DEFINITIONS

2.1 MULTIPLE ARCH (PARALLELOGRAM) CONFIGURATION (Figs. 1,2,3) - This configuration consists of a boom and two arches. The basic grapple movement is through a fixed arc. One of the arches may be replaced by hydraulic cylinders to provide unit with increased area of movement.

2.2 TWO FUNCTION MULTIPLE ARCH CONFIGURATION (Figs. 1 & 3) - This configuration consists of two arches, but one of the arches consists of two hydraulic cylinders to provide unit with increased area of movement.

2.3 SINGLE ARCH CONFIGURATION (Fig. 4)-

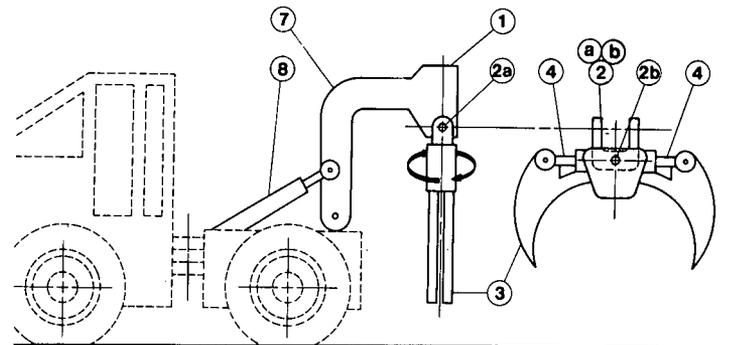


FIG. 4

This configuration consists of a single arch and is limited to a fixed arc grapple movement.

2.4 SWING BOOM CONFIGURATION (Fig. 5) - This configuration consists of a main boom and a jib boom which provide both horizontal and vertical grapple movements. In addition, the unit pivots about a vertical axis through an arc to either side of the longitudinal centerline to the rear of the vehicle.

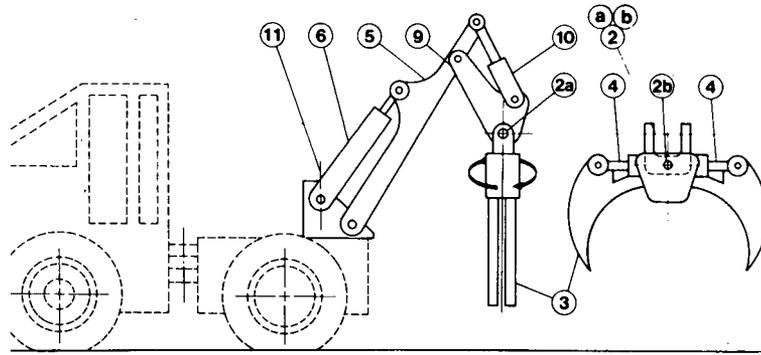


FIG. 5

3. NOMENCLATURE

1. Grapple Rotation Device
 - a) Powered
 - b) Non-powered
2. Grapple Pivot Device
 - a) Fore & Aft Pivot
 - b) Side Pivot
3. Grapple Arm
4. Grapple Arm Cylinder
5. Boom
6. Boom Cylinder
7. Arch
8. Arch Cylinder
9. Jib Boom
10. Jib Boom Cylinder
11. Swing Boom Pivot

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