

Recovery Attachment Points for Passenger Cars, Vans, and Light Trucks

Foreword—This Document has been revised according to the new SAE Technical Standards Board format (Definitions is now Section 3) and 4.2.1 has been added. Metric has also been added.

1. Scope—This SAE Recommended Practice is intended to provide guidelines to the vehicle manufacturer for applying recovery attachment points on vehicles rated up to 3178 kg (7000 lb) GVW, such as passenger cars, vans, and light trucks.

1.1 Purpose—This document is intended to be used as a guideline for vehicle manufacturers to provide easily identified recovery attachment points. The benefits are: minimized vehicle damage during recovery, reduced recovery hookup time, and improved traffic incident management.

2. References

2.1 Related Publication—The following publication is provided for information purposes only and is not a required part of this document.

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

SAE J1142—Towability Design Criteria and Equipment Use—Passenger Cars, Vans, and Light-Duty Trucks

3. Definitions

3.1 Recovery Point Access Angles—The angles of the recovery connecting device which should not create permanent damage during recovery.

3.2 Recovery Connecting Device—Attachable device, used in winching recovery operations, compatible with the designated recovery attachment points of a vehicle.

3.3 Recovery Vehicle—A vehicle specifically designed to recover, lift, and tow disabled vehicles.

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4. Recovery Attachment Points—Recovery attachment points are to be available on the vehicle as described herein:

4.1 Area of Placement—An area suitably located and identified by the vehicle manufacturer to support equipment necessary for recovery of a disabled vehicle.

4.2 Location of Attachment Points—The front recovery attachment point(s) should be located forward of the centerline of the front wheels. The rear recovery attachment point(s) should be located aft of the centerline of the rear wheels. Although four attachment points are preferable, one front and one rear is acceptable. If one attachment point is used front and rear, it is recommended that both should not be placed on the same side of the vehicle.

4.2.1 Recovery attachment points may be a reinforced slot or opening with load capacities as specified in 4.4 or a connection point that will accept a standard reasonable connecting device provided by the towing equipment manufacturers.

4.3 Recovery Point Access Angles

4.3.1 There should be access to the attachment points at any angle from zero degrees to 15 degrees from the horizontal point of attachment.

4.3.2 There should be no damage to the vehicle when the vehicle is pulled in the horizontal plane at the attachment point and parallel to the centerline of the vehicle.

4.4 Load Capacity—Within the specified recovery access angles, each recovery attachment point must have a load carrying capability not less than 50% of the GVW of the vehicle. There should be no structural deformation or damage which would impede future use of the recovery attachment point or affect the performance of the vehicle.

4.5 Attachment Point Opening—The attachment point opening must be a minimum of 40 mm (1.57 in) diameter to allow a nominal 9.525 mm (3/8-in) chain to pass through unobstructed.

5. Owner/Operator and Towing Manual Instructions

5.1 Location, Guidelines, and Limitations—Written description and drawings of location, specific guidelines, and limitations should be addressed in owner/operator and towing manuals.

6. Notes

6.1 Marginal Indicia—The change bar (I) located in the left margin is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. An (R) symbol to the left of the document title indicates a complete revision of the report.

6.2 Key Words—Automobile, car, pickup truck, minivan, towability.