



SURFACE VEHICLE STANDARD

J1853**JUN2014**Issued 1987-04
Reaffirmed 2014-06

Superseding J1853 OCT2008

Hand Winches—Boat Trailer Type

RATIONALE

J1853 has been reaffirmed to comply with the SAE five-year review policy.

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.

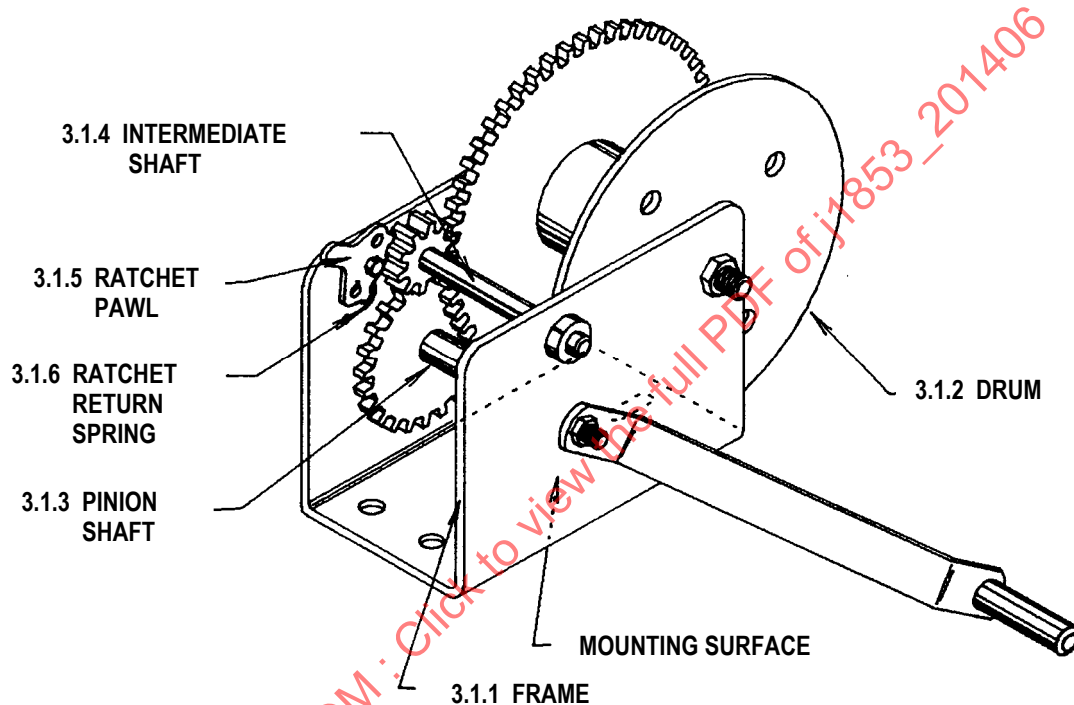


FIGURE 1 - COMPONENT PARTS OF THE WINCH

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.