

# Engel MT45 (42 quart)



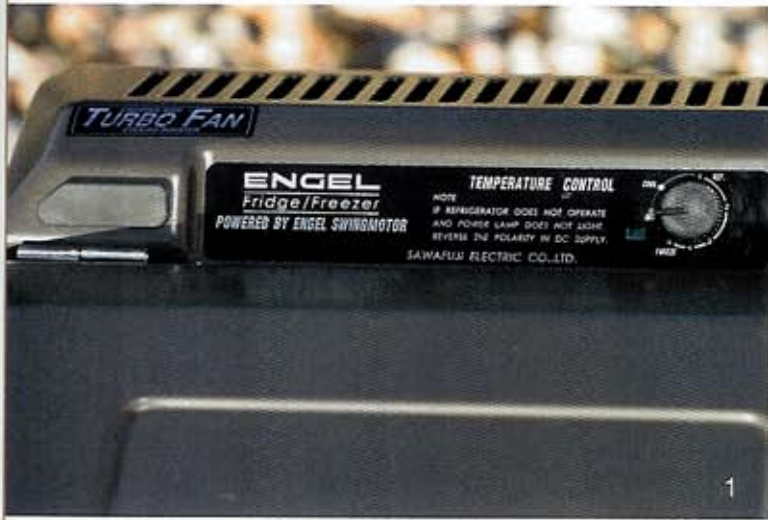
Consider this fridge a classic as it has been around for what seems to be ages, even in the U.S., and the design has changed little over the years. It has been common knowledge for some time that the Engel is virtually identical to the ARB as well as the Norcold (not included in this article). All of them share the same basic appearance and construction, with slight differences in the badging, finishes and colors. I decided to include both Engel and ARB in this review mostly to verify that their performance was indeed similar.

Many of the features I detailed in the ARB review apply to the Engel as well, save for the digital thermometer, which the U.S. version of the Engel lacks. The Engel exterior colors are brown and taupe; the ARB is a silvery blue. These fridges are distinct from their competitors in that they are powered by a patented swing-motor from Sawafuji electric. This motor uses an electromagnetic device to power a piston that compresses and pumps refrigerant through the cooling system. Electrical current is applied to a coil placed at a right angle to the magnetic field that applies thrust to the piston. This thrust is fine-tuned and maximized by synchronizing the frequency of the current with that of the piston assembly (piston, spring and coil). The thrust of the coil is directly transmitted to the piston, so a full stroke is not required upon start-up. This piston is the

only moving part and is self-lubricated. As such, swing motors are very simple and reliable.

The motor assembly is suspended inside the compressor casing using rubber bushings and coil springs. It is capable of withstanding vibrations from the worst roads, as well as operating angles up to 30 degrees. The refrigerant is pumped through an evaporator plate that is mounted to the inside surface of the cabinet and surrounds all four walls for even cooling. The distribution coils can be seen molded into the surface of this plate. The way the plate is mounted, with a space between it and the walls of the chest, allows for additional air circulation even if the basket is packed full. The downside to this is that anything spilled down the sides behind the plate is not easily cleaned up and will likely remain unless the plate is removed.

The underside of the lid is concave, a nice feature that facilitates full packing of the compartment with a little room left above to accommodate extra tall or last-minute items. The problematic open-pin hinge system remains, but Engel now also offers a hinge-lock accessory as an option.



1. Thermostat dial.
2. Latching mechanism.
3. Evaporator plate is visible inside cabinet. Supplied vinyl rubber mat shown on floor.
4. Gasket detail.
5. Drop-in basket holds 40 of these cans.
6. Hinge detail.



### Pros

- Time-proven reliability and excellent reputation.
- Good value.
- Low power consumption.
- Quiet operation.
- Full-size basket makes loading/unloading easy.
- Easily controlled without visual input (single-dial operation).
- Many accessories available.

### Cons

- Painted exterior is susceptible to scratches and rust if abused.
- Dark-colored lid collects solar heat.
- Thin steel exterior around motor compartment is easily dented.
- Removable hinge system can be problematic. (a hinge-lock accessory is available)
- Lid only opens in one direction, limiting mounting configurations.
- Cup holders and tray are not deep enough to be practical. A flat surface would be preferred.
- No integral thermometer (although Engel sells an add-on unit as an accessory)