

# T1 Style: The Ideal Alternator for Coach Bus Applications

It's easy to see why the Delco Remy T1 style alternator is the ideal alternator choice for coach bus applications. With nearly 20% more output than the competition, this new service unit easily handles the increased electrical demand required to operate today's coach bus.



Additionally, this high quality service unit—which was designed with the coach bus in mind—offers a number of advantages:

- **Power:** 24-volt, 185-amp models (replacing our 140amp model) provide high output performance for coach bus applications with significant electrical loads.
- Durability: Original OE design ensures a longer life.
- **Compact design:** Weighing 36 pounds with a frame diameter of only 7.5 inches, it frees up engine-mounting space.
- New service: No core
- Warranty: 1 year/unlimited miles\* \*Applicable to U.S. and Canada only

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## **39MT<sup>™</sup> Application Changes**

#### Detroit Diesel 13/15/16 Applications

The number of teeth on the ring gear of the new 2016 Detroit GHG17 engines and 39MT starters has changed.

- The ring gear on the GHG17 engine (for use on 2016) has 150 teeth and the starter has 11.
- The ring gear on the GHG14 engine (for use on 2015 or older) has 160 teeth and the starter has 12.



Nearly 50,000 motor coaches are on the road in the U.S. and Canada.



### T1 Style: The Ideal Alternator for Coach Bus Applications (continued from page 1)

185 AMP UPGRADE / COMPETITIVE INTERCHANGI					
140 Amp Delco Remy Part #	UPGRADE 185 Amp Delco Remy Part #	Leece Neville Part #	Bosch T1 Part #		
19025330	19025360	1277640 1277A640	0-986-038-290		
			0-986-037-420		
			0-986-034-910		
			0-986-033-550		
			0-986-033-520		
			0-986-031-600		
			0-120-689-571		
			0-120-689-545		
			0-120-689-535		
			0-120-689-533		
			0-120-689-530		
			0-120-689-520		
			0-120-689-513		
			0-120-689-512		
			0-120-689-508		
			0-120-689-503		

140 Amp Delco Remy Part #	UPGRADE 185 Amp Delco Remy Part #	Leece Neville Part #	Bosch T1 Part #
	19025363	1277720 1277A720	0-986-039-530
			0-120-689-567
			0-120-689-546
			0-120-689-542
10005000			0-120-689-541
19023333			0-120-689-540
			0-120-689-527
			0-120-689-522
			0-120-689-517
			0-120-689-507
	19025366	1277650 1277A650	0-120-689-506
19025336			0-120-689-567
			0-986-046-550
	19025367	1277A680 1277680 AC172TRA6A	0-120-689-566
19025337			0-986-045-990
			0-120-689-552



SPECIFICATIONS			
Performance Output	24 Volts/185 Amps		
Maximum Speed	7,000 RPM		
Rotation	Clockwise or counterclockwise		
Temperature Rating	80°C/176°F		
Efficiency	60%		
Weight	36.2 lbs/16.4 kg		
Overall Length	11.4 in/289.3 mm		
Stator Diameter	6.5 in/165.5 mm		
Mounting	T1 Style		

### **39MT<sup>TM</sup> Application Changes** (continued from page 1)

The 39MT starters will be labeled with the correct engine application for quick identification. These labels will be applied to both the starter and box. The starter housing will have one of two different colored labels, and the box will have a corresponding label alongside the part number label. (Samples on right)

The starter for the GHG14 engine MUST NOT be used on the GHG17 engine and vice versa.



Using the incorrect starter and ring gear combination will cause significant damage and will require both to be replaced. The starter pinion is the only change in the new model compared to the previous model years, but they are not interchangeable. Mixing motor and engine parts will result in starter motor and engine ring-gear damage.

## Tech Tip: Cold Weather Cranking



Winter months are upon us and with them come cold temperatures and "cold cranking." There are three factors that primarily contribute to cranking issues:

- Oil viscosity
- State of starter main cables
- Batteries

Unfortunately, sometimes these factors especially oil viscosity—are overlooked or even ignored. Read on to learn about each one and what you can do.

#### Oil Viscosity

Switching to a lower viscosity oil during the winter season offers these benefits:

- Easier engine start
- Faster engine lubrication
- Less energy consumption at engine start

The chart below shows crank speeds for a typical 15-liter engine with four 750 CCA batteries at -18°C (0°F) with decreasing oil viscosities. The use of lower viscosity oils provides significant improvements in crank speed. Lower viscosity oil equates to faster crank speeds, quicker starts and lower starter current draws.

Typical 15L Crank Speed with 4 X 750CCA at  $0^{\circ}$  F



Selection of oil viscosity should be in accordance with OEM guidelines. The following chart shows typical viscosity ranges versus temperature, but each OEM should be consulted for exact recommendations for a given engine application.



#### **Starter Main Cables**

The state of the starter main cables is another significant factor involved in reliable cold cranking. Before the winter months is the most idea time to check cables for loose connections and corrosion, both of which can increase circuit resistance and lead to slower cranking speeds. As a general rule of thumb, for every one-volt drop in the starter circuit, there will be a loss of approximately 28 RRM in cranking speed. The chart below shows the effect of increasing circuit resistance on cold crank speed.



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### Tech Tip: Cold Weather Cranking (continued from page 3)

#### **Batteries**

Most understand that healthy batteries are important for reliable cold cranking. Batteries with a low state of charge will not only cause a loss of cranking speed, but also a loss of available cranking time based on the diminished reserve capacity. This chart shows the effect of a decreasing battery charge on cranking speed.







Watch our Cold Weather Cranking Tech Tip video to see how the flow of oil is impacted by lower temperatures. Visit youtube.com/delcoremy100

## **New Part Numbers Added**



The online catalog is used by thousands of customers each week. We actively monitor catalog usage and evaluate cross-reference requests. As a result, we update the catalog with more cross-reference part numbers to help you. Newly released starters and alternators are added as well. Visit the DelcoRemy.com homepage:

- Most frequently searched competitor part-number cross references
- Most frequently searched newly added part-number cross references
- Newly released heavy duty starters and alternators

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