

Heavy-Duty Starters

QUALITY • VALUE • RESPONSIVENESS



MxT Series



39MT

38MT

29MT



Ready to Start the World's Toughest Engines

A Powerful New Solution for Today's Heavy-Duty Applications

Delco Remy proudly introduces Maximum Torque Technology (MxT™) starters, the next-generation starting solution for a broad range of demanding applications. Featuring the exclusive benefits of the Maximum Torque Technology Gearing System – including high torque output with a low-mass design and sealed noseless configuration – Delco Remy MxT Series starters are everything you would expect from the world's electrical systems leader.

MxT Advantages

'Maximum Torque Technology' – The Name Says it All

Highly advanced MxT gearing system delivers exceptional torque output and greater starting power

Low Mass

Reduces the overall weight on the vehicle and eases service through a compact design

Sealed Noseless Configuration

Eliminates debris accumulation and reduces contamination, resulting in decreased maintenance time and expense

Electrical Soft Start

All 38MT and 39MT starters feature an electrical soft-start design that rotates the pinion to allow for proper pinion-to-ring gear engagement before cranking, eliminating milled ring gears and pinions

Solid-Link Solenoid

Prolongs service life by eliminating contact welding in low-voltage situations

Heavy-Duty Bearing and Bushing System

Increases motor life and reliability by utilizing an oversized, long-life bearing and bushing system

29

38

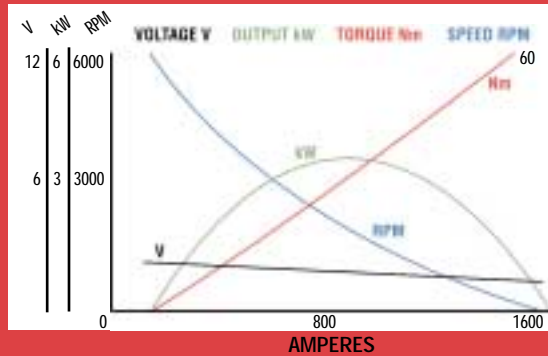
39

Delco Remy MxT Heavy-Duty Starters

12-Volt Performance Characteristics

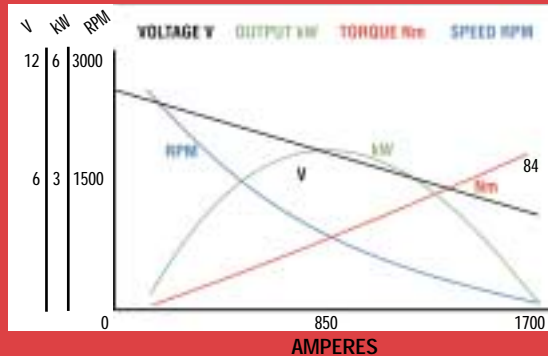
Popular OE Applications

MT



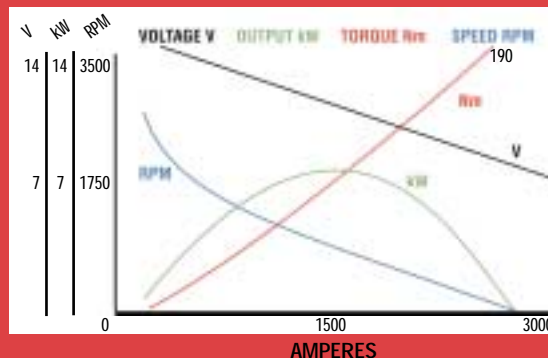
Cummins ISB (RH & LH)
Mercedes BR904/906
International VT365

MT



Mercedes MB926
Cummins ISC
Detroit Diesel 50
Caterpillar C7/C9
International DT466
Caterpillar 3126

MT



Mercedes MB4000
Cummins ISX
Volvo D12
Cummins ISL
Detroit Diesel 60
Caterpillar C15
Mack E7

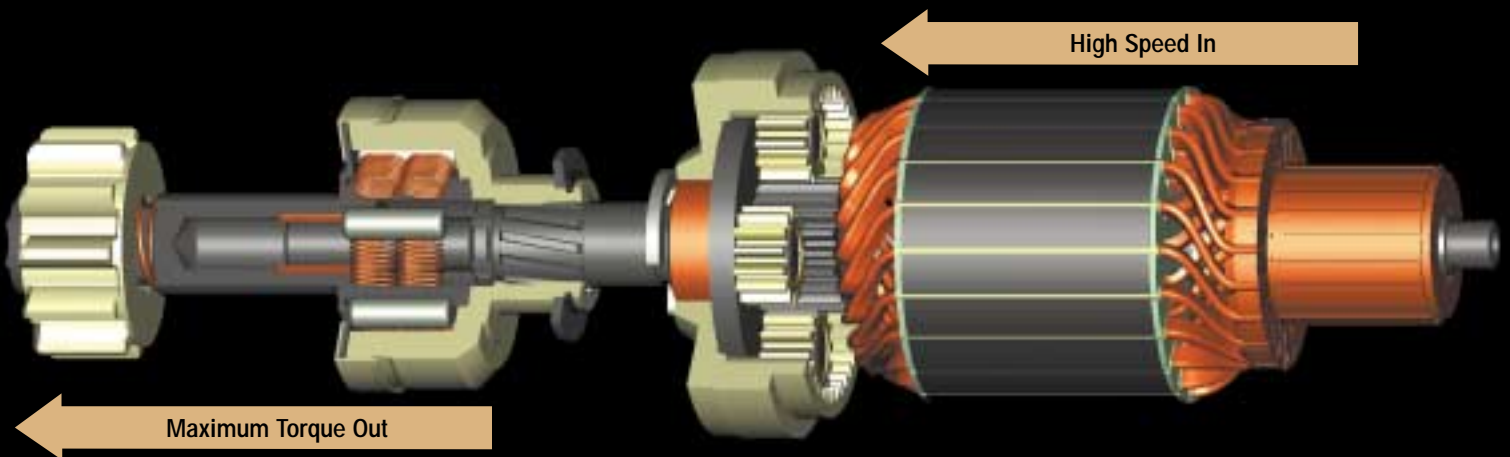
Delco Remy MxT Starter Specifications

Delco Remy Model No.	Volts	Power	Dimensions			Cranks up to Engine Size	Maximum Solenoid Control Current
			Weight	Length	Frame Diameter		
29MT	12V	3.3 kW	17.6 lbs	9.0"	3.5"	6.6L	75 Amps
29MT	24V	4.0 kW	17.6 lbs	9.0"	3.5"	8.0L	200 Amps
38MT	12V	4.6 kW	22 lbs	11.8"	3.9"	10.0L	300 Amps
38MT	24V	7.5 kW	22 lbs	11.8"	3.9"	12.0L	200 Amps
39MT	12V	7.2 kW	30.8 lbs	11.8"	4.5"	15.0L	300 Amps
39MT	24V	8.3 kW	30.8 lbs	11.8"	4.5"	16.0L	200 Amps

Delco Remy® MxT™ Series Technology

MxT Gearing System

Delco Remy MxT Series starters utilize a gearing system that transfers higher torque to the pinion with less mass compared to previous models.



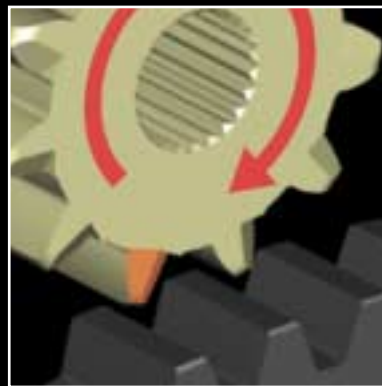
MxT starters feature the Maximum Torque Technology Gearing System that produces high-speed input and delivers maximum torque output.

Electrical Soft-Start Engagement System

A key design advantage in higher-torque producing MxT Series starters is the electrical soft-start system. The Delco Remy electrical soft-start system slowly rotates the pinion until it is properly engaged to the ring gear before cranking. That's why every **38MT** and **39MT** starter features the proven soft-start engagement system.



Ring Gear to Pinion Abutment



Electrical Soft-Start Pinion Rotation



Ring Gear to Pinion Engagement

Heavy-Duty Starters

MxT Series

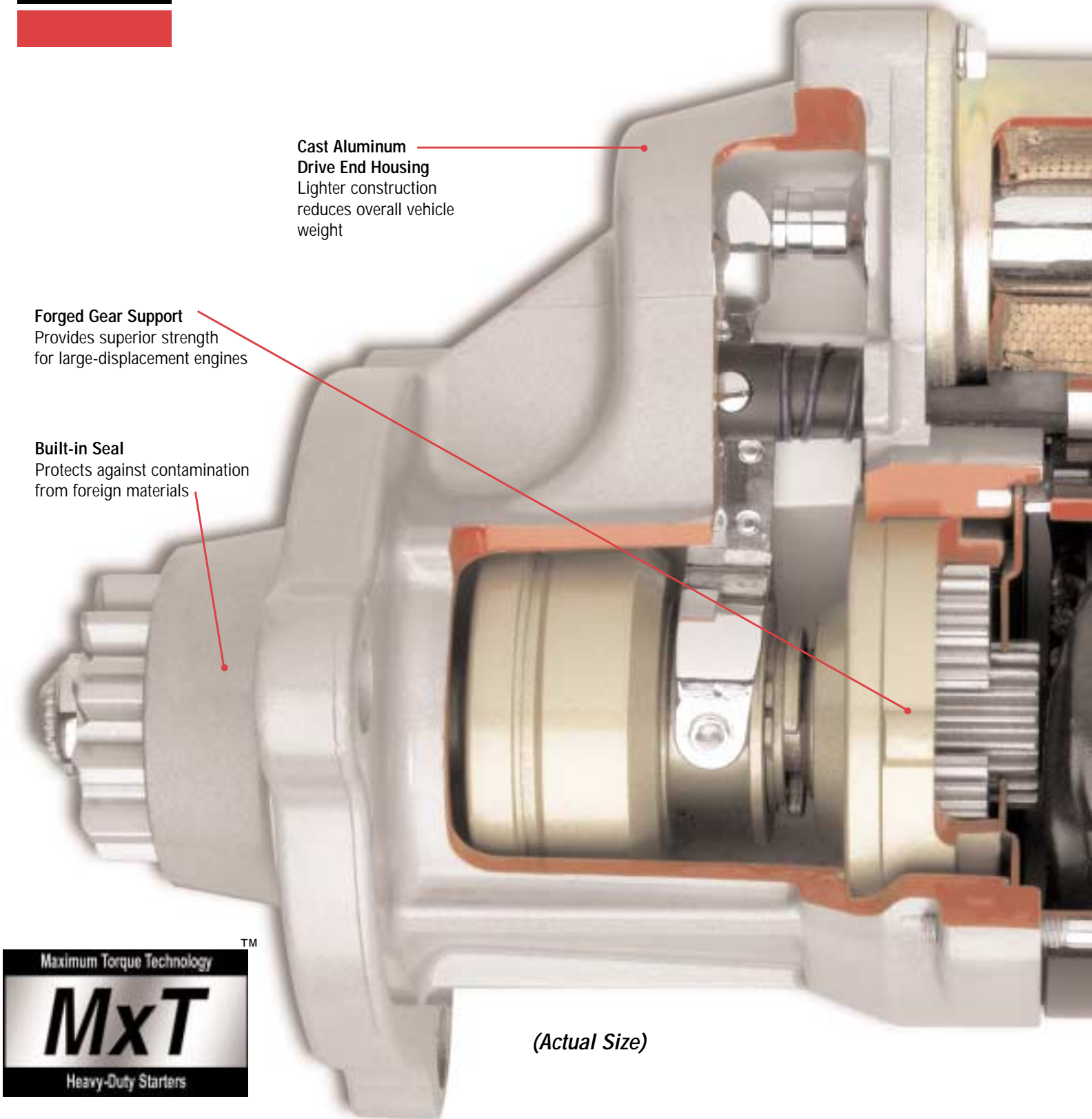
QUALITY • VALUE • RESPONSIVENESS



Cast Aluminum Drive End Housing
Lighter construction reduces overall vehicle weight

Forged Gear Support
Provides superior strength for large-displacement engines

Built-in Seal
Protects against contamination from foreign materials



TM

Maximum Torque Technology

MxT

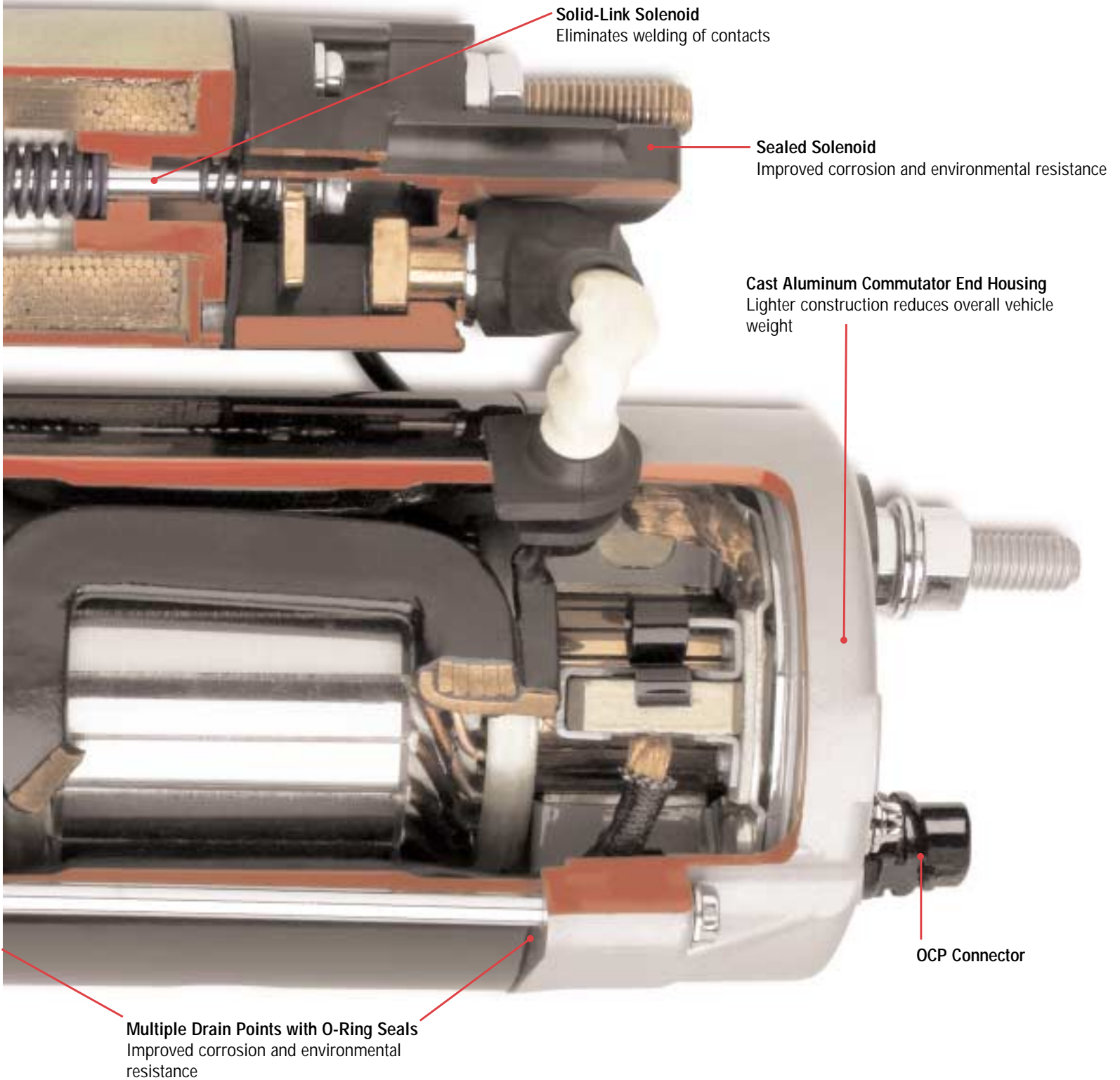
Heavy-Duty Starters

(Actual Size)

Overcrank Protection For Ultra Performance – Ideal for Cold Weather Conditions

Delco Remy MxT starters are offered with optional **Overcrank Protection** to ensure successful starts in even the harshest conditions, including highly stressed starters in large engine displacement systems. An internal temperature-sensitivity monitor prevents overcrank thermal damage and automatically resets once the starter cools to a safe cranking temperature.

Protect the starter from these adverse starting conditions: Operator misuse • Low battery capacity • High starting circuit resistance • Cold weather cranking



Delco Remy[®]

IMS Solution

Is Your Vehicle in Spec?

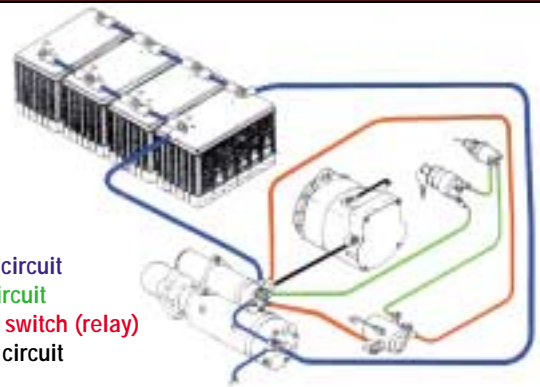
Starting performance can be adversely affected by electrical system voltage drops.

The Maintenance Council (TMC) specifies cranking circuit voltage drop of not more than one volt for a 12-volt system and two volts for a 24-volt system. TMC also states the control circuit must have a maximum drop at 80 amps of one volt for a 12-volt system; maximum drop at 40 amps is two volts on a 24-volt system.

Common Causes of Cranking Circuit Voltage Drop

- Corrosion of the terminals or cables
- Loose terminal or ground connections
- Undersized cables
- Battery cables that do not originate in close proximity to the starter

Cranking circuit
Control circuit
Magnetic switch (relay)
Charging circuit



Delco Remy Integral Magnetic Switch

Most OEMs have included magnetic “relay” switches in the design of the vehicle to transmit control circuit current. Many of these relays cannot successfully handle the amperage requirements of the starting motor. This may adversely affect starting performance.

Delco Remy's solution is the optional, OEM-approved heavy-duty Integral Magnetic Switch (IMS) attached directly to each Class 7 and 8 MxT starter, ensuring a far more robust and reliable circuit for starting the motor.

Delco Remy's heavy-duty IMS technology has been tested to 35 times normal gravitational pull to eliminate the possibility of closed magnetic switch circuits.

The Delco Remy **42MT** straight drive starter, with mechanical soft start, creates lower demand on the control circuit at start-up because of lower current draw on the solenoid.

To test whether your vehicle is in spec, use the Delco Remy[®] Intelli-Check2[™] hand-held diagnostic tool.

Testing with heavy-duty straight drive and MxT starters shows that for every one volt of drop in a system, the cold-crank engine RPM is reduced by 28 RPM.





MxT Series Heavy-Duty Starters



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