

Submitted for recognition as an American National Standard

Material Handler Nomenclature

1. Scope—This SAE Standard includes the names of major components and parts peculiar to this type of machine. Illustrations used here are not intended to include all existing commercial machines or to be exactly descriptive of any particular machine. They have been provided to describe the principles to be used in applying this document.

1.1 Purpose—The purpose of this document is to establish a uniform method of providing nomenclature for material handlers.

2. References

2.1 Related Publications—The following publications are provided for information purposes only and are not a required part of this document.

2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J1234—Specification Definitions—Off-Road Work Machines

SAE J2055—Identification Terminology and Component Nomenclature for Knuckle Boom Log Loaders

SAE J/ISO 6165—Identification Terminology of Earthmoving Machines

SAE J/ISO 7135—Nomenclature and Dimensions for Hydraulic Excavators (Information regarding applicable dimensions for material handlers are addressed under this document.)

2.1.2 AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)—Available from ASME, 22 Law Drive, Box 2900, Fairfield, NJ 07007-2900.

ASME B30.25—Scrap and Material Handlers

3. Definition

3.1 Material Handler—A swing-to-load machine with articulated booms and supporting structure designed to grab, lift, swing, and place various types of material.

4. Identification Terminology

4.1 Seven different types of mounting configurations are illustrated. (See Figure 1.)

4.2 Two different types of boom configurations are illustrated. (See Figure 2.)

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

TO PLACE A DOCUMENT ORDER: (724) 776-4970 FAX: (724) 776-0790
SAE WEB ADDRESS <http://www.sae.org>

4.3 Two different methods for grabbing material are illustrated. (See Figure 2.)

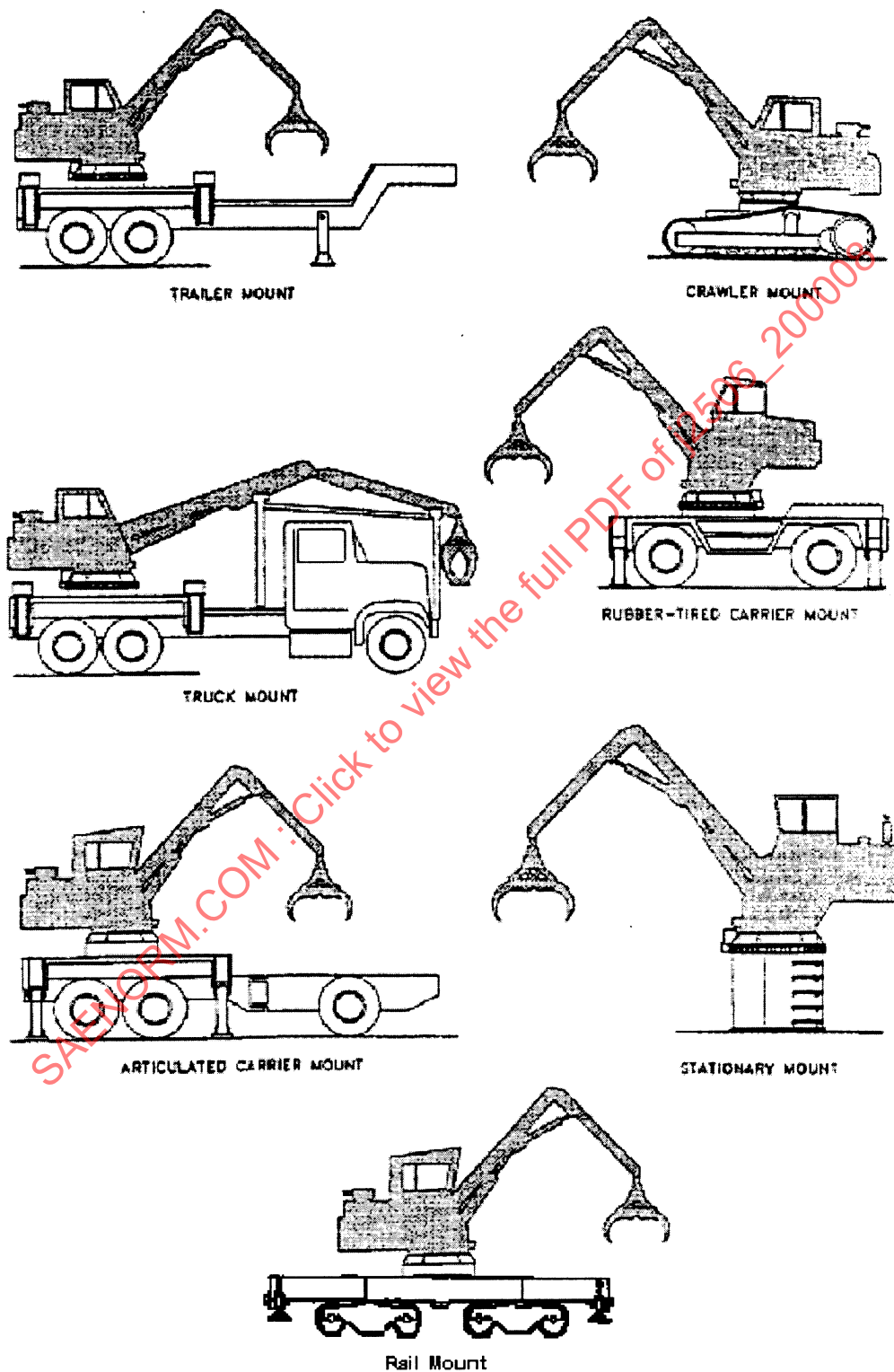
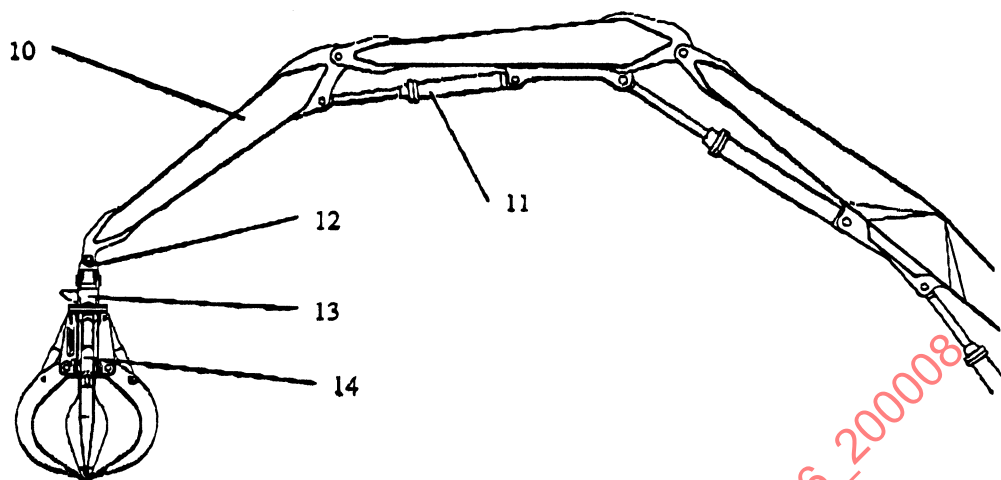
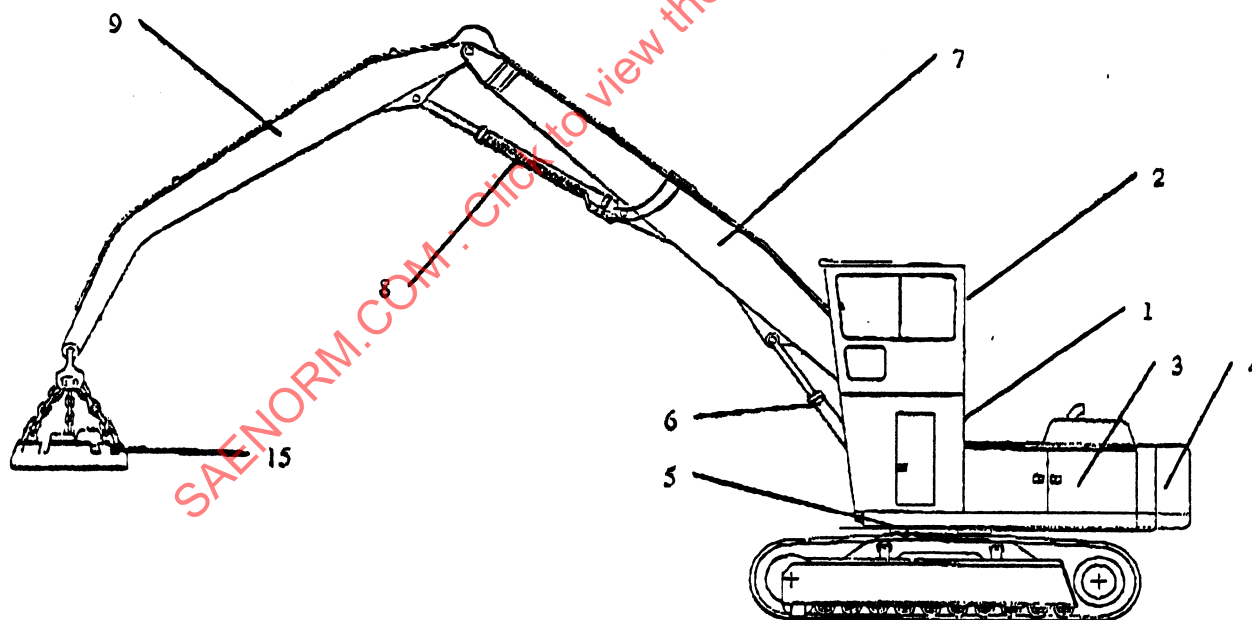


FIGURE 1—MOUNTING CONFIGURATIONS



3 Piece Front with Grapple



2 Piece Front with Magnet

FIGURE 2—MAJOR COMPONENTS

5. Component Nomenclature—Figure 2 identifies the major components.

1. Cab Riser
2. Cab
3. Upperstructure
4. Counterweight
5. Swing Bearing
6. Boom Cylinder
7. Boom
8. Arm Cylinder
9. Arm
10. Jib
11. Jib Cylinder
12. Grapple Pivot
13. Rotator
14. Grapple
15. Magnet

PREPARED BY THE SAE MACHINE TECHNICAL COMMITTEE

SAENORM.COM : Click to view the full PDF of j2506_200008