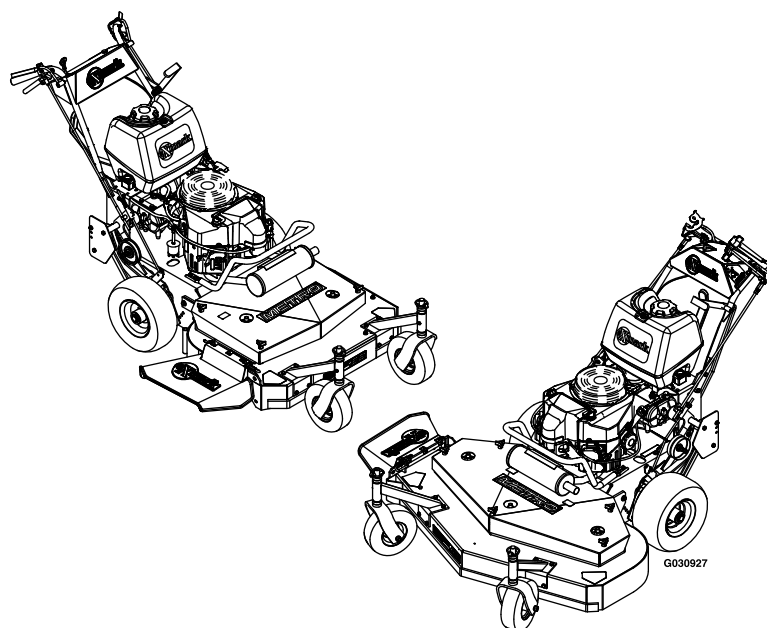




## **METRO®**

**Model No. MGS481CKA48300—Serial No. 400000000 and Up**

Picture below may not reflect actual product.



# **Parts Manual**

# Ordering Replacement Parts

To order replacement parts, please supply the part number, the quantity, and the description of each part desired.

## Understanding Reference Numbers

Each identified part in an illustration has a reference number. The reference number for a part also appears in the parts list, along with other information about the part.

This catalog uses two special reference number formats, one to indicate parts in a service assembly and another to indicate the quantity of a given part in an illustration.

## Service Assembly Reference Numbers

Parts in service assemblies have reference numbers in the form a:b. The a represents the reference number of the entire service assembly and the b represents a sequential number unique to each part within the service assembly.

For example, a wheel assembly might be identified by reference number 6, the tire by 6:1, the valve by 6:2, and the wheel by 6:3. When you order the assembly identified by reference number 6, you receive all parts identified by reference numbers 6:1, 6:2, and 6:3. However, you may also order any part individually. Reference numbers of this type appear in illustration and in parts lists.

## Reference Numbers Indicating Quantity

In an illustration, if a reference number indicates more than one part, the reference number has the form nX y. The n represents the quantity of the part, the X is the multiplication symbol, and the y represents the reference number.

For example, in an illustration, the reference number 2X 37 means that two of the parts identified by reference number 37 are indicated.

# List of Abbreviations

|                                              |                                                |                                          |
|----------------------------------------------|------------------------------------------------|------------------------------------------|
| <b>AR:</b> as required                       | <b>HLH:</b> hex lag head                       | <b>PTH:</b> phillips truss head          |
| <b>ASM:</b> assembly                         | <b>HOC:</b> height-of-cut                      | <b>PTO:</b> power-take-off               |
| <b>BBC:</b> blade brake control              | <b>HP:</b> high pressure                       | <b>RH:</b> right hand                    |
| <b>BHTF:</b> button head thread forming      | <b>HSBH:</b> hex socket button head            | <b>ROPS:</b> roll-over protection system |
| <b>CARR:</b> carriage                        | <b>HSFH:</b> hex socket flat head              | <b>RRB:</b> rear roller brush            |
| <b>CCW:</b> counter clockwise                | <b>HSH:</b> hex socket head                    | <b>SFH:</b> slotted fillister head       |
| <b>CW:</b> clockwise                         | <b>HWH:</b> hex washer head                    | <b>SHH:</b> slotted hex head             |
| <b>DEG:</b> degrees                          | <b>HWHTF:</b> hex washer head thread forming   | <b>SHWH:</b> slotted hex washer head     |
| <b>DPA:</b> Dual Point Adjustment            | <b>HYD:</b> hydraulic                          | <b>SPH:</b> slotted pan head             |
| <b>ECM:</b> electronic control module        | <b>LH:</b> left hand                           | <b>SQH:</b> square head                  |
| <b>EXT:</b> external                         | <b>LP:</b> low pressure                        | <b>SRH:</b> slotted round head           |
| <b>FH:</b> flat head                         | <b>LPG:</b> Liquefied Petroleum Gas            | <b>STD:</b> standard                     |
| <b>GA:</b> gauge                             | <b>NI:</b> nylon insert                        | <b>TAP:</b> self tapping                 |
| <b>HD:</b> heavy-duty                        | <b>NPTF:</b> national pipe thread fine         | <b>TTH:</b> torx truss head              |
| <b>HF:</b> hex flange                        | <b>PFH:</b> phillips flat head                 |                                          |
| <b>HH:</b> hex head                          | <b>PPH:</b> phillips pan head                  |                                          |
| <b>HHF:</b> hex head flange                  | <b>PPHTF:</b> phillips pan head thread forming |                                          |
| <b>HHFTF:</b> hex head flange thread forming | <b>PRH:</b> phillips round head                |                                          |
| <b>HJ:</b> hex jam                           |                                                |                                          |

# Touch Up Paint

Exmark black touch up spray paint – gloss black.

Exmark red touch up paint (spray paint – P/N 1-850337 - .6 oz liquid bottle – P/N 103-9140).

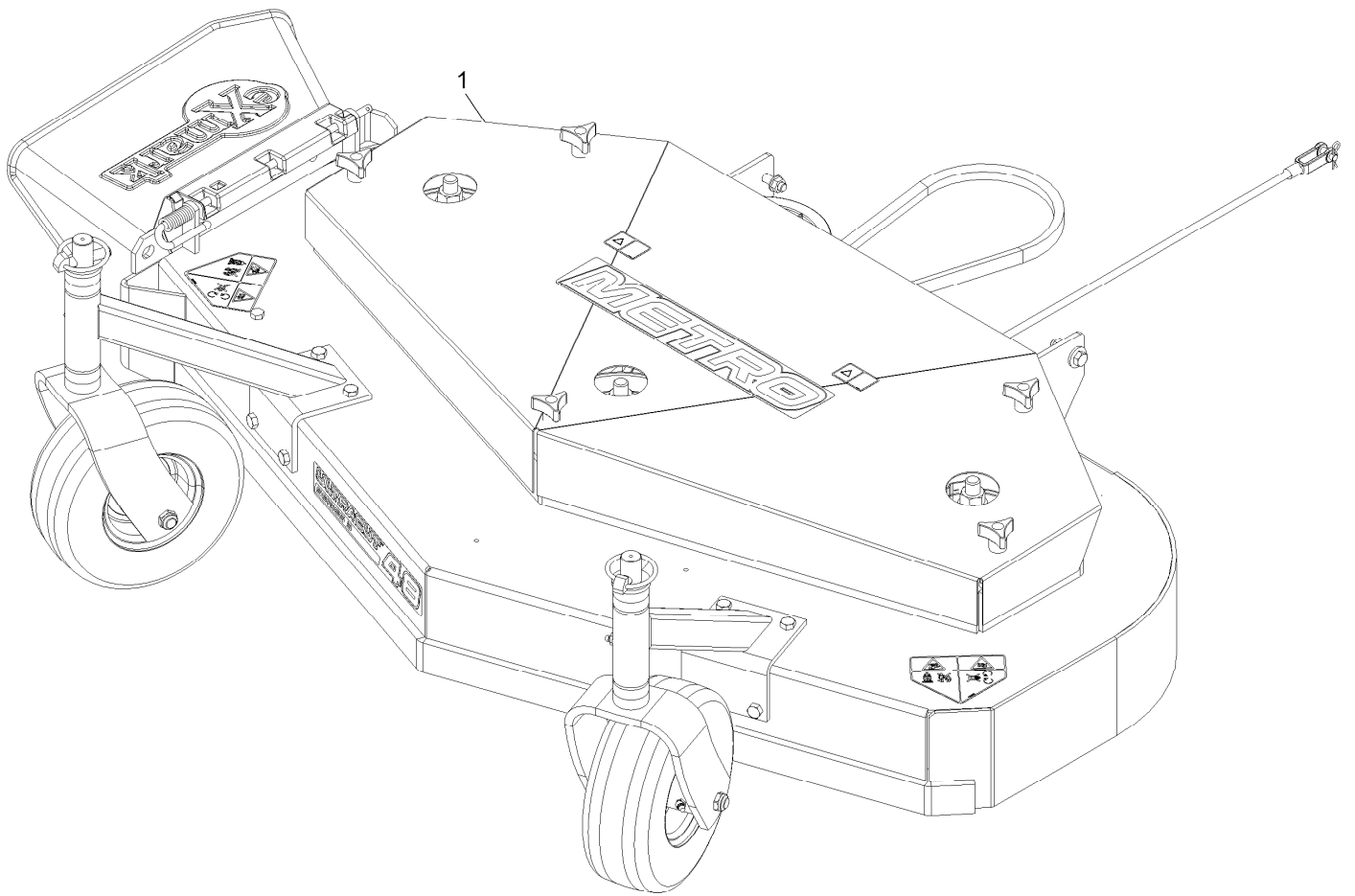


If your Exmark dealer does not have the Exmark part in stock, Exmark will get the parts to the dealer the next business day or the part will be FREE Guaranteed!! (Some restrictions apply. See your participating Exmark Dealer for details.)

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# Complete Deck Assembly

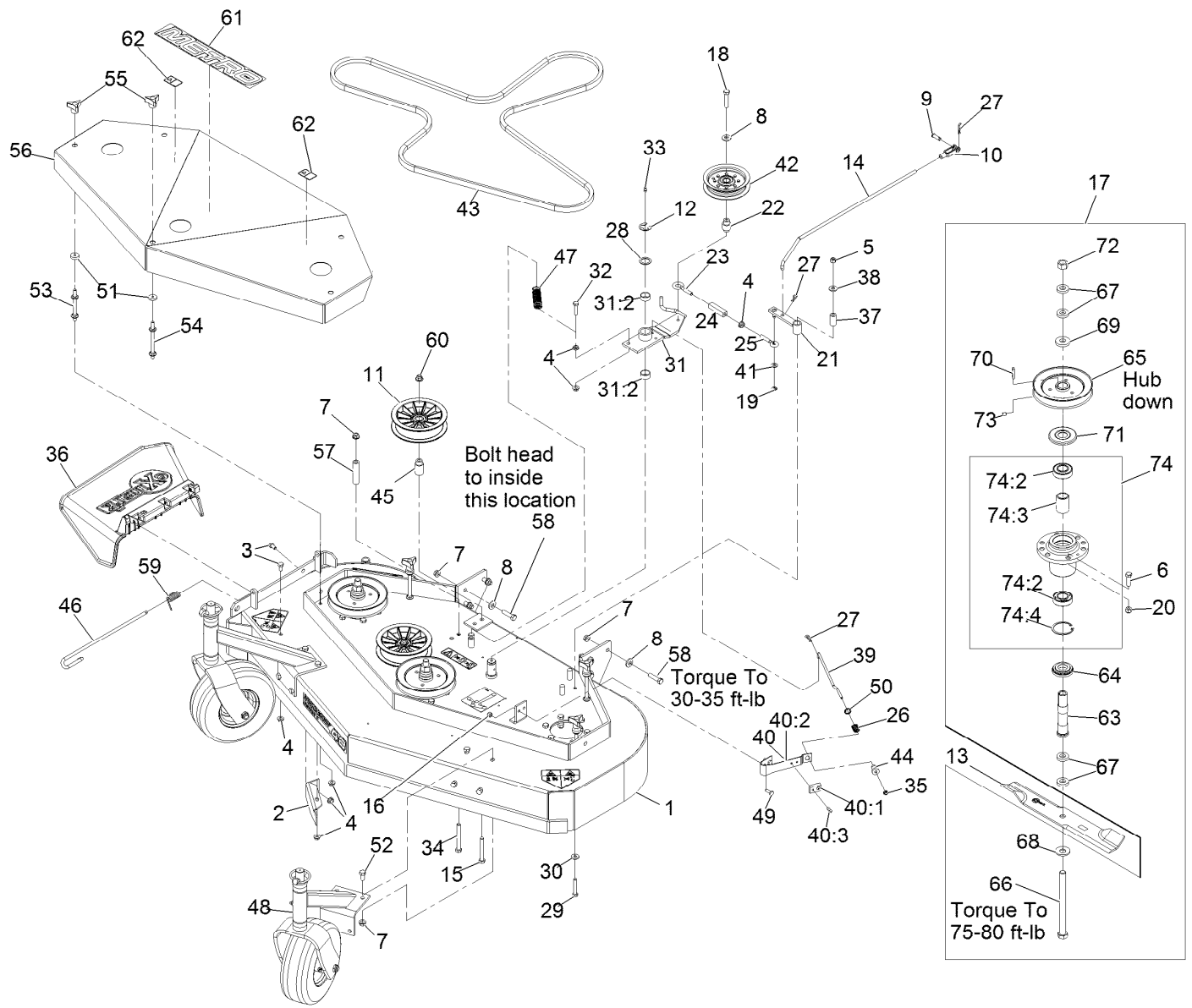


# Complete Deck Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           |                    | 1           | Deck ASM-48 ●      |

● Not serviced separately

# Deck Assembly



## Deck Assembly (continued)

| Ref. | Part Number | Qty. | Description                     | Ref. | Part Number | Qty. | Description                      |
|------|-------------|------|---------------------------------|------|-------------|------|----------------------------------|
| 1    | 1-404257    | 1    | Deck W/Decals And Dogleg        | 40   | 1-324372    | 1    | Pad And Spring ASM               |
| 2    | 116-1729-01 | 1    | Baffle-Dogleg                   | 40:1 | 1-323709    | 1    | Pad-Brake ●                      |
| 3    | 322-2       | 3    | Screw-HH 5/16-18 X 5/8          | 40:2 | 1-323710    | 1    | Spring ●                         |
| 4    | 32128-20    | 11   | Nut-Whizlock 5/16-18            | 40:3 | 103-0138    | 2    | Rivet 3/16 X 1/2 ●               |
| 5    | 3296-29     | 1    | Nut-Nyloc 5/16-18               | 41   | 3256-23     | 1    | Washer-5/16 Sae                  |
| 6    | 323-7       | 18   | Screw-HH 3/8-16 X 1 1/4         | 42   | 116-3626    | 1    | Pulley-Idler                     |
| 7    | 3290-357    | 8    | Nut-Whizlock 3/8-16             | 43   | 1-403174    | 1    | Drive Belt (Main Deck) 48"       |
| 8    | 98-5975     | 12   | Washer-Spring Disc 3/8          | 44   | 1-323746    | 1    | Spacer-Flanged                   |
| 9    | 1-808280    | 1    | Pin-Clevis 5/16 X 1 49/64       | 45   | 1-413113    | 2    | Bushing-Idler                    |
| 10   | 1-303105    | 1    | Yoke-Adjustable                 | 46   | 109-8854    | 1    | Pin-Chute                        |
| 11   | 109-0977    | 2    | Pulley,Idler 5"                 | 47   | 1-323071    | 1    | Spring-Extension                 |
| 12   | 32151-103   | 1    | E-Ring                          | 48   | 116-8245    | 2    | ASM-Caster Mnt W/Weight          |
| 13   | 116-5178    | 3    | Blade-Extreme 2, 16.25"         | 49   | 321-4       | 2    | Screw-HH 1/4-20 X 3/4            |
| 13   | 103-6738    | 3    | Blade,Low Lift 16.25            | 50   | 1-323748    | 1    | Ring-Push On                     |
| 13   | 103-6583    | 3    | Blade, 16.25 Notched            | 51   | 1-323417    | 5    | Washer-Belt Shield               |
| 13   | 103-6581    | 3    | Blade, 16.25 Mulching ♦         | 52   | 323-4       | 8    | Screw-HH 3/8-16 X 3/4            |
| 13   | 103-1577    | 3    | Blade, 16.25 Solid              | 53   | 1-303537    | 2    | Stud-Shield, Belt (Short)        |
| 14   | 1-323303    | 1    | Arm-Assist, Linkage             | 54   | 1-303536    | 3    | Stud-Shield, Belt (Long)         |
| 15   | 323-13      | 2    | Screw-HH 3/8-16 X 2 3/4         | 55   | 1-323385    | 5    | Knob-3 Prong                     |
| 16   | 3296-42     | 2    | Nut-Nyloc 1/4-20                | 56   | 116-2707    | 1    | ASM,Shield W/Decals 48 Metro     |
| 17   | 103-8387    | 3    | Asm, Cutter Housing Complete    | 57   | 1-403188    | 1    | Spacer                           |
| 18   | 702809      | 1    | Screw-HH                        | 58   | 323-8       | 8    | Screw-HH 3/8-16 X 1 1/2          |
| 19   | 32120-35    | 1    | E-Ring                          | 59   | 116-0962    | 1    | Spring, Torsion                  |
| 20   | 3296-39     | 18   | Nut-Nyloc 3/8-16                | 60   | 104-8301    | 2    | Nut-Nyloc 3/8-16 Flg             |
| 21   | 1-322235    | 1    | Arm-Assist                      | 61   | 126-6890    | 1    | Decal-Metro                      |
| 22   | 1-303434    | 1    | Bushing-Engagement              | 62   | 106-5517    | 2    | Decal-Warning, Hot Surface       |
| 23   | 1-303348    | 1    | Eyebolt-Thread, LH              | 63   | 1-323529    | 3    | Tube-Spindle, Short □            |
| 24   | 1-303236    | 1    | Body-Turnbuckle                 | 64   | 103-2535    | 3    | Spacer-Guard Bottom              |
| 25   | 1-303238    | 1    | Eyebolt-Thread, RH              | 65   | 1-403183    | 3    | Sheave □                         |
| 26   | 1-323747    | 1    | Spring-Compression              | 66   | 1-800861    | 3    | Screw-Cap, HH                    |
| 27   | 1-806003    | 3    | Hairpin-Cotter                  | 67   | 1-323539    | 12   | Spacer-Blade Drive               |
| 28   | 1-303352    | 1    | Washer-Spindle                  | 68   | 1-513208    | 3    | Washer-Spring Disc 5/8           |
| 29   | 322-10      | 1    | Screw-HH 5/16-18 X 2            | 69   | 1-323339    | 3    | Washer                           |
| 30   | 1-303334    | 1    | Washer-Spring Disc 5/16         | 70   | 1-807267    | 3    | Key-Machine 1/4 X 3/16 X 1 1/4   |
| 31   | 103-3600    | 1    | Idler Arm ASM                   | 71   | 103-1330    | 3    | Guard-Bearing Top □              |
| 31:2 | 1-323729    | 2    | Sleeve-Bearing                  | 72   | 3219-6      | 3    | Nut-Hex 5/8-18                   |
| 32   | 116-3515    | 1    | Screw,HH Special 5/16-18 X 1.25 | 73   | 3246-18     | 3    | Setscrew-5/16-18 X 3/8 ▲         |
| 33   | 302-19      | 1    | Zerk-1/4-28 Str                 | 74   |             | 3    | Cutter Housing ASM ■             |
| 34   | 323-20      | 1    | Screw-HH 3/8-16 X 3-1/4         | 74   | 103-8280    | 3    | Asm, Cutter Housing W/Bearings □ |
| 35   | 3296-56     | 1    | Nut-Nyloc 1/4-20 Thin           | 74:2 | 103-2477    | 2    | Bearing-Jackshaft                |
| 36   | 109-5151    | 1    | Deflector-Discharge             | 74:3 | 103-2534    | 1    | Spacer-Bearing                   |
| 37   | 1-403179    | 1    | Tube-Pivot                      | 74:4 | 32120-8     | 1    | Ring-Retaining                   |
| 38   | 3256-3      | 1    | Washer-5/16 Std                 |      |             |      |                                  |
| 39   | 1-323714    | 1    | Rod-Brake                       |      |             |      |                                  |

● Not illustrated

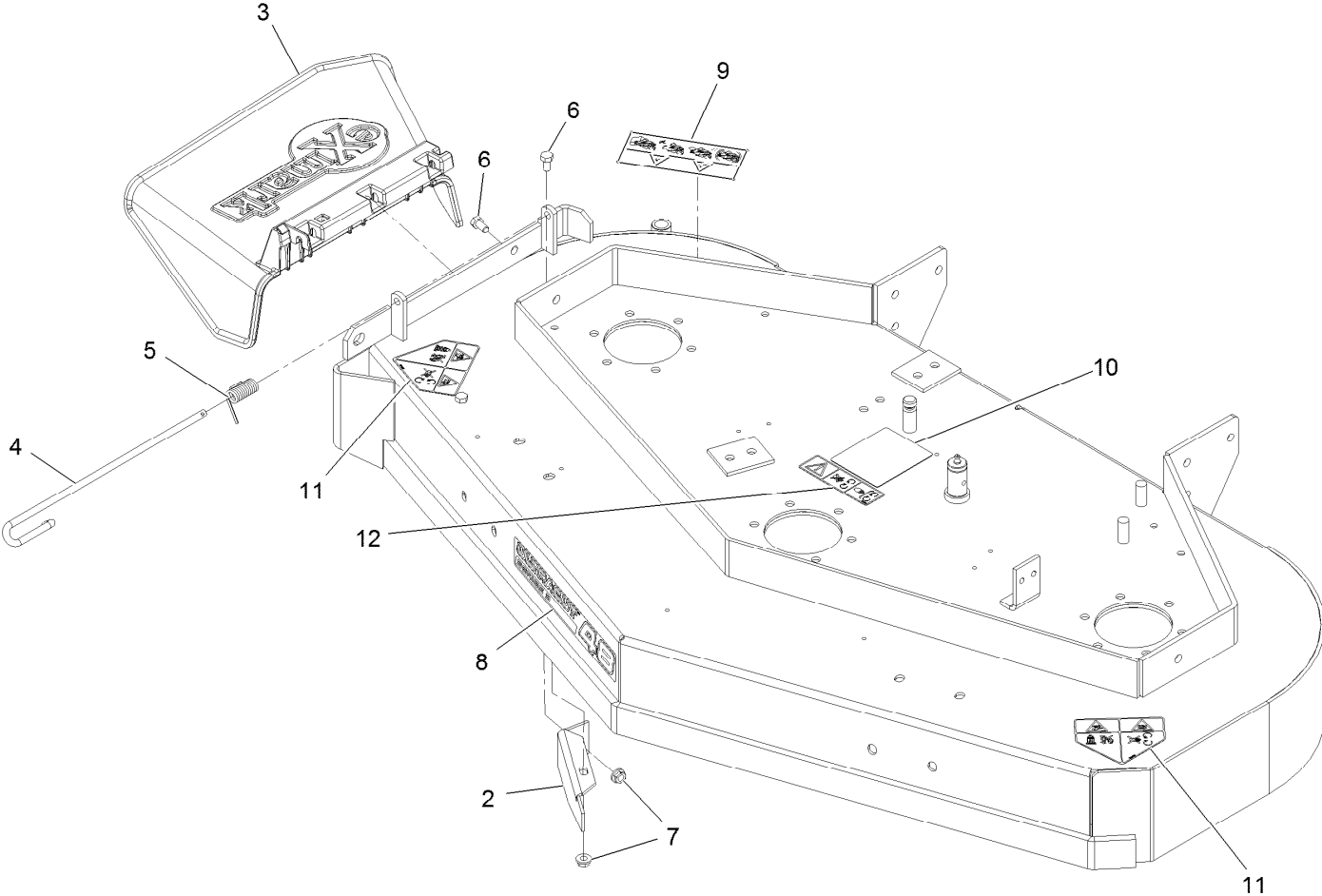
■ Not serviced separately

▲ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

♦ Requires installation of mulch kit for proper mulching. See your Exmark dealer for details.

□ Apply Mobil HTS grease (P/N 103-5217 1.5 oz packet) (or a food-grade anti-seize). See operator's manual for locations.

Deck W/Decals Assembly No. 1-404257

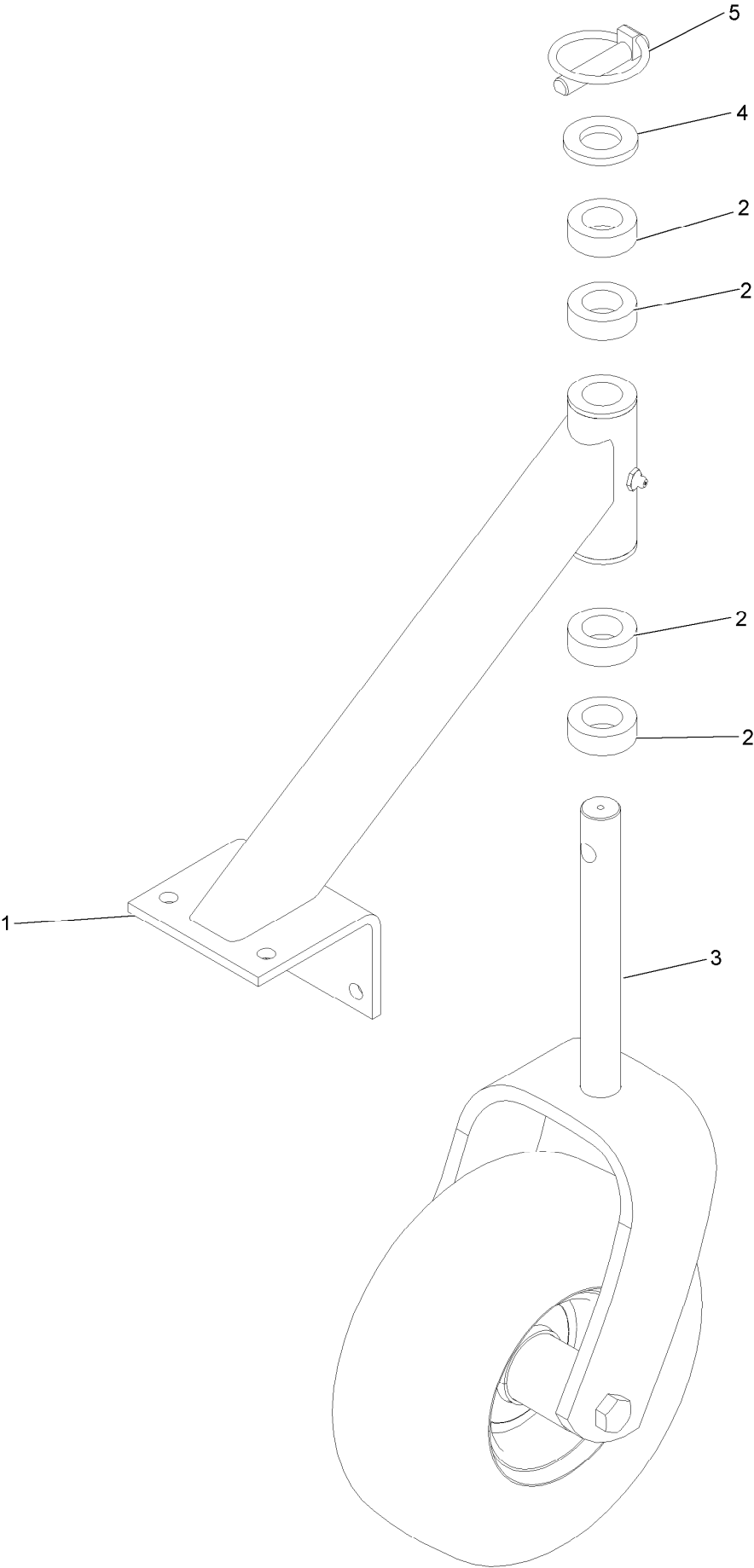


## Deck W/Decals Assembly No. 1-404257 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|------------------------|
| 2           | 116-1729-01        | 1           | Baffle-Dogleg          |
| 3           | 109-5151           | 1           | Deflector-Discharge    |
| 4           | 109-8854           | 1           | Pin-Chute              |
| 5           | 116-0962           | 1           | Spring, Torsion        |
| 6           | 322-2              | 4           | Screw-HH 5/16-18 X 5/8 |
| 7           | 32128-20           | 4           | Nut-Whizlock 5/16-18   |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>         |
|-------------|--------------------|-------------|----------------------------|
| 8           | 126-6746           | 1           | Decal-Ultracut 48 Series 3 |
| 9           | 114-3489           | 1           | Decal-Warning, Bagger      |
| 10          | 99-3943            | 1           | Decal-Routing, Belt        |
| 11          | 112-8760           | 2           | Decal-Danger               |
| 12          | 112-9028           | 1           | Decal-Missing, Cover       |

**Caster Mount W/Weight Assembly No. 116-8245**

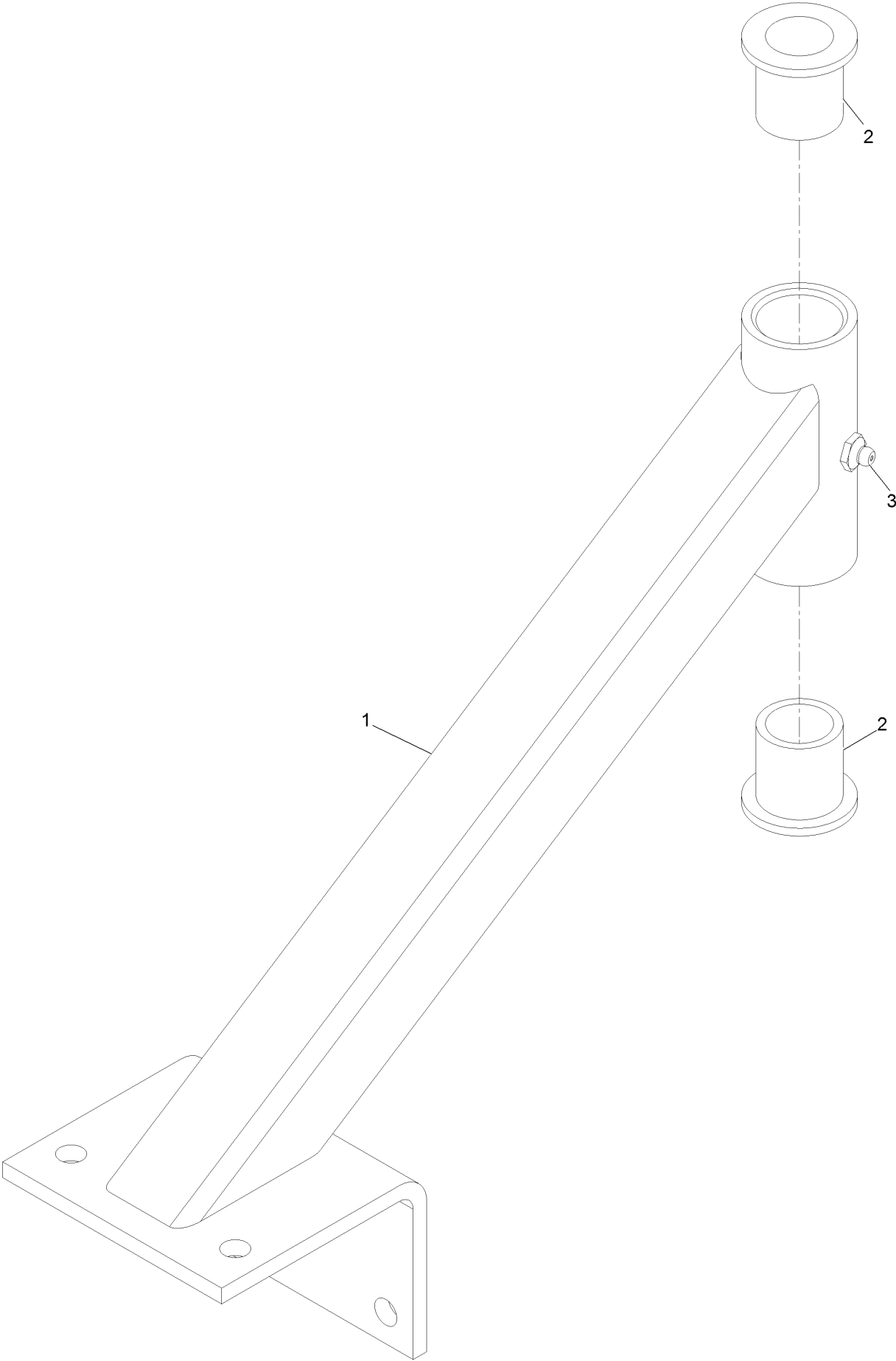


## Caster Mount W/Weight Assembly No. 116-8245 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>                         |
|-------------|--------------------|-------------|--------------------------------------------|
| 1           | 103-2296           | 1           | Caster Whl Support<br>W/Bearings, Weighted |
| 2           | 1-303314           | 4           | Spacer-Caster                              |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    |
|-------------|--------------------|-------------|-----------------------|
| 3           | 103-1236           | 1           | Caster Wheel Assembly |
| 4           | 1-513338           | 1           | Washer                |
| 5           | 1-809020           | 1           | Pin                   |

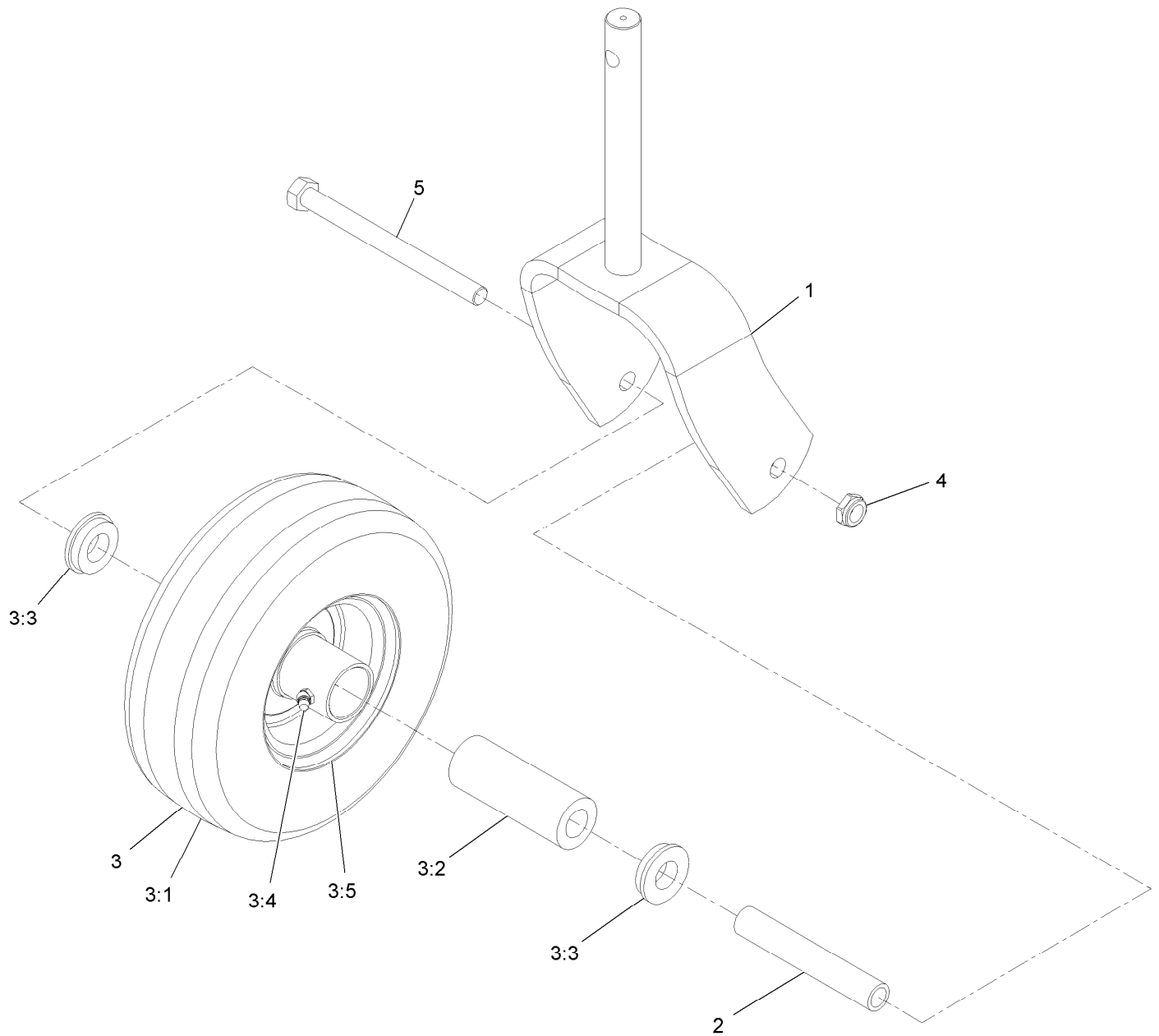
Caster Wheel Support W/Bearings 103-2296



## Caster Wheel Support W/Bearings 103-2296 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>                     |
|-------------|--------------------|-------------|----------------------------------------|
| 1           | 103-2297-01        | 1           | Caster Whl Support Wldmnt,<br>Weighted |
| 2           | 1-303514           | 2           | Bearing-Flanged                        |
| 3           | 302-52             | 1           | Fitting-Grease                         |

# Caster Wheel Assembly No. 103-1236



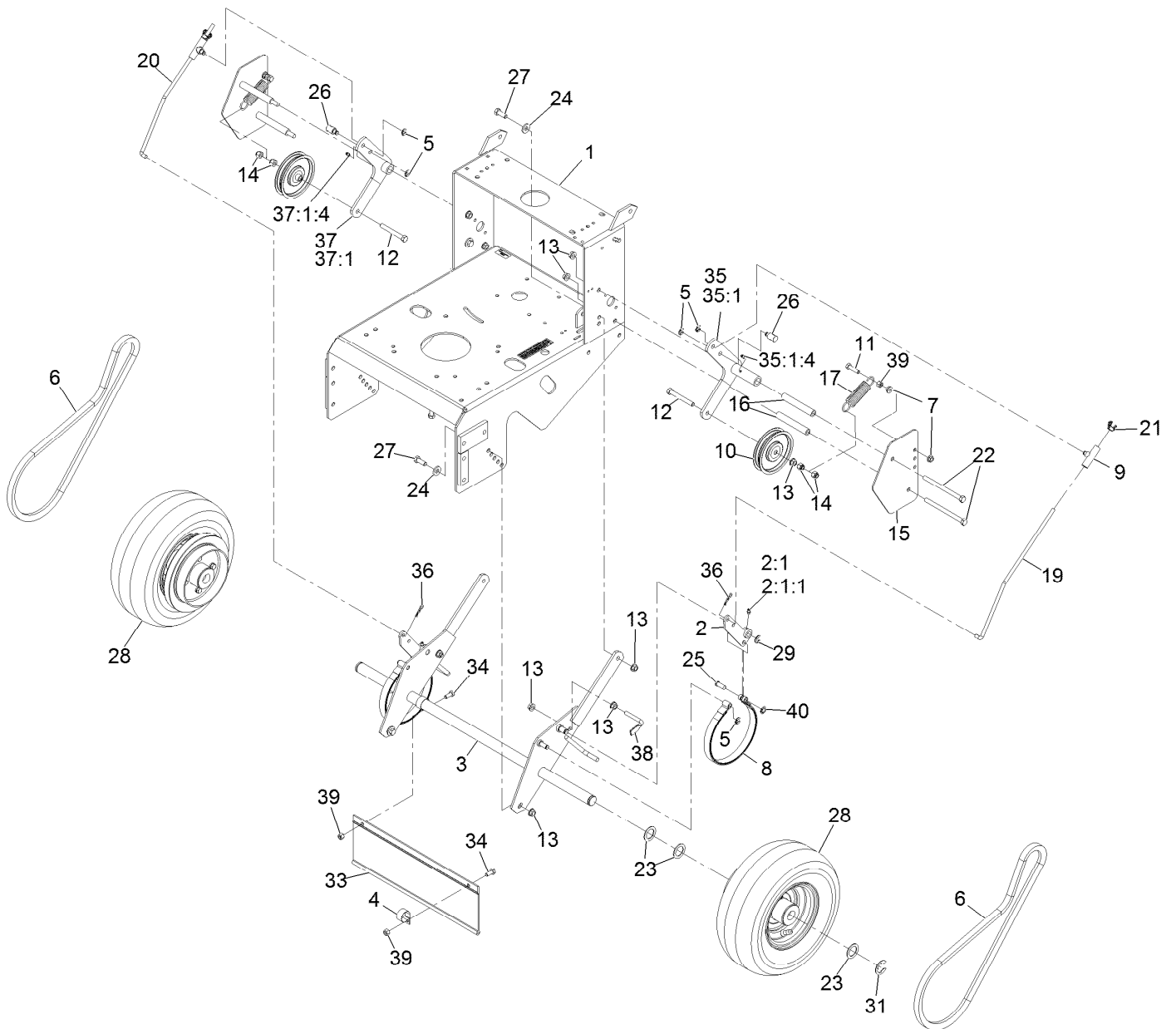
## Caster Wheel Assembly No. 103-1236 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 1           | 116-7942-01        | 1           | Fork-Caster        |
| 2           | 1-513547           | 1           | Spacer             |
| 3           | 110-5023           | 1           | Wheel And Tire ASM |
| 3:1         |                    | 1           | Tire ●             |
| 3:2         | 1-513809           | 1           | Bearing            |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i> |
|-------------|--------------------|-------------|--------------------|
| 3:3         | 1-513810           | 2           | Bushing            |
| 3:4         | 302-61             | 1           | Fitting-Grease     |
| 3:5         |                    | 1           | Wheel ●            |
| 4           | 3296-45            | 1           | Nut-Lock, NI       |
| 5           | 325-20             | 1           | Screw-HH           |

● Not serviced separately

# Engine Deck W/Transmission



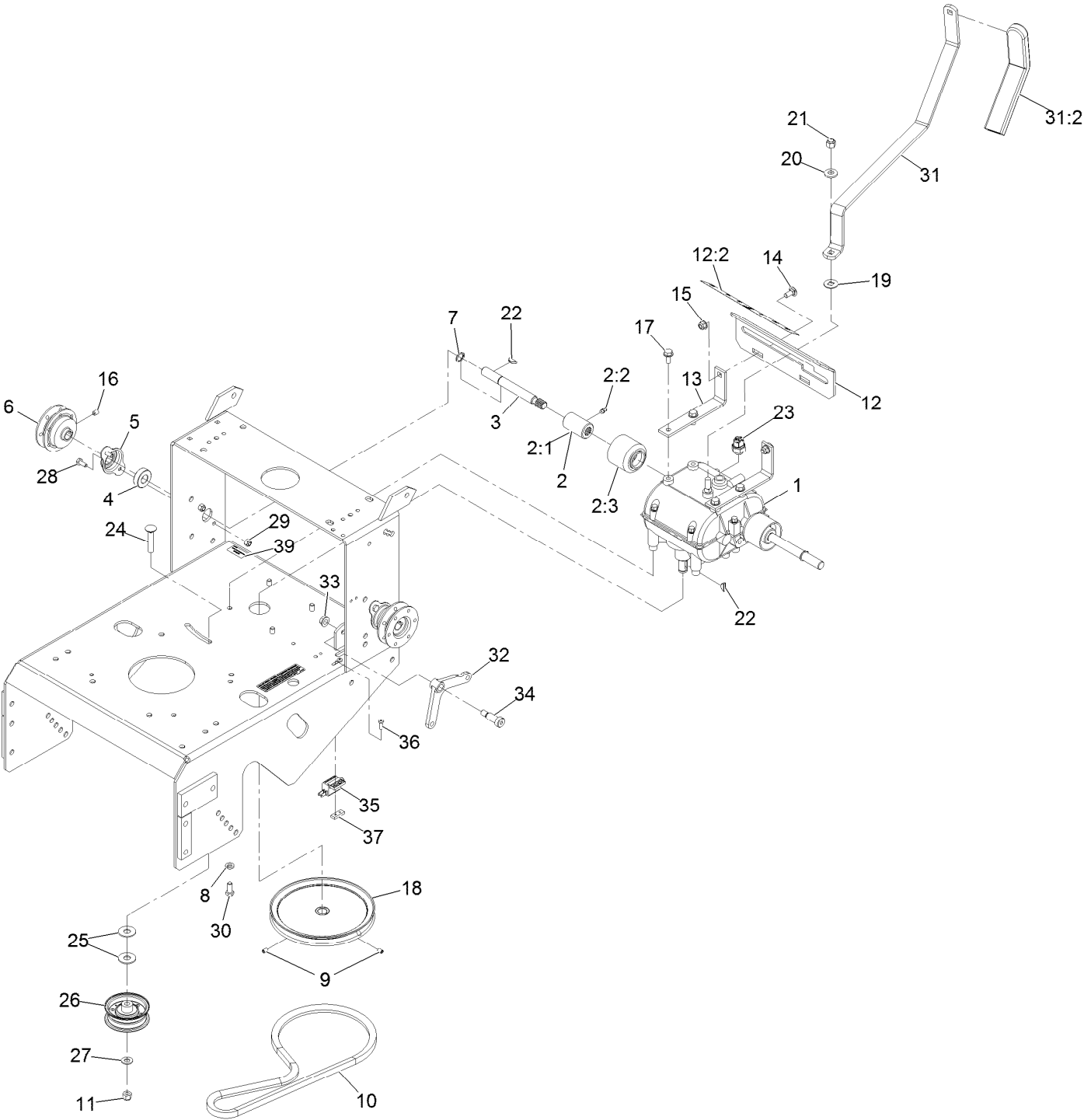
## Engine Deck W/Transmission (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>                 | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>       |
|-------------|--------------------|-------------|------------------------------------|-------------|--------------------|-------------|--------------------------|
| 1           | 116-6131           | 1           | ASM, Metro Engine Deck<br>W/Decals | 22          | 323-39             | 4           | Screw-HH                 |
| 2           | 103-1611-03        | 2           | Arm-Brake                          | 23          | 1-523157           | 6           | Washer-Spacer ●          |
| 2:1         |                    | 1           | Wld,Brake Arm ■                    | 23          | 1-543436           | 8           | Washer-Spacer ●          |
| 2:1:1       | 1-324154           | 1           | Asm,Bushing/Zerk                   | 24          | 98-5975            | 4           | Washer-Belleville        |
| 3           | 1-322117-03        | 1           | Axle                               | 25          | 1-323307           | 2           | Pin-Clevis               |
| 4           | 2412-104           | 2           | Clamp-R                            | 26          | 103-1618           | 2           | Swivel, Short            |
| 5           | 32151-47           | 4           | Ring-Retaining                     | 27          | 323-6              | 4           | Screw-HH                 |
| 6           | 1-323288           | 2           | Belt, Wheel Drive                  | 28          | 126-4482           | 2           | Drive Wheel ASM          |
| 7           | 32128-20           | 4           | Nut-HF                             | 29          | 32120-47           | 2           | Ring-Retaining, External |
| 8           | 1-323262           | 2           | Band-Brake                         | 31          | 1-808519           | 2           | Ring-Snap                |
| 9           | 110-5866           | 2           | Swivel-Brake                       | 33          | 98-3259            | 1           | Shield-Trailing          |
| 10          | 1-323277           | 2           | Idler-Wheel, Drive                 | 34          | 322-3              | 2           | Screw-HH                 |
| 11          | 116-3515           | 2           | Screw-HH, Special                  | 35          | 116-7542-03        | 1           | Arm-Idler, LH            |
| 12          | 99-8664            | 2           | Screw-HH                           | 35:1        |                    | 1           | Idler Arm LH Assy ■      |
| 13          | 3290-357           | 14          | Nut-HHF, Whiz                      | 35:1:4      | 302-19             | 1           | Fitting-Grease           |
| 14          | 3296-39            | 4           | Nut-Lock, NI                       | 36          | 1-806003           | 2           | Pin-Cotter               |
| 15          | 1-323287-01        | 2           | Shield-Wheel, Drive                | 37          | 116-7543-03        | 1           | Arm-Idler, RH            |
| 16          | 1-323283           | 4           | Spacer-Shield                      | 37:1        |                    | 1           | Idler Arm RH Assy ■      |
| 17          | 1-603402           | 2           | Spring-Extension                   | 37:1:4      | 302-19             | 1           | Fitting-Grease           |
| 19          | 103-1619           | 1           | Linkage,LH Brake                   | 38          | 1-412358           | 2           | Scraper                  |
| 20          | 103-1620           | 1           | Linkage,RH Brake                   | 39          | 3296-29            | 4           | Nut-Lock, NI             |
| 21          | 1-513959           | 2           | Wingnut-Nylock                     | 40          | 1-803051           | 2           | Nut-Push                 |

● QTY As Required

■ Not serviced separately

Engine Deck W/Transmission (cont.)



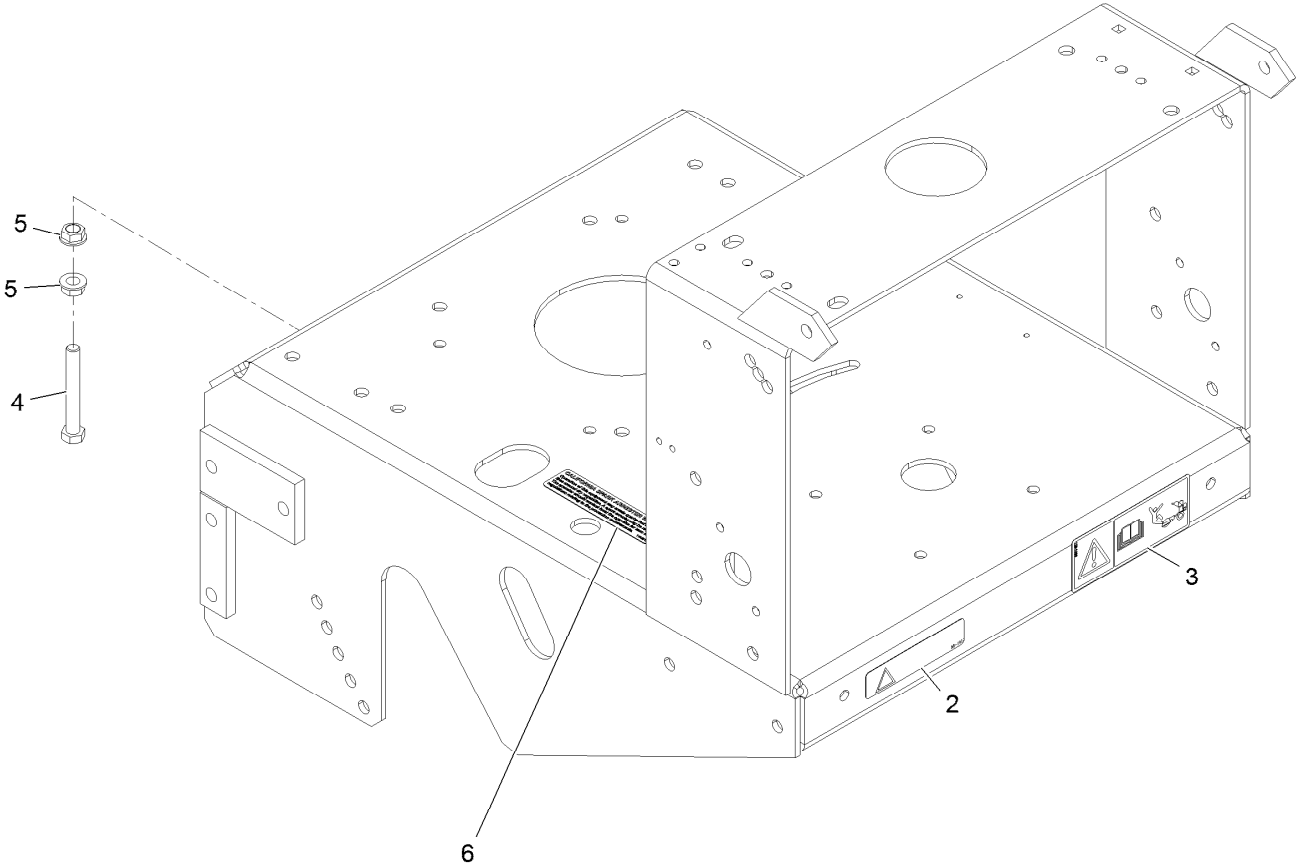
## Engine Deck W/Transmission (cont.) (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>          | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>         |
|-------------|--------------------|-------------|-----------------------------|-------------|--------------------|-------------|----------------------------|
| 1           | 132-4720           | 1           | Transmission-5 Speed        | 18          | 1-323278           | 1           | Sheave-Transmission ●      |
| 2           | 1-324340           | 2           | Coupling, W/Guard And Zerk  | 19          | 1-323379           | 1           | Washer                     |
| 2:1         | 1-323680           | 1           | Coupler                     | 20          | 98-5975            | 1           | Washer-Spring Disc 3/8     |
| 2:2         | 302-19             | 1           | Zerk-1/4-28 Str             | 21          | 3296-6             | 1           | Nut-Nyloc 3/8-24           |
| 2:3         | 51-4220            | 1           | Guard-Coupler               | 22          | 3257-5             | 3           | Key-Woodruff #9 3/4 X 3/16 |
| 3           | 1-323502           | 2           | Shaft-Transmission          | 23          | 1-303282           | 1           | Switch-Start, Neutral      |
| 4           | 1-323252           | 2           | Bearing-Shaft ●             | 24          | 3231-6             | 1           | Bolt-Carriage 3/8-16 X 2   |
| 5           | 1-323254           | 2           | Flange-Output               | 25          | 3256-5             | 2           | Washer-7/16 Std            |
| 6           | 103-6511           | 2           | Sheave-Transmission ●       | 26          | 130-8362           | 1           | Pulley-Idler, Flat         |
| 7           | 32151-62           | 2           | Ring-Retaining              | 27          | 3256-24            | 1           | Washer-3/8 Sae             |
| 8           | 1-805005           | 4           | Washer-Lock 5/16 Heavy      | 28          | 321-3              | 4           | Screw-HH 1/4-20 X 5/8      |
| 9           | 3245-41            | 2           | Setscrew-1/4-20 X 3/8 ■     | 29          | 3296-42            | 4           | Nut-Nyloc 1/4-20           |
| 10          | 1-323280           | 1           | Belt, Transmission Drive    | 30          | 322-3              | 4           | Screw-HH 5/16-18 X 3/4     |
| 11          | 3296-39            | 1           | Nut-Nyloc 3/8-16            | 31          | 103-1606           | 1           | Lever, Shift W/Grip        |
| 12          | 103-3498           | 1           | Asm, Shifter Plate          | 31:2        | 103-1733           | 1           | Grip Foam                  |
|             |                    |             | (1-323387-03) W/ Decals     | 32          | 1-303186           | 1           | Bellcrank                  |
| 12:2        | 98-3264            | 1           | Decal-Speed, Ground         | 33          | 3290-357           | 1           | Nut-Whizlock 3/8-16        |
| 13          | 1-323389-03        | 2           | Bracket-Plate, Shift        | 34          | 1-603403           | 1           | Bolt-Shoulder              |
| 14          | 3230-1             | 2           | Bolt-Carriage 5/16-18 X 3/4 | 35          | 1-513051           | 1           | Switch-N.O.                |
| 15          | 104-8300           | 2           | Nut-Nyloc 5/16-18 Flg       | 36          | 3290-500           | 2           | Screw-PPH #10-24 X 5/8     |
| 16          | 3246-18            | 2           | Setscrew-5/16-18 X 3/8 ■    | 37          | 1-633181           | 1           | Plate-Tapped               |
| 17          | 32144-11           | 4           | Screw-HWH 5/16-18 X 3/4 Tf  | 39          | 126-4345           | 1           | Decal-Patent               |

● Apply anti-seize compound in bore.

■ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

# Engine Deck W/Decals Assembly No. 116-6131

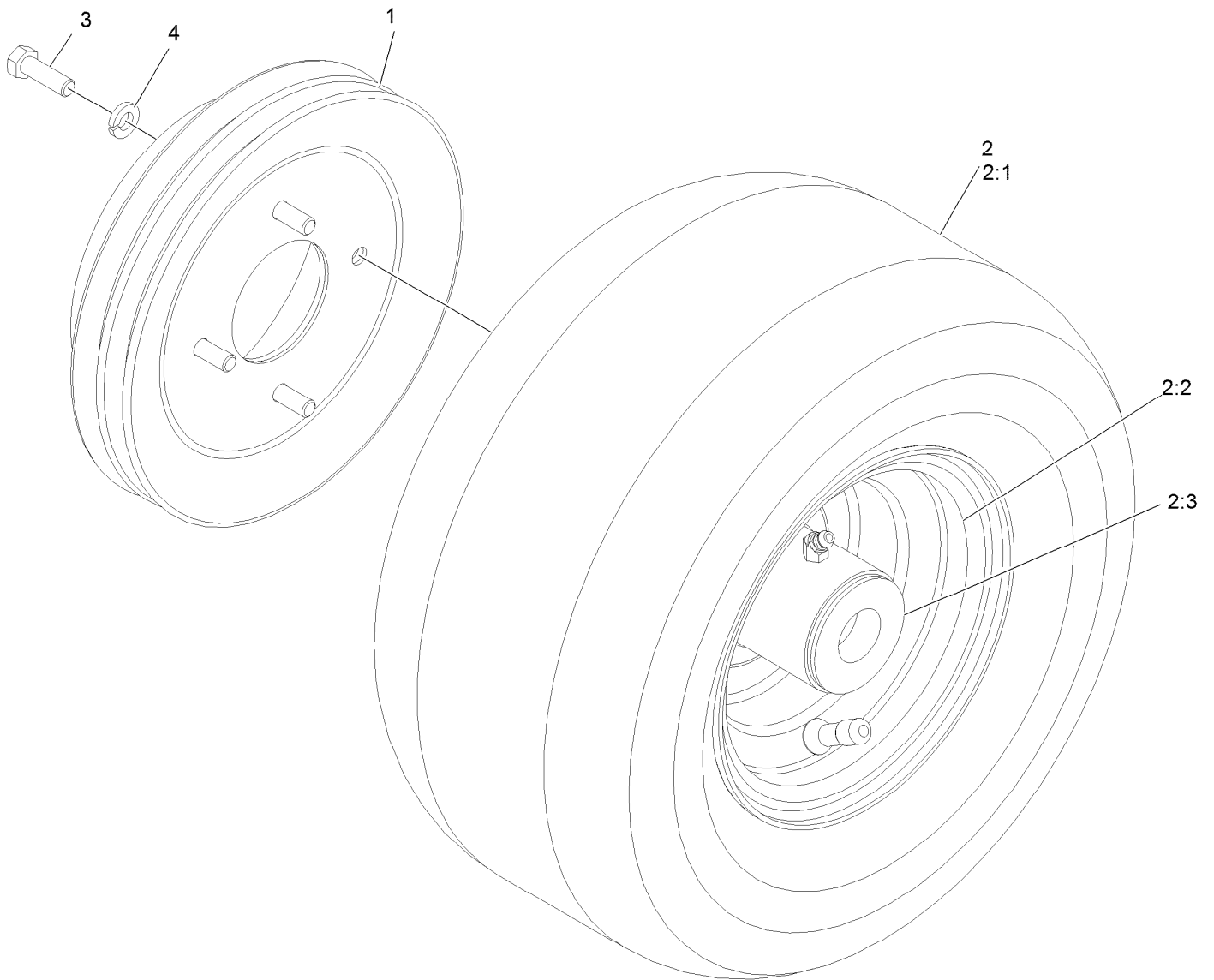


## Engine Deck W/Decals Assembly No. 116-6131 (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>   |
|-------------|--------------------|-------------|----------------------|
| 2           | 98-1977            | 1           | Decal-Warning        |
| 3           | 126-1400           | 1           | Decal-Warning, Sulky |
| 4           | 323-13             | 1           | Screw-HH             |

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>    |
|-------------|--------------------|-------------|-----------------------|
| 5           | 3290-357           | 2           | Nut-HHF, Whiz         |
| 6           | 117-2718           | 1           | Decal-Arrester, Spark |

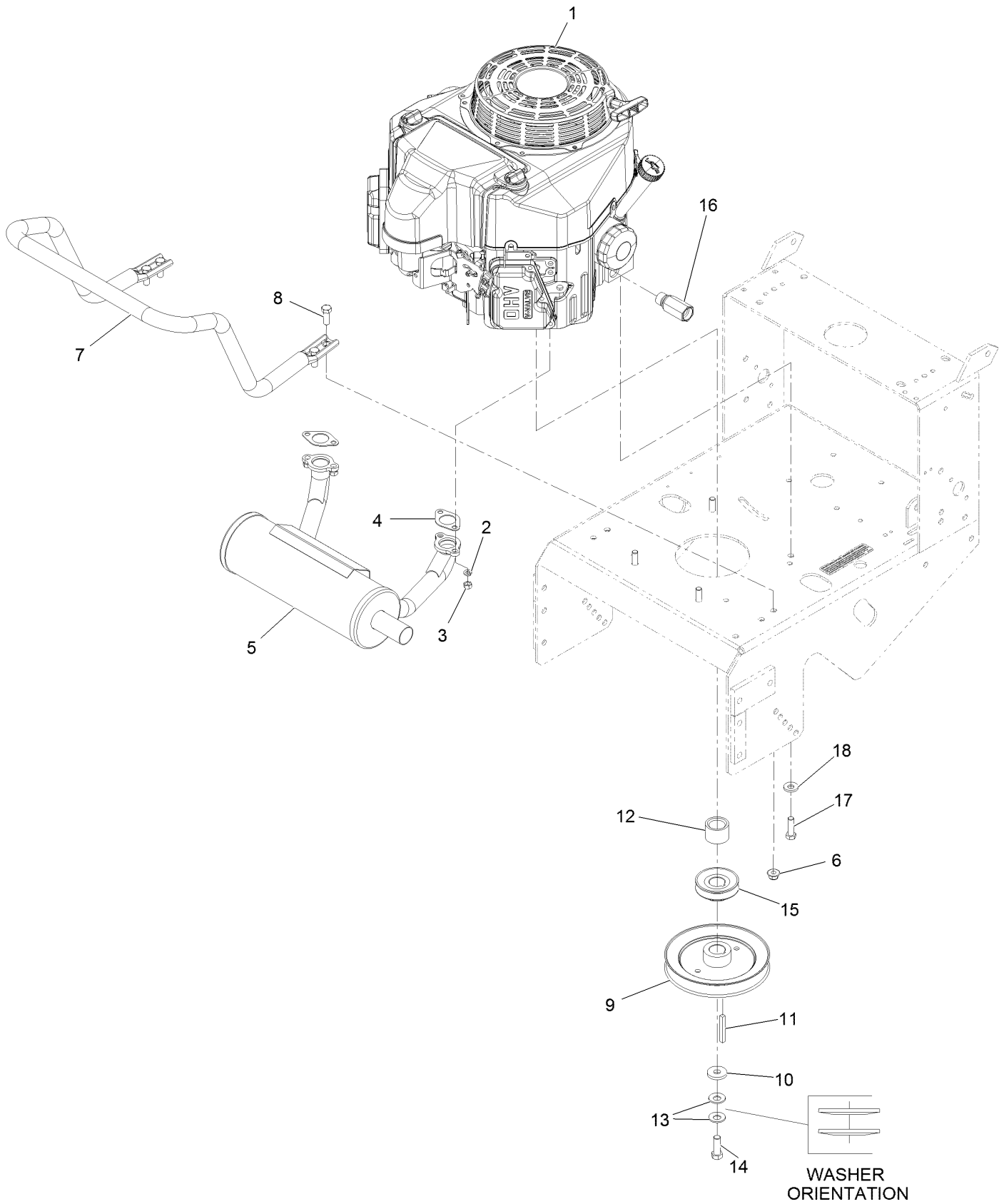
# Wheel and Tire Assembly



## Wheel and Tire Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>  | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>     |
|-------------|--------------------|-------------|---------------------|-------------|--------------------|-------------|------------------------|
| 1           | 109-4359           | 1           | Drum And Sheave ASM | 2:3         | 1-323329           | 2           | Bearing-Flanged        |
| 2           | 130-8364           | 1           | Wheel And Tire ASM  | 3           | 322-5              | 4           | Screw-HH 5/16-18 X 1   |
| 2:1         | 130-8367           | 1           | Tire                | 4           | 1-805005           | 4           | Washer-Lock 5/16 Heavy |
| 2:2         | 1-323328           | 1           | Wheel And Hub ASM   |             |                    |             |                        |

# Engine Assembly



## Engine Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>   | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      |
|-------------|--------------------|-------------|----------------------|-------------|--------------------|-------------|-------------------------|
| 1           |                    | 1           | Engine-Kawasaki ● ▲  | 10          | 1-373034           | 1           | Washer                  |
| 2           | 114-3550           | 4           | Washer-Lock          | 11          | 103-4177           | 1           | Key                     |
| 3           | 114-3549           | 4           | Nut-M8               | 12          | 1-633453           | 1           | Spacer-Clutch           |
| 4           | 1-653313           | 2           | Gasket-Exhaust       | 13          | 1-603610           | 2           | Washer-Spring Disc 7/16 |
| 5           | 116-3735           | 1           | Muffler-Horizontal   | 14          | 116-3702           | 1           | Screw-HH ◆              |
| 6           | 104-8301           | 4           | Nut-Nyloc 3/8-16 Flg | 15          | 103-1666           | 1           | Sheave-Transmission ■   |
| 7           | 116-6278-03        | 1           | Guard-Muffler        | 16          | 103-2587           | 1           | Adapter                 |
| 8           | 323-6              | 4           | Screw-HH 3/8-16 X 1  | 17          | 323-7              | 4           | Screw-HH 3/8-16 X 1 1/4 |
| 9           | 103-1667           | 1           | Sheave ■             | 18          | 98-5975            | 4           | Washer-Spring Disc 3/8  |

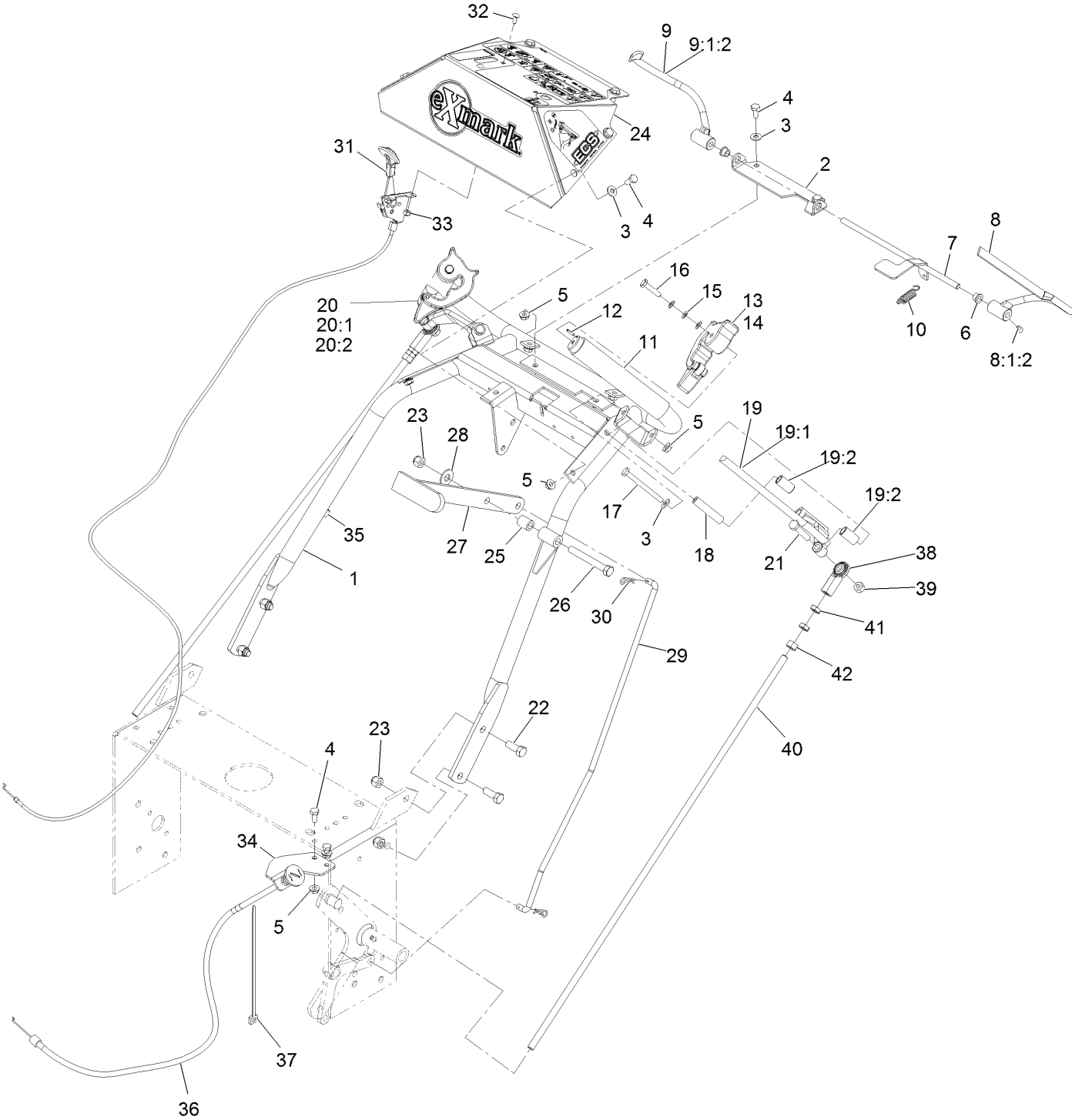
● Not serviced separately

▲ Obtain parts from [www.kawpowerepc.com](http://www.kawpowerepc.com)

◆ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

■ Apply anti-seize compound in bore.

# ECS Upper Handle and Controls



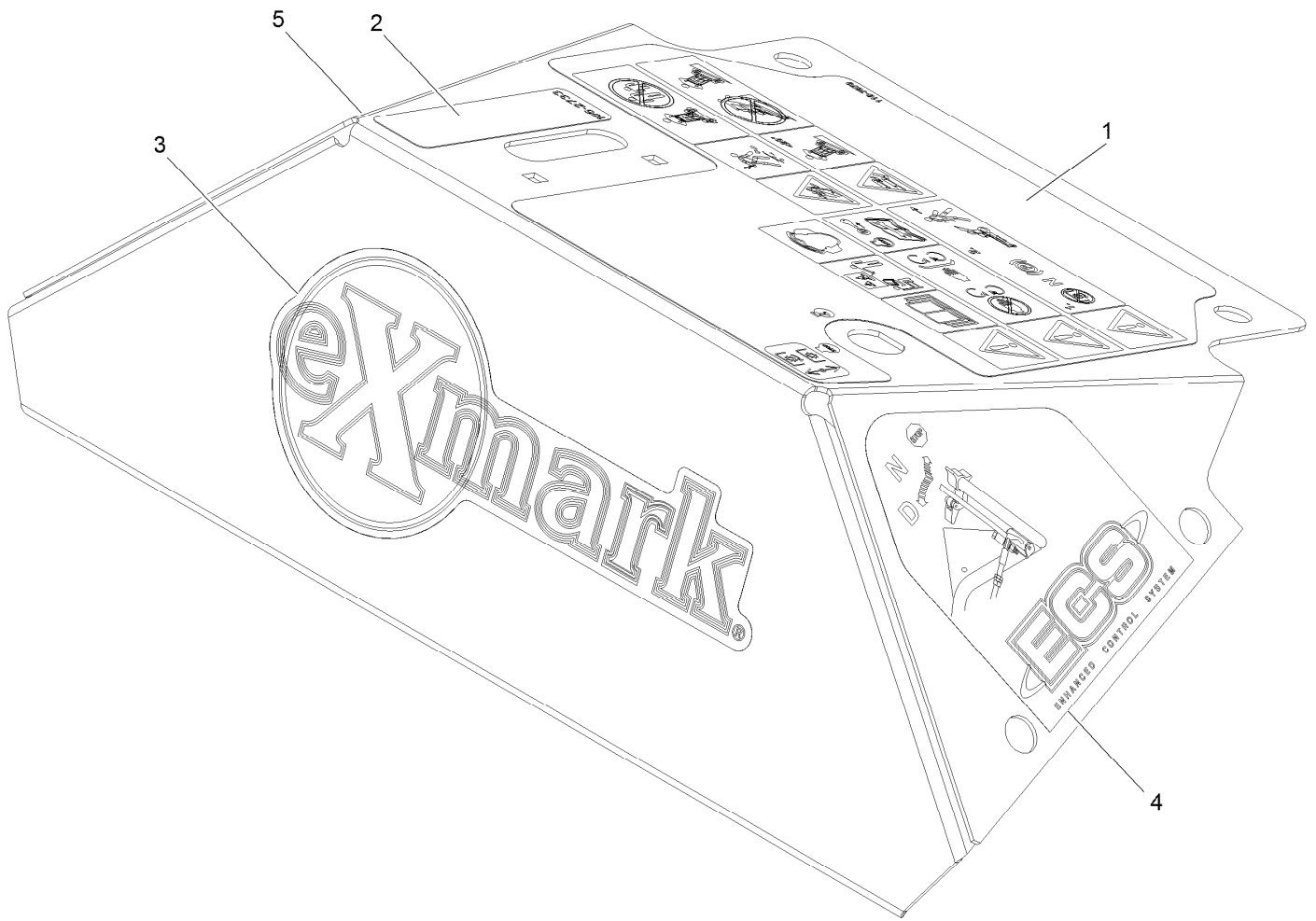
## ECS Upper Handle and Controls (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>                 | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>                     |
|-------------|--------------------|-------------|------------------------------------|-------------|--------------------|-------------|----------------------------------------|
| 1           | 103-0770-03        | 1           | Handle Weldment                    | 20:2        | 126-9366           | 2           | Bushing, Sleeve                        |
| 2           | 103-0489-03        | 1           | Bracket, Opc Axle                  | 21          | 322-9              | 2           | Screw-HH 5/16-18 X 1 3/4               |
| 3           | 3256-22            | 10          | Washer-1/4 Sae                     | 22          | 323-6              | 4           | Screw-HH 3/8-16 X 1                    |
| 4           | 321-3              | 10          | Screw-HH 1/4-20 X 5/8              | 23          | 3296-39            | 5           | Nut-Nyloc 3/8-16                       |
| 5           | 32128-33           | 12          | Nut-Whizlock 1/4-20                | 24          | 109-4934           | 1           | Asm, Console<br>(109-4649-03) W/Decals |
| 6           | 1-303365           | 2           | Bushing-Nylon                      | 25          | 1-633080           | 1           | Spacer                                 |
| 7           | 103-0769-03        | 1           | Rod Weldment, Opc                  | 26          | 323-14             | 1           | Screw-HH 3/8-16 X 3                    |
| 8           | 116-4079           | 1           | Wld,LH Opc Lever ■                 | 27          | 103-1629           | 1           | Clutch Lever W/Grip                    |
| 8:1:2       | 1-803322           | 1           | Setscrew-5/16-24 X 5/16 ●          | 28          | 3256-4             | 1           | Washer-3/8 Std                         |
| 9           | 116-4080           | 1           | Wld,RH Opc Lever ■                 | 29          | 103-1627           | 1           | Linkage, Upper                         |
| 9:1:2       | 1-803322           | 1           | Setscrew-5/16-24 X 5/16 ●          | 30          | 1-806003           | 2           | Hairpin-Cotter                         |
| 10          | 1-303363           | 1           | Spring-Extension                   | 31          | 116-2426           | 1           | Control, Throttle                      |
| 11          | 103-0815           | 2           | Grip-Bar, Handle                   | 31          | 116-2426RT02       | 1           | Control, Throttle                      |
| 12          | 126-2925           | 2           | Pin-Spring                         | 32          | 1-807513           | 2           | Bolt-Carriage #10-24 X 1/2             |
| 13          | 103-1631           | 1           | Latch, Thumb LH                    | 33          | 3296-2             | 2           | Nut-Nyloc #10-24                       |
| 14          | 103-1630           | 1           | Latch, Thumb RH                    | 34          | 103-1797-01        | 1           | Bracket-Cable, Choke                   |
| 15          | 1-303435           | 6           | Washer-Spring Disc 1/4             | 35          | 1-303088           | 1           | Clip-Cable                             |
| 16          | 103-0235           | 2           | Screw-HH 1/4-20 X 1 1/8<br>W/Nylon | 36          | 103-1796           | 1           | Cable-Choke                            |
| 17          | 321-14             | 2           | Screw-HH 1/4-20 X 2 3/4            | 36          | 103-1796RT01       | 1           | Cable-Choke                            |
| 18          | 103-0027           | 2           | Bushing-Lever, Drive               | 37          | 1-303335           | 1           | Tie-Cable 7 15/16 (Large)              |
| 19          | 103-2514           | 1           | Asm, Drive Lever LH                | 38          | 103-2463           | 2           | Balljoint                              |
| 19:1        | 116-4081           | 1           | Wld,LH Drive Lever                 | 39          | 3296-29            | 2           | Nut-Nyloc 5/16-18                      |
| 19:2        | 126-9366           | 2           | Bushing, Sleeve                    | 40          | 103-1604           | 2           | Linkage, Wheel Drive                   |
| 20          | 103-2513           | 1           | Asm, Drive Lever RH                | 41          | 3220-3             | 4           | Nut-Jam 3/8-24                         |
| 20:1        | 116-4082           | 1           | Wld,RH Drive Lever                 | 42          | 3219-3             | 2           | Nut-Hex 3/8-24                         |

● Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

■ Use Pro-Lock retaining type, Part no. 1-840023 (.5cc tube) on inside of bore of OPC hub.

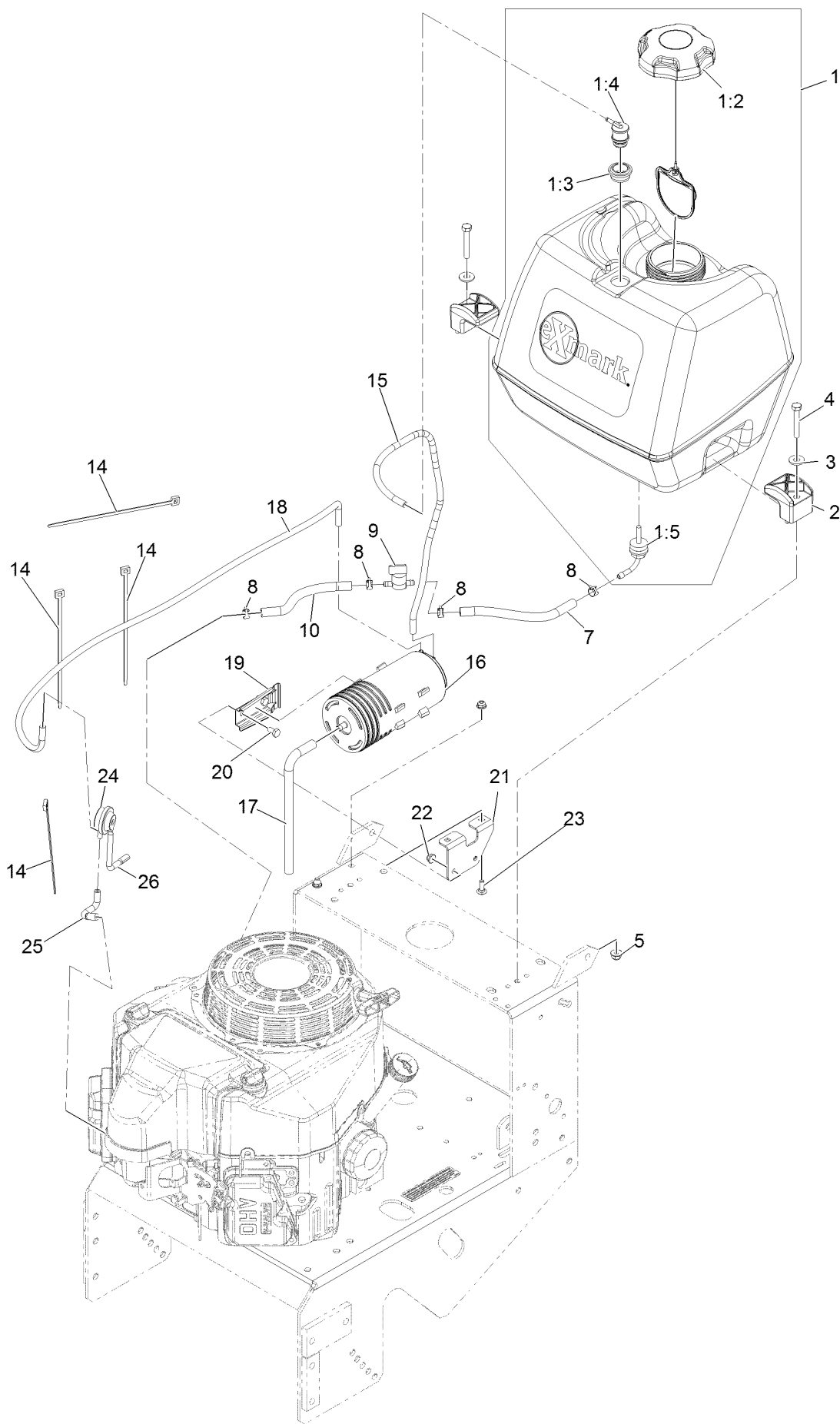
# Console W/Decals Assembly



## Console W/Decals Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>        |
|-------------|--------------------|-------------|-------------------------|-------------|--------------------|-------------|---------------------------|
| 1           | 116-7879           | 1           | Decal-Console Metro Ecs | 4           | 103-2244           | 1           | Decal, LH Ecs Instruction |
| 2           | 106-2733           | 1           | Decal-Throttle          | 5           | 103-2245           | 1           | Decal, RH Ecs Instruction |
| 3           | 126-6877           | 1           | Decal, Exmark Logo      |             |                    |             |                           |

# Fuel Tank Assembly



## Fuel Tank Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>                    | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>                            |
|-------------|--------------------|-------------|---------------------------------------|-------------|--------------------|-------------|-----------------------------------------------|
| 1           | 126-1525           | 1           | ASM, Fuel Tank                        | 15          | 114-0286           | 1           | Hose-Vent                                     |
| 1:2         | 120-5461           | 1           | Cap-Fuel, Ratcheting                  | 16          | 117-1221           | 1           | Canister-Carbon, 800Cc                        |
| 1:3         | 114-0284           | 1           | Grommet                               | 17          | 115-0962           | 1           | Hose-Vent, Canister                           |
| 1:4         | 119-3547           | 1           | Valve-Vent, Fuel                      | 18          | 116-2231           | 1           | Hose-Vent, Formed                             |
| 1:5         | 103-2605           | 1           | Fitting-Fuel Bulkhead<br>W/Strainer ♦ | 19          | 114-0292           | 1           | Bracket-Canister, Carbon                      |
| 2           | 107-4543           | 2           | Clamp                                 | 20          | 321-2              | 2           | Screw-HH 1/4-20 X 1/2                         |
| 3           | 3256-3             | 2           | Washer-5/16 Std                       | 21          | 115-4486-01        | 1           | Bracket-Canister, Carbon                      |
| 4           | 322-10             | 2           | Screw-HH 5/16-18 X 2                  | 22          | 104-7201           | 4           | Nut-Nyloc 1/4-20 Flg                          |
| 5           | 104-8300           | 2           | Nut-Nyloc 5/16-18 Flg                 | 23          | 3229-1             | 2           | Bolt-Carriage 1/4-20 X 3/4                    |
| 7           | 109-0650           | 1           | Hose-Fuel                             | 24          | 116-2232           | 1           | Valve-Control, Vacuum                         |
| 8           | 2412-98            | 4           | Clamp-Hose                            | 25          | 119-8502           | 1           | Hose-Vent, Formed                             |
| 9           | 1-603770           | 1           | Valve-Fuel                            | 26          | 119-8501           | 1           | Hose-Vent, Formed                             |
| 10          | 99-9415            | 1           | Hose-Fuel                             | 28          |                    | 1           | Pn 41019-1055 Filter W/6In<br>Fuel Line ● ■ ▲ |
| 14          | 1-303335           | 4           | Tie-Cable 7 15/16 (Large)             |             |                    |             |                                               |

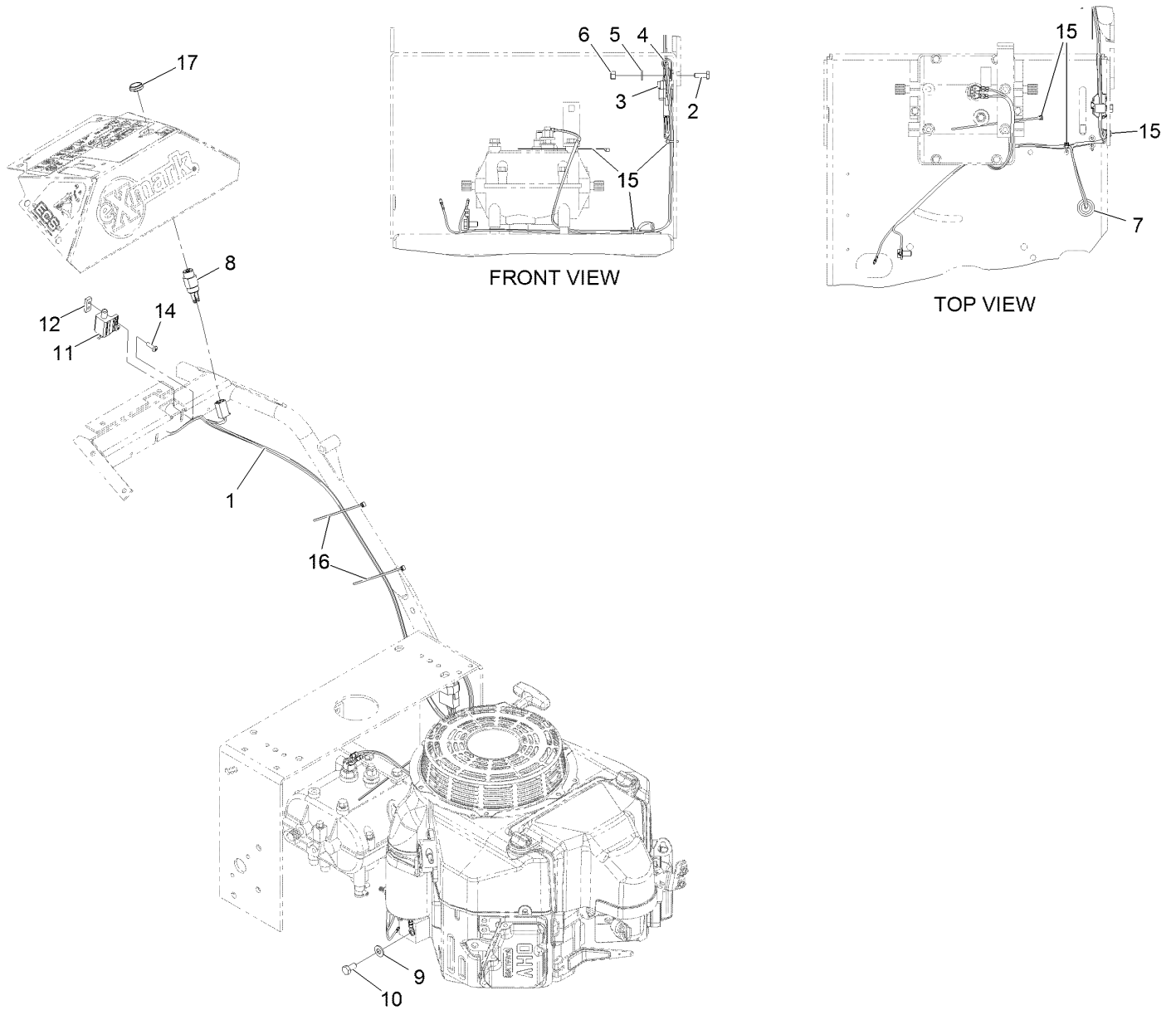
● Not illustrated

▲ Obtain parts from [www.kawpowerepc.com](http://www.kawpowerepc.com)

♦ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

■ Not serviced separately

# Electrical Assembly



## Electrical Assembly (continued)

| <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>                      | <i>Ref.</i> | <i>Part Number</i> | <i>Qty.</i> | <i>Description</i>      |
|-------------|--------------------|-------------|-----------------------------------------|-------------|--------------------|-------------|-------------------------|
| 1           | 116-2661           | 1           | Harness-Wire ●                          | 9           | 33094-00           | 1           | Washer                  |
| 2           | 321-4              | 1           | Screw-HH 1/4-20 X 3/4                   | 10          | 33114-016          | 1           | Screw-HH M8-1.25 X 16Mm |
| 3           | 1-323430           | 1           | Module-Interlock                        | 11          | 1-513051           | 1           | Switch-N.O.             |
| 4           | 1-513762           | 1           | Clip-Loom 1/2                           | 12          | 1-633181           | 1           | Plate-Tapped            |
| 5           | 3256-22            | 1           | Washer-1/4 Sae                          | 14          | 3290-500           | 2           | Screw-PPH #10-24 X 5/8  |
| 6           | 3296-42            | 1           | Nut-Nyloc 1/4-20                        | 15          | 1-303287           | 3           | Tie-Cable 5 1/2 (Small) |
| 7           | 1-543296           | 1           | Grommet                                 | 16          | 1-303287           | 2           | Tie-Cable 5 1/2 (Small) |
| 8           | 1-403121           | 1           | Switch & Key (Includes Nut<br>& Washer) | 17          | 103-0498           | 1           | Nut-Ignition            |

● Use dielectric grease on all unsealed connectors and terminals only. Do not apply in sealed connectors.

**Notes:**



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|------------------------------------|---------------------------------|
| CUSTOM RIDE SEAT SUSPENSION SYSTEM | OPERATOR CONTROLLED DISCHARGE   |
| FULL SUSPENSION SEAT               | SUN SHADE                       |
| DECK LIFT ASSIST KIT               | TRASH CONTAINER                 |
| HITCH KIT                          | TURF STRIPER                    |
| LIGHT KIT                          | ULTRA VAC COLLECTION SYSTEM     |
| 12V POWER PORT                     | ULTRA VAC QUICK DISPOSAL SYSTEM |
| MICRO-MULCH SYSTEM                 |                                 |

### OUT-FRONT RIDING ACCESSORIES AND OPTIONS

|                                    |                                 |
|------------------------------------|---------------------------------|
| CUSTOM RIDE SEAT SUSPENSION SYSTEM | SNOW BLADE                      |
| DUAL-TAIL WHEEL                    | SNOWBLOWER                      |
| FLOOR PAN EXTENDER                 | SUN SHADE                       |
| HITCH KIT                          | TRASH CONTAINER                 |
| LIGHT KIT                          | ULTRA VAC COLLECTION SYSTEM     |
| MICRO-MULCH SYSTEM                 | ULTRA VAC QUICK DISPOSAL SYSTEM |
| ROLL OVER PROTECTION SYSTEM (ROPS) | WEATHER CAB                     |

### WALK-BEHIND ACCESSORIES AND OPTIONS

|                    |              |
|--------------------|--------------|
| GRASS CATCHER      | TURF STRIPER |
| MICRO-MULCH SYSTEM | STANDON      |

\*Some accessories and options not available for some models.

Place Model No. and Serial No.  
Label Here (Included in the Literature  
Pack) or Fill in Below

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Serial No. \_\_\_\_\_

Date Purchased \_\_\_\_\_

Engine Model No. and Spec. No. \_\_\_\_\_

Engine Serial No. (E/No) \_\_\_\_\_

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