

S.A.E.
LIBRARY

Component Nomenclature - Skidder - Grapple — SAE J1111

SAE STANDARD
APPROVED MAY 1975

SAENORM.COM : Click to view the full PDF of J1111_197505

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,

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)-

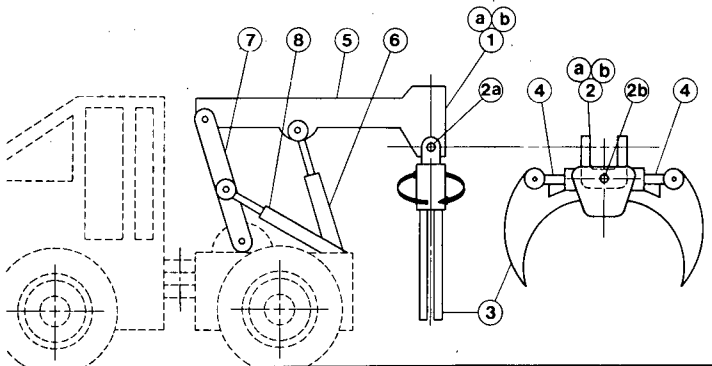


FIG. 1

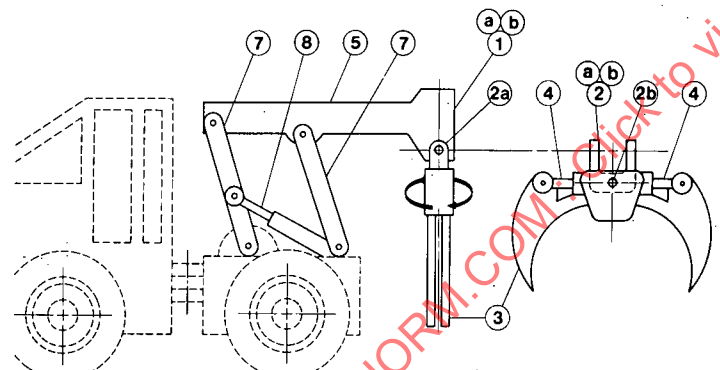


FIG. 2

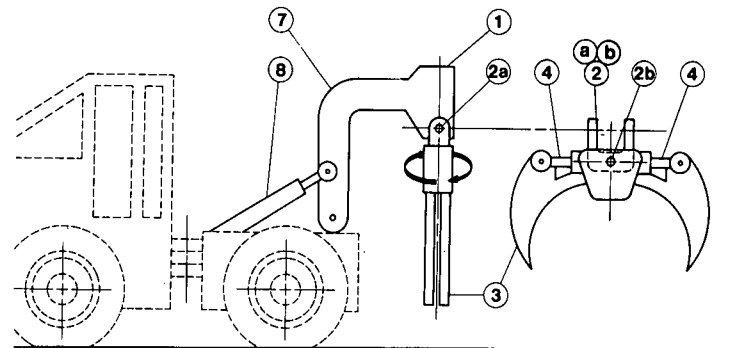


FIG. 4

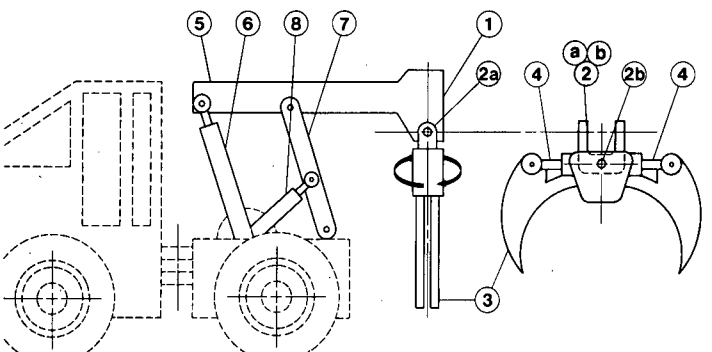


FIG. 3

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.

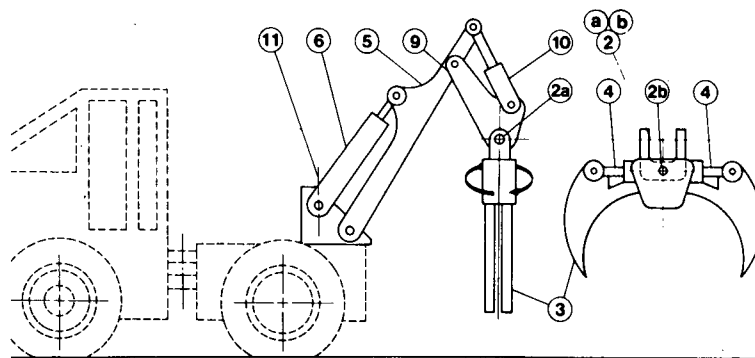


FIG. 5

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

SAENORM.COM :: Click to view the full PDF of J1111_197505