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**SAE J176 AUG77**

**Dry-Break Fueling  
Installation for  
Construction  
Machinery**

SAE Recommended Practice  
Revised August 1977

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Ø DRY-BREAK FUELING INSTALLATION  
FOR CONSTRUCTION MACHINERY

1. PURPOSE:

This recommended practice outlines design criteria which may be employed to facilitate the interchangeability of fuel receivers for dry-break fueling.

2. SCOPE:

This recommended practice specifies the application, position, protection, and size of dry-break fueling receivers and vents.

3. APPLICATION:

It is recommended that fuel tanks have 2-11 1/2 Dryseal NPTF (SAE J476 and J371a) openings to permit installation of a dry-break fueling receiver with an automatic shut off and appropriate venting. This applies to machines with a fuel capacity over 380L (100 gal-nominal) or as applicable on machines with less fuel capacity.

4. POSITION:

Whenever possible the fuel receiver should be accessible from ground level. Extensions to permit fueling from a remote area of the machine should be at least 50 mm (2 in) inside diameter with a minimum of bends.

5. PROTECTION:

The fuel receiver should be protected from external damage by its location or guards. The guards should not prevent removal of the receiver for repair.

The phi (Ø) symbol is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. If the symbol is next to the report title, it indicates a complete revision of the report.

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RATIONALE:

J176 has been updated in accordance with the SAE 5-year review practice. The only change was in the title which better reflects the equipment covered by the document. Construction equipment has been replaced by off-road work machines.

The document was considered for cancellation but the subcommittee felt it does have a significant contribution and should be maintained as a standard.

RELATIONSHIP OF SAE STANDARD TO ISO STANDARD:

Not applicable.

REFERENCE SECTION:

SAE J476 JUN61, Dryseal Pipe Threads

SAE J371 MAR78, Drain, Fill and Level Plugs for Off-Road, Self-Propelled Work Machines

APPLICATION:

This recommended practice specifies the application, position, protection, and size of dry-break fueling receivers and vents.

COMMITTEE COMPOSITION:

DEVELOPED BY THE SAE OFF-ROAD MACHINERY TECHNICAL COMMITTEE

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