

### 31.7 HYDRAULIC PILE DRIVER

#### MAIN FIELDS OF APPLICATION

- Foundation work
- River work
- Water supply and sewerage

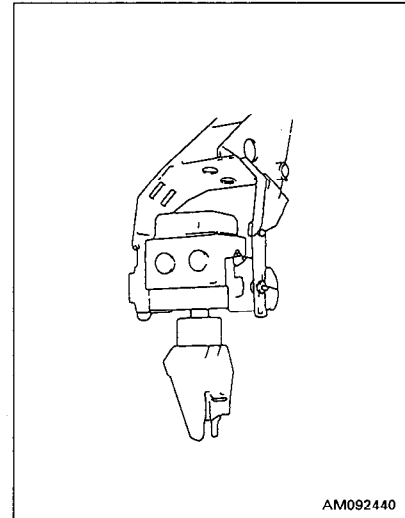
This is a piling machine employing the hydraulic power source of the excavator. The machine features a long arm and a chuck unit movable by 360°. This facilitates operations such as driving and removing long piles, driving in piles at corners, vertical driving etc.

#### MISTAKEN METHODS OF USE

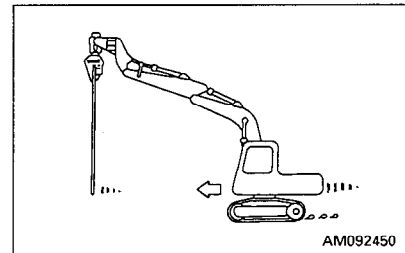
To ensure that the machine has a long life, and to ensure that operations are carried out in safety, do not operate the machine in any of the following ways.

- Do not operate the cylinder to the end of its stroke.  
Always leave approx. 5 cm (2 in) to spare.

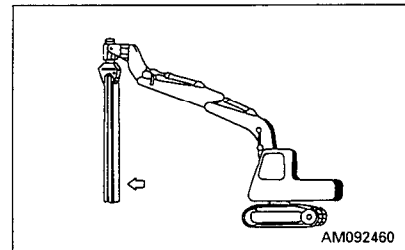
Forward or swing motion while grasping a pile



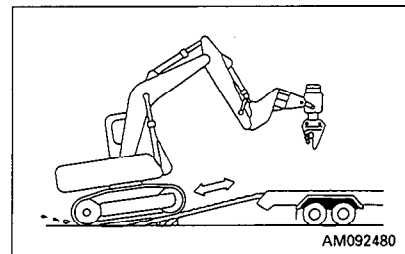
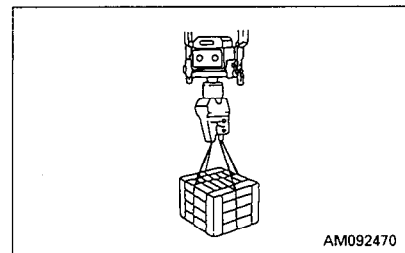
Lifting more than two piles at the same time



Work other than standard works



Loading or unloading a machine equipped with hydraulic pile driver



## 31.8 HYDRAULIC EXCAVATOR WITH MULTI-PURPOSE CRANE

### MAIN FIELDS OF APPLICATION

- Site preparation
- Water supply and sewerage
- River work
- Agricultural, civil engineering work

Crane operation can be carried out without removing the bucket. This machine is used for laying U section gutters and hume pipes for water supply and sewerage as well as river and canal work, agricultural, civil engineering work and site preparation.

### MISTAKEN METHODS OF USE

To ensure that the machine has a long life, and to ensure that operations are carried out in safety, do not operate the machine in any of the following ways.

- Do not operate the cylinder to the end of its stroke.  
Always leave approx. 5 cm (2 in) to spare.

Abrupt lever operation

Traveling with a suspended load

Operating other work equipment during crane operation

Excessive lengthening of wire rope

