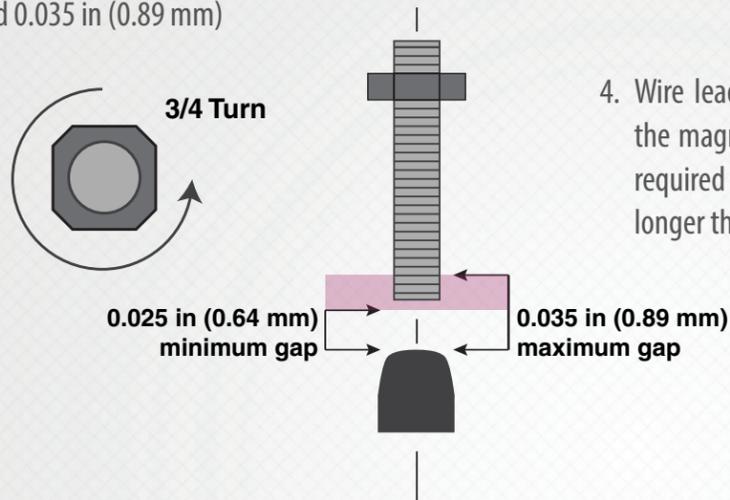
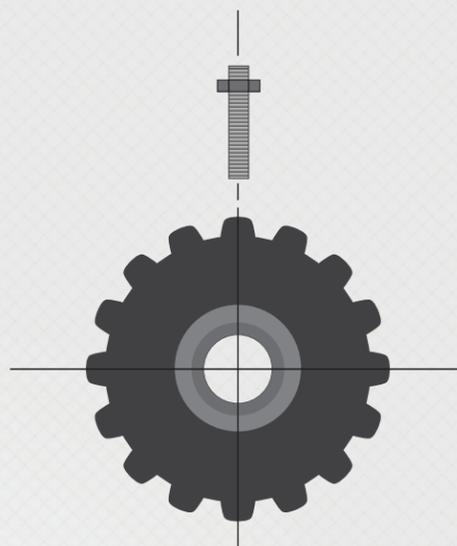


# INSTALLATION

## Magnetic Speed Pickup Installation:

1. If no mounting location is available, then drill and tap a hole in the flywheel housing. The threaded hole should be perpendicular to the center line of the crankshaft and centered over the ring gear teeth. Spot face the hole to provide a flat surface on which to anchor the locknut (refer to the charts on the inner page for the thread size of the Magnetic Speed Pickup).
2. Insert the magnetic speed pickup into the hole and turn it until the magnetic speed pickup makes contact with the face of the gear.
3. Back out the magnetic pickup by turning it counter clockwise (about a 3/4 turn). The gap between the pickup and gear should be no smaller than 0.025 in (0.64 mm) and 0.035 in (0.89 mm)



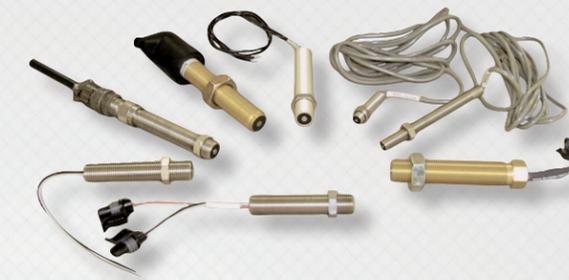
4. Wire leads should be twisted for their entire length from the magnetic speed sensor to the control unit. Shielding is required if external interference is present or the leads are longer than 10 ft (3 m).



## Magnetic Speed Pickups

### MSP SERIES

GAC's Magnetic Speed Sensors are a rugged and economic solution for detecting engine speed. Sturdier than plastic sensors and outperforming semiconductor-type devices at high temperatures, GAC's epoxy encapsulated sensors are unaffected by dust and dirt. Multiple sizes and customizable configurations are available.



## FEATURES

- Produces Electrical Frequency
- Requires No Energizing Circuit From Control
- Used On All GAC's Electronic Speed Controllers
- -65°F to +225°F (-55°C to +105°C) Operating Temperature
- Available For Hazardous Location Installation (Not Certified)

## OPTIONS



### TSE050 A New Tool For Your Toolkit!

The TSE050 simulates a running engine when connected to the magnetic pickup input on a speed control. An on-board potentiometer allows the signal to be adjusted between 750 to 10,000 Hz and is compatible with all GAC speed controls using a magnetic pickup.

## SPECIFICATIONS

### Power Input

Dimensions	See Chart on Inside Pages
Proximity to Gear Teeth	0.025 - 0.035 in. (0.64 - 0.89 mm)
Temperature Range	-65 °F to +225 °F (-55 °C to +105 °C)
Output	0.5 - 30 Volts RMS Is Recommended For Input To Control Units (1 V RMS When Cranking Engine)
Resistance (Varies From Sensor to Sensor)	160 - 1200 ohms

## CONNECTORS



Automotive



Military



Packard



Dual Packard



Stud Terminals

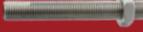
Contact Your Local Dealer:

Governors America Corp.  
720 Silver Street Agawam, MA 01001  
Phone: 413.786.5600 Fax: 413.789.7736  
[www.governors-america.com](http://www.governors-america.com)  
[info@governors-america.com](mailto:info@governors-america.com)

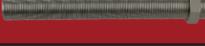
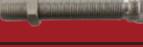
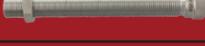
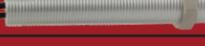
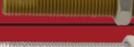
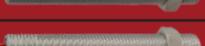


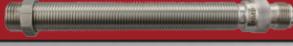
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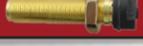
# SELECTION CHART

3/8 - 24 UNF-2A Threaded		THREAD LENGTH	HARNESS LENGTH	CONNECTOR TYPE	WITH MATING CONNECTOR	DRILL SIZE
MSP6729		2.7" (69)	6 ft (1.8m)	FLYING LEADS	No	0.332
MSP6730		1.7" (43)	6 ft (1.8m)	FLYING LEADS	No	0.332
MSP6731		4" (102)	6 ft (1.8m)	FLYING LEADS	No	0.332
MSP6737		2.7" (69)	6" (152mm)	PUSH-ON TERMINALS	No	0.332
MSP6740		1.7" (43)	6 ft 1.8m)	PACKARD	No	0.332
MSP6742		2.7" (69)	1 ft. (0.3m)	FLYING LEADS	No	0.332

3/4 - 16 UNF Threaded		THREAD LENGTH	HARNESS LENGTH	CONNECTOR TYPE	WITH MATING CONNECTOR	DRILL SIZE
MSP6724		3.45" (88)	3" (76mm)	AUTOMOTIVE	No	11/16
MSP6724C		3.45" (88)	3" (76mm)	AUTOMOTIVE	Yes	11/16
MSP6734		3.45" (88)	4" (100mm)	FLYING LEADS	No	11/16
MSP6735		3.45" (88)	2.25" (57mm)	PACKARD	No	11/16
MSP6744		2.3" (58)	n/a	STUD TERMINALS	No	11/16

5/8 - 18 UNF Threaded		THREAD LENGTH	HARNESS LENGTH	CONNECTOR TYPE	WITH MATING CONNECTOR	DRILL SIZE
MSP674		3" (76)	n/a	MILITARY	No	37/64
MSP675		3.19" (81)	7" (178mm)	FLYING LEADS	No	37/64
MSP676		5" (127)	1 ft (0.3m)	FLYING LEADS	No	37/64
MSP677		3" (76)	n/a	MILITARY	No	37/64
MSP678		4.86" (123)	n/a	MILITARY	No	37/64
MSP679		3" (76)	n/a	MILITARY	Yes	37/64
MSP6710		4.86" (123)	n/a	MILITARY	Yes	37/64
MSP6719		2.37" (60)	1 ft (0.3m)	FLYING LEADS	No	37/64
MSP6720		3.86" (98)	1 ft (0.3m)	FLYING LEADS	No	37/64
MSP6721		3.19" (81)	2.75" (70mm)	AUTOMOTIVE	No	37/64
MSP6721C		3.19" (81)	2.75" (70mm)	AUTOMOTIVE	Yes	37/64
MSP6722		2.37" (60)	6" (152mm)	PUSH-ON TERMINALS	No	37/64
MSP6728		3.19" (81)	6.25" (159mm)	PACKARD	No	37/64
MSP6728C		3.19" (81)	6.25" (159mm)	PACKARD	Yes	37/64
MSP6732		3.16" (80)	3.25" (82.6mm)	DUAL PACKARD	No	37/64
MSP6732C		3.16" (80)	3.25" (82.6mm)	DUAL PACKARD	Yes	37/64
MSP6743		3.5" (89)	n/a	STUD TERMINALS	No	37/64

M16 x 1.5 Threaded		THREAD LENGTH	HARNESS LENGTH	CONNECTOR TYPE	WITH MATING CONNECTOR	DRILL SIZE
MSP6714		3" (76)	n/a	MILITARY	No	14mm
MSP6715		3" (76)	n/a	MILITARY	Yes	14mm
MSP6723		3.13" (79)	3" (76mm)	AUTOMOTIVE	No	14mm
MSP6723C		3.13" (79)	3" (76mm)	AUTOMOTIVE	Yes	14mm
MSP6739		3.13" (79)	3" (76mm)	PACKARD	No	14mm
MSP6745		5" (127)	n/a	MILITARY	No	14mm

M18 x 1.5 Threaded		THREAD LENGTH	HARNESS LENGTH	CONNECTOR TYPE	WITH MATING CONNECTOR	DRILL SIZE
MSP6741		2.29 (58)	9" (228mm)	METRI-PAK 150	No	21/32
MSP6746		2.7 (69)	1.5 ft (0.46m)	AUTOMOTIVE	No	21/32

NOTE: For the most up-to-date list of magnetic speed pickups, go to [governors-america.com](http://governors-america.com). GAC is continuously adding new solutions for engine speed sensing.