

### **COMPETITIVE EDGE**



The "can use" application feature in our catalog allows practical consolidation of electrical units; giving distributor countermen and outside sales personnel additional chances to complete the sale.



All of our units have a 1 year/unlimited mileage warranty from the date of installation, matching OE programs for similar applications.



World American\* customer support and tech services utilize highly qualified professionals to deliver the best knowledge and service in the industry.



Every single unit is tested to our rigorous internal standards. No unit is shipped that is not a proven performer!



All World American® heavy-duty starting motors are equipped with a ratchet design pinion gear for positive engagement starts every time.



Every *World American*\* alternator is guaranteed to match or exceed the amperage output of the original design.



All World American® units are packaged with color-coded connections and easy to understand instructions. This attention to detail will reduce in large measure the amount of defect claims due to incorrect installation procedures.



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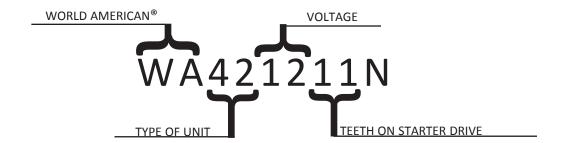
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# **HOW TO IDENTIFY** - PART NUMBERS -

### **STARTERS**



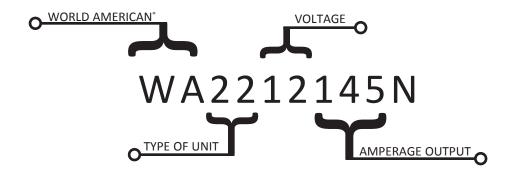
Corresponds to:

<u>42</u>MT<sup>™</sup>- Style / <u>12</u>V / <u>11</u> TOOTH

#### INTERCHANGE INFORMATION:

The numbers listed in this section are cross reference numbers for: Dixie, Wilson, Popular OE, and Reman OE

### **ALTERNATORS**



Corresponds to:

22SI™ - Style / 12V / 145 AMP

#### INTERCHANGE INFORMATION:

The numbers listed in this section are cross reference numbers for: Dixie\*, Wilson\*, Popular OE, and Reman\* OE



# VISUAL IDENTIFICATION - GUIDE-

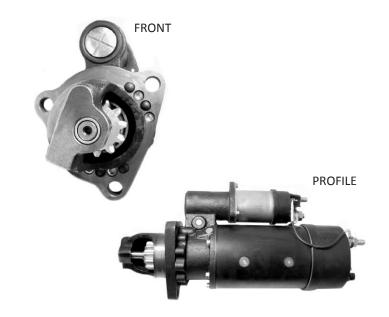
The World American\* Electronic Component catalog was designed to assist distributor salespeople and their customers in easily identifying starters and alternators. Therefore, units are presented in a way that makes the proper selection accurate and simple.

### **STARTERS**

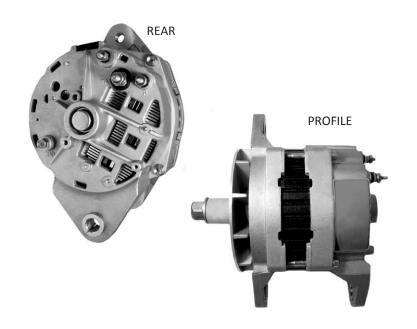
# Starter pictures are presented in two views:

**Front** - This angle will always show the solenoid at the 12 o'clock position to illustrate the proper drive end rotation for installation efforts.

**Profile** - This angle will always show the unit from a side view, detailing the opening to the drive pinion.



### **ALTERNATORS**



# Alternator pictures are presented in two views:

**Rear** - This angle will always show the power and auxiliary terminal, or any plug detail, needed on lighter-duty units.

**Profile** - This angle will always show the unit relative to the mounting configuration.



### **GENERAL NOTES**

#### **GENERAL NOTE #1**

When substituting alternators it is OK to replace a unit one for the other as long as the system voltage is the same (either 12 or 24 volt) and the replacement alternator is rated at the same or higher amperage output. For example: it is acceptable to replace an alternator with an output of 100 amps with one of 130 amps or higher as long as the unit supplied as the replacement is the same voltage. Doing this will not affect the wiring of the vehicle or connections to the battery or the accessory connections on the back of the alternator.

#### **GENERAL NOTE #2**

Pad type mountings are becoming more popular as they appear on the newer engines. The rules pertaining to amps and voltage when substituting these alternators are the same as in note #1. Some information relative to the mounting configurations is necessary. 22SI™ Style, 24SI™ Style and 110-555 Pad types all have the same mounting patterns and drill hole circumference. These units can be substituted for each other as long as the voltage and amp ratings are applied as in general note #1. However the mounting pattern on part number 3412135P is slightly different and substituting this with other Pad type alternators is not recommended. One exception to this rule would be on DDA Series 60 engines that are supplied from the factory with an adapter bracket used to mount the 34SI™ Style pad mount alternator. In this case, the DDA bracket will allow a 22SI™ Style, 24SI™ Style or 110-555 Pad mount configuration to be used.

#### **GENERAL NOTE #3**

21SI™, 22SI™, 24SI™ Delco\*-Style and 110-555 & JB type Leece-Neville\* Style alternators using the standard SAE J-180 type of mounting may be substituted for each other as per general note # 1. It is very important however to recognize that some truck makers may mount these units differently. In most cases all the units noted have a top mounting ear that connects to a curved slide bracket and is pulled tight during installation to achieve the proper belt tension. However, in some cases, the truck makers have placed the OE alternator in a "C" bracket to help control vibration. In this case the Delco\* 21SI™ Style, 22SI™ Style and 24SI™Style units can be used as substitutes for each other but not for the Leece-Neville\* units. In turn the 110-555 and JB Series Leece-Neville\* Style units can be used as substitutes for each other but not for the Delco\* Style units. The reason for this is caused by the centerline of the bolt holes in the front housing of the units being slightly different. The center to center bolt measurement of the Leece-Neville\* Style is about 1/2 inch wider.

#### **GENERAL NOTE #4**

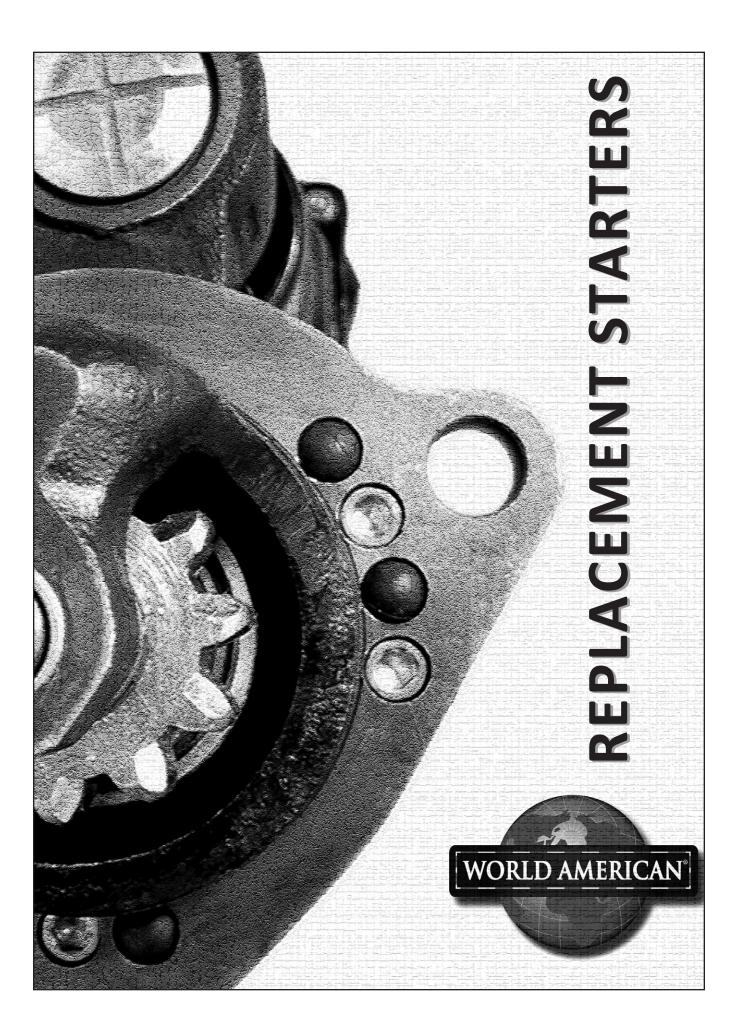
40MT™, 41MT™, 42MT™ and 50MT™ Delco® style starting motors are equipped with an adjustable drive (nose) housing. This design feature is incorporated into these units to accommodate the need for the motor body to be rotated in order for the solenoid to clear other engine components that may hinder the fit. Carefully done this is an acceptable practice by the end user. However, it is important to note that removing the drive housing to replace the pinion gear (from 11 to 12 tooth for example) is not recommended! The pinion gear in all of our motors has been calibrated to engage the engine flywheel perfectly. By removing the pinion gear this measurement is affected. The end result may be a torque failure of the drive, causing pieces of the starter to break and jam the flywheel motion. Every starting motor application in our catalog is supplied with the housing rotation set to the most popular aftermarket position. This will result in far fewer field adjustments.

#### **GENERAL NOTE #5**

Most, if not all, 41MT™ Style starting motors are used on mid-range diesel applications. These would include city delivery trucks made by Freightliner®, Mack®, Ford®, and GMC®.

#### **GENERAL NOTE #6**

Starting motors of this group are used primarily on fleet service vehicles equipped with Cummins®, International® or Ford® mid-range diesel engines.





 $\frac{\text{APPLICATION}}{\text{CHEVY}^{\$}}\text{ TYPE REPLACEMENT STARTING MOTORS}$ 

### **WA1210DEL**





 $\underline{12}$ V /  $\underline{10}$  TOOTH /  $\underline{DEL}$ CO $^{\circ}$  TYPE

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #6 for this part (page 5)

#### **INTERCHANGE INFORMATION:**

Dixie\*: S-8213 Wilson\*: 91-01-3927 Popular OE: 1113296 Reman\*: 10465168

#### APPLICATION:

Delco<sup>\*</sup>-type motor for Chevy<sup>\*</sup> C&K, GMC<sup>\*</sup>, Vans/PU 1995/2002 w/6.5L diesel engines

Fits both manual & automatic transmissions

### **WA1209HIT**





12V / 9 TOOTH / HITACHI® TYPE

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #6 for this part (page 5)

### **INTERCHANGE INFORMATION:**

Dixie<sup>\*</sup>: S-8997 Wilson<sup>\*</sup>: 91-25-1158 Popular OE: S14-100D

#### **APPLICATION:**

Hitachi<sup>\*</sup>-type motor for Chevy<sup>\*</sup>/GMC<sup>\*</sup>,Vans/PU 2003/2004 w/6.6L diesel engines

Fits both manual & automatic transmissions



#### **APPLICATION:**

FORD TYPE REPLACEMENT STARTING MOTORS

### **WA1213MIT**





12V / 13 TOOTH / MITSUBISHI TYPE

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #6 for this part (page 5)

### INTERCHANGE INFORMATION:

Dixie\*: S-8150 Wilson\*: 91-27-3039 Popular OE: M3T90071

#### **APPLICATION:**

Mitsubishi -type motor for Ford Van/PU 1985/1994 w/7.3L diesel engines

### **WA1212MIT**





12V / 12 TOOTH / MITSUBISHI® TYPE

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #6 for this part (page 5)

#### **INTERCHANGE INFORMATION:**

Dixie\*: S-8423 Wilson\*: 91-27-3156 Popular OE: M8T50071

#### **APPLICATION:**

Mitsubishi\*-type motor for Ford\* Van/PU 1995/2000 w/7.3L diesel engines



#### **APPLICATION:**

FORD° TYPE REPLACEMENT STARTING MOTORS

### **WA1212FOR**





12V / 12 TOOTH / FORD\* TYPE

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #6 for this part (page 5)

### INTERCHANGE INFORMATION:

Dixie<sup>°</sup>: S-2099 Wilson<sup>°</sup>: 91-02-5901

Popular OE: 2C32-11002-AA

### **APPLICATION:**

Ford\*-type motor for Ford\* Van/PU 2001/2003 w/7.3L diesel engines

### **WA1212FOR-1**





12V / 12 TOOTH / FORD\* TYPE

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #6 for this part (page 5)

#### **INTERCHANGE INFORMATION:**

Dixie<sup>°</sup>: S-2124 Wilson<sup>°</sup>: N/A

Popular OE: 3C3U-11000-AB/3C3U-11000-AC

### **APPLICATION:**

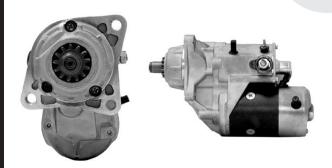
Ford\*-type motor for Ford\* Van/PU 2003/2004 w/6.0L diesel engines



#### **APPLICATION:**

**DODGE® TYPE REPLACEMENT STARTING MOTORS** 

### WA1213NIP



12V / 13 TOOTH / NIPPONDENSO® TYPE

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #6 for this part (page 5)

### **INTERCHANGE INFORMATION:**

 ${\sf Dixie}^{^{\circ}} : {\sf S-8544} \ / \ {\sf S-80039} \ / \ {\sf S-80074}$ 

Wilson<sup>\*</sup>: 91-29-5245 Popular OE: 228000-229

#### APPLICATION:

Nippondenso -type motor for Dodge Ram

1994/2000 w/5.9L diesel engines



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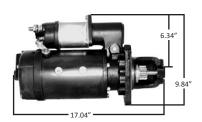


#### **APPLICATION**:

**DELCO®-TYPE REPLACEMENT STARTING MOTORS** 

### WA411210





**41**MT™ STYLE / **12**V / **10** TOOTH

GENERAL NOTES: Please read GENERAL NOTES #4 and #5

for this part (page 5)

SPECIAL NOTES: 3/8" mounting holes.

### **INTERCHANGE INFORMATION:**

Dixie\*: TS-1607 Wilson\*: 91-01-4307 Popular OE: 1993963 Reman\* OE: 10461098

### **APPLICATION:**

GMC Trucks with Cat 3116
Freightliner Trucks with Cat 3126

### WA411210-1





41MT™ STYLE / 12V / 10 TOOTH

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #4 and #5 for this part (page 5)

**INTERCHANGE INFORMATION:** 

Dixie\*: TS-1561 Wilson\*: 91-01-4287 Popular OE: 1993854 Reman\* OE: 10461058

#### APPLICATION:

Ford Trucks 6.6, 7.8L, Diesel

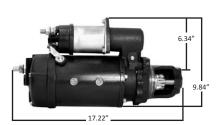
SPECIAL NOTES: 1.) Solenoid terminals reversed. 2.) Off-set nose housing. 3.) Mounting holes are 5/8"



APPLICATION:
DELCO\*-TYPE REPLACEMENT STARTING MOTORS

### WA411210-2





41MT™ STYLE / 12V / 10 TOOTH

GENERAL NOTES: Please read GENERAL NOTES #4 and #5

for this part (page 5)

### **INTERCHANGE INFORMATION:**

Dixie<sup>®</sup>: TS-1551 Wilson<sup>®</sup>: 91-01-4168 Popular OE: 1993850 Reman<sup>®</sup> OE: 10461044

### **APPLICATION:**

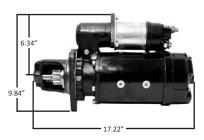
GMC & Chevy

Ford®

SPECIAL NOTES: 1.) Off-set nose housing. 2.) Ground stud in frame. 3.) Mounting holes are 5/8"

### WA411210-3





**41**MT™ STYLE / **12**V / **10** TOOTH

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #4 and #5 for this part (page 5)

SPECIAL NOTES: Mounting holes are 1/2"

#### **INTERCHANGE INFORMATION:**

Dixie<sup>\*</sup>: TS-1547 Wilson<sup>\*</sup>: 91-01-4140 Popular OE: 1993880 Reman<sup>\*</sup> OE: 10461108

#### **APPLICATION:**

Ford<sup>®</sup> Navistar<sup>®</sup>



### APPLICATION: DELCO\*-TYPE REPLACEMENT STARTING MOTORS

### WA411212





41MT™ STYLE / 12V / 12 TOOTH

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #4 and #5 for this part (page 5)

SPECIAL NOTES: Mounting holes are 5/8".

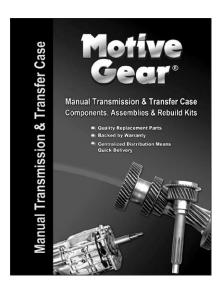
### INTERCHANGE INFORMATION:

Dixie\*: TS-1541 Wilson\*: 91-01-4285 Popular OE: 1993871 Reman\* OE: 10461089

#### APPLICATION:

Cummins Navistar

Waukesha Motors®



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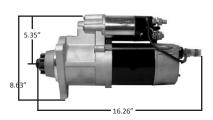
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#### **APPLICATION**: **DELCO®-TYPE REPLACEMENT STARTING MOTORS**

### *WA391211*





39MT™ STYLE / 12V / 11 TOOTH

### INTERCHANGE INFORMATION:

Dixie°: TS-1679 Wilson : 91-01-4487 Popular OE: 19011500 Reman® OE: 10461334

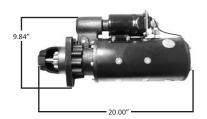
#### APPLICATION:

Most Current: Freightliner® Mack®

SPECIAL NOTES: Replaces Delco<sup>®</sup>'s newest heavy duty starting motor. This unit is an "open drive end" design.

# WA401211N REPLACES: WA1114098





40MT™ STYLE / 12V / 11 TOOTH

**GENERAL NOTES:** Please read GENERAL NOTE #4 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie<sup>®</sup>: S-1107 Wilson : 91-01-3701 Popular OE: 1114098 Reman OE: 10461045

### **WORLD AMERICAN CAN USE:**

WA421211 WA421211HSF



APPLICATION:
DELCO\*-TYPE STARTING MOTORS

### WA401212N

REPLACES: WA1114156





 $\underline{40}$ MT<sup>™</sup> STYLE /  $\underline{12}$ V /  $\underline{12}$  TOOTH

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #4 for this part (page 5)

INTERCHANGE INFORMATION:

Dixie\*: S-1132 Wilson\*: 91-01-3702 Popular OE: 1114156 Reman\* OE: 10461046

WORLD AMERICAN® CAN USE:

WA421212 WA421212HSF

<u>SPECIAL NOTES:</u> Features - 100% new, positork drive, heat treated armature shaft, varnished field coils, ductile iron D.E. housing, solenoids are 100% tested for coil strength, voltage drop across contacts & reserve burn off, 100% computer tested.

### **WA421211N**

REPLACES: WA1990352





<u>42</u>MT™ STYLE / <u>12</u>V / <u>11</u> TOOTH

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #4 for this part (page 5)

### **INTERCHANGE INFORMATION:**

Dixie\*: TS-1501 Wilson\*: 91-01-4166 Popular OE: 1990483 Reman\* OE: 10461052

WORLD AMERICAN CAN USE:

WA421211HSF

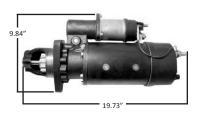


#### **APPLICATION:**

**DELCO®-TYPE REPLACEMENT STARTING MOTORS** 

### **WA421211HSF**





<u>42</u>MT<sup>™</sup> STYLE / <u>12</u>V / <u>11</u> TOOTH <u>H</u>eat <u>S</u>ensitive <u>F</u>use Style

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #4 for this part (page 5)

INTERCHANGE INFORMATION:

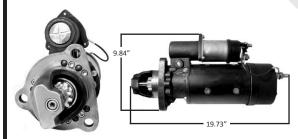
Dixie\*: TS-1512 Wilson\*: 91-01-4295 Popular OE: 1990355 Reman\* OE: 10461028

WORLD AMERICAN CAN USE:

<u>SPECIAL NOTES:</u> This starter motor is equipped with a  $\underline{\text{H}}$ eat  $\underline{\text{S}}$ ensitive  $\underline{\text{F}}$ use style relay built into the field housing. This device is designed to interrupt power to the unit if continuous cranking overheats it to a point where it may be damaged. Once it cools off, the relay will allow the motor to be engaged once again.

### **WA421212N**

REPLACES: WA1990353



42MT™ STYLE / 12V / 12 TOOTH

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #4 for this part (page 5)

**INTERCHANGE INFORMATION:** 

Dixie\*: TS-1500 Wilson\*: 91-01-4161 Popular OE: 1990429 Reman\* OE: 10461100

WORLD AMERICAN CAN USE:

WA421212HSF

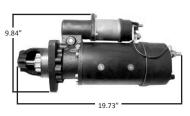


#### **APPLICATION:**

**DELCO°-TYPE REPLACEMENT STARTING MOTORS** 

### **WA421212HSF**





<u>42</u>MT<sup>™</sup> STYLE / <u>12</u>V / <u>12</u> TOOTH <u>H</u>eat <u>S</u>ensitive <u>F</u>use Style

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #4 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie\*: TS-1611 Wilson\*: 91-01-4407 Popular OE: 1990406 Reman\* OE: 10461233

### WORLD AMERICAN® CAN USE:

<u>SPECIAL NOTES:</u> This starter motor is equipped with a <u>Heat Sensitive Euse</u> style relay built into the field housing. This device is designed to interrupt power to the unit if continuous cranking overheats it to a point where it may be damaged. Once it cools off, the relay will allow the motor to be engaged once again.

### <u>WA422411N</u>

REPLACES: WA1990456





42MT™ STYLE / 24V / 11 TOOTH

<u>GENERAL NOTES:</u> Please read GENERAL NOTE #4 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie\*: TS-1503 Wilson\*: 91-01-4159 Popular OE: 1990456 Reman\* OE: 10461068

WORLD AMERICAN® CAN USE:



#### **APPLICATION: DELCO®-TYPE REPLACEMENT STARTING MOTORS**

# WA422412N REPLACES: WA1993804





42MT™ STYLE / 24V / 12 TOOTH

GENERAL NOTES: Please read GENERAL NOTE #4 for this part (page 5)

INTERCHANGE INFORMATION:

Dixie°: TS-1502 Wilson°: 91-01-4158 Popular OE: 1990453 Reman® OE: 10461025

### WORLD AMERICAN® CAN USE:

SPECIAL NOTES: Features - 100% new, positork drive, heat treated armature shaft, varnished field coils, ductile iron D.E. housing, solenoids are 100% tested for coil strength, voltage drop across contacts & reserve burn off, 100% computer tested.

### WA501211N





50MT™ STYLE / 12V / 11 TOOTH

**GENERAL NOTES:** Please read GENERAL NOTE #4 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie°: S-1293 Wilson\*: 91-01-4107 Popular OE: 1109545 Reman° OE: 10461056

WORLD AMERICAN® CAN USE:



APPLICATION:
DELCO°-TYPE REPLACEMENT STARTING MOTORS

### WA502411





<u>50</u>MT<sup>™</sup> STYLE / <u>24</u>V / <u>11</u> TOOTH

GENERAL NOTES: Please read GENERAL NOTE #4 for this

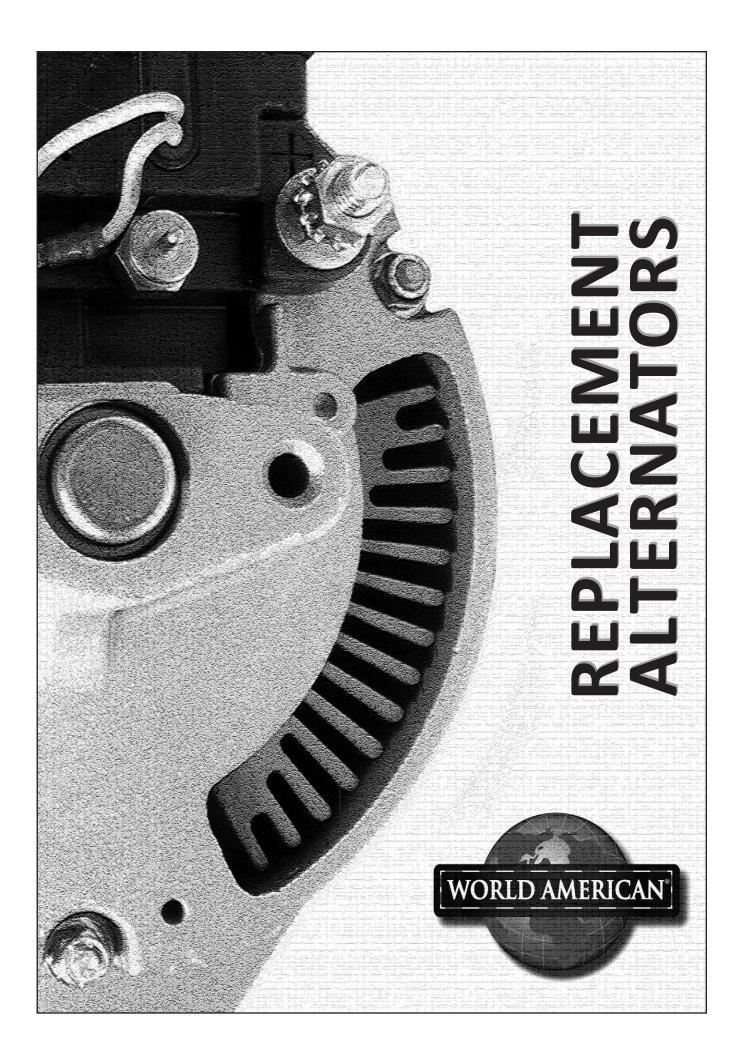
part (page 5)

### **INTERCHANGE INFORMATION:**

Dixie\*: TS-1061 Wilson\*: 91-01-3948 Popular OE: 1990250 Reman\* OE: 10461057

WORLD AMERICAN CAN USE:







APPLICATION: CHEVY°- TYPE REPLACEMENT ALTERNATORS

# **WA12105DEL**



12V / 105A / DELCO° TYPE

SPECIAL NOTES: PLUG #313

### **INTERCHANGE INFORMATION:**

Dixie\*: A1448/A1467 Wilson\*: 90-01-4245 Popular OE: 10480167

APPLICATION: 1999-2000 Chevy° C&K Series 6.5L Diesel w/Int. Fan

### WA12105DEL-1





12V / 105A / DELCO° TYPE

**INTERCHANGE INFORMATION:** 

Dixie\*: A-1548 Wilson\*: 90-01-4339 Popular OE: 10480326

<u>APPLICATION:</u> 2001-2002 Silverado 6.5L Diesel

SPECIAL NOTES: PLUG #314



**APPLICATION**: **CHEVY° - TYPE REPLACEMENT ALTERNATORS** 

## **WA12124DEL**



<u>12</u>V / <u>124</u>A / <u>DEL</u>CO° TYPE

**INTERCHANGE INFORMATION:** 

Dixie°: A-1453 Wilson\*: 90-01-4241 Popular OE: 10463636

APPLICATION: 1999-2000 Chevy° C&K Series 6.5L Diesel w/Ext. Fan

SPECIAL NOTES: PLUG #310

### **WA12140DEL**



12V / 140A / DELCO° TYPE

### **INTERCHANGE INFORMATION:**

Dixie°: A-1454 Wilson\*: 90-01-4251 Popular OE: 10463686

APPLICATION: 2001-2002 Chevy° C&K Series

6.5L Diesel w/Ext. Fan

H.D. Option

SPECIAL NOTES: PLUG #314



APPLICATION:
DODGE' - TYPE REPLACEMENT ALTERNATORS

### **WA12136BOS**





12V / 136A / BOSCH® TYPE

### **INTERCHANGE INFORMATION:**

Dixie°: A-6347 Wilson°: 90-15-6310

Popular OE: 0-124-489-004

APPLICATION: 1999-2001 Dodge<sup>®</sup> 5.9L Diesel Engines

SPECIAL NOTES: PLUG #363. Verify type of alternator. This vehicle uses both units.

### **WA12136NIP**





12V / 136A / NIPPONDENSO® TYPE

#### **INTERCHANGE INFORMATION:**

Dixie\*: A-8781 Wilson\*: 90-29-5357 Popular OE: 121000-428

APPLICATION:

1999-2001 Dodge® Diesel

5.9L - 359 Engines

SPECIAL NOTES: PLUG #314 w/Nippondenso\* - Type. Verify type of alternator. This vehicle uses both units.



APPLICATION:
DODGE\* - TYPE REPLACEMENT ALTERNATORS

### WA12136NIP-1

COMING SOON!

12V / 136A / NIPPONDENSO° TYPE

### **INTERCHANGE INFORMATION:**

Dixie°: A-8920 Wilson°: N/A

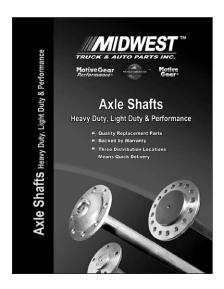
Popular OE: 121000-448

# APPLICATION: 2002 Dodge\*

2002 Dodge<sup>\*</sup> 5.9L-359 Diesel

Nippondenso<sup>®</sup> Unit

SPECIAL NOTES: PLUG #363. Verify type of alternator. This vehicle uses various types.



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#### **APPLICATION:**

FORD° - TYPE REPLACEMENT ALTERNATORS

### **WA12110FOR**



12V / 110A / FORD\* TYPE

#### **INTERCHANGE INFORMATION:**

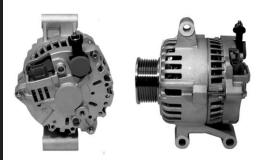
Dixie°: A-2024 Wilson°: 90-02-5092

Popular OE: F81Z-10346-EA

APPLICATION: 1999-2003 Ford® F-Series 7.3L Diesel w/Single Alt.

SPECIAL NOTES: PLUG #336. This is also used in dual alternator setups. This is the top position alternator.

### **WA12110FOR-1**



12V / 110A / FORD° TYPE

#### **INTERCHANGE INFORMATION:**

Dixie<sup>®</sup>: A-2025

Wilson\*: 90-02-5096

Popular OE: F81Z-10346-GA

APPLICATION: 1999-2003 Ford\* F-Series

7.3L Diesel

w/Dual Alternator Setup

SPECIAL NOTES: PLUG #336. This is the bottom position in the dual setup. See WA12110FOR for top position.



**APPLICATION**: FORD° - TYPE REPLACEMENT ALTERNATORS

## **WA12105FOR**





12V / 105A / FORD TYPE

SPECIAL NOTES: PLUG #336

### **INTERCHANGE INFORMATION:**

Dixie°: A2069

Wilson°: 90-02-5133

Popular OE: 4C3Z-10346-AA

# APPLICATION: 2004 Ford\* F-Series

6.0L Diesel w/Single Alt.

### WAFORREG





#### INTERCHANGE INFORMATION:

Dixie: N/A Wilson: N/A

Popular OE: F0PZ-10316-A

### **APPLICATION:**

SPECIAL NOTES: Use with WA1290FOR alternator.



### APPLICATION: DELCO\*-TYPE REPLACEMENT ALTERNATORS

# **WA201260**



20SI™ STYLE / 12V / 60 AMP "Brushless Type"

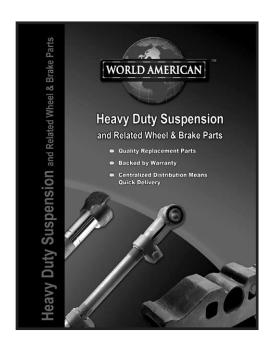
#### **INTERCHANGE INFORMATION:**

Dixie\*: A-1118 Wilson\*: 90-01-3127 Popular OE: 1117641 Reman\* OE: 10459020

WORLD AMERICAN® CAN USE:

WA2212145 WA2212130 WA2112130

SPECIAL NOTES: 12-volt 20SI<sup>™</sup> style units are not very popular; a very sure replacement application for this unit is WA2212130. The mounting configuration and size is the same and the higher amps gained by using a 22SI<sup>™</sup> style unit is an advantage to the end user.



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### APPLICATION: DELCO®-TYPE REPLACEMENT ALTERNATORS

### WA2112130





21SI™ STYLE / 12V / 130 AMP

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #1 AND #3 for this part (page 5)

#### **INTERCHANGE INFORMATION:**

Dixie<sup>\*</sup>: A-1358 Wilson<sup>\*</sup>: 90-01-4093 Popular OE: 1117906 Reman<sup>\*</sup> OE: 10459037

WORLD AMERICAN® CAN USE:

WA2212145 WA2212130

<u>SPECIAL NOTES:</u> Features: 100% new-built extra tough for heavy duty service, long-shaft rotor & longer needle bearings - provides more bearing surface to spread belt load for longer service life, 1/4" - 20 thru bolts used, universal R-terminal, features bolt pin type & 10-24 threaded connections.

### <u>WA2112145N</u>





21SI™ STYLE / 12V / 145 AMP

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #1 AND #3 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie<sup>\*</sup>: A-1350 Wilson<sup>\*</sup>: 90-01-4072 Popular OE: 1117916 Reman<sup>\*</sup> OE: 10459051

WORLD AMERICAN CAN USE:

WA2212145 WA110-555

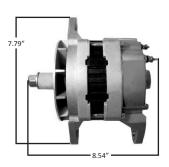
<u>SPECIAL NOTES</u>: Features: 100% new-built extra tough for heavy duty service, long-shaft rotor & longer needle bearings - provides more bearing surface to spread belt load for longer service life, 1/4" - 20 thru bolts used, universal R-terminal, features bolt pin type & 10-24 threaded connections.



<u>APPLICATION</u>:
DELCO°-TYPE REPLACEMENT ALTERNATORS

### **WA212470**





**21**SI™ STYLE / **24**V / **70** AMP

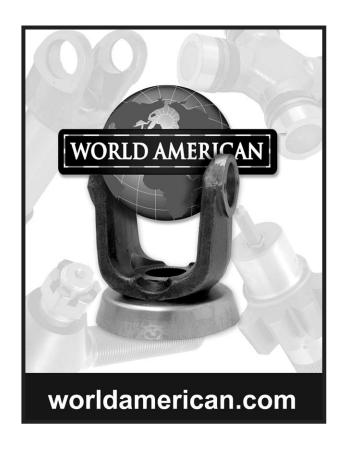
**INTERCHANGE INFORMATION:** 

Dixie® A-1351

Wilson\*: 90-01-4152 Popular OE: 19010111

WORLD AMERICAN CAN USE:

SPECIAL NOTES: The only 24-volt unit in either the 21/22 SI™style series of Delco -style alternators.





### APPLICATION: DELCO®-TYPE REPLACEMENT ALTERNATORS

# WA2212130N





22SI™ STYLE / 12V / 130 AMP

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #1 AND #3 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie\*: A-1493 Wilson\*: 90-01-4295 Popular OE: 19020309 Reman\* OE: 10459189

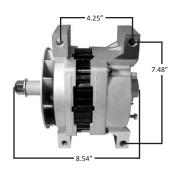
WORLD AMERICAN® CAN USE: WA2212145

WA2112130

<u>SPECIAL NOTES:</u> Features: 100% new-built extra tough for heavy duty service, long-shaft rotor & longer needle bearings - provides more bearing surface to spread belt load for longer service life, 1/4" - 20 thru bolts used, universal R-terminal, features bolt pin type & 10-24 threaded connections.

### WA2212130PN





22SI™ STYLE / 12V / 130 AMP Pad Mount

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #2 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie\*: A-1620 Wilson\*: 90-01-4392 Popular OE: 19020388 Reman\* OE: 10459320

WORLD AMERICAN CAN USE: WA2212145P

<u>SPECIAL NOTES:</u> Features: 100% new-built extra tough for heavy duty service, long-shaft rotor & longer needle bearings - provides more bearing surface to spread belt load for longer service life, 1/4" - 20 thru bolts used, universal R-terminal, features bolt pin type & 10-24 threaded connections.



### APPLICATION: DELCO\*-TYPE REPLACEMENT ALTERNATORS

# WA2212145N





22SI™ STYLE / 12V / 145 AMP

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #1 AND #3 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie\*: A-1452 Wilson\*: 90-01-4270 Popular OE: 19020303 Reman\* OE: 10459190

#### **WORLD AMERICAN CAN USE:**

<u>SPECIAL NOTES</u>: Features: 100% new-built extra tough for heavy duty service, long-shaft rotor & longer needle bearings - provides more bearing surface to spread belt load for longer service life, 1/4" - 20 thru bolts used, universal R-terminal, features bolt pin type & 10-24 threaded connections.

# WA2212145PN





22SI™ STYLE / 12V / 145 AMP Pad Mount

<u>GENERAL NOTES:</u> Please read GENERAL NOTES #2 for this part (page 5)

### **INTERCHANGE INFORMATION:**

Dixie\*: A-1621 Wilson\*: 91-01-4393 Popular OE: 19020389 Reman\* OE: 10459321

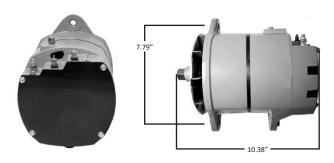
WORLD AMERICAN® CAN USE:

<u>SPECIAL NOTES:</u> Features: 100% new-built extra tough for heavy duty service, long-shaft rotor & longer needle bearings - provides more bearing surface to spread belt load for longer service life, 1/4" - 20 thru bolts used, universal R-terminal, features bolt pin type & 10-24 threaded connections.



#### **APPLICATION**: **DELCO°-TYPE REPLACEMENT ALTERNATORS**

### WA3312135



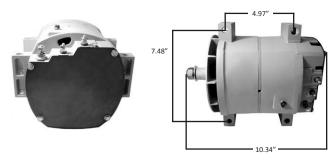
33SI™ STYLE / 12V / 135 AMP "Brushless Type"

#### **INTERCHANGE INFORMATION:**

Dixie°: A -1456 Wilson°: 90-01-4262 Popular OE: 19011155 Reman® OE: 10459141

WORLD AMERICAN° CAN USE: WA2212145

# WA3412135P



34SI™ STYLE / 12V / 135 AMP Pad Mount "Brushless Type"

GENERAL NOTES: Please read GENERAL NOTES #2 for this part (page 5)

### **INTERCHANGE INFORMATION:**

Dixie\*: A -1659 Wilson\*: 90-01-4344 Popular OE: 19011177 Reman° OE: 10459278

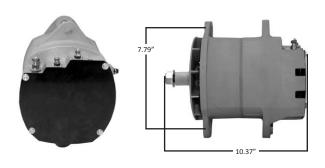
#### WORLD AMERICAN° CAN USE:

SPECIAL NOTES: Pad mount type units are seen primarily on truck models after 2001. This type of mounting was developed to overcome harsh vibrations caused by big bore diesel engines.



### APPLICATION: DELCO°-TYPE REPLACEMENT ALTERNATORS

# WA3412135Q

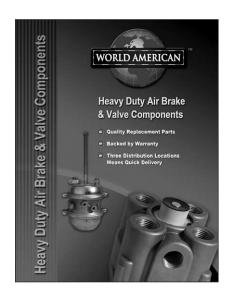


34SI™ STYLE / 12V / 135 AMP Quad Mount Style "Brushless Type"

#### **INTERCHANGE INFORMATION:**

Dixie\*: A-1459 Wilson\*: 90-01-4272 Popular OE: 19011167 Reman\* OE: 10459206

### WORLD AMERICAN® CAN USE:



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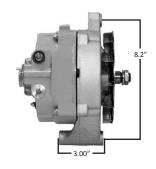
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### APPLICATION: FORD\*-TYPE REPLACEMENT ALTERNATORS

### WA1290FOR





12V / 90A / FORD TYPE "BLUE BACK" Style

"Spool Mount"

#### INTERCHANGE INFORMATION:

Dixie°: A-219

Wilson°: 90-02-5031

Popular OE: E2HF-10346AA/D4HF10300BA

WORLD AMERICAN° CAN USE:

SPECIAL NOTES: Will replace early model "round back" style alternator. External regular - sold seperate



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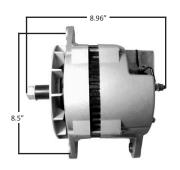
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#### <u>APPLICATION</u>: LEECE-NEVILLE\*-TYPE REPLACEMENT ALTERNATORS

### WA110-555N





<u>LN</u> / <u>12</u>V / <u>140</u> AMP "Load Handler" Style

<u>GENERAL NOTES:</u> Please refer to GENERAL NOTES #1 AND #3 for this part (page 5)

#### INTERCHANGE INFORMATION:

Dixie\*: A-9204 Wilson\*: 90-05-9124 Popular OE: 8LHA2070VB Reman\* OE: 110-555HD

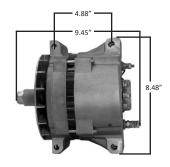
WORLD AMERICAN° CAN USE: WA2812160JB

WA2212145

<u>SPECIAL NOTES:</u> This is the most popular substitute replacement alternator in the marketplace. This unit can be used on almost all standard SAE J-180 mounting configurations.

### WA110-555PN





 $\underline{LN}$  /  $\underline{12}$ V /  $\underline{140}$  AMP  $\underline{P}$ ad Mount - "Load Handler" Style

GENERAL NOTES: Please refer to GENERAL NOTES #2 for

this part (page 5)

### INTERCHANGE INFORMATION:

Dixie\*: A-9384 Wilson\*: 90-05-9220 Popular OE: 8LHP2170V Reman\* OE: 110-555P

WORLD AMERICAN° CAN USE:

WA222145P

<u>SPECIAL NOTES:</u> Pad mount type units are seen primarily on truck models after 2001. This type of mounting was developed to overcome harsh vibrations caused by big bore diesel engines.



#### <u>APPLICATION</u>: LEECE-NEVILLE°-TYPE REPLACEMENT ALTERNATORS

### WA2712130JB





27 SERIES STYLE / 12V / 130 AMP JB Type

<u>GENERAL NOTES:</u> Please refer to GENERAL NOTES #1 AND #3 for this part (page 5)

**INTERCHANGE INFORMATION:** 

Dixie<sup>°</sup>: A-771 Wilson<sup>°</sup>: 90-04-7021 Popular OE: 2670LC

Reman<sup>®</sup> OE: 2760LCRM

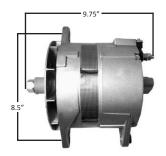
WORLD AMERICAN° CAN USE:

WA110-555 WA2812160JB WA2212145

<u>SPECIAL NOTES</u>: This L/N type alternator has the biggest frame of all of the most popular high output replacement units. Take care to measure clearances before using as a substitute unit.

### WA2812160JB





28 SERIES STYLE / 12V / 160 AMP JB Type

<u>GENERAL NOTES:</u> Please refer to GENERAL NOTES #1 AND #3 for this part (page 5)

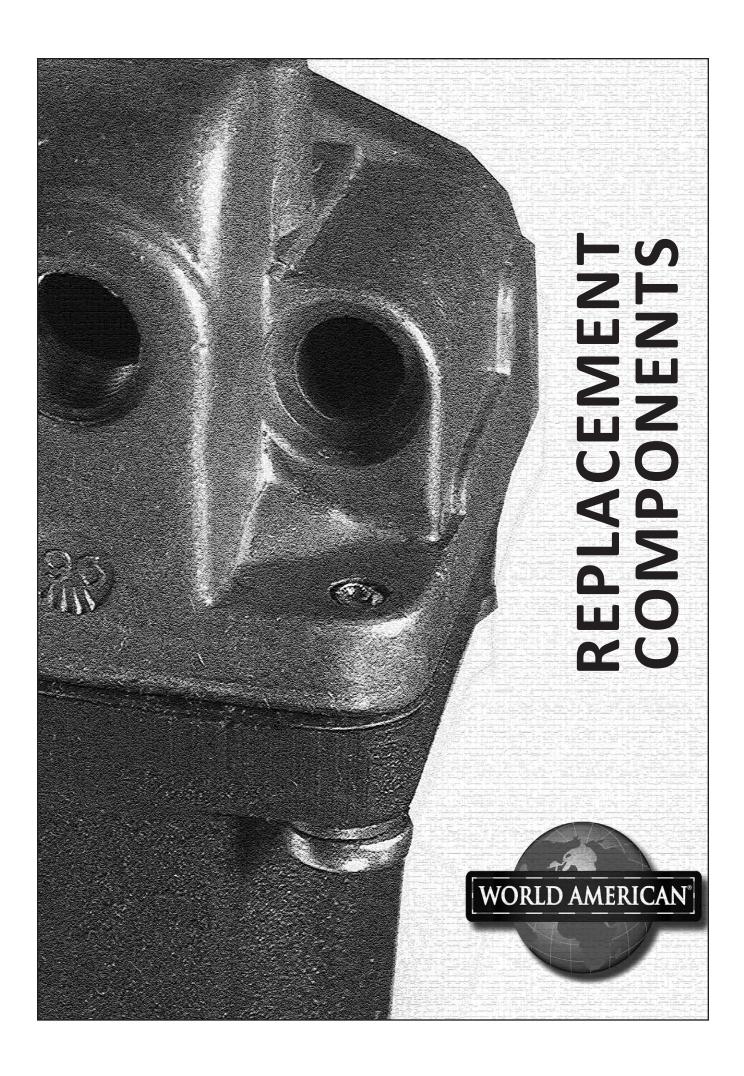
#### INTERCHANGE INFORMATION:

Dixie°: A-772

Wilson<sup>\*</sup>: 90-04-7039 Popular OE: 2800LC Reman<sup>\*</sup> OE: 2800LCRM

#### WORLD AMERICAN° CAN USE:

<u>SPECIAL NOTES:</u> This L/N type alternator has the biggest frame of all of the most popular high output replacement units. Take care to measure clearances before using as a substitute unit.





#### REPLACEMENT ELECTRICAL CONNECTORS

#### 4,6, and 7 - Way Sockets



WA15-400
REPLACES: PHILIPS 15-400

**DESCRIPTION:** 4-way electrical socket



WA15-430
REPLACES: PHILIPS 15-430

**DESCRIPTION:** 4-way electrical plug with spring & cable



WA15-600
REPLACES: PHILIPS 15-600

**DESCRIPTION:** 6-way electrical socket



WA15-630

**DESCRIPTION:** 6-way electrical plug with spring & cable



REPLACEMENT ELECTRICAL CONNECTORS

# 4,6, and 7 - Way Sockets (Cont.)



DESCRIPTION: 7-way electrical socket with split pin 2 hole



WA15-730
REPLACES: PHILIPS 15-730

**DESCRIPTION:** 7-way electrical plug with spring & cable



WA15-740

**DESCRIPTION:** 7-way weather bood guard

## **7-TERMINAL JUNCTION BOX**



WA22040

REPLACES: MIDLAND BE22040

**DESCRIPTION:** 7-Terminal style strip with grommets and hardware



**REPLACEMENT SOLENOID VALVES** 

#### **Shift Solenoid Valves**



# WAKN68237 REPLACES: MIDLAND KN68237

DESCRIPTION: 24 Volt, Supply Port (1) 1/4" P.T., Delivery Port (1) 1/4" P.T.



# 288905C91 REPLACES: MIDLAND\* KN68230

DESCRIPTION: 24 Volt, Supply Port (1) 1/4" P.T., Delivery Port (1) 1/4" P.T.

## **Fuel Solenoid Valves**



CUMMINS BM-6997312

**DESCRIPTION:** 12 Volt



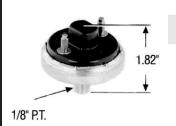
CUMMINS® BM-69973-24

**DESCRIPTION: 24 Volt** 



#### **REPLACEMENT ELECTRO-PNEUMATIC SWITCHES**

#### **Low Pressure Switches**

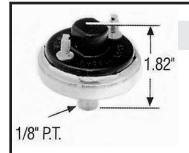


# WA13240

REPLACES: MIDLAND BE13240

MIDLAND 13240A

<u>DESCRIPTION:</u> 12 Volt or 24 Volt 1/8-27 NPTF thread single pole - Two terminal design actuates at 55 psi circuit normally closed at 0 pressure - BLACK



# WA13241

REPLACES: MIDLAND® BE13241

MIDLAND<sup>®</sup> 13241A

<u>DESCRIPTION:</u> 12 Volt or 24 Volt 1/8-27 NPTF thread single pole - Two terminal design actuates at 66 psi circuit normally closed at 0 pressure - BROWN



# WA228750

REPLACES: BENDIX<sup>®</sup> LP-3<sup>™</sup> 228750

DESCRIPTION: 1/4" P.T. Double terminal normally closed (0 psi) opens at 60 psi



# WA279416

REPLACES: BENDIX<sup>®</sup> LP-3<sup>™</sup> 279416

DESCRIPTION: 1/4" P.T. Double terminal normally closed (0 psi) opens at 60 psi



**REPLACEMENT ELECTRO-PNEUMATIC SWITCHES (CONT.)** 

# **Stop Light Switches**



#### SERVICE CIRCUIT STOPLIGHT SWITCH

# NEWA 13250

MIDLAND® 13250

<u>DESCRIPTION:</u> 12 Volt or 24 Volt 1/4-18 NPTF thread single pole - Two terminal design actuates at 3-5 psi circuit normally closed at 0 pressure - One million cycles at 30 amps - BLACK



#### TRAILER EMERGENCY STOPLIGHT SWITCH

REP<del>LACES: MIDIAND BE1325</del>5A

MIDLAND 13255

<u>DESCRIPTION:</u> 12 Volt or 24 Volt 1/8-27 NPTF thread actuates at 55 psi single pole - double throw - three terminal design circuit normally one open/one closed - BROWN



#### **STOPLIGHT SWITCH**

REMARKS BLOCK BROWN TO THE REPORT OF THE REP

DESCRIPTION: 1/4" P.T. normally closed (0 psi) closes at 5 psi



**REPLACEMENT ELECTRIC 2 SPEED MOTORS** 



40635

<u>DESCRIPTION:</u> Electric motor, early style 1983 & prior



# 113745R

<u>DESCRIPTION:</u> Electric shift motor, late style 1984 & later



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#### **QUALITY REPLACEMENT LIGHTING**



REPLACES:

TRUCK-LITE\*30250Y

PETERSON® 164A

GROTE 47113

Amber 2" LED Clr/Mrkr Lamp

**REPLACES:** 

TRUCK-LITE® 30250R

PETERSON° 164R

GROTE\* 47112

Red 2" LED Clr/Mrkr Lamp



**REPLACES:** 

TRUCK-LITE 10250Y

PETERSON° 162A

GROTE\* 47123

Amber 2.5" LED Clr/Mrkr Lamp

**REPLACES:** 

TRUCK-LITE 10250R

PETERSON<sup>®</sup> 162R

GROTE 47122

Red 2.5" LED Clr/Mrkr Lamp



WA22546R

Red 4" Grommet Mt.10 LED S/T/T Lamp

**REPLACES:** 

TRUCK-LITE 44302R

PETERSON\*417R-3

GROTE 53252



WA22565R

Red Oval 10 LED S/T/T Lamp

**REPLACES:** 

TRUCK-LITE 60250R

PETERSON<sup>®</sup> 420R-3

GROTE 53962



WA10017A

Amber Oval Mid Trir Side Turn

REPLACES:

TRUCK-LITE 60215Y

PETERSON\* -----

GROTE 52193

All lights meet D.O.T. requirements FMVSS 108 and pass rain, temperature and humidity, vibration, shock, aging and salt spray testing as per customer's specifications.



#### **QUALITY REPLACEMENT LIGHTING**



WA10019A

Amber Oval Turn Lamp

REPLACES:

TRUCK-LITE 60202Y

PETERSON 421A GROTE 52893

WA10015R

Red 4" Reflectorized S/T/T Lamp

REPLACES:

TRUCK-LITE 40215R

PETERSON 427R

GROTE 52672



WA10227R

Red 4" S/T/T Lamp - Plain

REPLACES:

TRUCK-LITE® 4020R

PETERSON<sup>®</sup> 426R

GROTE\* 52772



WA20207A

Amber 2.5" Clr/Mrkr w/Reflector

**REPLACES:** 

TRUCK-LITE 10205Y

PETERSON<sup>\*</sup> 143A

GROTE 45833

WA20207R

Red 2.5" Clr/Mrkr w/Reflector

REPLACES:

TRUCK-LITE® 10205R

PETERSON 143R

GROTE 45832



WA20208A

Amber 2" Clr/Mrkr Lamp

**REPLACES:** 

TRUCK-LITE 3020DY

PETERSON\*146A

GROTE 45823

WA20208R

Red 2" Clr/Mrkr Lamp

REPLACES:

TRUCK-LITE 30200R

PETERSON<sup>®</sup> 146R

GROTE 45822

All lights meet D.O.T. requirements FMVSS 108 and pass rain, temperature and humidity, vibration, shock, aging and salt spray testing as per customer's specifications.



#### **QUALITY REPLACEMENT LIGHTING**



**REPLACES:** 

TRUCK-LITE 94926

PETERSON° 431-491

GROTE 67000



WA538751

2 Wire Plug, Strait

**REPLACES:** 

TRUCK-LITE 94902

PETERSON® 142-49

GROTE\* -----



2 Wire Plug, 90 Degree

**REPLACES:** 

TRUCK-LITE® 94924

PETERSON° -----

GROTE 67050



WA55206-1

2.5" Open Grommet

REPLACES:

TRUCK-LITE 10700 PETERSON 143-18

GROTE 91400

2" Open Grommet

**REPLACES:** 

TRUCK-LITE® 30700

PETERSON® 146-18

GROTE 92120

4" Open Grommet

REPLACES:

TRUCK-LITE 40700

PETERSON\* 426-18

GROTE 91740

All lights meet D.O.T. requirements FMVSS 108 and pass rain, temperature and humidity, vibration, shock, aging and salt spray testing as per customer's specifications.

ing...this electrical unit you ect the black (ground) cable tive battery post! Failure to result in s erious personal

ling a brand new alternator please s in the following sequence.

# GE ALTERNATOR ATIONS ONLY

to the post marked with the Red

t the male wire harness plug into the r on the rear or side of the alternator. trical connections to assure proper of OVER TORQUE!! Broken or will cause premature failure and void

securing the unit to the engine. Make torqued properly.

cable connection and post; reconnect post on the battery and tighten.



his unit without first disconnecting ground post may cause premature







## **INSTALLATION GUIDE**

APPLICATION: ALL STARTERS

#### Note!





<u>Before installing...</u>this electrical unit you must disconnect the <u>black (ground)</u> cable from the negative battery post! Failure to do so could result in serious personal injury.

# For best results when installing a brand new starter please make the connections in the following sequence.

- 1. Connect **ground** cable to the post marked with the **Black** ground tab indicator.
- 2. Connect **power** cable to the post marked with the **Red** power tab indicator.
- 3. Connect the key switch cable to the post marked with the **Green** tab indicator.
- 4. Double Check all electrical connections to assure proper conductivity. **DO NOT OVER TORQUE!!** Broken or damaged connections will cause premature failure and void warranty.
- 5. Double check all bolts securing the unit to the engine. Make sure these fasteners are torqued properly.
- 6. Wire brush the ground cable connection and post; reconnect the cable to the negative post on the battery and tighten.



<u>Important note</u>...Installing this unit without first disconnecting the cable from the negative ground post may cause premature power surges, causing the unit to fail. <u>In these cases warranty</u> will be voided.

This installation guide will be included in ALL starter motor shipments.



### **INSTALLATION GUIDE**

#### **APPLICATION: MID-RANGE ALTERNATORS**

#### Note!



## Stop!!

Before installing...this electrical unit you must disconnect the black (ground) cable from the negative battery post! Failure to do so could result in serious personal injury.

For best results when installing a brand new alternator please make the connections in the following sequence.

#### MID-RANGE® ALTERNATOR APPLICATIONS ONLY

- 1. Connect power cable to the post marked with the **Red** power tab indicator.
- 2. If so equipped, connect the male wire harness plug into the receptacle located either on the rear or side of the alternator.
- 3. Double check all electrical connections to assure proper conductivity. DO NOT OVER TORQUE!! Broken or damaged connections will cause premature failure and void warranty.
- 4. Double check all bolts securing the unit to the engine. Make sure these fasteners are torqued properly.
- 5. Wire brush the ground cable connection and post; reconnect the cable to the negative post on the battery and tighten.



Important note...Installing this unit without first disconnecting the cable from the negative ground post may cause premature power surges, causing the unit to fail. In these cases warranty will be voided.

This installation quide will be included in ALL mid-range alternator shipments.



### INSTALLATION GUIDE

#### **APPLICATION**: **DELCO°- TYPE ALTERNATORS**

#### Note!



## Stop!!

Before installing...this electrical unit you must disconnect the black (ground) cable from the negative battery post! Failure to do so could result in serious personal injury.

For best results when installing a brand new alternator please make the connections in the following sequence.

#### DELCO®-STYLE ALTERNATORS ONLY

- 1. Connect power cable to the post marked with the Red power tab indicator. On some units this post could be marked BAT or POS.
- 2. Delco® type alternators are generally case grounded through the mounting bracket to the frame or engine. replacing a Leece Neville® type, reuse the existing ground strap and attach to the Delco® unit where indicated on their housing.
- 3. If so equipped, connect the cable for the relay switch, indicator light or tachometer to the post with the Blue tab indicator.
- 4. Double Check all electrical connections to assure proper conductivity. DO NOT OVER TORQUE!! Broken or damaged connections will cause premature failure and void warranty.
- Double check all bolts securing the unit to the engine. Make sure these fasteners are torqued properly.
- 6. Wire brush the ground cable connection and post; reconnect the cable to the negative post on the battery and tighten.



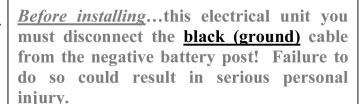
Important note...Installing this unit without first disconnecting the cable from the negative ground post may cause premature power surges, causing the unit to fail. In these cases warranty will be voided.

This installation guide will be included in ALL Delco®-type alternator shipments.



#### Note!

## Stop!!



For best results when installing a brand new alternator please make the connections in the following sequence.

# LEECE-NEVILLE® ALTERNATOR ONLY

- 1. Connect **power** cable to the post marked with the **Red** power tab indicator.
- 2. Connect the **black** tab indicator. If replacing a Delco® type with this unit, you must make sure to place a ground strap to the unit as indicated.
- 3. If so equipped, connect the cable for the relay switch, indicator light or tachometer to the post with the **Blue** tab indicator.
- 4. Double check all electrical connections to assure proper conductivity. **DO NOT OVER TORQUE!!** Broken or damaged connections will cause premature failure and void warranty.
- 5. Double check all bolts securing the unit to the engine. Make sure these fasteners are torqued properly.
- 6. Wire brush the ground cable connection and post; reconnect the cable to the negative post on the battery and tighten.



<u>Important note</u>...Installing this unit without first disconnecting the cable from the negative ground post may cause premature power surges, causing the unit to fail. <u>In these cases warranty</u> will be voided.

This installation quide will be included in ALL Leece-Neville -type alternator shipments.



# **WARRANTY**

MIDWEST TRUCK & AUTO PARTS, INC.™ warrants that all new MIDWEST TRUCK & AUTO PARTS, INC.™, except as otherwise provided herein, will be free from defects in material and workmanship for the first 6 months or 50,000 miles, whichever occurs first, with the sole exception of its heavy duty alternators and starters, the warranty for which shall extend for the first year, with no mileage limit. THIS WARRANTY WILL NOT APPLY IF ANY PART HAS BEEN MODIFIED, DAMAGED OR IS DEFECTIVE AS A RESULT OF ANY ACCIDENT, MISUSE, USE IN COMPETITIVE APPLICATIONS, IMPROPER INSTALLATION,

NEGLIGENCE, REPAIR OR ALTERATION.

COMPETITION PARTS ARE SOLD "AS IS", WITHOUT ANY WARRANTY WHATSOEVER. IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE EXCLUDED. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF SUCH PARTS IS WITH THE BUYER. SHOULD SUCH PARTS PROVE DEFECTIVE FOLLOWING THEIR PURCHASE, THE BUYER, AND NOT THE MANUFACTURER, DISTRIBUTOR OR RETAILER, ASSUMES THE ENTIRE COST OF ALL NECESSARY SERVICING OR REPAIR.

The MIDWEST TRUCK & AUTO PARTS, INC.™ parts warranty is voided if the part is used for competition or if it has been modified.

To make a warranty claim on parts used in non-competitive applications, distributors should contact MIDWEST TRUCK & AUTO PARTS, INC.™ distributor for a Return Goods Authorization (RGA) Number. No returns will be accepted without an RGA Number. All parts should be returned to MIDWEST TRUCK & AUTO PARTS, INC.™, freight prepaid. MIDWEST TRUCK & AUTO PARTS, INC.™ will issue a credit equal to the original purchase price for all defective parts covered by this warranty. In the event that a warranty claim cannot be substantiated by MIDWEST TRUCK & AUTO PARTS, INC.™, the parts will be returned to the customer, freight collect.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND IN NO EVENT WILL MIDWEST BE LIABLE FOR INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, ANY LABOR COSTS.

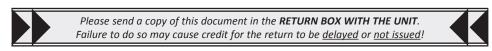




# **WARRANTY CLAIM FORM**



#### **ELECTRICAL UNIT**



Date:					
RGA Number:		Invoice	Invoice -or- Sales Order Number:		
	CONT	ACT INFORM	1ATION -	- PLEASE PRINT	
Contact Name:		<u>Distri</u> b	utor:		
Street Address:			<u>City/St</u> ate	e/Zip:	
Phone: Ext:		Fa		-ax:	
Email Address:					
		UNIT IN	FORMAT	TION	
Type of Unit:	ALTERNATOR		STARTER		
Part Number:			Date Insta	alled:	
Type of Engine:	DIESEL	GAS <u>OLINE</u>		NATURAL GAS	
Type of Vehicle:	TRUCK CO	ONSTR <u>UCTION</u>	AG	BUS	
RE <i>A</i>	ASON FOR RE	TURN - Pleas	se Select	From the Options Below	
STARTER					
Will Not Fit Engine		Will Not Start		Broken Studs or Contacts	
Stays Engaged		Burned	Out		
Other:					
	Starting motors claimed		NERAL NOTE: o a low voltage co	ondition in the batteries will not be honored.	
ALTERNATO	R				
Failed on Turn		Overch	narges	Fails to Charge Once Installed	
Burned Out		Broken Studs or Contacts			
Other:					
	Alternators claimed as w		NERAL NOTE: ss wiring (causing	g improper polarization) will not be honored.	

Please send a copy of this document in the RETURN BOX WITH THE UNIT.

Failure to do so may cause credit for the return to be <u>delayed</u> or <u>not issued</u>!



# Notes

# Notes

# Notes