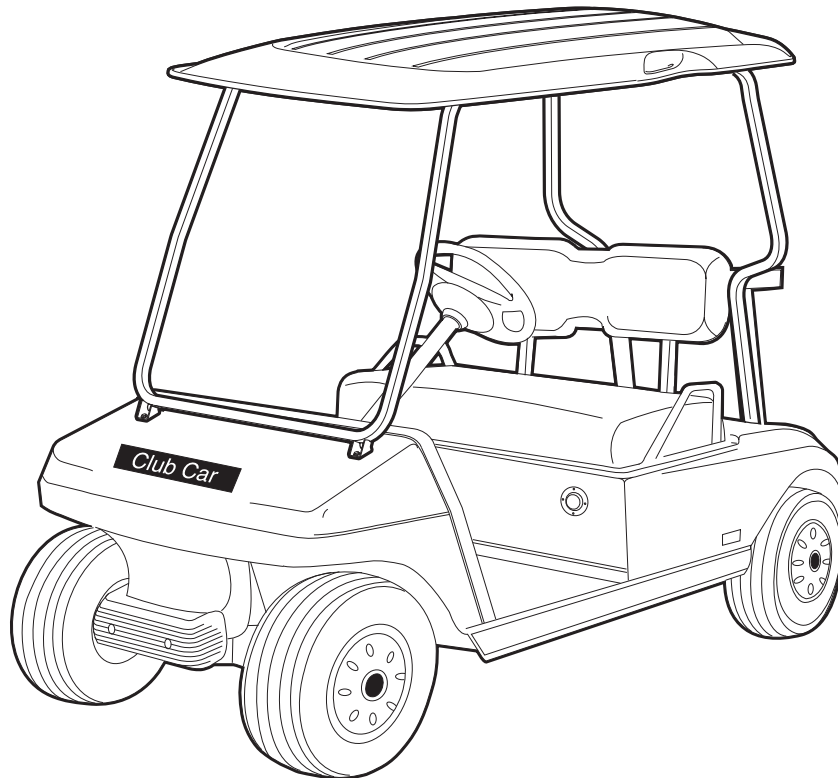




**2008  
DS Golf Cars  
Illustrated Parts List**



**Gasoline and Electric**

Manual Number 103373002  
Edition Code 1007K1010J



# USING THE ILLUSTRATED PARTS LIST

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## **⚠ 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 DS golf cars.

The manual is divided into sections. Note that there are two or three flags on the outside edge of each page. The first flag contains the section number of which that page is a part. The other flag (or flags) contains the letter G or E, signifying that the page pertains to the electric or gasoline vehicles only.

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.

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.*

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*2008 DS Golf Cars Illustrated Parts List*

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# BODY AND TRIM

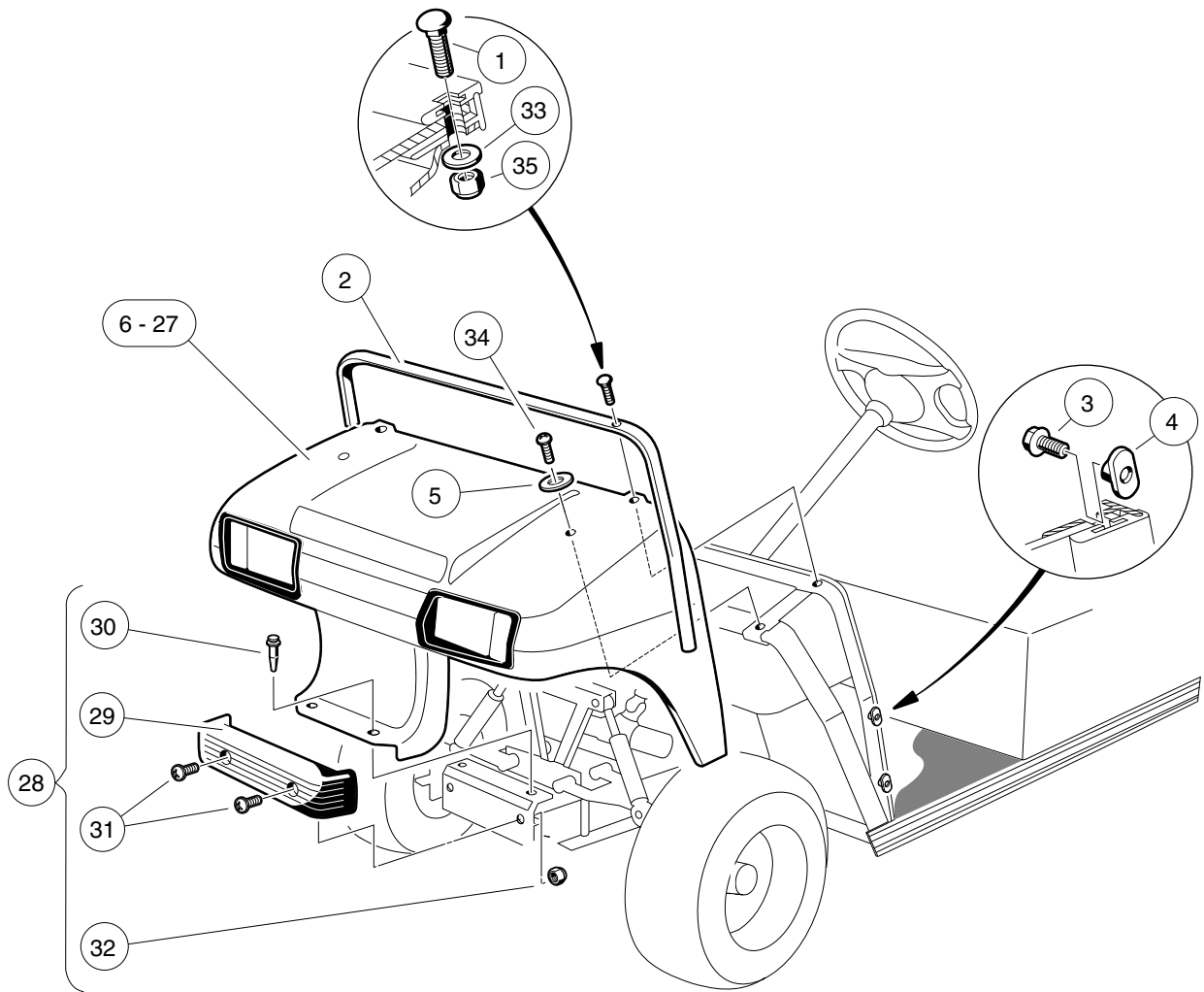
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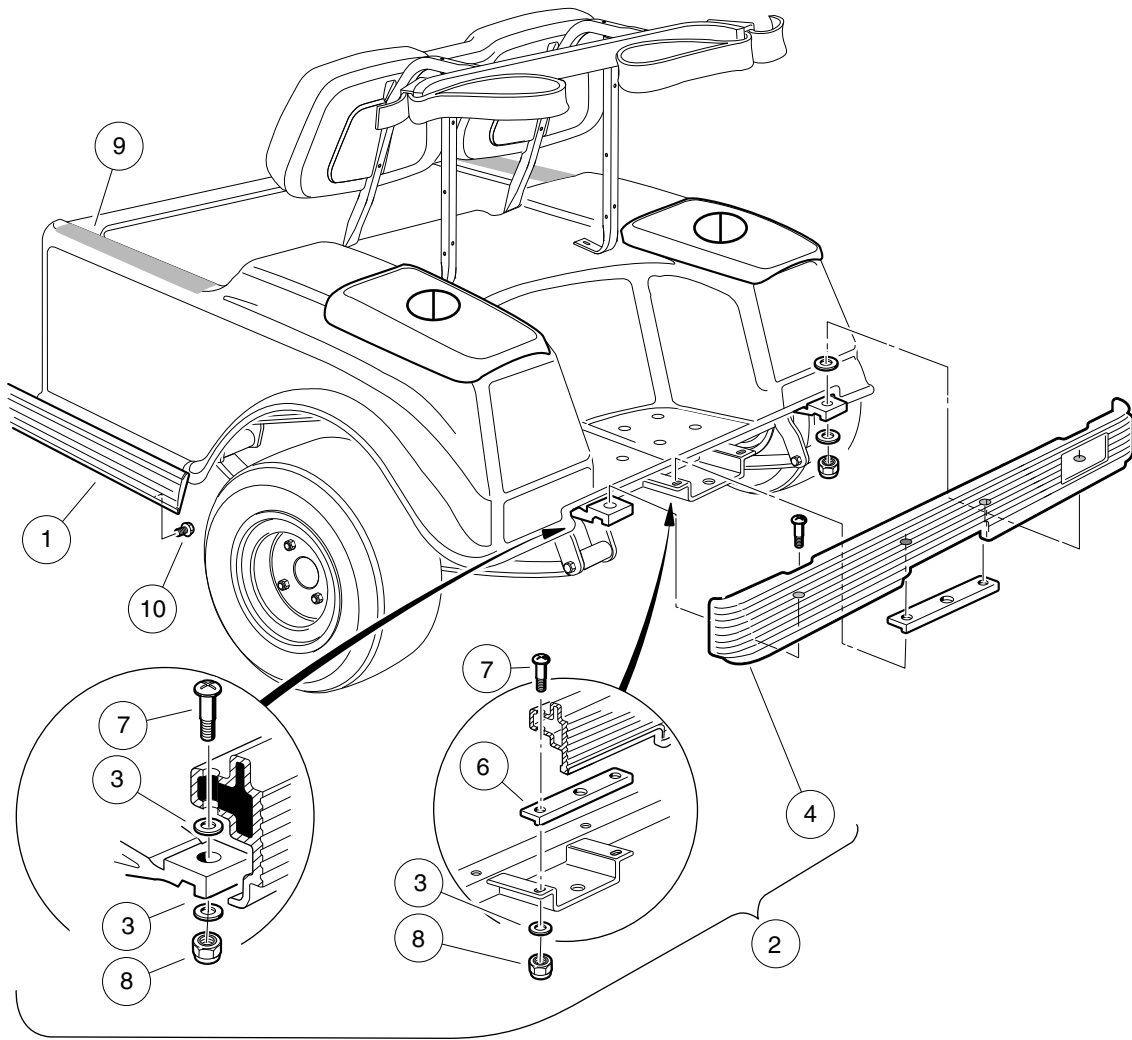


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# FRONT BODY

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1010435	Bolt, Carriage, 5/16-18 X 1.00 .....	2
2	1011014	Trim, Cowl .....	1
3	1011017	Screw, #8-32 X 0.375 .....	6
4	1011394	T-Nut Package (Set of 4) .....	1
5	1015075	Washer, 5/16 Flat Type A .....	2
6	101692501	Cowl, TPO, Beige .....	1
7	101692502	Cowl, TPO, White .....	1
8	101692504	Cowl, Tpo -gray .....	1
9	101692506	Cowl, TPO, Red .....	1
10	101692509	Cowl, TPO, Pacific Blue (Royal Blue) .....	1
11	101692510	Cowl, TPO, Dark Green .....	1
12	101692511	Cowl, TPO, Black .....	1
13	101692512	Cowl, TPO, Classic Blue (Navy) .....	1
14	101692513	Cowl, TPO, Burgundy .....	1
15	101692514	Cowl, TPO, Dark Gray .....	1
16	101692515	Cowl, TPO, Safety Yellow .....	1
17	101693901	Cowl with Headlight Opening, TPO, Beige .....	1
18	101693902	Cowl with Headlight Opening, TPO, White .....	1
19	101693904	Cowl with Headlight Opening, TPO, Gray .....	1
20	101693906	Cowl with Headlight Opening, TPO, Red .....	1
21	101693908	Cowl with Headlight Opening, TPO, Pacific Blue (Royal Blue) .....	1
22	101693909	Cowl with Headlight Opening, TPO, Dark Green .....	1
23	101693910	Cowl with Headlight Opening, TPO, Black .....	1
24	101693911	Cowl with Headlight Opening, TPO, Classic Blue (Navy) .....	1
25	101693912	Cowl with Headlight Opening, TPO, Burgundy .....	1
26	101693913	Cowl with Headlight Opening, TPO, Dark Gray .....	1
27	N/A	Cowl with Headlight Opening, TPO, Safety Yellow .....	1
28	1017080	Kit, Front Bumper (includes items 29 through 32) .....	1
29	1016868	Front Bumper .....	1
30	1016967	Blind Rivet, Push Type .....	2
31	7251	Screw, 5/16-18 x 1.0 Truss-Head .....	2
32	7473	Locknut, 5/16-18 Nylon Insert .....	2
33	1241	Washer, 5/16 Type A Flat .....	2
34	7251	Screw, 5/16-18 x 1.0 Truss-Head .....	2
35	7473	Locknut, 5/16-18 Nylon Insert .....	2

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# REAR BODY TRIM

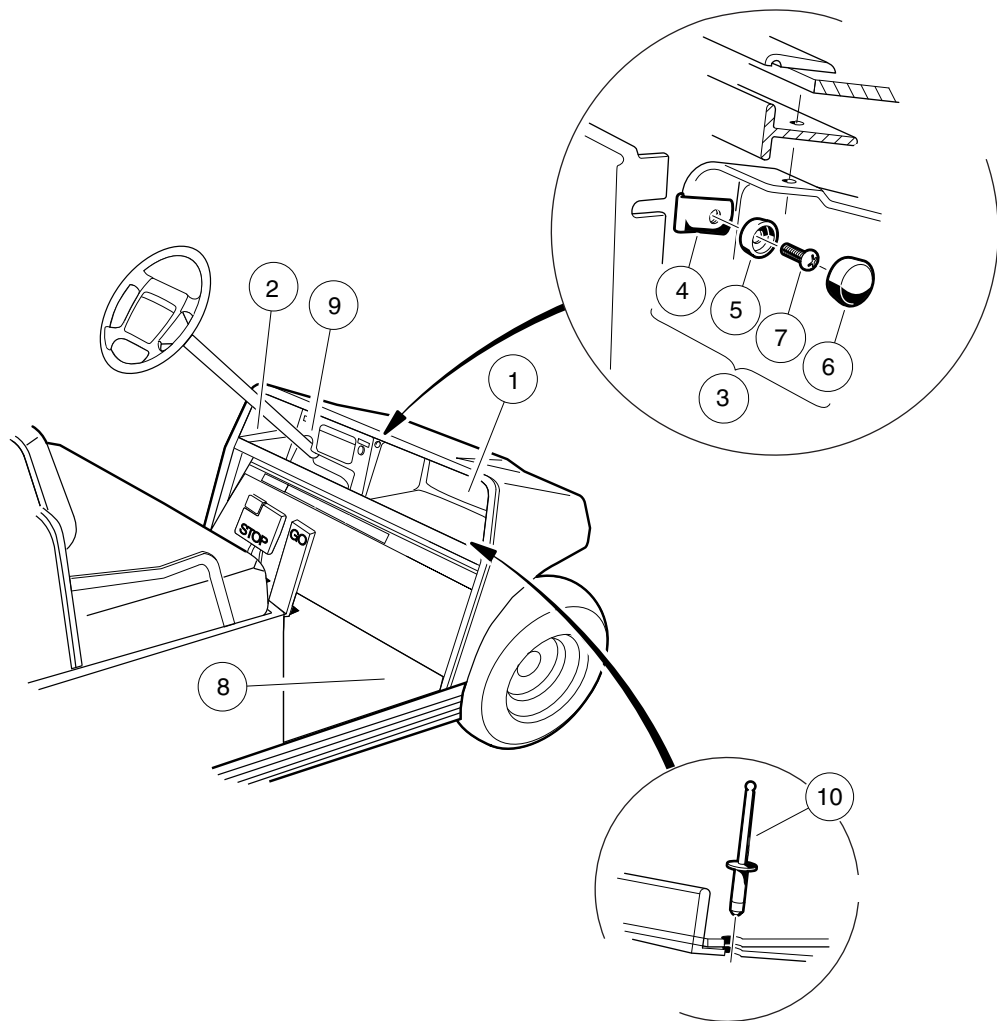
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1013983	Bumper, Side Trim .....	2
2	1017079	Kit, Rear Bumper (includes items 3 through 8) .....	1
3	1011697	Washer, 5/16 Flat .....	6
4	1016379	Bumper, Rear .....	1
5	1016874	Plate, Bumper Mounting, Short .....	2
6	1016875	Plate, Bumper Mounting, Long .....	1
7	1016876	Bolt, 3/8 Shoulder .....	4
8	7473	Locknut, 5/16-18 Nylon Insert .....	4
9	102221201	Wear Pad .....	2
10	102310701	Screw, #8-18 x 0.375, Hex-Head Washer .....	8
<p style="margin-left: 40px;">Note: Item 5 not used in this application.</p>			

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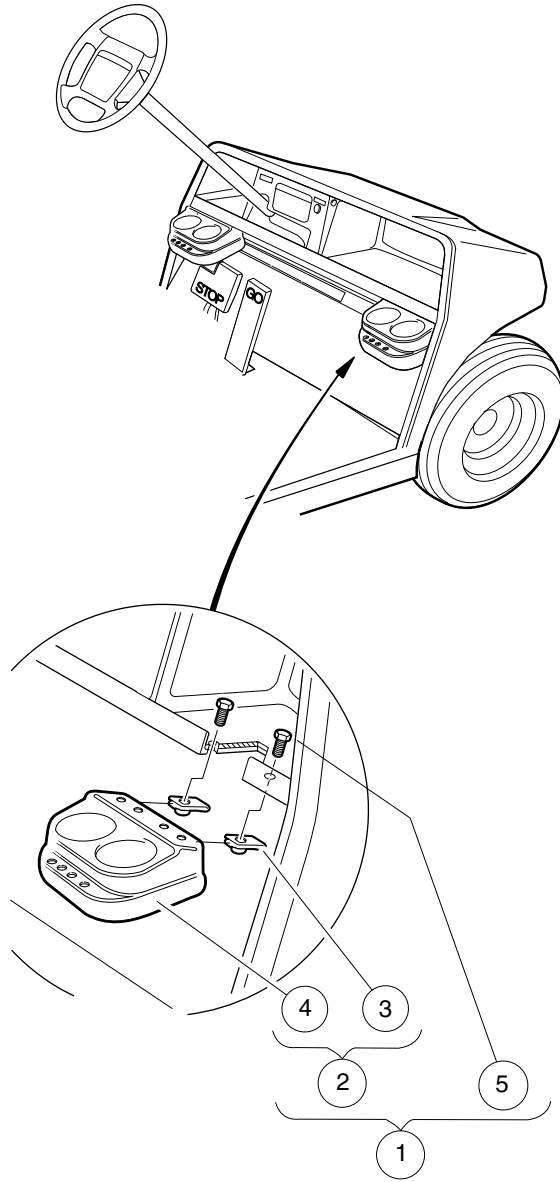


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# DASH COMPONENTS

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1013343	Dash Component, Passenger-Side, Black .....	1
2	1013344	Dash Component, Driver-Side .....	1
3	1014645	Snap Washer Kit, Black (includes items 4 through 7) .....	2
4	1011019	Nut, Speed .....	1
5	1011382	Washer, #10 Pan-Head Screw .....	1
6	1013494	Cover, Screw Head .....	1
7	1620	Screw, #10-16 X 0.75 Pan-Head Tap .....	1
8	101503202	Floormat .....	1
9	101660404	Dash Panel, Black Center .....	1
10	7973	Rivet, 3/16 X .400 Blind .....	5

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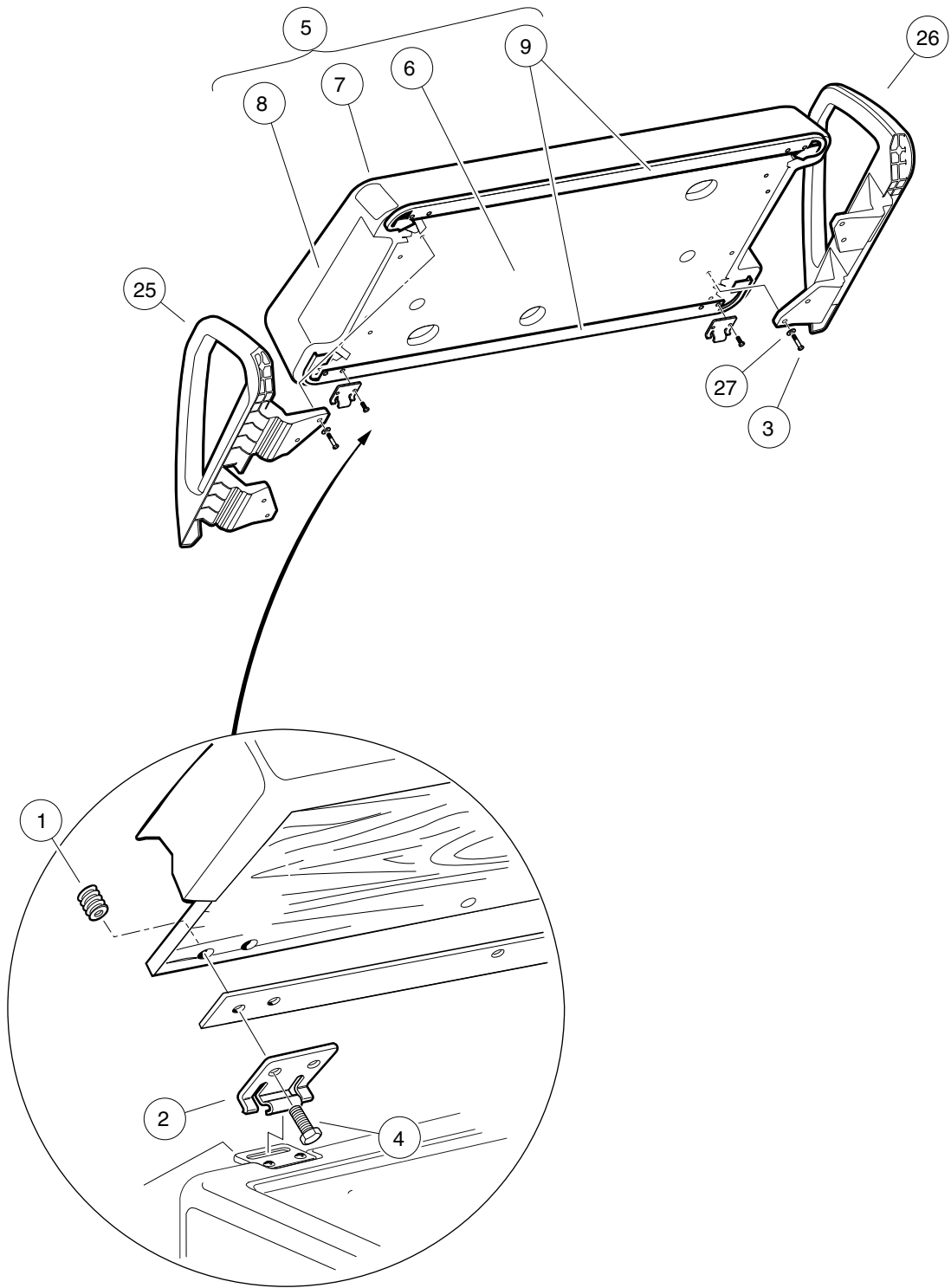


# BEVERAGE HOLDER

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	101708301	Drink Holder Kit (includes items 2 through 5) .....	2
2	1016811	Holder, Dual Cup (includes items 3 and 4) .....	1
3	1016952	U-Nut, 1/4-20 .....	2
4	N/A	Cup Holder, Dual .....	1
5	7847	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	2

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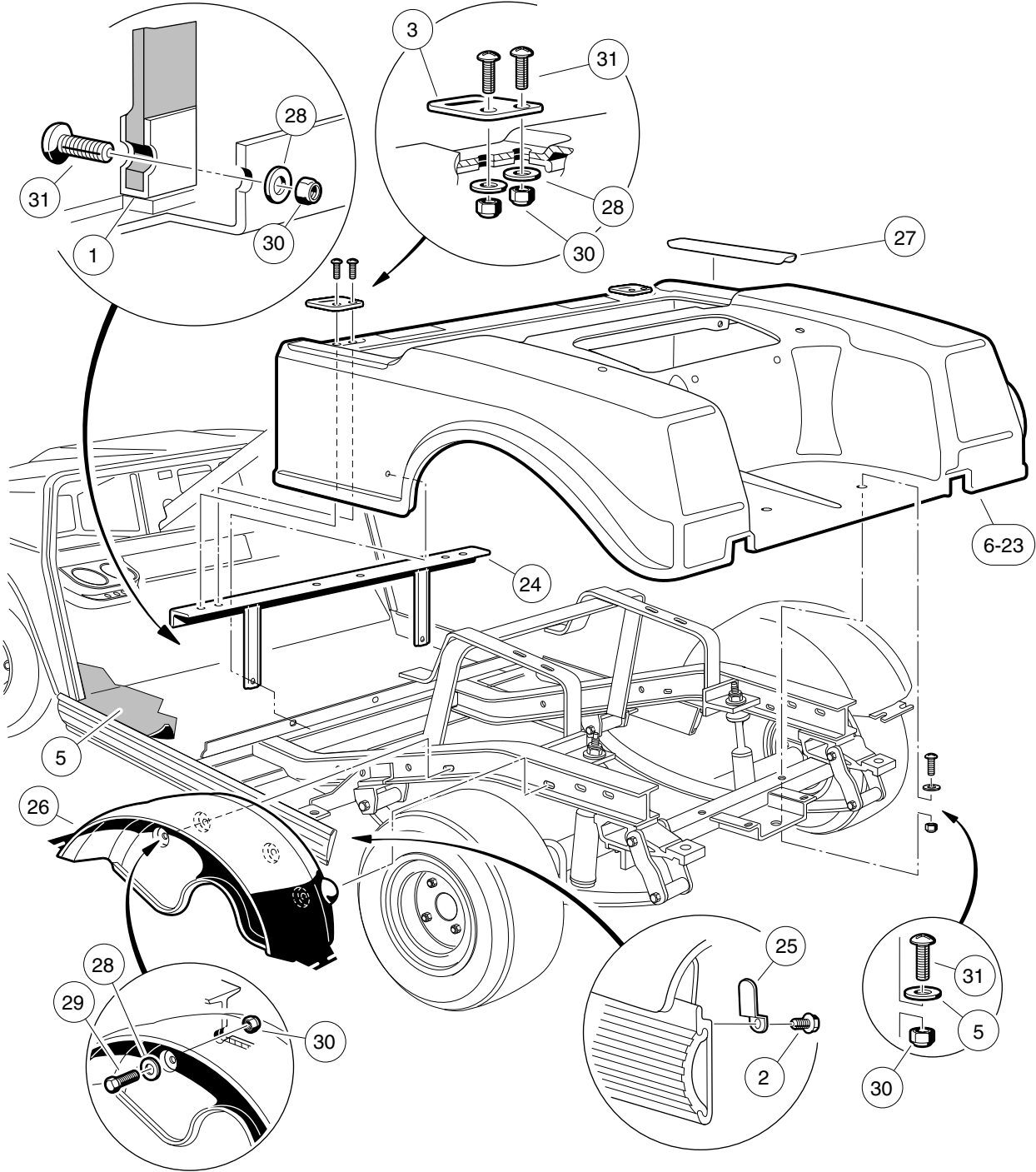
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# FRONT SEAT BOTTOM AND ARMRESTS

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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	seat bottom cover .....	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 12, 17, and 22 are the same as those shown for item 7, except for the vinyl seat covers.			

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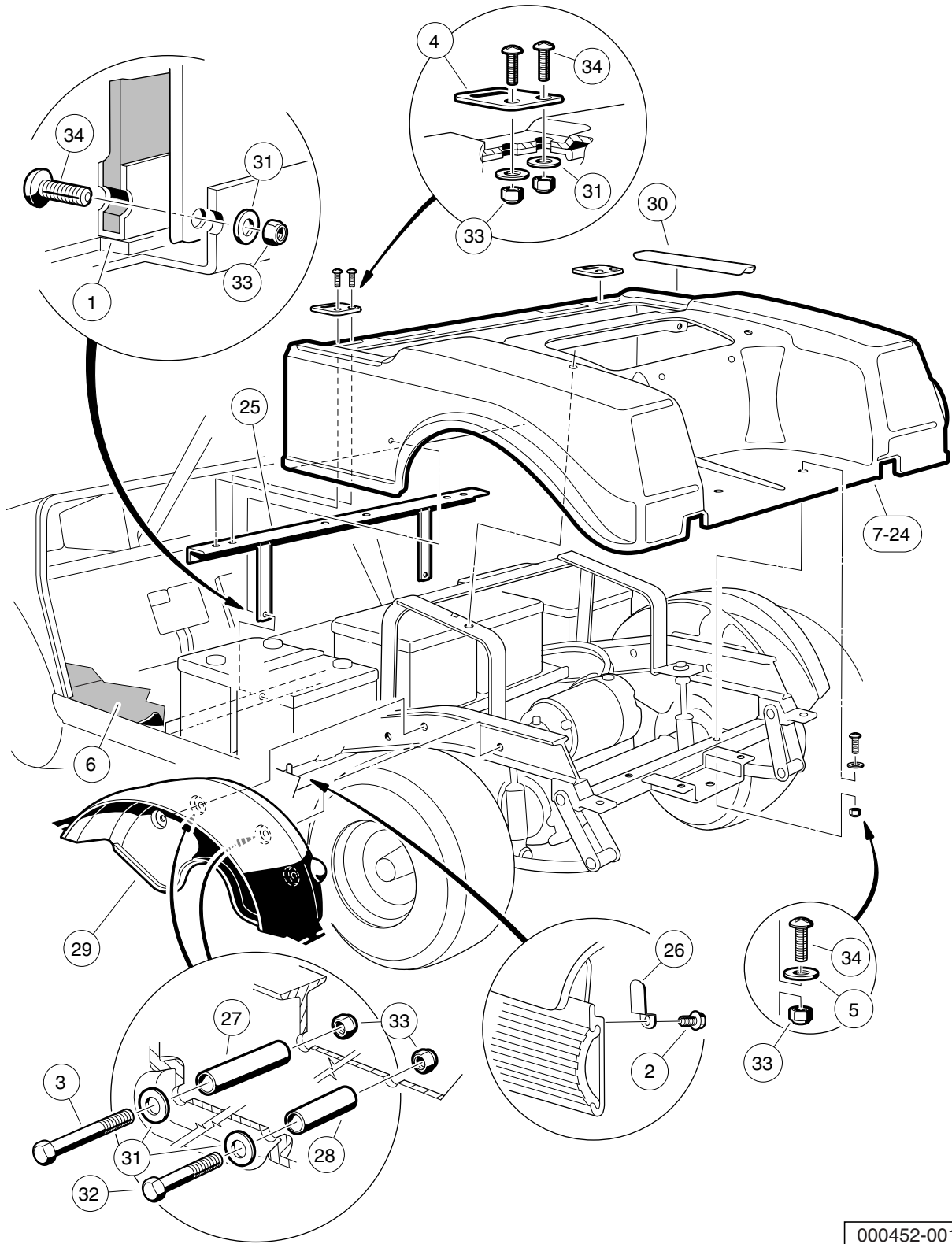
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## REAR BODY AND FENDER – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1010993	Body Kick Plate .....	1
2	1012047	Screw, #8-32 X .375 Self Tap .....	2
3	1012412	Body, Hinge Plate .....	2
4	1014306	Washer, 1/4" Type B Flat .....	2
5	101503202	Floormat .....	1
6	101692601	Body, Beige, TPO, Rear .....	1
7	101692602	Body, White, TPO, Rear .....	1
8	101692604	Body, Gray, TPO, Rear .....	1
9	101692606	Body, Red, TPO, Rear .....	1
10	101692609	Body, Pacific Blue (Royal Blue), TPO, Rear .....	1
11	101692610	Body, Dark Green, TPO, Rear .....	1
12	101692611	Body, Black, TPO, Rear .....	1
13	101692612	Body, Classic Blue, (Navy) TPO, Rear .....	1
14	101692613	Body, Burgundy, TPO, Rear .....	1
15	101696208	Body with Tail Light Hole, Beige, Rear .....	1
16	101696209	Body with Tail Light Hole, White, Rear .....	1
17	101696211	Body with Tail Light Hole, Gray, Rear .....	1
18	101696213	Body with Tail Light Hole, Red, Rear .....	1
19	101696215	Body with Tail Light Hole, Pacific Blue (Royal Blue), Rear .....	1
20	101696216	Body with Tail Light Hole, Dark Green, Rear .....	1
21	101696219	Body with Tail Light Hole, Black, Rear .....	1
22	101696220	Body with Tail Light Hole, Classic Blue, Rear .....	1
23	101696221	Body with Tail Light Hole, Burgundy, Rear .....	1
24	1017141	Body Support Weldment .....	1
25	1017748	Body Keeper Clip .....	2
26	1017936	Fender, Inner .....	2
27	102221201	Wear Pad .....	2
28	332	Washer, 1/4 Type A Narrow Flat .....	10
29	7847	Screw, 1/4-20 X 0.75 Hex-Head Cap .....	4
30	8233	Locknut, 1/4-20 Nylon Insert .....	12
31	8251	Screw, 1/4-20 X 1.0 Truss-Head Machine .....	8

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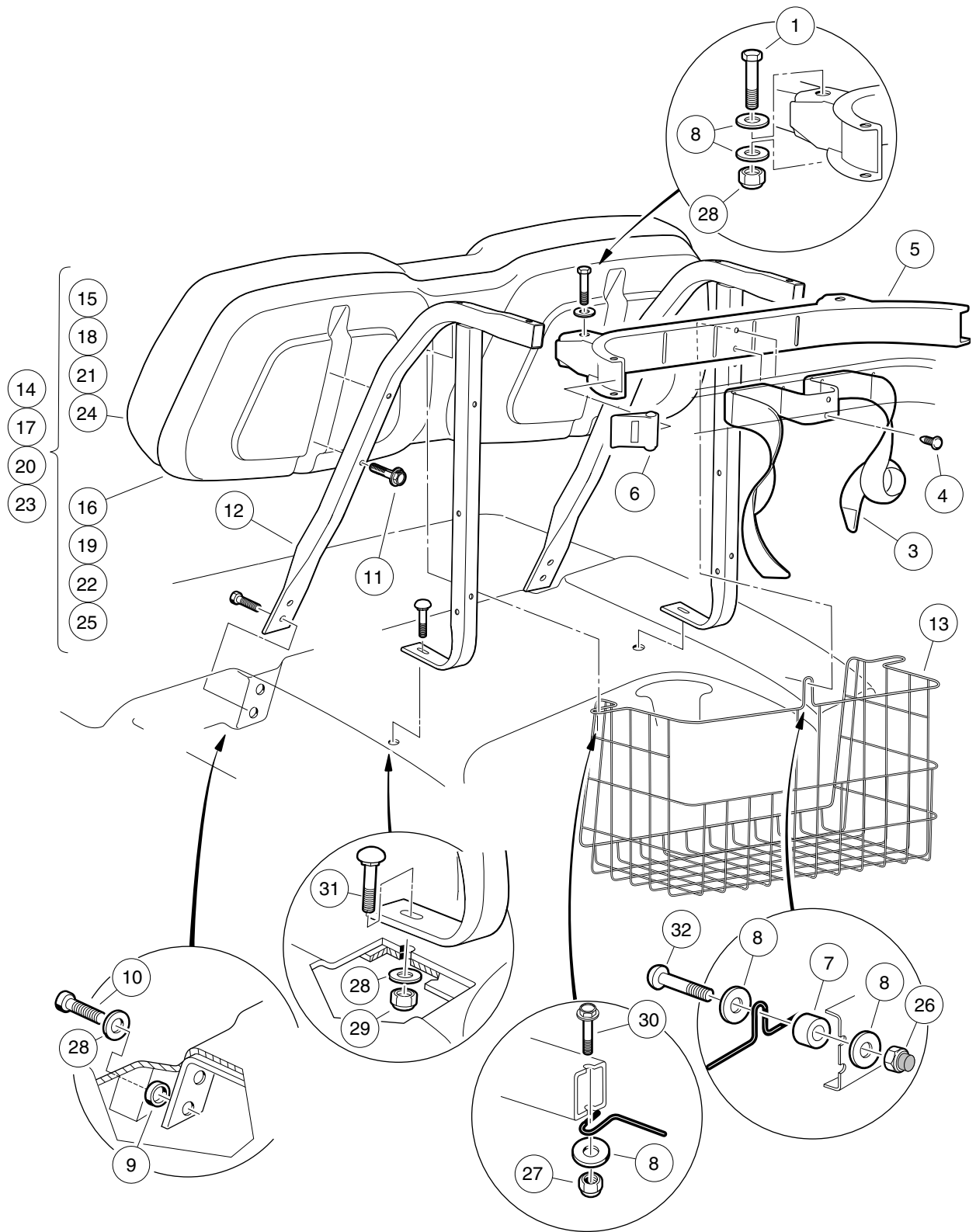
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## REAR BODY AND FENDER – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1010993	Body Kick Plate .....	1
2	1012047	Screw, #8-32 X .375 Self Tap .....	2
3	1012159	Bolt, 1/4-20 X 2.75 Hex-Head .....	2
4	1012412	Body, Hinge Plate .....	2
5	1014306	Washer, 1/4" Type B Flat .....	2
6	101503202	Floormat .....	1
7	101693301	Body, Beige, TPO, Rear .....	1
8	101693302	Body, White, TPO, Rear .....	1
9	101693304	Body, Gray, TPO, Rear .....	1
10	101693306	Body, Red, TPO, Rear .....	1
11	101693309	Body, Pacific Blue (Royal Blue), TPO, Rear .....	1
12	101693310	Body, Dark Green, TPO, Rear .....	1
13	101693311	Body, Black, TPO, Rear .....	1
14	101693312	Body, Classic Blue, TPO, Rear .....	1
15	101693313	Body, Burgundy, TPO, Rear .....	1
16	101696201	Body with Tail Light Hole, Beige, Rear .....	1
17	101696202	Body with Tail Light Hole, White, Rear .....	1
18	101696204	Body with Tail Light Hole, Gray, Rear .....	1
19	101696206	Body with Tail Light Hole, Red, Rear .....	1
20	101696217	Body, Rear W/tlt -ele Pacific Blue (Royal Blue) .....	1
21	101696218	Body with Tail Light Hole, Dark Green, Rear .....	1
22	101696222	Body with Tail Light Hole, Black, Rear .....	1
23	101696223	Body with Tail Light Hole, Classic Blue, Rear .....	1
24	101696224	Body with Tail Light Hole, Burgundy, Rear .....	1
25	1017141	Body Support Weldment .....	1
26	1017748	Body Keeper Clip .....	2
27	1017814	Spacer, 1.88-inch .....	2
28	1017815	Spacer, 0.5-inch .....	2
29	1017936	Fender, Inner .....	2
30	102221201	Wear Pad .....	2
31	332	Washer, 1/4 Type A Narrow Flat .....	10
32	7479	Screw, 1/4-20 X 1.25 Hex-Head Cap .....	2
33	8233	Locknut, 1/4-20 Nylon Insert .....	12
34	8251	Screw, 1/4-20 X 1.0 Truss-Head Machine .....	8

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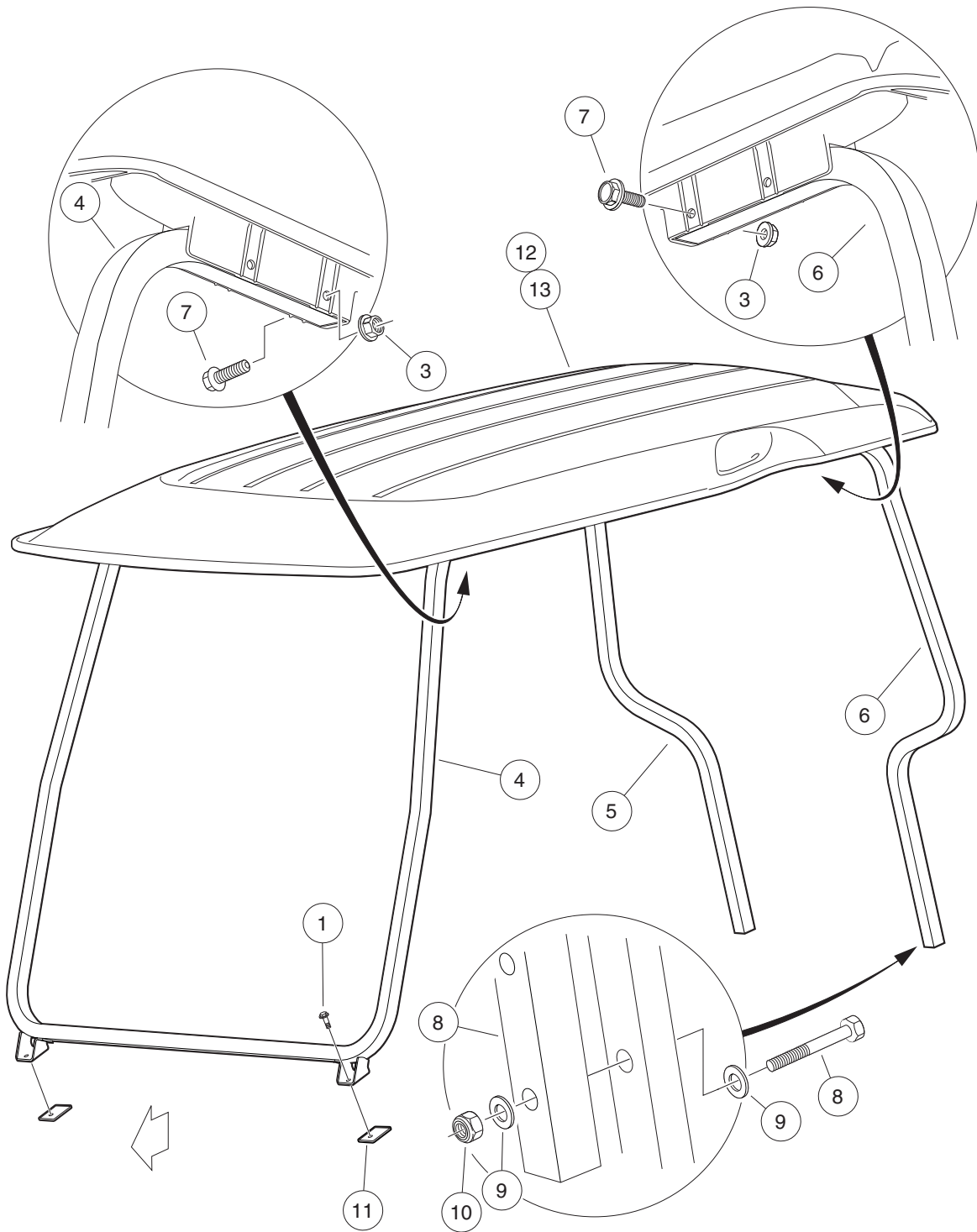


# SEAT BACK AND BAG HOOP

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1010921	Screw, 5/16-18 X 2.50 Hex Cap .....	2
2	1013935	Bag Hoop W/buckle & Strap Asm (includes items 3 through 6) .....	1
3	1010413	Bag Strap Assembly .....	1
4	1010434	Barrel - Plastic .....	2
5	N/A	Molded Bag Hoop .....	1
6	1013754	Buckle, Bag Strap .....	2
7	1014482	Spacer, Nylon .....	1
8	1015075	Washer, 5/16 Flat Type A .....	8
9	1017774	Body Spacer .....	4
10	101910401	Screw, 5/16-18 X 1.25 Thrd Frm .....	4
11	102076701	Screw, 1/4-20 X 1.75 Hex Sems .....	4
12	102236601	Support Weldment .....	2
13	102236703	Sweater Basket, Black .....	1
14	102238301	Kit, Seat Back, Buff (includes items 15 and 16) .....	1
15	102060511	Skin Seat Back, Beige .....	1
16	102237001	Cap - Seat Back .....	1
17	102238302	Kit, Seat Back, White (includes items 18 and 19) .....	1
18	102060512	Skin Seat Back, White .....	1
19	102237001	Cap - Seat Back .....	1
20	102238304	Kit, Seat Back, Black (includes items 21 and 22) .....	1
21	102060514	Skin Seat Back, Black .....	1
22	102237001	Cap - Seat Back .....	1
23	102238305	Kit, Seat Back, Gray (includes items 24 and 25) .....	1
24	102060515	Skin Seat Back, Gray .....	1
25	102237001	Cap - Seat Back .....	1
26	102242401	Nut - Nylon Insert W/cap .....	1
27	1028	Nut, 1/4-20 Hex .....	2
28	1241	Washer, 5/16 Type A Flat .....	6
29	7473	Locknut, 5/16-18 Nylon Insert .....	4
30	7479	Screw, 1/4-20 X 1.25 Hex-Head Cap .....	2
31	7818	Bolt, Carriage, 5/16-18 X 1.5 .....	2
32	8418	Screw, 1/4-20 X 1.50 Phillips Truss-Head .....	1

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000454-001

# CANOPY

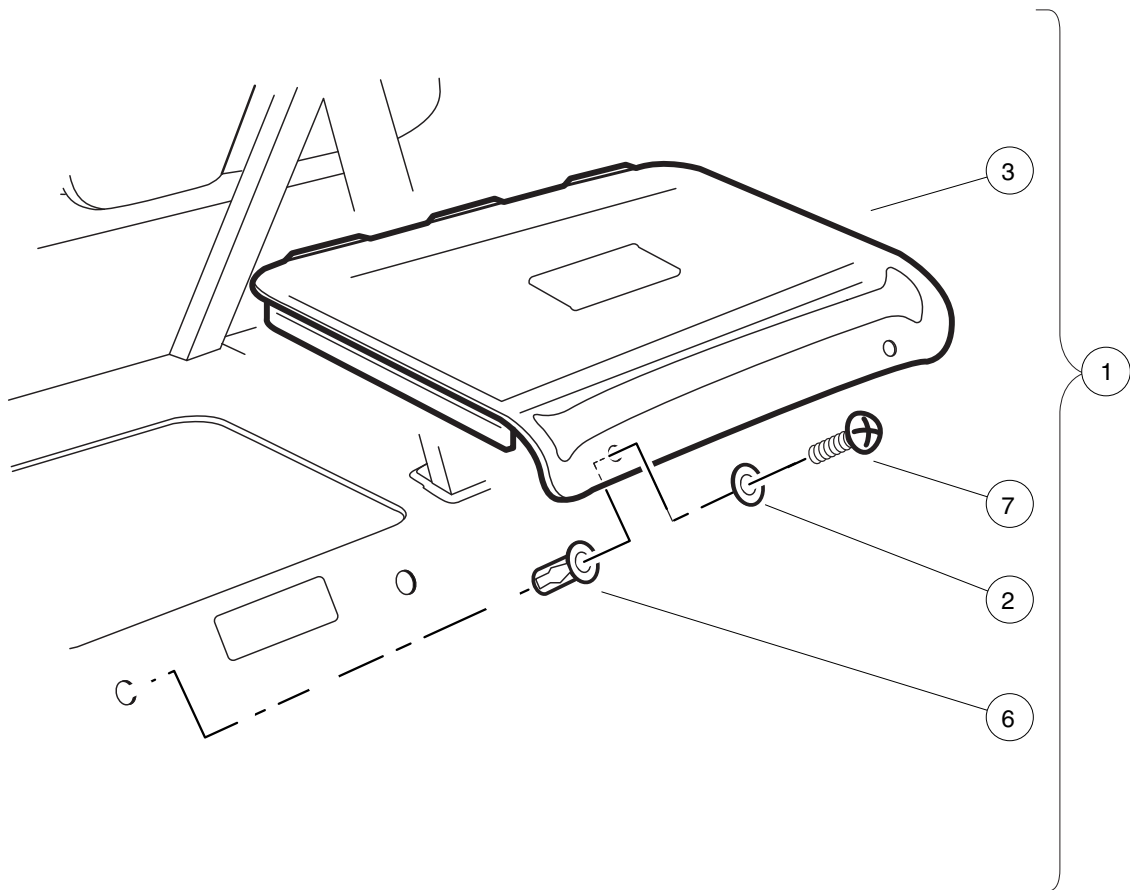
ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	102099101	Screw, 5/16-18 X 1.00 Hex Sems .....	2
2	102155501	Canopy Kit Struts (includes items 3 through 10) .....	1
3	101835601	Locknut, 1/4-20 Hex Whiz .....	8
4	102063901	Weldment - Windshield Frame .....	1
5	102064601	Support, Rear Canopy, Right-Hand .....	1
6	102065501	Support, Rear Canopy Left-Hand .....	1
7	102076701	Screw, 1/4-20 X 1.75 Hex Sems .....	8
8	324	Screw, 1/4-20 X 2.50 Hx Hd Cap .....	4
9	332	Washer, 1/4 Type A Narrow Flat .....	8
10	8233	Locknut, 1/4-20 Nylon Insert .....	4
11	102198301	Pad, Windshield Frame .....	2
12	N/A	Canopy, 2pass, Ds, White .....	1
13	N/A	Canopy, 2pass, Ds, Beige .....	1

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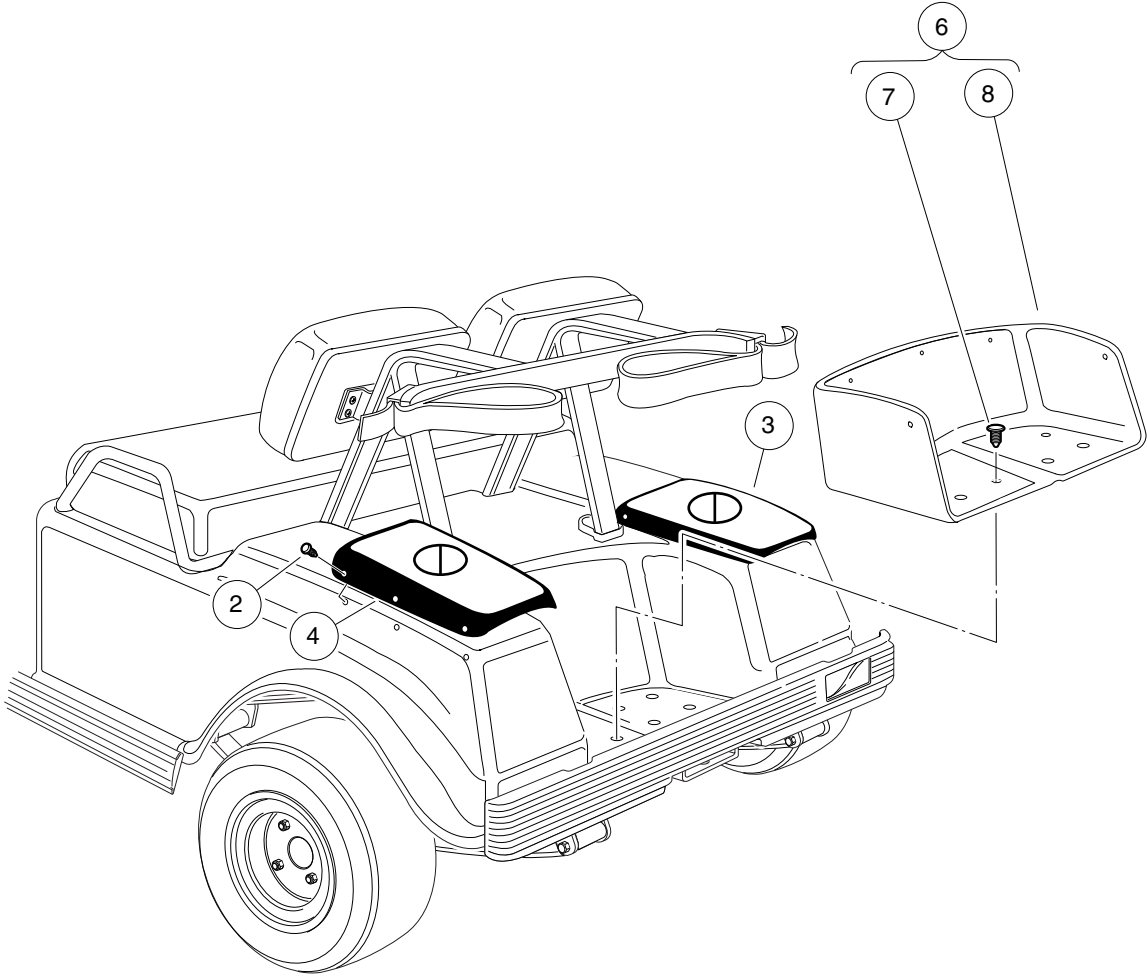
000783-001

# REAR ACCESS DOOR

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1013218	Kit, Access Door Black (includes items 2 through 7) .....	1
2	1012581	Washer, 0.609-inch OD, Nylon Cup .....	2
3	1013032	Molded Access Door Black .....	1
4	1013216	Plug, Button .....	2
5	N/A	Instruction Sheet Access Door .....	1
6	1015525	Nut, 1/4-20 Blind .....	2
7	8251	Screw, 1/4-20 X 1.0 Truss-Head Machine .....	2

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APM-000063-001

# SCUFF GUARD AND BAGWELL PROTECTOR KITS

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101706702	Scuff Guard Kit, TPO Body (includes items 2 through 5) .....	1
2	1010434	Barrel - Plastic .....	12
3	101776201	Scuff Guard Rh .....	1
4	101776301	Scuff Guard Lh .....	1
5	N/A	Instructions, Scuff Grd Instal .....	1
6	101768202	Bagwell Protector Kit (includes items 7 through 9) .....	1
7	1010434	Barrel - Plastic .....	9
8	1017267	Protector Bagwell .....	1
9	N/A	Instruction .....	1
10	101768204	Bagwell Protector - Ten Pack (includes items 11 through 13) .....	A/R
11	1010434	Barrel - Plastic .....	90
12	1017267	Protector Bagwell .....	10
13	N/A	Instruction .....	1

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# WHEELS AND TIRES

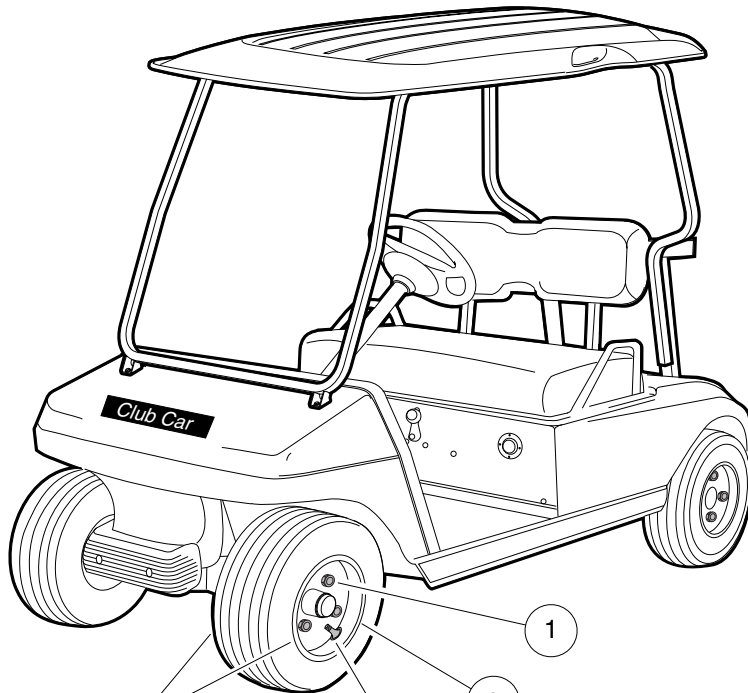
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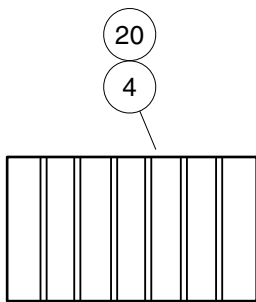
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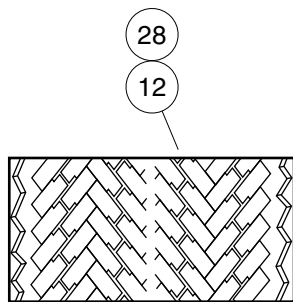
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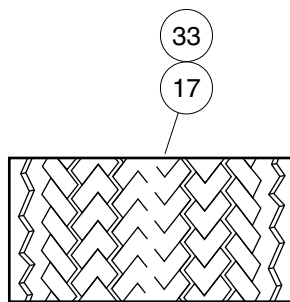
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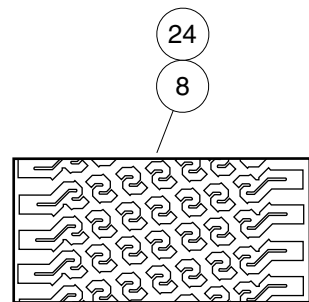
STANDARD TREAD  
Carlisle®



PERFORMANCE  
GRADE TREAD  
Duro®



PREMIUM TREAD  
Kenda®



EXTRA TRACTION  
Duro

Note: The performance grade tire has the wheel and tire matched and balanced at the Duro tire factory.

000457-001

# WHEELS AND TIRES

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1010984	.500-20 Unf Lug Nut .....	16
2	101570501	Tire/Wheel Asm, Beige, Standard Tread (includes items 3 through 5) .....	4
3	1015707	Wheel Rim, Beige .....	1
4	727102	Tire Unmto Turf Glde 18x8.50-8 .....	1
5	7310	Valve Stem .....	1
6	101570507	Tire/Wheel Asm, Beige, Xtrac Tread, 6-ply (includes items 7 through 9) .....	2
7	1015707	Wheel Rim, Beige .....	1
8	101769302	Tire, Unmounted Xtrac 18 x 8.50-8 .....	1
9	7310	Valve Stem .....	1
10	101570512	Tire/Wheel Asm, Beige, Duro Premium Tread (includes items 11 through 13) .....	4
11	1015707	Wheel Rim, Beige .....	1
12	102569304	Duro 18 X 8.5 X 8, 4-Ply .....	1
13	7310	Valve Stem .....	1
14	101570513	Tire/Wheel Asm, Beige, Kenda Premium Tread (includes items 15 through 17) .....	4
15	1015707	Wheel Rim, Beige .....	1
16	7310	Valve Stem .....	1
17	AM10682	Unmounted Prem Tire 18x8.50x8 .....	1
18	101651401	Tire/Wheel Asm, White, Standard Tread (includes items 19 through 21) .....	4
19	1014771	Wheel Rim, White .....	1
20	727102	Tire Unmto Turf Glde 18x8.50-8 .....	1
21	7310	Valve Stem .....	1
22	101651407	Tire/Wheel Asm, White, Extra-Traction, 6-Ply (includes items 23 through 25) .....	2
23	1014771	Wheel Rim, White .....	1
24	101769302	Tire, Unmounted Xtrac 18 x 8.50-8 .....	1
25	7310	Valve Stem .....	1
26	101651412	Tire/Wheel Asm, White, Duro Premium Tread (includes items 27 through 29) .....	4
27	1014771	Wheel Rim, White .....	1
28	102569304	Duro 18 X 8.5 X 8, 4-Ply .....	1
29	7310	Valve Stem .....	1
30	101651413	Tire/Wheel Asm, White, Kenda Premium Tread (includes items 31 through 33) .....	4
31	1014771	Wheel Rim, White .....	1
32	7310	Valve Stem .....	1
33	AM10682	Unmounted Prem Tire 18x8.50x8 .....	1

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# DECALS

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**⚠ WARNING**  
**ROLLOVER OR FALLING OFF MAY CAUSE DEATH.**

- Before using vehicle, read operating instructions.
- Remain seated and hold on to seat handle while moving.
- Do not start vehicle until all occupants are seated.
- Two (2) persons per seat maximum.
- Operate from driver side only and not on public roads.
- Keep entire body inside vehicle while moving.
- Drive slowly in turns and straight up and down slopes.
- Do not leave children unattended on vehicle.
- Never operate under the influence of alcohol or drugs.
- Use brakes to reduce speed when coasting downhill.
- Never stand in front of or behind vehicle.

CCI 1019606-01

**OFF | ON**

**OPERATING INSTRUCTIONS**

- Read owner's manual and safety warnings located on dash panel prior to driving.
- Study and understand controls.

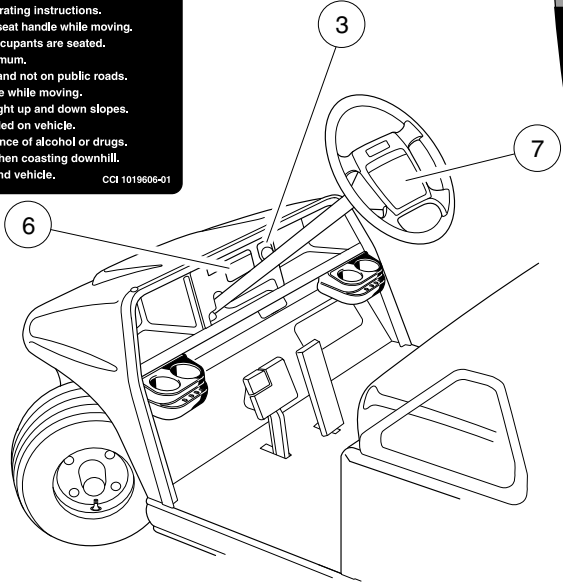
**TO OPERATE**

- Turn wheels to desired direction and ensure path is clear.
- Turn key to ON position.
- While stopped, place shift lever in desired position:  
 F=Forward N=Neutral R=Reverse (Buzzer will sound)
- Park brake will release and vehicle will start moving when accelerator pedal is pressed.
- Slowly press accelerator pedal to increase speed.
- To stop, release accelerator pedal and press brake pedal.

**BEFORE LEAVING**

- Press park brake pedal until it locks and holds vehicle.
- Place Forward/Reverse switch in NEUTRAL position.
- Turn key OFF and remove key when not in use.

CCI 10259201



**⚠ WARNING**  
**CAN CAUSE SEVERE INJURY**

**Rotating parts**

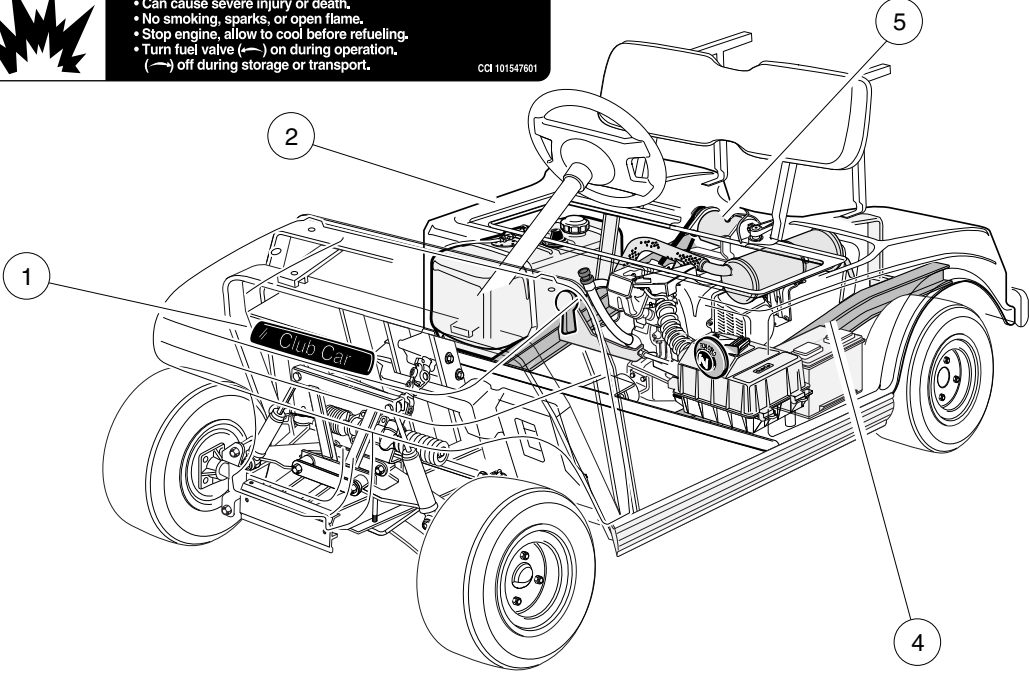
**HOT manifold & muffler**

**KEEP CLEAR** CCI 1019605-01

**⚠ WARNING**  
**GASOLINE EXPLOSION / FIRE.**

- Can cause severe injury or death.
- No smoking, sparks, or open flame.
- Stop engine, allow to cool before refueling.
- Turn fuel valve (←) on during operation, (→) off during storage or transport.

CCI 101547601



**⚠ WARNING**

**Negative frame ground. Can cause severe injury. Do not contact positive (+) battery post or cable to frame. Disconnect negative battery cable first.**

**⚠ WARNING**

**Excessive speed can cause severe injury or death. Do not tamper with engine governor adjustment.**

CCI 101915201

000458-001

## DECALS – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1014198	Nameplate Kit (gold) .....	1
2	101547601	Decal, Gasoline Explosion/Fire Warning .....	1
3	101825101	Decal, Off/On .....	1
4	101915201	Decal, Frame Ground and Governor Warning .....	1
5	101960501	Decal, Rotating Parts/Hot Manifold .....	2
6	101960601	Decal, Dash Warning .....	1
7	102519201	Decal, Operating Instr, Gas .....	1

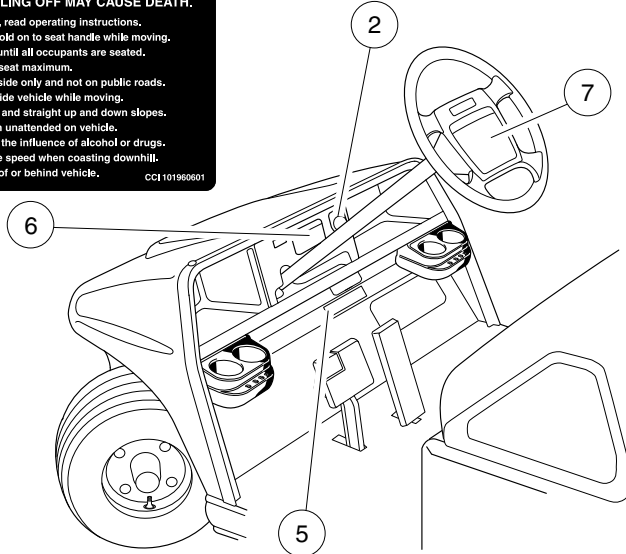
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**⚠ WARNING**  
**ROLLOVER OR FALLING OFF MAY CAUSE DEATH.**

- Before using vehicle, read operating instructions.
- Remain seated and hold on to seat handle while moving.
- Do not start vehicle until all occupants are seated.
- Two (2) persons per seat maximum.
- Operate from driver side only and not on public roads.
- Keep entire body inside vehicle while moving.
- Drive slowly in turns and straight up and down slopes.
- Do not leave children unattended on vehicle.
- Never operate under the influence of alcohol or drugs.
- Use brakes to reduce speed when coasting downhill.
- Never stand in front of or behind vehicle.

CCI101960601

**OFF | ON**



**OPERATING INSTRUCTIONS**

- Read owner's manual and dash-mounted safety warnings prior to driving.
- Study and understand controls.

**TO OPERATE**

- Turn wheels to desired direction and ensure path is clear.
- Turn key to ON position.
- While stopped, place Forward/Reverse switch in desired position: F=Forward, N=Neutral, R=Reverse (Buzzer will sound)
- Park brake will release and vehicle will start moving when accelerator pedal is pressed.
- Slowly press accelerator pedal to increase speed.
- To stop, release accelerator pedal and press brake pedal.

**BEFORE LEAVING**

- Press park brake pedal until it locks and holds vehicle.
- Place Forward/Reverse switch in NEUTRAL position.
- Turn key OFF and remove key when not in use.

**MOTOR BRAKING**

- Electric motor braking provides speed regulation functions.
- For parked vehicle, beeping alarm indicates vehicle roll away.
- In operation, beeping alarm indicates reduction in motor braking.
- Apply brakes to further reduce vehicle speed as required.
- System is activated only when tow switch is in the RUN position.
- When towing this vehicle, tow switch must be in the TOW position.

CCI 10258001

**IMPORTANT NOTICE**

- Maximum vehicle speed is limited by motor braking during downhill operation with accelerator pedal depressed.
- If motor brake enabled, vehicle motor will brake when accelerator pedal is released.
- Beeping alarm indicates reduction in motor braking. Apply brakes to reduce speed.
- System is activated only when tow switch is in the "RUN" position.
- When towing vehicle, tow switch must be in the "TOW" position.

101959902

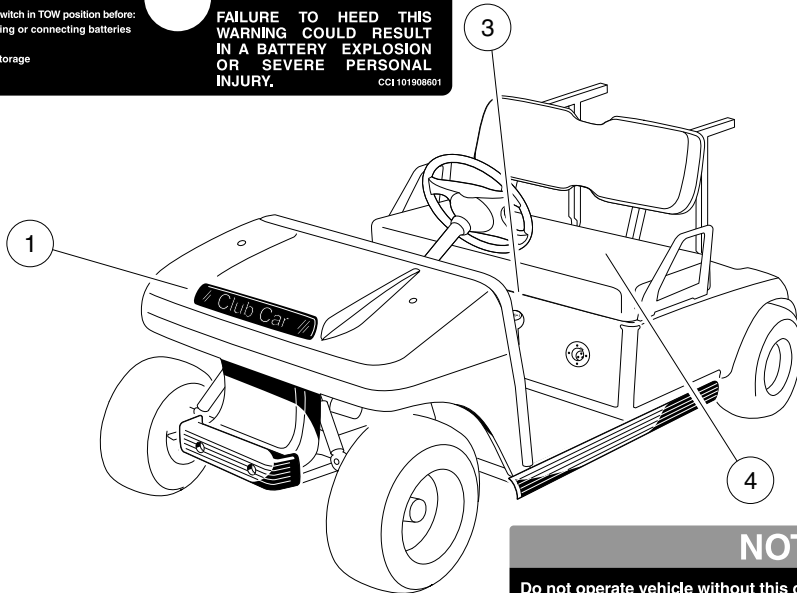
**⚠ WARNING** TOW RUN

Place Tow/Run switch in TOW position before:

- Disconnecting or connecting batteries
- Towing
- Extended storage
- Servicing

**FAILURE TO HEED THIS WARNING COULD RESULT IN A BATTERY EXPLOSION OR SEVERE PERSONAL INJURY.**

CCI101908601



**NOTICE**

Do not operate vehicle without this cover properly installed.  
 Do not direct water stream in this area; will cause damage to components.  
 See vehicle maintenance and service manual before servicing.

CCI 101931501

000459-001



## DECALS – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1014198	Nameplate Kit (gold) .....	1
2	101825101	Decal, Off/On .....	1
3	101908601	Decal, Tow/Run Switch Warning .....	1
4	101931501	Decal, Component Cover .....	1
5	101959902	Decal, IQ System Motor Braking .....	1
6	101960601	Decal, Dash Warning .....	1
7	102518001	Decal, Operating Instr, Elec .....	1

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# **BRAKES, PEDAL, AND CABLE ASSEMBLIES**

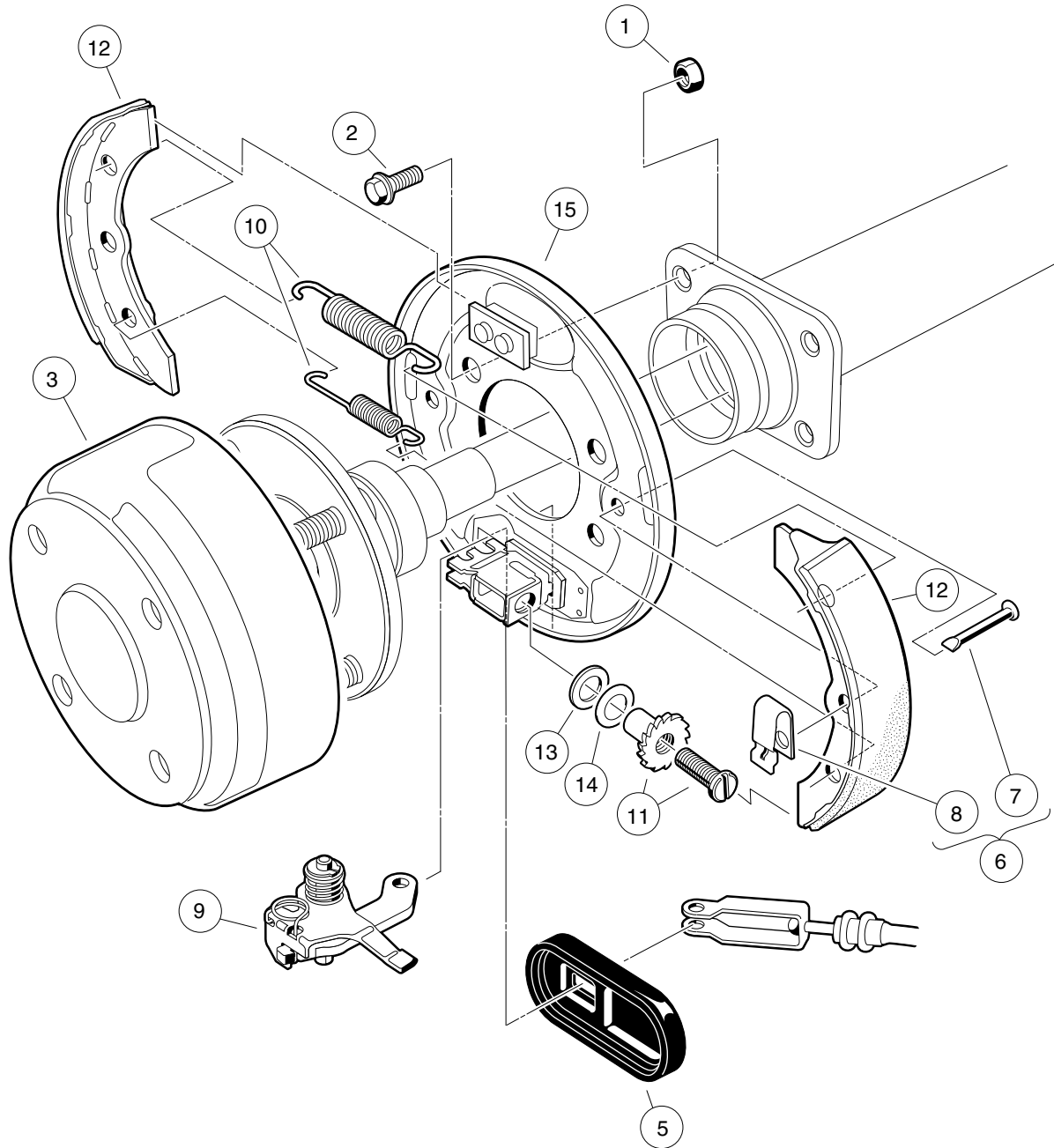
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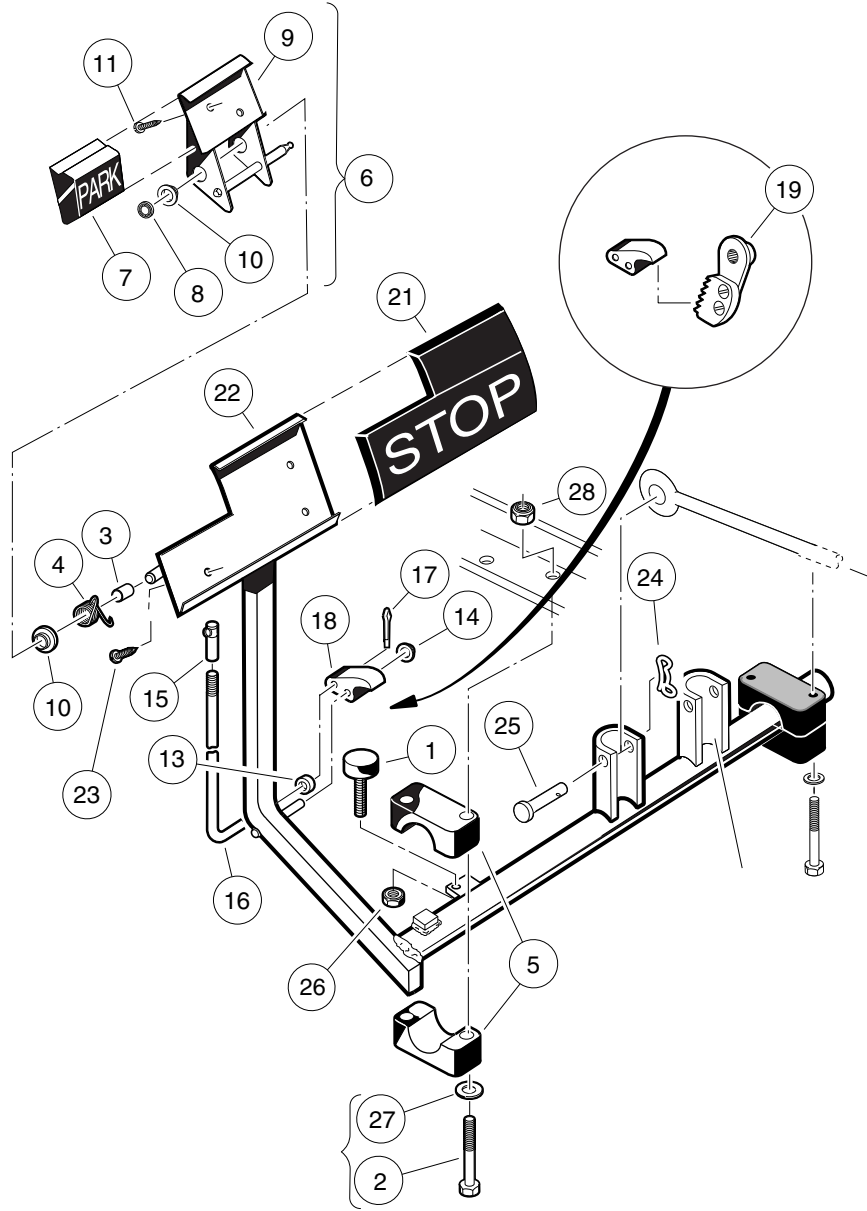
000186-001

## REAR BRAKE ASSEMBLY, SELF-ADJUSTING

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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	101823301	Cluster Assembly, Right (Passenger) Brake (includes items 5 through 15) .....	1
5	1010850	Dust Cover .....	1
6	1011466	Kit, Shoe Retainer (includes items 7 and 8) .....	1
7	N/A	Pin .....	2
8	N/A	Shoe Clamp Spring .....	2
9	101815501	Lever Assembly, Self-Adjusting Brake, Right (Passenger) .....	1
10	101816301	Package, Brake Spring, Self-Adjusting .....	1
11	101816501	Adj Mechanism, S.A. Brakes, Right (Passenger) .....	1
12	101823201	Package, Brake Shoe, Self-Adjusting .....	1
13	101823801	Plate, Washer, Brake, Self-Adjusting .....	1
14	101823901	Washer, Brake, Self-Adjusting .....	1
15	101824001	Plate Assembly, Right Brake Backing .....	1
16	101823302	Cluster Assembly, Left Brake (includes items 17 through 27) .....	1
17	1010850	Dust Cover .....	1
18	1011466	Kit, Shoe Retainer (includes items 19 and 20) .....	1
19	N/A	Pin .....	2
20	N/A	Shoe Clamp Spring .....	2
21	101815502	Lever Assembly, Self-Adjusting Brake, Left .....	1
22	101816301	Package, Brake Spring, Self-Adjusting .....	1
23	101816502	Adjusting Mechanism, Self-Adjusting Brake, Left .....	1
24	101823201	Package, Brake Shoe, Self-Adjusting .....	1
25	101823801	Plate, Washer, Brake, Self-Adjusting .....	1
26	101823901	Washer, Brake, Self-Adjusting .....	1
27	101824002	Plate Assembly, Left Brake Backing .....	1
<p>Note: Driver-side brake cluster not shown. Components have a similar appearance to passenger-side brake cluster components.</p>			

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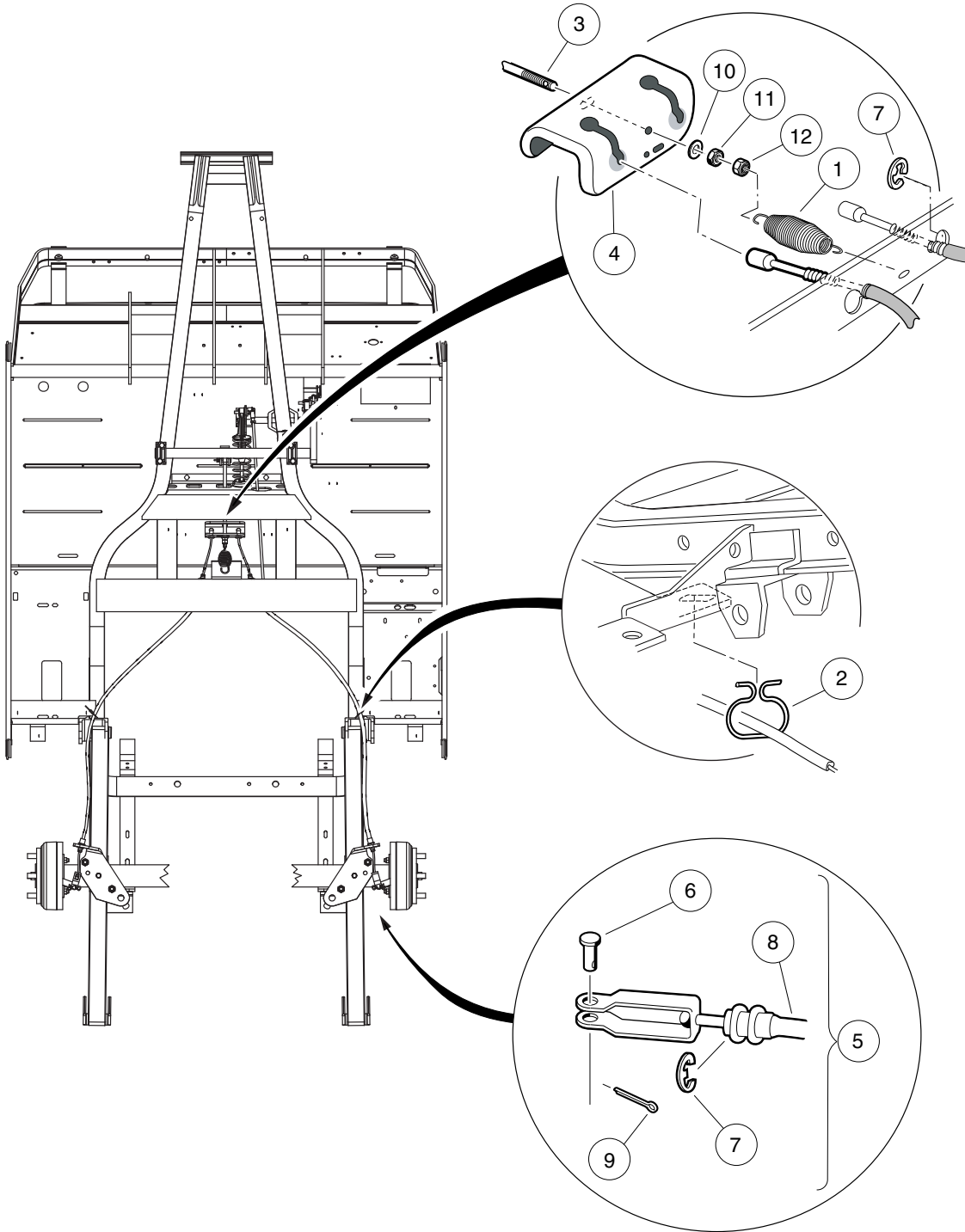


000187-001

# BRAKE PEDAL ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY	
		<b>1 2 3 4</b>		<b>4</b>
1	1010878	Bumper, Rubber .....	1	<b>G</b>
2	1010921	Screw, 5/16-18 X 2.50 Hex Cap .....	4	<b>E</b>
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	

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## BRAKE CABLE, EQUALIZER, AND EQUALIZER ROD

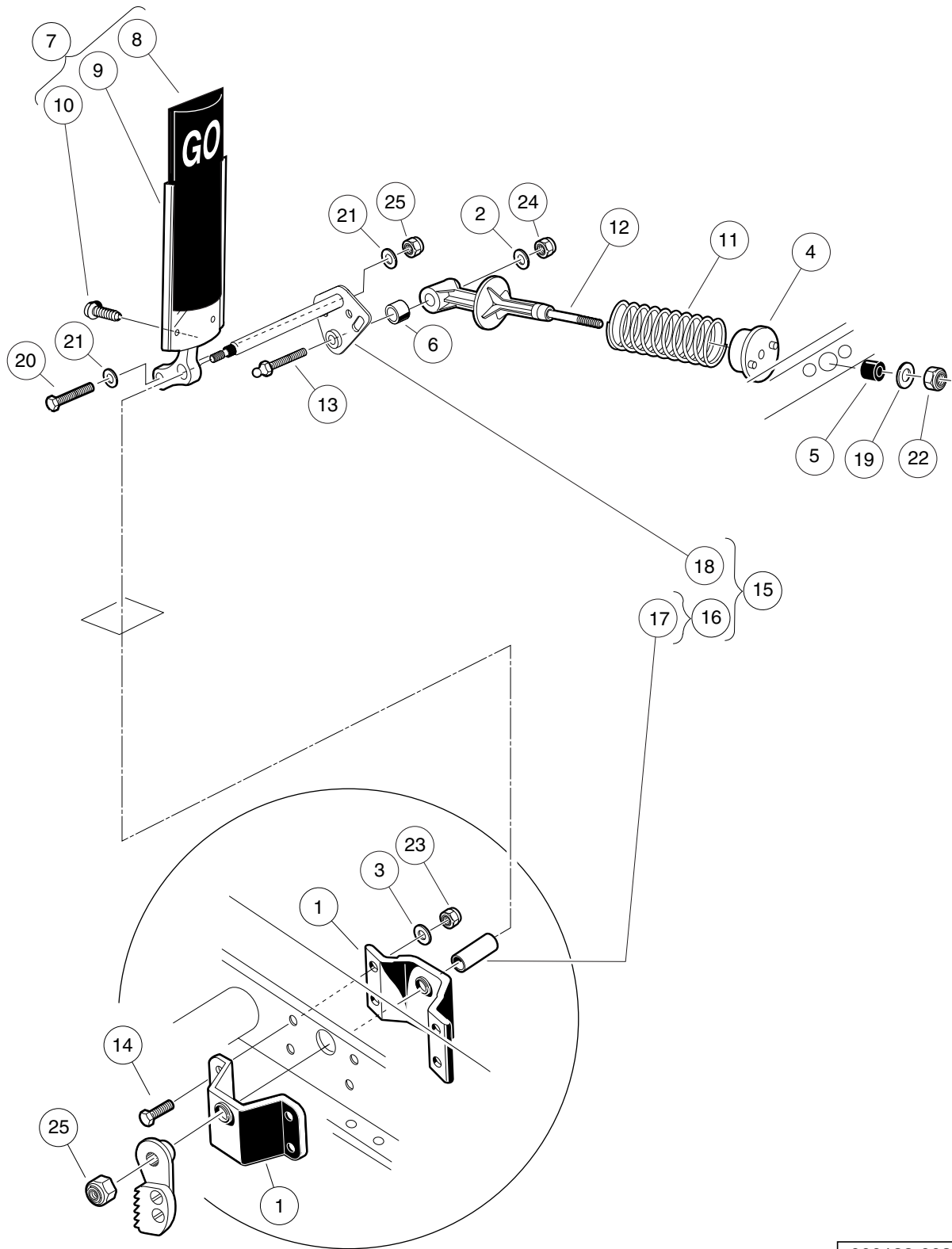
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1013531	Spring, Brake Return .....	1
2	101900801	Hanger, Brake Cable .....	2
3	101953101	Rod, Equalizer .....	1
4	101990801	Equalizer Bracket .....	1
5	102022101	Brake Cable Kit (includes items 6 through 9) .....	2
6	1010829	Pin, Clevis, 5/16 X 3/4 .....	1
7	1011779	E-Clip, 1/2 .....	2
8	N/A	Cable, Brake .....	1
9	1035	Cotter Pin, 3/32 x 1 .....	1
10	1241	Washer, 5/16 Type A Flat .....	5
11	1242	Nut, 5/16-18 Hex .....	1
12	7473	Locknut, 5/16-18 Nylon Insert .....	5

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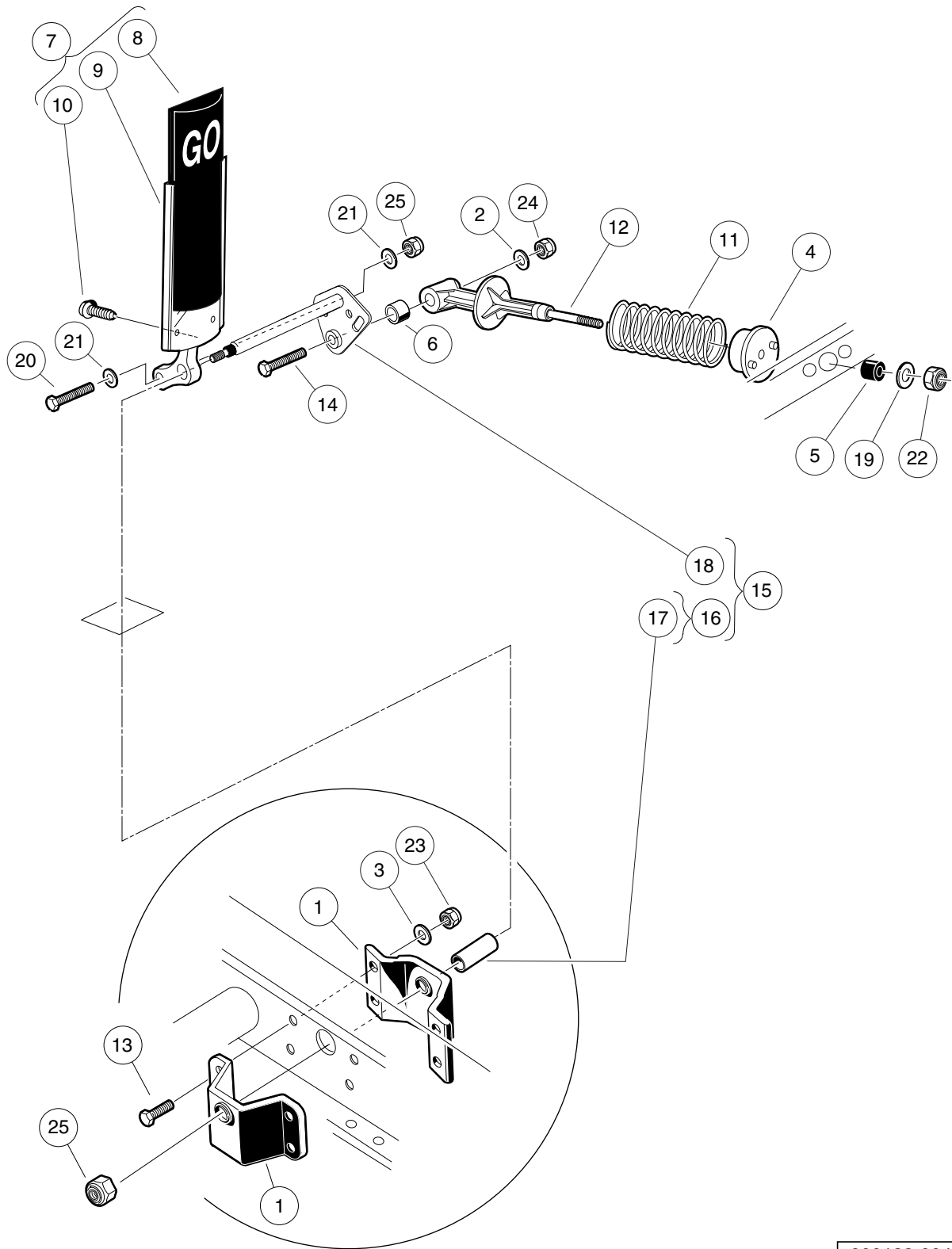
000188-003

# ACCELERATOR PEDAL ASSEMBLY – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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	N/A	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

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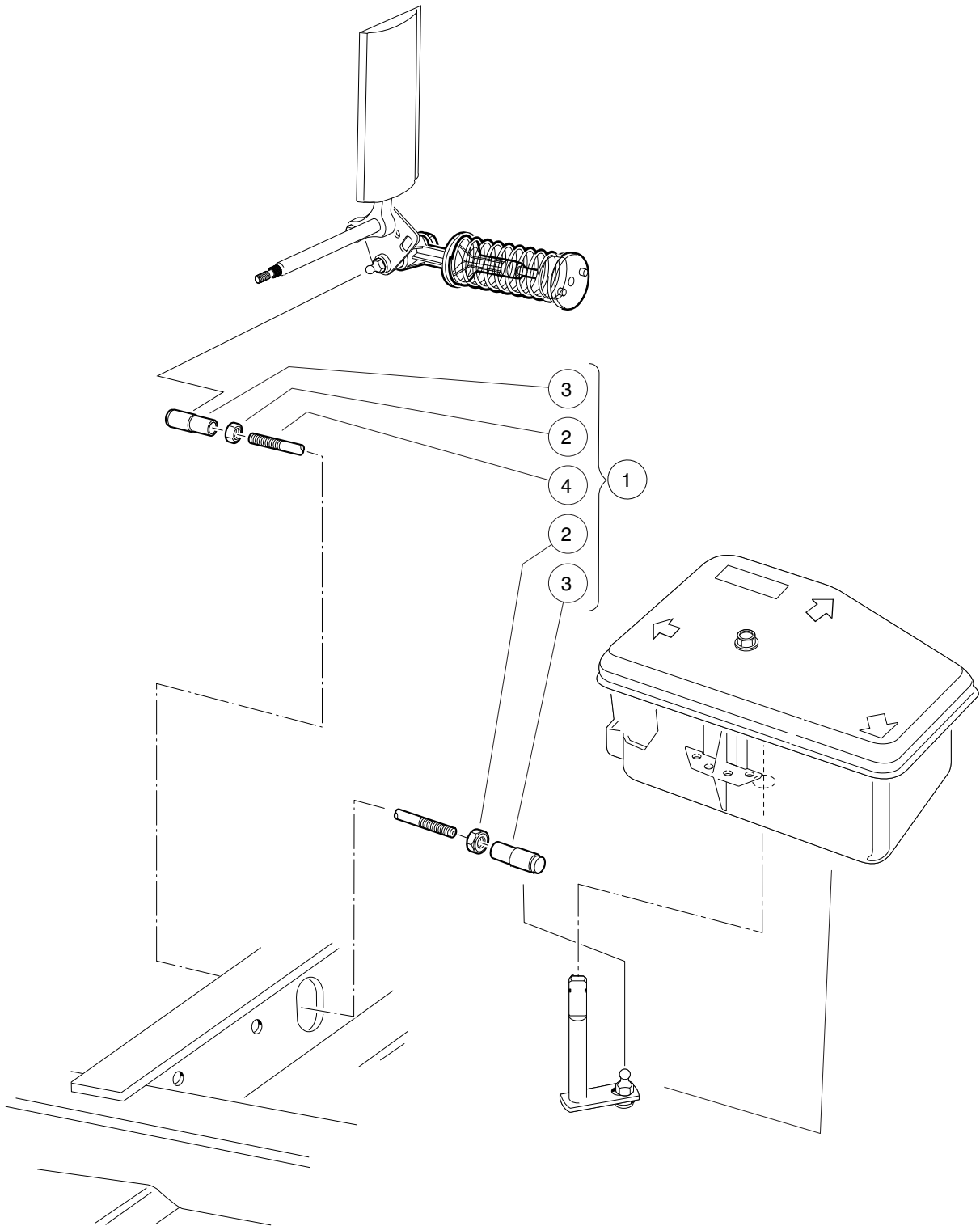
000188-004

# ACCELERATOR PEDAL ASSEMBLY – ELECTRIC VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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	N/A	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

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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

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# STEERING, FRONT AND REAR SUSPENSION

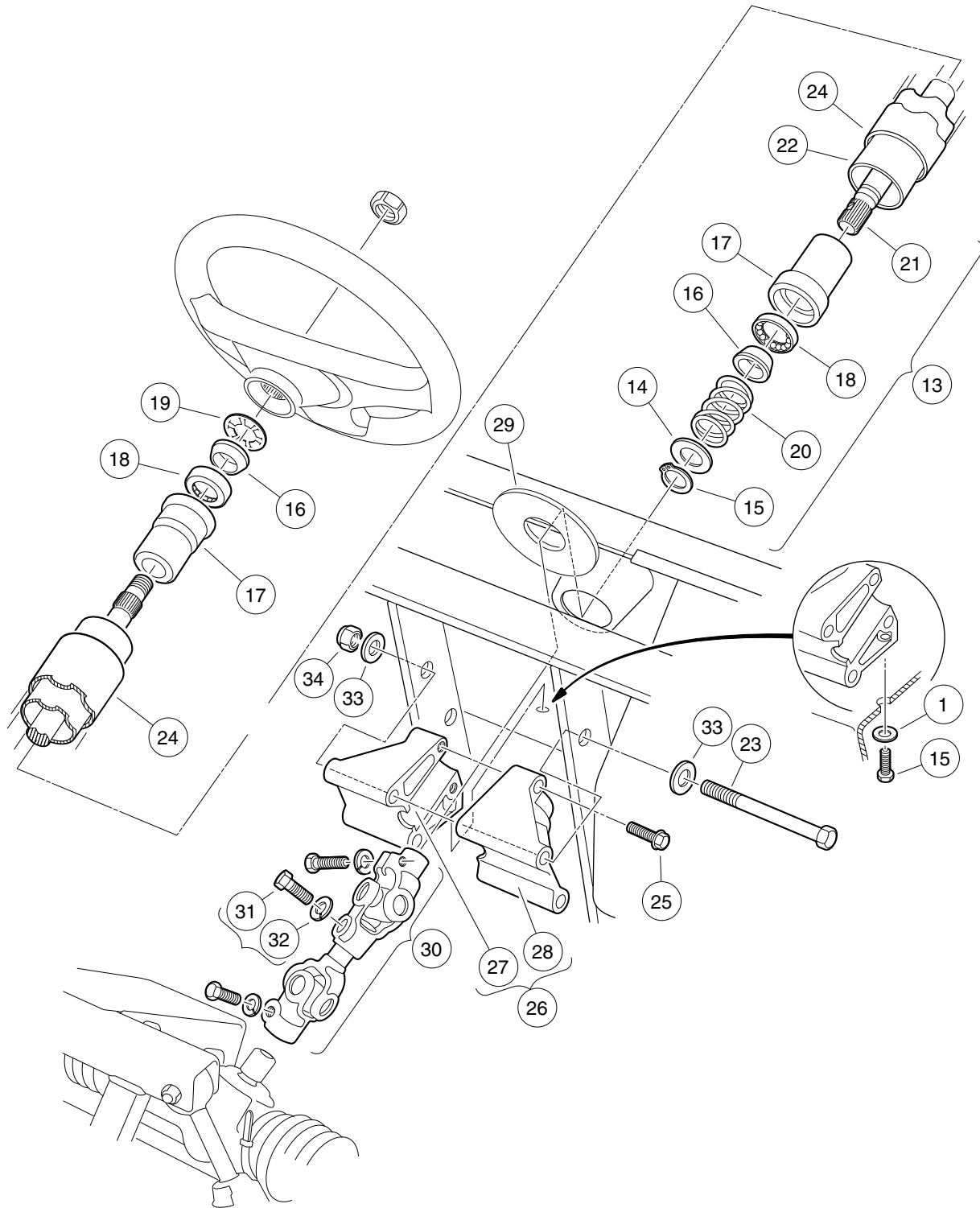
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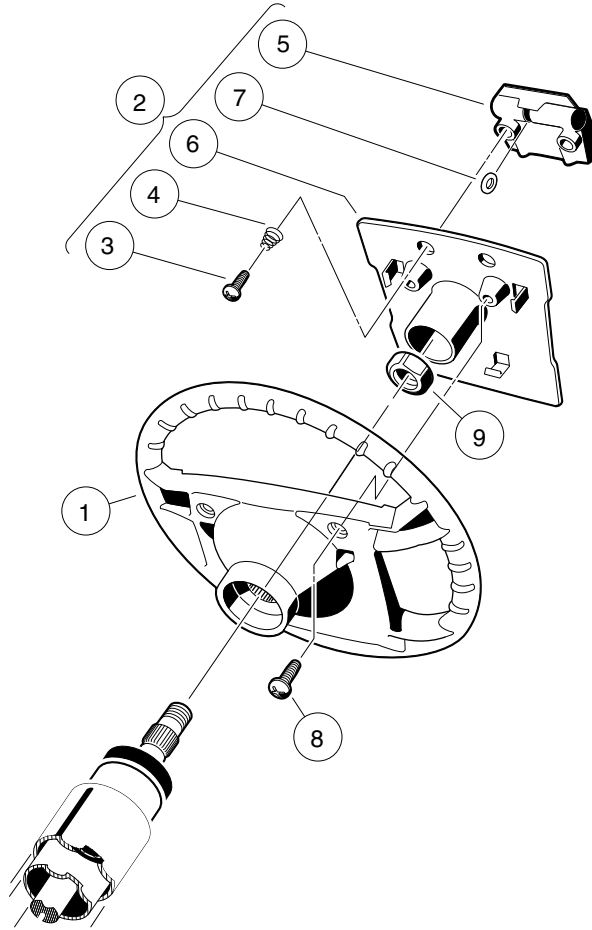
000247-002

# STEERING COLUMN

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1011697	Washer, 5/16 Flat .....	1
2	1014216	Steering Column Rebuild Kit (includes items 3 through 11) .....	1
3	1012466	Dust Cover .....	1
4	1012605	Ring, 0.579 Internal Retaining .....	1
5	1014125	Wedge, Molded .....	2
6	1014126	Seat, Plastic Bearing .....	2
7	1014211	Seal, Bearing .....	1
8	1014212	Spacer, Shaft .....	1
9	1014213	Bearing, Ball .....	2
10	1014214	Ring, Retaining .....	1
11	1014217	Spring, Steering Shaft .....	1
12	1014288	Screw, 5/16-18 X 0.75 Thread-Forming .....	1
13	1016181	Steering Shaft Assembly (includes items 14 through 22) .....	1
14	1012604	Washer, 0.675 ID X 1.19 OD .....	1
15	1012605	Ring, 0.579 Internal Retaining .....	1
16	1014125	Wedge, Molded .....	2
17	1014126	Seat, Plastic Bearing .....	2
18	1014213	Bearing, Ball .....	2
19	1014214	Ring, Retaining .....	1
20	1014217	Spring, Steering Shaft .....	1
21	1015545	Shaft, Steering Column .....	1
22	1016622	Column, Aluminum Steering .....	1
23	1016183	Screw, 3/8-16 X 7.00 Hex Cap .....	2
24	1016263	Cover, Steering Column Tube .....	1
25	1016269	Screw, 5/16-18 Thrd Forming .....	2
26	101984801	Kit, Steering Column Mounting Bracket (includes items 27 and 28) .....	1
27	N/A	Bracket, RH Steering Column Mount .....	1
28	N/A	Bracket, LH Steering column mount .....	1
29	102278001	Boot, Steering Column Round .....	1
30	103601601	Shaft, Intermediate Steering (includes items 31 and 32) .....	1
31	1017226	Bolt, Hex-Head, 8mm X 1.25 - 30 .....	3
32	7174	Lockwasher, 5/16 Split .....	3
33	334	Washer, 3/8 Type A Flat .....	4
34	8754	Locknut, 3/8-16 Hex .....	2

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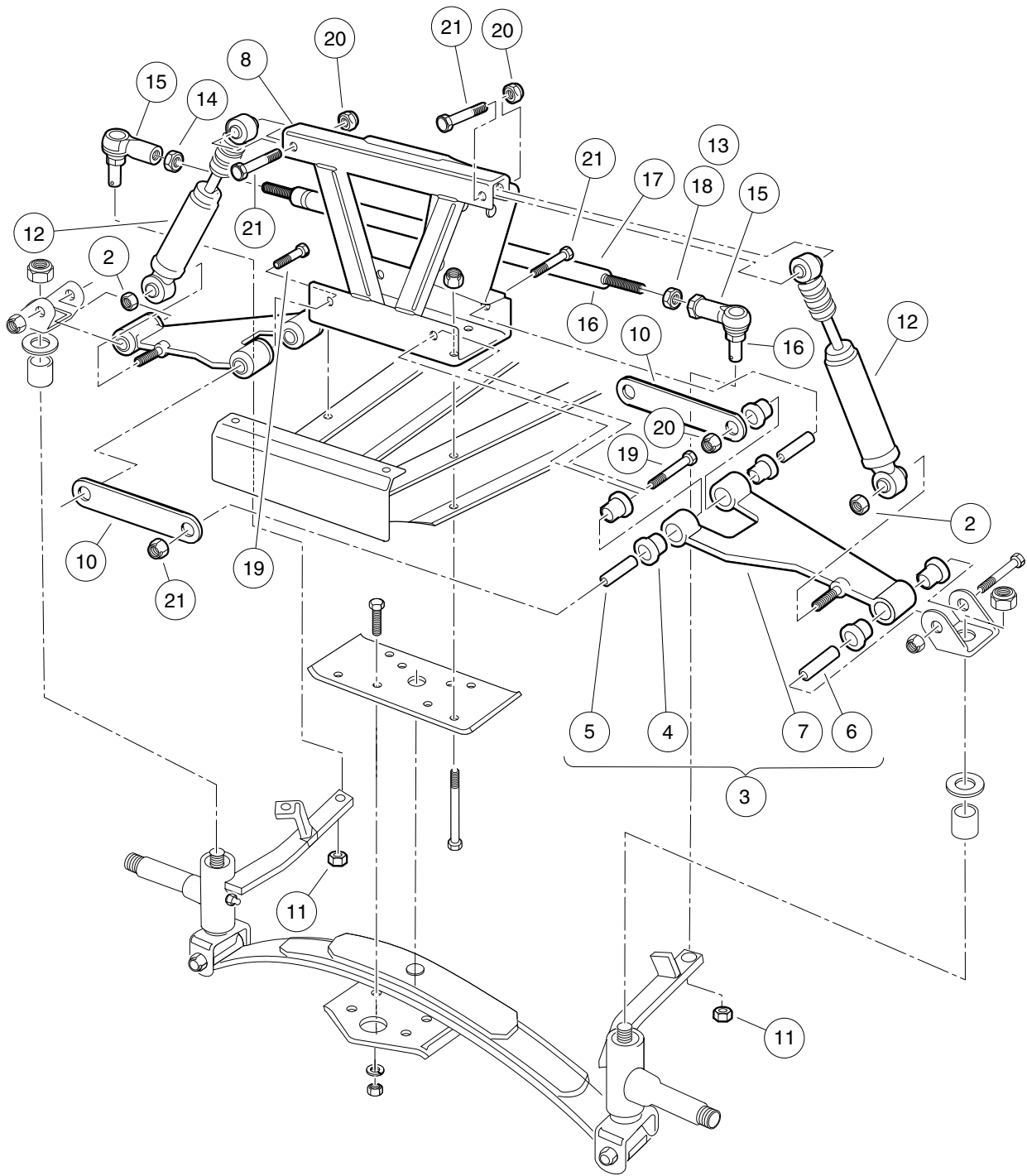
000246-002

# STEERING WHEEL

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1016156	Wheel, Steering .....	1
2	1016219	Plate, Scorecard (includes items 3 through 7) .....	1
3	1012565	Screw, #12 Phillips Round Head .....	2
4	1012566	Tapered Compression Spring .....	2
5	1016154	Clip, Scorecard .....	1
6	N/A	Plate, Score Card .....	1
7	1016214	Pencil Grip .....	1
8	1016663	Screw, #12-14 X 0.625 .....	2
9	1017273	Nut, 5/8-18 Nylon Insert Jam .....	1

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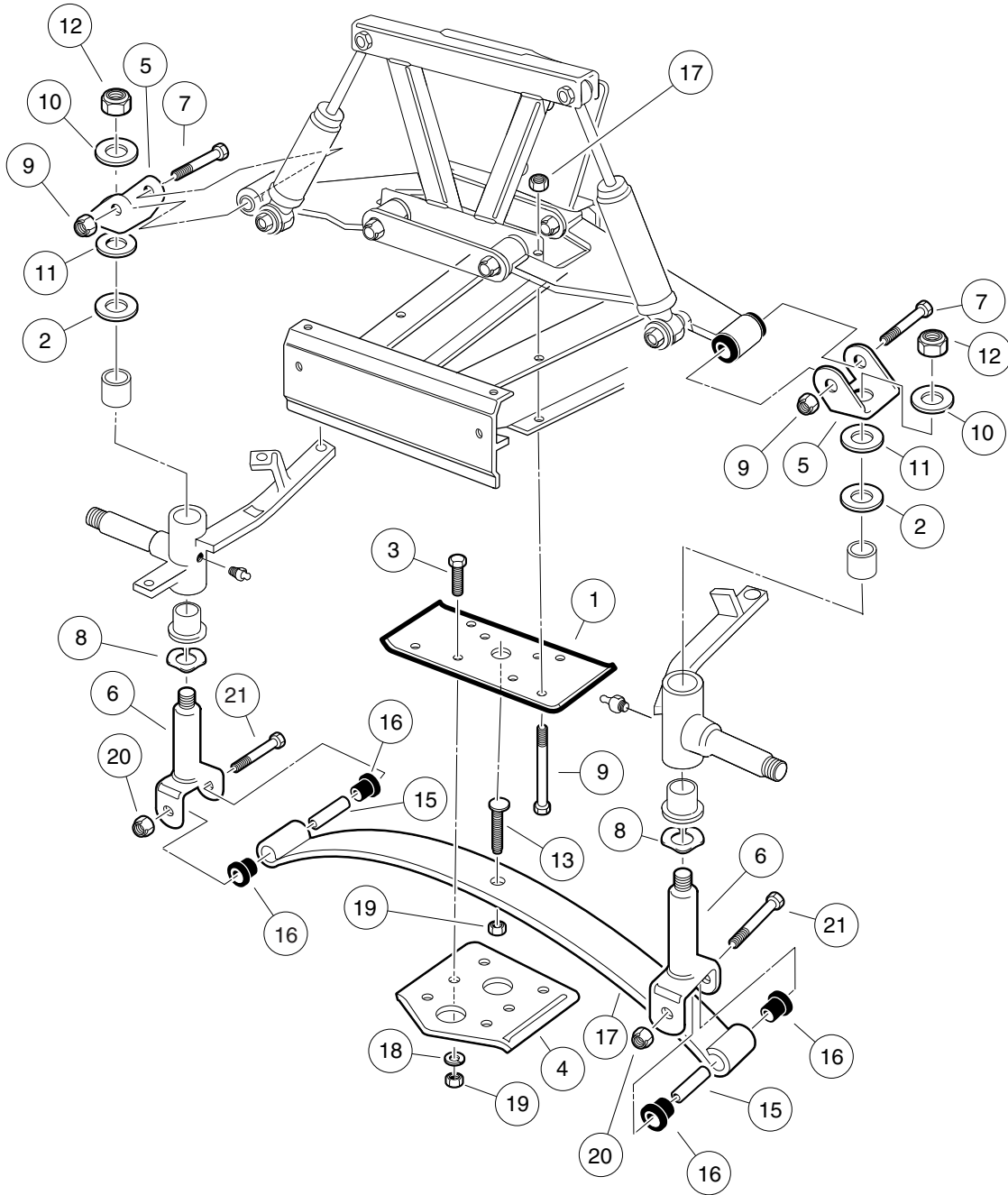
000312-002

## FRONT SUSPENSION, UPPER

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	N/A	Sub, Fr Susp. -1 Lf-2wb Golf (includes items 2 through 21) .....	A/R
2	1010138	Locknut, 3/8-16 Dimpled .....	2
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	N/A	Delta A-Plate .....	1
8	1016385	Delta Shock and Gear Support Assembly .....	1
9	1016387	Screw, 3/8-16 X 2.75 Hx Hd Cap .....	2
10	1017266	A-Plate Strap .....	2
11	102289201	Nut - Hex Locking, M12 X 1.25 .....	3
12	103351001	Shock Absorber, Front, Common .....	2
13	N/A	Asm, Tie Rod (includes items 14 through 18) .....	1
14	1013042	Nut, 12mm Hex .....	1
15	102022601	End, Tie Rod M12 X 1.25 Rh .....	1
16	102022602	End, Tie Rod, M12 X 1.25, Lh .....	1
17	103354701	Rod, Tie, Male Thd .....	1
18	103653501	Nut, Jam, M12-1.25, Lh .....	1
19	2402	Screw, 3/8-16 X 2.25 Hx Hd Cap .....	4
20	8754	Locknut, 3/8-16 Hex .....	13
21	8861	Bolt, 3/8-16 X 1.75 Hex .....	2

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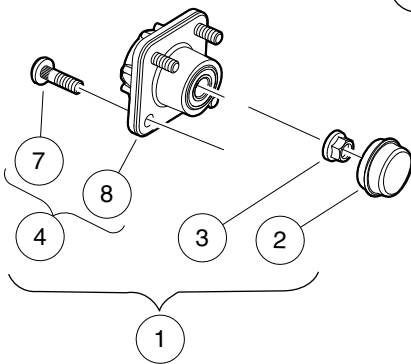
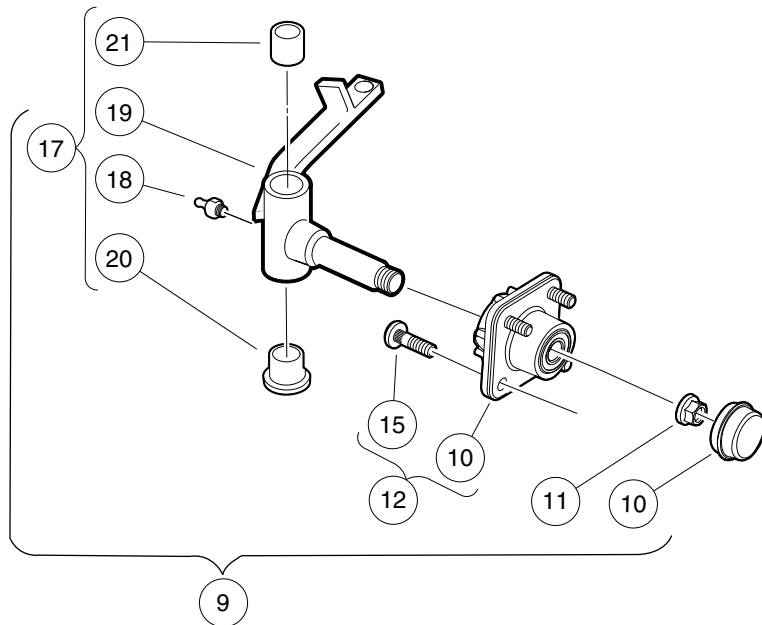
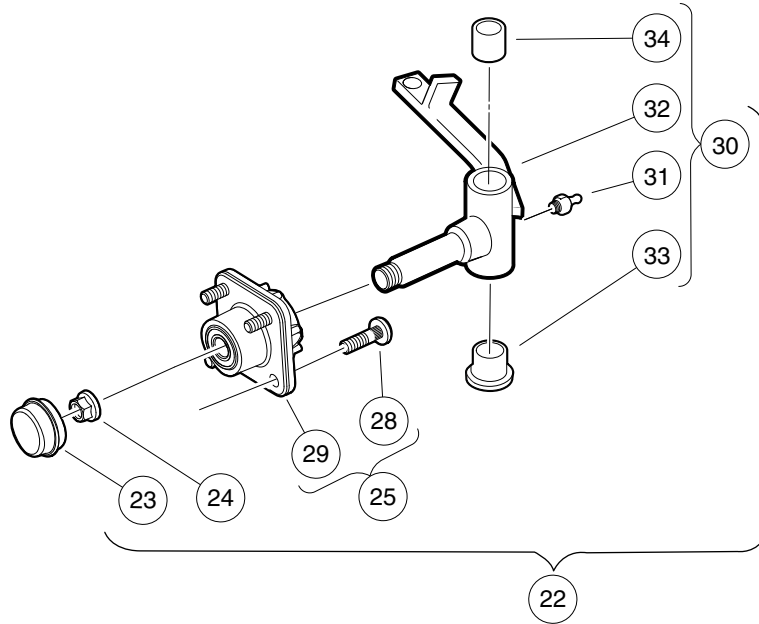


## FRONT SUSPENSION, LOWER

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1010124	Plate, Spring Mount .....	1
2	1010150	Bearing, Thrust .....	2
3	1010177	Bolt, 3/8-16 X 2.00 Hex Head .....	4
4	1014276	Plate, Front Spring Retainer .....	1
5	1016384	Clevis, Delta Upper .....	2
6	1016386	King Pin Assembly .....	2
7	1016387	Screw, 3/8-16 X 2.75 Hx Hd Cap .....	2
8	1016389	Washer, 1.125 Od Wave .....	2
9	101870501	Screw, 3/8-16 X 4.75 Hx Hd Cap .....	4
10	102564002	Washer-1/2 Conical, Yellow .....	2
11	102684501	Washer, M12 Hard Regular .....	2
12	102766301	Nut, 1/2-20, Center Lock .....	2
13	103507001	Eccentric Bolt Common .....	1
14	103628701	Spring Asm, Front, 1 Leaf (includes items 15 through 17) .....	1
15	1012303	Bushing, Steel .....	2
16	1015583	Bushing, Urethane .....	4
17	N/A	Spring, Front, 1 Leaf .....	1
18	357	Lockwasher, 3/8 Split .....	4
19	706	Nut, Hex 3/8-16 .....	1
20	8754	Locknut, 3/8-16 Hex .....	4
21	8755	Screw, 3/8-16 X 3.375 Hex Cap .....	2

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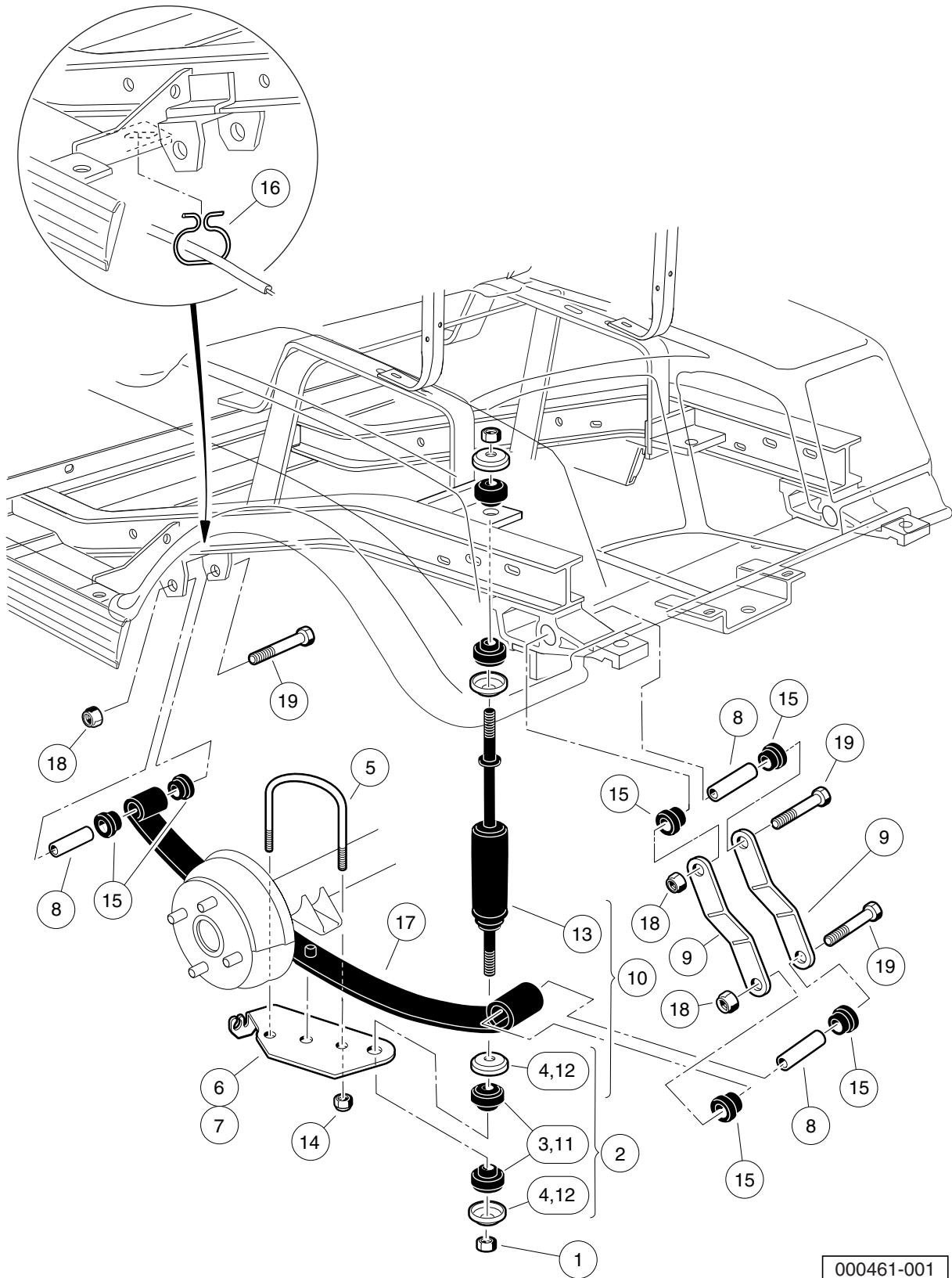
000301-002

# FRONT SPINDLES AND HUBS

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	102357701	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 Brg, Long Stud .....	1
9	N/A	Asm, Frt Hub & Spndle, Rh (includes items 10 through 17) .....	1
10	102353201	Cap, Front Hub .....	1
11	102353301	Hex Nut, Locking Flange, M14x2 .....	1
12	N/A	Asm, Front Hub, Bb, Long Stud (includes items 13 through 16) .....	1
13	N/A	Bearing, Ball, 6204 .....	2
14	N/A	Spacer, Bearing, Front Hub, Pm .....	1
15	103477901	Lug Stud, 1/2-20 Unf, 4037 .....	4
16	N/A	Front Hub, Ball Brg, Long Stud .....	1
17	103667103	Asm, Spindle, Rh, Sp (includes items 18 through 21) .....	1
18	1015597	Fitting, 1/4-28 Thread-Forming Grease .....	1
19	N/A	Subasm, Spndle, Rh, 2wb .....	1
20	7048	Bushing, Flanged Bronze .....	1
21	8067	Bushing, Bronze Spindle .....	1
22	N/A	Asm, Frt Hub & Spndle, Lh (includes items 23 through 30) .....	1
23	102353201	Cap, Front Hub .....	1
24	102353301	Hex Nut, Locking Flange, M14x2 .....	1
25	N/A	Asm, Front Hub, Bb, Long Stud (includes items 26 through 29) .....	1
26	N/A	Bearing, Ball, 6204 .....	2
27	N/A	Spacer, Bearing, Front Hub, Pm .....	1
28	103477901	Lug Stud, 1/2-20 Unf, 4037 .....	4
29	N/A	Front Hub, Ball Brg, Long Stud .....	1
30	103667203	Asm, Spindle, Lh, Sp (includes items 31 through 34) .....	1
31	1015597	Fitting, 1/4-28 Thread-Forming Grease .....	1
32	N/A	Subasm, Spndle, Lh, 2wb .....	1
33	7048	Bushing, Flanged Bronze .....	1
34	8067	Bushing, Bronze Spindle .....	1

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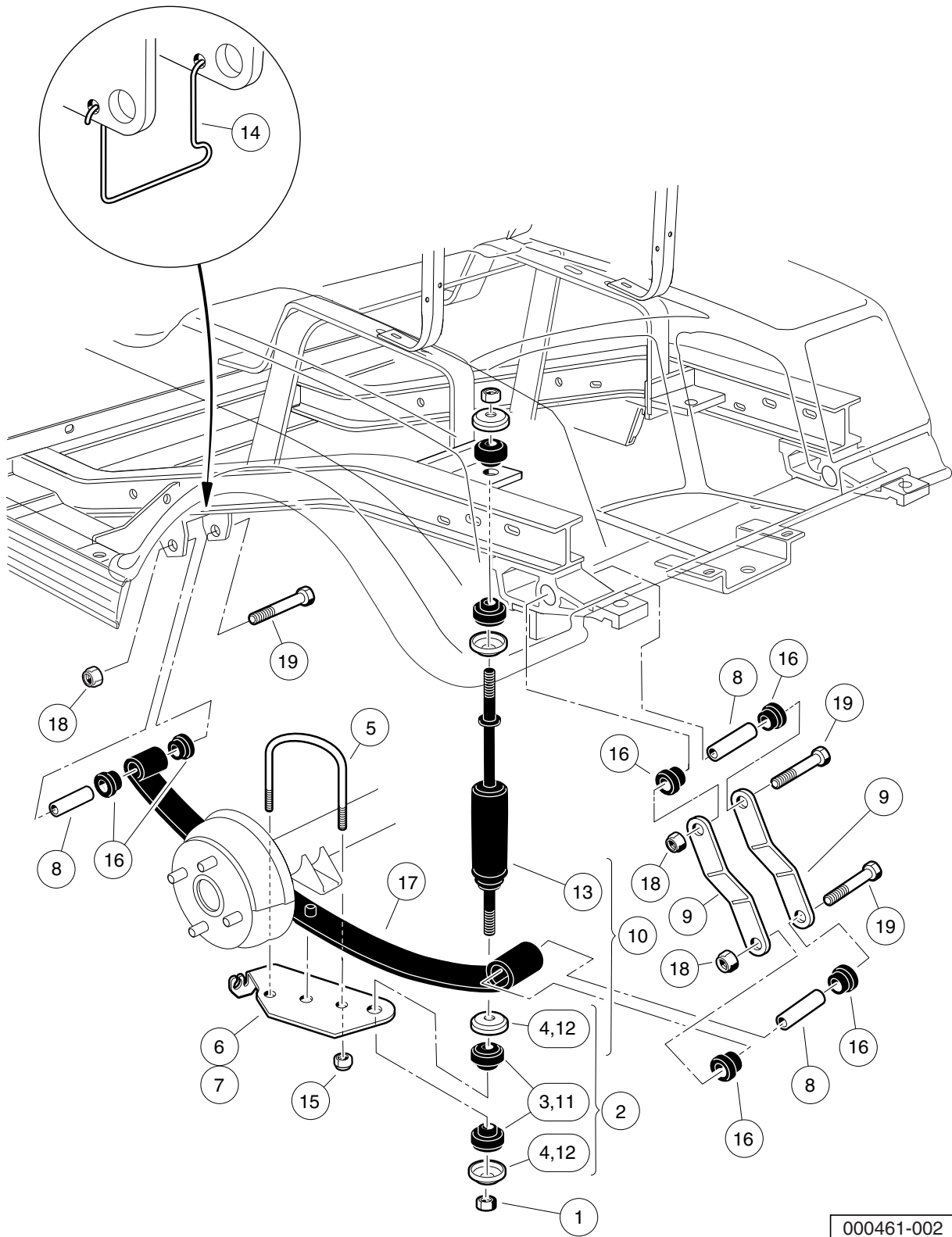
000461-001

## REAR SUSPENSION – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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	1012180	U-Bolt .....	2
6	1012181	Bracket, Shock Mounting, Right (Passenger) .....	1
7	1012182	Bracket, Shock Mounting, Left (Driver) .....	1
8	1012303	Bushing, Steel .....	6
9	1012304	Shackle, Rear Spring .....	4
10	1013164	Shock Absorber Kit (includes items 11 through 13) .....	1
11	1010142	Cushion, Shock Absorber .....	8
12	1010144	Retainer, Shock Absorber Cushion .....	8
13	102588501	Shock Absorber Rear Prv Spd .....	2
14	1014555	Locknut, 7/16-14 Nylon Hex .....	4
15	1015583	Bushing, Urethane .....	12
16	101900801	Hanger, Brake Cable .....	2
17	103502901	Spring, Rear, Ds .....	2
18	8754	Locknut, 3/8-16 Hex .....	6
19	8755	Screw, 3/8-16 X 3.375 Hex Cap .....	6

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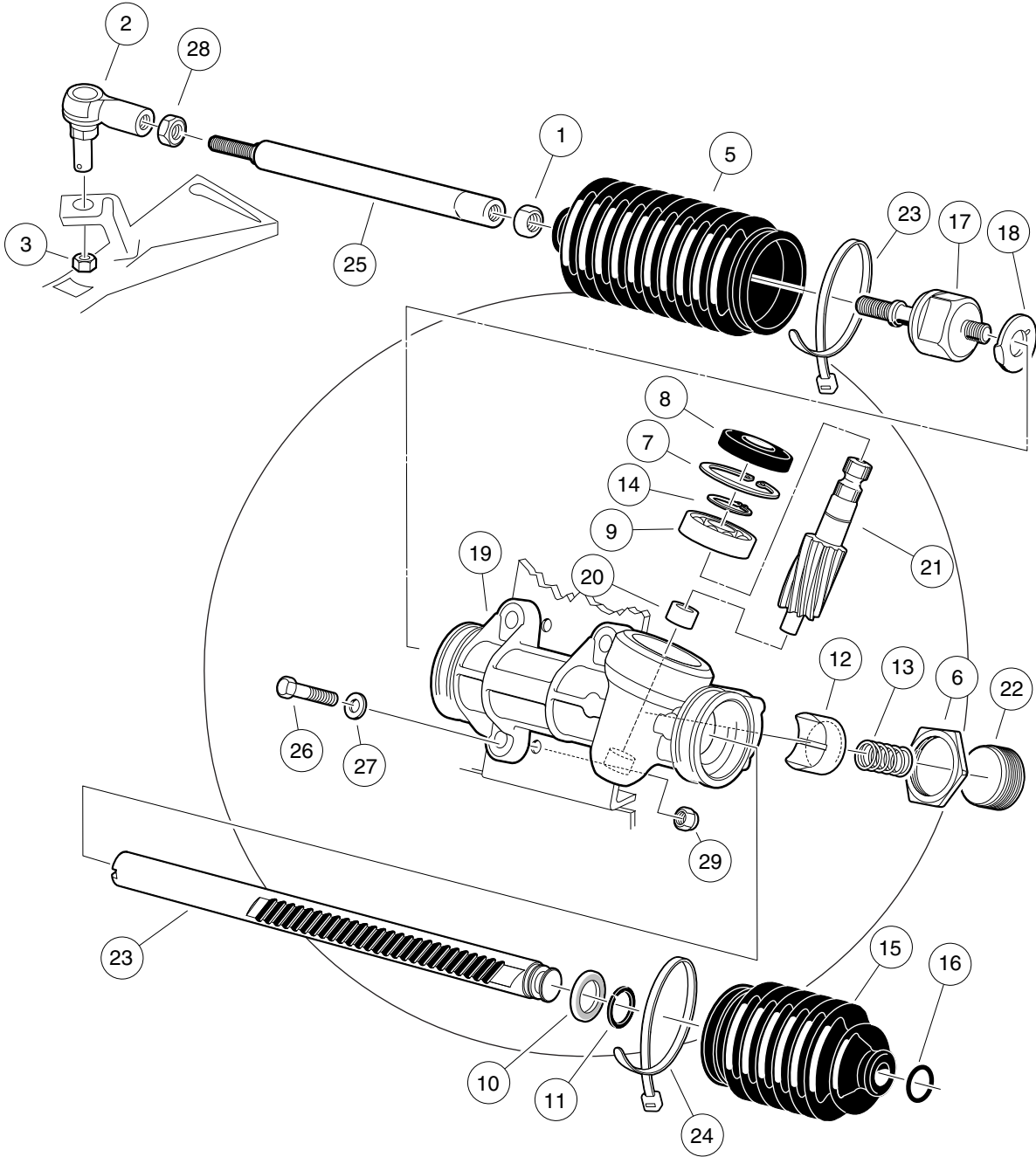
000461-002

## REAR SUSPENSION – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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	1012180	U-Bolt .....	2
6	1012181	Bracket, Shock Mounting, Right (Passenger) .....	1
7	1012182	Bracket, Shock Mounting, Left (Driver) .....	1
8	1012303	Bushing, Steel .....	6
9	1012304	Shackle, Rear Spring .....	4
10	1013164	Shock Absorber Kit (includes items 11 through 13) .....	1
11	1010142	Cushion, Shock Absorber .....	8
12	1010144	Retainer, Shock Absorber Cushion .....	8
13	102588501	Shock Absorber Rear Prv Spd .....	2
14	1013207	Hanger, Brake Cable .....	2
15	1014555	Locknut, 7/16-14 Nylon Hex .....	4
16	1015583	Bushing, Urethane .....	12
17	103629001	Spring Asm, Rear, Ds .....	2
18	8754	Locknut, 3/8-16 Hex .....	6
19	8755	Screw, 3/8-16 X 3.375 Hex Cap .....	6

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000960-001



## STEERING GEAR ASSEMBLY

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1013042	Nut, 12mm Hex .....	1
2	102022602	End, Tie Rod, M12 X 1.25, Lh .....	1
3	102289201	Nut - Hex Locking, M12 X 1.25 .....	3
4	103601501	Asm, Steering Rack And Pinion (includes items 5 through 24) .....	1
5	1013035	Bellows, Long .....	1
6	1013044	Rack Screw Locknut .....	1
7	1013051	Snap Ring .....	1
8	1013052	Seal, Steering Pinion Dust .....	1
9	101879401	Bearing, Ball .....	1
10	101879501	Stop Washer .....	1
11	101879601	Stop Ring, C-Type .....	1
12	101879701	Support Yoke .....	1
13	101879801	Rack Guide Pressure Spring .....	1
14	101879901	Ring, Stop, C-Type .....	1
15	101880001	Bellows, Short .....	1
16	101880101	Dust Seal Retaining Ring .....	1
17	101880201	Inner Ball Joint Asm .....	1
18	101880301	Washer, Tab .....	1
19	N/A	Box, Steering Gear .....	1
20	N/A	Bearing, Lower Pinion .....	1
21	N/A	Pinion, Steering .....	1
22	N/A	Screw, Rack Guide .....	1
23	N/A	Rack, Steering .....	1
24	8990	Tie Wrap, 8" Nylon .....	2
25	103653401	Link, Drag, Male Thd .....	1
26	1624	Screw, 3/8-16 X 1.50 Hex-Head Cap .....	3
27	334	Washer, 3/8 Type A Flat .....	3
28	7555	Nut, 1/2-20 Hex, Left-Hand Thread .....	1
29	8754	Locknut, 3/8-16 Hex .....	3

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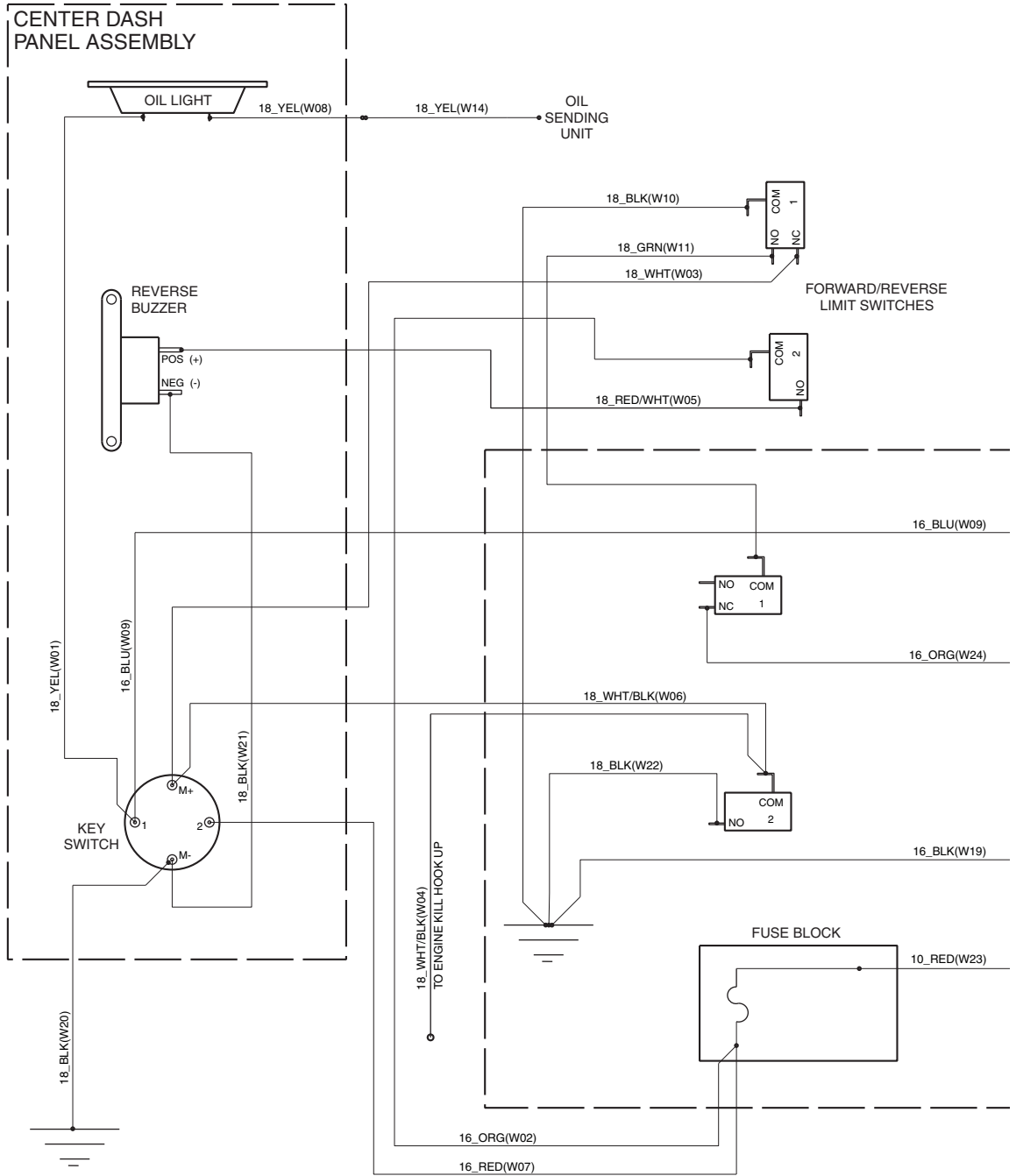
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# ELECTRICAL SYSTEM – GASOLINE VEHICLE

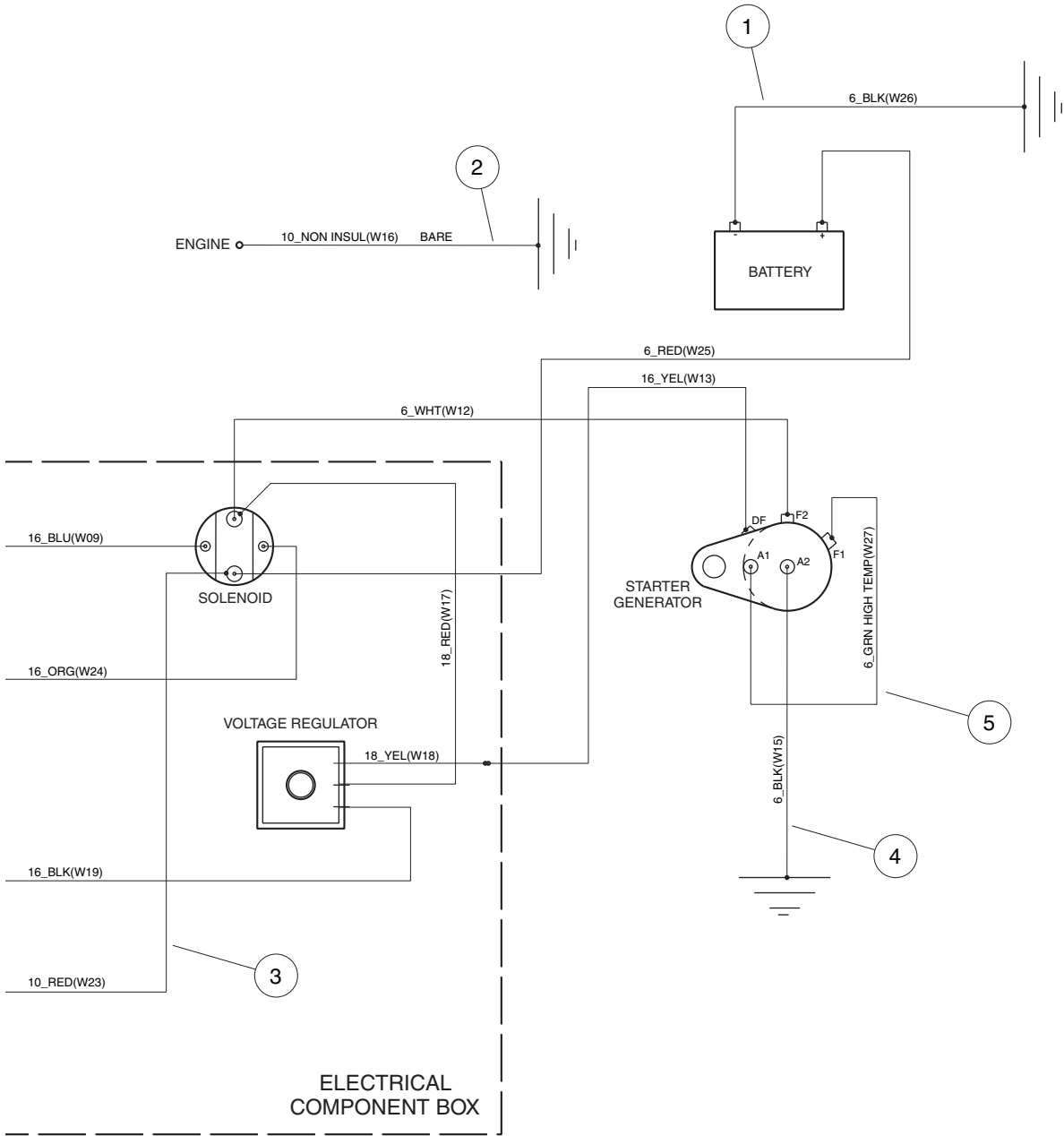
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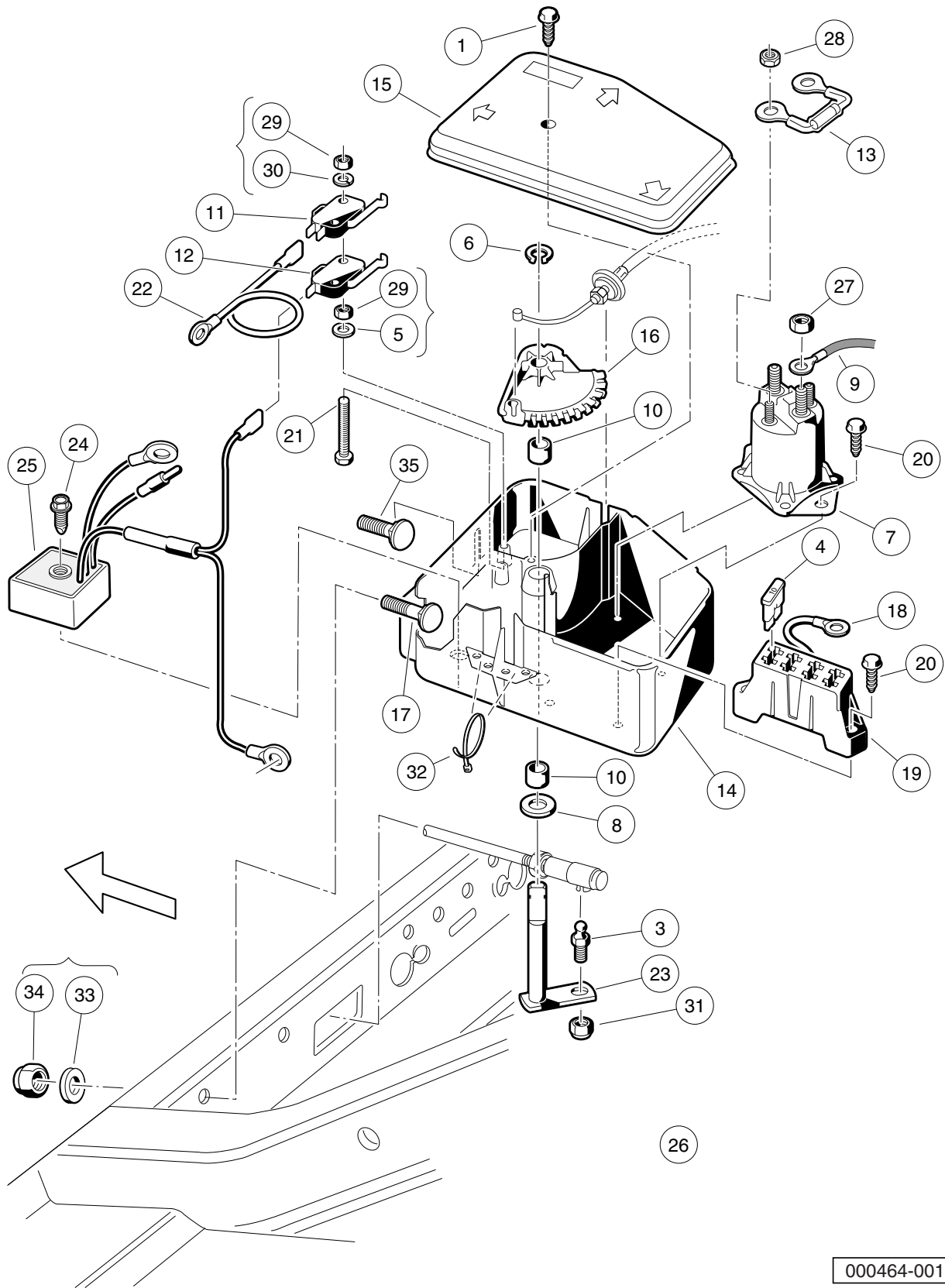
See previous two pages for illustration.

# WIRING

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1012382	Wire Assy, #6 Black .....	1
2	1015332	Wire Assembly, #10, Uninsulated .....	1
3	1015737	Wire Assy, #10 Red .....	1
4	1015920	Ground Wire Assembly .....	1
5	101837301	Wire Assy, #6 Green .....	1
6	103332302	Assy Wire Harness Gas Ds Kit .....	1

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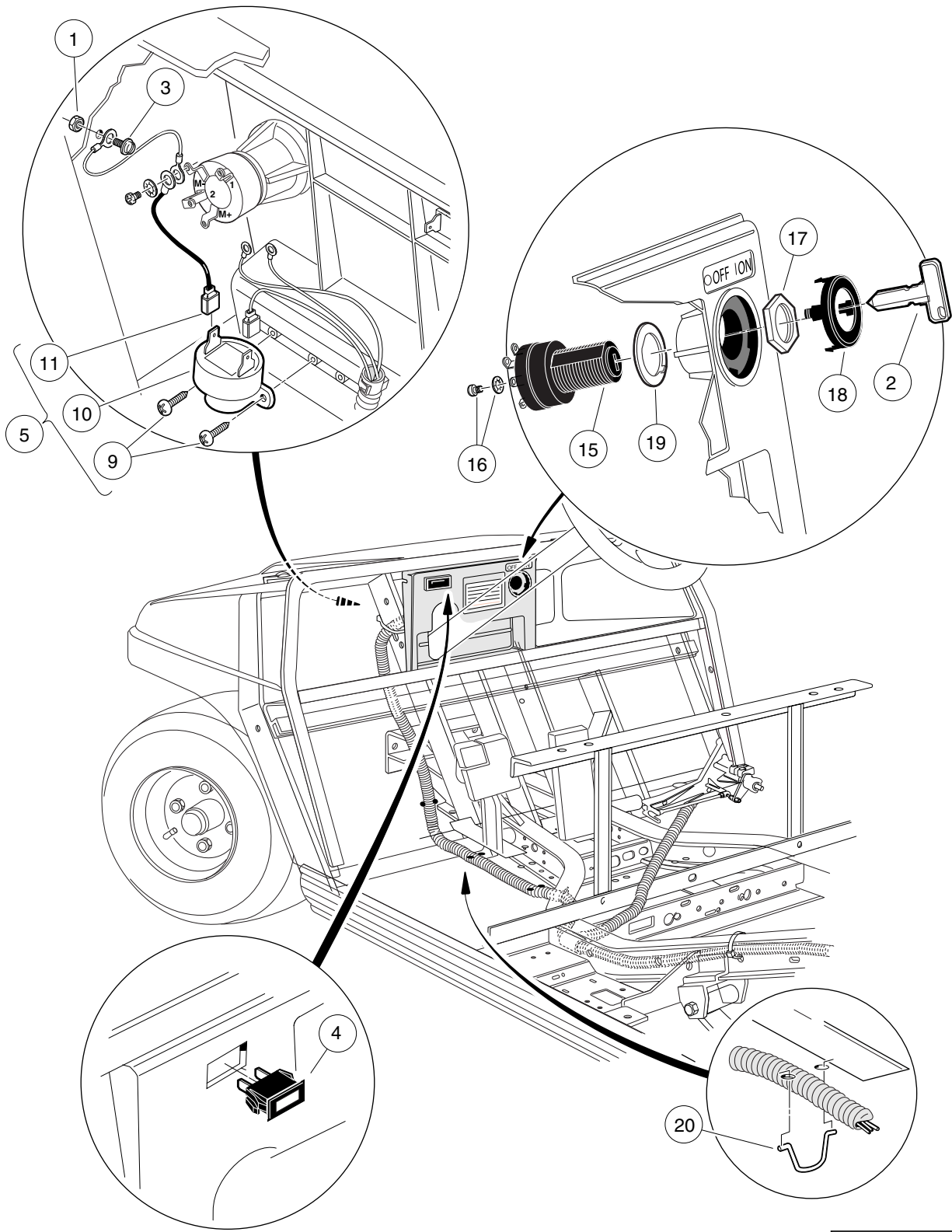


# ELECTRICAL COMPONENT BOX – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1015752	Screw, #12-16 X 0.625 Hi-Lo .....	1
2	101827601	Elec Component Box Asm , Ds (includes items 3 through 32) .....	1
3	1010954	Stud, 1/4-28 X 0.560 Ball .....	1
4	1012295	Fuse, 10-Amp .....	1
5	1012431	Washer, #4 Flat .....	2
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	1014807	Switch, Limit .....	1
12	1014808	Switch, Limit .....	1
13	1014948	Diode .....	1
14	1015371	Box, Electrical Component .....	1
15	1015372	Cover, Electric Box .....	1
16	1015373	Cam, Electric Box .....	1
17	1015405	Bolt, Carriage, 5/16-18 X 2.0 .....	1
18	1015737	Wire Assy, #10 Red .....	1
19	1015741	Fuse Block .....	1
20	1015752	Screw, #12-16 X 0.625 Hi-Lo .....	4
21	1015878	Screw, #4-40 Hex Head Machine .....	2
22	N/A	Wire Assy, #16 Orange .....	1
23	101821301	Bell Crank Weld Asm .....	1
24	101856102	Screw, 1/4-15 X 1.50 Hi-lo Hex .....	1
25	102711201	Voltage Regulator .....	1
26	103332302	Assy Wire Harness Gas Ds Kit .....	1
27	1242	Nut, 5/16-18 Hex .....	2
28	7893	Nut, #10-32 Hex .....	2
29	8057	Nut, #4-40 Hex Machine .....	4
30	8058	Lockwasher, #4 Split .....	2
31	8717	Locknut, 1/4-28 Nylon Insert .....	1
32	8990	Tie Wrap, 8" Nylon .....	2
33	1241	Washer, 5/16 Type A Flat .....	2
34	7473	Locknut, 5/16-18 Nylon Insert .....	2
35	7818	Bolt, Carriage, 5/16-18 X 1.5 .....	1

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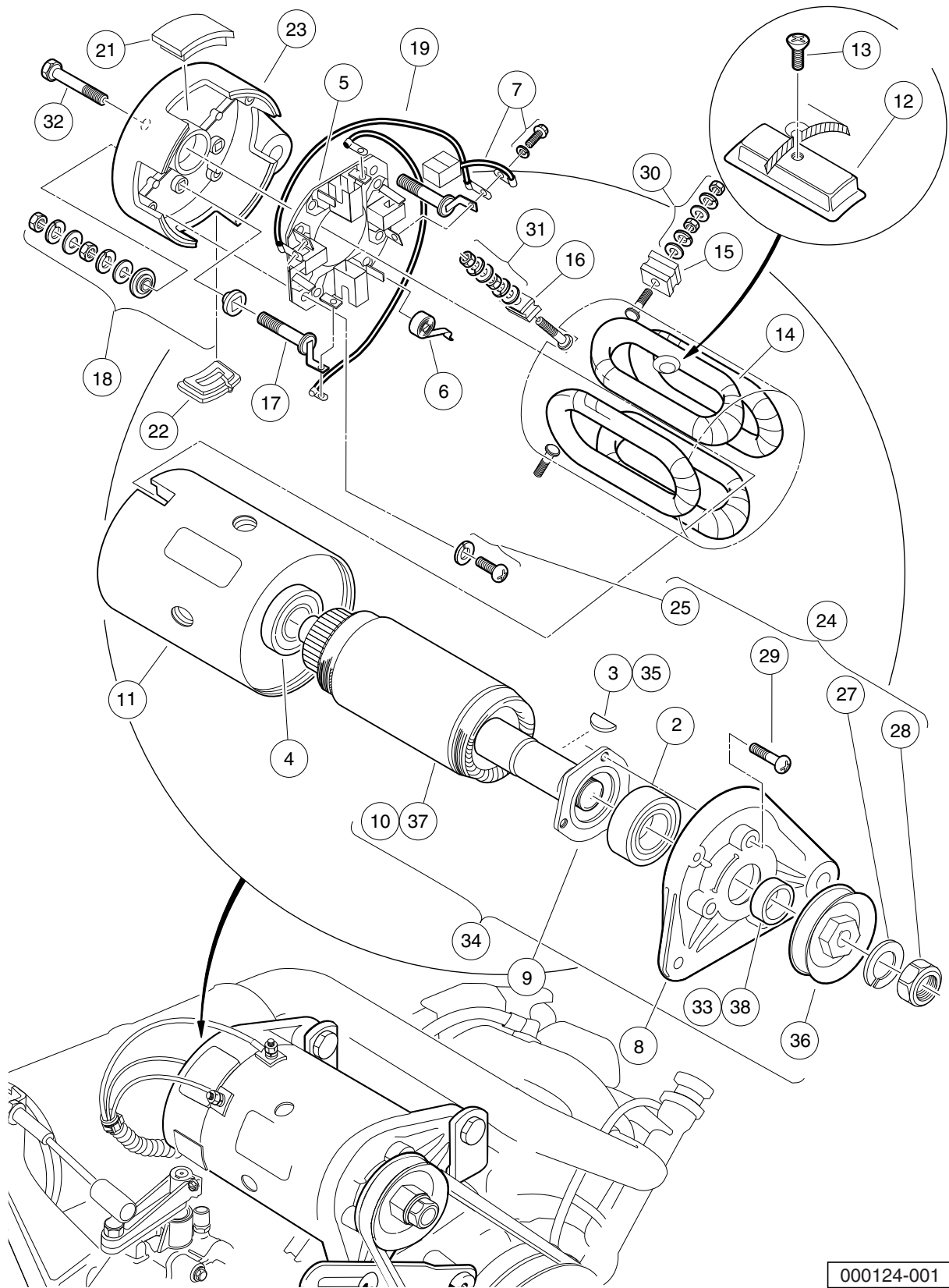
000465-001

# ELECTRICAL COMPONENTS, FRONT BODY – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1011229	Locknut, #6-32 Whiz .....	1
2	1012505	Keys (set of 2) .....	1
3	1015720	Screw, #6-32 X 1/2 Hex Washer-Head .....	1
4	1016630	Light, Oil .....	1
5	1016859	Kit, Reverse Buzzer (includes items 6 through 14) .....	1
6	1011229	Locknut, #6-32 Whiz .....	1
7	1012431	Washer, #4 Flat .....	2
8	1015720	Screw, #6-32 X 1/2 Hex Washer-Head .....	1
9	1016849	Screw, #4-24 X 0.33 Pan-Head Machine .....	2
10	1016851	Buzzer, Reverse (9-48 VDC) .....	1
11	1016857	Wire Assembly Black #18 .....	1
12	8056	Screw, #4-40 X 0.75 Round-Head Machine .....	2
13	8057	Nut, #4-40 Hex Machine .....	2
14	8058	Lockwasher, #4 Split .....	2
15	101826301	Key Switch, 12-Volt, Off/On .....	1
16	101830601	Screw and Washer Assembly .....	4
17	101830701	Nut, Key Switch .....	1
18	101834502	Cap, Black Key Switch .....	1
19	101851101	Washer, Key Switch .....	1
20	101900901	Harness Retainer .....	3
21	AM10079	Bulk Std Keys (50) * .....	1
		 Note: Some parts in Reverse Buzzer Kit are not used in this application.	

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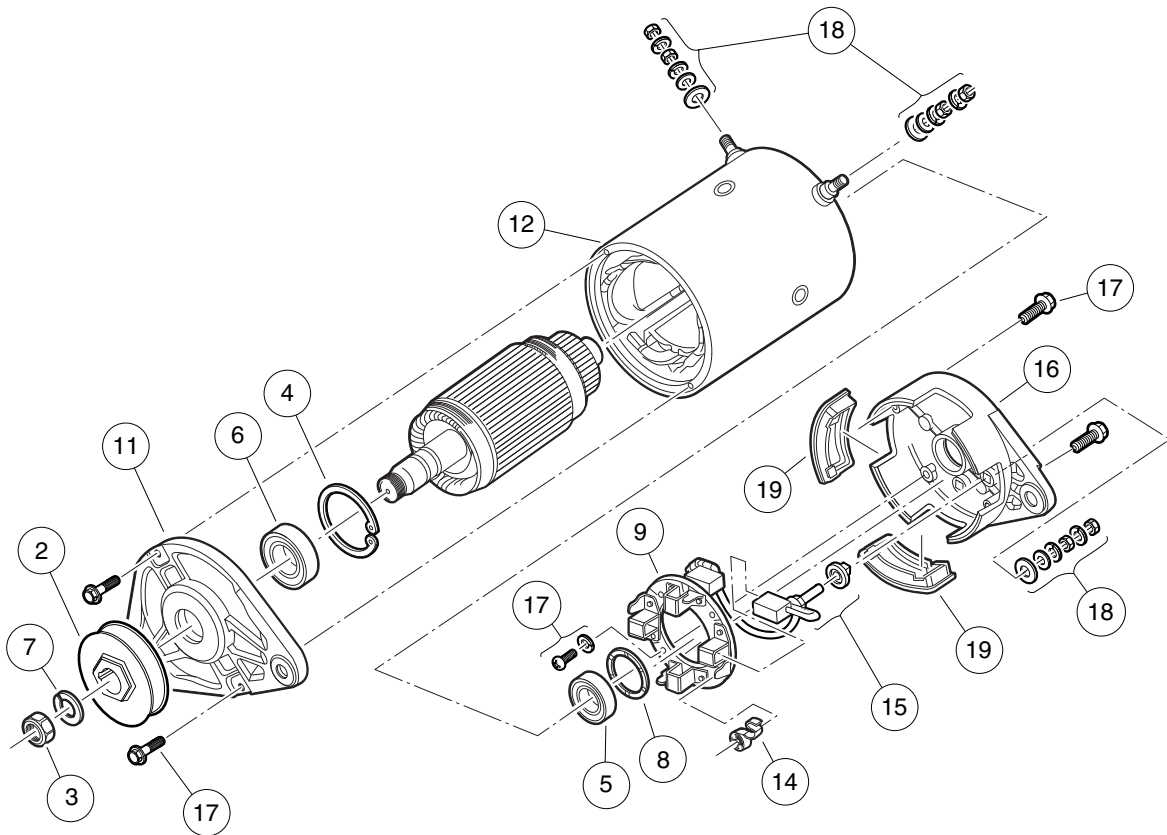


000124-001

# STARTER/GENERATOR ASSEMBLY MODEL G425419 – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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	N/A	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.	

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000124-002

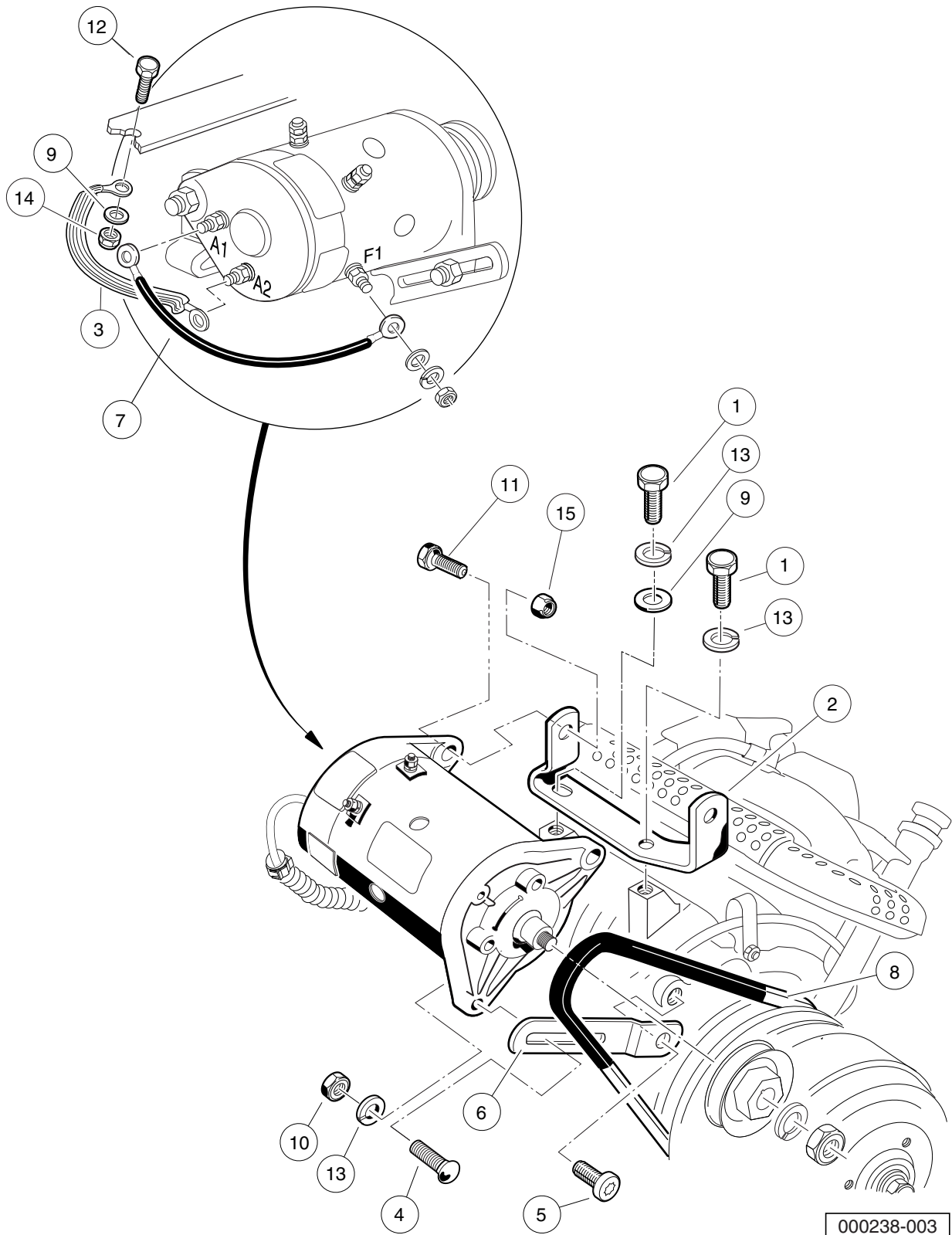
# STARTER/GENERATOR ASSEMBLY MODEL 114-01-4005 – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	102628201	Starter/Generator Bi-Rotational (includes items 2 through 19) .....	1
2	102711001	Pulley, V-Belt .....	A/R
3	102838701	Nut, Hex, M14x2, S-g .....	1
4	102838801	Retainer, Front, S-g .....	1
5	102838901	Bearing, Ball, Front, S-g .....	1
6	102839001	Bearing, Ball, Front, S-g .....	1
7	102839301	Washer, Lock M14x2, S-g .....	1
8	102841101	Washer, Wave, S-g .....	1
9	102844401	Assembly, Brush Plate, Starter/Generator .....	1
10	102844501	Asm, Armature, Starter/Generator .....	1
11	102844601	Head, Drive End, S-g .....	1
12	102844701	Asm, Frame and Field, Starter/Generator .....	1
13	103347101	Kit, Spring Brush, Starter/Generator (includes item 14) .....	1
14	N/A	Spring, Brush, S-g .....	4
15	103347301	Set, Brush Term, S-g .....	1
16	103347601	Head, Comm End, S-g .....	1
17	103347701	Set, Fast, Ceh Deh, S-g .....	1
18	103347801	Set, Term Hadrware, S/G .....	1
19	103347901	Kit, Cover, Brush Insp, Starter/Generator (includes items 20 and 21) .....	1
20	N/A	Plug, Rubber Drain, Start/Generator .....	3
21	N/A	Cover, Inspection, S-g .....	1
<p>Note: Item 2 will ONLY fit Model 114-01-4005 Starter/Generator. For COMPLETE starter/generator replacement, order model G425419 and the compatible pulley.</p>			

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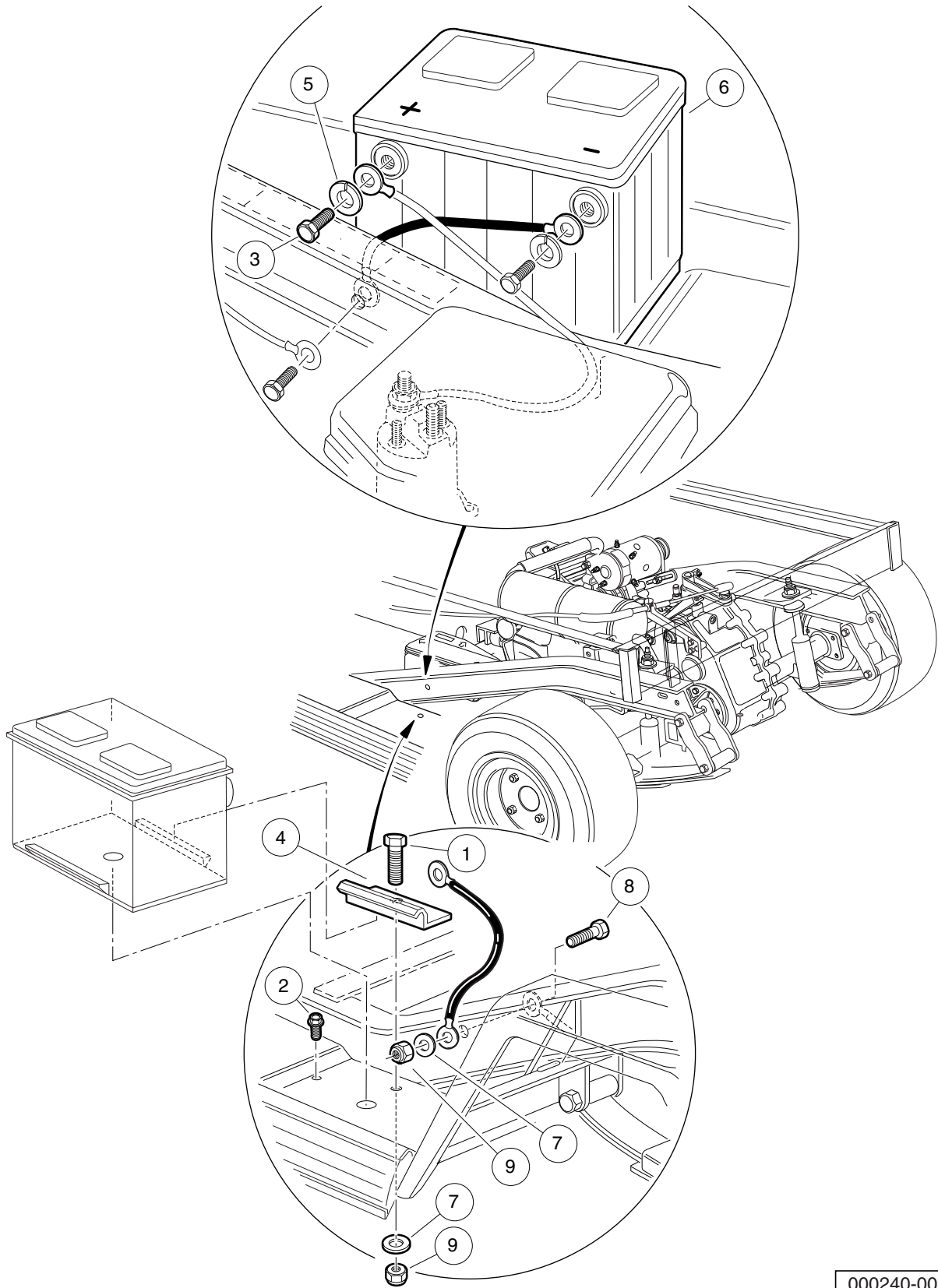


## FE290 STARTER/GENERATOR MOUNTING

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1012830	Screw, M8-125 X 22 Hex-Head .....	2
2	101524001	Bracket, Starter/Generator Mounting (FE290) .....	1
3	1015920	Ground Wire Assembly .....	1
4	1015932	Bolt, Carriage, 5/16-18 .....	1
5	1016074	Screw, M8-1.25 X 18mm Torx .....	1
6	1016883	Bracket, Starter/Generator Adjustment .....	1
7	101837301	Wire Assy, #6 Green .....	1
8	101916701	V-Belt .....	1
9	1241	Washer, 5/16 Type A Flat .....	1
10	1242	Nut, 5/16-18 Hex .....	1
11	705	Screw, Cap-hex Hd 3/8-16x1.25 .....	2
12	7173	Screw, 5/16-18 X 0.75 Hex-Head Cap .....	1
13	7174	Lockwasher, 5/16 Split .....	3
14	7473	Locknut, 5/16-18 Nylon Insert .....	1
15	8754	Locknut, 3/8-16 Hex .....	2

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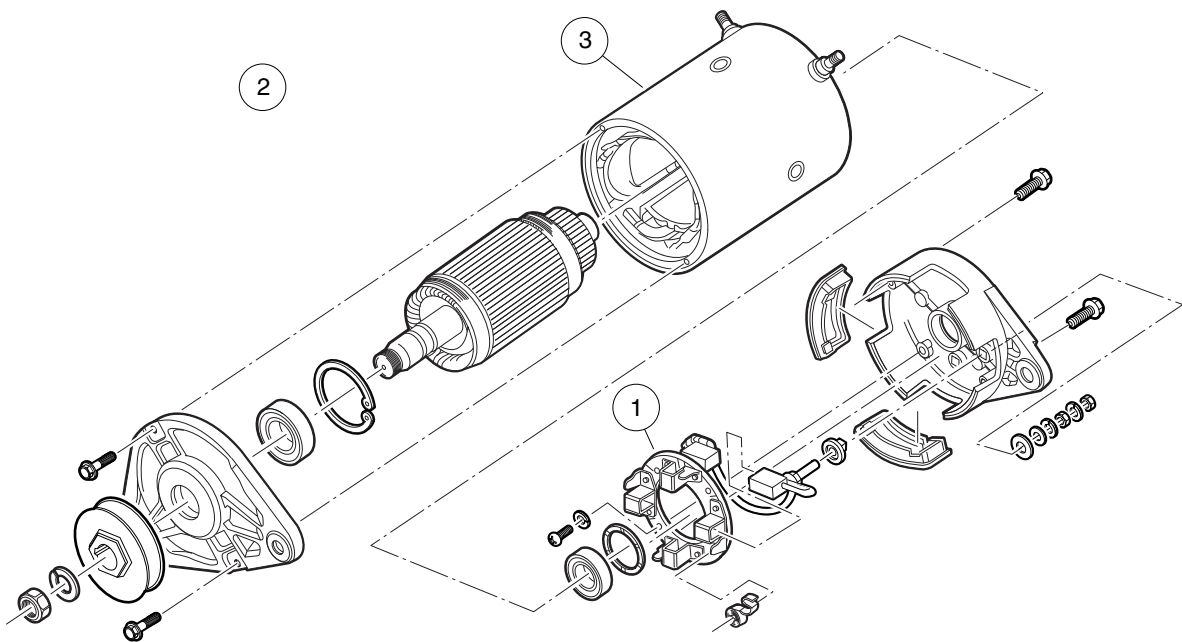
000240-001

## BATTERY – GASOLINE VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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	103496801	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

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000124-003

# STARTER/GENERATOR ASSEMBLY – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	103347301	Set, Brush Term, S-g .....	1
2	103678502	Asm, St/gen, Bi-rot, Ks, Svc .....	1
3	103720102	Assy, Frame Field, Util Ks .....	1

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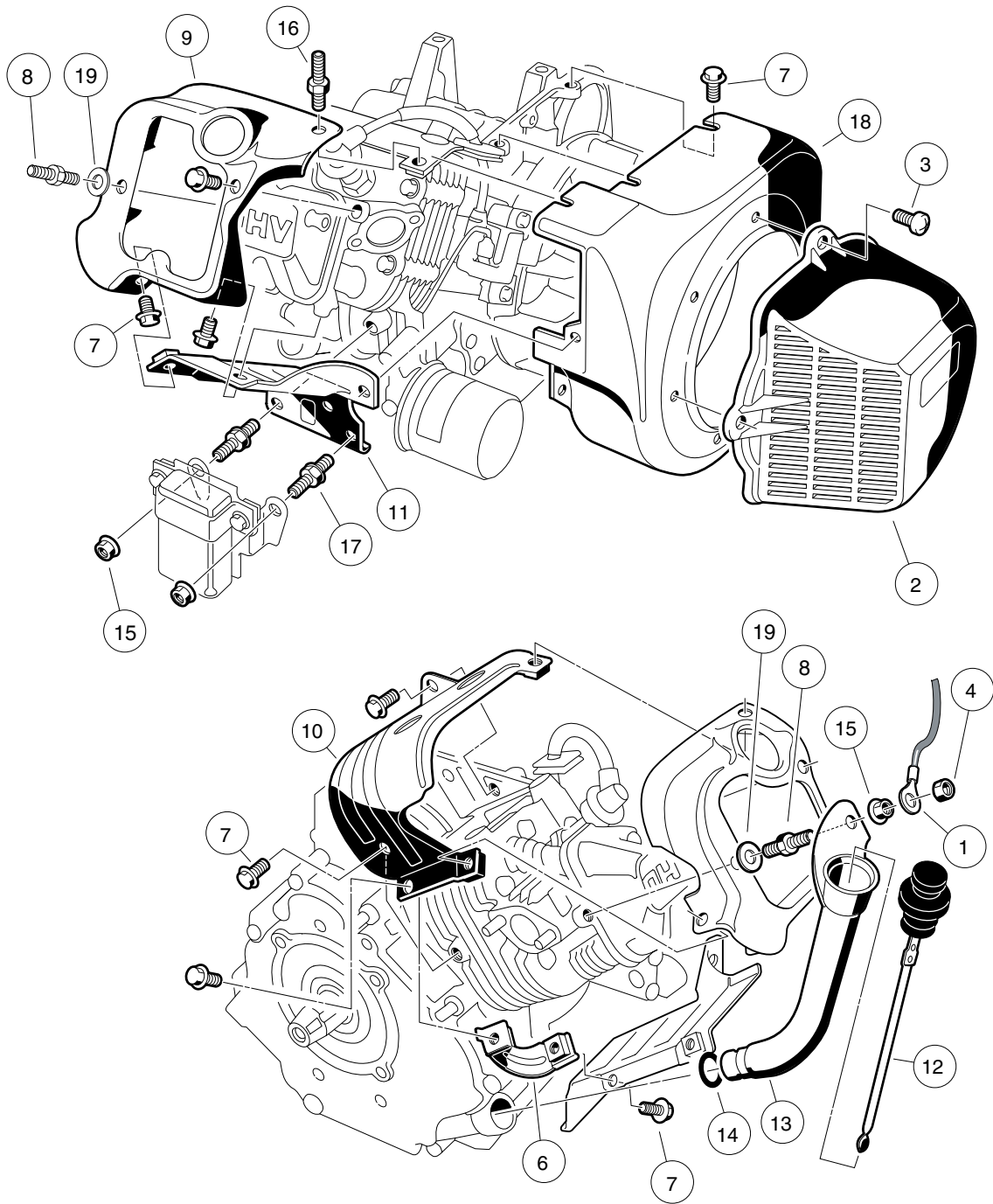
# FE290 ENGINE

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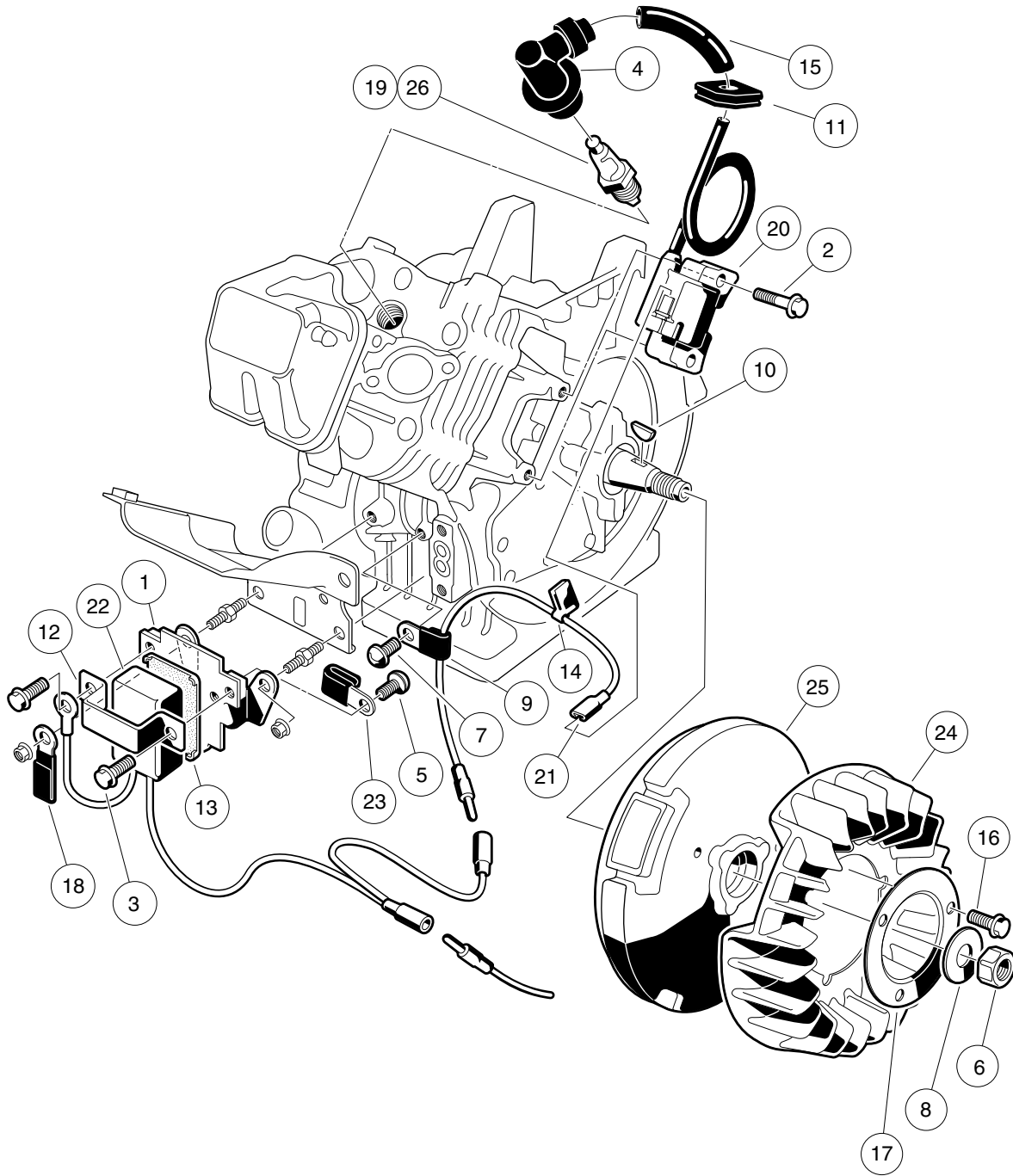


## FE290 ENGINE – SHROUDS AND BRACKETS

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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.	

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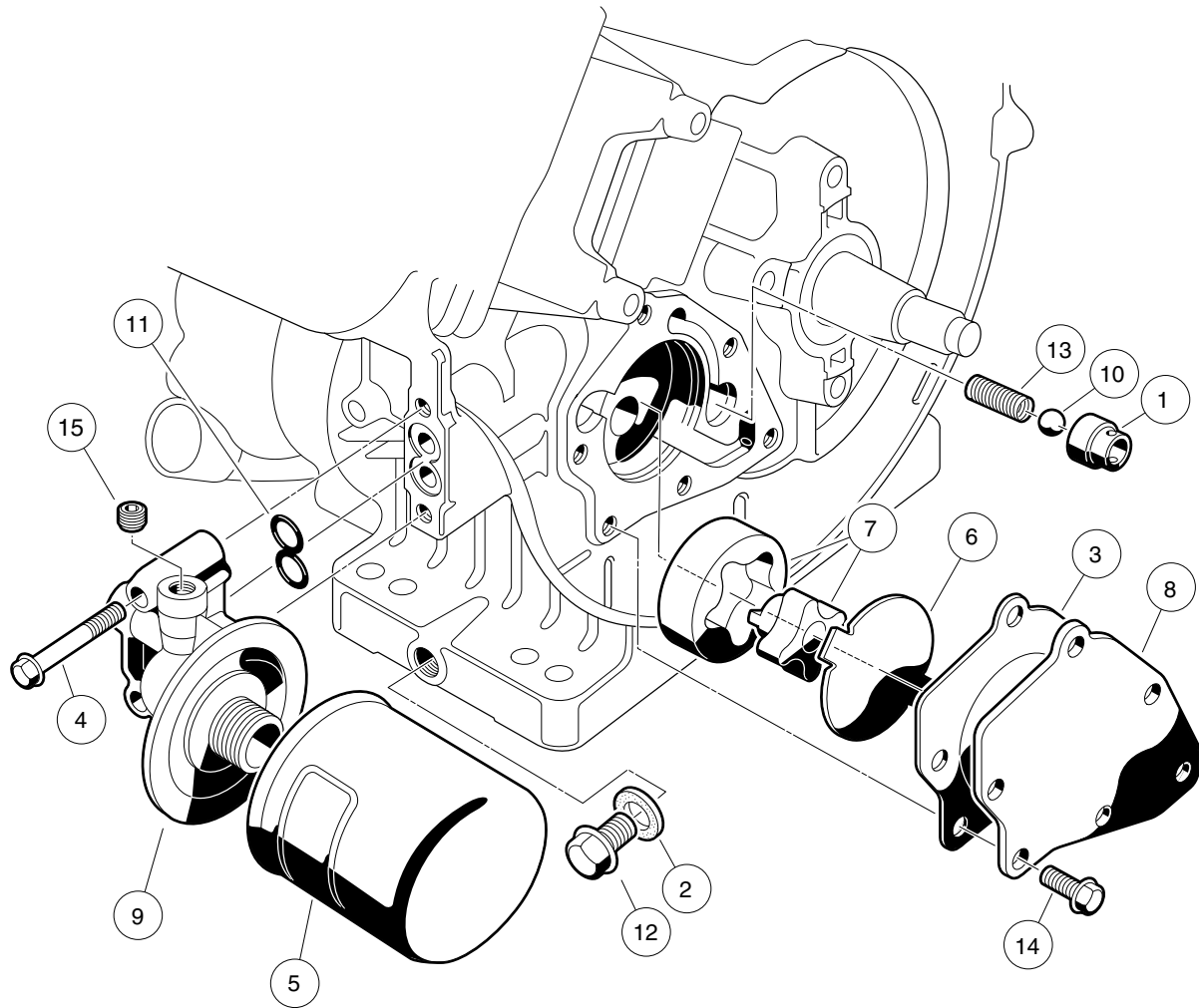
000195-001

# FE290 ENGINE – IGNITION COMPONENTS AND FLYWHEEL

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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	N/A	Clamp, Steel .....	1
24	101915801	Fan, FE290 (cw) .....	1
25	101929301	Flywheel, Complete .....	1
26	AM10724	Spark Plug, OHV (NGK) .....	1

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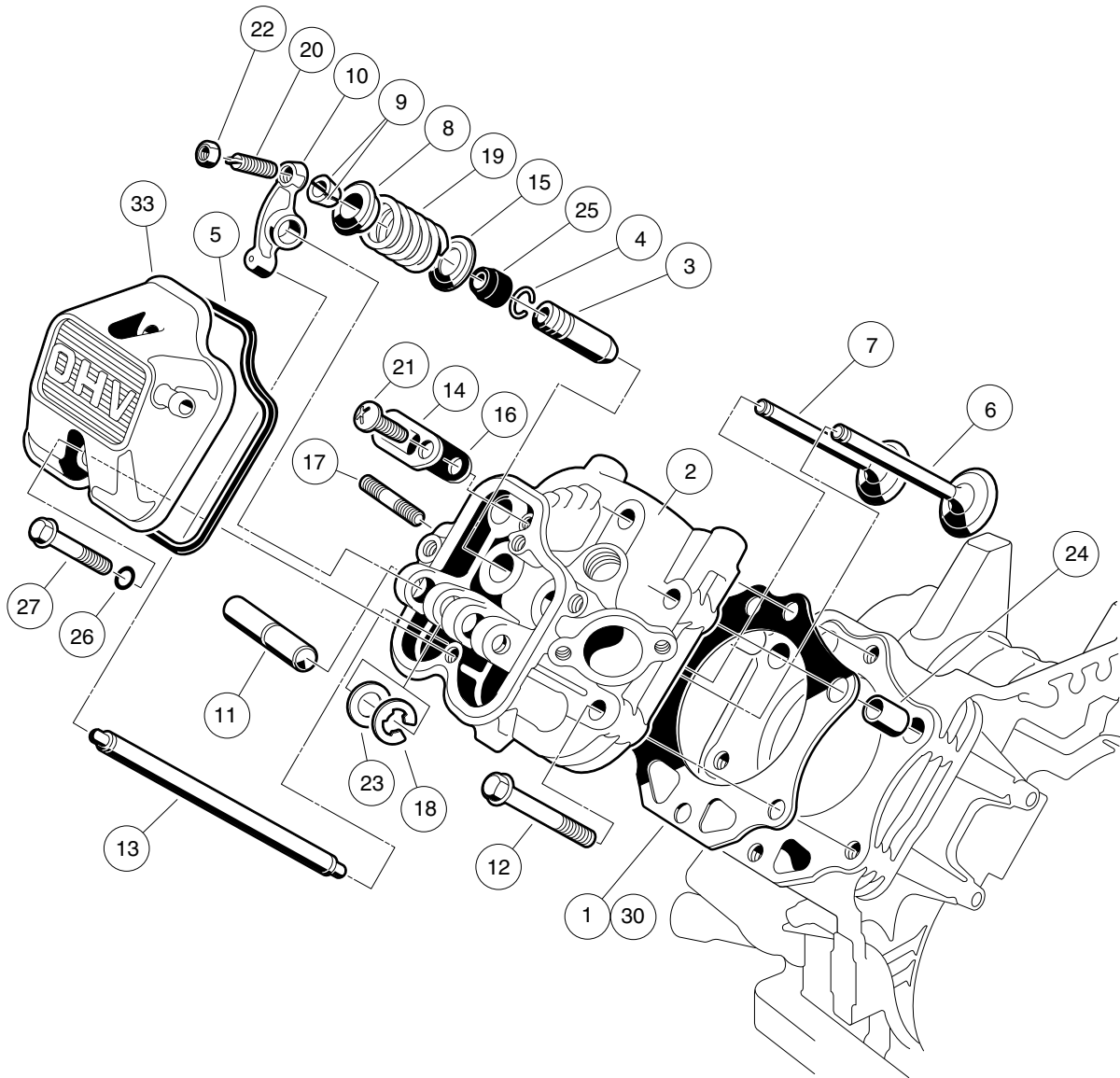


000196-001

## FE290 ENGINE – OIL CIRCULATION

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1016429	Seat, Value 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

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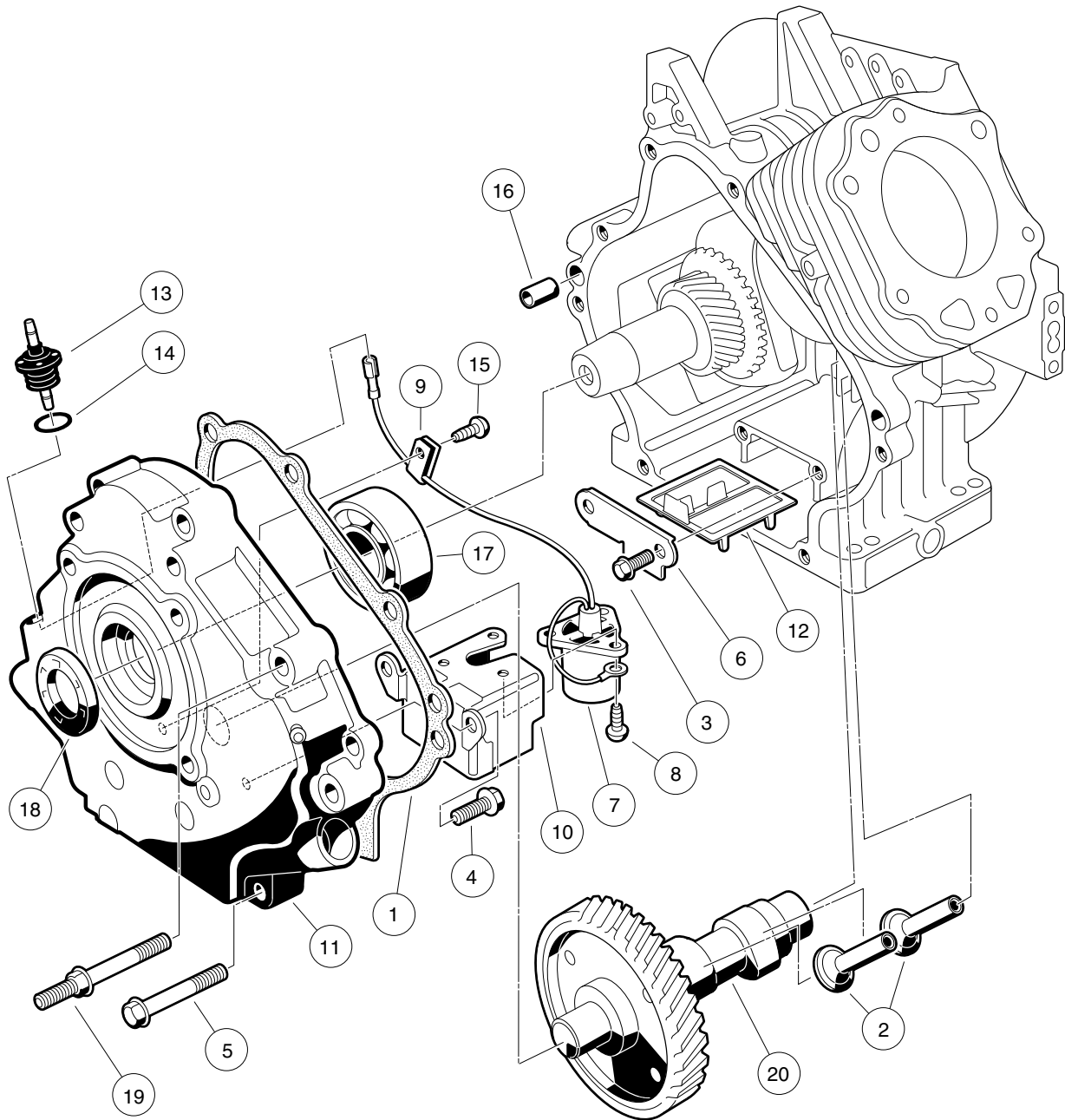
000197-001

## FE290 ENGINE – CYLINDER HEAD

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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

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000198-001



# FE290 ENGINE – CRANKCASE, CAMSHAFT, AND OIL SENSOR

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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

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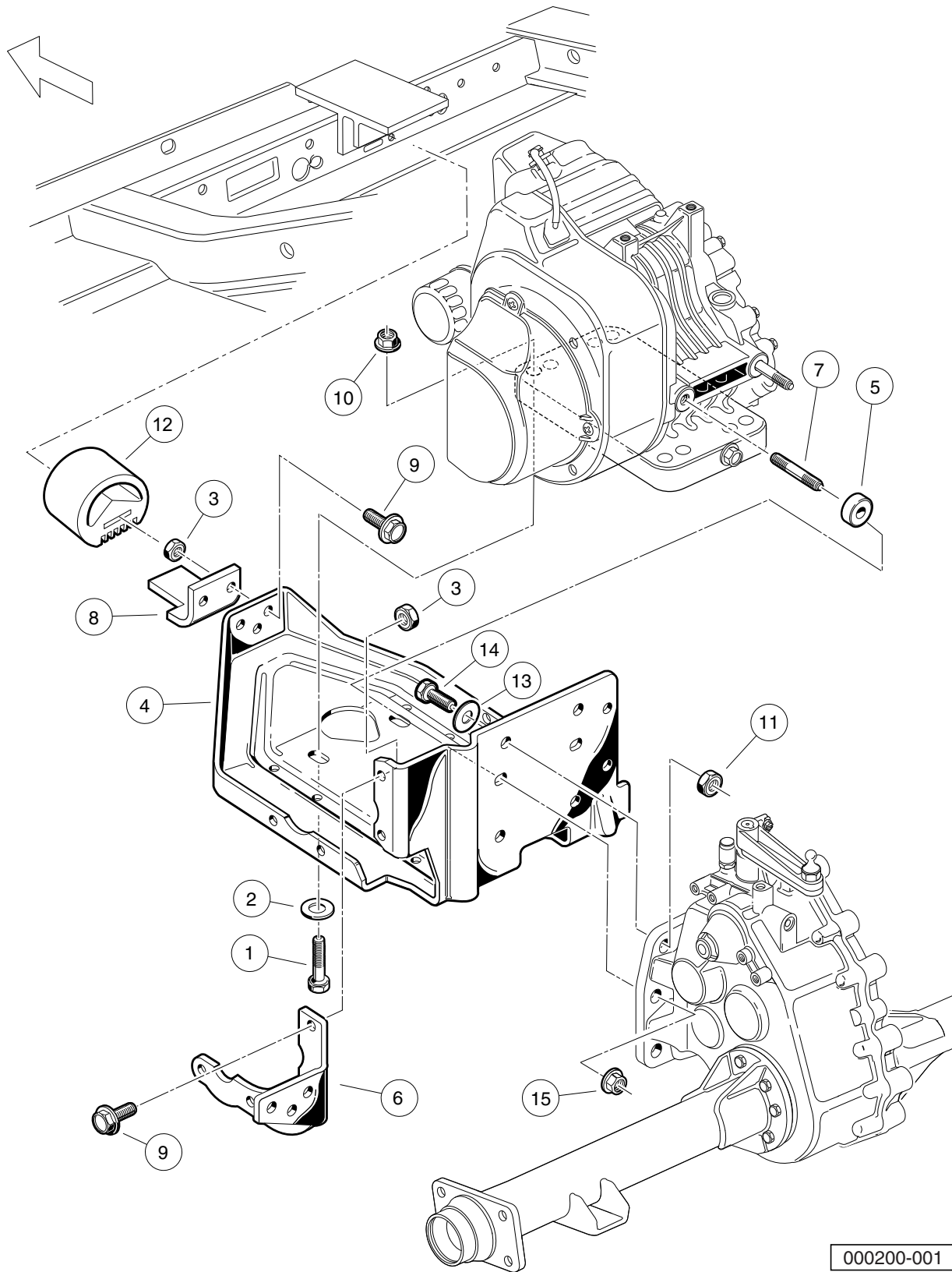


## FE290 ENGINE – CRANKCASE AND CRANKSHAFT

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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 .....	A/R
17	101655002	Shim, Crankshaft T=1.18 .....	A/R
18	101655003	Shim, Crankshaft T=1.23 .....	A/R
19	101655004	Shim, Crankshaft T=1.28 .....	A/R
20	101655005	Shim, Crankshaft T=1.33 .....	A/R
21	101655006	Shim, Crankshaft T=1.38 .....	A/R
22	101655007	Shim, Crankshaft T=1.43 .....	A/R
23	101655008	Shim, Crankshaft T=1.48 .....	A/R
24	101655009	Shim, Crankshaft T=1.53 .....	A/R
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

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# FE290 ENGINE MOUNTING

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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

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# FUEL, INTAKE, AND GOVERNOR SYSTEMS

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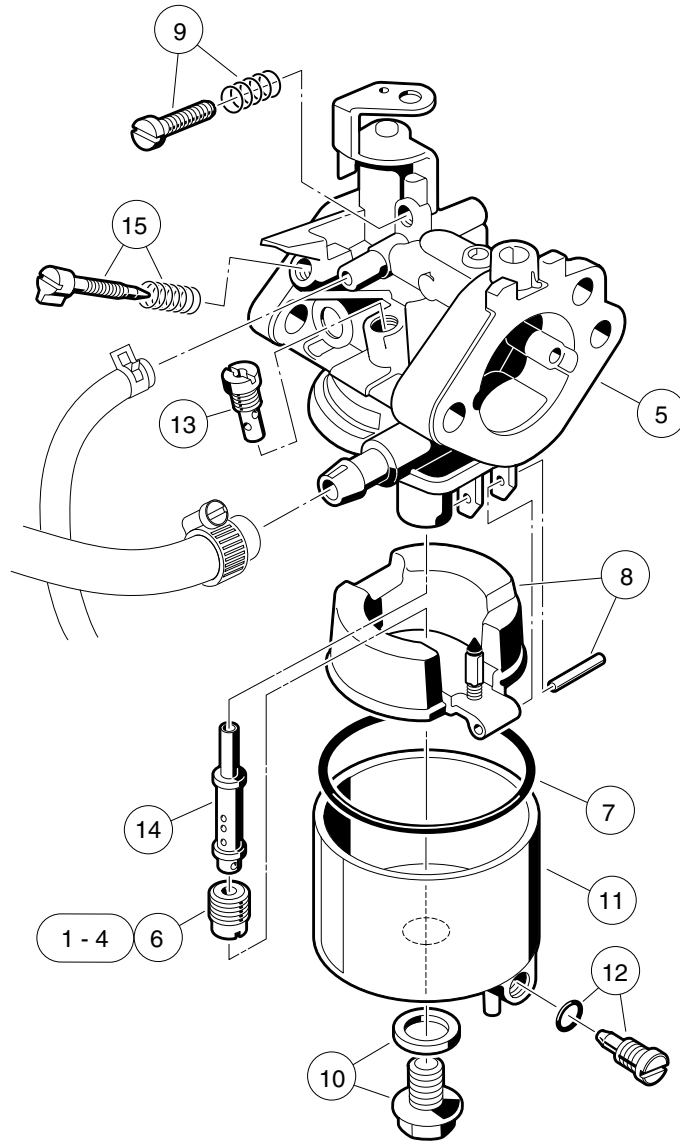


# FUEL SYSTEM

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ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1011988	Screw, 1/4-20 X 2.00 Phillips Truss-Head .....	1
2	1012649	Clamp, 0.460 Red Hose .....	7
3	1013687	Clamp, 3/8" Hose (screw type) .....	1
4	1013746	Clamp, 0.301 ID Hose .....	2
5	1014116	Nut, 1/4-20 Speed .....	2
6	1014928	Fuel Strap Assembly Rear .....	1
7	1017203	Carriage Bolt .....	2
8	101824401	Vent Barb .....	1
9	101987701	Clamp, Plastic Tie .....	1
10	102003201	Filter, Fuel, 30 Micron .....	1
11	102865101	Fuel Line .....	A/R
12	103651902	Asm, Tank, Ds Utl Wo/su† Nano (includes items 13 through 19) .....	1
13	1015137	Fuel Line (available by the foot) .....	A/R
14	1015139	Insulation Grommet .....	1
15	1015143	Vent, Fuel Tank .....	1
16	102406701	Bushing, Line, Return .....	1
17	103372101	Cap, Fuel Tank, Gas, Ratchet .....	1
18	103372302	Valve, Fuel, 288mm .....	1
19	103776902	Tank, Fuel, Top, Wo/su Nano .....	1
20	N/A	Kit, Fuel Pump Retrofit (includes items 21 and 22) .....	1
21	103010101	Pump, Fuel, Impulse, Fh .....	1
22	103781201	Instr, Fuel Pump Retrofit .....	1
23	8233	Locknut, 1/4-20 Nylon Insert .....	2
24	8248	Screw, 1/4-20 X 0.75 Truss-Head Machine .....	1
		Note: Total fuel line length: 47 inches (119.4 cm)	



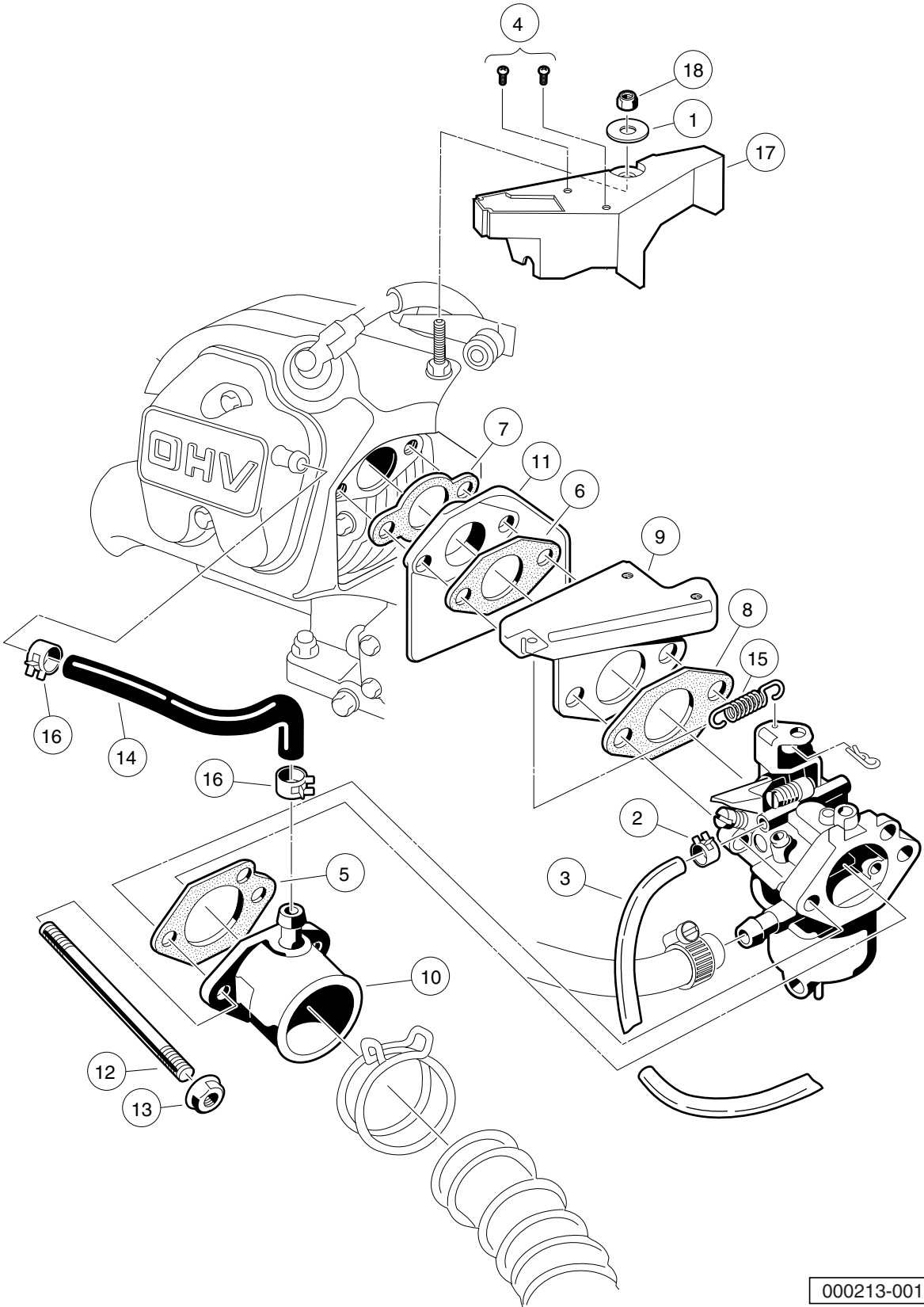
000211-001

# CARBURETOR ASSEMBLY – FE290

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	101642572	Jet, Altitude, # 72 .....	A/R
2	101642575	Jet, Altitude, # 75 .....	A/R
3	101642578	Jet, Altitude, # 78 .....	A/R
4	101642580	Jet, Altitude, # 80 .....	A/R
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
<p style="margin-left: 40px;">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.</p>			

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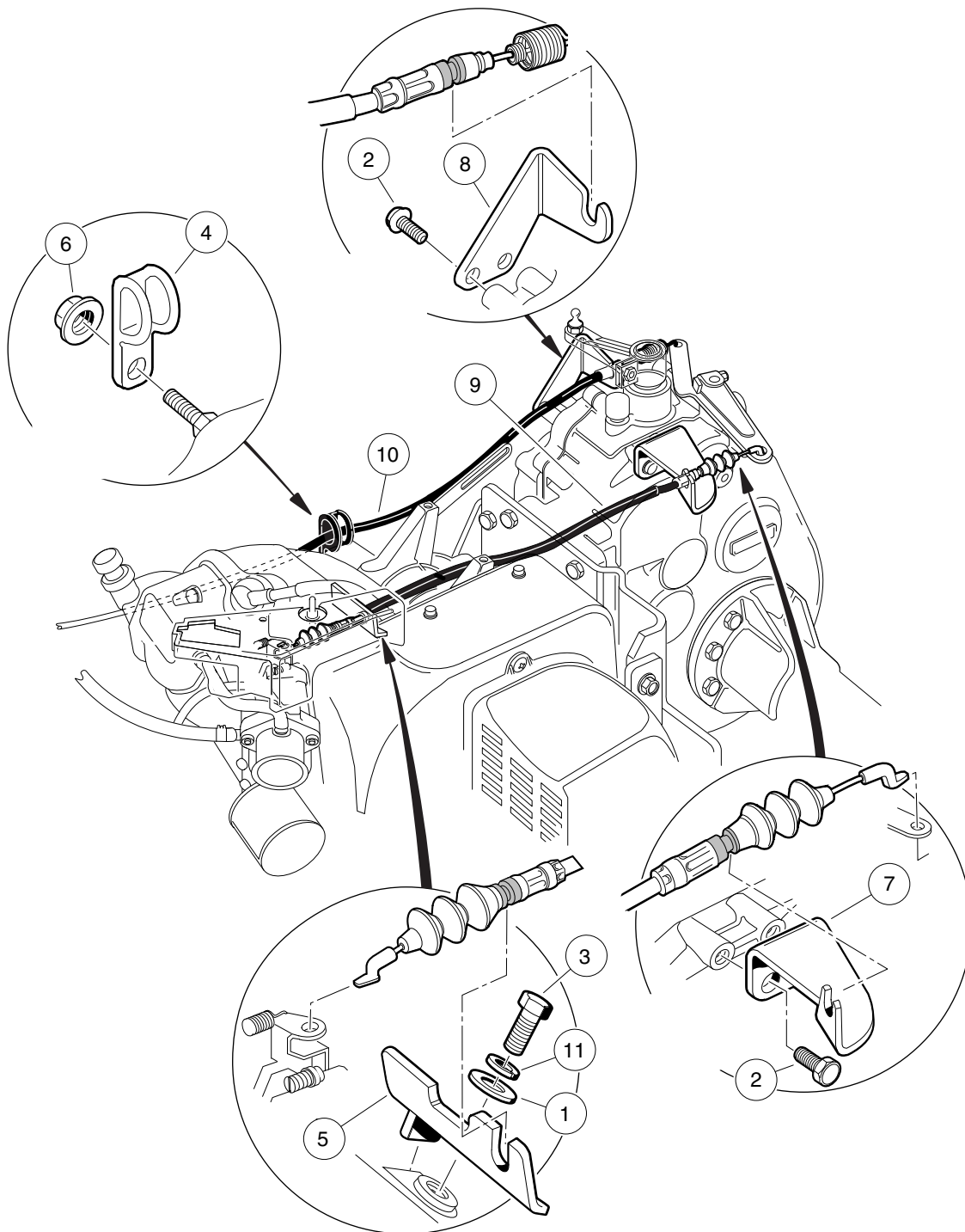


000213-001

## 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) .....	A/R
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

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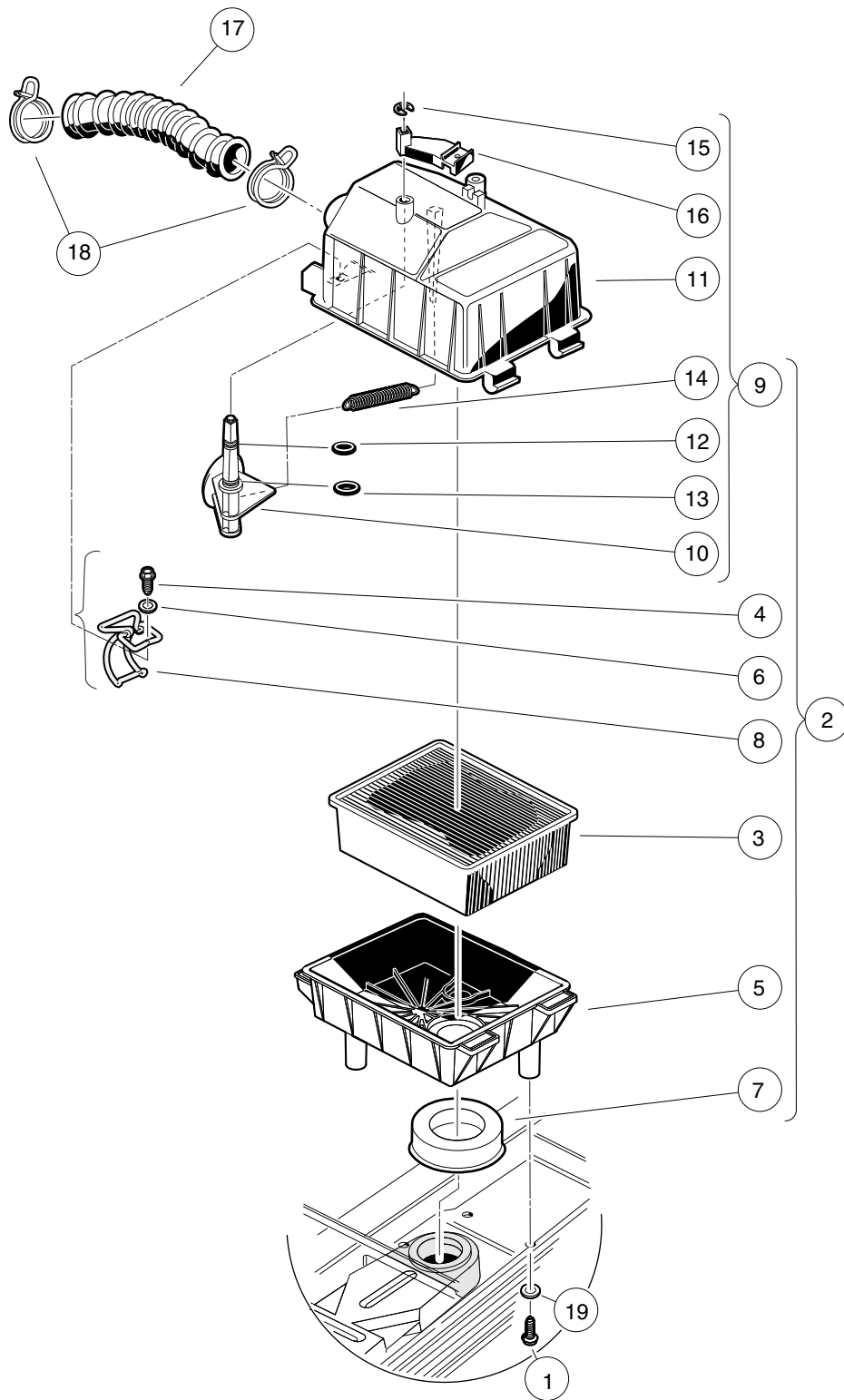


000215-001

## 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**  
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000332-001

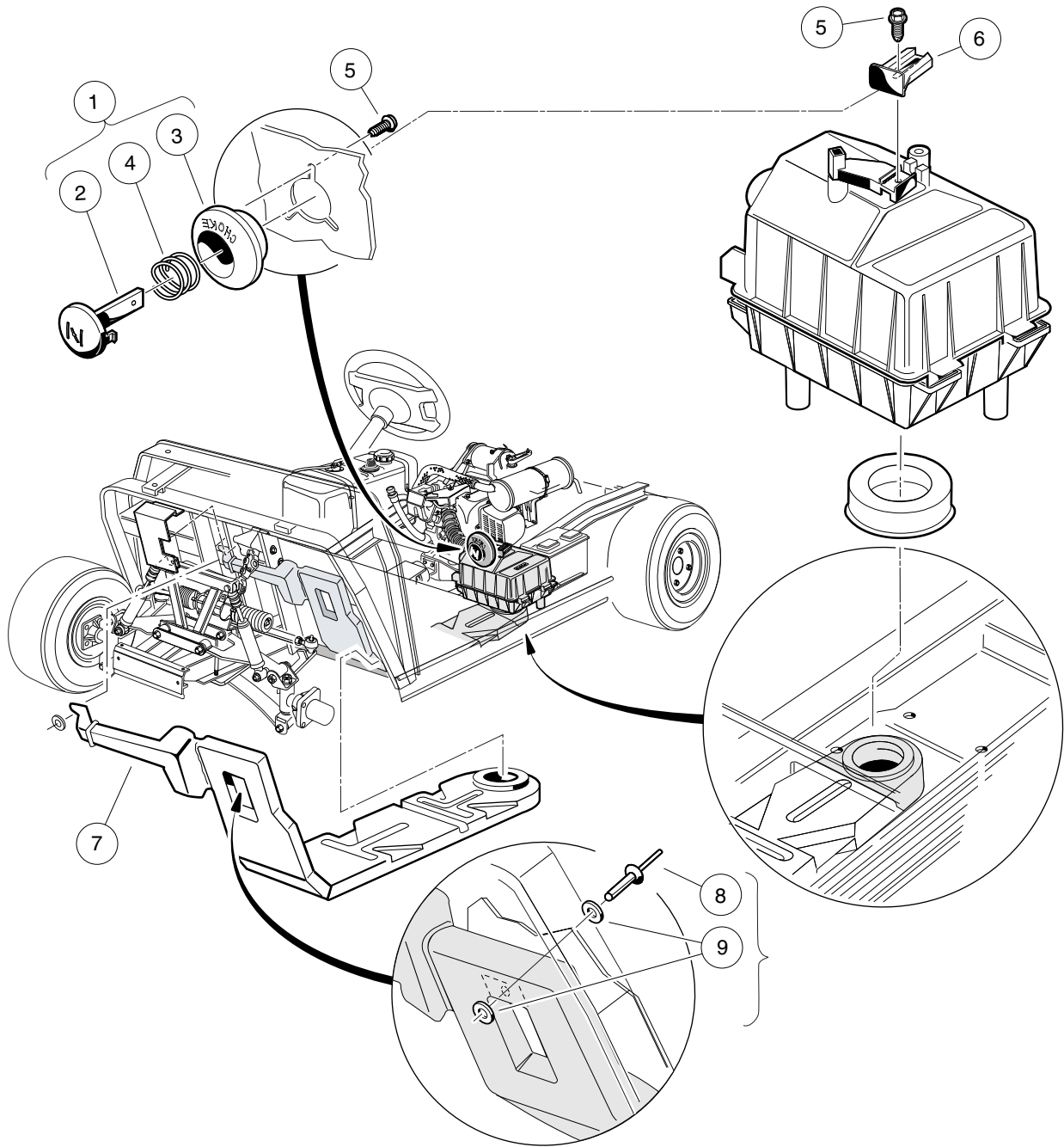


# AIR BOX AND INTAKE HOSE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1015752	Screw, #12-16 X 0.625 Hi-Lo .....	3
2	101821501	Assembly, Air Box (includes items 3 through 9) .....	1
3	1015426	Filter, Air .....	1
4	101804301	Screw, #8 X 0.500, Hex-Head Hi-Lo .....	2
5	101811901	Bottom, Air Box .....	1
6	101881701	Washer, #8 Stainless-Steel Flat .....	2
7	101921501	Seal, Intake .....	1
8	101925701	Latch, Wireform .....	2
9	101972801	Top Assy, Air Box (includes items 10 through 16) .....	1
10	N/A	Valve, Choke .....	1
11	N/A	Top, Air Box .....	1
12	N/A	O-Ring, 5/16 .....	1
13	N/A	O-Ring, 3/8 .....	1
14	101812301	Spring, Extension Return .....	1
15	101813001	Retaining Ring 0.25, Shaft .....	1
16	101917601	Lever, Choke .....	1
17	101837101	Hose, Air Intake .....	1
18	101971301	Clamp, 1.58" ID Hose .....	2
19	332	Washer, 1/4 Type A Narrow Flat .....	3

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000338-004

# INTAKE SYSTEM

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101805701	Button Assembly, Choke (includes items 2 through 4) .....	1
2	101811401	Lever, Choke .....	1
3	101811501	Guide, Choke Lever .....	1
4	101856201	Compression Spring .....	1
5	101850301	Screw, #12-16 X 0.50 Washer-Head Hi-Lo .....	4
6	101917701	Choke Positioner .....	1
7	103520301	Duct, Air Intake, Ds .....	1
8	1606	Rivet, 3/16 X .500 Alum Pop .....	2
9	183	Washer, #10 Type A Flat .....	4

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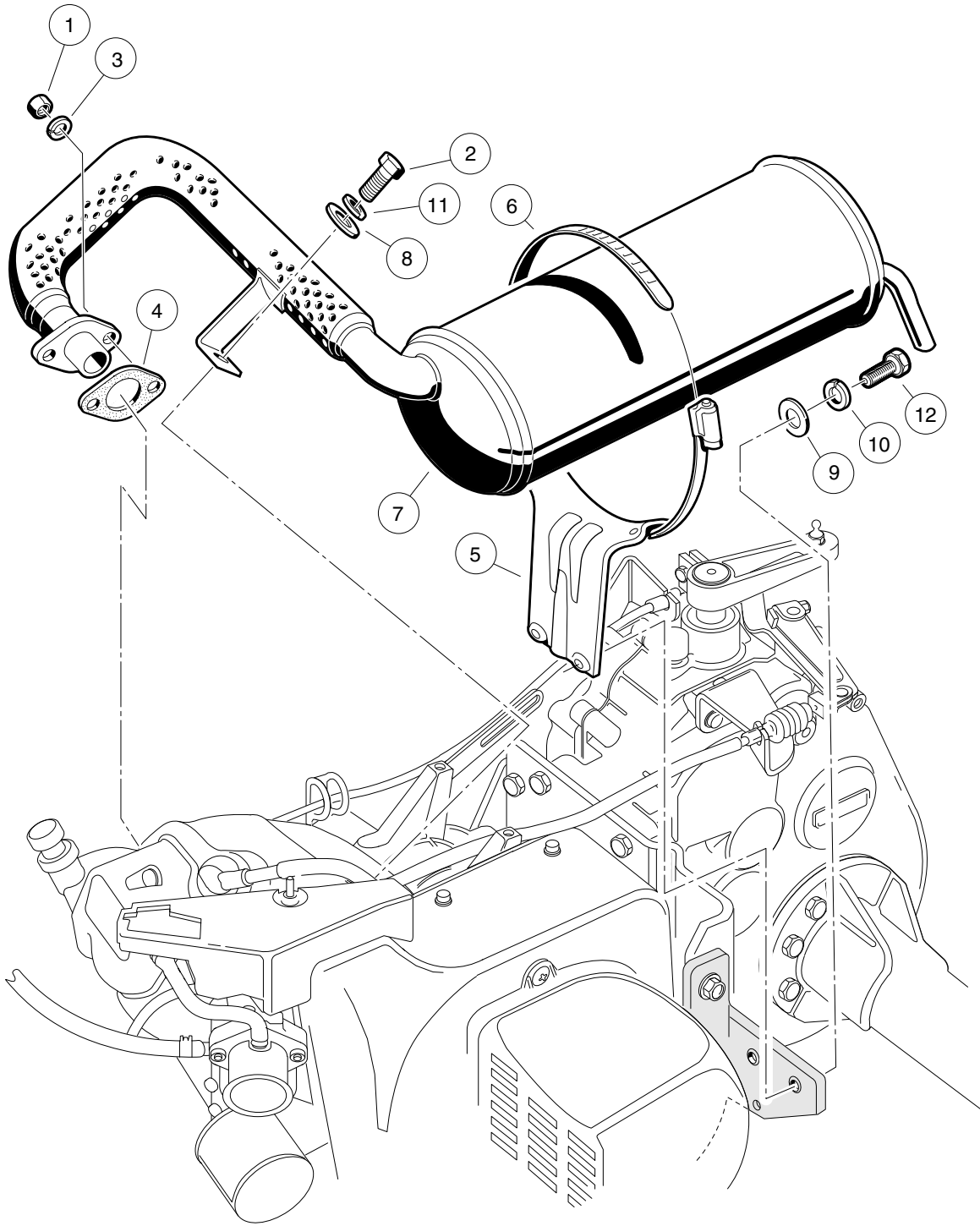
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# EXHAUST SYSTEM

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000208-001

## EXHAUST SYSTEM – FE290 ENGINE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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

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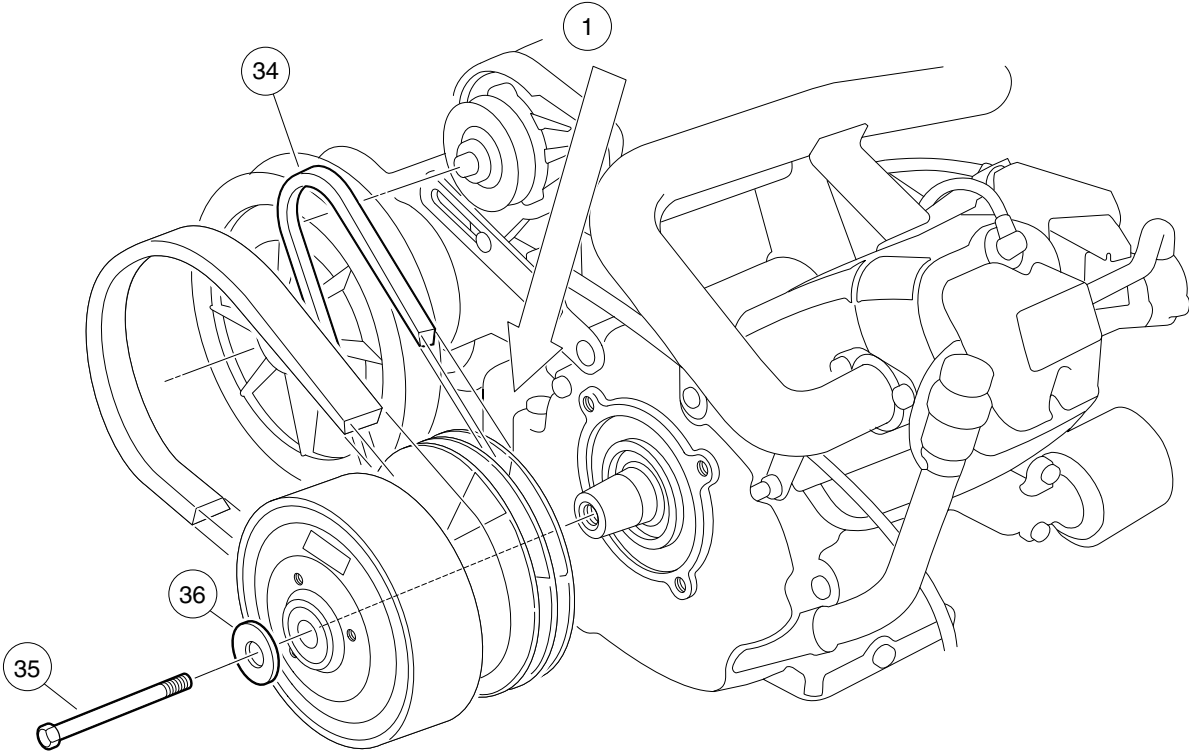
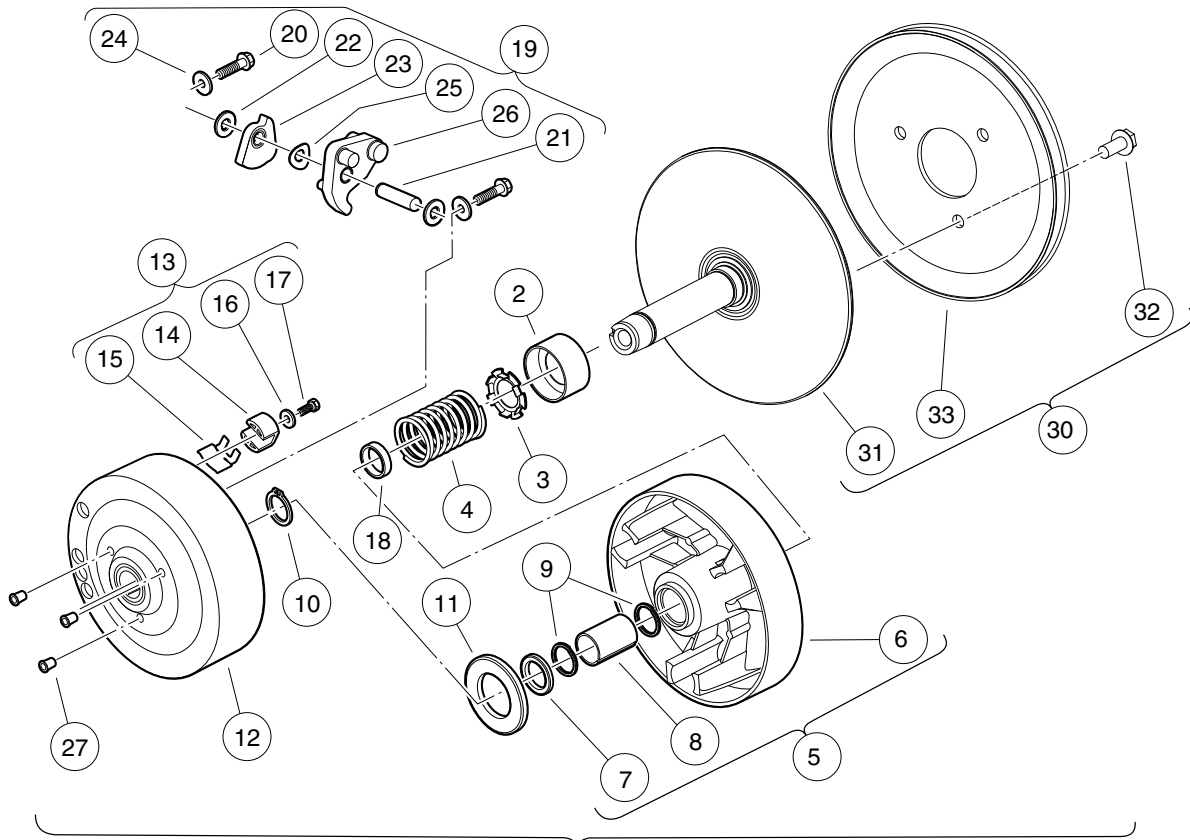


# TORQUE CONVERTER

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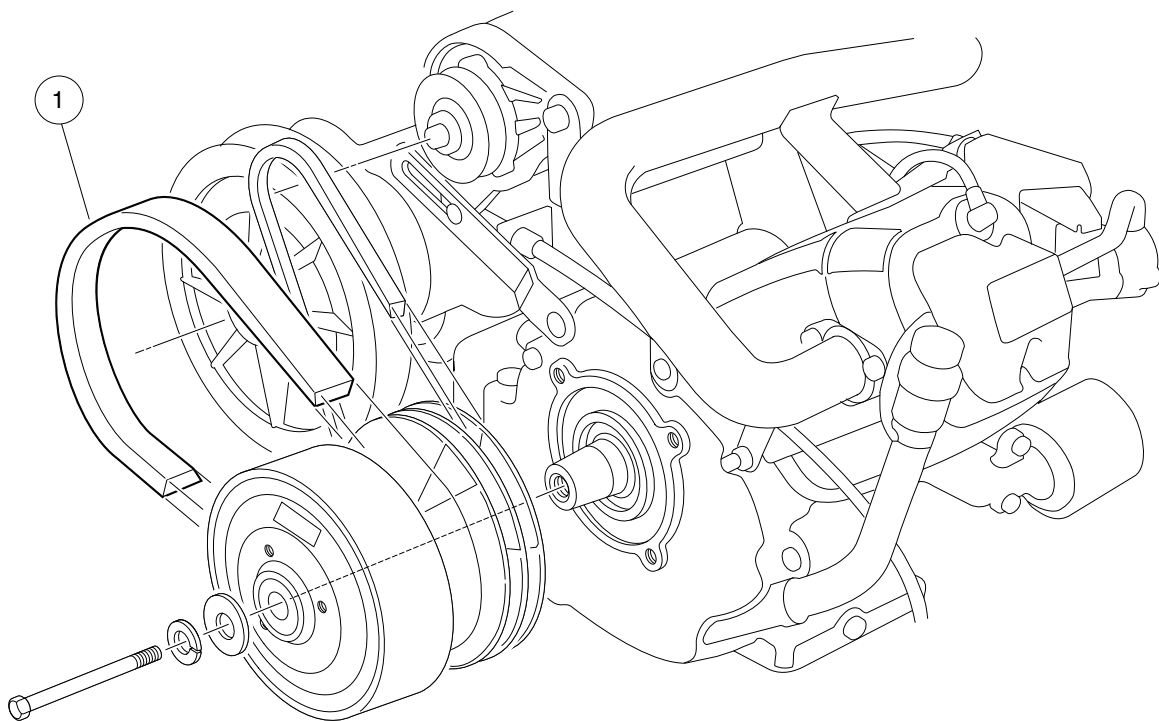
000217-001

# DRIVE CLUTCH

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ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	101833902	Clutch, Drive (includes items 2 through 28) .....	1
2	1014049	Bearing, Idler .....	1
3	1014050	Retainer, Spring .....	1
4	1014051	Spring, Drive Clutch .....	1
5	1014052	Movable-Face Assembly (includes items 6 through 8) .....	1
6	N/A	Drive Clutch Movable Face .....	1
7	1014055	Retainer .....	1
8	N/A	Bushing, Split, Drive Clutch .....	1
9	1014056	Ring, Spiral Backup .....	2
10	1014057	Ring, 0.810" Internal Retaining .....	1
11	1014058	Thrust Washer .....	1
12	1014059	Drive Hub Assy, Drive Clutch .....	1
13	1014453	Kit, Drive Clutch Button (includes items 14 through 17) .....	1
14	1014062	Driver, Drive Clutch .....	3
15	1014287	Spring, Drive Button .....	3
16	183	Washer, #10 Type A Flat .....	3
17	8450	Screw, #10-24 X 0.50 Hex-Head .....	3
18	1016289	Spacer, Fixed Face Shaft .....	1
19	1016801	Kit, Drive Clutch Weight (includes items 20 through 26) .....	1
20	1014063	Screw, 1/4-20 X 1.00 Hex Head .....	6
21	N/A	Pin, 0.3752 X 1.50 Dowel .....	3
22	1014065	Washer, 0.38" ID Delrin Flat .....	6
23	N/A	Clutch Weight, Secondary .....	3
24	N/A	Washer .....	6
25	1016201	Washer, Wave .....	3
26	N/A	Weight, Primary .....	3
27	101925601	Plug, Drive Clutch .....	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.	



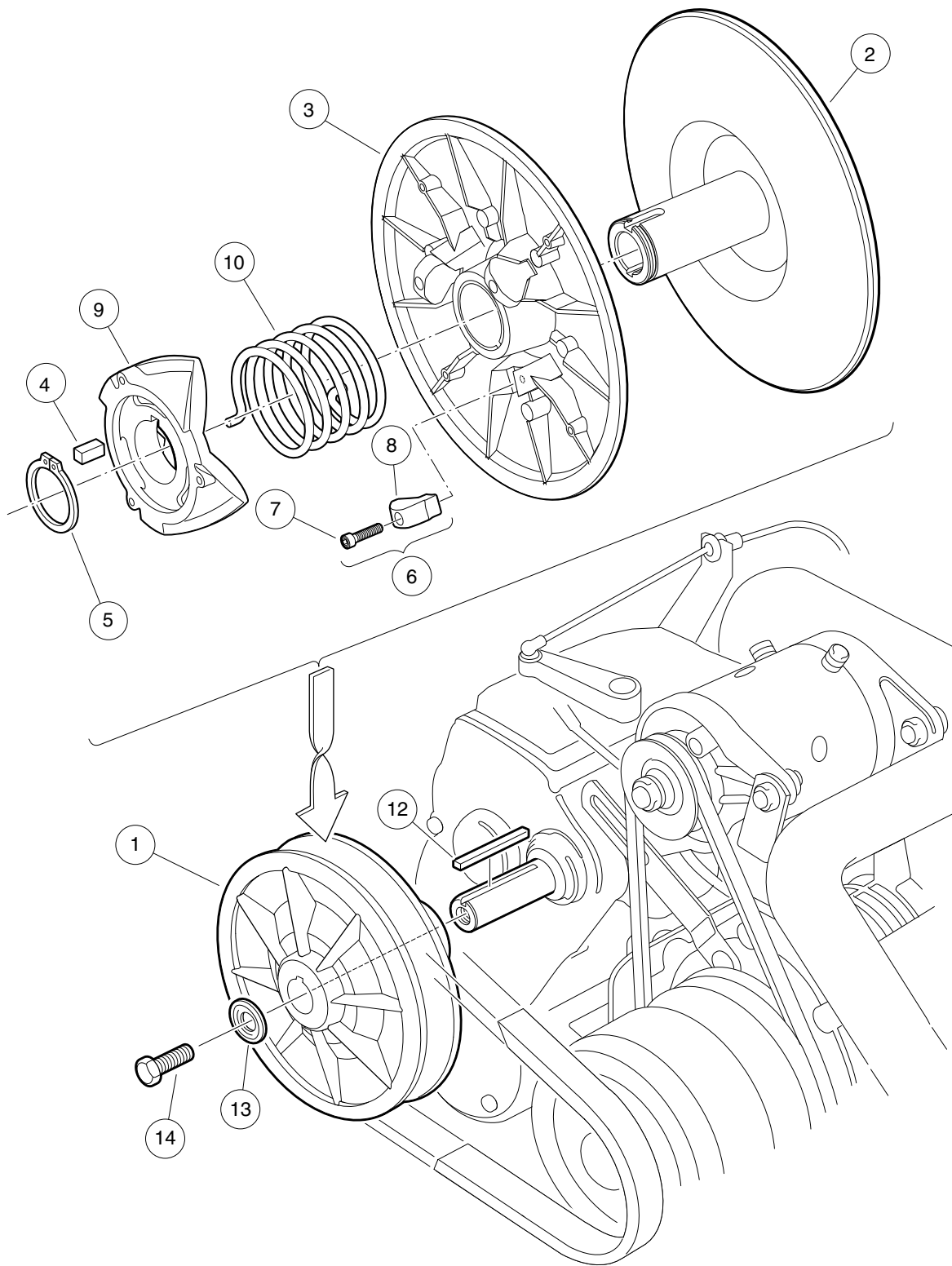
000218-001

# DRIVE BELT – FE290

ITEM	PART NO.	DESCRIPTION	QTY
1	1016203	<div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> <span>1</span><span>2</span><span>3</span><span>4</span> </div> Belt, Drive .....	1

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000219-001

# DRIVEN CLUTCH

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</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	N/A	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

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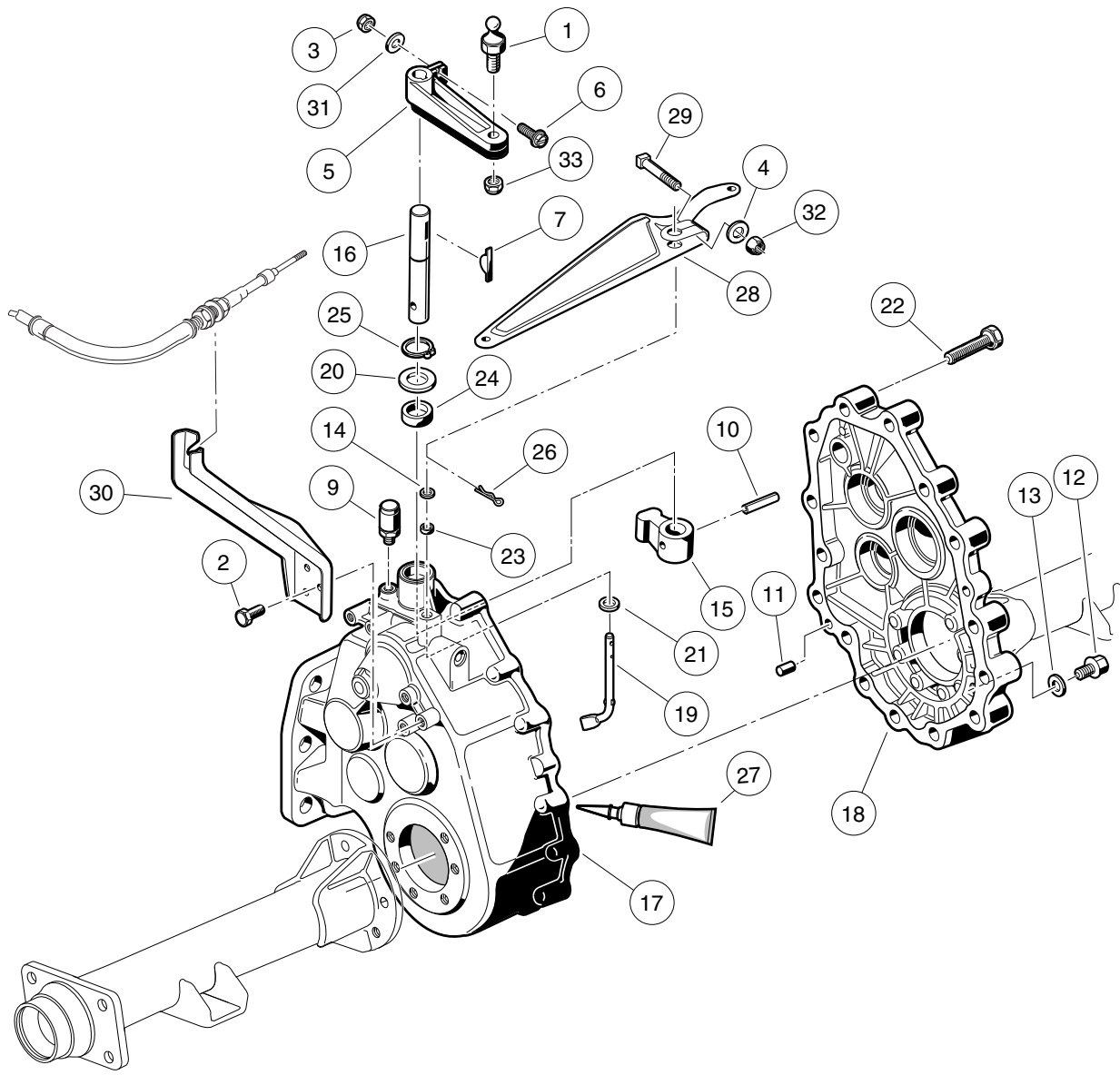


# TRANSAXLE – GASOLINE VEHICLE

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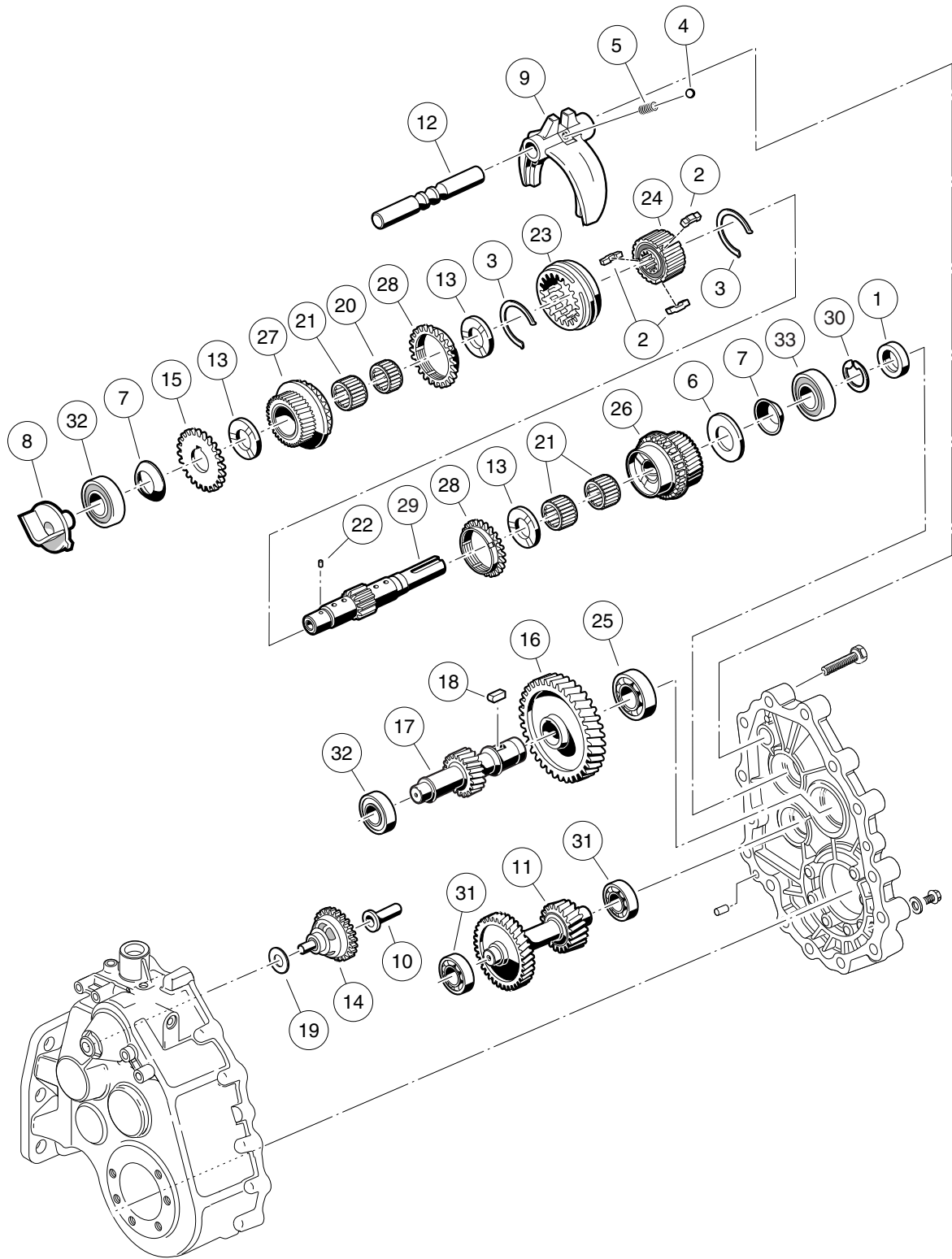
000220-001

# TRANSAXLE – GASOLINE VEHICLES, GEAR CASES AND BRACKETS

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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) .....	A/R
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

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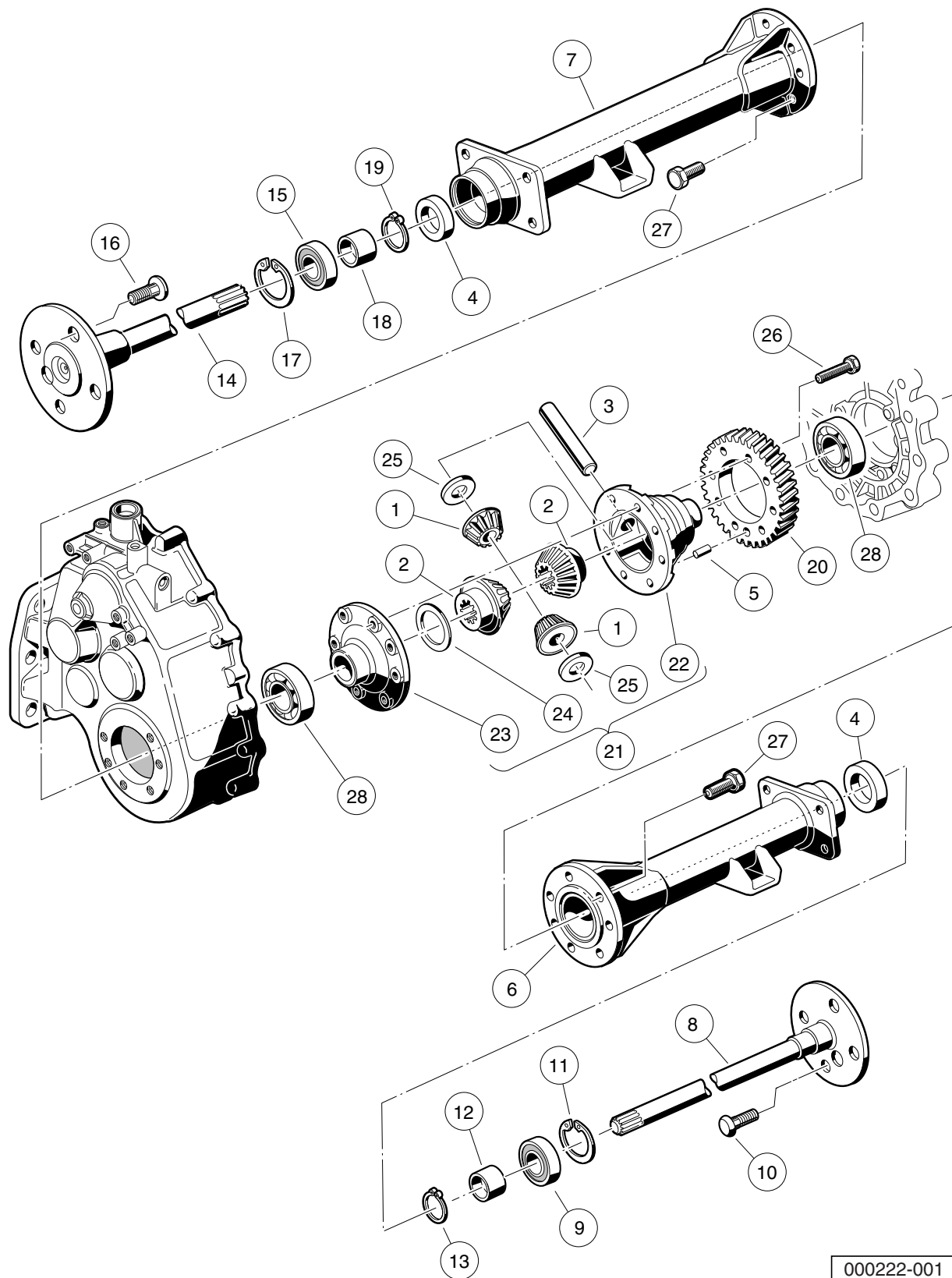
000221-001

# 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.			

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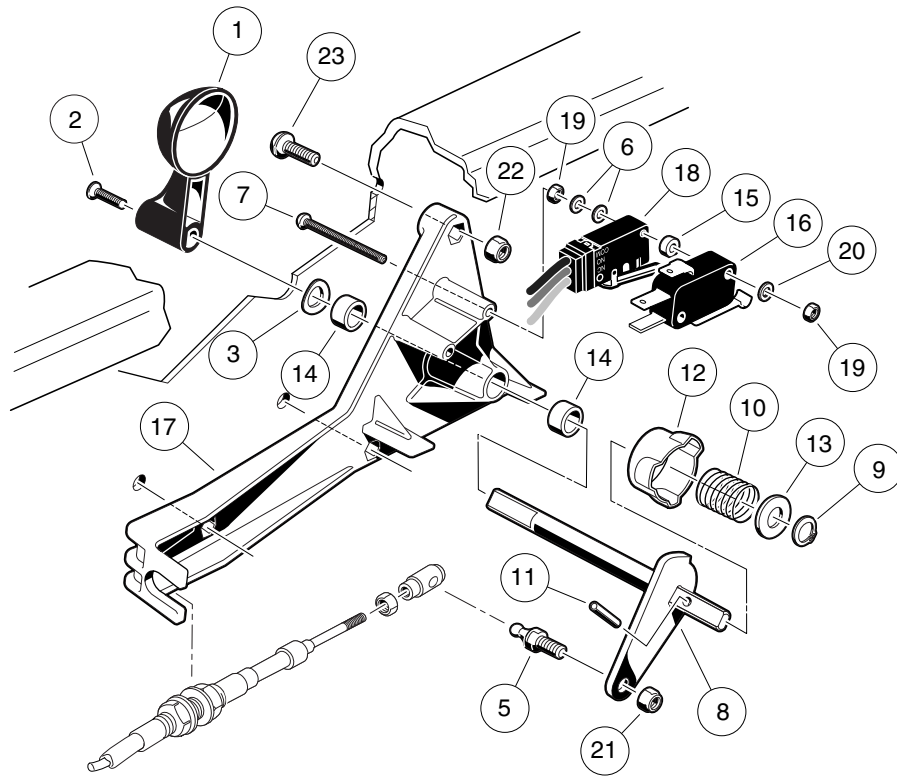


000222-001

# TRANSAXLE – GASOLINE VEHICLES, DIFFERENTIAL AND AXLES

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1013770	Differential Idler Gear .....	2
2	1013771	Gear, Differential .....	2
3	1013772	Pin, Differential .....	1
4	1013794	Axle Shaft Oil Seal .....	2
5	N/A	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

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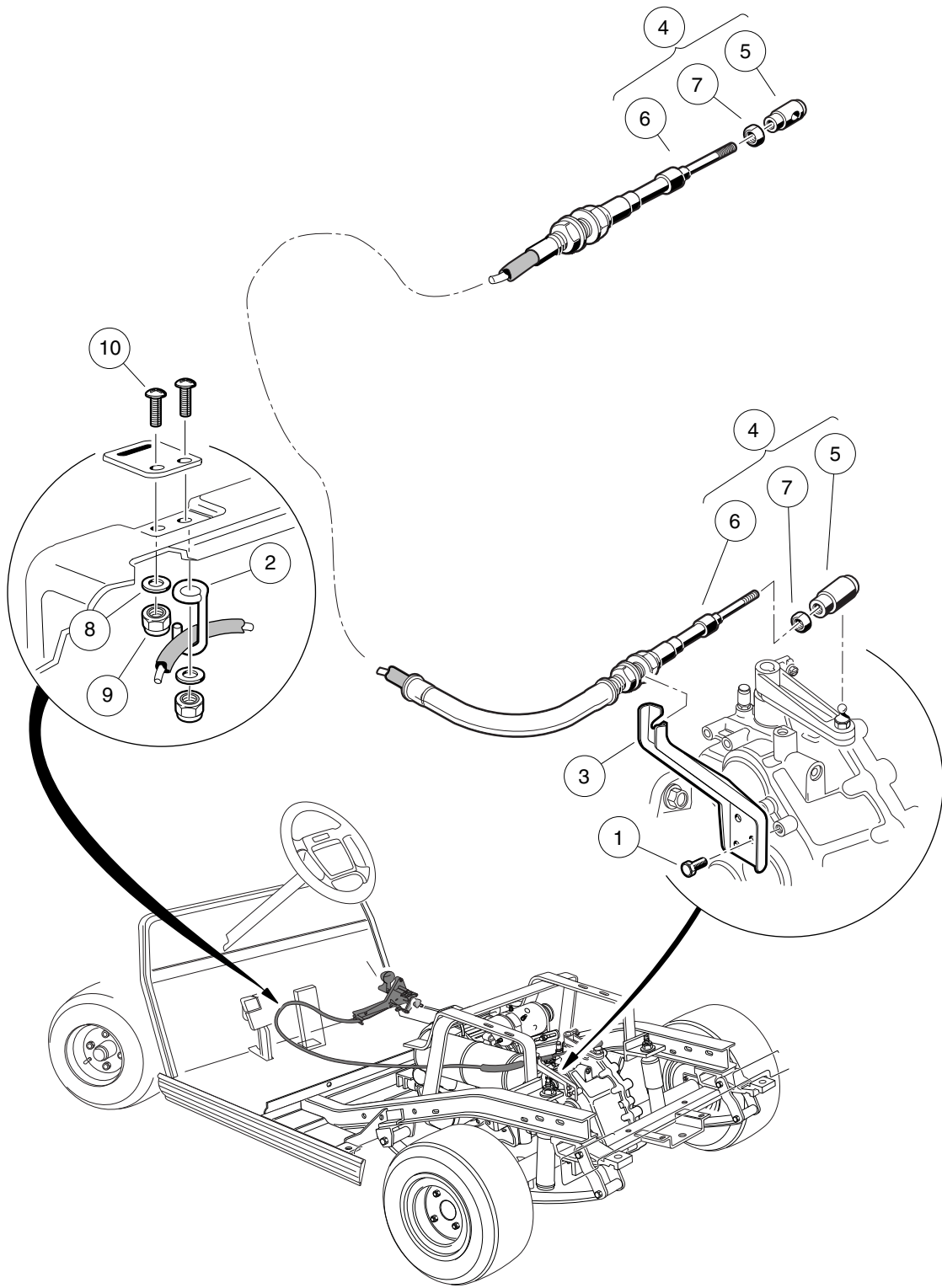
000236-001



# FORWARD/REVERSE SHIFTER ASSEMBLY – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY
		<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

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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

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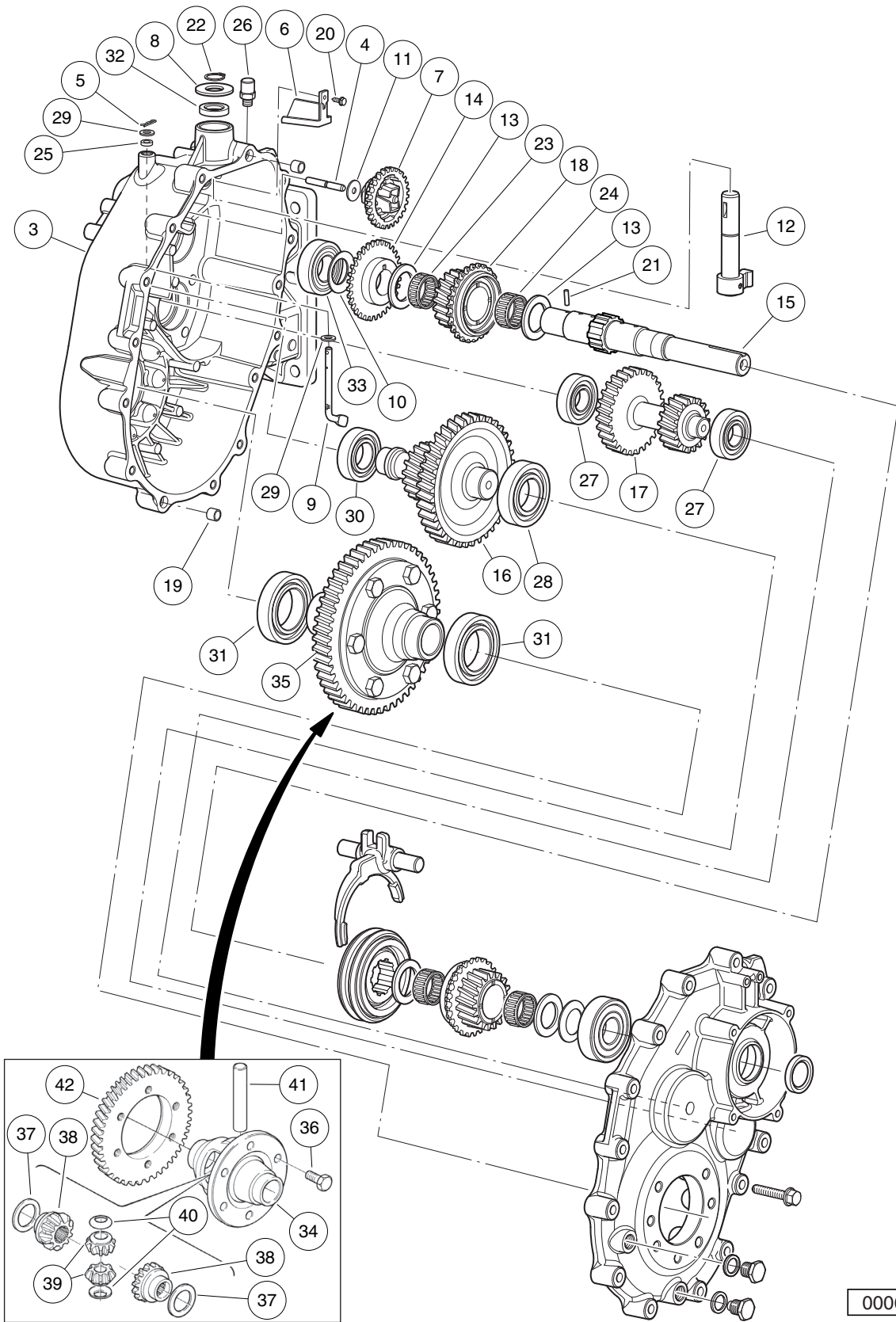
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# GRAZIANO TRANSAXLE – GASOLINE VEHICLE

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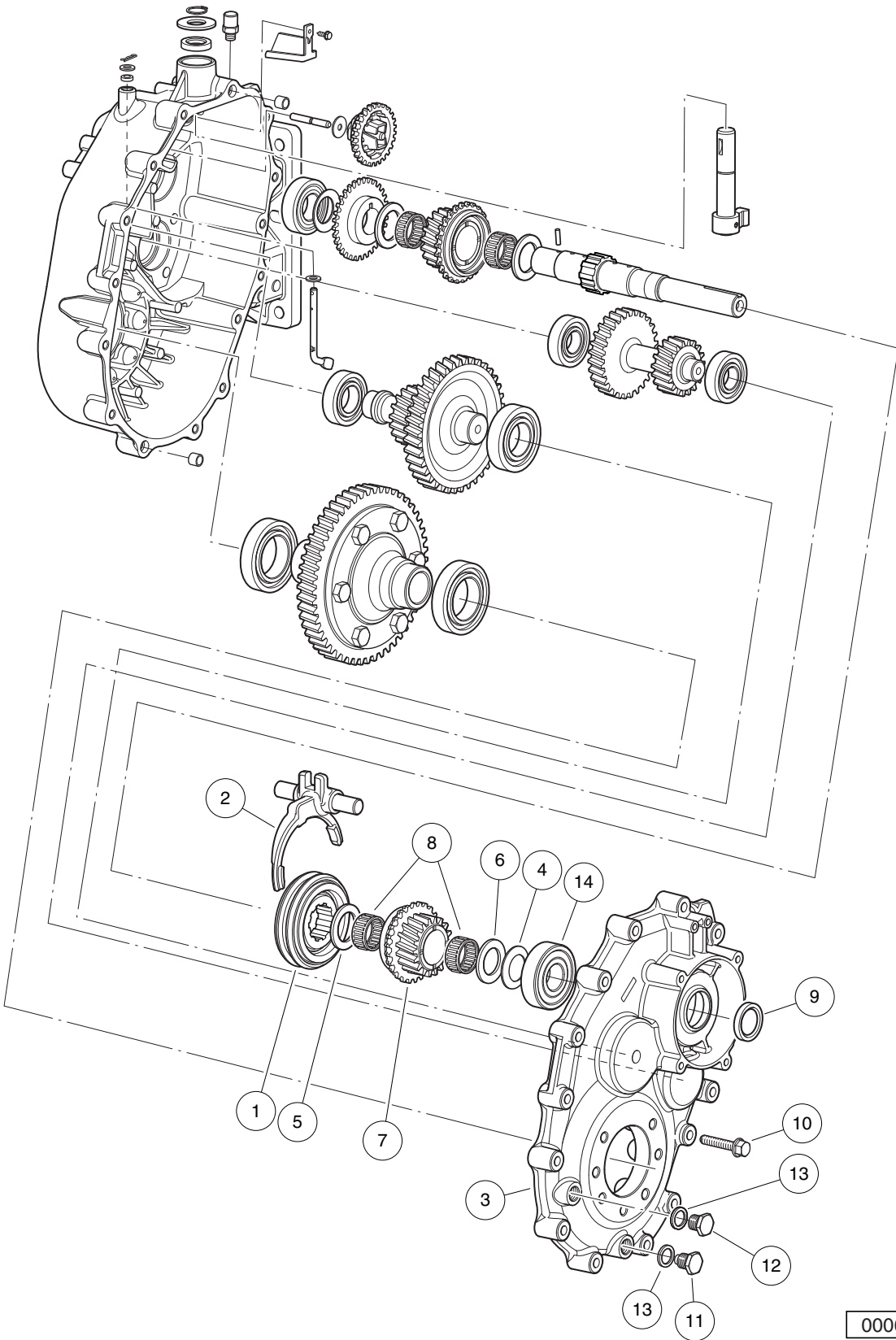


000680-001

# GRAZIANO TRANSAXLE – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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

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000680-002

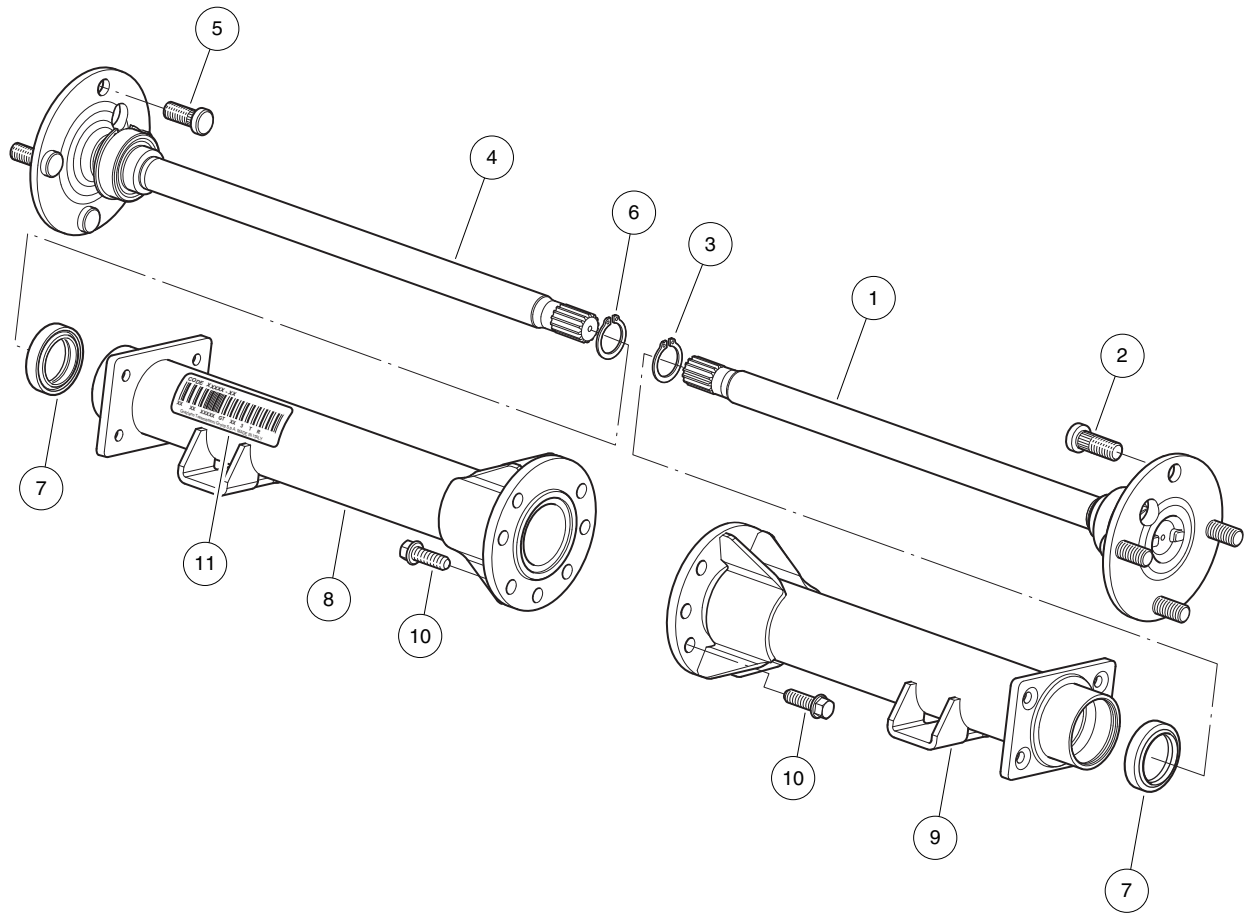


# GRAZIANO TRANSAXLE – GASOLINE VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	102897201	Synchronizer, Complete .....	1
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
<p>Note: Items listed on this page are components of the Graziano transaxle assembly.</p>			

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000681-001

# GRAZIANO TRANSAXLE – GASOLINE VEHICLES

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ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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
<p style="margin-left: 40px;">Note: Items listed on this page are components of the Graziano transaxle assembly.</p>			

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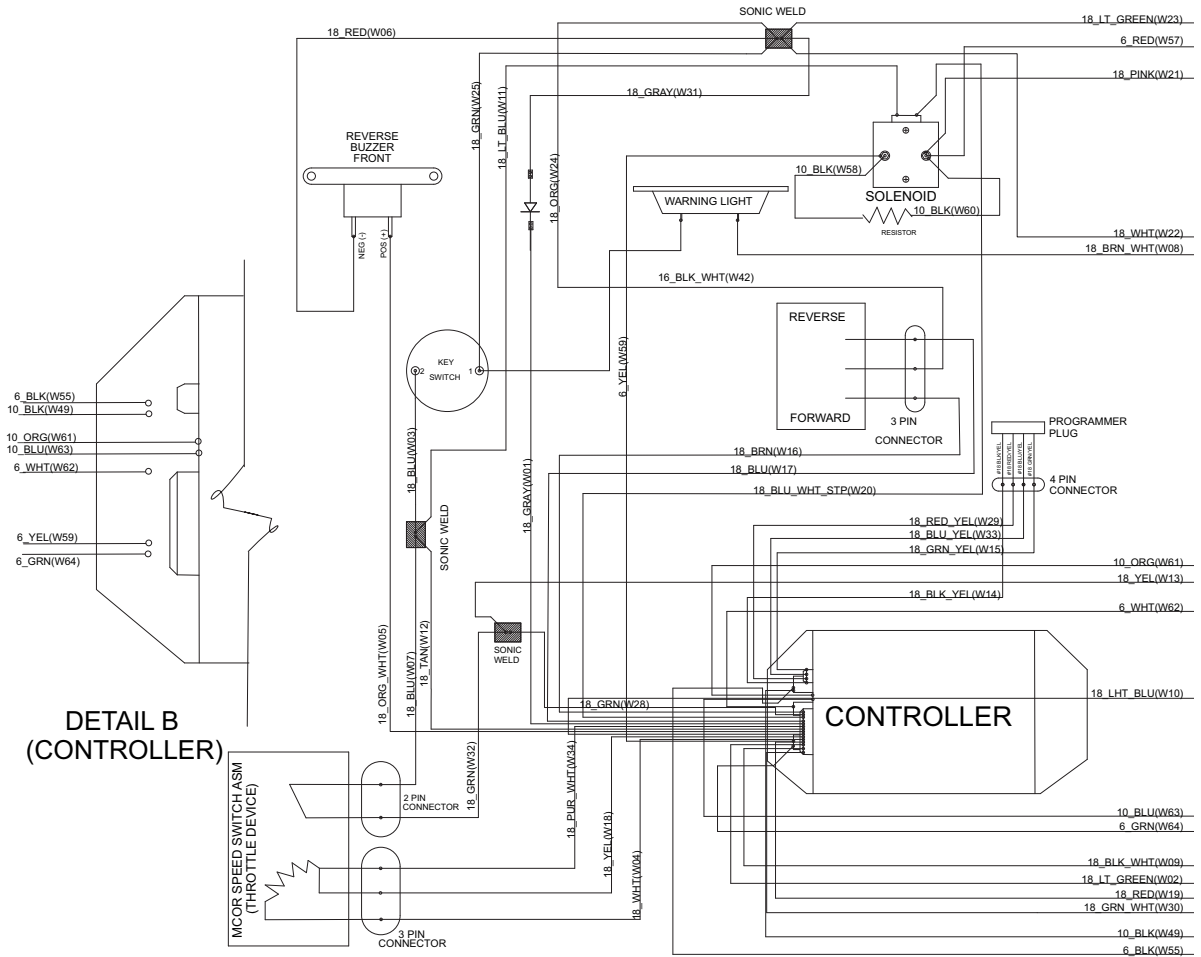
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# ELECTRICAL SYSTEM – ELECTRIC VEHICLE

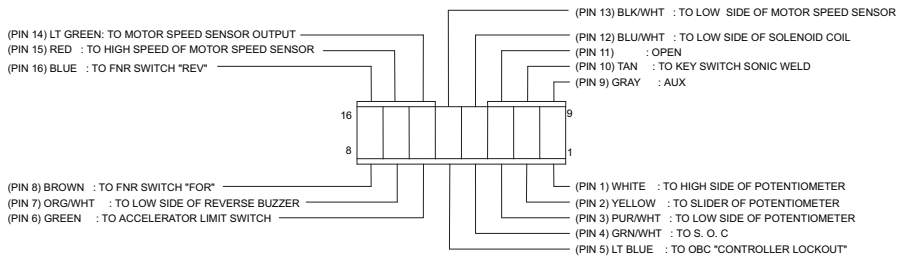
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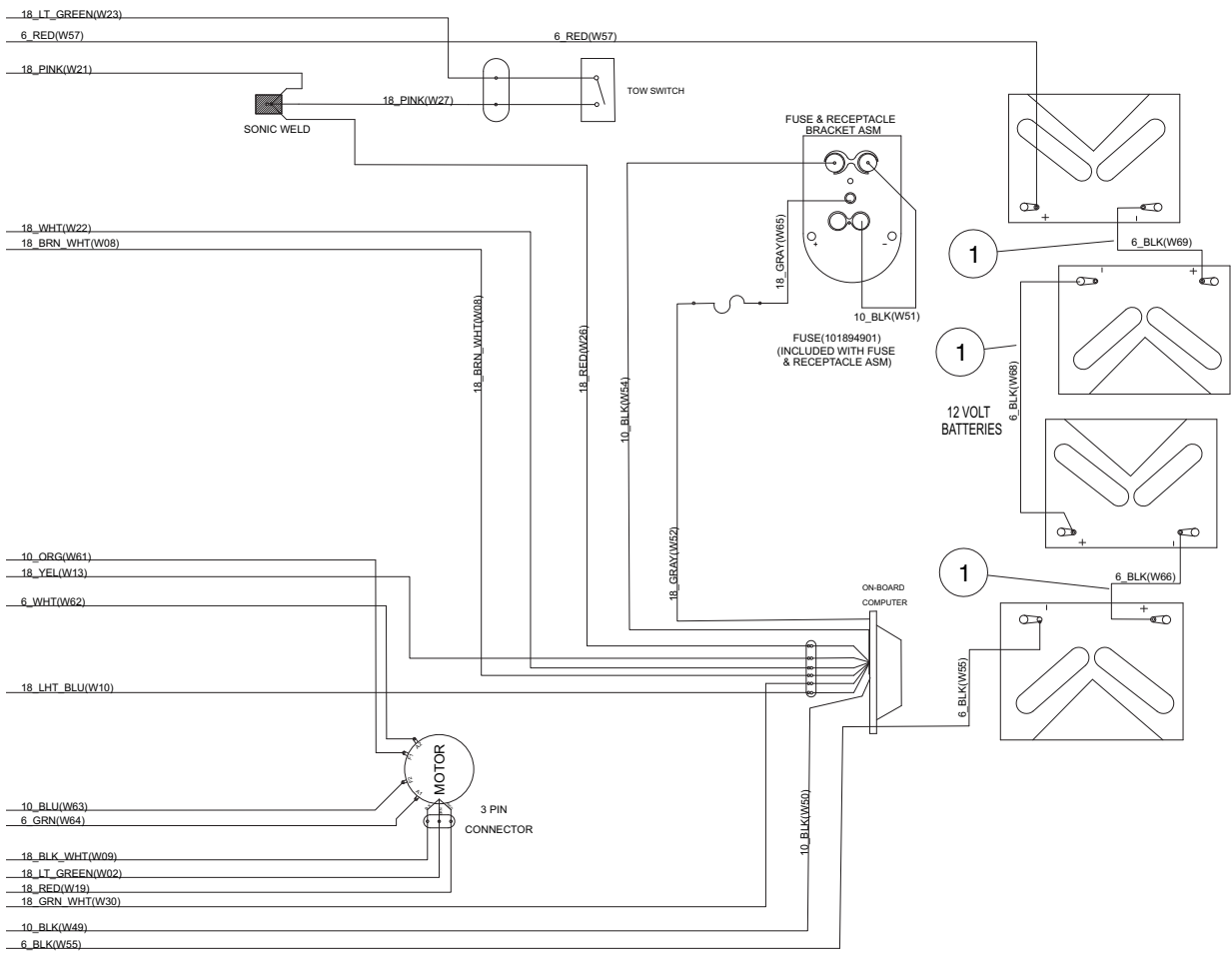
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DETAIL B (CONTROLLER)



000412-002



000412-002

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See previous two pages for illustration.

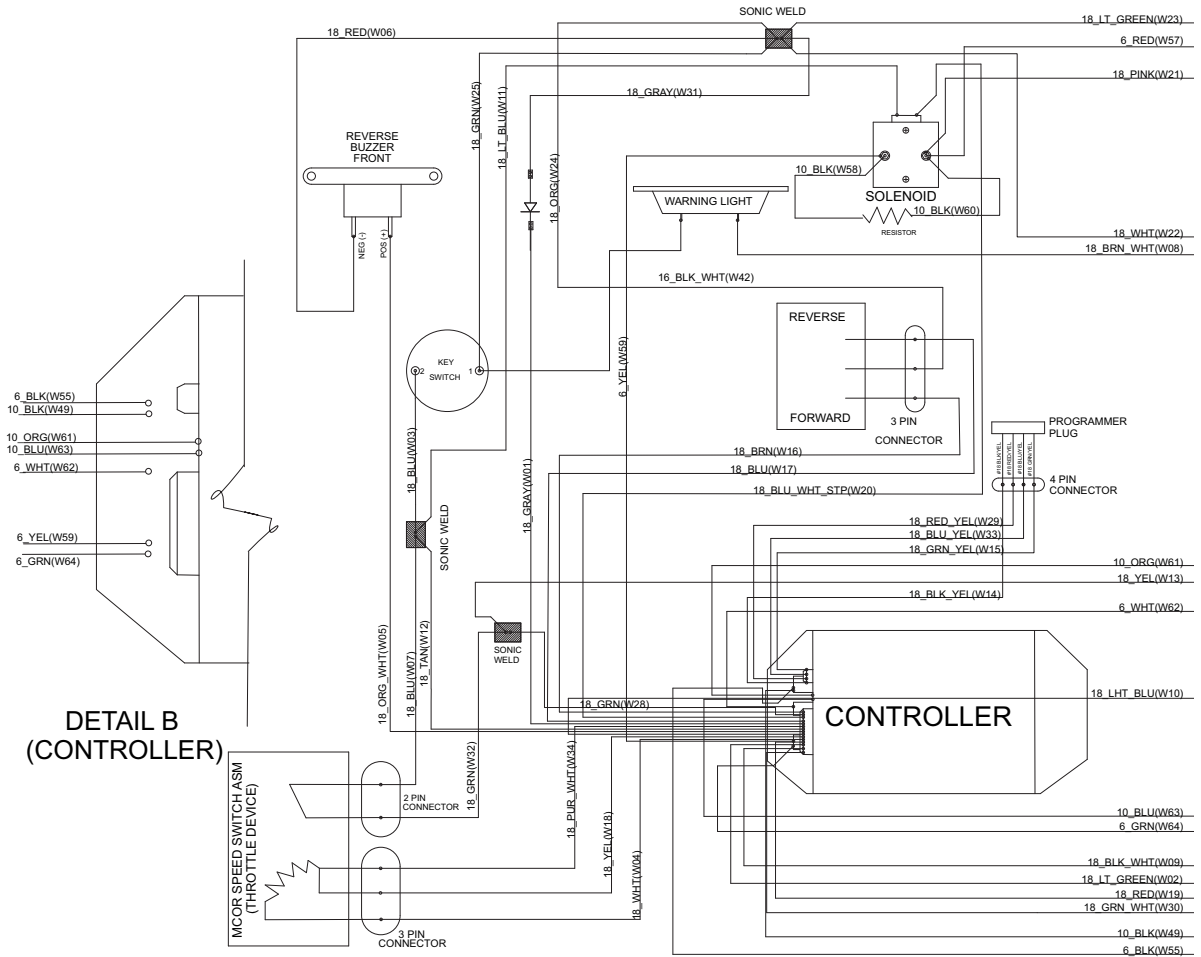


# WIRING

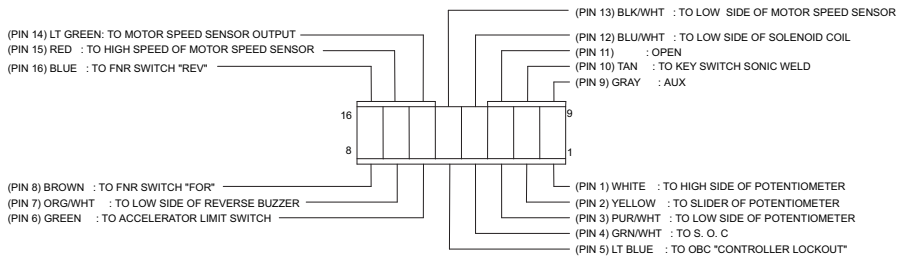
ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	101795701	Asm, Wire, #6blk 13in .....	3
2	102913301	Wire Harness, Electric, DS, Four 12-Volt Batteries .....	1
3	103250701	Wire Harness Ds Iq Data .....	1

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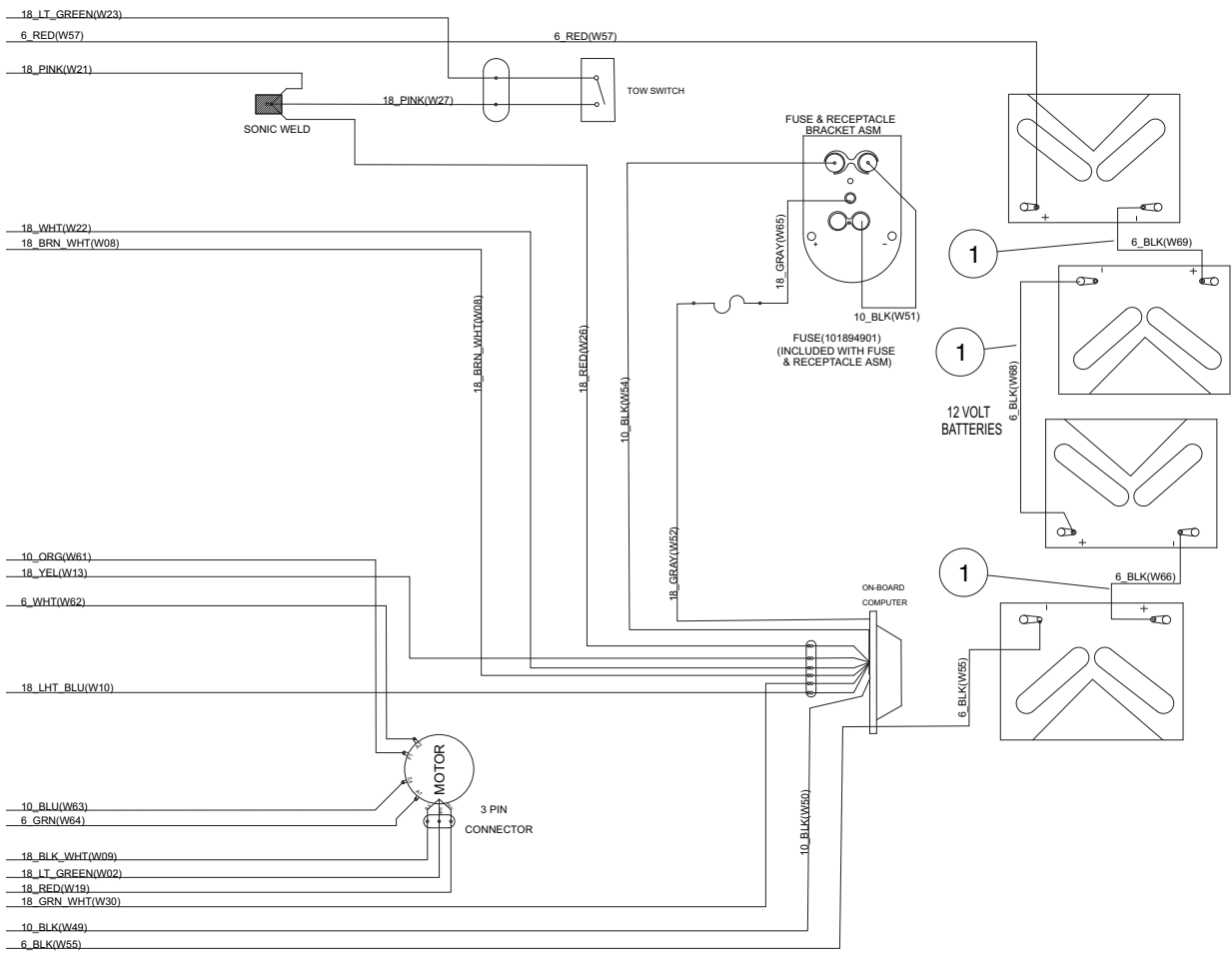
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DETAIL B (CONTROLLER)



000412-002



000412-002

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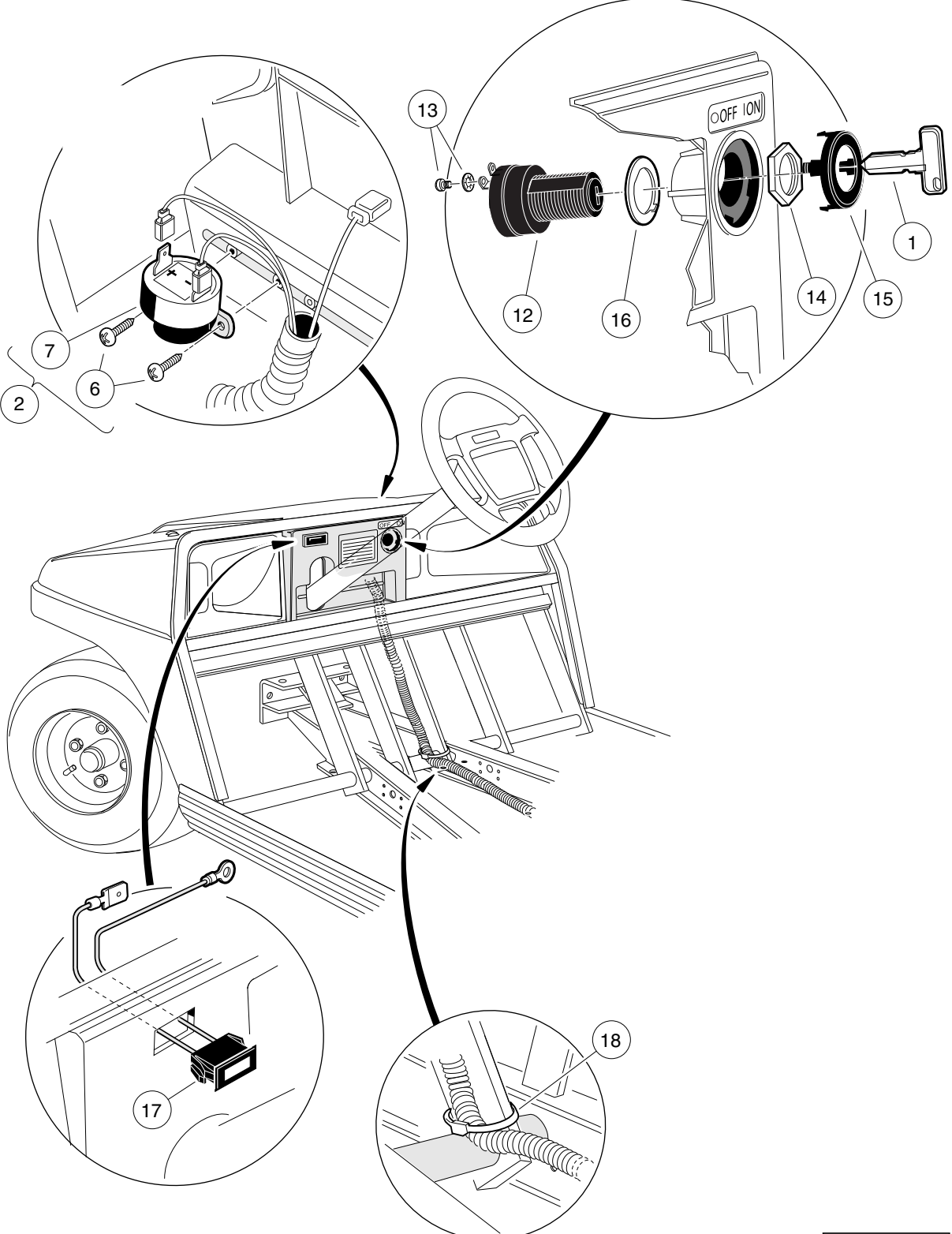
See previous two pages for illustration.

# WIRING

ITEM	PART NO.	DESCRIPTION	QTY
1	103689601	1 2 3 4 Wire Harness Elec Ds 12v .....	1

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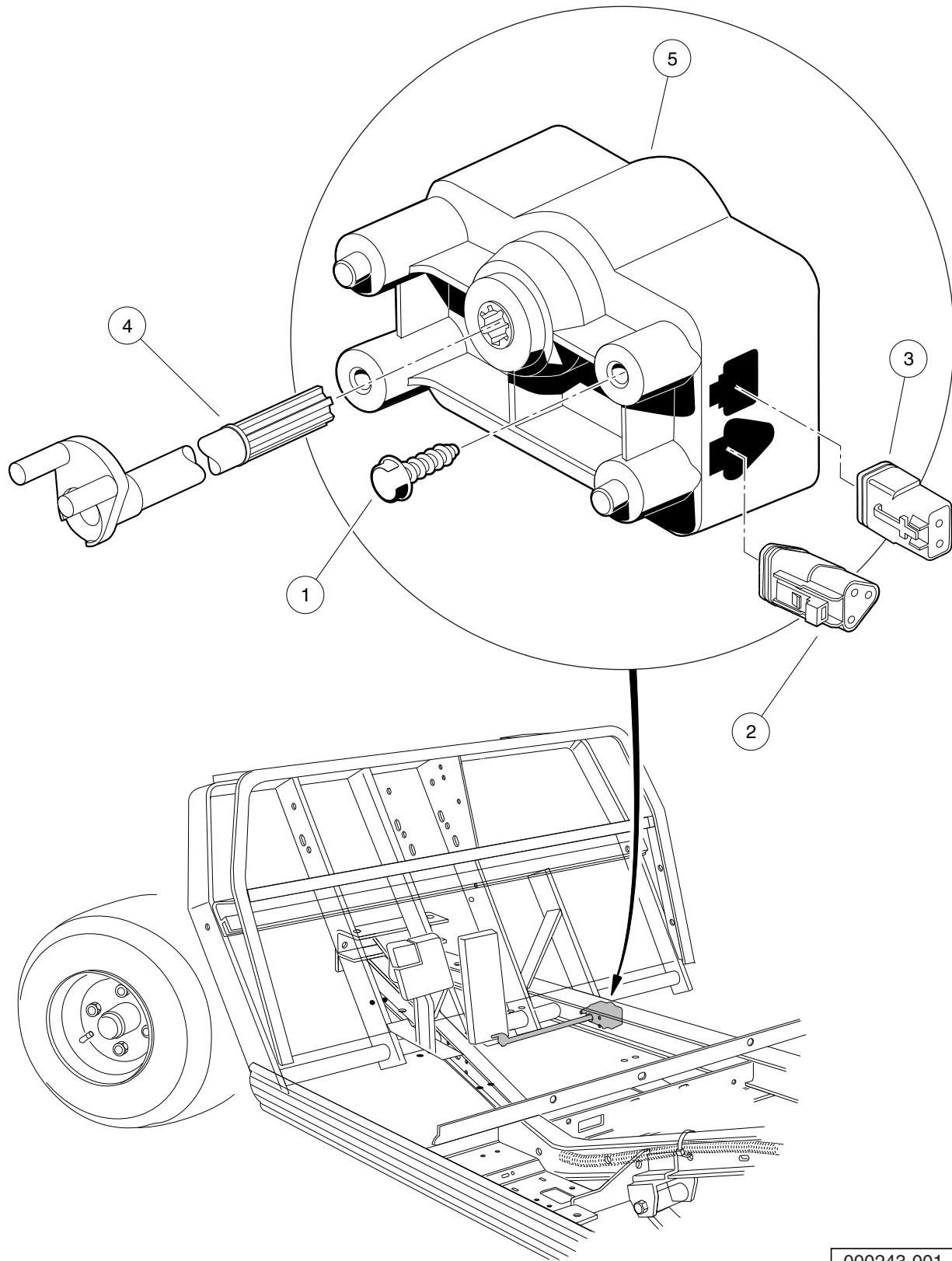
000340-001

# INSTRUMENT PANEL COMPONENTS

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1012505	Keys (set of 2) .....	1
2	1016859	Kit, Reverse Buzzer (includes items 3 through 11) .....	1
3	1011229	Locknut, #6-32 Whiz .....	1
4	1012431	Washer, #4 Flat .....	2
5	1015720	Screw, #6-32 X 1/2 Hex Washer-Head .....	1
6	1016849	Screw, #4-24 X 0.33 Pan-Head Machine .....	2
7	1016851	Buzzer, Reverse (9-48 VDC) .....	1
8	1016857	Wire Assembly Black #18 .....	1
9	8056	Screw, #4-40 X 0.75 Round-Head Machine .....	2
10	8057	Nut, #4-40 Hex Machine .....	2
11	8058	Lockwasher, #4 Split .....	2
12	101826201	Key Switch, On/Off .....	1
13	101830601	Screw and Washer Assembly .....	2
14	101830701	Nut, Key Switch .....	1
15	101834502	Cap, Black Key Switch .....	1
16	101851101	Washer, Key Switch .....	1
17	101935501	Light, Battery (Amber) .....	1
18	8990	Tie Wrap, 8" Nylon .....	2
		Note: Item 2, Reverse Buzzer Kit, contains parts not used in this application.	

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000243-001



# MOTOR CONTROLLER OUTPUT REGULATOR (MCOR)

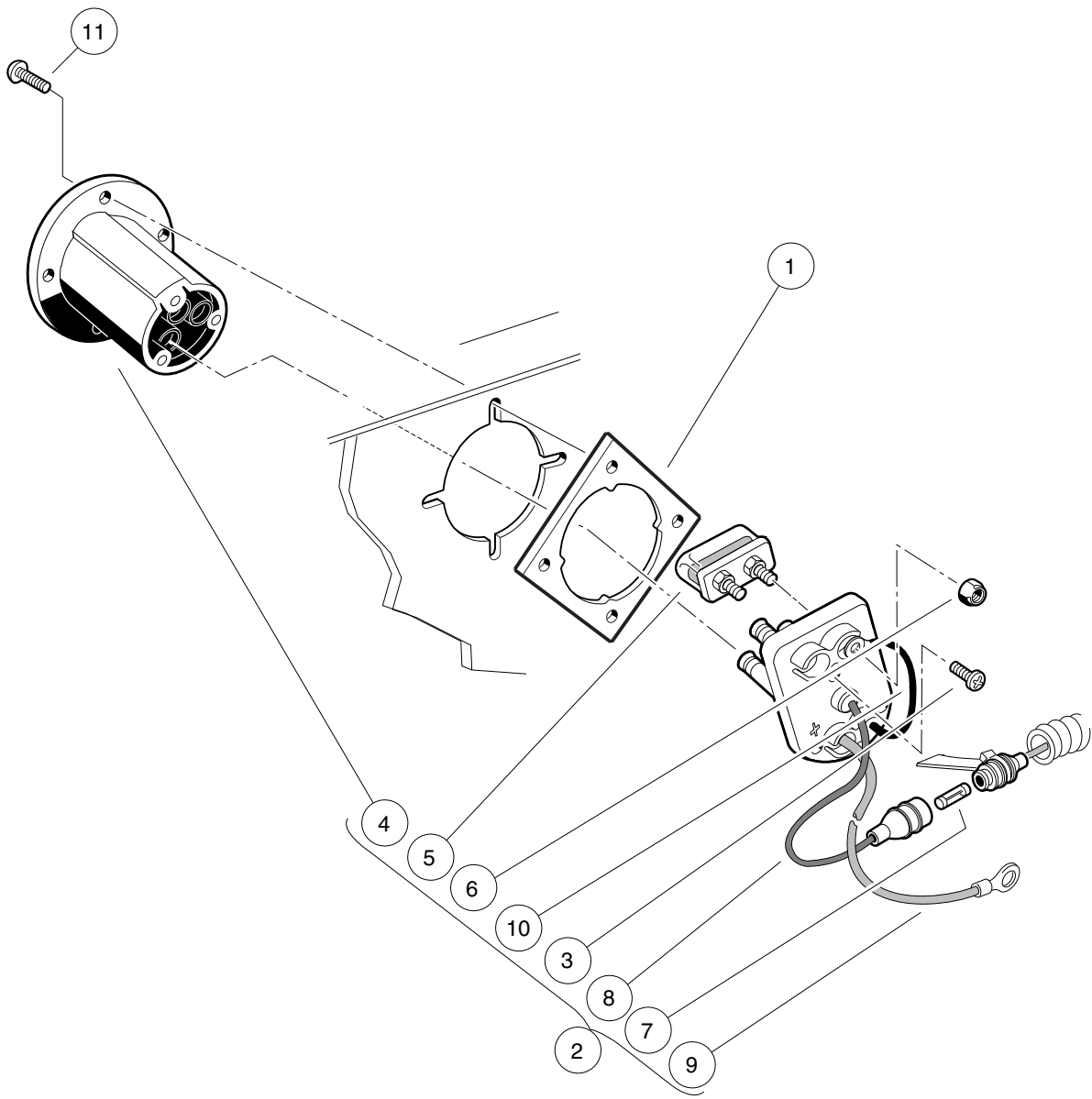
ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	1015752	Screw, #12-16 X 0.625 Hi-Lo .....	2
2	101920101	Kit, 3-Pin Wedge Lock .....	1
3	101936801	Kit, 2-Pin Wedge Lock .....	1
4	102101001	Bar, Drive, Cast .....	1
5	102101101	MCOR .....	1

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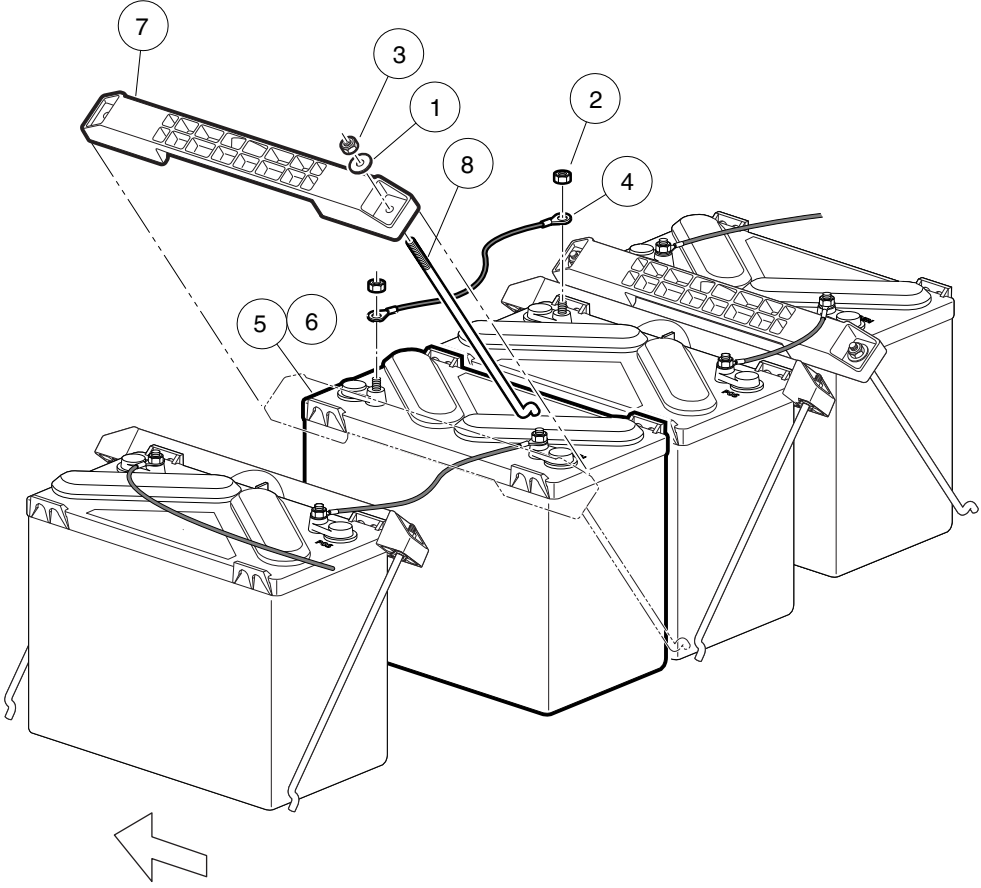
000369-001

# BATTERY CHARGER RECEPTACLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101801001	Plate, Receptacle Backing .....	1
2	101802101	Fuse and Receptacle Assembly (includes items 3 through 10) .....	1
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	101894901	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

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000241-002

# BATTERIES, ELECTRIC VEHICLE

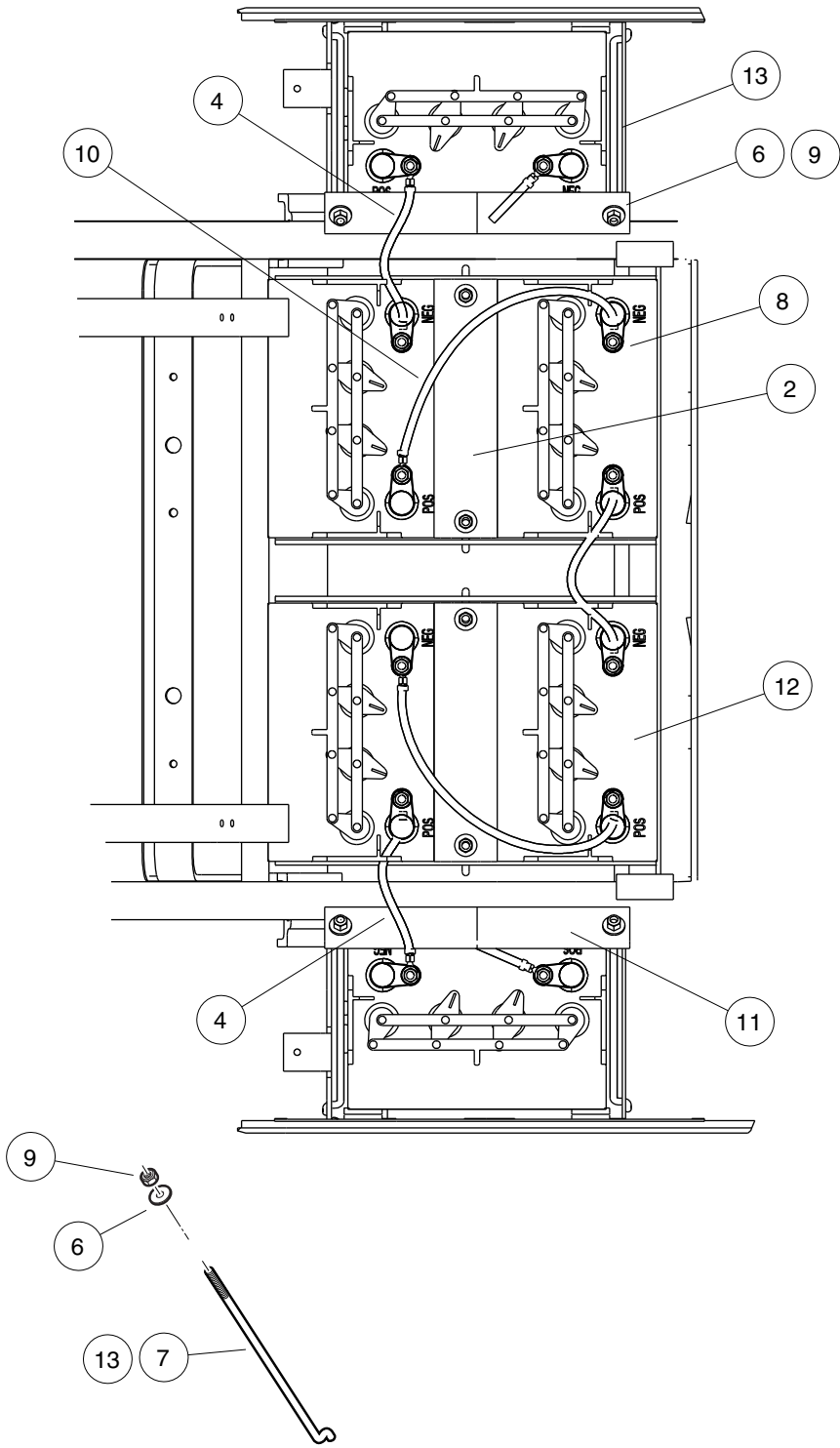
ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1011697	Washer, 5/16 Flat .....	8
2	1014304	Nut, 5/16-18 Stainless-Steel Hex .....	8
3	1015072	Locknut, 5/16-18 Nylon Insert .....	8
4	101795701	Asm, Wire, #6blk 13in .....	3
5	102511301	Battery, Ventmaster 12-Volt (Wet) .....	4
6	102511302	Battery, Ventmaster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

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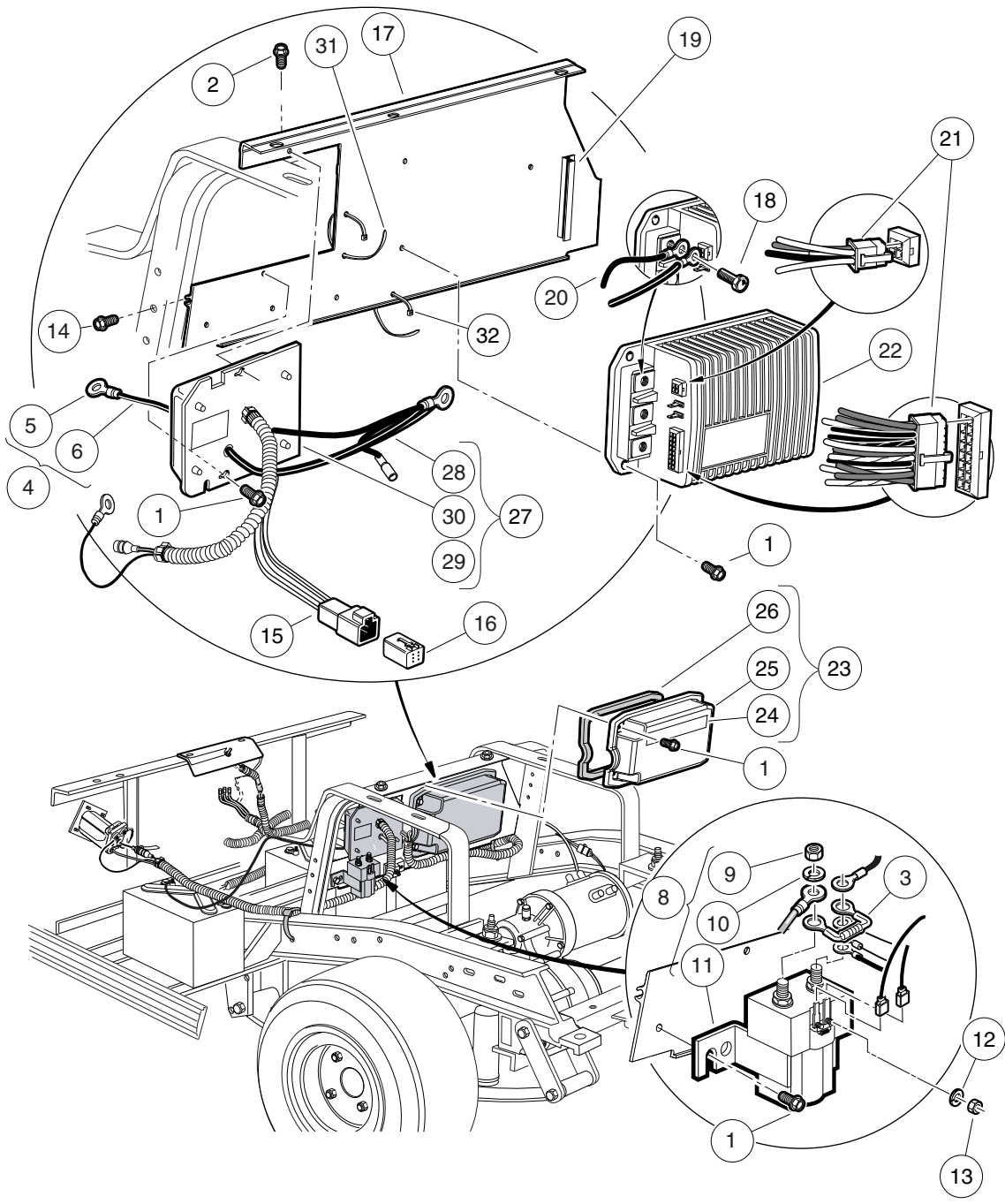
000241-004

## BATTERIES – 6 X 8V, ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	N/A	Instl, 8v Batt Us 48v Elec 6ga (includes items 2 through 13) .....	A/R
2	101090801	Hold-Down, Battery .....	2
3	101090802	Hold-Down, Battery .....	2
4	1010958	Asm, Wire, #6blk 8in .....	3
5	1011578	Washer, 5/16 Type B Flat .....	4
6	1011697	Washer, 5/16 Flat .....	4
7	1013683	J-Bolt .....	4
8	1014304	Nut, 5/16-18 Stainless-Steel Hex .....	12
9	1015072	Locknut, 5/16-18 Nylon Insert .....	8
10	101795701	Asm, Wire, #6blk 13in .....	2
11	103504301	Tee, Batt Ret Ctr Short .....	2
12	103695801	Battery, 8v, 8vgcxc, Wet .....	6
13	103696801	J Bolt, Batt Hold Down 12" .....	4

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000242-005

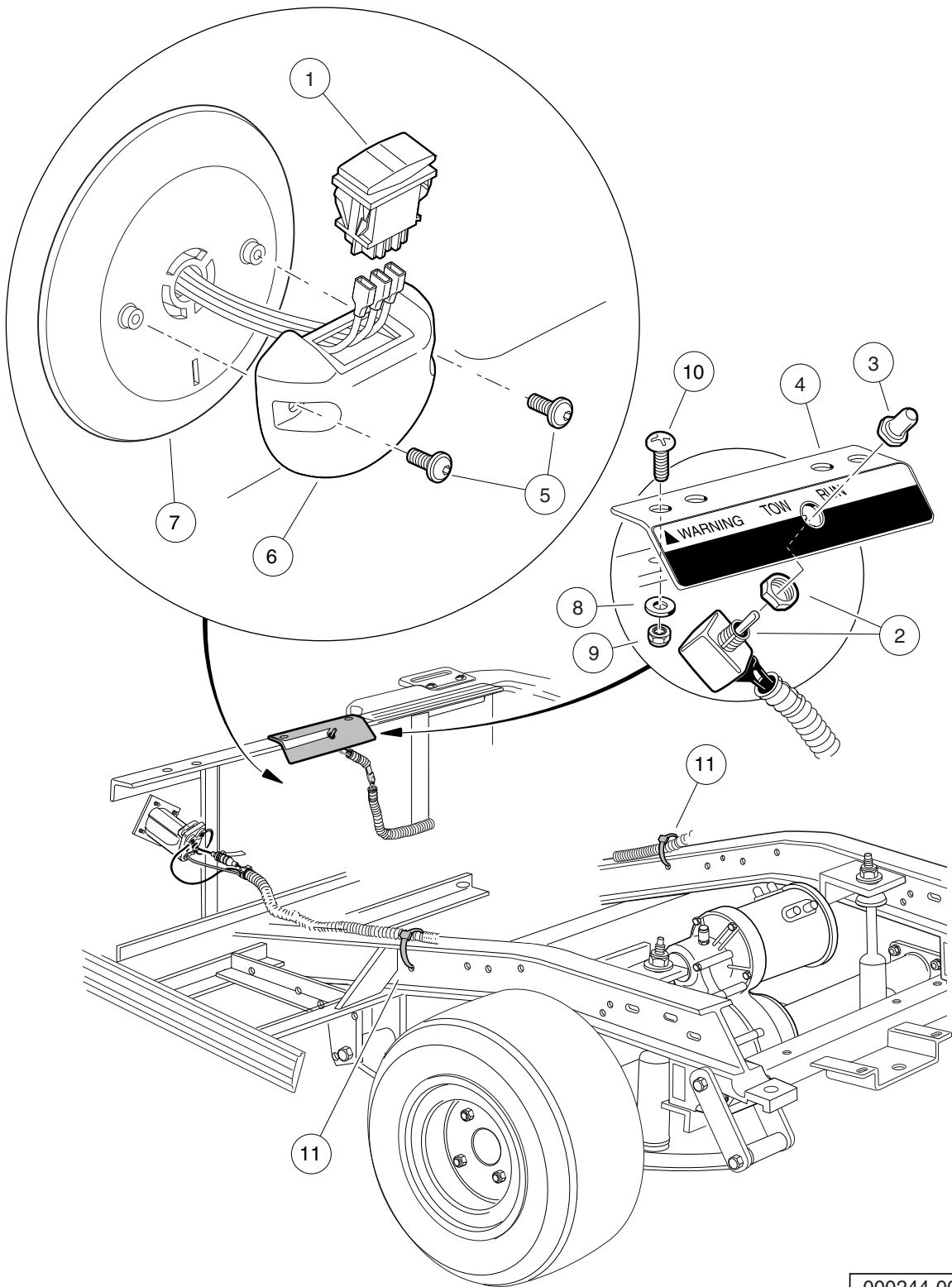


# OBC, CONTROLLER, AND SOLENOID – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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	101827801	Ground Wire Kit, 48-Volt (includes items 5 through 7) .....	1
5	101826801	Compression Lug .....	1
6	N/A	Wire Assembly, Black .....	1
7	8990	Tie Wrap, 8" Nylon .....	3
8	101908701	Solenoid, 48-Volt (includes items 9 through 13) .....	1
9	1012528	Nut, M8-1.25 Hex .....	2
10	1013734	Lockwasher, 8mm Split .....	2
11	N/A	Solenoid, 48-Volt .....	1
12	N/A	Washer, Lock .....	2
13	N/A	Nut .....	2
14	101910401	Screw, 5/16-18 X 1.25 Thrd Frm .....	2
15	101932601	Kit, 6-Pin Wedge Lock .....	1
16	101932701	Kit, 6-Pin Receptacle and Wedge Lock .....	1
17	101965205	Plate, Component Mounting .....	1
18	102240501	Bolt, Controller, Terminal .....	3
19	****	Extrusion, Cover Support .....	1
20	102263601	Wire Assy, #10 Black .....	1
21	102266501	Kit, Connector, IQ Controller .....	1
22	102806201	Controller, IQ, 48-volt .....	1
23	103316901	Cover Asm - Controller (includes items 24 through 26) .....	1
24	101931501	Decal, Component Cover .....	1
25	103316701	Cover - Controller, Deep .....	1
26	103316801	Gasket - Controller Cover .....	1
27	103359401	Kit, OBC, DS and Util IQ (includes items 28 through 30) .....	1
28	103282601	Wire Assembly Black #10 .....	1
29	N/A	Instr Obc Ds Pre 01-28-2007 .....	1
30	N/A	Asm, Obc, Iq, V3.0 .....	1
31	8639	Tie Wrap, 11" Nylon .....	1
32	8990	Tie Wrap, 8" Nylon .....	1
		**** Special order item available upon request.	

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000244-005

## FORWARD/REVERSE SWITCH, TOW/RUN SWITCH

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
1	101856002	Switch, Rocker, Single-Pole .....	1
2	101908101	Switch Assembly, Tow/Run .....	1
3	101908401	Boot, Switch .....	1
4	101922501	Bracket, Tow/Run Switch Mounting .....	1
5	102296920	Screw, M6 Torx Btn Hd Sems .....	2
6	102508401	Housing, FNR Electric .....	1
7	103262701	Bezel Adapter Fnr .....	1
8	332	Washer, 1/4 Type A Narrow Flat .....	2
9	8233	Locknut, 1/4-20 Nylon Insert .....	2
10	8248	Screw, 1/4-20 X 0.75 Truss-Head Machine .....	2
11	8990	Tie Wrap, 8" Nylon .....	1

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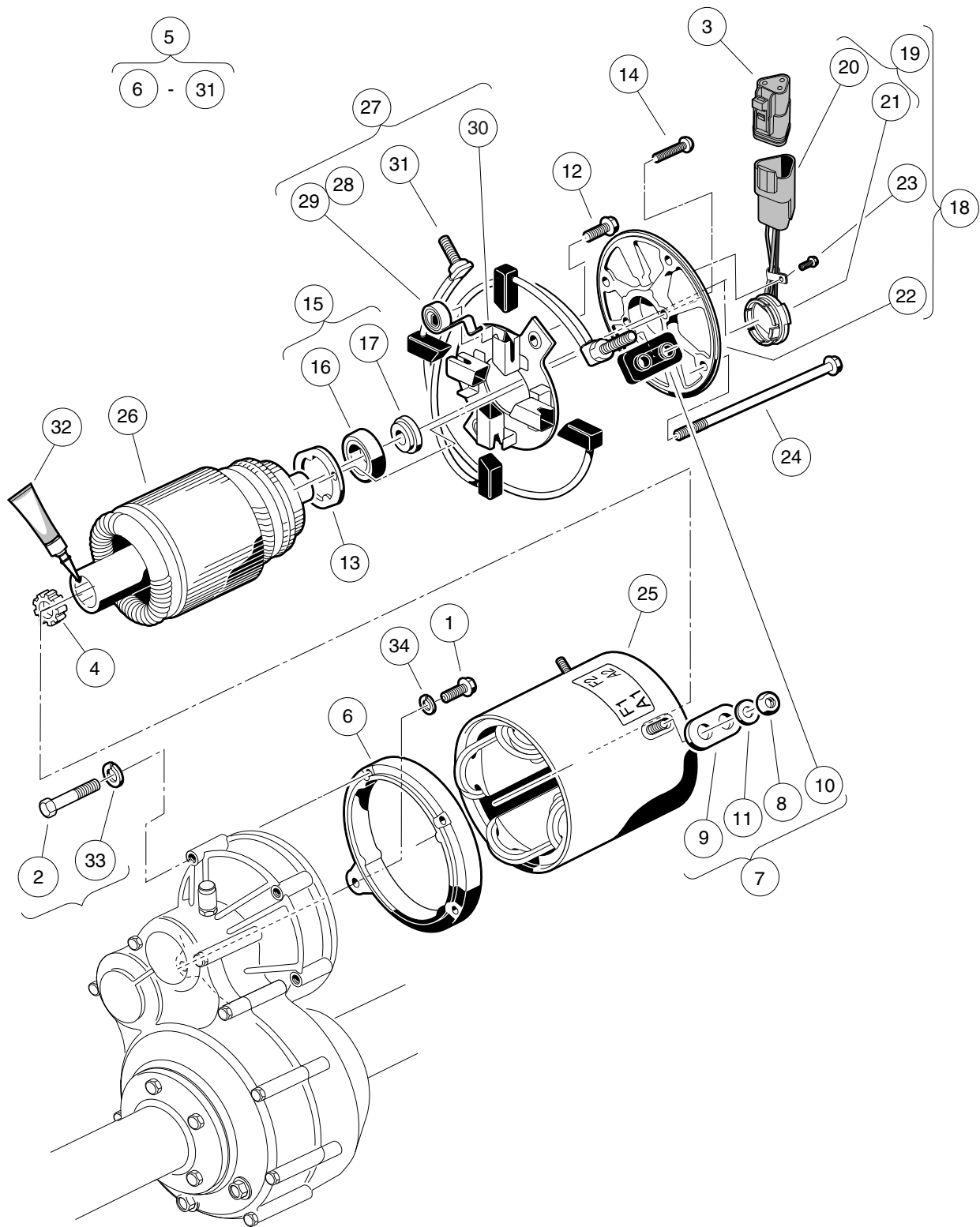
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# ELECTRIC MOTOR

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000349-002

## MOTOR (MODEL 5BC59JBS6390) – ELECTRIC VEHICLE

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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	N/A	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	N/A	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.			

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# MOTOR (MODEL EJ4-4001) – ELECTRIC VEHICLE

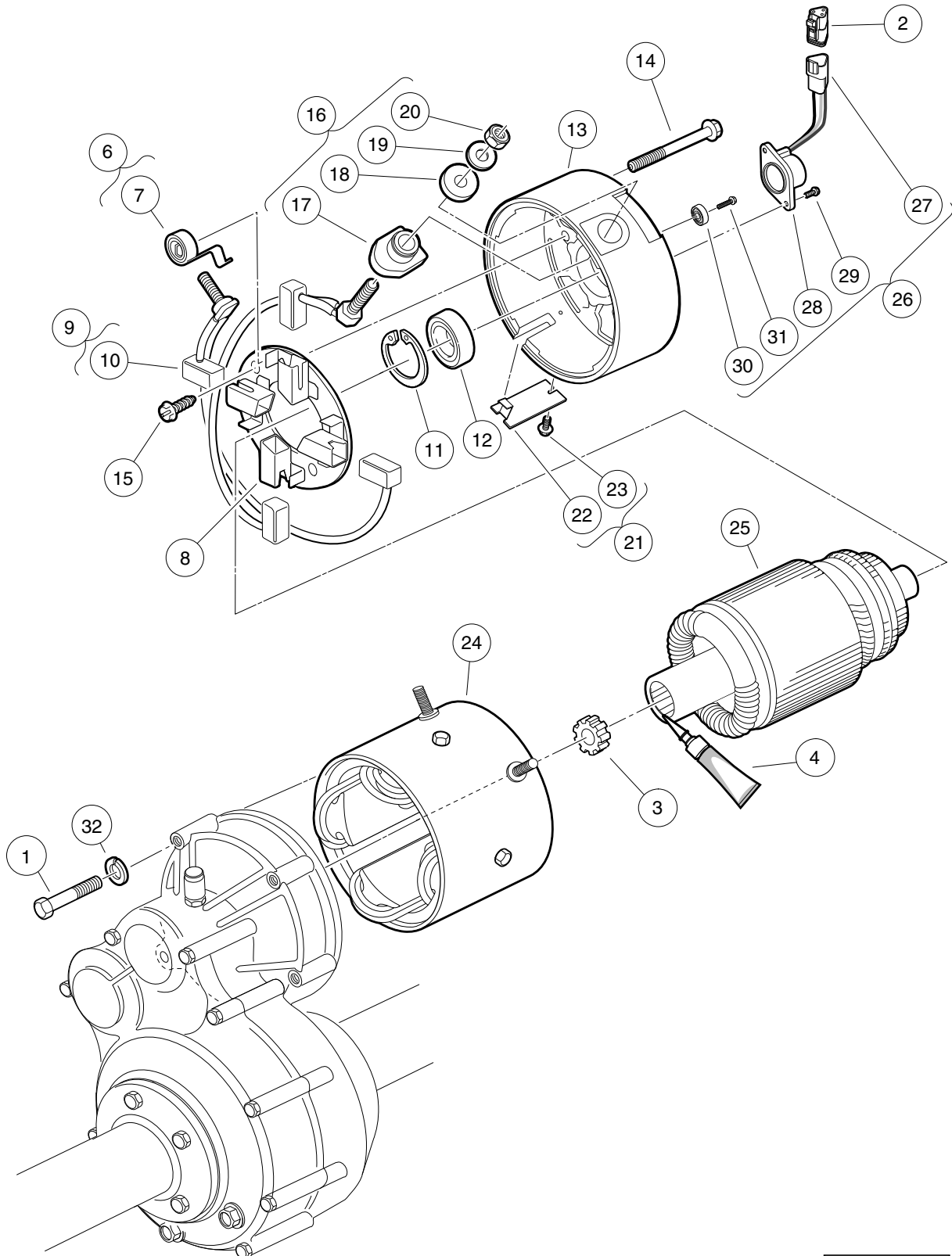
ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	1010934	Screw, 5/16-18 X 1.00 Hex Cap .....	1
2	1014201	Screw, 1/4-20 X 2.25 Hex Cap .....	3
3	101920101	Kit, 3-Pin Wedge Lock .....	1
4	102235201	Bumper, Drive Unit .....	1
5	102243403	Lubricant, Moly-Teflon (Single-Use Tube) .....	1
6	N/A	IQ Electric 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	N/A	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.	

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000185-002

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

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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	103572501	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	N/A	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

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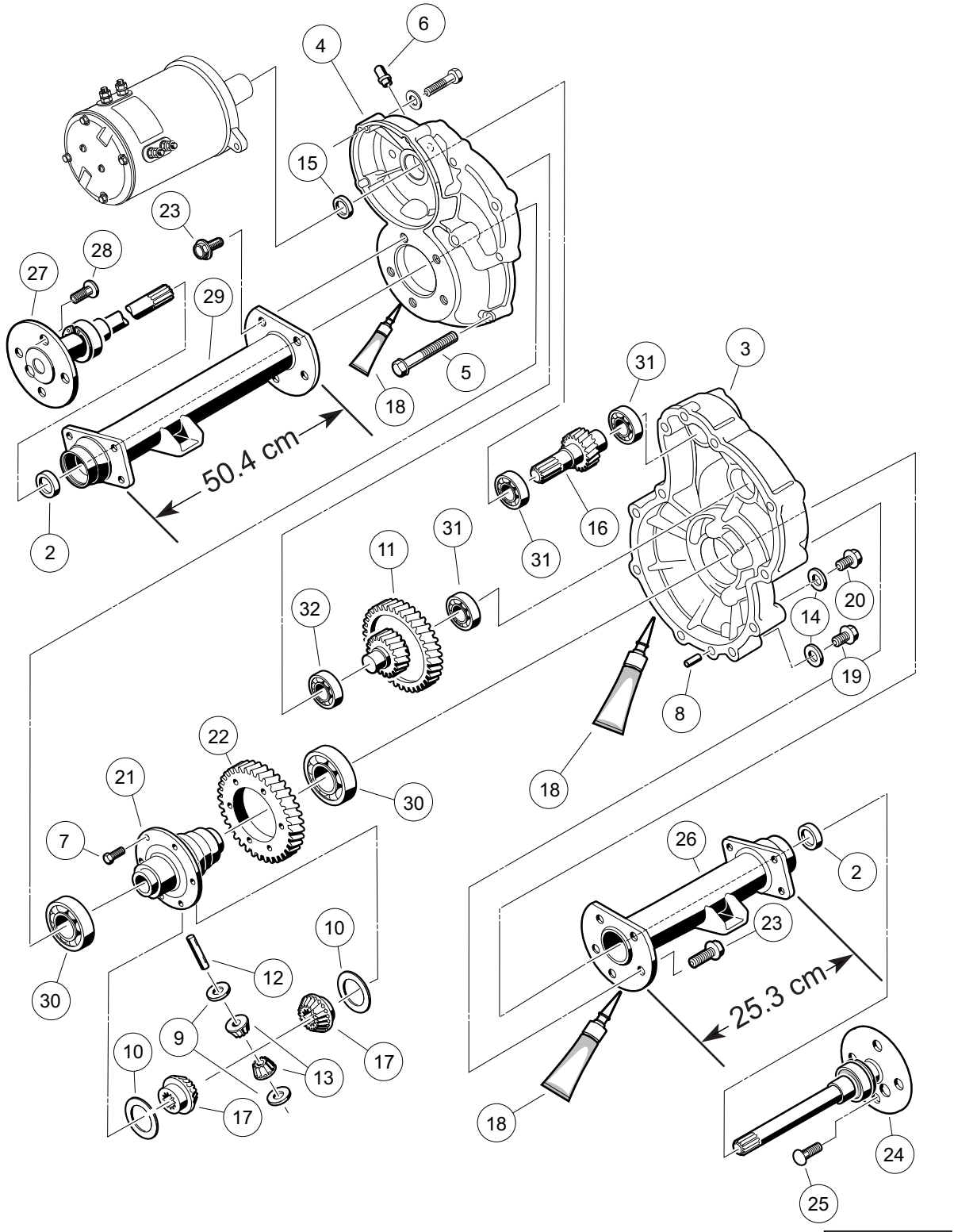
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# TRANSAXLE – ELECTRIC VEHICLES

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000223-002

# TRANSAXLE – ELECTRIC VEHICLES

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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) .....	A/R
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

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# BATTERY CHARGER

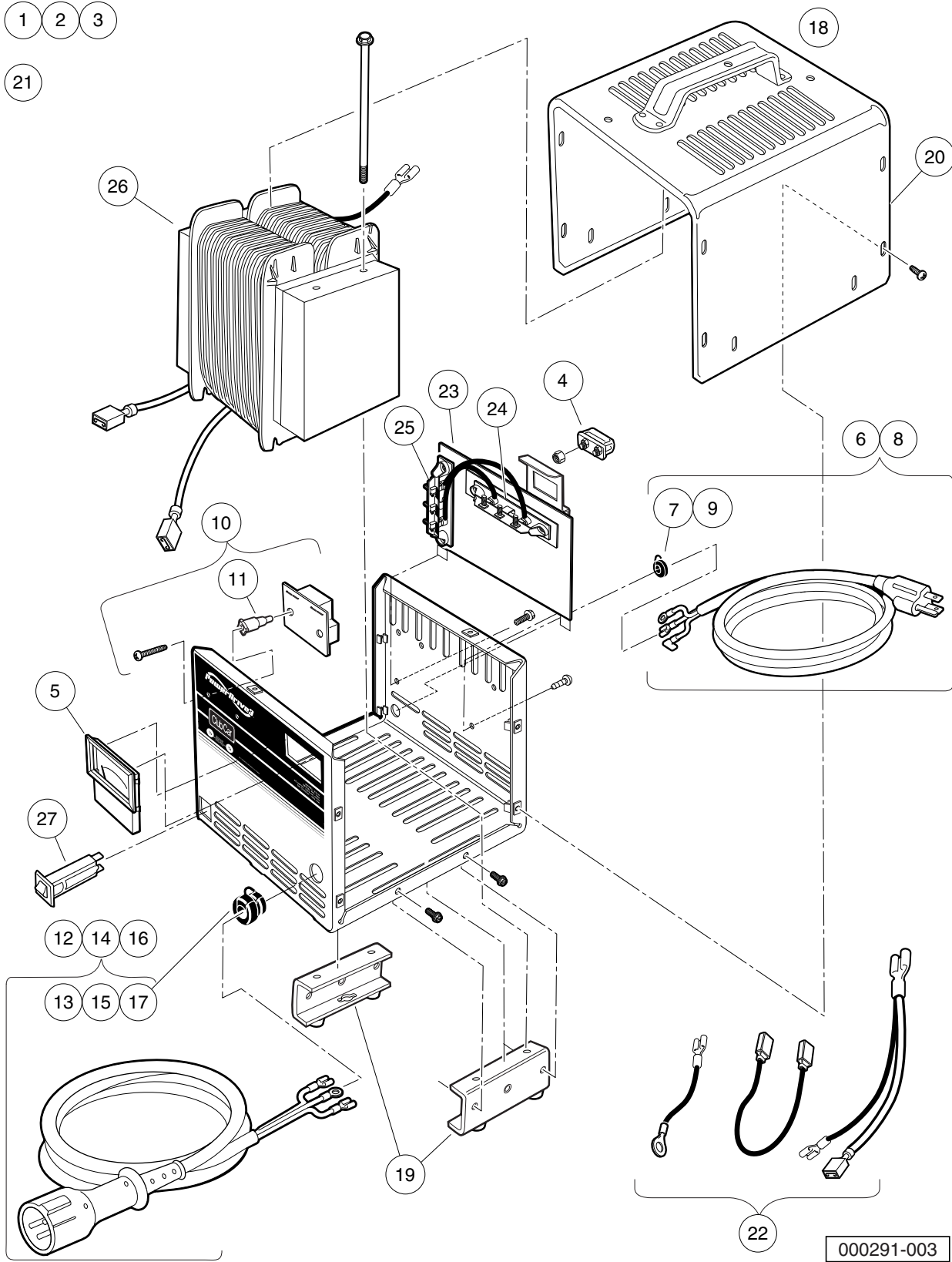
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- 2
- 3

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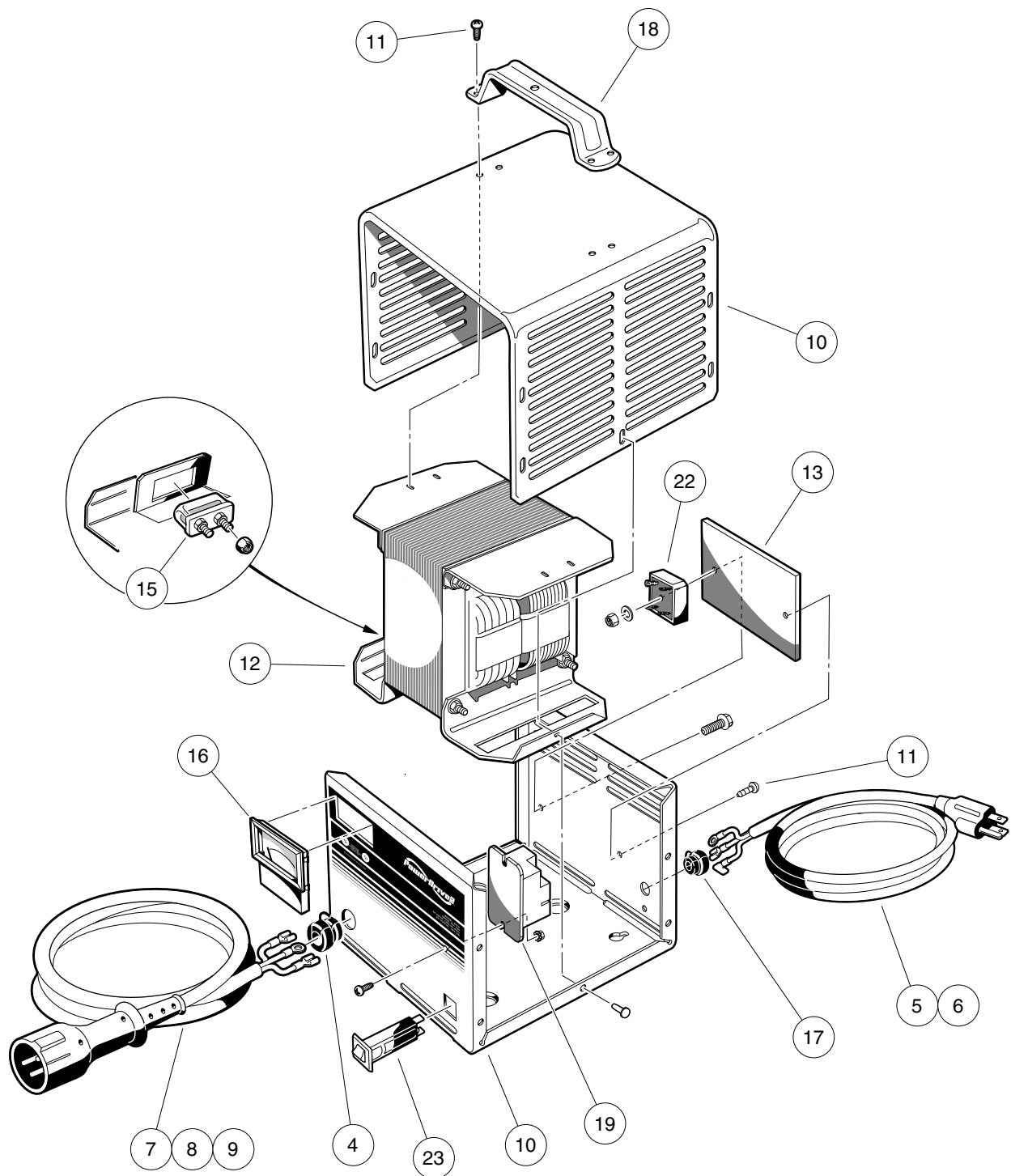
000291-003

# POWERDRIVE 3 BATTERY CHARGER, DOMESTIC

ITEM	PART NO.	DESCRIPTION	QTY
		1 2 3 4	
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	103429601	Kit, PD3 Wires .....	1
23	103517401	Kit Pd3 Button Diode (includes items 24 and 25) .....	1
24	N/A	Asm Diode Top .....	1
25	N/A	Asm Diode Side .....	1
26	103779601	Transformer, Pd3, Al .....	1
27	CCX8506	Circuit Breaker, 15-Amp/120-Volt .....	1

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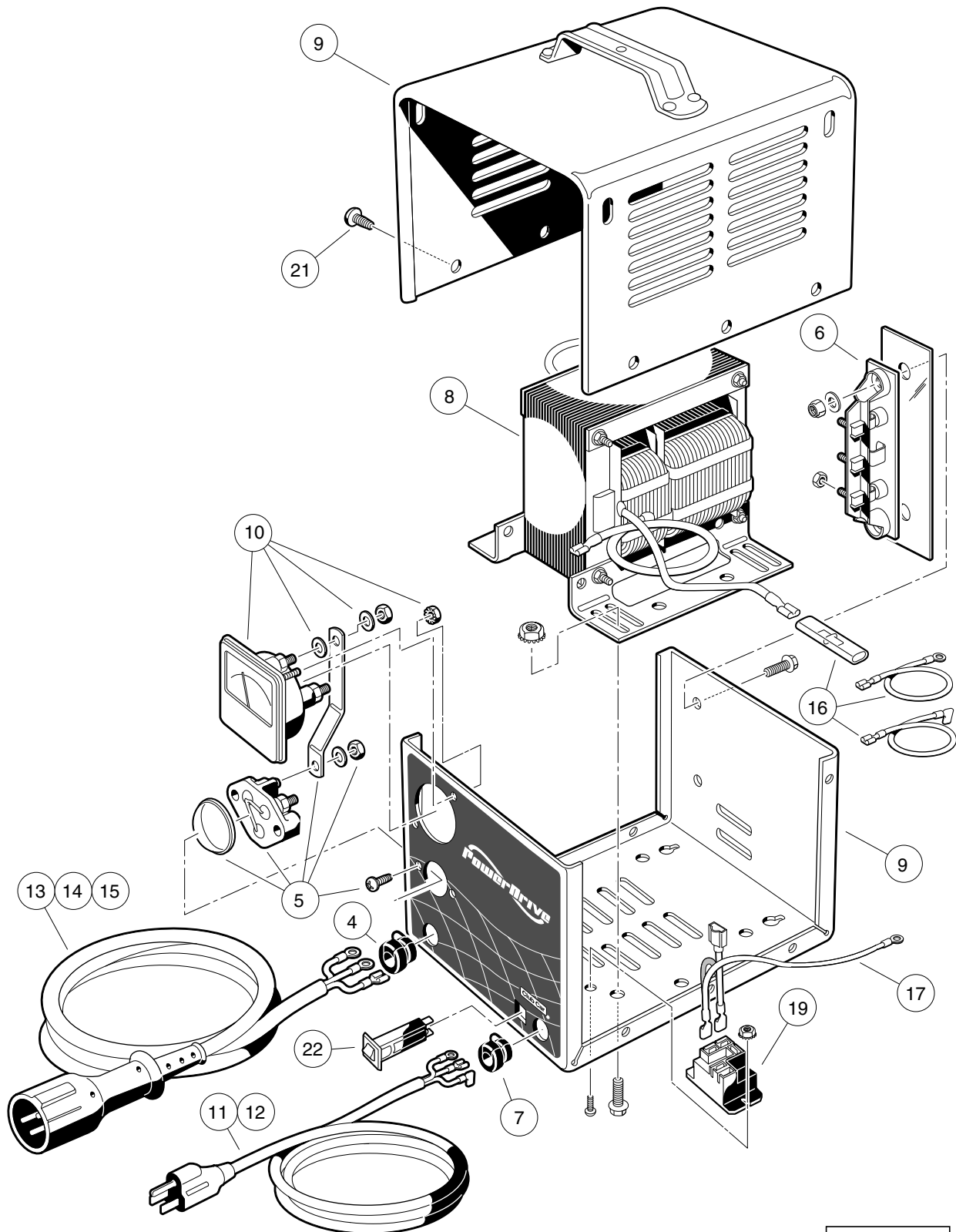
000291-001

# POWERDRIVE 2 BATTERY CHARGER (MODEL 22110), DOMESTIC

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
1	N/A	48-V/13-A PowerDrive 2 (9-ft. DC, 6-ft. AC) .....	1
2	N/A	48-V/13-A PowerDrive 2 (12-ft. DC, 9-ft. AC) .....	1
3	N/A	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
<p>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.</p>			

**16**

**E**



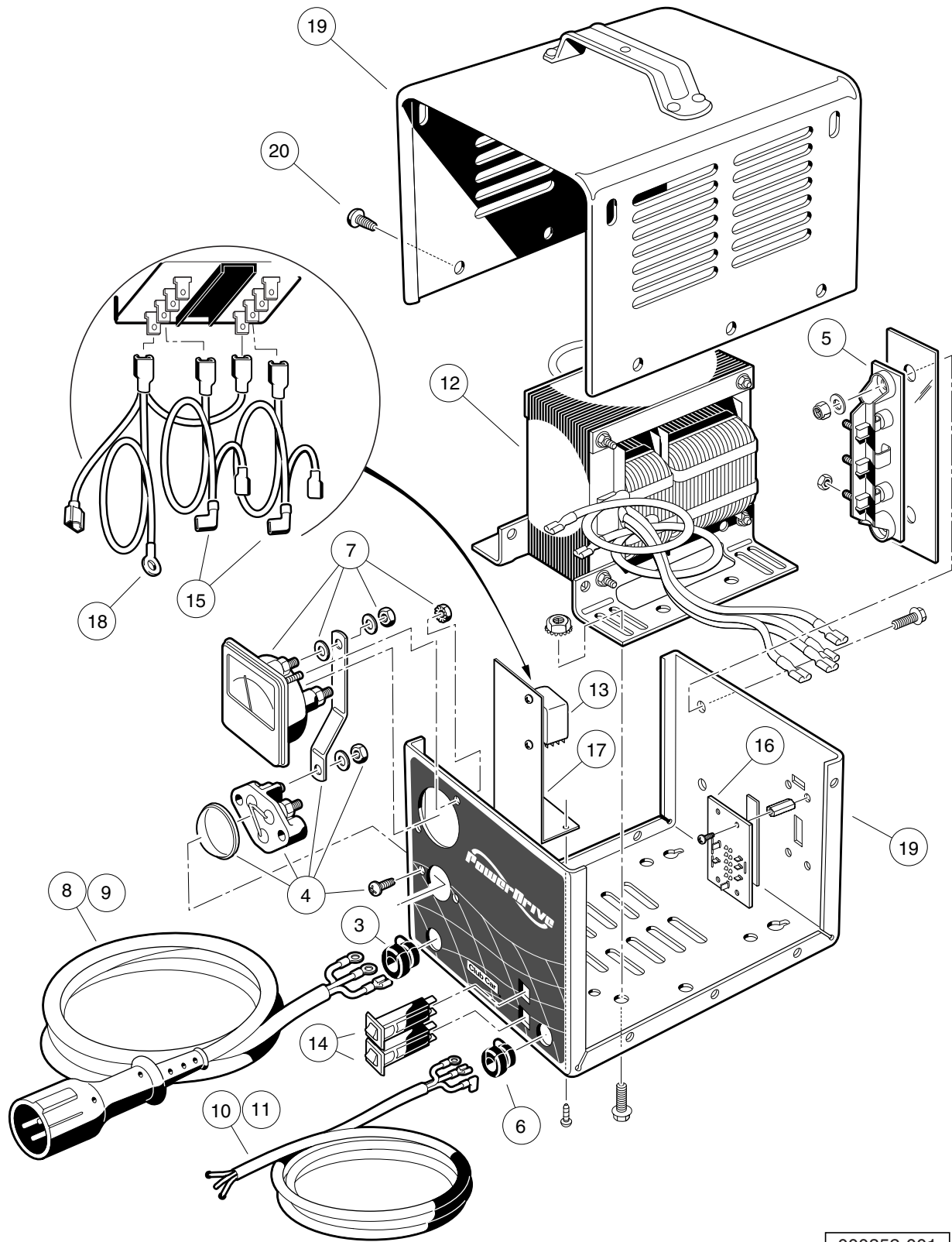
000351-001

# POWERDRIVE BATTERY CHARGER (MODEL 17930), DOMESTIC

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</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.	

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000352-001



# POWERDRIVE BATTERY CHARGER (MODEL 18780), EXPORT

ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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	****	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
<p>**** Special order item available upon request.</p> <p>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.</p>			

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# POWERDRIVE BATTERY CHARGER (MODEL 20310), EUROPEAN

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ITEM	PART NO.	DESCRIPTION	QTY
		<b>1 2 3 4</b>	
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	101828901	Cord, DC, 113-Inch (287 cm) .....	1
7	101828902	Cord, DC, 154-Inch (391 cm) .....	1
8	101838401	Circuit Breaker .....	2
9	101838601	Four-Position Switch .....	1
10	101973501	Receptacle, AC Cord .....	1
11	101976601	Ammeter with Mounting Bracket .....	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.	

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# MAINTENANCE AND SERVICE TOOLS

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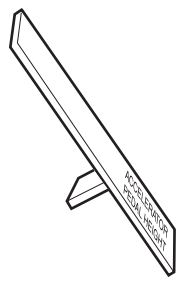
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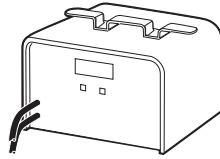
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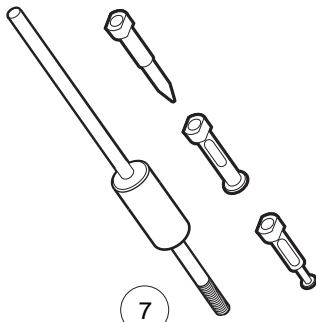
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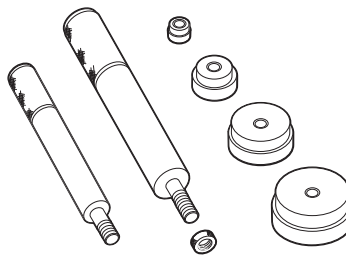
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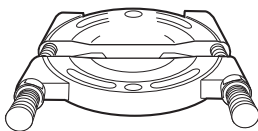
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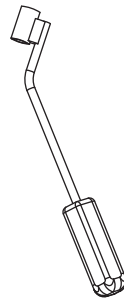
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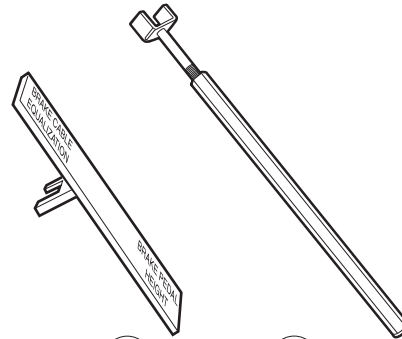
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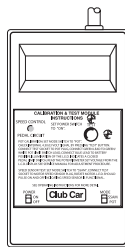
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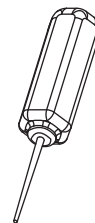
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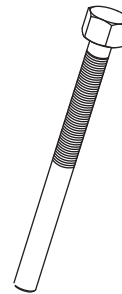
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# MAINTENANCE AND SERVICE TOOLS

ITEM	PART NO.	DESCRIPTION	QTY DIESEL	QTY GAS	QTY ELEC
		<p style="text-align: center;">1 2 3 4</p> <p>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.</p>			
1	101871001	Accelerator Pedal Adjustment Tool .....		1	1
2	101813202	Adhesive, Guide Ring, 3-Gram Tube .....			1
3	101641202	Arbor .....		1	
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	
		<p>Please refer to the maintenance and service manual for proper tool application.</p> <p>**** Special order item available upon request</p>			

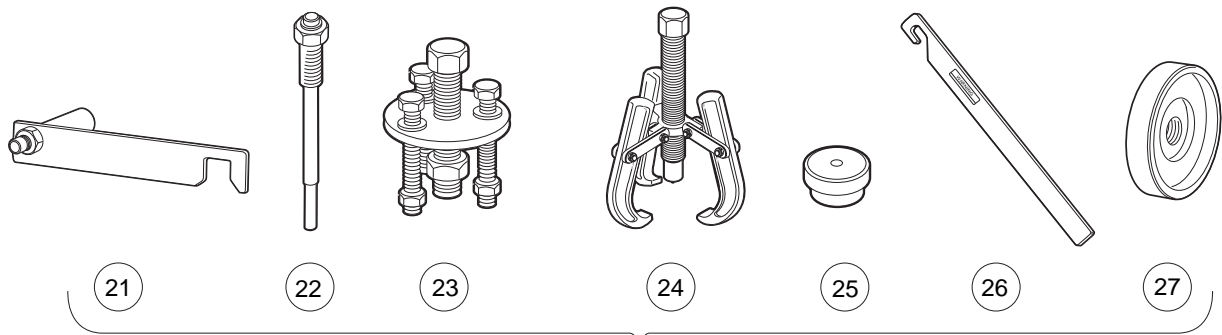
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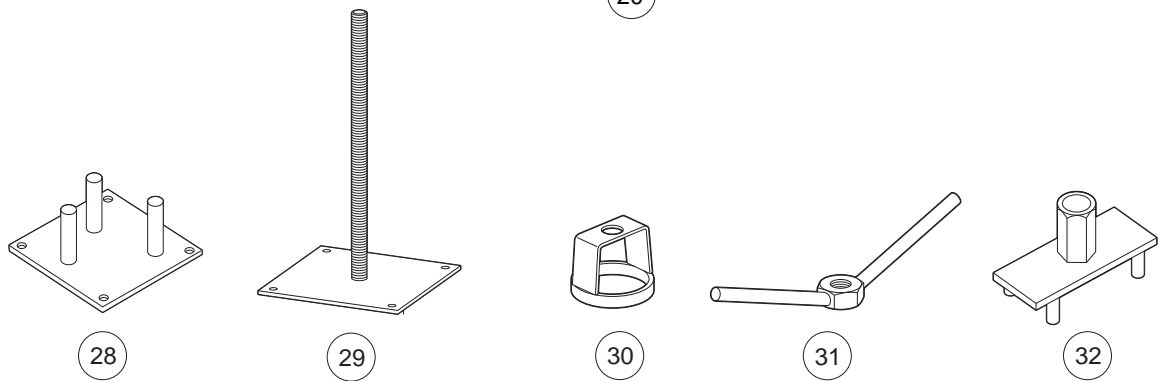
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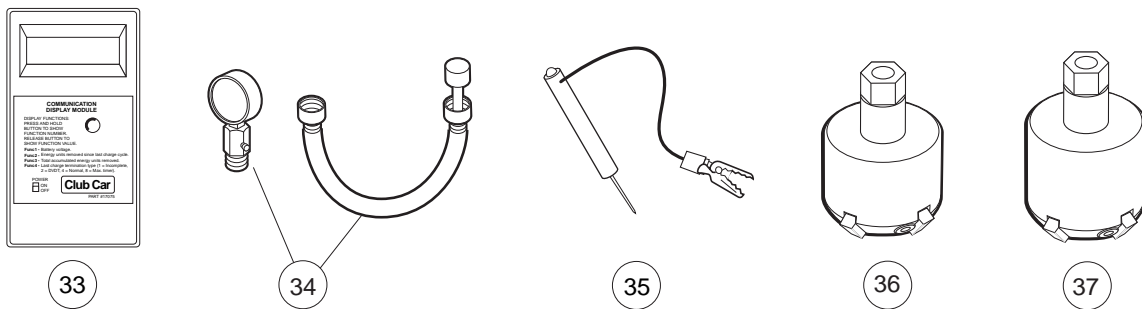
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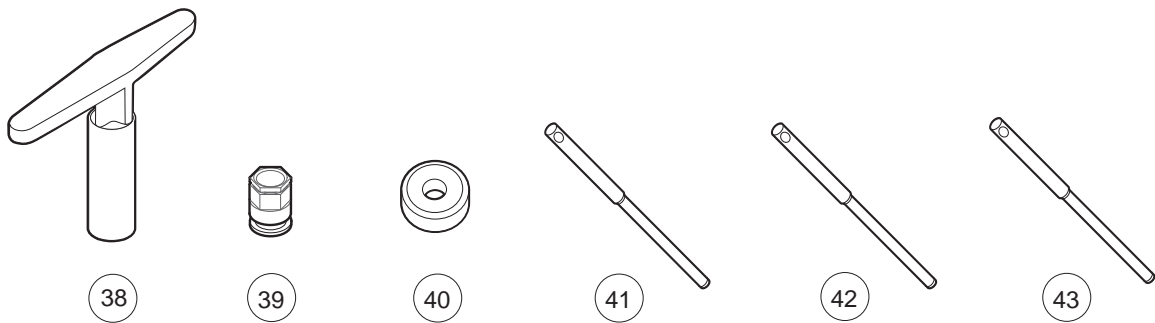
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(28) (29) (30) (31) (32)



(33) (34) (35) (36) (37)



(38) (39) (40) (41) (42) (43)



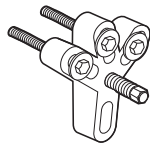
## MAINTENANCE AND SERVICE TOOLS, CONTINUED

ITEM	PART NO.	DESCRIPTION	QTY DIESEL	QTY GAS	QTY ELEC	<b>17</b>
		<b>1 2 3 4</b>				<b>G</b>
20	1014510	Clutch Tool Kit (includes items 21 - 27) .....		1		<b>E</b>
21	1014498	Clutch Alignment Tool (for pre-unitized transaxle vehicles built prior to 1997 model year) .....		1		<b>D</b>
22	1014496	Drive Clutch Puller (for Kawasaki engines only) .....		1		
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.				

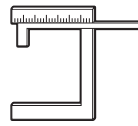
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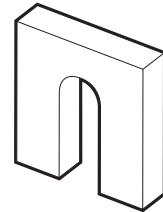
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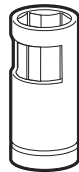
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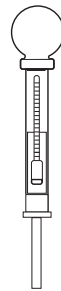
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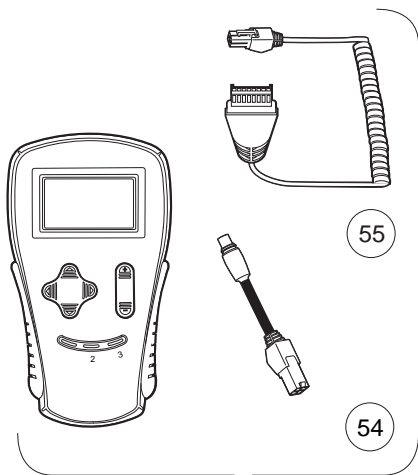
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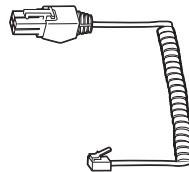
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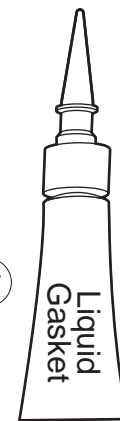
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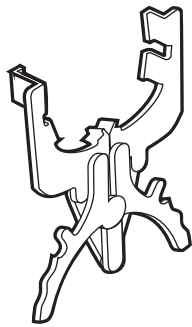
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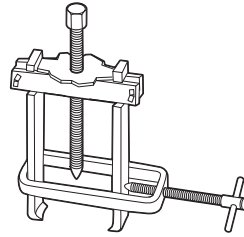
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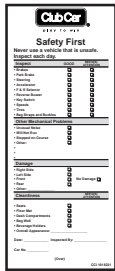
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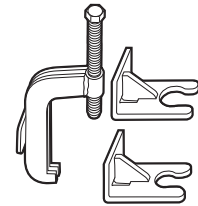
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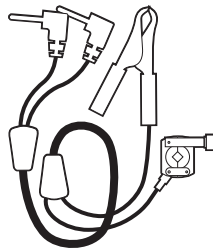
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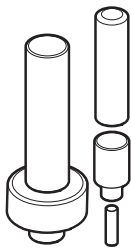
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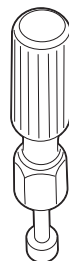
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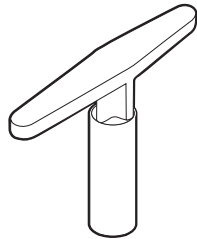
## MAINTENANCE AND SERVICE TOOLS, CONTINUED

ITEM	PART NO.	DESCRIPTION	QTY	QTY	QTY	<b>17</b>
			DIESEL	GAS	ELEC	
		<b>1 2 3 4</b>				<b>G</b>
62	1016414	Piston Ring Compressor Kit (FE290, FE350 and FE400 engines) .....		1		<b>E</b>
63	1016415	Piston Ring Pliers (for Kawasaki Engines) .....		1		<b>D</b>
64	102668801	Puller, Special Use (for Kubota D722 Diesel Engines) .....	1			
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		

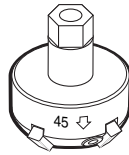
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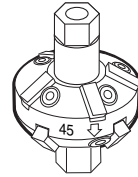
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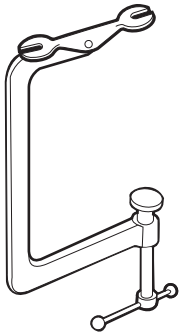
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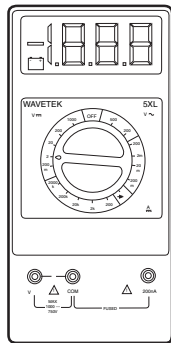
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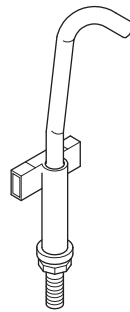
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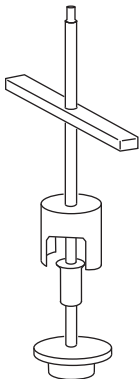
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## MAINTENANCE AND SERVICE TOOLS, CONTINUED

ITEM	PART NO.	DESCRIPTION	QTY DIESEL	QTY GAS	QTY ELEC
		1 2 3 4			
87	1016552	Valve Seat Cutter Guide .....		1	
88	1016551	Valve Seat Cutter T-Wrench .....		1	
89	1016553	Valve Seat Cutter, 45° (32 mm diameter) (for FE290 engines only) .....		1	
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
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	
		<p>*Note: The XRT 950 Drive Clutch Puller requires the use of Screw, Driven Clutch Disassembly, CCI Part Number 103600501.</p>			

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