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|  | <b>SURFACE<br/>VEHICLE<br/>STANDARD</b> |  <b>J1853 OCT2008</b> |
|                                                                                  |                                         | Issued 1987-04<br>Revised 2008-10                                                                        |
|                                                                                  |                                         | Superseding J1853 JUN2000                                                                                |
| Hand Winches—Boat Trailer Type                                                   |                                         |                                                                                                          |

## RATIONALE

Changes to this document were made to clarify terminology and/or definitions without change to any technical requirements.

### 1. SCOPE

This SAE Standard includes spur gear and direct drive type hand-cranked winches as used on boat trailers. This does not include brake type winches as used in boat lift, davit, or industrial applications.

### 2. REFERENCES

There are no referenced publications specified herein.

### 3. DEFINITIONS

#### 3.1 Winch Nomenclature

The following nomenclature has been adopted for uniformity in the terms used for the component parts of the winch.

##### 3.1.1 Frame

The basic structure that provides the mounting for the various component parts of the winch. (See Figure 1.)

##### 3.1.2 Drum

That portion of the winch to which the winch line is attached for winding same on to. (See Figure 1.)

##### 3.1.3 Pinion Shaft

The input shaft to which the primary input gear and crank handle are attached. (See Figure 1.)

##### 3.1.4 Intermediate Shaft

Any intermediate shafts incorporated for additional gear reduction or change in direction of rotation. (See Figure 1.)

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### 3.1.5 Ratchet Pawl

That spring-loaded device which is designed to index repeatedly into a gear when the handle is manually rotated and engages the gear to prevent reverse rotation when the handle is released. (See Figure 1.)

### 3.1.6 Ratchet Return Spring

The spring that activates the ratchet pawl. (See Figure 1).

### 3.1.7 Winch Line

Rope, wire rope, strap, or equivalent.

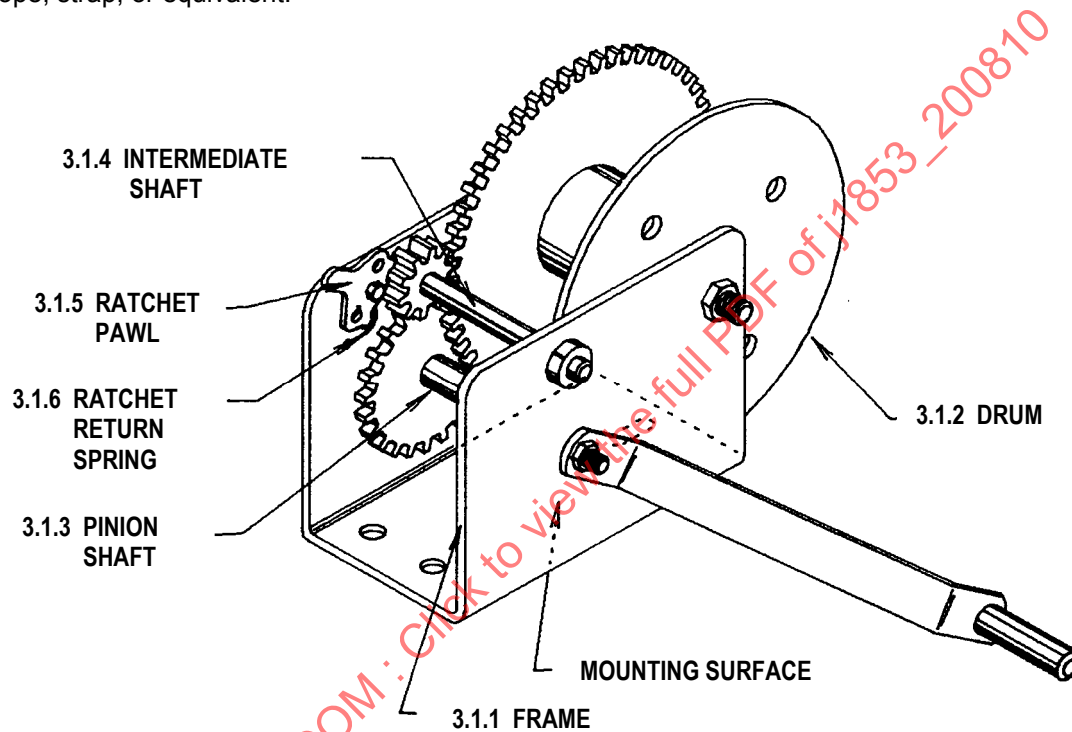


FIGURE 1 - COMPONENT PARTS OF THE WINCH

## 4. IDENTIFICATION

Boat trailer winches shall be permanently marked as follows:

- 4.1 Winch manufacturer's name, initials, or trademark.
- 4.2 Model number.
- 4.3 Maximum first layer line pull rating of the winch.
- 4.4 Year of manufacture.