

# Safetran

## Highway Crossing Gate MECHANISM Model S-60



- Tested & certified to meet all applicable AREMA recommended practices
- Designed for full integration into electronic crossing control systems
- Increased reliability
- Lower mean time to restore (MTTR)
- Plug-coupled PC board with advanced diagnostics
- Reliable gearmotor & electric brake combination
- Retrofit capability to upgrade older S-20 & S-40 mechanisms

The S-60 Gate Mechanism is an integral part of Safetran's complete Wayside Information System (WIS) and Wayside Alarm Management System (WAMS). The optional, on-board Mini Trackside Sensor (MTSS) monitors the operation of the electronic bell and gate tip sensor and reports the data back to the SEAR II event recorder on the wayside, providing a key part of the remote monitor/test/report system.

A new inline gear gearmotor & electric brake combination replaces the previous motor and electromechanical hold clear device. A new Bi-Directional Lock Bar (patent pending) locks the gate arm in any position to perform maintenance and adjustment functions. The plug-coupled PC board replaces the previous relay panel and can be changed and functionally tested in less than five (5) minutes.

Diagnostic LEDs on the PC board monitor the condition of the mechanism. The LEDs are illuminated from the actual voltage levels they are monitoring, minimizing the need for a multi-meter when troubleshooting.

The unique components of the new S-60 are backward compatible with the Safetran S-20 and S-40 gate mechanisms. A retrofit kit -- containing the gearmotor/electric brake, plug-coupled PC board, plug-coupled wiring harness, accessories and hardware -- allows older mechanisms to be quickly and easily upgraded to S-60 performance levels at a competitive cost.

## Specifications

<b>Housings &amp; Cover:</b>	Cast aluminum alloy
<b>Gear Train:</b>	240:1 reduction (gearmotor output to main shaft)
<b>Bearings:</b>	Maintenance-free, sealed construction
<b>Gearmotor:</b>	12 VDC, special purpose
<b>Operating Voltage:</b>	11 to 16 VDC
<b>Operating Current:</b>	6 to 15 A @ 12 VDC (current varies with gate arm length)
<b>Hold (Vertical) Current:</b>	300 mA without MTSS, 450 mA with MTSS @ 12 VDC
<b>Circuit Breaker:</b>	24 Amp, electronic auto restoration (reset in 10 secs.)
<b>Weight:</b>	320 pounds (mechanism only)

## Features

- Integrated PC board with LED diagnostics and over-speed control
- Adjustable snub circuit to set descend times
- Electronic auto-reset overload for motor protection
- Standard gate mechanism is equipped with four (4) contact/cam arrangements
- Maintenance switch to power down counterweights when gate arm is broken
- Bi-directional lock bar to secure mechanism in any position
- Single and two-wire gate control capability
- Horizontal & vertical buffers adjusted from outside of mechanism
- Lifting eyebolt for ease of installation



Bi-directional Lock Bar

## Options

- Up to three separate contact/cam arrangements may be added for position indication, traffic preemption interface, etc.
- Mini Trackage Sensor (MTSS)
- 12 & 24 VDC, 115 VAC defrosters

## Ordering Information

Part No.	Description
074007-X001	S-60, 4-contact
074007-X002	S-60, 5-contact
074007-X003	S-60, 6-contact
074007-X004	S-60, 7 contact

The above part numbers do not include MTSS or Defrosters.

For additional ordering information, call Customer Service at 1-800-626-2710.