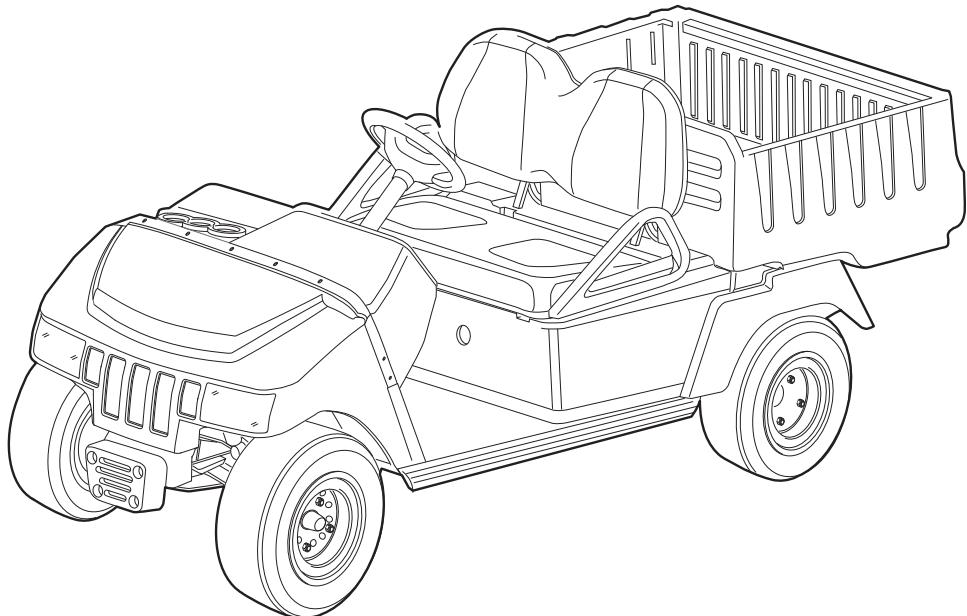


**Club Car**

®

**2008  
Carryall 232  
Illustrated Parts List**



**Gasoline and Electric Vehicles**

Manual Number 103373010  
Edition Code 1007M0112L



# USING THE ILLUSTRATED PARTS LIST

---

## **⚠ WARNING**

- This manual is to be used only for identification and ordering of service parts. Be sure to read and use the maintenance and service manual before attempting any vehicle repairs.

This manual covers all 2008 Carryall 232 gasoline and electric vehicles.

The manual is divided into sections. Note that there are flags on the outside edge of each page. The first flag contains the section number of which that page is a part. The other flags contain the letters G or E, signifying that the page pertains to either the gasoline vehicle, the electric vehicle, or both.

Use the Table of Contents to find the sections and pages that contain the parts and assemblies you seek. The Table of Contents lists section numbers, and under them, the individual page titles and numbers to be found in that section. The index can be used to find specific parts and assemblies. The index is divided into numerical and alphabetical listings with the page numbers in italic text.

There is a two-page spread for each individual page title in the Table of Contents. On the left-hand page is an illustration showing the parts in their relative positions; the parts are each tagged with an item number in a balloon. The right-hand page is the parts list page, and gives the page title at the top, then the item numbers (corresponding to the numbers on the illustration), part descriptions, and quantity of parts used.

Note that a part description may be indented. This indentation corresponds to a parts assembly level indicated by the numbers 1, 2, 3, and 4 at the top left corner of the parts description area of the parts list page. A part that is indented to *level 2* is a component of the *level 1* part (assembly) that it is listed under. A *level 3* part is a component of the *level 2* part that it is listed under, and a *level 4* part is a component of the *level 3* part preceding it. In each case, the part quantity given for a level 2, 3, or 4 part is *the quantity used per next higher level assembly of which it is a component*. A part that is not indented is a *level 1* part. This means that the quantity given is the quantity used per the portion of the vehicle illustrated on that particular spread.

## HOW TO ORDER PARTS

Replacement parts and accessories can be obtained from our network of authorized dealers and distributors. You can obtain the name and phone number of your closest authorized Club Car dealer or distributor by visiting our web site at [www.clubcar.com](http://www.clubcar.com) and clicking on the "Distributor Search" link or by calling our toll-free Service Parts and Technical Assistance hotline at (800) 872-2246 or (706) 863-3000, extension 3887.



P. O. Box 204658  
Augusta, Georgia 30917-4658 USA  
Telephone 706-863-3000  
Service Parts Fax 706-855-7413  
[www.clubcar.com](http://www.clubcar.com)

**NOTE:** This illustrated parts list represents the most current information at the time of publication. Club Car, Inc. is continually working to further improve its vehicles and other products. These improvements may affect the parts used to service the vehicle. Any modification and/or significant change in specifications will be forwarded to all Club Car and Carryall distributors/dealers and will, when applicable, appear in future editions of this illustrated parts list.

*Club Car, Inc. reserves the right to change specifications and designs at any time without notice and without the obligation of making changes to units previously sold.*

Copyright © 2007 Club Car, Inc.  
*Club Car* and *ArmorFlex*  
are registered trademarks of Club Car, Inc.  
This manual effective August 6, 2007.

# CONTENTS

---

## SECTION 1 – BODY AND TRIM

---

Front Body .....	1-3
Canopy Support System .....	1-5
Bumper .....	1-7
Brush Guard .....	1-9
Dash Box .....	1-11
Glove Box (Optional) .....	1-13
Side Trim .....	1-15
Nerf Bar (Optional) .....	1-17
Rear Body and Fender – Gasoline Vehicle .....	1-19
Rear Body and Fender – Electric Vehicle .....	1-21
Front Seat Bottom and Armrests .....	1-23
Seat Back .....	1-25
Cargo Bed .....	1-27
Bed Hinge .....	1-29
Access Panel and Heat Shield .....	1-31

## SECTION 2 – WHEELS AND TIRES

---

Wheels and Tires .....	2-3
Hubcap (Optional) .....	2-5

## SECTION 3 – DECALS

---

Safety Decals – Gasoline Vehicles .....	3-3
Safety Decals – Gasoline Vehicles, Continued .....	3-5
Safety Decals – Gasoline Vehicles, Continued .....	3-7
Safety Decals – Electric Vehicles .....	3-9
Safety Decals – Electric Vehicles, Continued .....	3-11
Logo Decals .....	3-13

## SECTION 4 – BRAKE SYSTEMS

---

Rear Brake Assembly, Self-Adjusting – Vehicle with 2-Wheel Brakes .....	4-3
Brake Pedal Assembly .....	4-5
Brake Cable, Equalizer, and Equalizer Rod – Vehicles with Two-Wheel Brakes .....	4-7
Accelerator Pedal Assembly – Gasoline Vehicle .....	4-9
Accelerator Pedal Assembly – Electric Vehicles with MCOR .....	4-11
Accelerator Rod .....	4-13

# CONTENTS

---

## SECTION 5 – STEERING AND SUSPENSIONS

---

Steering Column .....	5-3
Steering Wheel .....	5-5
Steering Gear Assembly .....	5-7
Front Suspension, Upper .....	5-9
Front Suspension, Lower .....	5-11
Front Spindles and Hubs .....	5-13
Rear Suspension .....	5-15

## SECTION 6 – ELECTRICAL SYSTEM – GASOLINE VEHICLES

---

Wiring – Gasoline Vehicle .....	6-5
Headlights .....	6-7
Electrical Component Box – Gasoline Vehicle .....	6-9
Electrical Components, Front Body – Gasoline Vehicle .....	6-11
Starter/Generator Assembly Model G425419 – Gasoline Vehicles .....	6-13
FE290 Starter/Generator Mounting – Gasoline Vehicle .....	6-15
Battery – Gasoline Vehicle .....	6-17

## SECTION 7 – FE290 ENGINE

---

FE290 Engine – Shrouds and Brackets .....	7-3
FE290 Engine – Ignition Components and Flywheel .....	7-5
FE290 Engine – Oil Circulation .....	7-7
FE290 Engine – Cylinder Head .....	7-9
FE290 Engine – Crankcase, Camshaft, and Oil Sensor .....	7-11
FE290 Engine – Crankcase and Crankshaft .....	7-13
FE290 Engine Mounting .....	7-15

## SECTION 8 – FUEL, INTAKE, AND GOVERNOR SYSTEMS

---

Fuel System .....	8-3
Fuel Tank with Fuel Level Sending Unit .....	8-5
Carburetor Assembly – FE290 .....	8-7
Carburetor Installation – FE290 .....	8-9
Governor and Accelerator Cables .....	8-11
Intake Duct, Choke, and Air Box Assembly .....	8-13

## SECTION 9 – EXHAUST SYSTEM

---

Exhaust System – FE290 Engine .....	9-3
-------------------------------------	-----

# CONTENTS

---

## SECTION 10 – TORQUE CONVERTER

---

Drive Clutch .....	10-3
Drive Belt – FE290 .....	10-5
Driven Clutch .....	10-7

## SECTION 11 – TRANSAXLE AND FNR SHIFTER- GASOLINE VEHICLE

---

Transaxle – Gasoline Vehicles, Gear Cases and Brackets .....	11-3
Transaxle – Gasoline Vehicles, Transmission and Gear Reduction .....	11-5
Transaxle – Gasoline Vehicles, Differential and Axles .....	11-7
Forward/Reverse Shifter Assembly – Gasoline Vehicles .....	11-9
Forward/Reverse Shifter Cable – Gasoline Vehicles .....	11-11
Differential Guard – XRT810 .....	11-13

## SECTION 12 – GRAZIANO TRANSAXLE – GASOLINE VEHICLE

---

Graziano Transaxle – Gasoline Vehicles .....	12-3
Graziano Transaxle – Gasoline Vehicles .....	12-5
Graziano Transaxle – Gasoline Vehicles .....	12-7

## SECTION 13 – ELECTRICAL SYSTEM – ELECTRIC VEHICLES

---

Wiring – Electric Vehicle .....	13-5
Headlights .....	13-7
Electrical Components, Front Body – Electric Vehicle .....	13-9
Motor Controller Output Regulator (MCOR) .....	13-11
Forward/Reverse Switch, Tow/Run Switch .....	13-13
Battery Charger Receptacle .....	13-15
Batteries, Electric Vehicle .....	13-17
OBC, Controller, and Solenoid – Electric Vehicle .....	13-19
Reverse Buzzer .....	13-21

## SECTION 14 – ELECTRIC MOTOR

---

Motor (Model 5BC59JBS6390) – Electric Vehicle .....	14-3
Motor (Model EJ4-4001) – Electric Vehicle .....	14-5
Motor (Model EJ8-4001A) – Electric Vehicle .....	14-7

## SECTION 15 – TRANSAXLE – ELECTRIC VEHICLES

---

Transaxle – Electric Vehicles .....	15-3
Differential Guard .....	15-5

# **CONTENTS**

---

## **SECTION 16 – BATTERY CHARGER**

---

PowerDrive 3 Battery Charger, Domestic .....	16-3
PowerDrive 2 Battery Charger (Model 22110), Domestic .....	16-5
PowerDrive Battery Charger (Model 17930), Domestic .....	16-7
PowerDrive Battery Charger (Model 18780), Export .....	16-9
PowerDrive Battery Charger (Model 20310), European .....	16-11

## **SECTION 17 – MAINTENANCE AND SERVICE TOOLS**

---

Maintenance and Service Tools .....	17-3
Maintenance and Service Tools, Continued .....	17-5
Maintenance and Service Tools, Continued .....	17-7
Maintenance and Service Tools, Continued .....	17-9
Maintenance and Service Tools, Continued .....	17-11

## **SECTION i – INDEX**

---

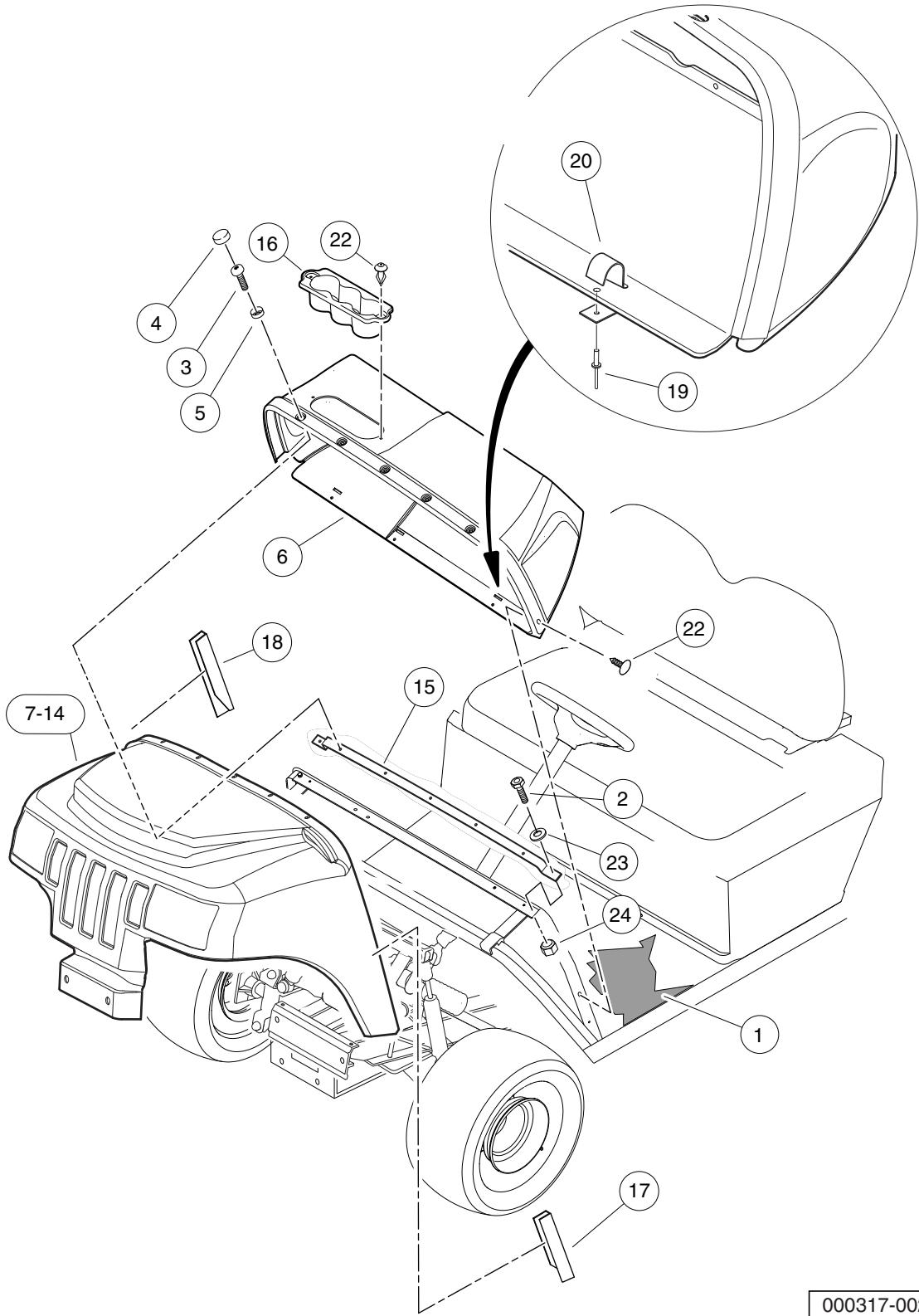
# BODY AND TRIM

---

1

G

E

**1****G****E**

000317-002

# FRONT BODY

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101503202	Floormat .....	1
2	101954301	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	2
3	102025801	Screw, 1/4-20 X .75 Torx Pn Hd .....	5
4	102045001	Cap, 1/4" Plastic Screw Head .....	5
5	102048401	Washer, 1/4 Id Scalloped Plast .....	5
6	102766701	Dash .....	1
7	102778501	Cowl, Red .....	1
8	102778502	Cowl, Green .....	1
9	102778503	Cowl, Camouflage (Husqvarna) .....	1
10	102778504	Cowl, Classic Blue .....	1
11	102778505	Cowl, XRT- Black .....	1
12	102778507	Cowl, XRT- Camo Hard Wood HD (Standard camo for XRT850) .....	1
13	N/A	Cowl, XRT- Camo Max4 HD .....	1
14	102778509	Cowl, XRT- Silver .....	1
15	102778601	Support, Upper Cowl .....	1
16	102796701	Object Holder .....	1
17	102822001	Cowl Cover, Driver-Side .....	1
18	102822002	Cowl Cover, Passenger-Side .....	1
19	102828701	Rivet .....	10
20	102857401	Clip, Dash .....	3
21	102914301	Push Pin, Black .....	2
22	102967901	Rivet, Removable, Tuflok 1/4" .....	2
23	332	Washer, 1/4 Type A Narrow Flat .....	2
24	8233	Locknut, 1/4-20 Nylon Insert .....	2

1

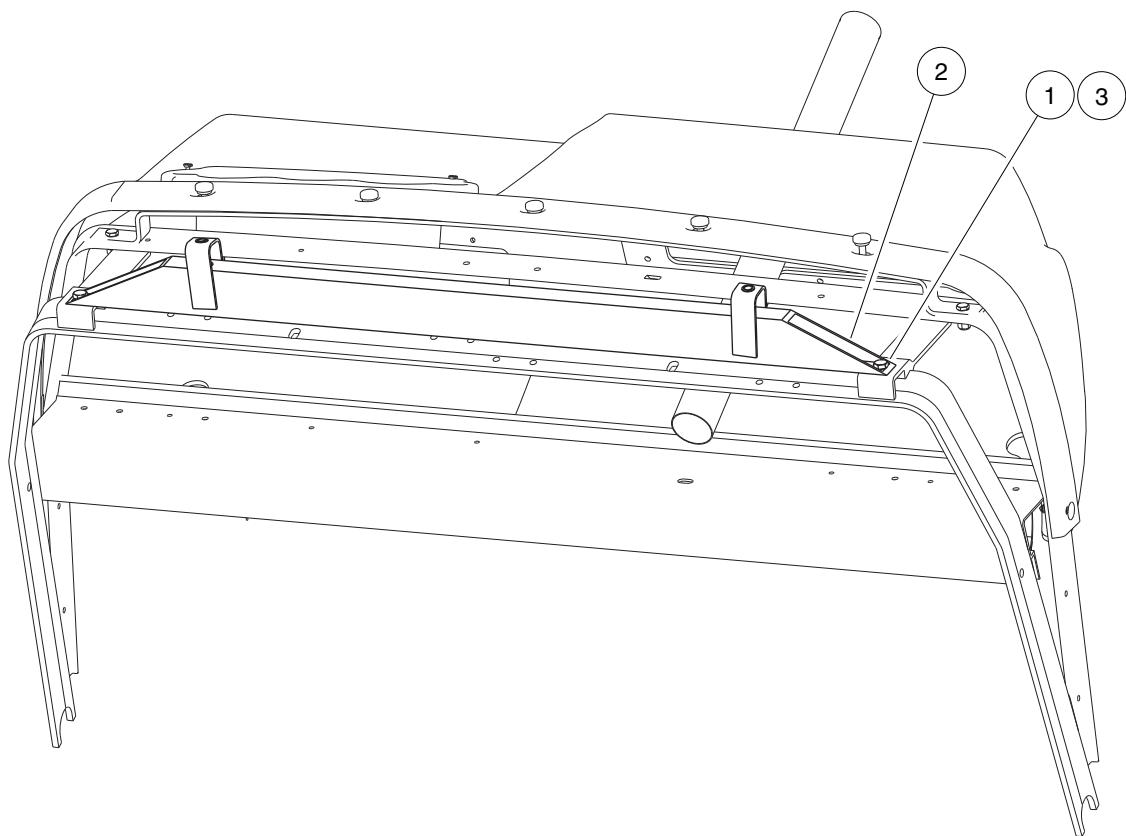
G

E

**1**

**G**

**E**



000582-001

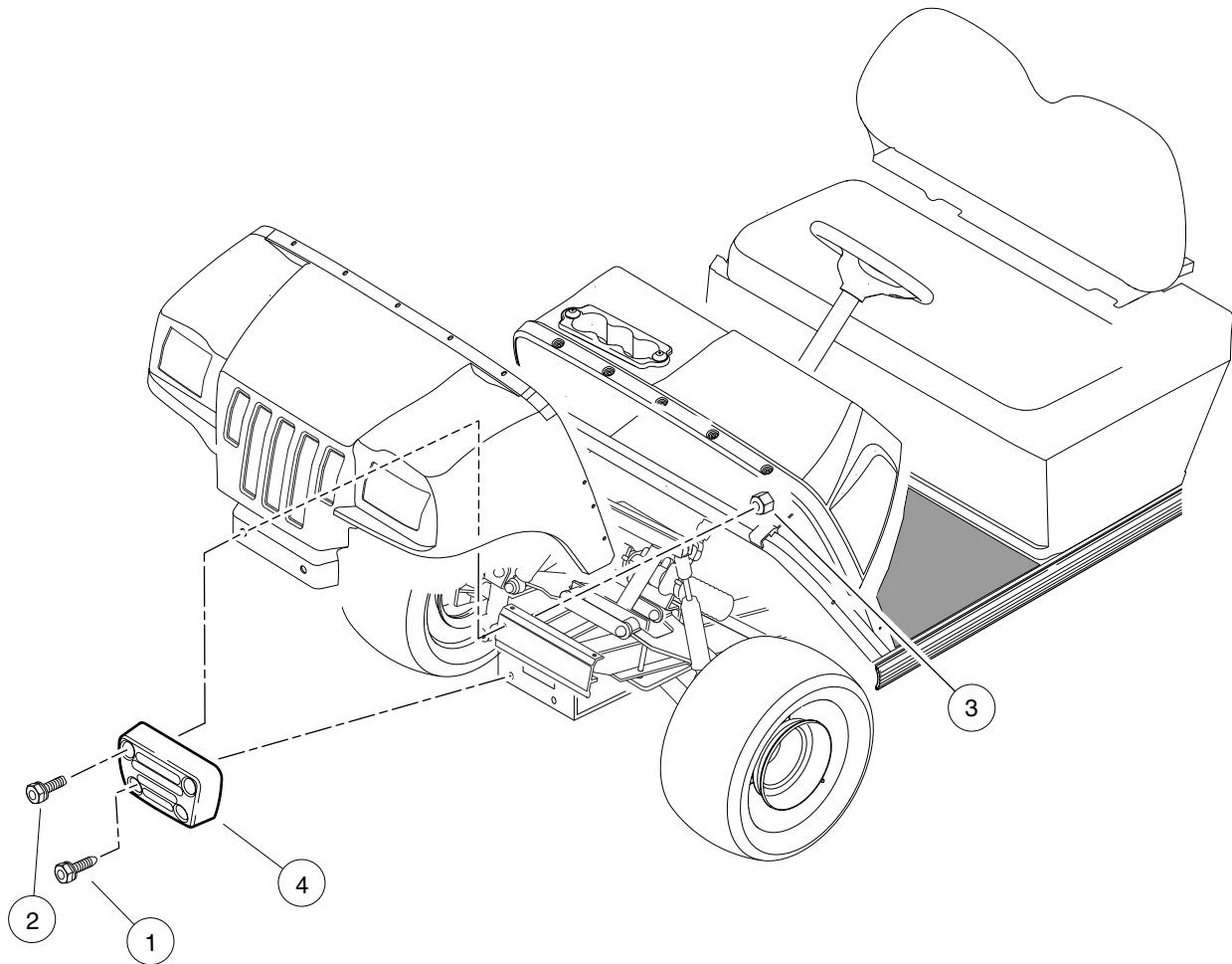
## CANOPY SUPPORT SYSTEM

ITEM	PART NO.	DESCRIPTION	QTY
1	102242101	Screw, 5/16-18 X 3/4 Hex-Head with Patch .....	2
2	103313301	Asm, Brace, Canopy, Tube, Xrt .....	1
3	1241	Washer, 5/16 Type A Flat .....	1

**1**

**G**

**E**



000357-002

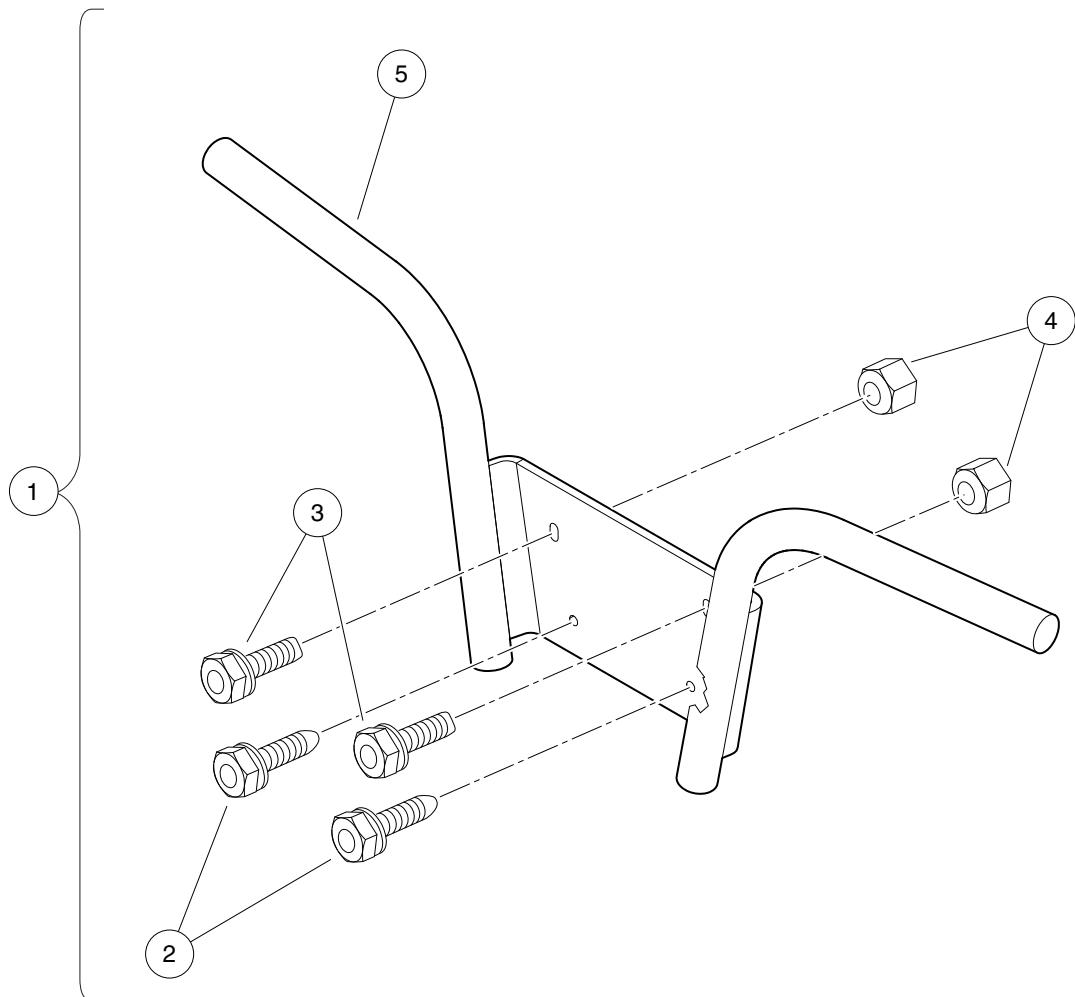
# BUMPER

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	102289002	Screw, M8 X 1.25 X 30 Tri, Blk .....	2
2	102298240	Bolt, Flange Head, M8-1.25 X 40 .....	2
3	102618601	Lock Nut, Flg M8 X 1.25 Nylon .....	2
4	102830501	Bumper, Cast .....	1

**1**

**G**

**E**



000356-001

# BRUSH GUARD

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	102852401	Kit, Brush Guard (includes items 2 through 6) .....	1
2	102289002	Screw, M8 X 1.25 X 30 Tri, Blk .....	2
3	102298240	Bolt, Flange Head, M8-1.25 X 40 .....	2
4	102618601	Lock Nut, Flg M8 X 1.25 Nylon .....	2
5	102830201	Guard, Brush .....	1
6	N/A	Instr, Brush Guard .....	1

1

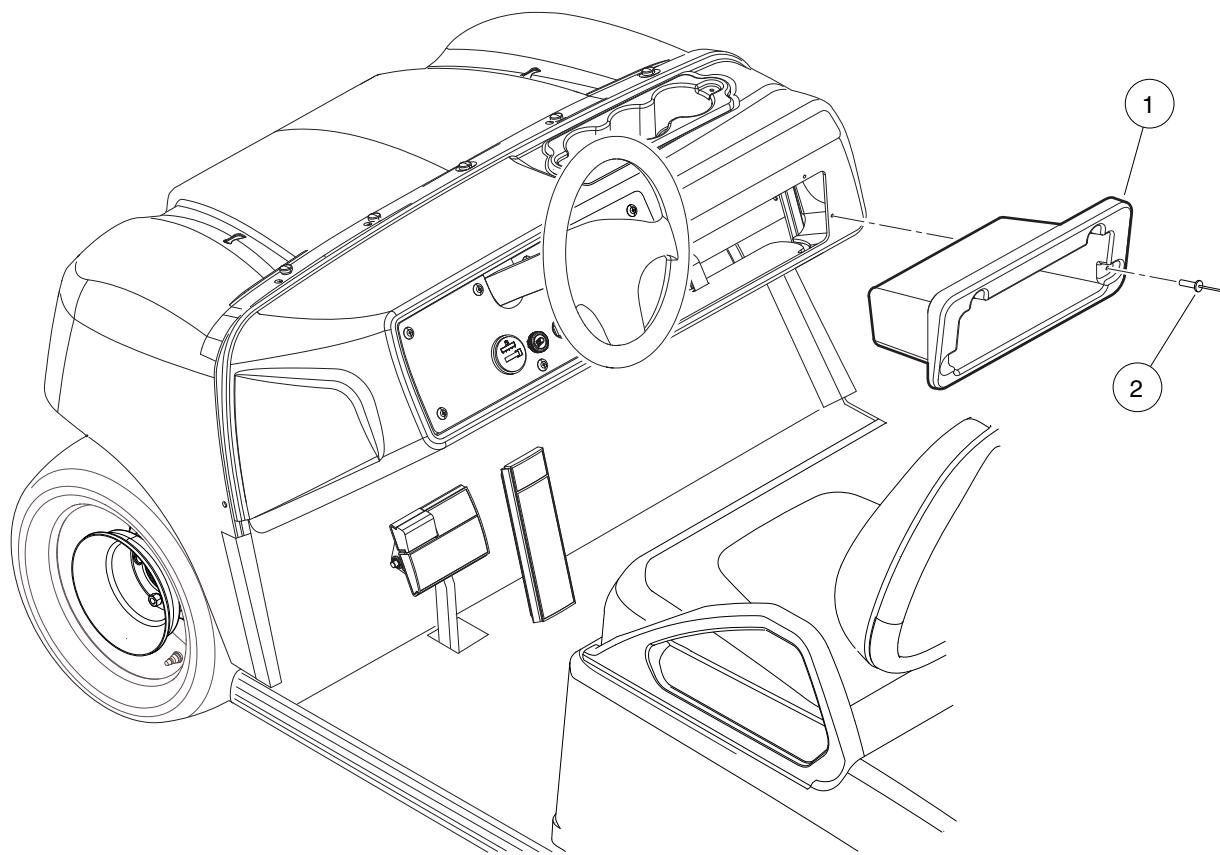
G

E

**1**

**G**

**E**



000358-001

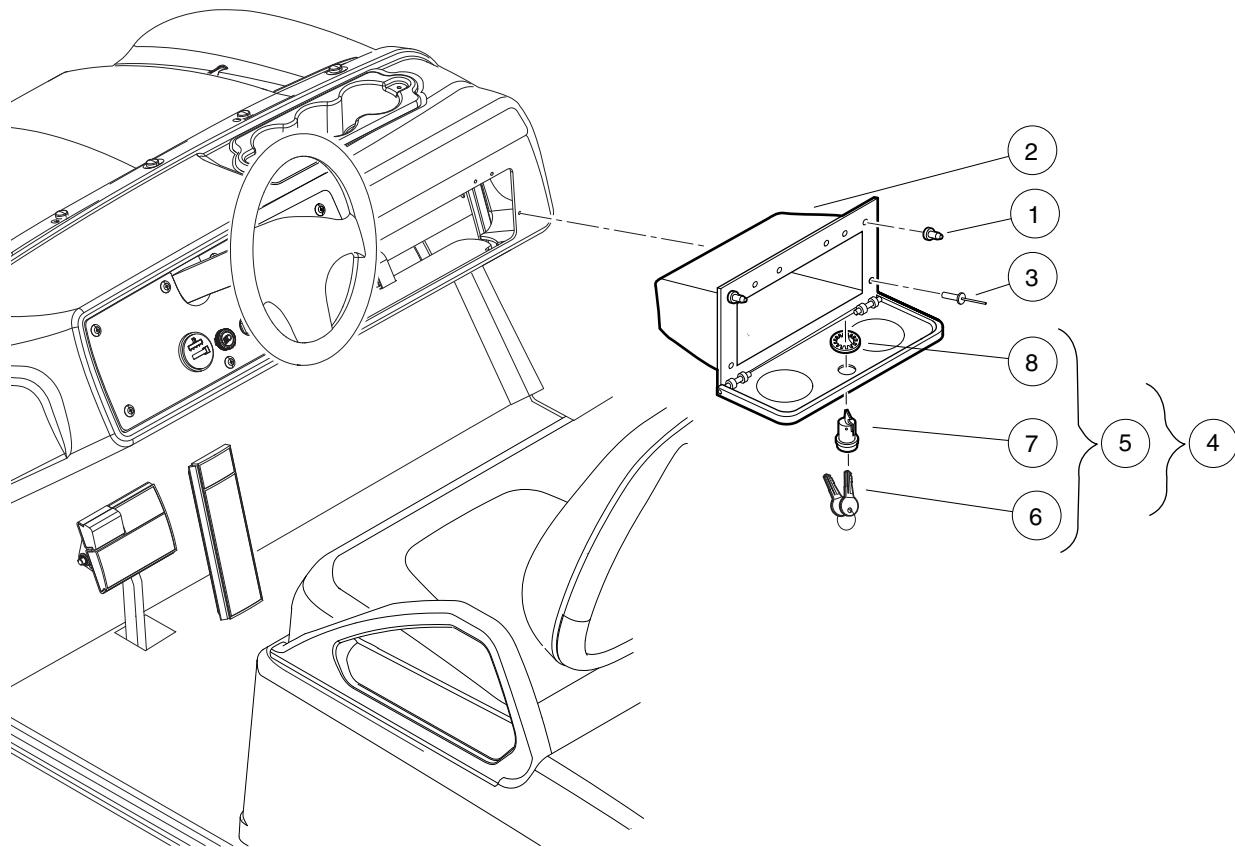
## DASH BOX

ITEM	PART NO.	DESCRIPTION	QTY
1	102810301	Box, Dash .....	1
2	102828701	Rivet .....	4

**1**

**G**

**E**



000359-001

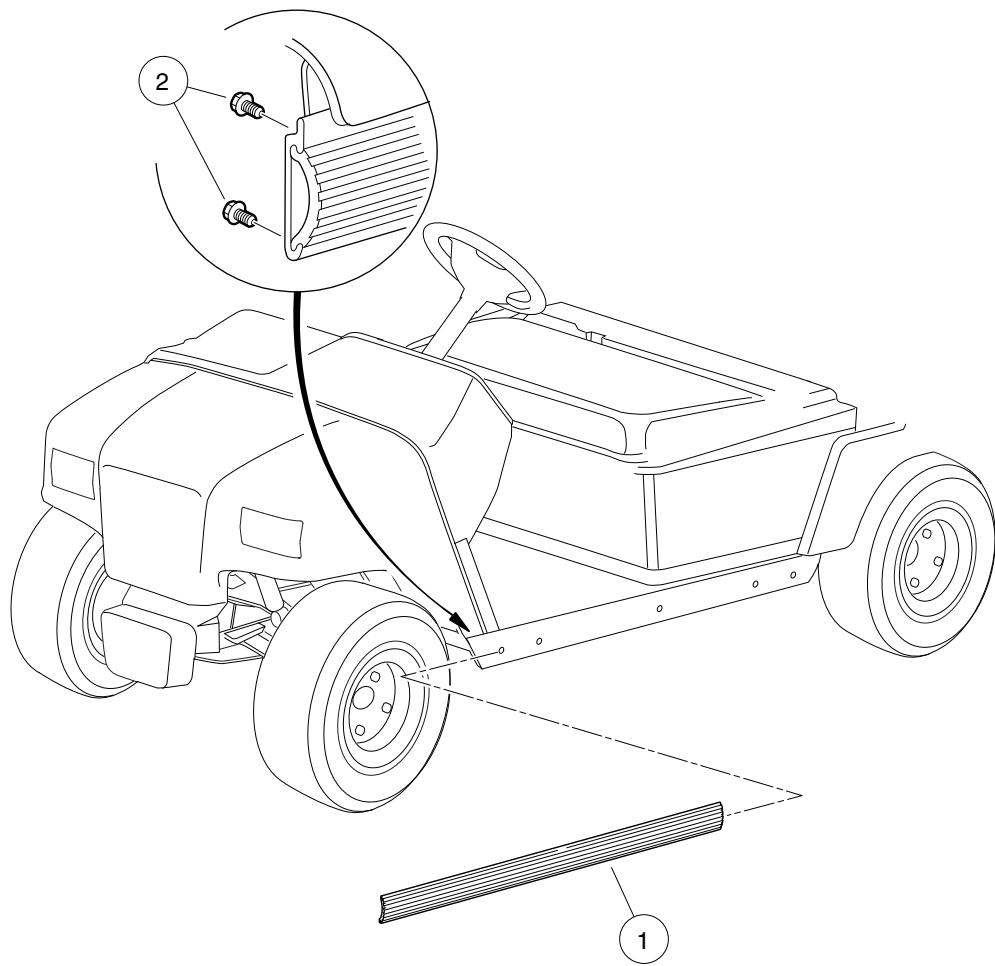
## GLOVE BOX (OPTIONAL)

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1010436	Bumper, Rubber .....	2
2	102796501	Glove Box .....	1
3	102828701	Rivet .....	6
4	102959401	Glove Box Lock / Key Kit (includes item 5) .....	1
5	N/A	Asm, Glove Box Lock / Key (includes items 6 through 8) .....	1
6	N/A	Key .....	2
7	N/A	Lock .....	1
8	N/A	Nut .....	1

**1**

**G**

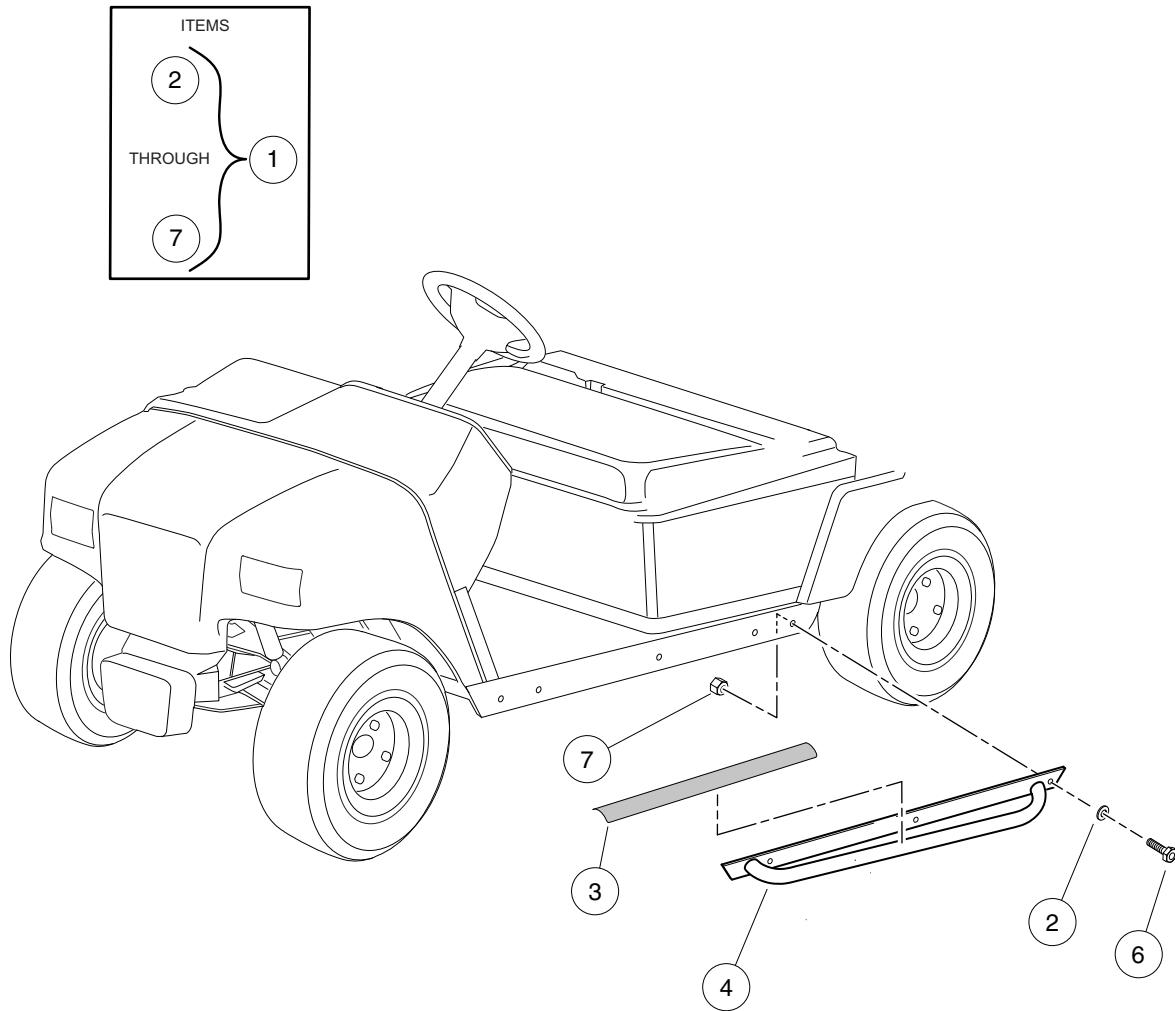
**E**



000361-002

## SIDE TRIM

ITEM	PART NO.	DESCRIPTION	QTY
1	1013983	1 2 3 4 Bumper, Side Trim .....	2
2	102310701	Screw, #8-18 x 0.375, Hex-Head Washer .....	8

**1****G****E**

000360-002

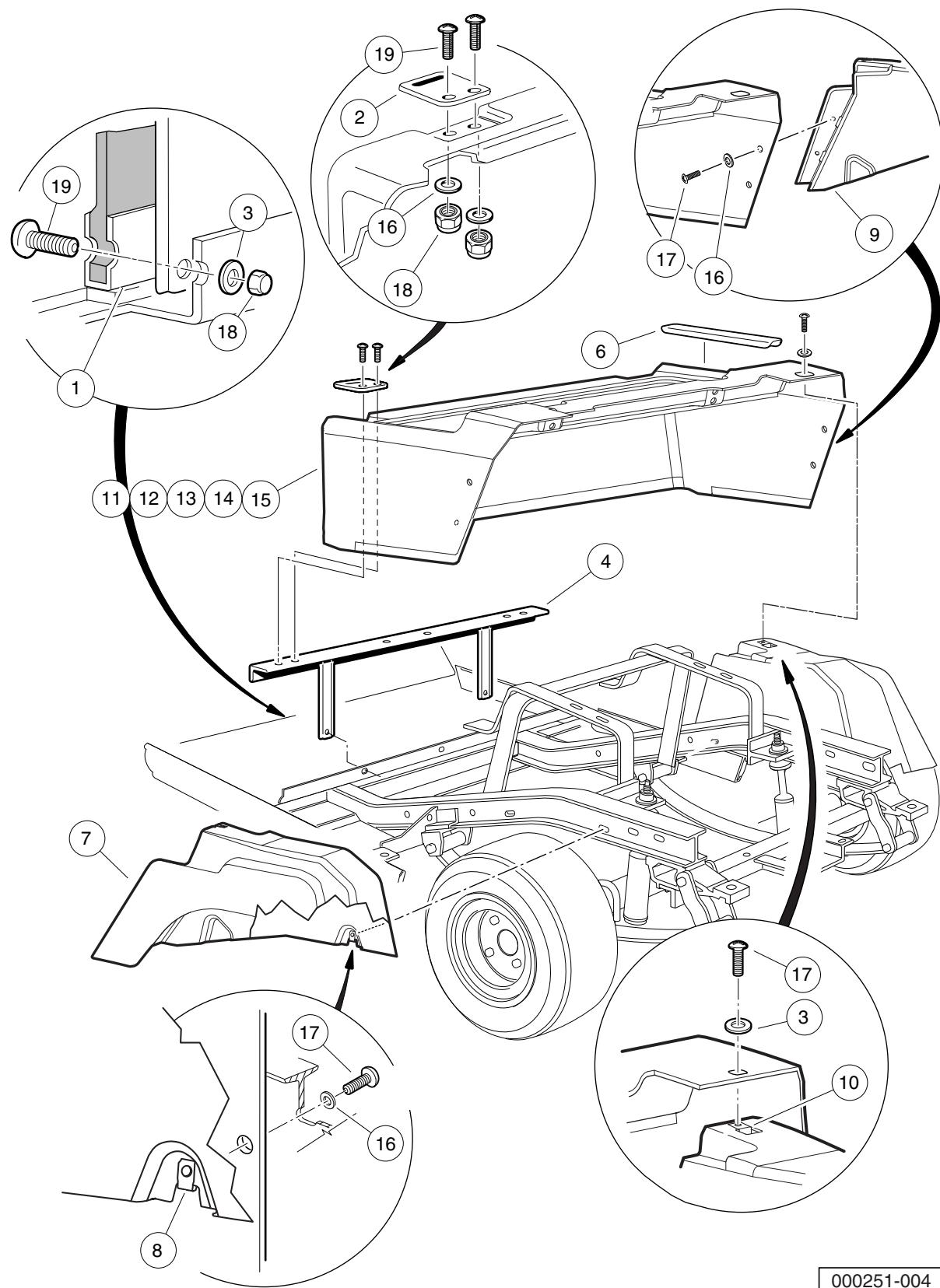
## NERF BAR (OPTIONAL)

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	102829802	Kit, Nerf Bar (black) (includes items 2 through 7) .....	1
2	1011990	Washer, 3/8 Flat .....	6
3	102355102	Tape, Non-skid .....	2
4	102829703	Nerf Bar Assy, Driver .....	1
5	102829704	Nerf Bar Assy, Passngr .....	1
6	320	Screw, 3/8-16 X 1.00 Hex-Head Cap .....	6
7	8754	Locknut, 3/8-16 Hex .....	6

1

G

E

**1****G****E**

000251-004

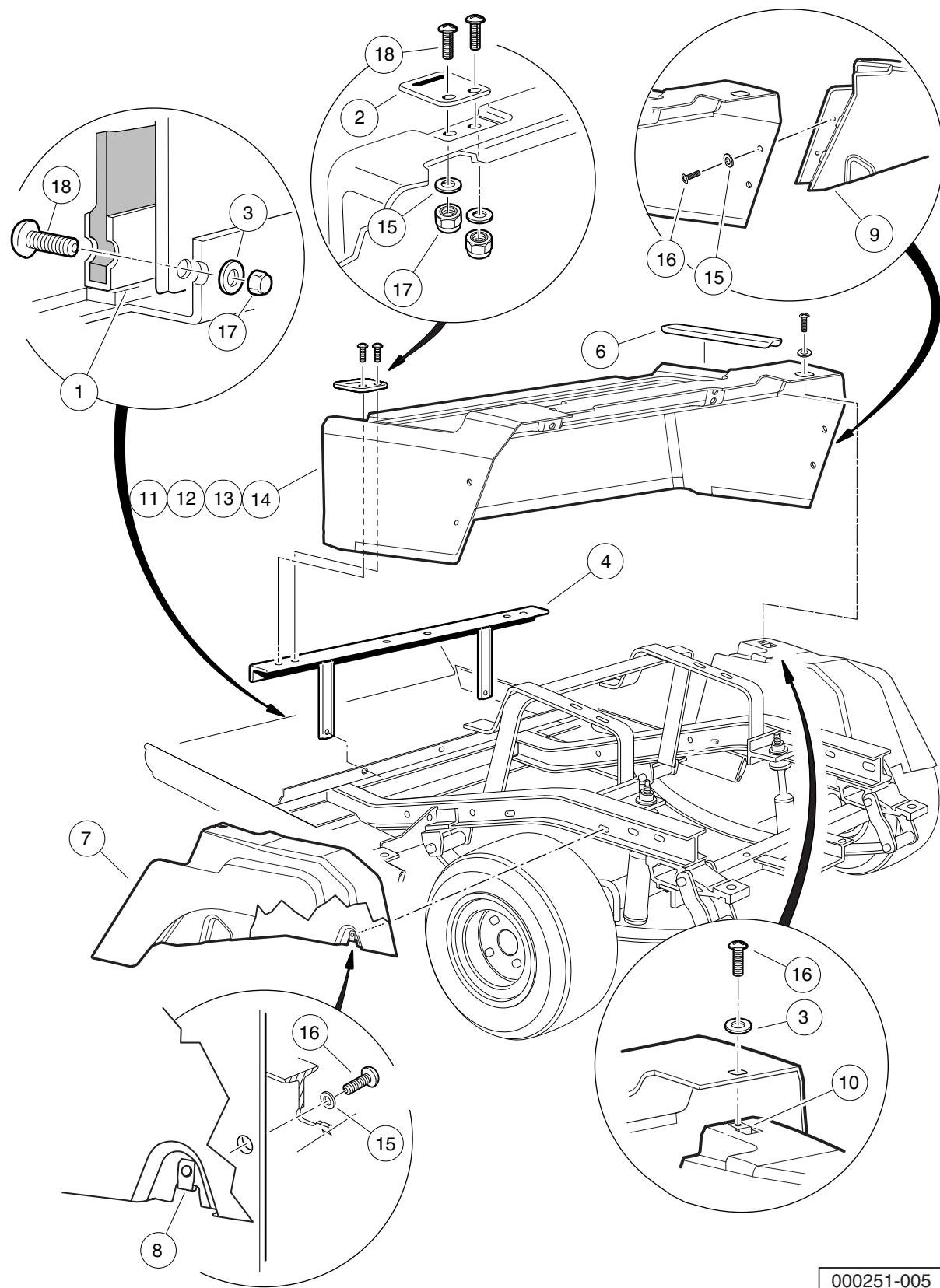
## REAR BODY AND FENDER – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1010993	Body Kick Plate .....	1
2	1012412	Body, Hinge Plate .....	2
3	1014306	Washer, 1/4" Type B Flat .....	8
4	1017141	Body Support Weldment .....	1
5	101855801	Cable Retainer .....	1
6	102221201	Wear Pad .....	2
7	102777601	Fender, Driver Side (includes item 8) .....	1
8	1016952	U-Nut, 1/4-20 .....	4
9	102777602	Fender, Passenger Side (includes item 10) .....	1
10	1016952	U-Nut, 1/4-20 .....	4
11	102796801	Body, Rear, Gas, Red .....	1
12	102796802	Body, Rear, Gas, Orange .....	1
13	102796803	Body, Rear, Gas, Green .....	1
14	102796804	Body, Rear, Gas, Classic Blue .....	1
15	102796805	Body, Rear, Gas, Olive Green .....	1
16	332	Washer, 1/4 Type A Narrow Flat .....	6
17	7847	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	8
18	8233	Locknut, 1/4-20 Nylon Insert .....	6
19	8251	Screw, 1/4-20 X 1.0 Truss-Head Machine .....	6

1

G

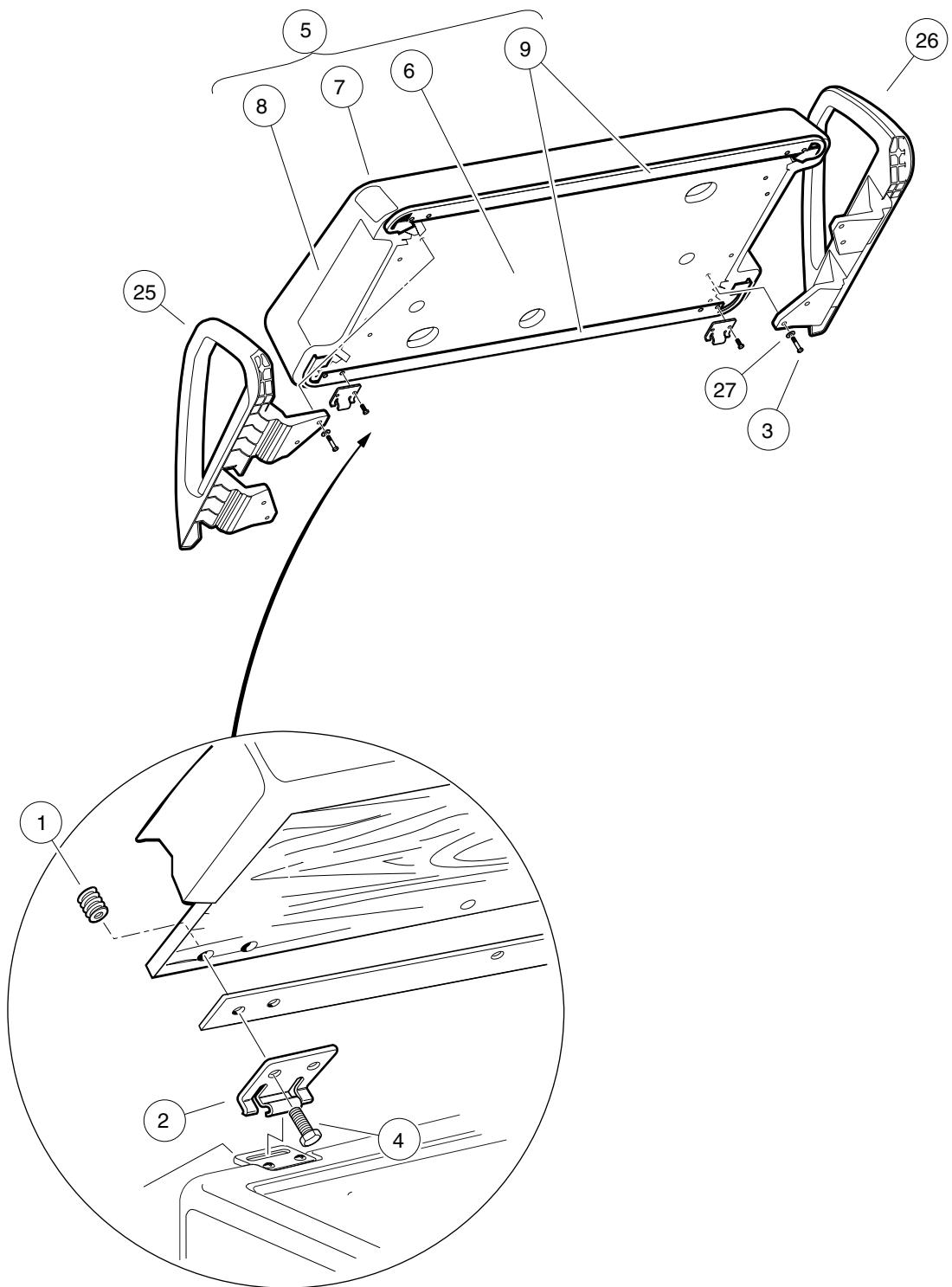
E

**1****G****E**

000251-005

## REAR BODY AND FENDER – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1010993	Body Kick Plate .....	1
2	1012412	Body, Hinge Plate .....	2
3	1014306	Washer, 1/4" Type B Flat .....	8
4	1017141	Body Support Weldment .....	1
5	101855801	Cable Retainer .....	1
6	102221201	Wear Pad .....	2
7	102777601	Fender, Driver Side (includes item 8) .....	1
8	1016952	U-Nut, 1/4-20 .....	4
9	102777602	Fender, Passenger Side (includes item 10) .....	1
10	1016952	U-Nut, 1/4-20 .....	4
11	102818301	Body, Rear, Electric, Red .....	1
12	102818302	Body, Rear, Electric, Orange .....	1
13	102818303	Body, Rear, Electric, Green .....	1
14	102818305	Body, Rear, Electric, Olive Green .....	1
15	332	Washer, 1/4 Type A Narrow Flat .....	6
16	7847	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	8
17	8233	Locknut, 1/4-20 Nylon Insert .....	6
18	8251	Screw, 1/4-20 X 1.0 Truss-Head Machine .....	6

**1****G****E**

000364-003

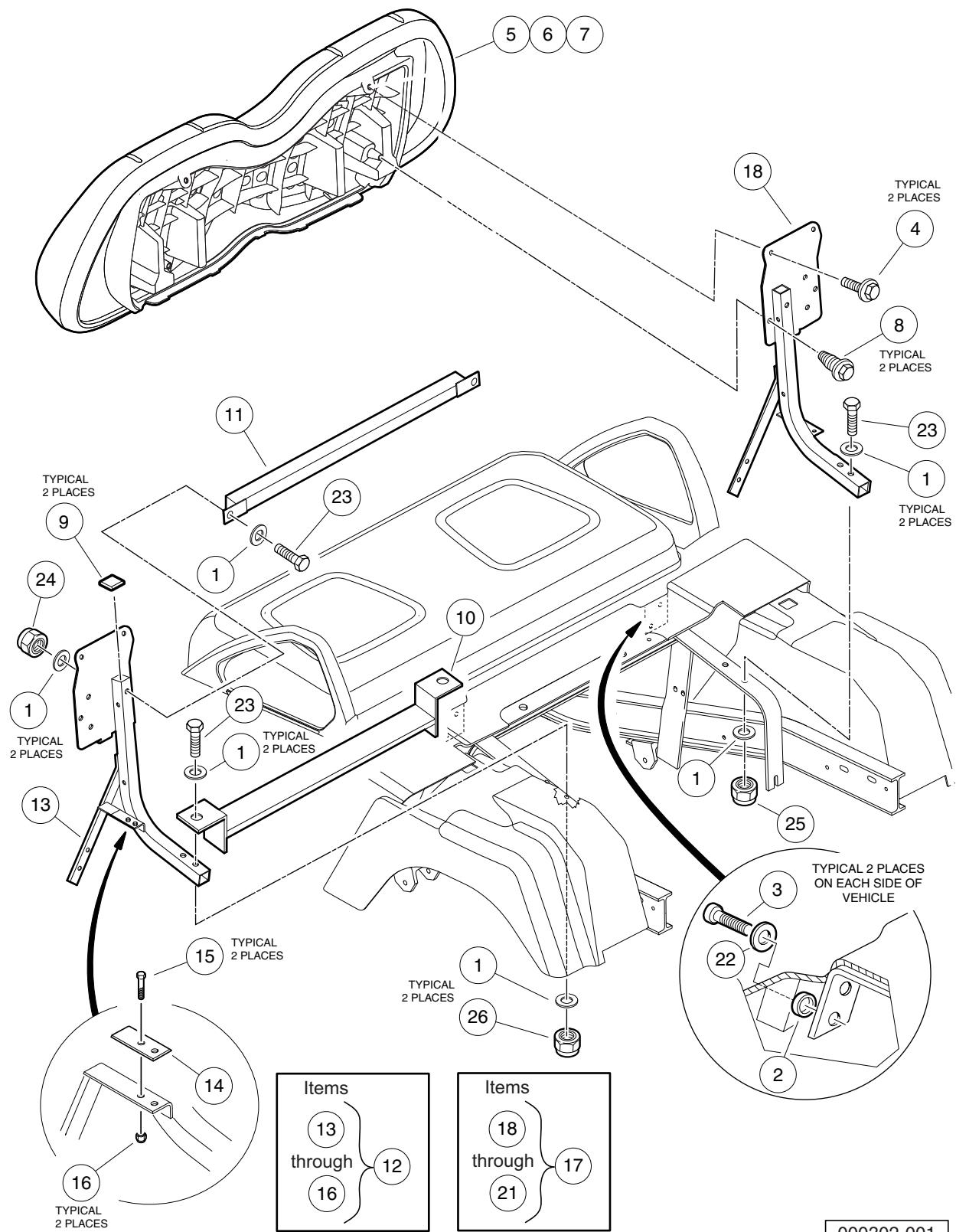
# FRONT SEAT BOTTOM AND ARMRESTS

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1010543	Insert - Wood .....	4
2	1011652	Hinge Plate .....	2
3	1016916	Screw, 1/4-20 X 1.50 Hex-Head Cap .....	8
4	101954301	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	4
5	102174201	Seat Bottom Assembly, Buff (includes items 6 through 9) .....	1
6	N/A	Plywood Assy .....	1
7	101998211	Vinyl Cover Seat Btm - Buffsvc .....	1
8	N/A	Foam, Seat .....	1
9	101998501	Gasket, Seat .....	2
10	102174202	Seat Bottom Assembly, White (includes items 11 through 14) .....	1
11	N/A	Plywood Assy .....	1
12	101998212	Vinyl Cover, Seat Bottom, White .....	1
13	N/A	Foam, Seat .....	1
14	101998501	Gasket, Seat .....	2
15	102174204	Seat Bottom Assembly, Black (includes items 16 through 19) .....	1
16	N/A	Plywood Assy .....	1
17	101998214	Vinyl Cover, Seat Bottom, Black .....	1
18	N/A	Foam, Seat .....	1
19	101998501	Gasket, Seat .....	2
20	102174205	Seat Bottom Assembly, Gray (includes items 21 through 24) .....	1
21	N/A	Plywood Assy .....	1
22	101998215	Vinyl Cover, Seat Bottom, Gray .....	1
23	N/A	Foam, Seat .....	1
24	101998501	Gasket, Seat .....	2
25	103246701	Hip Restraint, Drvr Side .....	1
26	103246801	Hip Restraint, Pass Side .....	1
27	332	Washer, 1/4 Type A Narrow Flat .....	8
		Note: Sub-components contained in items 10, 15, and 20 are the same as those shown for item 5, except for the vinyl seat covers.	

1

G

E

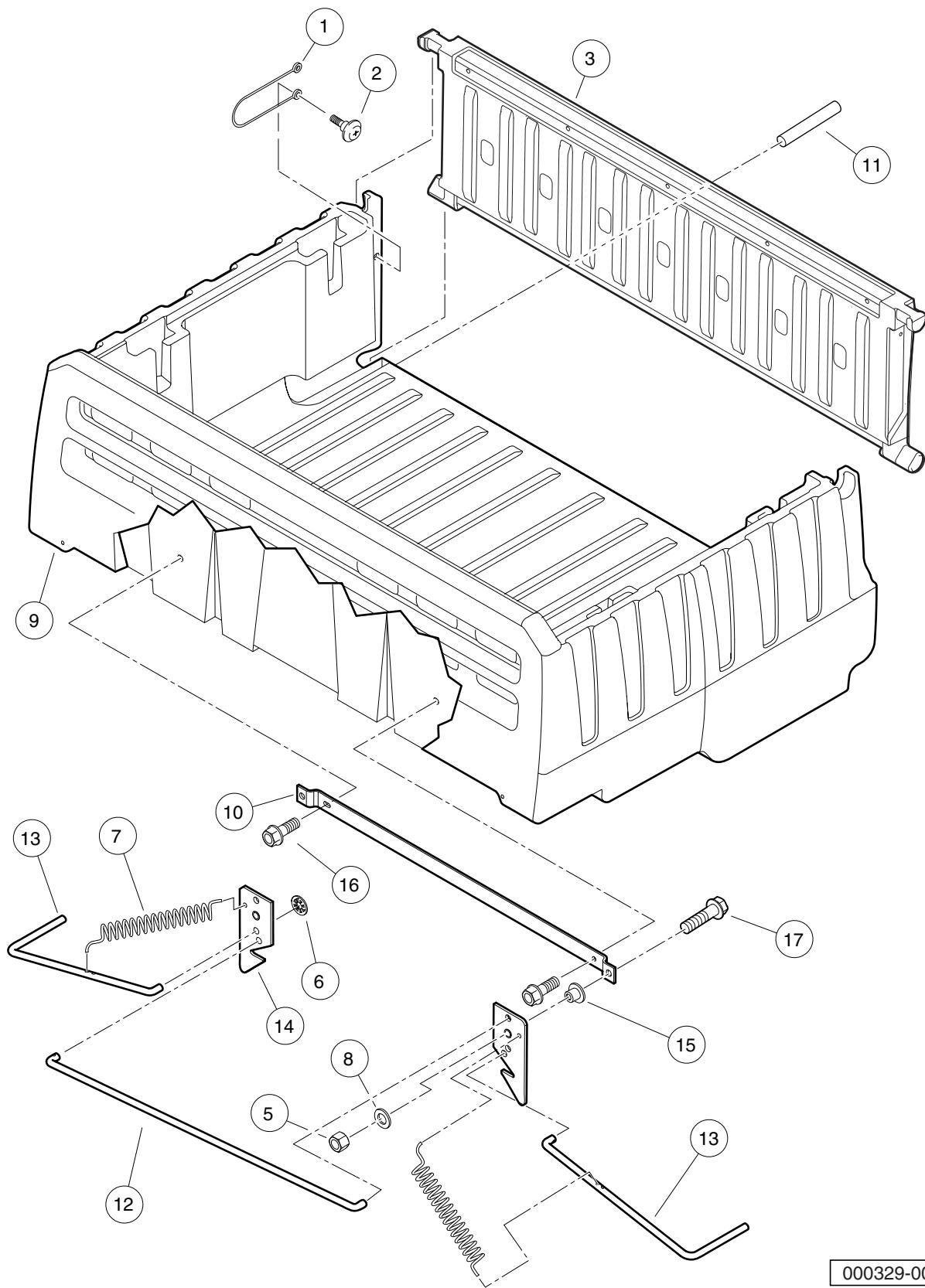


*Page 1-24*

2008 Carryall 232 Gasoline and Electric Vehicle Illustrated Parts List

# SEAT BACK

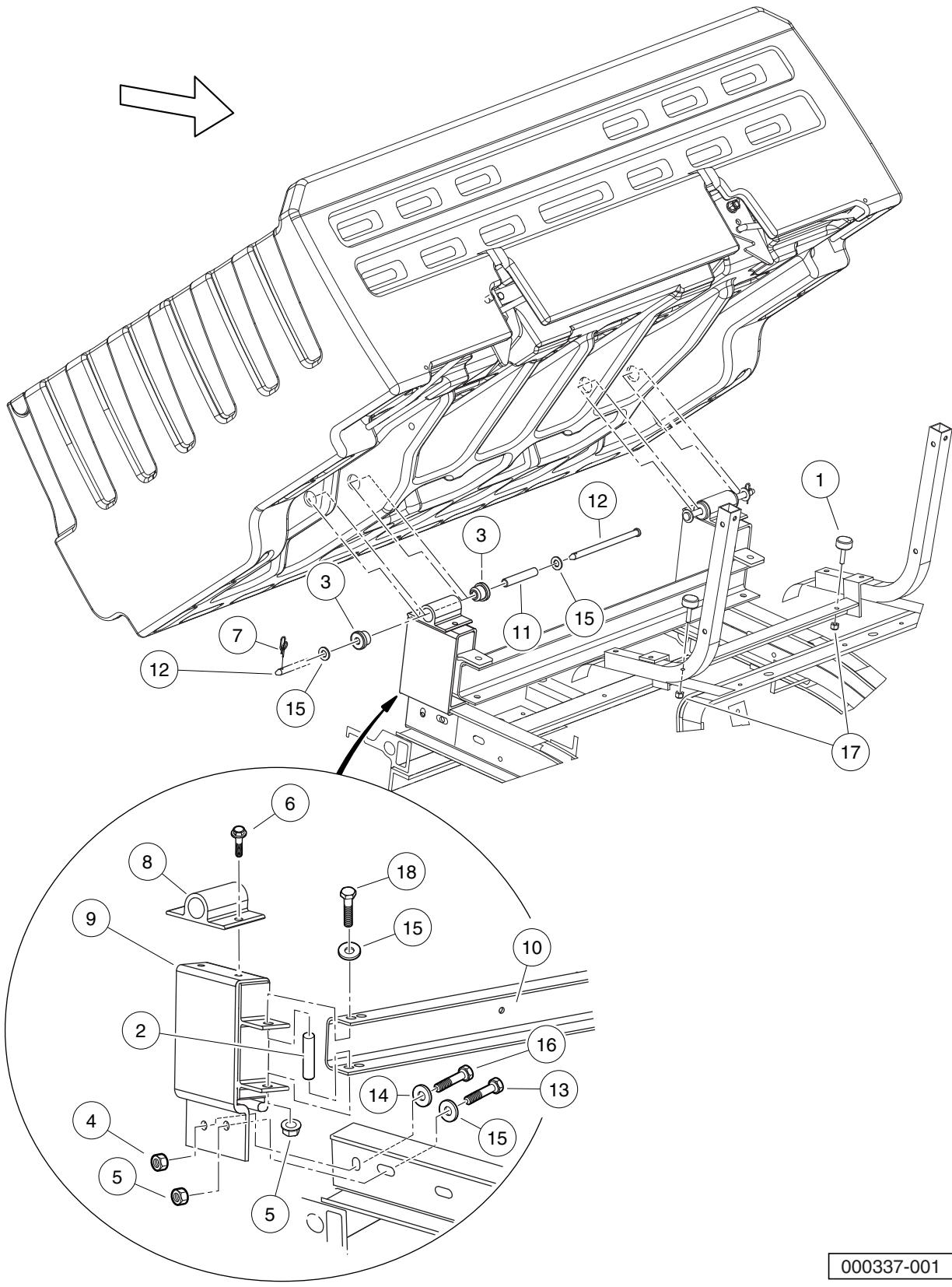
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	1
1	1011931	Washer, 1/4 Flat .....	12
2	1017774	Body Spacer .....	4
3	101910401	Screw, 5/16-18 X 1.25 Thrd Frm .....	4
4	102296530	Screw - M6 X 1.0 X 30 Sems .....	2
5	102503221	Service Backrest Asm, Beige .....	1
6	102503222	Service Backrest Asm, White .....	1
7	102503224	Service Backrest Asm, Gray .....	1
8	102544201	Screw, M6 Hex .....	2
9	102581201	Plug, Square - 25.4 mm .....	2
10	102796101	Weldment, Bed Support .....	1
11	102816201	Seat Support, Cross Brace .....	1
12	102913101	Seat Support W/striker, Drv (includes items 13 through 16) .....	1
13	102796301	Seat Support, Driver-Side .....	1
14	102840301	Striker Plate .....	1
15	7847	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	2
16	8233	Locknut, 1/4-20 Nylon Insert .....	2
17	102913102	Support, Seat, Right (passenger) (includes items 18 through 21) .....	1
18	102796302	Seat Support, Passenger-Side .....	1
19	102840301	Striker Plate .....	1
20	7847	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	2
21	8233	Locknut, 1/4-20 Nylon Insert .....	2
22	1241	Washer, 5/16 Type A Flat .....	4
23	7311	Screw, 1/4-20 X 2.00 Hex-Head Cap .....	6
24	7473	Locknut, 5/16-18 Nylon Insert .....	2
25	8233	Locknut, 1/4-20 Nylon Insert .....	6
26	8963	Screw, 5/16-18 X 1.75 Hex-Head Cap .....	2

**1****G****E**

000329-002

# CARGO BED

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	1
1	102779001	Lanyard, Tailgate .....	2
2	102779401	Bolt Lanyard .....	2
3	102779501	Tailgate .....	1
4	103189901	Bed Assembly (includes items 5 through 17) .....	1
5	1010138	Locknut, 3/8-16 Dimpled .....	2
6	1013876	Pushnut, 3/8 .....	4
7	N/A	Extension, Spring Latch .....	2
8	N/A	Washer, 3/8 Flat Type A .....	2
9	N/A	Bed .....	1
10	N/A	Support, Latch Link .....	1
11	N/A	Pin, Support .....	2
12	N/A	Rod, Long Link .....	1
13	N/A	Rod, Bed Lift, Short Bent .....	2
14	N/A	Catch, Tilt Bed .....	2
15	N/A	Bearing, Bronze, 1/2x9/32 .....	2
16	304	Screw, 1/4-20 X 1.0 Hex-Head Cap .....	2
17	320	Screw, 3/8-16 X 1.00 Hex-Head Cap .....	1
18	103317501	Kit, Plastic Bed Box Latch (includes items 19 through 22) .....	1
19	1010545	Screw, Hex Washer Head 1/4-14 X .75 .....	2
20	1011578	Washer, 5/16 Type B Flat .....	2
21	103293501	Spring, Tilt Latch 3.4 Lb/in .....	2
22	103317601	Instr, Bed Box Field Kit .....	1

**1****G****E**

000337-001

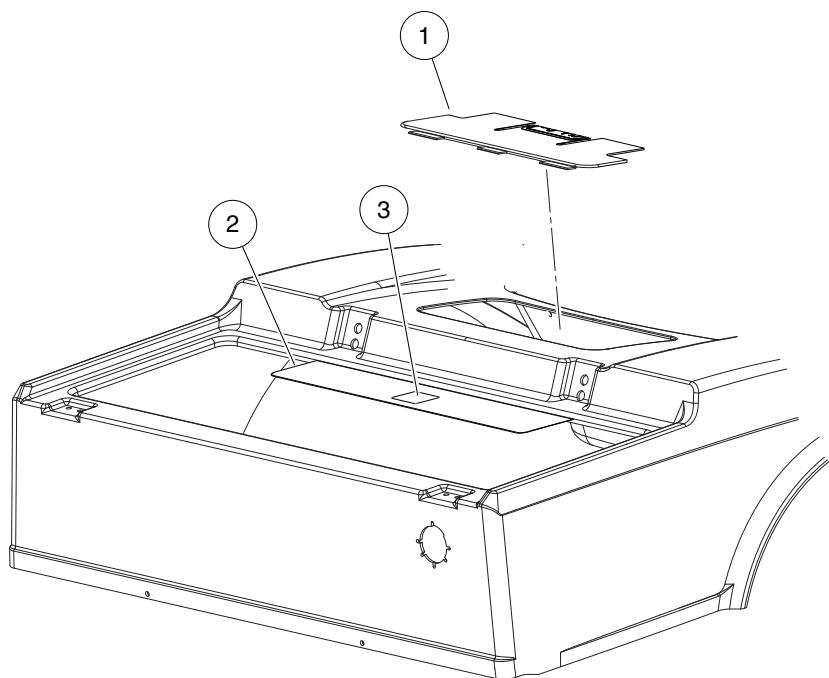
# BED HINGE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1010878	Bumper, Rubber .....	2
2	1012303	Bushing, Steel .....	2
3	1015583	Bushing, Urethane .....	4
4	101835601	Locknut, 1/4-20 Hex Whiz .....	2
5	102065901	Locknut, 3/8-16 Flanged Dimple .....	4
6	102289001	Screw, M8X1.25X30, Hex .....	4
7	102289301	Rue Ring - 1/2" .....	2
8	102797201	Hinge, Roto Bed .....	2
9	102820301	Support, Hinge .....	2
10	102820501	Stiffener, Bed Support .....	1
11	102821101	Bushing, Steel .....	2
12	102823201	Pin, Clevis, 3/8 .....	2
13	320	Screw, 3/8-16 X 1.00 Hex-Head Cap .....	2
14	332	Washer, 1/4 Type A Narrow Flat .....	2
15	334	Washer, 3/8 Type A Flat .....	8
16	7847	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	2
17	8233	Locknut, 1/4-20 Nylon Insert .....	2
18	8755	Screw, 3/8-16 X 3.375 Hex Cap .....	2

**1**

**G**

**E**



000819-002

## ACCESS PANEL AND HEAT SHIELD

ITEM	PART NO.	DESCRIPTION	QTY
1	N/A	1 2 3 4 Access Panel - Black, Cut .....	1
2	101806901	Shield, Heat .....	1
3	101960501	Decal, Rotating Parts/Hot Manifold .....	1

***1***

***G***

***E***

# **WHEELS AND TIRES**

---

**2**

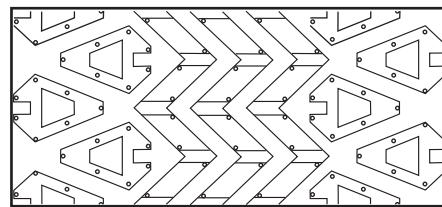
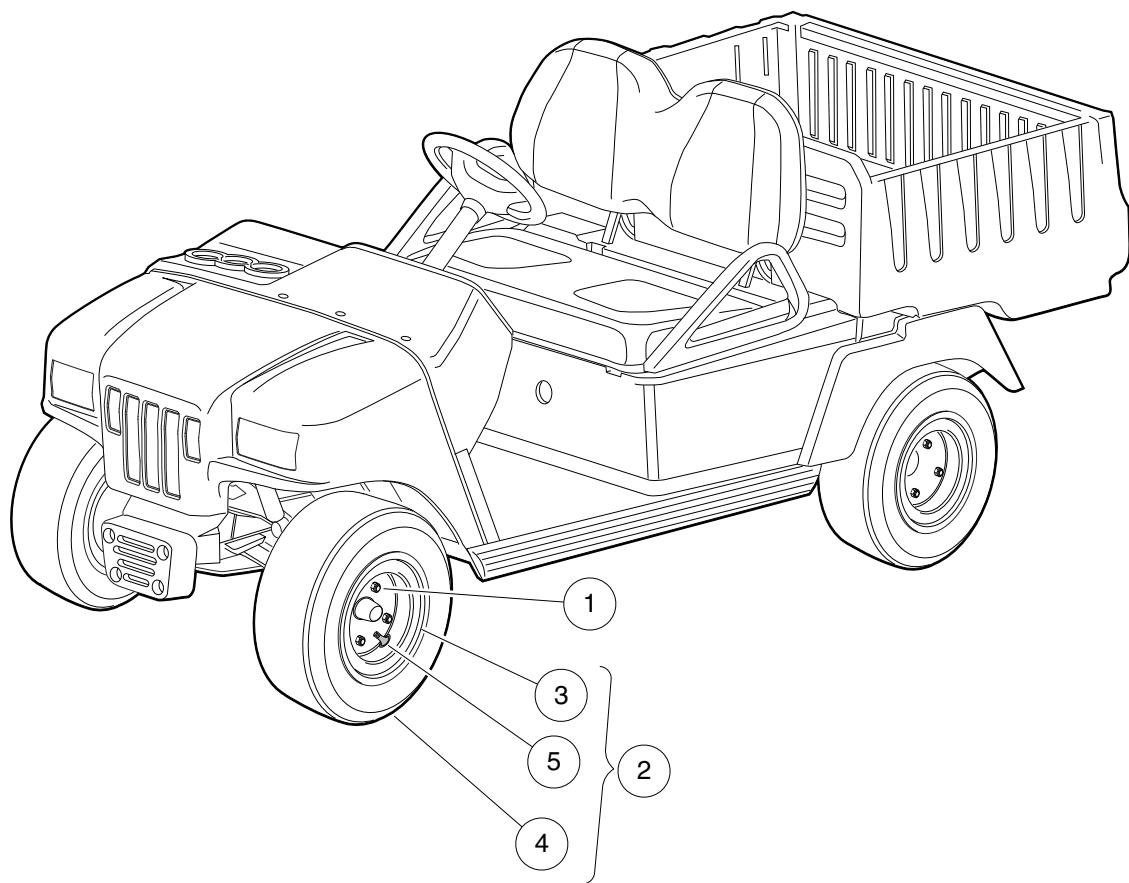
**G**

**E**

**2**

**G**

**E**



000224-002

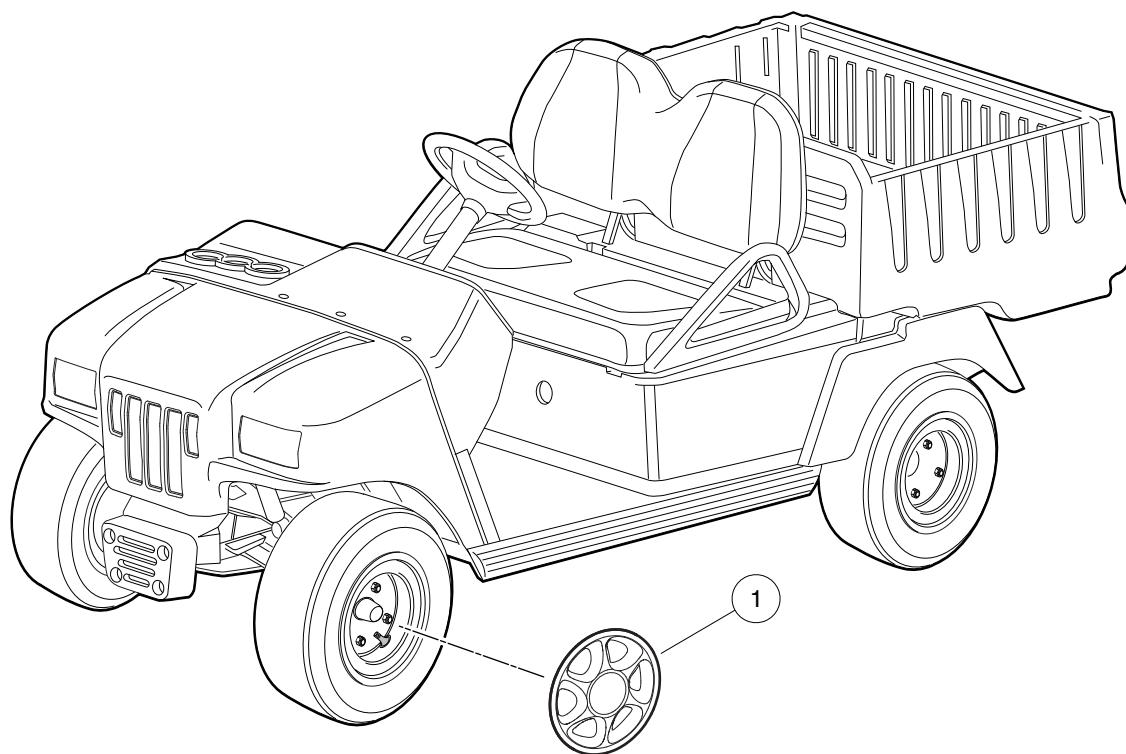
## WHEELS AND TIRES

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1010984	.500-20 Unf Lug Nut .....	16
2	102819101	Tire Assembly, All Trail II (includes items 3 through 5) .....	4
3	102815801	Wheel Rim, Gray .....	1
4	102815901	Tire, Unmounted, All Trail II .....	1
5	7310	Valve Stem .....	1

**2**

**G**

**E**



000318-002

## HUBCAP (OPTIONAL)

ITEM	PART NO.	DESCRIPTION	QTY	
1	102861401	1 2 3 4 Wheel Cover, Chrome Elite .....	4	<b>2</b> <b>G</b> <b>E</b>

**2**

**G**

**E**

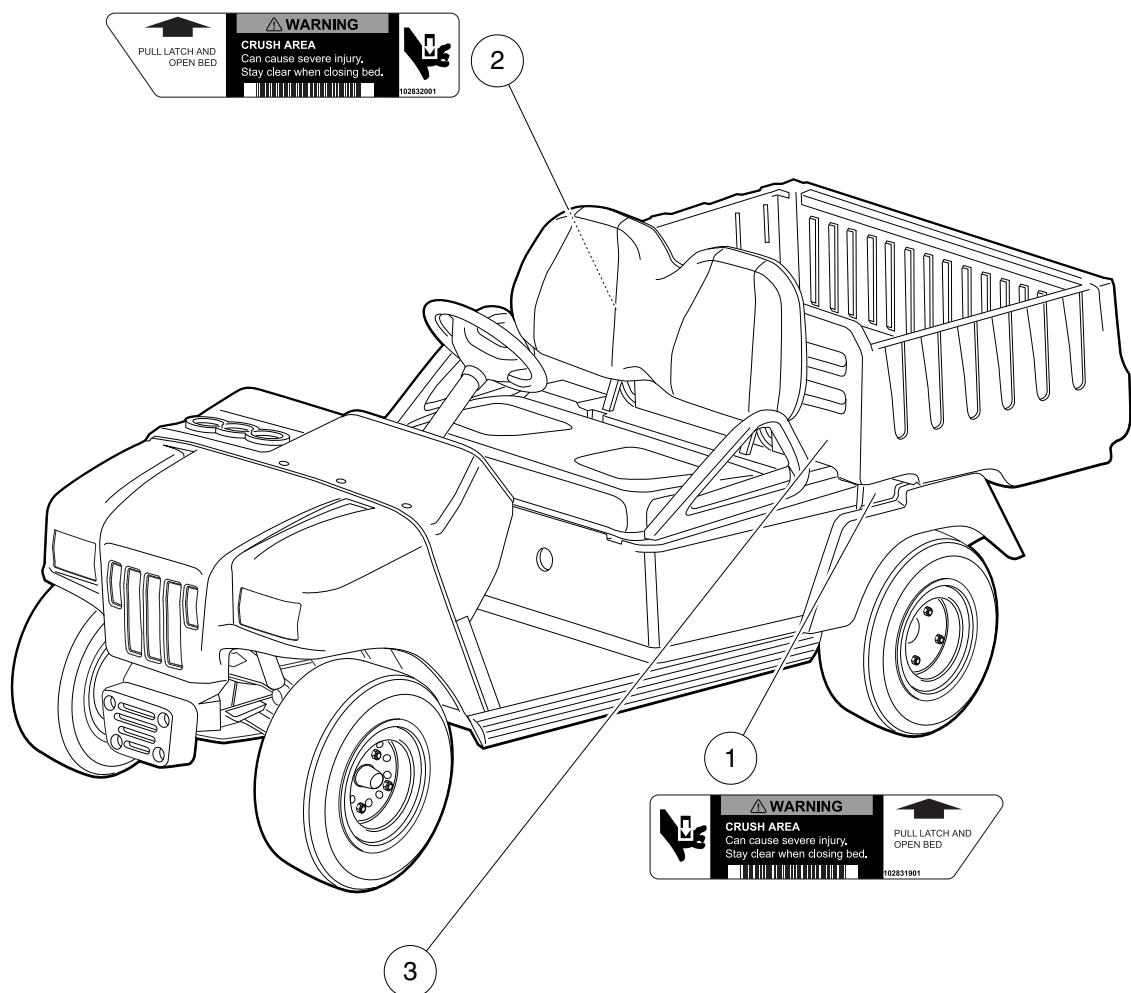
# **DECALS**

---

**3**

**G**

**E**

**3****G****E****NOTICE**

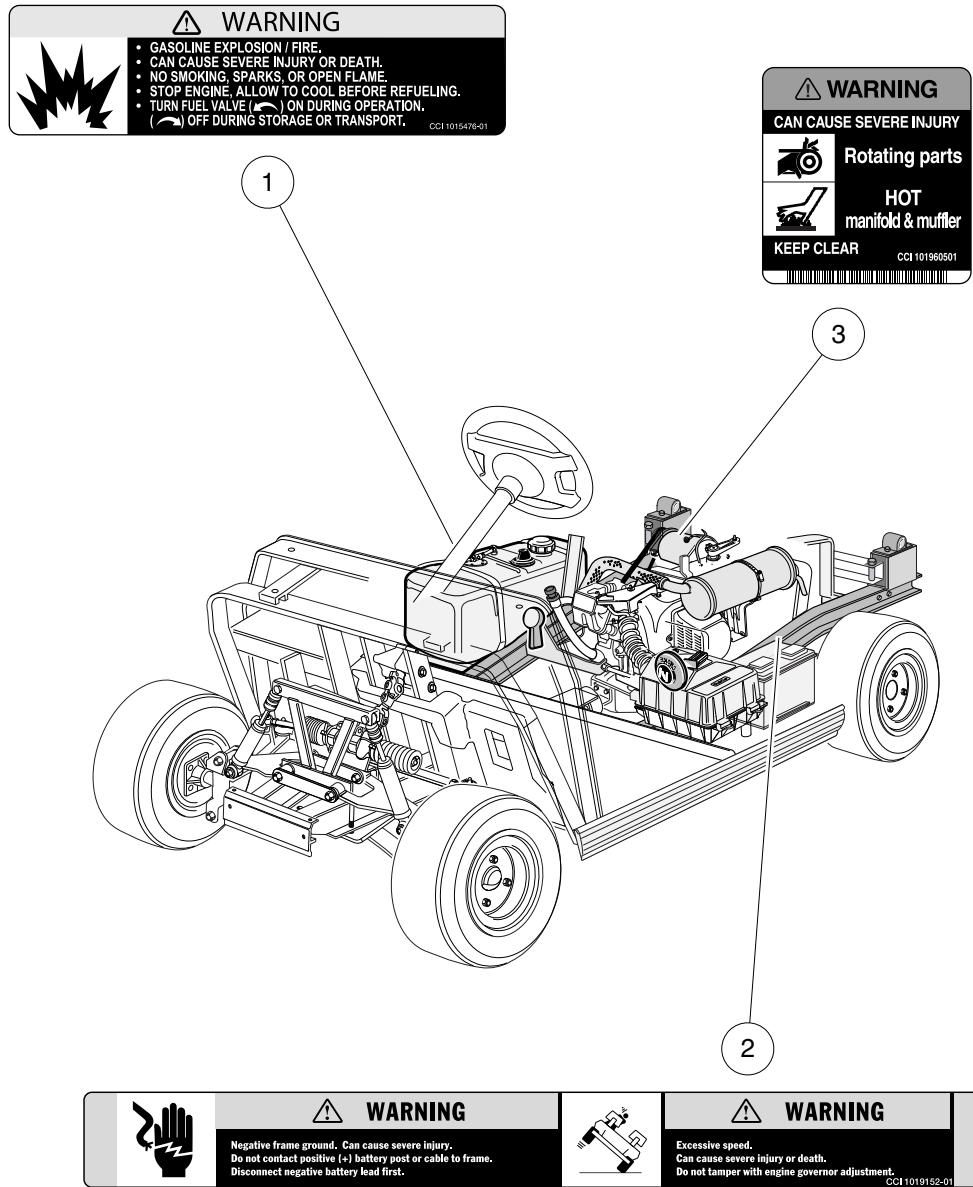
- THE OWNER/OPERATOR should maintain, lubricate, adjust, and operate the vehicle as detailed in the vehicle owners manual.

CCI 102833301

000225-002

## SAFETY DECALS – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY	
1	102831901	Decal, Crush Warning, Driver-Side .....	1	<b>3</b>
2	102832001	Decal, Crush Warning, Passenger-Side .....	1	<b>G</b>
3	102833301	Decal, Maintenance .....	1	<b>E</b>

**3****G****E**

000226-001

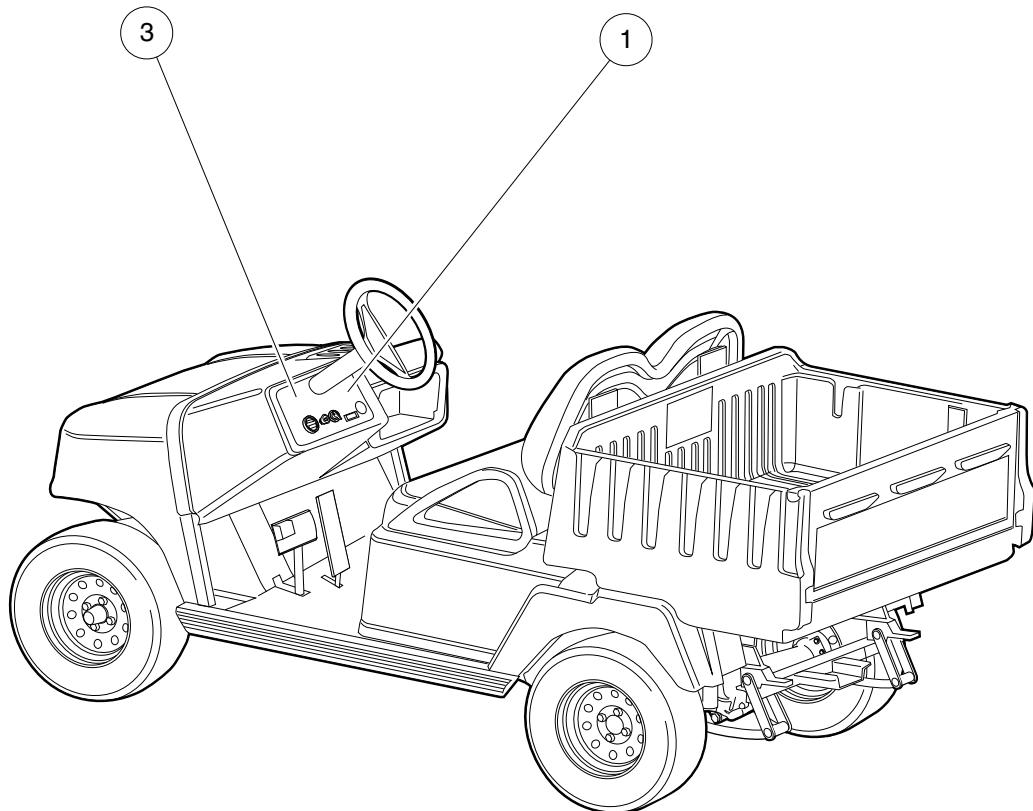
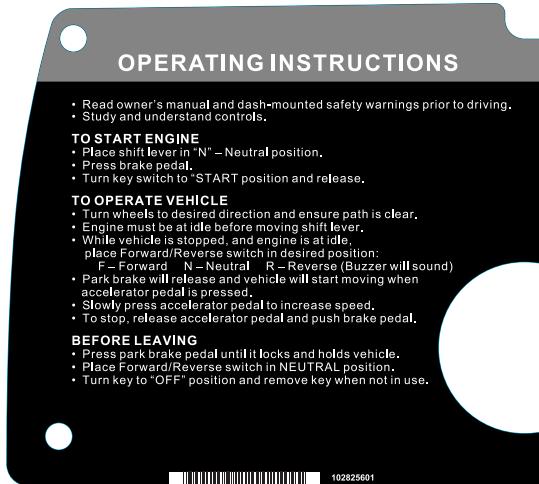
## SAFETY DECALS – GASOLINE VEHICLES, CONTINUED

ITEM	PART NO.	DESCRIPTION	QTY	
1	101547601	1 2 3 4 Decal, Gasoline Explosion/Fire Warning .....	1	<b>3</b>
2	101915201	Decal, Frame Ground and Governor Warning .....	1	<b>G</b>
3	101960501	Decal, Rotating Parts/Hot Manifold .....	1	<b>E</b>

3

G

E



000227-002

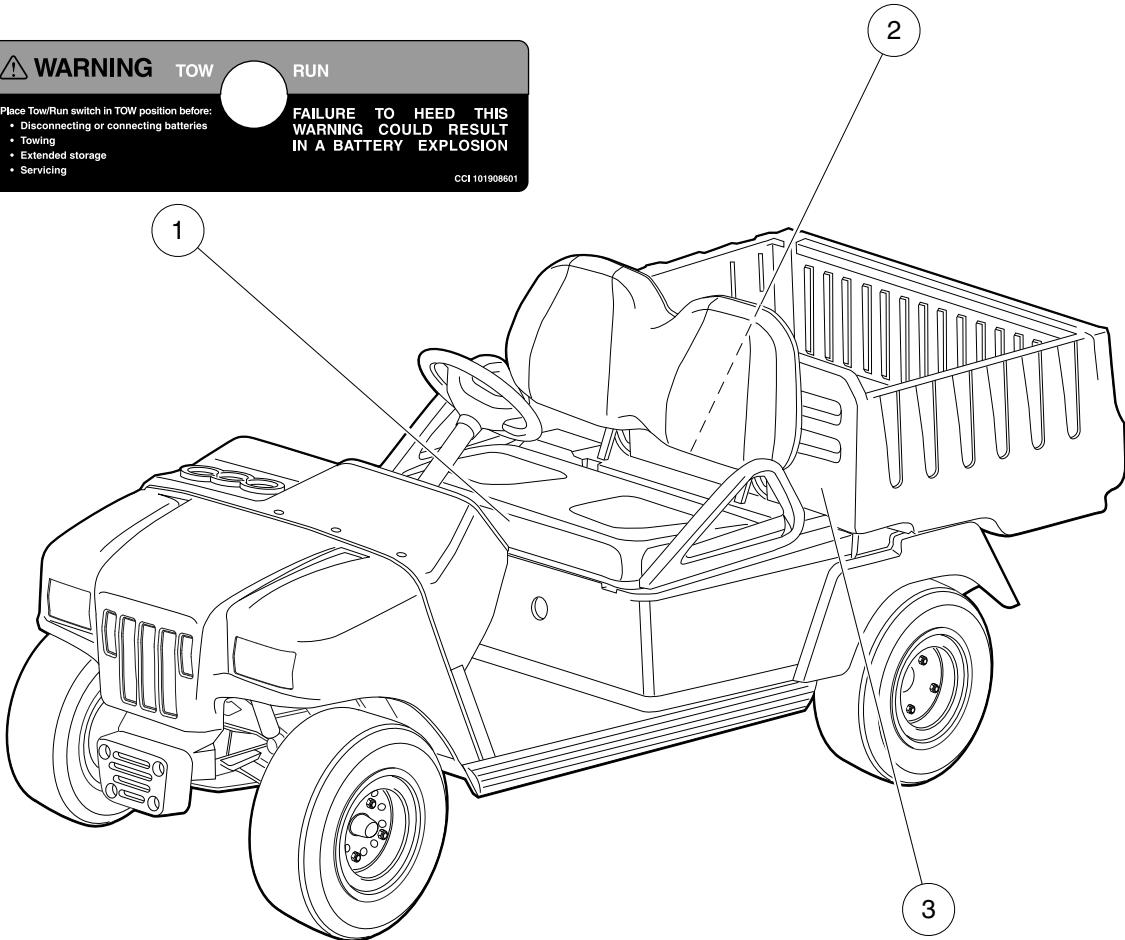
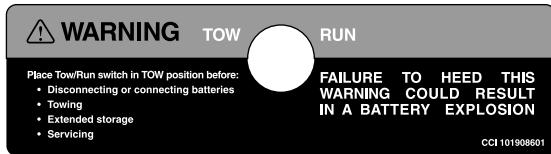
## SAFETY DECALS – GASOLINE VEHICLES, CONTINUED

ITEM	PART NO.	DESCRIPTION	QTY	
		<b>1 2 3 4</b>		<b>3</b>
1	102825401	Decal, Warning, Instrument Panel .....	1	<b>G</b>
2	102825402	Decal, Warning, Instrument Panel .....	1	<b>E</b>
3	102825601	Decal, Operating Instructions, Instrument Panel .....	1	
Note: Item 2 is for use on vehicles equipped with a 12-volt accessory outlet.				

**3****G****E****NOTICE**

Do not operate vehicle without this cover properly installed.  
Do not direct water stream in this area; will cause damage to components.

CCI 101931501

**NOTICE**

- THE OWNER/OPERATOR should maintain, lubricate, adjust, and operate the vehicle as detailed in the vehicle owners manual.

CCI 102833301

000228-002

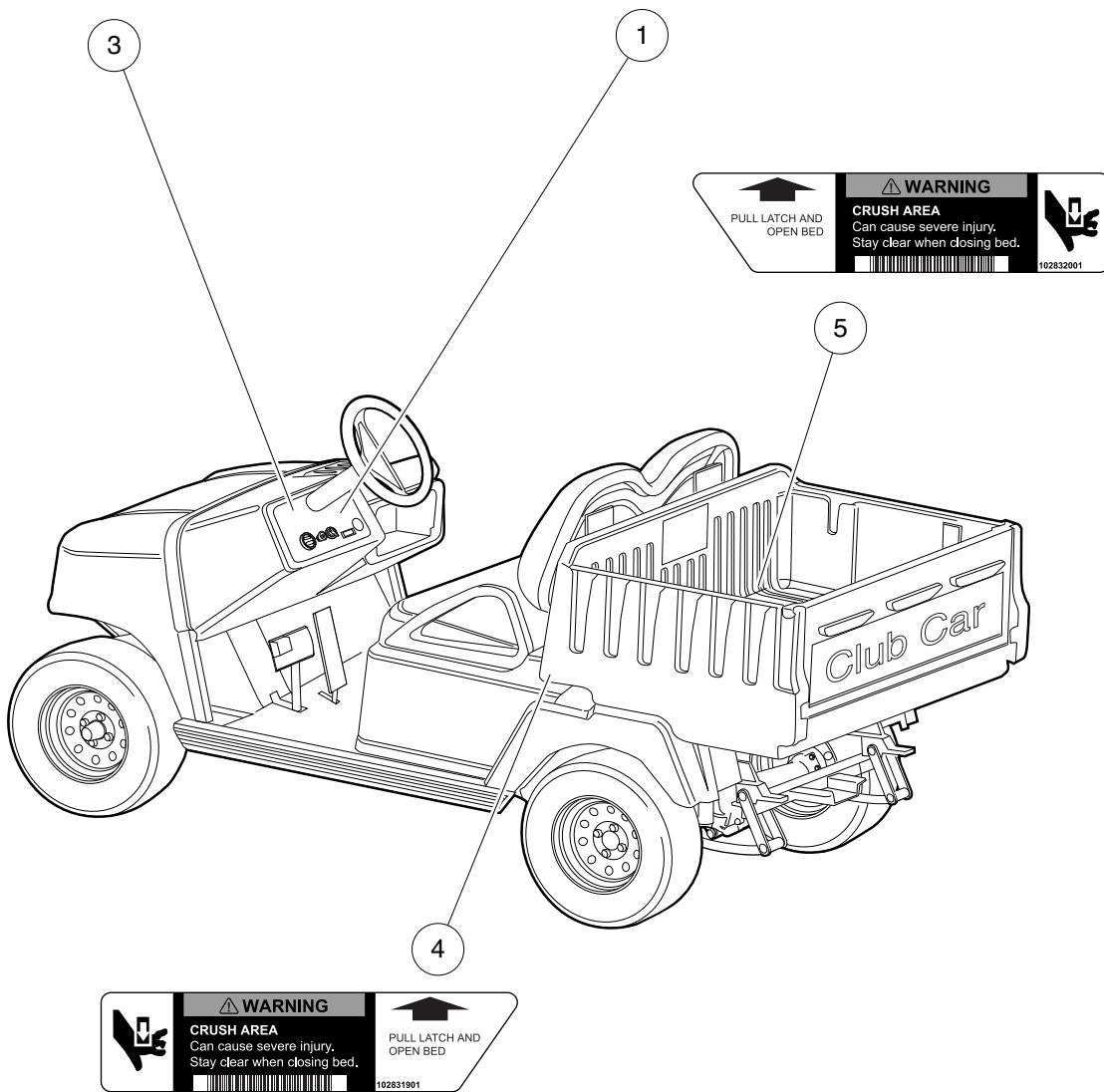
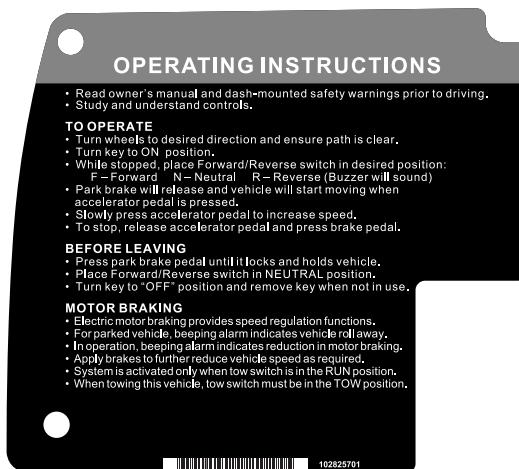
## SAFETY DECALS – ELECTRIC VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY	
1	101908601	Decal, Tow/Run Switch Warning .....	1	<b>3</b>
2	101931501	Decal, Component Cover .....	1	<b>G</b>
3	102833301	Decal, Maintenance .....	1	<b>E</b>

3

G

E



000229-002

## SAFETY DECALS – ELECTRIC VEHICLES, CONTINUED

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	102825501	Decal, Warning, Instrument Panel .....	1
2	102825502	Decal, Warning, Instrument Panel .....	1
3	102825701	Decal, Operating Instructions, Instrument Panel .....	1
4	102831901	Decal, Crush Warning, Driver-Side .....	1
5	102832001	Decal, Crush Warning, Passenger-Side .....	1
Note: Item 2 is for use on vehicles equipped with a 12-volt accessory outlet.			

**3**

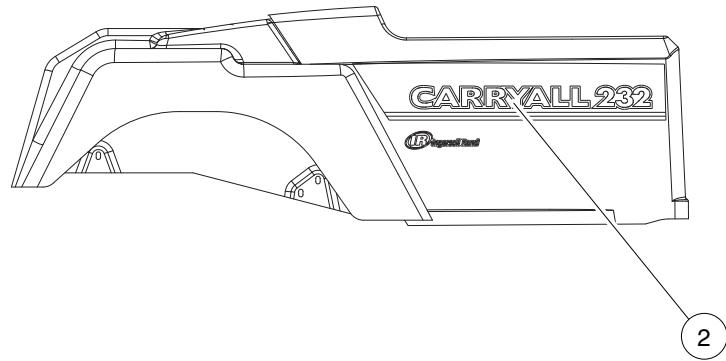
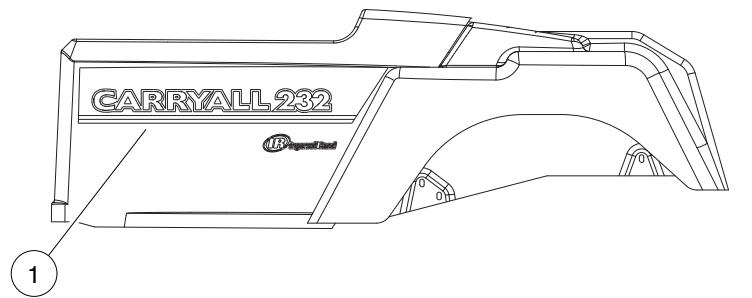
**G**

**E**

**3**

**G**

**E**



000299-003

## LOGO DECALS

ITEM	PART NO.	DESCRIPTION	QTY	
1	103018301	Decal, Carryall 232, Driver-Side .....	1	<b>3</b>
2	103018401	Decal, Carryall 232, Passenger-Side .....	1	<b>G</b>
		1 2 3 4		<b>E</b>

**3**

**G**

**E**

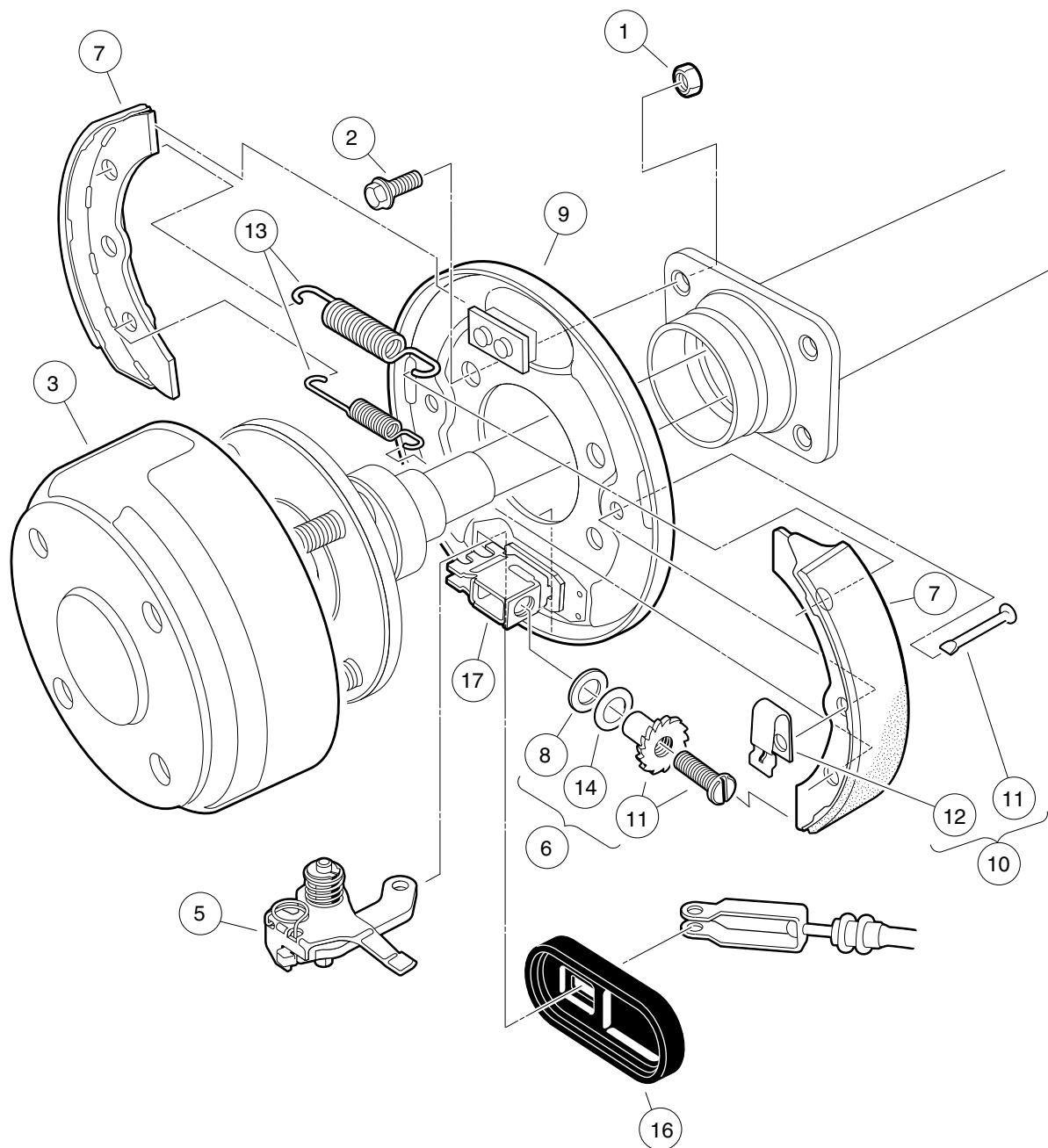
**4**

**G**

**E**

---

# BRAKE SYSTEMS

**4****G****E**

000186-001

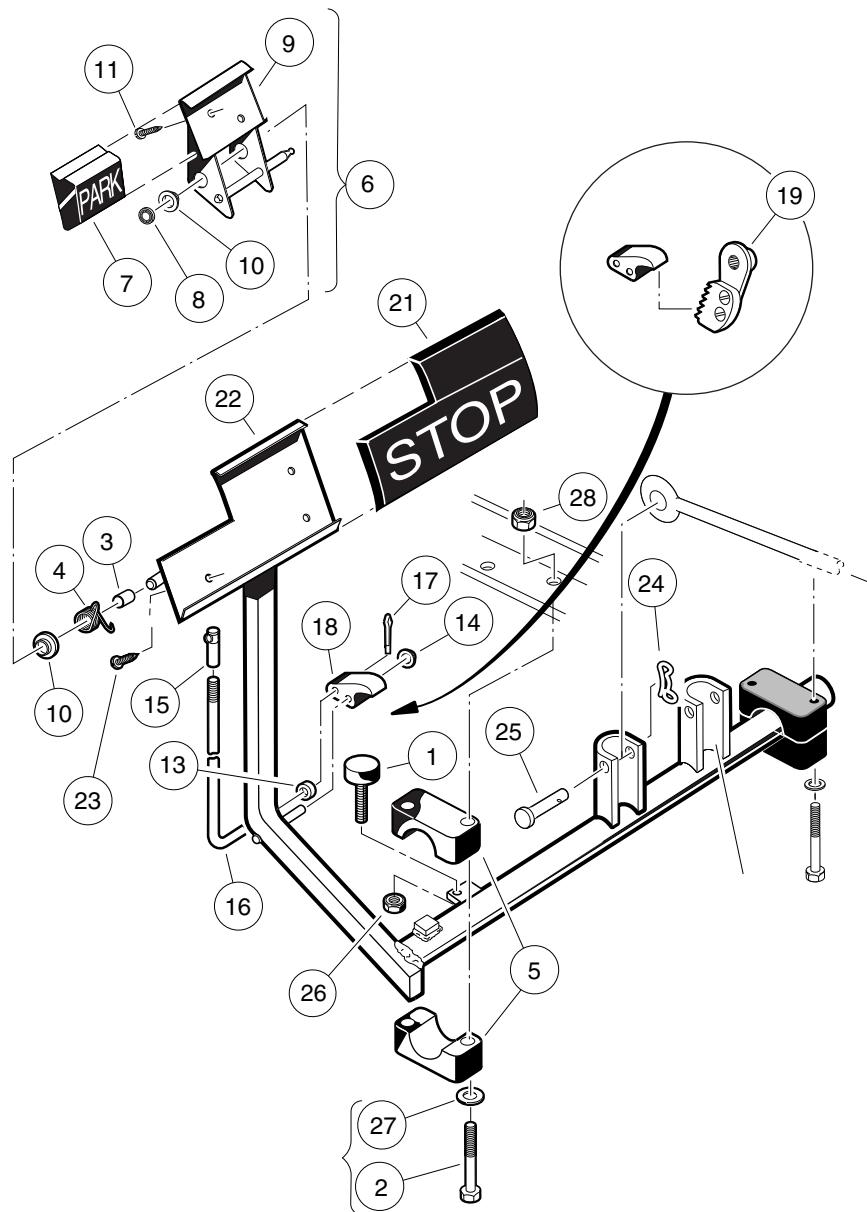
# REAR BRAKE ASSEMBLY, SELF-ADJUSTING – VEHICLE WITH 2-WHEEL BRAKES

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1013924	Nut, 5/16-24 Hex Head Cone .....	8
2	1014153	Bolt, Brake Cluster Mounting .....	8
3	101791101	Drum without Center Hole, Brake .....	2
4	103380201	Asm, Brake Cluster, Mech, Drvr (includes items 5 through 17) .....	1
5	101815501	Lever Assembly, Self-Adjusting Brake, Right (Passenger) .....	1
6	101816501	Adj Mechanism, S.A. Brakes, Right (Passenger) .....	1
7	101823201	Package, Brake Shoe, Self-Adjusting .....	1
8	101823801	Plate, Washer, Brake, Self-Adjusting .....	1
9	103483101	Back Plate, Rh .....	1
10	103483201	Kit, Shoe Retainer (includes items 11 and 12) .....	1
11	1010953	Pin .....	2
12	103483301	Spring, Shoe, Clamp .....	2
13	103483401	Package Brake Spring Self Adj (includes items 14 and 15) .....	1
14	101816401	Brake Spring Self Adj .....	2
15	103483501	Spring Brake .....	2
16	103483601	Cover, Dust .....	1
17	103483701	Brake Block .....	1
18	103380202	Asm, Brake Cluster, Mech, Pass (includes items 19 through 31) .....	1
19	101815502	Lever Assembly, Self-Adjusting Brake, Left .....	1
20	101816502	Adjusting Mechanism, Self-Adjusting Brake, Left .....	1
21	101823201	Package, Brake Shoe, Self-Adjusting .....	1
22	101823801	Plate, Washer, Brake, Self-Adjusting .....	1
23	103483102	Back Plate, Lh .....	1
24	103483201	Kit, Shoe Retainer (includes items 25 and 26) .....	1
25	1010953	Pin .....	2
26	103483301	Spring, Shoe, Clamp .....	2
27	103483401	Package Brake Spring Self Adj (includes items 28 and 29) .....	1
28	101816401	Brake Spring Self Adj .....	2
29	103483501	Spring Brake .....	2
30	103483601	Cover, Dust .....	1
31	103483701	Brake Block .....	1
		Note: Driver-side brake cluster not shown. Components have a similar appearance to passenger-side brake cluster components.	

4

G

E

**4****G****E**

000187-001

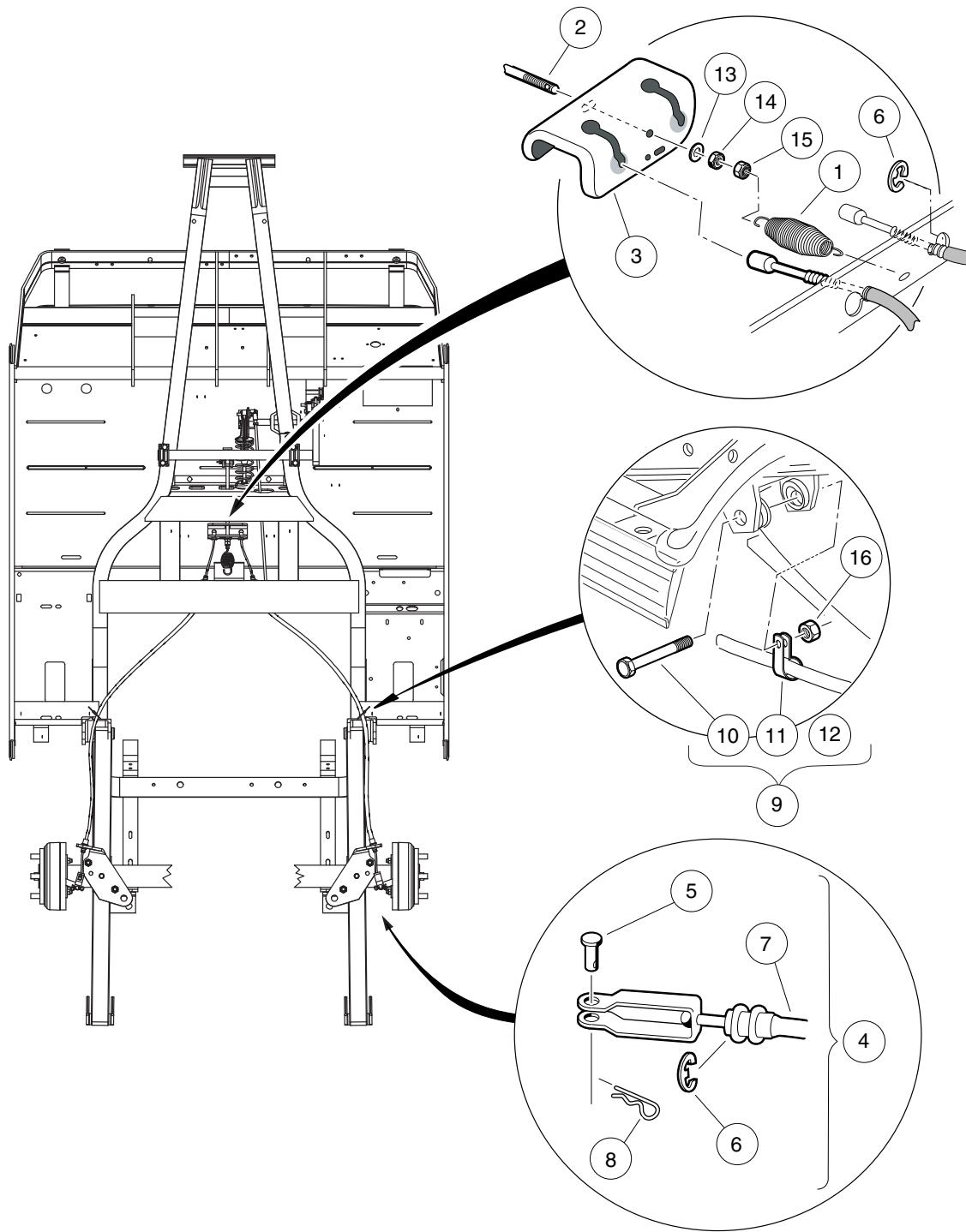
# BRAKE PEDAL ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1010878	Bumper, Rubber .....	1
2	1010921	Screw, 5/16-18 X 2.50 Hex Cap .....	4
3	1010927	Hill Brake Spacer .....	1
4	1010933	Spring, Hill Brake Torsion .....	1
5	1011402	Package, Brake Mounting Block .....	1
6	1011418	Kit, Hill Brake Pedal (includes items 7 through 11) .....	1
7	1013870	Pad, Hill Brake .....	1
8	1013876	Pushnut, 3/8 .....	1
9	N/A	Hill Brake Weld Assembly .....	1
10	1032	Bushing, Nylon .....	2
11	7716	Screw, #10-16 Type AB, Sheet Metal .....	2
12	101187702	Kit, Hill Brake Latch (includes items 13 through 19) .....	1
13	1010805	Sleeve, Hill Brake Rod .....	1
14	1010877	Pushnut, 3/8 .....	1
15	1010932	Ball Joint, 1/4-28 .....	1
16	N/A	Rod, Hill Brake .....	1
17	1017029	Pin, Cotter, 7/64 x 1/2 Stainless-Steel .....	1
18	N/A	Pawl, Hill Brake .....	1
19	101918501	Ratchet Assembly .....	1
20	101878201	Brake Pedal Kit (includes items 21 through 23) .....	1
21	1013869	Pad, Brake Pedal .....	1
22	N/A	Weldment, Brake Pedal 4wb Std .....	1
23	7716	Screw, #10-16 Type AB, Sheet Metal .....	3
24	102323101	Pin, Bow Tie Locking .....	1
25	102323201	Pin, 3/8 X 1-5/16 Clevis .....	1
26	1028	Nut, 1/4-20 Hex .....	1
27	1241	Washer, 5/16 Type A Flat .....	4
28	7473	Locknut, 5/16-18 Nylon Insert .....	4

4

G

E

**4****G****E**

000245-002

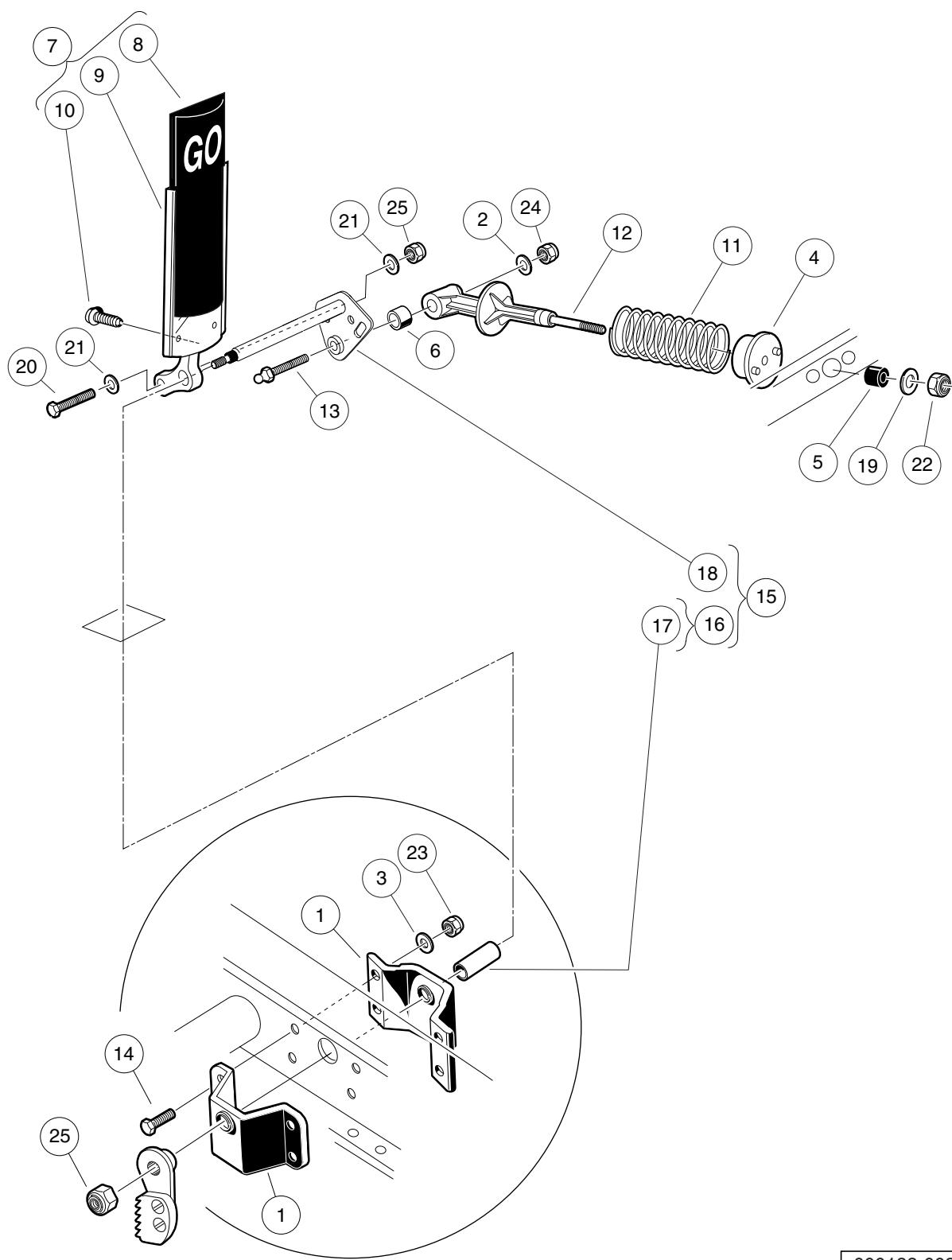
# BRAKE CABLE, EQUALIZER, AND EQUALIZER ROD – VEHICLES WITH TWO-WHEEL BRAKES

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1013531	Spring, Brake Return .....	1
2	101953101	Rod, Equalizer, 8.91" .....	1
3	101990801	Equalizer Bracket .....	1
4	102022101	Brake Cable Kit (includes items 5 through 8) .....	2
5	1010829	Pin, Clevis, 5/16 X 3/4 .....	1
6	1011779	E-Clip, 1/2 .....	2
7	N/A	Cable, Brake, 41" .....	1
8	1035	Cotter Pin, 3/32 x 1 .....	1
9	103377301	Kit, Field P-clamp, Brake Line (includes items 10 through 12) .....	1
10	102066201	Screw, 3/8-16 X 3.50 Hex Cap .....	2
11	103377201	P-clamp, Brake Line .....	2
12	N/A	Instr Fd. P-clamp, Brake Line .....	1
13	1241	Washer, 5/16 Type A Flat .....	5
14	1242	Nut, 5/16-18 Hex .....	1
15	7473	Locknut, 5/16-18 Nylon Insert .....	5
16	8754	Locknut, 3/8-16 Hex .....	2

4

G

E

**4****G****E**

000188-003

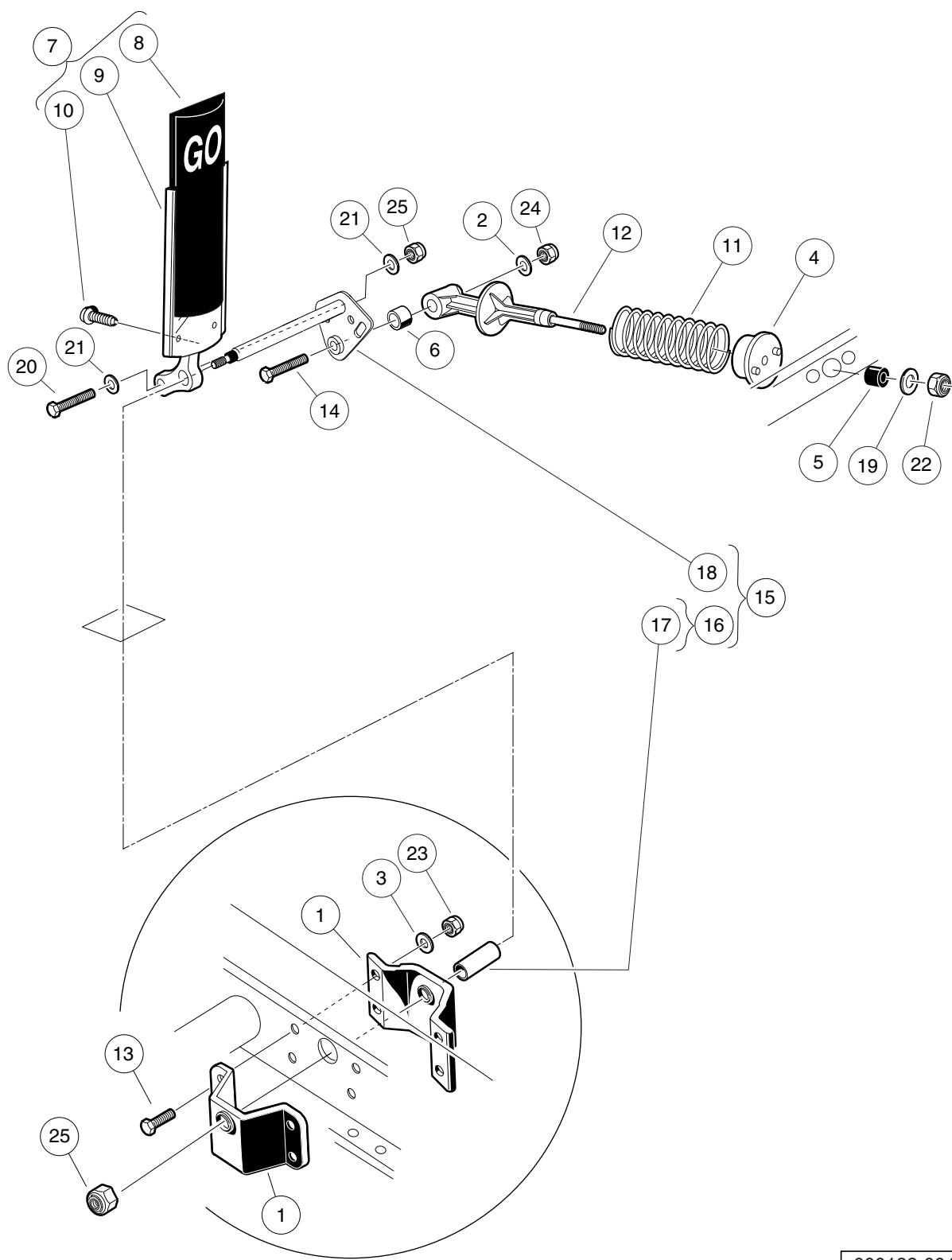
# ACCELERATOR PEDAL ASSEMBLY – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1011694	Accelerator Bracket and Bearing Assembly .....	2
2	1011931	Washer, 1/4 Flat .....	1
3	1014007	Washer, 1/4 Flat .....	4
4	1017378	Cup, Spring .....	1
5	1017380	Bumper, Spring Return .....	1
6	1017424	Bearing, Pivot Support .....	1
7	1017696	Sub Asm, Accelerator Pedal (includes items 8 through 10) .....	1
8	1013871	Pad, Accelerator Pedal .....	1
9	N/A	Accelerator Pedal Weldment .....	1
10	7716	Screw, #10-16 Type AB, Sheet Metal .....	4
11	101796201	Spring, Accelerator Return .....	1
12	101817401	Retainer, Spring .....	1
13	101818801	Stud, 1/4-28 X 1.35 Ball .....	1
14	101861901	Screw, 1/4-20 X 1.125 Hex Cap .....	4
15	102026001	Kit, Accelerator Pivot Rod Assembly (includes items 16 through 18) .....	1
16	1011700	Spacer Assembly (includes item 17) .....	1
17	101919801	Spacer, Accelerator .....	1
18	N/A	Pivot Rod Weldment .....	1
19	1241	Washer, 5/16 Type A Flat .....	1
20	1624	Screw, 3/8-16 X 1.50 Hex-Head Cap .....	1
21	334	Washer, 3/8 Type A Flat .....	2
22	7473	Locknut, 5/16-18 Nylon Insert .....	1
23	8233	Locknut, 1/4-20 Nylon Insert .....	4
24	8717	Locknut, 1/4-28 Nylon Insert .....	1
25	8754	Locknut, 3/8-16 Hex .....	2

4

G

E

**4****G****E**

000188-004

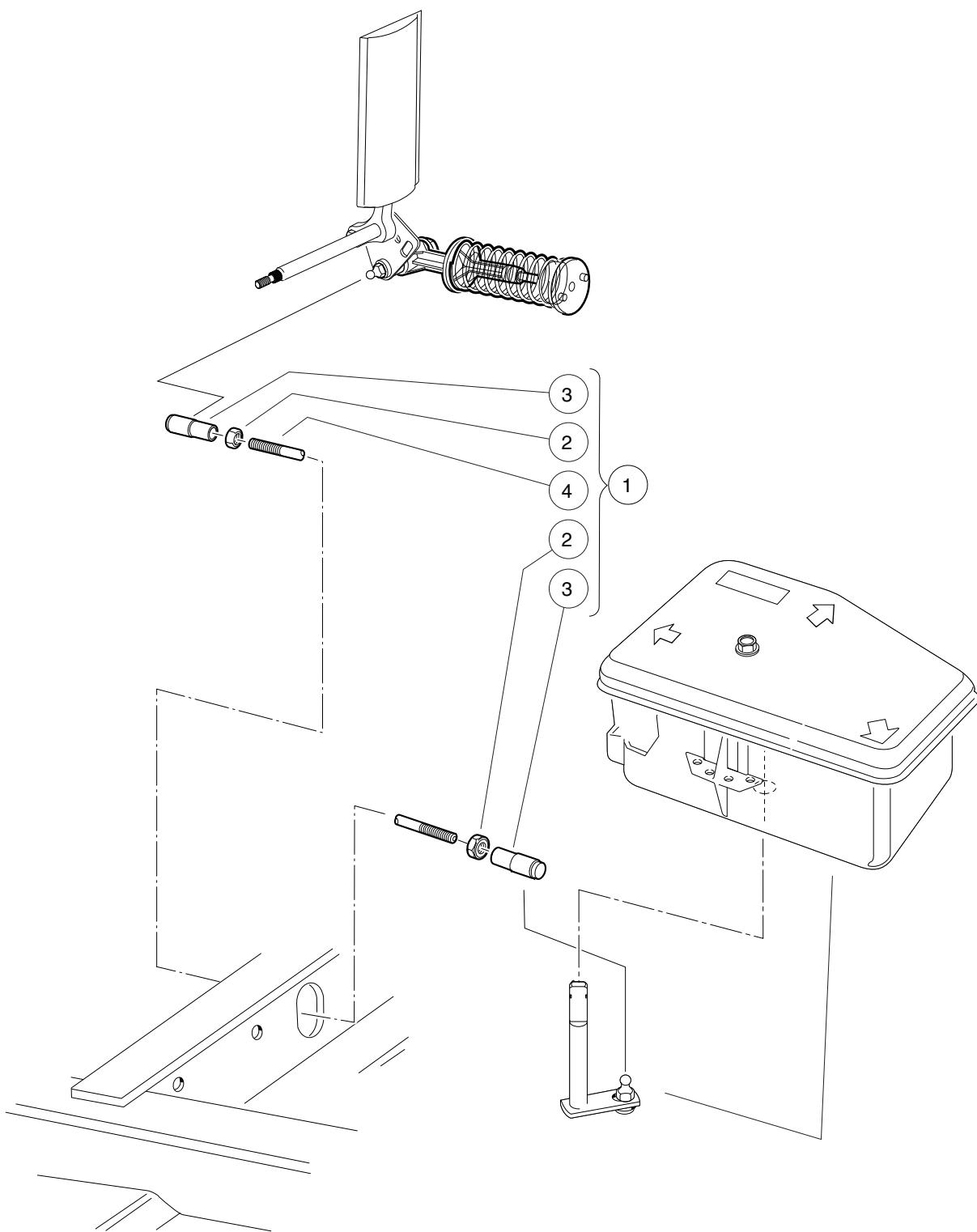
# ACCELERATOR PEDAL ASSEMBLY – ELECTRIC VEHICLES WITH MCOR

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1011694	Accelerator Bracket and Bearing Assembly .....	2
2	1011931	Washer, 1/4 Flat .....	1
3	1014007	Washer, 1/4 Flat .....	4
4	1017378	Cup, Spring .....	1
5	1017380	Bumper, Spring Return .....	1
6	1017424	Bearing, Pivot Support .....	1
7	1017696	Sub Asm, Accelerator Pedal (includes items 8 through 10) .....	1
8	1013871	Pad, Accelerator Pedal .....	1
9	N/A	Accelerator Pedal Weldment .....	1
10	7716	Screw, #10-16 Type AB, Sheet Metal .....	4
11	101796201	Spring, Accelerator Return .....	1
12	101817401	Retainer, Spring .....	1
13	101861901	Screw, 1/4-20 X 1.125 Hex Cap .....	4
14	101862001	Screw, 1/4-20 X 1.500 Flange .....	1
15	102026001	Kit, Accelerator Pivot Rod Assembly (includes items 16 through 18) .....	1
16	1011700	Spacer Assembly (includes item 17) .....	1
17	101919801	Spacer, Accelerator .....	1
18	N/A	Pivot Rod Weldment .....	1
19	1241	Washer, 5/16 Type A Flat .....	1
20	1624	Screw, 3/8-16 X 1.50 Hex-Head Cap .....	1
21	334	Washer, 3/8 Type A Flat .....	2
22	7473	Locknut, 5/16-18 Nylon Insert .....	1
23	8233	Locknut, 1/4-20 Nylon Insert .....	4
24	8717	Locknut, 1/4-28 Nylon Insert .....	1
25	8754	Locknut, 3/8-16 Hex .....	2

4

G

E

**4****G****E**

000362-001

## ACCELERATOR ROD

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101912401	Rod, Accelerator (includes items 2 through 4) .....	1
2	1011084	Nut, 1/4-28 Hex Jam .....	2
3	1011734	Joint, Ball .....	2
4	N/A	Accelerator Rod .....	1

4

G

E

**4**

**G**

**E**

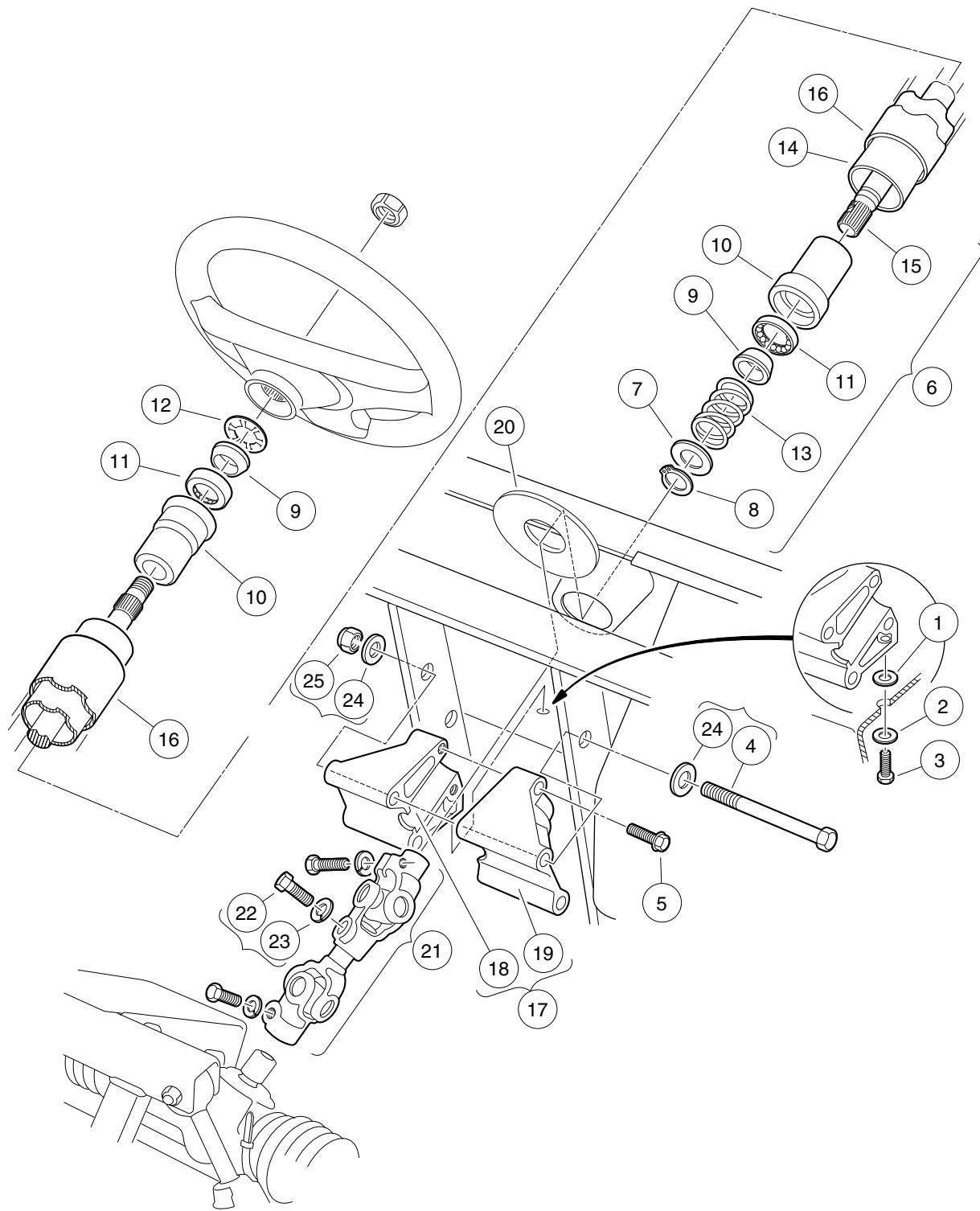
# **STEERING AND SUSPENSIONS**

---

**5**

**G**

**E**

**5****G****E**

000247-001

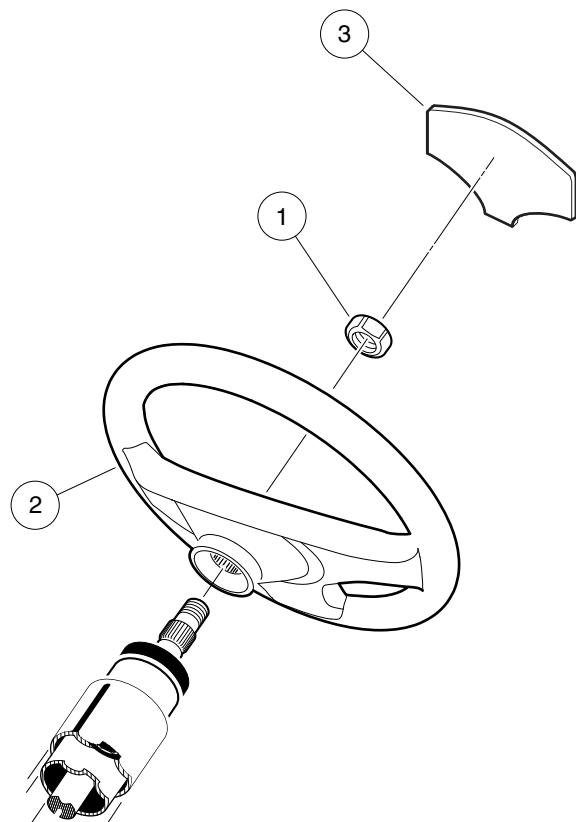
# STEERING COLUMN

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	5
1	1011578	Washer, 5/16 Type B Flat .....	1
2	1011697	Washer, 5/16 Flat .....	1
3	1014288	Screw, 5/16-18 X 0.75 Thread-Forming .....	1
4	1016183	Screw, 3/8-16 X 7.00 Hex Cap .....	2
5	1016269	Screw, 5/16-18 Thrd Forming .....	2
6	1017313	Steering Shaft Assembly (includes items 7 through 15) .....	1
7	1012604	Washer, 0.675 ID X 1.19 OD .....	1
8	1012605	Ring, 0.579 Internal Retaining .....	1
9	1014125	Wedge, Molded .....	2
10	1014126	Seat, Plastic Bearing .....	2
11	1014213	Bearing, Ball .....	2
12	1014214	Ring, Retaining .....	1
13	1014217	Spring, Steering Shaft .....	1
14	1017314	Column, Aluminum Steering .....	1
15	1017315	Shaft Steering Column .....	1
16	1017317	Tube Cover, Steering Column .....	1
17	101984801	Kit, Steering Column Mounting Bracket (includes items 18 and 19) .....	1
18	N/A	Bracket, RH Steering Column Mount .....	1
19	N/A	Bracket, LH Steering column mount .....	1
20	102278001	Boot, Steering Column Round .....	1
21	103601601	Shaft, Intermediate Steering (includes items 22 and 23) .....	1
22	1017226	Bolt, Hex-Head, 8mm X 1.25 - 30 .....	3
23	7174	Lockwasher, 5/16 Split .....	3
24	334	Washer, 3/8 Type A Flat .....	4
25	8754	Locknut, 3/8-16 Hex .....	2

**5**

**G**

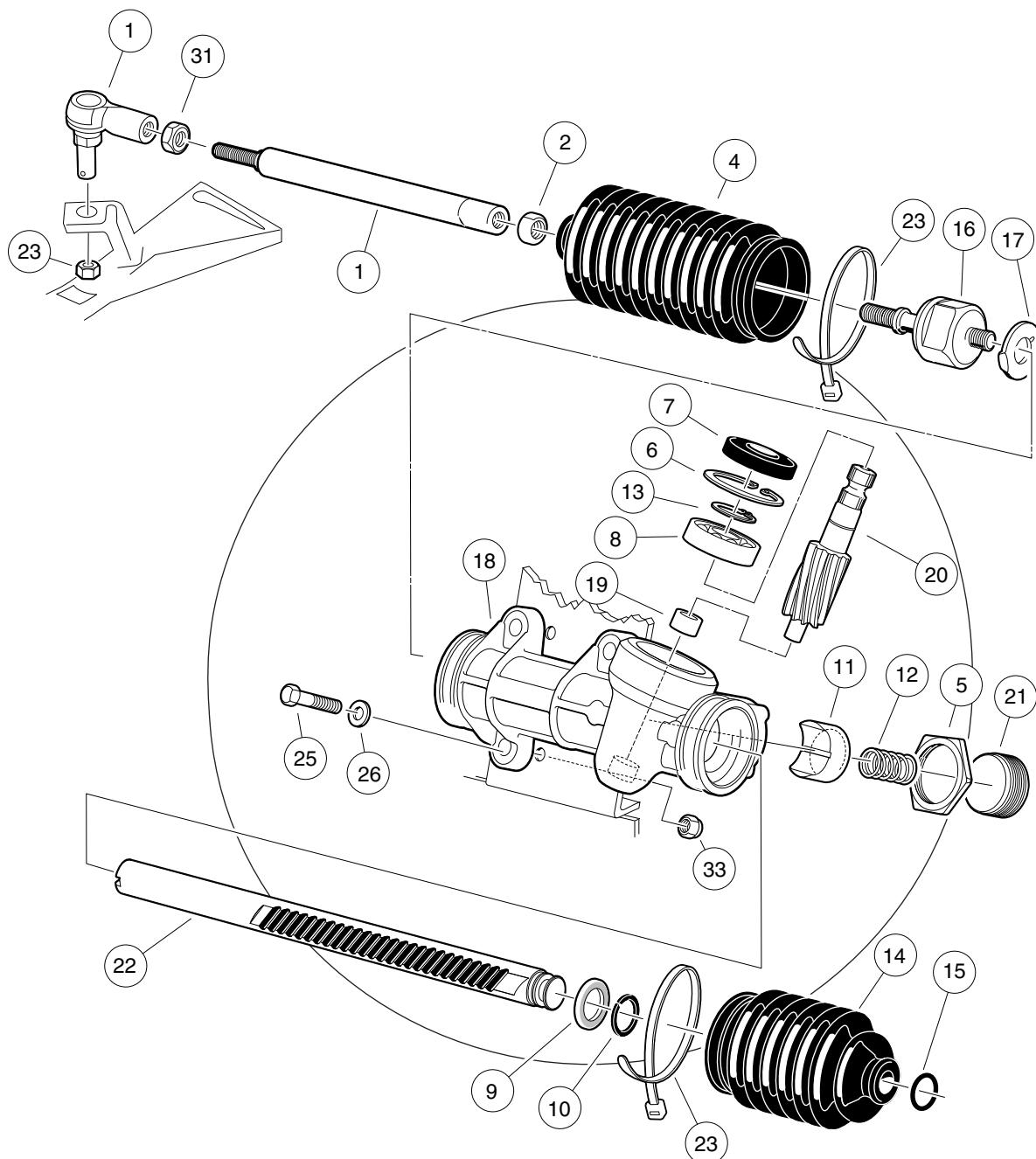
**E**



000246-001

## STEERING WHEEL

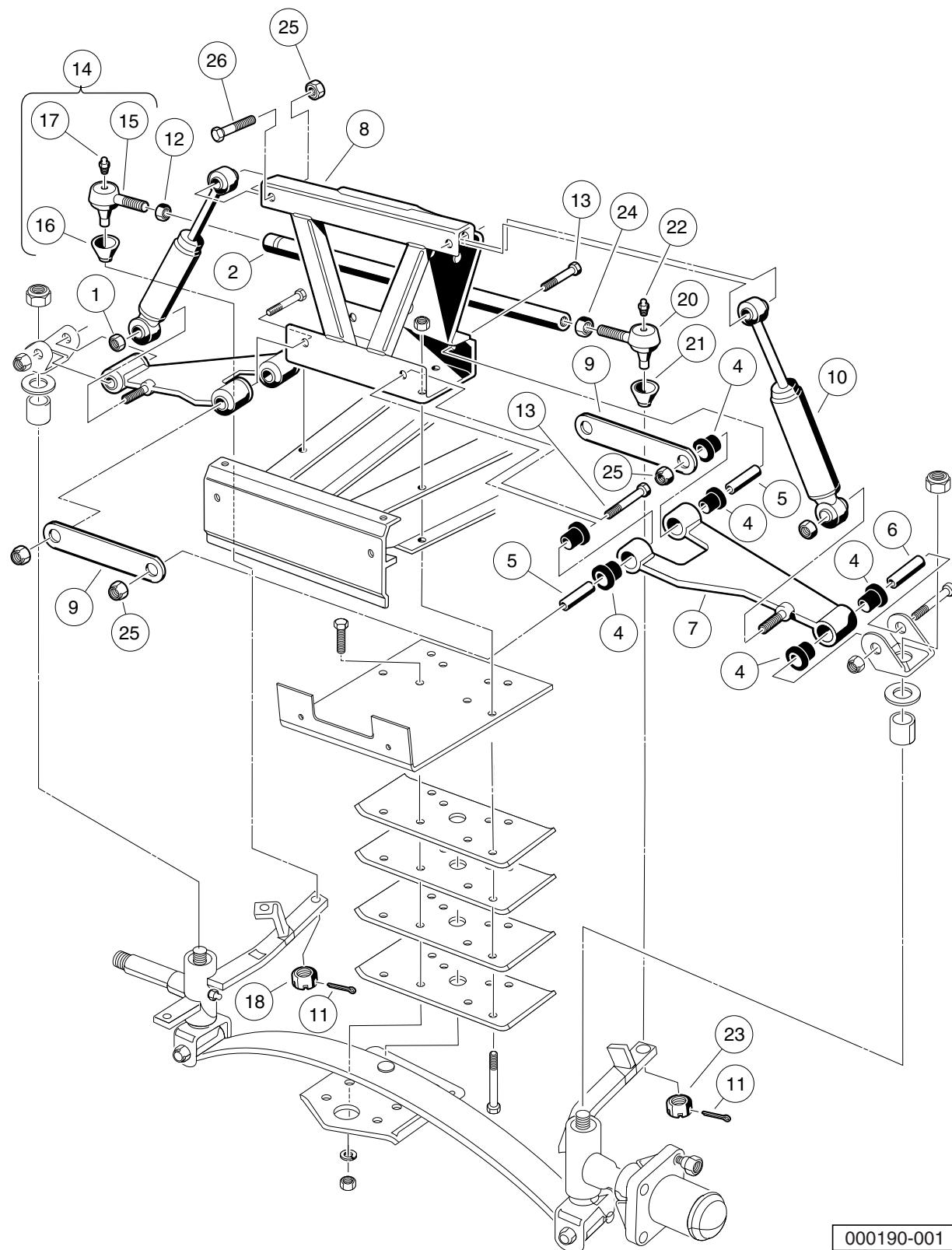
ITEM	PART NO.	DESCRIPTION	QTY	
1	1017273	Nut, 5/8-18 Nylon Insert Jam .....	1	<b>5</b>
2	102796201	Steering Wheel, Spline .....	1	<b>G</b>
3	102822401	Wheel Center .....	1	<b>E</b>

**5****G****E**

000189-001

# STEERING GEAR ASSEMBLY

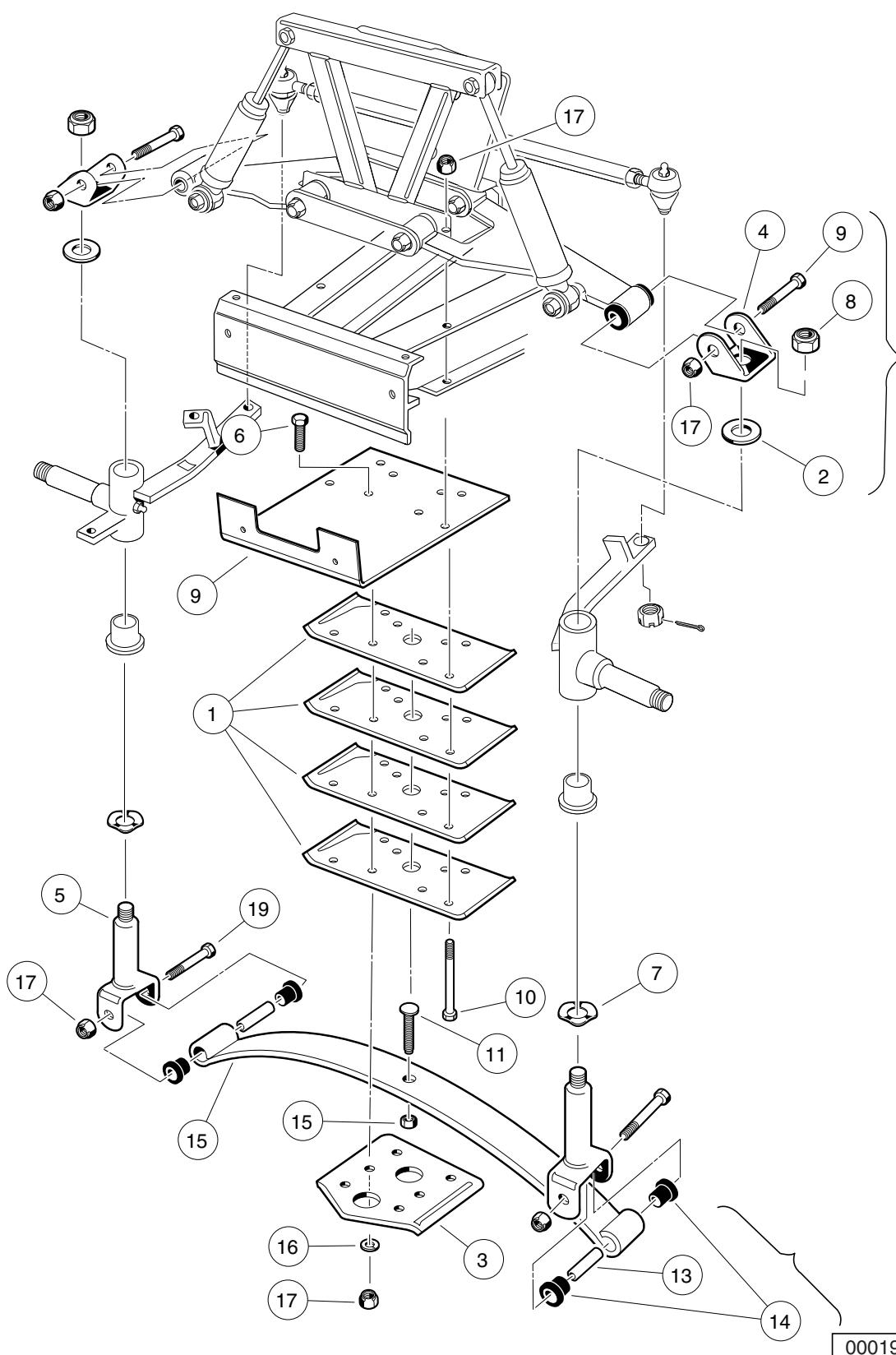
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	5
1	1012467	Link, Rack and Pinion Drag .....	1
2	1013042	Nut, 12mm Hex .....	1
3	101878302	Steering Gear Assembly (without yoke) (includes items 4 through 23) .....	1
4	1013035	Bellows, Long .....	1
5	1013044	Rack Screw Locknut .....	1
6	1013051	Snap Ring .....	1
7	1013052	Seal, Steering Pinion Dust .....	1
8	101879401	Bearing, Ball .....	1
9	101879501	Stop Washer .....	1
10	101879601	Stop Ring, C-Type .....	1
11	101879701	Support Yoke .....	1
12	101879801	Rack Guide Pressure Spring .....	1
13	101879901	Ring, Stop, C-Type .....	1
14	101880001	Bellows, Short .....	1
15	101880101	Dust Seal Retaining Ring .....	1
16	101880201	Inner Ball Joint Asm .....	1
17	101880301	Washer, Tab .....	1
18	N/A	Box, Steering Gear .....	1
19	N/A	Bearing, Lower Pinion .....	1
20	N/A	Pinion, Steering .....	1
21	N/A	Screw, Rack Guide .....	1
22	N/A	Rack, Steering .....	1
23	8990	Tie Wrap, 8" Nylon .....	2
24	1035	Cotter Pin, 3/32 x 1 .....	1
25	1624	Screw, 3/8-16 X 1.50 Hex-Head Cap .....	3
26	334	Washer, 3/8 Type A Flat .....	3
27	7540	Ball Joint, Left (includes items 28 through 31) .....	1
28	1011895	Socket, LH Vertical .....	1
29	1011930	Seal, Vertical Socket Dust .....	1
30	1015597	Fitting, 1/4-28 Thread-Forming Grease .....	1
31	7602	Nut, 3/8-24 UNF Hex .....	1
32	7555	Nut, 1/2-20 Hex, Left-Hand Thread .....	1
33	8754	Locknut, 3/8-16 Hex .....	3

**5****G****E**

000190-001

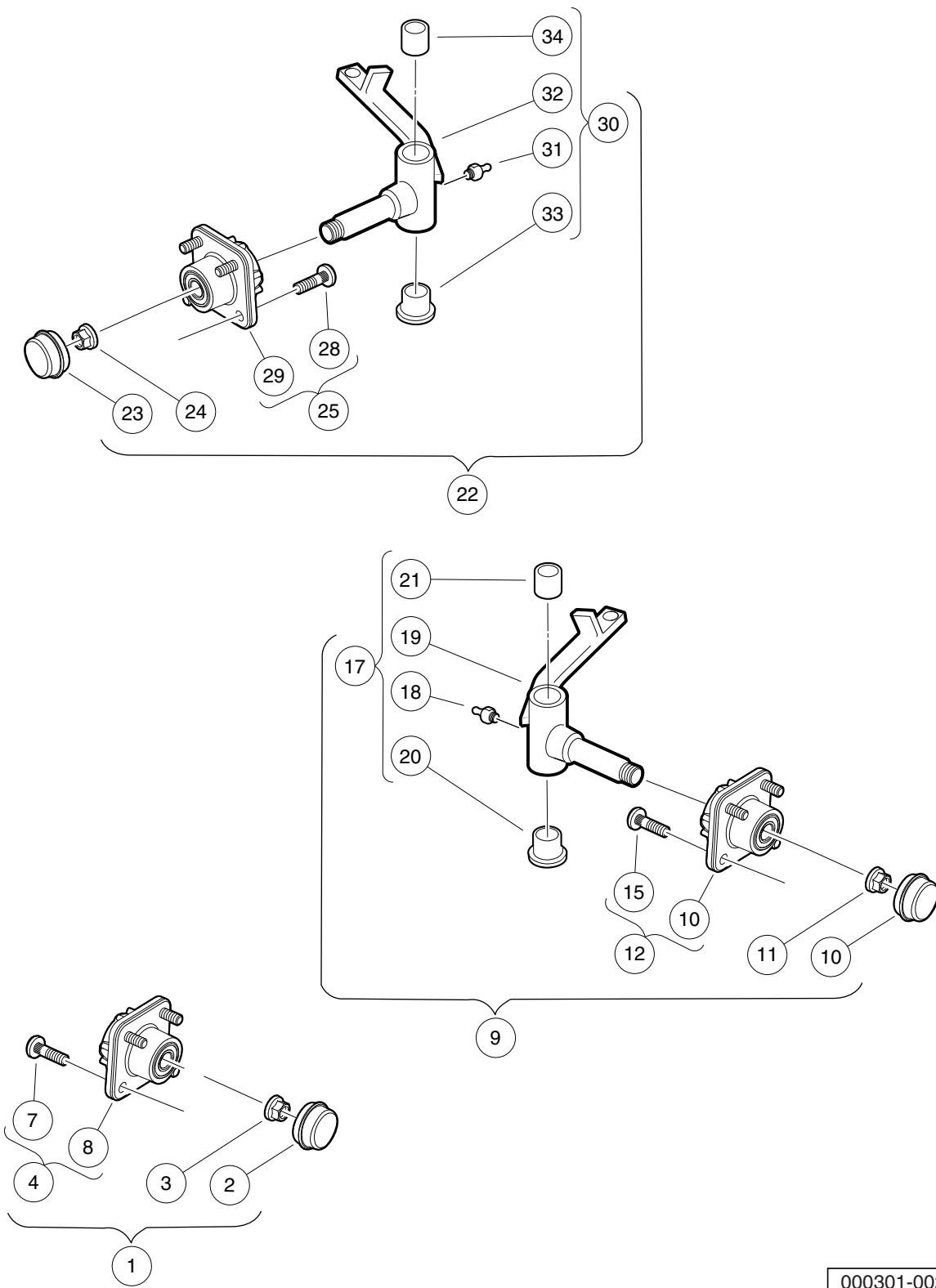
# FRONT SUSPENSION, UPPER

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	5
1	1010138	Locknut, 3/8-16 Dimpled .....	2
2	1010219	Tie Rod .....	1
3	1016353	Sub-Assembly, Delta A-Plate (includes items 4 through 7) .....	2
4	1016346	Bushing, Urethane .....	6
5	1016349	Sleeve, Delta Inner .....	2
6	1016350	Sleeve, Delta Outer .....	1
7	1016351	Delta A-Plate .....	1
8	1016385	Delta Shock and Gear Support Assembly .....	1
9	1017266	A-Plate Strap .....	2
10	103351001	Shock Absorber, Front, Common .....	2
11	1035	Cotter Pin, 3/32 x 1 .....	2
12	1308	Nut, 1/2-20 Hex .....	1
13	2402	Screw, 3/8-16 X 2.25 Hx Hd Cap .....	4
14	7539	Ball Joint, Right-Hand (includes items 15 through 18) .....	1
15	1011893	Socket, RH Vertical .....	1
16	1011930	Seal, Vertical Socket Dust .....	1
17	1015597	Fitting, 1/4-28 Thread-Forming Grease .....	1
18	7602	Nut, 3/8-24 UNF Hex .....	1
19	7540	Ball Joint, Left (includes items 20 through 23) .....	1
20	1011895	Socket, LH Vertical .....	1
21	1011930	Seal, Vertical Socket Dust .....	1
22	1015597	Fitting, 1/4-28 Thread-Forming Grease .....	1
23	7602	Nut, 3/8-24 UNF Hex .....	1
24	7555	Nut, 1/2-20 Hex, Left-Hand Thread .....	1
25	8754	Locknut, 3/8-16 Hex .....	10
26	8861	Bolt, 3/8-16 X 1.75 Hex .....	2

**5****G****E**

# FRONT SUSPENSION, LOWER

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	5
1	1010124	Plate, Spring Mount .....	4
2	1010150	Bearing, Thrust .....	2
3	1014276	Plate, Front Spring Retainer .....	1
4	1016384	Clevis, Delta Upper .....	2
5	1016386	King Pin Assembly .....	2
6	1016387	Screw, 3/8-16 X 2.75 Hx Hd Cap .....	6
7	1016389	Washer, 1.125 Od Wave .....	2
8	101903101	Locknut, 1/2-20 Nylon Insert .....	2
9	102830401	Support, Brush Guard .....	1
10	102913601	Screw, 3/8-16 X 5.50 Hx Hd Cap .....	4
11	103507001	Eccentric Bolt Common .....	1
12	N/A	Spring Asm, Front, 1 Leaf (includes items 13 through 15) .....	1
13	1012303	Bushing, Steel .....	2
14	1015583	Bushing, Urethane .....	4
15	N/A	Spring, Front, 1 Leaf .....	1
16	357	Lockwasher, 3/8 Split .....	4
17	706	Nut, Hex 3/8-16 .....	1
18	8754	Locknut, 3/8-16 Hex .....	8
19	8755	Screw, 3/8-16 X 3.375 Hex Cap .....	2

**5****G****E**

000301-002

# FRONT SPINDLES AND HUBS

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	5
1	N/A	Replacement Kit, Front Hub (includes items 2 through 4) .....	2
2	102353201	Cap, Front Hub .....	1
3	102353301	Hex Nut, Locking Flange, M14x2 .....	1
4	N/A	Asm, Front Hub, Bb, Long Stud (includes items 5 through 8) .....	1
5	N/A	Bearing, Ball, 6204 .....	2
6	N/A	Spacer, Bearing, Front Hub, Pm .....	1
7	103477901	Lug Stud, 1/2-20 Unf, 4037 .....	4
8	N/A	Front Hub, Ball Brdg, Long Stud .....	1
9	N/A	Asm, Hub And Spindle, Left-Hand Ext (includes items 10 through 15) .....	1
10	102352801	Front Hub Assembly, Ball Bearing (includes items 11 and 12) .....	1
11	102353401	Lug Stud, 1/2-20 UNF, 4037 Stl .....	4
12	N/A	Hub, Front .....	1
13	102353201	Cap, Front Hub .....	1
14	102353301	Hex Nut, Locking Flange, M14x2 .....	1
15	102354204	Asm, Spindle, LH, Ext (includes items 16 through 19) .....	1
16	1015597	Fitting, 1/4-28 Thread-Forming Grease .....	1
17	N/A	Subasm, Spindle, LH, Ext .....	1
18	7048	Bushing, Flanged Bronze .....	1
19	8067	Bushing, Bronze Spindle .....	1
20	N/A	Asm, Hub And Spindle, Right-Hand Ext (includes items 21 through 26) .....	1
21	102352801	Front Hub Assembly, Ball Bearing (includes items 22 and 23) .....	1
22	102353401	Lug Stud, 1/2-20 UNF, 4037 Stl .....	4
23	N/A	Hub, Front .....	1
24	102353201	Cap, Front Hub .....	1
25	102353301	Hex Nut, Locking Flange, M14x2 .....	1
26	102354104	Asm, Spindle, RH, Ext (includes items 27 through 30) .....	1
27	1015597	Fitting, 1/4-28 Thread-Forming Grease .....	1
28	N/A	Subasm, Spindle, RH, Ext .....	1
29	7048	Bushing, Flanged Bronze .....	1
30	8067	Bushing, Bronze Spindle .....	1

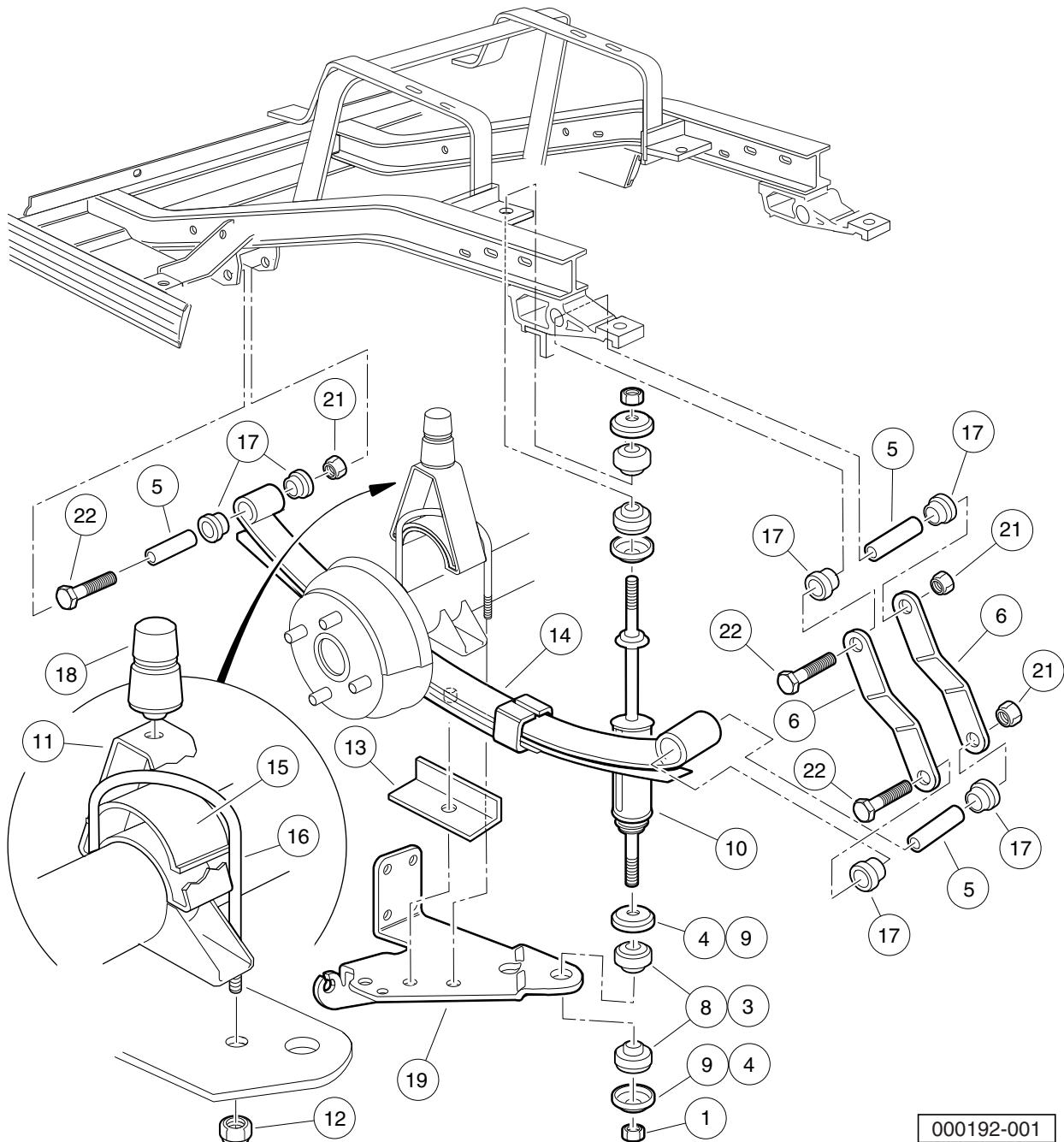
5

G

E

Items  
through  
2

Items  
through  
10



## REAR SUSPENSION

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	5
1	1010145	Nut, 3/8-24 Hex .....	4
2	1011415	Kit, Shock Absorber Cushion (includes items 3 and 4) .....	4
3	1010142	Cushion, Shock Absorber .....	2
4	1010144	Retainer, Shock Absorber Cushion .....	2
5	1012303	Bushing, Steel .....	6
6	1012304	Shackle, Rear Spring .....	4
7	1013164	Shock Absorber Kit (includes items 8 through 10) .....	1
8	1010142	Cushion, Shock Absorber .....	8
9	1010144	Retainer, Shock Absorber Cushion .....	8
10	102588501	Shock Absorber Rear Prv Spd .....	2
11	101454902	Bumper Mount, Angled .....	2
12	1014555	Locknut, 7/16-14 Nylon Hex .....	4
13	1014573	Spring Retainer .....	2
14	1014675	Rear Leaf Spring .....	2
15	1014901	Spacer, Overload Bumper .....	2
16	1014902	U-Bolt .....	2
17	1015583	Bushing, Urethane .....	12
18	1017235	Bumper, Jounce .....	2
19	101926501	Bracket, Left-Hand .....	1
20	101929401	Bracket, Right .....	1
21	8754	Locknut, 3/8-16 Hex .....	6
22	8755	Screw, 3/8-16 X 3.375 Hex Cap .....	6

**5**

**G**

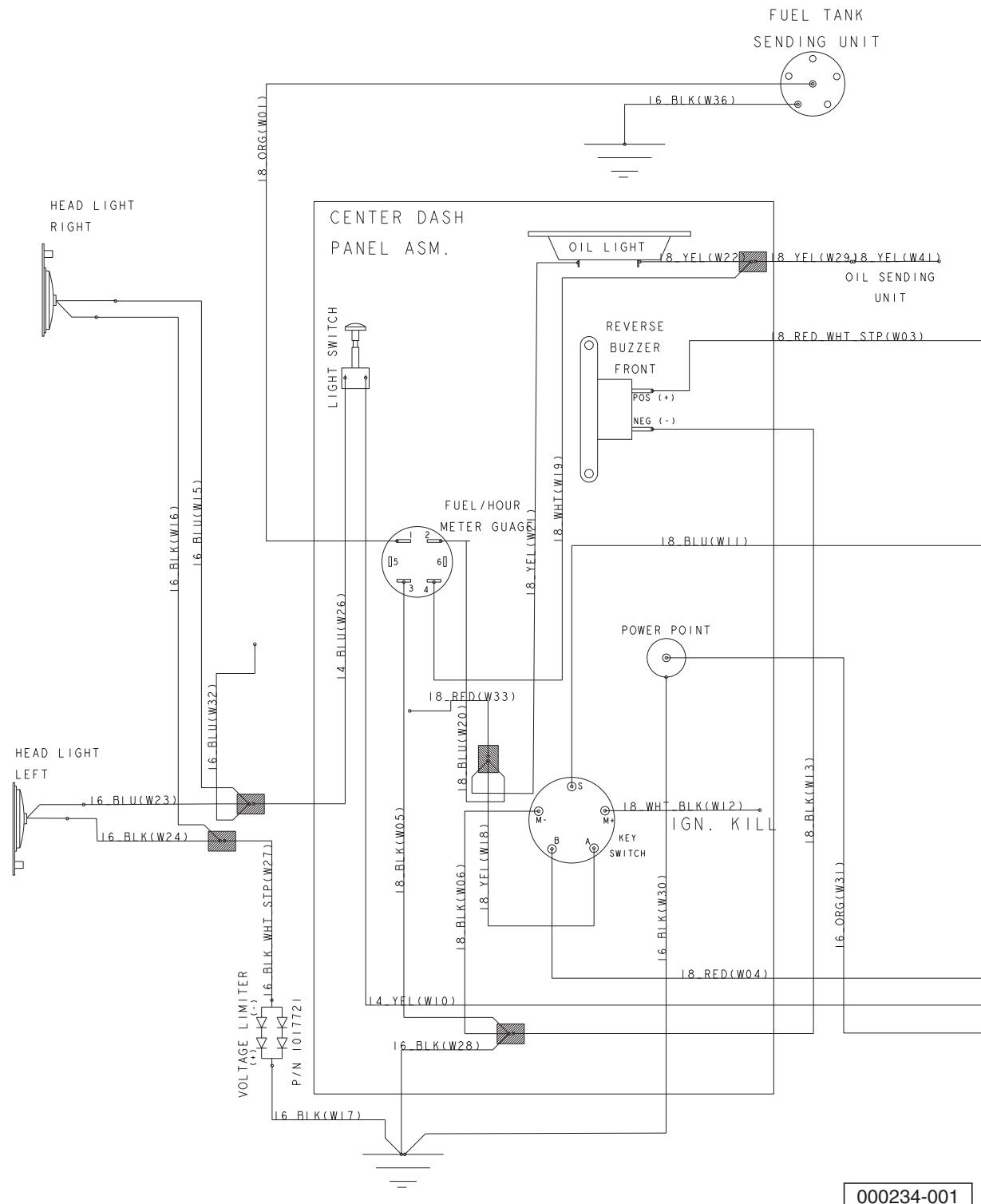
**E**

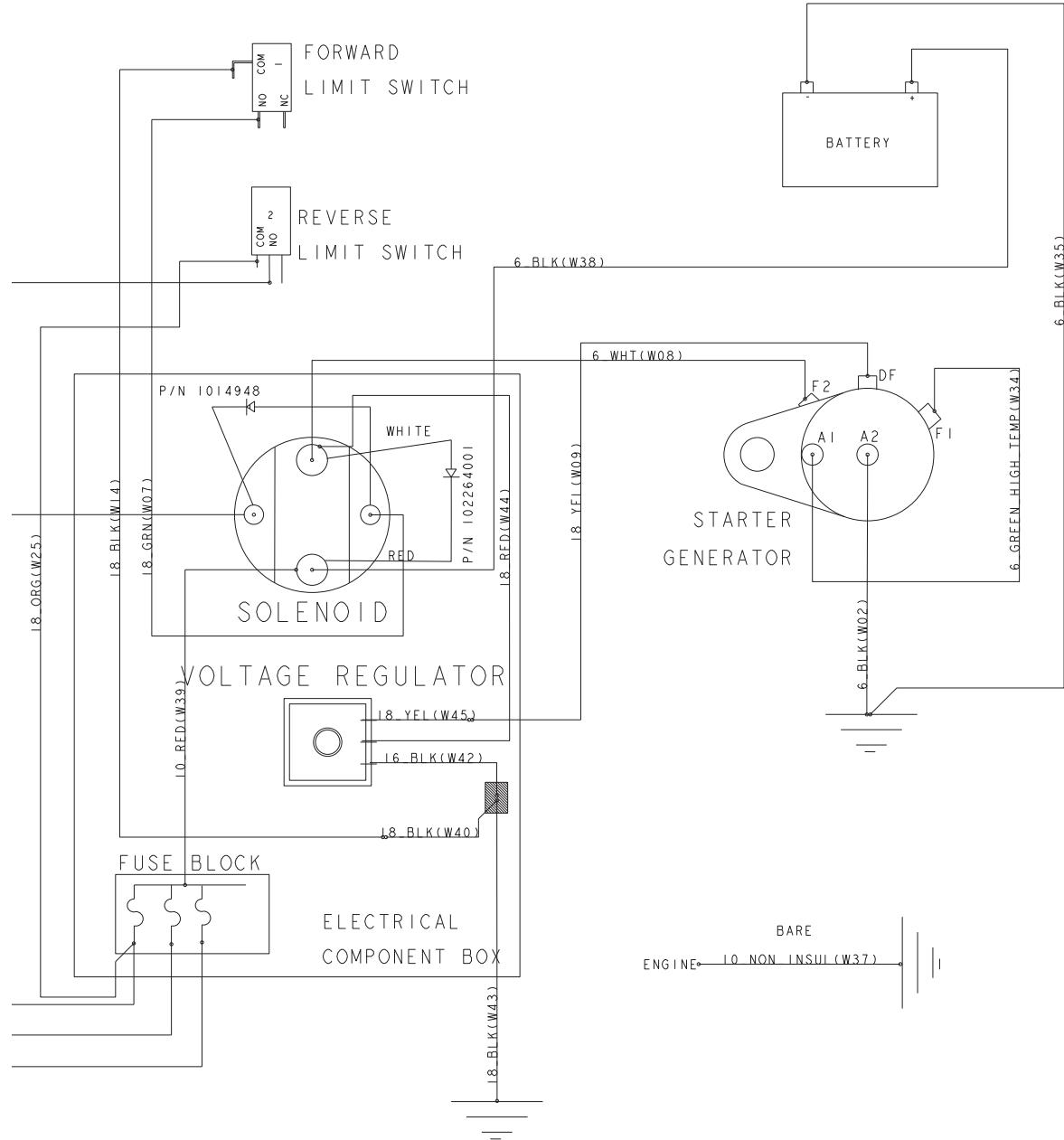
# **ELECTRICAL SYSTEM – GASOLINE VEHICLES**

---

**6**

**G**





000234-001

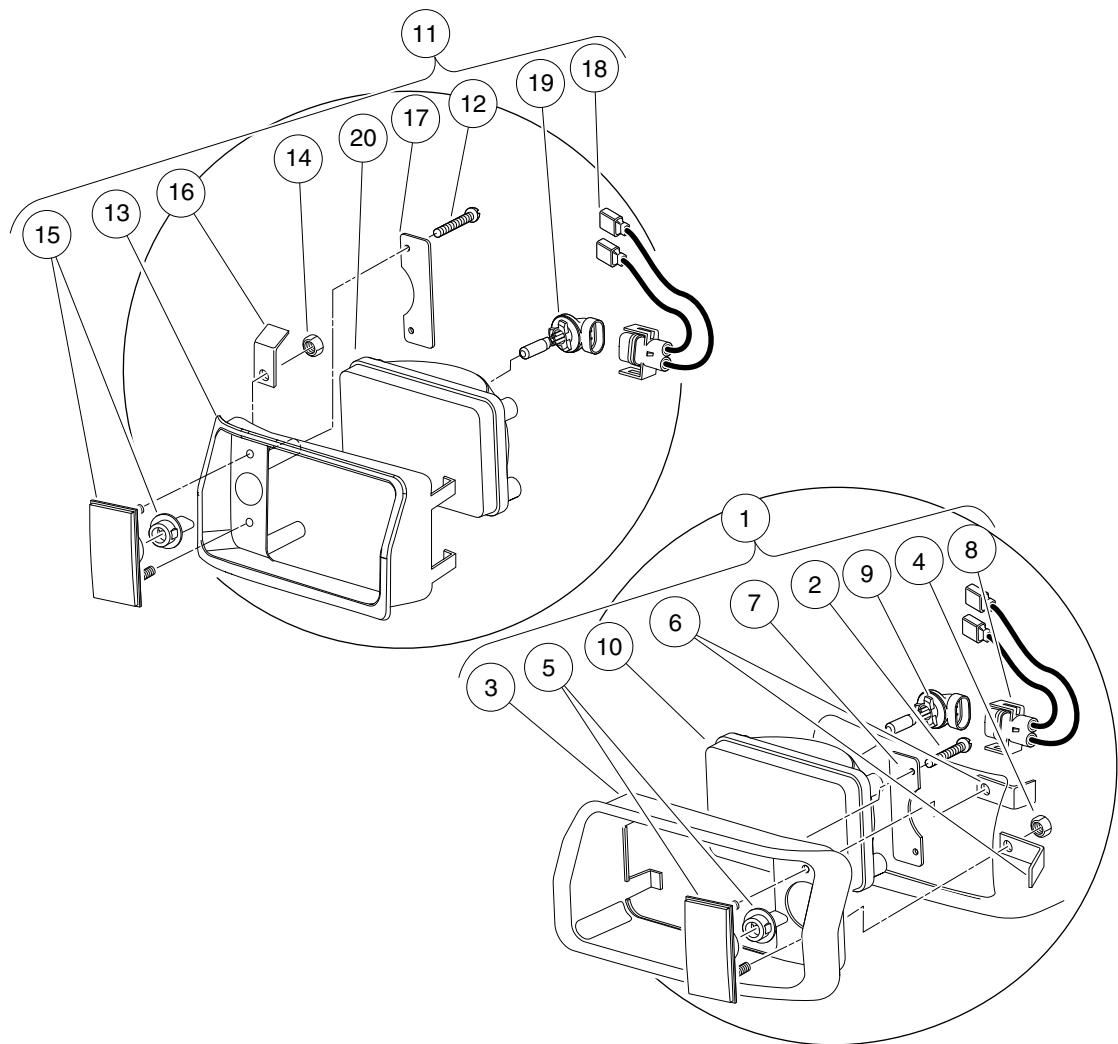
**6**

**G**

See previous two pages for illustration.

## WIRING – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY	
1	102803001	1 2 3 4 Wire Harness, Gasoline Vehicle .....	1	<b>6</b> <b>G</b>



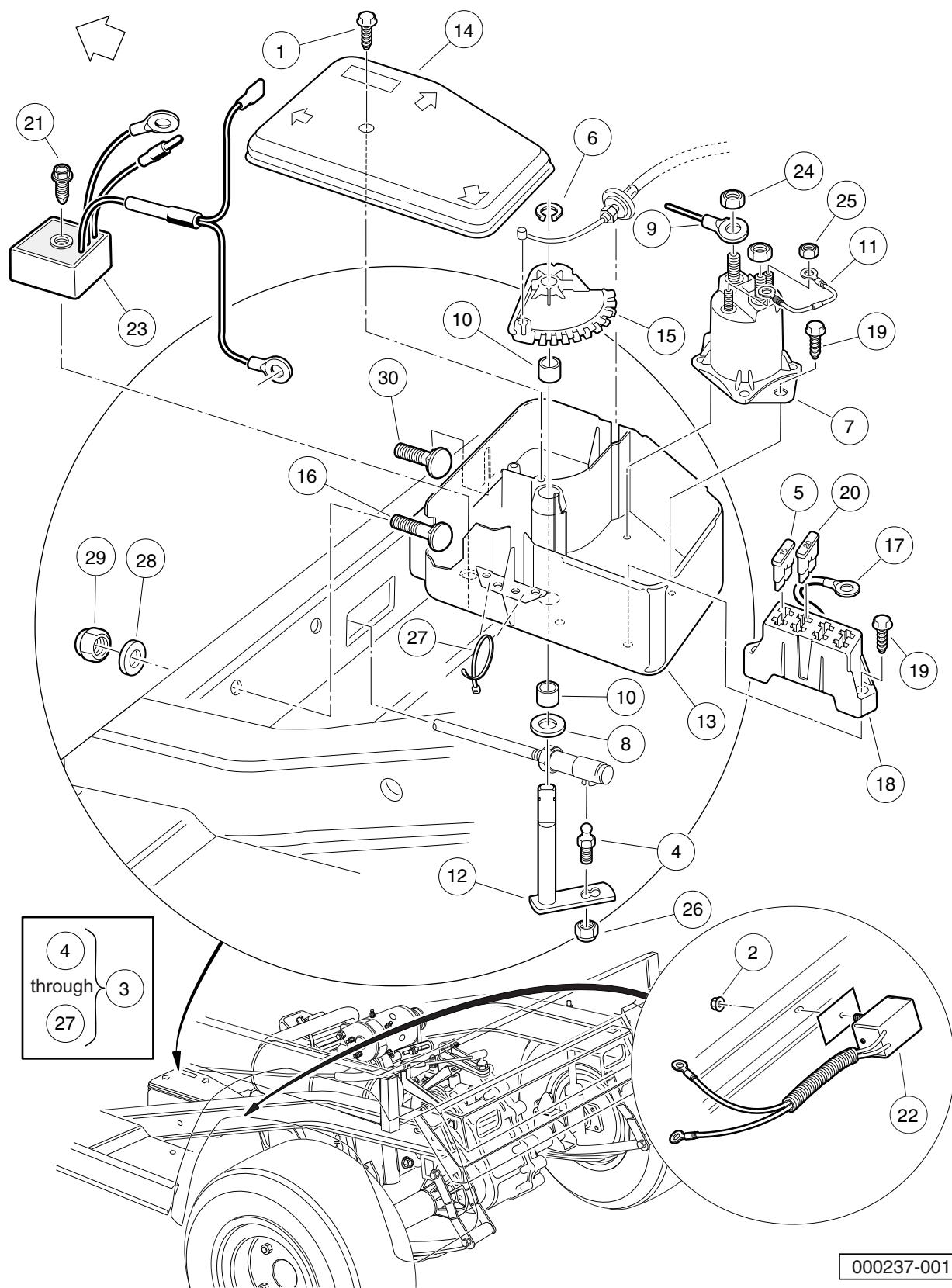
000073-001

# HEADLIGHTS

**6**

**G**

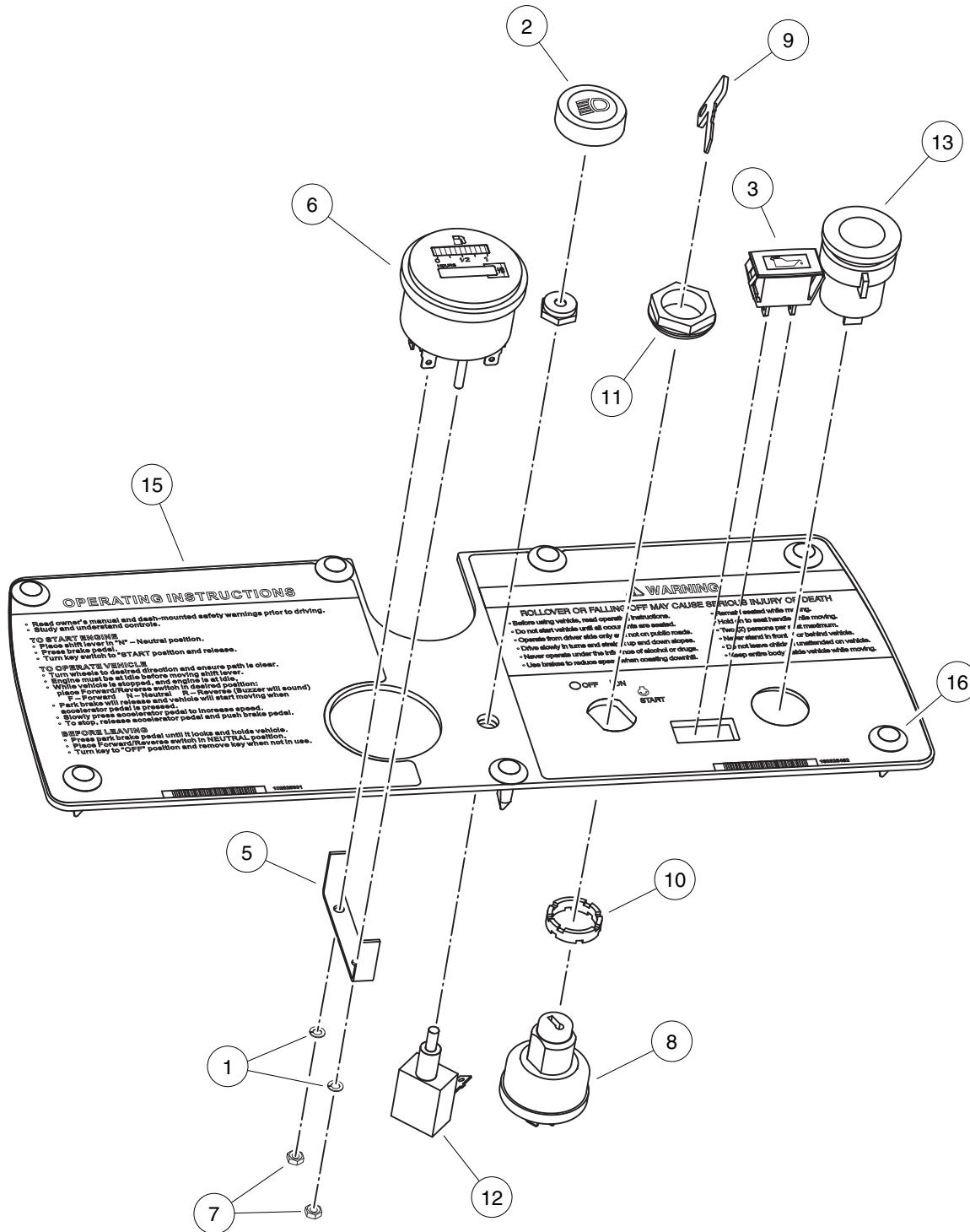
ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	101988001	Headlight Assembly, Driver-Side Single Beam (includes items 2 through 10) .....	1
2	1013461	Screw, #10-16 Hex-Head Hi-Lo .....	2
3	1016880	Headlight Bezel, Left .....	1
4	1017	Nut, #10-24 Stainless-Steel Hex Machine .....	2
5	1017062	Turn Signal Lens Assy .....	1
6	1017064	Mounting Bracket .....	2
7	1017065	Retainer, Headlight .....	1
8	101987901	Connector Harness Assembly, Headlight .....	1
9	101988101	Bulb, Headlight .....	1
10	101988201	Lens, Headlight .....	1
11	101988002	Headlight Assy, Passenger-Side Single Beam (includes items 12 through 20) .....	1
12	1013461	Screw, #10-16 Hex-Head Hi-Lo .....	2
13	1016879	Headlight Bezel, Right .....	1
14	1017	Nut, #10-24 Stainless-Steel Hex Machine .....	2
15	1017062	Turn Signal Lens Assy .....	1
16	1017064	Mounting Bracket .....	2
17	1017065	Retainer, Headlight .....	1
18	101987901	Connector Harness Assembly, Headlight .....	1
19	101988101	Bulb, Headlight .....	1
20	101988201	Lens, Headlight .....	1

**6****G**

000237-001

# ELECTRICAL COMPONENT BOX – GASOLINE VEHICLE

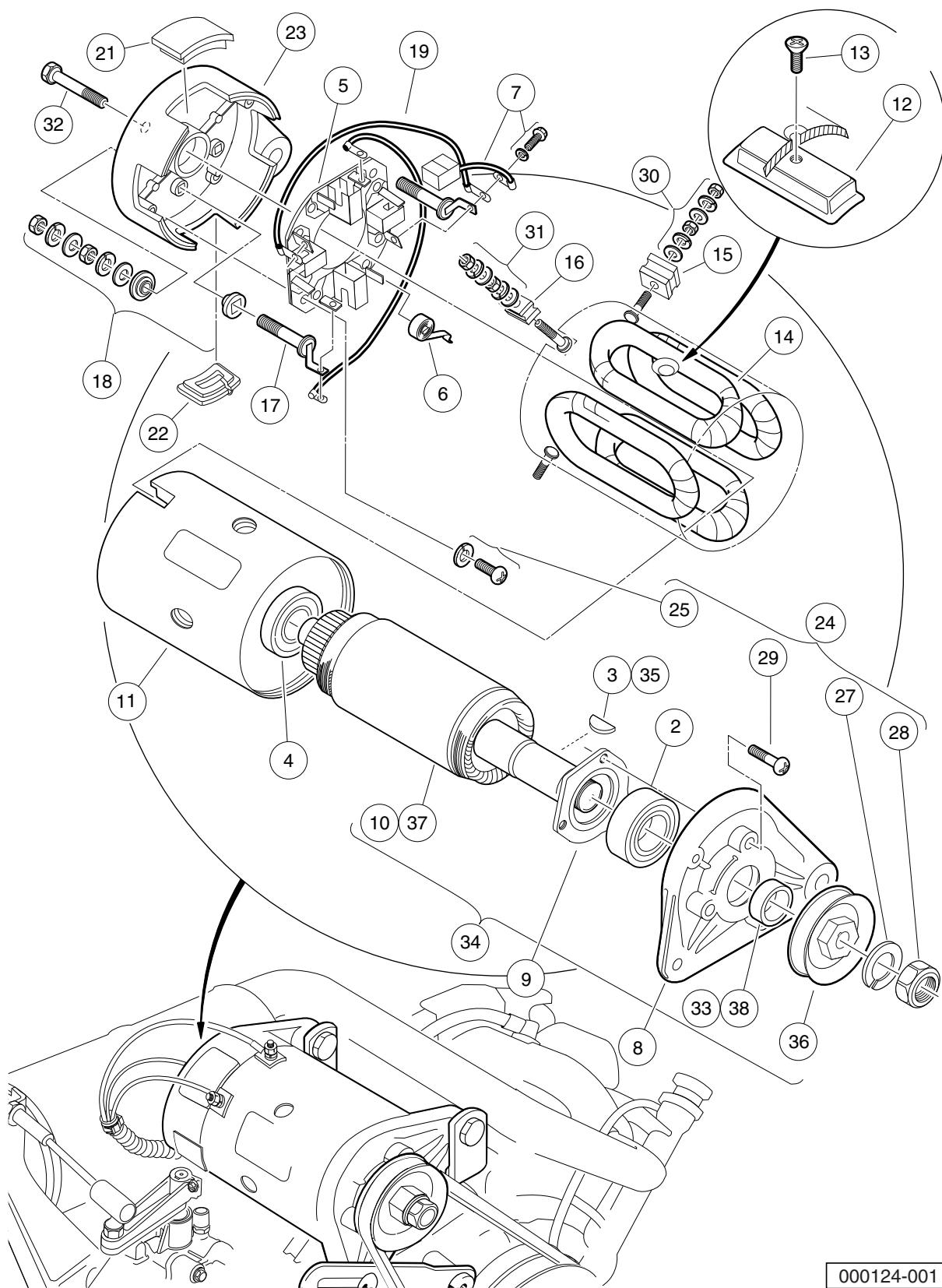
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	6
1	1015752	Screw, #12-16 X 0.625 Hi-Lo .....	1
2	101963401	Locknut, 5/16-18 Hex Flange .....	1
3	N/A	Assembly, Electrical Component Box (includes items 4 through 27) .....	1
4	1010954	Stud, 1/4-28 X 0.560 Ball .....	1
5	1012295	Fuse, 10-Amp .....	1
6	1013589	Ring, 0.338" Internal Retaining .....	1
7	1013609	Solenoid, 12-Volt .....	1
8	1014065	Washer, 0.38" ID Delrin Flat .....	1
9	1014119	Wire Assembly #6 Red .....	1
10	1014145	Bushing, Secondary Weight, Split .....	2
11	1014948	Diode .....	1
12	1015345	Bell Crank and Shaft Assembly .....	1
13	1015371	Box, Electrical Component .....	1
14	1015372	Cover, Electric Box .....	1
15	1015373	Cam, Electric Box .....	1
16	1015405	Bolt, Carriage, 5/16-18 X 2.0 .....	1
17	1015737	Wire Assy, #10 Red .....	1
18	1015741	Fuse Block .....	1
19	1015752	Screw, #12-16 X 0.625 Hi-Lo .....	4
20	1016423	Fuse, 20-Amp .....	1
21	101856102	Screw, 1/4-15 X 1.50 Hi-lo Hex .....	1
22	102264001	Diode Assembly .....	1
23	102711201	Voltage Regulator .....	1
24	1242	Nut, 5/16-18 Hex .....	2
25	7893	Nut, #10-32 Hex .....	2
26	8717	Locknut, 1/4-28 Nylon Insert .....	1
27	8990	Tie Wrap, 8" Nylon .....	2
28	1241	Washer, 5/16 Type A Flat .....	2
29	7473	Locknut, 5/16-18 Nylon Insert .....	2
30	7818	Bolt, Carriage, 5/16-18 X 1.5 .....	1



000232-001

# ELECTRICAL COMPONENTS, FRONT BODY – GASOLINE VEHICLE

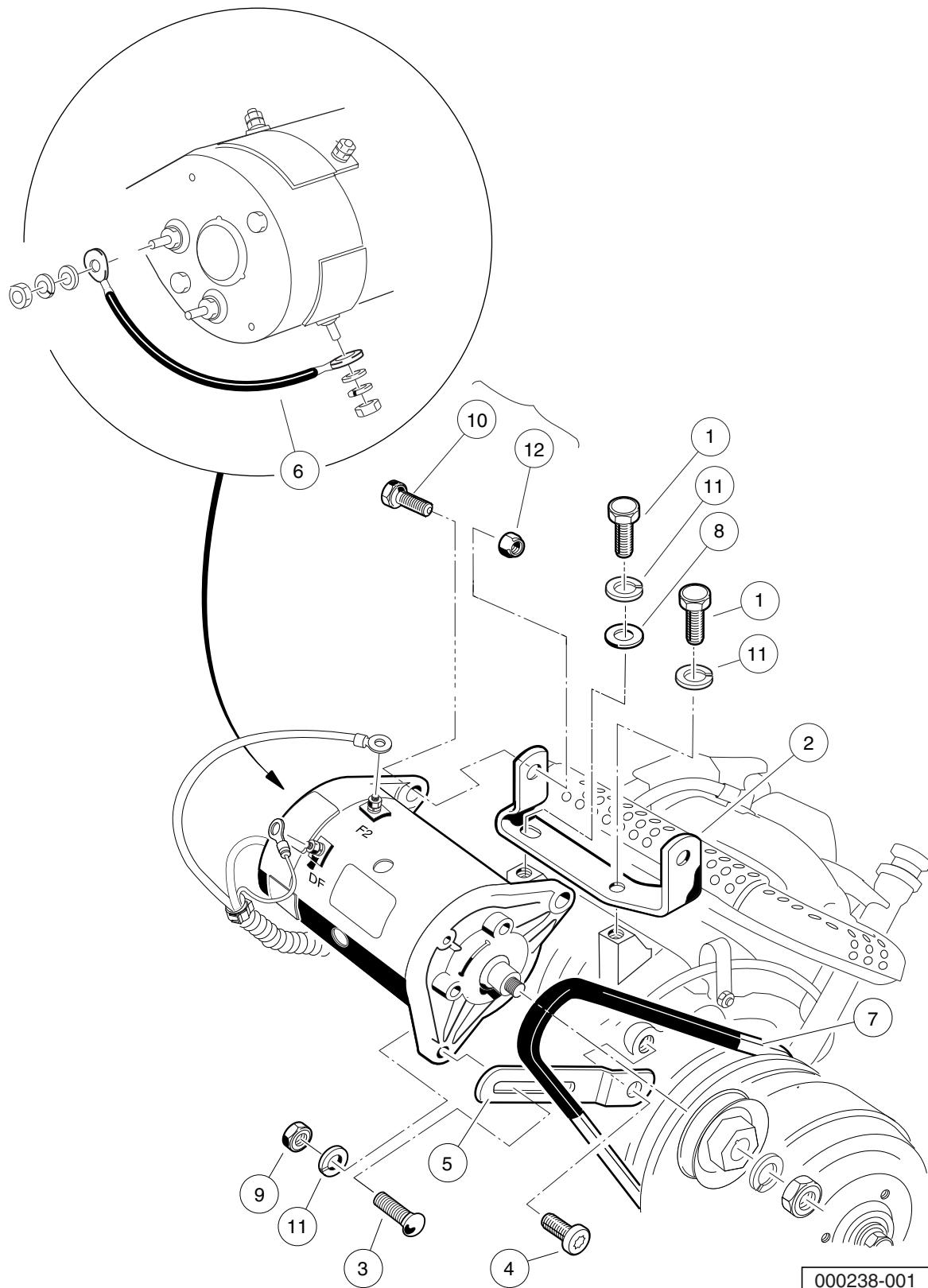
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	6
1	1012986	Lockwasher, M4 .....	2
2	1013857	Knob, Light Switch .....	1
3	1016630	Light, Oil .....	1
4	101990703	Gauge, Fuel/Hour, with Bracket (includes items 5 and 6) .....	1
5	102025901	Bracket, Fuel Gauge/Hour Meter .....	1
6	N/A	Gauge, Fuel/Hour .....	1
7	101991101	Nut, M4-0.7 .....	2
8	102044702	Key Switch 12v Key Start .....	1
9	102044801	Key Set .....	1
10	102051601	Spacer, Keyswitch .....	1
11	102051701	Nut, Key Switch .....	1
12	102051901	Switch, Light .....	1
13	102198001	Receptacle, Accessory .....	1
14	102804501	Panel, Instrument .....	1
15	102804502	Panel, Instrument (with 12-Volt Accessory Outlet Cutout) .....	1
16	102967901	Rivet, Removable, Tuflok 1/4"	7

**6****G**

000124-001

**STARTER/GENERATOR ASSEMBLY  
MODEL G425419 – GASOLINE VEHICLES**

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	6
1	101833701	Starter/Generator (cw) (includes items 2 through 33)	1
2	1013001	Bearing, Output Shaft Ball	1
3	1013003	Key, Starter/Generator	1
4	1013005	Bearing, Ball	1
5	101301102	Brush Holder Assembly (cw) (includes item 6)	1
6	101878101	Brush Spring Set	4
7	101869302	Brush and Screw Set (cw)	1
8	101874901	Front Bracket	1
9	101875001	Retainer	1
10	101875101	Armature	1
11	101875201	Field Coil Housing	1
12	101875301	Pole Set	1
13	101875401	Screw Set	1
14	101875501	Field Stator Coil Assembly	1
15	101875601	F Insulator Set	2
16	101875701	DF Insulator	1
17	101875802	A Connector (cw)	1
18	101876001	Screw and Mold Assembly	2
19	101876202	Brush Connector Assembly (cw)	2
20	101876301	Cover Set (includes items 21 and 22)	1
21	1012991	Brush Inspection Port Cover	3
22	1017653	Brush Port Cover w/Drain	1
23	101876402	Rear Bracket (cw)	1
24	101876501	Nut and Screw Set (includes items 25 through 29)	1
25	101896501	Brush Holder Asm Screw	2
26	N/A	Washer, M5 Flat	1
27	N/A	Washer, M14 Lock	1
28	N/A	Nut, Hex, M14 x 2	1
29	N/A	Screw, M5 x 0.8 x 18mm	3
30	101877601	Nut and Washer Set	2
31	101877701	Nut and Washer Set	1
32	101879001	Through Bolt Set	2
33	101939901	Spacer	1
34	101875102	Armature Asm Conversion Kit (includes items 35 through 38)	1
35	1013003	Key, Starter/Generator	1
36	1014289	Pulley, Starter/Generator	1
37	101875101	Armature	1
38	101939901	Spacer	1
		Note: Item 36 will ONLY fit Model G425419 Starter/Generator.	

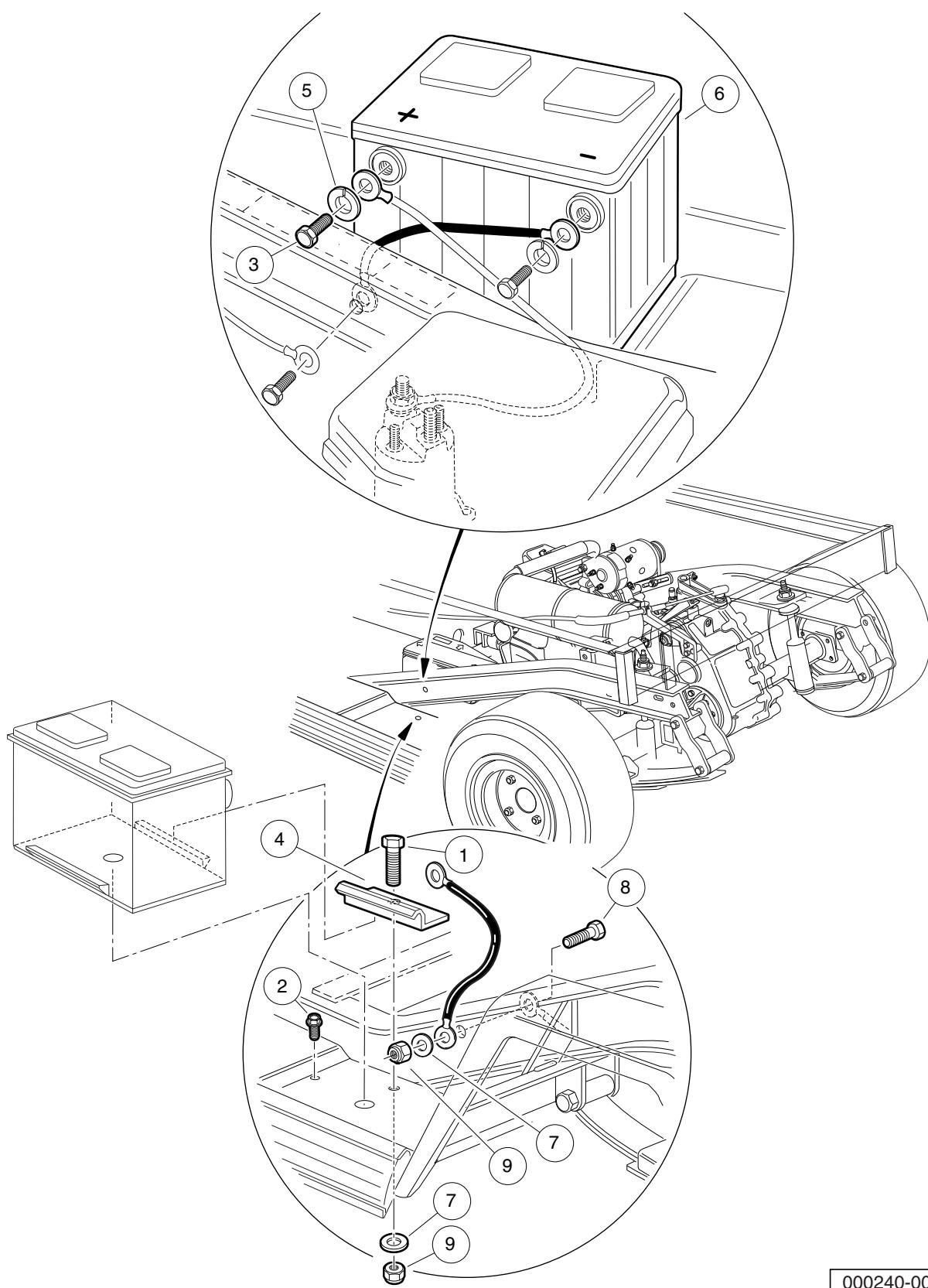
**6****G**

000238-001

# FE290 STARTER/GENERATOR MOUNTING – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	6
1	1012830	Screw, M8-125 X 22 Hex-Head .....	2
2	101524001	Bracket, Starter/Generator Mounting (FE290) .....	1
3	1015932	Bolt, Carriage, 5/16-18 .....	1
4	1016074	Screw, M8-1.25 X 18mm Torx .....	1
5	1016883	Bracket, Starter/Generator Adjustment .....	1
6	101837301	Wire Assy, #6 Green .....	1
7	101916701	V-Belt .....	1
8	1241	Washer, 5/16 Type A Flat .....	1
9	1242	Nut, 5/16-18 Hex .....	1
10	705	Screw, Cap-hex Hd 3/8-16x1.25 .....	2
11	7174	Lockwasher, 5/16 Split .....	3
12	8754	Locknut, 3/8-16 Hex .....	2

**6**  
**G**



000240-001

# BATTERY – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	6
1	1010934	Screw, 5/16-18 X 1.00 Hex Cap .....	1
2	1014288	Screw, 5/16-18 X 0.75 Thread-Forming .....	1
3	1014375	Screw, 3/8-16 X 0.50 Stainless Steel Hex-Head .....	2
4	101898001	Clamp, Battery .....	1
5	102355301	Lockwasher, #10 Split Ss .....	2
6	N/A	Battery, Start, 12v .....	1
7	1241	Washer, 5/16 Type A Flat .....	2
8	7173	Screw, 5/16-18 X 0.75 Hex-Head Cap .....	1
9	7473	Locknut, 5/16-18 Nylon Insert .....	2

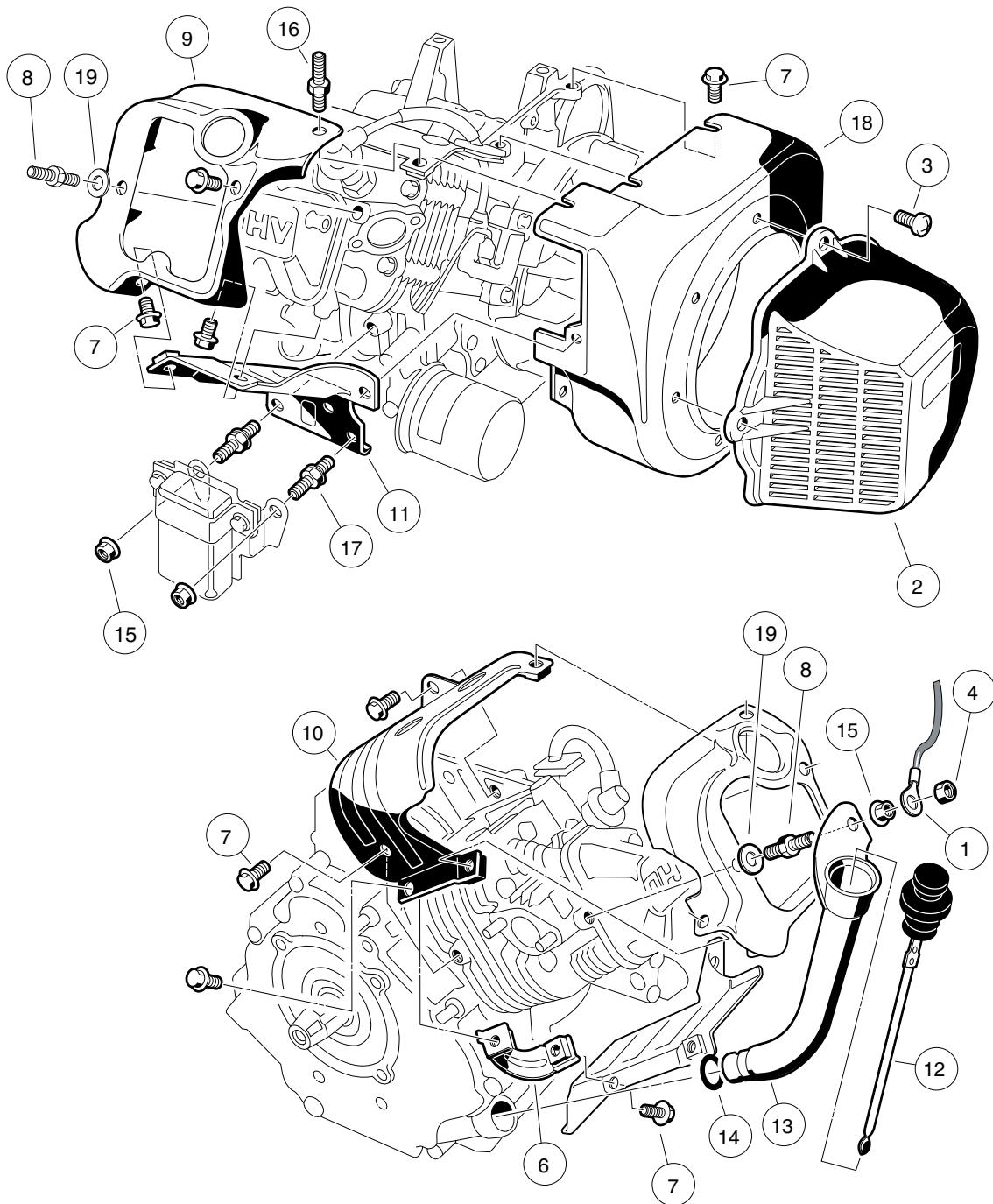
**6**

**G**

# FE290 ENGINE

7

G

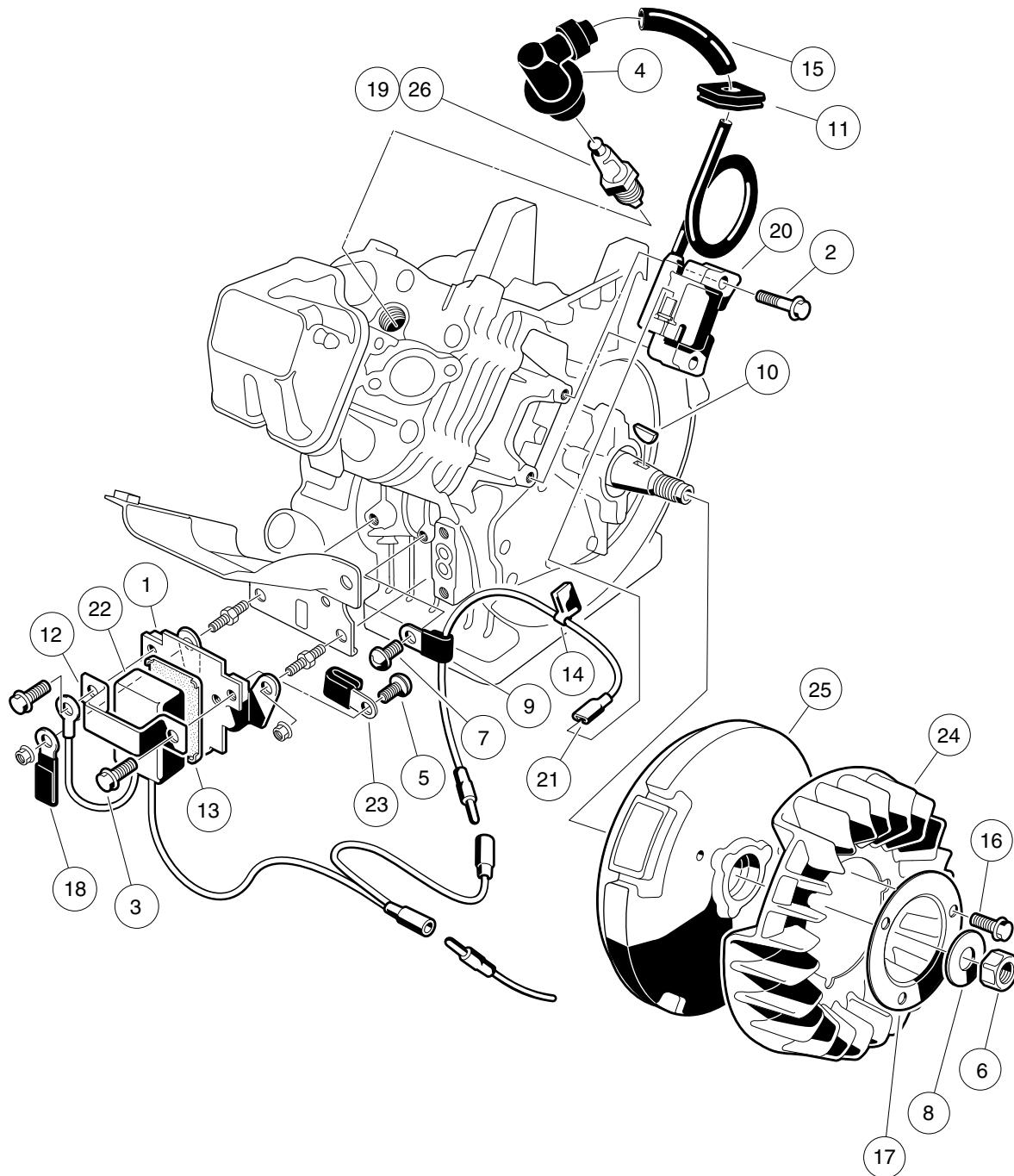
**7****G**

000194-001

# FE290 ENGINE – SHROUDS AND BRACKETS

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	7
1	1015332	Wire Assembly, #10, Uninsulated .....	1
2	1015649	Shroud, Fan .....	1
3	1015969	Screw, M6-1.00 X 10mm Pan Hd .....	4
4	101887601	Locknut, M6-1.00 Nylon Insert .....	1
5	101953901	Engine, FE290 (cw) * (includes items 6 through 19) .....	1
6	1016443	Bracket .....	1
7	1016456	Bolt, Flange Head, M6 x 1 x 12 mm .....	15
8	1016507	Bolt, Two-Ended .....	1
9	1016524	Shroud, Engine, FE290D .....	1
10	1016525	Shroud, Engine, FE290D .....	1
11	1016526	Shroud, Engine, FE290D .....	1
12	1016531	Dipstick .....	1
13	1016536	Tube, Oil Filler, FE290D .....	1
14	1016539	O-Ring .....	1
15	1016547	Nut, M6 Flange .....	3
16	1017221	Screw, M6-1.00 Stud .....	1
17	101909701	Stud, M6-1.00, Two-Ended .....	2
18	101915601	Housing, FE290 Fan .....	1
19	N/A	Washer, 6 mm Flat .....	1

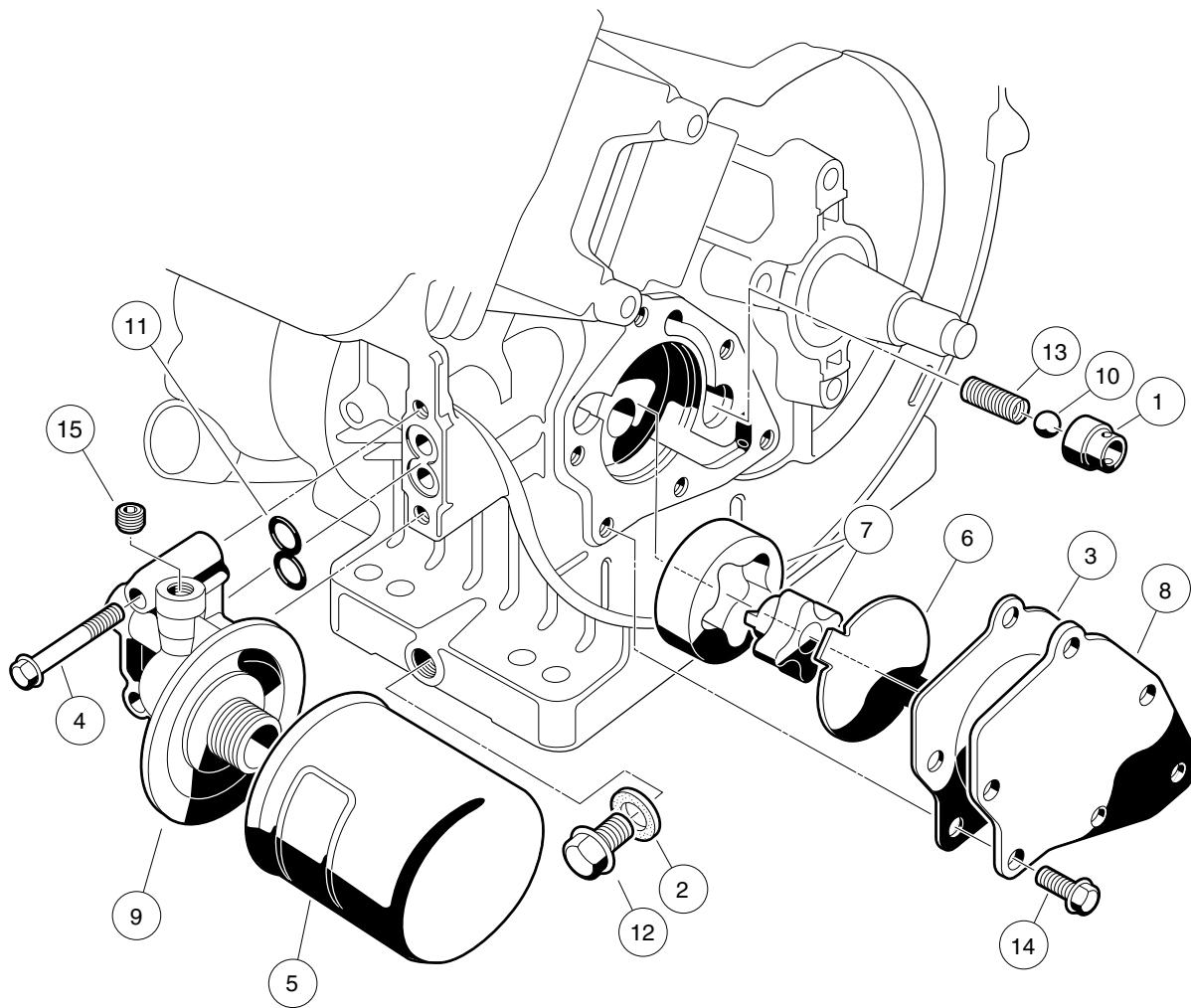
\* Note: FE290 engine component listings span several pages.



000195-001

# FE290 ENGINE – IGNITION COMPONENTS AND FLYWHEEL

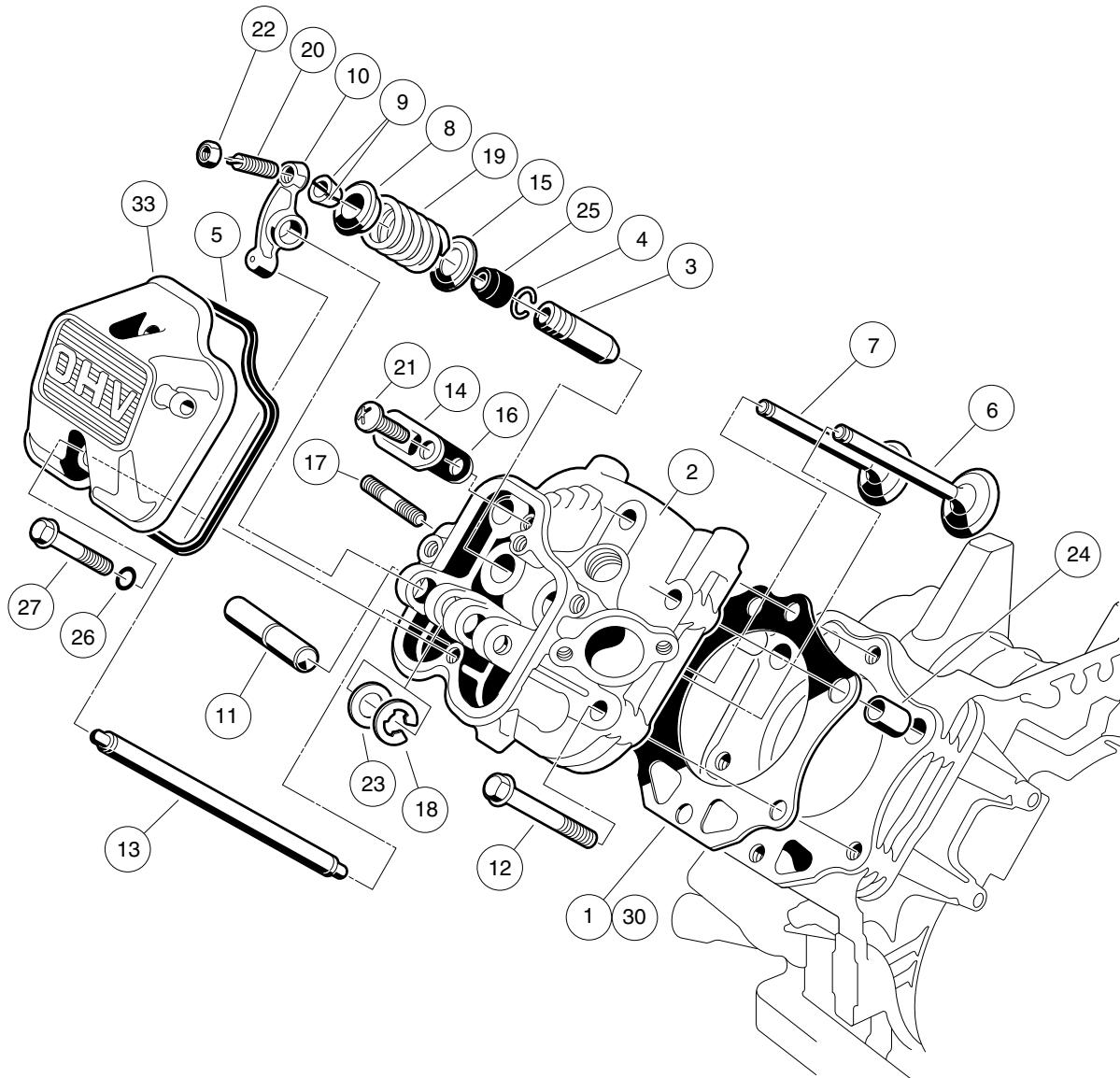
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	7
1	1016445	Bracket, RPM Limiter .....	1
2	1016455	Bolt, Flange Head .....	2
3	1016456	Bolt, Flange Head, M6 x 1 x 12 mm .....	2
4	1016493	Cap, Spark Plug .....	1
5	1016497	Screw, Pan WP Cross .....	1
6	1016505	Nut, Hex, Fine .....	1
7	1016544	Screw .....	1
8	1016548	Washer, M16 Flat .....	1
9	1016561	Clamp .....	1
10	1016562	Key .....	1
11	1016578	Ignition, Grommet .....	1
12	1016579	Band, RPM Limiter Mount .....	1
13	1016586	Damper, RPM Limiter .....	1
14	1016587	Clamp .....	1
15	1016588	Tube, 7mm X 10mm X 70mm .....	1
16	1017448	Bolt, Flanged .....	3
17	1017455	Plate, Flywheel Fan .....	1
18	1017468	Clamp .....	1
19	101881101	Spark Plug, OHV (Autolite) .....	1
20	101909201	Coil, Ignition .....	1
21	101909301	Lead Wire Assy .....	1
22	101909401	Limiter, RPM .....	1
23	101909501	Clamp, Steel .....	1
24	101915801	Fan, FE290 (cw) .....	1
25	101929301	Flywheel, Complete .....	1
26	AM10724	Spark Plug, OHV (NGK) .....	1



000196-001

# FE290 ENGINE – OIL CIRCULATION

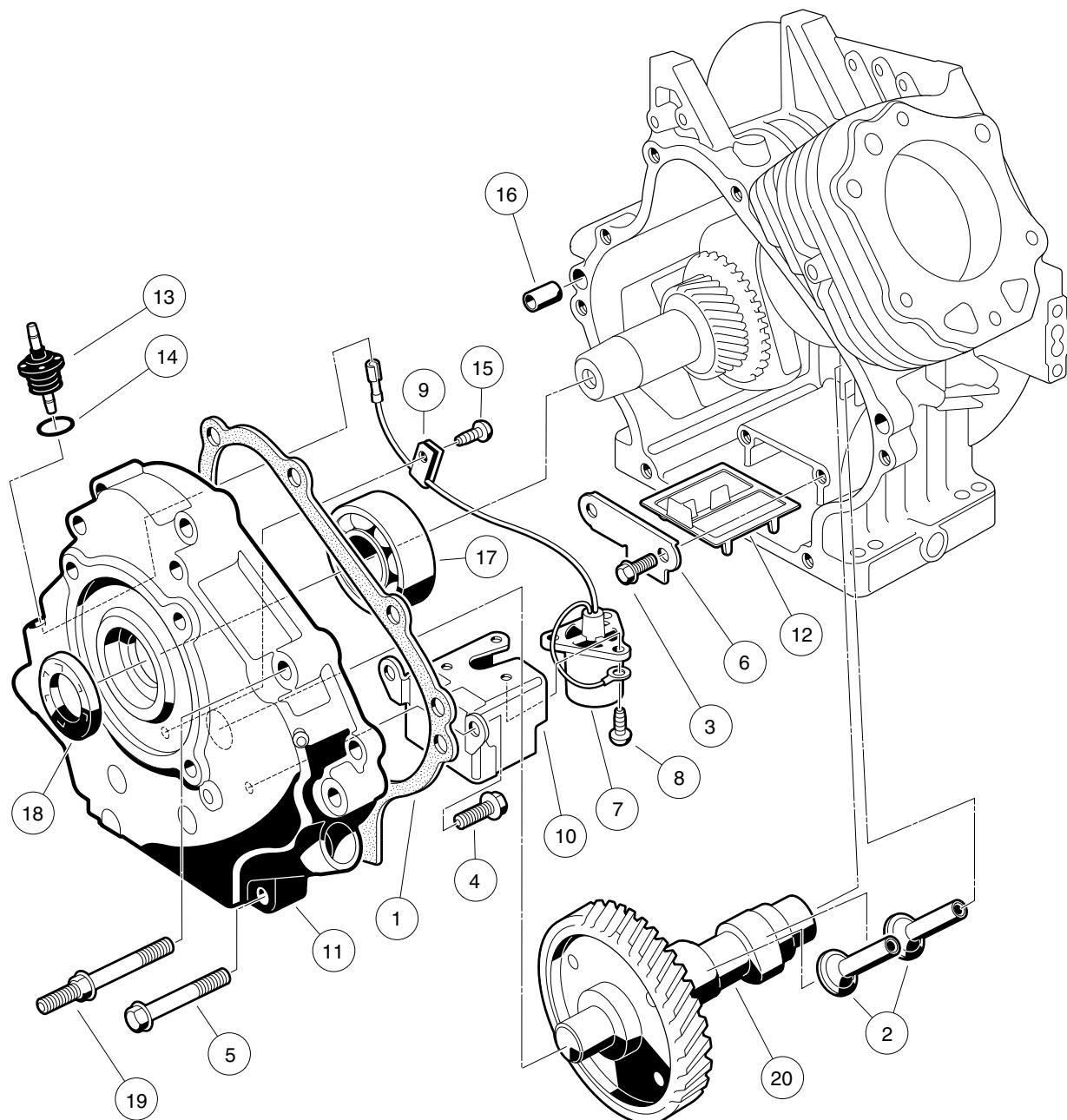
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	7
1	1016429	Seat, Valve Oil Press Relief .....	1
2	1016432	Gasket, Drain Plug .....	1
3	1016435	Gasket, Oil Pump .....	1
4	1016457	Bolt, Flange Head .....	2
5	1016467	Filter, Oil .....	1
6	1016473	Plate, Oil Pump .....	1
7	101648203	Oil Pump And Rotor .....	1
8	1016484	Cover, Pump .....	1
9	1016502	Bracket, Oil Filter Mount .....	1
10	1016537	Ball, Steel, Press, Relief .....	1
11	1016570	O-Ring .....	1
12	1016576	Plug, Drain .....	1
13	1016581	Spring .....	1
14	1017456	Bolt, Flanged .....	6
15	1017507	Plug .....	2



000197-001

# FE290 ENGINE – CYLINDER HEAD

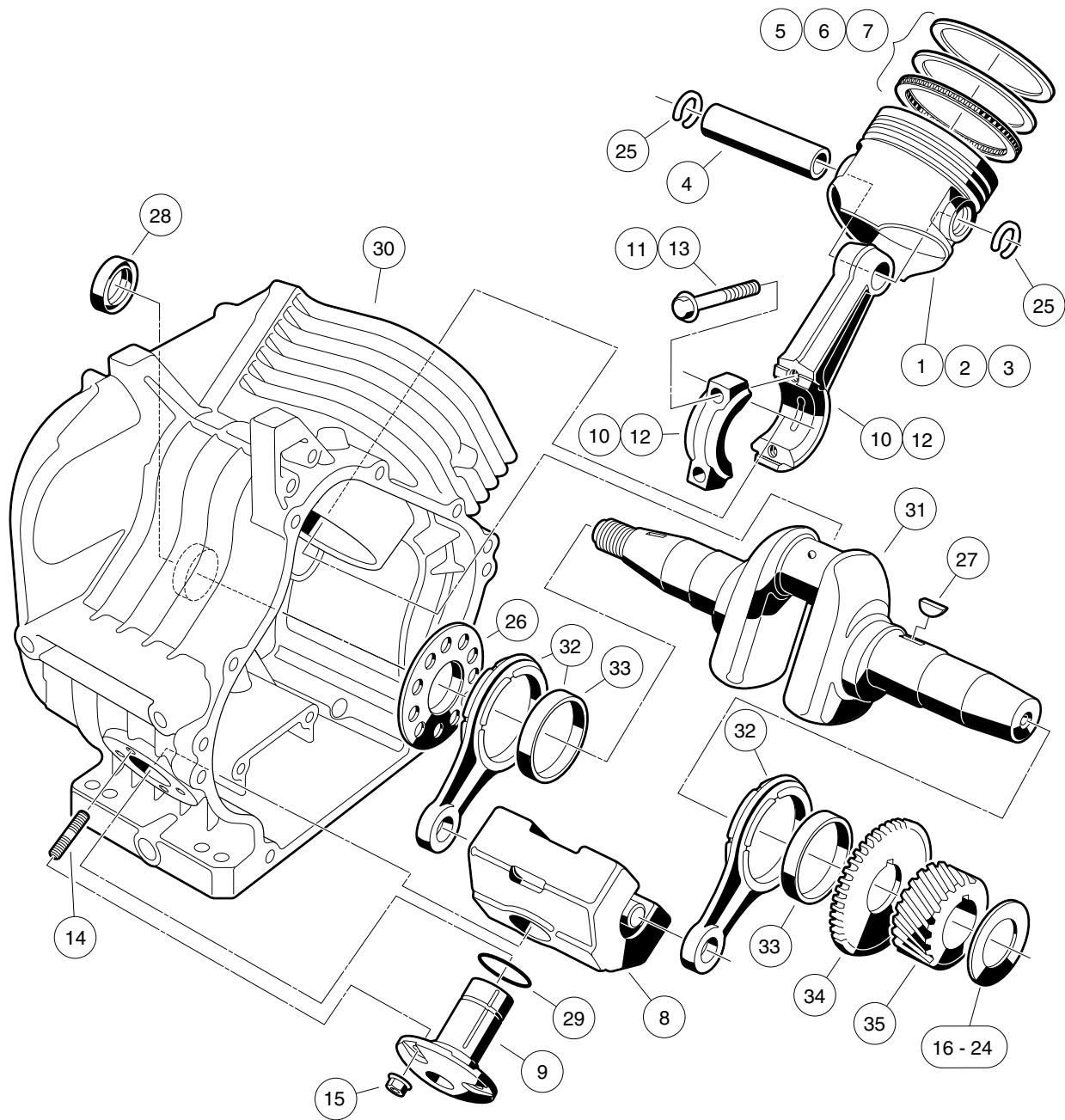
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	7
1	1016430	Gasket, Head, FE290 .....	1
2	1016431	Head Assembly, FE290 Cylinder (includes items 3 and 4) .....	1
3	1016519	Guide, Valve .....	2
4	1016560	Snap Ring .....	2
5	1016436	Gasket, Rocker Case .....	1
6	1016447	Valve, Intake .....	1
7	1016448	Valve, Exhaust .....	1
8	1016449	Retainer, Valve Spring .....	2
9	1016450	Collet .....	4
10	1016451	Arm, Rocker .....	2
11	1016452	Shaft, Rocker .....	1
12	1016458	Bolt, Flange Head, M8 x 1.25 x 45 mm .....	6
13	1016471	Rod, Push .....	2
14	1016474	Plate .....	1
15	1016479	Seat, Spring .....	2
16	1016483	Valve .....	1
17	1016489	Stud, Two-Ended, M8-1.25 .....	2
18	1016517	Circlip, Type-E .....	1
19	1016523	Spring, Engine Valve .....	2
20	1016542	Screw .....	2
21	1016544	Screw .....	1
22	1016545	Nut .....	2
23	1016549	Washer, 12.1x19x1.8 .....	1
24	1016563	Pin .....	2
25	1016566	Seal, Oil .....	2
26	1016569	O-Ring .....	2
27	1016583	Bolt, 6x35 .....	2
28	102304701	Kit, Gasket, FE290 (includes items 29 through 32) .....	1
29	1015330	Gasket, Exhaust .....	1
30	1016430	Gasket, Head, FE290 .....	1
31	1016440	Gasket, Engine to Insulator .....	1
32	1016446	Gasket, Crankcase Cover .....	1
33	102753401	Case, Rocker .....	1



000198-001

# FE290 ENGINE – CRANKCASE, CAMSHAFT, AND OIL SENSOR

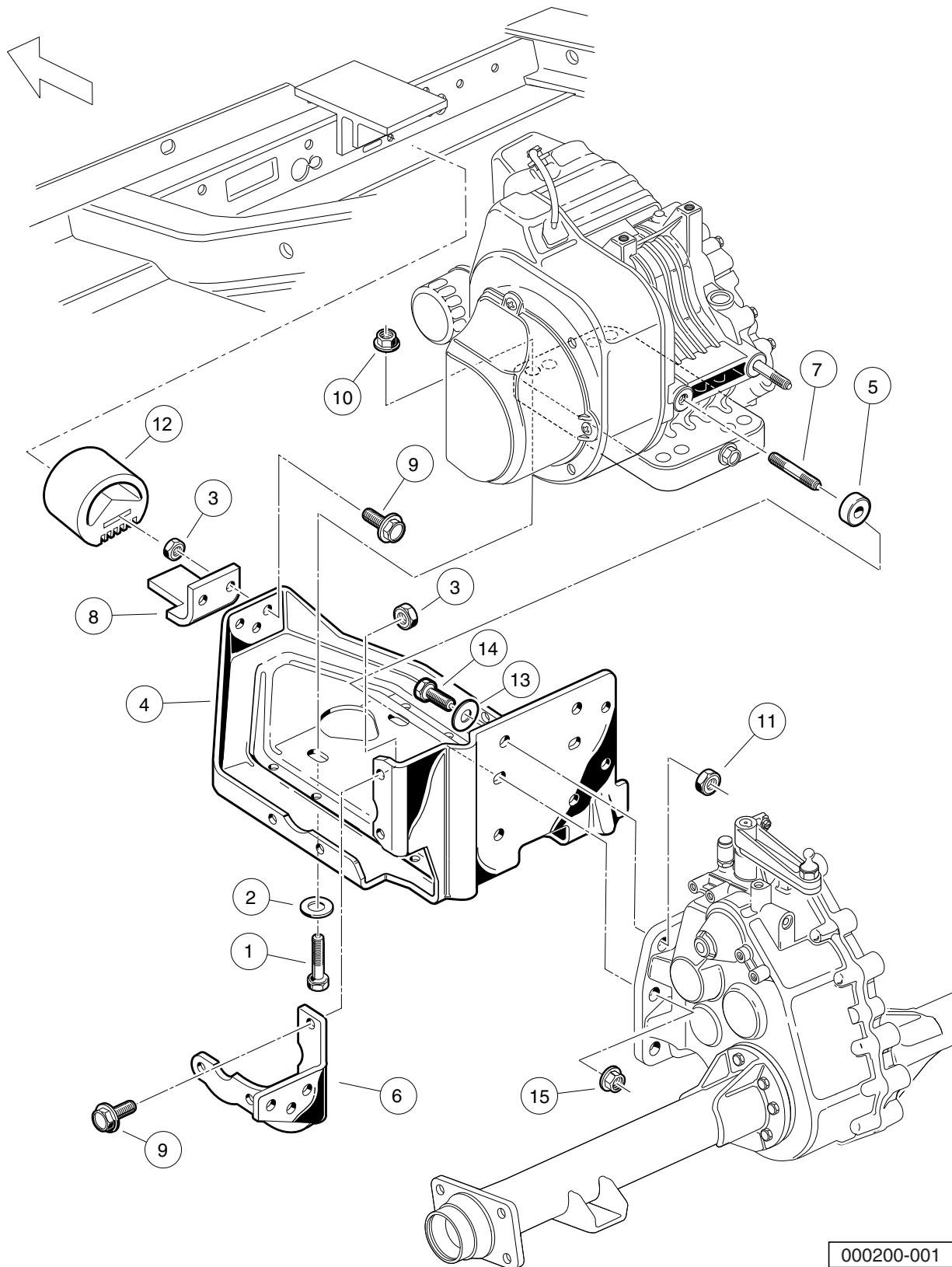
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	7
1	1016446	Gasket, Crankcase Cover .....	1
2	1016453	Tappet .....	2
3	1016454	Bolt, Flange Head, M5 x 0.8 x 8 mm .....	2
4	1016456	Bolt, Flange Head, M6 x 1 x 12 mm .....	2
5	1016458	Bolt, Flange Head, M8 x 1.25 x 45 mm .....	6
6	1016472	Plate, Oil Filter Screen .....	1
7	1016494	Sensor, Oil Level .....	1
8	1016496	Screw, Cross Pan-Head, M4 x 0.7 x 8 mm .....	3
9	1016506	Clamp .....	1
10	1016510	Bracket, Switch, Oil Level .....	1
11	1016520	Cover, Crankcase .....	1
12	1016521	Screen, Oil Filter .....	1
13	1016535	Connector, Cord .....	1
14	1016538	O-Ring .....	1
15	1016544	Screw .....	1
16	1016564	Pin .....	2
17	1016565	Bearing, Ball .....	1
18	1016567	Seal, Crankshaft .....	1
19	1016584	Bolt, Two-Ended, M8 x 1.25 x 69 mm .....	2
20	101915401	Camshaft Complete, FE290 .....	1



000199-001

# FE290 ENGINE – CRANKCASE AND CRANKSHAFT

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	7
1	101645901	Piston .....	1
2	101645902	Piston, Engine 0.25 mm Over .....	1
3	101645903	Piston, Engine 0.50 mm Over .....	1
4	1016460	Pin, Piston .....	1
5	101646101	Ring Set, Piston .....	1
6	101646102	Ring Set, Piston 0.25 mm Over .....	1
7	101646103	Ring Set, Piston 0.50 mm Over .....	1
8	1016469	Weight, Counterbalance .....	1
9	1016470	Shaft, Guide, Counterbalance .....	1
10	101647501	Rod Assembly (includes item 11) .....	1
11	1016509	Bolt .....	2
12	101647502	Rod Assembly, Connecting 0.50 mm Under (includes item 13) .....	1
13	1016509	Bolt .....	2
14	1016541	Stud, 6x14 .....	4
15	1016547	Nut, M6 Flange .....	4
16	101655001	Shim, Crankshaft T=1.13 .....	1
17	101655002	Shim, Crankshaft T=1.18 .....	1
18	101655003	Shim, Crankshaft T=1.23 .....	1
19	101655004	Shim, Crankshaft T=1.28 .....	1
20	101655005	Shim, Crankshaft T=1.33 .....	1
21	101655006	Shim, Crankshaft T=1.38 .....	1
22	101655007	Shim, Crankshaft T=1.43 .....	1
23	101655008	Shim, Crankshaft T=1.48 .....	1
24	101655009	Shim, Crankshaft T=1.53 .....	1
25	1016558	Ring, Snap .....	2
26	1016559	Spacer .....	1
27	1016562	Key .....	1
28	1016568	Seal, Oil .....	1
29	1016571	O-Ring .....	1
30	101915501	Crankcase Complete, FE290 (cw) .....	1
31	101922301	Crankshaft, FE290 Left-Hand Thread (includes items 32 through 35) .....	1
32	1016516	Rod (includes item 33) .....	2
33	1016580	Bearing, Plane .....	1
34	1016532	Gear, Spur .....	1
35	1016533	Gear, Helical .....	1

**7****G**

000200-001

# FE290 ENGINE MOUNTING

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	7
1	1010577	Bolt, Hex-Head, 5/16-18 X 1.50 .....	4
2	1012571	Washer, 5/16 Extra Thick Flat .....	4
3	1013924	Nut, 5/16-24 Hex Head Cone .....	6
4	101827101	Plate, Engine Mounting .....	1
5	101832101	Spacer, Powdered Metal .....	2
6	101832701	Stiffener (Flywheel Side) .....	1
7	101833201	Stud, M8-1.25 X 60mm Two-Ended .....	2
8	101834601	Snubber Bracket .....	1
9	101884801	Screw, 5/16-24 X 0.875 Grade-8 .....	6
10	101963401	Locknut, 5/16-18 Hex Flange .....	4
11	102065901	Locknut, 3/8-16 Flanged Dimple .....	4
12	102540301	Inner Frame Snubber .....	1
13	334	Washer, 3/8 Type A Flat .....	4
14	705	Screw, Cap-hex Hd 3/8-16x1.25 .....	4
15	96704416	Nut Flg, M8 X 1.25 Serrated .....	2

**7**

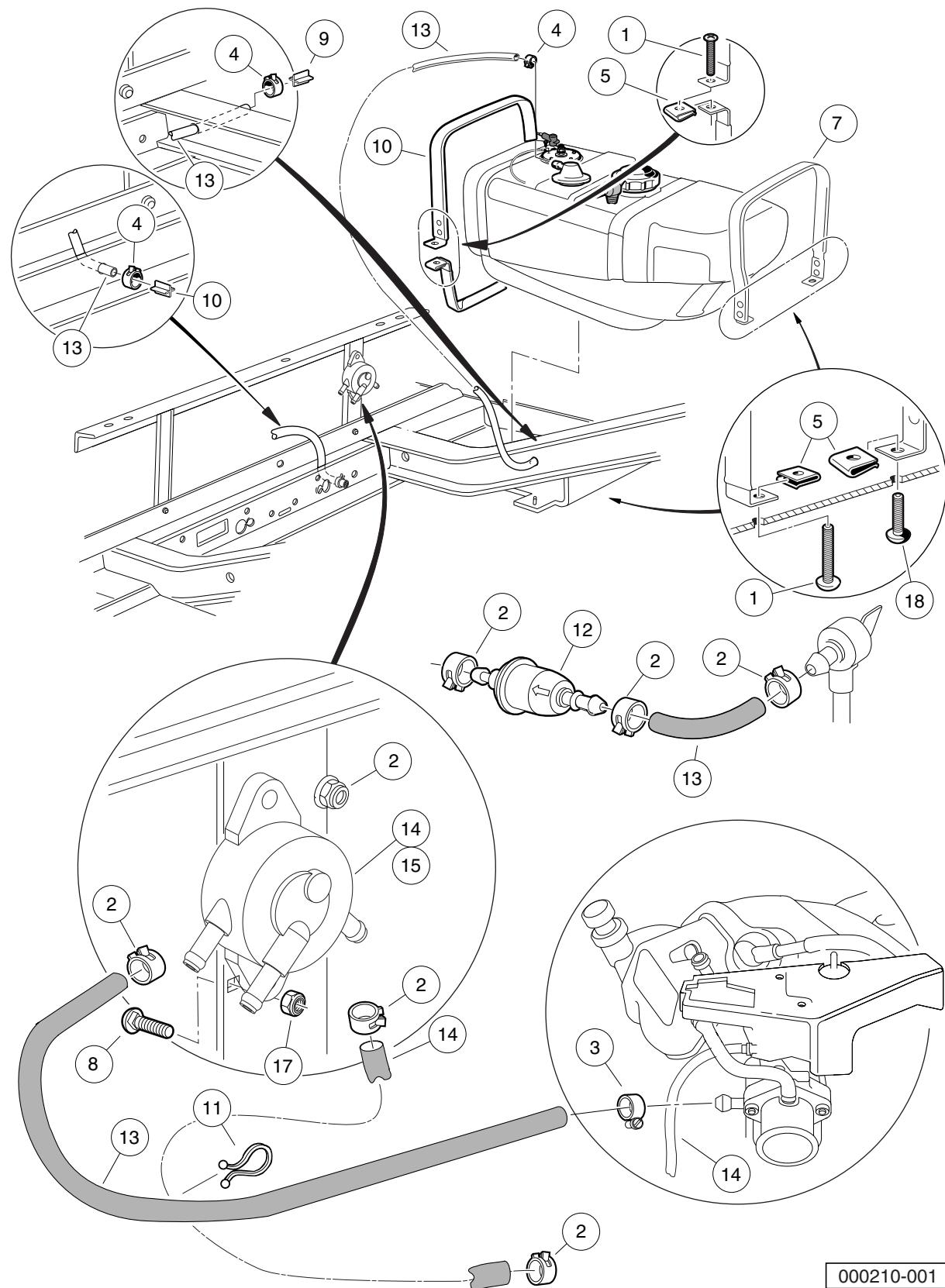
**G**

# **FUEL, INTAKE, AND GOVERNOR SYSTEMS**

---

**8**

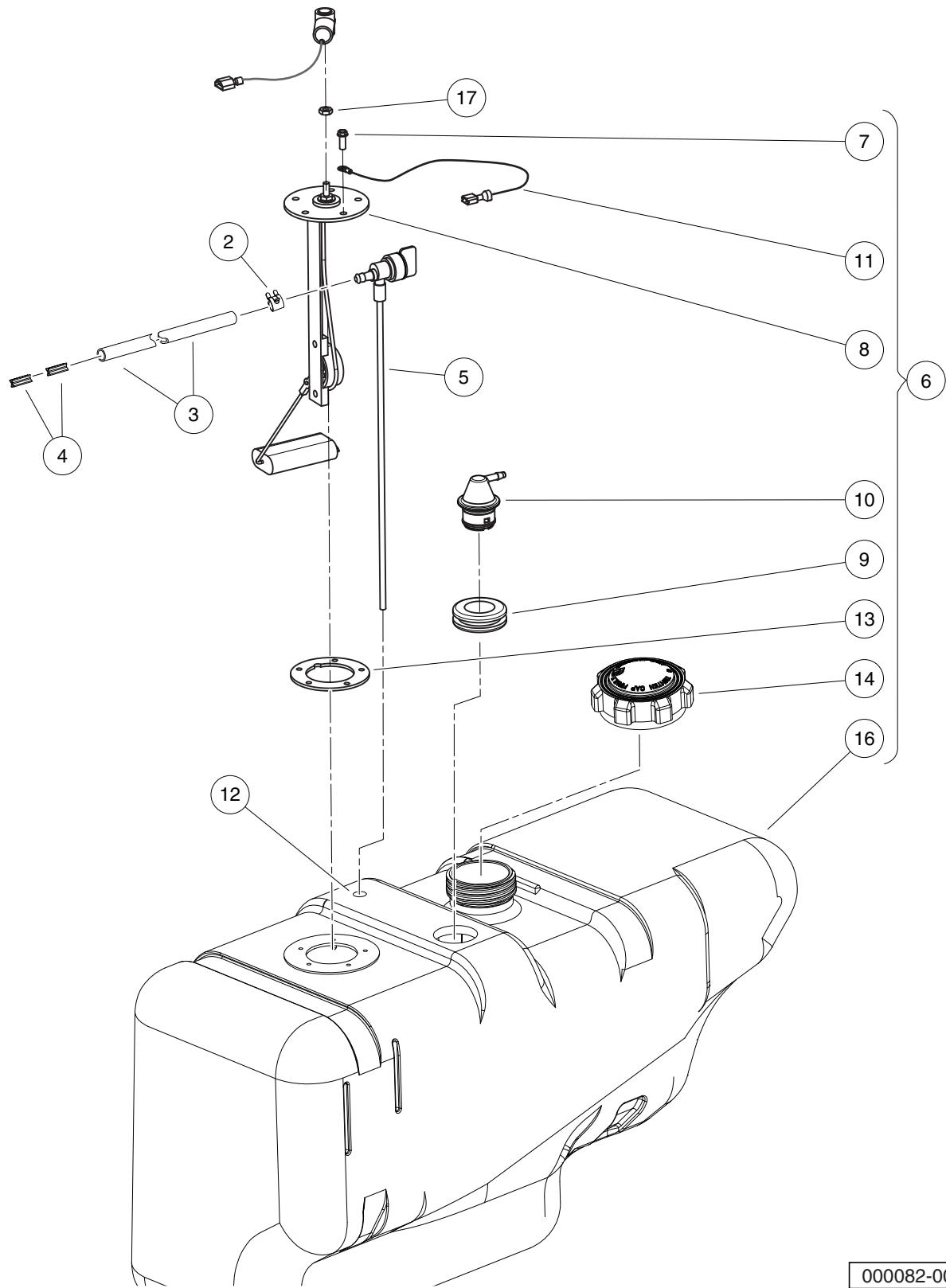
**G**

**8****G**

000210-001

# FUEL SYSTEM

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1011988	Screw, 1/4-20 X 2.00 Phillips Truss-Head .....	2
2	1012649	Clamp, 0.460 Red Hose .....	7
3	1013687	Clamp, 3/8" Hose (screw type) .....	1
4	1013746	Clamp, 0.301 ID Hose .....	3
5	1014116	Nut, 1/4-20 Speed .....	3
6	1014524	Kit, Impulse Pump Rebuild .....	1
7	1014928	Fuel Strap Assembly Rear .....	1
8	1017203	Carriage Bolt .....	2
9	101824401	Vent Barb .....	2
10	101955301	Fuel Strap Assy, Front .....	1
11	101987701	Clamp, Plastic Tie .....	1
12	102003201	Filter, Fuel, 30 Micron .....	1
13	102865101	Fuel Line .....	1
14	103781101	Kit, Fuel Pump Retrofit (includes items 15 and 16) .....	1
15	103010101	Pump, Fuel, Impulse, Fh .....	1
16	103781201	Instr, Fuel Pump Retrofit .....	1
17	8233	Locknut, 1/4-20 Nylon Insert .....	2
18	8248	Screw, 1/4-20 X 0.75 Truss-Head Machine .....	1



000082-003

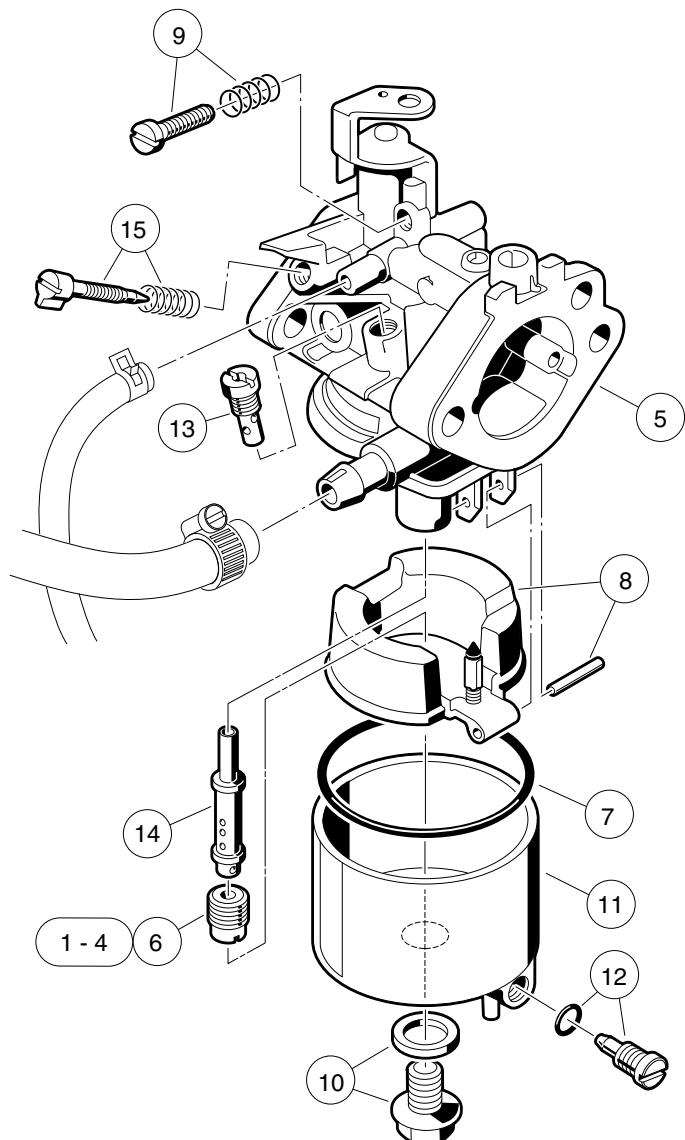
# FUEL TANK WITH FUEL LEVEL SENDING UNIT

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1016004	Tank Kit w/Sending Unit (includes items 2 through 6) .....	1
2	1013746	Clamp, 0.301 ID Hose .....	2
3	1015137	Fuel Line (available by the foot) .....	1
4	101824401	Vent Barb .....	2
5	101896901	Fuel Pickup w/Shut-Off Valve .....	1
6	103651901	Asm, Tank, Ds Utl W/sut Nano (includes items 7 through 16) .....	1
7	1013461	Screw, #10-16 Hex-Head Hi-Lo .....	5
8	1013462	Sending Unit, Fuel Level *	1
9	1015139	Insulation Grommet .....	1
10	1015143	Vent, Fuel Tank .....	1
11	1015921	Wire Assembly #16 Black .....	1
12	102406701	Bushing, Line, Return .....	1
13	102522001	Gasket, Rubber .....	1
14	103372101	Cap, Fuel Tank, Gas, Ratchet .....	1
15	103372302	Fuel Pickup w/Shut-Off Valve, 288mm .....	1
16	103776901	Tank, Fuel, Top, W/su Nano .....	1
17	8797	Nut, #10-32 Brass Hex .....	1

\* Note: Must replace fuel sending unit gasket when servicing this component.

**8**

**G**



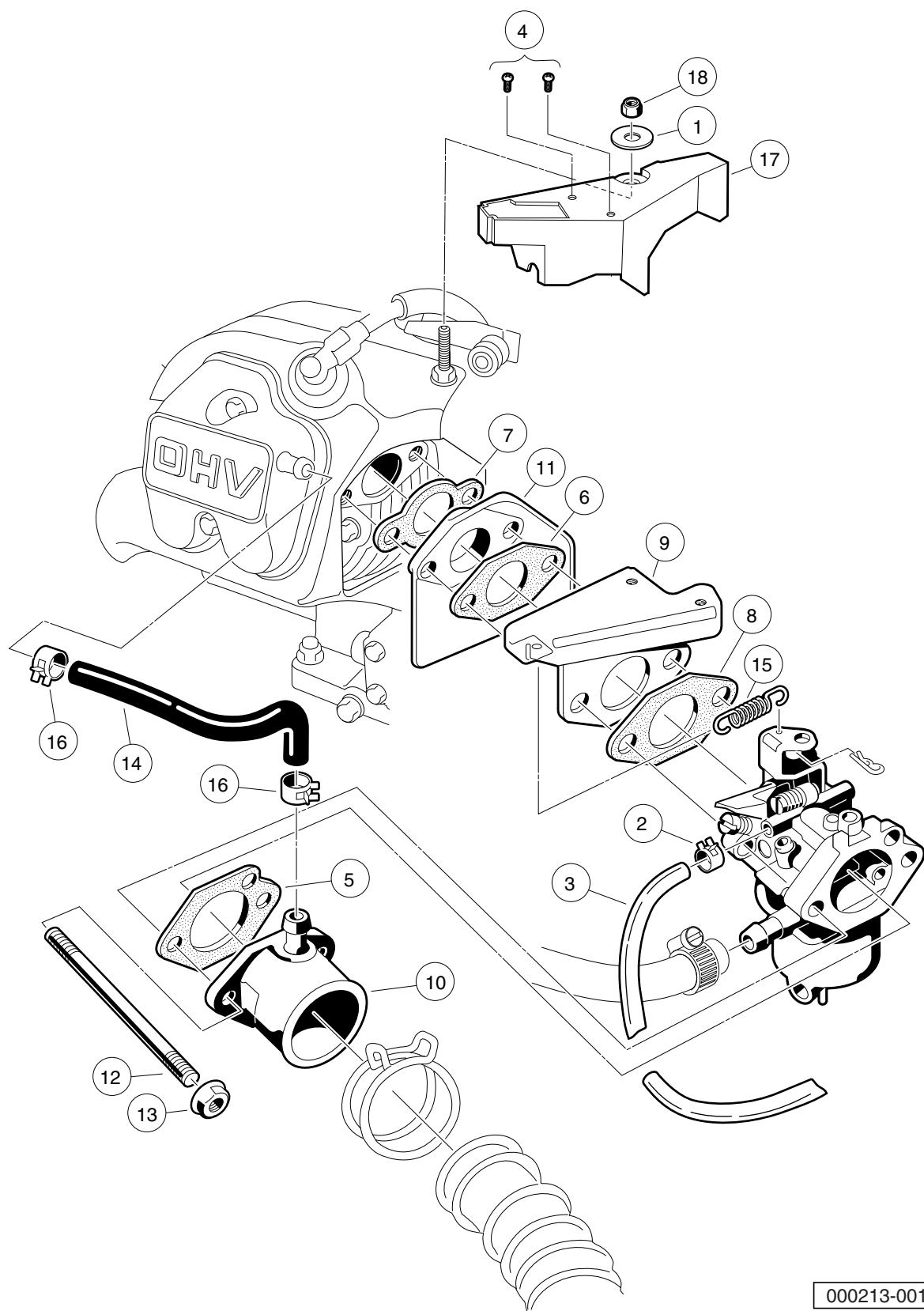
000211-001

# CARBURETOR ASSEMBLY – FE290

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101642572	Jet, Altitude, # 72 .....	1
2	101642575	Jet, Altitude, # 75 .....	1
3	101642578	Jet, Altitude, # 78 .....	1
4	101642580	Jet, Altitude, # 80 .....	1
5	101905601	Carburetor Assembly, FE290D (includes items 6 through 15) .....	1
6	101642582	Jet, Altitude, # 82 .....	1
7	1016437	Gasket, Carburetor Bowl OHV .....	1
8	1016486	Float Assembly .....	1
9	1016501	Screw Assembly .....	1
10	1016585	Bolt .....	1
11	1017461	Chamber Assembly, Float (includes item 12) .....	1
12	1016499	Screw Assembly .....	1
13	101973101	Jet, #40 Pilot .....	1
14	101973201	Nozzle, Main .....	1
15	N/A	Assembly, Pilot Air Screw .....	1
		Note: 101642582 for 0 - 3,000 feet; 101642580 for 3,000 - 5,000 feet; 101642578 for 5,000 - 8,000 feet; 101642575 for 8,000 - 10,000 feet; 101642572 for 10,000 feet and higher.	

**8**

**G**



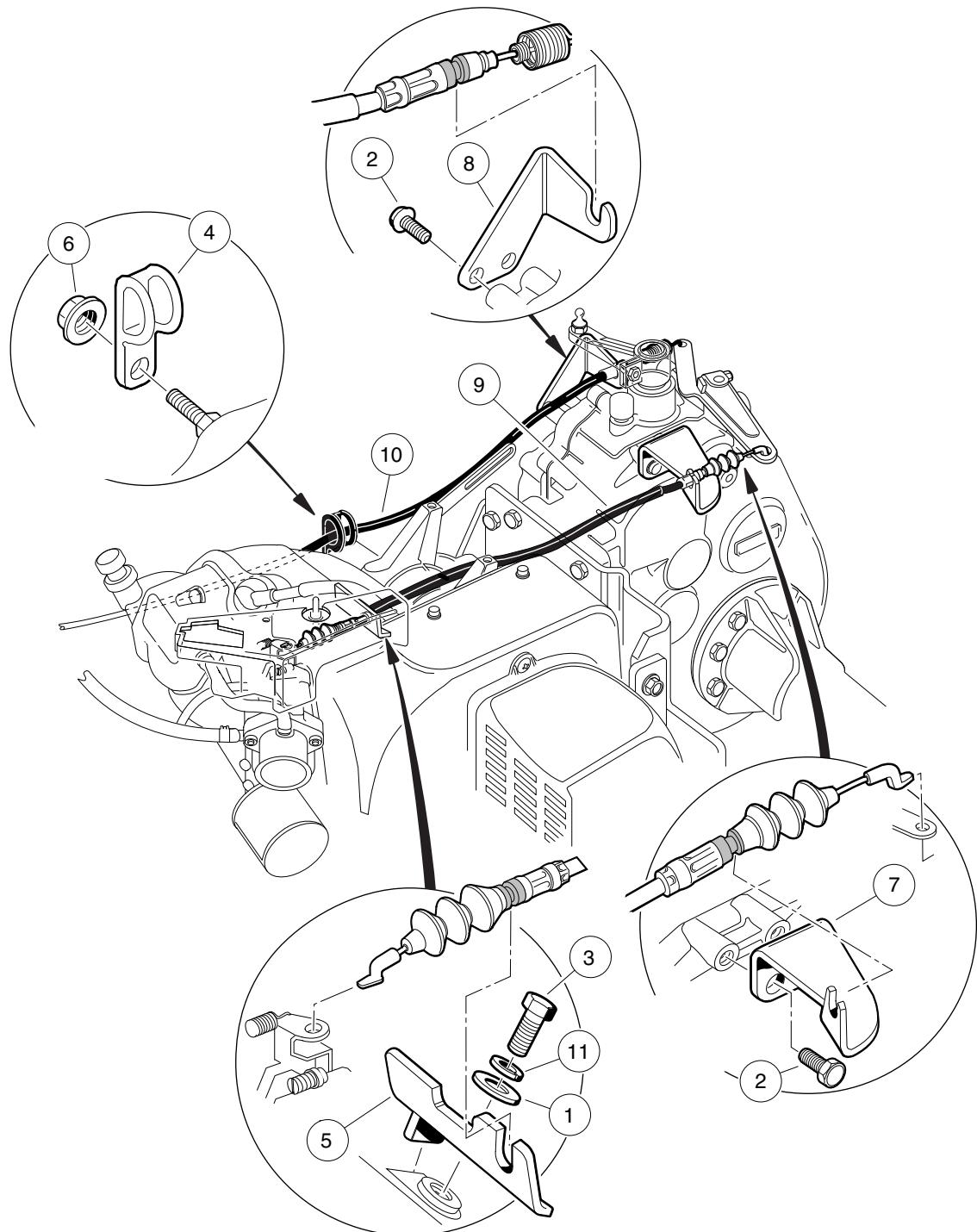
000213-001

# CARBURETOR INSTALLATION – FE290

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1011697	Washer, 5/16 Flat .....	1
2	1013746	Clamp, 0.301 ID Hose .....	1
3	1015137	Fuel Line (Available by the foot) .....	1
4	1016103	Screw, Pan Hd Tx, Taptite 6-32 .....	2
5	1016438	Gasket, Carb To Intake Manifold .....	1
6	1016439	Gasket, Insulator .....	1
7	1016440	Gasket, Engine to Insulator .....	1
8	1016441	Gasket, Sprg Brkt To Carb OHV .....	1
9	1016444	Bracket, Throttle Spring Return .....	1
10	1016480	Pipe, Intake Manifold .....	1
11	101648102	Insulator, Carburetor .....	1
12	101649002	Stud, M6-1.00 Two-Ended .....	2
13	1016547	Nut, M6 Flange .....	2
14	1016572	Tube, Crankcase Vent .....	1
15	1016582	Spring, Throttle Return .....	1
16	1017466	Clamp .....	2
17	101820201	Shield, Governor .....	1
18	101887601	Locknut, M6-1.00 Nylon Insert .....	1

**8**

**G**



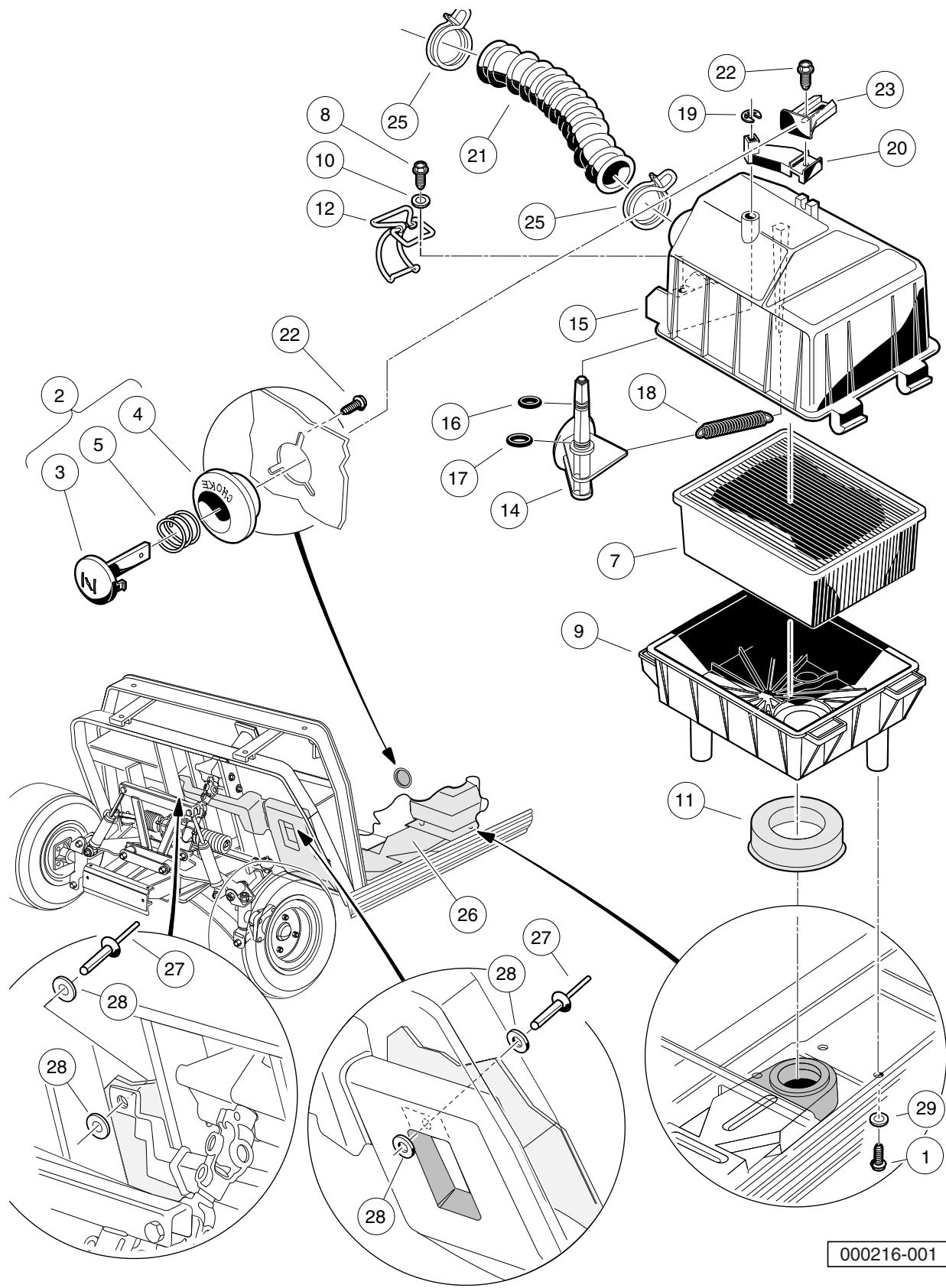
000215-001

# GOVERNOR AND ACCELERATOR CABLES

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1011697	Washer, 5/16 Flat .....	1
2	1012285	Screw, 1/4 X 0.625 Hex-Head .....	4
3	1012830	Screw, M8-125 X 22 Hex-Head .....	1
4	1013700	Clamp .....	2
5	101584502	Bracket, Governor Cable Snap-In .....	1
6	1016546	Nut .....	2
7	101832202	Bracket, Rear Governor Cable Snap-In .....	1
8	101832302	Bracket, Rear Accelerator Cable Snap-In .....	1
9	102336001	Cable, Governor, Snap-In .....	1
10	102336101	Cable, Accelerator, Snap-In .....	1
11	7174	Lockwasher, 5/16 Split .....	1

**8**

**G**



000216-001

# INTAKE DUCT, CHOKE, AND AIR BOX ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1015752	Screw, #12-16 X 0.625 Hi-Lo .....	3
2	101805701	Button Assembly, Choke (includes items 3 through 5) .....	1
3	101811401	Lever, Choke .....	1
4	101811501	Guide, Choke Lever .....	1
5	101856201	Compression Spring .....	1
6	101821501	Assembly, Air Box (includes items 7 through 13) .....	1
7	1015426	Filter, Air .....	1
8	101804301	Screw, #8 X 0.500, Hex-Head Hi-Lo .....	2
9	101811901	Bottom, Air Box .....	1
10	101881701	Washer, #8 Stainless-Steel Flat .....	2
11	101921501	Seal, Intake .....	1
12	101925701	Latch, Wireform .....	2
13	101972801	Top Assy, Air Box (includes items 14 through 20) .....	1
14	N/A	Valve, Choke .....	1
15	101811801	Top, Air Box .....	1
16	N/A	O-Ring, 5/16 .....	1
17	N/A	O-Ring, 3/8 .....	1
18	101812301	Spring, Extension Return .....	1
19	101813001	Retaining Ring 0.25, Shaft .....	1
20	101917601	Lever, Choke .....	1
21	101837101	Hose, Air Intake .....	1
22	101850301	Screw, #12-16 X 0.50 Washer-Head Hi-Lo .....	4
23	101917701	Choke Positioner .....	1
24	101971001	Tape Kit, Air Duct Repair .....	1
25	101971301	Clamp, 1.58" ID Hose .....	2
26	103520301	Duct, Air Intake, Ds .....	1
27	1606	Rivet, 3/16 X .500 Alum Pop .....	2
28	183	Washer, #10 Type A Flat .....	4
29	332	Washer, 1/4 Type A Narrow Flat .....	3
		Note: Item 25 is not illustrated.	

**8**

**G**

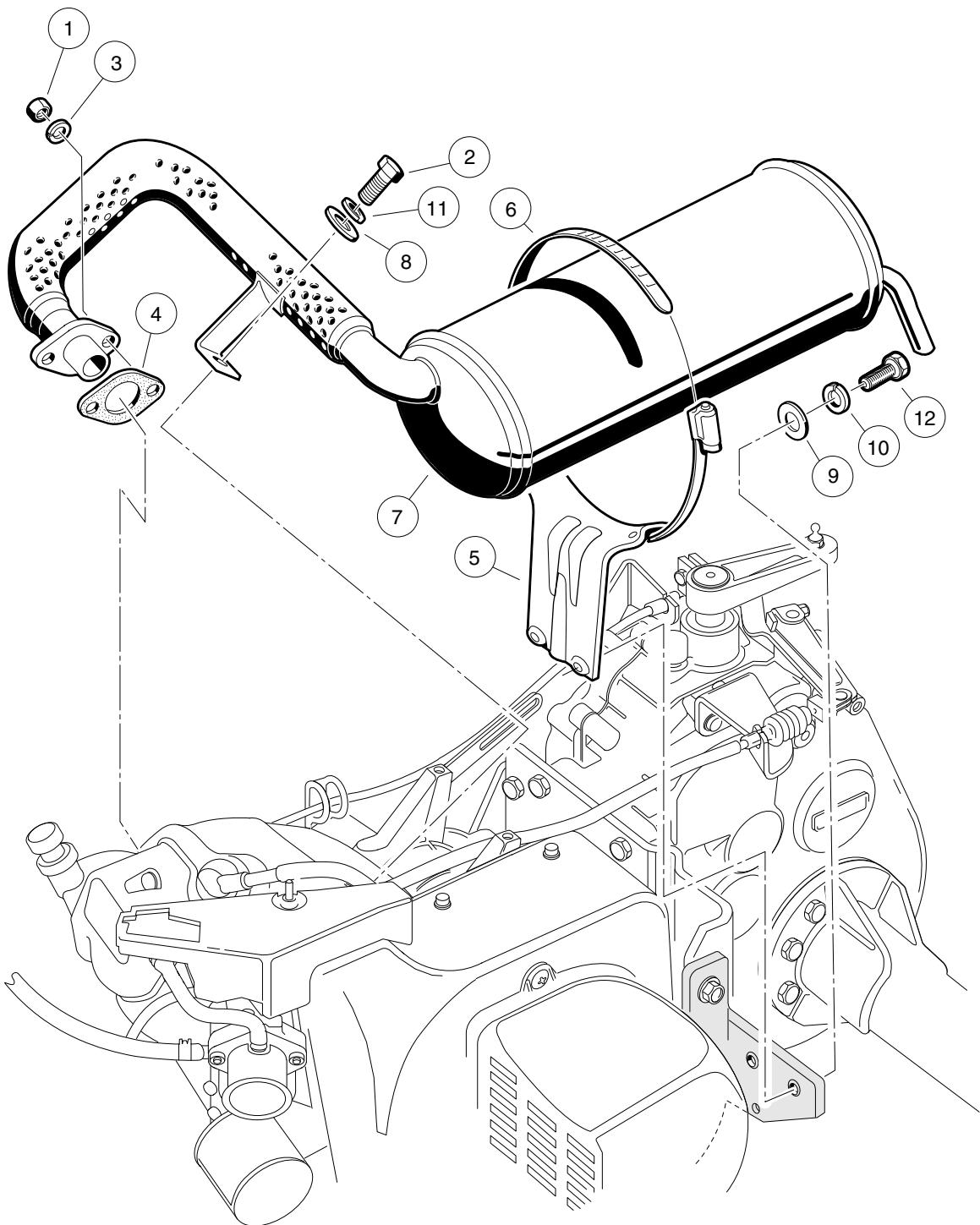
**8**

**G**

# EXHAUST SYSTEM

9

G



000208-001

# EXHAUST SYSTEM – FE290 ENGINE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	9
1	1012528	Nut, M8-1.25 Hex .....	2
2	1012830	Screw, M8-125 X 22 Hex-Head .....	1
3	1013734	Lockwasher, 8mm Split .....	2
4	1015330	Gasket, Exhaust .....	1
5	1015814	Bracket, Muffler Mounting .....	1
6	1017689	Clamp, 5" Muffler Hose .....	1
7	101859301	Exhaust System, FE290 .....	1
8	1241	Washer, 5/16 Type A Flat .....	1
9	332	Washer, 1/4 Type A Narrow Flat .....	2
10	451	Lockwasher, 1/4 Split .....	2
11	7174	Lockwasher, 5/16 Split .....	1
12	7847	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	2

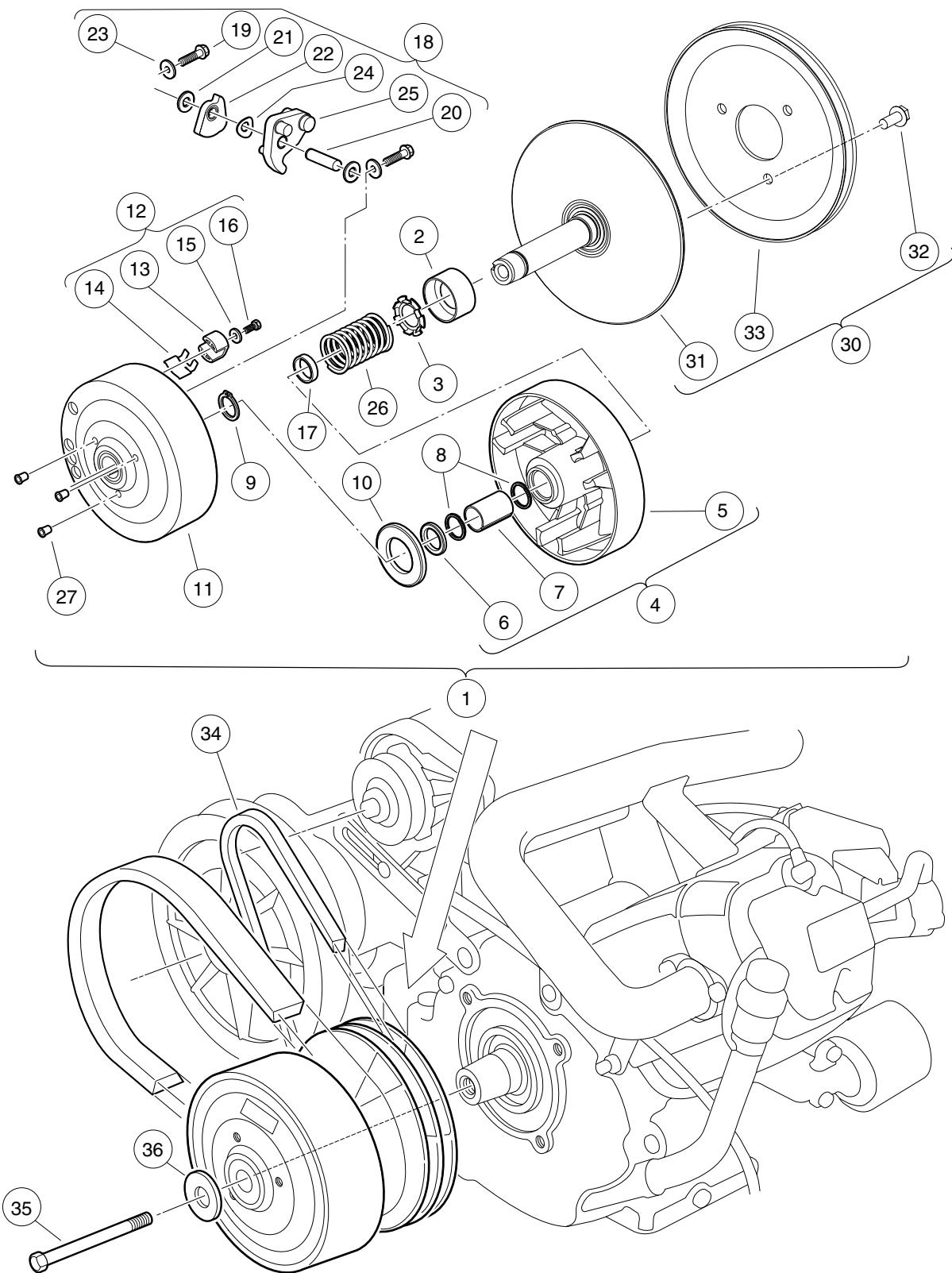
**9**

**G**

# TORQUE CONVERTER

10

G

**10****G**

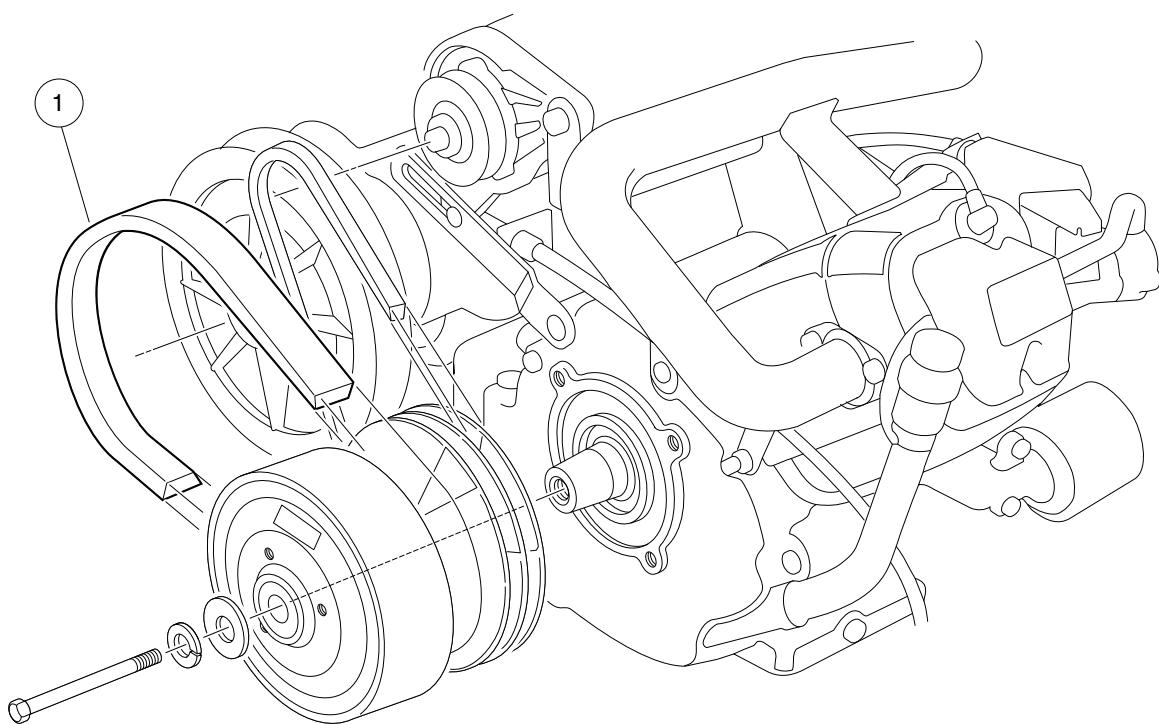
000217-003

# DRIVE CLUTCH

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	101833906	Drive Clutch Assy. FE 350/272 (includes items 2 through 28)	1
2	1014049	Bearing, Idler	1
3	1014050	Retainer, Spring	1
4	1014052	Movable-Face Assembly (includes items 5 through 7)	1
5	N/A	Drive Clutch Movable Face	1
6	1014055	Retainer	1
7	N/A	Bushing, Split, Drive Clutch	1
8	1014056	Ring, Spiral Backup	2
9	1014057	Ring, 0.810" Internal Retaining	1
10	1014058	Thrust Washer	1
11	1014059	Drive Hub Assy, Drive Clutch	1
12	1014453	Kit, Drive Clutch Button (includes items 13 through 16)	1
13	1014062	Driver, Drive Clutch	3
14	1014287	Spring, Drive Button	3
15	183	Washer, #10 Type A Flat	3
16	8450	Screw, #10-24 X 0.50 Hex-Head	3
17	1016289	Spacer, Fixed Face Shaft	1
18	1016801	Kit, Drive Clutch Weight (includes items 19 through 25)	1
19	1014063	Screw, 1/4-20 X 1.00 Hex Head	6
20	N/A	Pin, 0.3752 X 1.50 Dowel	3
21	1014065	Washer, 0.38" ID Delrin Flat	6
22	N/A	Clutch Weight, Secondary	3
23	N/A	Washer	6
24	1016201	Washer, Wave	3
25	N/A	Weight, Primary	3
26	1016901	Spring, Drive Clutch	1
27	N/A	Cap Plug	3
28	101929802	Kit, Fxd Face Dr Asm Fe290/350 (includes items 29 and 30)	1
29	N/A	Desiccant Bag (Not Shown)	1
30	101929801	Assembly, Fixed-Face Drive (includes items 31 through 33)	1
31	N/A	Fixed Face Assembly, Drive Clutch	1
32	1014288	Screw, 5/16-18 X 0.75 Thread-Forming	3
33	N/A	Pulley, Clutch	1
34	101916701	V-Belt	1
35	103345701	Screw 3/8-24x5.5 Hex Loc Ptch	1
36	808	Washer, 3/8 Type B Flat	1
		Note: Item 29 not shown.	

**10**

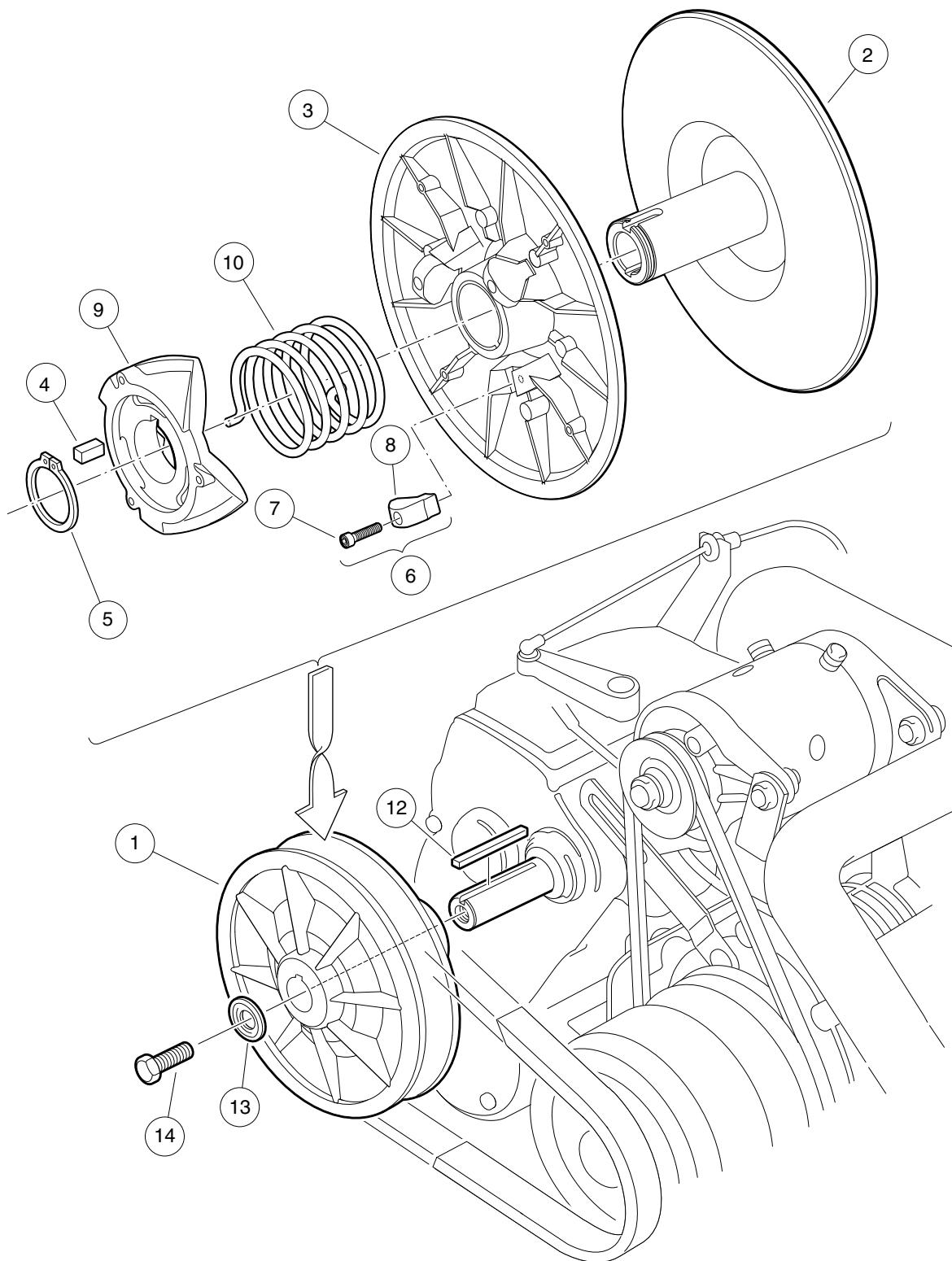
**G**



000218-001

# DRIVE BELT – FE290

ITEM	PART NO.	DESCRIPTION	QTY	
1	1016203	1 2 3 4 Belt, Drive .....	1	<b>10</b> <b>G</b>

**10****G**

000219-001

# DRIVEN CLUTCH

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		<b>10</b>
1	101834001	Assembly, Driven Clutch (includes items 2 through 10) .....	1	
2	1014070	Fixed Face Assy, Driven Clutch .....	1	
3	1014072	Movable-Face Assembly with Bushing .....	1	
4	1014078	Key, Driven Clutch .....	1	
5	1014080	Ring, Retaining .....	1	
6	1014454	Kit, Driven Clutch Button (includes items 7 and 8) .....	1	
7	1012836	Screw, #8-32 X 3/4 Socket-Head Cap .....	3	
8	1014076	Button, Drive .....	3	
9	1017686	Cam, Driven Clutch .....	1	
10	101836201	Spring, Driven Clutch, Reversed .....	1	
11	AM10419	Kit, Clutch Repair (includes items 12 through 14) .....	1	
12	101833401	Key, 3/16 Sq X 1.50" .....	1	
13	102155801	Washer, Driven Clutch .....	1	
14	102242101	Screw, 5/16-18 X 3/4 Hex-Head with Patch .....	1	

**10**

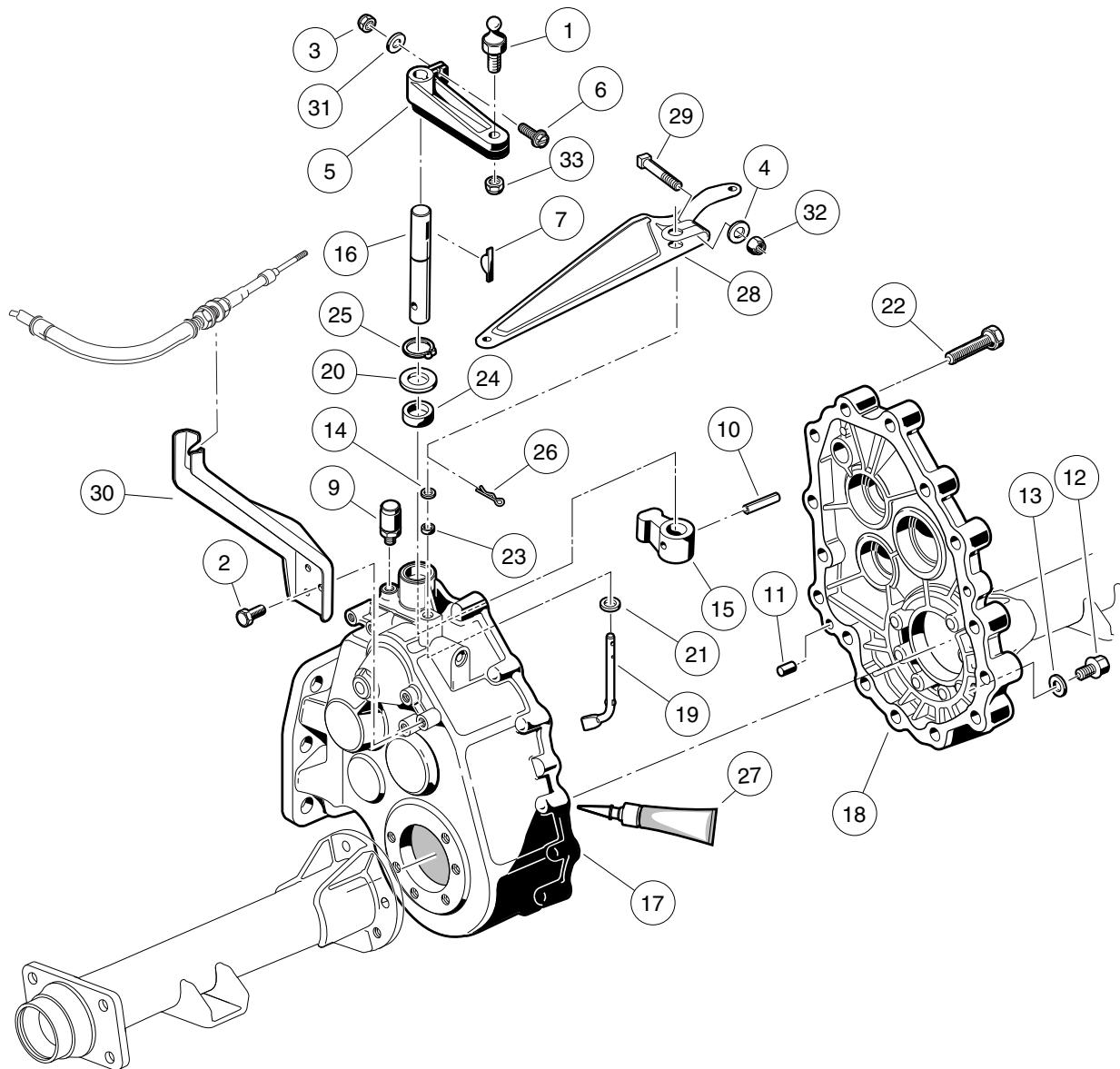
**G**

# **TRANSAXLE AND FNR SHIFTER- GASOLINE VEHICLE**

---

**11**

**G**



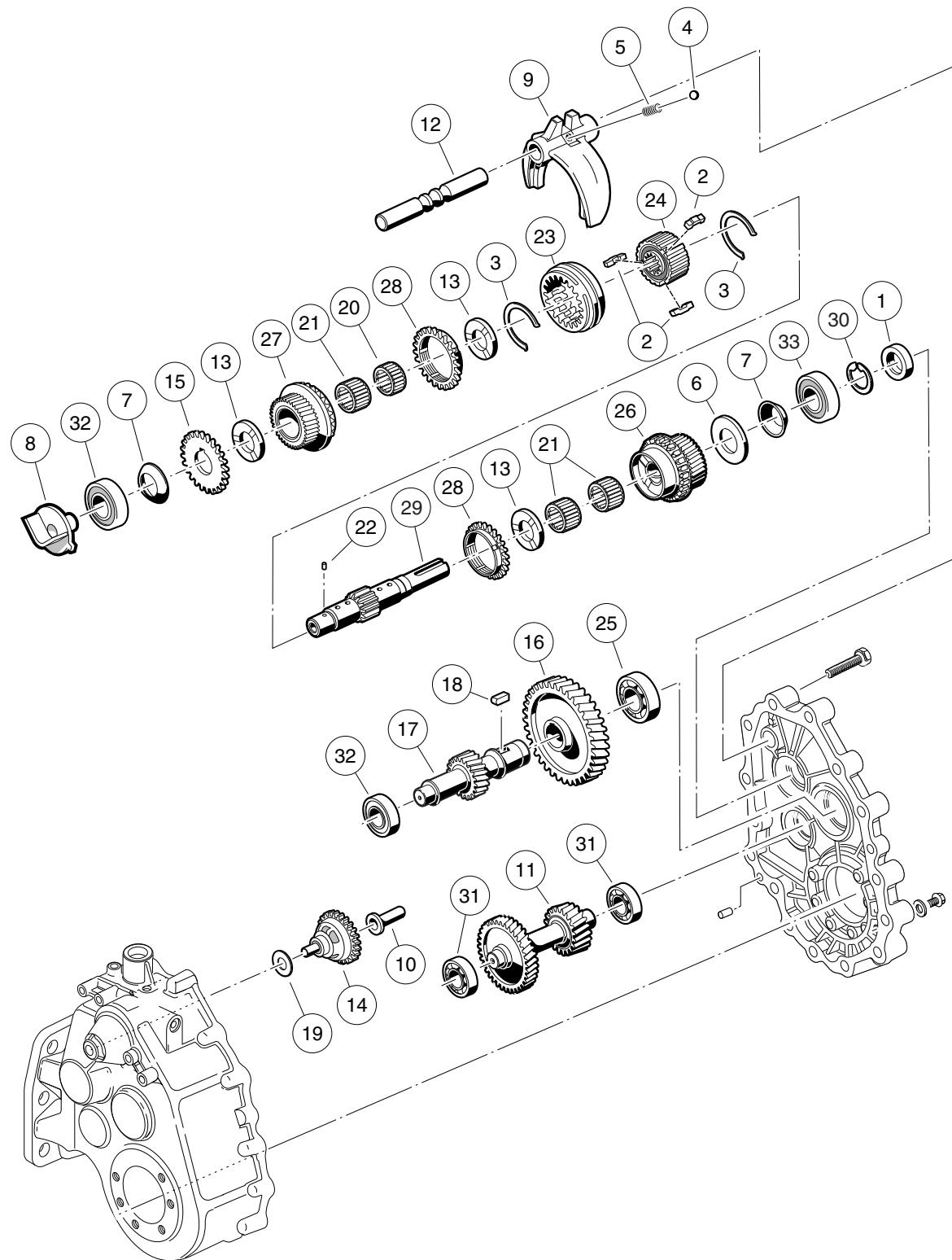
000220-001

# TRANSAXLE – GASOLINE VEHICLES, GEAR CASES AND BRACKETS

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1010954	Stud, 1/4-28 X 0.560 Ball .....	1
2	1012285	Screw, 1/4 X 0.625 Hex-Head .....	3
3	1013061	Locknut, #10-32 Nylon Insert .....	1
4	1014007	Washer, 1/4 Flat .....	1
5	1016341	Lever, Transmission Shift .....	1
6	1017082	Screw, #10-32 X 0.75, Hex-Head Machine .....	1
7	1017231	Key, Woodruff .....	1
8	101833601	Transaxle, 11.77 Ratio (includes items 9 through 27) .....	1
9	1012711	Breather .....	1
10	1012752	Roll Pin .....	1
11	1012896	Pin, Dowel .....	2
12	1013760	Fill Plug .....	2
13	1016432	Gasket, Drain Plug .....	1
14	1016513	Washer, M6 Flat .....	1
15	101890101	Lever, Change .....	1
16	101890201	Shaft - Change .....	1
17	101890501	Gear Case (driver side) .....	1
18	101890601	Gear Case (passenger side) .....	1
19	101891301	Arm Pivot .....	1
20	101892901	Washer .....	1
21	101893801	Washer .....	1
22	101926901	Screw, M8-1.25 X 40mm Hex-Head .....	15
23	101927101	Seal, Oil .....	1
24	101927201	Seal, Oil .....	1
25	101927301	Snap Ring .....	1
26	101928601	Pin, Cotter .....	1
27	101928701	Liquid Gasket (Transaxle case) .....	1
28	101834801	Arm, Governor .....	1
29	101886101	Screw, 1/4-20 X 1.00 Square-Head .....	1
30	102045901	Bracket, Shifter .....	1
31	183	Washer, #10 Type A Flat .....	1
32	8233	Locknut, 1/4-20 Nylon Insert .....	1
33	8717	Locknut, 1/4-28 Nylon Insert .....	1

**11**

**G**



000221-001

# TRANSAXLE – GASOLINE VEHICLES, TRANSMISSION AND GEAR REDUCTION

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1012714	Oil Seal .....	1
2	1012740	Synchro Insert .....	3
3	1012741	Synchro Spring .....	2
4	1012747	Shifter Ball .....	1
5	1012748	Shifter Spring .....	1
6	1016337	Washer, Thrust .....	1
7	1016338	Washer, Spring .....	2
8	101889401	Guide .....	1
9	101890001	Fork - Shift .....	1
10	101891601	Sleeve, Governor .....	1
11	101891901	Gear, Cluster .....	1
12	101892001	Rod, Shift .....	1
13	101892201	Plate, Thrust .....	3
14	101892301	Governor Assembly .....	1
15	101892401	Gear, Spur .....	1
16	101892501	Gear, Helical (61 Tooth) .....	1
17	101892601	Gear, Helical (17 Tooth) .....	1
18	101893201	Key Sunk .....	1
19	101893901	Washer .....	1
20	101927501	Needle Bearing .....	1
21	101927601	Needle Bearing .....	3
22	101927701	Pin, .116" Dia X 0.264 Dowel .....	1
23	101927901	Sleeve, Synchro .....	1
24	101928001	Hub, Synchro Clutch .....	1
25	101928101	Bearing, Ball .....	1
26	101980801	Gear Assembly, 16-Degree Synchro (25 Tooth) .....	1
27	101980901	Gear Assembly, 16-Degree Rear Synchro (28 Tooth) .....	1
28	101981001	Ring, 16-Degree Synchronizer .....	2
29	102453001	Shaft, Trans, with Circlip .....	1
30	102453101	Circlip .....	1
31	7335	Bearing .....	2
32	AM10080	Bearing, Ball, Sealed .....	2
33	AM10081	Bearing, Ball, Sealed .....	1

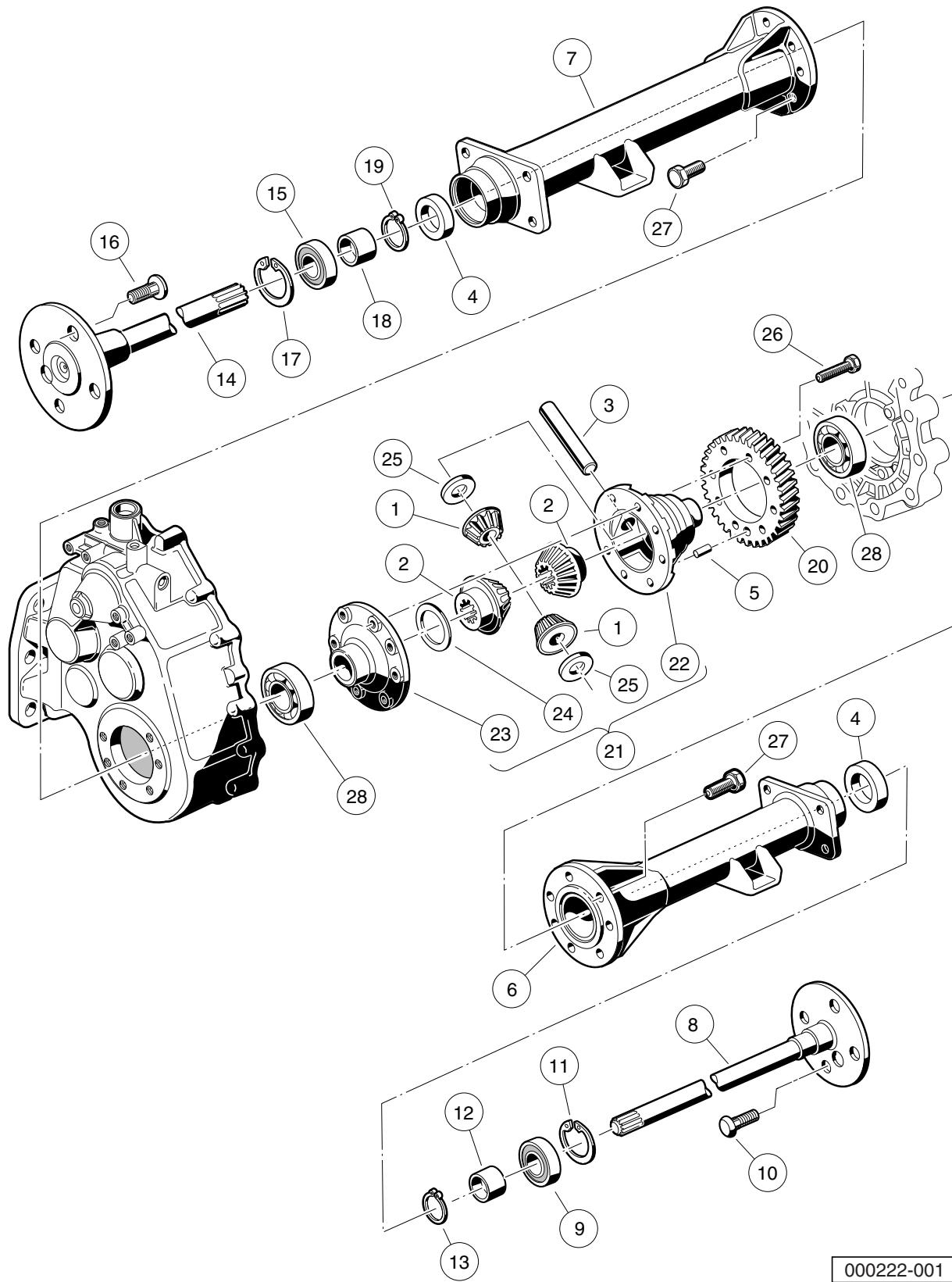
Note: Items listed on this page are components of the unitized transaxle.

**11**

**G**

11

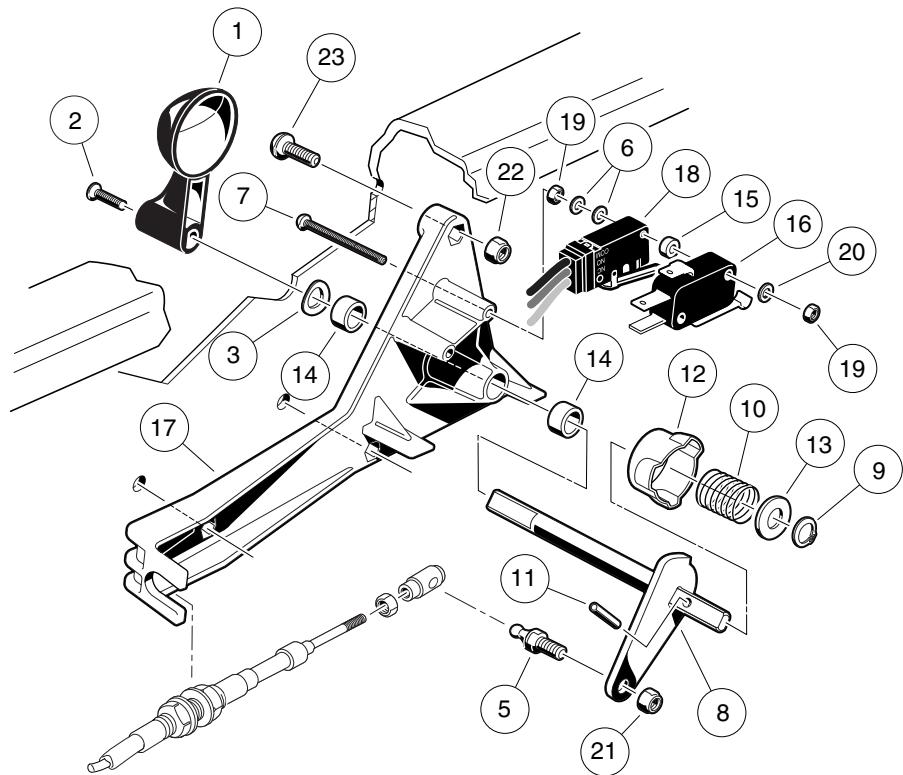
G



000222-001

# TRANSAXLE – GASOLINE VEHICLES, DIFFERENTIAL AND AXLES

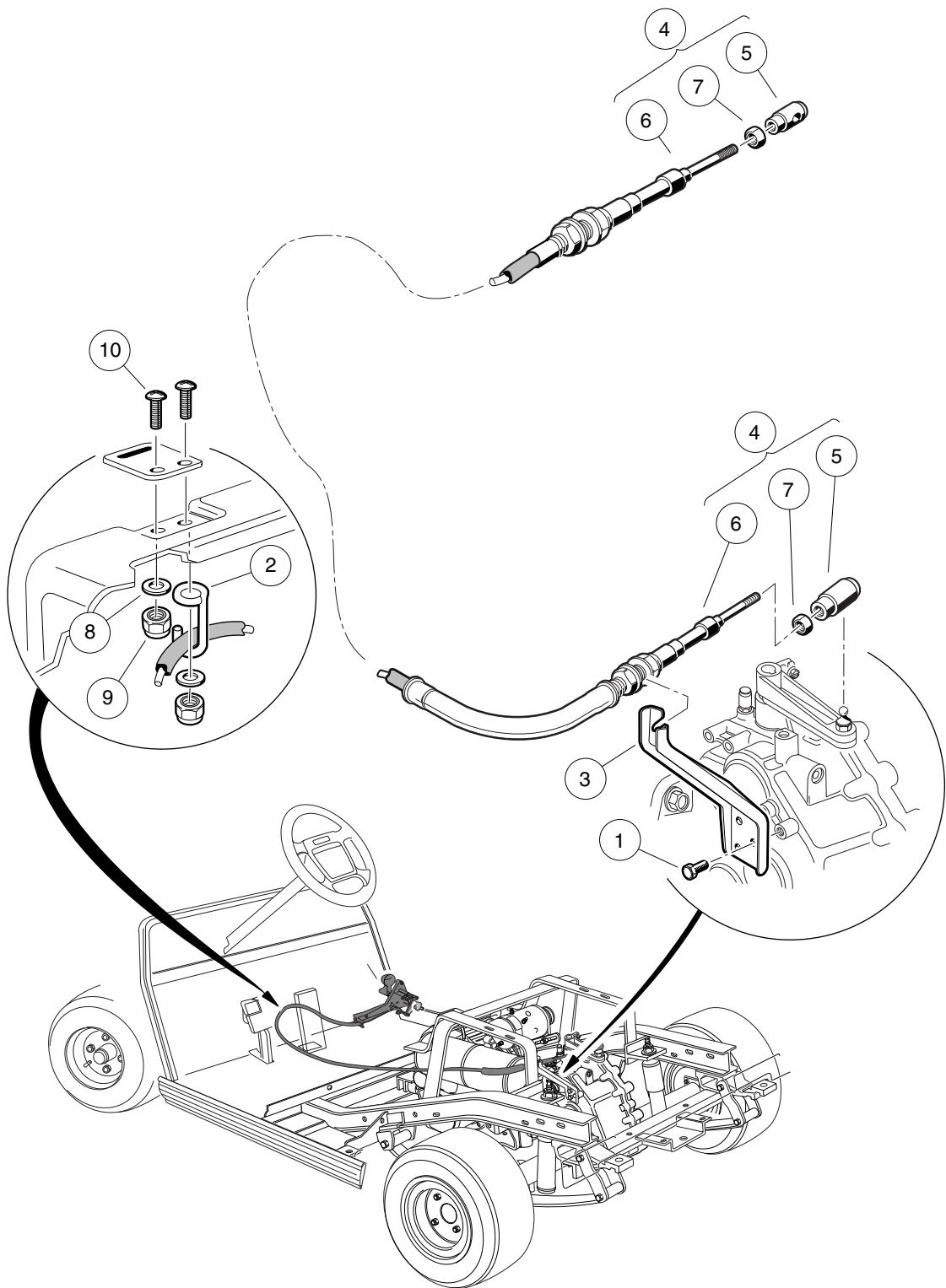
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	11
1	1013770	Differential Idler Gear .....	2
2	1013771	Gear, Differential .....	2
3	1013772	Pin, Differential .....	1
4	1013794	Axle Shaft Oil Seal .....	2
5	1014193	Dowel Pin .....	1
6	101890901	Pipe .....	1
7	101891001	Pipe .....	1
8	101891401	Axle Assembly, Passenger Side (includes items 9 through 13) .....	1
9	1011291	Outer Axle, Tube Bearing .....	1
10	1013787	Lug Stud .....	4
11	1013792	Circlip Type C .....	1
12	1014207	Bushing .....	1
13	1016672	Retaining Ring .....	1
14	101891501	Axle Assembly, Driver-Side (includes items 15 through 19) .....	1
15	1011291	Outer Axle, Tube Bearing .....	1
16	1013787	Lug Stud .....	4
17	1013792	Circlip Type C .....	1
18	1014207	Bushing .....	1
19	1016672	Retaining Ring .....	1
20	101892701	Gear, Helical .....	1
21	101910501	Kit, Differential Gear Case (includes items 22 through 25) .....	1
22	1013768	Differential Gear Case, Left-Hand .....	1
23	1013769	Differential Gear Case, Right-Hand .....	1
24	1013773	Plate, Thrust (Differential Gear) .....	1
25	1013774	Plate, Thrust (Idler Gear) .....	2
26	101928301	Screw, M8-1.25 X 35mm Hex Head .....	8
27	102031901	Bolt, M10 X 1.5 X 30mm .....	14
28	7330	Inner Axle Tube Bearing .....	2



000236-001

# FORWARD/REVERSE SHIFTER ASSEMBLY – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY	11	G
		<b>1 2 3 4</b>			
1	1012987	Handle, FNR .....	1		
2	1015064	Screw, #8-32 X 0.63 Machine .....	1		
3	1016201	Washer, Wave .....	1		
4	1016947	Assembly, FNR Shifter (includes items 5 through 21) .....	1		
5	1010954	Stud, 1/4-28 X 0.560 Ball .....	1		
6	1012431	Washer, #4 Flat .....	4		
7	1012594	Screw, #4-40 Machine .....	2		
8	1013587	FNR Bell Crank Weldment .....	1		
9	1013589	Ring, 0.338" Internal Retaining .....	1		
10	1013590	Spring, FNR Cam .....	1		
11	1013591	Pin, 1/8 X 1/2 Roll .....	1		
12	1014089	Neutral Lockout Cam Kit (includes item 13) .....	1		
13	1014065	Washer, 0.38" ID Delrin Flat .....	1		
14	1014145	Bushing, Secondary Weight, Split .....	2		
15	1014727	Washer, #4 Nylon Flat .....	2		
16	1014807	Switch, Limit .....	1		
17	1016342	FNR Shifter Base .....	1		
18	101979101	Assembly, Switch, Limit .....	1		
19	8057	Nut, #4-40 Hex Machine .....	4		
20	8058	Lockwasher, #4 Split .....	2		
21	8717	Locknut, 1/4-28 Nylon Insert .....	1		
22	8233	Locknut, 1/4-20 Nylon Insert .....	4		
23	8248	Screw, 1/4-20 X 0.75 Truss-Head Machine .....	4		



000248-001

# FORWARD/REVERSE SHIFTER CABLE – GASOLINE VEHICLES

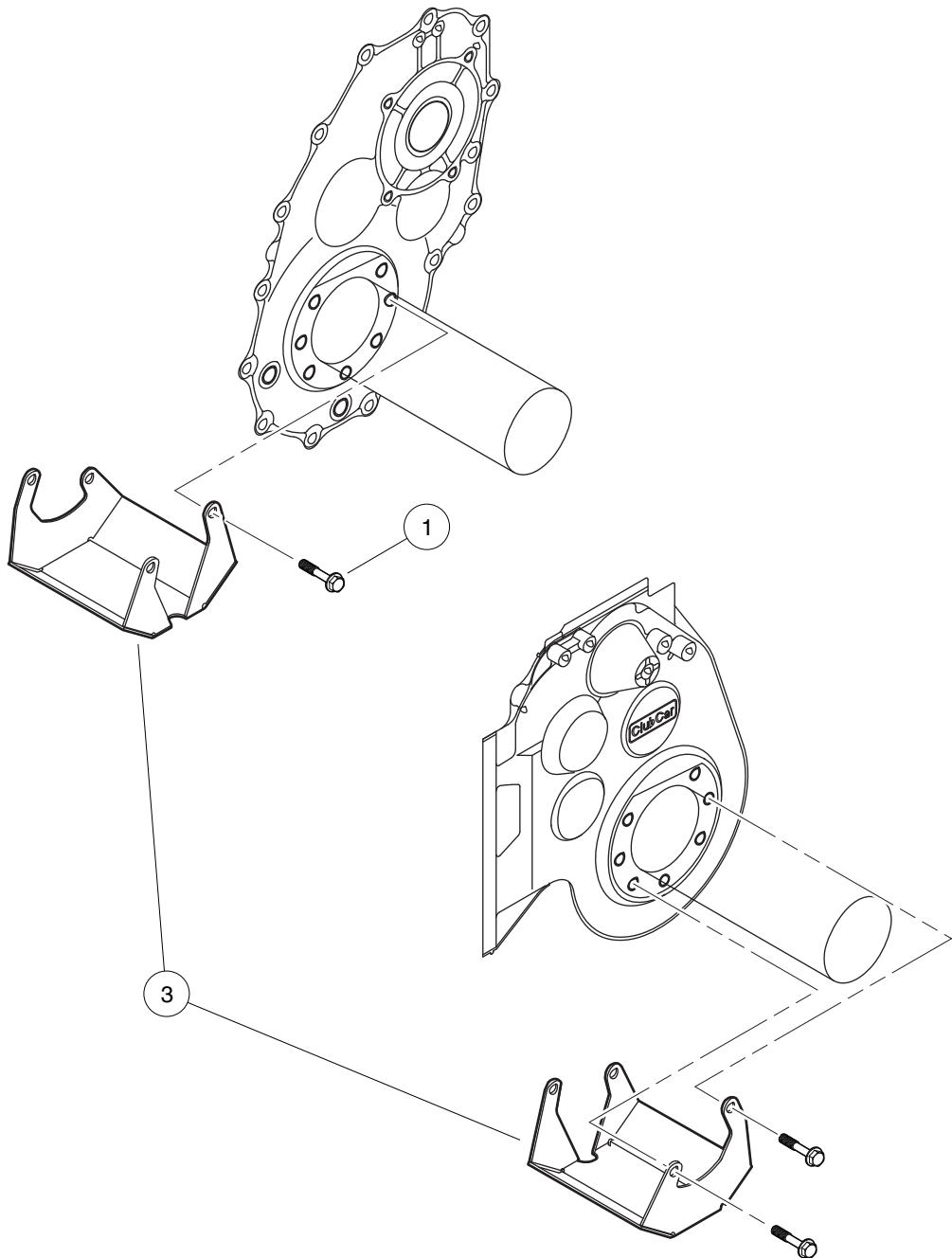
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1012285	Screw, 1/4 X 0.625 Hex-Head .....	3
2	101855801	Cable Retainer .....	1
3	101922601	Bracket, Shifter .....	1
4	101951501	FNR Shifter Cable (includes items 5 through 7) .....	1
5	1012333	Joint, #10-32 Ball .....	2
6	103379501	Cable, Transmission Shifter Ds .....	1
7	7893	Nut, #10-32 Hex .....	2
8	332	Washer, 1/4 Type A Narrow Flat .....	4
9	8233	Locknut, 1/4-20 Nylon Insert .....	4
10	8251	Screw, 1/4-20 X 1.0 Truss-Head Machine .....	4

**11**

**G**

**11**

**G**



000366-001

## DIFFERENTIAL GUARD – XRT810

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		11
1	101926901	Screw, M8-1.25 X 40mm Hex-Head .....	4	G
2	101932902	Diff Guard Unitized Kit (Includes Instructions) (includes item 3) .....	1	
3	N/A	Guard, Unitized Differential .....	1	

**11**

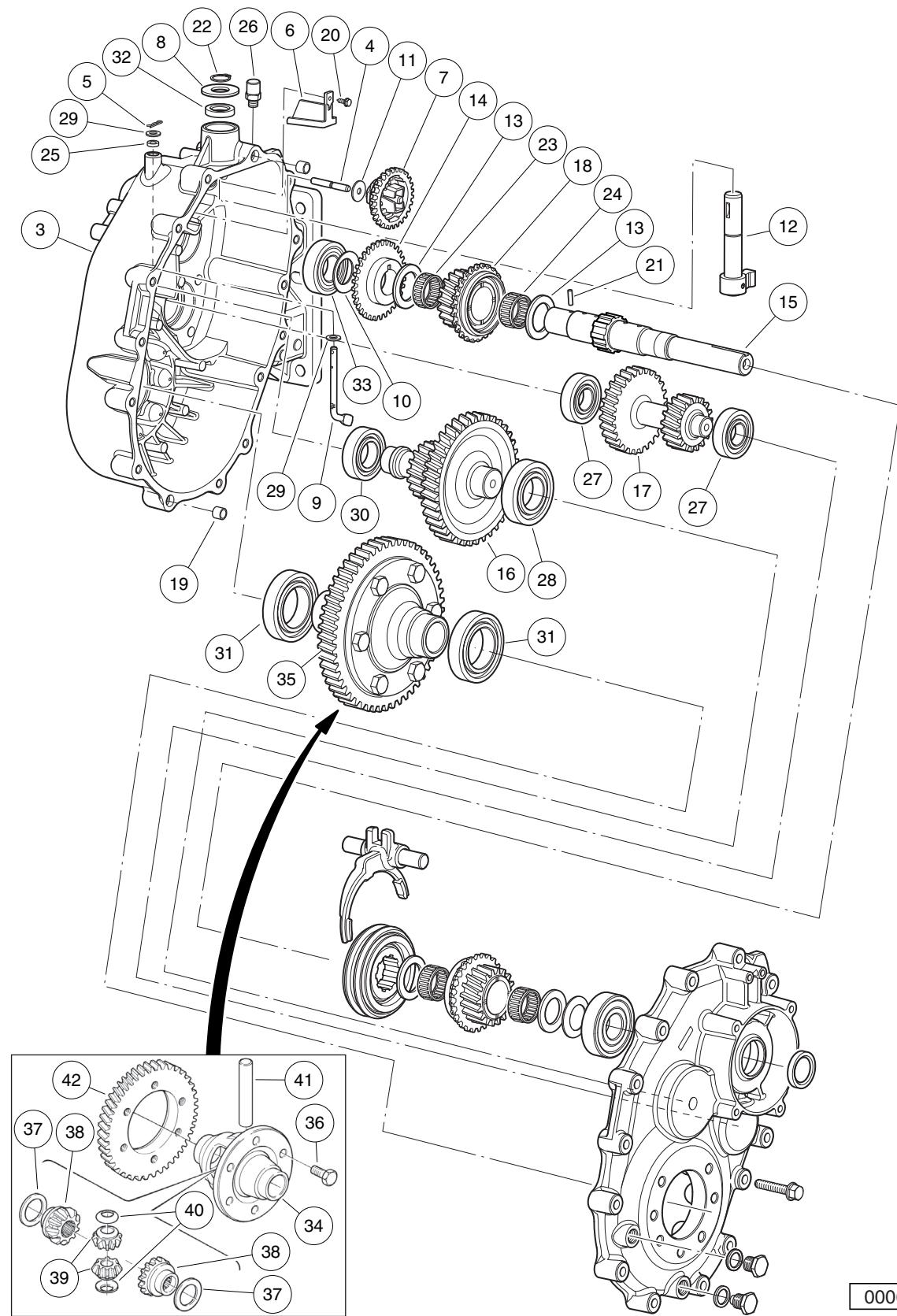
**G**

# **GRAZIANO TRANSAXLE – GASOLINE VEHICLE**

---

**12**

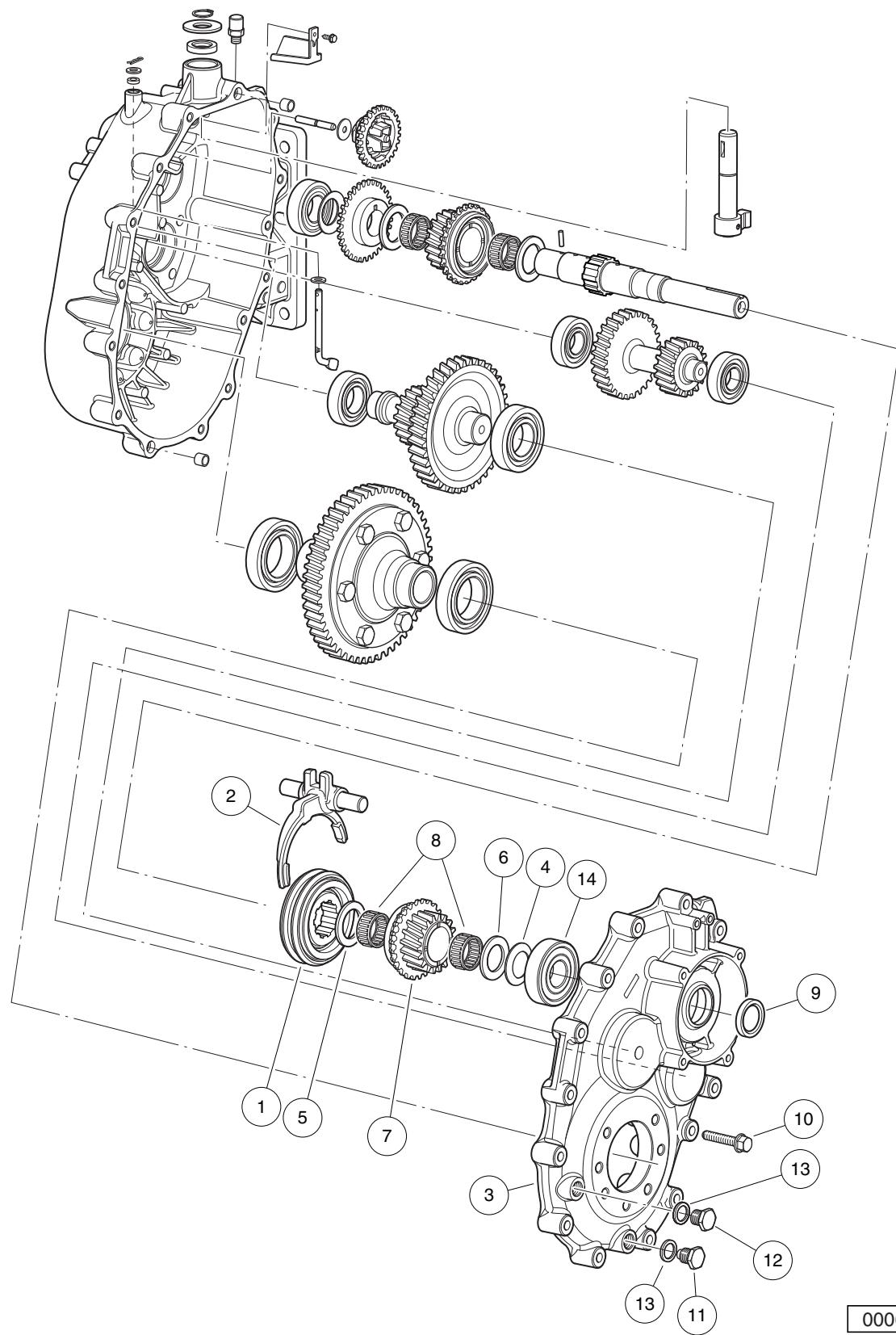
**G**

**12****G**

000680-001

# GRAZIANO TRANSAXLE – GASOLINE VEHICLES

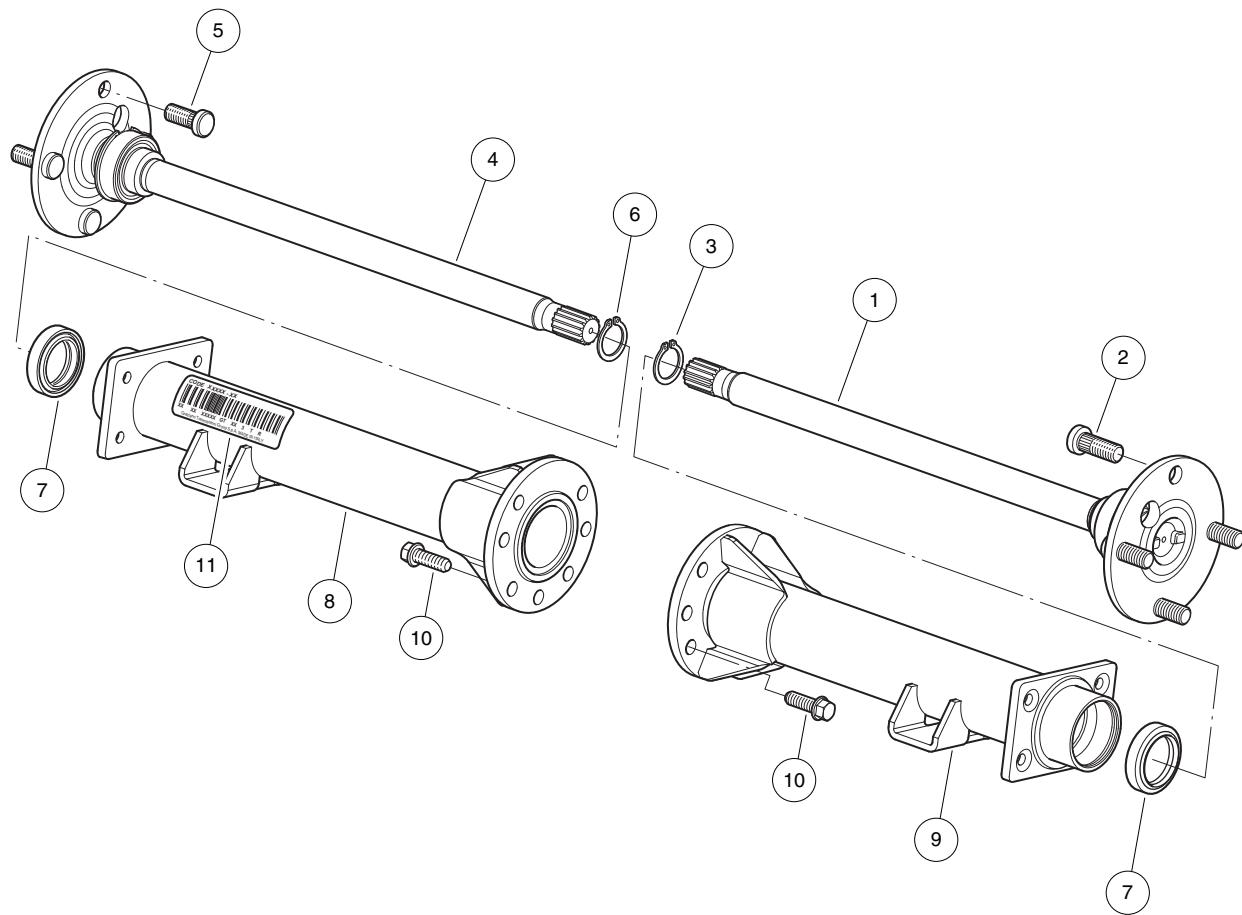
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	12
1	102896801	Transaxle, Unitized, Graziano (includes items 2 through 35) .....	1
2	102896901	Gear Box, Complete (includes items 3 and 4) .....	1
3	N/A	Gear Box .....	1
4	N/A	Pin, Speed Governor .....	1
5	102897401	Pin, Split .....	1
6	102897601	Conveyor, Oil .....	1
7	102897701	Assembly, Speed Governor .....	1
8	102897801	Washer, Thrust .....	1
9	102897901	Lever, Speed Governor .....	1
10	102898001	Washer, Belleville .....	1
11	102898101	Bearing, Thrust .....	1
12	102898201	Unit, Drive Selector .....	1
13	102898301	Bearing, Thrust .....	2
14	102898501	Gear, Speed Governor .....	1
15	102898601	Shaft, Main .....	1
16	102898701	Shaft, Secondary .....	1
17	102898801	Shaft, Reverse Gear .....	1
18	102899001	Gear, Complete, 28t .....	1
19	102899101	Dowel .....	2
20	102899201	Screw .....	1
21	102899301	Pin .....	1
22	102899401	Ring, Snap .....	1
23	102899501	Cage, Roller .....	1
24	102899601	Cage, Roller .....	1
25	102899701	Grommet .....	1
26	102899801	Bleeder .....	1
27	102900401	Bearing .....	2
28	102900501	Bearing .....	1
29	102900601	Washer .....	2
30	102900701	Bearing .....	1
31	102900801	Bearing .....	2
32	102900901	Grommet .....	1
33	102901001	Bearing .....	1
34	102901201	Box, Differential .....	1
35	102902001	Assembly, Differential (includes items 36 through 42) .....	1
36	102901301	Screw, M10 X 25 .....	6
37	102901401	Ring, Sleeve .....	2
38	102901501	Gear, Sun .....	2
39	102901601	Gear, Planetary .....	2
40	102901701	Ring, Sleeve .....	2
41	102901801	Pin .....	1
42	102901901	Gear .....	1

**12****G**

000680-002

# GRAZIANO TRANSAXLE – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		12
1	102897201	Synchronizer, Complete .....	1	G
2	102897301	Fork, Complete .....	1	
3	102897501	Cover, Box .....	1	
4	102898001	Washer, Belleville .....	1	
5	102898301	Bearing, Thrust .....	1	
6	102898401	Washer, Thrust .....	1	
7	102898901	Gear, Complete, 25t .....	1	
8	102899601	Cage, Roller .....	2	
9	102899901	Grommet .....	1	
10	102900001	Screw .....	15	
11	102900101	Plug, Magnetic .....	1	
12	102900201	Plug .....	1	
13	102900301	Seal .....	2	
14	102901101	Bearing .....	1	
Note: Items listed on this page are components of the Graziano transaxle assembly.				



000681-001

# GRAZIANO TRANSAXLE – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY	
		<b>1 2 3 4</b>		<b>12</b>
1	102902101	Shaft, Short, Complete (includes items 2 and 3) .....	1	
2	102902301	Bolt, Stud .....	4	
3	102902401	Snap Ring .....	1	
4	102902201	Shaft, Long, Complete (includes items 5 and 6) .....	1	
5	102902301	Bolt, Stud .....	4	
6	102902401	Snap Ring .....	1	
7	102902501	Seal, Lip .....	2	
8	102902601	Assembly, Tube Extension, Lh .....	1	
9	102902701	Assembly, Tube Extension, Rh .....	1	
10	102902801	Screw, M10 X 30 .....	14	
11	N/A	Tag, Serial .....	1	
Note: Items listed on this page are components of the Graziano transaxle assembly.				

**12**

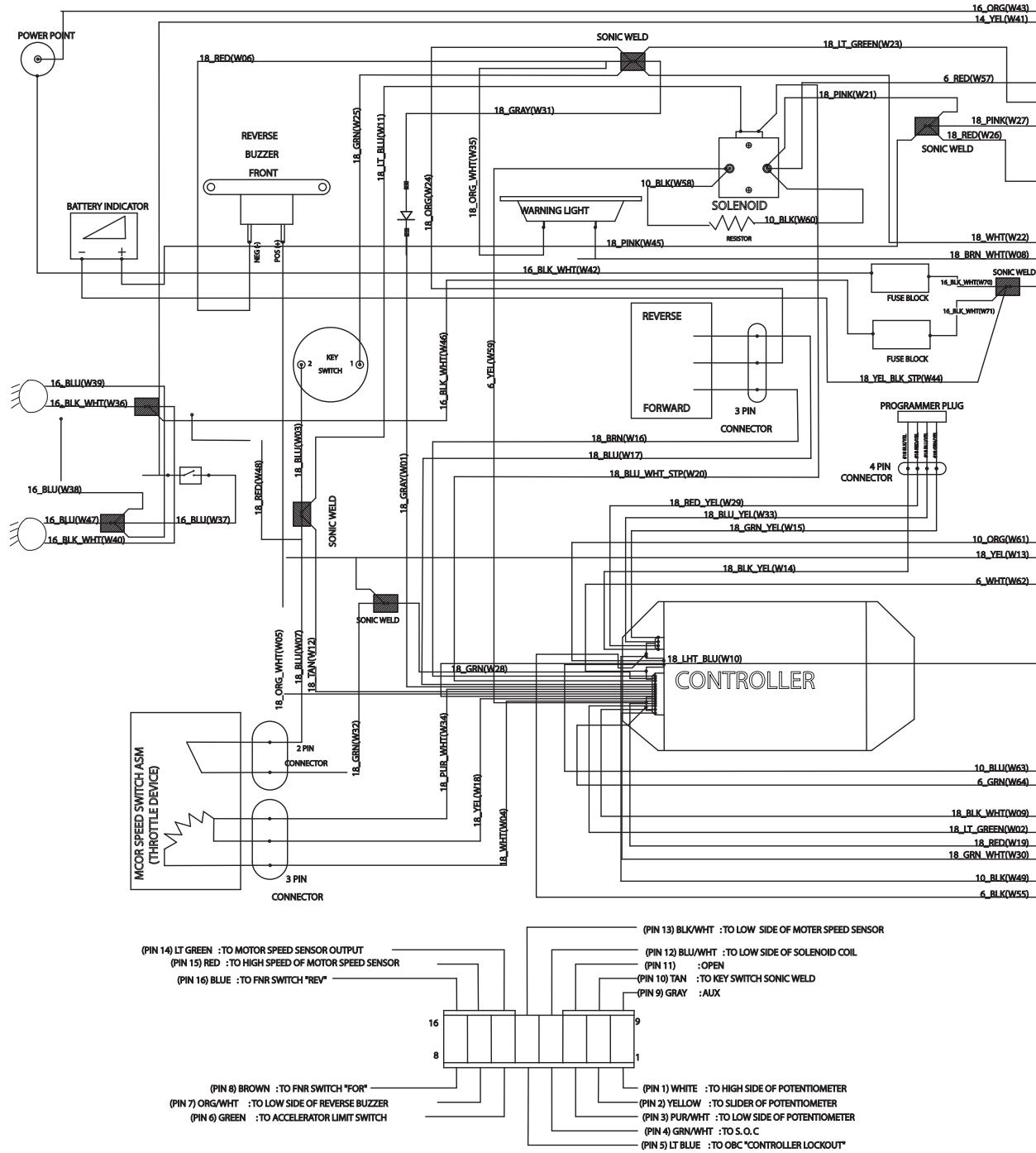
**G**

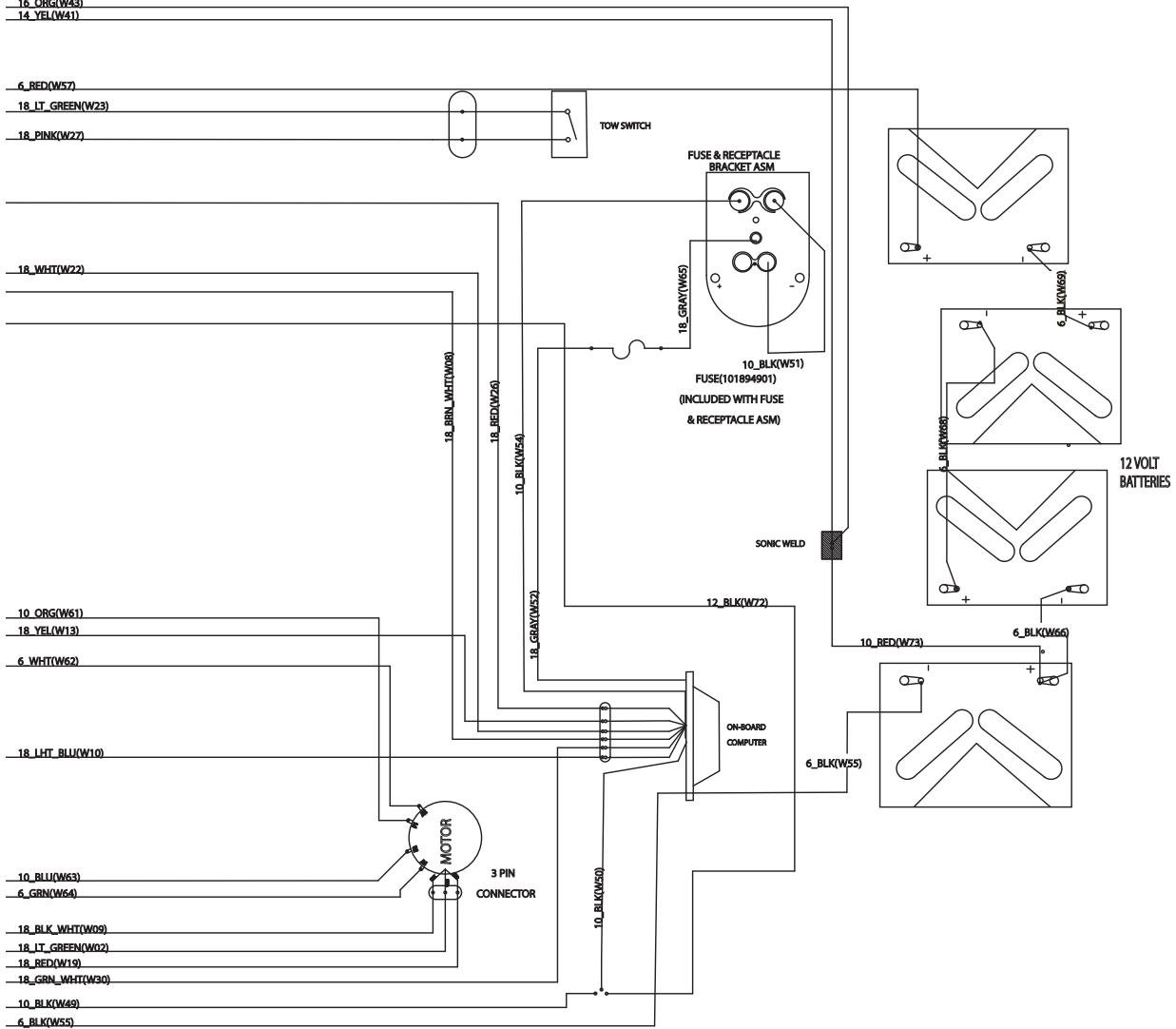
# ELECTRICAL SYSTEM – ELECTRIC VEHICLES

---

13

E





000233-001

**13**

**E**

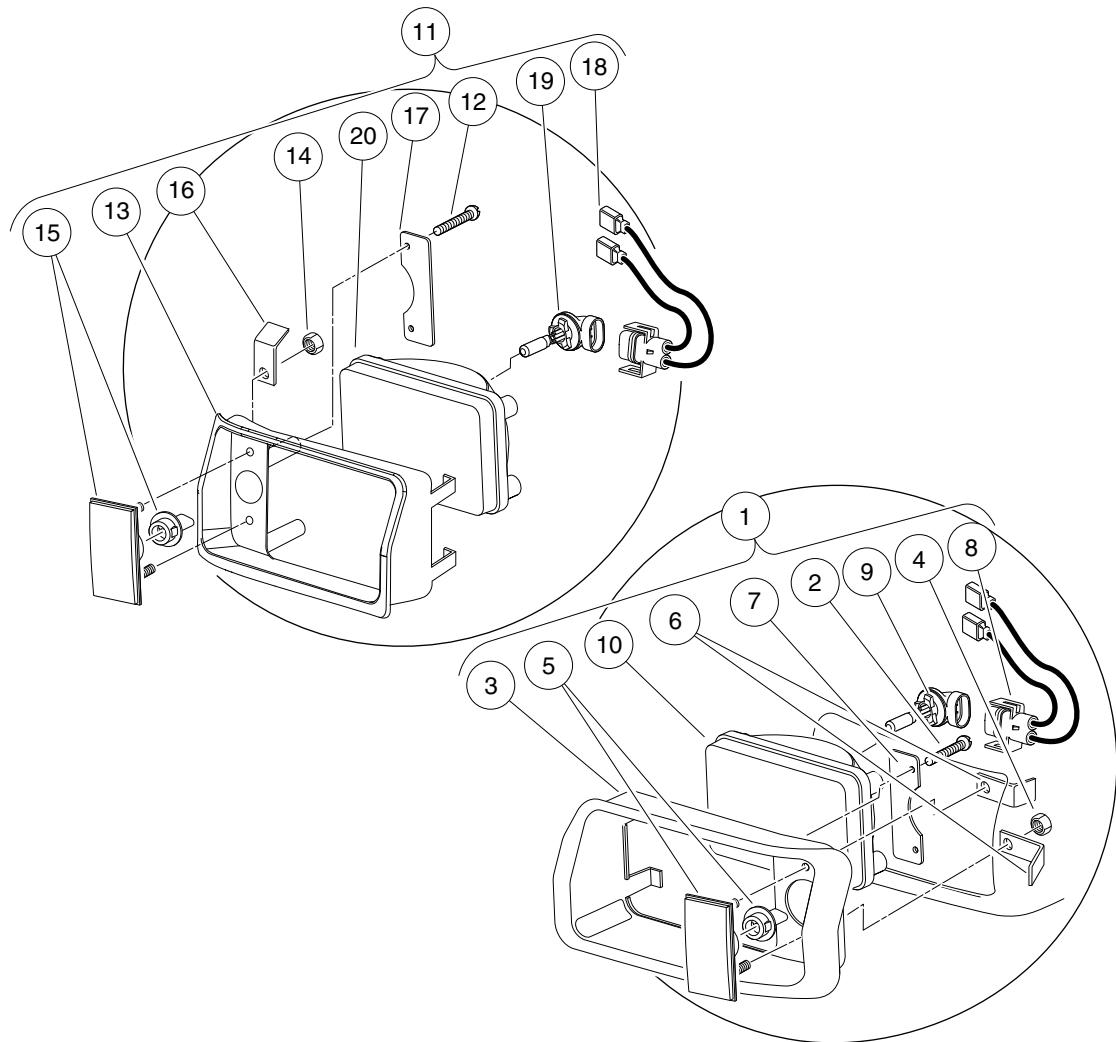
See previous two pages for illustration.

## WIRING – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY	
1	102810501	1 2 3 4 Wire Harness, Electric Vehicle .....	1	E

**13**

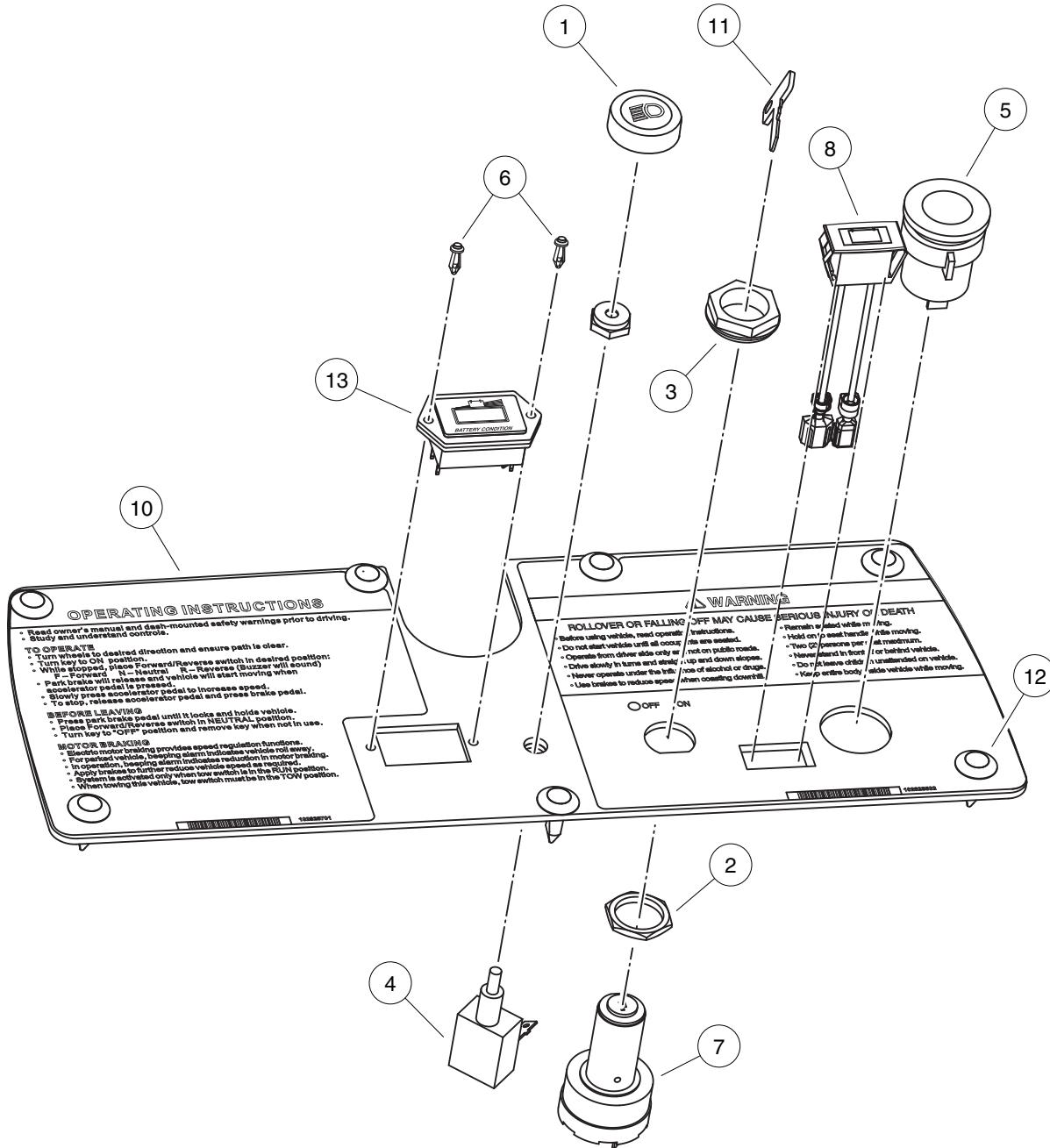
**E**



000073-001

# HEADLIGHTS

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		<b>13</b>
1	101988001	Headlight Assembly, Driver-Side Single Beam (includes items 2 through 10) .....	1	
2	1013461	Screw, #10-16 Hex-Head Hi-Lo .....	2	<b>E</b>
3	1016880	Headlight Bezel, Left .....	1	
4	1017	Nut, #10-24 Stainless-Steel Hex Machine .....	2	
5	1017062	Turn Signal Lens Assy .....	1	
6	1017064	Mounting Bracket .....	2	
7	1017065	Retainer, Headlight .....	1	
8	101987901	Connector Harness Assembly, Headlight .....	1	
9	101988101	Bulb, Headlight .....	1	
10	101988201	Lens, Headlight .....	1	
11	101988002	Headlight Assy, Passenger-Side Single Beam (includes items 12 through 20) .....	1	
12	1013461	Screw, #10-16 Hex-Head Hi-Lo .....	2	
13	1016879	Headlight Bezel, Right .....	1	
14	1017	Nut, #10-24 Stainless-Steel Hex Machine .....	2	
15	1017062	Turn Signal Lens Assy .....	1	
16	1017064	Mounting Bracket .....	2	
17	1017065	Retainer, Headlight .....	1	
18	101987901	Connector Harness Assembly, Headlight .....	1	
19	101988101	Bulb, Headlight .....	1	
20	101988201	Lens, Headlight .....	1	



000231-001

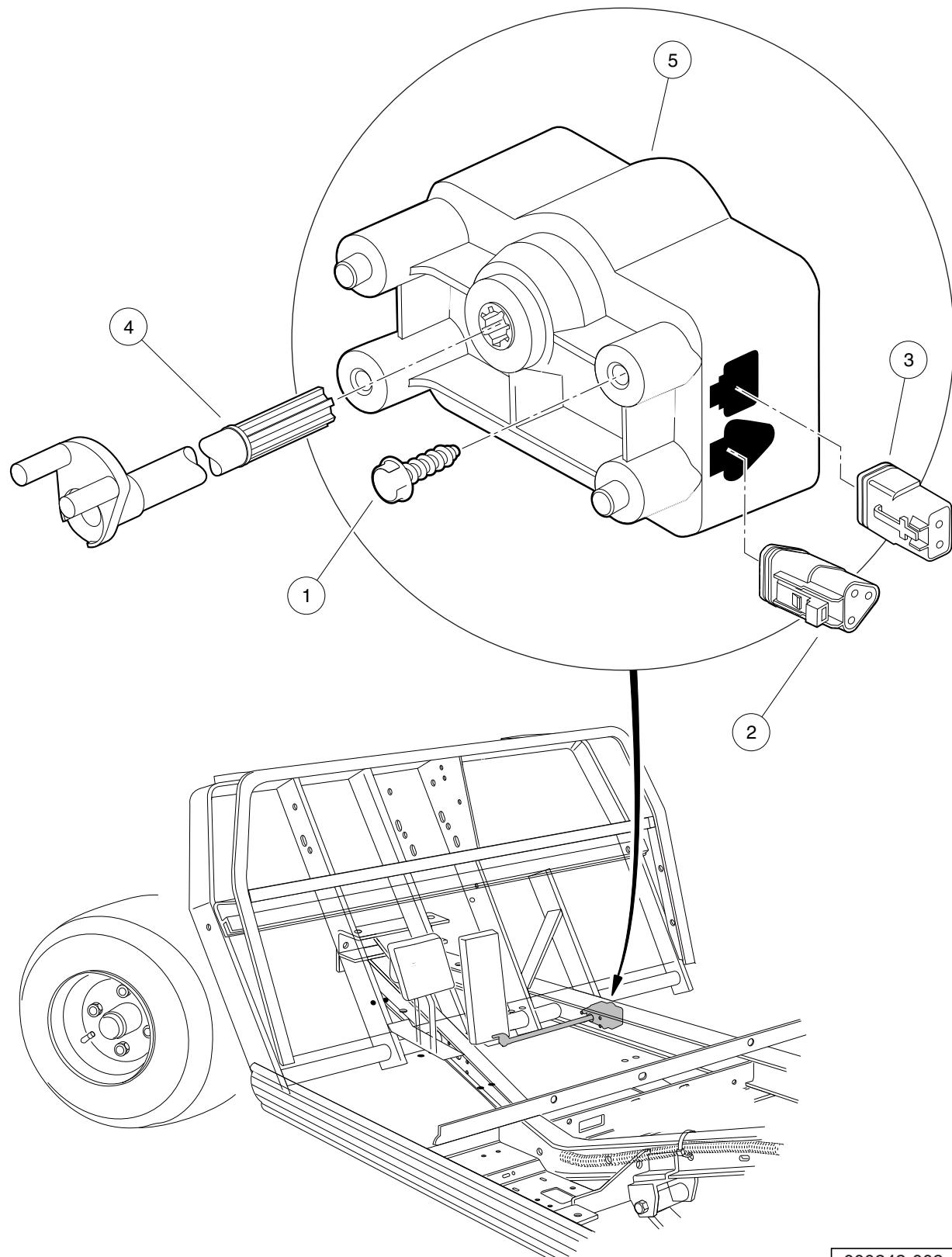
# ELECTRICAL COMPONENTS, FRONT BODY – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		13
1	1013857	Knob, Light Switch .....	1	
2	101830701	Nut, Key Switch .....	1	E
3	102051701	Nut, Key Switch .....	1	
4	102051901	Switch, Light .....	1	
5	102198001	Receptacle, Accessory .....	1	
6	102499001	Rivet, Micro Tuflok .....	2	
7	102508601	Key Switch, Electric .....	1	
8	102508701	Light, Battery .....	1	
9	102804503	Panel, Instrument .....	1	
10	102804504	Panel, Instrument (With 12-Volt Accessory Outlet Cutout) * .....	1	
11	102830801	Set, Key .....	1	
12	102967901	Rivet, Removable, Tuflok 1/4" .....	7	
13	103200701	Battery Condition Indicator - 48V .....	1	

Note: Items marked with an asterisk (\*) are to be used only on vehicles equipped with a 12-volt accessory outlet.

**13**

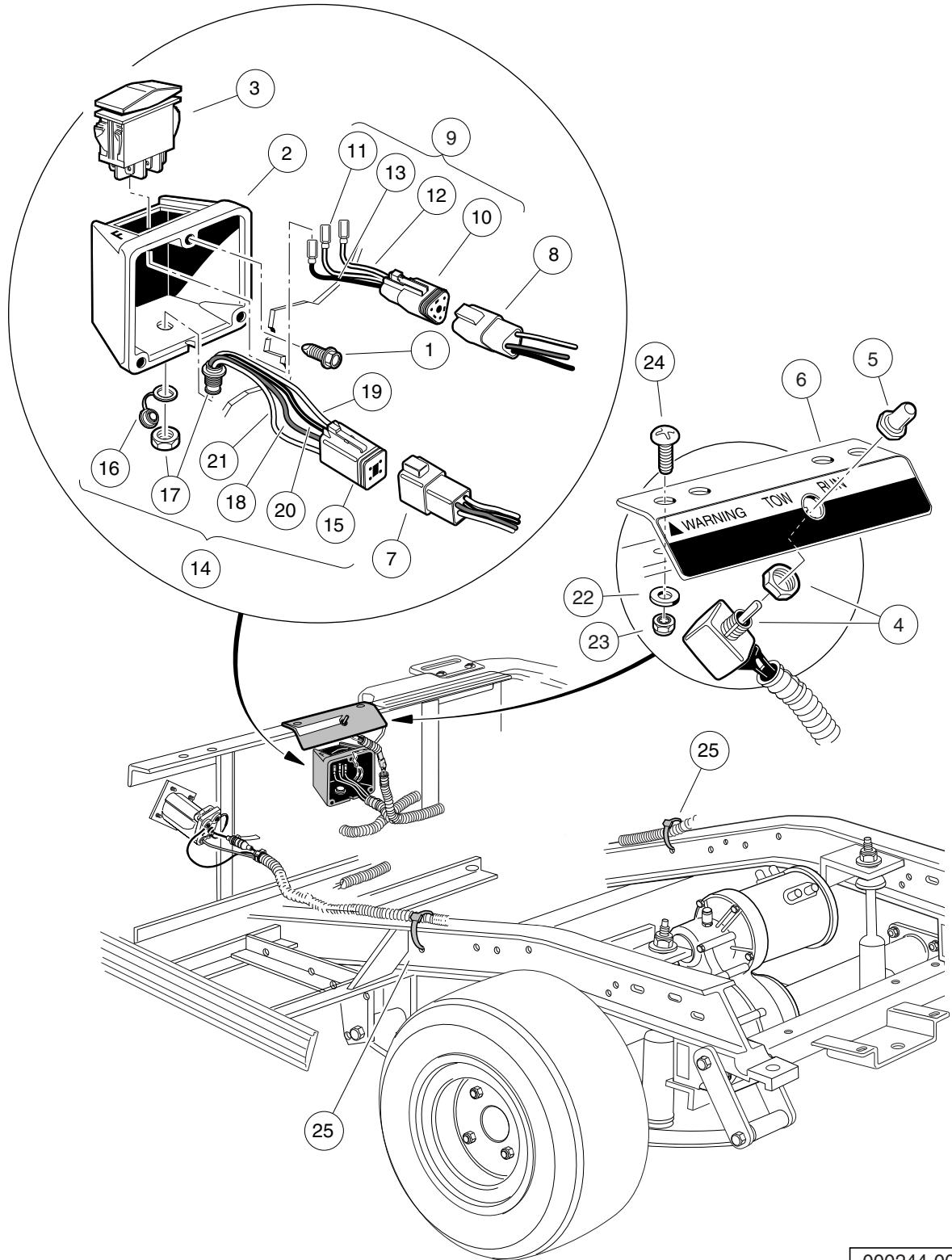
**E**



000243-002

# MOTOR CONTROLLER OUTPUT REGULATOR (MCOR)

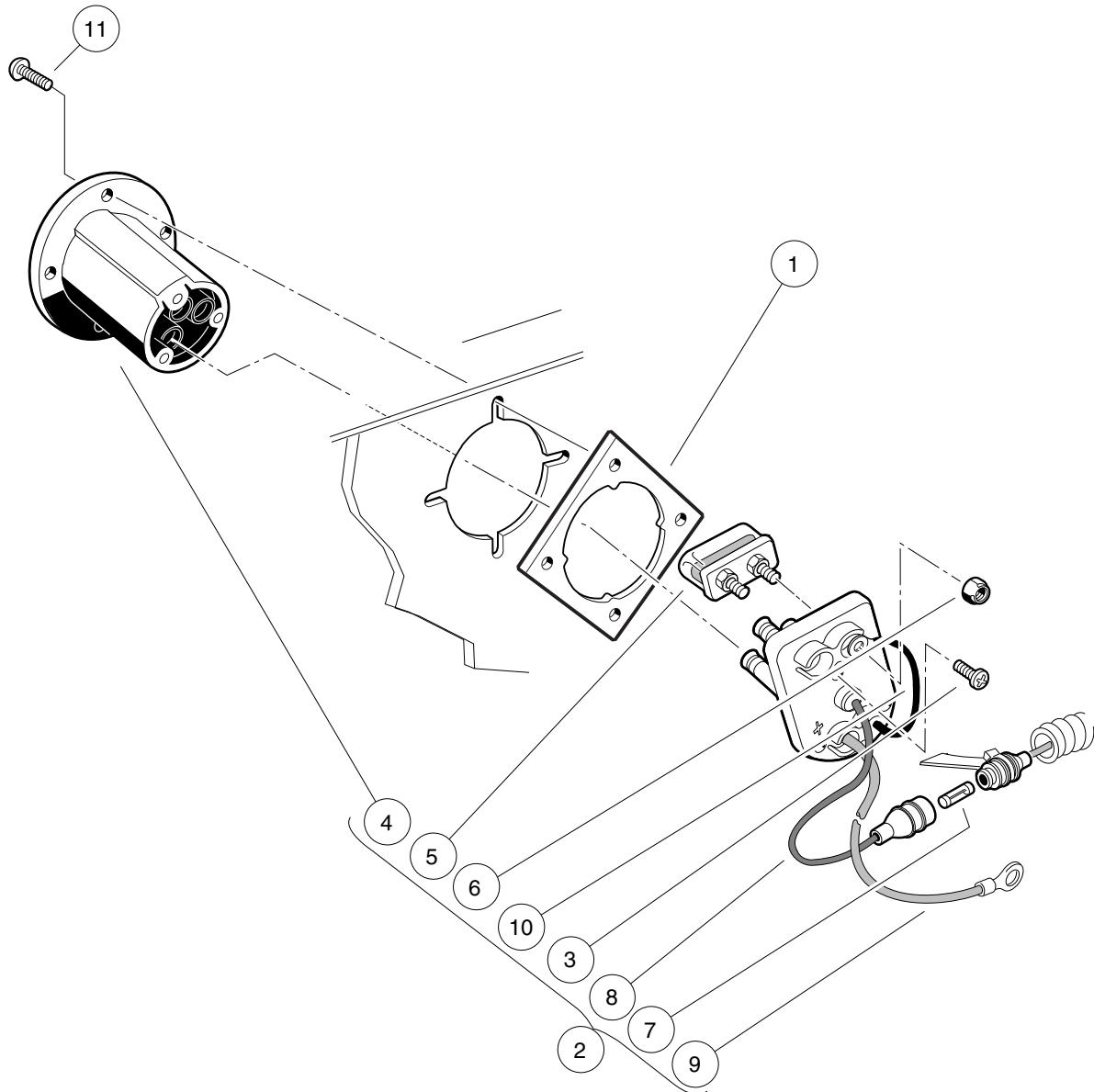
ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		13
1	1015752	Screw, #12-16 X 0.625 Hi-Lo .....	2	
2	101920101	Kit, 3-Pin Wedge Lock .....	1	E
3	101936801	Kit, 2-Pin Wedge Lock .....	1	
4	102101001	Bar, Drive, Cast .....	1	
5	102101101	MCOR .....	1	

**13****E**

000244-001

# FORWARD/REVERSE SWITCH, TOW/RUN SWITCH

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		<b>13</b>
1	1012285	Screw, 1/4 X 0.625 Hex-Head .....	3	
2	101855002	Case, FNR Switch .....	1	<b>E</b>
3	101856002	Switch, Rocker, Single-Pole .....	1	
4	101908101	Switch Assembly, Tow/Run .....	1	
5	101908401	Boot, Switch .....	1	
6	101922501	Bracket, Tow/Run Switch Mounting .....	1	
7	101932401	Kit, 4-Pin Receptacle and Wedge Lock .....	1	
8	101942301	Kit, 3-Pin Wedge Lock .....	1	
9	102266601	Wire Assembly, FNR Switch (includes items 10 through 13) .....	1	
10	101920101	Kit, 3-Pin Wedge Lock .....	1	
11	N/A	Wire Assembly, #18 Blue .....	1	
12	N/A	Wire Assembly, #18 Orange .....	1	
13	N/A	Wire Assembly, #18 Brown .....	1	
14	102266701	Wire Assembly, IQDM Port (includes items 15 through 21) .....	1	
15	101932501	Kit, 4-Pin Wedge Lock .....	1	
16	102196901	Dust Cap .....	1	
17	N/A	Connector Mount, Four-Pin .....	1	
18	N/A	Wire Assembly, #18 Red/Yellow .....	1	
19	N/A	Wire Assembly, #18 Black/Yellow .....	1	
20	N/A	Wire Assembly, #18 Blue/Yellow .....	1	
21	N/A	Wire Assembly, #18 Green/Yellow .....	1	
22	332	Washer, 1/4 Type A Narrow Flat .....	2	
23	8233	Locknut, 1/4-20 Nylon Insert .....	2	
24	8248	Screw, 1/4-20 X 0.75 Truss-Head Machine .....	2	
25	8990	Tie Wrap, 8" Nylon .....	1	

**13****E**

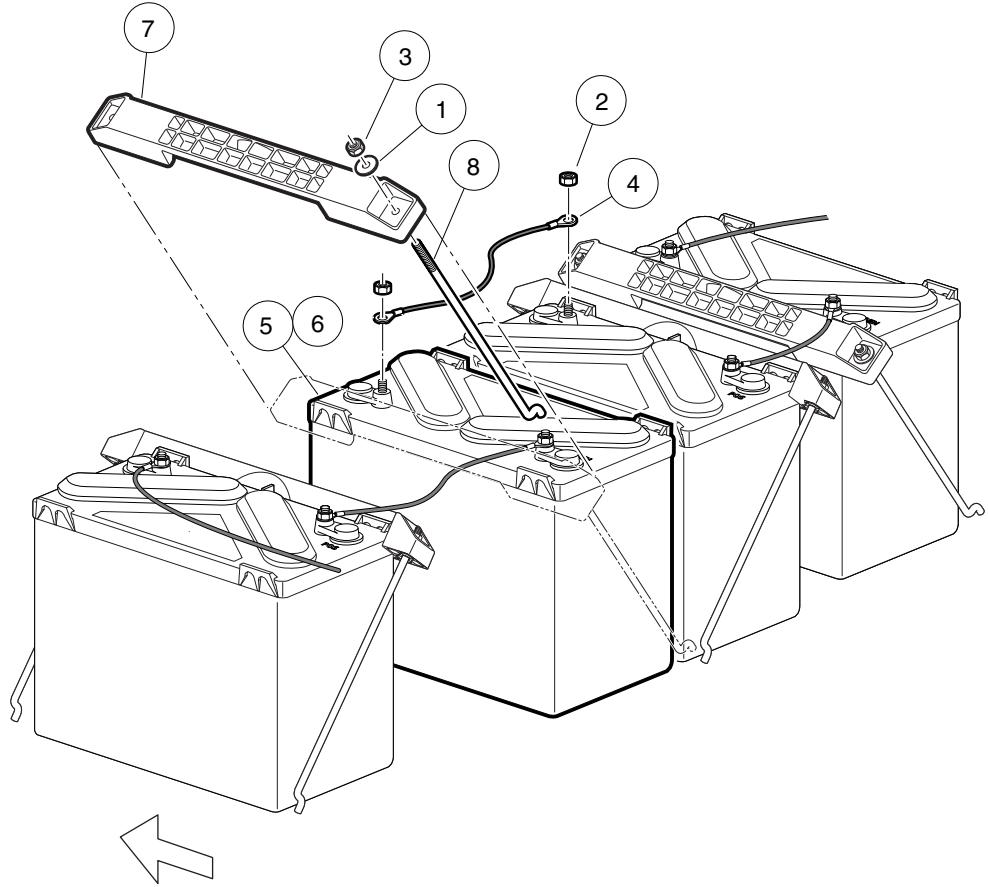
000369-001

# BATTERY CHARGER RECEPTACLE

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		<b>13</b>
1	101801001	Plate, Receptacle Backing .....	1	
2	101802101	Fuse and Receptacle Assembly (includes items 3 through 10) .....	1	<b>E</b>
3	1017705	Screw, #8 X 5/8 Phillips Pan-Head Type AB .....	3	
4	101796501	Receptacle .....	1	
5	101796801	Fuse Assembly (includes item 6) .....	1	
6	1013061	Locknut, #10-32 Nylon Insert .....	2	
7	N/A	Fuse, 3/8-Amp .....	1	
8	N/A	Wire Assembly, Sense Lead, Gray .....	1	
9	N/A	Wire Assembly, #10 Red .....	1	
10	N/A	Wire Assembly, #10 Black .....	1	
11	101832001	Screw, #7-19 X 0.625 Phillips Pan-Head Tap .....	4	

**13**

**E**



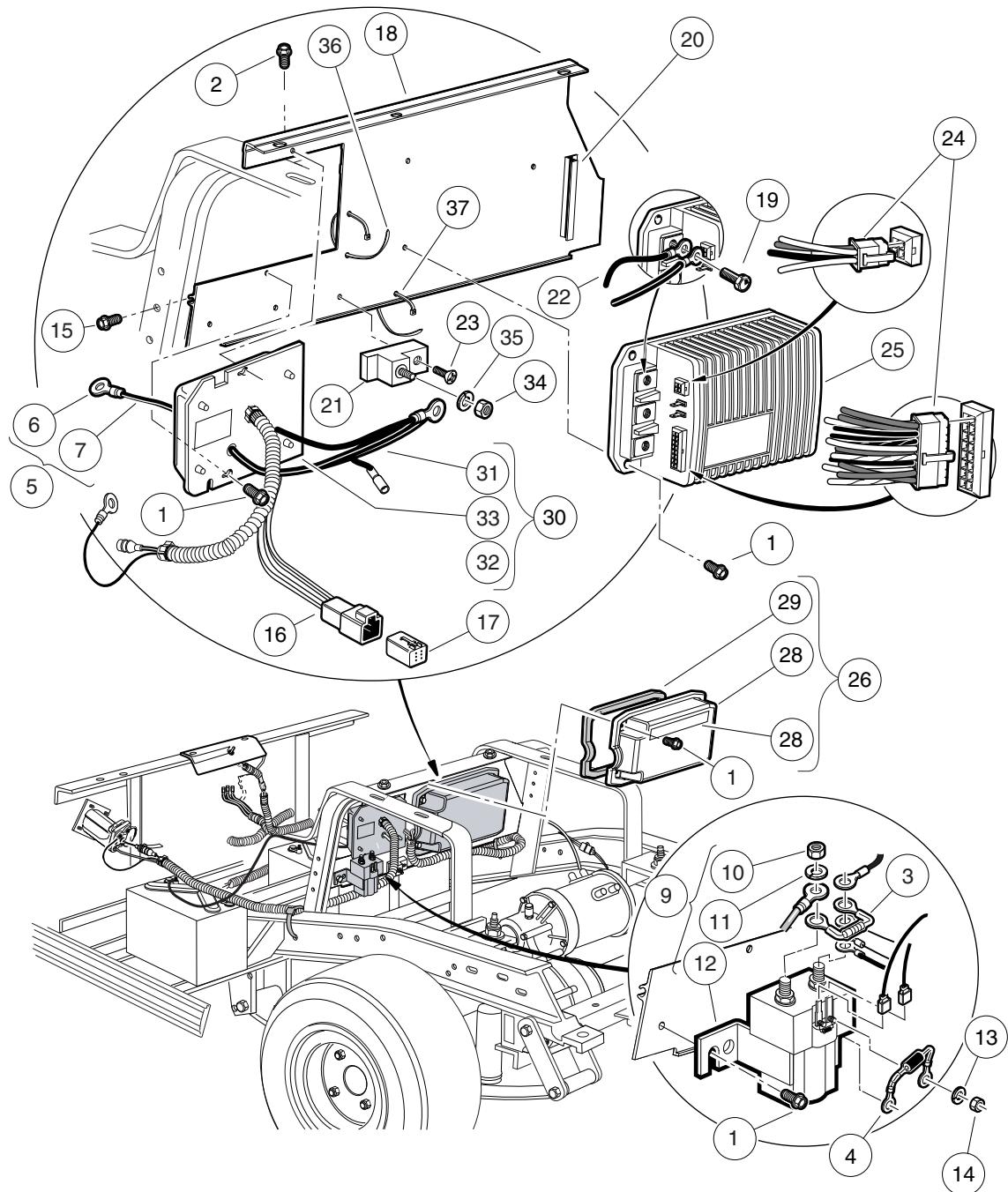
000241-002

# BATTERIES, ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		13
1	1011697	Washer, 5/16 Flat .....	8	
2	1014304	Nut, 5/16-18 Stainless-Steel Hex .....	8	E
3	1015072	Locknut, 5/16-18 Nylon Insert .....	8	
4	101795701	Asm, Wire, #6blk 13in .....	3	
5	102511301	Battery, Ventmaster 12-Volt (Wet) .....	4	
6	102511302	Battery, Ventmaster 12-Volt (Dry, also known as moist) .....	4	
7	102777401	Battery Hold-Down .....	4	
8	102832601	Bolt, Battery, J- .....	8	

13

E



000242-006

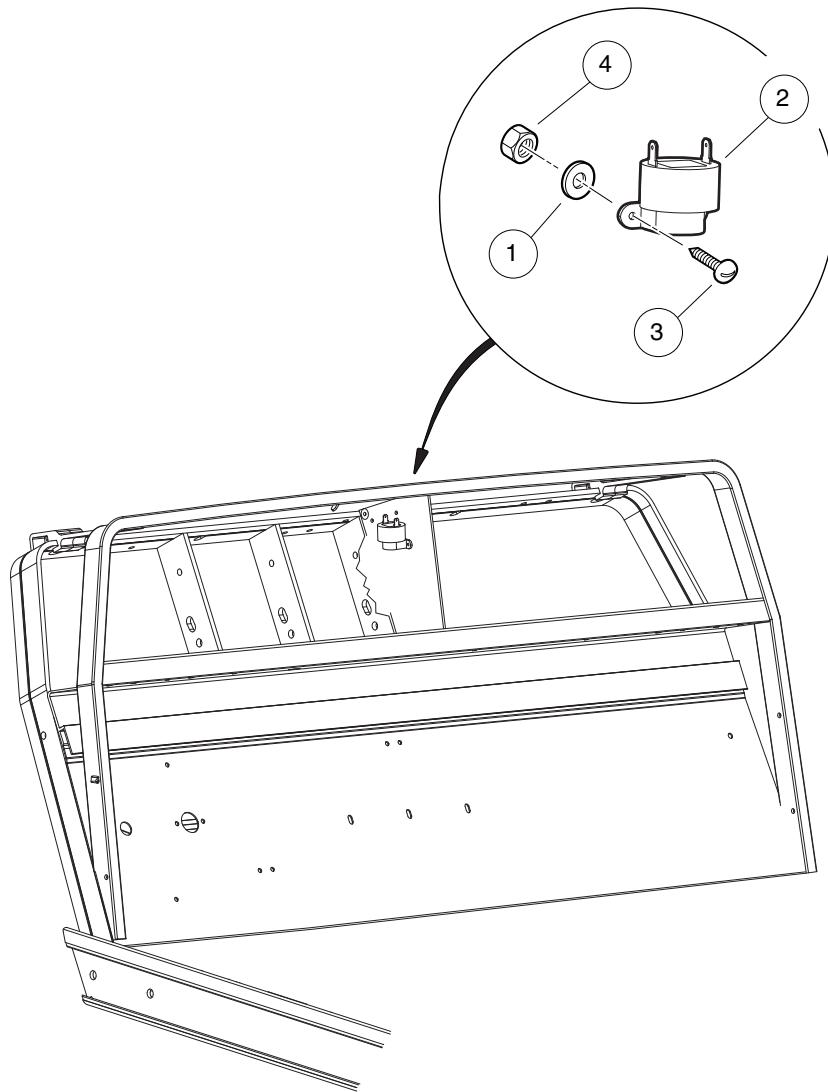
# OBC, CONTROLLER, AND SOLENOID – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	13
1	1012285	Screw, 1/4 X 0.625 Hex-Head .....	9
2	1014288	Screw, 5/16-18 X 0.75 Thread-Forming .....	2
3	1014947	Resistor Assembly .....	1
4	1014948	Diode .....	1
5	101827801	Ground Wire Kit, 48-Volt (includes items 6 through 8) .....	1
6	101826801	Compression Lug .....	1
7	N/A	Wire Assembly, Black .....	1
8	8990	Tie Wrap, 8" Nylon .....	3
9	101908701	Solenoid, 48-Volt (includes items 10 through 14) .....	1
10	1012528	Nut, M8-1.25 Hex .....	2
11	1013734	Lockwasher, 8mm Split .....	2
12	N/A	Solenoid, 48-Volt .....	1
13	N/A	Washer, Lock .....	2
14	N/A	Nut .....	2
15	101910401	Screw, 5/16-18 X 1.25 Thrd Frm .....	2
16	101932601	Kit, 6-Pin Wedge Lock .....	1
17	101932701	Kit, 6-Pin Receptacle and Wedge Lock .....	1
18	101965205	Plate, Component Mounting .....	1
19	102240501	Bolt, Controller, Terminal .....	3
20	****	Extrusion, Cover Support .....	1
21	102259801	Terminal Block .....	1
22	102263601	Wire Assy, #10 Black .....	1
23	102263701	Screw, #10-24 X 0.75 Phillips, Thread-Forming .....	1
24	102266501	Kit, Connector, IQ Controller .....	1
25	102806201	Controller, IQ, 48-volt .....	1
26	103316901	Cover Asm - Controller (includes items 27 through 29) .....	1
27	101931501	Decal, Component Cover .....	1
28	103316701	Cover - Controller, Deep .....	1
29	103316801	Gasket - Controller Cover .....	1
30	N/A	Kit, OBC, DS and Util IQ (includes items 31 through 33) .....	1
31	103282601	Wire Assembly Black #10 .....	1
32	N/A	Instr Obc Ds Pre 01-28-2007 .....	1
33	103403101	Asm, Obc, Iq, V3.0 .....	1
34	1242	Nut, 5/16-18 Hex .....	1
35	7174	Lockwasher, 5/16 Split .....	1
36	8639	Tie Wrap, 11" Nylon .....	1
37	8990	Tie Wrap, 8" Nylon .....	1

\*\*\*\* Special order item available upon request.

**13**

**E**



000363-001

## REVERSE BUZZER

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		13
1	1012431	Washer, #4 Flat .....	1	
2	1016851	Buzzer, Reverse (9-48 VDC) .....	1	E
3	8056	Screw, #4-40 X 0.75 Round-Head Machine .....	1	
4	8057	Nut, #4-40 Hex Machine .....	1	

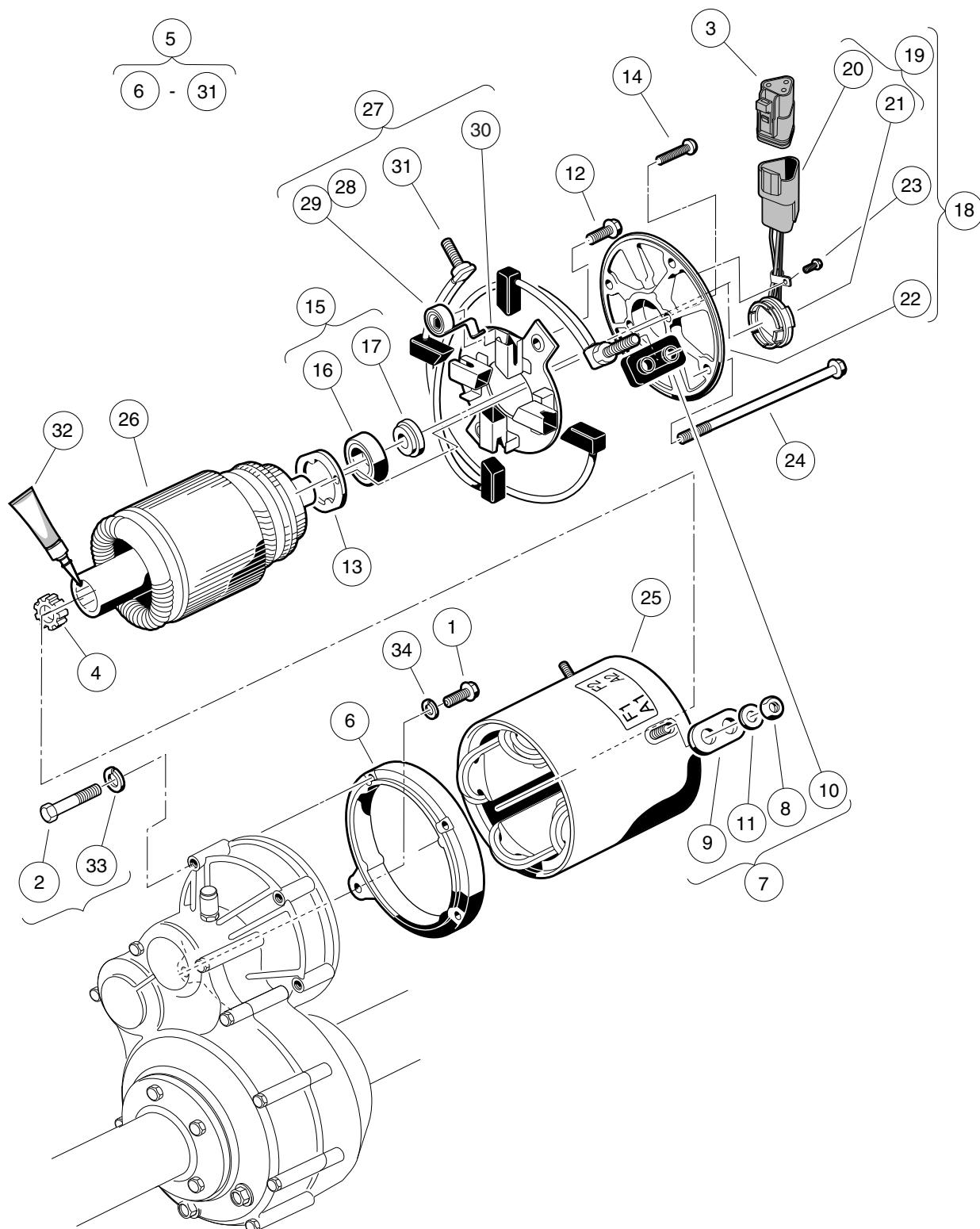
**13**

**E**

# ELECTRIC MOTOR

---

E

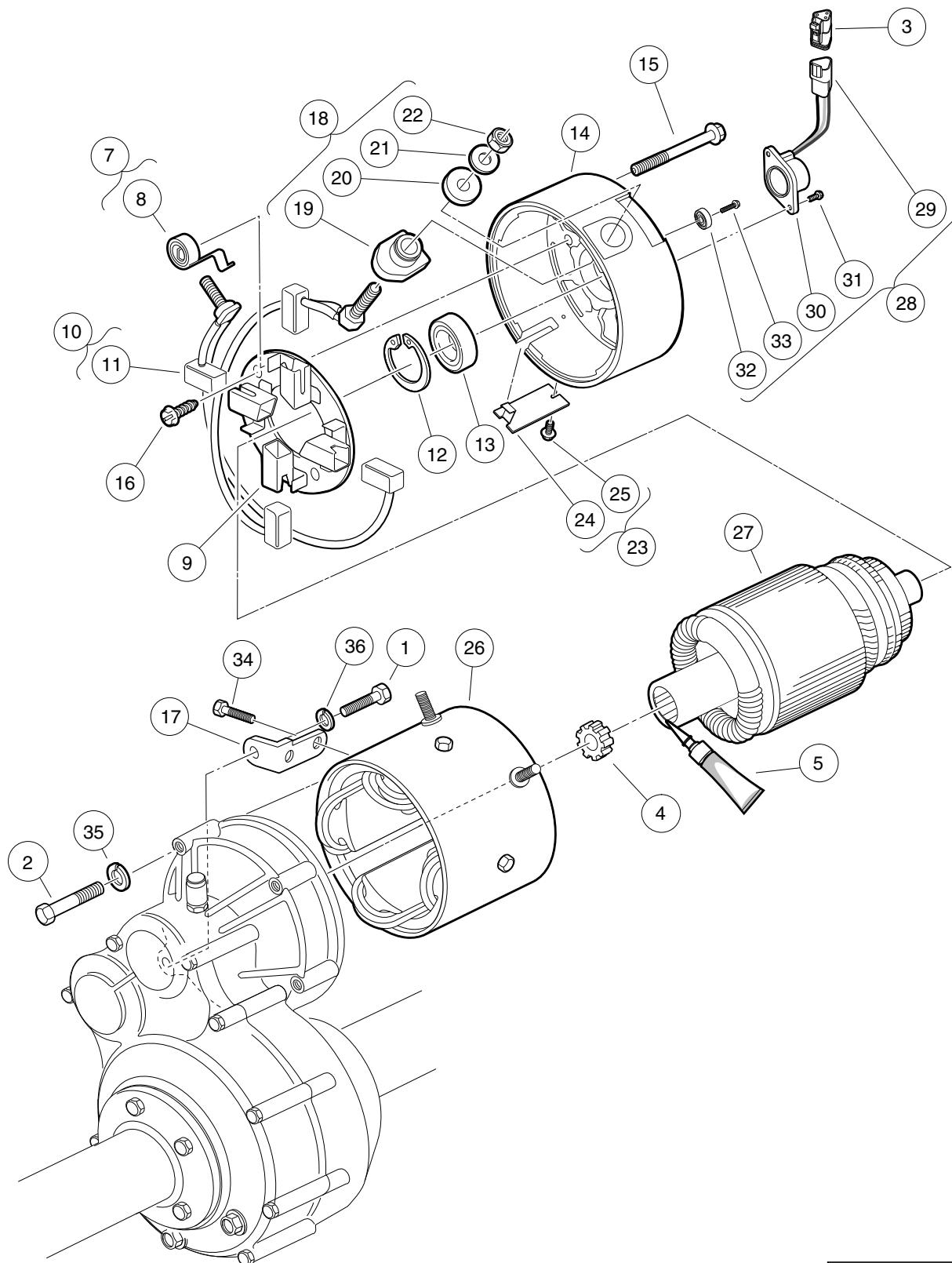
**14****E**

000349-002

# MOTOR (MODEL 5BC59JBS6390) – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	14
1	1010934	Screw, 5/16-18 X 1.00 Hex Cap .....	1
2	1014201	Screw, 1/4-20 X 2.25 Hex Cap .....	3
3	101920101	Kit, 3-Pin Wedge Lock .....	1
4	102235201	Bumper, Drive Unit .....	1
5	102240104	Motor, 48-Volt Non-Skew IQ * (includes items 6 through 27) .....	1
6	1017944	End Shield .....	1
7	1017947	Hardware Package (includes items 8 through 11) .....	1
8	1011280	Locknut, 5/16-18 .....	4
9	N/A	Insulator Bushing .....	2
10	N/A	Insulated Bushing .....	2
11	1241	Washer, 5/16 Type A Flat .....	4
12	1017949	Screw, #6-32 X 0.480 Hex-Head .....	2
13	1017950	Bearing Retainer .....	1
14	1017953	Screw, Bearing Retainer .....	2
15	102265701	Kit, Bearing and Magnet (includes items 16 and 17) .....	1
16	1011290	Ball Bearing .....	1
17	102265801	Magnet .....	1
18	102265901	Motor End Shield Asm (includes items 19 through 23) .....	1
19	102265601	Speed Sensor Assembly (includes items 20 and 21) .....	1
20	101942301	Kit, 3-Pin Wedge Lock .....	1
21	N/A	Sensor, Speed, without Connector .....	1
22	102266001	End Shield, Motor .....	1
23	102267001	Screw, #8-32 X 0.375 Hex-Head .....	1
24	102266101	Screw, #10 - 32 X 8.250 .....	4
25	103325701	Stator Shell and Winding .....	1
26	103325801	Non Skew Armature .....	1
27	103337601	Brush Assembly, IQ Motor, Non-Skew (includes items 28 through 31) .....	1
28	1011411	Kit, Brush Spring (ge Motor) (includes item 29) .....	1
29	1011285	Brush Spring .....	4
30	103325501	Brush Rigging, Non-Skew Motor .....	1
31	103325601	Brush Set, Non-Skew .....	1
32	102243403	Lubricant, Moly-Teflon (Single-Use Tube) .....	1
33	451	Lockwasher, 1/4 Split .....	3
34	7174	Lockwasher, 5/16 Split .....	1

\* Note: The model 5BC59JBS6390 motor has been discontinued. To replace the motor, use motor model EJ8-4001A.

**14****E**

000185-001

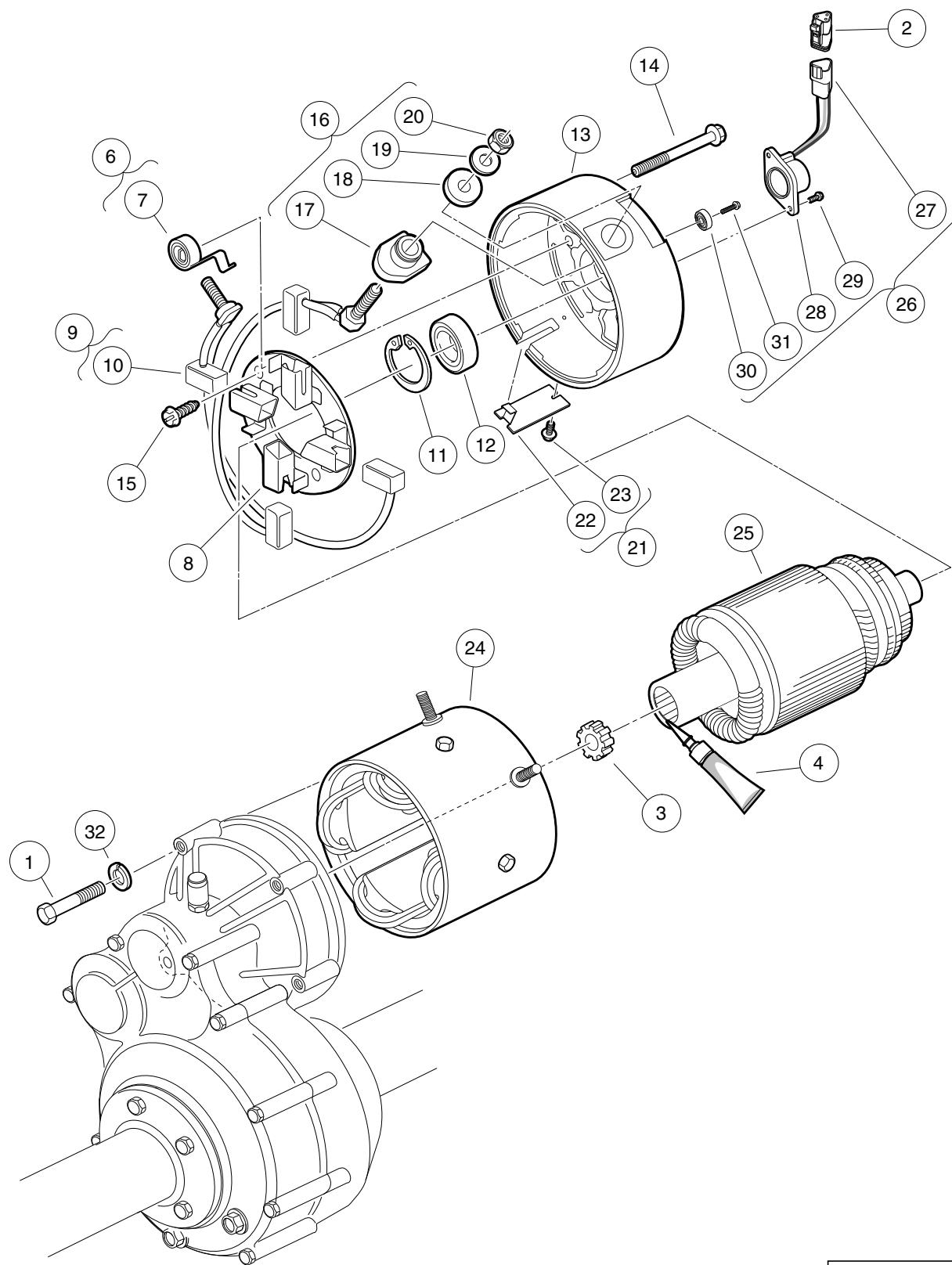
# MOTOR (MODEL EJ4-4001) – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	14
1	1010934	Screw, 5/16-18 X 1.00 Hex Cap .....	1
2	1014201	Screw, 1/4-20 X 2.25 Hex Cap .....	3
3	101920101	Kit, 3-Pin Wedge Lock .....	1
4	102235201	Bumper, Drive Unit .....	1
5	102243403	Lubricant, Moly-Teflon (Single-Use Tube) .....	1
6	102705001	IQ Electric Motor, 48-VDC 3.3 hp * (includes items 7 through 34) .....	1
7	102186001	Spring Kit, Motor Brush (includes item 8) .....	1
8	N/A	Spring, Brush, S-g .....	4
9	102186101	Brush Box Assembly .....	1
10	102186201	Brush Kit, Motor (includes item 11) .....	1
11	N/A	Assembly, Brush and Terminal .....	2
12	102186301	Ring, 2.24" Internal Retaining .....	1
13	102186401	Bearing, Ball .....	1
14	102186701	End Cap, Motor .....	1
15	N/A	Screw, 1/4-20 X 2.25 Hex-Head Washer .....	2
16	102186901	Screw, #8-32 X .5 Hex-Head .....	2
17	102187001	L-Bracket, Motor .....	1
18	102187101	Hardware Kit, Motor Terminal (includes items 19 through 22) .....	2
19	N/A	Bushing, Nylon .....	2
20	N/A	Washer, Nylon Flat .....	2
21	N/A	Washer, Flat, 5/16 Steel .....	2
22	N/A	Nut, Brass Hex, 5/16 - 18 .....	2
23	102187201	Plate Kit, Motor Cover (includes items 24 and 25) .....	1
24	N/A	Assembly, Cover Plate .....	1
25	N/A	Screw, #8-32 x 0.375, Taptite Thread .....	1
26	102704701	Frame and Field Assembly .....	1
27	102704801	Armature Assembly .....	1
28	102704901	Kit, Speed Sensor (includes items 29 through 33) .....	1
29	101942301	Kit, 3-Pin Wedge Lock .....	1
30	N/A	Sensor, Motor Speed, ADC .....	1
31	N/A	Screw, #8-32, Taptite Thread .....	2
32	N/A	Magnet, ADC Motor .....	1
33	N/A	Screw, 1/4-20 x 0.5 .....	1
34	N/A	Bolt, 1/4 - 20 x 0.73 Thread-Forming .....	2
35	451	Lockwasher, 1/4 Split .....	3
36	7174	Lockwasher, 5/16 Split .....	1

\* Note: The model EJ4-4001 motor has been discontinued. To replace the motor, use motor model EJ8-4001A.

**14**

**E**

**14****E**

000185-002

# MOTOR (MODEL EJ8-4001A) – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1014201	Screw, 1/4-20 X 2.25 Hex Cap .....	3
2	101920101	Kit, 3-Pin Wedge Lock .....	1
3	102235201	Bumper, Drive Unit .....	1
4	102243403	Lubricant, Moly-Teflon (Single-Use Tube) .....	1
5	N/A	IQ Electric Motor, 48-VDC 3.3 hp (includes items 6 through 26) .....	1
6	102186001	Spring Kit, Motor Brush (includes item 7) .....	1
7	N/A	Spring, Brush, S-g .....	4
8	102186101	Brush Box Assembly .....	1
9	102186201	Brush Kit, Motor (includes item 10) .....	1
10	N/A	Assembly, Brush and Terminal .....	2
11	102186301	Ring, 2.24" Internal Retaining .....	1
12	102186401	Bearing, Ball .....	1
13	102186701	End Cap, Motor .....	1
14	N/A	Screw, 1/4-20 X 2.25 Hex-Head Washer .....	2
15	102186901	Screw, #8-32 X .5 Hex-Head .....	2
16	102187101	Hardware Kit, Motor Terminal (includes items 17 through 20) .....	2
17	N/A	Bushing, Nylon .....	2
18	N/A	Washer, Nylon Flat .....	2
19	N/A	Washer, Flat, 5/16 Steel .....	2
20	N/A	Nut, Brass Hex, 5/16 - 18 .....	2
21	102187201	Plate Kit, Motor Cover (includes items 22 and 23) .....	1
22	N/A	Assembly, Cover Plate .....	1
23	N/A	Screw, #8-32 x 0.375, Taptite Thread .....	1
24	102704701	Frame and Field Assembly .....	1
25	102704801	Armature Assembly .....	1
26	102704901	Kit, Speed Sensor (includes items 27 through 31) .....	1
27	101942301	Kit, 3-Pin Wedge Lock .....	1
28	N/A	Sensor, Motor Speed, ADC .....	1
29	N/A	Screw, #8-32, Taptite Thread .....	2
30	N/A	Magnet, ADC Motor .....	1
31	N/A	Screw, 1/4-20 x 0.5 .....	1
32	451	Lockwasher, 1/4 Split .....	3

**14**

**E**

**14**

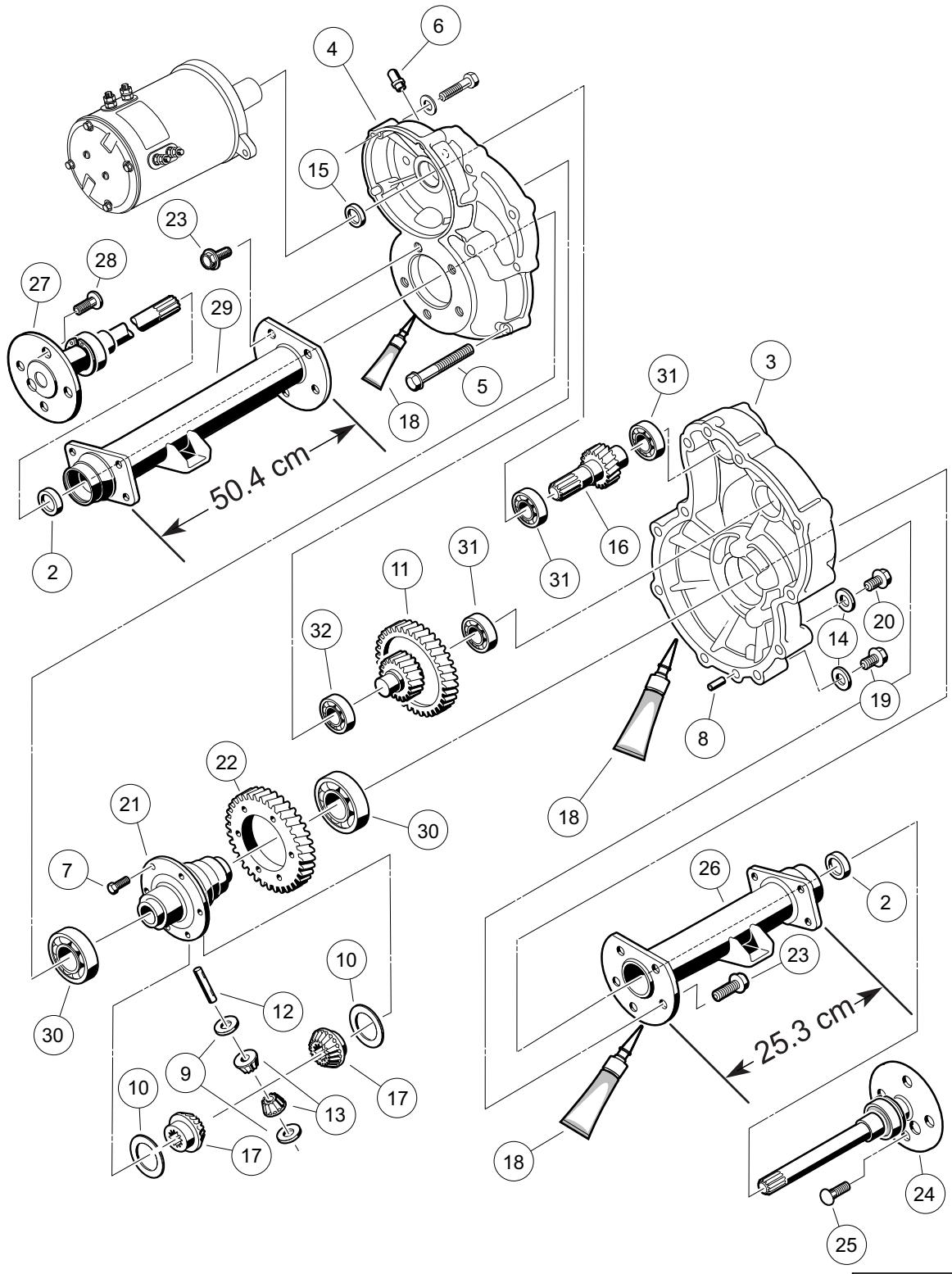
**E**

# **TRANSAXLE – ELECTRIC VEHICLES**

---

**15**

**E**



000223-002

# TRANSAXLE – ELECTRIC VEHICLES

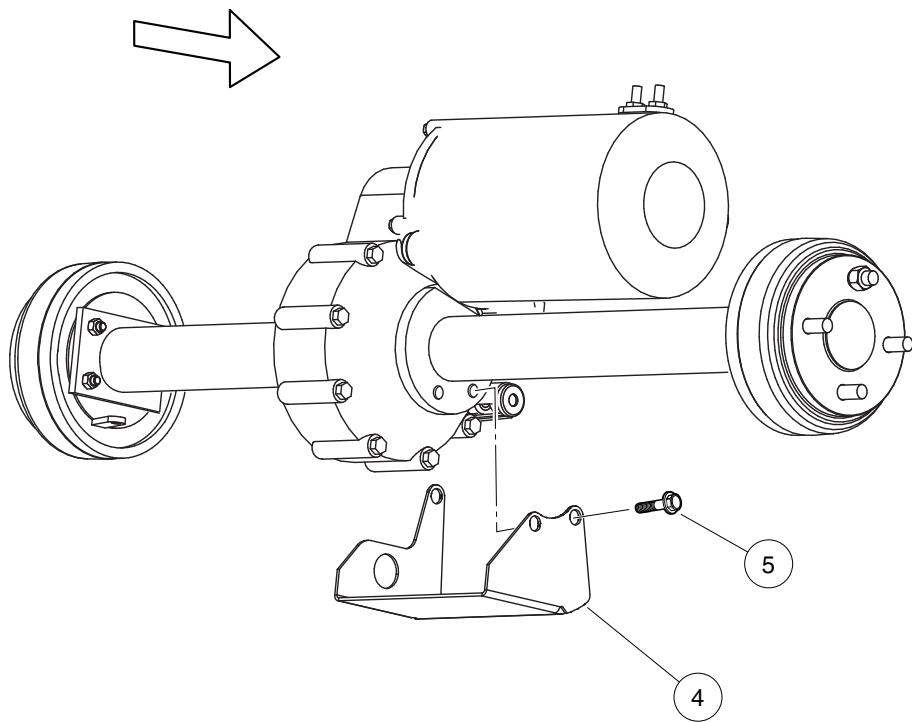
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	102771701	Transaxle, Electric (includes items 2 through 32) .....	1
2	1013794	Axle Shaft Oil Seal .....	2
3	101895401	Gear Case, Left-Hand .....	1
4	101895501	Gear Case, Passenger-Side .....	1
5	101897001	Screw, M8-1.25 X 60mm Hex-Head .....	11
6	101897201	Breather .....	1
7	101897401	Screw, M10-1.25 X 25mm .....	6
8	101897601	Pin, 11mm OD X 8.5mm ID X 10mm .....	2
9	101903601	Washer, Thrust .....	2
10	101903701	Washer, Thrust .....	2
11	101906901	Intermediate Shaft Assembly .....	1
12	101922101	Pin, 15.99mm X 88.7mm Dowel .....	1
13	101923001	Gear, Differential Idler .....	2
14	101923201	Gasket .....	2
15	101923501	Seal, Lip .....	1
16	101923701	Shaft, Input .....	1
17	101923901	Gear, Differential .....	2
18	101928701	Liquid Gasket (Transaxle case) .....	1
19	101972101	Plug, M14-1.5 X 12mm Magnetic .....	1
20	101972201	Plug, M14-1.5 X 12mm Hex .....	1
21	102356601	Housing, Differential, 6 Bolt .....	1
22	102356801	Gear, Differential Output, 6-Bolt .....	1
23	102357001	Screw, Flg Hd M10 X 1.5 X 30 .....	10
24	102886301	Axle Assembly, Driver-Side (includes item 25) .....	1
25	101922201	Lug Stud .....	4
26	102886401	Tube, Axle, Driver-Side .....	1
27	102886501	Axle Assembly, Passenger-Side (includes item 28) .....	1
28	101922201	Lug Stud .....	4
29	102886601	Tube, Axle, Passenger-Side .....	1
30	7330	Inner Axle Tube Bearing .....	2
31	7335	Bearing .....	3
32	7336	Bearing .....	1

**15**

**E**

**15**

**E**



000365-001

## DIFFERENTIAL GUARD

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		<b>15</b>
1	101611402	Differential Guard Kit (includes items 2 through 4) .....	1	
2	101911401	Kit - Support Brace .....	2	
3	101936101	Screw, M10-1.50 X 60mm Hex Cap .....	2	
4	101978601	Guard, Elect.axle Differential .....	1	
5	102357001	Screw, Flg Hd M10 X 1.5 X 30 .....	3	

**15**

**E**

# BATTERY CHARGER

---

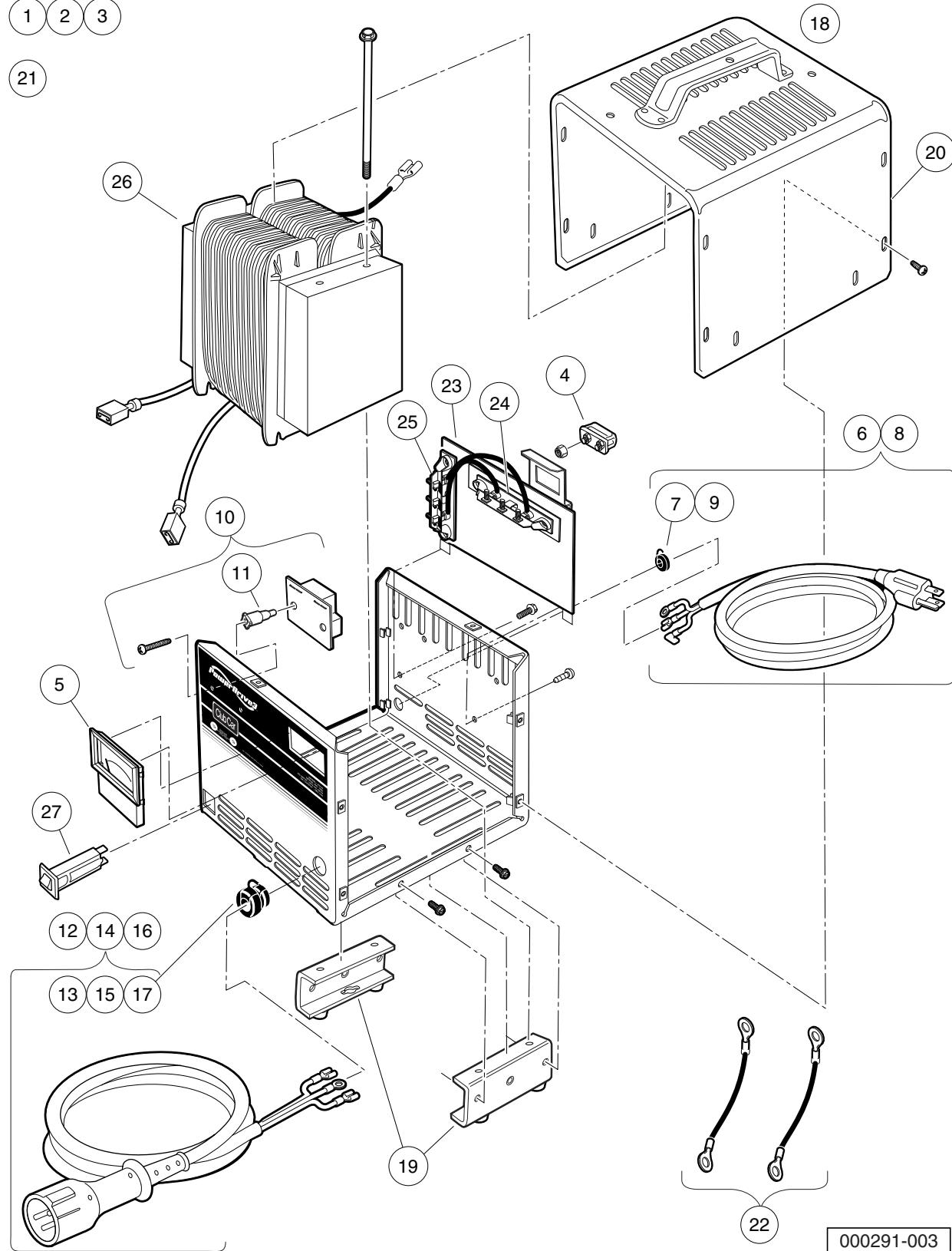
E

**16**

1 2 3

**E**

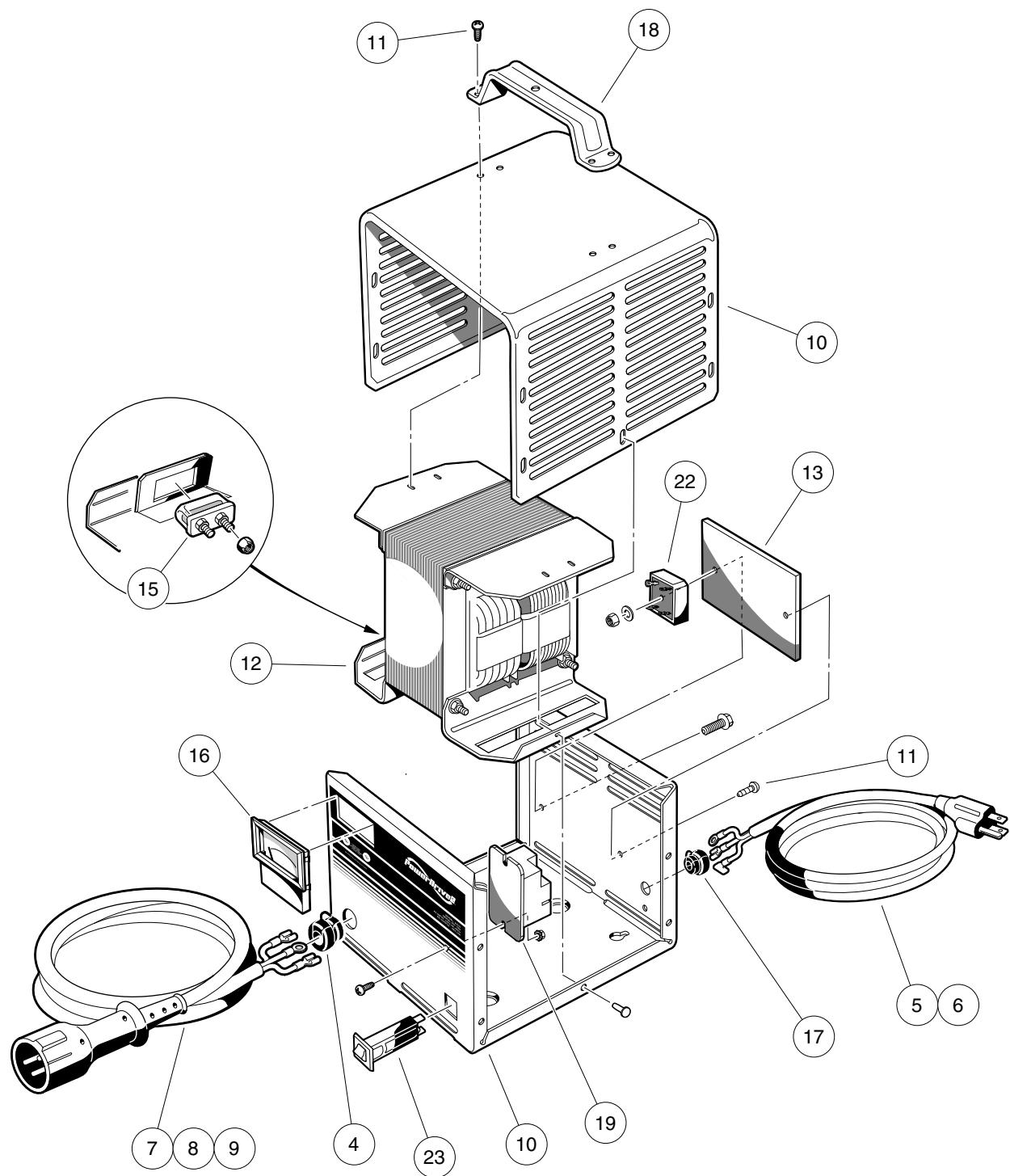
21



000291-003

# POWERDRIVE 3 BATTERY CHARGER, DOMESTIC

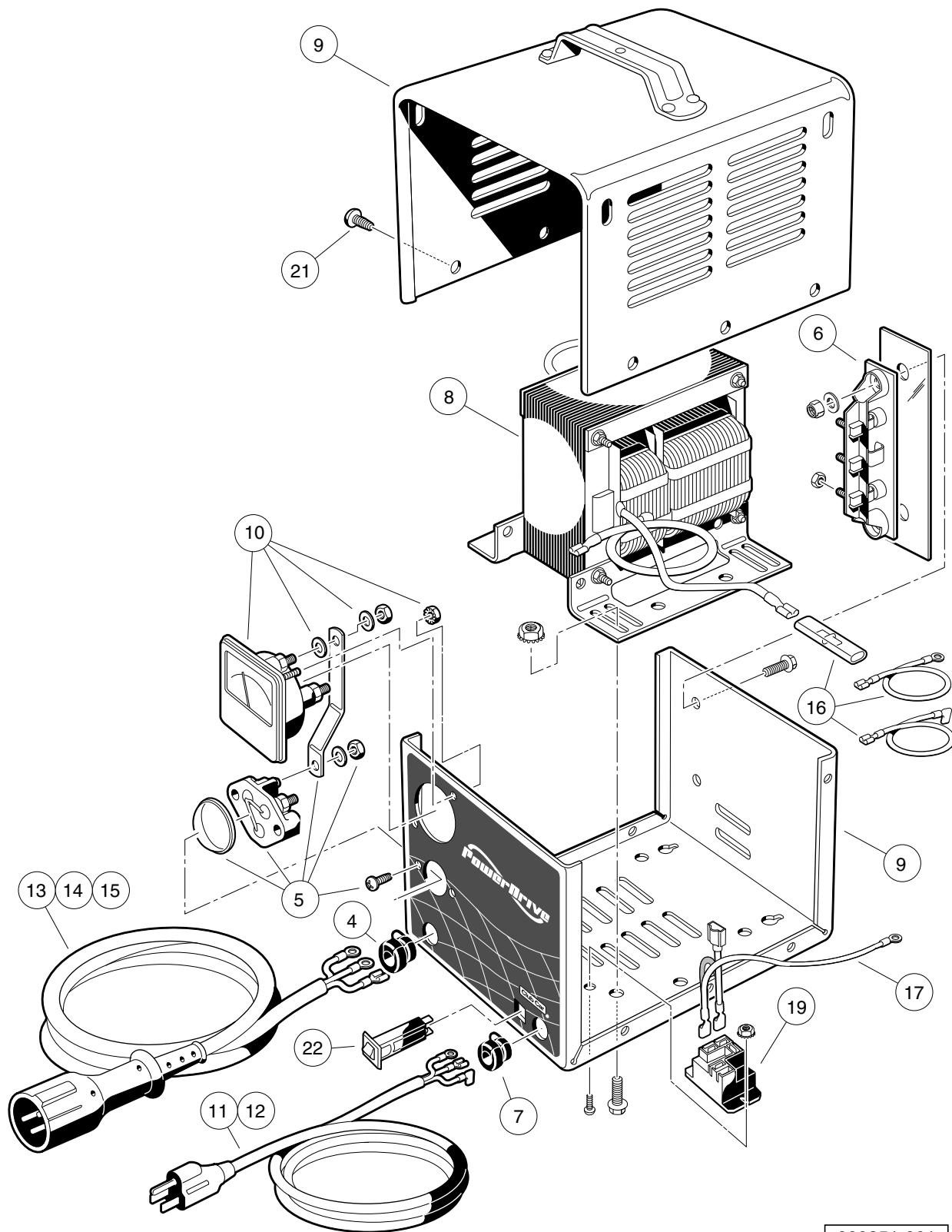
ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		<b>16</b>
1	103717001	Chgr, Pd3 Stnry, 9Dc6'Ac'	1	
2	103717002	Chgr, Pd3 Stnry, 12Dc9'Ac'	1	
3	103717003	Chgr, Pd3 Stnry, 20Dc9'Ac'(includes items 4 through 27)	1	
4	102273701	PD2 Fuse Asm	1	
5	102273801	PD2 Ammeter	1	
6	103428501	Kit, PD3 Cordset - AC 80" (includes item 7)	1	
7	102273901	PD2 AC Cord Bushing	1	
8	103428601	Kit, PD3 Cordset, - AC 114" (includes item 9)	1	
9	102273901	PD2 AC Cord Bushing	1	
10	103428701	Asm, PD3 Board Relay (includes item 11)	1	
11	103429701	PD3 Plastic Stand-Offs	2	
12	103429001	PD3 Cordset - DC 113" (includes item 13)	1	
13	1012098	Bushing, DC Cord	1	
14	103429101	PD3 Cordset - DC 154" (includes item 15)	1	
15	1012098	Bushing, DC Cord	1	
16	103429201	PD3 Cordset - DC 205" (includes item 17)	1	
17	1012098	Bushing, DC Cord	1	
18	103429301	Asm, PD3 Case (includes items 19 and 20)	1	
19	103434001	Asm, PD3 Legs	1	
20	103439901	PD3Case Top (Includes Handle)	1	
21	103429501	Kit, PD3 Hardware	1	
22	103513001	Wire Asm Kit Blk Pd3	1	
23	103517401	Kit Pd3 Button Diode (includes items 24 and 25)	1	
24	103512801	Asm Diode Top	1	
25	103512901	Asm Diode Side	1	
26	103779601	Transformer, Pd3, AI	1	
27	CCX8506	Circuit Breaker, 15-Amp/120-Volt	1	



000291-001

# POWERDRIVE 2 BATTERY CHARGER (MODEL 22110), DOMESTIC

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		16
1	101802204	48-V/13-A PowerDrive 2 (9-ft. DC, 6-ft. AC) .....	1	E
2	101802205	48-V/13-A PowerDrive 2 (12-ft. DC, 9-ft. AC) .....	1	
3	101802206	48-V/13-A PowerDrive 2 (20-ft. DC, 9-ft. AC) (includes items 4 through 23) .....	1	
4	1012098	Bushing, DC Cord .....	1	
5	101828801	Cord, AC, 80-Inch (203 cm) .....	1	
6	101828802	Cord, AC, 108-Inch (274 cm) .....	1	
7	101828904	PD2 DC Cordset, 113-inch .....	1	
8	101828905	PD2 DC Cordset, 154-inch .....	1	
9	101828906	Pd2 Dc Cordset 250 Inch .....	1	
10	102273201	PD2 Case (includes item 11) .....	1	
11	7577	Screw, #10 X 0.50 Phillips Pan-Head .....	12	
12	102273301	PD2 Transformer Asm .....	1	
13	102273401	PD2 Heatsink .....	1	
14	102273601	PD2 Wire Asm .....	1	
15	102273701	PD2 Fuse Asm .....	1	
16	102273801	PD2 Ammeter .....	1	
17	102273901	PD2 AC Cord Bushing .....	1	
18	102274001	PD2 Handle .....	1	
19	103414901	Kit, Relay, 48v 30a W/instr (includes items 20 and 21) .....	1	
20	103397901	Relay, Spst No, 48v 30a, Pmt .....	1	
21	N/A	Kit, Relay, 48v 30a Instrns .....	1	
22	103517601	Pd2 Rectifier Kit .....	1	
23	CCX8506	Circuit Breaker, 15-Amp/120-Volt .....	1	
		Note: Item 16 not shown. Level 1 Battery Charger part numbers include one AC and one DC cord. They do not include all of the level 2 cords listed.		

**16****E**

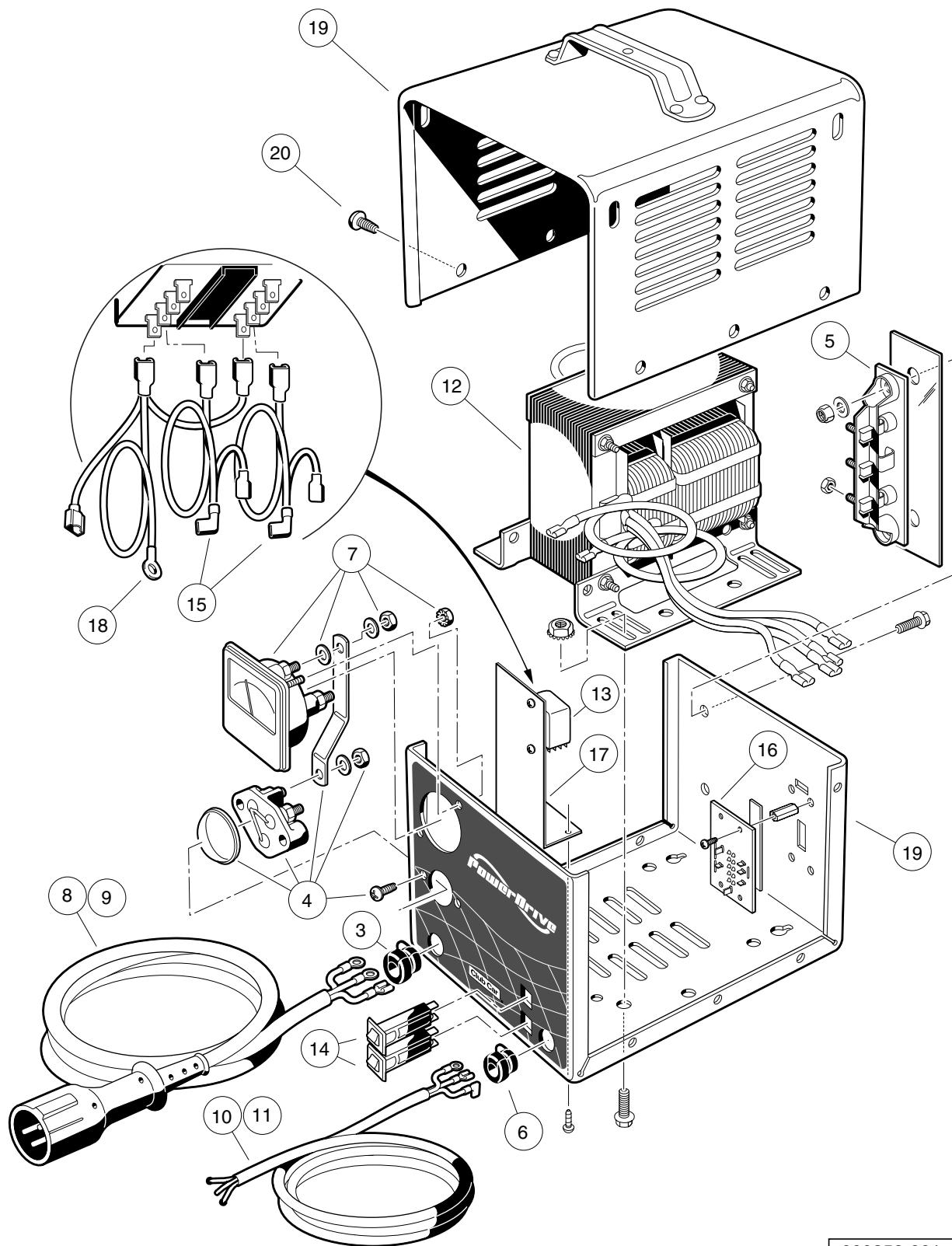
000351-001

# POWERDRIVE BATTERY CHARGER (MODEL 17930), DOMESTIC

ITEM	PART NO.	DESCRIPTION	QTY	
		1 2 3 4		<b>16</b>
1	101802201	48V/17A PowerDrive (9-ft DC, 6-ft AC Cord) .....	1	
2	101802202	48V/17A PowerDrive (12-ft DC, 9-ft AC Cord) .....	1	
3	101802203	48V/17A PowerDrive (20-ft DC, 9-ft AC Cord) (includes items 4 through 22) .....	1	
4	1012098	Bushing, DC Cord .....	1	
5	1012101	Fuse Assembly .....	1	
6	1015914	Rectifier with Heatsink Assembly .....	1	
7	1015917	Bushing, AC Cord .....	1	
8	****	Transformer, Battery Charger .....	1	
9	101828301	Case Assembly .....	1	
10	101828501	Ammeter .....	1	
11	101828801	Cord, AC, 80-Inch (203 cm) .....	1	
12	101828802	Cord, AC, 108-Inch (274 cm) .....	1	
13	101828901	Cord, DC, 113-Inch (287 cm) .....	1	
14	101828902	Cord, DC, 154-Inch (391 cm) .....	1	
15	101828903	Cord, DC, 250-Inch (635 cm) .....	1	
16	101831101	Wire Assembly Kit .....	1	
17	101914401	Assembly, Voltage Suppressor .....	1	
18	103414901	Kit, Relay, 48v 30a W/instr (includes items 19 and 20) .....	1	
19	103397901	Relay, Spst No, 48v 30a, Pmt .....	1	
20	N/A	Kit, Relay, 48v 30a Instrns .....	1	
21	7577	Screw, #10 X 0.50 Phillips Pan-Head .....	10	
22	CCX8506	Circuit Breaker, 15-Amp/120-Volt .....	1	

\*\*\*\* Special order item available upon request.

Note: Level 1 Battery Charger part numbers include one AC and one DC cord.  
They do not include all of the level 2 cords listed.

**16****E**

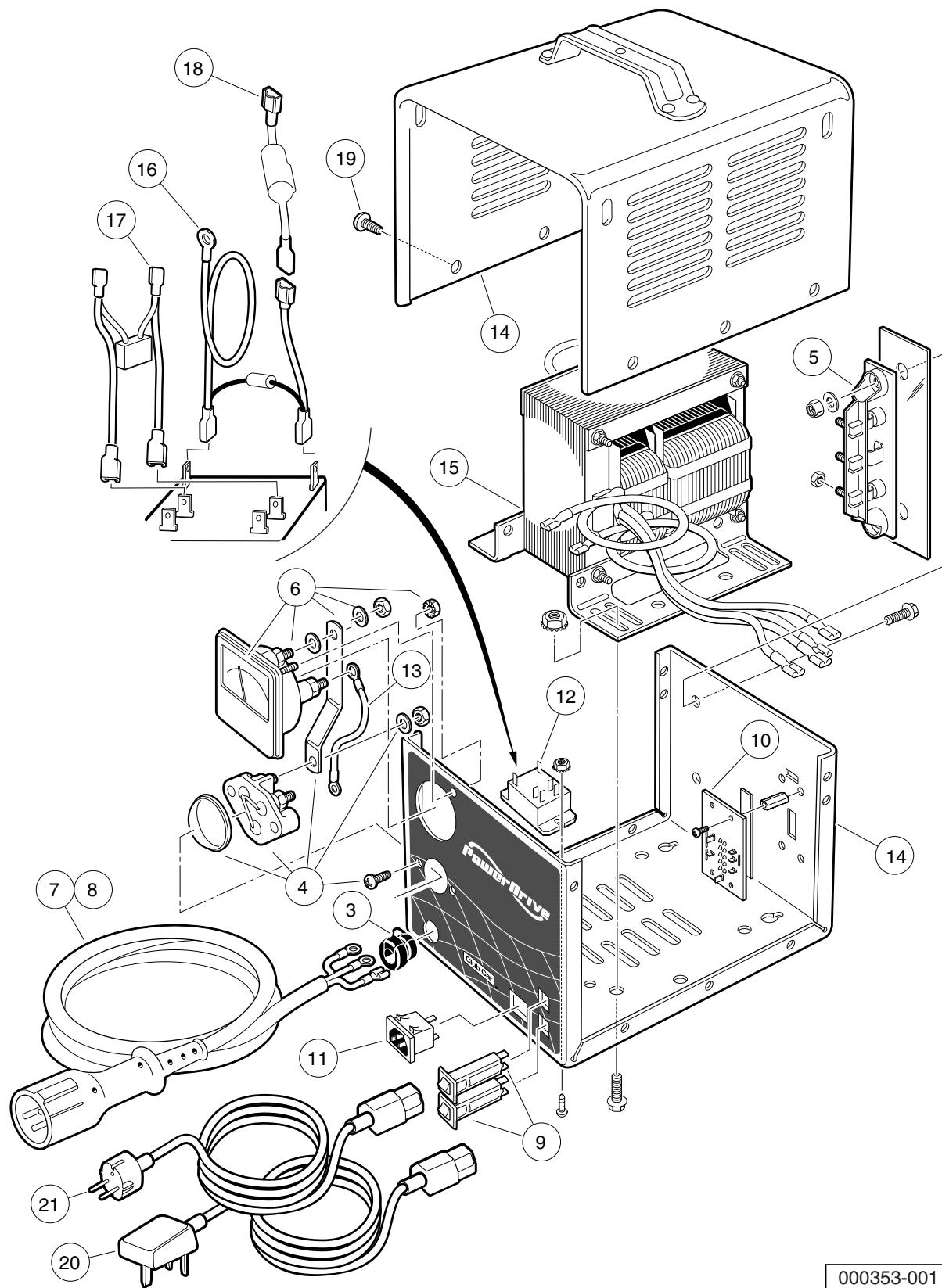
000352-001

# POWERDRIVE BATTERY CHARGER (MODEL 18780), EXPORT

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101831503	Battery Charger, 48-Volt DC (8.5-ft DC, 6-ft AC) .....	1
2	101831504	Battery Charger, 48-Volt DC (12-ft DC, 9-ft AC) (includes items 3 through 20) .....	1
3	1012098	Bushing, DC Cord .....	1
4	1012101	Fuse Assembly .....	1
5	1015914	Rectifier with Heatsink Assembly .....	1
6	1015917	Bushing, AC Cord .....	1
7	101828501	Ammeter .....	1
8	101828901	Cord, DC, 113-Inch (287 cm) .....	1
9	101828902	Cord, DC, 154-Inch (391 cm) .....	1
10	101831701	Cord, AC, 80-Inch (203 cm), without Plug .....	1
11	101831702	Cord, AC, 118-Inch (203 cm), without Plug .....	1
12	101838201	Transformer, Export Battery Charger .....	1
13	101838301	Relay, Export Charger .....	1
14	101838401	Circuit Breaker .....	2
15	101838501	Kit, Wire Assembly .....	1
16	101838601	Four-Position Switch .....	1
17	****	Mounting Bracket, Relay .....	1
18	101914401	Assembly, Voltage Suppressor .....	1
19	N/A	Case, Charger .....	1
20	7577	Screw, #10 X 0.50 Phillips Pan-Head .....	10
		**** Special order item available upon request.	
		Note: Level 1 Battery Charger part numbers include one AC and one DC cord. They do not include all of the level 2 cords listed.	

**16**

**E**

**16****E**

000353-001

# POWERDRIVE BATTERY CHARGER (MODEL 20310), EUROPEAN

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101956201	Battery Charger, 48-Volt w/ 4-Position Switch (8.5-ft DC) .....	1
2	101956202	Battery Charger, 48-Volt w/ 4-Pos. Switch (12-ft DC) (includes items 3 through 19) .....	1
3	1012098	Bushing, DC Cord .....	1
4	1012101	Fuse Assembly .....	1
5	1015914	Rectifier with Heatsink Assembly .....	1
6	101828501	Ammeter .....	1
7	101828901	Cord, DC, 113-Inch (287 cm) .....	1
8	101828902	Cord, DC, 154-Inch (391 cm) .....	1
9	101838401	Circuit Breaker .....	2
10	101838601	Four-Position Switch .....	1
11	101973501	Receptacle, AC Cord .....	1
12	101987501	Relay .....	1
13	N/A	Wire, Jumper .....	1
14	N/A	Case, Charger .....	1
15	****	Transformer, European Battery Charger .....	1
16	****	Suppressor, AC Voltage .....	1
17	****	Assembly, Wire .....	1
18	****	Limiter, Current .....	1
19	7577	Screw, #10 X 0.50 Phillips Pan-Head .....	10
20	101958201	Cord, UK, AC, Battery Charger .....	1
21	101958301	Cord, European AC, Battery Charger .....	1
		**** Special order item available upon request.	

Note: Level 1 Battery Charger part numbers include one AC and one DC cord.  
They do not include all of the level 2 cords listed.

16

E

**16**

**E**

# MAINTENANCE AND SERVICE TOOLS

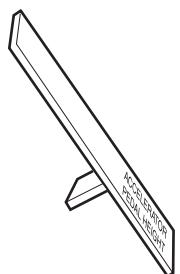
---

17

G

E

D

**17****G****E****D**

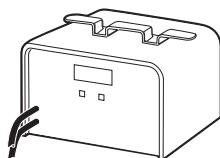
1



2



3



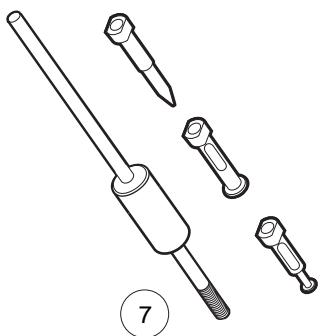
4



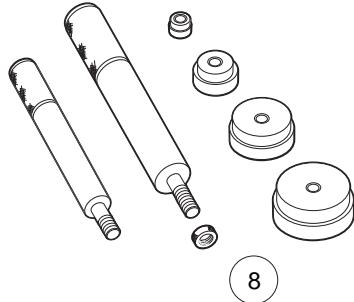
5



6



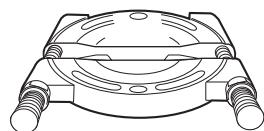
7



8



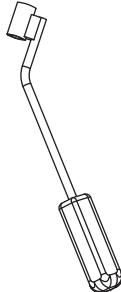
9



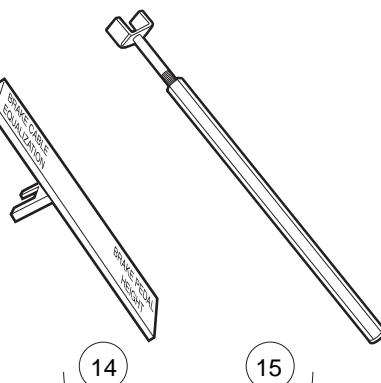
10



11



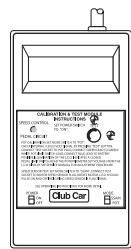
12



14

13

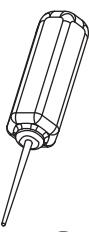
15



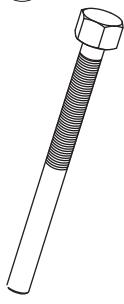
16



17



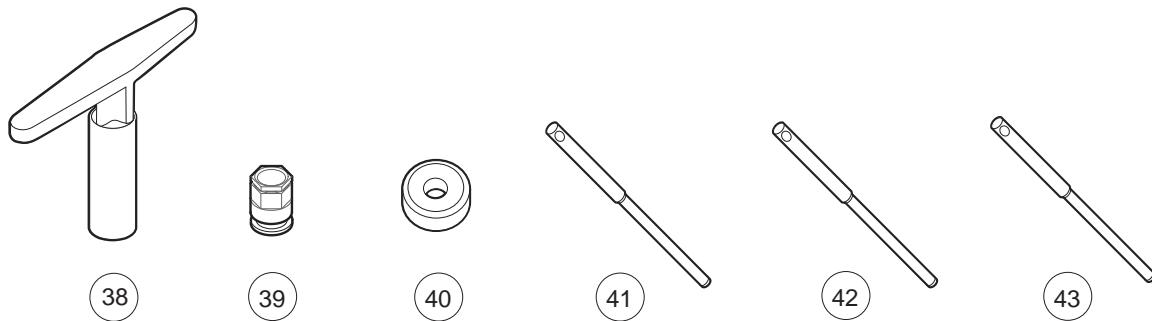
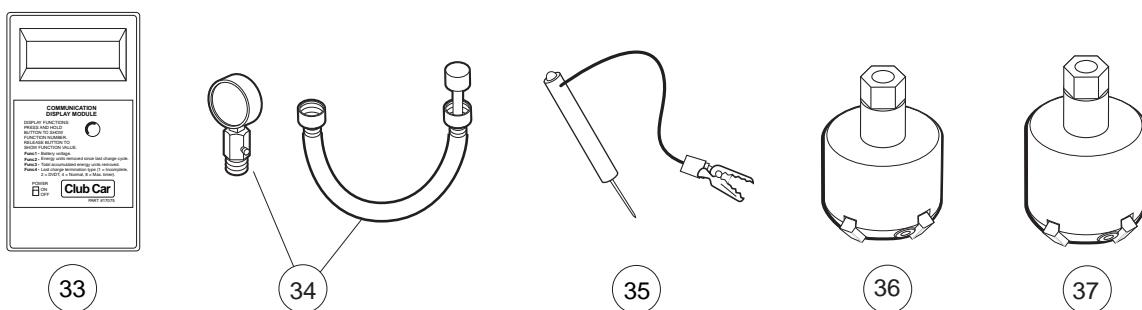
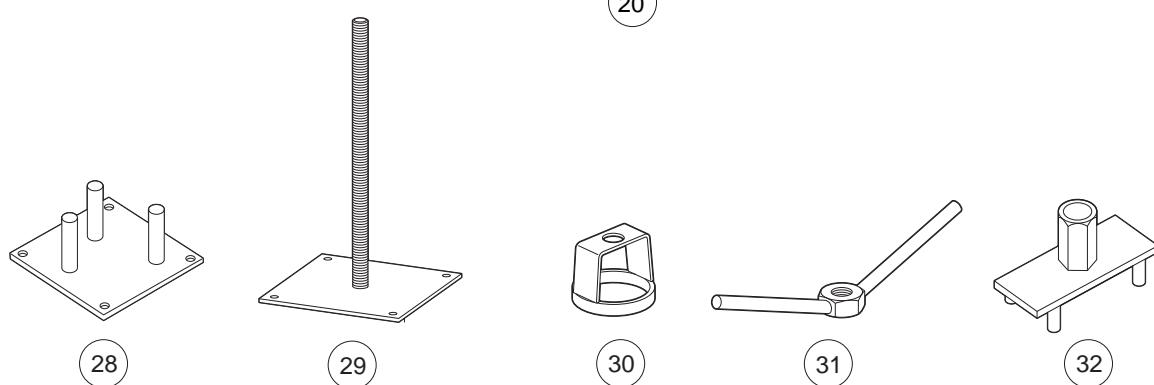
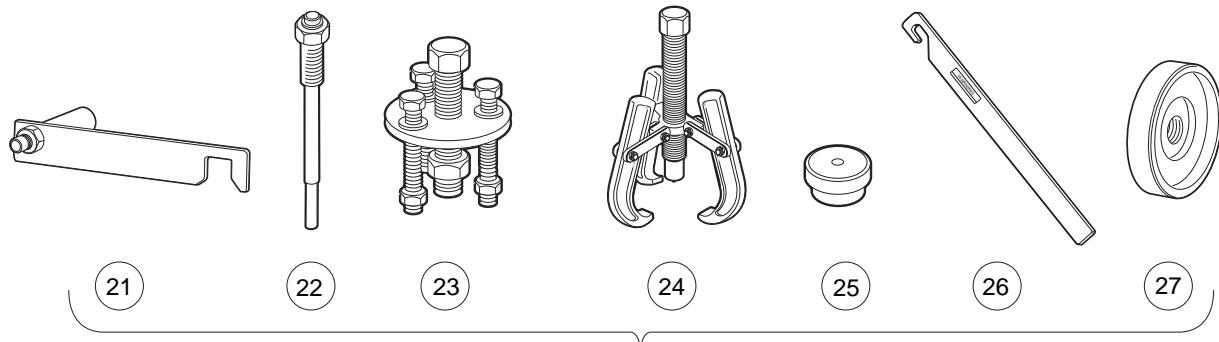
18



19

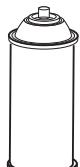
# MAINTENANCE AND SERVICE TOOLS

ITEM	PART NO.	DESCRIPTION	QTY DIESEL	QTY GAS	QTY ELEC	
		<b>1 2 3 4</b> The following tool list includes all tools available from Club Car for maintenance and service procedures for gasoline, electric, and/or diesel vehicles, both past and present models. Be sure to carefully examine the tool list for applicability to your vehicle before ordering.				<b>17</b>
1	101871001	Accelerator Pedal Adjustment Tool .....		1	1	<b>G</b>
2	101813202	Adhesive, Guide Ring, 3-Gram Tube .....			1	<b>E</b>
3	101641202	Arbor .....		1		<b>D</b>
4	101831901	Battery Discharge Machine, 36/48 Volt .....			1	
5	1014305	Battery Terminal Protector Spray .....	1	1	1	
6	1011767	Battery Thermometer .....	1	1	1	
7	1016417	Bearing and Oil Seal Remover Assembly .....	1	1	1	
8	1016416	Bearing Driver Set .....	1	1	1	
9	1012811	Bearing Puller .....	1	1	1	
10	1012812	Bearing Puller Wedge Attachment .....	1	1	1	
11	1013582	Brake Adjustment Tool (used only on vehicles with manually adjusted mechanical brakes) .....		1	1	
12	102555501	Brake Cable Release Tool .....	1	1	1	
13	102249901	Brake Pedal Adjustment Tool Kit (used for the Carryall Electric Industrial Truck only) (includes items 14 and 15) .....			1	
14	****	Brake Pedal Adjustment Tool .....			1	
15	****	Brake Pedal Tension Tool .....			1	
16	101887101	Calibration Test Module .....			1	
17	101808401	Cam Installation Tool .....			1	
18	102562401	Charger Bezel Tool .....			1	
19	102686101	Clutch Removal Tool (for 4x4 vehicles) .....	1	1		
		Please refer to the maintenance and service manual for proper tool application.  **** Special order item available upon request				

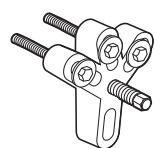
**17****G****E****D**

## MAINTENANCE AND SERVICE TOOLS, CONTINUED

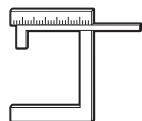
ITEM	PART NO.	DESCRIPTION	QTY DIESEL	QTY GAS	QTY ELEC	
		<b>1 2 3 4</b>				<b>17</b>
20	1014510	Clutch Tool Kit (includes items 21 - 27) .....		1		<b>G</b>
21	1014498	Clutch Alignment Tool (for pre-unitized transaxle vehicles built prior to 1997 model year) .....		1		<b>E</b>
22	1014496	Drive Clutch Puller (for Kawasaki engines only) .....		1		<b>D</b>
23	1014497	Drive Clutch Hub Puller (for Kawasaki engines only) .....		1		
24	1014508	Driven Clutch Cam Puller (for Kawasaki engines only) .....		1		
25	1014507	Driven Clutch Puller Plug (for Kawasaki engines only) .....		1		
26	1015524	Drive Clutch Holder Tool Assembly (for Kawasaki engines only) .....		1		
27	101809101	Press Weldment (for Kawasaki engines only) .....		1		
28	102601501	Drive ClutchFixed Sheave Tool (for 4x4 vehicles) .....	1	1		
29	102603501	Driven Clutch Spring Compression Base (for use with items 30 and 31) (for 4x4 vehicles) .....	1	1		
30	102605201	Driven Clutch Spring Compression Collar (for use with items 29 and 31) (for 4x4 vehicles) .....	1	1		
31	102606101	Driven Clutch Spring Compression Nut (for use with items 29 and 30) (for 4x4 vehicles) .....	1	1		
32	102607501	Drive Clutch Spider Removal Tool (for 4x4 vehicles) .....	1	1		
33	101831801	Communication Display Module .....			1	
34	101641002	Compression Gauge and Adapter .....		1		
35	1011273	Continuity Tester .....		1	1	
36	102773801	Cutter, Valve Seat, #122 .....		1		
37	102773901	Cutter, Valve Seat #115 .....		1		
38	102774101	Wrench, T, #505.....		1		
39	102774101	Adapter, T-Wrench.....		1		
40	102675401	Cutter, Valve Seat, 60 Degree (requires item 51) (for Honda GX620 Gasoline Engines) .....		1		
41	102774201	Pilot, 6.6 MM .....		1		
42	102774301	Pilot, 6.62 MM.....		1		
43	102774401	Pilot, 6.65 MM.....		1		
		Please refer to the maintenance and service manual for proper tool application.				

**17****G****E****D**

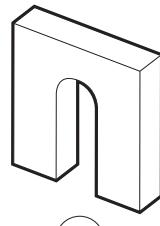
44



45



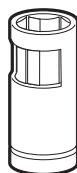
46



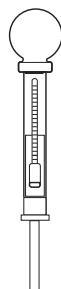
47



48



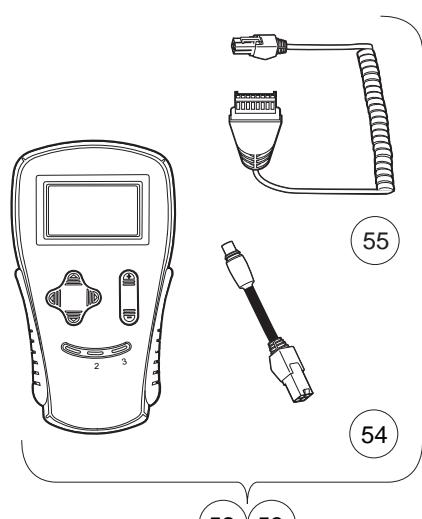
49



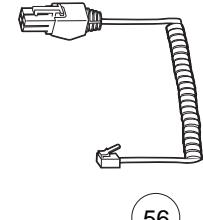
50



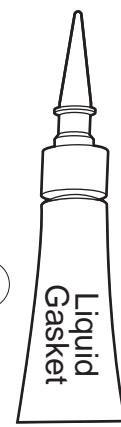
51



52 53

54  
55

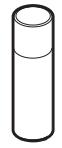
56



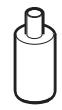
57



58



59 60



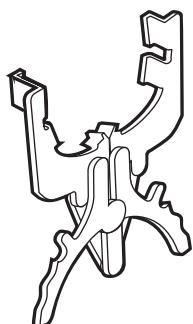
61

## MAINTENANCE AND SERVICE TOOLS, CONTINUED

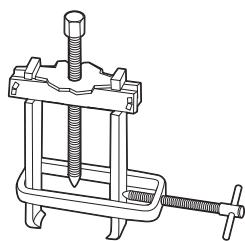
ITEM	PART NO.	DESCRIPTION	QTY DIESEL	QTY GAS	QTY ELEC	
		1 2 3 4				<b>17</b>
44	1012151	Dry Moly Lubricant .....	1	1	1	<b>G</b>
45	1016627	Flywheel Puller Kit (for Kawasaki Engines) .....		1		<b>E</b>
46	102669901	Gauge, Carburetor Float Level (for Honda GX620 Gasoline Engines) .....		1		<b>D</b>
47	1016418	Gear Yoke .....	1	1	1	
48	101933101	Governor Shaft Installation Tool (for Kawasaki Engine Vehicles) .....		1		
49	102169401	Hydraulic Brake Adjuster (for Turf/CA 272/472, Pioneer/XRT 1200, Bobcat 2100, HUV 4213) .....			1	
50	1011478	Hydrometer .....	1	1	1	
51	1013593	Internal Retaining Ring Pliers .....	1	1	1	
52	102248803	IQ Display Module (IQDM) Kit (IQ System and IQ Plus vehicles) .. (includes items 54 and 55)			1	
53	102248804	IQ Display Module (IQDM-P) Kit (IQ System and IQ Plus vehicles) .. (includes items 54 and 55)			1	
54	102251501	Adaptor, Cable .....			1	
55	102241502	IQDM Series 2 Cable .....			1	
56	102241501	IQDM Series 1 Cable (replacement) .....			1	
57	101928701	Liquid Gasket (transaxle case) .....	1	1	1	
58	102243402	Moly-Teflon Lubricant (4-oz. (113-gram) tube) .....			1	
59	101997201	Paint, Touch-Up – Beige* .....		1	1	
59	101997207	Paint, Touch-Up – Black* .....		1	1	
59	101997212	Paint, Touch-Up – Burgundy* .....		1	1	
59	101997211	Paint, Touch-Up – Classic Blue (Navy)* .....		1	1	
59	101997205	Paint, Touch-Up – Dark Gray* .....	1	1	1	
59	101997209	Paint, Touch-Up – Dark Green* .....	1	1	1	
59	101997204	Paint, Touch-Up – Gray* .....	1	1	1	
59	101997203	Paint, Touch-Up – Red* .....	1	1	1	
59	101997206	Paint, Touch-Up – Royal Blue (Pacific Blue)* .....		1	1	
59	101997202	Paint, Touch-Up – White* .....	1	1	1	
60	102562301	Paint, Precedent Underbody – Gray .....		1	1	
61	102587201	Paint Pen, Touch-Up, Precedent Underbody – Black .....		1	1	
		Please refer to the maintenance and service manual for proper tool application.				
		* Item 59 is not for use on Surlyn® body material, which is used on Precedent vehicles.				

**17****G****E****D**

62



63



64



65



66



67



68



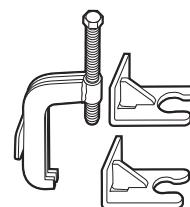
69



70



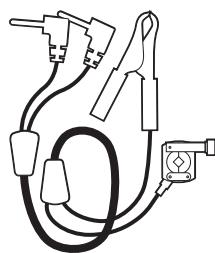
71



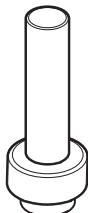
72



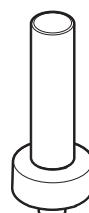
73



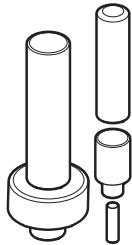
74



75



76



77



83



84



85



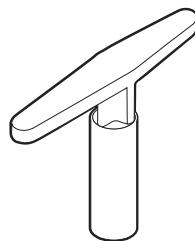
86

## MAINTENANCE AND SERVICE TOOLS, CONTINUED

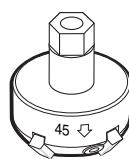
ITEM	PART NO.	DESCRIPTION	QTY DIESEL	QTY GAS	QTY ELEC	
		1 2 3 4				<b>17</b>
62	1016414	Piston Ring Compressor Kit (FE290, FE350 and FE400 engines) .....		1		<b>G</b>
63	1016415	Piston Ring Pliers (for Kawasaki Engines) .....		1		
64	102668801	Puller, Special Use (for Kubota D722 Diesel Engines) .....	1			<b>E</b>
65	1012549	Retaining Ring Pliers, 45° External .....	1	1	1	
66	1012560	Retaining Ring Pliers, 90° Internal .....	1	1	1	
67	101823101	Safety First Card (50 per pack) .....	1	1	1	
68	1012809	Seal Puller .....	1	1	1	
69	102330901	Spanner Wrench (for coil over shock front suspension vehicles only) .....	1	1		
70	1014264	Steering Column Bearing Press Tool .....		1	1	
71	1014259	Steering Column Retaining Ring Tool .....		1	1	
72	102061201	Steering Wheel Puller Tool .....	1	1	1	
73	AM10753	Tachometer (includes gasoline engine pick up lead only) .....	1	1		
74	AM10771	Tachometer Diesel Probe (for use with item 73) .....	1			
75	1014162	Transaxle Axle Seal Tool .....		1		
76	1014161	Transaxle Pinion Seal Tool .....		1		
77	1014115	Transmission Tool Kit .....		1		
78	101611003	Tune-Up Kit, All OHV (for FE290, FE350, FE400 only) (includes air filter, spark plug, oil filter, fuel filters) (not shown) .....		1		
79	AM11804	Tune-Up Kit, Gx620 (for Honda Engines) (includes air filter, spark plug, oil filter, fuel filters) (not shown) .....		1		
80	AM11805	Tune-Up Kit, D722 (for Kubota Engines) (includes air filter, oil filter, fuel filters, water separator filter) (not shown) .....	1			
81	AM1220301	Tune-Up Kit, Precedent (for FE290/350 Engines) (includes air filter, spark plug, oil filter, fuel filters) (not shown) .....		1		
82	AM1232401	Tune-Up Kit, FH680D (for Kawasaki V-Twin Engines) (includes oil filter, fuel filter, air filter, and spark plugs) (not shown) .....		1		
83	1016413	Valve Clearance Adjuster Screw Holder (for FE290 engines only) .....		1		
84	102674601	Valve Guide Driver (for Honda GX620 Gasoline Engines) .....		1		
85	101641201	Valve Guide Reamer (FE290, FE350, and FE400 only) .....		1		
86	102674401	Valve Guide Reamer, 6.6 mm (for Honda GX620 Gasoline Engines) .....		1		

**17****G****E****D**

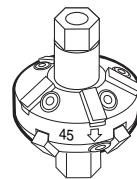
87



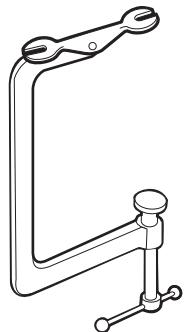
88



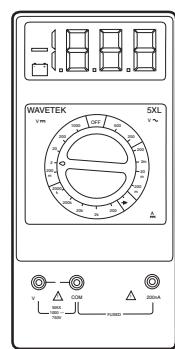
89



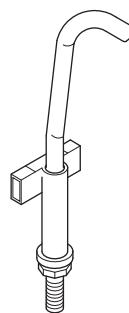
90



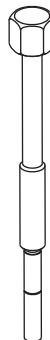
91



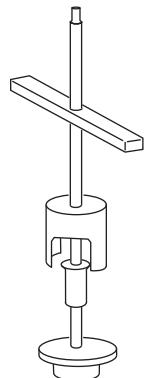
92



93



94



95



96

## MAINTENANCE AND SERVICE TOOLS, CONTINUED

ITEM	PART NO.	DESCRIPTION	QTY DIESEL	QTY GAS	QTY ELEC	
		1 2 3 4				<b>17</b>
87	1016552	Valve Seat Cutter Guide .....		1		<b>G</b>
88	1016551	Valve Seat Cutter T-Wrench .....		1		
89	1016553	Valve Seat Cutter, 45° (32 mm diameter) (for FE290 engines only) .....		1		<b>E</b>
90	1016554	Valve Seat Cutter, 45°/30° (35 mm diameter) .....		1		
91	101641101	Valve Spring Compressor .....		1		
92	1011480	Volt Ohm Meter .....	1	1	1	<b>D</b>
93	102570401	Tool, Tensioning, Starter Generator (For Precedent vehicles) .....		1		
94	103601401	Puller, Drive Clutch, XRT 950* .....		1		
95	103601701	Tool, Disassembly, Driven Clutch, XRT 950.....		1		
96	103600501	Screw, Driven Clutch Disassembly, M6, XRT 950 .....		1		

\*Note: The XRT 950 Drive Clutch Puller requires the use of Screw, Driven Clutch Disassembly, CCI Part Number 103600501.



# INDEX

**Part Number and Page**

AM10753	17-9	8450	10-3	1011895	5-7, 5-9
AM10771	17-9	8639	13-19	1011930	5-7, 5-9
AM10080	11-5	8717	4-9, 4-11, 6-9, 11-3, 11-9	1011931	1-25, 4-9, 4-11
AM10081	11-5	8754	1-17, 4-7, 4-9, 4-11, 5-3, 5-7, 5-9, 5-11, 5-15, 6-15	1011988	8-3
AM10419	10-7	8755	1-29, 5-11, 5-15	1011990	1-17
AM10724	7-5	8797	8-5	1012098	16-3, 16-5, 16-7, 16-9, 16-11
CCX8506	16-3, 16-5, 16-7	8861	5-9	1012101	16-7, 16-9, 16-11
183	8-13, 10-3, 11-3	8963	1-25	1012151	17-7
304	1-27	8990	5-7, 6-9, 13-13, 13-19	1012285	8-11, 11-3, 11-11, 13-13, 13-19
320	1-17, 1-27, 1-29	1010124	5-11	1012295	6-9
332	1-3, 1-19, 1-21, 1-23, 1-29, 8-13, 9-3, 11-11, 13-13	1010138	1-27, 5-9	1012303	1-29, 5-11, 5-15
334	1-29, 4-9, 4-11, 5-3, 5-7, 7-15	1010142	5-15	1012304	5-15
357	5-11	1010144	5-15	1012333	11-11
451	9-3, 14-3, 14-5, 14-7	1010145	5-15	1012412	1-19, 1-21
705	6-15, 7-15	1010150	5-11	1012431	11-9, 13-21
706	5-11	1010219	5-9	1012467	5-7
808	10-3	1010436	1-13	1012528	9-3, 13-19
1017	6-7, 13-7	1010543	1-23	1012549	17-9
1028	4-5	1010545	1-27	1012560	17-9
1032	4-5	1010577	7-15	1012571	7-15
1035	4-7, 5-7, 5-9	1010805	4-5	1012594	11-9
1241	1-5, 1-25, 4-5, 4-7, 4-9, 4-11, 6-9, 6-15, 6-17, 9-3, 14-3	1010829	4-7	1012604	5-3
1242	4-7, 6-9, 6-15, 13-19	1010877	4-5	1012605	5-3
1308	5-9	1010878	1-29, 4-5	1012649	8-3
1606	8-13	1010921	4-5	1012711	11-3
1624	4-9, 4-11, 5-7	1010927	4-5	1012714	11-5
2402	5-9	1010932	4-5	1012740	11-5
7048	5-13	1010933	4-5	1012741	11-5
7173	6-17	1010934	6-17, 14-3, 14-5	1012747	11-5
7174	5-3, 6-15, 8-11, 9-3, 13-19, 14-3, 14-5	1010953	4-3	1012748	11-5
7310	2-3	1010954	6-9, 11-3, 11-9	1012752	11-3
7311	1-25	1010984	2-3	1012809	17-9
7330	11-7, 15-3	1010993	1-19, 1-21	1012811	17-3
7335	11-5, 15-3	1011084	4-13	1012812	17-3
7336	15-3	1011273	17-5	1012830	6-15, 8-11, 9-3
7473	1-25, 4-5, 4-7, 4-9, 4-11, 6-9, 6-17	1011280	14-3	1012836	10-7
7539	5-9	1011285	14-3	1012896	11-3
7540	5-7, 5-9	1011290	14-3	1012986	6-11
7555	5-7, 5-9	1011291	11-7	1012987	11-9
7577	16-5, 16-7, 16-9, 16-11	1011402	4-5	1012991	6-13
7602	5-7, 5-9	1011411	14-3	1013001	6-13
7716	4-5, 4-9, 4-11	1011415	5-15	1013003	6-13
7818	6-9	1011418	4-5	1013005	6-13
7847	1-19, 1-21, 1-25, 1-29, 9-3	1011478	17-7	101301102	6-13
7893	6-9, 11-11	1011480	17-11	1013035	5-7
8056	13-21	1011578	1-27, 5-3	1013042	5-7
8057	11-9, 13-21	1011652	1-23	1013044	5-7
8058	11-9	1011694	4-9, 4-11	1013051	5-7
8067	5-13	1011697	5-3, 8-9, 8-11, 13-17	1013052	5-7
8233	1-3, 1-19, 1-21, 1-25, 1-29, 4-9, 4-11, 8-3, 11-3, 11-9, 11-11, 13-13	1011700	4-9, 4-11	1013061	11-3, 13-15
8248	8-3, 11-9, 13-13	1011734	4-13	1013164	5-15
8251	1-19, 1-21, 11-11	1011767	17-3	1013461	6-7, 8-5, 13-7
		1011779	4-7	1013462	8-5
		101187702	4-5	1013531	4-7
		1011893	5-9	1013582	17-3
				1013587	11-9

# INDEX

1013589	6-9, 11-9	1014207	11-7	1015752	6-9, 8-13, 13-11
1013590	11-9	1014213	5-3	1015814	9-3
1013591	11-9	1014214	5-3	101584502	8-11
1013593	17-7	1014217	5-3	1015914	16-7, 16-9, 16-11
1013609	6-9	1014259	17-9	1015917	16-7, 16-9
1013687	8-3	1014264	17-9	1015921	8-5
1013700	8-11	1014276	5-11	1015932	6-15
1013734	9-3, 13-19	1014287	10-3	1015969	7-3
1013746	8-3, 8-5, 8-9	1014288	5-3, 6-17, 10-3, 13-19	1016004	8-5
1013760	11-3	1014289	6-13	1016074	6-15
1013768	11-7	1014304	13-17	1016103	8-9
1013769	11-7	1014305	17-3	101611003	17-9
1013770	11-7	1014306	1-19, 1-21	101611402	15-5
1013771	11-7	1014375	6-17	1016183	5-3
1013772	11-7	1014453	10-3	1016201	10-3, 11-9
1013773	11-7	1014454	10-7	1016203	10-5
1013774	11-7	1014496	17-5	1016269	5-3
1013787	11-7	1014497	17-5	1016289	10-3
1013792	11-7	1014498	17-5	1016337	11-5
1013794	11-7, 15-3	1014507	17-5	1016338	11-5
1013857	6-11, 13-9	1014508	17-5	1016341	11-3
1013869	4-5	1014510	17-5	1016342	11-9
1013870	4-5	1014524	8-3	1016346	5-9
1013871	4-9, 4-11	101454902	5-15	1016349	5-9
1013876	1-27, 4-5	1014555	5-15	1016350	5-9
1013924	4-3, 7-15	1014573	5-15	1016351	5-9
1013983	1-15	1014675	5-15	1016353	5-9
1014007	4-9, 4-11, 11-3	1014727	11-9	1016384	5-11
1014049	10-3	1014807	11-9	1016385	5-9
1014050	10-3	1014901	5-15	1016386	5-11
1014052	10-3	1014902	5-15	1016387	5-11
1014055	10-3	1014928	8-3	1016389	5-11
1014056	10-3	1014947	13-19	101641002	17-5
1014057	10-3	1014948	6-9, 13-19	101641101	17-11
1014058	10-3	101503202	1-3	101641201	17-9
1014059	10-3	1015064	11-9	101641202	17-3
1014062	10-3	1015072	13-17	1016413	17-9
1014063	10-3	1015137	8-5, 8-9	1016414	17-9
1014065	6-9, 10-3, 11-9	1015139	8-5	1016415	17-9
1014070	10-7	1015143	8-5	1016416	17-3
1014072	10-7	101524001	6-15	1016417	17-3
1014076	10-7	1015330	7-9, 9-3	1016418	17-7
1014078	10-7	1015332	7-3	1016423	6-9
1014080	10-7	1015345	6-9	101642572	8-7
1014089	11-9	1015371	6-9	101642575	8-7
1014115	17-9	1015372	6-9	101642578	8-7
1014116	8-3	1015373	6-9	101642580	8-7
1014119	6-9	1015405	6-9	101642582	8-7
1014125	5-3	1015426	8-13	1016429	7-7
1014126	5-3	101547601	3-5	1016430	7-9
1014145	6-9, 11-9	1015524	17-5	1016431	7-9
1014153	4-3	1015583	1-29, 5-11, 5-15	1016432	7-7, 11-3
1014161	17-9	1015597	5-7, 5-9, 5-13	1016435	7-7
1014162	17-9	1015649	7-3	1016436	7-9
1014193	11-7	1015737	6-9	1016437	8-7
1014201	14-3, 14-5, 14-7	1015741	6-9	1016438	8-9

# INDEX

1016439	8-9	1016513	11-3	1016579	7-5
1016440	7-9, 8-9	1016516	7-13	1016580	7-13
1016441	8-9	1016517	7-9	1016581	7-7
1016443	7-3	1016519	7-9	1016582	8-9
1016444	8-9	1016520	7-11	1016583	7-9
1016445	7-5	1016521	7-11	1016584	7-11
1016446	7-9, 7-11	1016523	7-9	1016585	8-7
1016447	7-9	1016524	7-3	1016586	7-5
1016448	7-9	1016525	7-3	1016587	7-5
1016449	7-9	1016526	7-3	1016588	7-5
1016450	7-9	1016531	7-3	1016627	17-7
1016451	7-9	1016532	7-13	1016630	6-11
1016452	7-9	1016533	7-13	1016672	11-7
1016453	7-11	1016535	7-11	1016801	10-3
1016454	7-11	1016536	7-3	1016851	13-21
1016455	7-5	1016537	7-7	1016879	6-7, 13-7
1016456	7-3, 7-5, 7-11	1016538	7-11	1016880	6-7, 13-7
1016457	7-7	1016539	7-3	1016883	6-15
1016458	7-9, 7-11	1016541	7-13	1016901	10-3
101645901	7-13	1016542	7-9	1016916	1-23
101645902	7-13	1016544	7-5, 7-9, 7-11	1016947	11-9
101645903	7-13	1016545	7-9	1016952	1-19, 1-21
1016460	7-13	1016546	8-11	1017029	4-5
101646101	7-13	1016547	7-3, 7-13, 8-9	1017062	6-7, 13-7
101646102	7-13	1016548	7-5	1017064	6-7, 13-7
101646103	7-13	1016549	7-9	1017065	6-7, 13-7
1016467	7-7	101655001	7-13	1017082	11-3
1016469	7-13	101655002	7-13	1017141	1-19, 1-21
1016470	7-13	101655003	7-13	1017203	8-3
1016471	7-9	101655004	7-13	1017221	7-3
1016472	7-11	101655005	7-13	1017226	5-3
1016473	7-7	101655006	7-13	1017231	11-3
1016474	7-9	101655007	7-13	1017235	5-15
101647501	7-13	101655008	7-13	1017266	5-9
101647502	7-13	101655009	7-13	1017273	5-5
1016479	7-9	1016551	17-11	1017313	5-3
1016480	8-9	1016552	17-11	1017314	5-3
101648102	8-9	1016553	17-11	1017315	5-3
101648203	7-7	1016554	17-11	1017317	5-3
1016483	7-9	1016558	7-13	1017378	4-9, 4-11
1016484	7-7	1016559	7-13	1017380	4-9, 4-11
1016486	8-7	1016560	7-9	1017424	4-9, 4-11
1016489	7-9	1016561	7-5	1017448	7-5
101649002	8-9	1016562	7-5, 7-13	1017455	7-5
1016493	7-5	1016563	7-9	1017456	7-7
1016494	7-11	1016564	7-11	1017461	8-7
1016496	7-11	1016565	7-11	1017466	8-9
1016497	7-5	1016566	7-9	1017468	7-5
1016499	8-7	1016567	7-11	1017507	7-7
1016501	8-7	1016568	7-13	1017653	6-13
1016502	7-7	1016569	7-9	1017686	10-7
1016505	7-5	1016570	7-7	1017689	9-3
1016506	7-11	1016571	7-13	1017696	4-9, 4-11
1016507	7-3	1016572	8-9	1017705	13-15
1016509	7-13	1016576	7-7	1017774	1-25
1016510	7-11	1016578	7-5	101791101	4-3

# INDEX

1017944	14-3	101831101	16-7	101877601	6-13
1017947	14-3	101831503	16-9	101877701	6-13
1017949	14-3	101831504	16-9	101878101	6-13
1017950	14-3	101831701	16-9	101878201	4-5
1017953	14-3	101831702	16-9	101878302	5-7
101795701	13-17	101831801	17-5	101879001	6-13
101796201	4-9, 4-11	101831901	17-3	101879401	5-7
101796501	13-15	101832001	13-15	101879501	5-7
101796801	13-15	101832101	7-15	101879601	5-7
101801001	13-15	101832202	8-11	101879701	5-7
101802101	13-15	101832302	8-11	101879801	5-7
101802201	16-7	101832701	7-15	101879901	5-7
101802202	16-7	101833201	7-15	101880001	5-7
101802203	16-7	101833401	10-7	101880101	5-7
101802204	16-5	101833601	11-3	101880201	5-7
101802205	16-5	101833701	6-13	101880301	5-7
101802206	16-5	101833906	10-3	101881101	7-5
101804301	8-13	101834001	10-7	101881701	8-13
101805701	8-13	101834601	7-15	101884801	7-15
101806901	1-31	101834801	11-3	101886101	11-3
101808401	17-3	101835601	1-29	101887101	17-3
101809101	17-5	101836201	10-7	101887601	7-3, 8-9
101811401	8-13	101837101	8-13	101889401	11-5
101811501	8-13	101837301	6-15	101890001	11-5
101811801	8-13	101838201	16-9	101890101	11-3
101811901	8-13	101838301	16-9	101890201	11-3
101812301	8-13	101838401	16-9, 16-11	101890501	11-3
101813001	8-13	101838501	16-9	101890601	11-3
101813202	17-3	101838601	16-9, 16-11	101890901	11-7
101815501	4-3	101850301	8-13	101891001	11-7
101815502	4-3	101855002	13-13	101891301	11-3
101816401	4-3	101855801	1-19, 1-21, 11-11	101891401	11-7
101816501	4-3	101856002	13-13	101891501	11-7
101816502	4-3	101856102	6-9	101891601	11-5
101817401	4-9, 4-11	101856201	8-13	101891901	11-5
101818801	4-9	101859301	9-3	101892001	11-5
101820201	8-9	101861901	4-9, 4-11	101892201	11-5
101821501	8-13	101862001	4-11	101892301	11-5
101823101	17-9	101869302	6-13	101892401	11-5
101823201	4-3	101871001	17-3	101892501	11-5
101823801	4-3	101874901	6-13	101892601	11-5
101824401	8-3, 8-5	101875001	6-13	101892701	11-7
101826801	13-19	101875101	6-13	101892901	11-3
101827101	7-15	101875102	6-13	101893201	11-5
101827801	13-19	101875201	6-13	101893801	11-3
101828301	16-7	101875301	6-13	101893901	11-5
101828501	16-7, 16-9, 16-11	101875401	6-13	101895401	15-3
101828801	16-5, 16-7	101875501	6-13	101895501	15-3
101828802	16-5, 16-7	101875601	6-13	101896501	6-13
101828901	16-7, 16-9, 16-11	101875701	6-13	101896901	8-5
101828902	16-7, 16-9, 16-11	101875802	6-13	101897001	15-3
101828903	16-7	101876001	6-13	101897201	15-3
101828904	16-5	101876202	6-13	101897401	15-3
101828905	16-5	101876301	6-13	101897601	15-3
101828906	16-5	101876402	6-13	101898001	6-17
101830701	13-9	101876501	6-13	101903101	5-11

# INDEX

101903601	15-3	101929401	5-15	101988201	6-7, 13-7
101903701	15-3	101929801	10-3	101990703	6-11
101905601	8-7	101929802	10-3	101990801	4-7
101906901	15-3	101931501	3-9, 13-19	101991101	6-11
101908101	13-13	101932401	13-13	101998211	1-23
101908401	13-13	101932501	13-13	101998212	1-23
101908601	3-9	101932601	13-19	101998214	1-23
101908701	13-19	101932701	13-19	101998215	1-23
101909201	7-5	101932902	11-13	101998501	1-23
101909301	7-5	101933101	17-7	102003201	8-3
101909401	7-5	101936101	15-5	102022101	4-7
101909501	7-5	101936801	13-11	102025801	1-3
101909701	7-3	101939901	6-13	102025901	6-11
101910401	1-25, 13-19	101942301	13-13, 14-3, 14-5, 14-7	102026001	4-9, 4-11
101910501	11-7	101951501	11-11	102031901	11-7
101911401	15-5	101953101	4-7	102044702	6-11
101912401	4-13	101953901	7-3	102044801	6-11
101914401	16-7, 16-9	101954301	1-3, 1-23	102045001	1-3
101915201	3-5	101955301	8-3	102045901	11-3
101915401	7-11	101956201	16-11	102048401	1-3
101915501	7-13	101956202	16-11	102051601	6-11
101915601	7-3	101958201	16-11	102051701	6-11, 13-9
101915801	7-5	101958301	16-11	102051901	6-11, 13-9
101916701	6-15, 10-3	101960501	1-31, 3-5	102061201	17-9
101917601	8-13	101963401	6-9, 7-15	102065901	1-29, 7-15
101917701	8-13	101965205	13-19	102066201	4-7
101918501	4-5	101971001	8-13	102101001	13-11
101919801	4-9, 4-11	101971301	8-13	102101101	13-11
101920101	13-11, 13-13, 14-3, 14-5, 14-7	101972001	17-7	102155801	10-7
101921501	8-13	101972002	17-7	102169401	17-7
101922101	15-3	101972003	17-7	102174201	1-23
101922201	15-3	101972004	17-7	102174202	1-23
101922301	7-13	101972005	17-7	102174204	1-23
101922501	13-13	101972006	17-7	102174205	1-23
101922601	11-11	101972007	17-7	102186001	14-5, 14-7
101923001	15-3	101972009	17-7	102186101	14-5, 14-7
101923201	15-3	101972011	17-7	102186201	14-5, 14-7
101923501	15-3	101972012	17-7	102186301	14-5, 14-7
101923701	15-3	101972101	15-3	102186401	14-5, 14-7
101923901	15-3	101972201	15-3	102186701	14-5, 14-7
101925701	8-13	101972801	8-13	102186901	14-5, 14-7
101926501	5-15	101973101	8-7	102187001	14-5
101926901	11-3, 11-13	101973201	8-7	102187101	14-5, 14-7
101927101	11-3	101973501	16-11	102187201	14-5, 14-7
101927201	11-3	101978601	15-5	102196901	13-13
101927301	11-3	101979101	11-9	102198001	6-11, 13-9
101927501	11-5	101980801	11-5	102221201	1-19, 1-21
101927601	11-5	101980901	11-5	102235201	14-3, 14-5, 14-7
101927701	11-5	101981001	11-5	102240104	14-3
101927901	11-5	101984801	5-3	102240501	13-19
101928001	11-5	101987501	16-11	102241501	17-7
101928101	11-5	101987701	8-3	102241502	17-7
101928301	11-7	101987901	6-7, 13-7	102242101	1-5, 10-7
101928601	11-3	101988001	6-7, 13-7	102243402	17-7
101928701	11-3, 15-3, 17-7	101988002	6-7, 13-7	102243403	14-3, 14-5, 14-7
101929301	7-5	101988101	6-7, 13-7	102248803	17-7

# INDEX

102249901	17-3	102508701	13-9	102796501	1-13
102251501	17-7	102511301	13-17	102796701	1-3
102259801	13-19	102511302	13-17	102796801	1-19
102263601	13-19	102522001	8-5	102796802	1-19
102263701	13-19	102540301	7-15	102796803	1-19
102264001	6-9	102544201	1-25	102796804	1-19
102265601	14-3	102555501	17-3	102796805	1-19
102265701	14-3	102562401	17-3	102797201	1-29
102265801	14-3	102570401	17-11	102803001	6-5
102265901	14-3	102581201	1-25	102804501	6-11
102266001	14-3	102588501	5-15	102804502	6-11
102266101	14-3	102601501	17-5	102804503	13-9
102266501	13-19	102603501	17-5	102804504	13-9
102266601	13-13	102605201	17-5	102806201	13-19
102266701	13-13	102606101	17-5	102810301	1-11
102267001	14-3	102607501	17-5	102810501	13-5
102273201	16-5	102618601	1-7, 1-9	102815801	2-3
102273301	16-5	102668801	17-9	102815901	2-3
102273401	16-5	102669901	17-7	102816201	1-25
102273601	16-5	102674001	17-5	102818301	1-21
102273701	16-3, 16-5	102674101	17-5	102818302	1-21
102273801	16-3, 16-5	102674201	17-5	102818303	1-21
102273901	16-3, 16-5	102674401	17-9	102818305	1-21
102274001	16-5	102674601	17-9	102819101	2-3
102278001	5-3	102675001	17-5	102820301	1-29
102289001	1-29	102675101	17-5	102820501	1-29
102289002	1-7, 1-9	102675201	17-5	102821101	1-29
102289301	1-29	102675301	17-5	102822001	1-3
102296530	1-25	102675401	17-5	102822002	1-3
102298240	1-7, 1-9	102686101	17-3	102822401	5-5
102304701	7-9	102704701	14-5, 14-7	102823201	1-29
102310701	1-15	102704801	14-5, 14-7	102825401	3-7
102323101	4-5	102704901	14-5, 14-7	102825402	3-7
102323201	4-5	102705001	14-5	102825501	3-11
102330901	17-9	102711201	6-9	102825502	3-11
102336001	8-11	102753401	7-9	102825601	3-7
102336101	8-11	102766701	1-3	102825701	3-11
102352801	5-13	102771701	15-3	102828701	1-3, 1-11, 1-13
102353201	5-13	102777401	13-17	102829703	1-17
102353301	5-13	102777601	1-19, 1-21	102829704	1-17
102353401	5-13	102777602	1-19, 1-21	102829802	1-17
102354104	5-13	102778501	1-3	102830201	1-9
102354204	5-13	102778502	1-3	102830401	5-11
102355102	1-17	102778503	1-3	102830501	1-7
102355301	6-17	102778504	1-3	102830801	13-9
102356601	15-3	102778505	1-3	102831901	3-3, 3-11
102356801	15-3	102778507	1-3	102832001	3-3, 3-11
102357001	15-3, 15-5	102778509	1-3	102832601	13-17
102406701	8-5	102778601	1-3	102833301	3-3, 3-9
102453001	11-5	102779001	1-27	102840301	1-25
102453101	11-5	102779401	1-27	102852401	1-9
102499001	13-9	102779501	1-27	102857401	1-3
102503221	1-25	102796101	1-25	102861401	2-5
102503222	1-25	102796201	5-5	102865101	8-3
102503224	1-25	102796301	1-25	102886301	15-3
102508601	13-9	102796302	1-25	102886401	15-3

# INDEX

102886501	15-3	102902401	12-7	103483102	4-3
102886601	15-3	102902501	12-7	103483201	4-3
102896801	12-3	102902601	12-7	103483301	4-3
102896901	12-3	102902701	12-7	103483401	4-3
102897201	12-5	102902801	12-7	103483501	4-3
102897301	12-5	102913101	1-25	103483601	4-3
102897401	12-3	102913102	1-25	103483701	4-3
102897501	12-5	102913601	5-11	103507001	5-11
102897601	12-3	102914301	1-3	103512801	16-3
102897701	12-3	102959401	1-13	103512901	16-3
102897801	12-3	102967901	1-3, 6-11, 13-9	103513001	16-3
102897901	12-3	103010101	8-3	103517401	16-3
102898001	12-3, 12-5	103018301	3-13	103517601	16-5
102898101	12-3	103018401	3-13	103520301	8-13
102898201	12-3	103189901	1-27	103601601	5-3
102898301	12-3, 12-5	103200701	13-9	103651901	8-5
102898401	12-5	103246701	1-23	103717001	16-3
102898501	12-3	103246801	1-23	103717002	16-3
102898601	12-3	103282601	13-19	103717003	16-3
102898701	12-3	103293501	1-27	103776901	8-5
102898801	12-3	103313301	1-5	103779601	16-3
102898901	12-5	103316701	13-19	103781101	8-3
102899001	12-3	103316801	13-19	103781201	8-3
102899101	12-3	103316901	13-19	96704416	7-15
102899201	12-3	103317501	1-27		
102899301	12-3	103317601	1-27		
102899401	12-3	103325501	14-3		
102899501	12-3	103325601	14-3		
102899601	12-3, 12-5	103325701	14-3		
102899701	12-3	103325801	14-3		
102899801	12-3	103337601	14-3		
102899901	12-5	103345701	10-3		
102900001	12-5	103351001	5-9		
102900101	12-5	103372101	8-5		
102900201	12-5	103372302	8-5		
102900301	12-5	103377201	4-7		
102900401	12-3	103377301	4-7		
102900501	12-3	103379501	11-11		
102900601	12-3	103380201	4-3		
102900701	12-3	103380202	4-3		
102900801	12-3	103397901	16-5, 16-7		
102900901	12-3	103403101	13-19		
102901001	12-3	103414901	16-5, 16-7		
102901101	12-5	103428501	16-3		
102901201	12-3	103428601	16-3		
102901301	12-3	103428701	16-3		
102901401	12-3	103429001	16-3		
102901501	12-3	103429101	16-3		
102901601	12-3	103429201	16-3		
102901701	12-3	103429301	16-3		
102901801	12-3	103429501	16-3		
102901901	12-3	103429701	16-3		
102902001	12-3	103434001	16-3		
102902101	12-7	103439901	16-3		
102902201	12-7	103477901	5-13		
102902301	12-7	103483101	4-3		

## A

- absorber, rear shock 5-15
- AC cord 16-5, 16-7, 16-9, 16-11
- AC cord bushing 16-3, 16-5
- AC cord receptacle 16-11
- AC cordset 16-3
- accelerator bracket and bearing assembly 4-9, 4-11
- accelerator cable 8-11
- accelerator pedal 4-9, 4-11
- accelerator pedal adjustment tool 17-3
- accelerator pivot rod 4-9, 4-11
- accelerator return spring 4-9, 4-11
- accelerator rod 4-13
- accessory receptacle 6-11, 13-9
- adapter
  - cable (IQDM) 17-7
- adhesive, guide ring 17-3
- adjuster
  - hydraulic brake 17-7
- air box 8-13
- air box top 8-13
- air filter 8-13
- air intake hose 8-13
- ammeter 16-3, 16-5, 16-7, 16-9, 16-11
- angled bumper mount 5-15
- A-plate strap 5-9
- A-plate, delta 5-9
- arbor 17-3
- arm
  - governor 11-3

# INDEX

pivot 11-3  
 rocker 7-9  
 armature 6-13, 14-3, 14-5, 14-7  
 armature conversion kit 6-13  
 assembly  
     accelerator bracket and bearing 4-9, 4-11  
     accelerator pivot rod 4-9, 4-11  
     air box 8-13  
     air box top 8-13  
     armature 6-13  
     axle 11-7  
     bearing, steering shaft 5-3  
     bell crank and shaft 6-9  
     brake lever 4-3  
     brush connector 6-13  
     brush holder 6-13  
     carburetor 8-7  
     connecting rod 7-13  
     delta A-plate 5-9  
     delta shock and gear support 5-9  
     drive hub 10-3  
     driven clutch 10-7  
     driven clutch fixed-face 10-7  
     field coil 6-13  
     float 8-7  
     Forward/Reverse shifter 11-9  
     frame and field (motor) 14-5, 14-7  
     fuel tank vent 8-5  
     governor 11-5  
     headlight 6-7, 13-7  
     headlight harness 6-7, 13-7  
     idle screw 8-7  
     inner ball joint 5-7  
     kingpin 5-11  
     moveable-face 10-3, 10-7  
     pilot air screw 8-7  
     ratchet 4-5  
     secondary clutch weight 10-3  
     steering shaft 5-3  
     turn signal lens 6-7, 13-7  
 axle 11-7, 12-3, 15-3  
 axle guard 11-13, 15-5  
 axle shaft oil seal 11-7, 15-3  
 axle tube 15-3

## B

backrest 1-25  
 bag, desiccant 10-3  
 ball joint 4-5, 4-13, 5-7, 5-9, 11-11  
 ball joint, left-hand thread 5-7, 5-9  
 ball stud 6-9, 11-3, 11-9  
 ball, bearing 5-13  
 ball, shifter 11-5  
 ball, steel pressure relief 7-7  
 band, RPM limiter mount 7-5  
 bar, drive 13-11

barb, vent 8-3, 8-5  
 battery 6-17  
 battery charger 16-5, 16-7, 16-9, 16-11  
 battery charger case 16-5, 16-7, 16-9, 16-11  
 battery charger handle 16-5  
 battery charger receptacle 13-15  
 battery charger transformer 16-5, 16-7, 16-9,  
     16-11  
 battery clamp 6-17  
 battery condition indicator, 48-volt 13-9  
 battery discharge machine 17-3  
 battery hold-down, 12-volt 13-17  
 battery light 13-9  
 battery terminal protector spray 17-3  
 battery thermometer 17-3  
 battery, 12-volt, Trojan T1275, moist 13-17  
 battery, 12-volt, Trojan T1275, wet 13-17  
 bearing 15-3  
     ball 5-13  
     ball (motor) 14-5, 14-7  
     ball (steering pinion) 5-7  
     idler 10-3  
     inner axle tube 11-7, 15-3  
     lower pinion (steering) 5-7  
     needle 11-5  
     outer axle tube 11-7  
     pivot support 4-9, 4-11  
     steering shaft 5-3  
     thrust 5-11  
 bearing and oil seal remover 17-3  
 bearing driver set 17-3  
 bearing puller 17-3  
 bearing puller wedge 17-3  
 bearing retainer 14-3  
 bearing seat 5-3  
 bed support 1-25  
 bed support stiffener 1-29  
 bed, cargo 1-27  
 bell crank 11-9  
 bell crank and shaft 6-9  
 bellows 5-7  
 belt, drive 10-5  
 belt, starter/generator 6-15, 10-3  
 bezel, headlight 6-7, 13-7  
 block, brake-mounting 4-5  
 block, fuse 6-9  
 body kick plate 1-19, 1-21  
 body, front 1-3  
 body, rear 1-19, 1-21  
 bolt, J- 13-17  
 bolt, U- 5-15  
 boot, steering column 5-3  
 boot, switch 13-13  
 bottom, air box 8-13  
 box  
     air 8-13

dash 1-11  
 electrical component 6-9  
 glove 1-13  
 steering gear 5-7  
 box lock kit, glove 1-13  
 brace, canopy 1-5  
 brace, seat support cross 1-25  
 bracket 5-15, 6-11, 7-3  
     accelerator cable 8-11  
     adjustable starter/generator 6-15  
     governor cable 8-11  
     headlight mounting 6-7, 13-7  
     muffler mounting 9-3  
     oil filter mount 7-7  
     oil level switch 7-11  
     relay mounting 16-9  
     RPM limiter 7-5  
     shifter 11-3, 11-11  
     snubber 7-15  
     starter/generator mounting 6-15  
     steering column 5-3  
     steering column mounting 5-3  
     throttle spring return 8-9  
     Tow/Run switch 13-13  
 brake adjusting mechanism 4-3  
 brake adjustment tool 17-3  
 brake cable 4-7  
 brake cable equalizer 4-7  
 brake cable release tool 17-3  
 brake drum 4-3  
 brake lever 4-3  
 brake mounting block 4-5  
 brake pedal 4-5  
 brake pedal adjustment tool 17-3  
 brake pedal pad 4-5  
 brake pedal tension tool 17-3  
 brake return spring 4-7  
 brake self-adjusting mechanism 4-3  
 brake shoe 4-3  
 brake spring 4-3  
 breaker, circuit 16-3, 16-5, 16-7, 16-9, 16-11  
 breather 11-3, 15-3  
 brush 14-3, 14-5, 14-7  
 brush and screw set 6-13  
 brush box assembly 14-5, 14-7  
 brush connector 6-13  
 brush guard 1-9  
 brush guard support 5-11  
 brush holder 6-13  
 brush inspection port cover 6-13  
 brush port cover 6-13  
 brush rigging 14-3, 14-5, 14-7  
 brush spring 14-3, 14-5, 14-7  
 brush spring set 6-13  
 bulb, headlight 6-7, 13-7  
 bumper

# INDEX

- cast 1-7  
 drive unit (motor) 14-3, 14-5, 14-7  
 jounce 5-15  
 rubber 1-13, 1-29, 4-5  
 side trim 1-15  
 spring return 4-9, 4-11  
 bumper mount, angled 5-15  
 bushing 10-3  
     AC cord 16-3, 16-5  
     bronze 5-13  
     nylon 4-5  
     return line 8-5  
     spindle 5-13  
     steel 1-29, 5-11, 5-15  
     urethane 1-29, 5-9, 5-11, 5-15  
 bushing, insulated 14-3  
 button, choke 8-13  
 button, drive 10-7  
 buzzer, reverse 13-21
- C**
- cable  
     accelerator 8-11  
     brake 4-7  
     governor 8-11  
     IQDM 17-7  
     transmission 11-11  
 cable retainer 1-19, 1-21, 11-11  
 cable, cargo bed 1-27  
 calibration test module 17-3  
 cam  
     driven clutch 10-7  
     electrical component box 6-9  
         neutral lockout 11-9  
 cam installation tool 17-3  
 camshaft 7-11  
 canopy brace 1-5  
 cap  
     dust 13-13  
     spark plug 7-5  
 carburetor 8-7  
 carburetor float level tool 17-7  
 carburetor insulator 8-9, 14-3  
 carburetor mounting gasket 8-9  
 card, safety first 17-9  
 cargo bed 1-27  
 cargo bed hinge 1-29  
 case  
     battery charger 16-5, 16-7, 16-9, 16-11  
     differential gear 11-7  
     FNR switch 13-13  
     gear 11-3, 15-3  
     rocker 7-9  
 case, charger 16-3  
 cast bumper 1-7  
 catch, tilt bed 1-27
- center, steering wheel 5-5  
 charger bezel tool 17-3  
 charger board relay 16-3  
 charger case 16-3  
 charger hardware 16-3  
 charger legs 16-3  
 charger receptacle 13-15  
 charger, battery 16-5, 16-7  
 choke button 8-13  
 choke lever 8-13  
 choke lever guide 8-13  
 choke positioner 8-13  
 choke valve 8-13  
 circuit breaker 16-3, 16-5, 16-7, 16-9, 16-11  
 clamp  
     battery 6-17  
     cable retaining 8-11  
     hose 8-3, 8-5, 8-9, 8-13  
     muffler hose 9-3  
 clevis, upper delta 5-11  
 cluster idler gear 11-5  
 clutch alignment tool 17-5  
 clutch pulley 10-3  
 clutch removal tool 17-3  
 clutch repair kit 10-7  
 clutch tool kit 17-5  
 clutch weight 10-3  
 clutch, drive 10-3  
 clutch, driven 10-7  
 coil, field 6-13  
 coil, ignition 7-5  
 collet 7-9  
 column, steering 5-3  
 communication display module 17-5  
 component box, electrical 6-9  
 component mounting plate 13-19  
 compression gauge 17-5  
 compression lug 13-19  
 compression spring 8-13  
 compressor, piston ring 17-9  
 compressor, valve spring 17-11  
 computer, onboard 13-19  
 connecting rod 7-13  
 connector, a- 6-13  
 connector, four-pin 13-13  
 connector, speed controller 13-19  
 continuity tester 17-5  
 controller cover 13-19  
 controller cover gasket 13-19  
 controller, motor speed 13-19  
 cord connector 7-11  
 cord set, DC 16-5  
 cord, AC 16-5, 16-7, 16-9, 16-11  
 cord, DC 16-7, 16-9, 16-11  
 Cordset  
     PD3, AC 114" 16-3
- PD3, AC 80" 16-3  
 PD3, DC 113" 16-3  
 PD3, DC 154" 16-3  
 PD3, DC 205" 16-3  
 counterbalance guide shaft 7-13  
 counterbalance weight 7-13  
 cover  
     brush inspection port 6-13  
     brush port 6-13  
     cowl 1-3  
     crankcase 7-11  
     electrical box 6-9  
     oil pump 7-7  
     steering column 5-3  
 cover gasket, controller 13-19  
 cover plate 14-5, 14-7  
 cover, controller 13-19  
 cover, speed controller 13-19  
 cowl 1-3  
 cowl cover 1-3  
 cowl support 1-3  
 crank, bell 11-9  
 crankcase 7-13  
 crankcase cover gasket 7-9, 7-11  
 crankcase vent tube 8-9  
 crankshaft 7-13  
 crankshaft seal 7-11  
 crankshaft shim 7-13  
 cross brace, seat support 1-25  
 C-type stop ring 5-7  
 cup, spring 4-9, 4-11  
 current limiter 16-11  
 cushion, shock absorber 5-15  
 cutter, valve seat 17-5, 17-11
- D**
- damper, RPM limiter 7-5  
 dash 1-3  
 dash box 1-11  
 DC cord 16-7, 16-9, 16-11  
 DC cord set 16-5  
 DC cordset 16-3  
 decal  
     Carryall 232 3-13  
     component cover 3-9, 13-19  
     crush area 3-3, 3-11  
     crush warning 3-3, 3-11  
     driver/passenger 3-5  
     frame ground 3-5  
     instrument panel warning 3-7, 3-11  
     operating instructions 3-7, 3-11  
     owner notice 3-3, 3-9  
     rotating parts 1-31, 3-5  
     Tow/Run switch warning 3-9
- delta A-plate 5-9  
 delta A-plate sub-assembly 5-9

# INDEX

delta shock and gear support 5-9

desiccant bag 10-3

DF-terminal insulator 6-13

diesel tachometer probe 17-9

differential

  drive unit 12-3, 15-3

differential gear 11-7, 15-3

differential gear case 11-7

differential guard 11-13, 15-5

differential housing 15-3

differential idler gear 11-7

differential pin 11-7

diode 6-9, 13-19

dipstick 7-3

drain plug 7-7

drain plug gasket 7-7, 11-3

drive bar 13-11

drive belt 10-5

drive button 10-7

drive clutch 10-3

drive clutch button 10-3

drive clutch fixed sheave tool 17-5

drive clutch fixed-face 10-3

drive clutch holder tool 17-5

drive clutch hub puller 17-5

drive clutch puller 17-5

drive clutch spider removal tool 17-5

drive clutch spring 10-3

drive clutch weight 10-3

drive hub 10-3

drive unit bumper 14-3, 14-5, 14-7

drive unit guard 11-13, 15-5

driven clutch 10-7

driven clutch button 10-7

driven clutch cam 10-7

driven clutch cam puller 17-5

driven clutch fixed-face assembly 10-7

driven clutch puller plug 17-5

driven clutch spring compression base tool  
17-5

driven clutch spring compression collar tool  
17-5

driven clutch spring compression nut tool  
17-5

driver, drive clutch 10-3

drum, brake 4-3

dry moly lubricant 17-7

dust cap 13-13

## E

E-clip 4-7

electrical box cover 6-9

electrical component box 6-9

end bell, commutator 6-13

end bell, output shaft 6-13

end cap, motor 14-3, 14-5, 14-7

end shield

  motor 14-3

engine 7-3

engine mounting plate 7-15

engine shroud 7-3

engine valve spring 7-9

equalizer rod 4-7

equalizer, brake cable 4-7

exhaust system 9-3

exhaust valve 7-9

extension, spring latch 1-27

extrusion 13-19

## F

face, moveable 10-3, 10-7

fan housing 7-3

fan shroud 7-3

fan, flywheel 7-5

fender 1-19, 1-21

field coil 6-13

field coil housing 6-13

fill plug 11-3

filter

  air 8-13

  fuel 8-3

  oil 7-7

fitting, thread-forming grease 5-7, 5-9, 5-13

fixed-face, drive clutch 10-3

fixed-face, driven clutch 10-7

float 8-7

floor mat 1-3

flywheel 7-5

flywheel fan plate 7-5

flywheel puller 17-7

FNR handle 11-9

FNR shifter base 11-9

FNR switch case 13-13

foam, seat 1-23

fork, shift 11-5

Forward/Reverse shifter 11-9

frame and field assembly (motor) 14-5, 14-7

front body 1-3

front body support 1-19, 1-21

front hub 5-13

front spring retainer plate 5-11

F-terminal hardware 6-13

f-terminal insulator 6-13

fuel filter 8-3

fuel gauge sending unit 8-5

fuel gauge/hour meter 6-11

fuel line 8-3, 8-5, 8-9

fuel tank 8-5

fuel tank strap 8-3

fuel tank vent 8-5

fuse 13-15, 16-7, 16-9, 16-11

  10-amp 6-9

20-amp 6-9

3/8-amp 13-15

charger 16-3, 16-5

fuse block 6-9

## G

gasket 15-3

carburetor mounting 8-7, 8-9

crankcase cover 7-9, 7-11

drain plug 7-7, 11-3

exhaust 7-9, 9-3

head 7-9

insulator 7-9, 8-9

liquid 11-3, 15-3, 17-7

oil pump 7-7

rocker case 7-9

seat 1-23

sending unit 8-5

gasket kit, FE290 7-9

gasket, controller cover 13-19

gauge, compression 17-5

gauge, fuel/hour 6-11

gear

  case 11-3, 15-3

  cluster idler 11-5

  differential 11-7, 15-3

  differential idler 11-7, 15-3

  differential output 15-3

  helical 7-13, 11-5, 11-7

  spur 7-13, 11-5

  synchro 11-5

gear yoke 17-7

glove box 1-13

glove box key 1-13

glove box lock 1-13

glove box lock kit 1-13

governor 11-5

governor arm 11-3

governor cable 8-11

governor cable bracket 8-11

governor shaft installation tool 17-7

governor shield 8-9

grommet 8-5

guard, brush 1-9

guard, differential 11-13, 15-5

guide

  choke lever 8-13

  intake valve 7-9

  valve seat cutter 17-11

guide ring adhesive 17-3

## H

handle, battery charger 16-5

handle, FNR 11-9

hardware kit, charger 16-3

# INDEX

hardware, F-terminal 6-13

harness, wire 13-5

  gasoline 6-5

head gasket 7-9

head, FE290 7-9

headlight assembly 6-7, 13-7

headlight bulb 6-7, 13-7

headlight harness 6-7, 13-7

headlight retainer 6-7, 13-7

heatsink 16-5

heatsink and rectifier 16-7, 16-9, 16-11

helical gear 7-13, 11-5, 11-7

hill brake rod 4-5

hill brake weld assembly 4-5

hinge plate 1-19, 1-21, 1-23

hinge support 1-29

hinge, cargo bed 1-29

hold-down, battery, 12-volt 13-17

holder, object 1-3

hose, air intake 8-13

hose, fuel 8-3

hour meter/fuel gauge 6-11

housing

  2-pin 13-11

  3-pin 13-11, 13-13, 14-3, 14-5, 14-7

  4-pin 13-13

  6-pin 13-19

  differential 15-3

  fan 7-3

  field coil 6-13

hub 5-13

hub and spindle 5-13

hub, front 5-13

hub, synchronizer clutch 11-5

hubcap 5-13

hydraulic brake adjuster 17-7

hydrometer 17-7

## I

idle screw assembly 8-7

idler bearing 10-3

idler gear, differential 15-3

ignition coil 7-5

inner frame snubber 7-15

input shaft 15-3

insert, synchronizer 11-5

instrument panel 6-11, 13-9

insulated bushing 14-3

insulator gasket 7-9, 8-9

insulator, carburetor 8-9, 14-3

intake pipe 8-9

intake valve 7-9

intermediate shaft 15-3

internal retaining ring pliers 17-7

IQ display module (IQDM) 17-7

## J

J-bolt 13-17

jet, main 8-7

jet, pilot 8-7

joint

  ball 4-5, 4-13, 5-9, 11-11

  left-hand thread ball 5-7, 5-9

jounce bumper 5-15

## K

key 13-9

  crankshaft 7-5, 7-13

  driven clutch 10-7

  square 10-7

  starter/generator 6-13

  woodruff 11-3

key (pair) 6-11

key switch 6-11, 13-9

key switch spacer 6-11

key, glove box 1-13

keyswitch nut 6-11, 13-9

kick plate, body 1-19, 1-21

kingpin 5-11

kit

  2-pin housing 13-11

  3-pin housing 13-11, 13-13, 14-3, 14-5, 14-7

  4-pin housing 13-13

  6-pin housing 13-19

  accelerator pivot rod 4-9, 4-11

  air duct repair tape 8-13

  brake cable 4-7

  brake pedal 4-5

  brake pedal adjustment tool 17-3

  clutch repair 10-7

  differential gear case 11-7

  drive clutch button 10-3

  drive clutch weight 10-3

  driven clutch button 10-7

  front hub replacement 5-13

  fuel tank 8-5

  impulse fuel pump rebuild 8-3

  IQ display module (IQDM) 17-7

  magnet and bearing 14-3

  motor brush 14-5, 14-7

  motor brush spring 14-5, 14-7

  motor cover plate 14-5, 14-7

  motor speed sensor 14-5, 14-7

  motor terminal hardware 14-5, 14-7

  neutral lockout cam 11-9

  park brake latch 4-5

  park brake pedal 4-5

  PD3 Cordest, AC 114" 16-3

  PD3 Cordest, AC 80" 16-3

  PD3 Cordest, DC 113" 16-3

  PD3 Cordest, DC 154" 16-3

PD3 Cordest, DC 205" 16-3

PD3 hardware 16-3

shock absorber 5-15

shock absorber cushion 5-15

tune-up 17-9

knob, light switch 6-11, 13-9

## L

latch spring 1-27

latch, air box 8-13

latch, park brake 4-5

L-bracket, motor 14-5

leaf spring 5-15

legs, charger 16-3

lens, headlight 6-7, 13-7

lever

  change 11-3

  choke 8-13

  transmission shifter 11-3

light

  battery 13-9

  oil 6-11

light switch 6-11, 13-9

light switch knob 6-11, 13-9

limit switch 11-9

limiter

  current 16-11

  RPM 7-5

line, fuel 8-3, 8-5, 8-9

link, rack and pinion drag 5-7

link, rod 1-27

liquid gasket 11-3, 15-3, 17-7

lock kit, glove box 1-13

lock, glove box 1-13

low oil warning light 6-11

lubricant, dry moly 17-7

lubricant, moly-teflon 14-3, 14-5, 14-7, 17-7

lug nut 2-3

lug stud 5-13, 11-7, 15-3

lug, compression 13-19

## M

magnet and bearing kit 14-3

magnet, speed sensor 14-3, 14-5, 14-7

main jet 8-7

main nozzle 8-7

mat, floor 1-3

MCOR 13-11

mechanism, brake adjusting 4-3

meter, volt ohm 17-11

module

  calibration test 17-3

  communication display 17-5

moly-teflon lubricant 17-7

motor

# INDEX

- 48-volt 14-3  
48-volt IQ 14-5, 14-7  
motor armature 14-3  
motor brush 14-3  
motor brush kit 14-5, 14-7  
motor brush spring kit 14-5, 14-7  
motor bumper 14-3, 14-5, 14-7  
motor end cap 14-3, 14-5, 14-7  
motor end shield 14-3  
motor L-bracket 14-5  
motor magnet, speed sensor 14-3, 14-5, 14-7  
motor speed controller 13-19  
motor speed sensor 14-3, 14-5, 14-7  
motor speed sensor kit 14-5, 14-7  
motor stator shell and winding 14-3  
motor terminal hardware kit 14-5, 14-7  
mounting block, brake 4-5  
moveable-face 10-3, 10-7  
muffler hose clamp 9-3
- N**  
needle bearing 11-5  
nerf bar 1-17  
neutral lockout cam 11-9  
non-skid tape 1-17  
nozzle, main 8-7  
nut, keyswitch 6-11, 13-9  
nut, lug 2-3
- O**  
OBC 13-19  
OBC, onboard computer 13-19  
object holder 1-3  
oil filler tube 7-3  
oil filter 7-7  
oil filter mount bracket 7-7  
oil filter screen 7-11  
oil filter screen plate 7-11  
oil level sensor 7-11  
oil level switch bracket 7-11  
oil pump and rotor 7-7  
oil pump cover 7-7  
oil pump gasket 7-7  
oil pump plate 7-7  
oil seal 7-9, 7-13, 11-3, 11-5  
oil warning light, low 6-11  
onboard computer 13-19  
O-ring 7-3, 7-9, 7-11, 7-13  
overload bumper spacer 5-15
- P**  
pad  
  accelerator pedal 4-9, 4-11  
  brake pedal 4-5  
  park brake 4-5  
wear 1-19, 1-21  
paint, touch-up 17-7  
panel  
  instrument 6-11  
panel, instrument 6-11, 13-9  
park brake latch 4-5  
park brake pedal 4-5  
park brake rod sleeve 4-5  
park brake spacer 4-5  
park brake torsion spring 4-5  
pawl 4-5  
pedal, accelerator 4-9, 4-11  
pedal, brake 4-5  
pedal, park brake 4-5  
pilot air screw 8-7  
pilot jet 8-7  
pin, differential 11-7  
pin, piston 7-13  
pinion, steering 5-7  
pipe, intake 8-9  
piston 7-13  
piston ring 7-13  
piston ring compressor 17-9  
piston ring pliers 17-9  
pivot arm 11-3  
pivot support bearing 4-9, 4-11  
plate  
  body kick 1-19, 1-21  
  component mounting 13-19  
  cover 14-5, 14-7  
  engine mounting 7-15  
  flywheel fan 7-5  
  front spring retainer 5-11  
  hinge 1-19, 1-21, 1-23  
  oil filter screen 7-11  
  oil pump 7-7  
  receptacle backing 13-15  
  spring mounting 5-11  
  thrust 11-5, 11-7  
pliers  
  internal retaining ring 17-7  
  piston ring 17-9  
  retaining ring 17-9  
plug  
  4-pin 13-13  
  6-pin 13-19  
  drain 7-7  
  driven clutch puller 17-5  
  fill 11-3  
  spark 7-5  
pole set 6-13  
positioner, choke 8-13  
press weldment 17-5  
protector spray, battery terminal 17-3  
puller  
  bearing 17-3
- clutch 17-3  
drive clutch 17-5  
drive clutch hub 17-5  
driven clutch cam 17-5  
flywheel 17-7  
seal 17-9  
special use tool 17-9  
pulley  
  clutch 10-3  
  starter-generator 6-13  
push rod 7-9
- R**  
rack and pinion drag link 5-7  
rack guide pressure spring 5-7  
rack, steering 5-7  
ratchet, park brake 4-5  
reamer, valve guide 17-9  
rear body 1-19  
rear spring shackle 5-15  
receptacle 13-15  
receptacle backing plate 13-15  
receptacle, AC cord 16-11  
receptacle, accessory 6-11, 13-9  
receptacle, battery charger 13-15  
rectifier with heatsink 16-7, 16-9, 16-11  
regulator, voltage 6-9  
relay 16-9, 16-11  
relay mounting bracket 16-9  
relay, charger board 16-3  
remover, bearing and oil seal 17-3  
resistor assembly 13-19  
retainer  
  accelerator pedal spring 4-9, 4-11  
  bearing 14-3  
  cable 1-19, 1-21, 11-11  
  headlight 6-7, 13-7  
  shock absorber cushion 5-15  
  spring 5-15  
  spring (drive clutch) 10-3  
  valve spring 7-9  
retaining ring 5-3  
retaining ring pliers 17-9  
return spring bumper 4-9, 4-11  
reverse buzzer 13-21  
rigging, brush 14-3  
rim, wheel 2-3  
ring  
  piston 7-13  
  retaining 5-3, 6-9, 10-3, 10-7, 11-9  
  snap 5-7, 7-9, 7-13  
  spiral backup 10-3  
  synchronizer 11-5  
ring, C-type stop 5-7  
rock guard 11-13, 15-5  
rocker arm 7-9

# INDEX

rocker case 7-9  
rocker case gasket 7-9  
rocker shaft 7-9  
rocker switch 13-13  
rod  
  accelerator 4-13  
  accelerator pivot 4-9, 4-11  
  connecting 7-13  
  crankshaft 7-13  
  equalizer 4-7  
  hill brake 4-5  
  link 1-27  
  push 7-9  
  shift 11-5  
  tie 5-9  
rotor, oil pump and 7-7  
RPM limiter 7-5  
RPM limiter bracket 7-5  
RPM limiter damper 7-5  
RPM limiter mount band 7-5  
rubber bumper 1-13

## S

safety first card 17-9  
screen, oil filter 7-11  
screw, valve clearance adjuster 17-9  
seal  
  crankshaft 7-11  
  intake 8-13  
  lip 15-3  
  oil 7-9, 7-13, 11-3, 11-5, 11-7, 15-3  
  steering pinion dust 5-7  
  vertical socket dust 5-7, 5-9  
seal puller 17-9  
sealant 11-3, 15-3  
seat  
  spring 7-9  
  valve 7-7  
seat bottom assembly 1-23  
seat bottom cover 1-23  
seat cover, vinyl 1-23  
seat cover, white 1-23  
seat foam 1-23  
seat gasket 1-23  
seat support 1-25  
seat support cross brace 1-25  
seat, bearing 5-3  
sending unit, fuel gauge 8-5  
sensor, motor speed 14-3, 14-5, 14-7  
sensor, oil level 7-11  
sensor, speed 14-3  
set, brush and screw 6-13  
set, pole 6-13  
shackle, rear spring 5-15  
shaft  
  change 11-3

counterbalance guide 7-13  
input 15-3  
intermediate 15-3  
rocker 7-9  
steering column 5-3  
  transmission 11-5  
shield, governor 8-9  
shift fork 11-5  
shift rod 11-5  
shifter base, FNR 11-9  
shifter bracket 11-3, 11-11  
shim, crankshaft 7-13  
shock absorber 5-9  
shock absorber (rear) 5-15  
shock absorber cushion 5-15  
shock absorber cushion retainer 5-15  
shoe, brake 4-3  
shroud, engine 7-3  
shroud, fan 7-3  
side bar 1-17  
sleeve  
  delta A-plate 5-9  
  governor 11-5  
  park brake rod 4-5  
  synchronizer 11-5  
snap ring 5-7, 7-9, 7-13  
snubber bracket 7-15  
snubber, inner frame 7-15  
socket 5-7, 5-9  
solenoid, 12-volt 6-9  
solenoid, 48-volt 13-19  
spacer  
  accelerator pivot rod 4-9, 4-11  
  key switch 6-11  
  overload bumper 5-15  
  park brake 4-5  
spanner wrench 17-9  
spark plug 7-5  
spark plug cap 7-5  
speed controller 13-19  
speed controller connector 13-19  
speed controller cover 13-19  
speed sensor 14-3, 14-5, 14-7  
speed sensor magnet 14-3, 14-5, 14-7  
speed sensor, motor 14-3, 14-5, 14-7  
spindle 5-13  
spindle and hub 5-13  
spiral backup ring 10-3  
spray, battery terminal protector 17-3  
spring 1-27  
  accelerator return 4-9, 4-11  
  brake return 4-7  
  brush 6-13, 14-3, 14-5, 14-7  
  compression 8-13  
  drive button 10-3  
  drive clutch 10-3  
driven clutch 10-7  
engine valve 7-9  
extension return 8-13  
forward/reverse cam 11-9  
leaf 5-15  
park brake torsion 4-5  
rack guide pressure 5-7  
shifter 11-5  
steering shaft compression 5-3  
synchronizer 11-5  
throttle return 8-9  
spring cup 4-9, 4-11  
spring mounting plate 5-11  
spring retainer 5-15  
spur gear 7-13, 11-5  
stand-offs, plastic 16-3  
starter/generator 6-13  
starter/generator belt 6-15, 10-3  
starter/generator mounting bracket 6-15  
starter/generator pulley 6-13  
stator shell and winding 14-3  
steel bushing 1-29, 5-11, 5-15  
steel pressure relief ball 7-7  
steering column 5-3  
steering column bearing press tool 17-9  
steering column retaining ring tool 17-9  
steering gear box 5-7  
steering pinion 5-7  
steering pinion dust seal 5-7  
steering rack 5-7  
steering shaft assembly 5-3  
steering shaft compression spring 5-3  
steering wheel 5-5  
steering wheel center 5-5  
steering wheel puller tool 17-9  
stem, valve 2-3  
stiffener, bed support 1-29  
stiffener, flywheel side 7-15  
strap, A-plate 5-9  
strap, fuel tank 8-3  
stud 7-15  
  lug 5-13, 11-7, 15-3  
stud, ball 6-9, 11-3, 11-9  
support  
  bed 1-25  
  brush guard 5-11  
  cowl 1-3  
  hinge 1-29  
  latch link 1-27  
  seat 1-25  
support yoke (steering) 5-7  
support, front body 1-19, 1-21  
support, seat 1-25  
 suppressor, voltage 16-7, 16-9, 16-11  
switch  
  four-position 16-9, 16-11

# INDEX

- key 6-11, 13-9  
light 6-11, 13-9  
limit 11-9  
rocker 13-13  
Tow/Run 13-13  
switch rubber boot 13-13  
synchro gear 11-5  
synchronizer clutch hub 11-5  
synchronizer insert 11-5  
synchronizer sleeve 11-5  
synchronizer spring 11-5  
system, exhaust 9-3
- T**  
12-volt solenoid 6-9  
tachometer 17-9  
tachometer probe, diesel 17-9  
taligate 1-27  
tank, fuel 8-5  
tape, non-skid 1-17  
tappet 7-11  
terminal block 13-19  
tester, continuity 17-5  
thermometer, battery 17-3  
thread-forming grease fitting 5-7, 5-9, 5-13  
throttle return spring 8-9  
throttle spring return bracket 8-9  
thrust bearing 5-11  
thrust plate 11-5, 11-7  
tie rod 5-9  
tie wrap 5-7, 6-9, 13-13, 13-19  
tilt bed catch 1-27  
tilt latch 1-27  
tire 2-3  
tool  
accelerator pedal adjustment 17-3  
belt tensioning, starter/generator 17-11  
brake adjustment 17-3  
brake cable release 17-3  
brake pedal adjustment 17-3  
brake pedal tension 17-3  
cam installation 17-3  
carburetor float level 17-7  
charger bezel 17-3  
clutch alignment 17-5  
cT-wrench 17-5  
drive clutch fixed sheave 17-5  
drive clutch holder 17-5  
drive clutch spider removal 17-5  
driven clutch spring compression base 17-5  
driven clutch spring compression collar 17-5  
driven clutch spring compression nut 17-5  
governor shaft installation 17-7  
puller, special use 17-9
- steering column bearing press 17-9  
steering column retaining ring 17-9  
steering wheel puller 17-9  
transaxle axle seal 17-9  
transaxle pinion seal 17-9  
transmission 17-9  
valve guide driver 17-9  
valve seat cutter 17-5  
tool kit, clutch 17-5  
touch-up paint 17-7  
Tow/Run switch 13-13  
Tow/Run switch bracket 13-13  
transaxle 12-3, 15-3  
transaxle axle seal tool 17-9  
transaxle guard 11-13, 15-5  
transaxle housing 15-3  
transaxle pinion seal tool 17-9  
transaxle, unitized 11-3  
transformer, battery charger 16-5, 16-7, 16-9, 16-11  
transmission cable 11-11  
transmission shaft 11-5  
transmission tool 17-9  
tube  
crankcase vent 8-9  
oil filler 7-3  
tune-up kit 17-9  
turn signal lens 6-7, 13-7  
T-wrench tool 17-5
- U**  
U-bolt 5-15  
unitized transaxle 11-3  
upper delta clevis 5-11  
urethane bushing 1-29, 5-9, 5-11, 5-15
- V**  
valve  
choke 8-13  
exhaust 7-9  
fuel pickup tube 8-5  
intake 7-9  
reed 7-9  
valve clearance adjuster screw 17-9  
valve guide driver tool 17-9  
valve guide reamer 17-9  
valve guide, intake 7-9  
valve seat 7-7  
valve seat cutter 17-5, 17-11  
valve seat cutter guide 17-11  
valve seat cutter tool 17-5  
valve seat t-wrench 17-11  
valve spring compressor 17-11  
valve spring retainer 7-9  
valve stem 2-3  
vent barb 8-3, 8-5
- vertical socket dust seal 5-7, 5-9  
volt ohm meter 17-11  
voltage regulator 6-9  
voltage suppressor 16-7, 16-9, 16-11
- W**  
warning light, low oil 6-11  
wear pad 1-19, 1-21  
wedge, bearing puller 17-3  
weight  
clutch 10-3  
counterbalance 7-13  
secondary clutch 10-3  
weldment  
press 17-5  
wheel cover 2-5  
wheel rim 2-3  
wheel, steering 5-5  
wire harness 13-5  
wire harness, gasoline 6-5  
woodruff key 11-3  
wrap, tie 5-7, 6-9, 13-13, 13-19  
wrench, spanner 17-9
- Y**  
yoke, gear 17-7  
yoke, support (steering) 5-7





**Club Car, Inc.**  
P.O. Box 204658  
Augusta, GA 30917-4658  
USA

**Web** [www.clubcar.com](http://www.clubcar.com)  
**Phone** 1.706.863.3000  
1.800.ClubCar  
**Int'l** +1 706.863.3000  
**Fax** 1.706.863.5808