

OPERATOR SPECIFICATIONS

OPERATOR FEATURES

A. MOTOR 1 AND 2 HP

The motors used in the HS670 GC and HS670 GI are T.E.F.C. (totally enclosed, fan cooled) and operate at 3450 R.P.M. They incorporate a built-in manually resettable thermal overload.

B. DIRECTIONAL VALVE

Directional valve is 3 position, 4 way. It incorporates 2 solenoids which are 24 VDC. The power required for operation is rectified from 24 VAC.

C. HYDRAULIC BRAKE

Dual valve system limits gate over travel.

D. BYPASS VALVE

Incorporates a handle at side of pump. When positioned downward, it will allow manual operation of the gate.

E. RELIEF VALVE

Built into pump. Set at 600 p.s.i. for HS670 1HP and 1500 p.s.i. for HS670 2HP.

F. VENT CAP

When removed, you may add hydraulic oil. Must be on during operator operation.

G. LIMIT SWITCH

All limit switches are oil tight and watertight, and of NEMA 3, 4, and 13 construction. Open switch for right hand, close switch for left hand.

H. DRIVE WHEELS

Drive wheels are constructed of polyurethane material on a steel hub and have a hardness factor of 95. HS670 1HP = 1-1/2" wide, 6" diameter; HS670 2HP = 2" wide, 6" diameter.

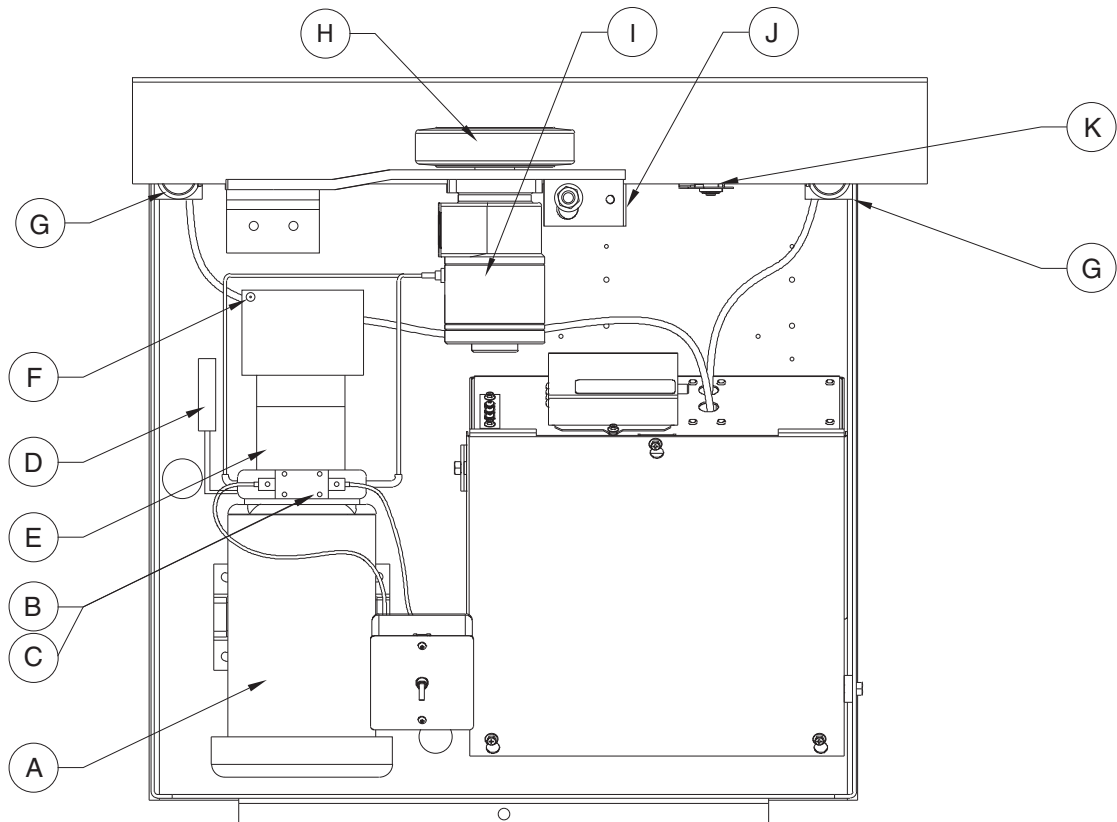
I. HYDRAULIC MOTOR

Roller vane, free wheeling type with a displacement of 12 cubic inches per revolution.

J. SUSPENSION SYSTEM

Incorporates two compression springs. HS670 1HP and HS670 2HP use different compression springs. See also page 11.

K. HALL EFFECT (RPM) SENSOR ASSEMBLY



OPERATOR SPECIFICATIONS

OPERATOR DIMENSIONS AND HORSEPOWER CHART

MODEL HS670 GC

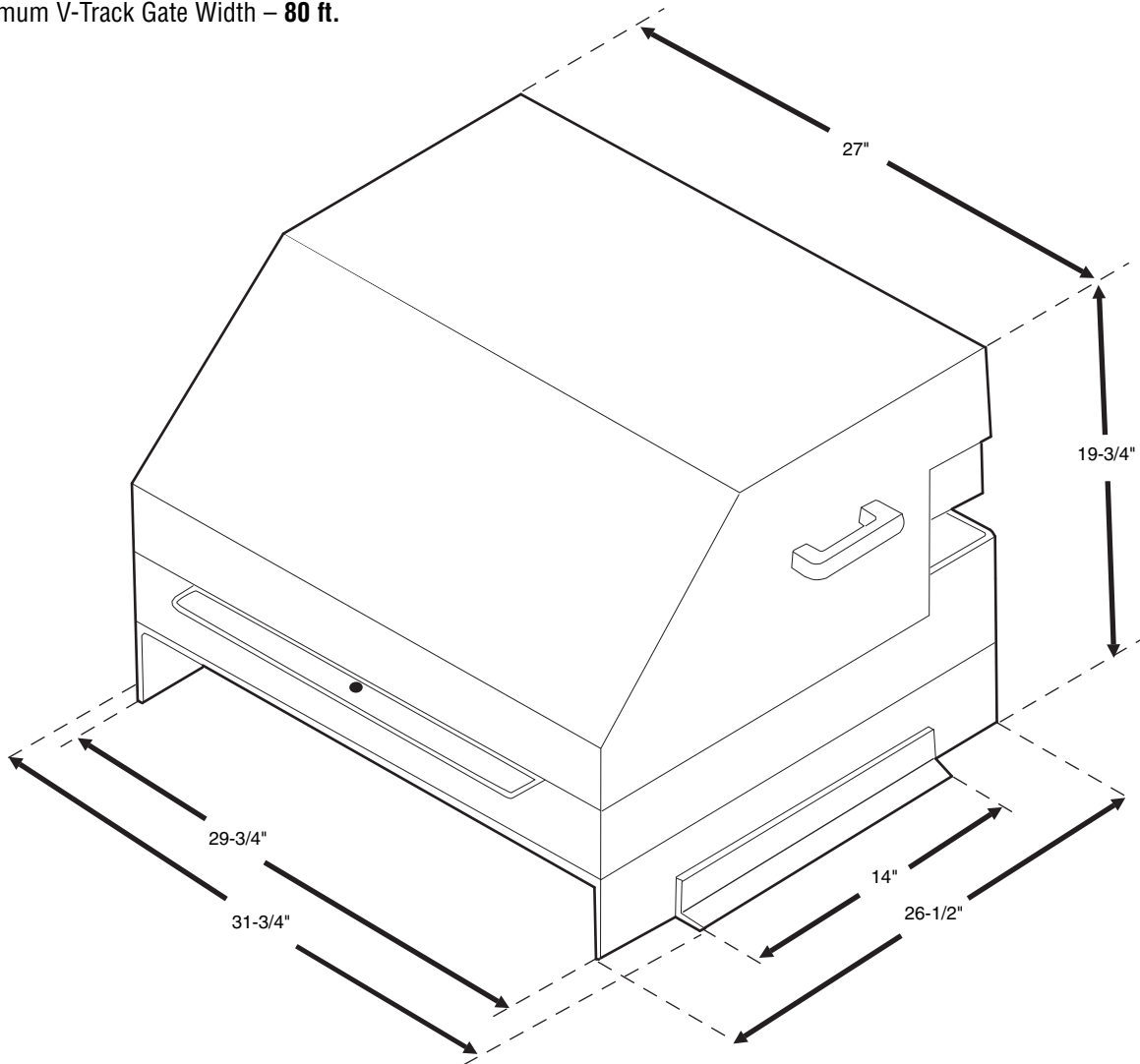
- **1 HP Motor**
Gate Speed – **12"/sec.**
Maximum Gate Weight – **3000 lbs.**
Maximum V-Track Gate Width – **80 ft.**

MODEL HS670 GI

- **1 HP Motor**
Gate Speed – **18"/sec.**
Maximum Gate Weight – **3000 lbs.**
Maximum V-Track Gate Width – **80 ft.**

MODEL HS670 GI

- **2 HP Motor**
Gate Speed – **18"/sec.**
Maximum Gate Weight – **5000 lbs.**
Maximum V-Track Gate Width – **80 ft.**



OPERATOR SPECIFICATIONS

UL325 MODEL CLASSIFICATIONS

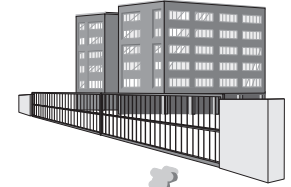
CLASS I – RESIDENTIAL VEHICULAR GATE OPERATOR

A vehicular gate operator (or system) intended for use in a home of one-to four single family dwellings, or a garage or parking area associated therewith.



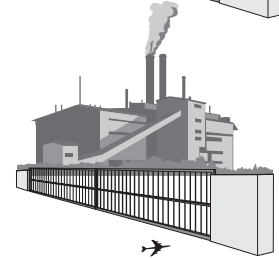
CLASS II – COMMERCIAL/GENERAL ACCESS VEHICULAR GATE OPERATOR

A vehicular gate operator (or system) intended for use in a commercial location or building such as a multi-family housing unit (five or more single family units) hotel, garage, retail store or other building servicing the general public.



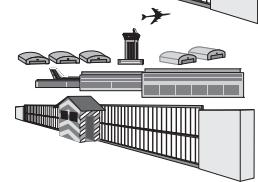
CLASS III – COMMERCIAL/GENERAL ACCESS VEHICULAR GATE OPERATOR

A vehicular gate operator (or system) intended for use in a industrial location or building such as a factory or loading dock area or other location not intended to service the general public.



CLASS IV – RESTRICTED ACCESS VEHICULAR GATE OPERATOR

A vehicular gate operator (or system) intended for use in a guarded industrial location or building such as an airport security area or other restricted access locations not servicing the general public, in which unauthorized access is prevented via supervision by security personnel.



SAFETY ACCESSORY SELECTION

All UL325 compliant LiftMaster gate operators will accept external entrapment protection devices to protect people from motorized gate systems. UL325 requires that the type of entrapment protection correctly matches each gate application. Below are the six types of entrapment protection recognized by UL325 for use on this operator.

ENTRAPMENT PROTECTION TYPES

Type A: Inherent obstruction sensing system, self-contained within the operator. This system must sense and initiate the reverse of the gate within two seconds of contact with a solid object.

Type B1: Connections provided for a non-contact device, such as a photo eye can be used as a secondary protection.

Type B2: Connections provided for a contact sensor. A contact device such as a gate edge can be used for secondary protection.

Type C: Inherent adjustable clutch or pressure relief valve.

Type D: Connections provided for a control requiring continuous pressure to operate the operator open and close.

Type E: Built-in audio alarm (e.g., sirens, horns or buzzers).

NOTES:

UL requires that all installations must have warning signs placed in plain view on both sides of the gate to warn pedestrians of the dangers of motorized gate systems.

Model HS670 meets the following specifications:



MODEL	CLASS 1	CLASS 2	CLASS 3	CLASS 4
HS670 GC	✓	✓	✓	✓
HS670 GI	N/A	N/A	✓	✓

UL325 ENTRAPMENT PROTECTION REQUIREMENTS

GATE OPERATOR ENTRAPMENT PROTECTION

UL325 Installation Class	Slide Gate Operator		Swing & Gate Barrier (Arm) Operator	
	Primary Type	Secondary Type	Primary Type	Secondary Type
Class I & II	A	B1, B2 or D	A or C	A, B1, B2 C or D
Class III	A, B1 or B2	A, B1, B2, D or E	A, B1, B2 or C	D or E
Class IV	A, B1, B2 or D	A, B1, B2, D or E	A, B1, B2, C or D	A, B1, C, D or E

In order to complete a proper installation you must satisfy the entrapment protection chart shown above. That means that the installation must have one primary means of entrapment protection and one independent secondary means of entrapment protection. Both primary and secondary entrapment protection methods must be designed, arranged or configured to protect against entrapments in both the open and close directions of gate travel.

For Example: For a slide gate system that is installed on a single-family residence (UL325 Class I) you must provide the following: As your primary type of entrapment protection you must provide Type A inherent (built into the operator) entrapment sensing and at least one of the following as your secondary entrapment protection: Type B1- Non-contact sensors such as photo-eyes, Type B2- Contact sensors such as gate edges or Type D- Constant pressure control.